

## Grindrod Water (GRW) Water Quality Report for September 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	CFU <sup>2</sup> /100 mL	1	-----	>200 <sup>2</sup>	-----	-----	-----
Total Coliform	CARO	CFU <sup>2</sup> /100 mL	1	-----	>200 <sup>2</sup>	-----	-----	-----
Turbidity	Operator Grab Sample	NTU	12	-----	-----	0.63	1.49	1.01
Turbidity	SCADA <sup>1</sup> Daily Average	NTU	30 Days	-----	-----	1.84	4.28	2.82

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

<sup>2</sup>CARO analyzed this sample in CFU/100mL method instead of MPN/100mL method, which resulted in overgrown Total Coliforms and E.coli.

### 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> Daily Average	mg/L	30 Days	-----	-----	1.04	1.45	1.24
Free Chlorine <sup>2</sup>	Operator Grab Sample	mg/L	12	-----	-----	1.32	1.77	1.52
Total Chlorine	Operator Grab Sample	mg/L	12	-----	-----	1.39	1.84	1.60
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> Daily Average	NTU	30 Days	-----	-----	0.04	0.06	0.05
Turbidity <sup>2</sup>	Operator Grab Sample	NTU	12	-----	-----	0.08	0.17	0.12

<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 2310 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 Grab Sample	mg/L	12	-----	-----	1.20	1.68	1.42
Total Chlorine	Operator Grab Sample	mg/L	12	-----	-----	1.27	1.79	1.50
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 Grab Sample	NTU	12	-----	-----	0.06	0.24	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
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**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