

## Outback Water System - Water Quality Report for August 2023

### 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
E.coli <sup>2</sup>	Caro	MPN/100 mL	1	-----	<1	-----	-----	-----
E.coli <sup>2</sup>	RDNO Lab	MPN/100 mL	2	-----	-----	<1	<1	<1
Total Coliform	Caro	MPN/100 mL	1	-----	727	-----	-----	-----
Total Coliform	RDNO Lab	MPN/100 mL	2	-----	-----	816.4	980.4	898.4
Turbidity <sup>1</sup>	GVW WQ Tech	NTU	2	-----	-----	0.34	0.59	0.47

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

<sup>2</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	6	-----	1.44	1.59	1.50
Free Chlorine <sup>2</sup> (Reservoir)	SCADA <sup>1</sup> Daily Average	mg/L	31 Days	-----	1.23	1.67	1.50
Total Chlorine (Reservoir)	Operator Grab Sample	mg/L	6	-----	1.55	1.76	1.66
E.coli (Reservoir)	RDNO Lab	MPN/100 mL	6	-----	<1	<1	<1
E.coli (Reservoir)	Caro	CFU/100 mL	1	-----	<1	<1	<1
Total Coliform (Reservoir)	RDNO Lab	MP/100 mL	6	-----	<1	<1	<1
Total Coliform (Reservoir)	Caro	CFU/100 mL	1	-----	<1	<1	<1
Turbidity <sup>2</sup> (Reservoir)	Operator Grab Sample	NTU	6	-----	0.28	0.35	0.31
Turbidity <sup>2</sup> (Reservoir)	SCADA <sup>1</sup> Daily Average	NTU	31 Days	-----	0.18	0.24	0.21
UVT (Unfiltered) Booster	SCADA <sup>1</sup> Daily Average	%	31 Days	-----	87.16	91.52	89.71

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

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

## 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 (the 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)	0.40
Average (ML/Day)	0.16
Monthly Total (ML)	4.93

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

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

**Table 4 Customer calls for the month**

# of Calls	Type of Call	Issue/Inquiry	Investigation	Comments
0	-----	-----	-----	-----