REGIONAL DISTRICT NORTH OKANAGAN

Delcliffe Water Utility - Water Quality Report for June 2025

1. Source

The Delcliffe water utility pumps raw water from Okanagan Lake through a screened intake line to a covered reservoir. The water is chlorinated with sodium hypochlorite as it enters the baffled reservoir. The reservoir provides chlorine contact time and the system is then fed from a booster station located at the reservoir. A raw (untreated) water sample is taken at the lake pump station at least once per month. Table 1 summarizes the results for bacterial and turbidity for the untreated water.

Table 1 Delcliffe Intake (untreated)

Parameter	Laboratory		# of Samples	# of Deviations	Result	Min	Max	Average[2]
E.coli[1]	RDNO Lab	MPN/100 mL	2[3]	-----	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	2[3]	-----	-----	16.1	19.9	18.0
Turbidity	Operator Grab Sample	NTU	1	-----	0.82	-----	-----	-----

[1]Drinking Water Treatment Objectives_ BC (Sec 4.3): The number of E. coli in raw water should not exceed 20/100 mL in at least 90% of samples from the previous six months.
[2]Averages using non detect samples use ½ the reporting limit for the calculation.
[3]Samples include a duplicate sample taken for quality assurance purposes.

2. Treatment Plant

The Delcliffe water utility uses chlorine disinfection only. Table 2 summarizes chlorine and turbidity levels at the point where the water enters the distribution system.

Table 2 Delcliffe Water Treatment SCADA Data

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
Free Chlorine[2]	SCADA[1] Daily Average	mg/L	30 Days	-----	0.64	1.90	1.64
Turbidity[2]	SCADA[1] Daily Average	NTU	30 Days	-----	0.40	0.80	0.51

[1]SCADA: Supervisory Control and Data Acquisition.
[2]Operation Guideline: As outlined in Deviation Response Plan - free chlorine >0.50 mg/L, turbidity <1.0 NTU.

3. Distribution

The Delcliffe water utility provides potable water to 30 residential connections. Most connected residents are seasonally occupied, with approximately 11 connections considered year-round or permanent. The population increases to an estimated one hundred and eighty (180) people during peak summer months. Table 3 summarizes the results for chlorine, turbidity, and bacteria for the distribution system. Table 4 summarizes the daily flow rates for this month.

Table 3 Delcliffe Distribution Parameters

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average[2]
Free Chlorine[1]	Operator Grab Sample	mg/L	8	-----	0.95	1.99	1.49
Total Chlorine[1]	Operator Grab Sample	mg/L	8	-----	1.14	2.30	1.73
E.coli	Caro	CFU/100 mL	5	-----	<1	<1	<1
E.coli	RDNO Lab	CFU/100 mL	3[3]	-----	<1	<1	<1
Total Coliform	Caro	CFU/100 mL	5	-----	<1	<1	<1
Total Coliform	RDNO Lab	CFU/100 mL	3[3]	-----	<1	<1	<1
Turbidity[1]	Operator Grab Sample	NTU	8	-----	0.71	1.29	0.95

[1]Operation Guideline: As outlined in Deviation Response Plan - free chlorine >0.20 mg/L, turbidity <1.0 NTU.
[2]Averages using non detect samples use ½ the reporting limit for the calculation.
[3]Additional samples were collected and ran at the RDNO Lab due to the BWN that was issued for the Delcliffe water system.

Table 4 Volumes for Delcliffe Distribution System over the Month

Volumes	Delcliffe
Min (ML/Day)	0.00
Max (ML/Day)	0.12
Average (ML/Day)	0.10
Monthly Total (ML)	2.86

4. Water Quality Customer Calls

Water Quality customer calls within the Delcliffe service area are tracked and recorded. There were no customer calls this month.

5. Localized WQA's and Other Activity

On June 17, 2025, immediate emergency water restrictions were put in place for the Delcliffe water system due to a water outage caused by an intake issue. Customers were advised that water was to be limited to essential household needs only: drinking, food preparation, toilets, or other personal essential uses. A Boil Water Notice (BWN) was issued due to the water outage. GVW supplemented the reservoir by using water hauling trucks to keep the

reservoir filled. On June 18, 2025, Operators and drivers managed to restore Delcliffe Water Systems pumping capacity and water restrictions were removed. The BWN was rescinded on June 20, 2025, after sampling was completed and showed no further threat to the water system.