Drinking Water Quality and Compliance Annual Notice to Consumers Town of Lampman Distribution System Station Number SK05ND0008

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 Lampman water quality and sample submission compliance record for the January 1, 2024 to December 31, 2024 time period. This report was completed on January 31, 2025. Readers should refer to Water Security Agency's Municipal Drinking Water Quality Monitoring Guidelines, June 2015, EPB 502 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 department's 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

Water Quality Standards Bacteriological Quality

Parameter	Limit	Regular Samples Required	Regular Samples Submitted	# of Positive Regular Sample Results
Total Coliform	Zero organisms/100 mL	51	51	0
E. Coli	Zero organisms/100 mL	51	51	0

Water Disinfection -

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

Parameter	Minimum Limit	Total Chlorine Residual Range	Free Chlorine Residual Range	# of Tests Required	# of Tests Submitted	# Of Tests Not Meeting Requirements
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	0.23-4.30	0.14-3.36	51	51	0

<u>Water Disinfection - Free Chlorine Residual for Water Entering Distribution System from Waterworks Records-From Water Treatment Plant Records</u>

Parameter	Limit (mg/L)	Test Level Range	# of Tests Performed	# Of Tests Not Meeting Requirements
Free Chlorine	Minimum 0.1 mg/L	.13-4.16	365	0

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual is required for water entering the distribution system. Tests are normally 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.

Turbidity - From Water Treatment Plant Records

Parameter	Limit NTU	Test Level Range	# of Tests Not Meeting Requirements	# of Tests Required	# of Tests Performed
Turbidity	1.0	.2-1.31	1	366	365

Chemical – Health Category

All waterworks serving less than 5000 persons are required to submit water samples for SE's Chemical Health category once every 2 years. The Chemical Health category includes analysis for arsenic, barium, boron, cadmium, chromium, fluoride, lead, nitrate, selenium and uranium.

The last sample for Chemical Health analysis was submitted on March 27, 2023. Sample results indicated that the provincial drinking water quality standards were not exceeded.

Parameter	Limit MAC	Units	Limit IMAC	Units	Sample Result (s)	Units	# of Samples Exceeding Limit	*Results
Arsenic	10.0	μg/L					0	average values
Barium	1.0	mg/L					0	for
Boron			5.0	mg/L			0	communities or
Bromate	10.0	μg/L					0	waterworks
Cadmium	5.0	μg/L					0	that fluoridate
Chlorate	1.0	mg/L					0	drinking water
Chlorite	1.0	mg/L					0	supplies or those with
Chromium	50.0	μg/L					0	elevated
Flouride (avg. *)	1.5	mg/L					0	concentrations
Lead	10.0	μg/L					0	of fluoride or
Nitrate (avg. *)	45.0	mg/L					0	nitrates.
Selenium	10.0	μg/L					0]
Uranium	20.0	μg/L					0]

Chemical - Trihalomethanes (THMs)and Haloacetic Acids (HAAs)

Parameter	Limit (mg/L)	Sample Result (average)	Units (mg/L or μg/L)	# of Samples Required	# of Samples Submitted
Trihalomethanes	0.1	.254	.254	4 (1 every 3 months)	1
Haloacetic Acid	0.08	.059	.059	4 (1 every 3 months)	1

General Chemical

Parameter	Aesthetic Objective (mg/L)	Sample Results (average)	Units (mg/L or µg/L)	# of Samples Required	# of Samples Submitted
Alkalinity	500	557			
Bicarbonate	No Objective				
Calcium	No Objective				
Carbonate	No Objective				
Chloride	250				
Conductivity	No Objective				
Hardness	800	377			
Magnesium	200				
pH	No Objective	7.7			
Sodium	300	643			
Sulphate	500	912.4			
Total Dissolved Solids	1500	2541			

All waterworks serving less than 5000 persons are required to submit water samples for SE's General Chemical category once every two years if a ground water source and once per three months every second year if a surface water or blended surface/groundwater source. The General Chemical category includes analysis for alkalinity, bicarbonate, calcium, carbonate, chloride, conductivity, hardness (as CaCO₃), magnesium, sodium, sulphate and total dissolved solids.

The last sample for General Chemical analysis was required June 30, 2023 and submitted on June 27, 2023. The last sets of quarterly samples for General Chemical analysis were required on March 31, June 30, Sept 30 Dec 30 2024 and were submitted on *January 10, 2024.* Samples exceeded provincial aesthetic objectives for the General Chemical category for the following parameters: *In Table above*

*Objectives apply to certain characteristics of or substances found in water for human consumptive or hygienic use. The presence of these substances will affect the acceptance of water by consumers and/or interfere with the practice of supplying good quality water. Compliance with drinking water aesthetic objectives is not mandatory as these objectives are in the range where they do not constitute a health hazards. The aesthetic objectives for several parameters (including hardness as CaCO₃, magnesium, sodium and total dissolved solids) consider regional differences in drinking water sources and quality.

More information on water quality and sample submission performance may be obtained from:

Town Of Lampman Box 40, Lampman, SK S0C1N0 306-487-2462 lampman@sasktel.net

June 2015 EPB 536D