

Outback Water System - Water Quality Report for January 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 |
|------------------------------|-------------|------------|--------------|-----------------|--------|-------|-------|---------|
| E.coli² | Caro | MPN/100 mL | 1 | ----- | <1 | ----- | ----- | ----- |
| E.coli² | RDNO Lab | MPN/100 mL | 2 | ----- | ----- | <1 | <1 | <1 |
| Total Coliform | Caro | MPN/100 mL | 1 | ----- | 1 | ----- | ----- | ----- |
| Total Coliform | RDNO Lab | MPN/100 mL | 2 | ----- | ----- | <1 | <1 | <1 |
| Turbidity¹ | GVW WQ Tech | NTU | 1 | ----- | 0.26 | ----- | ----- | ----- |

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

²Drinking 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 ² (Reservoir) | Operator Grab Sample | mg/L | 5 | ----- | 1.39 | 1.76 | 1.55 |
| Free Chlorine ² (Reservoir) | SCADA ¹ Daily Average | mg/L | 31 Days | ----- | 1.29 | 1.98 | 1.60 |
| Total Chlorine (Reservoir) | Operator Grab Sample | mg/L | 5 | ----- | 1.53 | 1.88 | 1.71 |
| E.coli (Reservoir) | Caro | CFU/100 mL | 6 | ----- | <1 | <1 | <1 |
| Total Coliform (Reservoir) | Caro | CFU/100 mL | 6 | ----- | <1 | <1 | <1 |
| Turbidity ² (Reservoir) | Operator Grab Sample | NTU | 5 | ----- | 0.18 | 0.21 | 0.20 |
| Turbidity ² (Reservoir) | SCADA ¹ Daily Average | NTU | 31 Days | ----- | 0.12 | 0.15 | 0.13 |
| UVT (Unfiltered) Booster | SCADA ¹ Daily Average | % | 31 Days | ----- | 75.33 | 92.50 | 90.05 |

¹SCADA: Supervisory Control and Data Acquisition.

²Operational guidelines based on 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 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) | 0.32 |
| Average (ML/Day) | 0.04 |
| Monthly Total (ML) | 1.22 |

4. Water Quality Customer Calls and Notifications

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