



Meliadine Gold Mine  
NWB 2AM-MEL1631  
October 2022 Monthly Report

**Prepared for:**  
Nunavut Water Board

**Prepared by:**  
Agnico Eagle Mines Limited – Meliadine Division

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## BACKGROUND

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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 October 2022.

## WATER MANAGEMENT

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### 1.1 WATER USAGE

Table 1.1 details monthly water usage approved under Water License 2AM-MEL1631:

**Table 1.1: Summary of the monthly water usage in October 2022**

	Monthly Usage (m <sup>3</sup> )
Camp, Mill, Dust suppression (MEL-11)	44,461
Dust suppression (water obtained along AWAR/Meliadine River)	0
Total October	44,461
Year to date 2022	<b>380,580</b>

### 1.2 DEWATERING ACTIVITIES

No dewatering activities took place during the month.

### 1.3 MELIADINE DISCHARGE

Discharge from the EWTP into Meliadine Lake via the Final Discharge Point (MEL-14) started July 1<sup>st</sup>, 2022, and stopped September 25<sup>th</sup>, 2022. No discharge to Meliadine Lake occurred during the month.

### 1.4 MELVIN BAY DISCHARGE

No discharge to Melvin Bay occurred during the month.

### 1.5 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 during the month.

### 1.6 SEWAGE TREATMENT PLANT

Approximately 4,866 m<sup>3</sup> of treated wastewater was discharged into CP1 during the month. Approximately 17.6 m<sup>3</sup> of sludge was removed during the month. The sludge is either disposed of in WRSF1 or WRSF3.

### 1.7 CONTAINMENTS

No discharge from the Itivia fuel containment facility (Station Mel-25) occurred during the month.

## **1.8 MONITORING ANALYTICAL DATA**

Eleven (11) samples related to the Water Licence were taken during the month. The analytical results from these sampling events are presented in Appendix. No exceedance occurred in October 2022.

It should be noted that the total mercury result for sample collected at MEL-19 monitoring station on October 2<sup>nd</sup> is not available because the sampling bottle was received empty at the laboratory (it possibly leaked during shipping). Previous sampling events at MEL-19 showed total mercury results below detection limit (< 0.00001 mg/L) in 2022.

## **MATERIAL MANAGEMENT**

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### **1.9 LANDFILL / LANDFARM**

The volume of material placed into the landfill is evaluated through periodic surveys. According to the most recent survey done on July 28<sup>th</sup>, 2022, the landfill contained approximately 20,526 m<sup>3</sup> of material.

Approximately 3.5 m<sup>3</sup> of contaminated material was put into the Type A Landfarm during the month. According to the most recent survey done on August 5<sup>th</sup>, 2022, the Landfarm A contained approximately 522 m<sup>3</sup> of material.

### **1.10 ORE**

Approximately 150,856 tonnes of ore were processed through the Mill during the month.

### **1.11 WASTE ROCK STORAGE FACILITY**

A total of 63,095 tonnes of waste rock was removed in the underground mine development process during the month while 428,673 tonnes of waste rock were removed from open pit mining. 42,796 tonnes were used as underground dry rockfill.

### **1.12 TAILINGS**

106,550 dry tonnes of filtered tailings were sent to the Tailing Storage Facility during the month. 44,306 tonnes of tailings were used for paste underground backfill.

## **SECTION 4 SPILL MANAGEMENT**

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### **4.1 INTERNAL AND REPORTABLE SPILLS**

Spills reported internally (10) are listed in the table 4.1 and were managed according to Agnico Eagle'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. Two (2) reportable spills occurred during the month (Refer to grey shading in Table 4.1).

**Table 4.1: Summary of Agnico Eagle's Spill Reports in October 2022**

<b>Date and time of occurrence</b>	<b>If material not listed in dropdown or more details, enter here</b>	<b>Estimated quantity</b>	<b>Exact location of incident</b>	<b>Description of incident</b>	<b>Describe immediate corrective actions</b>
Thursday, October 06, 2022 8:00:00 AM	Hydraulic Oil	4 L	Front of wash bay	After being cleaned in the wash bay, an employee forgot to install the hydraulic cap on the cylinder of a scoop releasing 4 L of hydraulic oil on the ground.	Absorbent pads were deployed to collect free liquid. Contaminated material was also collected and brought inside the maintenance shop for disposal in the hazmat bin.
Thursday, October 06, 2022 1:00:00 PM	Engine Coolant	5 L	KM 25 on AWAR	An engine coolant hose failed, releasing approximately 5 L of coolant.	Contaminated soil was removed and disposed of properly.
Saturday, October 08, 2022 4:00:00 AM	Q-cell	1 KG	Module 1-2 outside emulsion plant	An employee was washing floors in the emulsion plant with water. Residual Q-cell was in the water/floor. The contaminated water leaked out of the plant and onto the ground.	The residual water in the emulsion plant was disposed of in the treated sump water tote.
Saturday, October 15, 2022 12:00:00 AM	Hydraulic Oil	250 L	HG PAD	During normal operations, haul truck 14 was offloading ore onto OP1 when the hydraulic pump pressure hose failed.	Spill absorbent pads were deployed to recover pooling surface oil and to contain the spill. The contaminated material was then excavated and directed to the primary crusher for processing through the process plant.

Tuesday, October 18, 2022 9:30:00 AM	Sewage	30 L	Sludge tank STP main camp	An estimated 30 L of untreated sewage was spilled on the industrial pad due to a miscommunication between two operators during sewage transfer from the sewage treatment plant (STP) sludge tank and the sewage vacuum truck.	Upon discovery of the spill, the operator stopped the power take off (PTO). All surface material was hand excavated and contained within a 76 L plastic tub. The material collected was then reworked through the main camp lift station for further treatment.
Tuesday, October 18, 2022 8:00:00 PM	Diesel Fuel	10 L	Paste Plant Cement laydown	Five-gallon diesel cans were being used to hold open cement doors. A gust of wind blew the door closed, knocking over a diesel can that was not closed properly.	Spill kit was used to contain spill. A skid steer was used to scrape up contaminated soil and put it in a Quatrex bag. Workers were told not to use diesel cans to hold open doors.
Wednesday, October 19, 2022 1:00:00 PM	Diesel Fuel	5 L	Explo camp next to helicopter pad	A light tower flipped on the side and spilled diesel.	Contaminated soil was recovered and placed into Landfarm A.
Thursday, October 20, 2022 2:30:00 AM	Diesel Fuel	13 L	Dome 3 lay down	A boom truck arrived at surface Dome 3 to load some steel to bring underground. When the operator got out of his equipment, he noticed the fuel tank was leaking through the side glass.	Absorbent rags were used and placed into a Quatrex bag and surface material was shoveled and placed into a Quatrex bag (Oily solids).
Monday, October 24, 2022 10:00:00 PM	Hydraulic Oil	45 L	West side of AWAR next to Tiri02	A hose disconnected on a Dozer Cat and hydraulic oil started spilling on the ground.	An excavator was used to remove the contaminated ground (waste rock) which was placed inside a haul truck and disposed of in the Landfarm.
Saturday, October 29, 2022 3:00:00 AM	Hydraulic Oil	4 L	E540690 N6988459	A hydraulic hose failed inside a drill and some oil leaked out on the ground.	Spill pads were used, and contaminated materials were disposed of in a Quatrex bag.

## Appendix – Monitoring Analytical Data

MEL-11		10/12/2022
Parameter	Unit	
<b>WQ01- Field Measured</b>		
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.49
Turbidity	NTU	0.3
Specific conductivity	umhos/cm	110
Hardness, as CaCO <sub>3</sub>	mg/L	32.1
Total alkalinity, as CaCO <sub>3</sub>	mg/L	23
Carbonate, as CaCO <sub>3</sub>	mg/L	< 1.0
Bicarbonate, as CaCO <sub>3</sub>	mg/L	22
TDS	mg/L	90
TDS, calculated	mg/L	53
TSS	mg/L	< 1
Total organic carbon	mg/L	3.5
Dissolved organic carbon	mg/L	3.5
<b>WQ03- Major Ions</b>		
Chloride	mg/L	15
Cyanide	mg/L	< 0.00050
Cyanide (free)	mg/L	< 0.0020
Cyanide (WAD)	mg/L	0.0011
Silica	mg/L	0.49
Sulfate	mg/L	6.2
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	< 0.050
Nitrate (as N)	mg/L	< 0.10
Nitrite (as N)	mg/L	< 0.010
Total Kjeldahl nitrogen	mg/L	0.16
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.0071
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00056
Barium	mg/L	0.0081
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00097
Iron	mg/L	0.022
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Manganese	mg/L	0.0036
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	0.0538



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
<b>WQ07- Dissolved Metals</b>		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00050
Barium	mg/L	0.0083
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	8.91
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00081
Iron	mg/L	0.0116
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium (Dissolved)	mg/L	1.59
Manganese	mg/L	< 0.0010
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	0.978
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	6.84
Strontium	mg/L	0.0473
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
<b>WQ10- 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

MEL-15		10/2/2022
Parameter	Unit	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.66
Turbidity	NTU	0.7
Specific conductivity	umhos/cm	140
Hardness, as CaCO <sub>3</sub>	mg/L	52.7
Total alkalinity, as CaCO <sub>3</sub>	mg/L	46
Carbonate, as CaCO <sub>3</sub>	mg/L	< 1.0
Bicarbonate, as CaCO <sub>3</sub>	mg/L	45
TDS	mg/L	85
TDS, calculated	mg/L	72
TSS	mg/L	1
Total organic carbon	mg/L	4.7
Dissolved organic carbon	mg/L	4.7
<b>WQ03- Major Ions</b>		
Chloride	mg/L	12
Cyanide	mg/L	0.00051
Cyanide (free)	mg/L	0.0021
Cyanide (WAD)	mg/L	< 0.00050
Silica	mg/L	1.4
Sulfate	mg/L	7.3
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	0.082
Nitrate (as N)	mg/L	< 0.10
Nitrite (as N)	mg/L	< 0.010
Total Kjeldahl nitrogen	mg/L	0.20
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.0063
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00115
Barium	mg/L	0.0117
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00067
Iron	mg/L	0.057
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020

Manganese	mg/L	0.0048
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	0.0816
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
<b>WQ07- Dissolved Metals</b>		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00076
Barium	mg/L	0.0114
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	17.3
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00059
Iron	mg/L	0.0178
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium (Dissolved)	mg/L	1.98
Manganese	mg/L	< 0.0010
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.10
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	5.18
Strontium	mg/L	0.0803
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		10/2/2022
Parameter	Unit	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.70
Turbidity	NTU	0.5
Specific conductivity	umhos/cm	170
Hardness, as CaCO <sub>3</sub>	mg/L	59.4
Total alkalinity, as CaCO <sub>3</sub>	mg/L	41
Carbonate, as CaCO <sub>3</sub>	mg/L	< 1.0
Bicarbonate, as CaCO <sub>3</sub>	mg/L	41
TDS	mg/L	100
TDS, calculated	mg/L	82
TSS	mg/L	1
Total organic carbon	mg/L	5.4
Dissolved organic carbon	mg/L	5.1
<b>WQ03- Major Ions</b>		
Chloride	mg/L	21
Cyanide	mg/L	< 0.00050
Cyanide (free)	mg/L	< 0.0020
Cyanide (WAD)	mg/L	< 0.00050
Silica	mg/L	0.97
Sulfate	mg/L	6.9
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	< 0.050
Nitrate (as N)	mg/L	< 0.10
Nitrite (as N)	mg/L	< 0.010
Total Kjeldahl nitrogen	mg/L	0.21
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.0107
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00461
Barium	mg/L	0.0233
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00133
Iron	mg/L	0.100
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020

Manganese	mg/L	0.0047
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	0.0936
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
<b>WQ07- Dissolved Metals</b>		
Aluminum	mg/L	0.0055
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00350
Barium	mg/L	0.0226
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	19.2
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00119
Iron	mg/L	0.0411
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium (Dissolved)	mg/L	2.61
Manganese	mg/L	0.0021
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.46
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	5.60
Strontium	mg/L	0.0910
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-17		10/2/2022
Parameter	Unit	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.88
Turbidity	NTU	0.8
Specific conductivity	umhos/cm	710
Hardness, as CaCO <sub>3</sub>	mg/L	266
Total alkalinity, as CaCO <sub>3</sub>	mg/L	57
Carbonate, as CaCO <sub>3</sub>	mg/L	< 1.0
Bicarbonate, as CaCO <sub>3</sub>	mg/L	56
TDS	mg/L	505
TDS, calculated	mg/L	410
TSS	mg/L	< 1
Total organic carbon	mg/L	11
Dissolved organic carbon	mg/L	10
<b>WQ03- Major Ions</b>		
Chloride	mg/L	89
Cyanide	mg/L	< 0.00050
Cyanide (free)	mg/L	0.0033
Cyanide (WAD)	mg/L	< 0.00050
Silica	mg/L	5.5
Sulfate	mg/L	160
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	0.15
Nitrate (as N)	mg/L	0.23
Nitrite (as N)	mg/L	< 0.010
Total Kjeldahl nitrogen	mg/L	0.53
Total phosphorus	mg/L	0.024
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.0096
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00119
Barium	mg/L	0.0462
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	0.000024
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00162
Iron	mg/L	0.333
Lead	mg/L	< 0.00020

Lithium	mg/L	0.0112
Manganese	mg/L	0.0529
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0052
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Strontium	mg/L	0.555
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00032
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
<b>WQ07- Dissolved Metals</b>		
Aluminum	mg/L	0.0061
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00083
Barium	mg/L	0.0452
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	87.0
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00142
Iron	mg/L	0.182
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0110
Magnesium (Dissolved)	mg/L	10.8
Manganese	mg/L	0.0506
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0049
Potassium (Dissolved)	mg/L	3.52
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	26.0
Strontium	mg/L	0.554
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00032
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050

MEL-18		10/2/2022
Parameter	Unit	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.85
Turbidity	NTU	0.5
Specific conductivity	umhos/cm	210
Hardness, as CaCO <sub>3</sub>	mg/L	76.0
Total alkalinity, as CaCO <sub>3</sub>	mg/L	45
Carbonate, as CaCO <sub>3</sub>	mg/L	< 1.0
Bicarbonate, as CaCO <sub>3</sub>	mg/L	45
TDS	mg/L	110
TDS, calculated	mg/L	100
TSS	mg/L	2
Total organic carbon	mg/L	5.0
Dissolved organic carbon	mg/L	4.8
<b>WQ03- Major Ions</b>		
Chloride	mg/L	28
Cyanide	mg/L	< 0.00050
Cyanide (free)	mg/L	0.0026
Cyanide (WAD)	mg/L	< 0.00050
Silica	mg/L	0.72
Sulfate	mg/L	12
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	0.077
Nitrate (as N)	mg/L	< 0.10
Nitrite (as N)	mg/L	< 0.010
Total Kjeldahl nitrogen	mg/L	0.18
Total phosphorus	mg/L	0.052
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.0120
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00238
Barium	mg/L	0.0163
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00088
Iron	mg/L	0.111
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0087



Manganese	mg/L	0.0072
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	0.163
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
<b>WQ07- Dissolved Metals</b>		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00125
Barium	mg/L	0.0155
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	24.4
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00068
Iron	mg/L	0.0198
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0087
Magnesium (Dissolved)	mg/L	3.29
Manganese	mg/L	0.0020
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.36
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	6.75
Strontium	mg/L	0.163
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-19		10/2/2022
Parameter	Unit	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.94
Turbidity	NTU	0.4
Hardness, as CaCO <sub>3</sub>	mg/L	1120
Total alkalinity, as CaCO <sub>3</sub>	mg/L	120
TDS	mg/L	3370
TDS, calculated	mg/L	3000
TSS	mg/L	4
<b>WQ03- Major Ions</b>		
Chloride	mg/L	1300
Cyanide	mg/L	0.00328
Fluoride	mg/L	0.18
Silica	mg/L	5.5
Sulfate	mg/L	530
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	2.7
Nitrate (as N)	mg/L	6.00
Nitrite (as N)	mg/L	0.198
Total phosphorus	mg/L	0.024
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.0451
Arsenic	mg/L	0.0206
Barium	mg/L	0.134
Cadmium	mg/L	0.000100
Chromium	mg/L	< 0.0020
Copper	mg/L	0.0066
Iron	mg/L	0.059
Lead	mg/L	< 0.00040
Manganese	mg/L	0.218
Mercury	mg/L	-
Molybdenum	mg/L	0.0038
Nickel	mg/L	0.0652
Selenium	mg/L	0.00099
Silver	mg/L	< 0.000040
Thallium	mg/L	0.000028
Zinc	mg/L	< 0.010
<b>WQ07- Dissolved Metals</b>		
Calcium (Dissolved)	mg/L	289
Magnesium (Dissolved)	mg/L	95.4
Potassium (Dissolved)	mg/L	34.0
Sodium (Dissolved)	mg/L	635

MEL-20		10/2/2022
Parameter	Unit	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.94
Turbidity	NTU	18
Hardness, as CaCO <sub>3</sub>	mg/L	1070
Total alkalinity, as CaCO <sub>3</sub>	mg/L	120
TDS	mg/L	2740
TDS, calculated	mg/L	3200
TSS	mg/L	26
<b>WQ03- Major Ions</b>		
Chloride	mg/L	1300
Cyanide	mg/L	0.0120
Fluoride	mg/L	0.16
Silica	mg/L	9.6
Sulfate	mg/L	570
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	18
Nitrate (as N)	mg/L	46.7
Nitrite (as N)	mg/L	0.540
Total phosphorus	mg/L	0.062
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.433
Arsenic	mg/L	0.0529
Barium	mg/L	0.115
Cadmium	mg/L	0.000200
Chromium	mg/L	< 0.0040
Copper	mg/L	0.0088
Iron	mg/L	1.03
Lead	mg/L	0.00366
Manganese	mg/L	0.740
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0069
Nickel	mg/L	0.0529
Selenium	mg/L	0.00324
Silver	mg/L	< 0.000080
Thallium	mg/L	0.000056
Zinc	mg/L	< 0.020
<b>WQ07- Dissolved Metals</b>		
Calcium (Dissolved)	mg/L	266
Magnesium (Dissolved)	mg/L	93.6
Potassium (Dissolved)	mg/L	38.9
Sodium (Dissolved)	mg/L	648

MEL-21		10/2/2022
Parameter	Unit	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.95
Turbidity	NTU	1.7
Hardness, as CaCO <sub>3</sub>	mg/L	950
Total alkalinity, as CaCO <sub>3</sub>	mg/L	150
TDS	mg/L	1990
TDS, calculated	mg/L	2000
TSS	mg/L	6
<b>WQ03- Major Ions</b>		
Chloride	mg/L	790
Cyanide	mg/L	0.00364
Fluoride	mg/L	0.16
Silica	mg/L	6.7
Sulfate	mg/L	440
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	2.6
Nitrate (as N)	mg/L	11.4
Nitrite (as N)	mg/L	0.189
Total phosphorus	mg/L	0.035
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.076
Arsenic	mg/L	0.0312
Barium	mg/L	0.103
Cadmium	mg/L	0.000080
Chromium	mg/L	< 0.0040
Copper	mg/L	0.0054
Iron	mg/L	0.362
Lead	mg/L	0.00223
Manganese	mg/L	0.549
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0105
Nickel	mg/L	0.0433
Selenium	mg/L	0.00080
Silver	mg/L	< 0.000080
Thallium	mg/L	< 0.000040
Zinc	mg/L	< 0.020
<b>WQ07- Dissolved Metals</b>		
Calcium (Dissolved)	mg/L	251
Magnesium (Dissolved)	mg/L	68.0
Potassium (Dissolved)	mg/L	25.0
Sodium (Dissolved)	mg/L	325

MEL-22		10/2/2022
Parameter	Unit	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.87
Turbidity	NTU	2.0
Hardness, as CaCO <sub>3</sub>	mg/L	1540
Total alkalinity, as CaCO <sub>3</sub>	mg/L	99
TDS	mg/L	3020
TDS, calculated	mg/L	3300
TSS	mg/L	5
<b>WQ03- Major Ions</b>		
Chloride	mg/L	1600
Cyanide	mg/L	0.00111
Fluoride	mg/L	< 0.10
Silica	mg/L	2.1
Sulfate	mg/L	460
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	1.4
Nitrate (as N)	mg/L	7.06
Nitrite (as N)	mg/L	0.037
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	0.013
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.020
Arsenic	mg/L	0.00469
Barium	mg/L	0.0970
Cadmium	mg/L	0.000065
Chromium	mg/L	< 0.0050
Copper	mg/L	0.0035
Iron	mg/L	0.424
Lead	mg/L	< 0.0010
Manganese	mg/L	0.616
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0050
Nickel	mg/L	0.0305
Selenium	mg/L	< 0.00050
Silver	mg/L	< 0.00010
Thallium	mg/L	< 0.000050
Zinc	mg/L	< 0.025
<b>WQ07- Dissolved Metals</b>		
Calcium (Dissolved)	mg/L	437
Magnesium (Dissolved)	mg/L	109
Potassium (Dissolved)	mg/L	38.8
Sodium (Dissolved)	mg/L	526

MEL-23		10/2/2022
Parameter	Unit	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.95
Turbidity	NTU	1.3
Hardness, as CaCO <sub>3</sub>	mg/L	1530
Total alkalinity, as CaCO <sub>3</sub>	mg/L	190
TDS	mg/L	4900
TDS, calculated	mg/L	5200
TSS	mg/L	7
<b>WQ03- Major Ions</b>		
Chloride	mg/L	2200
Cyanide	mg/L	0.00309
Fluoride	mg/L	0.26
Silica	mg/L	5.9
Sulfate	mg/L	1000
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	9.3
Nitrate (as N)	mg/L	21.2
Nitrite (as N)	mg/L	0.512
Total phosphorus	mg/L	0.041
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.082
Arsenic	mg/L	0.0111
Barium	mg/L	0.0858
Cadmium	mg/L	0.000226
Chromium	mg/L	< 0.0050
Copper	mg/L	0.0067
Iron	mg/L	0.153
Lead	mg/L	< 0.0010
Manganese	mg/L	0.876
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0127
Nickel	mg/L	0.104
Selenium	mg/L	0.00225
Silver	mg/L	< 0.00010
Thallium	mg/L	< 0.000050
Zinc	mg/L	< 0.025
<b>WQ07- Dissolved Metals</b>		
Calcium (Dissolved)	mg/L	291
Magnesium (Dissolved)	mg/L	201
Potassium (Dissolved)	mg/L	73.2
Sodium (Dissolved)	mg/L	1170

MEL-SR1	MEL-SR MAX GRAB (WSEEP/RO)	MEL-SR MAX MEAN (WSEEP/RO)	Sample date	10/8/2022
Parameter			Sample type	
			Unit	
<b>WQ01- Field Measured</b>				
Turbidity			NTU	0.88
<b>WQ02- Conventional Parameters</b>				
pH	6.0 to 9.5	6.0 to 9.5	pH units	8.11
Turbidity			NTU	0.3
Hardness, as CaCO <sub>3</sub>			mg/L	554
Total alkalinity, as CaCO <sub>3</sub>			mg/L	230
TDS			mg/L	980
TDS, calculated			mg/L	990
TSS	100	50	mg/L	1
<b>WQ03- Major Ions</b>				
Chloride			mg/L	310
Cyanide			mg/L	0.00100
Fluoride			mg/L	0.14
Silica			mg/L	4.6
Sulfate			mg/L	210
<b>WQ04- Nutrients and Chlorophyll a</b>				
Ammonia Nitrogen (as N)			mg/L	< 0.050
Nitrate (as N)			mg/L	0.34
Nitrite (as N)			mg/L	< 0.010
Total phosphorus			mg/L	< 0.020
Orthophosphate (P)			mg/L	< 0.010
<b>WQ05- General Organics</b>				
Total oil and grease			mg/L	2.2
<b>WQ06- Total Metals</b>				
Aluminum			mg/L	0.0067
Arsenic			mg/L	0.00299
Barium			mg/L	0.0653
Cadmium			mg/L	0.000016
Chromium			mg/L	< 0.0010
Copper			mg/L	0.00306
Iron			mg/L	0.039
Lead			mg/L	< 0.00020
Manganese			mg/L	0.0169
Mercury			mg/L	< 0.00001
Molybdenum			mg/L	0.0011
Nickel			mg/L	0.0277
Selenium			mg/L	0.00010

Silver			mg/L	< 0.000020
Thallium			mg/L	0.000012
Zinc			mg/L	0.0555
<b>WQ07- Dissolved Metals</b>				
Calcium (Dissolved)			mg/L	151
Magnesium (Dissolved)			mg/L	33.5
Potassium (Dissolved)			mg/L	13.8
Sodium (Dissolved)			mg/L	140