

## Outback Water System - Water Quality Report for October 2024

### 1. Source

The Outback water system pumps raw water from Okanagan Lake through a screened intake line to a booster station. The booster station houses the Ultraviolet reactor, sodium hypochlorite injection, instrumentation, and booster pumps to pump water to a two celled reservoir. A raw (untreated) water sample is taken at the intake lake pump station approximately 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
<b>E.coli<sup>1</sup></b>	Caro	MPN/100 mL	1	-----	<1	-----	-----	-----
<b>E.coli<sup>1</sup></b>	RDNO Lab	MPN/100 mL	2	-----	-----	<1	<1	<1
<b>Total Coliform</b>	Caro	MPN/100 mL	1	-----	<1	-----	-----	-----
<b>Total Coliform</b>	RDNO Lab	MPN/100 mL	2	-----	-----	1.0	3.1	2.1
<b>Turbidity</b>	Operator Grab Sample	NTU	1	-----	0.98	-----	-----	-----

<sup>1</sup>Drinking 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 weekly samples from the previous six months.

## 2. Treatment Plants

The Outback water system uses Ultraviolet (UV) and chlorine disinfection. Table 2 summarizes results for chlorine, bacterial, turbidity, and UV Transmittance (UVT).

**Table 2 Outback Water Treatment Plant**

Parameter	Laboratory	Units	# of Samples	# of Deviations	Min	Max	Average
Free Chlorine <sup>2</sup> (Reservoir)	Operator Grab Sample	mg/L	5	-----	1.07	1.28	1.21
Free Chlorine <sup>2</sup> (Reservoir)	SCADA <sup>1</sup> Daily Average	mg/L	31 Days	-----	1.08	1.73	1.38
Total Chlorine (Reservoir)	Operator Grab Sample	mg/L	5	-----	1.29	1.45	1.38
E.coli (Reservoir)	Caro	CFU/100 mL	5	-----	<1	<1	<1
Total Coliform (Reservoir)	Caro	CFU/100 mL	5	-----	<1	<1	<1
Turbidity <sup>2</sup> (Reservoir)	Operator Grab Sample	NTU	5	-----	0.25	0.32	0.29
Turbidity <sup>2</sup> (Reservoir)	SCADA <sup>1</sup> Daily Average	NTU	31 Days	-----	0.15	0.18	0.17
UVT (Unfiltered) Booster <sup>3</sup>	SCADA <sup>1</sup> Daily Average	%	31 Days	-----	87.96	91.37	89.58

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

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

<sup>3</sup>UVT (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 in the Outback Resort (Strata). 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)	0.28
Average (ML/Day)	0.04
Monthly Total (ML)	1.18

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

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