



**Delcliffe Water Utility - Water Quality Report for August 2024**

**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
E.coli <sup>1</sup>	Caro	MPN/100 mL	1	-----	<1	-----	-----	-----
E.coli <sup>1</sup>	RDNO Lab	MPN/100 mL	2	-----	-----	<1	1	<1
Total Coliform	Caro	MPN/100 mL	1	-----	45	-----	-----	-----
Total Coliform	RDNO Lab	MPN/100 mL	2	-----	-----	69.7	83.6	76.7
Turbidity	GVW WQ Tech	NTU	1	-----	0.77	-----	-----	-----

<sup>1</sup>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 the weekly samples from the previous six months.

**2. Treatment Plant**

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

**Table 2 Delcliffe Water Treatment SCADA Data**

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
Free Chlorine <sup>2</sup>	SCADA <sup>1</sup> Daily Average	mg/L	31 Days	-----	1.47	2.04	1.76
Turbidity <sup>2</sup>	SCADA <sup>1</sup> Daily Average	NTU	31 Days	-----	0.30	0.58	0.41

<sup>1</sup>SCADA: Supervisory Control and Data Acquisition.

<sup>2</sup>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) persons 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
Free Chlorine <sup>1</sup>	Operator Grab Sample	mg/L	7	-----	1.53	1.95	1.77
Total Chlorine <sup>1</sup>	Operator Grab Sample	mg/L	7	-----	1.68	2.12	1.91
E.coli	Caro	CFU/100 mL	4	-----	<1	<1	<1
Total Coliform	Caro	CFU/100 mL	4	-----	<1	<1	<1
Turbidity <sup>1</sup>	Operator Grab Sample	NTU	7	-----	0.48	0.66	0.58

<sup>1</sup>Operation Guideline: As outlined in Deviation Response Plan - free chlorine >0.20 mg/L, turbidity <1.0 NTU.

**Table 4 Volumes for Delcliffe Distribution System over the Month**

Volumes	Delcliffe
Min (ML/Day)	0.08
Max (ML/Day)	0.16
Average (ML/Day)	0.12
Monthly Total (ML)	3.64

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**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.