

Outback Water System - Water Quality Report for May 2025

1. Source

The Outback water system consists of raw water pumps from Okanagan Lake, a screened intake, a booster station and a two celled reservoir. The booster station houses the ultraviolet (UV) reactor, sodium hypochlorite injection (chlorine), instrumentation, and booster pumps. A raw (untreated) water sample is taken at the lake pump station once a month. Table 1 summarizes the results for bacterial, turbidity and UV Transmittance (UVT) for the untreated water at the lake pump station.

Table 1 Outback Intake (untreated)

Parameter	Laboratory		# of Samples	# of Deviations	Result	Min	Max	Average ²
E.coli¹	RDNO Lab	MPN/100 mL	2	-----	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	2	-----	-----	1	2	1.5
Turbidity	Operator Grab Sample	NTU	1	-----	0.47	-----	-----	-----

¹Drinking Water Treatment Objectives_ BC (Sec 4.3): The number of E. coli in raw water should not exceed 20/100 mL in at least 90% of the samples from the previous six months.

²Averages using non detect samples use ½ the reporting limit for the calculation.

2. Treatment Plant

The Outback water system uses UV and chlorine disinfection to meet dual disinfection goals. Table 2 summarizes results for chlorine, bacterial, turbidity, and UVT.

Table 2 Outback Water Treatment Plant

Parameter	Laboratory	Units	# of Samples	# of Deviations	Min	Max	Average
Free Chlorine² (Reservoir)	Operator Grab Sample	mg/L	5	-----	1.27	1.76	1.46
Free Chlorine² (Reservoir)	SCADA ¹ Daily Average	mg/L	31 Days	-----	1.22	1.64	1.43
Total Chlorine (Reservoir)	Operator Grab Sample	mg/L	5	-----	1.45	1.94	1.65
E.coli (Reservoir)	Caro	CFU/100 mL	4	-----	<1	<1	<1
Total Coliform (Reservoir)	Caro	CFU/100 mL	4	-----	<1	<1	<1
Turbidity² (Reservoir)	Operator Grab Sample	NTU	5	-----	0.27	0.39	0.34
Turbidity ² (Reservoir)	SCADA ¹ Daily Average	NTU	31 Days	-----	0.16	0.26	0.21
UVT (Unfiltered) Booster³	SCADA ¹ Daily Average	%	31 Days	-----	82.7	87.4	85.7

¹SCADA: Supervisory Control and Data Acquisition.

²Operational guidelines based on GVW WQ Deviation Response Plan - free chlorine >0.50 mg/L turbidity <1 NTU.

³UVT (Unfiltered) is recorded continuously while booster is both on and off and is not always a representation of the raw water.

3. Distribution

The Outback water system is owned and operated by Greater Vernon Water, a service of the Regional District of North Okanagan. The water system supplies bulk water from the reservoir to the Outback Resort. The Outback Resort water distribution system is a “stand alone system” and the responsibility of the owner/ operator (Strata). Greater Vernon Water does not monitor the water quality within the Outback Resort water distribution system. Table 3 summarizes the daily flow rates for the month.

Table 3 Monthly Supply Volumes for Outback System over the Month

Volumes	Outback
Min (ML/Day)	0.00
Max (ML/Day)	0.38
Average (ML/Day)	0.07
Monthly Total (ML)	2.15

4. Water Quality Customer Calls and Notifications

There were no water quality customer calls from the Outback Resort this month.