CITY OF Lethbridge

# Water Treatment Plant

August Report 2026

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 | 0.066 | 0.3 |
| Chloramines | mg/L | 1.87 | n/a[1] |
| Nitrate-N | mg/L | 0.05 | 10 |
| Fluoride | mg/L | 0.78 | 1.5 |
| Trihalomethanes | mg/L | 0.043 | 0.1 |
| Aluminum | mg/L | 0.100 | 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 | 154 | n/a[2] |
| TDS - total dissolved solids | mg/L | 181 | ≤ 500 |
| Sulfate | mg/L | 34.5 | ≤ 500 |
| Sodium | mg/L | 10.3 | ≤ 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 guidline 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

| | Aug 4/2026 | | Aug 10/2026 | | Aug 17/2026 | | Aug 24/2026 | |
|---|---|---|---|---|---|---|---|---|
| | 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 | 1.45 | N | | | 1.35 | N | 1.35 | N |
| Sample 2 North Lethbridge | 1.24 | N | | | 1.29 | N | 1.31 | N |
| Sample 3 North Lethbridge | 1.52 | N | 1.53 | N | 1.19 | N | 1.35 | N |
| Sample 4 North Lethbridge | 1.62 | N | | | | | 1.48 | N |
| Sample 5 North Lethbridge | | | 1.39 | N | | | | |
| Sample 6 North Lethbridge | | | | | | | | |
| Sample 7 North Lethbridge | 1.69 | N | 1.67 | N | 1.60 | N | 1.64 | N |
| Sample 8 North Lethbridge | | | | | | | | |
| Sample 9 North Lethbridge | | | 1.06 | N | | | | |
| Sample 10 North Lethbridge | | | 1.52 | N | 1.37 | N | 1.48 | N |
| Sample 11 North Lethbridge | 1.62 | N | 1.63 | N | | | 1.59 | N |
| Sample 12 North Lethbridge | 1.55 | N | 1.50 | N | | | 1.51 | N |
| Sample 13 North Lethbridge | 1.61 | N | 1.58 | N | 1.64 | N | 1.63 | N |
| Sample 14 North Lethbridge | 1.58 | N | | | | | 1.62 | N |
| Sample 15 North Lethbridge | | | | | | | | |
| Sample 16 North Lethbridge | 1.58 | N | | | 1.33 | N | | |
| Sample 17 North Lethbridge | 1.13 | N | | | 1.10 | N | 1.28 | N |
| Sample 18 North Lethbridge | | | | | | | | |
| Sample 19 North Lethbridge | | | | | 1.33 | N | | |
| Sample 20 South Lethbridge | | | 1.40 | N | 1.28 | N | | |
| Sample 21 South Lethbridge | | | 1.59 | N | 1.59 | N | | |
| Sample 22 South Lethbridge | 1.77 | N | 1.71 | N | 1.67 | N | 1.71 | N |
| Sample 23 South Lethbridge | | | 1.53 | N | | | | |
| Sample 24 South Lethbridge | | | | | | | | |
| Sample 25 South Lethbridge | 1.95 | N | 1.99 | N | 1.96 | N | 1.95 | N |

| | Aug 4/2026 | | Aug 11/2026 | | Aug 18/2026 | | Aug 25/2026 | |
|---|---|---|---|---|---|---|---|---|
| | 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 | | | 1.37 | N | 1.35 | N | | |
| Sample 27 West Lethbridge | 1.36 | N | 1.34 | N | | | 1.32 | N |
| Sample 28 West Lethbridge | | | | | | | | |
| Sample 29 West Lethbridge | 1.14 | N | | | | | 1.23 | N |
| Sample 30 West Lethbridge | | | | | | | | |
| Sample 31 West Lethbridge | | | | | | | | |
| Sample 32 West Lethbridge | | | 1.45 | N | | | 1.43 | N |
| Sample 33 West Lethbridge | 1.59 | N | 1.53 | N | 1.36 | N | 1.55 | N |
| Sample 34 West Lethbridge | | | | | | | | |
| Sample 35 West Lethbridge | | | | | | | | |
| Sample 36 West Lethbridge | 1.66 | N | 1.62 | N | 1.56 | N | 1.63 | N |
| Sample 37 West Lethbridge | 1.62 | N | | | 1.68 | N | | |
| Sample 38 West Lethbridge | | | 1.47 | N | 1.27 | N | | |
| Sample 39 West Lethbridge | 1.25 | N | 1.14 | N | 1.09 | N | 1.14 | N |
| Sample 40 West Lethbridge | | | | | 1.44 | N | | |
| Sample 41 South Lethbridge | | | | | 1.60 | N | | |
| Sample 42 South Lethbridge | | | 1.40 | N | 1.30 | N | 1.30 | N |
| Sample 43 South Lethbridge | 0.76 | N | | | | | 1.21 | N |
| Sample 44 South Lethbridge | 1.35 | N | 1.38 | N | | | | |
| Sample 45 South Lethbridge | 1.36 | N | 1.45 | N | 1.37 | N | 1.43 | N |
| Sample 46 South Lethbridge | | | | | 1.26 | N | | |
| Sample 47 South Lethbridge | 1.59 | N | 1.52 | N | 1.47 | N | 1.43 | N |
| Sample 48 South Lethbridge | | | 1.06 | N | | | | |
| Sample 49 South Lethbridge | | | | | 1.38 | N | 1.25 | N |
| Sample 50 South Lethbridge | 1.38 | N | | | | | 1.40 | N |
| Sample 51 South Lethbridge | 1.20 | N | 1.32 | N | | | | |
| Sample 52 South Lethbridge | 1.28 | N | | | | | 1.19 | N |

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

| | |
|---|---|
| **Chlorine Residual Minimum =** | **0.76 mg/L** |
| **Chlorine Residual Maximum =** | **1.99 mg/L** |
| **Chlorine Residual Average =** | **1.44 mg/L** |