Meliadine Gold Mine
NWB 2AM-MEL1631
August 2024 Monthly Report

Prepared for:
Nunavut Water Board

Prepared by:
Agnico Eagle Mines Limited – Meliadine Division

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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 August 2024.

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 the monthly water usage in 2024

Usage	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2024 Total
MEL-11[1]	m^3	46,859	40,057	43,273	42,794	33,136	40,333	50,559[2]	53,277	-	-	-	-	350,288
Dust suppression[3]	m^3	0	0	0	0	0	0	-	-	-	-	-	-	0
Dust suppression[4]	m^3	0	0	0	0	579	3,121	2,753	2,241	-	-	-	-	8,694

In August, approximately 2,241 m^3 of contact water was used for dust suppression purposes on site, in areas captured by the Contact Water management facilities reporting back to CP1 (including haul roads and open pit areas).

2.2 DEWATERING ACTIVITIES

Four (4) ponds (B36, B37, B38 and B62) were dewatered to Contact Water management facilities (Collection Pond 1) during the month as part of the permitted fish salvage.

[1] Camp, Mill, Dust suppression
[2] The July MEL-11 water usage was corrected in the August report
[3] Water obtained along AWAR/Meliadine River
[4] Reclaim water obtained from CP1 or other Contact Water management facilities and used for dust suppression on site

2.3 WATER DISCHARGE

Table 2.3 details monthly water discharge, including:

- discharge from the EWTP to Meliadine Lake via the Final Discharge Point (MEL-14);
- discharge of treated saline effluent to Melvin Bay via the Final Discharge Point (MEL-26), and
- discharge from the Itivia fuel containment facility (MEL-25).

Table 2.3: Summary of the monthly water discharge in 2024

Location	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2024 Total
MEL-14	m^3	0	0	0	0	0	171,936	72,724	0	-	-	-	-	244,660
MEL-26	m^3	0	0	0	0	0	0	0	0	-	-	-	-	0
MEL-25	m^3	0	0	0	0	0	0	0	0	-	-	-	-	0

2.4 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.

As per the approved Landfill (Stage 4) Berm Raise Design Report and Monitoring station MEL-24 description Modification, water accumulated inside the landfill is pumped towards Pond H13, which is the current location seepage from the landfill flows towards.

2.5 SEWAGE TREATMENT PLANT

Table 2.5 details monthly discharge from the Sewage Treatment Plant (STP), including the treated wastewater discharge to CP1 and sludge removed and disposed of in the WRSF.

Table 2.5: Summary of the monthly disposal/discharge from the STP in 2024

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2024 Total
Wastewater Discharge (m^3)		4,350	5,270	6,070	5,777	4,131	4,945	5,080	5,306	-	-	-	-	40,929
Sewage Sludge	Amount (m^3)	100	100	120	120	81.4	80	10.50	31	-	-	-	-	642.90
	Disposal Location	WRSF3	WRSF3	WRSF3	WRSF3	WRSF3	WRSF3	WRSF3	WRSF3	-	-	-	-	-

2.6 MONITORING ANALYTICAL DATA

Eleven (11) samples related to the Water Licence were taken during the month. The analytical results are presented in Appendix.

SECTION 3 • MATERIAL MANAGEMENT

3.1 LANDFILL / LANDFARM

Table 3.1 details quarterly Landfill and Landfarm survey results, as well as the amount of material placed in the Landfarm every month.

Table 3.1: Summary of the monthly disposal in the Landfarm and quarterly survey volumes of Landfill and Landfarm

Location	Unit	Q1			Q2			Q3			Q4			2024 Total
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Landfill (Survey)	m^3	28,127			26,087			27,232			-			-
Landfarm (Survey)	m^3	604[5]			537			1,158			-			-
Landfarm[6]	m^3	1.8	0.02	3.25	7.28	2.3	32.52	3.78	7.47	-	-	-	-	58.42

[5] From landfarm survey conducted in October 2023. Surveys of the Landfarm are generally not conducted during the winter months, as the presence of snow would not allow a representative survey of the soil quantity.
[6] Amount of contaminated solid material (soil) placed in the Landfarm or lined sorting area.

3.2 ORE, WASTE ROCK STORAGE FACILITY, TAILINGS

Table 3.2 details monthly material management, including processed ore, waste rock, and tailings.

Table 3.2: Summary of the monthly material management in 2024

Material (tonnes)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Cumulative 2024
Processed Ore		190,946	154,435	156,820	166,561	113,952	144,504	190,576	181,680	-	-	-	-	1,299,474
Waste Rock	Removed from open pit mining	175,380	534,627	845,427	701,244	344,631	231,788	481,603	397,615	-	-	-		3,712,315
	Removed from underground mining	71,281[7]	67,267	73,926	87,413	54,382	71,177	65,504	74,681	-	-	-		565,632
	Used as underground dry rockfill	49,823	31,805	10,566	31,716	18,233	13,755	23,217	54,582	-	-	-		233,698
Tailings	Send to TSF	144,379	107,392	111,857	125,769	83,808	110,265	152,691	151,392	-	-	-		987,553
	Used as paste underground backfill	46,567	47,043	44,963	40,792	30,144	34,239	37,885	30,288	-	-	-		311,921

[7] January waste rock removed from underground mining was updated in February report

SECTION 4 SPILL MANAGEMENT

4.1 INTERNAL AND REPORTABLE SPILLS

Spills reported internally 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 the gray shading in Table 4.1).

Table 4.1: Summary of Agnico Eagle's Spill Reports during the month

Date and time of occurrence	Contaminant	Estimated quantity	Exact location of incident	Description of incident	Describe immediate corrective actions
Friday, August 02, 2024 5:15:00 AM	Coolant	3L	KCG Parking	After parking the loader, a worker noticed a leak under the equipment. Investigation revealed a loose clamp at the bottom of the radiator.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of at the landfarm.
Friday, August 02, 2024 6:00:00 PM	Petroleum products	0.5L	MSB parking area north of Maintenance garage	After parking the vehicle, worker noticed oil dripping from under the engine.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of at the landfarm.
Friday, August 02, 2024 7:45:00 PM	Diesel Fuel	3L	KCG Parking	While the operator was filling the loader with diesel fuel, 3 liters of fuel overflowed from the tank and spilled onto the ground at the KCG parking lot. The spill was caused by a faulty vent in the fuel tank.	Contaminated material was scrapped and disposed of at the landfarm. The fuel tank vent will be replaced.
Saturday, August 03, 2024 6:30:00 PM	EWTP sludge	0.5L	D-CP1	While recirculating EWTP sludge through the sludge line, an employee noticed that the line leaked at one of the joint.	No remediation was done due to its location (underneath 14 inches pipelines), which made it inaccessible. The spill occurred within the site's water management infrastructures catchment.
Sunday, August 04, 2024 4:00:00 PM	Diesel Fuel	2L	3M Fuel Farm	While fueling an equipment, a worker discovered a pre-existing spill of approx.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin.

				2L of diesel at the 3 Million Fuel Farm.	
Wednesday, August 07, 2024 10:00:00 AM	Diesel Fuel	5L	Itivia Refuelling Station	During an inspection at Itivia, a spill was discovered. Investigation revealed that the fuel tank might have been filed to much and it overflowed by the vent, or the fuel expended because of the warm weather.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin.
Thursday, August 08, 2024 8:00:00 AM	Diesel Fuel	2L	Behind MSB garage new section	The spill occurred due to a leaking fuel tank on a Toyota.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin.
Thursday, August 08, 2024 2:30:00 PM	Hydraulic Oil	15L	TIRI01	A hydaulic oil hose failed on a drill resulting in a 15L spill of hydraulic oil.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of in the mill.
Sunday, August 11, 2024 9:30:00 AM	Petroleum products	0.5m3	CP1 snow dump	An employee saw a piece of tarp sticking out of the ground at the CP1 snow dump area. Upon pulling on the tarp, he realized that this tarp has holding oily loose material, probably from a spill clean up. The tarp was probably buried in the snow during the previous winter and during snowplowing activities, the tarp made its way inadvertently to the area.	Contaminated material was placed in the Landfarm A. The tarp was disposed of in a Quatrex bag.
Monday, August 12, 2024 9:00:00 AM	Sewage	20L	MSB lift station	An estimated 20 L of sewage spilled onto the industrial pad at the Multi-Service Building (MSB) lift station. During routine operation of the sewage vacuum truck, the operator was manipulating a transfer hose when they accidentally contacted the pump valve on the truck, inadvertently engaging the pump and resulting in 20 L of	The vacuum truck operator immediately switched the pump valve back into the neutral position, thus stopping the spill. The employee then notified their supervisor as well as the environment department to assess the spill. The sewage impacted area was hand excavated and the recovered material

				sewage being discharged from the hose onto the industrial pad. The spill occurred within the site's water management infrastructure, and as such, no waterbodies were impacted by the spill.	was brought to Landfarm A.
Sunday, August 18, 2024 2:30:00 AM	Diesel Fuel	25L	Portal 2 Gas Boy	25 liters of diesel fuel spilled onto the ground because of a malfunction on a haul truck. A drip tray was used, but by the time the stop button was pressed, the fuel had overflowed the drip tray.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin.
Tuesday, August 20, 2024 4:00:00 PM	Waste Oil	400L	Dome #3	A skid steer operator was moving a small bin of equipment when the forks inadvertently contacted a waste oil tote at Dome 3, Portal 1. The forks punctured the tote resulting in a release of 400 L of waste oil.	Employees in the area plugged the hole in the tote to prevent further spillage and deployed spill pads, spill booms, and absorbent to contain spill. A loader was dispatched to excavate the contaminated soil, and the recovered contaminated material was brought to Landfarm A.
Wednesday, August 21, 2024 2:00:00 PM	Diesel Fuel	10L	3 M Fuel farm	After fueling the bus, the operator noticed a leak from the fuel tank resulting in a 5L spill of diesel.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of at the Landfarm.
Friday, August 23, 2024 7:39:00 AM	Hydraulic Oil	5L	KCG Maintenance Shop Yard	While the loader operator was transporting an excavator bucket on the forks of the loader, the excavator bucket pin fell out, striking the hydraulic hoses on the loader's quick attach accessory, resulting in damaged hoses and a 5L spill of hydraulic oil from the loader.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of at the Landfarm.
Friday, August 23,	Hydraulic Oil	5L	WRSF1	While the fuel truck operator was fueling the excavator, he observed	Spill pads were deployed to clean-up the spill and disposed

2024 7:39:00 AM				hydraulic oil leaking from the boom cylinder.	of in the appropriate bin. Contaminated material was scrapped and disposed of at the Landfarm.
Friday, August 23, 2024 5:30:00 PM	Engine Oil	10L	TIRI01	A worker drove his pickup truck over a rock in the open pit, damaging the oil tank and causing an engine oil spill.	Contaminated material was scrapped and disposed of at the Landfarm.
Sunday, August 25, 2024 11:00:00 PM	Hydraulic Oil	2L	TIRI01	The operator observed a small leak of hydraulic oil coming from a fitting on a drill.	Contaminated material was scrapped and disposed of at the Landfarm.
Friday, August 30, 2024 2:00:00 AM	Hydraulic Oil	2L	AWAR KM 10	A hydraulic oil hose failed on an excavator.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of at the Landfarm.
Friday, August 30, 2024 9:00:00 AM	Diesel Fuel	10L	TIRI01	A malfunctioning diesel pump on a haul truck resulted in a 10L spill.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin. Contaminated material stayed in the pit ore blast, since it was high grade ore which will be processed at the mill.
Saturday, August 31, 2024 1:30:00 PM	Diesel Fuel	0.20L	Itivia HDD pad	While bringing the crane on the drilling pad at Itivia, the fuel filter on the crane came loose, resulting in the spill.	Spill pads were deployed to clean-up the limited quantity of fuel that was on the platform and disposed of in the appropriate bin.

Appendix – Monitoring Analytical Data

MEL-11		8/4/2024
WQ02- Conventional Parameters		
pH	**pH units**	7.54
Turbidity	**NTU**	0.2
Conductivity	**ms/cm**	0.107
Hardness, as CaCO3	**mg/L**	27.1
Total alkalinity, as CaCO3	**mg/L**	23
Carbonate, as CaCO3	**mg/L**	< 1.0
Bicarbonate, as CaCO3	**mg/L**	23
TDS	**mg/L**	55
TDS, calculated	**mg/L**	52
TSS	**mg/L**	1
Total organic carbon	**mg/L**	3.2
Dissolved organic carbon	**mg/L**	3.2
WQ03- Major Ions		
Chloride	**mg/L**	13
Cyanide	**mg/L**	< 0.00050
Cyanide (free)	**mg/L**	< 0.0020
Cyanide (WAD)	**mg/L**	< 0.00050
Fluoride	**mg/L**	< 0.10
Silica	**mg/L**	0.41
Sulfate	**mg/L**	6.7
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as N)	**mg/L**	< 0.050
Nitrate (as N)	**mg/L**	< 0.10
Nitrite (as N)	**mg/L**	< 0.010
Total phosphorus	**mg/L**	< 0.020
Orthophosphate (P)	**mg/L**	< 0.010
WQ06- Total Metals		
Aluminum	**mg/L**	0.0036
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00081
Barium	**mg/L**	0.0084
Beryllium	**mg/L**	< 0.00010
Cadmium	**mg/L**	< 0.000010
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00090
Iron	**mg/L**	0.029
Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	< 0.0020
Manganese	**mg/L**	0.0120
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**	0.0460
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**	< 0.0030
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00075
Barium	**mg/L**	0.0081
Beryllium	**mg/L**	< 0.00010
Boron	**mg/L**	< 0.050
Cadmium	**mg/L**	< 0.000010
Calcium (Dissolved)	**mg/L**	8.61
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00082
Iron	**mg/L**	0.0091
Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	< 0.0020
Magnesium (Dissolved)	**mg/L**	1.49
Manganese	**mg/L**	< 0.0010
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	< 0.0010
Nickel	**mg/L**	< 0.0010
Potassium (Dissolved)	**mg/L**	1.03
Selenium	**mg/L**	< 0.00010
Silver	**mg/L**	< 0.000020
Sodium (Dissolved)	**mg/L**	6.51
Strontium	**mg/L**	0.0460
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
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-15		8/5/2024
WQ02- Conventional Parameters		
pH	**pH units**	7.78
Turbidity	**NTU**	0.9
Conductivity	**ms/cm**	0.149
Hardness, as CaCO3	**mg/L**	50.8
Total alkalinity, as CaCO3	**mg/L**	49
Carbonate, as CaCO3	**mg/L**	< 1.0
Bicarbonate, as CaCO3	**mg/L**	48
TDS	**mg/L**	90
TDS, calculated	**mg/L**	73
TSS	**mg/L**	2
Total organic carbon	**mg/L**	4.9
Dissolved organic carbon	**mg/L**	4.6
WQ03- Major Ions		
Chloride	**mg/L**	12
Cyanide	**mg/L**	0.00065
Cyanide (free)	**mg/L**	< 0.0020
Cyanide (WAD)	**mg/L**	< 0.00050
Fluoride	**mg/L**	< 0.10
Silica	**mg/L**	0.85
Sulfate	**mg/L**	4.6
WQ04- Nutrients and Chlorophyll a		
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**	0.33
Total phosphorus	**mg/L**	< 0.020
Orthophosphate (P)	**mg/L**	< 0.010
WQ06- Total Metals		
Aluminum	**mg/L**	0.0048
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00210
Barium	**mg/L**	0.0118
Beryllium	**mg/L**	< 0.00010

Cadmium	**mg/L**	< 0.000010
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00057
Iron	**mg/L**	0.109
Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	< 0.0020
Manganese	**mg/L**	0.0154
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**	0.0787
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**	< 0.0030
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00179
Barium	**mg/L**	0.0124
Beryllium	**mg/L**	< 0.00010
Boron	**mg/L**	< 0.050
Cadmium	**mg/L**	< 0.000010
Calcium (Dissolved)	**mg/L**	18.3
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00063
Iron	**mg/L**	0.0477
Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	< 0.0020
Magnesium (Dissolved)	**mg/L**	2.21
Manganese	**mg/L**	0.0033
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	< 0.0010
Nickel	**mg/L**	< 0.0010
Potassium (Dissolved)	**mg/L**	1.28
Selenium	**mg/L**	< 0.00010
Silver	**mg/L**	< 0.000020
Sodium (Dissolved)	**mg/L**	6.05
Strontium	**mg/L**	0.0813
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		8/5/2024
WQ02- Conventional Parameters		
pH	**pH units**	7.80
Turbidity	**NTU**	1.0
Conductivity	**ms/cm**	0.175
Hardness, as CaCO3	**mg/L**	51.0
Total alkalinity, as CaCO3	**mg/L**	46
Carbonate, as CaCO3	**mg/L**	< 1.0
Bicarbonate, as CaCO3	**mg/L**	46
TDS	**mg/L**	135
TDS, calculated	**mg/L**	84
TSS	**mg/L**	5
Total organic carbon	**mg/L**	4.8
Dissolved organic carbon	**mg/L**	4.7
WQ03- Major Ions		
Chloride	**mg/L**	20
Cyanide	**mg/L**	0.00076
Cyanide (free)	**mg/L**	< 0.0020
Cyanide (WAD)	**mg/L**	0.00090
Fluoride	**mg/L**	< 0.10
Silica	**mg/L**	0.34
Sulfate	**mg/L**	4.8
WQ04- Nutrients and Chlorophyll a		
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**	0.30
Total phosphorus	**mg/L**	< 0.020
Orthophosphate (P)	**mg/L**	< 0.010
WQ06- Total Metals		
Aluminum	**mg/L**	0.0093
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00923
Barium	**mg/L**	0.0220
Beryllium	**mg/L**	< 0.00010
Boron	**mg/L**	< 0.050
Cadmium	**mg/L**	< 0.000010
Chromium	**mg/L**	< 0.0010

Copper	**mg/L**	0.00085
Iron	**mg/L**	0.136
Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	< 0.0020
Manganese	**mg/L**	0.0110
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**	0.0872
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**	0.0044
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00866
Barium	**mg/L**	0.0248
Beryllium	**mg/L**	< 0.00010
Boron	**mg/L**	< 0.050
Cadmium	**mg/L**	< 0.000010
Calcium (Dissolved)	**mg/L**	20.3
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00102
Iron	**mg/L**	0.0371
Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	< 0.0020
Magnesium (Dissolved)	**mg/L**	2.87
Manganese	**mg/L**	0.0037
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	< 0.0010
Nickel	**mg/L**	< 0.0010
Potassium (Dissolved)	**mg/L**	1.70
Selenium	**mg/L**	< 0.00010
Silver	**mg/L**	< 0.000020
Sodium (Dissolved)	**mg/L**	6.38
Strontium	**mg/L**	0.0934
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		8/5/2024
WQ02- Conventional Parameters		
pH	**pH units**	7.94
Turbidity	**NTU**	0.9
Conductivity	**ms/cm**	0.453
Hardness, as CaCO3	**mg/L**	145
Total alkalinity, as CaCO3	**mg/L**	69
Carbonate, as CaCO3	**mg/L**	< 1.0
Bicarbonate, as CaCO3	**mg/L**	69
TDS	**mg/L**	335
TDS, calculated	**mg/L**	230
TSS	**mg/L**	1
Total organic carbon	**mg/L**	12
Dissolved organic carbon	**mg/L**	12
WQ03- Major Ions		
Chloride	**mg/L**	60
Cyanide	**mg/L**	0.00144
Cyanide (free)	**mg/L**	< 0.0020
Cyanide (WAD)	**mg/L**	0.0014
Fluoride	**mg/L**	< 0.10
Silica	**mg/L**	1.4
Sulfate	**mg/L**	45
WQ04- Nutrients and Chlorophyll a		
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**	0.64
Total phosphorus	**mg/L**	< 0.020
Orthophosphate (P)	**mg/L**	< 0.010
WQ06- Total Metals		
Aluminum	**mg/L**	0.0105
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00113
Barium	**mg/L**	0.0390
Beryllium	**mg/L**	< 0.00010
Boron	**mg/L**	< 0.050
Cadmium	**mg/L**	< 0.000010
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00109
Iron	**mg/L**	0.136

Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	0.0057
Manganese	**mg/L**	0.0471
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	< 0.0010
Nickel	**mg/L**	0.0018
Selenium	**mg/L**	< 0.00010
Silver	**mg/L**	< 0.000020
Strontium	**mg/L**	0.337
Thallium	**mg/L**	< 0.000010
Tin	**mg/L**	< 0.0050
Titanium	**mg/L**	< 0.0050
Uranium	**mg/L**	0.00016
Vanadium	**mg/L**	< 0.0050
Zinc	**mg/L**	< 0.0050
WQ07- Dissolved Metals		
Aluminum	**mg/L**	< 0.0030
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00111
Barium	**mg/L**	0.0402
Beryllium	**mg/L**	< 0.00010
Boron	**mg/L**	< 0.050
Cadmium	**mg/L**	< 0.000010
Calcium (Dissolved)	**mg/L**	49.3
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00109
Iron	**mg/L**	0.0675
Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	0.0067
Magnesium (Dissolved)	**mg/L**	7.72
Manganese	**mg/L**	0.0335
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	< 0.0010
Nickel	**mg/L**	0.0017
Potassium (Dissolved)	**mg/L**	3.70
Selenium	**mg/L**	< 0.00010
Silver	**mg/L**	< 0.000020
Sodium (Dissolved)	**mg/L**	20.5
Strontium	**mg/L**	0.361
Thallium	**mg/L**	< 0.000010
Tin	**mg/L**	< 0.0050
Titanium	**mg/L**	< 0.0050
Uranium	**mg/L**	0.00015
Vanadium	**mg/L**	< 0.0050
Zinc	**mg/L**	< 0.0050

MEL-18		8/5/2024
WQ02- Conventional Parameters		
pH	**pH units**	7.81
Turbidity	**NTU**	0.9
Conductivity	**ms/cm**	0.240
Hardness, as CaCO3	**mg/L**	73.4
Total alkalinity, as CaCO3	**mg/L**	54
Carbonate, as CaCO3	**mg/L**	< 1.0
Bicarbonate, as CaCO3	**mg/L**	54
TDS	**mg/L**	165
TDS, calculated	**mg/L**	120
TSS	**mg/L**	4
Total organic carbon	**mg/L**	4.9
Dissolved organic carbon	**mg/L**	4.6
WQ03- Major Ions		
Chloride	**mg/L**	32
Cyanide	**mg/L**	0.00076
Cyanide (free)	**mg/L**	< 0.0020
Cyanide (WAD)	**mg/L**	0.00075
Fluoride	**mg/L**	< 0.10
Silica	**mg/L**	0.47
Sulfate	**mg/L**	8.6
WQ04- Nutrients and Chlorophyll a		
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**	0.34
Total phosphorus	**mg/L**	< 0.020
Orthophosphate (P)	**mg/L**	< 0.010
WQ06- Total Metals		
Aluminum	**mg/L**	0.0056
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00379
Barium	**mg/L**	0.0202
Beryllium	**mg/L**	< 0.00010
Boron	**mg/L**	< 0.050
Cadmium	**mg/L**	< 0.000010
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00069
Iron	**mg/L**	0.101
Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	0.0102

Manganese	**mg/L**	0.0157
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**	0.184
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**	< 0.0030
Antimony	**mg/L**	< 0.00050
Arsenic	**mg/L**	0.00321
Barium	**mg/L**	0.0211
Beryllium	**mg/L**	< 0.00010
Boron	**mg/L**	< 0.050
Cadmium	**mg/L**	< 0.000010
Calcium (Dissolved)	**mg/L**	28.2
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00085
Iron	**mg/L**	0.0346
Lead	**mg/L**	< 0.00020
Lithium	**mg/L**	0.0103
Magnesium (Dissolved)	**mg/L**	3.83
Manganese	**mg/L**	0.0037
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	< 0.0010
Nickel	**mg/L**	< 0.0010
Potassium (Dissolved)	**mg/L**	1.81
Selenium	**mg/L**	< 0.00010
Silver	**mg/L**	< 0.000020
Sodium (Dissolved)	**mg/L**	9.09
Strontium	**mg/L**	0.199
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		8/5/2024
WQ02- Conventional Parameters		
pH	**pH units**	7.99
Turbidity	**NTU**	1.0
Hardness, as CaCO3	**mg/L**	747
Total alkalinity, as CaCO3	**mg/L**	99
TDS	**mg/L**	2410
TDS, calculated	**mg/L**	2100
TSS	**mg/L**	3
WQ03- Major Ions		
Chloride	**mg/L**	800
Cyanide	**mg/L**	0.00178
Fluoride	**mg/L**	0.17
Silica	**mg/L**	1.2
Sulfate	**mg/L**	470
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as N)	**mg/L**	0.094
Nitrate (as N)	**mg/L**	8.29
Nitrite (as N)	**mg/L**	0.055
Total phosphorus	**mg/L**	< 0.020
Orthophosphate (P)	**mg/L**	< 0.010
WQ06- Total Metals		
Aluminum	**mg/L**	0.0227
Arsenic	**mg/L**	0.0114
Barium	**mg/L**	0.0694
Cadmium	**mg/L**	0.000054
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00411
Iron	**mg/L**	0.025
Lead	**mg/L**	< 0.00020
Manganese	**mg/L**	0.0403
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	0.0034
Nickel	**mg/L**	0.0355
Selenium	**mg/L**	0.00106
Silver	**mg/L**	< 0.000020
Thallium	**mg/L**	0.000028
Titanium	**mg/L**	< 0.0050
Zinc	**mg/L**	< 0.0050
WQ07- Dissolved Metals		
Calcium (Dissolved)	**mg/L**	218
Magnesium (Dissolved)	**mg/L**	67.9
Potassium (Dissolved)	**mg/L**	28.8
Sodium (Dissolved)	**mg/L**	413

MEL-20		8/5/2024
WQ02- Conventional Parameters		
pH	**pH units**	7.80
Turbidity	**NTU**	4.3
Conductivity	**ms/cm**	9.44
Hardness, as CaCO3	**mg/L**	1590
Total alkalinity, as CaCO3	**mg/L**	120
TDS	**mg/L**	6170
TDS, calculated	**mg/L**	5600
TSS	**mg/L**	7
Total organic carbon	**mg/L**	12
WQ03- Major Ions		
Chloride	**mg/L**	2200
Cyanide	**mg/L**	0.00309
Cyanide (free)	**mg/L**	0.0047
Cyanide (WAD)	**mg/L**	0.0014
Fluoride	**mg/L**	0.23
Silica	**mg/L**	4.4
Sulfate	**mg/L**	1200
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as N)	**mg/L**	21
Nitrate (as N)	**mg/L**	74.7
Nitrite (as N)	**mg/L**	1.74
Total phosphorus	**mg/L**	< 0.020
Orthophosphate (P)	**mg/L**	0.022
WQ06- Total Metals		
Aluminum	**mg/L**	0.082
Arsenic	**mg/L**	0.0896
Barium	**mg/L**	0.0667
Cadmium	**mg/L**	0.000430
Chromium	**mg/L**	< 0.0050
Copper	**mg/L**	0.0077
Iron	**mg/L**	0.147
Lead	**mg/L**	0.0035
Manganese	**mg/L**	1.09
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	0.0121
Nickel	**mg/L**	0.0921
Selenium	**mg/L**	0.00673
Silver	**mg/L**	< 0.00010
Thallium	**mg/L**	< 0.000050
Titanium	**mg/L**	< 0.025

Zinc	**mg/L**	< 0.025
WQ07- Dissolved Metals		
Calcium (Dissolved)	**mg/L**	402
Magnesium (Dissolved)	**mg/L**	174
Potassium (Dissolved)	**mg/L**	72.8
Sodium (Dissolved)	**mg/L**	1210

MEL-21		8/5/2024
WQ02- Conventional Parameters		
pH	**pH units**	8.12
Turbidity	**NTU**	19
Hardness, as CaCO3	**mg/L**	378
Total alkalinity, as CaCO3	**mg/L**	97
TDS	**mg/L**	1090
TDS, calculated	**mg/L**	940
TSS	**mg/L**	17
WQ03- Major Ions		
Chloride	**mg/L**	300
Cyanide	**mg/L**	0.00193
Fluoride	**mg/L**	0.15
Silica	**mg/L**	3.1
Sulfate	**mg/L**	220
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as N)	**mg/L**	0.77
Nitrate (as N)	**mg/L**	7.46
Nitrite (as N)	**mg/L**	0.171
Total phosphorus	**mg/L**	0.026
Orthophosphate (P)	**mg/L**	< 0.010
WQ06- Total Metals		
Aluminum	**mg/L**	0.316
Arsenic	**mg/L**	0.0228
Barium	**mg/L**	0.0371
Cadmium	**mg/L**	0.000022
Chromium	**mg/L**	< 0.0010
Copper	**mg/L**	0.00300
Iron	**mg/L**	0.580
Lead	**mg/L**	0.00065
Manganese	**mg/L**	0.138
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	0.0092
Nickel	**mg/L**	0.0164
Selenium	**mg/L**	0.00101
Silver	**mg/L**	< 0.000020

Thallium	**mg/L**	0.000010
Titanium	**mg/L**	0.0170
Zinc	**mg/L**	< 0.0050
WQ07- Dissolved Metals		
Calcium (Dissolved)	**mg/L**	100
Magnesium (Dissolved)	**mg/L**	35.8
Potassium (Dissolved)	**mg/L**	15.5
Sodium (Dissolved)	**mg/L**	174

MEL-22		8/5/2024
WQ02- Conventional Parameters		
pH	**pH units**	7.73
Turbidity	**NTU**	0.6
Hardness, as CaCO3	**mg/L**	1270
Hardness, as CaCO3-Dissolved	**mg/L**	1440
Total alkalinity, as CaCO3	**mg/L**	61
TDS	**mg/L**	5430
TDS, calculated	**mg/L**	4900
TSS	**mg/L**	2
WQ03- Major Ions		
Chloride	**mg/L**	2400
Cyanide	**mg/L**	0.00150
Fluoride	**mg/L**	0.11
Silica	**mg/L**	1.8
Sulfate	**mg/L**	520
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as N)	**mg/L**	4.5
Nitrate (as N)	**mg/L**	17.1
Nitrite (as N)	**mg/L**	0.500
Total phosphorus	**mg/L**	< 0.020
Orthophosphate (P)	**mg/L**	< 0.010
WQ06- Total Metals		
Aluminum	**mg/L**	< 0.015
Arsenic	**mg/L**	0.00498
Barium	**mg/L**	0.0797
Cadmium	**mg/L**	< 0.000050
Chromium	**mg/L**	< 0.0050
Copper	**mg/L**	0.0027
Iron	**mg/L**	< 0.050
Lead	**mg/L**	< 0.0010
Manganese	**mg/L**	0.104
Mercury	**mg/L**	< 0.00001

Molybdenum	**mg/L**	0.0076
Nickel	**mg/L**	0.0256
Selenium	**mg/L**	0.00215
Silver	**mg/L**	< 0.00010
Thallium	**mg/L**	< 0.000050
Titanium	**mg/L**	< 0.025
Zinc	**mg/L**	< 0.025
WQ07- Dissolved Metals		
Calcium (Dissolved)	**mg/L**	334
Magnesium (Dissolved)	**mg/L**	147
Potassium (Dissolved)	**mg/L**	80.1
Sodium (Dissolved)	**mg/L**	1260

MEL-23		8/5/2024
WQ02- Conventional Parameters		
pH	**pH units**	8.11
Turbidity	**NTU**	1.1
Hardness, as CaCO3	**mg/L**	917
Total alkalinity, as CaCO3	**mg/L**	150
TDS	**mg/L**	4200
TDS, calculated	**mg/L**	3900
TSS	**mg/L**	5
WQ03- Major Ions		
Chloride	**mg/L**	1700
Cyanide	**mg/L**	0.00186
Fluoride	**mg/L**	0.32
Silica	**mg/L**	2.1
Sulfate	**mg/L**	570
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as N)	**mg/L**	0.69
Nitrate (as N)	**mg/L**	10.2
Nitrite (as N)	**mg/L**	0.251
Total phosphorus	**mg/L**	< 0.020
Orthophosphate (P)	**mg/L**	< 0.010
WQ06- Total Metals		
Aluminum	**mg/L**	< 1.8
Arsenic	**mg/L**	< 0.059
Barium	**mg/L**	< 0.59
Cadmium	**mg/L**	< 0.0059
Chromium	**mg/L**	< 0.59
Copper	**mg/L**	< 0.29
Iron	**mg/L**	< 5.9
Lead	**mg/L**	< 0.12

Manganese	**mg/L**	< 0.59
Mercury	**mg/L**	< 0.00001
Molybdenum	**mg/L**	< 0.59
Nickel	**mg/L**	< 0.59
Selenium	**mg/L**	< 0.059
Silver	**mg/L**	< 0.012
Thallium	**mg/L**	< 0.0059
Titanium	**mg/L**	< 2.9
Zinc	**mg/L**	< 2.9
WQ07- Dissolved Metals		
Calcium (Dissolved)	**mg/L**	167
Magnesium (Dissolved)	**mg/L**	159
Potassium (Dissolved)	**mg/L**	56.2
Sodium (Dissolved)	**mg/L**	1060

MEL-24		8/1/2024
WQ02- Conventional Parameters		
pH	**pH units**	7.45
Turbidity	**NTU**	48
Hardness, as CaCO3	**mg/L**	1190
Total alkalinity, as CaCO3	**mg/L**	190
TDS	**mg/L**	3050
TDS, calculated	**mg/L**	2900
TSS	**mg/L**	110
WQ03- Major Ions		
Chloride	**mg/L**	430
Cyanide	**mg/L**	0.138
Fluoride	**mg/L**	0.32
Silica	**mg/L**	27
Sulfate	**mg/L**	1400
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as N)	**mg/L**	48
Nitrate (as N)	**mg/L**	< 0.10
Nitrite (as N)	**mg/L**	< 0.010
Total phosphorus	**mg/L**	2.8
Orthophosphate (P)	**mg/L**	1.4
WQ06- Total Metals		
Aluminum	**mg/L**	0.615
Arsenic	**mg/L**	1.17
Barium	**mg/L**	0.0720
Cadmium	**mg/L**	0.000205
Chromium	**mg/L**	0.0067
Copper	**mg/L**	0.0329

Iron	**mg/L**	4.14
Lead	**mg/L**	0.0345
Manganese	**mg/L**	0.282
Mercury	**mg/L**	< 0.00010
Molybdenum	**mg/L**	0.0531
Nickel	**mg/L**	0.0387
Selenium	**mg/L**	0.00361
Silver	**mg/L**	0.00019
Thallium	**mg/L**	< 0.000050
Titanium	**mg/L**	< 0.025
Zinc	**mg/L**	0.443
WQ07- Dissolved Metals		
Calcium (Dissolved)	**mg/L**	493
Magnesium (Dissolved)	**mg/L**	27.7
Potassium (Dissolved)	**mg/L**	94.5
Sodium (Dissolved)	**mg/L**	335