

## Grindrod Water (GRW) Water Quality Report for August 2025

The following is the water quality summary for the Grindrod Water (GRW) Utility.

### 1. Source

The GRW system draws raw water from the Shuswap River through a screened intake line to a wet well. The raw water is pumped from the wet well through a small treatment plant referred to as a package treatment plant and into a below ground storage reservoir. There is no elevated storage in the whole system and as a result pumps run continuously to maintain pressure. A generator provides water during a power outage. Table 1 summarizes the bacterial and turbidity results for the untreated water at the treatment plant.

**Table 1 Grindrod Water Treatment Plant – Untreated**

| Parameter      | Laboratory                       | Units      | # of Samples | # of Deviations | Result | Min   | Max   | Average |
|----------------|----------------------------------|------------|--------------|-----------------|--------|-------|-------|---------|
| E.coli         | CARO                             | MPN/100 mL | 1            | -----           | 19     | ----- | ----- | -----   |
| Total Coliform | CARO                             | MPN/100 mL | 1            | -----           | 548    | ----- | ----- | -----   |
| Turbidity      | Operator Grab Sample             | NTU        | 13           | -----           | -----  | 0.83  | 2.04  | 1.47    |
| Turbidity      | SCADA <sup>1</sup> Daily Average | NTU        | 31 Days      | -----           | -----  | 1.86  | 3.65  | 2.43    |

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

### 2. Treatment Plant

The Grindrod package water treatment plant was designed for a filter flow rate of 66 U.S. gpm (4.2 liters per second) but is operated at about 53 U.S. gpm (3.3 Lps). The flow rate is determined by the operating speed of the pump in the wet well and meeting the turbidity guidelines. The treatment plant consists of a hydraulic flocculation chamber, a tube settler/clarifier and a mixed media filter. The plant discharge turbidity is typically below 0.2 NTU. Table 2 summarizes the results for chlorine and turbidity for the treated water at the treatment plant.

**Table 2 Grindrod Water Treatment Plant - Treated**

| Parameter                  | Laboratory                          | Units      | # of Samples | # of Deviations | Result | Min  | Max  | Average |
|----------------------------|-------------------------------------|------------|--------------|-----------------|--------|------|------|---------|
| Free Chlorine <sup>2</sup> | SCADA <sup>1</sup><br>Daily Average | mg/L       | 31 Days      | -----           | -----  | 1.17 | 2.16 | 1.50    |
| Free Chlorine <sup>2</sup> | Operator<br>Grab Sample             | mg/L       | 13           | -----           | -----  | 1.12 | 1.75 | 1.44    |
| Total Chlorine             | Operator<br>Grab Sample             | mg/L       | 13           | -----           | -----  | 1.17 | 1.77 | 1.51    |
| E.coli                     | CARO <sup>3</sup>                   | CFU/100 mL | 2            | -----           | -----  | <1   | <1   | <1      |
| Total Coliform             | CARO <sup>3</sup>                   | CFU/100 mL | 2            | -----           | -----  | <1   | <1   | <1      |
| Turbidity <sup>2</sup>     | SCADA <sup>1</sup><br>Daily Average | NTU        | 31 Days      | -----           | -----  | 0.03 | 0.06 | 0.03    |
| Turbidity <sup>2</sup>     | Operator<br>Grab Sample             | NTU        | 13           | -----           | -----  | 0.08 | 0.23 | 0.14    |

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

<sup>2</sup>Operation Guideline: As outlined in Deviation Response Plan - free chlorine >0.20 mg/L; turbidity <1.0 NTU.

<sup>3</sup>Treatment Plant and Distribution bacterial samples are included in the required monthly bacterial sampling amounts as per Drinking Water Protection Regulations Schedule B.

### 3. Distribution

GRW provides potable water to 4 commercial, 3 institutional, 1 industrial, 1 recreational park, and 50 residential connections. The population served is approximately one hundred fifty (150). Table 3 summarizes the results for chlorine and turbidity for the distribution system from the following sample station locations: Fourth Ave, 135 3<sup>rd</sup> Ave, and James St. The amount of water volume used at Grindrod for July was 3467 m<sup>3</sup>.

**Table 3 Grindrod Distribution Parameters**

| Parameter                  | Laboratory              | Units      | # of Samples | # of Deviations | Result | Min  | Max  | Average |
|----------------------------|-------------------------|------------|--------------|-----------------|--------|------|------|---------|
| Free Chlorine <sup>1</sup> | Operator<br>Grab Sample | mg/L       | 13           | -----           | -----  | 0.94 | 1.61 | 1.38    |
| Total Chlorine             | Operator<br>Grab Sample | mg/L       | 13           | -----           | -----  | 1.05 | 1.76 | 1.47    |
| E.coli                     | CARO <sup>2</sup>       | CFU/100 mL | 2            | -----           | -----  | <1   | <1   | <1      |
| Total Coliform             | CARO <sup>2</sup>       | CFU/100 mL | 2            | -----           | -----  | <1   | <1   | <1      |
| Turbidity <sup>1</sup>     | Operator<br>Grab Sample | NTU        | 13           | -----           | -----  | 0.06 | 0.21 | 0.15    |

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

<sup>2</sup>Treatment Plant and Distribution bacterial samples are included in the required monthly bacterial sampling amounts as per Drinking Water Protection Regulations Schedule B.

**4. Water Quality Customer Calls and Notifications**

Customer calls within the Grindrod Water Utility service area are tracked and recorded. There were zero customer calls this month.

**Table 4 Water Quality Customer Calls for the month**

| # of Calls | Issue/Inquiry | Investigation | Comments |
|------------|---------------|---------------|----------|
| -----      | -----         | -----         | -----    |

**5. Operational or Maintenance Activity**

Operational activities within the Grindrod Water service area are tracked and recorded. There were zero distribution operational activity this month.

Table 5 outlines the routine distribution operational and maintenance activities during the month.

**Table 5 Monthly Operational Work and Maintenance**

| NUMBER OF LOCATIONS | TYPE OF WORK                          |
|---------------------|---------------------------------------|
| 0                   | Standpipe Maintenance                 |
| 0                   | Water Service Locate                  |
| 0                   | Water Main Break Repair               |
| 0                   | Water Service Install/Inspection      |
| 0                   | Water Turn On/Off                     |
| 0                   | Water Service and/or Curb Stop Repair |
| 0                   | Water Meter/ERT Install               |
| 0                   | Water Meter/ERT Inspection            |
| 0                   | Water Meter/ERT Maintenance           |
| 0                   | Water Meter/ERT Replacement           |
| 0                   | Water Meter Manual Read               |
| 0                   | Water Investigation                   |
| 0                   | Reservoir Cleaning                    |