

# Water Treatment Plant

## December 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	0.075	0.3
Chloramines	mg/L	1.88	n/a <sup>1</sup>
Nitrate-N	mg/L	0.14	10
Fluoride	mg/L	0.74	1.5
Trihalomethanes	mg/L	0.023	0.1
Aluminum	mg/L	0.041	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		7.14	7.0 - 10.5
Hardness	mg/L	162	n/a <sup>2</sup>
TDS - total dissolved solids	mg/L	189	≤ 500
Sulfate	mg/L	32.4	≤ 500
Sodium	mg/L	11.3	≤ 200
Iron	mg/L	< 0.01	≤ 0.3
Manganese	mg/L	< 0.005	≤ 0.02

<sup>1</sup> 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.

<sup>2</sup> 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**

	Dec 1/2025		Dec 8/2025		Dec 15/2025		Dec 22/2025	
	Sample Results		Sample Results		Sample Results		Sample Results	
	Cl 2	Bac T						
Sample 1 North Lethbridge							1.91	N
Sample 2 North Lethbridge	1.75	N			1.63	N		
Sample 3 North Lethbridge	1.65	N	1.97	N	1.71	N	1.89	N
Sample 4 North Lethbridge	1.84	N			1.74	N		
Sample 5 North Lethbridge			1.61	N				
Sample 6 North Lethbridge			2.01	N				
Sample 7 North Lethbridge	1.71	N	2.03	N	1.82	N	1.95	N
Sample 8 North Lethbridge								
Sample 9 North Lethbridge							1.04	N
Sample 10 North Lethbridge					1.80	N		
Sample 11 North Lethbridge	1.57	N			1.75	N		
Sample 12 North Lethbridge	1.90	N	1.96	N				
Sample 13 North Lethbridge	1.96	N	1.92	N	1.79	N	2.00	N
Sample 14 North Lethbridge	1.91	N						
Sample 15 North Lethbridge	1.86	N	1.21	N			1.69	N
Sample 16 North Lethbridge			1.52	N			1.58	N
Sample 17 North Lethbridge	1.10	N			1.45	N	0.85	N
Sample 18 North Lethbridge			1.99	N				
Sample 19 North Lethbridge							1.86	N
Sample 20 South Lethbridge	1.70	N	1.18	N	1.61	N	1.80	N
Sample 21 South Lethbridge			1.92	N	1.81	N	1.71	N
Sample 22 South Lethbridge	2.00	N	2.00	N	1.83	N	1.92	N
Sample 23 South Lethbridge					1.71	N		
Sample 24 South Lethbridge								
Sample 25 South Lethbridge	2.04	N	1.97	N	1.95	N	2.02	N

	Dec 1/2025		Dec 9/2025		Dec 16/2025		Dec 22/2025	
	Sample Results		Sample Results		Sample Results		Sample Results	
	Cl 2	Bac T						
Sample 26 West Lethbridge					1.49	N	1.47	N
Sample 27 West Lethbridge	1.77	N					1.78	N
Sample 28 West Lethbridge								
Sample 29 West Lethbridge			1.85	N				
Sample 30 West Lethbridge	1.87	N	1.83	N				
Sample 31 West Lethbridge			1.73	N				
Sample 32 West Lethbridge	1.66	N	1.73	N			1.75	N
Sample 33 West Lethbridge	1.63	N	1.80	N	1.74	N	1.86	N
Sample 34 West Lethbridge			1.90	N				
Sample 35 West Lethbridge					1.65	N	1.67	N
Sample 36 West Lethbridge	1.83	N	1.80	N	1.82	N	1.79	N
Sample 37 West Lethbridge							1.85	N
Sample 38 West Lethbridge								
Sample 39 West Lethbridge	0.94	N			1.53	N	1.63	N
Sample 40 West Lethbridge	1.39	N						
Sample 41 South Lethbridge			1.93	N				
Sample 42 South Lethbridge	1.69	N			1.49	N		
Sample 43 South Lethbridge	1.69	N			1.52	N		
Sample 44 South Lethbridge			1.96	N	1.73	N		
Sample 45 South Lethbridge	1.89	N	1.92	N	1.83	N	1.75	N
Sample 46 South Lethbridge	1.84	N	1.73	N			1.63	N
Sample 47 South Lethbridge			1.90	N	1.78	N		
Sample 48 South Lethbridge	1.72	N			1.40	N	1.40	N
Sample 49 South Lethbridge								
Sample 50 South Lethbridge								
Sample 51 South Lethbridge	1.76	N			1.30	N	1.69	N
Sample 52 South Lethbridge					1.54	N	1.60	N

Total Negative (N) = 103  
Total Positive (P) = 0  
Total Re-Samples = 0

Chlorine Residual Minimum = 0.85 mg/L  
Chlorine Residual Maximum = 2.04 mg/L  
Chlorine Residual Average = 1.72 mg/L