

108 Waterworks Annual Report

In accordance with Interior Health Permit No. 14-124-00001 for 108 Waterworks, the following is an annual report on the status of the 108 Waterworks for the period of June 2022 to June 2023.

The report contains:

- An overview of maintenance for the system
- Average daily water flows
- Results of bacteriological and chemical water testing
- Groundwater Supply

Please forward questions or concerns to the Cariboo Regional District Environmental Services Department at (250) 392-3351 or 1-800-665-1636.

Electoral Areas

A – Red Bluff-Quesnel South • B – Quesnel West-Bouchie Lake-Ten Mile • C – Barlow-Bowron • D – Wildwood-McLeese Lake
E – Esler-Dog Creek • F – Horsefly-Likely-150 Mile House • G – Lac La Hache-108 Mile House • H – Canim Lake-Forest Grove
I – Narcosli-Nazko • J – West Chilcotin • K – East Chilcotin • L – Lone Butte-Interlakes

Municipalities

Quesnel • Wells • Williams Lake • 100 Mile House

108 Waterworks Maintenance Schedule

Maintenance Item	Frequency
Inspect treatment plant.	Daily
Check pump houses to ensure proper operation of the pumps and automatic pump-up system.	Twice per week
Inspect the total supply area for signs of leaks or abuse of the water system.	Weekly
Inspect back wash.	Twice per month
Service pumps including testing of any standby pumps, and any minor maintenance and cleanup.	Monthly
Obtain biological water samples and deliver to Interior Health.	Monthly
Check heating system in the pump houses.	During winter months
Inspect storage tanks for any signs of freezing or icing problems.	During winter months
Service all fire hydrants and standpipes and ensure clear access.	Annually
Flush distribution pipelines and exercise all isolating gate valves.	Annually
Clean, flush and disinfect storage tanks.	Annually
Obtain chemical water samples and deliver to Interior Health.	Annually
Clean reservoirs.	Annually
Clean inside of buildings, paint pipes as required and clear weeds around building.	Annually or as required
Test and inspect all new water connections, and attend to water service turn-off and turn-on.	As requested
Paint hydrants, standpipes and valve boxes.	As required
Attend to unscheduled inspections, emergency calls and repairs.	As required

**108 Waterworks
Average Daily Water Flows
June 2022 to June 2023**

<u>Month</u>	<u>Cubic Meters</u>	<u>Imperial Gallons</u>
June	680	149,579
July	340	74,789
August	1,397	307,297
September	not available	not available
October	583	128,242
November	515	113,284
December	253	55,652
January	560	123,183
February	537	118,123
March	562	123,535
April	596	131,190
May	1,028	226,128
June	1,337	294,055

**108 Waterworks
Microbiological Monthly Monitoring
June 2022 to June 2023**

2022	Sampling Point	Total Coliforms Results	E. coli Results	Chlorine (Range) mg/L
June	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.12 – 0.28
July	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.23 – 0.43
August	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.11 – 0.32
September	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.22 – 0.37
October	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.12 – 0.23
November	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.24 – 0.24
December	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.35 – 0.38

2023	Sampling Point	Total Coliforms Results	E. coli Results	Chlorine (Range) mg/L
January	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.40 – 0.76
February	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.42 – 0.47
March	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.28 – 0.53
April	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.11 – 0.22
May	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.10 – 0.36
June	108 Mall 108 WTP Sepa Well Kyllo Road	< 1 < 1 < 1 < 1	< 1 < 1 < 1 < 1	0.11 – 0.45

Bacteriological tests are performed routinely for total coliforms and E. coli. Potable water standards are outlined in [Schedule A](#) as per the Sec. 2 of the [Drinking Water Protection Regulation](#).

108 Waterworks Groundwater Supply and Treatment Plant

Construction of the water treatment plant to remove Manganese was completed in June 2018. The treatment plant is achieving greater than 95% removal of Manganese. Manganese concentration in raw water ranges between 0.4 mg/L and 0.5 mg/L and is about 0.015 mg/L after treatment. A new groundwater supply was drilled in November 2018, near the existing Well #2. The well was completed in the same aquifer as Well #2 and has similar water quality. The well was connected to the system in March of 2020. The water treatment plant was classified by EOCP in 2023 as WT II.