

Meliadine Gold Mine NWB 2AM-MEL1631 June 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 June 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	ОСТ	NOV	DEC	2024 Total
MEL-11 ¹	m³	46,859	40,057	43,273	42,794	33,136	40,333	-	-	-	-	-	-	246,452
Dust suppression ²	m³	0	0	0	0	0	0	-	-	-	-	-	-	0
Dust suppression ³	m ³	0	0	0	0	579	3,121	-	-	-	-	-	-	3,700

In June, approximately 3,121 m³ 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

No dewatering activities took place during the month.

2.3 WATER DISCHARGE

Table 2.3 details monthly water discharge, including:

¹ Camp, Mill, Dust suppression

² Water obtained along AWAR/Meliadine River

³ Reclaim water obtained from CP1 or other Contact Water management facilities and used for dust suppression on site

- 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	ОСТ	NOV	DEC	2024 Total
MEL-14	m³	0	0	0	0	0	171,936	-	-	-	-	-	-	171,936
MEL-26	m³	0	0	0	0	0	0	-	-	-	-	-	-	0
MEL-25	m ³	0	0	0	0	0	0	-	-	-	-	-	-	0

Discharge of treated effluent from the EWTP into Meliadine Lake via the Final Discharge Point (MEL-14) started on June 17th, 2024.

A total of 4,405 m3 was discharged from borrow pit B12 at KM 15 of the All-Weather Access Road (AWAR), including 3,600 m3 referenced in the June 7 reportable spill (table 4.1) and 805 m3 after the end of the 10-day discharge notice.

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	ОСТ	NOV	DEC	2024 Total
Wastewater Dis	scharge (m³)	4,350	5,270	6,070	5,777	4,131	4,945	1	-	ı	ı	ı	-	30,543
c cl l	Amount (m³)	100	100	120	120	81.4	80	-	-	,	1	-	-	601.40
Sewage Sludge	Disposal Location	WRSF3	WRSF3	WRSF3	WRSF3	WRSF3	WRSF3	-	-	1	,	-	-	-

2.6 MONITORING ANALYTICAL DATA

Nineteen (19) 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
Location	Onit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	2024 Total
Landfill	m^3		28,127			26,087	,		-			-		-
(Survey)														
Landfarm (Survey)	m^3		604 ⁴			537			-			-		-
Landfarm ⁵	m³	1.8	0.02	3.25	7.28	2.3	32.52	-	-	-	-	-	-	47.17

⁴ 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.

⁵ 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	ОСТ	NOV	DEC	Cumulative 2024
Processed Or	re	190,946	154,435	156,820	166,561	113,952	144,504	-	ı	-	-	-	-	927,218
	Removed from open pit mining	175,380	534,627	845,427	701,244	344,631	231,788	-	-	-	-	-	-	2,833,097
Waste Rock	Removed from underground mining	71,281 ⁶	67,267	73,926	87,413	54,382	71,177	-	-	-	-	-	-	425,447
	Used as underground dry rockfill	49,823	31,805	10,566	31,716	18,233	13,755	-	-	-	-	-	-	155,899
Tailings	Send to TSF	144,379	107,392	111,857	125,769	83,808	110,265	-	-	-	-	-	-	683,470
Tailings	Used as paste underground backfill	46,567	47,043	44,963	40,792	30,144	34,239	-	-	-	-	-	-	243,748

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⁶ 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. Seven (7) reportable spills and 1 exceedance 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
Saturday, June 01, 2024 2:30:00 PM	Oily Water	60 L	Hazmat area (Orbit)	A worker was moving a tote to the hazmat laydown with a loader. While placing the tote down, the forks came in contact with another oily water tote, causing the spill of 60L onto the ground.	Spill pads were deployed to clean-up the spill and disposed of in the appropriate bin.
Tuesday, June 04, 2024 1:00:00 PM	Hydraulic oil	90 L	WRSF3	After dumping a load, a hydraulic hose on a Haul Truck failed, resulting in a 90L spill onto the WRSF3.	The operator stopped the equipment. Contaminated material was scrapped and disposed of at the landfarm.
Thursday, June 06, 2024 3:30:00 AM	Sewage	1.5 m ³	STP	An estimated 1.5m³ of sewage was spilled onto the industrial pad of the Sewage Treatment Plant (STP). An electrical relay failure in a pump system modified the normal sequencing of three valves, allowing these valves to be actuated in the wrong position. This caused treated effluent to be transported back into the aerobic tanks while they were receiving raw sewage for treatment, exceeding the aerobic tank capacity and resulting in an overflow from aerobic tank #2.	The STP operator manually closed the valve between the treated effluent tank and aerobic tank #2. The operator then lowered the aerobic tank #2 level with a vacuum truck to prevent further overflow. Instrumentation was called to replace the faulty electrical relay. Once the spill was under control, a vacuum truck was dispatched to collect the free-standing liquid inside and outside the STP. Additionally, the ground surface was excavated, and the

					recovered material was transported to Landfarm A
Friday, June 07, 2024 7:00:00 AM	Coolant	3.8 L	MSB Staircase	A broken jar of coolant spilled on the ground of the engineering locker, at the bottom of MSB staircase.	Spill pads were deployed to recover the spill and disposed of in the appropriate bin. This spill occurred inside a building and did not reach the environment.
Friday, June 07, 2024 2:30:00 PM	Hydraulic oil	23 L	Pump Road	A hydraulic hose broke on a bulldozer, resulting in a 23L spill of hydraulic oil.	The operator stopped the equipment. Absorbent pads were deployed to collect the spill and were disposed of in the appropriate bin. Contaminated material was scrapped and disposed of at the landfarm.
Friday, June 07, 2024 4:00:00 PM	Snowmelt water	3600 m ³	KM 15 Borrow pit	An employee performing a surface runoff inspection at borrow pit B12 observed dewatering activities occurring within the borrow pit. Dewatering of borrow pits is typical after spring melt to prevent potential seepage, erosion and sedimentation from ponding water within the borrow pit, and to allow access to construction material located within or near the standing water. This planned discharge occurred one day before the end of the 10-day discharge notice issued to the Inspector and before the pre-discharge water quality results were received from an accredited laboratory.	The employee contacted the Water Management Supervisor to notify them of the ongoing pumping and to shut down the pump. Field measurements did not indicate a potential exceedance of the effluent quality limits listed under Part D, Item 18 of the 2AM-MEL1631 Water Licence. Samples were collected and sent to an external laboratory for analysis. A grab sample was also taken for internal analysis of Total Suspended Solids (TSS). Results for internal and external analysis are presented in Table 1, both before discharge (May 18th) and after discharge (June 8th). Both the May 28th and June 8th samples show that results were compliant with the effluent quality limits listed under Part D, Item 18 of the 2AM-

					MEL1631 Water Licence.
Saturday, June 08, 2024 11:30:00 AM	Propylene Glycol	20 L	Pump road	A haul truck punctured a tire on the Pump road. Inside the haul trucks tires, there is propylene glycol to extend the tire life, which spilled on the road.	Absorbent pads were deployed to collect the spill and were disposed of in the appropriate bin. Contaminated material was scrapped and disposed of in the appropriate bin.
Sunday, June 09, 2024 2:00:00 PM	Sewage	50 L	C-Wing mechanical room	An estimated 50 L of sewage was spilled onto the ground at the C-wing holding tank. An employee observed water dripping from the C-wing floor onto the ground. Upon investigation, the employee observed sewage overflowing from the holding tank and that a push button style faucet was stuck in open position, sending water to the holding tank, thus creating the overflow and spill outside of the building. The C-wing was not occupied at the time of the event and the sewage holding tank was left empty apart from minor residue.	The employee closed the faucet and the water in the wing, then contacted the Energy and Infrastructure (E&I) maintenance supervisor report the spill and start remediation. After the event, the vacuum truck operator began cleaning up the building and the affected area outside.
Monday, June 10, 2024 9:30:00 PM	Hydraulic oil	50 L	MSB EAST PARKING LOT	Employee was testing the PTO pump on a trailer, and the ball valve on the hydraulic tank failed, resulting in a 50L spill of hydraulic oil.	Absorbent pads were deployed to collect the spill and were disposed of in the appropriate bin. Contaminated material was scrapped and disposed of in the appropriate bin.

Wednesday, June 12, 2024 11:00:00 PM	Coolant	50 L	Haul road in front of KCG yard	A coolant hose on a loader failed resulting in a 50L spill of coolant.	The equipment was stopped. Spills pads were used to clean-up the spill and were disposed of as hazmat.
Wednesday, June 19, 2024 8:00:00 PM	Hydraulic Oil	200 L	Ore Pad 2 Extension (marginal pile)	While the loader was operating at the OP2 extension open pit marginal stockpile, the operator heard an unusual noise. Upon inspection, it was discovered that a hydraulic leak had occurred, resulting in the hydraulic tank being completely emptied.	The operator's immediate response was to shut down the loader equipment. Spill absorbent pads were deployed to recover the pooling surface oil and contain the spill. The contaminated material was subsequently excavated and directed to the primary crusher for processing through the plant.
Saturday, June 22, 2024 1:30:00 PM	Diesel fuel	25 L	Fuel farm 6M	An operator over fueled an equipment, and the secondary containment was not used under the equipment, resulting in a 25L of spill of diesel.	Contaminated material was scrapped and disposed of at the landfarm. Material removed was replaced by fresh material to protect the liner.
Sunday, June 23, 2024 8:00:00 AM	Sewage	50 L	MSB Lift Station	An estimated 50 liters of sewage spilled onto the industrial pad at the Multi-Service Building (MSB) lift station. A brief power outage at the MSB caused the Variable Frequency Drives (VFDs) to malfunction. As a result, when the vacuum truck operators arrived to discharge sewage from the truck into the lift station, the tank overflowed from the inlet pipe, leading to the spill.	Upon seeing the pipe overflow, the vacuum truck operators took immediate action by promptly vacuuming the tank to contain the spill. Subsequently, the E&I Maintenance supervisor was alerted to the pump malfunction. Electricians were quickly dispatched to restart the system, ensuring the incident would not recur. The sewage impacted area was hand excavated and the recovered

					material was brought to Landfarm A.
Tuesday, June 25, 2024 4:30:00 PM	Diesel Fuel	2 L	10035MS30 (Tiri-01)	A small spill of diesel fuel occurred from a defective o-ring on the emulsion truck's fuel pump. Approximately 2 liters of fuel was spilled on the pit floor.	Contaminated material was scrapped and disposed of at the landfarm.
Friday, June 28, 2024 6:30:00 AM	Sewage	100 L	Wing 13	An estimated 100 L of sewage was spilled onto the industrial pad at the Wing 13 lift station. The primary lift station pump became clogged with noncompliant material which caused the pump to fail. Subsequently, the lift station control box failed to initiate the lift station's secondary pump. Due to the primary pump failing and the secondary pump not initiating, the lift station overflowed, and sewage was spilled onto the industrial pad.	The primary pump was unclogged and reset. A vacuum truck was dispatched to collect the spilled material inside the lift station and the ground outside of the lift station. The ground surface was then excavated using the backhoe and the contaminated material was brought to the Landfarm A.
Saturday, June 29, 2024 8:30:00 AM	Diesel fuel	80 L	Itivia	During a site inspection by the Environment department, it was noticed that the fuel tank on Tessier service truck was leaking/dripping.	Contaminated material was scrapped and disposed of at the landfarm. The fuel tank was put out of service and was brought to the shop to be repaired.
Saturday, June 29, 2024 8:30:00 AM	Diesel fuel	5 L	Itivia	While removing the bag of fuel contaminated absorbent pad,the bag broke resulting in a 5L spill of diesel fuel.	Contaminated material was scrapped and disposed of at the landfarm.
Saturday, June 29, 2024 11:00:00 PM	Sewage	615 L	Industrial Pad	Membrane 3 in the Sewage Treatment Plant (STP) failed which caused the aerobic tank 2 to overflow, releasing approximately 615 L sewage on the industrial pad.	Contaminated material was scrapped and disposed of at the landfarm.

Appendix – Monitoring Analytical Data

MEL-1:	1	6/4/2024
Parameter	Unit	
WQ02- Conventional Pa	rameters	
рН	pH units	7.26
Turbidity	NTU	0.3
Conductivity	ms/cm	0.126
Hardness, as CaCO3	mg/L	-
Total alkalinity, as	mg/L	33
CaCO3		
Carbonate, as CaCO3	mg/L	< 1.0
Bicarbonate, as CaCO3	mg/L	32
TDS	mg/L	65
TDS, calculated	mg/L	65
TSS	mg/L	2
Total organic carbon	mg/L	3.5
Dissolved organic	mg/L	3.2
carbon		
WQ03- Major Ions	<u>, </u>	
Chloride	mg/L	17
Cyanide	mg/L	< 0.00050
Cyanide (free)	mg/L	< 0.0020
Cyanide (WAD)	mg/L	< 0.00050
Silica	mg/L	1.1
Sulfate	mg/L	5.9
WQ04- Nutrients and Ch	nlorophyll 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	0.21
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
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
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00083
Iron	mg/L	0.028
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Manganese	mg/L	0.0112

Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.00020
Strontium	mg/L	0.0556
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.0030
Vanadium		< 0.0050
Zinc	mg/L	< 0.0050
	mg/L	< 0.0030
WQ07- Dissolved Metals Aluminum		< 0.0030
	mg/L	
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00074
Barium	mg/L	0.0120
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	11.6
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00098
Iron	mg/L	0.0084
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium	mg/L	2.01
(Dissolved)		
Manganese	mg/L	< 0.0010
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.39
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	8.27
Strontium	mg/L	0.0601
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	3	
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	-
F1 (C6-C10)	mg/L	-
F2 (C10-C16)	mg/L	< 0.1
F3 (C16-C34)	mg/L	< 0.2
F4 (C34-C50)	mg/L	< 0.2

MEL-12	6/17/2024						
Parameter	Unit						
WQ02- Conventional Parameters							
рН	pH units	7.86					
Turbidity	NTU	3.3					
Conductivity	ms/cm	1.31					
Hardness, as CaCO3	mg/L	-					
Total alkalinity, as CaCO3	mg/L	50					
TDS	mg/L	875					
TDS, calculated	mg/L	700					
TSS	mg/L	6					
Total organic carbon	mg/L	7.9					
WQ03- Major Ions							
Chloride	mg/L	260					
Cyanide	mg/L	0.00494					
Fluoride	mg/L	< 0.10					
Silica	mg/L	0.20					
Sulfate	mg/L	130					
WQ04- Nutrients and Ch	nlorophyll a						
Ammonia Nitrogen (as N)	mg/L	0.19					
Nitrate (as N)	mg/L	4.35					
Nitrite (as N)	mg/L	0.206					
Total phosphorus	mg/L	0.044					
Orthophosphate (P)	mg/L	< 0.010					
WQ06- Total Metals							
Aluminum	mg/L	0.214					
Arsenic	mg/L	0.0225					
Barium	mg/L	0.0251					
Cadmium	mg/L	0.000023					
Chromium	mg/L	< 0.0010					

	_
mg/L	0.00331
mg/L	0.218
mg/L	0.00083
mg/L	0.0997
mg/L	< 0.00001
mg/L	0.0046
mg/L	0.0048
mg/L	0.00058
mg/L	< 0.000020
mg/L	-
mg/L	< 0.0050
mg/L	< 0.0050
s	
mg/L	80.6
mg/L	22.3
mg/L	13.1
mg/L	139
	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L

MEL-14						6/17/2024	6/24/2024	
Parameter	MDMER MAX GRAB	MDMER MAX MONTHLY MEAN	2AM- MEL1631 MEL-14 MAX GRAB	2AM- MEL1631 MEL-14 MAX MEAN	Unit	Monthly Average (N)	-	-
WQ02- Conventional Parameters								
рН	9.5	9.5	9.5	9.5	pH units	7.61	7.34	7.3
Dissolved Oxygen					mg/L	10.9	10.9	10.9
Turbidity					NTU	0.6	0.5	0.6
Conductivity					ms/cm	1.41	1.33	1.48
Hardness, as CaCO3					mg/L	490	-	-
Total alkalinity, as CaCO3					mg/L	61	39	40
Carbonate, as CaCO3					mg/L	0.5	< 1.0	< 1.0
Bicarbonate, as CaCO3					mg/L	61	39	40
TDS			4500	3500	mg/L	1423	905	890
TDS, calculated			4500	3500	mg/L	1321	700	820
TSS	30	15	30	15	mg/L	3	2	3
Total organic carbon					mg/L	8.4	4.9	4.4
Dissolved organic carbon					mg/L	7.8	4.3	4.2
WQ03- Major lons								
Chloride					mg/L	568	270	340
Cyanide	1	0.5	1	0.5	mg/L	0.00146	0.00551	0.00335
Cyanide (free)					mg/L	0.0019	0.0057	0.0039
Cyanide (WAD)					mg/L	0.00112	0.0046	0.0030

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Silica					mg/L	0.377	0.19	< 0.050
Sulfate					mg/L	221	130	160
WQ04- Nutrients and Chlorophy	ıll a					<u>I</u>	L	
Ammonia Nitrogen (as N)			18	14	mg/L	0.332	0.16	0.30
Nitrate (as N)					mg/L	9.03	4.38	5.55
Nitrite (as N)					mg/L	0.221	0.204	0.197
Total Kjeldahl nitrogen					mg/L	0.98	0.81	0.87
Total phosphorus			4	2	mg/L	0.024	0.023	0.024
Orthophosphate (P)					mg/L	0.006	< 0.010	< 0.010
WQ06- Total Metals			<u> </u>	•				
Aluminum			3	2	mg/L	0.373	0.394	0.580
Antimony					mg/L	0.00082	0.00079	0.00087
Arsenic	0.6	0.3	0.6	0.3	mg/L	0.00503	0.0131	0.0141
Barium					mg/L	0.0555	0.0228	0.0264
Beryllium					mg/L	0.00006	< 0.00010	< 0.00010
Boron					mg/L	0.293	0.122	0.127
Cadmium					mg/L	0.000012	0.000016	0.000020
Chromium					mg/L	0.0006	< 0.0010	< 0.0010
Cobalt					mg/L	0.00094	0.00136	0.00159
Copper	0.6	0.3	0.4	0.2	mg/L	0.00253	0.00205	0.00213
Iron					mg/L	0.019	0.021	0.017
Lead	0.2	0.1	0.2	0.1	mg/L	0.00011	< 0.00020	< 0.00020
Lithium					mg/L	0.0316	0.0160	0.0154
Manganese					mg/L	0.0450	0.0243	0.0163
Mercury					mg/L	0.000005	< 0.00001	< 0.00001
Molybdenum					mg/L	0.0055	0.0043	0.0048
Nickel	1	0.5	1	0.5	mg/L	0.0045	0.0038	0.0043
Selenium					mg/L	0.00044	0.00054	0.00071
Silver					mg/L	0.000011	<	< 0.000020
							0.000020	
Strontium					mg/L	1.68	0.845	0.926
Thallium					mg/L	0.000030	0.000012	0.000016
Tin					mg/L	0.0028	< 0.0050	< 0.0050
Titanium					mg/L	0.0028	< 0.0050	< 0.0050
Uranium					mg/L	0.00128	0.00018	0.00032
Vanadium					mg/L	0.0028	< 0.0050	< 0.0050
Zinc	1	0.5	0.8	0.4	mg/L	0.0032	< 0.0050	< 0.0050
WQ07- Dissolved Metals			T			T	T	
Aluminum			3	2	mg/L	0.129	0.0855	0.154
Antimony					mg/L	0.00084	0.00086	0.00085
Arsenic	0.6	0.3	0.6	0.3	mg/L	0.00406	0.0128	0.0134
Barium					mg/L	0.0550	0.0239	0.0265
Beryllium					mg/L	0.00006	< 0.00010	< 0.00010
Boron					mg/L	0.303	0.127	0.128
Cadmium					mg/L	0.000013	0.000017	0.000018

Water Licence 2AM-MEL1631

Calcium (Dissolved)			1		mg/L	131.7	81.8	84.2
Chromium					mg/L	0.0006	< 0.0010	< 0.0010
Cobalt					mg/L	0.00092	0.00146	0.00161
Copper	0.6	0.3	0.4	0.2	mg/L	0.00247	0.00215	0.00214
Iron					mg/L	0.0080	0.0086	0.0071
Lead	0.2	0.1	0.2	0.1	mg/L	0.00011	< 0.00020	< 0.00020
Lithium					mg/L	0.0315	0.0176	0.0176
Magnesium (Dissolved)					mg/L	38.7	22.7	24.0
Manganese					mg/L	0.0437	0.0218	0.0113
Mercury					mg/L	0.000005	< 0.00001	< 0.00001
Molybdenum					mg/L	0.0055	0.0046	0.0046
Nickel	1	0.5	1	0.5	mg/L	0.0045	0.0040	0.0042
Potassium (Dissolved)					mg/L	20.6	13.4	14.0
Selenium					mg/L	0.00044	0.00062	0.00069
Silver					mg/L	0.000011	<	< 0.000020
							0.000020	
Sodium (Dissolved)					mg/L	253	141	152
Strontium					mg/L	1.67	0.871	0.912
Thallium					mg/L	0.00003	0.000013	0.000015
Tin					mg/L	0.0028	< 0.0050	< 0.0050
Titanium					mg/L	0.0028	< 0.0050	< 0.0050
Uranium					mg/L	0.00121	0.00011	0.00018
Vanadium					mg/L	0.0028	< 0.0050	< 0.0050
Zinc	1	0.5	0.8	0.4	mg/L	0.0028	< 0.0050	< 0.0050
WQ08- Radionuclides								
Radium-226	1.11	0.37			Bq/l	0.0059	< 0.0050	< 0.0050
WQ09- Toxicity								
Daphnia 48 h static acute test - LC50					%	-	>100	-
Daphnia 48 h Static Acute Test - EC50					%	-	>100	-
LC50 (96h) - Rainbow Trout					%	-	>100	-
Lemna Minor Biomasse - IC25					%	-	-	-
Lemna Minor Frond Increase - IC25					%	-	-	-
WQ10- Volatile Organics								
Benzene					mg/L	0.00010	< 0.00020	< 0.00020
Ethylbenzene					mg/L	0.00010	< 0.00020	< 0.00020
Toluene					mg/L	0.00012	< 0.00020	< 0.00020
Xylenes					mg/L	0.00023	< 0.00040	< 0.00040
m,p-Xylenes					mg/L	0.00023	< 0.00040	< 0.00040
o-Xylene					mg/L	0.00010	< 0.00020	< 0.00020
F1 (C6-C10)-BTEX					mg/L	0.0125	-	-
F1 (C6-C10)					mg/L	0.0125	-	-
F2 (C10-C16)					mg/L	0.05	< 0.1	< 0.1
F3 (C16-C34)					mg/L	0.1	< 0.2	< 0.2
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F4 (C34-C50) mg/L 0.1 < 0.2 < 0.2

MEL-1	6/16/2024							
		0,10,2021						
Parameter	Unit							
WQ02- Conventional Parameters								
pH	pH units	7.51						
Turbidity	NTU	0.6						
Conductivity	ms/cm	0.116						
Hardness, as CaCO3	mg/L	-						
Total alkalinity, as	mg/L	40						
CaCO3	,,							
Carbonate, as CaCO3	mg/L	< 1.0						
Bicarbonate, as CaCO3	mg/L	40						
TDS	mg/L	115						
TDS, calculated	mg/L	60						
TSS	mg/L	1						
Total organic carbon	mg/L	4.1						
Dissolved organic	mg/L	3.5						
carbon								
WQ03- Major Ions								
Chloride	mg/L	7.9						
Cyanide	mg/L	0.00052						
Cyanide (free)	mg/L	< 0.0020						
Cyanide (WAD)	mg/L	0.00052						
Silica	mg/L	1.2						
Sulfate	mg/L	4.5						
WQ04- Nutrients and Ch	nlorophyll a							
Ammonia Nitrogen (as	mg/L	< 0.050						
N)								
Nitrate (as N)	mg/L	< 0.10						
Nitrite (as N)	mg/L	< 0.010						
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	0.0238						
Antimony	mg/L	< 0.00050						
Arsenic	mg/L	0.00524						
Barium	mg/L	0.0157						
Beryllium	mg/L	< 0.00010						
Cadmium	mg/L	< 0.000010						
Chromium	mg/L	< 0.0010						
Copper	mg/L	0.00053						
СОРРСІ	1116/ L	0.00055						

Iron	mg/L	0.201
Lead	mg/L	0.00051
Lithium	mg/L	< 0.0020
Manganese	mg/L	0.0392
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.00020
Strontium	mg/L	0.0740
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		< 0.0050
	mg/L	< 0.0030
WQ07- Dissolved Metal Aluminum		< 0.0030
	mg/L	+
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00265
Barium	mg/L	0.0150
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	15.5
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00054
Iron	mg/L	0.0560
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium	mg/L	1.88
(Dissolved)		
Manganese	mg/L	0.0200
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.08
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	4.70
Strontium	mg/L	0.0713
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-10	6/16/2024						
Parameter							
WQ02- Conventional Parameters							
pH	pH units	7.37					
Turbidity	NTU	0.6					
Conductivity	ms/cm	0.110					
Hardness, as CaCO3	mg/L	-					
Total alkalinity, as	mg/L	31					
CaCO3							
Carbonate, as CaCO3	mg/L	< 1.0					
Bicarbonate, as CaCO3	mg/L	31					
TDS	mg/L	115					
TDS, calculated	mg/L	55					
TSS	mg/L	< 1					
Total organic carbon	mg/L	3.1					
Dissolved organic	mg/L	2.8					
carbon							
WQ03- Major Ions							
Chloride	mg/L	12					
Cyanide	mg/L	0.00060					
Cyanide (free)	mg/L	< 0.0020					
Cyanide (WAD)	mg/L	< 0.00050					
Silica	mg/L	0.37					
Sulfate	mg/L	3.7					
WQ04- Nutrients and Ch	nlorophyll a						
Ammonia Nitrogen (as	mg/L	0.065					
N)	_						
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					
WQ06- Total Metals							
Aluminum	mg/L	0.0073					
Antimony	mg/L	< 0.00050					
Arsenic	mg/L	0.00807					
Barium	mg/L	0.0186					
Beryllium	mg/L	< 0.00010					
Boron	mg/L	< 0.050					
Cadmium	mg/L	< 0.000010					
Chromium	mg/L	< 0.0010					

Iron	Copper	mg/L	0.00060
Lead mg/L 0.00022 Lithium mg/L < 0.0020			
Lithium mg/L < 0.0020 Manganese mg/L 0.0155 Mercury mg/L < 0.00001	Lead		
Manganese mg/L 0.0155 Mercury mg/L < 0.00001		_	
Mercury mg/L < 0.00001 Molybdenum mg/L < 0.0010		_	
Molybdenum mg/L < 0.0010 Nickel mg/L < 0.0010		_	
Nickel mg/L < 0.0010 Selenium mg/L < 0.00010	•	_	
Selenium mg/L < 0.00010 Silver mg/L < 0.000020	•	_	
Silver mg/L < 0.000020 Strontium mg/L 0.0583 Thallium mg/L < 0.000010		_	
Strontium mg/L 0.0583 Thallium mg/L < 0.000010		_	
Thallium mg/L		_	
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 0.0034 Antimony mg/L 0.00650 Barium mg/L 0.00650 Barium mg/L 0.00650 Barium mg/L 0.0010 Boron mg/L < 0.00010 Cadmium mg/L < 0.00010 Cadmium mg/L < 0.00010 Calcium (Dissolved) mg/L 13.9 Chromium mg/L 0.00497 Lead mg/L 0.00497 Lead mg/L 0.0020 Lithium mg/L 0.0020 Lithium mg/L 0.0020 Magnesium mg/L 0.00164 Mercury mg/L 0.00164 Mercury mg/L 0.0010 Nickel mg/L 0.0010 Nickel mg/L 0.0010 Potassium (Dissolved) mg/L 1.18 Selenium mg/L 0.00020 Sodium (Dissolved) mg/L 1.18 Selenium mg/L 0.00020 Sodium (Dissolved) mg/L 0.00020 Sodium (Dissolved) mg/L 0.00020 Sodium (Dissolved) mg/L 0.00020 Sodium (Dissolved) mg/L 0.00010 Tin mg/L 0.000010 Tin mg/L 0.000010		_	
Titanium mg/L < 0.0050 Uranium mg/L < 0.00010		_	
Uranium mg/L < 0.00010 Vanadium mg/L < 0.0050		_	
Vanadium mg/L < 0.0050 Zinc mg/L < 0.0050		_	
Zinc mg/L < 0.0050 WQ07- Dissolved Metals Aluminum mg/L 0.0034 Antimony mg/L 0.00050 Arsenic mg/L 0.000650 Barium mg/L 0.0211 Beryllium mg/L 0.00010 Boron mg/L < 0.050		_	
WQ07- Dissolved Metals Aluminum mg/L 0.0034 Antimony mg/L < 0.00050		_	
Aluminum mg/L 0.0034 Antimony mg/L < 0.00050 Arsenic mg/L 0.00650 Barium mg/L 0.0211 Beryllium mg/L < 0.00010 Boron mg/L < 0.050 Cadmium mg/L < 0.00010 Calcium (Dissolved) mg/L 13.9 Chromium mg/L < 0.0010 Copper mg/L 0.0497 Lead mg/L < 0.00020 Lithium mg/L < 0.0020 Magnesium mg/L 1.90 (Dissolved) mg/L < 0.0002 Manganese mg/L < 0.00001 Molybdenum mg/L < 0.0010 Nickel mg/L < 0.0010 Nickel mg/L < 0.00010 Selenium mg/L < 0.00010 Silver mg/L < 0.000020 Sodium (Dissolved) mg/L < 0.000010 Tinllium mg/L < 0.000010	-		< 0.0050
Antimony mg/L < 0.00050 Arsenic mg/L 0.00650 Barium mg/L 0.0211 Beryllium mg/L < 0.00010		ı	
Arsenic mg/L 0.00650 Barium mg/L 0.0211 Beryllium mg/L < 0.00010		_	
Barium mg/L 0.0211 Beryllium mg/L < 0.00010	•	_	
Beryllium mg/L < 0.00010 Boron mg/L < 0.050		_	
Boron mg/L < 0.050 Cadmium mg/L < 0.000010			
Cadmium mg/L < 0.000010 Calcium (Dissolved) mg/L 13.9 Chromium mg/L < 0.0010	•	_	
Calcium (Dissolved) mg/L 13.9 Chromium mg/L < 0.0010		_	
Chromium mg/L < 0.0010 Copper mg/L 0.00064 Iron mg/L 0.0497 Lead mg/L < 0.00020			
Copper mg/L 0.00064 Iron mg/L 0.0497 Lead mg/L < 0.00020		mg/L	
Iron mg/L 0.0497 Lead mg/L < 0.00020 Lithium mg/L < 0.0020 Magnesium (Dissolved) mg/L 1.90 Manganese mg/L 0.0164 Mercury mg/L < 0.00001 Molybdenum mg/L < 0.0010 Nickel mg/L < 0.0010 Potassium (Dissolved) mg/L < 0.00010 Selenium mg/L < 0.00010 Silver mg/L < 0.000020 Sodium (Dissolved) mg/L 4.13 Strontium mg/L < 0.000010 Thallium mg/L < 0.000010 Tin mg/L < 0.00050	Chromium		
Lead mg/L < 0.00020 Lithium mg/L < 0.0020	Copper	mg/L	
Lithium mg/L < 0.0020 Magnesium (Dissolved) mg/L 1.90 Manganese mg/L 0.0164 Mercury mg/L < 0.00001	Iron	mg/L	0.0497
Magnesium (Dissolved) mg/L 1.90 Manganese mg/L 0.0164 Mercury mg/L < 0.00001	Lead	mg/L	< 0.00020
(Dissolved) mg/L 0.0164 Mercury mg/L < 0.00001 Molybdenum mg/L < 0.0010 Nickel mg/L < 0.0010 Potassium (Dissolved) mg/L 1.18 Selenium mg/L < 0.00010 Silver mg/L < 0.00020 Sodium (Dissolved) mg/L 4.13 Strontium mg/L < 0.0637 Thallium mg/L < 0.000010 Tin mg/L < 0.0050	Lithium	mg/L	< 0.0020
Manganese mg/L 0.0164 Mercury mg/L < 0.00001 Molybdenum mg/L < 0.0010 Nickel mg/L < 0.0010 Potassium (Dissolved) mg/L < 0.00010 Selenium mg/L < 0.00020 Silver mg/L 4.13 Strontium mg/L 0.0637 Thallium mg/L < 0.000010 Tin mg/L < 0.0050	_	mg/L	1.90
Mercury mg/L < 0.00001 Molybdenum mg/L < 0.0010	· · · · · · · · · · · · · · · · · · ·	_	
Molybdenum mg/L < 0.0010 Nickel mg/L < 0.0010			
Nickel mg/L < 0.0010 Potassium (Dissolved) mg/L 1.18 Selenium mg/L < 0.00010	•	_	
Potassium (Dissolved) mg/L 1.18 Selenium mg/L < 0.00010	· · · · · · · · · · · · · · · · · · ·		
Selenium mg/L < 0.00010 Silver mg/L < 0.000020		_	
Silver mg/L < 0.000020 Sodium (Dissolved) mg/L 4.13 Strontium mg/L 0.0637 Thallium mg/L < 0.000010		_	
Sodium (Dissolved) mg/L 4.13 Strontium mg/L 0.0637 Thallium mg/L < 0.000010 Tin mg/L < 0.0050		_	
Strontium mg/L 0.0637 Thallium mg/L < 0.000010 Tin mg/L < 0.0050	Silver	mg/L	< 0.000020
Thallium mg/L < 0.000010 Tin mg/L < 0.0050	Sodium (Dissolved)	mg/L	4.13
Tin mg/L < 0.0050	Strontium	mg/L	0.0637
	Thallium	mg/L	< 0.000010
Titanium mg/L < 0.0050	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		6/16/2024
Parameter	Unit	
WQ02- Conventional Pa	rameters	
pH	pH units	7.61
Turbidity	NTU	0.7
Conductivity	ms/cm	0.281
Hardness, as CaCO3	mg/L	-
Total alkalinity, as CaCO3	mg/L	48
Carbonate, as CaCO3	mg/L	< 1.0
Bicarbonate, as CaCO3	mg/L	48
TDS	mg/L	235
TDS, calculated	mg/L	150
TSS	mg/L	1
Total organic carbon	mg/L	7.0
Dissolved organic	mg/L	6.4
carbon		
WQ03- Major Ions		
Chloride	mg/L	31
Cyanide	mg/L	0.00067
Cyanide (free)	mg/L	0.0022
Cyanide (WAD)	mg/L	< 0.00050
Silica	mg/L	0.42
Sulfate	mg/L	37
WQ04- Nutrients and Cl	hlorophyll 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	0.36
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
Aluminum	mg/L	0.0066
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00109
Barium	mg/L	0.0292
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010

Chromium	mg/L	< 0.0010
Copper	mg/L	0.00102
Iron	mg/L	0.116
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0033
Manganese	mg/L	0.033
Mercury	•	< 0.00001
	mg/L	< 0.0010
Molybdenum Nickel	mg/L	
	mg/L	0.0014
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Strontium	mg/L	0.235
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 Metal	s	
Aluminum	mg/L	0.0056
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00100
Barium	mg/L	0.0301
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	32.5
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00107
Iron	mg/L	0.0805
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0040
Magnesium	mg/L	4.24
(Dissolved)	0 .	
Manganese	mg/L	0.0193
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0014
Potassium (Dissolved)	mg/L	2.18
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	11.8
Strontium	mg/L	0.240
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
1111	ilig/ L	\ 0.0030

Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050

MEL-18	8	6/16/2024
Parameter	Unit	
WQ02- Conventional Pa		
pH	pH units	7.51
Turbidity	NTU	0.4
Conductivity	ms/cm	0.195
Hardness, as CaCO3	mg/L	-
Total alkalinity, as CaCO3	mg/L	46
Carbonate, as CaCO3	mg/L	< 1.0
Bicarbonate, as CaCO3	mg/L	46
TDS	mg/L	175
TDS, calculated	mg/L	98
TSS	mg/L	< 1
Total organic carbon	mg/L	3.7
Dissolved organic	mg/L	3.4
carbon	mg/ L	3.4
WQ03- Major lons		
Chloride	mg/L	25
Cyanide	mg/L	0.00066
Cyanide (free)	mg/L	0.0022
Cyanide (WAD)	mg/L	0.00072
Silica	mg/L	0.65
Sulfate	mg/L	8.1
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	0.16
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
Aluminum	mg/L	0.0069
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00403
Barium	mg/L	0.0231
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050

Cadmium	mg/L	< 0.000010
Copper	mg/L	0.00053
Iron	mg/L	0.124
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0086
Manganese	mg/L	0.0215
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.00020
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc		< 0.0050
	mg/L	< 0.0030
WQ07- Dissolved Metal Aluminum		< 0.0030
	mg/L	
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00310
Barium	mg/L	0.0238
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	25.2
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00054
Iron	mg/L	0.0610
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0098
Magnesium	mg/L	3.35
(Dissolved)	/•	0.0100
Manganese	mg/L	0.0188
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.53
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	7.32
Strontium	mg/L	0.175
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		6/16/2024
Parameter	Unit	
WQ02- Conventional Parame	eters	
рН	pH units	7.69
Turbidity	NTU	6.2
Hardness, as CaCO3	mg/L	-
Total alkalinity, as CaCO3	mg/L	42
TDS	mg/L	460
TDS, calculated	mg/L	370
TSS	mg/L	5
WQ03- Major Ions		
Chloride	mg/L	120
Cyanide	mg/L	0.00068
Fluoride	mg/L	< 0.10
Silica	mg/L	1.2
Sulfate	mg/L	97
WQ04- Nutrients and Chloro	phyll a	
Ammonia Nitrogen (as N)	mg/L	0.43
Nitrate (as N)	mg/L	1.54
Nitrite (as N)	mg/L	0.014
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
Aluminum	mg/L	0.138
Arsenic	mg/L	0.00696
Barium	mg/L	0.0158
Cadmium	mg/L	0.000015
Calcium (total)	mg/L	37.4
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00185
Iron	mg/L	0.230
Lead	mg/L	0.00054
Magnesium (total)	mg/L	9.97
Manganese	mg/L	0.0570
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0012
Nickel	mg/L	0.0112
Potassium (total)	mg/L	5.12
Selenium	mg/L	0.00031
Silver	mg/L	< 0.000020
Sodium (total)	mg/L	54.9
Thallium	mg/L	-

Titanium	mg/L	0.0076
Zinc	mg/L	< 0.0050
WQ07- Dissolved Metals		
Calcium (Dissolved)	mg/L	45.1
Magnesium (Dissolved)	mg/L	11.8
Potassium (Dissolved)	mg/L	5.98
Sodium (Dissolved)	mg/L	65.5

NACL 24	2	6/16/2024
MEL-20	1	
Parameter	Unit	N
WQ02- Conventional Parame		T
рН	pH units	7.62
Turbidity	NTU	9.2
Conductivity	ms/cm	2.45
Hardness, as CaCO3	mg/L	-
Total alkalinity, as CaCO3	mg/L	62
TDS	mg/L	1570
TDS, calculated	mg/L	1400
TSS	mg/L	9
Total organic carbon	mg/L	4.0
WQ03- Major Ions		
Chloride	mg/L	490
Cyanide	mg/L	0.0347
Cyanide (free)	mg/L	0.028
Cyanide (WAD)	mg/L	0.032
Silica	mg/L	1.6
Sulfate	mg/L	280
WQ04- Nutrients and Chloro	phyll a	
Ammonia Nitrogen (as N)	mg/L	8.8
Nitrate (as N)	mg/L	21.5
Nitrite (as N)	mg/L	0.299
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals	<u> </u>	
Aluminum	mg/L	0.150
Arsenic	mg/L	0.117
Barium	mg/L	0.0336
Cadmium	mg/L	0.000067
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00661
Iron	mg/L	0.479
Lead	mg/L	0.00616
Manganese	mg/L	0.275

Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0052
Nickel	mg/L	0.0209
Selenium	mg/L	0.00225
Silver	mg/L	0.000029
Thallium	mg/L	-
Titanium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
WQ07- Dissolved Metals		
Calcium (Dissolved)	mg/L	118
Magnesium (Dissolved)	mg/L	45.1
Potassium (Dissolved)	mg/L	21.0
Sodium (Dissolved)	mg/L	303

MEL-21		6/16/2024
Parameter	Unit	
WQ02- Conventional Pa	rameters	
рН	pH units	7.76
Turbidity	NTU	6.1
Hardness, as CaCO3	mg/L	-
Total alkalinity, as	mg/L	76
CaCO3		
TDS	mg/L	775
TDS, calculated	mg/L	640
TSS	mg/L	6
WQ03- Major lons		
Chloride	mg/L	190
Cyanide	mg/L	0.0259
Fluoride	mg/L	< 0.10
Silica	mg/L	2.1
Sulfate	mg/L	180
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as N)	mg/L	0.77
Nitrate (as N)	mg/L	4.23
Nitrite (as N)	mg/L	0.047
Total phosphorus	mg/L	0.028
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
Aluminum	mg/L	0.145
Arsenic	mg/L	0.137
Barium	mg/L	0.0265
Cadmium	mg/L	0.000014
Chromium	mg/L	< 0.0010

Copper	mg/L	0.0107
Iron	mg/L	0.456
Lead	mg/L	0.00584
Manganese	mg/L	0.101
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0061
Nickel	mg/L	0.0121
Selenium	mg/L	0.00073
Silver	mg/L	0.000021
Thallium	mg/L	-
Titanium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
WQ07- Dissolved Metal	S	
Calcium (Dissolved)	mg/L	77.6
Magnesium	mg/L	23.3
(Dissolved)		
Potassium (Dissolved)	mg/L	10.3
Sodium (Dissolved)	mg/L	103

MEL-22		6/16/2024	
Parameter	Unit		
WQ02- Conventional Pa	rameters		
рН	pH units	7.80	
Turbidity	NTU	2.4	
Hardness, as CaCO3	mg/L	-	
Total alkalinity, as CaCO3	mg/L	110	
TDS	mg/L	4790	
TDS, calculated	mg/L	4100	
TSS	mg/L	3	
WQ03- Major Ions			
Chloride	mg/L	2000	
Cyanide	mg/L	0.00809	
Fluoride	mg/L	0.11	
Silica	mg/L	1.7	
Sulfate	mg/L	550	
WQ04- Nutrients and Ch	nlorophyll a		
Ammonia Nitrogen (as N)	mg/L	12	
Nitrate (as N)	mg/L	20.3	
Nitrite (as N)	mg/L	0.288	
Total phosphorus	mg/L	< 0.020	
Orthophosphate (P)	mg/L	< 0.010	
WQ06- Total Metals			

Aluminum	mg/L	0.037
Arsenic	mg/L	0.00983
Barium	mg/L	0.0799
Cadmium	mg/L	0.000059
Chromium	mg/L	< 0.0050
Copper	mg/L	0.0040
Iron	mg/L	0.181
Lead	mg/L	< 0.0010
Manganese	mg/L	0.409
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0085
Nickel	mg/L	0.0376
Selenium	mg/L	0.00213
Silver	mg/L	< 0.00010
Thallium	mg/L	-
Titanium	mg/L	< 0.025
Zinc	mg/L	0.039
WQ07- Dissolved Metal	s	
Calcium (Dissolved)	mg/L	258
Magnesium	mg/L	141
(Dissolved)		
Potassium (Dissolved)	mg/L	60.0
Sodium (Dissolved)	mg/L	998

MEL-23		6/16/2024		
Parameter Unit				
WQ02- Conventional Pa	rameters			
рН	pH units	7.61		
Turbidity	NTU	6.1		
Hardness, as CaCO3	mg/L	-		
Total alkalinity, as	mg/L	38		
CaCO3				
TDS	mg/L	310		
TDS, calculated	mg/L	270		
TSS	mg/L	12		
WQ03- Major Ions	WQ03- Major Ions			
Chloride	mg/L	84		
Cyanide	mg/L	0.00127		
Fluoride	mg/L	< 0.10		
Silica	mg/L	0.90		
Sulfate	mg/L	61		
WQ04- Nutrients and Chlorophyll a				
Ammonia Nitrogen (as N)	mg/L	0.39		

Nitrate (as N)	mg/L	1.18
Nitrite (as N)	mg/L	0.014
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
Aluminum	mg/L	0.182
Arsenic	mg/L	0.0118
Barium	mg/L	0.0094
Cadmium	mg/L	0.000013
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00127
Iron	mg/L	0.392
Lead	mg/L	0.00107
Manganese	mg/L	0.0594
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0016
Nickel	mg/L	0.0094
Selenium	mg/L	0.00018
Silver	mg/L	< 0.000020
Thallium	mg/L	-
Titanium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
WQ07- Dissolved Metal	s	
Calcium (Dissolved)	mg/L	24.3
Magnesium	mg/L	9.83
(Dissolved)		
Potassium (Dissolved)	mg/L	4.67
Sodium (Dissolved)	mg/L	52.5

MEL-24	4	6/5/2024	6/26/2024
Parameter	Unit	-	-
WQ02- Conventional Pa	rameters		
рН	pH units	7.54	7.29
Turbidity	NTU	2.3	4.8
Hardness, as CaCO3	mg/L	-	-
Total alkalinity, as	mg/L	76	130
CaCO3			
TDS	mg/L	1050	1770
TDS, calculated	mg/L	870	1700
TSS	mg/L	7	18
WQ03- Major Ions			
Chloride	mg/L	87	210
Cyanide	mg/L	0.0416	0.0376
Fluoride	mg/L	0.13	0.30

Silica	mg/L	6.9	14		
Sulfate	mg/L	440	860		
WQ04- Nutrients and Chlorophyll a					
Ammonia Nitrogen (as	mg/L	6.3	16		
N)					
Nitrate (as N)	mg/L	7.16	5.12		
Nitrite (as N)	mg/L	0.809	5.57		
Nitrate + nitrite (as N)	mg/L	7.97	10.7		
Total phosphorus	mg/L	0.22	0.62		
Orthophosphate (P)	mg/L	0.090	0.12		
WQ06- Total Metals					
Aluminum	mg/L	0.173	0.395		
Arsenic	mg/L	0.212	0.316		
Barium	mg/L	0.0316	0.0522		
Cadmium	mg/L	0.000073	0.000082		
Chromium	mg/L	0.0035	0.0054		
Copper	mg/L	0.0274	0.0336		
Iron	mg/L	0.502	1.25		
Lead	mg/L	0.00456	0.00787		
Manganese	mg/L	0.111	0.136		
Mercury	mg/L	0.00001	< 0.00001		
Molybdenum	mg/L	0.0085	0.0221		
Nickel	mg/L	0.0062	0.0143		
Selenium	mg/L	0.00110	0.00233		
Silver	mg/L	0.000071	0.000068		
Thallium	mg/L	-	-		
Titanium	mg/L	< 0.0050	< 0.010		
Zinc	mg/L	0.175	0.236		
WQ07- Dissolved Metals			•		
Calcium (Dissolved)	mg/L	180	314		
Magnesium	mg/L	11.1	14.0		
(Dissolved)					
Potassium (Dissolved)	mg/L	12.9	37.0		
Sodium (Dissolved)	mg/L	64.5	138		

MEL-SR1	6/5/2024	
Parameter Unit		
WQ02- Conventional Parame	eters	
рН	pH units	8.01
Turbidity	NTU	0.8
Hardness, as CaCO3	mg/L	-
Hardness, as CaCO3-	mg/L	228
Dissolved		
Total alkalinity, as CaCO3	mg/L	120
TDS	mg/L	415

TDS, calculated	mg/L	390		
TSS	mg/L	1		
WQ03- Major Ions				
Chloride	mg/L	90		
Cyanide	mg/L	< 0.00050		
Fluoride	mg/L	< 0.10		
Silica	mg/L	2.6		
Sulfate	mg/L	96		
WQ04- Nutrients and Chloro	phyll a			
Ammonia Nitrogen (as N)	mg/L	< 0.050		
Nitrate (as N)	mg/L	< 0.10		
Nitrite (as N)	mg/L	< 0.010		
Nitrate + nitrite (as N)	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	2.4		
WQ06- Total Metals				
Aluminum	mg/L	0.0423		
Arsenic	mg/L	0.00221		
Barium	mg/L	0.0274		
Cadmium	mg/L	< 0.000010		
Calcium (total)	mg/L	64.0		
Chromium	mg/L	< 0.0010		
Copper	mg/L	0.00262		
Iron	mg/L	0.096		
Lead	mg/L	< 0.00020		
Magnesium (total)	mg/L	11.4		
Manganese	mg/L	0.0182		
Mercury	mg/L	< 0.00001		
Molybdenum	mg/L	0.0010		
Nickel	mg/L	0.0087		
Potassium (total)	mg/L	6.04		
Selenium	mg/L	< 0.00010		
Silver	mg/L	< 0.000020		
Sodium (total)	mg/L	43.6		
Thallium	mg/L	-		
Titanium	mg/L	< 0.0050		
Zinc	mg/L	0.0158		
WQ07- Dissolved Metals				
Aluminum	mg/L	0.0090		
Arsenic	mg/L	0.00218		
Barium	mg/L	0.0299		
Cadmium	mg/L	< 0.000010		
Calcium (Dissolved)	mg/L	71.5		

Chromium	mg/L	< 0.0010
Copper	mg/L	0.00250
Iron	mg/L	0.0329
Lead	mg/L	< 0.00020
Magnesium (Dissolved)	mg/L	12.1
Manganese	mg/L	0.0189
Molybdenum	mg/L	0.0011
Nickel	mg/L	0.0090
Potassium (Dissolved)	mg/L	6.63
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	46.0
Thallium	mg/L	< 0.000010
Zinc	mg/L	0.0160

MEL-SR18			6/8/2024	6/19/2024	
Parameter	MEL-SR MAX GRAB (WSEEP/RO)	MEL-SR MAX MEAN (WSEEP/RO)	Unit		
WQ01- Field Measured	· · ·	•			
Turbidity			NTU	14.4	13
WQ02- Conventional Para	meters				
рН			pH units	7.23	6.40
рН	9.5	9.5	pH units	ı	-
Turbidity			NTU	15	5.5
Hardness, as CaCO3			mg/L	•	-
Total alkalinity, as CaCO3			mg/L	11	14
TDS			mg/L	35	50
TDS, calculated			mg/L	19	29
TSS	100	50	mg/L	16	6
WQ03- Major Ions					
Chloride			mg/L	1.3	1.8
Cyanide			mg/L	< 0.00050	< 0.00050
Fluoride			mg/L	< 0.10	< 0.10
Silica			mg/L	0.31	0.51
Sulfate			mg/L	3.9	7.7
WQ04- Nutrients and Chlo	rophyll a				
Ammonia Nitrogen (as N)			mg/L	< 0.050	< 0.050
Nitrate (as N)			mg/L	0.15	< 0.10
Nitrite (as N)			mg/L	< 0.010	< 0.010
Total phosphorus			mg/L	0.025	0.036
Orthophosphate (P)			mg/L	< 0.010	< 0.010

WQ05- General Organics				
Total oil and grease	mg/L	< 0.50	0.60	
WQ06- Total Metals				
Aluminum	mg/L	0.472	0.284	
Arsenic	mg/L	0.00400	0.00314	
Barium	mg/L	0.0119	0.0108	
Cadmium	mg/L	< 0.000010	< 0.000010	
Chromium	mg/L	0.0016	< 0.0010	
Copper	mg/L	0.00382	0.00272	
Iron	mg/L	0.924	0.409	
Lead	mg/L	0.00089	0.00048	
Manganese	mg/L	0.0259	0.0088	
Mercury	mg/L	< 0.00001	< 0.00001	
Molybdenum	mg/L	< 0.0010	< 0.0010	
Nickel	mg/L	0.0019	< 0.0010	
Selenium	mg/L	< 0.00010	< 0.00010	
Silver	mg/L	< 0.000020	< 0.000020	
Thallium	mg/L	-	-	
Titanium	mg/L	0.0245	0.0114	
Zinc	mg/L	< 0.0050	< 0.0050	
WQ07- Dissolved Metals				
Calcium (Dissolved)	mg/L	4.51	7.47	
Magnesium (Dissolved)	mg/L	0.510	0.747	
Potassium (Dissolved)	mg/L	0.654	1.36	
Sodium (Dissolved)	mg/L	1.00	1.49	

MEL-SR20			6/12/2024	
Parameter	MEL-SR MAX GRAB (WSEEP/RO)	MEL-SR MAX MEAN (WSEEP/RO)	Unit	
WQ01- Field Measured				
Turbidity			NTU	0.93
WQ02- Conventional Par	ameters			
рН			pH units	7.81
Turbidity			NTU	0.6
Hardness, as CaCO3			mg/L	-
Total alkalinity, as CaCO3			mg/L	75
TDS			mg/L	225
TDS, calculated			mg/L	170
TSS	100	50	mg/L	2
WQ03- Major lons				
Chloride			mg/L	22
Cyanide			mg/L	0.00084

Fluoride	mg/L	< 0.10
Silica	mg/L	0.46
Sulfate	mg/L	38
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as	mg/L	< 0.050
N)		0.00
Nitrate (as N)	mg/L	0.23
Nitrite (as N)	mg/L	< 0.010
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ05- General Organics		
Total oil and grease	mg/L	1.3
WQ06- Total Metals		
Aluminum	mg/L	0.0144
Arsenic	mg/L	0.00799
Barium	mg/L	0.0163
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00157
Iron	mg/L	0.081
Lead	mg/L	< 0.00020
Manganese	mg/L	0.0509
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0011
Nickel	mg/L	0.0048
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Thallium	mg/L	-
Titanium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
WQ07- Dissolved Metals	, <u></u>	
Calcium (Dissolved)	mg/L	38.5
Magnesium (Dissolved)	mg/L	7.54
Potassium (Dissolved)	mg/L	3.35
Sodium (Dissolved)	mg/L	10.4