

## Delcliffe Water Utility - Water Quality Report for December 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 <sup>2</sup> |
|---------------------------|----------------------|------------|----------------|-----------------|--------|-------|-------|----------------------|
| <b>E.coli<sup>1</sup></b> | RDNO Lab             | MPN/100 mL | 2 <sup>3</sup> | -----           | -----  | <1    | 1.0   | <1                   |
| <b>Total Coliform</b>     | RDNO Lab             | MPN/100 mL | 2 <sup>3</sup> | -----           | -----  | 2.0   | 3.1   | 2.6                  |
| <b>Turbidity</b>          | Operator Grab Sample | NTU        | 1              | -----           | 0.31   | ----- | ----- | -----                |

<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 samples from the previous six months.

<sup>2</sup>Averages using non detect samples use ½ the reporting limit for the calculation.

<sup>3</sup>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 |
|----------------------------------|-------------------------------------|------|--------------|-----------------|------|------|---------|
| <b>Free Chlorine<sup>2</sup></b> | SCADA <sup>1</sup><br>Daily Average | mg/L | 31 Days      | -----           | 1.62 | 1.98 | 1.76    |
| <b>Turbidity<sup>2</sup></b>     | SCADA <sup>1</sup><br>Daily Average | NTU  | 31 Days      | -----           | 0.20 | 0.27 | 0.22    |

<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) 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 <sup>2</sup> |
|-----------------------------------|----------------------|------------|--------------|-----------------|------|------|----------------------|
| <b>Free Chlorine<sup>1</sup></b>  | Operator Grab Sample | mg/L       | 4            | -----           | 1.69 | 1.84 | 1.77                 |
| <b>Total Chlorine<sup>1</sup></b> | Operator Grab Sample | mg/L       | 4            | -----           | 1.89 | 2.06 | 2.01                 |
| <b>E.coli</b>                     | Caro                 | CFU/100 mL | 4            | -----           | <1   | <1   | <1                   |
| <b>Total Coliform</b>             | Caro                 | CFU/100 mL | 4            | -----           | <1   | <1   | <1                   |
| <b>Turbidity<sup>1</sup></b>      | Operator Grab Sample | NTU        | 4            | -----           | 0.30 | 0.36 | 0.33                 |

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

<sup>2</sup>Averages using non detect samples use ½ the reporting limit for the calculation.

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

| Volumes                   | Delcliffe |
|---------------------------|-----------|
| <b>Min (ML/Day)</b>       | 0.04      |
| <b>Max (ML/Day)</b>       | 0.05      |
| <b>Average (ML/Day)</b>   | 0.05      |
| <b>Monthly Total (ML)</b> | 1.45      |

#### 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

Localized WQA's and other maintenance activities are tracked and recorded. There were no localized WQA's or other maintenance activities this month.