



REGIONAL DISTRICT NORTH OKANAGAN

Whitevale Water Utility Water Quality Report for May 2019

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 which is then chlorinated and pumped into an in-ground concrete reservoir. Water is then pumped into the distribution system. Table 1 summarize the results for bacterial and turbidity for the untreated water at the treatment plant.

Table 1 Whitevale Well #2

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
E.coli ²	Caro	CFU/100 mL	1	-----	<1	<1	<1
Total Coliform	Caro	CFU/100 mL	1	-----	<1	<1	<1
Turbidity ¹	Operator Grab Sample	NTU	1	-----	0.11	0.11	0.11

¹Operation Guideline: As outlined in Deviation Response Plan, turbidity < 1 NTU

²Drinking Water Treatment Objectives_ BC (Sec 4.3): Determine number of raw water samples with E. coli >20 CFU. The number of E. coli in raw water does not exceed 20/100 mL in at least 90% of the weekly samples from the previous six months.

2. Treatment Plant

The Whitevale Water Utility utilizes chlorine disinfection only. Table 2 summarizes chlorine levels from the sample line that comes off the reservoir outlet pipe that feeds the distribution system.

Table 2 Whitevale Water Treatment Reservoir

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
Free Chlorine ²	SCADA ¹ Daily Average	mg/L	31 Days	-----	0.77	0.95	0.86

¹SCADA: Supervisory Control and Data Acquisition.

²WQ Deviation Response Plan - Free Chlorine <0.20 mg/L or >2.20 mg/L

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 3 summarize the results for chlorine, turbidity, and bacteria for the distribution system. The monthly water volume used at Whitevale in May was 4,360 m³.

Table 3 Whitevale Distribution Parameters

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
Free Chlorine	Operator Grab Sample	mg/L	6	-----	0.79	0.88	0.83
Total Chlorine	Operator Grab Sample	mg/L	6	-----	0.88	0.96	0.92
Turbidity	Operator Grab Sample	NTU	6	-----	0.09	0.16	0.10
E.coli	Caro	CFU/100 mL	4	-----	<1	<1	<1
Total Coliform	Caro	CFU/100 mL	4	-----	<1	<1	<1