

Meliadine Gold Project NWB 2AM-MEL1631 June 2021 Monthly Report

**Prepared for:** 

Nunavut Water Board

Prepared by:

Agnico Eagle Mines Limited – Meliadine Division

September 2021

# **Table of Contents**

| SECTION 1 | 1 • BACKGROUND                                    | 3  |
|-----------|---------------------------------------------------|----|
| SECTION 2 | 2 • WATER MANAGEMENT                              | 3  |
| 2.1       | Water Usage                                       |    |
| 2.2       | DEWATERING ACTIVITIES                             | 3  |
| 2.3       | MELIADINE DISCHARGE                               |    |
| 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                                      |    |
| 2.8       | MONITORING ANALYTICAL DATA                        | 4  |
| SECTION 3 | 3 • MATERIAL MANAGEMENT                           | 30 |
| 3.1       | Landfill / Landfarm                               | 30 |
| 3.2       | ORE                                               | 30 |
| 3.3       | WASTE ROCK STORAGE FACILITY                       | 30 |
| 3.4       | TAILINGS                                          | 30 |
| SECTION 4 | 4 SPILL MANAGEMENT                                | 30 |
| 4.1       | INTERNAL AND REPORTABLE SPILLS                    | 30 |

# SECTION 1 • BACKGROUND

As required under Part I, Item 9 of amended 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 June 2021.

# **SECTION 2** • WATER MANAGEMENT

### 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 June 2021

|                        | Monthly Usage (m³) |
|------------------------|--------------------|
| Camp and Mill (MEL-11) | 40,517             |
| Dust suppression       | 0                  |
| Total June             | 40,517             |
|                        |                    |
| Year to date 2021      | 223,166            |

### 2.2 DEWATERING ACTIVITIES

No dewatering activities took place in June 2021.

### 2.3 MELIADINE DISCHARGE

No discharge from the EWTP into Meliadine Lake via the Final Discharge Point (MEL-14) took place in June 2021.

# 2.4 MELVIN BAY DISCHARGE

No discharge to sea via the Final Discharge Point (MEL-26) took place in June 2021.

# 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 June 2021.

# 2.6 SEWAGE TREATMENT PLANT

In June 2021, 5,070 m<sup>3</sup> of treated wastewater was discharged into CP1. The majority of the sludge is disposed of in the WRSF.

#### 2.7 CONTAINMENTS

Discharge from the Itivia fuel containment facility (Station Mel-25) occurred on June 20 and 21, 2021. Approximately 5,250 m<sup>3</sup> was discharged through the discharge period.

# 2.8 MONITORING ANALYTICAL DATA

In June 2021, 16 samples related to the Water Licence were taken. See below the analytical results from these sampling events.

One exceedance occurred in June 2021 at station MEL-SR14 for total suspended solids (TSS). While conducting a routine inspection on June 3<sup>rd</sup>, 2021, surface runoff water was observed at sampling station MEL-SR14 located on the southwest side of the Bypass Road. Samples were collected for laboratory analysis to assess the TSS concentration and other water quality parameters. Laboratory results were received on June 17th and TSS concentration exceeded the criteria of 100 mg/L, as per the obligations under the Nunavut Water Board License 2AM-MEL1631, Part D, item 18. Given the low flow of the runoff and the closest water body being 125 m away, the runoff did not reach any water body.

| MEL-11                            | Sample date | 6/20/2021 |
|-----------------------------------|-------------|-----------|
| Parameter                         | Unit        | -         |
| WQ02- Conventional Parameters     |             |           |
| рН                                | pH units    | 7.26      |
| Turbidity                         | NTU         | 0.3       |
| Specific conductivity             | umhos/cm    | 100       |
| Hardness, as CaCO3 (T)            | mg/L        | 26.2      |
| Carbonate, as CaCO3               | mg/L        | < 1.0     |
| Bicarbonate, as CaCO3             | mg/L        | 17        |
| TDS                               | mg/L        | 70        |
| TSS                               | mg/L        | < 1       |
| Total organic carbon              | mg/L        | 3.7       |
| Dissolved organic carbon          | mg/L        | 3.7       |
| Total alkalinity, as CaCO3        | mg/L        | 17        |
| WQ03- Major Ions                  |             |           |
| Calcium                           | mg/L        | 7.80      |
| Chloride                          | mg/L        | 14        |
| Cyanide                           | mg/L        | < 0.0050  |
| Cyanide (free)                    | mg/L        | 0.0018    |
| Cyanide (WAD)                     | mg/L        | < 0.0010  |
| Magnesium                         | mg/L        | 1.55      |
| Potassium                         | mg/L        | 1.06      |
| Sodium                            | mg/L        | 6.56      |
| Sulfate                           | mg/L        | 5.9       |
| Silica                            | mg/L        | 0.47      |
| WQ04- Nutrients and Chlorophyll a |             |           |
| Total ammonia-N                   | mg/L        | < 0.050   |
| Nitrate                           | mg/L        | < 0.10    |
| Nitrite                           | mg/L        | < 0.010   |
| Nitrate + nitrite                 | mg/L        | < 0.10    |
| Total Kjeldahl nitrogen           | mg/L        | 0.25      |
| Total phosphorus                  | mg/L        | 0.0039    |

| Orthophosphate (P)     | mg/L | < 0.010    |
|------------------------|------|------------|
| WQ06- Total Metals     |      |            |
| Aluminum               | mg/L | 0.0133     |
| Antimony               | mg/L | < 0.00050  |
| Arsenic                | mg/L | 0.00072    |
| Barium                 | mg/L | 0.0094     |
| Beryllium              | mg/L | < 0.00010  |
| Boron                  | mg/L | < 0.050    |
| Cadmium                | mg/L | < 0.000010 |
| Chromium               | mg/L | < 0.0010   |
| Copper                 | mg/L | 0.00104    |
| Iron                   | mg/L | 0.065      |
| Lead                   | mg/L | < 0.00020  |
| Lithium                | mg/L | < 0.0020   |
| Manganese              | mg/L | 0.0097     |
| Mercury                | mg/L | < 0.00001  |
| Molybdenum             | mg/L | < 0.0010   |
| Nickel                 | mg/L | 0.0011     |
| Selenium               | mg/L | < 0.00010  |
| Silver                 | mg/L | < 0.000020 |
| Strontium              | mg/L | 0.0468     |
| 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  |
| WQ07- Dissolved Metals |      |            |
| Aluminum               | mg/L | 0.0081     |
| Antimony               | mg/L | < 0.00050  |
| Arsenic                | mg/L | 0.00047    |
| Barium                 | mg/L | 0.0092     |
| Beryllium              | mg/L | < 0.00010  |
| Boron                  | mg/L | < 0.050    |
| Cadmium                | mg/L | < 0.000010 |
| Chromium               | mg/L | < 0.0010   |
| Copper                 | mg/L | 0.00095    |
| Iron                   | mg/L | 0.0285     |
| Lead                   | mg/L | < 0.00020  |
| Lithium                | mg/L | < 0.0020   |
| Manganese              | mg/L | 0.0068     |
| Mercury                | mg/L | < 0.00001  |

| Molybdenum              | mg/L | < 0.0010   |  |
|-------------------------|------|------------|--|
| Nickel                  | mg/L | 0.0011     |  |
| Selenium                | mg/L | < 0.00010  |  |
| Silver                  | mg/L | < 0.000020 |  |
| Strontium               | mg/L | 0.0461     |  |
| 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  |  |
| WQ10- Volatile Organics |      |            |  |
| 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      |  |

| MEL-12                               | Sample date | 6/30/2021 |
|--------------------------------------|-------------|-----------|
| Parameter                            | Unit        | -         |
| <b>WQ02- Conventional Parameters</b> | S           |           |
| рН                                   | pH units    | 7.54      |
| Turbidity                            | NTU         | 3.6       |
| Specific conductivity                | umhos/cm    | 1500      |
| Hardness, as CaCO3 (T)               | mg/L        | 312       |
| TDS                                  | mg/L        | 895       |
| TSS                                  | mg/L        | 12        |
| Total organic carbon                 | mg/L        | 9.8       |
| Total alkalinity, as CaCO3           | mg/L        | 47        |
| WQ03- Major Ions                     |             |           |
| Calcium                              | mg/L        | 89.6      |
| Chloride                             | mg/L        | 360       |
| Cyanide                              | mg/L        | < 0.0050  |
| Fluoride                             | mg/L        | 0.11      |
| Magnesium                            | mg/L        | 26.6      |

| Potassium                     | mg/L | 12.9       |
|-------------------------------|------|------------|
| Sodium                        | mg/L | 170        |
| Sulfate                       | mg/L | 120        |
| WQ04- Nutrients and Chlorophy | ll a |            |
| Total ammonia-N               | mg/L | 0.29       |
| Nitrate                       | mg/L | 5.56       |
| Nitrite                       | mg/L | 0.129      |
| Nitrate + nitrite             | mg/L | 5.69       |
| Total phosphorus              | mg/L | 0.091      |
| Orthophosphate (P)            | mg/L | 0.019      |
| WQ06- Total Metals            |      |            |
| Aluminum                      | mg/L | 0.360      |
| Arsenic                       | mg/L | 0.0353     |
| Barium                        | mg/L | 0.0388     |
| Cadmium                       | mg/L | 0.000023   |
| Calcium                       | mg/L | 85.3       |
| Chromium                      | mg/L | < 0.0010   |
| Copper                        | mg/L | 0.00384    |
| Iron                          | mg/L | 0.627      |
| Lead                          | mg/L | 0.00425    |
| Magnesium                     | mg/L | 24.1       |
| Manganese                     | mg/L | 0.209      |
| Mercury                       | mg/L | < 0.00001  |
| Molybdenum                    | mg/L | 0.0043     |
| Nickel                        | mg/L | 0.0044     |
| Potassium                     | mg/L | 12.3       |
| Selenium                      | mg/L | 0.00097    |
| Silver                        | mg/L | < 0.000020 |
| Sodium                        | mg/L | 153        |
| Thallium                      | mg/L | 0.000021   |
| Zinc                          | mg/L | 0.0067     |

| MEL-15                        | Sample date | 6/20/2021 |
|-------------------------------|-------------|-----------|
| Parameter                     | Unit        | -         |
| WQ02- Conventional Parameters |             |           |
| рН                            | pH units    | 7.60      |
| Turbidity                     | NTU         | 0.2       |
| Specific conductivity         | umhos/cm    | 100       |
| Hardness, as CaCO3 (T)        | mg/L        | 34.1      |
| Carbonate, as CaCO3           | mg/L        | < 1.0     |
| Bicarbonate, as CaCO3         | mg/L        | 29        |
| TDS                           | mg/L        | 65        |

| TSS                           | mg/L  | 1          |
|-------------------------------|-------|------------|
| Total organic carbon          | mg/L  | 3.2        |
| Dissolved organic carbon      | mg/L  | 3.3        |
| Total alkalinity, as CaCO3    | mg/L  | 29         |
| WQ03- Major Ions              |       |            |
| Calcium                       | mg/L  | 11.5       |
| Chloride                      | mg/L  | 9.7        |
| Cyanide                       | mg/L  | < 0.0050   |
| Cyanide (free)                | mg/L  | 0.0018     |
| Cyanide (WAD)                 | mg/L  | < 0.0010   |
| Magnesium                     | mg/L  | 1.31       |
| Potassium                     | mg/L  | 0.891      |
| Sodium                        | mg/L  | 4.41       |
| Sulfate                       | mg/L  | 5.3        |
| Silica                        | mg/L  | 0.36       |
| WQ04- Nutrients and Chlorophy | ıll a |            |
| Total ammonia-N               | mg/L  | < 0.050    |
| Nitrate                       | mg/L  | < 0.10     |
| Nitrite                       | mg/L  | < 0.010    |
| Nitrate + nitrite             | mg/L  | < 0.10     |
| Total Kjeldahl nitrogen       | mg/L  | 0.11       |
| Total phosphorus              | mg/L  | < 0.020    |
| Orthophosphate (P)            | mg/L  | < 0.010    |
| WQ06- Total Metals            |       |            |
| Aluminum                      | mg/L  | 0.0071     |
| Antimony                      | mg/L  | < 0.00050  |
| Arsenic                       | mg/L  | 0.00195    |
| Barium                        | mg/L  | 0.0114     |
| Beryllium                     | mg/L  | < 0.00010  |
| Boron                         | mg/L  | < 0.050    |
| Cadmium                       | mg/L  | < 0.000010 |
| Chromium                      | mg/L  | < 0.0010   |
| Copper                        | mg/L  | 0.00075    |
| Iron                          | mg/L  | 0.076      |
| Lead                          | mg/L  | 0.00023    |
| Lithium                       | mg/L  | < 0.0020   |
| Manganese                     | mg/L  | 0.0082     |
| Mercury                       | mg/L  | < 0.00001  |
| Molybdenum                    | mg/L  | < 0.0010   |
| Nickel                        | mg/L  | < 0.0010   |
| Selenium                      | mg/L  | < 0.00010  |
| Silicon                       | mg/L  | 0.18       |
| Silver                        | mg/L  | < 0.000020 |

| Sodium                 | mg/L | 4.39       |
|------------------------|------|------------|
| Strontium              | mg/L | 0.0589     |
| 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   |
| WQ07- Dissolved Metals |      |            |
| Aluminum               | mg/L | 0.0033     |
| Antimony               | mg/L | < 0.00050  |
| Arsenic                | mg/L | 0.00164    |
| Barium                 | mg/L | 0.0114     |
| Beryllium              | mg/L | < 0.00010  |
| Boron                  | mg/L | < 0.050    |
| Cadmium                | mg/L | < 0.000010 |
| Chromium               | mg/L | < 0.0010   |
| Copper                 | mg/L | 0.00066    |
| Iron                   | mg/L | 0.0460     |
| Lead                   | mg/L | < 0.00020  |
| Lithium                | mg/L | < 0.0020   |
| Manganese              | mg/L | 0.0064     |
| Mercury                | mg/L | < 0.00001  |
| Molybdenum             | mg/L | < 0.0010   |
| Nickel                 | mg/L | < 0.0010   |
| Selenium               | mg/L | < 0.00010  |
| Silver                 | mg/L | < 0.000020 |
| Strontium              | mg/L | 0.0587     |
| 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   |

| MEL-16                        | Sample date | 6/20/2021 |
|-------------------------------|-------------|-----------|
| Parameter                     | Unit        | -         |
| WQ02- Conventional Parameters |             |           |
| рН                            | pH units    | 7.59      |
| Turbidity                     | NTU         | 0.4       |
| Specific conductivity         | umhos/cm    | 110       |
| Hardness, as CaCO3 (T)        | mg/L        | 40.3      |

| Carbonate, as CaCO3           | mg/L | < 1.0      |
|-------------------------------|------|------------|
| Bicarbonate, as CaCO3         | mg/L | 29         |
| TDS                           | mg/L | 60         |
| TSS                           | mg/L | 3          |
| Total organic carbon          | mg/L | 3.1        |
| Dissolved organic carbon      | mg/L | 3.1        |
| Total alkalinity, as CaCO3    | mg/L | 29         |
| WQ03- Major Ions              |      | _          |
| Calcium                       | mg/L | 12.3       |
| Chloride                      | mg/L | 15         |
| Cyanide                       | mg/L | < 0.0050   |
| Cyanide (free)                | mg/L | 0.0018     |
| Cyanide (WAD)                 | mg/L | < 0.0010   |
| Magnesium                     | mg/L | 1.77       |
| Potassium                     | mg/L | 1.03       |
| Sodium                        | mg/L | 3.25       |
| Sulfate                       | mg/L | 2.8        |
| Silica                        | mg/L | 0.12       |
| WQ04- Nutrients and Chlorophy | ll a |            |
| Total ammonia-N               | mg/L | < 0.050    |
| Nitrate                       | mg/L | < 0.10     |
| Nitrite                       | mg/L | < 0.010    |
| Nitrate + nitrite             | mg/L | < 0.10     |
| Total Kjeldahl nitrogen       | mg/L | 0.14       |
| Total phosphorus              | mg/L | < 0.020    |
| Orthophosphate (P)            | mg/L | < 0.010    |
| WQ06- Total Metals            |      | •          |
| Aluminum                      | mg/L | 0.0137     |
| Antimony                      | mg/L | < 0.00050  |
| Arsenic                       | mg/L | 0.00884    |
| Barium                        | mg/L | 0.0232     |
| Beryllium                     | mg/L | < 0.00010  |
| Boron                         | mg/L | < 0.050    |
| Cadmium                       | mg/L | < 0.000010 |
| Chromium                      | mg/L | < 0.0010   |
| Copper                        | mg/L | 0.00087    |
| Iron                          | mg/L | 0.131      |
| Lead                          | mg/L | 0.00071    |
| Lithium                       | mg/L | < 0.0020   |
| Manganese                     | mg/L | 0.0135     |
| Mercury                       | mg/L | < 0.00001  |
| Molybdenum                    | mg/L | < 0.0010   |
| Nickel                        | mg/L | < 0.0010   |

| Selenium               | mg/L | < 0.00010  |
|------------------------|------|------------|
| Silver                 | mg/L | < 0.000020 |
| Strontium              | mg/L | 0.0685     |
| 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   |
| WQ07- Dissolved Metals |      | •          |
| Aluminum               | mg/L | 0.0041     |
| Antimony               | mg/L | < 0.00050  |
| Arsenic                | mg/L | 0.00577    |
| Barium                 | mg/L | 0.0213     |
| Beryllium              | mg/L | < 0.00010  |
| Boron                  | mg/L | < 0.050    |
| Cadmium                | mg/L | < 0.000010 |
| Chromium               | mg/L | < 0.0010   |
| Copper                 | mg/L | 0.00076    |
| Iron                   | mg/L | 0.0494     |
| Lead                   | mg/L | 0.00023    |
| Lithium                | mg/L | < 0.0020   |
| Manganese              | mg/L | 0.0123     |
| Mercury                | mg/L | < 0.00001  |
| Molybdenum             | mg/L | < 0.0010   |
| Nickel                 | mg/L | < 0.0010   |
| Selenium               | mg/L | < 0.00010  |
| Silver                 | mg/L | < 0.000020 |
| Strontium              | mg/L | 0.0638     |
| 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   |
|                        | mg/L | < 0.0050   |

| MEL-17                        | Sample date | 6/20/2021  |
|-------------------------------|-------------|------------|
| Parameter                     | Unit        | -          |
| WQ02- Conventional Parameters |             |            |
| pH                            | pH units    | 7.66       |
| Turbidity                     | NTU         | 0.7        |
| Specific conductivity         | umhos/cm    | 160        |
| Hardness, as CaCO3 (T)        | mg/L        | 54.0       |
| Carbonate, as CaCO3           | mg/L        | < 1.0      |
| Bicarbonate, as CaCO3         | mg/L        | 34         |
| TDS                           | mg/L        | 110        |
| TSS                           | mg/L        | 4          |
| Total organic carbon          | mg/L        | 5.6        |
| Dissolved organic carbon      | mg/L        | 5.9        |
| Total alkalinity, as CaCO3    | mg/L        | 34         |
| WQ03- Major Ions              |             |            |
| Calcium                       | mg/L        | 17.5       |
| Chloride                      | mg/L        | 20         |
| Cyanide                       | mg/L        | < 0.0050   |
| Cyanide (free)                | mg/L        | 0.0018     |
| Cyanide (WAD)                 | mg/L        | < 0.0010   |
| Magnesium                     | mg/L        | 2.13       |
| Potassium                     | mg/L        | 1.47       |
| Sodium                        | mg/L        | 5.49       |
| Sulfate                       | mg/L        | 9.5        |
| Silica                        | mg/L        | 0.72       |
| WQ04- Nutrients and Chlorophy |             |            |
| Total ammonia-N               | mg/L        | < 0.050    |
| Nitrate                       | mg/L        | < 0.10     |
| Nitrite                       | mg/L        | < 0.010    |
| Nitrate + nitrite             | mg/L        | < 0.10     |
| Total Kjeldahl nitrogen       | mg/L        | 0.25       |
| Total phosphorus              | mg/L        | < 0.020    |
| Orthophosphate (P)            | mg/L        | < 0.010    |
| WQ06- Total Metals            |             |            |
| Aluminum                      | mg/L        | 0.0072     |
| Antimony                      | mg/L        | < 0.00050  |
| Arsenic                       | mg/L        | 0.00089    |
| Barium                        | mg/L        | 0.0207     |
| Beryllium                     | mg/L        | < 0.00010  |
| Boron                         | mg/L        | < 0.050    |
| Cadmium                       | mg/L        | < 0.000010 |
| Chromium                      | mg/L        | < 0.0010   |

| Copper                 | mg/L | 0.00106    |
|------------------------|------|------------|
| Iron                   | mg/L | 0.247      |
| Lead                   | mg/L | < 0.00020  |
| Lithium                | mg/L | 0.0033     |
| Manganese              | mg/L | 0.0440     |
| Mercury                | mg/L | < 0.00001  |
| Molybdenum             | mg/L | < 0.0010   |
| Nickel                 | mg/L | 0.0013     |
| Selenium               | mg/L | < 0.00010  |
| Silver                 | mg/L | < 0.000020 |
| Strontium              | mg/L | 0.142      |
| 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   |
| WQ07- Dissolved Metals |      |            |
| Aluminum               | mg/L | 0.0057     |
| Antimony               | mg/L | < 0.00050  |
| Arsenic                | mg/L | 0.00081    |
| Barium                 | mg/L | 0.0203     |
| Beryllium              | mg/L | < 0.00010  |
| Boron                  | mg/L | < 0.050    |
| Cadmium                | mg/L | < 0.000010 |
| Chromium               | mg/L | < 0.0010   |
| Copper                 | mg/L | 0.00105    |
| Iron                   | mg/L | 0.161      |
| Lead                   | mg/L | < 0.00020  |
| Lithium                | mg/L | 0.0032     |
| Manganese              | mg/L | 0.0324     |
| Mercury                | mg/L | < 0.00001  |
| Molybdenum             | mg/L | < 0.0010   |
| Nickel                 | mg/L | 0.0014     |
| Selenium               | mg/L | < 0.00010  |
| Silver                 | mg/L | < 0.000020 |
| Strontium              | mg/L | 0.139      |
| 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   |

| MEL-18                        | Sample date | 6/20/2021  |
|-------------------------------|-------------|------------|
| Parameter                     | Unit        | -          |
| WQ02- Conventional Parameters | 5           |            |
| pH                            | pH units    | 7.63       |
| Turbidity                     | NTU         | 0.5        |
| Specific conductivity         | umhos/cm    | 130        |
| Hardness, as CaCO3 (T)        | mg/L        | 45.7       |
| Carbonate, as CaCO3           | mg/L        | < 1.0      |
| Bicarbonate, as CaCO3         | mg/L        | 30         |
| TDS                           | mg/L        | 100        |
| TSS                           | mg/L        | < 1        |
| Total organic carbon          | mg/L        | 3.0        |
| Dissolved organic carbon      | mg/L        | 3.3        |
| Total alkalinity, as CaCO3    | mg/L        | 30         |
| WQ03- Major Ions              |             |            |
| Calcium                       | mg/L        | 14.7       |
| Chloride                      | mg/L        | 18         |
| Cyanide                       | mg/L        | < 0.0050   |
| Cyanide (free)                | mg/L        | 0.0018     |
| Cyanide (WAD)                 | mg/L        | < 0.0010   |
| Magnesium                     | mg/L        | 1.97       |
| Potassium                     | mg/L        | 1.02       |
| Sodium                        | mg/L        | 3.95       |
| Sulfate                       | mg/L        | 4.8        |
| Silica                        | mg/L        | 0.34       |
| WQ04- Nutrients and Chlorophy | l a         |            |
| Total ammonia-N               | mg/L        | < 0.050    |
| Nitrate                       | mg/L        | < 0.10     |
| Nitrite                       | mg/L        | < 0.010    |
| Nitrate + nitrite             | mg/L        | < 0.10     |
| Total Kjeldahl nitrogen       | mg/L        | 0.12       |
| Total phosphorus              | mg/L        | < 0.020    |
| Orthophosphate (P)            | mg/L        | < 0.010    |
| WQ06- Total Metals            |             |            |
| Aluminum                      | mg/L        | 0.0138     |
| Antimony                      | mg/L        | < 0.00050  |
| Arsenic                       | mg/L        | 0.00308    |
| Barium                        | mg/L        | 0.0166     |
| Beryllium                     | mg/L        | < 0.00010  |
| Boron                         | mg/L        | < 0.050    |
| Cadmium                       | mg/L        | < 0.000010 |
| Chromium                      | mg/L        | < 0.0010   |

| Copper                 | mg/L | 0.00064    |
|------------------------|------|------------|
| Iron                   | mg/L | 0.155      |
| Lead                   | mg/L | 0.00036    |
| Lithium                | mg/L | 0.0080     |
| Manganese              | mg/L | 0.0275     |
| Mercury                | mg/L | < 0.00001  |
| Molybdenum             | mg/L | < 0.0010   |
| Nickel                 | mg/L | < 0.0010   |
| Selenium               | mg/L | < 0.00010  |
| Silver                 | mg/L | < 0.000020 |
| Strontium              | mg/L | 0.133      |
| 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   |
| WQ07- Dissolved Metals |      |            |
| Aluminum               | mg/L | 0.0166     |
| Antimony               | mg/L | < 0.00050  |
| Arsenic                | mg/L | 0.00238    |
| Barium                 | mg/L | 0.0159     |
| Beryllium              | mg/L | < 0.00010  |
| Boron                  | mg/L | < 0.050    |
| Cadmium                | mg/L | < 0.000010 |
| Chromium               | mg/L | < 0.0010   |
| Copper                 | mg/L | 0.00062    |
| Iron                   | mg/L | 0.113      |
| Lead                   | mg/L | < 0.00020  |
| Lithium                | mg/L | 0.0077     |
| Manganese              | mg/L | 0.0215     |
| Mercury                | mg/L | < 0.00001  |
| Molybdenum             | mg/L | < 0.0010   |
| Nickel                 | mg/L | < 0.0010   |
| Selenium               | mg/L | < 0.00010  |
| Silver                 | mg/L | < 0.000020 |
| Strontium              | mg/L | 0.130      |
| 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   |

| MEL-20                        | Sample date | 6/20/2021 |
|-------------------------------|-------------|-----------|
| Parameter                     | Unit        | -         |
| WQ02- Conventional Parameters |             |           |
| рН                            | pH units    | 7.70      |
| Turbidity                     | NTU         | 32        |
| Hardness, as CaCO3 (T)        | mg/L        | 250       |
| TDS                           | mg/L        | 745       |
| TSS                           | mg/L        | 40        |
| Total alkalinity, as CaCO3    | mg/L        | 76        |
| WQ03- Major Ions              |             |           |
| Calcium                       | mg/L        | 69.8      |
| Chloride                      | mg/L        | 240       |
| Cyanide                       | mg/L        | 0.026     |
| Fluoride                      | mg/L        | < 0.10    |
| Magnesium                     | mg/L        | 15.9      |
| Potassium                     | mg/L        | 12.3      |
| Sodium                        | mg/L        | 148       |
| Sulfate                       | mg/L        | 220       |
| WQ04- Nutrients and Chlorophy | II a        |           |
| Total ammonia-N               | mg/L        | 8.1       |
| Nitrate                       | mg/L        | 6.97      |
| Nitrite                       | mg/L        | 0.096     |
| Nitrate + nitrite             | mg/L        | 7.07      |
| Total phosphorus              | mg/L        | 0.094     |
| Orthophosphate (P)            | mg/L        | 0.094     |
| WQ06- Total Metals            |             |           |
| Aluminum                      | mg/L        | 0.531     |
| Arsenic                       | mg/L        | 0.447     |
| Barium                        | mg/L        | 0.0449    |
| Cadmium                       | mg/L        | 0.000053  |
| Calcium                       | mg/L        | 72.3      |
| Chromium                      | mg/L        | 0.0013    |
| Copper                        | mg/L        | 0.0154    |
| Iron                          | mg/L        | 1.42      |
| Lead                          | mg/L        | 0.0196    |
| Magnesium                     | mg/L        | 16.8      |
| Manganese                     | mg/L        | 0.268     |
| Mercury                       | mg/L        | < 0.00001 |
| Molybdenum                    | mg/L        | 0.0096    |
| Nickel                        | mg/L        | 0.0145    |
| Potassium                     | mg/L        | 12.9      |

| Selenium | mg/L | 0.00830  |
|----------|------|----------|
| Silver   | mg/L | 0.000027 |
| Sodium   | mg/L | 154      |
| Thallium | mg/L | 0.000022 |
| Zinc     | mg/L | < 0.0050 |

| MEL-21                            | Sample date                                        | 6/20/2021 |
|-----------------------------------|----------------------------------------------------|-----------|
| Parameter                         | Unit                                               | -         |
| WQ02- Conventional Parameters     |                                                    |           |
| рН                                | pH units                                           | 7.78      |
| Turbidity                         | NTU                                                | 13        |
| Hardness, as CaCO3 (T)            | mg/L                                               | 248       |
| TDS                               | mg/L                                               | 560       |
| TSS                               | mg/L                                               | 21        |
| Total alkalinity, as CaCO3        | mg/L                                               | 58        |
| WQ03- Major Ions                  |                                                    |           |
| Calcium                           | mg/L                                               | 72.1      |
| Chloride                          | mg/L                                               | 190       |
| Cyanide                           | mg/L                                               | 0.0070    |
| Fluoride                          | mg/L                                               | < 0.10    |
| Magnesium                         | mg/L                                               | 14.8      |
| Potassium                         | mg/L                                               | 6.53      |
| Sodium                            | mg/L                                               | 64.7      |
| Sulfate                           | mg/L                                               | 85        |
| WQ04- Nutrients and Chlorophyll a |                                                    |           |
| Total ammonia-N                   | mg/L                                               | 0.57      |
| Nitrate                           | mg/L                                               | 0.90      |
| Nitrite                           | mg/L                                               | 0.020     |
| Nitrate + nitrite                 | mg/L                                               | 0.92      |
| Total phosphorus                  | mg/L                                               | 0.032     |
| Orthophosphate (P)                | mg/L                                               | 0.012     |
| WQ06- Total Metals                | <del>,                                      </del> |           |
| Aluminum                          | mg/L                                               | 0.364     |
| Arsenic                           | mg/L                                               | 0.137     |
| Barium                            | mg/L                                               | 0.0415    |
| Cadmium                           | mg/L                                               | 0.000040  |
| Calcium                           | mg/L                                               | 74.3      |
| Chromium                          | mg/L                                               | < 0.0010  |
| Copper                            | mg/L                                               | 0.00687   |
| Iron                              | mg/L                                               | 1.02      |
| Lead                              | mg/L                                               | 0.0157    |
| Magnesium                         | mg/L                                               | 15.2      |

| Manganese  | mg/L | 0.118      |
|------------|------|------------|
| Mercury    | mg/L | < 0.00001  |
| Molybdenum | mg/L | 0.0037     |
| Nickel     | mg/L | 0.0119     |
| Potassium  | mg/L | 6.77       |
| Selenium   | mg/L | 0.00053    |
| Silver     | mg/L | < 0.000020 |
| Sodium     | mg/L | 65.7       |
| Thallium   | mg/L | 0.000011   |
| Zinc       | mg/L | < 0.0050   |

| MEL-22                        | Sample date | 6/20/2021 |
|-------------------------------|-------------|-----------|
| Parameter                     | Unit        | -         |
| WQ02- Conventional Parameters | S           |           |
| рН                            | pH units    | 7.92      |
| Turbidity                     | NTU         | 1.2       |
| Hardness, as CaCO3 (T)        | mg/L        | 667       |
| TDS                           | mg/L        | 1910      |
| TSS                           | mg/L        | 3         |
| Total alkalinity, as CaCO3    | mg/L        | 100       |
| WQ03- Major Ions              |             |           |
| Calcium                       | mg/L        | 173       |
| Chloride                      | mg/L        | 960       |
| Cyanide                       | mg/L        | 0.019     |
| Fluoride                      | mg/L        | 0.13      |
| Magnesium                     | mg/L        | 56.1      |
| Potassium                     | mg/L        | 33.4      |
| Sodium                        | mg/L        | 394       |
| Sulfate                       | mg/L        | 220       |
| WQ04- Nutrients and Chlorophy | II a        |           |
| Total ammonia-N               | mg/L        | 7.6       |
| Nitrate                       | mg/L        | 11.4      |
| Nitrite                       | mg/L        | 0.363     |
| Nitrate + nitrite             | mg/L        | 11.8      |
| Total phosphorus              | mg/L        | < 0.020   |
| Orthophosphate (P)            | mg/L        | < 0.010   |
| WQ06- Total Metals            |             |           |
| Aluminum                      | mg/L        | 0.0316    |
| Arsenic                       | mg/L        | 0.0119    |
| Barium                        | mg/L        | 0.0556    |
| Cadmium                       | mg/L        | 0.000038  |
| Calcium                       | mg/L        | 174       |

| Chromium   | mg/L | < 0.0020   |
|------------|------|------------|
| Copper     | mg/L | 0.0033     |
| Iron       | mg/L | 0.110      |
| Lead       | mg/L | 0.00070    |
| Magnesium  | mg/L | 56.8       |
| Manganese  | mg/L | 0.285      |
| Mercury    | mg/L | < 0.00001  |
| Molybdenum | mg/L | 0.0075     |
| Nickel     | mg/L | 0.0195     |
| Potassium  | mg/L | 33.6       |
| Selenium   | mg/L | 0.00046    |
| Silver     | mg/L | < 0.000040 |
| Sodium     | mg/L | 399        |
| Thallium   | mg/L | 0.000044   |
| Zinc       | mg/L | < 0.010    |

| MEL-23                        | Sample date | 6/20/2021 |
|-------------------------------|-------------|-----------|
| Parameter                     | Unit        | -         |
| WQ02- Conventional Parameters |             |           |
| рН                            | pH units    | 7.86      |
| Turbidity                     | NTU         | 33        |
| Hardness, as CaCO3 (T)        | mg/L        | 280       |
| TDS                           | mg/L        | 845       |
| TSS                           | mg/L        | 41        |
| Total alkalinity, as CaCO3    | mg/L        | 65        |
| WQ03- Major Ions              |             |           |
| Calcium                       | mg/L        | 55.9      |
| Chloride                      | mg/L        | 300       |
| Cyanide                       | mg/L        | 0.0073    |
| Fluoride                      | mg/L        | < 0.10    |
| Magnesium                     | mg/L        | 32.2      |
| Potassium                     | mg/L        | 13.5      |
| Sodium                        | mg/L        | 159       |
| Sulfate                       | mg/L        | 180       |
| WQ04- Nutrients and Chlorophy | I a         |           |
| Total ammonia-N               | mg/L        | 2.8       |
| Nitrate                       | mg/L        | 5.44      |
| Nitrite                       | mg/L        | 0.033     |
| Nitrate + nitrite             | mg/L        | 5.48      |
| Total phosphorus              | mg/L        | 0.038     |
| Orthophosphate (P)            | mg/L        | < 0.010   |
| WQ06- Total Metals            |             |           |

| Aluminum   | mg/L | 0.437      |
|------------|------|------------|
| Arsenic    | mg/L | 0.00897    |
| Barium     | mg/L | 0.0360     |
| Cadmium    | mg/L | 0.000017   |
| Calcium    | mg/L | 58.4       |
| Chromium   | mg/L | 0.0014     |
| Copper     | mg/L | 0.00259    |
| Iron       | mg/L | 1.13       |
| Lead       | mg/L | 0.00206    |
| Magnesium  | mg/L | 32.6       |
| Manganese  | mg/L | 0.208      |
| Mercury    | mg/L | < 0.00001  |
| Molybdenum | mg/L | 0.0045     |
| Nickel     | mg/L | 0.0220     |
| Potassium  | mg/L | 13.7       |
| Selenium   | mg/L | 0.00043    |
| Silver     | mg/L | < 0.000020 |
| Sodium     | mg/L | 159        |
| Thallium   | mg/L | < 0.000010 |
| Zinc       | mg/L | < 0.0050   |

| MEL-25                               | Sample date | 6/8/2021  |
|--------------------------------------|-------------|-----------|
| Parameter                            | Unit        | -         |
| WQ02- Conventional Parameters        | 5           |           |
| рН                                   | pH units    | 7.46      |
| TSS                                  | mg/L        | 2         |
| <b>WQ04- Nutrients and Chlorophy</b> | II a        |           |
| Total ammonia-N                      | mg/L        | 0.095     |
| WQ05- General Organics               |             |           |
| Total oil and grease                 | mg/L        | < 0.50    |
| WQ06- Total Metals                   |             |           |
| Arsenic                              | mg/L        | 0.00071   |
| Copper                               | mg/L        | 0.00167   |
| Lead                                 | mg/L        | < 0.00020 |
| Nickel                               | mg/L        | 0.0021    |
| WQ10- Volatile Organics              |             |           |
| 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   |

| MEL-SR-1                           | MEL-SR MAX         | MEL-SR MAX | Sample date | 6/8/2021 | 6/17/2021  |  |
|------------------------------------|--------------------|------------|-------------|----------|------------|--|
| INIET-2K-1                         | GRAB               | MEAN       | Sample type | N        | N          |  |
| Parameter                          | (WSEEP/RO)         | (WSEEP/RO) | Unit        | -        | -          |  |
| WQ01- Field Measured               |                    |            |             |          |            |  |
| Turbidity                          |                    |            | NTU         | -        | 2.95       |  |
| <b>WQ02- Conventional Paramet</b>  | ers                |            |             |          |            |  |
| рН                                 | 9.5                | 9.5        | pH units    | 7.85     | 8.12       |  |
| Turbidity                          |                    |            | NTU         | 9.6      | < 0.1      |  |
| Hardness, as CaCO3 (T)             |                    |            | mg/L        | 130      | 268        |  |
| TDS                                |                    |            | mg/L        | 245      | 430        |  |
| TSS                                | 100                | 50         | mg/L        | 12       | 1          |  |
| Total alkalinity, as CaCO3         |                    |            | mg/L        | 86       | 150        |  |
| WQ03- Major Ions                   | ·                  |            |             |          |            |  |
| Chloride                           |                    |            | mg/L        | 41       | 120        |  |
| Cyanide                            |                    |            | mg/L        | < 0.0050 | < 0.0050   |  |
| Fluoride                           |                    |            | mg/L        | < 0.10   | 0.10       |  |
| Sulfate                            |                    |            | mg/L        | 37       | 86         |  |
| <b>WQ04- Nutrients and Chlorop</b> | hyll a             |            |             |          |            |  |
| Total ammonia-N                    |                    |            | mg/L        | < 0.050  | < 0.050    |  |
| Nitrate                            |                    |            | mg/L        | < 0.10   | 0.12       |  |
| Nitrite                            |                    |            | mg/L        | < 0.010  | < 0.010    |  |
| Nitrate + nitrite                  |                    |            | mg/L        | < 0.10   | 0.12       |  |
| Total phosphorus                   |                    |            | mg/L        | < 0.020  | < 0.020    |  |
| Orthophosphate (P)                 |                    |            | mg/L        | < 0.010  | < 0.010    |  |
| WQ05- General Organics             |                    |            |             |          |            |  |
| Total oil and grease               |                    |            | mg/L        | < 0.50   | < 0.50     |  |
| WQ06- Total Metals                 | WQ06- Total Metals |            |             |          |            |  |
| Aluminum                           |                    |            | mg/L        | 0.401    | 0.0480     |  |
| Arsenic                            |                    |            | mg/L        | 0.00260  | 0.00193    |  |
| Barium                             |                    |            | mg/L        | 0.0249   | 0.0391     |  |
| Cadmium                            |                    |            | mg/L        | 0.000012 | < 0.000010 |  |

| Calcium    | mg/L | 41.0       | 83.4       |
|------------|------|------------|------------|
| Chromium   | mg/L | 0.0028     | < 0.0010   |
| Copper     | mg/L | 0.00465    | 0.00333    |
| Iron       | mg/L | 0.670      | 0.109      |
| Lead       | mg/L | 0.00042    | < 0.00020  |
| Magnesium  | mg/L | 6.70       | 14.6       |
| Manganese  | mg/L | 0.0502     | 0.0124     |
| Mercury    | mg/L | < 0.00001  | < 0.00001  |
| Molybdenum | mg/L | 0.0011     | 0.0013     |
| Nickel     | mg/L | 0.0059     | 0.0087     |
| Potassium  | mg/L | 4.43       | 8.33       |
| Selenium   | mg/L | < 0.00010  | < 0.00010  |
| Silver     | mg/L | < 0.000020 | < 0.000020 |
| Sodium     | mg/L | 19.6       | 47.0       |
| Thallium   | mg/L | 0.000016   | 0.000011   |
| Zinc       | mg/L | 0.0143     | 0.0167     |

| MEL-SR-7                         |                    |                    | Sample<br>date | 6/3/2021 | 6/8/2021 | 6/17/2021 |
|----------------------------------|--------------------|--------------------|----------------|----------|----------|-----------|
|                                  | MEL-SR<br>MAX GRAB | MEL-SR<br>MAX MEAN | Sample<br>type | N        | N        | N         |
| Parameter                        | (WSEEP/RO)         | (WSEEP/RO)         | Unit           | -        | -        | -         |
| WQ01- Field Measured             |                    |                    |                |          |          |           |
| Turbidity                        |                    |                    |                | -        | -        | 3.83      |
| <b>WQ02- Conventional Parame</b> | eters              |                    |                |          |          |           |
| рН                               | 9.5                | 9.5                | pH units       | 7.69     | 7.74     | 8.06      |
| Turbidity                        |                    |                    | NTU            | 1.2      | 11       | 1.8       |
| Hardness, as CaCO3 (T)           |                    |                    | mg/L           | 73.6     | 83.9     | 158       |
| TDS                              |                    |                    | mg/L           | 175      | 175      | 320       |
| TSS                              | 100                | 50                 | mg/L           | 5        | 16       | 1         |
| Total alkalinity, as CaCO3       |                    |                    | mg/L           | 56       | 61       | 110       |
| WQ03- Major Ions                 |                    |                    |                |          |          |           |

| Chloride                          | mg/L | 25         | 30         | 70         |
|-----------------------------------|------|------------|------------|------------|
| Cyanide                           | mg/L | < 0.0050   | < 0.0050   | < 0.0050   |
| Fluoride                          | mg/L | < 0.10     | < 0.10     | < 0.10     |
| Sulfate                           | mg/L | 24         | 33         | 59         |
| WQ04- Nutrients and Chlorophyll a |      |            |            |            |
| Total ammonia-N                   | mg/L | < 0.050    | < 0.050    | < 0.050    |
| Nitrate                           | mg/L | < 0.10     | < 0.10     | < 0.10     |
| Nitrite                           | mg/L | < 0.010    | < 0.010    | < 0.010    |
| Nitrate + nitrite                 | mg/L | < 0.10     | < 0.10     | < 0.10     |
| Total phosphorus                  | mg/L | 0.022      | 0.034      | < 0.020    |
| Orthophosphate (P)                | mg/L | < 0.010    | < 0.010    | < 0.010    |
| WQ05- General Organics            |      |            |            |            |
| Total oil and grease              | mg/L | < 0.50     | 0.60       | < 0.50     |
| WQ06- Total Metals                |      |            |            |            |
| Aluminum                          | mg/L | 0.223      | 0.521      | 0.0300     |
| Arsenic                           | mg/L | 0.00119    | 0.00364    | 0.00298    |
| Barium                            | mg/L | 0.0171     | 0.0192     | 0.0252     |
| Cadmium                           | mg/L | 0.000012   | 0.000018   | 0.000012   |
| Calcium                           | mg/L | 22.9       | 25.5       | 47.9       |
| Chromium                          | mg/L | 0.0014     | 0.0033     | < 0.0010   |
| Copper                            | mg/L | 0.00330    | 0.00543    | 0.00332    |
| Iron                              | mg/L | 0.365      | 0.850      | 0.145      |
| Lead                              | mg/L | 0.00026    | 0.00056    | < 0.00020  |
| Magnesium                         | mg/L | 3.98       | 4.90       | 9.31       |
| Manganese                         | mg/L | 0.0183     | 0.0204     | 0.0305     |
| Mercury                           | mg/L | < 0.00001  | < 0.00001  | < 0.00001  |
| Molybdenum                        | mg/L | < 0.0010   | < 0.0010   | < 0.0010   |
| Nickel                            | mg/L | 0.0026     | 0.0044     | 0.0075     |
| Potassium                         | mg/L | 3.09       | 3.39       | 4.97       |
| Selenium                          | mg/L | < 0.00010  | < 0.00010  | < 0.00010  |
| Silver                            | mg/L | < 0.000020 | < 0.000020 | < 0.000020 |
| Sodium                            | mg/L | 14.2       | 17.6       | 38.8       |
| Thallium                          | mg/L | < 0.000010 | 0.000014   | < 0.000010 |
| Zinc                              | mg/L | 0.0093     | 0.0104     | < 0.0050   |

| MEL-SR-7-US                        | MEL-SR MAX | MEL-SR MAX | Sample date | 6/17/2021 |
|------------------------------------|------------|------------|-------------|-----------|
| WILL-3K-7-03                       | GRAB       | MEAN       | Sample type | N         |
| Parameter                          | (WSEEP/RO) | (WSEEP/RO) | Unit        | -         |
| WQ01- Field Measured               |            |            |             |           |
| Turbidity                          |            |            | NTU         | 4.12      |
| <b>WQ02- Conventional Paramete</b> | ers        |            |             |           |
| рН                                 | 9.5        | 9.5        | pH units    | 8.03      |
| Turbidity                          |            |            | NTU         | 0.9       |
| Hardness, as CaCO3 (T)             |            |            | mg/L        | 112       |
| TDS                                |            |            | mg/L        | 240       |
| TSS                                | 100        | 50         | mg/L        | 16        |
| Total alkalinity, as CaCO3         |            |            | mg/L        | 72        |
| WQ03- Major Ions                   |            |            |             |           |
| Chloride                           |            |            | mg/L        | 61        |
| Cyanide                            |            |            | mg/L        | < 0.0050  |
| Fluoride                           |            |            | mg/L        | 0.10      |
| Sulfate                            |            |            | mg/L        | 53        |
| WQ04- Nutrients and Chloroph       | ıyll a     |            |             |           |
| Total ammonia-N                    |            |            | mg/L        | < 0.050   |
| Nitrate                            |            |            | mg/L        | 0.22      |
| Nitrite                            |            |            | mg/L        | < 0.010   |
| Nitrate + nitrite                  |            |            | mg/L        | 0.22      |
| Total phosphorus                   |            |            | mg/L        | < 0.020   |
| Orthophosphate (P)                 |            |            | mg/L        | < 0.010   |
| WQ05- General Organics             |            |            |             |           |
| Total oil and grease               |            |            | mg/L        | < 0.50    |
| WQ06- Total Metals                 | -          |            |             |           |
| Aluminum                           |            |            | mg/L        | 0.0739    |
| Arsenic                            |            |            | mg/L        | 0.00250   |
| Barium                             |            |            | mg/L        | 0.0257    |
| Cadmium                            |            |            | mg/L        | 0.000014  |
| Calcium                            |            |            | mg/L        | 33.6      |
| Chromium                           |            |            | mg/L        | 0.0026    |
| Copper                             |            |            | mg/L        | 0.00494   |
| Iron                               |            |            | mg/L        | 0.095     |
| Lead                               |            |            | mg/L        | < 0.00020 |
| Magnesium                          |            |            | mg/L        | 6.71      |
| Manganese                          |            |            | mg/L        | 0.0036    |
| Mercury                            |            |            | mg/L        | 0.00035   |
| Molybdenum                         |            |            | mg/L        | 0.0016    |
| Nickel                             |            |            | mg/L        | 0.0026    |
| Potassium                          |            |            | mg/L        | 7.12      |
| Selenium                           |            |            | mg/L        | 0.00018   |

| Silver   | mg/L | < 0.000020 |
|----------|------|------------|
| Sodium   | mg/L | 37.1       |
| Thallium | mg/L | 0.000014   |
| Zinc     | mg/L | < 0.0050   |

| MEL CD 42                   | MEL-SR MAX | MEL-SR MAX | Sample date | 6/8/2021   |
|-----------------------------|------------|------------|-------------|------------|
| MEL-SR-13                   | GRAB       | MEAN       | Sample type | N          |
| Parameter                   | (WSEEP/RO) | (WSEEP/RO) | Unit        | -          |
| WQ02- Conventional Parame   | ters       |            |             |            |
| рН                          | 9.5        | 9.5        | pH units    | 7.65       |
| Turbidity                   |            |            | NTU         | 2.6        |
| Hardness, as CaCO3 (T)      |            |            | mg/L        | 56.8       |
| TDS                         |            |            | mg/L        | 130        |
| TSS                         | 100        | 50         | mg/L        | 10         |
| Total alkalinity, as CaCO3  |            |            | mg/L        | 45         |
| WQ03- Major Ions            |            |            |             |            |
| Chloride                    |            |            | mg/L        | 27         |
| Cyanide                     |            |            | mg/L        | < 0.0050   |
| Fluoride                    |            |            | mg/L        | < 0.10     |
| Sulfate                     |            |            | mg/L        | 20         |
| WQ04- Nutrients and Chlorop | hyll a     |            |             |            |
| Total ammonia-N             |            |            | mg/L        | < 0.050    |
| Nitrate                     |            |            | mg/L        | < 0.10     |
| Nitrite                     |            |            | mg/L        | < 0.010    |
| Nitrate + nitrite           |            |            | mg/L        | < 0.10     |
| Total phosphorus            |            |            | mg/L        | < 0.020    |
| Orthophosphate (P)          |            |            | mg/L        | < 0.010    |
| WQ05- General Organics      |            |            |             |            |
| Total oil and grease        |            |            | mg/L        | < 0.50     |
| WQ06- Total Metals          |            |            |             |            |
| Aluminum                    |            |            | mg/L        | 0.138      |
| Arsenic                     |            |            | mg/L        | 0.00061    |
| Barium                      |            |            | mg/L        | 0.0082     |
| Cadmium                     |            |            | mg/L        | < 0.000010 |
| Calcium                     |            |            | mg/L        | 16.0       |
| Chromium                    |            |            | mg/L        | 0.0011     |
| Copper                      |            |            | mg/L        | 0.00310    |
| Iron                        |            |            | mg/L        | 0.263      |
| Lead                        |            |            | mg/L        | < 0.00020  |
| Magnesium                   |            |            | mg/L        | 4.09       |
| Manganese                   |            |            | mg/L        | 0.0069     |
| Mercury                     |            |            | mg/L        | < 0.00001  |
| Molybdenum                  |            |            | mg/L        | < 0.0010   |

# Water Licence 2AM-MEL1631

| Nickel    | mg/L | 0.0021     |
|-----------|------|------------|
| Potassium | mg/L | 2.38       |
| Selenium  | mg/L | < 0.00010  |
| Silver    | mg/L | < 0.000020 |
| Sodium    | mg/L | 17.8       |
| Thallium  | mg/L | < 0.000010 |
| Zinc      | mg/L | 0.0665     |

| MEL-SR-14                          | MEL-SR MAX | MEL-SR MAX | Sample date | Monthly  | 6/3/2021 | 6/8/2021 | 6/17/2021 |
|------------------------------------|------------|------------|-------------|----------|----------|----------|-----------|
| IVIEL-3K-14                        | GRAB       | MEAN       | Sample type | Average  | N        | N        | N         |
| Parameter                          | (WSEEP/RO) | (WSEEP/RO) | Unit        | Average  | _        | _        | -         |
| WQ01- Field Measured               |            |            |             |          |          |          |           |
| Turbidity                          |            |            | NTU         | 1.99     | -        | -        | 1.99      |
| <b>WQ02- Conventional Paramete</b> | rs         |            |             |          |          |          |           |
| рН                                 | 9.5        | 9.5        | pH units    | 7.64     | 7.25     | 7.65     | 8.02      |
| Turbidity                          |            |            | NTU         | 18.03    | 14       | 39       | 1.1       |
| Hardness, as CaCO3 (T)             |            |            | mg/L        | 62.90    | 30.5     | 42.2     | 116       |
| TDS                                |            |            | mg/L        | 198.33   | 90       | 195      | 310       |
| TSS                                | 100        | 50         | mg/L        | 66.67    | 120      | 78       | 2         |
| Total alkalinity, as CaCO3         |            |            | mg/L        | 60.00    | 28       | 52       | 100       |
| WQ03- Major Ions                   |            |            |             |          |          |          |           |
| Chloride                           |            |            | mg/L        | 32.27    | 9.8      | 21       | 66        |
| Cyanide                            |            |            | mg/L        | 0.0050   | < 0.0050 | < 0.0050 | < 0.0050  |
| Fluoride                           |            |            | mg/L        | 0.13     | < 0.10   | 0.15     | 0.15      |
| Sulfate                            |            |            | mg/L        | 27.87    | < 1.0    | 7.6      | 75        |
| WQ04- Nutrients and Chloroph       | yll a      |            |             |          |          |          |           |
| Total ammonia-N                    |            |            | mg/L        | 0.05     | < 0.050  | < 0.050  | < 0.050   |
| Nitrate                            |            |            | mg/L        | 0.11     | < 0.10   | < 0.10   | 0.12      |
| Nitrite                            |            |            | mg/L        | 0.01     | < 0.010  | < 0.010  | < 0.010   |
| Nitrate + nitrite                  |            |            | mg/L        | 0.11     | < 0.10   | < 0.10   | 0.12      |
| Total phosphorus                   |            |            | mg/L        | 0.07     | 0.15     | 0.054    | < 0.020   |
| Orthophosphate (P)                 |            |            | mg/L        | 0.01     | < 0.010  | < 0.010  | < 0.010   |
| WQ05- General Organics             |            |            |             |          |          |          |           |
| Total oil and grease               |            |            | mg/L        | 0.50     | < 0.50   | < 0.50   | < 0.50    |
| WQ06- Total Metals                 |            |            |             |          |          |          |           |
| Aluminum                           |            |            | mg/L        | 1.36187  | 2.37     | 1.64     | 0.0756    |
| Arsenic                            |            |            | mg/L        | 0.00163  | 0.00202  | 0.00205  | 0.00082   |
| Barium                             |            |            | mg/L        | 0.02960  | 0.0409   | 0.0241   | 0.0238    |
| Cadmium                            |            |            | mg/L        | 0.00002  | 0.000018 | 0.000022 | 0.000011  |
| Calcium                            |            |            | mg/L        | 16.73667 | 7.01     | 10.5     | 32.7      |

| Chromium   | mg/L | 0.007 | 0.0098         | 0.0104     | < 0.0010   |
|------------|------|-------|----------------|------------|------------|
| Copper     | mg/L | 0.013 | 0.00889        | 0.0163     | 0.0157     |
| Iron       | mg/L | 2.105 | 3.55           | 2.64       | 0.126      |
| Lead       | mg/L | 0.000 | 0.00111        | 0.00099    | < 0.00020  |
| Magnesium  | mg/L | 5.156 | 3.15           | 3.89       | 8.43       |
| Manganese  | mg/L | 0.032 | 0.0536         | 0.0415     | 0.0026     |
| Mercury    | mg/L | 0.000 | 0.00001        | < 0.00001  | < 0.00001  |
| Molybdenum | mg/L | 0.001 | < 0.0010       | 0.0014     | 0.0014     |
| Nickel     | mg/L | 0.006 | 0.0061         | 0.0083     | 0.0054     |
| Potassium  | mg/L | 3.623 | 2.66           | 3.19       | 5.02       |
| Selenium   | mg/L | 0.000 | 0.00010        | < 0.00010  | 0.00011    |
| Silver     | mg/L | 0.000 | 002 < 0.000020 | < 0.000020 | < 0.000020 |
| Sodium     | mg/L | 33.16 | 8.60           | 27.7       | 63.2       |
| Thallium   | mg/L | 0.000 | 0.000047       | 0.000029   | 0.000017   |
| Zinc       | mg/L | 0.096 | 0.0860         | 0.0712     | 0.132      |

# 3.1 LANDFILL / LANDFARM

The volume of material placed into the landfill is evaluated through periodic surveys. According to the most recent survey done May 5<sup>th</sup>, 2021 the landfill contained approximately 22,546 m³ of material.

In June 2021, approximately 2.2 m<sup>2</sup> of contaminated soil was transferred to the Type A Landfarm as a result of spills cleanup.

### 3.2 ORE

Approximately 141,156 tonnes of ore were processed through the Mill in June 2021.

### 3.3 WASTE ROCK STORAGE FACILITY

In June 2021, a total of 52,224 tonnes of waste rock was removed in the mine development process. 29,677 tonnes were used as underground dry rockfill.

### 3.4 TAILINGS

97,998 dry tonnes of filtered tailings were sent to the Tailing Storage Facility in June 2021. 43,158 tonnes of tailings were used for paste underground backfill.

### **SECTION 4 SPILL MANAGEMENT**

# 4.1 INTERNAL AND REPORTABLE SPILLS

Spills reported internally (9) are listed in the table 4.1 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. Three reportable spills occurred in June 2021.

Table 4.1: Summary of Agnico's Spill Reports in June 2021

| Date and time of occurrence                    | If material<br>not listed<br>in<br>dropdown<br>or more<br>details,<br>enter here | Estimated quantity (I) | Exact<br>location<br>of<br>incident  | Description of incident                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Describe immediate corrective actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------|----------------------------------------------------------------------------------|------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tuesday,<br>June 01,<br>2021<br>10:00:00<br>AM | Diesel Fuel                                                                      | 20.00                  | Itivia<br>Laydown,<br>Rankin         | The dry break valve<br>on the fuel truck<br>failed, releasing<br>approximately 20<br>liters of fuel.                                                                                                                                                                                                                                                                                                                                                                                            | The contractor<br>(Sakku) took care of<br>replacing the<br>defective part and of<br>the spill clean-up.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Friday, June<br>04, 2021<br>12:00:00<br>AM     | Diesel Fuel                                                                      | 250.00                 | Exploration<br>Camp<br>Core<br>Shack | On the morning of June 4th, workers noticed the smell of fuel in the exploration camp core shack. A fuel line from an exterior above-ground heating fuel tank had cracked, releasing an estimated 250 L of fuel. Most the fuel migrated under the building, while some of it flowed away from the building onto the gravel driveway area. The supply copper line to a furnace located approximately 10 m away cracked, likely due to the cold conditions and the presence of water in the line. | An estimated 20L of fuel began to migrate away from the building and into the parking area.  Absorbent pads were used to collect the contaminated standing liquid and were disposed of into Quatrex hazmat bags. A trench was dug to mitigate further migration of the spill. The decantation room inside the building contains a down slope sump, which began to fill with diesel. A submersible pump was used to periodically pump the diesel and contaminated water into a tote. The entire decantation room was dismantled and cleared of material so that the subfloor could be inspected more thoroughly. Floorboards were removed, revealing a significant amount of ice and diesel contaminated floor |

|  |  | joists. A heater was used in order to speed up the melting process so that floor joints could be removed. The ice was left to melt and the contaminated water was pumped into totes which will be shipped south as hazmat. |
|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |                                                                                                                                                                                                                            |

| Saturday,<br>June 05,<br>2021<br>1:00:00 PM | Grey and<br>Black<br>Water | 3,500.00 | Wing 12<br>on Main<br>Camp    | On June 5, workers conducting a regular inspection of the camp exterior found that a drainage pipe had separated from the building due to the weight of thawing snow. The pipe flows directly between the bathroom drains of the dorm wing 12, and delivers drain water to the exterior pump/lift station of the wing. Greywater and blackwater from the showers, sinks, and toilets, was released onto the gravel pad beneath the wing. An estimated 3,500L of water would have been released. A follow-up investigation revealed that the pipe hangers on this wing were only temporary, and were never replaced when the wing was installed the previous year. The temporary hangers were unable to support the additional weight of the thawing snow, which led to the breakage. | The initial action was to close out the usage of the Wing 12 bathrooms so until the pipe could be fixed, in order to prevent any more water from being released. The sucker truck was used to recover as much standing liquid and debris from the ground as possible, which was deposited back into the lift station of the main camp to be treated through the Sewage Treatment Plant. The piping was replaced and installed with heavy-duty pipe hangers, heat trace cables and insulation. All of the hangers on the remaining wings were inspected and they were all the correct heavy-duty type. |
|---------------------------------------------|----------------------------|----------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sunday,<br>June 13,<br>2021<br>9:30:00 AM   | Coolant                    | 25.00    | KM16 on<br>the AWAR           | A coolant hose failed on a tractor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The equipment was stopped, absorbent pads were used and disposed of according to procedure. Contaminated soil was removed and placed into 5 pails for disposal at Landfarm A.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Monday,<br>June 21,<br>2021<br>5:00:00 AM   | Engine Oil                 | 0.01     | Pump at<br>Drill M21-<br>2935 | Engine oil dripped off while refueling of the pump.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Absorbent pads were used and disposed of as hazmat.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Monday,<br>June 21,<br>2021<br>11:30:00<br>AM | Hydraulic<br>Oil               | 3.00    | West of<br>the MSB<br>Building           | An oil leak occurred on a crane's hose.                                                                                                                                                                                                                                                                                                                                                                                             | Absorbent pads were used and contaminated soil was removed. Contaminated materials were disposed of as hazmat.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------|--------------------------------|---------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Thursday,<br>June 24,<br>2021<br>9:00:00 AM   | Petroleum products             | 65.00   | Hazmat<br>storage<br>seacan,<br>KCG yard | A leak occurred on<br>the distribution valve<br>of a 1000L<br>petroleum products<br>Tote while a worker<br>was using the Tote<br>to refuel.                                                                                                                                                                                                                                                                                         | Absorbent pads were used and disposed of as hazmat. Contaminated soil was removed and put into Landfarm A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Monday,<br>June 28,<br>2021<br>2:00:00 AM     | Hydraulic<br>Oil               | 10.00   | KCG<br>Crusher<br>OP2                    | While operating the excavator that is feeding the crusher, an hose failed and some hydraulic oil was spilled on the ground.                                                                                                                                                                                                                                                                                                         | Contaminated<br>material was<br>removed and brought<br>to Landfarm A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Tuesday,<br>June 29,<br>2021<br>4:00:00 PM    | Water with corrosion inhibitor | 8000.00 | South end of Arctic corridor             | Due to failure of an expansion joint on the heat recovery system, approximately 8 m3 of water containing corrosion inhibitor (Drewgard 4109) spilled in the south end of the Arctic corridor (between the Multi Service Building (MSB) and the process plant), and then leaked to the ground below on the Industrial Pad. The mix of Drewgard to water in the system was estimated to be 11 L of Drewgard to every 1000 L of water. | Sand berms were constructed in order to contain the spilled water in a central area and mitigate further migration until site personnel were able to shut down the system, preventing further release of heat recovery water. Contaminated material was removed with a frontend loader, placed in the Waste Rock Storage Facility 1 (WRSF1) and encapsulated in waste rock. The release occurred due to the failure of an expansion joint in the boiler recirculation system. The cause of the failed component is uncertain and is currently still under investigation. The expansion joint was replaced and the system inspected for leaks. |