

Water Treatment Plant

September 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	0.072	0.3
Chloramines	mg/L	1.86	n/a ¹
Nitrate-N	mg/L	0.03	10
Fluoride	mg/L	0.78	1.5
Trihalomethanes	mg/L	0.023	0.1
Aluminum	mg/L	0.1470	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		7.32	7.0 - 10.5
Hardness	mg/L	145	n/a ²
TDS - total dissolved solids	mg/L	179	≤ 500
Sulfate	mg/L	34.6	≤ 500
Sodium	mg/L	9.6	≤ 200
Iron	mg/L	<0.01	≤ 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

	Sep 2/2025		Sep 8/2025		Sep 15/2025		Sep 22/2025	
	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 1 North Lethbridge	1.62	N						
Sample 2 North Lethbridge	1.40	N			1.23	N		
Sample 3 North Lethbridge	1.54	N	1.53	N	1.35	N	1.55	N
Sample 4 North Lethbridge					1.43	N		
Sample 5 North Lethbridge					1.28	N	1.41	N
Sample 6 North Lethbridge							1.74	N
Sample 7 North Lethbridge	1.76	N	1.76	N	1.55	N	1.77	N
Sample 8 North Lethbridge								
Sample 9 North Lethbridge	1.42	N						
Sample 10 North Lethbridge	1.58	N			1.47	N		
Sample 11 North Lethbridge	1.65	N	1.64	N			1.66	N
Sample 12 North Lethbridge			1.63	N	1.48	N		
Sample 13 North Lethbridge	1.71	N	1.73	N	1.57	N	1.74	N
Sample 14 North Lethbridge	1.61	N	1.58	N			1.63	N
Sample 15 North Lethbridge							1.21	N
Sample 16 North Lethbridge			1.44	N	1.25	N		
Sample 17 North Lethbridge	1.42	N	1.38	N			1.29	N
Sample 18 North Lethbridge			1.99	N			1.62	N
Sample 19 North Lethbridge								
Sample 20 South Lethbridge			1.31	N	1.21	N		
Sample 21 South Lethbridge			1.76	N				
Sample 22 South Lethbridge	1.84	N	1.76	N	1.59	N	1.77	N
Sample 23 South Lethbridge	1.70	N			1.23	N	1.42	N
Sample 24 South Lethbridge								
Sample 25 South Lethbridge	2.03	N	2.10	N	1.84	N	2.05	N

	Sep 2/2025		Sep 9/2025		Sep 15/2025		Sep 23/2025	
	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 26 West Lethbridge					1.28	N	1.40	N
Sample 27 West Lethbridge								
Sample 28 West Lethbridge			1.59	N	1.57	N		
Sample 29 West Lethbridge	1.52	N			1.29	N	1.47	N
Sample 30 West Lethbridge								
Sample 31 West Lethbridge			1.33	N	1.32	N	1.36	N
Sample 32 West Lethbridge					1.10	N	1.52	N
Sample 33 West Lethbridge	1.90	N	1.66	N	1.46	N	1.67	N
Sample 34 West Lethbridge							1.57	N
Sample 35 West Lethbridge	1.55	N					1.40	N
Sample 36 West Lethbridge	1.72	N	1.71	N	1.48	N	1.75	N
Sample 37 West Lethbridge	1.80	N	1.67	N				
Sample 38 West Lethbridge	1.56	N					1.88	N
Sample 39 West Lethbridge	0.48	N	1.49	N	1.20	N		
Sample 40 West Lethbridge	1.73	N	1.51	N	1.12	N	1.60	N
Sample 41 South Lethbridge			1.87	N				
Sample 42 South Lethbridge	1.58	N						
Sample 43 South Lethbridge	1.51	N						
Sample 44 South Lethbridge	1.47	N	1.50	N				
Sample 45 South Lethbridge	1.63	N	1.54	N	1.56	N	1.59	N
Sample 46 South Lethbridge			1.01	N	1.46	N		
Sample 47 South Lethbridge							1.78	N
Sample 48 South Lethbridge	1.68	N			1.32	N		
Sample 49 South Lethbridge			1.40	N				
Sample 50 South Lethbridge							1.46	N
Sample 51 South Lethbridge								
Sample 52 South Lethbridge			1.47	N	1.33	N		

Total Negative (N) = 104
Total Positive (P) = 0
Total Re-Samples = 0

Chlorine Residual Minimum = 0.48 mg/L
 Chlorine Residual Maximum = 2.10 mg/L
 Chlorine Residual Average = 1.54 mg/L