Outback Intake Water Quality 2022

Water System: Greater Vernon Water

Source: Okanagan Lake

Facility: Outback Lake Station

Sampling Point: Outback Lake Station (1729C)

Date of Sample: 7/25/2022



| Date of Sample: | 7/25/2022 | | |
|---|---|---|--|
| | | Canadian Drinking Water Guidelines | |
| Anions | Results (mg/L) | Maximum Acceptable Concentration (MAC) | Aesthetic Objective (AO) Operational Guideline (OG) |
| Chloride | 5.42 | • | <250 |
| Fluoride | 0.17 | 1.5 | |
| Nitrate (As N) | 0.059 | 10 | |
| Nitrite (as N) | < 0.010 | 1 | |
| Sulphate | 30.2 | | <u><</u> 500 |
| General Parameters | Results (mg/L) | Maximum Acceptable Concentration (MAC) | Aesthetic Objective (AO) Operational Guideline (OG) |
| Alkalinity, Bicarbonate (as CaCO3) | 121 | N/A | |
| Alkalinity, Carbonate (as CaCO3) | < 1.0 | N/A | |
| Alkalinity, Hydroxide (as CaCO3) | < 1.0 | N/A | |
| Alkalinity, Phenolphthalein (as CaCO3) | < 1.0 | N/A | |
| Alkalinity, Total (as CaCO3) | 121 | N/A | |
| Carbon, Dissolved Organic | 4.01 | N/A | |
| Carbon, Total Organic | 4.31 | N/A | |
| Chlorophyll a | 1.3 | N/A | |
| Colour, True | 6.9 | N/A | <u>≤</u> 15 TCU |
| Conductivity (EC) | 280 | N/A | |
| Cyanide, Total | < 0.0020 | 0.2 | |
| Nitrogen, Total Kjeldahl | 0.224 | N/A | |
| pH | 8.10 | N/A | 7.0 - 10.5 |
| Phosphorus, Total (as P) | 0.0076 | N/A | |
| Phosphorus, Total Dissolved | 0.0062 | N/A | |
| Turbidity | 0.33 | | OG <1 |
| Calculated Parameters | Results (mg/L) | Maximum Acceptable Concentration (MAC) | Aesthetic Objective (AO) Operational Guideline (OG) |
| | | | |
| Hardness, Total | 127 | N/A | |
| Hardness, Total Total Dissolved Solids | 127 174 | | <u><</u> 500 |
| | 1 | | ≤500 Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids | 174 | N/A Maximum Acceptable | Aesthetic Objective (AO) |
| Total Dissolved Solids Total Metals | 174 Results (mg/L unless noted) | N/A Maximum Acceptable Concentration (MAC) | Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids Total Metals Aluminum, total | 174 Results (mg/L unless noted) 0.009 | N/A Maximum Acceptable Concentration (MAC) N/A | Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 | Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 | Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 | Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 | Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.00010 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 | Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A | Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 | Aesthetic Objective (AO) Operational Guideline (OG) |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00050 < 0.00010 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A | Aesthetic Objective (AO) Operational Guideline (OG) OG ≤0.1 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00050 < 0.00010 0.00123 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 2 N/A 0.005 | Aesthetic Objective (AO) Operational Guideline (OG) OG ≤0.1 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 2 N/A 0.005 N/A 0.005 N/A | Aesthetic Objective (AO) Operational Guideline (OG) OG ≤0.1 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total Manganese, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 < 0.00020 9.76 0.00103 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 2 N/A 0.005 N/A 0.005 N/A 0.12 | Aesthetic Objective (AO) Operational Guideline (OG) OG ≤0.1 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total Manganese, total Mercury, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 < 0.00020 9.76 0.00103 < 0.00103 < 0.00010 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 2 N/A 0.005 N/A 0.005 N/A 0.010 1 2 0.001 | Aesthetic Objective (AO) Operational Guideline (OG) OG <0.1 <p><1</p> <0.3 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total Manganese, total Mercury, total Molybdenum, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 < 0.00020 9.76 0.00103 < 0.00103 < 0.00010 0.00332 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 2 N/A 0.005 N/A 0.005 N/A 0.001 1 0.001 N/A 0.005 N/A | Aesthetic Objective (AO) Operational Guideline (OG) OG <0.1 <p><1</p> <0.3 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total Marcury, total Molybdenum, total Nickel, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 < 0.00020 9.76 0.00103 < 0.00103 < 0.00010 0.00332 0.00059 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 2 N/A 0.005 N/A 0.005 N/A 0.001 N/A 0.005 | Aesthetic Objective (AO) Operational Guideline (OG) OG <0.1 <p><1</p> <0.3 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total Magnesee, total Mercury, total Molybdenum, total Nickel, total Potassium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 < 0.00020 9.76 0.00103 < 0.00103 < 0.00010 0.00332 0.00059 2.44 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 2 N/A 0.005 N/A 0.005 N/A 0.001 N/A 0.005 N/A 0.005 | Aesthetic Objective (AO) Operational Guideline (OG) OG <0.1 <p><1</p> <0.3 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total Manganese, total Mercury, total Mickel, total Potassium, total Selenium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 < 0.00020 9.76 0.00103 < 0.00103 < 0.00010 0.00332 0.00039 2.44 < 0.00050 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 0.005 N/A 0.005 N/A 0.001 1 1 1 1 1 1 1 1 1 1 1 1 | Aesthetic Objective (AO) Operational Guideline (OG) OG ≤0.1 <1 ≤0.3 ≤0.02 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total Magnese, total Mercury, total Mickel, total Potassium, total Selenium, total Selenium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 < 0.00020 9.76 0.00103 < 0.00103 < 0.00010 0.00332 0.00059 2.44 < 0.00050 11.6 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 0.005 N/A 0.12 0.001 N/A N/A N/A N/A N/A N/A N/A N/ | Aesthetic Objective (AO) Operational Guideline (OG) OG <0.1 <p><1</p> <0.3 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total Magnese, total Mercury, total Mickel, total Potassium, total Selenium, total Selenium, total Sodium, total Strontium, total Strontium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 < 0.00020 9.76 0.00103 < 0.00103 < 0.00010 0.00332 0.00059 2.44 < 0.00050 11.6 0.268 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 2 N/A 0.005 N/A 0.12 0.001 N/A N/A N/A N/A N/A N/A N/A N/ | Aesthetic Objective (AO) Operational Guideline (OG) OG ≤0.1 <1 ≤0.3 ≤0.02 |
| Total Dissolved Solids Total Metals Aluminum, total Antimony, total Arsenic, total Barium, total Boron, total Cadmium, total Calcium, total Chromium, total Cobalt, total Copper, total Iron, total Lead, total Magnesium, total Magnese, total Mercury, total Mickel, total Potassium, total Selenium, total Selenium, total | 174 Results (mg/L unless noted) 0.009 < 0.00020 <0.00050 0.0204 < 0.0500 <0.000010 34.5 < 0.00050 < 0.00010 0.00123 < 0.010 < 0.00020 9.76 0.00103 < 0.00103 < 0.00010 0.00332 0.00059 2.44 < 0.00050 11.6 | N/A Maximum Acceptable Concentration (MAC) N/A 0.006 0.01 1 5 0.005 N/A 0.05 N/A 0.005 N/A 0.12 0.001 N/A N/A N/A N/A N/A N/A N/A N/ | Aesthetic Objective (AO) Operational Guideline (OG) OG ≤0.1 <1 ≤0.3 ≤0.02 |

Notes: No current Guideline ; Reference Health Canada

Hardness - no guideline - "Hardness Levels between 80 and 100 mg/L as CaCo3 are considered acceptable; levels

greater than 200 are considered poor but can be tolerated; those in excess of 500 are normally considered unacceptable.

Turbidity - 1 NTU when disinfection required; <5 NTU aesthetic clarity

[&]quot;<" = less than detection limit shown

[&]quot;>" = greater than upper range limit shown

[&]quot;«" = less than number shown (Detected)

[&]quot;»" = greater than number shown (Detected)

^{*} Criteria Exceeded