

## Outback Water System - Water Quality Report for February 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 (source)**

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	1	-----	<1	-----	-----	-----
Total Coliform	Caro	MPN/100 mL	1	-----	<1	-----	-----	-----
Total Coliform	RDNO Lab	MPN/100 mL	1	-----	<1	-----	-----	-----
Turbidity <sup>1</sup>	Operator Grab Sample	NTU	1	-----	0.31	-----	-----	-----

<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	4	-----	1.54	1.70	1.60
Free Chlorine <sup>2</sup> (Reservoir)	SCADA <sup>1</sup> Daily Average	mg/L	28 Days	-----	1.57	1.83	1.70
Total Chlorine (Reservoir)	Operator Grab Sample	mg/L	4	-----	1.74	1.82	1.78
E.coli (Reservoir)	Caro	CFU/100 mL	4	-----	<1	<1	<1
Total Coliform (Reservoir)	Caro	CFU/100 mL	4	-----	<1	<1	<1
Turbidity <sup>2</sup> (Reservoir)	Operator Grab Sample	NTU	4	-----	0.10	0.18	0.14
Turbidity <sup>2</sup> (Reservoir)	SCADA <sup>1</sup> Daily Average	NTU	28 Days	-----	0.10	0.12	0.11
UVT (Unfiltered) Booster	SCADA <sup>1</sup> Daily Average	%	28 Days	-----	87.76	91.40	89.58

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

<sup>2</sup>GVW WQ Deviation Response Plan - free chlorine < 0.20 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)	0.26
Average (ML/Day)	0.04
Monthly Total (ML)	1.03

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

There were 0 water quality calls from the Outback Resort this month.

**Table 4 Customer calls for the month**

# of Calls	Type of Call	Issue/Inquiry	Investigation	Comments
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