



# REGIONAL DISTRICT NORTH OKANAGAN

## Whitevale Water Utility Water Quality Report for May 2022

The following is the water quality summary for the Whitevale Water (WVW) Utility.

### 1. Source

The WVW system draws raw water from a groundwater well, Well 2 (well plate identification number (WPID) 16643 and well tag number (WTN) 90803 which is then chlorinated and pumped into an in-ground concrete reservoir. Water is then pumped into the distribution system. Tables 1 and 2 summarize the results for bacterial and turbidity for the untreated water at the treatment plant.

**Table 1 Whitevale Well 2 Bacteria**

| Parameter                   | Laboratory |            | # of Samples | # of Deviations | Result |
|-----------------------------|------------|------------|--------------|-----------------|--------|
| E.coli <sup>1</sup>         | Caro       | CFU/100 mL | 1            | -----           | <1     |
| Total Coliform <sup>1</sup> | Caro       | CFU/100 mL | 1            | -----           | <1     |

<sup>1</sup>Drinking Water Treatment Objectives (Microbiological) for Ground Water Supplies in BC (Sec 2.3): No detectable bacteria per 100 mL of drinking water. Where more than 1 sample is collected in a 30 day period the standard for total coliform is at least 90% of the samples may have no detectable total coliform per 100 mL and no sample has more than 10 total coliform bacteria per 100 mL.

**Table 2 Whitevale Well 2 Turbidity**

| Parameter              | Laboratory           |     | # of Samples | # of Deviations | Min  | Max  | Average |
|------------------------|----------------------|-----|--------------|-----------------|------|------|---------|
| Turbidity <sup>1</sup> | Operator Grab Sample | NTU | 9            | -----           | 0.05 | 0.08 | 0.06    |

<sup>1</sup>WQ Deviation Response Plan - Turbidity > 1 NTU

## 2. Treatment Plant

The Whitevale Water Utility utilizes chlorine disinfection only. Table 3 summarizes chlorine and turbidity levels from the sample line that comes off the reservoir outlet pipe that feeds the distribution system.

**Table 3 Whitevale Water Treatment Reservoir**

| Parameter                  | Laboratory                          |      | # of Samples | # of Deviations | Min  | Max  | Average |
|----------------------------|-------------------------------------|------|--------------|-----------------|------|------|---------|
| Free Chlorine <sup>2</sup> | SCADA <sup>1</sup><br>Daily Average | mg/L | 31 Days      | -----           | 0.81 | 0.96 | 0.85    |
| Turbidity <sup>2</sup>     | SCADA <sup>1</sup><br>Daily Average | NTU  | 31 Days      | -----           | 0.03 | 0.06 | 0.03    |

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

<sup>2</sup>WQ Deviation Response Plan - Free Chlorine <0.20 mg/L or >2.20 mg/L; Turbidity > 1.0 NTU

## 3. Distribution

WVW provides potable water to 92 residential connections and 1 institutional connection (not in use, supplies storage for fire suppression). There are no large scale industrial or irrigation customers on this system. Table 4 summarizes the results for chlorine, turbidity, and bacteria for the distribution system. The monthly water volume used at Whitevale this month was 3,203 m<sup>3</sup>.

**Table 4 Whitevale Distribution Parameters**

| Parameter                  | Laboratory              |               | # of Samples | # of Deviations | Min  | Max  | Average |
|----------------------------|-------------------------|---------------|--------------|-----------------|------|------|---------|
| Free Chlorine <sup>1</sup> | Operator<br>Grab Sample | mg/L          | 19           | -----           | 0.74 | 0.94 | 0.81    |
| Total Chlorine             | Operator<br>Grab Sample | mg/L          | 19           | -----           | 0.79 | 0.99 | 0.87    |
| Turbidity <sup>1</sup>     | Operator<br>Grab Sample | NTU           | 19           | -----           | 0.06 | 0.10 | 0.07    |
| E.coli                     | Caro                    | CFU/100<br>mL | 4            | -----           | <1   | <1   | <1      |
| Total Coliform             | Caro                    | CFU/100<br>mL | 4            | -----           | <1   | <1   | <1      |

<sup>1</sup>WQ Deviation Response Plan - Free Chlorine <0.20 mg/L or >2.20 mg/L; Turbidity > 1.0 NTU

**4. Customer Calls and Notifications**

Customer calls within the Whitevale Water Utility service area are tracked and recorded. There were no customer calls in May.

**5. Operational or Maintenance Activity**

Operational activities within the Whitevale Water service area are tracked and recorded. There were no distribution operational activities in May.