

REPORTED TO Parksville, City of
P O Box 1390, 100 Jensen Avenue East
Parksville, BC V9P 2H3

TEL (250) 951-2489
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ATTENTION Barbara Silenieks

WORK ORDER 7061084

PO NUMBER 002637

RECEIVED / TEMP 2017-06-13 09:15 / 8°C

PROJECT Drinking Water Pkg

REPORTED 2017-06-20

PROJECT INFO

General Comments:

CARO Analytical Services employs methods which are conducted according to procedures accepted by appropriate regulatory agencies, and/or are conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts, except where otherwise agreed to by the client.

The results in this report apply to the samples analyzed in accordance with the Chain of Custody or Sample Requisition 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.



Authorized By:

Jeffery Lopes, B.Sc.
Account Manager

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

Locations:

#110 4011 Viking Way
Richmond, BC V6V 2K9
Tel: 604-279-1499

#102 3677 Highway 97N
Kelowna, BC V1X 5C3
Tel: 250-765-9646

17225 109 Avenue
Edmonton, AB T5S 1H7
Tel: 780-489-9100

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| Analysis Description | Method Reference | Technique | Location |
|---|----------------------------|---|----------|
| Alkalinity in Water | APHA 2320 B* | Titration with H2SO4 | Kelowna |
| Anions by IC in Water | APHA 4110 B | Ion Chromatography with Chemical Suppression of Eluent Conductivity | Kelowna |
| Coliforms, Total (MF) in Water | APHA 9222 | Membrane Filtration | Sublet |
| Colour, True in Water | APHA 2120 C | Spectrophotometry (456 nm) | Kelowna |
| Conductivity in Water | APHA 2510 B | Conductivity Meter | Kelowna |
| Cyanide, SAD in Water | ASTM D7511-12 | Flow Injection Analysis with In-Line Ultraviolet Digestion and Amperometric Detection | Kelowna |
| E. coli (MF) in Water | APHA 9223 B | Enzyme Substrate Endo Agar | Sublet |
| Hardness (as CaCO3) in Water | APHA 2340 B* | Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Estimated) | N/A |
| Langelier Index in Water | APHA 2330 B | Calculation | N/A |
| Mercury, total by CVAFS in Water | EPA 245.7* | BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS) | Richmond |
| pH in Water | APHA 4500-H+ B | Electrometry | Kelowna |
| Solids, Total Dissolved (calc) in Water | APHA 1030 E | Calculation: 100 x ([Cations]-[Anions])/([Cations]+[Anions]) | N/A |
| Temperature (lab) in Water | APHA 2550 B | Thermometer | Kelowna |
| Total Metals by ICPMS in Water | APHA 3030 E* / APHA 3125 B | HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma Mass Spectrometry (ICP-MS) | Richmond |
| Turbidity in Water | APHA 2130 B | Nephelometry | Kelowna |

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

Method Reference Descriptions:

APHA Standard Methods for the Examination of Water and Wastewater, 22nd Edition, American Public Health Association/American Water Works Association/Water Environment Federation
 ASTM ASTM International Test Methods
 EPA United States Environmental Protection Agency Test Methods

Glossary of Terms:

MRL Method Reporting Limit
 < Less than the Reported Detection Limit (RDL) - the RDL may be higher than the MRL due to various factors such as dilutions, limited sample volume, high moisture, or interferences
 °C Degrees Celcius
 CFU/100 mL Colony Forming Units per 100 millilitres
 CU Colour Units (referenced against a platinum cobalt standard)
 mg/L Milligrams per litre
 NTU Nephelometric Turbidity Units
 pH units pH < 7 = acidic, pH > 7 = basic
 µS/cm Microsiemens per centimetre

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| Analyte | Result / Recovery | Standard / Guideline | MRL / Limits | Units | Prepared | Analyzed | Notes |
|---------|-------------------|----------------------|--------------|-------|----------|----------|-------|
|---------|-------------------|----------------------|--------------|-------|----------|----------|-------|

Sample ID: 760 Ermineskin (7061084-01) [Water] Sampled: 2017-06-12 10:10

Anions

| | | | | | | | |
|----------------|---------|-----|-------|------|-----|------------|--|
| Chloride | 23.5 | N/A | 0.10 | mg/L | N/A | 2017-06-15 | |
| Fluoride | < 0.10 | N/A | 0.10 | mg/L | N/A | 2017-06-15 | |
| Nitrate (as N) | 1.13 | N/A | 0.010 | mg/L | N/A | 2017-06-15 | |
| Nitrite (as N) | < 0.010 | N/A | 0.010 | mg/L | N/A | 2017-06-15 | |
| Sulfate | 7.5 | N/A | 1.0 | mg/L | N/A | 2017-06-15 | |

General Parameters

| | | | | | | | |
|--|----------|-----|--------|----------|-----|------------|-----|
| Alkalinity, Total (as CaCO3) | 125 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Alkalinity, Phenolphthalein (as CaCO3) | < 1.0 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Alkalinity, Bicarbonate (as CaCO3) | 125 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Alkalinity, Carbonate (as CaCO3) | < 1.0 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Alkalinity, Hydroxide (as CaCO3) | < 1.0 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Colour, True | < 5.0 | N/A | 5.0 | CU | N/A | 2017-06-15 | |
| Conductivity (EC) | 339 | N/A | 2.0 | µS/cm | N/A | 2017-06-14 | |
| Cyanide, Total | < 0.0020 | N/A | 0.0020 | mg/L | N/A | 2017-06-15 | |
| pH | 7.72 | N/A | 0.01 | pH units | N/A | 2017-06-14 | HT2 |
| Temperature, at pH | 23 | N/A | | °C | N/A | 2017-06-14 | HT2 |
| Turbidity | 0.13 | N/A | 0.10 | NTU | N/A | 2017-06-14 | |

Calculated Parameters

| | | | | | | | |
|--------------------------------|-------|-----|-------|------|-----|------------|--|
| Hardness, Total (as CaCO3) | 152 | N/A | 0.500 | mg/L | N/A | N/A | |
| Langelier Index | -0.08 | N/A | -5.0 | - | N/A | 2017-06-20 | |
| Solids, Total Dissolved (calc) | 173 | N/A | 1.00 | mg/L | N/A | N/A | |

Total Metals

| | | | | | | | |
|-------------------|------------|-----|----------|------|------------|------------|--|
| Aluminum, total | < 0.0050 | N/A | 0.0050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Antimony, total | < 0.00010 | N/A | 0.00010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Arsenic, total | < 0.00050 | N/A | 0.00050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Barium, total | 0.0100 | N/A | 0.0050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Boron, total | 0.014 | N/A | 0.004 | mg/L | 2017-06-14 | 2017-06-14 | |
| Cadmium, total | < 0.000010 | N/A | 0.000010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Calcium, total | 34.6 | N/A | 0.20 | mg/L | 2017-06-14 | 2017-06-14 | |
| Chromium, total | 0.00077 | N/A | 0.00050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Cobalt, total | < 0.00010 | N/A | 0.00010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Copper, total | 0.0198 | N/A | 0.00020 | mg/L | 2017-06-14 | 2017-06-14 | |
| Iron, total | 0.014 | N/A | 0.010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Lead, total | 0.00120 | N/A | 0.00010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Magnesium, total | 15.9 | N/A | 0.010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Manganese, total | 0.00898 | N/A | 0.00020 | mg/L | 2017-06-14 | 2017-06-14 | |
| Mercury, total | < 0.00002 | N/A | 0.00002 | mg/L | 2017-06-19 | 2017-06-19 | |
| Molybdenum, total | < 0.00010 | N/A | 0.00010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Nickel, total | < 0.00020 | N/A | 0.00020 | mg/L | 2017-06-14 | 2017-06-14 | |
| Potassium, total | 0.81 | N/A | 0.02 | mg/L | 2017-06-14 | 2017-06-14 | |
| Selenium, total | < 0.00050 | N/A | 0.00050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Sodium, total | 9.42 | N/A | 0.02 | mg/L | 2017-06-14 | 2017-06-14 | |
| Uranium, total | 0.000228 | N/A | 0.000020 | mg/L | 2017-06-14 | 2017-06-14 | |
| Zinc, total | 0.0150 | N/A | 0.0040 | mg/L | 2017-06-14 | 2017-06-14 | |

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|---------|-------------------|----------------------|--------------|-------|----------|----------|-------|
|---------|-------------------|----------------------|--------------|-------|----------|----------|-------|

Sample ID: 760 Ermineskin (7061084-01) [Water] Sampled: 2017-06-12 10:10, Continued

Microbiological Parameters

| | | | | | | | |
|------------------|----|-----|---|------------|--|------------|--|
| Coliforms, Total | <1 | N/A | 1 | CFU/100 mL | | 2017-06-13 | |
| E. coli | <1 | N/A | 1 | CFU/100 mL | | 2017-06-13 | |

Sample ID: 1116 Herring Gull Way (7061084-02) [Water] Sampled: 2017-06-12 09:40

Anions

| | | | | | | | |
|----------------|--------------|-----|-------|------|-----|------------|--|
| Chloride | 5.70 | N/A | 0.10 | mg/L | N/A | 2017-06-15 | |
| Fluoride | < 0.10 | N/A | 0.10 | mg/L | N/A | 2017-06-15 | |
| Nitrate (as N) | 0.040 | N/A | 0.010 | mg/L | N/A | 2017-06-15 | |
| Nitrite (as N) | < 0.010 | N/A | 0.010 | mg/L | N/A | 2017-06-15 | |
| Sulfate | 1.4 | N/A | 1.0 | mg/L | N/A | 2017-06-15 | |

General Parameters

| | | | | | | | |
|--|-------------|-----|--------|----------|-----|------------|-----|
| Alkalinity, Total (as CaCO3) | 21.8 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Alkalinity, Phenolphthalein (as CaCO3) | < 1.0 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Alkalinity, Bicarbonate (as CaCO3) | 21.8 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Alkalinity, Carbonate (as CaCO3) | < 1.0 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Alkalinity, Hydroxide (as CaCO3) | < 1.0 | N/A | 2.0 | mg/L | N/A | 2017-06-14 | |
| Colour, True | < 5.0 | N/A | 5.0 | CU | N/A | 2017-06-15 | |
| Conductivity (EC) | 67.1 | N/A | 2.0 | µS/cm | N/A | 2017-06-14 | |
| Cyanide, Total | < 0.0020 | N/A | 0.0020 | mg/L | N/A | 2017-06-15 | |
| pH | 7.09 | N/A | 0.01 | pH units | N/A | 2017-06-14 | HT2 |
| Temperature, at pH | 23 | N/A | | °C | N/A | 2017-06-14 | HT2 |
| Turbidity | 0.10 | N/A | 0.10 | NTU | N/A | 2017-06-14 | |

Calculated Parameters

| | | | | | | | |
|--------------------------------|-------------|-----|-------|------|-----|------------|--|
| Hardness, Total (as CaCO3) | 25.6 | N/A | 0.500 | mg/L | N/A | N/A | |
| Langelier Index | -2.1 | N/A | -5.0 | - | N/A | 2017-06-20 | |
| Solids, Total Dissolved (calc) | 33.2 | N/A | 1.00 | mg/L | N/A | N/A | |

Total Metals

| | | | | | | | |
|-------------------|----------------|-----|----------|------|------------|------------|--|
| Aluminum, total | 0.0109 | N/A | 0.0050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Antimony, total | < 0.00010 | N/A | 0.00010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Arsenic, total | < 0.00050 | N/A | 0.00050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Barium, total | 0.0056 | N/A | 0.0050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Boron, total | 0.012 | N/A | 0.004 | mg/L | 2017-06-14 | 2017-06-14 | |
| Cadmium, total | < 0.000010 | N/A | 0.000010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Calcium, total | 8.47 | N/A | 0.20 | mg/L | 2017-06-14 | 2017-06-14 | |
| Chromium, total | < 0.00050 | N/A | 0.00050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Cobalt, total | < 0.00010 | N/A | 0.00010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Copper, total | 0.0171 | N/A | 0.00020 | mg/L | 2017-06-14 | 2017-06-14 | |
| Iron, total | 0.012 | N/A | 0.010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Lead, total | 0.00061 | N/A | 0.00010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Magnesium, total | 1.09 | N/A | 0.010 | mg/L | 2017-06-14 | 2017-06-14 | |
| Manganese, total | < 0.00020 | N/A | 0.00020 | mg/L | 2017-06-14 | 2017-06-14 | |
| Mercury, total | < 0.00002 | N/A | 0.00002 | mg/L | 2017-06-19 | 2017-06-19 | |
| Molybdenum, total | < 0.00010 | N/A | 0.00010 | mg/L | 2017-06-14 | 2017-06-14 | |

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| Analyte | Result / Recovery | Standard / Guideline | MRL / Limits | Units | Prepared | Analyzed | Notes |
|---------|-------------------|----------------------|--------------|-------|----------|----------|-------|
|---------|-------------------|----------------------|--------------|-------|----------|----------|-------|

Sample ID: 1116 Herring Gull Way (7061084-02) [Water] Sampled: 2017-06-12 09:40, Continued

Total Metals, Continued

| | | | | | | | |
|------------------|---------------|-----|----------|------|------------|------------|--|
| Nickel, total | < 0.00020 | N/A | 0.00020 | mg/L | 2017-06-14 | 2017-06-14 | |
| Potassium, total | 0.14 | N/A | 0.02 | mg/L | 2017-06-14 | 2017-06-14 | |
| Selenium, total | < 0.00050 | N/A | 0.00050 | mg/L | 2017-06-14 | 2017-06-14 | |
| Sodium, total | 2.95 | N/A | 0.02 | mg/L | 2017-06-14 | 2017-06-14 | |
| Uranium, total | < 0.000020 | N/A | 0.000020 | mg/L | 2017-06-14 | 2017-06-14 | |
| Zinc, total | 0.0083 | N/A | 0.0040 | mg/L | 2017-06-14 | 2017-06-14 | |

Microbiological Parameters

| | | | | | | | |
|------------------|----|-----|---|------------|--|------------|--|
| Coliforms, Total | <1 | N/A | 1 | CFU/100 mL | | 2017-06-13 | |
| E. coli | <1 | N/A | 1 | CFU/100 mL | | 2017-06-13 | |

Sample / Analysis Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.

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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** Laboratory reagent water is carried through sample preparation and analysis steps. Method Blanks indicate that results are free from contamination, i.e. not biased high from sources such as the sample container or the laboratory environment
- **Duplicate (Dup):** Preparation and analysis of a replicate aliquot of a sample. Duplicates provide a measure of the analytical method's precision, i.e. how reproducible a result is. Duplicates are only reported if they are associated with your sample data.
- **Blank Spike (BS):** A known amount of standard is carried through sample preparation and analysis steps. Blank Spikes, also known as laboratory control samples (LCS), are prepared from a different source of standard than used for the calibration. They ensure that the calibration is acceptable (i.e. not biased high or low) and also provide a measure of the analytical method's accuracy (i.e. closeness of the result to a target value).
- **Standard Reference Material (SRM):** A material of similar matrix to the samples, externally certified for the parameter(s) listed. Standard Reference Materials ensure that the preparation steps in the method are adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

| Analyte | Result | MRL Units | Spike Level | Source Result | % REC | REC Limit | % RPD | RPD Limit | Notes |
|------------------------------|---------|------------|--|---------------|-------|-----------|-------|-----------|-------|
| Anions, Batch B7F1061 | | | | | | | | | |
| Blank (B7F1061-BLK1) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Chloride | < 0.10 | 0.10 mg/L | | | | | | | |
| Fluoride | < 0.10 | 0.10 mg/L | | | | | | | |
| Nitrate (as N) | < 0.010 | 0.010 mg/L | | | | | | | |
| Nitrite (as N) | < 0.010 | 0.010 mg/L | | | | | | | |
| Sulfate | < 1.0 | 1.0 mg/L | | | | | | | |
| Blank (B7F1061-BLK2) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Chloride | < 0.10 | 0.10 mg/L | | | | | | | |
| Fluoride | < 0.10 | 0.10 mg/L | | | | | | | |
| Nitrate (as N) | < 0.010 | 0.010 mg/L | | | | | | | |
| Nitrite (as N) | < 0.010 | 0.010 mg/L | | | | | | | |
| Sulfate | < 1.0 | 1.0 mg/L | | | | | | | |
| Blank (B7F1061-BLK3) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Chloride | < 0.10 | 0.10 mg/L | | | | | | | |
| Fluoride | < 0.10 | 0.10 mg/L | | | | | | | |
| Nitrate (as N) | < 0.010 | 0.010 mg/L | | | | | | | |
| Nitrite (as N) | < 0.010 | 0.010 mg/L | | | | | | | |
| Sulfate | < 1.0 | 1.0 mg/L | | | | | | | |
| LCS (B7F1061-BS1) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Chloride | 16.0 | 0.10 mg/L | 16.0 | | 100 | 90-110 | | | |
| Fluoride | 3.66 | 0.10 mg/L | 4.00 | | 91 | 88-108 | | | |
| Nitrate (as N) | 4.07 | 0.010 mg/L | 4.00 | | 102 | 93-108 | | | |
| Nitrite (as N) | 1.90 | 0.010 mg/L | 2.00 | | 95 | 85-114 | | | |
| Sulfate | 16.1 | 1.0 mg/L | 16.0 | | 100 | 91-109 | | | |
| LCS (B7F1061-BS2) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Chloride | 16.0 | 0.10 mg/L | 16.0 | | 100 | 90-110 | | | |
| Fluoride | 3.90 | 0.10 mg/L | 4.00 | | 97 | 88-108 | | | |
| Nitrate (as N) | 4.03 | 0.010 mg/L | 4.00 | | 101 | 93-108 | | | |
| Nitrite (as N) | 1.91 | 0.010 mg/L | 2.00 | | 96 | 85-114 | | | |
| Sulfate | 16.1 | 1.0 mg/L | 16.0 | | 100 | 91-109 | | | |

APPENDIX 1: QUALITY CONTROL DATA

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| Analyte | Result | MRL Units | Spike Level | Source Result | % REC | REC Limit | % RPD | RPD Limit | Notes |
|--|--------|------------|--|---------------|-------|-----------|-------|-----------|-------|
| Anions, Batch B7F1061, Continued | | | | | | | | | |
| LCS (B7F1061-BS3) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Chloride | 16.0 | 0.10 mg/L | 16.0 | | 100 | 90-110 | | | |
| Fluoride | 3.95 | 0.10 mg/L | 4.00 | | 99 | 88-108 | | | |
| Nitrate (as N) | 4.04 | 0.010 mg/L | 4.00 | | 101 | 93-108 | | | |
| Nitrite (as N) | 1.91 | 0.010 mg/L | 2.00 | | 95 | 85-114 | | | |
| Sulfate | 16.1 | 1.0 mg/L | 16.0 | | 101 | 91-109 | | | |
| General Parameters, Batch B7F1078 | | | | | | | | | |
| Blank (B7F1078-BLK1) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Turbidity | < 0.10 | 0.10 NTU | | | | | | | |
| Blank (B7F1078-BLK2) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Turbidity | < 0.10 | 0.10 NTU | | | | | | | |
| Blank (B7F1078-BLK3) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Turbidity | < 0.10 | 0.10 NTU | | | | | | | |
| LCS (B7F1078-BS1) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Turbidity | 38.6 | 0.10 NTU | 40.0 | | 96 | 90-110 | | | |
| LCS (B7F1078-BS2) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Turbidity | 38.8 | 0.10 NTU | 40.0 | | 97 | 90-110 | | | |
| LCS (B7F1078-BS3) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Turbidity | 38.2 | 0.10 NTU | 40.0 | | 96 | 90-110 | | | |
| General Parameters, Batch B7F1084 | | | | | | | | | |
| Blank (B7F1084-BLK1) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Alkalinity, Total (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Alkalinity, Phenolphthalein (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Alkalinity, Bicarbonate (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Alkalinity, Carbonate (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Alkalinity, Hydroxide (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Conductivity (EC) | < 2.0 | 2.0 µS/cm | | | | | | | |
| Blank (B7F1084-BLK2) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Alkalinity, Total (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Alkalinity, Phenolphthalein (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Alkalinity, Bicarbonate (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Alkalinity, Carbonate (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Alkalinity, Hydroxide (as CaCO3) | < 1.0 | 2.0 mg/L | | | | | | | |
| Conductivity (EC) | < 2.0 | 2.0 µS/cm | | | | | | | |
| LCS (B7F1084-BS1) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Alkalinity, Total (as CaCO3) | 101 | 2.0 mg/L | 100 | | 101 | 92-106 | | | |
| LCS (B7F1084-BS2) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Alkalinity, Total (as CaCO3) | 99.8 | 2.0 mg/L | 100 | | 100 | 92-106 | | | |
| LCS (B7F1084-BS3) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Conductivity (EC) | 1390 | 2.0 µS/cm | 1410 | | 98 | 95-104 | | | |
| LCS (B7F1084-BS4) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Conductivity (EC) | 1420 | 2.0 µS/cm | 1410 | | 100 | 95-104 | | | |

APPENDIX 1: QUALITY CONTROL DATA

REPORTED TO PROJECT Parksville, City of
Drinking Water Pkg

WORK ORDER REPORTED 7061084
2017-06-20

| Analyte | Result | MRL Units | Spike Level | Source Result | % REC | REC Limit | % RPD | RPD Limit | Notes |
|---------|--------|-----------|-------------|---------------|-------|-----------|-------|-----------|-------|
|---------|--------|-----------|-------------|---------------|-------|-----------|-------|-----------|-------|

General Parameters, Batch B7F1084, Continued

| | | | | | | | | | |
|---------------------------------|------|---------------|--|--|-----|--------|--|--|-----|
| Reference (B7F1084-SRM1) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| pH | 7.01 | 0.01 pH units | 7.00 | | 100 | 98-102 | | | HT2 |
| Reference (B7F1084-SRM2) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| pH | 7.02 | 0.01 pH units | 7.00 | | 100 | 98-102 | | | HT2 |

General Parameters, Batch B7F1164

| | | | | | | | | | |
|-------------------------------|----------|-------------|--|--|-----|--------|---|----|--|
| Blank (B7F1164-BLK1) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Cyanide, Total | < 0.0020 | 0.0020 mg/L | | | | | | | |
| Blank (B7F1164-BLK2) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Cyanide, Total | < 0.0020 | 0.0020 mg/L | | | | | | | |
| LCS (B7F1164-BS1) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Cyanide, Total | 0.0207 | 0.0020 mg/L | 0.0200 | | 104 | 85-115 | | | |
| LCS (B7F1164-BS2) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Cyanide, Total | 0.0223 | 0.0020 mg/L | 0.0200 | | 112 | 85-115 | | | |
| LCS Dup (B7F1164-BSD1) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Cyanide, Total | 0.0212 | 0.0020 mg/L | 0.0200 | | 106 | 85-115 | 2 | 10 | |
| LCS Dup (B7F1164-BSD2) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Cyanide, Total | 0.0227 | 0.0020 mg/L | 0.0200 | | 114 | 85-115 | 2 | 10 | |

General Parameters, Batch B7F1192

| | | | | | | | | | |
|-----------------------------|-------|--------|--|--|-----|--------|--|--|--|
| Blank (B7F1192-BLK1) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Colour, True | < 5.0 | 5.0 CU | | | | | | | |
| LCS (B7F1192-BS1) | | | Prepared: 2017-06-15, Analyzed: 2017-06-15 | | | | | | |
| Colour, True | 10 | 5.0 CU | 10.0 | | 100 | 85-115 | | | |

Total Metals, Batch B7F1024

| | | | | | | | | | |
|-----------------------------|------------|---------------|--|--|--|--|--|--|--|
| Blank (B7F1024-BLK1) | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | | | |
| Aluminum, total | < 0.0050 | 0.0050 mg/L | | | | | | | |
| Antimony, total | < 0.00010 | 0.00010 mg/L | | | | | | | |
| Arsenic, total | < 0.00050 | 0.00050 mg/L | | | | | | | |
| Barium, total | < 0.0050 | 0.0050 mg/L | | | | | | | |
| Boron, total | < 0.004 | 0.004 mg/L | | | | | | | |
| Cadmium, total | < 0.000010 | 0.000010 mg/L | | | | | | | |
| Calcium, total | < 0.20 | 0.20 mg/L | | | | | | | |
| Chromium, total | < 0.00050 | 0.00050 mg/L | | | | | | | |
| Cobalt, total | < 0.00010 | 0.00010 mg/L | | | | | | | |
| Copper, total | < 0.00020 | 0.00020 mg/L | | | | | | | |
| Iron, total | < 0.010 | 0.010 mg/L | | | | | | | |
| Lead, total | < 0.00010 | 0.00010 mg/L | | | | | | | |
| Magnesium, total | < 0.010 | 0.010 mg/L | | | | | | | |
| Manganese, total | < 0.00020 | 0.00020 mg/L | | | | | | | |
| Molybdenum, total | < 0.00010 | 0.00010 mg/L | | | | | | | |
| Nickel, total | < 0.00020 | 0.00020 mg/L | | | | | | | |
| Potassium, total | < 0.02 | 0.02 mg/L | | | | | | | |
| Selenium, total | < 0.00050 | 0.00050 mg/L | | | | | | | |
| Sodium, total | < 0.02 | 0.02 mg/L | | | | | | | |
| Uranium, total | < 0.000020 | 0.000020 mg/L | | | | | | | |

APPENDIX 1: QUALITY CONTROL DATA

REPORTED TO PROJECT Parksville, City of
Drinking Water Pkg

WORK ORDER REPORTED 7061084
2017-06-20

| Analyte | Result | MRL Units | Spike Level | Source Result | % REC | REC Limit | % RPD | RPD Limit | Notes |
|---|-----------|---------------|-------------|---------------|--|-----------|-------|-----------|-------|
| Total Metals, Batch B7F1024, Continued | | | | | | | | | |
| Blank (B7F1024-BLK1), Continued | | | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | |
| Zinc, total | < 0.0040 | 0.0040 mg/L | | | | | | | |
| LCS (B7F1024-BS1) | | | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | |
| Aluminum, total | < 0.0050 | 0.0050 mg/L | 0.00200 | | 112 | 80-120 | | | |
| Antimony, total | 0.00210 | 0.00010 mg/L | 0.00200 | | 105 | 80-120 | | | |
| Arsenic, total | 0.00190 | 0.00050 mg/L | 0.00200 | | 95 | 80-120 | | | |
| Barium, total | < 0.0050 | 0.0050 mg/L | 0.00200 | | 113 | 80-120 | | | |
| Boron, total | < 0.004 | 0.004 mg/L | 0.00200 | | 95 | 80-120 | | | |
| Cadmium, total | 0.00204 | 0.000010 mg/L | 0.00200 | | 102 | 80-120 | | | |
| Calcium, total | 0.21 | 0.20 mg/L | 0.200 | | 103 | 80-120 | | | |
| Chromium, total | 0.00195 | 0.00050 mg/L | 0.00200 | | 98 | 80-120 | | | |
| Cobalt, total | 0.00201 | 0.00010 mg/L | 0.00200 | | 101 | 80-120 | | | |
| Copper, total | 0.00210 | 0.00020 mg/L | 0.00200 | | 105 | 80-120 | | | |
| Iron, total | 0.197 | 0.010 mg/L | 0.200 | | 99 | 80-120 | | | |
| Lead, total | 0.00214 | 0.00010 mg/L | 0.00200 | | 107 | 80-120 | | | |
| Magnesium, total | 0.205 | 0.010 mg/L | 0.200 | | 103 | 80-120 | | | |
| Manganese, total | 0.00174 | 0.00020 mg/L | 0.00200 | | 87 | 80-120 | | | |
| Molybdenum, total | 0.00202 | 0.00010 mg/L | 0.00200 | | 101 | 80-120 | | | |
| Nickel, total | 0.00208 | 0.00020 mg/L | 0.00200 | | 104 | 80-120 | | | |
| Potassium, total | 0.20 | 0.02 mg/L | 0.200 | | 101 | 80-120 | | | |
| Selenium, total | 0.00206 | 0.00050 mg/L | 0.00200 | | 103 | 80-120 | | | |
| Sodium, total | 0.24 | 0.02 mg/L | 0.240 | | 101 | 80-120 | | | |
| Uranium, total | 0.00207 | 0.000020 mg/L | 0.00200 | | 104 | 80-120 | | | |
| Reference (B7F1024-SRM1) | | | | | Prepared: 2017-06-14, Analyzed: 2017-06-14 | | | | |
| Aluminum, total | 0.297 | 0.0050 mg/L | 0.303 | | 98 | 81-129 | | | |
| Antimony, total | 0.0510 | 0.00010 mg/L | 0.0511 | | 100 | 88-114 | | | |
| Arsenic, total | 0.112 | 0.00050 mg/L | 0.118 | | 95 | 88-114 | | | |
| Barium, total | 0.823 | 0.0050 mg/L | 0.823 | | 100 | 72-104 | | | |
| Boron, total | 3.41 | 0.004 mg/L | 3.45 | | 99 | 75-121 | | | |
| Cadmium, total | 0.0494 | 0.000010 mg/L | 0.0495 | | 100 | 89-111 | | | |
| Calcium, total | 11.9 | 0.20 mg/L | 11.6 | | 102 | 86-121 | | | |
| Chromium, total | 0.233 | 0.00050 mg/L | 0.250 | | 93 | 89-114 | | | |
| Cobalt, total | 0.0373 | 0.00010 mg/L | 0.0377 | | 99 | 91-113 | | | |
| Copper, total | 0.486 | 0.00020 mg/L | 0.486 | | 100 | 91-115 | | | |
| Iron, total | 0.482 | 0.010 mg/L | 0.488 | | 99 | 77-124 | | | |
| Lead, total | 0.201 | 0.00010 mg/L | 0.204 | | 99 | 92-113 | | | |
| Magnesium, total | 3.78 | 0.010 mg/L | 3.79 | | 100 | 78-120 | | | |
| Manganese, total | 0.103 | 0.00020 mg/L | 0.109 | | 95 | 90-114 | | | |
| Molybdenum, total | 0.197 | 0.00010 mg/L | 0.198 | | 100 | 90-111 | | | |
| Nickel, total | 0.241 | 0.00020 mg/L | 0.249 | | 97 | 90-111 | | | |
| Potassium, total | 7.32 | 0.02 mg/L | 7.21 | | 102 | 84-113 | | | |
| Selenium, total | 0.127 | 0.00050 mg/L | 0.121 | | 105 | 85-115 | | | |
| Sodium, total | 7.44 | 0.02 mg/L | 7.54 | | 99 | 82-123 | | | |
| Uranium, total | 0.0307 | 0.000020 mg/L | 0.0306 | | 100 | 85-120 | | | |
| Zinc, total | 2.48 | 0.0040 mg/L | 2.49 | | 100 | 85-111 | | | |
| Total Metals, Batch B7F1384 | | | | | | | | | |
| Blank (B7F1384-BLK1) | | | | | Prepared: 2017-06-19, Analyzed: 2017-06-19 | | | | |
| Mercury, total | < 0.00002 | 0.00002 mg/L | | | | | | | |
| Blank (B7F1384-BLK2) | | | | | Prepared: 2017-06-19, Analyzed: 2017-06-19 | | | | |
| Mercury, total | < 0.00002 | 0.00002 mg/L | | | | | | | |

APPENDIX 1: QUALITY CONTROL DATA

REPORTED TO PROJECT Parksville, City of
Drinking Water Pkg

WORK ORDER REPORTED 7061084
2017-06-20

| Analyte | Result | MRL Units | Spike Level | Source Result | % REC | REC Limit | % RPD | RPD Limit | Notes |
|---|---------|--------------|-------------|--|-------|-----------|-------|-----------|-------|
| <i>Total Metals, Batch B7F1384, Continued</i> | | | | | | | | | |
| Reference (B7F1384-SRM1) | | | | Prepared: 2017-06-19, Analyzed: 2017-06-19 | | | | | |
| Mercury, total | 0.00470 | 0.00002 mg/L | 0.00489 | | 96 | 50-150 | | | |
| Reference (B7F1384-SRM2) | | | | Prepared: 2017-06-19, Analyzed: 2017-06-19 | | | | | |
| Mercury, total | 0.00446 | 0.00002 mg/L | 0.00489 | | 91 | 50-150 | | | |

QC Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.

