



Meliadine Gold Project  
NWB 2AM-MEL1631  
August, 2019 Monthly Report

**Prepared for:**

Nunavut Water Board

**Prepared by:**

Agnico Eagle Mines Limited – Meliadine Division

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## Table of Contents

|                                                             |           |
|-------------------------------------------------------------|-----------|
| <b>SECTION 1 • BACKGROUND .....</b>                         | <b>3</b>  |
| <b>SECTION 2 • WATER MANAGEMENT .....</b>                   | <b>3</b>  |
| 2.1 WATER USAGE .....                                       | 3         |
| 2.2 DEWATERING ACTIVITIES .....                             | 3         |
| 2.3 MELIADINE DISCHARGE .....                               | 3         |
| 2.4 MELVIN BAY DISCHARGE .....                              | 3         |
| 2.5 SEEPAGE AND RUNOFF FROM THE LANDFILL AND LANDFARM ..... | 3         |
| 2.6 SEWAGE TREATMENT PLANT .....                            | 3         |
| 2.7 CONTAINMENTS.....                                       | 4         |
| 2.8 MONITORING ANALYTICAL DATA .....                        | 4         |
| <b>SECTION 3 • MATERIAL MANAGEMENT.....</b>                 | <b>39</b> |
| 3.1 LANDFILL / LANDFARM.....                                | 39        |
| 3.2 ORE .....                                               | 39        |
| 3.3 WASTE ROCK STORAGE FACILITY.....                        | 39        |
| 3.4 TAILINGS .....                                          | 39        |
| <b>SECTION 4 SPILL MANAGEMENT .....</b>                     | <b>40</b> |
| 4.1 INTERNAL AND REPORTABLE SPILLS .....                    | 40        |

## SECTION 1 • BACKGROUND

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As required under Part I, Item 10 of Type A Water License 2AM-MEL1631, this report documents the water management and monitoring activities at the mine site, and provides a summary of spills/ actions for the month of August 2019.

## SECTION 2 • WATER MANAGEMENT

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### 2.1 WATER USAGE

Table 2.1 details monthly water usage approved under Water License 2AM-MEL1631:

**Table 2.1: Summary of Agnico's monthly water usage in August 2019**

|                                          | Monthly Usage (m <sup>3</sup> ) |
|------------------------------------------|---------------------------------|
| Camp and Mill (MEL-11)                   | 35,558                          |
| Construction – Batch Plant (MEL-26 – A8) | 0                               |
| Dust suppression                         | 72                              |
| Total August                             | 35,630                          |
| Year to date 2019                        | 171,638                         |

### 2.2 DEWATERING ACTIVITIES

Dewatering of the Lake H-19 and H-20 started August 17<sup>th</sup>, a total of 36,168m<sup>3</sup> was dewatered through the EWTP in August

### 2.3 MELIADINE DISCHARGE

Discharge from the EWTP into Meliadine Lake via the Final Discharge Point (MEL-14) started in July, a total of 107,825m<sup>3</sup> was discharged in August including the dewatering of H-19 and H-20.

### 2.4 MELVIN BAY DISCHARGE

Discharge to sea via the Final Discharge Point (MEL-26) started August 1<sup>st</sup>, a total of 12,749m<sup>3</sup> was discharged in August.

### 2.5 SEEPAGE AND RUNOFF FROM THE LANDFILL AND LANDFARM

The 2AM-MEL1631 landfill and landfarm were commissioned in November 2017. No seepage or runoff was observed in August 2019.

### 2.6 SEWAGE TREATMENT PLANT

In August 2019, 3,265m<sup>3</sup> of treated wastewater was discharged into CP1. 19.5m<sup>3</sup> of sludge was removed during the month. The majority of the sludge is disposed of in the Tailings Storage Facility as approved, the

sludge can also be utilized as nutrient in the site landfarm or shipped to the south with Agnico Eagle's hazmat if needed.

## 2.7 CONTAINMENTS

Discharged from the Itivia fuel containment facility (Station Mel-25) occurred during the summer and approximately 6811m<sup>3</sup> was discharged at the end of August. Water sample complied with the water Licence criteria.

## 2.8 MONITORING ANALYTICAL DATA

In August, numerous samples related to the water Licence were sampled. See below the analytical results from these monitoring stations. One exceedance occurred during the month of August at station MEL-26 for TSS.

| MEL-SR                                 | 8/4/2019  | 8/28/2019 | 8/28/2019      |
|----------------------------------------|-----------|-----------|----------------|
|                                        | MEL-SR1   | MEL-SR1   | ITIVIA MEL-SR3 |
| Parameter                              |           |           |                |
| pH                                     | 7.79      | -         | -              |
| Conductivity                           | 1412      | -         | -              |
| Temperature                            | 7.09      | -         | -              |
| Dissolved oxygen                       | 8.71      | -         | -              |
| Dissolved oxygen                       | 73.3      | -         | -              |
| pH                                     | 8.07      | 7.99      | 7.86           |
| Hardness, Calcium Carbonate            | 464       | 411       | 5820           |
| Total suspended solids                 | 3         | 81        | 36             |
| Turbidity                              | 0.5       | 78        | 0.4            |
| Total Dissolved Solids                 | 960       | 710       | 29800          |
| Alkalinity, Total as CaCO <sub>3</sub> | 210       | 140       | 100            |
| Chloride                               | 210       | 170       | 14000          |
| Cyanide                                | < 0.0050  | < 0.0050  | < 0.0050       |
| Fluoride                               | 0.12      | 0.12      | 0.5            |
| Sulphate                               | 160       | 180       | 2000           |
| Nitrate                                | 0.19      | 1.4       | < 0.10         |
| Nitrite                                | < 0.010   | 0.02      | < 0.010        |
| Nitrate + nitrite                      | 0.19      | 1.42      | < 0.10         |
| Total ammonia                          | < 0.050   | 0.39      | 0.19           |
| Total phosphorus                       | < 0.020   | 0.039     | 0.087          |
| Orthophosphate                         | < 0.010   | < 0.010   | 0.014          |
| Total oil and grease                   | 0.5       | < 0.50    | < 0.50         |
| Aluminum                               | 0.0294    | 2.85      | 0.251          |
| Antimony                               | < 0.00050 | < 0.00050 | < 0.025        |
| Arsenic                                | 0.00294   | 0.00478   | < 0.0050       |
| Barium                                 | 0.0578    | 0.0767    | < 0.05         |
| Beryllium                              | < 0.00010 | < 0.00010 | < 0.0050       |

|            |            |            |           |
|------------|------------|------------|-----------|
| Bismuth    | < 0.0010   | < 0.0010   | < 0.05    |
| Boron      | 0.075      | 0.102      | 3.74      |
| Cadmium    | 0.000018   | 0.000026   | < 0.00050 |
| Calcium    | 143        | 122        | 331       |
| Chromium   | < 0.0010   | 0.0186     | < 0.05    |
| Cobalt     | 0.00049    | 0.00344    | < 0.01    |
| Copper     | 0.00386    | 0.0101     | < 0.025   |
| Iron       | 0.118      | 4.22       | < 0.5     |
| Lead       | < 0.00020  | 0.00108    | < 0.01    |
| Lithium    | 0.0319     | 0.0438     | 0.151     |
| Magnesium  | 26         | 25.9       | 1210      |
| Manganese  | 0.0247     | 0.101      | < 0.05    |
| Mercury    | < 0.00001  | < 0.00001  | < 0.00001 |
| Molybdenum | < 0.0010   | 0.0013     | < 0.05    |
| Nickel     | 0.0201     | 0.0172     | < 0.05    |
| Potassium  | 11.9       | 11.7       | 323       |
| Selenium   | 0.00011    | 0.00012    | < 0.0050  |
| Silicon    | 1.33       | 5.15       | < 5       |
| Silver     | < 0.000020 | < 0.000020 | < 0.0010  |
| Sodium     | 95.6       | 78.4       | 8870      |
| Strontium  | 0.888      | 1.02       | 6.99      |
| Sulphur    | 59.4       | 60.3       | 810       |
| Thallium   | < 0.000010 | 0.000044   | < 0.00050 |
| Tin        | < 0.0050   | < 0.0050   | < 0.25    |
| Titanium   | < 0.0050   | 0.134      | < 0.25    |
| Uranium    | 0.00255    | 0.00224    | < 0.0050  |
| Vanadium   | < 0.0050   | 0.0074     | < 0.25    |
| Zinc       | 0.0316     | 0.0225     | < 0.25    |
| Zirconium  | < 0.00010  | 0.00069    | < 0.0050  |

| MEL-SR                      | 8/4/2019 | 8/28/2019 |
|-----------------------------|----------|-----------|
|                             | MEL-SR7  | MEL-SR7   |
| Parameter                   |          |           |
| pH                          | 7.52     | -         |
| Conductivity                | 1375     | -         |
| Temperature                 | 9.4      | -         |
| Dissolved oxygen            | 9.71     | -         |
| Dissolved oxygen            | 87.6     | -         |
| pH                          | 7.99     | 7.82      |
| Hardness, Calcium Carbonate | 428      | 482       |
| Total suspended solids      | 2        | 5         |
| Turbidity                   | 0.1      | 2.5       |

|                                        |            |            |
|----------------------------------------|------------|------------|
| Total Dissolved Solids                 | 880        | 880        |
| Alkalinity, Total as CaCO <sub>3</sub> | 170        | 200        |
| Chloride                               | 210        | 210        |
| Cyanide                                | < 0.0050   | < 0.0050   |
| Fluoride                               | < 0.10     | < 0.10     |
| Sulphate                               | 190        | 180        |
| Nitrate                                | 1.68       | 1.15       |
| Nitrite                                | 0.14       | 0.021      |
| Nitrate + nitrite                      | 1.82       | 1.17       |
| Total ammonia                          | 0.7        | 0.73       |
| Total phosphorus                       | < 0.020    | 0.02       |
| Orthophosphate                         | < 0.010    | < 0.010    |
| Total oil and grease                   | 0.8        | < 0.50     |
| Aluminum                               | 0.0053     | 0.107      |
| Antimony                               | 0.00056    | < 0.00050  |
| Arsenic                                | 0.0105     | 0.00524    |
| Barium                                 | 0.0482     | 0.0507     |
| Beryllium                              | < 0.00010  | < 0.00010  |
| Bismuth                                | < 0.0010   | < 0.0010   |
| Boron                                  | < 0.05     | < 0.05     |
| Cadmium                                | 0.000025   | 0.000014   |
| Calcium                                | 131        | 145        |
| Chromium                               | < 0.0010   | < 0.0010   |
| Cobalt                                 | 0.00142    | 0.00185    |
| Copper                                 | 0.00739    | 0.00421    |
| Iron                                   | 0.05       | 0.419      |
| Lead                                   | < 0.00020  | < 0.00020  |
| Lithium                                | 0.0096     | 0.0098     |
| Magnesium                              | 24.4       | 29.1       |
| Manganese                              | 0.0083     | 0.0839     |
| Mercury                                | < 0.00001  | < 0.00001  |
| Molybdenum                             | < 0.0010   | < 0.0010   |
| Nickel                                 | 0.0225     | 0.014      |
| Potassium                              | 10.2       | 11.8       |
| Selenium                               | 0.0002     | < 0.00010  |
| Silicon                                | 0.572      | 1.74       |
| Silver                                 | < 0.000020 | < 0.000020 |
| Sodium                                 | 103        | 111        |
| Strontium                              | 0.578      | 0.628      |
| Sulphur                                | 66.2       | 64.3       |
| Thallium                               | < 0.000010 | < 0.000010 |
| Tin                                    | < 0.0050   | < 0.0050   |
| Titanium                               | < 0.0050   | < 0.0050   |
| Uranium                                | 0.00204    | 0.00188    |
| Vanadium                               | < 0.0050   | < 0.0050   |

|           |           |          |
|-----------|-----------|----------|
| Zinc      | < 0.0050  | < 0.0050 |
| Zirconium | < 0.00010 | 0.00015  |

| MEL-11                                 | Sample Date | 8/4/2019 |
|----------------------------------------|-------------|----------|
| Parameter                              | Unit        |          |
| <b>Field Measured</b>                  |             |          |
| pH                                     | pH units    | 7.92     |
| Conductivity                           | uS/cm       | 78       |
| Temperature                            | °C          | 12.8     |
| Dissolved oxygen                       | mg/L        | 7.3      |
| Dissolved oxygen                       | %           | 69.6     |
| <b>Conventional Parameters</b>         |             |          |
| pH                                     | pH units    | 7.28     |
| Specific conductivity                  | umhos/cm    | 78       |
| Hardness, Calcium Carbonate            | mg/L        | 22.5     |
| Hardness, Dissolved                    | mg/L        | 22.5     |
| Total organic carbon                   | mg/L        | 2.8      |
| Dissolved organic carbon               | mg/L        | 2.6      |
| Turbidity                              | NTU         | 0.3      |
| Total suspended solids                 | mg/L        | 1        |
| Total Dissolved Solids                 | mg/L        | 30       |
| <b>Major Ions</b>                      |             |          |
| Alkalinity, Total as CaCO <sub>3</sub> | mg/L        | 16       |
| Bicarbonate, as CaCO <sub>3</sub>      | mg/L        | 16       |
| Calcium                                | mg/L        | 7.12     |
| Carbonate, as CaCO <sub>3</sub>        | mg/L        | < 1.0    |
| Chloride                               | mg/L        | 9.8      |
| Cyanide Total                          | mg/L        | < 0.0050 |
| Cyanide Free                           | mg/L        | 0.0018   |
| Cyanide WAD                            | mg/L        | < 0.0010 |
| Magnesium                              | mg/L        | 1.15     |
| Potassium                              | mg/L        | 0.916    |
| Sodium                                 | mg/L        | 4.6      |
| Sulphate                               | mg/L        | 3.6      |
| Silica                                 | mg/L        | 1        |
| <b>Nutrients and Chlorophyll a</b>     |             |          |
| Nitrate                                | mg/L        | < 0.10   |
| Nitrite                                | mg/L        | < 0.010  |
| Nitrate + nitrite                      | mg/L        | < 0.10   |
| Total ammonia                          | mg/L        | < 0.050  |
| Total Kjeldahl nitrogen                | mg/L        | 0.15     |
| Total phosphorus                       | mg/L        | < 0.020  |

|                         |      |            |
|-------------------------|------|------------|
| Orthophosphate          | mg/L | < 0.010    |
| <b>Total Metals</b>     |      |            |
| Aluminum                | mg/L | 0.0034     |
| Antimony                | mg/L | < 0.00050  |
| Arsenic                 | mg/L | 0.00028    |
| Barium                  | mg/L | 0.0078     |
| Beryllium               | mg/L | < 0.00010  |
| Bismuth                 | mg/L | < 0.0010   |
| Boron                   | mg/L | < 0.05     |
| Cadmium                 | mg/L | < 0.000010 |
| Calcium                 | mg/L | 6.99       |
| Chromium                | mg/L | < 0.0010   |
| Cobalt                  | mg/L | < 0.00020  |
| Copper                  | mg/L | 0.00078    |
| Iron                    | mg/L | 0.018      |
| Lead                    | mg/L | < 0.00020  |
| Lithium                 | mg/L | < 0.0020   |
| Magnesium               | mg/L | 1.22       |
| Manganese               | mg/L | 0.0041     |
| Mercury                 | mg/L | < 0.00001  |
| Molybdenum              | mg/L | < 0.0010   |
| Nickel                  | mg/L | < 0.0010   |
| Potassium               | mg/L | 0.917      |
| Selenium                | mg/L | < 0.00010  |
| Silicon                 | mg/L | 0.151      |
| Silver                  | mg/L | < 0.000020 |
| Sodium                  | mg/L | 4.67       |
| Strontium               | mg/L | 0.037      |
| Sulphur                 | mg/L | < 3        |
| Thallium                | mg/L | < 0.000010 |
| Tin                     | mg/L | < 0.0050   |
| Titanium                | mg/L | < 0.0050   |
| Uranium                 | mg/L | < 0.00010  |
| Vanadium                | mg/L | < 0.0050   |
| Zinc                    | mg/L | < 0.0050   |
| Zirconium               | mg/L | < 0.00010  |
| <b>Dissolved Metals</b> |      |            |
| Aluminum                | mg/L | < 0.0030   |
| Antimony                | mg/L | < 0.00050  |
| Arsenic                 | mg/L | 0.00027    |
| Barium                  | mg/L | 0.0078     |
| Beryllium               | mg/L | < 0.00010  |
| Bismuth                 | mg/L | < 0.0010   |
| Boron                   | mg/L | < 0.05     |
| Cadmium                 | mg/L | < 0.000010 |

|                                |                    |                 |
|--------------------------------|--------------------|-----------------|
| Chromium                       | mg/L               | < 0.0010        |
| Cobalt                         | mg/L               | < 0.00020       |
| Copper                         | mg/L               | 0.00059         |
| Iron                           | mg/L               | 0.0061          |
| Lead                           | mg/L               | < 0.00020       |
| Lithium                        | mg/L               | < 0.0020        |
| Manganese                      | mg/L               | < 0.0010        |
| Mercury                        | mg/L               | < 0.00001       |
| Molybdenum                     | mg/L               | < 0.0010        |
| Nickel                         | mg/L               | < 0.0010        |
| Selenium                       | mg/L               | < 0.00010       |
| Silicon                        | mg/L               | 0.142           |
| Silver                         | mg/L               | < 0.000020      |
| Strontium                      | mg/L               | 0.0375          |
| Sulphur                        | mg/L               | < 3.0           |
| Thallium                       | mg/L               | < 0.000010      |
| Tin                            | mg/L               | < 0.0050        |
| Titanium                       | mg/L               | < 0.0050        |
| Uranium                        | mg/L               | < 0.00010       |
| Vanadium                       | mg/L               | < 0.0050        |
| Zinc                           | mg/L               | < 0.0050        |
| Zirconium                      | mg/L               | < 0.00010       |
| <b>Volatile Organics</b>       |                    |                 |
| Benzene                        | mg/L               | < 0.00020       |
| Ethylbenzene                   | mg/L               | < 0.00020       |
| Toluene                        | mg/L               | < 0.00020       |
| Xylenes                        | mg/L               | < 0.00040       |
| m,p-Xylenes                    | mg/L               | < 0.00040       |
| o-Xylene                       | mg/L               | < 0.00020       |
| F1 (C6-C10)-BTEX               | mg/L               | < 0.025         |
| F1 (C6-C10)                    | mg/L               | < 0.025         |
| F2 (C10-C16)                   | mg/L               | < 0.1           |
| F3 (C16-C34)                   | mg/L               | < 0.2           |
| F4 (C34-C50)                   | mg/L               | < 0.2           |
| Reached baseline at C50        | mg/L               | YES             |
| <b>MEL-12</b>                  | <b>Sample Date</b> | <b>8/7/2019</b> |
| <b>Parameter</b>               | <b>Unit</b>        |                 |
| <b>Conventional Parameters</b> |                    |                 |
| pH                             | pH units           | 7.8             |
| Specific conductivity          | umhos/cm           | 3500            |
| Hardness, as CaCO <sub>3</sub> | mg/L               | 687             |
| Hardness, Calcium Carbonate    | mg/L               | 690 680         |
| Total organic carbon           | mg/L               | 14              |

|                                    |      |            |
|------------------------------------|------|------------|
| Total suspended solids             | mg/L | 8          |
| Turbidity                          | NTU  | 3.5        |
| Total Dissolved Solids             | mg/L | 2100       |
| <b>Major Ions</b>                  |      |            |
| Calcium                            | mg/L | 195        |
| Chloride                           | mg/L | 930        |
| Cyanide Total                      | mg/L | < 0.0050   |
| Cyanide WAD                        | mg/L | 0.0013     |
| Fluoride                           | mg/L | < 0.10     |
| Magnesium                          | mg/L | 48.5       |
| Potassium                          | mg/L | 25.2       |
| Sodium                             | mg/L | 339        |
| Sulphate                           | mg/L | 130        |
| <b>Nutrients and Chlorophyll a</b> |      |            |
| Nitrate                            | mg/L | 25.3       |
| Nitrite                            | mg/L | 1.61       |
| Nitrate + nitrite                  | mg/L | 26.9       |
| Total ammonia                      | mg/L | 7.9        |
| Total phosphorus                   | mg/L | 0.081      |
| Orthophosphate                     | mg/L | < 0.010    |
| <b>Total Metals</b>                |      |            |
| Aluminum                           | mg/L | 0.0473     |
| Antimony                           | mg/L | 0.00063    |
| Arsenic                            | mg/L | 0.00366    |
| Barium                             | mg/L | 0.118      |
| Beryllium                          | mg/L | < 0.00010  |
| Bismuth                            | mg/L | < 0.0010   |
| Boron                              | mg/L | 0.364      |
| Cadmium                            | mg/L | 0.000037   |
| Calcium                            | mg/L | 188        |
| Chromium                           | mg/L | < 0.0010   |
| Cobalt                             | mg/L | 0.0012     |
| Copper                             | mg/L | 0.00264    |
| Iron                               | mg/L | 0.199      |
| Lead                               | mg/L | 0.00027    |
| Lithium                            | mg/L | 0.0998     |
| Magnesium                          | mg/L | 50.9       |
| Manganese                          | mg/L | 0.0704     |
| Mercury                            | mg/L | < 0.00001  |
| Molybdenum                         | mg/L | 0.0027     |
| Nickel                             | mg/L | 0.0069     |
| Potassium                          | mg/L | 23.7       |
| Selenium                           | mg/L | 0.00017    |
| Silicon                            | mg/L | 0.717      |
| Silver                             | mg/L | < 0.000020 |

|                         |      |            |
|-------------------------|------|------------|
| Strontium               | mg/L | 4.1        |
| Sulphur                 | mg/L | 45.5       |
| Thallium                | mg/L | 0.000058   |
| Tin                     | mg/L | < 0.0050   |
| Titanium                | mg/L | < 0.0050   |
| Uranium                 | mg/L | 0.00106    |
| Vanadium                | mg/L | < 0.0050   |
| Zinc                    | mg/L | 0.047      |
| Zirconium               | mg/L | < 0.00010  |
| <b>Dissolved Metals</b> |      |            |
| Aluminum                | mg/L | 0.03       |
| Antimony                | mg/L | 0.00057    |
| Arsenic                 | mg/L | 0.00338    |
| Barium                  | mg/L | 0.12       |
| Beryllium               | mg/L | < 0.00010  |
| Bismuth                 | mg/L | < 0.0010   |
| Boron                   | mg/L | 0.414      |
| Cadmium                 | mg/L | 0.000031   |
| Chromium                | mg/L | < 0.0010   |
| Cobalt                  | mg/L | 0.00106    |
| Copper                  | mg/L | 0.00208    |
| Iron                    | mg/L | 0.069      |
| Lead                    | mg/L | < 0.00020  |
| Lithium                 | mg/L | 0.128      |
| Manganese               | mg/L | 0.0282     |
| Mercury                 | mg/L | < 0.00001  |
| Molybdenum              | mg/L | 0.0028     |
| Nickel                  | mg/L | 0.0063     |
| Selenium                | mg/L | 0.00018    |
| Silicon                 | mg/L | 0.751      |
| Silver                  | mg/L | < 0.000020 |
| Strontium               | mg/L | 4.44       |
| Sulphur                 | mg/L | 48.3       |
| Thallium                | mg/L | 0.00006    |
| Tin                     | mg/L | < 0.0050   |
| Titanium                | mg/L | < 0.0050   |
| Uranium                 | mg/L | 0.00107    |
| Vanadium                | mg/L | < 0.0050   |
| Zinc                    | mg/L | 0.0239     |
| Zirconium               | mg/L | < 0.00010  |

| MEL-14         | 8/6/2019 | 8/13/2019 | 8/20/2019 | 8/29/2019 |
|----------------|----------|-----------|-----------|-----------|
| Parameter      |          |           |           |           |
| Field Measured |          |           |           |           |

|                                        |          |          |          |          |
|----------------------------------------|----------|----------|----------|----------|
| pH                                     | 7.14     | 7.24     | 7.45     | 7.45     |
| Conductivity                           | 1534     | 1728     | 1882     | 2010     |
| Temperature                            | 14.8     | 13.6     | 14.8     | 19.4     |
| Dissolved oxygen                       | -        | -        | -        | 5.94     |
| Dissolved oxygen                       | 72.6     | 85       | 95       | 64.9     |
| <b>Conventional Parameters</b>         |          |          |          |          |
| pH                                     | 7.26     | 7.36     | 7.8      | 7.71     |
| Specific conductivity                  | 1500     | 1700     | 1800     | 1900     |
| Temperature                            | 5.5      | 11       | 9        | -        |
| Hardness, Calcium Carbonate            | 232      | 293      | 388      | 441      |
| Hardness, as CaCO <sub>3</sub>         | 234      | 271      | 388      | 391      |
| Dissolved Oxygen                       | 10.3     | 10.2     | 10       | 9.6      |
| Biochemical Oxygen Demand, 5 Day       | < 2      | < 2      | 2        | < 2      |
| Total organic carbon                   | 3.3      | 3.7      | 13       | 12       |
| Dissolved organic carbon               | 2.8      | 3.7      | 11       | 10       |
| Total suspended solids                 | 2        | 2        | 7        | 4        |
| Turbidity                              | 0.3      | 0.2      | 1.5      | 1.4      |
| Total Dissolved Solids                 | 1070     | 1130     | 1310     | 1170     |
| <b>Major Ions</b>                      |          |          |          |          |
| Alkalinity, Total as CaCO <sub>3</sub> | 18       | 22       | 51       | 46       |
| Bicarbonate, as CaCO <sub>3</sub>      | 18       | 22       | 50       | 46       |
| Calcium                                | 66.2     | 75.4     | 108      | 109      |
| Carbonate, as CaCO <sub>3</sub>        | < 1.0    | < 1.0    | < 1.0    | < 1.0    |
| Chloride                               | 370      | 410      | 460      | 470      |
| Cyanide Total                          | < 0.0050 | < 0.0050 | < 0.0050 | < 0.0050 |
| Cyanide Free                           | 0.0011   | 0.0011   | 0.0018   | 0.0014   |
| Cyanide WAD                            | < 0.0010 | < 0.0010 | < 0.0010 | < 0.0010 |
| Magnesium                              | 16.7     | 20       | 28.8     | 28.8     |
| Potassium                              | 11.7     | 11       | 12.9     | 12.9     |
| Sodium                                 | 162      | 162      | 181      | 177      |
| Sulphate                               | 39       | 50       | 63       | 69       |
| Silica                                 | 0.43     | 0.53     | 0.7      | 0.75     |
| <b>Nutrients and Chlorophyll a</b>     |          |          |          |          |
| Nitrate                                | 13.6     | 12.9     | 11.1     | 11.5     |
| Nitrite                                | 0.573    | 0.753    | 0.738    | 0.726    |
| Nitrate + nitrite                      | 14.2     | 13.7     | 11.8     | 12.3     |
| Total ammonia                          | 3.8      | 3.2      | 2.8      | 2.6      |
| Total Kjeldahl nitrogen                | 4.1      | 3.3      | 3.6      | 2.9      |
| Total phosphorus                       | < 0.020  | < 0.020  | 0.025    | 0.023    |

|                     |            |            |            |            |
|---------------------|------------|------------|------------|------------|
| Orthophosphate      | < 0.010    | < 0.010    | < 0.010    | < 0.010    |
| <b>Total Metals</b> |            |            |            |            |
| Aluminum            | 0.0674     | 0.0992     | 0.529      | 0.515      |
| Antimony            | < 0.00050  | < 0.00050  | < 0.00050  | < 0.00050  |
| Arsenic             | 0.0009     | 0.00116    | 0.00206    | 0.00199    |
| Barium              | 0.0378     | 0.0519     | 0.068      | 0.0724     |
| Beryllium           | < 0.00010  | < 0.00010  | < 0.00010  | < 0.00010  |
| Bismuth             | < 0.0010   | < 0.0010   | < 0.0010   | < 0.0010   |
| Boron               | 0.392      | 0.323      | 0.175      | 0.181      |
| Cadmium             | 0.000012   | 0.000012   | 0.000016   | 0.000013   |
| Calcium             | 64.9       | 82.2       | 108        | 118        |
| Chromium            | < 0.0010   | < 0.0010   | < 0.0010   | < 0.0010   |
| Cobalt              | 0.00034    | 0.00037    | 0.0005     | 0.00043    |
| Copper              | 0.00062    | 0.00065    | 0.00149    | 0.00116    |
| Iron                | 0.133      | 0.049      | 0.085      | 0.095      |
| Lead                | < 0.00020  | < 0.00020  | < 0.00020  | 0.00022    |
| Lithium             | 0.0557     | 0.0526     | 0.0498     | 0.0545     |
| Magnesium           | 17         | 21.4       | 29.1       | 35.8       |
| Manganese           | 0.0093     | 0.0056     | 0.023      | 0.0165     |
| Mercury             | < 0.00001  | < 0.00001  | < 0.00001  | < 0.00001  |
| Molybdenum          | < 0.0010   | 0.001      | 0.0015     | 0.0015     |
| Nickel              | 0.0022     | 0.0025     | 0.0038     | 0.0033     |
| Potassium           | 10.5       | 12         | 12.8       | 13.5       |
| Selenium            | < 0.00010  | < 0.00010  | 0.00013    | 0.00012    |
| Silicon             | 0.238      | 0.266      | 0.419      | 0.475      |
| Silver              | < 0.000020 | < 0.000020 | < 0.000020 | < 0.000020 |
| Sodium              | 161        | 171        | 186        | 193        |
| Strontium           | 1.37       | 1.85       | 2.05       | 2.26       |
| Sulphur             | 14.3       | 18.8       | 24.1       | 26.3       |
| Thallium            | 0.000023   | 0.000026   | 0.000039   | 0.000027   |
| Tin                 | < 0.0050   | < 0.0050   | < 0.0050   | < 0.0050   |
| Titanium            | < 0.0050   | < 0.0050   | < 0.0050   | < 0.0050   |
| Uranium             | 0.00018    | 0.00017    | 0.00046    | 0.00035    |
| Vanadium            | < 0.0050   | < 0.0050   | < 0.0050   | < 0.0050   |
| Zinc                | 0.0055     | < 0.0050   | < 0.0050   | < 0.0050   |
| Zirconium           | < 0.00010  | < 0.00010  | < 0.00010  | < 0.00010  |

| <b>Dissolved Metals</b>  |            |            |            |            |
|--------------------------|------------|------------|------------|------------|
| Aluminum                 | 0.0272     | 0.0323     | 0.112      | 0.0641     |
| Antimony                 | < 0.00050  | < 0.00050  | < 0.00050  | < 0.00050  |
| Arsenic                  | 0.00087    | 0.00104    | 0.00188    | 0.00167    |
| Barium                   | 0.0389     | 0.0456     | 0.0685     | 0.0677     |
| Beryllium                | < 0.00010  | < 0.00010  | < 0.00010  | < 0.00010  |
| Bismuth                  | < 0.0010   | < 0.0010   | < 0.0010   | < 0.0010   |
| Boron                    | 0.406      | 0.341      | 0.181      | 0.181      |
| Cadmium                  | 0.000018   | < 0.000010 | 0.000013   | 0.000014   |
| Chromium                 | < 0.0010   | < 0.0010   | < 0.0010   | < 0.0010   |
| Cobalt                   | 0.00035    | 0.00037    | 0.00047    | 0.0004     |
| Copper                   | 0.00067    | 0.0006     | 0.00129    | 0.00107    |
| Iron                     | 0.152      | 0.0538     | 0.036      | 0.0349     |
| Lead                     | < 0.00020  | < 0.00020  | < 0.00020  | < 0.00020  |
| Lithium                  | 0.0571     | 0.054      | 0.0542     | 0.0581     |
| Manganese                | 0.0105     | 0.0053     | 0.0105     | 0.0069     |
| Mercury                  | < 0.00001  | < 0.00001  | < 0.00001  | < 0.00001  |
| Molybdenum               | 0.0061     | < 0.0010   | 0.0098     | 0.0014     |
| Nickel                   | 0.0023     | 0.0024     | 0.0036     | 0.0032     |
| Selenium                 | < 0.00010  | < 0.00010  | 0.00012    | 0.00011    |
| Silicon                  | 0.256      | 0.247      | 0.415      | 0.42       |
| Silver                   | < 0.000020 | < 0.000020 | < 0.000020 | < 0.000020 |
| Strontium                | 1.29       | 1.63       | 2.01       | 2.18       |
| Sulphur                  | 15.9       | 17.8       | 25         | 25         |
| Thallium                 | 0.000024   | 0.000024   | 0.000032   | 0.000029   |
| Tin                      | < 0.0050   | < 0.0050   | < 0.0050   | < 0.0050   |
| Titanium                 | < 0.0050   | < 0.0050   | < 0.0050   | < 0.0050   |
| Uranium                  | 0.00017    | 0.00013    | 0.00044    | 0.00027    |
| Vanadium                 | < 0.0050   | < 0.0050   | < 0.0050   | < 0.0050   |
| Zinc                     | 0.0075     | < 0.0050   | < 0.0050   | < 0.0050   |
| Zirconium                | < 0.00010  | < 0.00010  | < 0.00010  | < 0.00010  |
| <b>Volatile Organics</b> |            |            |            |            |
| Benzene                  | < 0.00020  | < 0.00020  | < 0.00020  | < 0.00020  |
| Ethylbenzene             | < 0.00020  | < 0.00020  | < 0.00020  | < 0.00020  |

|                                       |           |           |           |           |
|---------------------------------------|-----------|-----------|-----------|-----------|
| Toluene                               | < 0.00020 | < 0.00020 | < 0.00020 | < 0.00020 |
| Xylenes                               | < 0.00040 | < 0.00040 | < 0.00040 | < 0.00040 |
| m,p-Xylenes                           | < 0.00040 | < 0.00040 | < 0.00040 | < 0.00040 |
| o-Xylene                              | < 0.00020 | < 0.00020 | < 0.00020 | < 0.00020 |
| F1 (C6-C10)-BTEX                      | < 0.025   | < 0.025   | < 0.025   | < 0.025   |
| F1 (C6-C10)                           | < 0.025   | < 0.025   | < 0.025   | < 0.025   |
| F2 (C10-C16)                          | < 0.1     | < 0.1     | < 0.1     | < 0.1     |
| F3 (C16-C34)                          | < 0.2     | < 0.2     | < 0.2     | < 0.2     |
| F4 (C34-C50)                          | < 0.2     | < 0.2     | < 0.2     | < 0.2     |
| Reached baseline at C50               | YES       | YES       | YES       | YES       |
| <b>Toxicity</b>                       |           |           |           |           |
| Daphnia 48 h static acute test - LC50 | > 100     | -         | -         | -         |
| Daphnia 48 h Static Acute Test - EC50 | > 100     | -         | -         | -         |
| LC50 (96h) - Rainbow Trout            | > 100     | -         | -         | -         |
| Aerobic heterotrophic bacteria        | 1 180     | 1220      | 1320      | -         |
| Atypical colonies                     | 1 600     | 1150      | 8400      | -         |
| Escherichia coli                      | 2         | < 2       | 8         | -         |
| Fecal Coliform                        | 2         | < 2       | 8         | -         |
| Total Coliform                        | < 10      | 10        | < 100     | -         |
| <b>Radionuclides</b>                  |           |           |           |           |
| Radium-226                            | < 0.0050  | < 0.0050  | < 0.0050  | < 0.0050  |

|                                |                    |          |
|--------------------------------|--------------------|----------|
| <b>MEL-15</b>                  | <b>Sample Date</b> | 8/4/2019 |
| <b>Parameter</b>               | <b>Unit</b>        |          |
| <b>Field Measured</b>          |                    |          |
| pH                             | pH units           | 7.83     |
| Conductivity                   | uS/cm              | 100.2    |
| Temperature                    | °C                 | 11.9     |
| Dissolved oxygen               | mg/L               | 9.05     |
| Dissolved oxygen               | %                  | 84.6     |
| <b>Conventional Parameters</b> |                    |          |

|                                        |          |            |
|----------------------------------------|----------|------------|
| pH                                     | pH units | 7.56       |
| Specific conductivity                  | umhos/cm | 89         |
| Hardness, as CaCO <sub>3</sub>         | mg/L     | 36.4       |
| Hardness, Calcium Carbonate            | mg/L     | 37.9       |
| Total organic carbon                   | mg/L     | 4.7        |
| Dissolved organic carbon               | mg/L     | 4          |
| Total suspended solids                 | mg/L     | < 1        |
| Turbidity                              | NTU      | 0.3        |
| Total Dissolved Solids                 | mg/L     | 80         |
| <b>Major Ions</b>                      |          |            |
| Alkalinity, Total as CaCO <sub>3</sub> | mg/L     | 30         |
| Bicarbonate, as CaCO <sub>3</sub>      | mg/L     | 30         |
| Calcium                                | mg/L     | 12.3       |
| Carbonate, as CaCO <sub>3</sub>        | mg/L     | < 1.0      |
| Chloride                               | mg/L     | 7          |
| Cyanide Total                          | mg/L     | < 0.0050   |
| Cyanide Free                           | mg/L     | 0.0018     |
| Cyanide WAD                            | mg/L     | < 0.0010   |
| Magnesium                              | mg/L     | 1.36       |
| Potassium                              | mg/L     | 0.882      |
| Sodium                                 | mg/L     | 3.28       |
| Sulphate                               | mg/L     | 1.1        |
| Silica                                 | mg/L     | 0.32       |
| <b>Nutrients and Chlorophyll a</b>     |          |            |
| Nitrate                                | mg/L     | < 0.10     |
| Nitrite                                | mg/L     | < 0.010    |
| Nitrate + nitrite                      | mg/L     | < 0.10     |
| Total ammonia                          | mg/L     | 0.12       |
| Total Kjeldahl nitrogen                | mg/L     | 0.24       |
| Total phosphorus                       | mg/L     | < 0.020    |
| Orthophosphate                         | mg/L     | < 0.010    |
| <b>Total Metals</b>                    |          |            |
| Aluminum                               | mg/L     | 0.0039     |
| Antimony                               | mg/L     | < 0.00050  |
| Arsenic                                | mg/L     | 0.00086    |
| Barium                                 | mg/L     | 0.0106     |
| Beryllium                              | mg/L     | < 0.00010  |
| Bismuth                                | mg/L     | < 0.0010   |
| Boron                                  | mg/L     | < 0.05     |
| Cadmium                                | mg/L     | < 0.000010 |
| Calcium                                | mg/L     | 12.8       |
| Chromium                               | mg/L     | < 0.0010   |
| Cobalt                                 | mg/L     | < 0.00020  |
| Copper                                 | mg/L     | 0.00062    |
| Iron                                   | mg/L     | 0.084      |

|                         |      |            |
|-------------------------|------|------------|
| Lead                    | mg/L | < 0.00020  |
| Lithium                 | mg/L | < 0.0020   |
| Magnesium               | mg/L | 1.44       |
| Manganese               | mg/L | 0.0094     |
| Mercury                 | mg/L | < 0.00001  |
| Molybdenum              | mg/L | < 0.0010   |
| Nickel                  | mg/L | < 0.0010   |
| Potassium               | mg/L | 0.888      |
| Selenium                | mg/L | < 0.00010  |
| Silicon                 | mg/L | 0.244      |
| Silver                  | mg/L | < 0.000020 |
| Sodium                  | mg/L | 3.37       |
| Strontium               | mg/L | 0.0638     |
| Sulphur                 | mg/L | < 3        |
| Thallium                | mg/L | < 0.000010 |
| Tin                     | mg/L | < 0.0050   |
| Titanium                | mg/L | < 0.0050   |
| Uranium                 | mg/L | < 0.00010  |
| Vanadium                | mg/L | < 0.0050   |
| Zinc                    | mg/L | < 0.0050   |
| Zirconium               | mg/L | < 0.00010  |
| <b>Dissolved Metals</b> |      |            |
| Aluminum                | mg/L | < 0.0030   |
| Antimony                | mg/L | < 0.00050  |
| Arsenic                 | mg/L | 0.00074    |
| Barium                  | mg/L | 0.0103     |
| Beryllium               | mg/L | < 0.00010  |
| Bismuth                 | mg/L | < 0.0010   |
| Boron                   | mg/L | < 0.05     |
| Cadmium                 | mg/L | < 0.000010 |
| Chromium                | mg/L | < 0.0010   |
| Cobalt                  | mg/L | < 0.00020  |
| Copper                  | mg/L | 0.00049    |
| Iron                    | mg/L | 0.0387     |
| Lead                    | mg/L | < 0.00020  |
| Lithium                 | mg/L | < 0.0020   |
| Manganese               | mg/L | 0.0026     |
| Mercury                 | mg/L | < 0.00001  |
| Molybdenum              | mg/L | < 0.0010   |
| Nickel                  | mg/L | < 0.0010   |
| Selenium                | mg/L | < 0.00010  |
| Silicon                 | mg/L | 0.242      |
| Silver                  | mg/L | < 0.000020 |
| Strontium               | mg/L | 0.0634     |
| Sulphur                 | mg/L | < 3.0      |

|           |      |            |
|-----------|------|------------|
| Thallium  | mg/L | < 0.000010 |
| Tin       | mg/L | < 0.0050   |
| Titanium  | mg/L | < 0.0050   |
| Uranium   | mg/L | < 0.00010  |
| Vanadium  | mg/L | < 0.0050   |
| Zinc      | mg/L | < 0.0050   |
| Zirconium | mg/L | < 0.00010  |

| MEL-16                                 | Sample Date | 8/4/2019 |
|----------------------------------------|-------------|----------|
| Parameter                              | Unit        |          |
| <b>Field Measured</b>                  |             |          |
| pH                                     | pH units    | 7.59     |
| Conductivity                           | ms/cm       | 93.8     |
| Temperature                            | °C          | 10.5     |
| Dissolved oxygen                       | mg/L        | 7.88     |
| Dissolved oxygen                       | %           | 70.3     |
| <b>Conventional Parameters</b>         |             |          |
| pH                                     | pH units    | 7.37     |
| Specific conductivity                  | umhos/cm    | 93       |
| Hardness, as CaCO <sub>3</sub>         | mg/L        | 35.2     |
| Hardness, Calcium Carbonate            | mg/L        | 35.5     |
| Total organic carbon                   | mg/L        | 4.3      |
| Dissolved organic carbon               | mg/L        | 3.9      |
| Total suspended solids                 | mg/L        | 2        |
| Turbidity                              | NTU         | 0.5      |
| Total Dissolved Solids                 | mg/L        | 95       |
| <b>Major Ions</b>                      |             |          |
| Alkalinity, Total as CaCO <sub>3</sub> | mg/L        | 25       |
| Bicarbonate, as CaCO <sub>3</sub>      | mg/L        | 25       |
| Calcium                                | mg/L        | 11.7     |
| Carbonate, as CaCO <sub>3</sub>        | mg/L        | < 1.0    |
| Chloride                               | mg/L        | 11       |
| Cyanide Total                          | mg/L        | < 0.0050 |
| Cyanide Free                           | mg/L        | 0.0018   |
| Cyanide WAD                            | mg/L        | < 0.0010 |
| Magnesium                              | mg/L        | 1.47     |
| Potassium                              | mg/L        | 0.973    |
| Sodium                                 | mg/L        | 2.45     |
| Sulphate                               | mg/L        | 1.6      |
| Silica                                 | mg/L        | 0.17     |
| <b>Nutrients and Chlorophyll a</b>     |             |          |
| Nitrate                                | mg/L        | < 0.10   |
| Nitrite                                | mg/L        | < 0.010  |

|                         |      |            |
|-------------------------|------|------------|
| Nitrate + nitrite       | mg/L | < 0.10     |
| Total ammonia           | mg/L | < 0.050    |
| Total Kjeldahl nitrogen | mg/L | 0.18       |
| Total phosphorus        | mg/L | < 0.020    |
| Orthophosphate          | mg/L | < 0.010    |
| <b>Total Metals</b>     |      |            |
| Aluminum                | mg/L | 0.0074     |
| Antimony                | mg/L | < 0.00050  |
| Arsenic                 | mg/L | 0.00115    |
| Barium                  | mg/L | 0.0175     |
| Beryllium               | mg/L | < 0.00010  |
| Bismuth                 | mg/L | < 0.0010   |
| Boron                   | mg/L | < 0.05     |
| Cadmium                 | mg/L | 0.000016   |
| Calcium                 | mg/L | 11.7       |
| Chromium                | mg/L | < 0.0010   |
| Cobalt                  | mg/L | < 0.00020  |
| Copper                  | mg/L | 0.00091    |
| Iron                    | mg/L | 0.1        |
| Lead                    | mg/L | < 0.00020  |
| Lithium                 | mg/L | < 0.0020   |
| Magnesium               | mg/L | 1.52       |
| Manganese               | mg/L | 0.008      |
| Mercury                 | mg/L | < 0.00001  |
| Molybdenum              | mg/L | < 0.0010   |
| Nickel                  | mg/L | < 0.0010   |
| Potassium               | mg/L | 0.959      |
| Selenium                | mg/L | < 0.00010  |
| Silicon                 | mg/L | 0.126      |
| Silver                  | mg/L | < 0.000020 |
| Sodium                  | mg/L | 2.45       |
| Strontium               | mg/L | 0.0616     |
| Sulphur                 | mg/L | < 3        |
| Thallium                | mg/L | < 0.000010 |
| Tin                     | mg/L | < 0.0050   |
| Titanium                | mg/L | < 0.0050   |
| Uranium                 | mg/L | < 0.00010  |
| Vanadium                | mg/L | < 0.0050   |
| Zinc                    | mg/L | < 0.0050   |
| Zirconium               | mg/L | < 0.00010  |
| <b>Dissolved Metals</b> |      |            |
| Cobalt                  | mg/L | < 0.00020  |
| Mercury                 | mg/L | < 0.00001  |
| Sulphur                 | mg/L | < 3.0      |

| MEL-17                                 | Sample Date | 8/4/2019 |
|----------------------------------------|-------------|----------|
| Parameter                              | Unit        |          |
| <b>Field Measured</b>                  |             |          |
| pH                                     | pH units    | 8        |
| Conductivity                           | uS/cm       | 326.5    |
| Temperature                            | °C          | 9.8      |
| Dissolved oxygen                       | mg/L        | 7.42     |
| Dissolved oxygen                       | %           | 65.5     |
| <b>Conventional Parameters</b>         |             |          |
| pH                                     | pH units    | 7.89     |
| Specific conductivity                  | umhos/cm    | 310      |
| Hardness, as CaCO <sub>3</sub>         | mg/L        | 105      |
| Hardness, Calcium Carbonate            | mg/L        | 110      |
| Total organic carbon                   | mg/L        | 10       |
| Dissolved organic carbon               | mg/L        | 9.7      |
| Total suspended solids                 | mg/L        | 3        |
| Turbidity                              | NTU         | 0.9      |
| Total Dissolved Solids                 | mg/L        | 305      |
| <b>Major Ions</b>                      |             |          |
| Alkalinity, Total as CaCO <sub>3</sub> | mg/L        | 55       |
| Bicarbonate, as CaCO <sub>3</sub>      | mg/L        | 54       |
| Calcium                                | mg/L        | 35.1     |
| Carbonate, as CaCO <sub>3</sub>        | mg/L        | < 1.0    |
| Chloride                               | mg/L        | 49       |
| Cyanide Total                          | mg/L        | < 0.0050 |
| Cyanide Free                           | mg/L        | 0.0018   |
| Cyanide WAD                            | mg/L        | < 0.0010 |
| Magnesium                              | mg/L        | 4.23     |
| Potassium                              | mg/L        | 2.27     |
| Sodium                                 | mg/L        | 11.2     |
| Sulphate                               | mg/L        | 7.9      |
| Silica                                 | mg/L        | 0.86     |
| <b>Nutrients and Chlorophyll a</b>     |             |          |
| Nitrate                                | mg/L        | < 0.10   |
| Nitrite                                | mg/L        | < 0.010  |
| Nitrate + nitrite                      | mg/L        | < 0.10   |
| Total ammonia                          | mg/L        | < 0.050  |
| Total Kjeldahl nitrogen                | mg/L        | 0.47     |
| Total phosphorus                       | mg/L        | < 0.020  |
| Orthophosphate                         | mg/L        | < 0.010  |
| <b>General Organics</b>                |             |          |
| Total oil and grease                   | mg/L        | 0.6      |
| <b>Total Metals</b>                    |             |          |

|                         |      |                       |
|-------------------------|------|-----------------------|
| Aluminum                | mg/L | 0.0057                |
| Antimony                | mg/L | < 0.00050             |
| Arsenic                 | mg/L | 0.00078               |
| Barium                  | mg/L | 0.0308                |
| Beryllium               | mg/L | < 0.00010             |
| Bismuth                 | mg/L | < 0.0010              |
| Boron                   | mg/L | < 0.05                |
| Cadmium                 | mg/L | < 0.000010            |
| Calcium                 | mg/L | 36.7                  |
| Chromium                | mg/L | < 0.0010              |
| Cobalt                  | mg/L | < 0.00020             |
| Copper                  | mg/L | 0.00108               |
| Iron                    | mg/L | 0.267                 |
| Lead                    | mg/L | < 0.00020             |
| Lithium                 | mg/L | 0.0106                |
| Magnesium               | mg/L | 4.46                  |
| Manganese               | mg/L | 0.0389                |
| Mercury                 | mg/L | < 0.00001   < 0.00001 |
| Molybdenum              | mg/L | < 0.0010              |
| Nickel                  | mg/L | 0.0015                |
| Potassium               | mg/L | 2.27                  |
| Selenium                | mg/L | < 0.00010             |
| Silicon                 | mg/L | 0.489                 |
| Silver                  | mg/L | < 0.000020            |
| Sodium                  | mg/L | 11.9                  |
| Strontium               | mg/L | 0.345                 |
| Sulphur                 | mg/L | < 3                   |
| Thallium                | mg/L | < 0.000010            |
| Tin                     | mg/L | < 0.0050              |
| Titanium                | mg/L | < 0.0050              |
| Uranium                 | mg/L | < 0.00010             |
| Vanadium                | mg/L | < 0.0050              |
| Zinc                    | mg/L | < 0.0050              |
| Zirconium               | mg/L | < 0.00010             |
| <b>Dissolved Metals</b> |      |                       |
| Aluminum                | mg/L | 0.0032                |
| Antimony                | mg/L | < 0.00050             |
| Arsenic                 | mg/L | 0.00076               |
| Barium                  | mg/L | 0.0305                |
| Beryllium               | mg/L | < 0.00010             |
| Bismuth                 | mg/L | < 0.0010              |
| Boron                   | mg/L | < 0.05                |
| Cadmium                 | mg/L | < 0.000010            |
| Chromium                | mg/L | < 0.0010              |

|                          |      |            |
|--------------------------|------|------------|
| Cobalt                   | mg/L | < 0.00020  |
| Copper                   | mg/L | 0.00094    |
| Iron                     | mg/L | 0.152      |
| Lead                     | mg/L | < 0.00020  |
| Lithium                  | mg/L | 0.0102     |
| Manganese                | mg/L | 0.0242     |
| Molybdenum               | mg/L | < 0.0010   |
| Nickel                   | mg/L | 0.0015     |
| Selenium                 | mg/L | < 0.00010  |
| Silicon                  | mg/L | 0.495      |
| Silver                   | mg/L | < 0.000020 |
| Strontium                | mg/L | 0.369      |
| Sulphur                  | mg/L | < 3.0      |
| Thallium                 | mg/L | < 0.000010 |
| Tin                      | mg/L | < 0.0050   |
| Titanium                 | mg/L | < 0.0050   |
| Uranium                  | mg/L | < 0.00010  |
| Vanadium                 | mg/L | < 0.0050   |
| Zinc                     | mg/L | < 0.0050   |
| Zirconium                | mg/L | < 0.00010  |
| <b>Volatile Organics</b> |      |            |
| Benzene                  | mg/L | < 0.00020  |
| Ethylbenzene             | mg/L | < 0.00020  |
| Toluene                  | mg/L | < 0.00020  |
| Xylenes                  | mg/L | < 0.00040  |
| m,p-Xylenes              | mg/L | < 0.00040  |
| o-Xylene                 | mg/L | < 0.00020  |
| F1 (C6-C10)-BTEX         | mg/L | < 0.025    |
| F1 (C6-C10)              | mg/L | < 0.025    |

|                                |                    |          |
|--------------------------------|--------------------|----------|
| <b>MEL-18</b>                  | <b>Sample Date</b> | 8/7/2019 |
| <b>Parameter</b>               | <b>Unit</b>        |          |
| <b>Conventional Parameters</b> |                    |          |
| pH                             | pH units           | 7.49     |
| Specific conductivity          | umhos/cm           | 130      |
| Hardness, Calcium Carbonate    | mg/L               | 43       |
| Total organic carbon           | mg/L               | 4.4      |
| Dissolved organic carbon       | mg/L               | 4        |
| Total suspended solids         | mg/L               | 1        |
| Turbidity                      | NTU                | 0.5      |
| Total Dissolved Solids         | mg/L               | 95       |
| <b>Major Ions</b>              |                    |          |
| Alkalinity, Total as CaCO3     | mg/L               | 30       |

|                                    |      |            |
|------------------------------------|------|------------|
| Bicarbonate, as CaCO <sub>3</sub>  | mg/L | 30         |
| Carbonate, as CaCO <sub>3</sub>    | mg/L | < 1.0      |
| Chloride                           | mg/L | 18         |
| Cyanide Total                      | mg/L | < 0.0050   |
| Cyanide Free                       | mg/L | < 0.0010   |
| Cyanide WAD                        | mg/L | < 0.0010   |
| Sulphate                           | mg/L | 4          |
| Silica                             | mg/L | 0.35       |
| <b>Nutrients and Chlorophyll a</b> |      |            |
| Nitrate                            | mg/L | < 0.10     |
| Nitrite                            | mg/L | < 0.010    |
| Nitrate + nitrite                  | mg/L | < 0.10     |
| Total ammonia                      | mg/L | < 0.050    |
| Total Kjeldahl nitrogen            | mg/L | 0.27       |
| Total phosphorus                   | mg/L | < 0.020    |
| Orthophosphate                     | mg/L | < 0.010    |
| <b>Total Metals</b>                |      |            |
| Aluminum                           | mg/L | 0.0055     |
| Antimony                           | mg/L | < 0.00050  |
| Arsenic                            | mg/L | 0.00152    |
| Barium                             | mg/L | 0.0136     |
| Beryllium                          | mg/L | < 0.00010  |
| Bismuth                            | mg/L | < 0.0010   |
| Boron                              | mg/L | < 0.05     |
| Cadmium                            | mg/L | < 0.000010 |
| Calcium                            | mg/L | 14.1       |
| Chromium                           | mg/L | < 0.0010   |
| Cobalt                             | mg/L | < 0.00020  |
| Copper                             | mg/L | 0.00068    |
| Iron                               | mg/L | 0.094      |
| Lead                               | mg/L | < 0.00020  |
| Lithium                            | mg/L | 0.0049     |
| Magnesium                          | mg/L | 1.88       |
| Manganese                          | mg/L | 0.0097     |
| Mercury                            | mg/L | < 0.00001  |
| Molybdenum                         | mg/L | < 0.0010   |
| Nickel                             | mg/L | < 0.0010   |
| Potassium                          | mg/L | 0.982      |
| Selenium                           | mg/L | < 0.00010  |
| Silicon                            | mg/L | 0.168      |
| Silver                             | mg/L | < 0.000020 |
| Strontium                          | mg/L | 0.0958     |
| Sulphur                            | mg/L | < 3        |
| Thallium                           | mg/L | < 0.000010 |
| Tin                                | mg/L | < 0.0050   |

|                         |      |           |
|-------------------------|------|-----------|
| Titanium                | mg/L | < 0.0050  |
| Uranium                 | mg/L | < 0.00010 |
| Vanadium                | mg/L | < 0.0050  |
| Zinc                    | mg/L | < 0.0050  |
| Zirconium               | mg/L | < 0.00010 |
| <b>Dissolved Metals</b> |      |           |
| Mercury                 | mg/L | < 0.00001 |

|                                        |                    |                 |
|----------------------------------------|--------------------|-----------------|
| <b>MEL-21</b>                          | <b>Sample Date</b> | <b>8/4/2019</b> |
| <b>Parameter</b>                       | <b>Unit</b>        |                 |
| <b>Field Measured</b>                  |                    |                 |
| pH                                     | pH units           | 9.07            |
| Conductivity                           | uS/cm              | 3682            |
| Temperature                            | °C                 | 10.6            |
| Dissolved oxygen                       | mg/L               | 9.45            |
| Dissolved oxygen                       | %                  | 86.3            |
| <b>Conventional Parameters</b>         |                    |                 |
| pH                                     | pH units           | 8.03            |
| Hardness, as CaCO <sub>3</sub>         | mg/L               | 508             |
| Hardness, Calcium Carbonate            | mg/L               | 522             |
| Total suspended solids                 | mg/L               | 43              |
| Turbidity                              | NTU                | 35              |
| Total Dissolved Solids                 | mg/L               | 2190            |
| <b>Major Ions</b>                      |                    |                 |
| Alkalinity, Total as CaCO <sub>3</sub> | mg/L               | 130             |
| Calcium                                | mg/L               | 105             |
| Chloride                               | mg/L               | 910             |
| Cyanide                                | mg/L               | < 0.0050        |
| Fluoride                               | mg/L               | 0.26            |
| Magnesium                              | mg/L               | 59.4            |
| Potassium                              | mg/L               | 32.2            |
| Sodium                                 | mg/L               | 478             |
| Sulphate                               | mg/L               | 270             |
| <b>Nutrients and Chlorophyll a</b>     |                    |                 |
| Nitrate                                | mg/L               | 3.34            |
| Nitrite                                | mg/L               | 0.111           |
| Nitrate + nitrite                      | mg/L               | 3.45            |
| Total ammonia                          | mg/L               | 2.5             |
| Total phosphorus                       | mg/L               | < 0.20          |
| Orthophosphate                         | mg/L               | < 0.010         |
| <b>Total Metals</b>                    |                    |                 |
| Aluminum                               | mg/L               | 0.799           |
| Antimony                               | mg/L               | 0.0081          |
| Arsenic                                | mg/L               | 0.0124          |

|                         |      |            |
|-------------------------|------|------------|
| Barium                  | mg/L | 0.0741     |
| Beryllium               | mg/L | < 0.00020  |
| Bismuth                 | mg/L | < 0.0020   |
| Boron                   | mg/L | 1.19       |
| Cadmium                 | mg/L | 0.000032   |
| Calcium                 | mg/L | 109        |
| Chromium                | mg/L | 0.0026     |
| Cobalt                  | mg/L | 0.00391    |
| Copper                  | mg/L | 0.0051     |
| Iron                    | mg/L | 1.35       |
| Lead                    | mg/L | 0.00164    |
| Lithium                 | mg/L | 0.0366     |
| Magnesium               | mg/L | 60.9       |
| Manganese               | mg/L | 0.19       |
| Mercury                 | mg/L | < 0.00001  |
| Molybdenum              | mg/L | 0.0546     |
| Nickel                  | mg/L | 0.0381     |
| Potassium               | mg/L | 32.6       |
| Selenium                | mg/L | 0.00077    |
| Silicon                 | mg/L | 4.27       |
| Silver                  | mg/L | < 0.000040 |
| Sodium                  | mg/L | 484        |
| Strontium               | mg/L | 1.05       |
| Sulphur                 | mg/L | 97.3       |
| Thallium                | mg/L | 0.000023   |
| Tin                     | mg/L | < 0.01     |
| Titanium                | mg/L | 0.061      |
| Uranium                 | mg/L | 0.0152     |
| Vanadium                | mg/L | < 0.01     |
| Zinc                    | mg/L | < 0.01     |
| Zirconium               | mg/L | 0.00161    |
| <b>Dissolved Metals</b> |      |            |
| Aluminum                | mg/L | 0.0094     |
| Antimony                | mg/L | 0.008      |
| Arsenic                 | mg/L | 0.00775    |
| Barium                  | mg/L | 0.0641     |
| Beryllium               | mg/L | < 0.00020  |
| Bismuth                 | mg/L | < 0.0020   |
| Boron                   | mg/L | 1.14       |
| Cadmium                 | mg/L | < 0.000020 |
| Chromium                | mg/L | < 0.0020   |
| Cobalt                  | mg/L | 0.00268    |
| Copper                  | mg/L | 0.003      |
| Iron                    | mg/L | < 0.01     |
| Lead                    | mg/L | < 0.00040  |

|            |      |            |
|------------|------|------------|
| Lithium    | mg/L | 0.0318     |
| Manganese  | mg/L | 0.146      |
| Mercury    | mg/L | < 0.00001  |
| Molybdenum | mg/L | 0.0542     |
| Nickel     | mg/L | 0.0324     |
| Selenium   | mg/L | 0.00072    |
| Silicon    | mg/L | 2.69       |
| Silver     | mg/L | < 0.000040 |
| Strontium  | mg/L | 1.02       |
| Sulphur    | mg/L | 94.5       |
| Thallium   | mg/L | < 0.000020 |
| Tin        | mg/L | < 0.01     |
| Titanium   | mg/L | < 0.01     |
| Uranium    | mg/L | 0.0144     |
| Vanadium   | mg/L | < 0.01     |
| Zinc       | mg/L | < 0.01     |
| Zirconium  | mg/L | 0.00038    |

| MEL-22                                 | Sample Date | 8/4/2019 |
|----------------------------------------|-------------|----------|
| Parameter                              | Unit        |          |
| <b>Field Measured</b>                  |             |          |
| pH                                     | pH units    | 7.92     |
| Conductivity                           | uS/cm       | 6842     |
| Temperature                            | °C          | 9.8      |
| Dissolved oxygen                       | mg/L        | 10.86    |
| Dissolved oxygen                       | %           | 91.6     |
| <b>Conventional Parameters</b>         |             |          |
| pH                                     | pH units    | 7.8      |
| Specific conductivity                  | umhos/cm    | 6800     |
| Hardness, as CaCO <sub>3</sub>         | mg/L        | 1440     |
| Hardness, Calcium Carbonate            | mg/L        | 1420     |
| Total organic carbon                   | mg/L        | 18       |
| Total suspended solids                 | mg/L        | 13       |
| Turbidity                              | NTU         | 4.7      |
| Total Dissolved Solids                 | mg/L        | 4760     |
| <b>Major Ions</b>                      |             |          |
| Alkalinity, Total as CaCO <sub>3</sub> | mg/L        | 68       |
| Calcium                                | mg/L        | 404      |
| Chloride                               | mg/L        | 2100     |
| Cyanide                                | mg/L        | < 0.0050 |
| Fluoride                               | mg/L        | 0.11     |
| Magnesium                              | mg/L        | 105      |
| Potassium                              | mg/L        | 42.6     |
| Sodium                                 | mg/L        | 676      |

|                                    |      |            |
|------------------------------------|------|------------|
| Sulphate                           | mg/L | 250        |
| <b>Nutrients and Chlorophyll a</b> |      |            |
| Nitrate                            | mg/L | 28.3       |
| Nitrite                            | mg/L | 0.551      |
| Nitrate + nitrite                  | mg/L | 28.8       |
| Total ammonia                      | mg/L | 12         |
| Total phosphorus                   | mg/L | 0.07       |
| Orthophosphate                     | mg/L | < 0.010    |
| <b>Total Metals</b>                |      |            |
| Aluminum                           | mg/L | 0.0978     |
| Antimony                           | mg/L | < 0.0010   |
| Arsenic                            | mg/L | 0.00426    |
| Barium                             | mg/L | 0.117      |
| Beryllium                          | mg/L | < 0.00020  |
| Bismuth                            | mg/L | < 0.0020   |
| Boron                              | mg/L | 0.437      |
| Cadmium                            | mg/L | 0.000137   |
| Calcium                            | mg/L | 397        |
| Chromium                           | mg/L | < 0.0020   |
| Cobalt                             | mg/L | 0.00212    |
| Copper                             | mg/L | 0.0042     |
| Iron                               | mg/L | 0.277      |
| Lead                               | mg/L | < 0.00040  |
| Lithium                            | mg/L | 0.289      |
| Magnesium                          | mg/L | 105        |
| Manganese                          | mg/L | 0.143      |
| Mercury                            | mg/L | < 0.00001  |
| Molybdenum                         | mg/L | 0.0045     |
| Nickel                             | mg/L | 0.0215     |
| Potassium                          | mg/L | 43.1       |
| Selenium                           | mg/L | 0.00025    |
| Silicon                            | mg/L | 0.866      |
| Silver                             | mg/L | < 0.000040 |
| Sodium                             | mg/L | 674        |
| Strontium                          | mg/L | 9.7        |
| Sulphur                            | mg/L | 82.3       |
| Thallium                           | mg/L | 0.000096   |
| Tin                                | mg/L | < 0.01     |
| Titanium                           | mg/L | < 0.01     |
| Uranium                            | mg/L | 0.00375    |
| Vanadium                           | mg/L | < 0.01     |
| Zinc                               | mg/L | < 0.01     |
| Zirconium                          | mg/L | < 0.00020  |
| <b>Dissolved Metals</b>            |      |            |
| Aluminum                           | mg/L | 0.0071     |

|            |      |            |
|------------|------|------------|
| Antimony   | mg/L | < 0.0010   |
| Arsenic    | mg/L | 0.00316    |
| Barium     | mg/L | 0.118      |
| Beryllium  | mg/L | < 0.00020  |
| Bismuth    | mg/L | < 0.0020   |
| Boron      | mg/L | 0.42       |
| Cadmium    | mg/L | 0.000098   |
| Chromium   | mg/L | < 0.0020   |
| Cobalt     | mg/L | 0.00183    |
| Copper     | mg/L | 0.00348    |
| Iron       | mg/L | 0.053      |
| Lead       | mg/L | < 0.00040  |
| Lithium    | mg/L | 0.267      |
| Manganese  | mg/L | 0.0819     |
| Mercury    | mg/L | < 0.00001  |
| Molybdenum | mg/L | 0.004      |
| Nickel     | mg/L | 0.0193     |
| Selenium   | mg/L | 0.00022    |
| Silicon    | mg/L | 0.714      |
| Silver     | mg/L | < 0.000040 |
| Strontium  | mg/L | 9.75       |
| Sulphur    | mg/L | 84.1       |
| Thallium   | mg/L | 0.000092   |
| Tin        | mg/L | < 0.01     |
| Titanium   | mg/L | < 0.01     |
| Uranium    | mg/L | 0.00357    |
| Vanadium   | mg/L | < 0.01     |
| Zinc       | mg/L | < 0.01     |
| Zirconium  | mg/L | < 0.00020  |

|                                |                    |          |
|--------------------------------|--------------------|----------|
| <b>MEL-23</b>                  | <b>Sample Date</b> | 8/4/2019 |
| <b>Parameter</b>               | <b>Unit</b>        |          |
| <b>Field Measured</b>          |                    |          |
| pH                             | pH units           | 7.77     |
| Conductivity                   | uS/cm              | 276.1    |
| Temperature                    | °C                 | 11.4     |
| Dissolved oxygen               | mg/L               | 9.05     |
| Dissolved oxygen               | %                  | 85       |
| <b>Conventional Parameters</b> |                    |          |
| pH                             | pH units           | 7.89     |
| Hardness, as CaCO <sub>3</sub> | mg/L               | 76.6     |
| Hardness, Calcium Carbonate    | mg/L               | 76.6     |
| Total suspended solids         | mg/L               | 1        |

|                                        |      |            |
|----------------------------------------|------|------------|
| Turbidity                              | NTU  | 0.4        |
| Total Dissolved Solids                 | mg/L | 230        |
| <b>Major Ions</b>                      |      |            |
| Alkalinity, Total as CaCO <sub>3</sub> | mg/L | 43         |
| Calcium                                | mg/L | 21.8       |
| Chloride                               | mg/L | 48         |
| Cyanide                                | mg/L | < 0.0050   |
| Fluoride                               | mg/L | < 0.10     |
| Magnesium                              | mg/L | 5.39       |
| Potassium                              | mg/L | 1.93       |
| Sodium                                 | mg/L | 18.9       |
| Sulphate                               | mg/L | 3.8        |
| <b>Nutrients and Chlorophyll a</b>     |      |            |
| Nitrate                                | mg/L | < 0.10     |
| Nitrite                                | mg/L | < 0.010    |
| Nitrate + nitrite                      | mg/L | < 0.10     |
| Total ammonia                          | mg/L | 0.1        |
| Total phosphorus                       | mg/L | < 0.020    |
| Orthophosphate                         | mg/L | < 0.010    |
| <b>Total Metals</b>                    |      |            |
| Aluminum                               | mg/L | 0.0068     |
| Antimony                               | mg/L | < 0.00050  |
| Arsenic                                | mg/L | 0.00184    |
| Barium                                 | mg/L | 0.0229     |
| Beryllium                              | mg/L | < 0.00010  |
| Bismuth                                | mg/L | < 0.0010   |
| Boron                                  | mg/L | < 0.05     |
| Cadmium                                | mg/L | < 0.000010 |
| Calcium                                | mg/L | 21.7       |
| Chromium                               | mg/L | < 0.0010   |
| Cobalt                                 | mg/L | < 0.00020  |
| Copper                                 | mg/L | 0.00095    |
| Iron                                   | mg/L | 0.17       |
| Lead                                   | mg/L | < 0.00020  |
| Lithium                                | mg/L | 0.0036     |
| Magnesium                              | mg/L | 5.46       |
| Manganese                              | mg/L | 0.0112     |
| Mercury                                | mg/L | < 0.00001  |
| Molybdenum                             | mg/L | < 0.0010   |
| Nickel                                 | mg/L | 0.0015     |
| Potassium                              | mg/L | 1.95       |
| Selenium                               | mg/L | < 0.00010  |
| Silicon                                | mg/L | 0.14       |
| Silver                                 | mg/L | < 0.000020 |
| Sodium                                 | mg/L | 19.3       |

|                         |      |            |
|-------------------------|------|------------|
| Strontium               | mg/L | 0.142      |
| Sulphur                 | mg/L | < 3        |
| Thallium                | mg/L | < 0.000010 |
| Tin                     | mg/L | < 0.0050   |
| Titanium                | mg/L | < 0.0050   |
| Uranium                 | mg/L | < 0.00010  |
| Vanadium                | mg/L | < 0.0050   |
| Zinc                    | mg/L | < 0.0050   |
| Zirconium               | mg/L | < 0.00010  |
| <b>Dissolved Metals</b> |      |            |
| Aluminum                | mg/L | 0.0036     |
| Antimony                | mg/L | < 0.00050  |
| Arsenic                 | mg/L | 0.00162    |
| Barium                  | mg/L | 0.0234     |
| Beryllium               | mg/L | < 0.00010  |
| Bismuth                 | mg/L | < 0.0010   |
| Boron                   | mg/L | < 0.05     |
| Cadmium                 | mg/L | < 0.000010 |
| Chromium                | mg/L | < 0.0010   |
| Cobalt                  | mg/L | < 0.00020  |
| Copper                  | mg/L | 0.00083    |
| Iron                    | mg/L | 0.104      |
| Lead                    | mg/L | < 0.00020  |
| Lithium                 | mg/L | 0.0035     |
| Manganese               | mg/L | 0.0078     |
| Mercury                 | mg/L | < 0.00001  |
| Molybdenum              | mg/L | < 0.0010   |
| Nickel                  | mg/L | 0.0013     |
| Selenium                | mg/L | < 0.00010  |
| Silicon                 | mg/L | 0.132      |
| Silver                  | mg/L | < 0.000020 |
| Strontium               | mg/L | 0.139      |
| Sulphur                 | mg/L | < 3.0      |
| Thallium                | mg/L | < 0.000010 |
| Tin                     | mg/L | < 0.0050   |
| Titanium                | mg/L | < 0.0050   |
| Uranium                 | mg/L | < 0.00010  |
| Vanadium                | mg/L | < 0.0050   |
| Zinc                    | mg/L | < 0.0050   |
| Zirconium               | mg/L | < 0.00010  |

|                  |                    |          |           |
|------------------|--------------------|----------|-----------|
| <b>MEL-03-01</b> | <b>Sample Date</b> | 8/9/2019 | 8/14/2019 |
| <b>Parameter</b> | <b>Unit</b>        |          |           |

| Field Measured                         |          |           |           |
|----------------------------------------|----------|-----------|-----------|
| pH                                     | pH units | 7.43      | 7.11      |
| Conductivity                           | uS/cm    | 72.9      | 71.4      |
| Temperature                            | °C       | 12.14     | 13.6      |
| Dissolved oxygen                       | %        | 94.8      | 104.6     |
| Conventional Parameters                |          |           |           |
| pH                                     | pH units | 7.47      | 7.56      |
| Specific conductivity                  | umhos/cm | 73        | 73        |
| Hardness, Calcium Carbonate            | mg/L     | 21        | 20.7      |
| Hardness, as CaCO <sub>3</sub>         | mg/L     | 21.7      | 21.4      |
| Dissolved Oxygen                       | mg/L     | 11        | 10.2      |
| Total organic carbon                   | mg/L     | 2.3       | 2.3       |
| Dissolved organic carbon               | mg/L     | 2         | 2         |
| Total suspended solids                 | mg/L     | 2         | 1         |
| Turbidity                              | NTU      | < 0.1     | 0.1       |
| Total Dissolved Solids                 | mg/L     | 55        | 50        |
| Major Ions                             |          |           |           |
| Alkalinity, Total as CaCO <sub>3</sub> | mg/L     | 16        | 17        |
| Bicarbonate, as CaCO <sub>3</sub>      | mg/L     | 16        | 17        |
| Calcium                                | mg/L     | 6.81      | 6.75      |
| Carbonate, as CaCO <sub>3</sub>        | mg/L     | < 1.0     | < 1.0     |
| Chloride                               | mg/L     | 8.6       | 8.7       |
| Cyanide Total                          | mg/L     | < 0.0050  | < 0.0050  |
| Cyanide Free                           | mg/L     | < 0.0010  | 0.0032    |
| Cyanide WAD                            | mg/L     | < 0.0010  | < 0.0010  |
| Magnesium                              | mg/L     | 1.14      | 1.12      |
| Potassium                              | mg/L     | 0.856     | 0.853     |
| Sodium                                 | mg/L     | 4.4       | 4.31      |
| Sulphate                               | mg/L     | 2.8       | 2.8       |
| Silica                                 | mg/L     | 0.22      | 0.17      |
| Nutrients and Chlorophyll a            |          |           |           |
| Nitrate                                | mg/L     | < 0.10    | < 0.10    |
| Nitrite                                | mg/L     | < 0.010   | < 0.010   |
| Nitrate + nitrite                      | mg/L     | < 0.10    | < 0.10    |
| Total ammonia                          | mg/L     | 0.13      | < 0.050   |
| Nitrogen, Kjeldahl                     | mg/L     | 0.19      | 0.18      |
| Total phosphorus                       | mg/L     | < 0.020   | < 0.020   |
| Orthophosphate                         | mg/L     | < 0.010   | < 0.010   |
| Total Metals                           |          |           |           |
| Aluminum                               | mg/L     | 0.0125    | 0.0037    |
| Antimony                               | mg/L     | < 0.00050 | < 0.00050 |
| Arsenic                                | mg/L     | 0.00018   | 0.00019   |
| Barium                                 | mg/L     | 0.0075    | 0.0078    |
| Beryllium                              | mg/L     | < 0.00010 | < 0.00010 |
| Bismuth                                | mg/L     | < 0.0010  | < 0.0010  |

|                         |      |            |            |
|-------------------------|------|------------|------------|
| Boron                   | mg/L | < 0.05     | < 0.05     |
| Cadmium                 | mg/L | < 0.000010 | < 0.000010 |
| Calcium                 | mg/L | 6.63       | 6.52       |
| Chromium                | mg/L | < 0.0010   | < 0.0010   |
| Cobalt                  | mg/L | < 0.00020  | < 0.00020  |
| Copper                  | mg/L | 0.00062    | 0.0006     |
| Iron                    | mg/L | 0.014      | 0.011      |
| Lead                    | mg/L | < 0.00020  | < 0.00020  |
| Lithium                 | mg/L | < 0.0020   | < 0.0020   |
| Magnesium               | mg/L | 1.07       | 1.06       |
| Manganese               | mg/L | 0.0025     | 0.0024     |
| Mercury                 | mg/L | < 0.00001  | < 0.00001  |
| Molybdenum              | mg/L | < 0.0010   | < 0.0010   |
| Nickel                  | mg/L | < 0.0010   | < 0.0010   |
| Potassium               | mg/L | 0.88       | 0.826      |
| Selenium                | mg/L | < 0.00010  | < 0.00010  |
| Silicon                 | mg/L | 0.11       | 0.106      |
| Silver                  | mg/L | < 0.000020 | < 0.000020 |
| Sodium                  | mg/L | 4.04       | 4.04       |
| Strontium               | mg/L | 0.0309     | 0.0304     |
| Sulphur                 | mg/L | < 3        | < 3        |
| Thallium                | mg/L | < 0.000010 | < 0.000010 |
| Tin                     | mg/L | < 0.0050   | < 0.0050   |
| Titanium                | mg/L | < 0.0050   | < 0.0050   |
| Uranium                 | mg/L | < 0.00010  | < 0.00010  |
| Vanadium                | mg/L | < 0.0050   | < 0.0050   |
| Zinc                    | mg/L | < 0.0050   | < 0.0050   |
| Zirconium               | mg/L | < 0.00010  | < 0.00010  |
| <b>Dissolved Metals</b> |      |            |            |
| Aluminum                | mg/L | 0.0035     | < 0.0030   |
| Antimony                | mg/L | < 0.00050  | < 0.00050  |
| Arsenic                 | mg/L | 0.00021    | 0.00018    |
| Barium                  | mg/L | 0.0073     | 0.0073     |
| Beryllium               | mg/L | < 0.00010  | < 0.00010  |
| Bismuth                 | mg/L | < 0.0010   | < 0.0010   |
| Boron                   | mg/L | < 0.05     | < 0.05     |
| Cadmium                 | mg/L | < 0.000010 | < 0.000010 |
| Chromium                | mg/L | < 0.0010   | < 0.0010   |
| Cobalt                  | mg/L | < 0.00020  | < 0.00020  |
| Copper                  | mg/L | 0.00058    | 0.00056    |
| Iron                    | mg/L | < 0.0050   | < 0.0050   |
| Lead                    | mg/L | < 0.00020  | < 0.00020  |
| Lithium                 | mg/L | < 0.0020   | < 0.0020   |
| Manganese               | mg/L | < 0.0010   | < 0.0010   |
| Mercury                 | mg/L | < 0.00001  | < 0.00001  |

|                          |      |            |            |
|--------------------------|------|------------|------------|
| Molybdenum               | mg/L | < 0.0010   | < 0.0010   |
| Nickel                   | mg/L | < 0.0010   | < 0.0010   |
| Selenium                 | mg/L | < 0.00010  | < 0.00010  |
| Silicon                  | mg/L | 0.101      | 0.102      |
| Silver                   | mg/L | < 0.000020 | < 0.000020 |
| Strontium                | mg/L | 0.0313     | 0.0306     |
| Sulphur                  | mg/L | < 3.0      | < 3.0      |
| Thallium                 | mg/L | < 0.000010 | < 0.000010 |
| Tin                      | mg/L | < 0.0050   | < 0.0050   |
| Titanium                 | mg/L | < 0.0050   | < 0.0050   |
| Uranium                  | mg/L | < 0.00010  | < 0.00010  |
| Vanadium                 | mg/L | < 0.0050   | < 0.0050   |
| Zinc                     | mg/L | < 0.0050   | < 0.0050   |
| Zirconium                | mg/L | < 0.00010  | < 0.00010  |
| <b>Volatile Organics</b> |      |            |            |
| Benzene                  | mg/L | < 0.00020  | < 0.00020  |
| Ethylbenzene             | mg/L | < 0.00020  | < 0.00020  |
| Toluene                  | mg/L | < 0.00020  | < 0.00020  |
| Xylenes                  | mg/L | < 0.00040  | < 0.00040  |
| m,p-Xylenes              | mg/L | < 0.00040  | < 0.00040  |
| o-Xylene                 | mg/L | < 0.00020  | < 0.00020  |
| F1 (C6-C10)-BTEX         | mg/L | < 0.025    | < 0.025    |
| F1 (C6-C10)              | mg/L | < 0.025    | < 0.025    |
| F2 (C10-C16)             | mg/L | < 0.1      | < 0.1      |
| F3 (C16-C34)             | mg/L | < 0.2      | < 0.2      |
| F4 (C34-C50)             | mg/L | < 0.2      | < 0.2      |
| Reached baseline at C50  | mg/L | YES        | YES        |
| <b>Radionuclides</b>     |      |            |            |
| Radium-226               | Bq/l | < 0.0050   | < 0.0050   |

| MEL-13                         | Sample Date | 8/10/2019 | 8/18/2019 |
|--------------------------------|-------------|-----------|-----------|
| Parameter                      | Unit        |           |           |
| <b>Field Measured</b>          |             |           |           |
| pH                             | pH units    | -         | 7.62      |
| Conductivity                   | uS/cm       | -         | 81.8      |
| Temperature                    | °C          | -         | 12.7      |
| Dissolved oxygen               | %           | -         | 106.1     |
| <b>Conventional Parameters</b> |             |           |           |
| pH                             | pH units    | 7.26      | 7.59      |
| Specific conductivity          | umhos/cm    | 84        | 86        |
| Hardness, Calcium Carbonate    | mg/L        | 22.4      | 23.1      |
| Hardness, as CaCO3             | mg/L        | 23        | 23        |
| Dissolved Oxygen               | mg/L        | 11.6      | 10.3      |
| Total organic carbon           | mg/L        | 3         | 3.2       |

|                                        |      |            |            |
|----------------------------------------|------|------------|------------|
| Dissolved organic carbon               | mg/L | 3          | 2.6        |
| Total suspended solids                 | mg/L | 1          | 1          |
| Turbidity                              | NTU  | < 0.1      | 0.2        |
| Total Dissolved Solids                 | mg/L | 45         | 70         |
| <b>Major Ions</b>                      |      |            |            |
| Alkalinity, Total as CaCO <sub>3</sub> | mg/L | 16         | 16         |
| Bicarbonate, as CaCO <sub>3</sub>      | mg/L | 16         | 16         |
| Calcium                                | mg/L | 7.12       | 7.12       |
| Carbonate, as CaCO <sub>3</sub>        | mg/L | < 1.0      | < 1.0      |
| Chloride                               | mg/L | 12         | 12         |
| Cyanide Total                          | mg/L | < 0.0050   | < 0.0050   |
| Cyanide Free                           | mg/L | 0.0011     | 0.0021     |
| Cyanide WAD                            | mg/L | < 0.0010   | < 0.0010   |
| Magnesium                              | mg/L | 1.28       | 1.27       |
| Potassium                              | mg/L | 0.935      | 0.93       |
| Sodium                                 | mg/L | 5.07       | 5.03       |
| Sulphate                               | mg/L | 3.6        | 3.3        |
| Silica                                 | mg/L | 0.8        | 0.31       |
| <b>Nutrients and Chlorophyll a</b>     |      |            |            |
| Nitrate                                | mg/L | < 0.10     | < 0.10     |
| Nitrite                                | mg/L | < 0.010    | < 0.010    |
| Nitrate + nitrite                      | mg/L | < 0.10     | < 0.10     |
| Total ammonia                          | mg/L | 0.13       | 0.22       |
| Total Kjeldahl nitrogen                | mg/L | 0.37       | 0.18       |
| Total phosphorus                       | mg/L | < 0.020    | < 0.020    |
| Orthophosphate                         | mg/L | < 0.010    | < 0.010    |
| <b>Total Metals</b>                    |      |            |            |
| Aluminum                               | mg/L | 0.0051     | 0.0055     |
| Antimony                               | mg/L | < 0.00050  | < 0.00050  |
| Arsenic                                | mg/L | 0.00033    | 0.00039    |
| Barium                                 | mg/L | 0.0071     | 0.0074     |
| Beryllium                              | mg/L | < 0.00010  | < 0.00010  |
| Bismuth                                | mg/L | < 0.0010   | < 0.0010   |
| Boron                                  | mg/L | < 0.05     | < 0.05     |
| Cadmium                                | mg/L | < 0.000010 | < 0.000010 |
| Calcium                                | mg/L | 6.86       | 7.15       |
| Chromium                               | mg/L | < 0.0010   | < 0.0010   |
| Cobalt                                 | mg/L | < 0.00020  | < 0.00020  |
| Copper                                 | mg/L | 0.00066    | 0.00072    |
| Iron                                   | mg/L | 0.023      | 0.023      |
| Lead                                   | mg/L | < 0.00020  | < 0.00020  |
| Lithium                                | mg/L | < 0.0020   | < 0.0020   |
| Magnesium                              | mg/L | 1.27       | 1.28       |
| Manganese                              | mg/L | 0.0045     | 0.005      |
| Mercury                                | mg/L | < 0.00001  | < 0.00001  |

|                         |      |            |            |
|-------------------------|------|------------|------------|
| Molybdenum              | mg/L | < 0.0010   | < 0.0010   |
| Nickel                  | mg/L | < 0.0010   | < 0.0010   |
| Potassium               | mg/L | 0.901      | 0.984      |
| Selenium                | mg/L | < 0.00010  | < 0.00010  |
| Silicon                 | mg/L | 0.184      | 0.2        |
| Silver                  | mg/L | < 0.000020 | < 0.000020 |
| Sodium                  | mg/L | 5.01       | 5.17       |
| Strontium               | mg/L | 0.0376     | 0.0394     |
| Sulphur                 | mg/L | < 3        | < 3        |
| Thallium                | mg/L | < 0.000010 | < 0.000010 |
| Tin                     | mg/L | < 0.0050   | < 0.0050   |
| Titanium                | mg/L | < 0.0050   | < 0.0050   |
| Uranium                 | mg/L | < 0.00010  | < 0.00010  |
| Vanadium                | mg/L | < 0.0050   | < 0.0050   |
| Zinc                    | mg/L | < 0.0050   | < 0.0050   |
| Zirconium               | mg/L | < 0.00010  | < 0.00010  |
| <b>Dissolved Metals</b> |      |            |            |
| Aluminum                | mg/L | < 0.0030   | < 0.0030   |
| Antimony                | mg/L | < 0.00050  | < 0.00050  |
| Arsenic                 | mg/L | 0.00034    | 0.00037    |
| Barium                  | mg/L | 0.0073     | 0.0072     |
| Beryllium               | mg/L | < 0.00010  | < 0.00010  |
| Bismuth                 | mg/L | < 0.0010   | < 0.0010   |
| Boron                   | mg/L | < 0.05     | < 0.05     |
| Cadmium                 | mg/L | < 0.000010 | < 0.000010 |
| Chromium                | mg/L | < 0.0010   | < 0.0010   |
| Cobalt                  | mg/L | < 0.00020  | < 0.00020  |
| Copper                  | mg/L | 0.0014     | 0.00066    |
| Iron                    | mg/L | 0.0065     | 0.0085     |
| Lead                    | mg/L | < 0.00020  | < 0.00020  |
| Lithium                 | mg/L | < 0.0020   | < 0.0020   |
| Manganese               | mg/L | < 0.0010   | 0.0013     |
| Mercury                 | mg/L | < 0.00001  | < 0.00001  |
| Molybdenum              | mg/L | < 0.0010   | 0.002      |
| Nickel                  | mg/L | < 0.0010   | < 0.0010   |
| Selenium                | mg/L | < 0.00010  | < 0.00010  |
| Silicon                 | mg/L | 0.187      | 0.183      |
| Silver                  | mg/L | < 0.000020 | < 0.000020 |
| Strontium               | mg/L | 0.0402     | 0.0397     |
| Sulphur                 | mg/L | < 3.0      | < 3.0      |
| Thallium                | mg/L | < 0.000010 | < 0.000010 |
| Tin                     | mg/L | < 0.0050   | < 0.0050   |
| Titanium                | mg/L | < 0.0050   | < 0.0050   |
| Uranium                 | mg/L | < 0.00010  | < 0.00010  |
| Vanadium                | mg/L | < 0.0050   | < 0.0050   |

|                          |      |           |           |
|--------------------------|------|-----------|-----------|
| Zinc                     | mg/L | < 0.0050  | < 0.0050  |
| Zirconium                | mg/L | < 0.00010 | < 0.00010 |
| <b>Volatile Organics</b> |      |           |           |
| Benzene                  | mg/L | < 0.00020 | < 0.00020 |
| Ethylbenzene             | mg/L | < 0.00020 | < 0.00020 |
| Toluene                  | mg/L | < 0.00020 | < 0.00020 |
| Xylenes                  | mg/L | < 0.00040 | < 0.00040 |
| m,p-Xylenes              | mg/L | < 0.00040 | < 0.00040 |
| o-Xylene                 | mg/L | < 0.00020 | < 0.00020 |
| F1 (C6-C10)-BTEX         | mg/L | < 0.025   | < 0.025   |
| F1 (C6-C10)              | mg/L | < 0.025   | < 0.025   |
| F2 (C10-C16)             | mg/L | < 0.1     | < 0.1     |
| F3 (C16-C34)             | mg/L | < 0.2     | < 0.2     |
| F4 (C34-C50)             | mg/L | < 0.2     | < 0.2     |
| Reached baseline at C50  | mg/L | YES       | YES       |
| <b>Radionuclides</b>     |      |           |           |
| Radium-226               | Bq/l | < 0.0050  | < 0.0050  |

| MEL-26                         | 8/3/2019 | 8/5/2019 | 8/12/2019 | 8/19/2019 | 8/26/2019 |
|--------------------------------|----------|----------|-----------|-----------|-----------|
| Parameter                      |          |          |           |           |           |
| <b>Field Measured</b>          |          |          |           |           |           |
| pH                             | 7.66     | 7.66     | 7.88      | 8.2       | 7.1       |
| Conductivity                   | 34280    | 34280    | 34292     | 48357     | 28207     |
| Temperature                    | 10.3     | 10.4     | 10.5      | 10.9      | 11.8      |
| Dissolved oxygen               | 8.46     | -        | -         | -         | 7.56      |
| Dissolved oxygen               | 103.8    | 87.6     | 70.6      | 60.98     | 79.2      |
| <b>Conventional Parameters</b> |          |          |           |           |           |
| pH                             | 7.82     | 7.69     | 7.69      | 8         | 7.32      |
| Specific conductivity          | 34000    | 30000    | 33000     | 46000     | 27000     |
| Hardness, as CaCO <sub>3</sub> | 5080     | 4900     | 6450      | 8740      | 4480      |
| Hardness, Calcium Carbonate    | 4970     | 4790     | 6220      | 8190      | 4450      |
| Dissolved Oxygen               | 9.67     | 9.52     | 9.93      | 10.5      | 9.44      |
| Total organic carbon           | 5        | 6.1      | 20        | 31        | 17        |
| Dissolved organic carbon       | 4.3      | 5.3      | 20        | 29        | 17        |
| Turbidity                      | 1.7      | 0.7      | 0.2       | 7.5       | 0.5       |
| Total suspended solids         | 27       | 19       | 22        | 53        | 14        |
| Volatile TSS                   | -        | 10       | -         | 24        | 8         |

|                                        |           |           |           |           |          |
|----------------------------------------|-----------|-----------|-----------|-----------|----------|
| Total Dissolved Solids                 | 22000     | 20000     | 22600     | 32000     | 17800    |
| <b>Major Ions</b>                      |           |           |           |           |          |
| Alkalinity, Total as CaCO <sub>3</sub> | 82        | 80        | 91        | 130       | 57       |
| Bicarbonate, as CaCO <sub>3</sub>      | 82        | 79        | 91        | 130       | 57       |
| Calcium                                | 846       | 943       | 1450      | 1760      | 875      |
| Carbonate, as CaCO <sub>3</sub>        | < 1.0     | < 1.0     | < 1.0     | 1.2       | < 1.0    |
| Chloride                               | 12000     | 11000     | 12000     | 17000     | 9500     |
| Cyanide Total                          | 0.0064    | < 0.0050  | < 0.0050  | 0.2       | < 0.0050 |
| Cyanide Free                           | 0.0025    | 0.0011    | < 0.0010  | 0.011     | < 0.001  |
| Cyanide WAD                            | 0.0014    | < 0.0010  | 0.017     | 0.035     | 0.0035   |
| Magnesium                              | 720       | 618       | 690       | 1060      | 557      |
| Potassium                              | 193       | 182       | 215       | 310       | 162      |
| Sodium                                 | 6010      | 5240      | 5420      | 7960      | 4550     |
| Sulphate                               | 1100      | 980       | 1200      | 1700      | 870      |
| Silica                                 | 2.1       | 2.1       | 1.7       | 8.1       | 4.4      |
| <b>Nutrients and Chlorophyll a</b>     |           |           |           |           |          |
| Nitrate                                | 41        | 46.2      | 75.7      | 79.8      | 43.5     |
| Nitrite                                | 0.387     | 0.296     | 0.087     | 2.04      | < 0.01   |
| Nitrate + nitrite                      | 41.4      | 46.5      | 75.8      | 81.8      | 43.5     |
| Total ammonia                          | 4.1       | 3.1       | 4.6       | 39        | 3.8      |
| Total Kjeldahl nitrogen                | 13        | 9.3       | 11        | 46        | 14       |
| Total phosphorus                       | 0.068     | 0.054     | 0.078     | 0.25      | 0.08     |
| Orthophosphate                         | < 0.010   | < 0.010   | < 0.010   | 0.024     | 0.012    |
| <b>Total Metals</b>                    |           |           |           |           |          |
| Aluminum                               | 0.102     | 0.074     | 0.273     | 0.268     | 0.351    |
| Antimony                               | < 0.01    | 0.0059    | < 0.01    | < 0.025   | < 0.05   |
| Arsenic                                | 0.015     | 0.012     | 0.0131    | 0.075     | 0.012    |
| Barium                                 | 0.125     | 0.176     | 0.321     | 0.331     | 0.181    |
| Beryllium                              | < 0.0020  | < 0.0010  | < 0.0020  | < 0.0050  | < 0.01   |
| Bismuth                                | < 0.02    | < 0.01    | < 0.02    | < 0.05    | < 0.1    |
| Boron                                  | < 1       | 0.827     | < 1       | < 2.5     | < 5      |
| Cadmium                                | < 0.00020 | < 0.00010 | < 0.00020 | < 0.00050 | < 0.0010 |
| Calcium                                | 800       | 922       | 1440      | 1670      | 866      |
| Chromium                               | < 0.02    | < 0.01    | < 0.02    | < 0.05    | < 0.1    |
| Cobalt                                 | < 0.0040  | 0.0021    | 0.0047    | < 0.01    | < 0.02   |
| Copper                                 | < 0.01    | 0.0087    | < 0.01    | < 0.025   | < 0.05   |
| Iron                                   | < 0.2     | < 0.1     | 0.215     | < 0.5     | < 1      |
| Lead                                   | < 0.0040  | < 0.0020  | < 0.0040  | < 0.01    | < 0.02   |
| Lithium                                | 0.35      | 0.47      | 0.78      | 0.885     | 0.498    |
| Magnesium                              | 723       | 604       | 638       | 976       | 555      |

|                         |           |           |           |           |           |
|-------------------------|-----------|-----------|-----------|-----------|-----------|
| Manganese               | 0.108     | 0.071     | 0.092     | 0.284     | < 0.1     |
| Mercury                 | < 0.00001 | < 0.00001 | < 0.00001 | < 0.00001 | < 0.00001 |
| Molybdenum              | < 0.02    | 0.015     | < 0.02    | < 0.05    | < 0.1     |
| Nickel                  | < 0.02    | < 0.01    | 0.037     | 0.065     | < 0.1     |
| Potassium               | 195       | 175       | 208       | 292       | 170       |
| Selenium                | < 0.0020  | 0.0011    | < 0.0020  | < 0.0050  | < 0.01    |
| Silicon                 | < 2       | < 1       | < 2       | < 5       | < 10      |
| Silver                  | < 0.00040 | < 0.00020 | < 0.00040 | < 0.0010  | < 0.0020  |
| Sodium                  | 5780      | 4820      | 4950      | 7440      | 4380      |
| Strontium               | 21.5      | 23        | 35        | 38.9      | 20.2      |
| Sulphur                 | 437       | 393       | 454       | 672       | 375       |
| Thallium                | < 0.00020 | < 0.00010 | < 0.00020 | < 0.00050 | < 0.0010  |
| Tin                     | < 0.1     | < 0.05    | < 0.1     | < 0.25    | < 0.5     |
| Titanium                | < 0.1     | < 0.05    | < 0.1     | < 0.25    | < 0.5     |
| Uranium                 | < 0.0020  | 0.001     | < 0.0020  | 0.007     | < 0.01    |
| Vanadium                | < 0.1     | < 0.05    | < 0.1     | < 0.25    | < 0.5     |
| Zinc                    | < 0.1     | < 0.05    | < 0.1     | < 0.25    | < 0.5     |
| Zirconium               | < 0.0020  | < 0.0010  | < 0.0020  | < 0.0050  | < 0.01    |
| <b>Dissolved Metals</b> |           |           |           |           |           |
| Aluminum                | 0.076     | 0.046     | 0.188     | < 0.15    | 0.161     |
| Antimony                | < 0.0050  | < 0.0050  | < 0.01    | < 0.025   | < 0.0050  |
| Arsenic                 | 0.0148    | 0.0112    | 0.0124    | 0.0748    | 0.0102    |
| Barium                  | 0.128     | 0.18      | 0.315     | 0.343     | 0.181     |
| Beryllium               | < 0.0010  | < 0.0010  | < 0.0020  | < 0.0050  | < 0.0010  |
| Bismuth                 | < 0.01    | < 0.01    | < 0.02    | < 0.05    | < 0.01    |
| Boron                   | 0.864     | 0.863     | < 1       | < 2.5     | 0.628     |
| Cadmium                 | < 0.00010 | < 0.00010 | < 0.00020 | < 0.00050 | < 0.00010 |
| Chromium                | < 0.01    | < 0.01    | < 0.02    | < 0.05    | < 0.01    |
| Cobalt                  | < 0.0020  | < 0.0020  | 0.0045    | < 0.01    | 0.0036    |
| Copper                  | < 0.0020  | < 0.0020  | < 0.0040  | < 0.01    | 0.005     |
| Iron                    | < 0.05    | < 0.05    | < 0.1     | < 0.25    | < 0.05    |
| Lead                    | < 0.0020  | < 0.0020  | < 0.0040  | < 0.01    | < 0.0020  |
| Lithium                 | 0.35      | 0.499     | 0.903     | 0.911     | 0.432     |
| Manganese               | 0.084     | 0.062     | 0.066     | 0.299     | 0.015     |
| Mercury                 | < 0.00001 | < 0.00001 | < 0.00001 | < 0.00001 | < 0.00001 |
| Molybdenum              | 0.016     | 0.012     | < 0.02    | < 0.05    | 0.013     |
| Nickel                  | < 0.01    | < 0.01    | 0.037     | 0.064     | 0.019     |
| Selenium                | < 0.0010  | < 0.0010  | < 0.0020  | < 0.0050  | < 0.0010  |
| Silicon                 | < 1       | < 1       | < 2       | < 5       | < 1       |
| Silver                  | < 0.00020 | < 0.00020 | < 0.00040 | < 0.0010  | < 0.00020 |

|                      |           |           |           |           |           |
|----------------------|-----------|-----------|-----------|-----------|-----------|
| Strontium            | 22.1      | 24.7      | 33.8      | 40.9      | 20.8      |
| Sulphur              | 441       | 379       | 475       | 712       | 368       |
| Thallium             | < 0.00010 | < 0.00010 | < 0.00020 | < 0.00050 | < 0.00010 |
| Tin                  | < 0.05    | < 0.05    | < 0.1     | < 0.25    | < 0.05    |
| Titanium             | < 0.05    | < 0.05    | < 0.1     | < 0.25    | < 0.05    |
| Uranium              | 0.001     | < 0.0010  | < 0.0020  | 0.0068    | 0.0041    |
| Vanadium             | < 0.05    | < 0.05    | < 0.1     | < 0.25    | < 0.05    |
| Zinc                 | < 0.05    | < 0.05    | < 0.1     | < 0.25    | 0.067     |
| Zirconium            | < 0.0010  | < 0.0010  | < 0.0020  | < 0.0050  | < 0.0010  |
| <b>Radionuclides</b> |           |           |           |           |           |
| Radium-226           | 0.12      | 0.17      | 0.14      | 0.3       | 0.16      |

## SECTION 3 • MATERIAL MANAGEMENT

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### 3.1 LANDFILL / LANDFARM

The volume of material placed into the landfill is evaluated through periodic surveys. According to the most recent survey done August 15<sup>th</sup>, the landfill contained approximately 14 610 m<sup>3</sup> of material.

In August 2019, approximately 1m<sup>3</sup> of contaminated soil was transferred to the Type A Landfarm as a result of minor spills cleanup.

### 3.2 ORE

Approximately 127,303 tonnes of ore were processed through the Mill in August.

### 3.3 WASTE ROCK STORAGE FACILITY

In August, a total of 24,310 tonnes of waste rock was removed in the mine development process. No material was used as underground dry rockfill. No waste was stockpiled for progressive closure cover.

### 3.4 TAILINGS

97,385 dry tonnes of filtered tailings were sent to the Tailing Storage Facility in August 2019. 29,918 tonnes of tailings were used for paste underground backfill

## SECTION 4 SPILL MANAGEMENT

### 4.1 INTERNAL AND REPORTABLE SPILLS

All spills reported internally (6) are listed in the table 4.1 below and were managed according to Agnico's spill contingency plan. Spills were contained and cleaned up, contaminated material was disposed of in an appropriate manner, and the clean-up actions were monitored closely by the Environment Department.

One reportable spills occurred August 19th. Discharge criteria for TSS was exceeded at MEL-26

**Table 4.1: Summary of Agnico's Spill Reports in August 2019**

| Date and time of occurrence | Material        | Estimated quantity (l) | Location                          | Description of incident                                                                                                                                                                                                                     | Describe immediate corrective actions                                                                                                                                                                                                         |
|-----------------------------|-----------------|------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8/4/2019 10:00              | Diesel          | 15.00                  | Surface Dome 3                    | leak in diesel hose connection caused a 15L diesel fuel spill near surface dome 3 building                                                                                                                                                  | Operator placed spill pads on ground and cleaned up spill. Maintenance team was contacted to fix leaking connection. Proper pre-op of equipment will help identify potential equipment malfunctions.                                          |
| 8/9/2019 15:00              | Diesel          | 25                     | gas boy / msb mechanic parking    | the operator noticed his truck had a fuel leak.                                                                                                                                                                                             | Used spill kit and clean up material                                                                                                                                                                                                          |
| 8/10/2019 15:30             | hydraulic fluid | 5.00                   | East Side of Construction Offices | The dozer was being used and the hydraulic hose broke. 5 L of hydraulic fluid was leaked onto the group.                                                                                                                                    | The operator shut off the engine and put spill pads on the ground. He called the mechanic. The spill pads were placed in a quatrex bag and brought to the hazardous waste area. A 20 L pail of contaminated soil was brought to the landfarm. |
| 8/15/2019 22:30             | hydraulic oil   | 25.00                  | MSB Shop in the front parking lot | Mechanic was performing test on the tractor on electrical side. He had to start the equipment and when he goes back outside he see the leak. He performed his pre-op but did not notice that there was loose fitting on the P.brake System. | Put absorbing pad immediately on the spill to contain it. Contact Site Service to see if they can dispose of the contaminated material. Ask Mechanic to reconnect hose after towing.                                                          |

|                |               |       |                        |                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                        |
|----------------|---------------|-------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8/19/2019 7:00 | TSS           | TBD   | MEL-26                 | <p>During the discharge to sea, regulatory samples were collected at compliance point (MEL-26) on August 19, 2019. The preliminary results from the sample were received on 26 August 2019 with the TSS being 53 ppm and 33 ppm for the duplicate which are above the MDMER limit.</p> <p>A follow-up report will be completed regarding this exceedance.</p> | <p>As a result of this, AEM has begun taking internal TSS/turbidity samples to monitor the water quality for the discharge to sea and are continuing to investigate the cause of the incident. It is anticipated with this elevated TSS result from August 19 that the monthly average of 15 ppm will be exceeded.</p> |
| 8/21/2019 8:00 | hydraulic oil | 35.00 | North side of church   | hose busted on a brake system, operator seen it and stopped the machine.                                                                                                                                                                                                                                                                                      | change hose and clean up spill                                                                                                                                                                                                                                                                                         |
| 8/25/2019 1:30 | hydraulic oil | 2.00  | km15 Quarry, AWAR road | Operator was loading 0-30mm at 15km quarry on AWAR road and noticed a small leak on boom of loader. After investigation he found a small leak near the main cylinder of the boom.                                                                                                                                                                             | Loader was shut down. Supervisor notified. Maintenance was called and an O-ring was replaced. All hydraulic oil was picked-up by the mechanic and the operator and disposed of in a quatrex bag. (mostly all with absorbent pads)                                                                                      |