



# Drinking Water Quality and Compliance Annual Notice to Consumers Town of Blaine Lake

## Introduction

---

The Water Security Agency and the Ministry of Environment requires that at least once each year waterworks owners provide notification to consumers of the quality of water produced and supplied as well as information on the performance of the waterworks in submitting samples as required by a Minister's Order or Permit to operate a waterworks.

The following is a summary of the *Town of Blaine Lake's* quality and sample submission compliance record for the 2024 time period. This report was completed on February 5, 2025.

Readers should refer to Water Security Agency's Municipal Drinking Water Quality Monitoring Guidelines, November 2002, EPB 2022 for more information on minimum sample submission requirements and the meaning of type of sample. Permit requirements for a specific waterworks may require more sampling than outlined in the departments monitoring guidelines. If consumers need more information on the nature and significance of specific water tests, for example, "what is the significance of Selenium in a water supply", more detailed information is available from: [http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index\\_e.html](http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index_e.html)

## Water Quality Standards

---

### Bacteriological Quality

The Town of Blaine Lake is responsible to ensure that bacteriological samples are submitted weekly as required by the permit to operate

Parameter/Location	Limit	Regular Samples Required	Regular Samples Submitted	# of Positive Regular Sample Submitted (%)
Total Coliform	0 Organisms/100 mL	52	52	0
E. Coli	0 Organisms/100 mL	52	52	0
Background Bacteria	Less than 200/100 mL	52	52	0

## Water Disinfection

### Total Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual OR 0.5 mg/L total chlorine residual is required at all times throughout the distribution system. A proper chlorine submission is a bacteriological sample submission form with both the free and total chlorine residual fields filled out. Adequate chlorine is a result that indicates that the chlorine level is above the regulated minimums. A waterworks is required to submit chlorine residual test results on every bacteriological sample they submit.

Parameter	Minimum Limit	Total Chlorine Residual Range	Free Chlorine Residual Range	# Tests Required	# Tests Submitted	# Adequate Chlorine (%)
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	0.5-1.34mg/L		52	52	100

### Total Chlorine Residual for Water Entering Distribution System from Waterworks Records

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual is required for water entering the distribution system. Tests are performed on a daily basis by the waterworks operator and are to be recorded in operation records. This data includes the number of free chlorine residual tests performed, the overall range of free chlorine residual (highest and lowest recorded values) and the number of tests and percentage of results not meeting the minimum requirement of 0.1 mg/L free chlorine residual.

Parameter	Limit (mg/L)	Test Level Range	# Tests Performed	# Tests Not Meeting Requirements
Free chlorine Residual	.0.1mg/l	>0.1 mg/l	365	0

### Turbidity – From Water Treatment Plant Records

Turbidity is a measure of water treatment efficiency and measures the “clarity” of the drinking water. It is reported in *Nephelometric Turbidity Units* (NTU's). All waterworks are required to monitor turbidity at the water treatment plant. The Town of Blaine Lake is required to measure turbidity daily from water entering the distribution system

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed
Turbidity		<1.00 NTU	0	0.45	365	365

## Chemical – Trihalomethanes (THMs) and Haloacetic Acids (HAAs)

THMs and Haloacetic Acids may be generated during the water disinfection process as a by-product of reactions between chlorine and organic material. THMs are generally found only in drinking water obtained from surface water supplies. THMs and HAAs are to be monitored on a quarterly basis and the IMAC result is expressed as an average of 4 quarterly samples as required by the permit to operate.

Parameter	THMs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1		4 (quarterly)	Not Required
Haloacetic Acid	0.08		4 (quarterly)	

## Objectives –potential of Hydrogen (pH) , Manganese, Conductivity

Objectives apply to certain characteristics of, or substances found in water for human consumptive or hygienic use. Compliance with drinking water objectives is not mandatory as these objectives are in the range where they do not constitute a health hazard.

Parameter	Objective Limit (mg/L)	Test Level range	# Tests Required	# Tests Performed
Ph	7.0 to 10.5	10.07-6.62	365	365
Manganese	0.05 AO*		24	52
Conductivity	0.00012	328-132	24	365

\*AO denotes aesthetic objective. The Aesthetic Objectives for several parameters (including hardness as CaCO<sub>3</sub>, magnesium, sodium and total dissolved solids) consider regional differences in drinking water quality.

**For more information on water quality and sample submission contact:**

Town of Blaine Lake  
301 Main Street  
Saskatchewan, S0J 0J0  
Phone: (306) 497-2531  
Email: [blainelake@sasktel.net](mailto:blainelake@sasktel.net)