



# North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

## Certificate of Analysis

Report To: City of Campbell River  
Allison Neill

Lab Number: 102076  
Date Reported: 10 May 13  
Date Completed: 10 May 13  
Date Received: 18 Apr 13 13:47

**102076-01 260DE**

**Gordon Road**

Sampled By: Allison  
Sampling Date: 18 Apr 13 10:40

| Test          | Result   | Units                     | Drinking Water Guideline |
|---------------|----------|---------------------------|--------------------------|
| Alkalinity    | 20       | mg/L (CaCO <sub>3</sub> ) |                          |
| Colour - True | <5       | Colour Units              | 15                       |
| Total Cyanide | <0.002   | mg/L                      |                          |
| d-Aluminium   | <0.005   | mg/L                      |                          |
| d-Antimony    | <0.0002  | mg/L                      |                          |
| d-Arsenic     | <0.0002  | mg/L                      |                          |
| d-Barium      | 0.002    | mg/L                      |                          |
| d-Beryllium   | <0.00004 | mg/L                      |                          |
| d-Boron       | 0.005    | mg/L                      |                          |
| d-Cadmium     | <0.00001 | mg/L                      |                          |
| d-Calcium     | 7.3      | mg/L                      |                          |
| d-Chromium    | <0.0004  | mg/L                      |                          |
| d-Cobalt      | <0.00002 | mg/L                      |                          |
| d-Copper      | 0.004    | mg/L                      |                          |
| d-Iron        | 0.015    | mg/L                      |                          |
| d-Lead        | 0.0002   | mg/L                      |                          |
| d-Lithium     | <0.001   | mg/L                      |                          |
| d-Magnesium   | 0.71     | mg/L                      |                          |
| d-Manganese   | <0.001   | mg/L                      |                          |
| d-Molybdenum  | 0.00022  | mg/L                      |                          |
| d-Nickel      | <0.001   | mg/L                      |                          |
| d-Potassium   | <0.1     | mg/L                      |                          |
| d-Selenium    | <0.0006  | mg/L                      |                          |
| d-Silicon     | 1.58     | mg/L                      |                          |
| d-Silver      | 0.00005  | mg/L                      |                          |
| d-Sodium      | 1.4      | mg/L                      |                          |

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC

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102076-01 260DE

Gordon Road

Sampled By: Allison

Sampling Date: 18 Apr 13 10:40

| Test                          | Result   | Units    | Drinking Water Guideline |
|-------------------------------|----------|----------|--------------------------|
| d-Strontium                   | 0.013    | mg/L     |                          |
| d-Thallium                    | 0.00002  | mg/L     |                          |
| d-Tin                         | 0.0002   | mg/L     |                          |
| d-Titanium                    | <0.010   | mg/L     |                          |
| d-Uranium                     | <0.0004  | mg/L     |                          |
| d-Vanadium                    | 0.00025  | mg/L     |                          |
| d-Zinc                        | 0.002    | mg/L     |                          |
| Hardness (CaCO <sub>3</sub> ) | 21       | mg/L     |                          |
| Bromoacetic Acid              | <2.0     | ug/L     |                          |
| Bromochloroacetic Acid        | <2.0     | ug/L     |                          |
| Chloroacetic Acid             | <2.0     | ug/L     |                          |
| Dibromoacetic Acid            | <2.0     | ug/L     |                          |
| Dichloroacetic Acid           | 7.4      | ug/L     |                          |
| Trichloroacetic Acid          | 4.8      | ug/L     |                          |
| Total Halo Acetic Acids       | 12       | ug/L     |                          |
| Nitrate (N)                   | 0.05     | mg/L     | 10 MAC                   |
| pH at 25 C                    | 7.3      | pH Units | 6.5-8.5                  |
| Total Dissolved Solids        | 40       | mg/L     | 500 AO                   |
| Total Kjeldahl Nitrogen       | 0.13     | mg/L     |                          |
| T-Aluminium                   | 0.011    | mg/L     | 0.1 Operational Std      |
| T-Antimony                    | <0.0001  | mg/L     | 0.006 MAC                |
| T-Arsenic                     | 0.00012  | mg/L     | 0.010 MAC                |
| T-Barium                      | 0.00247  | mg/L     | 1.0 MAC                  |
| T-Beryllium                   | <0.00005 | mg/L     |                          |
| T-Boron                       | 0.01     | mg/L     | 5 MAC                    |
| T-Bismuth                     | <0.0001  | mg/L     |                          |
| T-Cadmium                     | <0.00001 | mg/L     | 0.005 MAC                |
| T-Calcium                     | 7.1      | mg/L     |                          |
| T-Chromium                    | <0.0005  | mg/L     | 0.05 MAC                 |
| T-Cobalt                      | <0.0001  | mg/L     |                          |
| T-Copper                      | 0.0069   | mg/L     | 1.0 AO                   |
| T-Iron                        | 0.019    | mg/L     | 0.3 AO                   |
| T-Lead                        | 0.0004   | mg/L     | 0.010 MAC                |
| T-Lithium                     | <0.0005  | mg/L     |                          |

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**102076-01 260DE**

**Gordon Road**

Sampled By: Allison

Sampling Date: 18 Apr 13 10:40

| Test                   | Result   | Units | Drinking Water Guideline |
|------------------------|----------|-------|--------------------------|
| T-Magnesium            | 0.72     | mg/L  |                          |
| T-Manganese            | 0.0029   | mg/L  | 0.05 AO                  |
| T-Molybdenum           | 0.00014  | mg/L  |                          |
| T-Nickel               | <0.0002  | mg/L  |                          |
| T-Potassium            | <0.1     | mg/L  |                          |
| T-Selenium             | 0.0001   | mg/L  | 0.01 MAC                 |
| T-Silicon              | 1.73     | mg/L  |                          |
| T-Silver               | <0.00005 | mg/L  |                          |
| T-Sodium               | 1.8      | mg/L  | 200 AO                   |
| T-Strontium            | 0.0122   | mg/L  |                          |
| T-Thallium             | <0.00001 | mg/L  |                          |
| T-Tin                  | <0.0001  | mg/L  |                          |
| T-Titanium             | <0.0005  | mg/L  |                          |
| T-Uranium              | <0.00001 | mg/L  |                          |
| T-Vanadium             | 0.0003   | mg/L  |                          |
| T-Zinc                 | 0.0037   | mg/L  | 5.0 AO                   |
| Bromodichloromethane   | <0.001   | mg/L  | 0.016 MAC                |
| Bromoform              | <0.001   | mg/L  |                          |
| Chloroform             | 0.016    | mg/L  |                          |
| Dibromochloromethane   | <0.001   | mg/L  |                          |
| Total Trihalomethanes  | 0.016    | mg/L  | 0.100 MAC                |
| Total Suspended Solids | <5.0     | mg/L  |                          |
| Turbidity              | <0.5     | NTU's | 5 AO                     |

**102076-02 2087F**

**Homewood**

Sampled By: Allison

Sampling Date: 18 Apr 13 11:05

| Test          | Result  | Units                     | Drinking Water Guideline |
|---------------|---------|---------------------------|--------------------------|
| Alkalinity    | 20      | mg/L (CaCO <sub>3</sub> ) |                          |
| Colour - True | <5      | Colour Units              | 15                       |
| Total Cyanide | <0.002  | mg/L                      |                          |
| d-Aluminium   | <0.005  | mg/L                      |                          |
| d-Antimony    | <0.0002 | mg/L                      |                          |

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102076-02 2087F

Homewood

Sampled By: Allison

Sampling Date: 18 Apr 13 11:05

| Test                          | Result   | Units | Drinking Water Guideline |
|-------------------------------|----------|-------|--------------------------|
| d-Arsenic                     | <0.0002  | mg/L  |                          |
| d-Barium                      | 0.002    | mg/L  |                          |
| d-Beryllium                   | <0.00004 | mg/L  |                          |
| d-Boron                       | 0.005    | mg/L  |                          |
| d-Cadmium                     | <0.00001 | mg/L  |                          |
| d-Calcium                     | 7.38     | mg/L  |                          |
| d-Chromium                    | <0.0004  | mg/L  |                          |
| d-Cobalt                      | <0.00002 | mg/L  |                          |
| d-Copper                      | 0.007    | mg/L  |                          |
| d-Iron                        | 0.005    | mg/L  |                          |
| d-Lead                        | 0.0002   | mg/L  |                          |
| d-Lithium                     | <0.001   | mg/L  |                          |
| d-Magnesium                   | 0.68     | mg/L  |                          |
| d-Manganese                   | 0.001    | mg/L  |                          |
| d-Molybdenum                  | 0.00016  | mg/L  |                          |
| d-Nickel                      | <0.001   | mg/L  |                          |
| d-Potassium                   | 0.1      | mg/L  |                          |
| d-Selenium                    | <0.0006  | mg/L  |                          |
| d-Silicon                     | 1.59     | mg/L  |                          |
| d-Silver                      | 0.00002  | mg/L  |                          |
| d-Sodium                      | 0.7      | mg/L  |                          |
| d-Strontium                   | 0.012    | mg/L  |                          |
| d-Thallium                    | <0.00001 | mg/L  |                          |
| d-Tin                         | <0.0001  | mg/L  |                          |
| d-Titanium                    | <0.010   | mg/L  |                          |
| d-Uranium                     | <0.0004  | mg/L  |                          |
| d-Vanadium                    | 0.00028  | mg/L  |                          |
| d-Zinc                        | 0.003    | mg/L  |                          |
| Hardness (CaCO <sub>3</sub> ) | 21       | mg/L  |                          |
| Bromoacetic Acid              | <2.0     | ug/L  |                          |
| Bromochloroacetic Acid        | <2.0     | ug/L  |                          |
| Chloroacetic Acid             | <2.0     | ug/L  |                          |
| Dibromoacetic Acid            | <2.0     | ug/L  |                          |
| Dichloroacetic Acid           | 8.7      | ug/L  |                          |

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• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

102076-02 2087F

Homewood

Sampled By: Allison

Sampling Date: 18 Apr 13 11:05

| Test                    | Result   | Units    | Drinking Water Guideline |
|-------------------------|----------|----------|--------------------------|
| Trichloroacetic Acid    | 7.2      | ug/L     |                          |
| Total Halo Acetic Acids | 16       | ug/L     |                          |
| Nitrate (N)             | <0.05    | mg/L     | 10 MAC                   |
| pH at 25 C              | 7.3      | pH Units | 6.5-8.5                  |
| Total Dissolved Solids  | 34       | mg/L     | 500 AO                   |
| Total Kjeldahl Nitrogen | 0.16     | mg/L     |                          |
| T-Aluminium             | 0.01     | mg/L     | 0.1 Operational Std      |
| T-Antimony              | <0.0001  | mg/L     | 0.006 MAC                |
| T-Arsenic               | 0.00012  | mg/L     | 0.010 MAC                |
| T-Barium                | 0.00269  | mg/L     | 1.0 MAC                  |
| T-Beryllium             | <0.00005 | mg/L     |                          |
| T-Boron                 | 0.007    | mg/L     | 5 MAC                    |
| T-Bismuth               | <0.0001  | mg/L     |                          |
| T-Cadmium               | <0.00001 | mg/L     | 0.005 MAC                |
| T-Calcium               | 7.25     | mg/L     |                          |
| T-Chromium              | <0.0005  | mg/L     | 0.05 MAC                 |
| T-Cobalt                | <0.0001  | mg/L     |                          |
| T-Copper                | 0.0089   | mg/L     | 1.0 AO                   |
| T-Iron                  | 0.017    | mg/L     | 0.3 AO                   |
| T-Lead                  | 0.0004   | mg/L     | 0.010 MAC                |
| T-Lithium               | <0.0005  | mg/L     |                          |
| T-Magnesium             | 0.7      | mg/L     |                          |
| T-Manganese             | 0.0017   | mg/L     | 0.05 AO                  |
| T-Molybdenum            | 0.00012  | mg/L     |                          |
| T-Nickel                | <0.0002  | mg/L     |                          |
| T-Potassium             | <0.1     | mg/L     |                          |
| T-Selenium              | 0.0001   | mg/L     | 0.01 MAC                 |
| T-Silicon               | 1.74     | mg/L     |                          |
| T-Silver                | <0.00005 | mg/L     |                          |
| T-Sodium                | 1        | mg/L     | 200 AO                   |
| T-Strontium             | 0.0116   | mg/L     |                          |
| T-Thallium              | <0.00001 | mg/L     |                          |
| T-Tin                   | <0.0001  | mg/L     |                          |
| T-Titanium              | <0.0005  | mg/L     |                          |

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**102076-02 2087F**

**Homewood**

Sampled By: Allison

Sampling Date: 18 Apr 13 11:05

| Test                   | Result   | Units | Drinking Water Guideline |
|------------------------|----------|-------|--------------------------|
| T-Uranium              | <0.00001 | mg/L  |                          |
| T-Vanadium             | 0.0003   | mg/L  |                          |
| T-Zinc                 | 0.008    | mg/L  | 5.0 AO                   |
| Bromodichloromethane   | <0.001   | mg/L  | 0.016 MAC                |
| Bromoform              | <0.001   | mg/L  |                          |
| Chloroform             | 0.02     | mg/L  |                          |
| Dibromochloromethane   | <0.001   | mg/L  |                          |
| Total Trihalomethanes  | 0.02     | mg/L  | 0.100 MAC                |
| Total Suspended Solids | <5.0     | mg/L  |                          |
| Turbidity              | <0.5     | NTU's | 5 AO                     |

**102076-03 1D4D5**

**Nikola / Willis**

Sampled By: Allison

Sampling Date: 18 Apr 13 11:20

| Test          | Result   | Units                     | Drinking Water Guideline |
|---------------|----------|---------------------------|--------------------------|
| Alkalinity    | <20      | mg/L (CaCO <sub>3</sub> ) |                          |
| Colour - True | <5       | Colour Units              | 15                       |
| Total Cyanide | <0.002   | mg/L                      |                          |
| d-Aluminium   | <0.005   | mg/L                      |                          |
| d-Antimony    | <0.0002  | mg/L                      |                          |
| d-Arsenic     | <0.0002  | mg/L                      |                          |
| d-Barium      | 0.002    | mg/L                      |                          |
| d-Beryllium   | <0.00004 | mg/L                      |                          |
| d-Boron       | 0.004    | mg/L                      |                          |
| d-Cadmium     | <0.00001 | mg/L                      |                          |
| d-Calcium     | 7.26     | mg/L                      |                          |
| d-Chromium    | <0.0004  | mg/L                      |                          |
| d-Cobalt      | <0.00002 | mg/L                      |                          |
| d-Copper      | 0.006    | mg/L                      |                          |
| d-Iron        | <0.005   | mg/L                      |                          |
| d-Lead        | 0.0003   | mg/L                      |                          |
| d-Lithium     | <0.001   | mg/L                      |                          |
| d-Magnesium   | 0.75     | mg/L                      |                          |

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102076-03 1D4D5

Nikola / Willis

Sampled By: Allison

Sampling Date: 18 Apr 13 11:20

| Test                          | Result   | Units    | Drinking Water Guideline |
|-------------------------------|----------|----------|--------------------------|
| d-Manganese                   | <0.001   | mg/L     |                          |
| d-Molybdenum                  | 0.00014  | mg/L     |                          |
| d-Nickel                      | <0.001   | mg/L     |                          |
| d-Potassium                   | 0.1      | mg/L     |                          |
| d-Selenium                    | <0.0006  | mg/L     |                          |
| d-Silicon                     | 1.59     | mg/L     |                          |
| d-Silver                      | <0.00001 | mg/L     |                          |
| d-Sodium                      | 0.7      | mg/L     |                          |
| d-Strontium                   | 0.012    | mg/L     |                          |
| d-Thallium                    | <0.00001 | mg/L     |                          |
| d-Tin                         | 0.0001   | mg/L     |                          |
| d-Titanium                    | <0.010   | mg/L     |                          |
| d-Uranium                     | <0.0004  | mg/L     |                          |
| d-Vanadium                    | 0.00028  | mg/L     |                          |
| d-Zinc                        | 0.004    | mg/L     |                          |
| Hardness (CaCO <sub>3</sub> ) | 21       | mg/L     |                          |
| Bromoacetic Acid              | <2.0     | ug/L     |                          |
| Bromochloroacetic Acid        | <2.0     | ug/L     |                          |
| Chloroacetic Acid             | <2.0     | ug/L     |                          |
| Dibromoacetic Acid            | <2.0     | ug/L     |                          |
| Dichloroacetic Acid           | 9        | ug/L     |                          |
| Trichloroacetic Acid          | 9.2      | ug/L     |                          |
| Total Halo Acetic Acids       | 18       | ug/L     |                          |
| Nitrate (N)                   | <0.05    | mg/L     | 10 MAC                   |
| pH at 25 C                    | 7.1      | pH Units | 6.5-8.5                  |
| Total Dissolved Solids        | 38       | mg/L     | 500 AO                   |
| Total Kjeldahl Nitrogen       | 0.17     | mg/L     |                          |
| T-Aluminium                   | 0.011    | mg/L     | 0.1 Operational Std      |
| T-Antimony                    | <0.0001  | mg/L     | 0.006 MAC                |
| T-Arsenic                     | 0.00012  | mg/L     | 0.010 MAC                |
| T-Barium                      | 0.00257  | mg/L     | 1.0 MAC                  |
| T-Beryllium                   | <0.00005 | mg/L     |                          |
| T-Boron                       | 0.006    | mg/L     | 5 MAC                    |
| T-Bismuth                     | <0.0001  | mg/L     |                          |

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102076-03 1D4D5

Nikola / Willis

Sampled By: Allison

Sampling Date: 18 Apr 13 11:20

| Test                          | Result   | Units | Drinking Water Guideline |
|-------------------------------|----------|-------|--------------------------|
| T-Cadmium                     | <0.00001 | mg/L  | 0.005 MAC                |
| T-Calcium                     | 7.01     | mg/L  |                          |
| T-Chromium                    | <0.0005  | mg/L  | 0.05 MAC                 |
| T-Cobalt                      | <0.0001  | mg/L  |                          |
| T-Copper                      | 0.0076   | mg/L  | 1.0 AO                   |
| T-Iron                        | 0.013    | mg/L  | 0.3 AO                   |
| T-Lead                        | 0.001    | mg/L  | 0.010 MAC                |
| T-Lithium                     | <0.0005  | mg/L  |                          |
| T-Magnesium                   | 0.77     | mg/L  |                          |
| T-Manganese                   | 0.0029   | mg/L  | 0.05 AO                  |
| T-Molybdenum                  | 0.00013  | mg/L  |                          |
| T-Nickel                      | <0.0002  | mg/L  |                          |
| T-Potassium                   | <0.1     | mg/L  |                          |
| T-Selenium                    | 0.0002   | mg/L  | 0.01 MAC                 |
| T-Silicon                     | 1.73     | mg/L  |                          |
| T-Silver                      | <0.00005 | mg/L  |                          |
| T-Sodium                      | 0.9      | mg/L  | 200 AO                   |
| T-Strontium                   | 0.011    | mg/L  |                          |
| T-Thallium                    | <0.00001 | mg/L  |                          |
| T-Tin                         | <0.0001  | mg/L  |                          |
| T-Titanium                    | <0.0005  | mg/L  |                          |
| T-Uranium                     | <0.00001 | mg/L  |                          |
| T-Vanadium                    | 0.0003   | mg/L  |                          |
| T-Zinc                        | 0.0045   | mg/L  | 5.0 AO                   |
| Hardness (CaCO <sub>3</sub> ) | 21       | mg/L  | 80-100                   |
| Bromodichloromethane          | <0.001   | mg/L  | 0.016 MAC                |
| Bromoform                     | <0.001   | mg/L  |                          |
| Chloroform                    | 0.017    | mg/L  |                          |
| Dibromochloromethane          | <0.001   | mg/L  |                          |
| Total Trihalomethanes         | 0.017    | mg/L  | 0.100 MAC                |
| Total Suspended Solids        | 1,200    | mg/L  |                          |
| Turbidity                     | <0.5     | NTU's | 5 AO                     |

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102076-04 26623

Vaughn

Sampled By: Allison

Sampling Date: 18 Apr 13 12:30

| Test                          | Result   | Units                     | Drinking Water Guideline |
|-------------------------------|----------|---------------------------|--------------------------|
| Alkalinity                    | 20       | mg/L (CaCO <sub>3</sub> ) |                          |
| Colour - True                 | <5       | Colour Units              | 15                       |
| Total Cyanide                 | <0.002   | mg/L                      |                          |
| d-Aluminium                   | <0.005   | mg/L                      |                          |
| d-Antimony                    | <0.0002  | mg/L                      |                          |
| d-Arsenic                     | <0.0002  | mg/L                      |                          |
| d-Barium                      | 0.002    | mg/L                      |                          |
| d-Beryllium                   | <0.00004 | mg/L                      |                          |
| d-Boron                       | 0.004    | mg/L                      |                          |
| d-Cadmium                     | <0.00001 | mg/L                      |                          |
| d-Calcium                     | 8.25     | mg/L                      |                          |
| d-Chromium                    | <0.0004  | mg/L                      |                          |
| d-Cobalt                      | <0.00002 | mg/L                      |                          |
| d-Copper                      | 0.004    | mg/L                      |                          |
| d-Iron                        | 0.006    | mg/L                      |                          |
| d-Lead                        | 0.0002   | mg/L                      |                          |
| d-Lithium                     | <0.001   | mg/L                      |                          |
| d-Magnesium                   | 0.5      | mg/L                      |                          |
| d-Manganese                   | <0.001   | mg/L                      |                          |
| d-Molybdenum                  | 0.00013  | mg/L                      |                          |
| d-Nickel                      | <0.001   | mg/L                      |                          |
| d-Potassium                   | <0.1     | mg/L                      |                          |
| d-Selenium                    | <0.0006  | mg/L                      |                          |
| d-Silicon                     | 1.59     | mg/L                      |                          |
| d-Silver                      | <0.00001 | mg/L                      |                          |
| d-Sodium                      | 0.7      | mg/L                      |                          |
| d-Strontium                   | 0.014    | mg/L                      |                          |
| d-Thallium                    | <0.00001 | mg/L                      |                          |
| d-Tin                         | <0.0001  | mg/L                      |                          |
| d-Titanium                    | <0.010   | mg/L                      |                          |
| d-Uranium                     | <0.0004  | mg/L                      |                          |
| d-Vanadium                    | 0.0003   | mg/L                      |                          |
| d-Zinc                        | 0.001    | mg/L                      |                          |
| Hardness (CaCO <sub>3</sub> ) | 23       | mg/L                      |                          |

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# North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

102076-04 26623

Vaughn

Sampled By: Allison

Sampling Date: 18 Apr 13 12:30

| Test                    | Result   | Units    | Drinking Water Guideline |
|-------------------------|----------|----------|--------------------------|
| Bromoacetic Acid        | <2.0     | ug/L     |                          |
| Bromochloroacetic Acid  | <2.0     | ug/L     |                          |
| Chloroacetic Acid       | <2.0     | ug/L     |                          |
| Dibromoacetic Acid      | <2.0     | ug/L     |                          |
| Dichloroacetic Acid     | 14       | ug/L     |                          |
| Trichloroacetic Acid    | 20.6     | ug/L     |                          |
| Total Halo Acetic Acids | 35       | ug/L     |                          |
| Nitrate (N)             | <0.05    | mg/L     | 10 MAC                   |
| pH at 25 C              | 7.3      | pH Units | 6.5-8.5                  |
| Total Dissolved Solids  | 36       | mg/L     | 500 AO                   |
| Total Kjeldahl Nitrogen | 0.16     | mg/L     |                          |
| T-Aluminium             | 0.011    | mg/L     | 0.1 Operational Std      |
| T-Antimony              | <0.0001  | mg/L     | 0.006 MAC                |
| T-Arsenic               | 0.00012  | mg/L     | 0.010 MAC                |
| T-Barium                | 0.00262  | mg/L     | 1.0 MAC                  |
| T-Beryllium             | <0.00005 | mg/L     |                          |
| T-Boron                 | 0.006    | mg/L     | 5 MAC                    |
| T-Bismuth               | <0.0001  | mg/L     |                          |
| T-Cadmium               | <0.00001 | mg/L     | 0.005 MAC                |
| T-Calcium               | 8.21     | mg/L     |                          |
| T-Chromium              | <0.0005  | mg/L     | 0.05 MAC                 |
| T-Cobalt                | <0.0001  | mg/L     |                          |
| T-Copper                | 0.0046   | mg/L     | 1.0 AO                   |
| T-Iron                  | 0.018    | mg/L     | 0.3 AO                   |
| T-Lead                  | 0.0003   | mg/L     | 0.010 MAC                |
| T-Lithium               | <0.0005  | mg/L     |                          |
| T-Magnesium             | 0.55     | mg/L     |                          |
| T-Manganese             | 0.0011   | mg/L     | 0.05 AO                  |
| T-Molybdenum            | 0.00013  | mg/L     |                          |
| T-Nickel                | <0.0002  | mg/L     |                          |
| T-Potassium             | 0.1      | mg/L     |                          |
| T-Selenium              | 0.0001   | mg/L     | 0.01 MAC                 |
| T-Silicon               | 1.81     | mg/L     |                          |
| T-Silver                | <0.00005 | mg/L     |                          |

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102076-04 26623

Vaughn

Sampled By: Allison

Sampling Date: 18 Apr 13 12:30

| Test                          | Result   | Units | Drinking Water Guideline |
|-------------------------------|----------|-------|--------------------------|
| T-Sodium                      | 1        | mg/L  | 200 AO                   |
| T-Strontium                   | 0.0133   | mg/L  |                          |
| T-Thallium                    | <0.00001 | mg/L  |                          |
| T-Tin                         | <0.0001  | mg/L  |                          |
| T-Titanium                    | <0.0005  | mg/L  |                          |
| T-Uranium                     | <0.00001 | mg/L  |                          |
| T-Vanadium                    | 0.0003   | mg/L  |                          |
| T-Zinc                        | 0.0024   | mg/L  | 5.0 AO                   |
| Hardness (CaCO <sub>3</sub> ) | 23       | mg/L  | 80-100                   |
| Bromodichloromethane          | 0.001    | mg/L  | 0.016 MAC                |
| Bromoform                     | <0.001   | mg/L  |                          |
| Chloroform                    | 0.039    | mg/L  |                          |
| Dibromochloromethane          | <0.001   | mg/L  |                          |
| Total Trihalomethanes         | 0.04     | mg/L  | 0.100 MAC                |
| Total Suspended Solids        | <5.0     | mg/L  |                          |
| Turbidity                     | <0.5     | NTU's | 5 AO                     |

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# North Island Laboratories

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## 102076-01

| Test                   | Method  | Analyst | Date      |
|------------------------|---|---------|-----------|
| Alkalinity             | Titration to 4.5, APHA 2320 B -modified         | NI&L    | 4/18/2013 |
| Bromoacetic Acid       | Exova Subcontract Exova Subcontract             | EXL     | 5/6/2013  |
| Bromochloroacetic Acid | Exova Subcontract Exova Subcontract             | EXL     | 5/6/2013  |
| Bromodichloromethane   | Exova Subcontract-EPA 8260B/5035 - modified     | EXL     | 4/22/2013 |
| Bromoform              | Exova Subcontract-EPA 8260B/5035 - modified     | EXL     | 4/22/2013 |
| Chloroacetic Acid      | Exova Subcontract Exova Subcontract             | EXL     | 5/6/2013  |
| Chloroform             | Exova Subcontract-EPA 8260B/5035 - modified     | EXL     | 4/22/2013 |
| Colour - True          | Spectrophotometer, APHA 2120 C -modified        | NI&L    | 4/18/2013 |
| d-Aluminium            | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Antimony             | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Arsenic              | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Barium               | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Beryllium            | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Boron                | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Cadmium              | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Calcium              | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Chromium             | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Cobalt               | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Copper               | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Iron                 | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Lead                 | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Lithium              | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Magnesium            | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Manganese            | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Molybdenum           | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Nickel               | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Potassium            | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Selenium             | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Silicon              | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Silver               | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Sodium               | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Strontium            | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Thallium             | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Tin                  | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |
| d-Titanium             | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL     | 4/19/2013 |

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|                               |   |      |           |
|-------------------------------|---|------|-----------|
| d-Uranium                     | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL  | 4/19/2013 |
| d-Vanadium                    | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL  | 4/19/2013 |
| d-Zinc                        | Exova Subcontract, ICP-AES, EPA 6010C -modified | EXL  | 4/19/2013 |
| Dibromoacetic Acid            | Exova Subcontract Exova Subcontract             | EXL  | 5/6/2013  |
| Dibromochloromethane          | Exova Subcontract-EPA 8260B/5035 - modified     | EXL  | 4/22/2013 |
| Dichloroacetic Acid           | Exova Subcontract Exova Subcontract             | EXL  | 5/6/2013  |
| Hardness (CaCO <sub>3</sub> ) | Hardness by Calculation, APHA 2340 B -modified  | EXL  | 4/19/2013 |
| Nitrate (N)                   | Ion Chromatography, EPA 300.1 -modified         | NIsL | 4/19/2013 |
| pH at 25 C                    | Electrometric, APHA 4500 B -modified            | NIsL | 4/18/2013 |
| T-Aluminium                   | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Antimony                    | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Arsenic                     | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Barium                      | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Beryllium                   | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Bismuth                     | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Boron                       | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Cadmium                     | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Calcium                     | Exova Subcontract, ICP, APHA 3120B -modified    | EXL  | 4/22/2013 |
| T-Chromium                    | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Cobalt                      | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Copper                      | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Iron                        | Exova Subcontract, ICP, APHA 3120B -modified    | EXL  | 4/22/2013 |
| T-Lead                        | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Lithium                     | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Magnesium                   | Exova Subcontract, ICP, APHA 3120B-modified     | EXL  | 4/22/2013 |
| T-Manganese                   | Exova Subcontract, ICP, APHA 3120B -modified    | EXL  | 4/22/2013 |
| T-Molybdenum                  | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Nickel                      | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Potassium                   | Exova Subcontract, ICP, APHA 3120B - modified   | EXL  | 4/22/2013 |
| T-Selenium                    | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Silicon                     | Exova Subcontract, ICP, APHA 3120B - modified   | EXL  | 4/22/2013 |
| T-Silver                      | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Sodium                      | Exova Subcontract, ICP, APHA 3120B - modified   | EXL  | 4/22/2013 |
| T-Strontium                   | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Thallium                    | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Tin                         | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |
| T-Titanium                    | Exova Subcontract, ICP, APHA 3120B - modified   | EXL  | 4/22/2013 |
| T-Uranium                     | Exova Subcontract, ICP-MS,USEPA 200.8-modified  | EXL  | 4/22/2013 |

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|                         |  |      |           |
|-------------------------|--|------|-----------|
| T-Vanadium              | Exova Subcontract, ICP, APHA 3120B - modified        | EXL  | 4/22/2013 |
| T-Zinc                  | Exova Subcontract, ICP-MS, USEPA 200.8-modified      | EXL  | 4/22/2013 |
| Total Cyanide           | Exova Subcontract Exova Subcontract                  | EXL  | 4/25/2013 |
| Total Dissolved Solids  | Exova Subcontract, dried @180C, APHA 2540C-modified  | EXL  | 4/20/2013 |
| Total Halo Acetic Acids | Exova Subcontract Exova Subcontract                  | EXL  | 5/6/2013  |
| Total Kjeldahl Nitrogen | Exova Subcontract, ISO/TR 11905-2 -modified          | EXL  | 4/22/2013 |
| Total Suspended Solids  | Gravimetric, dried @103-105C, TSS EPA 160.2-modified | NI&L | 4/19/2013 |
| Total Trihalomethanes   | Exova Subcontract-EPA 8260B/5035 - modified          | EXL  | 4/22/2013 |
| Trichloroacetic Acid    | Exova Subcontract Exova Subcontract                  | EXL  | 5/6/2013  |
| Turbidity               | Nephelometric, APHA 2130 B -modified                 | NI&L | 4/19/2013 |

Approved By:

Catherine Black, Owner/Operator

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