# CERTIFICATE OF ANALYSIS

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|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards<br>1631 Mable Lake Rd<br>Lumby, BC V0E 2G6 | | |
| **ATTENTION** | Russ Collins | **WORK ORDER** | 9052351 |
| **PO NUMBER** | Mid Shuswap Lumby Water Stewards | **RECEIVED / TEMP** | 2019-05-27 09:05 / 7°C |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |
| **PROJECT INFO** | | **COC NUMBER** | 40837.5581 |

**Introduction:**

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO 17025:2005 for specific tests listed in the scope of accreditation approved by CALA.

*Big Picture Sidekicks*

You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

*We've Got Chemistry*

It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

*Ahead of the Curve*

Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

*If you have any questions or concerns, please contact me at estclair@caro.ca*

**Authorized By:**

Eilish St.Clair, B.Sc., C.I.T.
Client Service Representative

CARO ANALYTICAL SERVICES

# TEST RESULTS

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|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Harris Creek (Hwy 6) (9052351-01) \| Matrix: Water \| Sampled: 2019-05-26 11:45** | | | | | | FILT, PRES |
| ***Anions*** | | | | | | |
| Chloride | **0.29** | AO ≤ 250 | 0.10 | mg/L | 2019-05-27 | |
| Nitrate (as N) | **0.015** | MAC = 10 | 0.010 | mg/L | 2019-05-27 | |
| Nitrite (as N) | < 0.010 | MAC = 1 | 0.010 | mg/L | 2019-05-27 | |
| Sulfate | **4.8** | AO ≤ 500 | 1.0 | mg/L | 2019-05-27 | |
| ***Calculated Parameters*** | | | | | | |
| Hardness, Total (as CaCO3) | **22.3** | None Required | 0.100 | mg/L | N/A | |
| Nitrate+Nitrite (as N) | **0.0153** | N/A | 0.0100 | mg/L | N/A | |
| Nitrogen, Total | **0.298** | N/A | 0.0500 | mg/L | N/A | |
| ***General Parameters*** | | | | | | |
| Ammonia, Total (as N) | **0.035** | None Required | 0.020 | mg/L | 2019-05-29 | |
| Conductivity (EC) | **49.3** | N/A | 2.0 | µS/cm | 2019-05-28 | |
| Nitrogen, Total Kjeldahl | **0.283** | N/A | 0.050 | mg/L | 2019-05-30 | |
| pH | **7.33** | 7.0-10.5 | 0.10 | pH units | 2019-05-28 | HT2 |
| Phosphorus, Total (as P) | **0.0226** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Phosphorus, Total Dissolved | **0.0114** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Turbidity | **2.09** | OG < 1 | 0.10 | NTU | 2019-05-28 | |
| ***Microbiological Parameters*** | | | | | | |
| Coliforms, Total | **410** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| Background Colonies | **> 200** | N/A | 200 | CFU/100 mL | 2019-05-27 | |
| E. coli | **33** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| ***Total Metals*** | | | | | | |
| Aluminum, total | **252** | OG < 100 | 2.0 | µg/L | 2019-05-30 | |
| Antimony, total | < 0.050 | MAC = 6 | 0.050 | µg/L | 2019-05-30 | |
| Arsenic, total | **0.297** | MAC = 10 | 0.050 | µg/L | 2019-05-30 | |
| Barium, total | **7.96** | MAC = 1000 | 0.10 | µg/L | 2019-05-30 | |
| Beryllium, total | **0.016** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Bismuth, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Boron, total | < 2.0 | MAC = 5000 | 2.0 | µg/L | 2019-05-30 | |
| Cadmium, total | **0.0099** | MAC = 5 | 0.0020 | µg/L | 2019-05-30 | |
| Calcium, total | **6200** | N/A | 40 | µg/L | 2019-05-30 | |
| Chromium, total | **0.45** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Cobalt, total | **0.157** | N/A | 0.0050 | µg/L | 2019-05-30 | |
| Copper, total | **1.83** | AO ≤ 1000 | 0.20 | µg/L | 2019-05-30 | |
| Iron, total | **299** | AO ≤ 300 | 2.0 | µg/L | 2019-05-30 | |
| Lead, total | **0.091** | MAC = 5 | 0.050 | µg/L | 2019-05-30 | |
| Lithium, total | **1.46** | N/A | 0.050 | µg/L | 2019-05-30 | |
| Magnesium, total | **1650** | N/A | 5.0 | µg/L | 2019-05-30 | |
| Manganese, total | **13.7** | MAC = 120 | 0.050 | µg/L | 2019-05-30 | |
| Mercury, total | < 0.000010 | MAC = 0.001 | 0.000010 | mg/L | 2019-05-29 | |

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# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Harris Creek (Hwy 6) (9052351-01) \| Matrix: Water \| Sampled: 2019-05-26 11:45, Continued** | | | | | | FILT, PRES |
| ***Total Metals, Continued*** | | | | | | |
| Molybdenum, total | **0.470** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Nickel, total | **4.93** | N/A | 0.040 | µg/L | 2019-05-30 | |
| Phosphorus, total | **24** | N/A | 10 | µg/L | 2019-05-30 | |
| Potassium, total | **840** | N/A | 10 | µg/L | 2019-05-30 | |
| Selenium, total | **0.13** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Silicon, total | **5220** | N/A | 100 | µg/L | 2019-05-30 | |
| Silver, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Sodium, total | **1760** | AO ≤ 200000 | 20 | µg/L | 2019-05-30 | |
| Strontium, total | **37.8** | N/A | 0.10 | µg/L | 2019-05-30 | |
| Sulfur, total | **1500** | N/A | 1000 | µg/L | 2019-05-30 | |
| Tellurium, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Thallium, total | **0.0042** | N/A | 0.0040 | µg/L | 2019-05-30 | |
| Thorium, total | **0.036** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Tin, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Titanium, total | **12.1** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Tungsten, total | < 0.20 | N/A | 0.20 | µg/L | 2019-05-30 | |
| Uranium, total | **0.198** | MAC = 20 | 0.0010 | µg/L | 2019-05-30 | |
| Vanadium, total | **1.31** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Zinc, total | **2.0** | AO ≤ 5000 | 1.0 | µg/L | 2019-05-30 | |
| Zirconium, total | **0.491** | N/A | 0.020 | µg/L | 2019-05-30 | |
| **Duteau Creek (Hwy 6) (9052351-02) \| Matrix: Water \| Sampled: 2019-05-26 11:30** | | | | | | |
| ***Anions*** | | | | | | |
| Chloride | **4.30** | AO ≤ 250 | 0.10 | mg/L | 2019-05-27 | |
| Nitrate (as N) | **0.471** | MAC = 10 | 0.010 | mg/L | 2019-05-27 | |
| Nitrite (as N) | < 0.010 | MAC = 1 | 0.010 | mg/L | 2019-05-27 | |
| Sulfate | **18.8** | AO ≤ 500 | 1.0 | mg/L | 2019-05-27 | |
| ***Calculated Parameters*** | | | | | | |
| Hardness, Total (as CaCO3) | **81.1** | None Required | 0.100 | mg/L | N/A | |
| Nitrate+Nitrite (as N) | **0.471** | N/A | 0.0100 | mg/L | N/A | |
| Nitrogen, Total | **0.865** | N/A | 0.0500 | mg/L | N/A | |
| ***General Parameters*** | | | | | | |
| Ammonia, Total (as N) | **0.023** | None Required | 0.020 | mg/L | 2019-05-29 | |
| Conductivity (EC) | **177** | N/A | 2.0 | µS/cm | 2019-05-28 | |
| Nitrogen, Total Kjeldahl | **0.394** | N/A | 0.050 | mg/L | 2019-05-30 | |
| pH | **7.88** | 7.0-10.5 | 0.10 | pH units | 2019-05-28 | HT2 |
| Phosphorus, Total (as P) | **0.0313** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Phosphorus, Total Dissolved | **0.0122** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Turbidity | **2.49** | OG < 1 | 0.10 | NTU | 2019-05-28 | |

# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Duteau Creek (Hwy 6) (9052351-02) \| Matrix: Water \| Sampled: 2019-05-26 11:30, Continued** | | | | | | |
| ***Microbiological Parameters*** | | | | | | |
| Coliforms, Total | 2400 | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| Background Colonies | **> 200** | N/A | 200 | CFU/100 mL | 2019-05-27 | |
| E. coli | 200 | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | MIC15 |
| ***Total Metals*** | | | | | | |
| Aluminum, total | **122** | OG < 100 | 2.0 | µg/L | 2019-05-30 | |
| Antimony, total | < 0.050 | MAC = 6 | 0.050 | µg/L | 2019-05-30 | |
| Arsenic, total | **0.376** | MAC = 10 | 0.050 | µg/L | 2019-05-30 | |
| Barium, total | **21.1** | MAC = 1000 | 0.10 | µg/L | 2019-05-30 | |
| Beryllium, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Bismuth, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Boron, total | **3.9** | MAC = 5000 | 2.0 | µg/L | 2019-05-30 | |
| Cadmium, total | **0.0119** | MAC = 5 | 0.0020 | µg/L | 2019-05-30 | |
| Calcium, total | **24200** | N/A | 40 | µg/L | 2019-05-30 | |
| Chromium, total | **0.45** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Cobalt, total | **0.175** | N/A | 0.0050 | µg/L | 2019-05-30 | |
| Copper, total | **1.34** | AO ≤ 1000 | 0.20 | µg/L | 2019-05-30 | |
| Iron, total | **457** | AO ≤ 300 | 2.0 | µg/L | 2019-05-30 | |
| Lead, total | **0.072** | MAC = 5 | 0.050 | µg/L | 2019-05-30 | |
| Lithium, total | **2.32** | N/A | 0.050 | µg/L | 2019-05-30 | |
| Magnesium, total | **5020** | N/A | 5.0 | µg/L | 2019-05-30 | |
| Manganese, total | **71.8** | MAC = 120 | 0.050 | µg/L | 2019-05-30 | |
| Mercury, total | < 0.000010 | MAC = 0.001 | 0.000010 | mg/L | 2019-05-29 | |
| Molybdenum, total | **1.79** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Nickel, total | **1.03** | N/A | 0.040 | µg/L | 2019-05-30 | |
| Phosphorus, total | **36** | N/A | 10 | µg/L | 2019-05-30 | |
| Potassium, total | **1970** | N/A | 10 | µg/L | 2019-05-30 | |
| Selenium, total | **0.73** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Silicon, total | **5650** | N/A | 100 | µg/L | 2019-05-30 | |
| Silver, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Sodium, total | **4230** | AO ≤ 200000 | 20 | µg/L | 2019-05-30 | |
| Strontium, total | **152** | N/A | 0.10 | µg/L | 2019-05-30 | |
| Sulfur, total | **6000** | N/A | 1000 | µg/L | 2019-05-30 | |
| Tellurium, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Thallium, total | < 0.0040 | N/A | 0.0040 | µg/L | 2019-05-30 | |
| Thorium, total | **0.023** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Tin, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Titanium, total | **8.45** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Tungsten, total | < 0.20 | N/A | 0.20 | µg/L | 2019-05-30 | |
| Uranium, total | **0.974** | MAC = 20 | 0.0010 | µg/L | 2019-05-30 | |
| Vanadium, total | **0.87** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Zinc, total | **1.6** | AO ≤ 5000 | 1.0 | µg/L | 2019-05-30 | |
| Zirconium, total | **0.288** | N/A | 0.020 | µg/L | 2019-05-30 | |

CARO ANALYTICAL SERVICES

# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Mid Bessette Creek (9052351-03) \| Matrix: Water \| Sampled: 2019-05-26 11:00** | | | | | | FILT, PRES |
| ***Anions*** | | | | | | |
| Chloride | **1.24** | AO ≤ 250 | 0.10 | mg/L | 2019-05-27 | |
| Nitrate (as N) | **0.074** | MAC = 10 | 0.010 | mg/L | 2019-05-27 | |
| Nitrite (as N) | < 0.010 | MAC = 1 | 0.010 | mg/L | 2019-05-27 | |
| Sulfate | **9.2** | AO ≤ 500 | 1.0 | mg/L | 2019-05-27 | |
| ***Calculated Parameters*** | | | | | | |
| Hardness, Total (as CaCO3) | **44.0** | None Required | 0.100 | mg/L | N/A | |
| Nitrate+Nitrite (as N) | **0.0737** | N/A | 0.0100 | mg/L | N/A | |
| Nitrogen, Total | **0.356** | N/A | 0.0500 | mg/L | N/A | |
| ***General Parameters*** | | | | | | |
| Ammonia, Total (as N) | **0.044** | None Required | 0.020 | mg/L | 2019-05-29 | |
| Conductivity (EC) | **97.9** | N/A | 2.0 | µS/cm | 2019-05-28 | |
| Nitrogen, Total Kjeldahl | **0.282** | N/A | 0.050 | mg/L | 2019-05-30 | |
| pH | **7.67** | 7.0-10.5 | 0.10 | pH units | 2019-05-28 | HT2 |
| Phosphorus, Total (as P) | **0.0359** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Phosphorus, Total Dissolved | **0.0155** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Turbidity | **4.15** | OG < 1 | 0.10 | NTU | 2019-05-28 | |
| ***Microbiological Parameters*** | | | | | | |
| Coliforms, Total | **1100** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| Background Colonies | **> 200** | N/A | 200 | CFU/100 mL | 2019-05-27 | |
| E. coli | **130** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| ***Total Metals*** | | | | | | |
| Aluminum, total | **367** | OG < 100 | 2.0 | µg/L | 2019-05-30 | |
| Antimony, total | < 0.050 | MAC = 6 | 0.050 | µg/L | 2019-05-30 | |
| Arsenic, total | **0.421** | MAC = 10 | 0.050 | µg/L | 2019-05-30 | |
| Barium, total | **14.3** | MAC = 1000 | 0.10 | µg/L | 2019-05-30 | |
| Beryllium, total | **0.020** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Bismuth, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Boron, total | < 2.0 | MAC = 5000 | 2.0 | µg/L | 2019-05-30 | |
| Cadmium, total | **0.0238** | MAC = 5 | 0.0020 | µg/L | 2019-05-30 | |
| Calcium, total | **13400** | N/A | 40 | µg/L | 2019-05-30 | |
| Chromium, total | **0.70** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Cobalt, total | **0.286** | N/A | 0.0050 | µg/L | 2019-05-30 | |
| Copper, total | **1.99** | AO ≤ 1000 | 0.20 | µg/L | 2019-05-30 | |
| Iron, total | **558** | AO ≤ 300 | 2.0 | µg/L | 2019-05-30 | |
| Lead, total | **0.149** | MAC = 5 | 0.050 | µg/L | 2019-05-30 | |
| Lithium, total | **1.80** | N/A | 0.050 | µg/L | 2019-05-30 | |
| Magnesium, total | **2580** | N/A | 5.0 | µg/L | 2019-05-30 | |
| Manganese, total | **28.7** | MAC = 120 | 0.050 | µg/L | 2019-05-30 | |

# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Mid Bessette Creek (9052351-03) \| Matrix: Water \| Sampled: 2019-05-26 11:00, Continued** | | | | | | FILT, PRES |
| ***Total Metals, Continued*** | | | | | | |
| Mercury, total | < 0.000010 | MAC = 0.001 | 0.000010 | mg/L | 2019-05-29 | |
| Molybdenum, total | **0.837** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Nickel, total | **4.28** | N/A | 0.040 | µg/L | 2019-05-30 | |
| Phosphorus, total | **43** | N/A | 10 | µg/L | 2019-05-30 | |
| Potassium, total | **1030** | N/A | 10 | µg/L | 2019-05-30 | |
| Selenium, total | **0.54** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Silicon, total | **5430** | N/A | 100 | µg/L | 2019-05-30 | |
| Silver, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Sodium, total | **2280** | AO ≤ 200000 | 20 | µg/L | 2019-05-30 | |
| Strontium, total | **87.8** | N/A | 0.10 | µg/L | 2019-05-30 | |
| Sulfur, total | **2900** | N/A | 1000 | µg/L | 2019-05-30 | |
| Tellurium, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Thallium, total | **0.0059** | N/A | 0.0040 | µg/L | 2019-05-30 | |
| Thorium, total | **0.041** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Tin, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Titanium, total | **20.3** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Tungsten, total | < 0.20 | N/A | 0.20 | µg/L | 2019-05-30 | |
| Uranium, total | **0.402** | MAC = 20 | 0.0010 | µg/L | 2019-05-30 | |
| Vanadium, total | **1.45** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Zinc, total | **5.7** | AO ≤ 5000 | 1.0 | µg/L | 2019-05-30 | |
| Zirconium, total | **0.447** | N/A | 0.020 | µg/L | 2019-05-30 | |
| **Lower Bessette Creek (9052351-04) \| Matrix: Water \| Sampled: 2019-05-26 10:30** | | | | | | FILT, PRES |
| ***Anions*** | | | | | | |
| Chloride | **1.30** | AO ≤ 250 | 0.10 | mg/L | 2019-05-27 | |
| Nitrate (as N) | **0.087** | MAC = 10 | 0.010 | mg/L | 2019-05-27 | |
| Nitrite (as N) | < 0.010 | MAC = 1 | 0.010 | mg/L | 2019-05-27 | |
| Sulfate | **10.1** | AO ≤ 500 | 1.0 | mg/L | 2019-05-27 | |
| ***Calculated Parameters*** | | | | | | |
| Hardness, Total (as CaCO3) | **46.9** | None Required | 0.100 | mg/L | N/A | |
| Nitrate+Nitrite (as N) | **0.0869** | N/A | 0.0100 | mg/L | N/A | |
| Nitrogen, Total | **0.455** | N/A | 0.0500 | mg/L | N/A | |
| ***General Parameters*** | | | | | | |
| Ammonia, Total (as N) | **0.023** | None Required | 0.020 | mg/L | 2019-05-29 | |
| Conductivity (EC) | **103** | N/A | 2.0 | µS/cm | 2019-05-28 | |
| Nitrogen, Total Kjeldahl | **0.368** | N/A | 0.050 | mg/L | 2019-05-30 | |
| pH | **7.70** | 7.0-10.5 | 0.10 | pH units | 2019-05-28 | HT2 |
| Phosphorus, Total (as P) | **0.0502** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Phosphorus, Total Dissolved | **0.0160** | N/A | 0.0020 | mg/L | 2019-06-02 | |

# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Lower Bessette Creek (9052351-04) \| Matrix: Water \| Sampled: 2019-05-26 10:30, Continued** | | | | | | FILT, PRES |
| ***General Parameters, Continued*** | | | | | | |
| Turbidity | **6.50** | OG < 1 | 0.10 | NTU | 2019-05-28 | |
| ***Microbiological Parameters*** | | | | | | |
| Coliforms, Total | **1300** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| Background Colonies | **> 200** | N/A | 200 | CFU/100 mL | 2019-05-27 | |
| E. coli | **110** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| ***Total Metals*** | | | | | | |
| Aluminum, total | **553** | OG < 100 | 2.0 | µg/L | 2019-05-30 | |
| Antimony, total | < 0.050 | MAC = 6 | 0.050 | µg/L | 2019-05-30 | |
| Arsenic, total | **0.502** | MAC = 10 | 0.050 | µg/L | 2019-05-30 | |
| Barium, total | **16.8** | MAC = 1000 | 0.10 | µg/L | 2019-05-30 | |
| Beryllium, total | **0.029** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Bismuth, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Boron, total | < 2.0 | MAC = 5000 | 2.0 | µg/L | 2019-05-30 | |
| Cadmium, total | **0.0364** | MAC = 5 | 0.0020 | µg/L | 2019-05-30 | |
| Calcium, total | **14100** | N/A | 40 | µg/L | 2019-05-30 | |
| Chromium, total | **1.10** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Cobalt, total | **0.426** | N/A | 0.0050 | µg/L | 2019-05-30 | |
| Copper, total | **2.52** | AO ≤ 1000 | 0.20 | µg/L | 2019-05-30 | |
| Iron, total | **844** | AO ≤ 300 | 2.0 | µg/L | 2019-05-30 | |
| Lead, total | **0.249** | MAC = 5 | 0.050 | µg/L | 2019-05-30 | |
| Lithium, total | **2.08** | N/A | 0.050 | µg/L | 2019-05-30 | |
| Magnesium, total | **2810** | N/A | 5.0 | µg/L | 2019-05-30 | |
| Manganese, total | **37.9** | MAC = 120 | 0.050 | µg/L | 2019-05-30 | |
| Mercury, total | < 0.000010 | MAC = 0.001 | 0.000010 | mg/L | 2019-05-29 | |
| Molybdenum, total | **0.897** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Nickel, total | **4.65** | N/A | 0.040 | µg/L | 2019-05-30 | |
| Phosphorus, total | **49** | N/A | 10 | µg/L | 2019-05-30 | |
| Potassium, total | **1130** | N/A | 10 | µg/L | 2019-05-30 | |
| Selenium, total | **0.60** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Silicon, total | **5890** | N/A | 100 | µg/L | 2019-05-30 | |
| Silver, total | **0.012** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Sodium, total | **2420** | AO ≤ 200000 | 20 | µg/L | 2019-05-30 | |
| Strontium, total | **95.5** | N/A | 0.10 | µg/L | 2019-05-30 | |
| Sulfur, total | **3200** | N/A | 1000 | µg/L | 2019-05-30 | |
| Tellurium, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Thallium, total | **0.0089** | N/A | 0.0040 | µg/L | 2019-05-30 | |
| Thorium, total | **0.064** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Tin, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Titanium, total | **32.4** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Tungsten, total | < 0.20 | N/A | 0.20 | µg/L | 2019-05-30 | |
| Uranium, total | **0.460** | MAC = 20 | 0.0010 | µg/L | 2019-05-30 | |

# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Lower Bessette Creek (9052351-04) \| Matrix: Water \| Sampled: 2019-05-26 10:30, Continued** | | | | | | FILT, PRES |
| ***Total Metals, Continued*** | | | | | | |
| Vanadium, total | **1.97** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Zinc, total | **4.2** | AO ≤ 5000 | 1.0 | µg/L | 2019-05-30 | |
| Zirconium, total | **0.485** | N/A | 0.020 | µg/L | 2019-05-30 | |
| **Shuswap River (Wilsey Dam) (9052351-05) \| Matrix: Water \| Sampled: 2019-05-26 10:10** | | | | | | FILT, PRES |
| ***Anions*** | | | | | | |
| Chloride | **0.23** | AO ≤ 250 | 0.10 | mg/L | 2019-05-27 | |
| Nitrate (as N) | **0.081** | MAC = 10 | 0.010 | mg/L | 2019-05-27 | |
| Nitrite (as N) | < 0.010 | MAC = 1 | 0.010 | mg/L | 2019-05-27 | |
| Sulfate | **4.1** | AO ≤ 500 | 1.0 | mg/L | 2019-05-27 | |
| ***Calculated Parameters*** | | | | | | |
| Hardness, Total (as CaCO3) | **32.5** | None Required | 0.100 | mg/L | N/A | |
| Nitrate+Nitrite (as N) | **0.0807** | N/A | 0.0100 | mg/L | N/A | |
| Nitrogen, Total | **0.271** | N/A | 0.0500 | mg/L | N/A | |
| ***General Parameters*** | | | | | | |
| Ammonia, Total (as N) | **0.022** | None Required | 0.020 | mg/L | 2019-05-29 | |
| Conductivity (EC) | **68.0** | N/A | 2.0 | µS/cm | 2019-05-28 | |
| Nitrogen, Total Kjeldahl | **0.190** | N/A | 0.050 | mg/L | 2019-05-30 | |
| pH | **7.61** | 7.0-10.5 | 0.10 | pH units | 2019-05-28 | HT2 |
| Phosphorus, Total (as P) | **0.0159** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Phosphorus, Total Dissolved | **0.0026** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Turbidity | **2.72** | OG < 1 | 0.10 | NTU | 2019-05-28 | |
| ***Microbiological Parameters*** | | | | | | |
| Coliforms, Total | **290** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| Background Colonies | **> 200** | N/A | 200 | CFU/100 mL | 2019-05-27 | |
| E. coli | **16** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| ***Total Metals*** | | | | | | |
| Aluminum, total | **190** | OG < 100 | 2.0 | µg/L | 2019-05-30 | |
| Antimony, total | < 0.050 | MAC = 6 | 0.050 | µg/L | 2019-05-30 | |
| Arsenic, total | **0.230** | MAC = 10 | 0.050 | µg/L | 2019-05-30 | |
| Barium, total | **8.75** | MAC = 1000 | 0.10 | µg/L | 2019-05-30 | |
| Beryllium, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Bismuth, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Boron, total | < 2.0 | MAC = 5000 | 2.0 | µg/L | 2019-05-30 | |
| Cadmium, total | **0.0179** | MAC = 5 | 0.0020 | µg/L | 2019-05-30 | |
| Calcium, total | **10900** | N/A | 40 | µg/L | 2019-05-30 | |
| Chromium, total | **0.59** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |

# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Shuswap River (Wilsey Dam) (9052351-05) \| Matrix: Water \| Sampled: 2019-05-26 10:10, Continued** | | | | | | FILT, PRES |
| ***Total Metals, Continued*** | | | | | | |
| Cobalt, total | **0.162** | N/A | 0.0050 | µg/L | 2019-05-30 | |
| Copper, total | **0.78** | AO ≤ 1000 | 0.20 | µg/L | 2019-05-30 | |
| Iron, total | **269** | AO ≤ 300 | 2.0 | µg/L | 2019-05-30 | |
| Lead, total | **0.113** | MAC = 5 | 0.050 | µg/L | 2019-05-30 | |
| Lithium, total | **0.679** | N/A | 0.050 | µg/L | 2019-05-30 | |
| Magnesium, total | **1270** | N/A | 5.0 | µg/L | 2019-05-30 | |
| Manganese, total | **11.6** | MAC = 120 | 0.050 | µg/L | 2019-05-30 | |
| Mercury, total | < 0.000010 | MAC = 0.001 | 0.000010 | mg/L | 2019-05-29 | |
| Molybdenum, total | **0.558** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Nickel, total | **0.579** | N/A | 0.040 | µg/L | 2019-05-30 | |
| Phosphorus, total | **14** | N/A | 10 | µg/L | 2019-05-30 | |
| Potassium, total | **605** | N/A | 10 | µg/L | 2019-05-30 | |
| Selenium, total | **0.30** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Silicon, total | **3110** | N/A | 100 | µg/L | 2019-05-30 | |
| Silver, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Sodium, total | **775** | AO ≤ 200000 | 20 | µg/L | 2019-05-30 | |
| Strontium, total | **50.1** | N/A | 0.10 | µg/L | 2019-05-30 | |
| Sulfur, total | **1300** | N/A | 1000 | µg/L | 2019-05-30 | |
| Tellurium, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Thallium, total | **0.0050** | N/A | 0.0040 | µg/L | 2019-05-30 | |
| Thorium, total | **0.018** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Tin, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Titanium, total | **8.78** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Tungsten, total | < 0.20 | N/A | 0.20 | µg/L | 2019-05-30 | |
| Uranium, total | **0.281** | MAC = 20 | 0.0010 | µg/L | 2019-05-30 | |
| Vanadium, total | **0.72** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Zinc, total | **1.9** | AO ≤ 5000 | 1.0 | µg/L | 2019-05-30 | |
| Zirconium, total | **0.076** | N/A | 0.020 | µg/L | 2019-05-30 | |
| **Shuswap River (Odd Fellows) (9052351-06) \| Matrix: Water \| Sampled: 2019-05-26 09:30** | | | | | | FILT, PRES |
| ***Anions*** | | | | | | |
| Chloride | **0.41** | AO ≤ 250 | 0.10 | mg/L | 2019-05-27 | |
| Nitrate (as N) | **0.072** | MAC = 10 | 0.010 | mg/L | 2019-05-27 | |
| Nitrite (as N) | < 0.010 | MAC = 1 | 0.010 | mg/L | 2019-05-27 | |
| Sulfate | **5.3** | AO ≤ 500 | 1.0 | mg/L | 2019-05-27 | |
| ***Calculated Parameters*** | | | | | | |
| Hardness, Total (as CaCO3) | **37.6** | None Required | 0.100 | mg/L | N/A | |
| Nitrate+Nitrite (as N) | **0.0721** | N/A | 0.0100 | mg/L | N/A | |
| Nitrogen, Total | **0.217** | N/A | 0.0500 | mg/L | N/A | |

CARO ANALYTICAL SERVICES

# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Shuswap River (Odd Fellows) (9052351-06) \| Matrix: Water \| Sampled: 2019-05-26 09:30, Continued** | | | | | | FILT, PRES |
| ***General Parameters*** | | | | | | |
| Ammonia, Total (as N) | **0.021** | None Required | 0.020 | mg/L | 2019-05-29 | |
| Conductivity (EC) | **78.9** | N/A | 2.0 | µS/cm | 2019-05-28 | |
| Nitrogen, Total Kjeldahl | **0.145** | N/A | 0.050 | mg/L | 2019-05-30 | |
| pH | **7.65** | 7.0-10.5 | 0.10 | pH units | 2019-05-28 | HT2 |
| Phosphorus, Total (as P) | **0.0207** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Phosphorus, Total Dissolved | **0.0023** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Turbidity | **3.69** | OG < 1 | 0.10 | NTU | 2019-05-28 | |
| ***Microbiological Parameters*** | | | | | | |
| Coliforms, Total | **300** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| Background Colonies | **> 200** | N/A | 200 | CFU/100 mL | 2019-05-27 | |
| E. coli | **59** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| ***Total Metals*** | | | | | | |
| Aluminum, total | **212** | OG < 100 | 2.0 | µg/L | 2019-05-30 | |
| Antimony, total | < 0.050 | MAC = 6 | 0.050 | µg/L | 2019-05-30 | |
| Arsenic, total | **0.285** | MAC = 10 | 0.050 | µg/L | 2019-05-30 | |
| Barium, total | **10.2** | MAC = 1000 | 0.10 | µg/L | 2019-05-30 | |
| Beryllium, total | **0.011** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Bismuth, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Boron, total | < 2.0 | MAC = 5000 | 2.0 | µg/L | 2019-05-30 | |
| Cadmium, total | **0.0216** | MAC = 5 | 0.0020 | µg/L | 2019-05-30 | |
| Calcium, total | **12400** | N/A | 40 | µg/L | 2019-05-30 | |
| Chromium, total | **0.61** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Cobalt, total | **0.174** | N/A | 0.0050 | µg/L | 2019-05-30 | |
| Copper, total | **0.96** | AO ≤ 1000 | 0.20 | µg/L | 2019-05-30 | |
| Iron, total | **320** | AO ≤ 300 | 2.0 | µg/L | 2019-05-30 | |
| Lead, total | **0.123** | MAC = 5 | 0.050 | µg/L | 2019-05-30 | |
| Lithium, total | **0.871** | N/A | 0.050 | µg/L | 2019-05-30 | |
| Magnesium, total | **1580** | N/A | 5.0 | µg/L | 2019-05-30 | |
| Manganese, total | **16.3** | MAC = 120 | 0.050 | µg/L | 2019-05-30 | |
| Mercury, total | < 0.000010 | MAC = 0.001 | 0.000010 | mg/L | 2019-05-29 | |
| Molybdenum, total | **0.668** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Nickel, total | **0.858** | N/A | 0.040 | µg/L | 2019-05-30 | |
| Phosphorus, total | **17** | N/A | 10 | µg/L | 2019-05-30 | |
| Potassium, total | **705** | N/A | 10 | µg/L | 2019-05-30 | |
| Selenium, total | **0.33** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Silicon, total | **3440** | N/A | 100 | µg/L | 2019-05-30 | |
| Silver, total | **0.012** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Sodium, total | **1070** | AO ≤ 200000 | 20 | µg/L | 2019-05-30 | |
| Strontium, total | **61.1** | N/A | 0.10 | µg/L | 2019-05-30 | |
| Sulfur, total | **1500** | N/A | 1000 | µg/L | 2019-05-30 | |
| Tellurium, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |

CARO ANALYTICAL SERVICES

# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Shuswap River (Odd Fellows) (9052351-06) \| Matrix: Water \| Sampled: 2019-05-26 09:30, Continued** | | | | | | FILT, PRES |
| ***Total Metals, Continued*** | | | | | | |
| Thallium, total | **0.0042** | N/A | 0.0040 | µg/L | 2019-05-30 | |
| Thorium, total | **0.020** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Tin, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Titanium, total | **9.59** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Tungsten, total | < 0.20 | N/A | 0.20 | µg/L | 2019-05-30 | |
| Uranium, total | **0.307** | MAC = 20 | 0.0010 | µg/L | 2019-05-30 | |
| Vanadium, total | **0.84** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Zinc, total | **2.6** | AO ≤ 5000 | 1.0 | µg/L | 2019-05-30 | |
| Zirconium, total | **0.103** | N/A | 0.020 | µg/L | 2019-05-30 | |
| **Vance Creek (Mabel Lake Road) (9052351-07) \| Matrix: Water \| Sampled: 2019-05-26 11:15** | | | | | | FILT, PRES |
| ***Anions*** | | | | | | |
| Chloride | **1.73** | AO ≤ 250 | 0.10 | mg/L | 2019-05-27 | |
| Nitrate (as N) | **0.049** | MAC = 10 | 0.010 | mg/L | 2019-05-27 | |
| Nitrite (as N) | < 0.010 | MAC = 1 | 0.010 | mg/L | 2019-05-27 | |
| Sulfate | **26.1** | AO ≤ 500 | 1.0 | mg/L | 2019-05-27 | |
| ***Calculated Parameters*** | | | | | | |
| Hardness, Total (as CaCO3) | **146** | None Required | 0.100 | mg/L | N/A | |
| Nitrate+Nitrite (as N) | **0.0490** | N/A | 0.0100 | mg/L | N/A | |
| Nitrogen, Total | **0.127** | N/A | 0.0500 | mg/L | N/A | |
| ***General Parameters*** | | | | | | |
| Ammonia, Total (as N) | **0.028** | None Required | 0.020 | mg/L | 2019-05-29 | |
| Conductivity (EC) | **276** | N/A | 2.0 | µS/cm | 2019-05-28 | |
| Nitrogen, Total Kjeldahl | **0.078** | N/A | 0.050 | mg/L | 2019-05-30 | |
| pH | **8.22** | 7.0-10.5 | 0.10 | pH units | 2019-05-28 | HT2 |
| Phosphorus, Total (as P) | **0.0195** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Phosphorus, Total Dissolved | **0.0038** | N/A | 0.0020 | mg/L | 2019-06-02 | |
| Turbidity | **7.24** | OG < 1 | 0.10 | NTU | 2019-05-28 | |
| ***Microbiological Parameters*** | | | | | | |
| Coliforms, Total | **90** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| Background Colonies | **> 200** | N/A | 200 | CFU/100 mL | 2019-05-27 | |
| E. coli | **1** | MAC = 0 | 1 | CFU/100 mL | 2019-05-27 | |
| ***Total Metals*** | | | | | | |
| Aluminum, total | **206** | OG < 100 | 2.0 | µg/L | 2019-05-30 | |
| Antimony, total | **0.068** | MAC = 6 | 0.050 | µg/L | 2019-05-30 | |
| Arsenic, total | **0.556** | MAC = 10 | 0.050 | µg/L | 2019-05-30 | |
| Barium, total | **31.3** | MAC = 1000 | 0.10 | µg/L | 2019-05-30 | |

# TEST RESULTS

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analyte | Result | Guideline | RL | Units | Analyzed | Qualifier |
|---|---|---|---|---|---|---|
| **Vance Creek (Mabel Lake Road) (9052351-07) \| Matrix: Water \| Sampled: 2019-05-26 11:15, Continued** | | | | | | FILT, PRES |
| ***Total Metals, Continued*** | | | | | | |
| Beryllium, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Bismuth, total | < 0.010 | N/A | 0.010 | µg/L | 2019-05-30 | |
| Boron, total | < 2.0 | MAC = 5000 | 2.0 | µg/L | 2019-05-30 | |
| Cadmium, total | **0.0860** | MAC = 5 | 0.0020 | µg/L | 2019-05-30 | |
| Calcium, total | **50100** | N/A | 40 | µg/L | 2019-05-30 | |
| Chromium, total | **0.55** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Cobalt, total | **0.264** | N/A | 0.0050 | µg/L | 2019-05-30 | |
| Copper, total | **1.39** | AO ≤ 1000 | 0.20 | µg/L | 2019-05-30 | |
| Iron, total | **422** | AO ≤ 300 | 2.0 | µg/L | 2019-05-30 | |
| Lead, total | **0.165** | MAC = 5 | 0.050 | µg/L | 2019-05-30 | |
| Lithium, total | **1.74** | N/A | 0.050 | µg/L | 2019-05-30 | |
| Magnesium, total | **4970** | N/A | 5.0 | µg/L | 2019-05-30 | |
| Manganese, total | **12.6** | MAC = 120 | 0.050 | µg/L | 2019-05-30 | |
| Mercury, total | < 0.000010 | MAC = 0.001 | 0.000010 | mg/L | 2019-05-29 | |
| Molybdenum, total | **1.61** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Nickel, total | **0.731** | N/A | 0.040 | µg/L | 2019-05-30 | |
| Phosphorus, total | **20** | N/A | 10 | µg/L | 2019-05-30 | |
| Potassium, total | **1040** | N/A | 10 | µg/L | 2019-05-30 | |
| Selenium, total | **3.25** | MAC = 50 | 0.10 | µg/L | 2019-05-30 | |
| Silicon, total | **5450** | N/A | 100 | µg/L | 2019-05-30 | |
| Silver, total | **0.013** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Sodium, total | **2080** | AO ≤ 200000 | 20 | µg/L | 2019-05-30 | |
| Strontium, total | **329** | N/A | 0.10 | µg/L | 2019-05-30 | |
| Sulfur, total | **8300** | N/A | 1000 | µg/L | 2019-05-30 | |
| Tellurium, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Thallium, total | < 0.0040 | N/A | 0.0040 | µg/L | 2019-05-30 | |
| Thorium, total | **0.024** | N/A | 0.010 | µg/L | 2019-05-30 | |
| Tin, total | < 0.050 | N/A | 0.050 | µg/L | 2019-05-30 | |
| Titanium, total | **4.30** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Tungsten, total | < 0.20 | N/A | 0.20 | µg/L | 2019-05-30 | |
| Uranium, total | **0.761** | MAC = 20 | 0.0010 | µg/L | 2019-05-30 | |
| Vanadium, total | **0.72** | N/A | 0.20 | µg/L | 2019-05-30 | |
| Zinc, total | **2.9** | AO ≤ 5000 | 1.0 | µg/L | 2019-05-30 | |
| Zirconium, total | **0.060** | N/A | 0.020 | µg/L | 2019-05-30 | |

**Sample Qualifiers:**

| | |
|---|---|
| FILT | The sample has been filtered for TDP in the laboratory. Results may not reflect conditions at the time of sampling. |
| HT2 | The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended. |
| MIC15 | Due to a high bacterial count, the final result is estimated. |
| PRES | Sample has been preserved for TDP in the laboratory and the holding time has been extended. |

# APPENDIX 1: SUPPORTING INFORMATION

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

| Analysis Description | Method Ref. | Technique | Location |
|---|---|---|---|
| Ammonia, Total in Water | SM 4500-NH3 G* (2017) | Automated Colorimetry (Phenate) | Kelowna |
| Anions in Water | SM 4110 B (2017) | Ion Chromatography | Kelowna |
| Coliforms, Total in Water | SM 9222 B (2017) | Membrane Filtration / m-Endo Agar | Kelowna |
| Conductivity in Water | SM 2510 B (2017) | Conductivity Meter | Kelowna |
| E. coli in Water | SM 9222 G (2017) | Membrane Filtration / Nutrient Agar with MUG | Kelowna |
| Hardness in Water | SM 2340 B* (2017) | Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est) | N/A |
| Mercury, total in Water | EPA 245.7* | BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS) | Richmond |
| Nitrogen, Total Kjeldahl in Water | SM 4500-Norg D* (2017) | Block Digestion and Flow Injection Analysis | Kelowna |
| pH in Water | SM 4500-H+ B (2017) | Electrometry | Kelowna |
| Phosphorus, Total Dissolved in Water | SM 4500-P B.5* (2011) / SM 4500-P F (2017) | Persulfate Digestion / Automated Colorimetry (Ascorbic Acid) | Kelowna |
| Phosphorus, Total in Water | SM 4500-P B.5* (2011) / SM 4500-P F (2017) | Persulfate Digestion / Automated Colorimetry (Ascorbic Acid) | Kelowna |
| Total Metals in Water | EPA 200.2* / EPA 6020B | HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS) | Richmond |
| Turbidity in Water | SM 2130 B (2017) | Nephelometry | Kelowna |

*Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method*

**Glossary of Terms:**

| | |
|---|---|
| RL | Reporting Limit (default) |
| < | Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors |
| > | Greater than the specified Result |
| AO | Aesthetic Objective |
| CFU/100 mL | Colony Forming Units per 100 millilitres |
| MAC | Maximum Acceptable Concentration (health based) |
| mg/L | Milligrams per litre |
| NTU | Nephelometric Turbidity Units |
| OG | Operational Guideline (treated water) |
| pH units | pH < 7 = acidic, ph > 7 = basic |
| µg/L | Micrograms per litre |
| µS/cm | Microsiemens per centimetre |
| EPA | United States Environmental Protection Agency Test Methods |
| SM | Standard Methods for the Examination of Water and Wastewater, American Public Health Association |

**Guidelines Referenced in this Report:**

Guidelines for Canadian Drinking Water Quality (Health Canada, Feb 2017)

***Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user***

# APPENDIX 1: SUPPORTING INFORMATION

| | | | |
|---|---|---|---|
| **REPORTED TO** | Mid Shuswap Lumby Water Stewards | **WORK ORDER** | 9052351 |
| **PROJECT** | Analytical Testing | **REPORTED** | 2019-06-03 13:11 |

**General Comments:**

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued unless otherwise agreed to in writing. The quality control (QC) data is available upon request

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager:estclair@caro.ca