



# REGIONAL DISTRICT NORTH OKANAGAN

## Whitevale Water Utility Water Quality Report for January 2023

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

A Precautionary Boil Water Notice was issued on January 12, 2023 due to a power outage that caused a loss of water in the distribution system. The Precautionary Boil Water Notice was rescinded on January 18, 2023 after bacterial testing results and disinfection levels were confirmed to be within normal drinking water standards within the distribution system.

### 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	0.07	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> Daily Average	mg/L	31 Days	-----	0.70	0.84	0.79
Turbidity <sup>2</sup>	SCADA <sup>1</sup> Daily Average	NTU	31 Days	-----	0.04	0.07	0.05

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

<sup>2</sup>WQ Deviation Response Plan - Free Chlorine <0.20 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 3,362 m<sup>3</sup>.

**Table 4 Whitevale Distribution Parameters**

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
Free Chlorine <sup>1</sup>	Operator Grab Sample	mg/L	19	-----	0.71	0.83	0.75
Total Chlorine	Operator Grab Sample	mg/L	19	-----	0.74	0.88	0.81
Turbidity <sup>1</sup>	Operator Grab Sample	NTU	19	-----	0.05	0.11	0.08
E.coli	Caro	CFU/100 mL	9 <sup>2</sup>	-----	<1	<1	<1
E.coli	RDNO Lab	MPN/100 mL	9 <sup>2</sup>	-----	<1	<1	<1
Total Coliform	Caro	CFU/100 mL	9 <sup>2</sup>	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	9 <sup>2</sup>	-----	<1	<1	<1

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

<sup>2</sup>Additional bacterial testing was completed due to the power outage and subsequent Precautionary Boil Water Notice.

**4. Customer Calls and Notifications**

Customer calls within the Whitevale Water Utility service area are tracked and recorded. There was 4 customer calls this month.

**Table 5 Customer calls for the month**

# of Calls	Type of Call	Issue/Inquiry	Investigation	Comments
3	No Water	Water loss caused by power outage	Yes	A Precautionary Boil Water Notice was issued from January 12 to 18
1	Inquiry	Boil Water Notice	No	Customer was inquiring about the Precautionary Boil Water Notice

**5. Operational or Maintenance Activity**

Operational activities within the Whitevale Water service area are tracked and recorded. There was 1 distribution operational activity this month.

**Table 6 Monthly Operational Work and Maintenance**

NUMBER OF LOCATIONS	TYPE OF WORK
0	Hydrant Maintenance
0	Water Service Locate
0	Water Main Break Repair
0	Water Service Install
1	Water Turn On/Off
0	Water Curb Stop Repair
0	Water Meter Inspection
0	Water Meter Maintenance
0	Water Meter Replacement
0	Water Meter Manual Read
0	Water Investigation