

Meliadine Gold Mine NWB 2AM-MEL1631 August 2023 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 2023.

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 August 2023

Usage	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	2023 Total
MEL-11 ¹	m³	36,021	37,240	43,452	40,082	44,346	38,080	47,136	44,663	-	-	-	-	331,020
Dust suppression ²	m³	0	0	0	0	0	0	0	0	-	-	-	-	0
Dust suppression (CP1) ³	m ³	0	0	0	0	0	264	2,080	3455	-	-	-	-	5799

In August, approximately 3455 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 August 2023

Location	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	2023 Total
MEL-14	m³	0	0	0	0	0	209,024	81,119	54,894	-	-	-	-	345,037
MEL-26	m³	0	0	0	0	0	0	0	0	-	-	-	-	0
MEL-25	m ³	0	0	0	0	2,060	0	510	0	-	-	-	-	2,570

Discharge of treated effluent from the EWTP into Meliadine Lake via the Final Discharge Point (MEL-14) started on June 10th 2023.

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 August 2023

		JAN	FEB	MAR	APR	MAY	JU	IN	JL	JL	AUG	SEP	ОСТ	NOV	DEC	2023 Total
Wastewater Disch	narge (m³)	5,141	4,305	4,522	4,519	4,764	4,7	' 54	5,0	95	4,913	-	-	-	-	38,013
Courage Cludge	Amount (m³)	17	7	20.5	18	21	19	1	17	5	16	-	-	-	-	141.5
Sewage Sludge	Disposal Location	WRSF1	WRSF3	WRSF3	WRSF3	WRSF3	WRSF1	WRSF3	WRSF3	WRSF1	WRSF1	-	-	-	-	NA

2.6 MONITORING ANALYTICAL DATA

Fifteen (15) 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			2023 Total	
Location		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	2023 TOtal	
Landfill	m^3		25,666	5		23,663			22,118			-		-	
(Survey)															
Landfarm (Survey)	m^3		-			143			272			-		-	
Landfarm⁴	m³	0.05	41.5	3	5.5	46.05	0.25	0.07	1.55	-	-	1	-	97.97	

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⁴ 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 August 2023

Mate	erial (tonnes)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	Cumulative 2023
Processe	d Ore	155,514	150,876	171,369	149,029	172,955	137,629	166,668	153,272	-	-	-	-	1,257,312
	Removed from open pit mining	50,606	42,866	114,885	159,630	287,354	249,975	372,511	435,222	-	-	-	-	1,713,049
Waste Rock	Removed from underground mining	67,109	51,780	70,674	73,390	81,439	56,214	63,078	52,904	-	-	-	-	516,588
	Used as underground dry rockfill	51,834	48,024	35,017	18,200	44,224	42,578	29,540	27,102	-	-	-	-	296,519
	Send to TSF	133,227	121,499	132,300	110,473	125,285	112,728	124,335	114,231	-	-	-	-	976,078
Tailings	Used as paste underground backfill	22,287	29,377	39,069	38,556	45,670	24,901	42,333	39,041	-	-	-	-	281,234

SECTION 4 SPILL MANAGEMENT

4.1 INTERNAL AND REPORTABLE SPILLS

Spills reported internally (17) 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. Four (4) reportable spills or exceedance occurred during the month (Refer to the gray shading in Table 4.1).

Table 4.1: Summary of Agnico Eagle's Spill Reports in August 2023

Date and time of occurrence	Contaminant	Estimate d quantity	Unit	Exact location of incident	Description of incident	Describe immediate corrective actions
Tuesday, August 01, 2023 8:30:00 AM	Diesel	1.5	L	MSB Parking	When conducting the pre-op for PCK33, a 1.5L diesel spill was observed under 65PCK33 at the MSB parking area.	Surface mobile maintenance was contacted and 65PCK33 was brought to the shop to further inspect what happened. An estimated of 20Kg of contaminated material was scrapped up using a small excavator and brought to Landfarm A sorting area.
Wednesda y, August 02, 2023 8:00:00 AM	Contact Water	16	m³	Southeast of the vent raise, Channel 5	During pumping of low salinity contact water from SP4 to SP1, a hugger clamp came apart and released water into the channel leading to CP5.	Pumping was stopped and environmental coordinator was contacted. Since the contact water was released within the site's Contact Water management facilities, no cleanup efforts were undertaken.

Friday, August 04, 2023 4:30:00 PM	Hydraulic Oil	25	L	Bucket laydown	A hydraulic line failed on a loader while operating resulting in a spill of 25 L of hydraulic oil.	The loader was stopped. Absorbent pads were used to collect the spill. Contaminated materials were collected in a quatrex bag and disposed of at the hazmat laydown.
Friday, August 04, 2023 6:00:00 PM	Sewage	125	L	Wing 8	An estimated 125 L of sewage was spilled onto the industrial pad at the wing 8 lift station. The Energy and Infrastructure department was notified of an overflow occurring at wing 8 lift station. A plumber was dispatched to address the situation and restore the system to its intended operational state. The spilled sewage was contained to the immediate local area, and no water bodies were impacted by the spill.	Upon arrival to wing 8 lift station, the plumber switched the pump from the automatic to the manual setting to lower the level of the tank and prevent further spillage. A vacuum truck was used to clean the free liquid on the ground. The ground surface was hand excavated and the recovered material was brought to Landfarm A as per the Spill Contingency Plan.
Friday, August 11, 2023 4:00:00 PM	Petroleum products	2	L	Target AQU23-D	While changing a hydraulic chuck of a drill rotation, hydraulic oil leaked in the floor and probably passed through the wood floor and onto the tundra.	Absorbent pads were deployed to collect the spill. Contaminated materials were collected in a quatrex bag and disposed of at the hazmat laydown.
Saturday, August 12, 2023 3:30:00 AM	Tailing	1.5	m ³	Northwest side of Paste Plant Building	There was an inadvertent release of approximately 1.5m3 of tailings and fresh water outside the paste plant facility. The	The operator promptly reported it to the supervisor, who initiated the spill cleanup. The tailings-impacted material that migrated outside of

					incident resulted from an overflow within the solid tailings hopper due to a malfunctioning sensor. In response, the plant operator undertook remedial actions, which involved hosing down the affected area. This action inadvertently led the mixture of tailings and fresh water to migrate from a maintenance door outside the facility.	the paste plant facility was collected and relocated to the Tailings Storage Facility for disposal.
Saturday, August 12, 2023 2:30:00 PM	Diesel Fuel	5	L	KCG shop (near welding seacan)	During the winter, an external fuel tank was filled. Fuel expended with the warm weather and leaked by the overflow tube.	A bucket was placed under the overflow to catch spilling fuel. Contaminated material was recovered and disposed of as per procedure.
Thursday, August 17, 2023 5:00:00 PM	Diesel Fuel	1	L	Drill sh-84	The secondary containment overflowed under the drill releasing 1L of diesel on the ground.	Secondary containment was emptied. Absorbent pads were used to collect the spill. Contaminated materials were collected in a quatrex bag and disposed of at the hazmat laydown.
Friday, August 18, 2023 8:30:00 AM	Hydraulic Oil	4	L	TIRI01C- 10050MS11	Hydraulic oil spilled from a loose valve on the oscillation cylinder of the drill. The cylinder was changed the day before, and the bolts may not have been checked. The bolt wasn't tightened enough, and it loosened, causing a 4-litre spill.	The drill was stopped, and the valve was tightened. Absorbent pads were deployed to clean the spill. Contaminated materials were collected in a quatrex bag and disposed of at the hazmat laydown.

Saturday, August 19, 2023 8:30:00 AM	Break Oil	1	L	AWAR	Break oil spilled from a Toyota while in operation.	Absorbent pads were deployed to contain the spill. Contaminated materials were collect in a quatrex bag and disposed of at the hazmat laydown.
Friday, August 25, 2023 10:00:00 AM	Contact Water	20	M ³	Water Treatment Complex	There was an inadvertent release of approximately 20 m3 of contact water outside the Water Treatment Complex (WTC) during the Saline Effluent Treatment Plant (SETP) commissioning activities. A High-Density Polyethylene (HDPE) influent line that transitions to a Polyvinyl Chloride (PVC) coupler as it enters the WTC was conveying saline contact water from Tiriganiaq Open Pit 2 (Tiri 02) to the SETP. The contraction of the HDPE line caused the vertical portion of the coupling to shift, then break due to additional stress, resulting in a spill of contact water. Due Due to the location of the spill, contact water flowed into Collection Pond 1 (CP1), a part of the site's surface contact runoff management system.	In response to the spill incident, contact water being conveyed to the SETP was immediately suspended to prevent further spillage. Given the volume of the release, the event was calculated to have a negligible impact on CP1 water quality. Sampling efforts were not indicative of significant changes in water quality nor of the presence of a isolated plume of spilled water at the sampled locations. As a precautionary measure, discharge to Meliadine lake was suspended. Once it was confirmed that the impact was negligible, discharge resumed.

Sunday, August 27, 2023 4:30:00 AM	Hydraulic Oil	20	L	B10 Borrow Pit	The quick-release hose on loader 21-204 was pinched while loading a 10-Wheeler, causing a leak.	Loader was stopped. Contaminated materials were collected and brought to the landfarm.
Monday, August 28, 2023 1:00:00 PM	Oily Water	60	L	Hazmat Laydown	During a Hazmat laydown clean up, a quatrex bag filled with oily water was found dripping on the ground.	The quatrex bag was brought to the wash bay to be emptied. Contaminated materials were collected and 0.5m³ of material was brought to the landfarm.
Tuesday, August 29, 2023 1:30:00 AM	Emulsion	320	L	Emulsion pad	When loading emulsion on a boom truck with a loader, one of the forks was not correctly positioned under the container. The container tipped over by 45 degrees and the cap came off the container, causing half the tote to spill onto the ground, in a lined area.	Contaminated material was collected and disposed of in quatrex bags.
Wednesda y, August 30, 2023 5:00:00 AM	Sewage	25	L	Wing 4	An estimated 25 L of sewage was spilled onto the industrial pad by wing 4 lift station. A power failure at wing 4 deenergized the lift station and caused the spill. No water bodies were impacted by this spill.	The water to the wing was closed so no further spill could continue and the vacuum truck was brought to pump down the level in the basin and the secondary containment. Absorbent pads were later laid down outside the entrance to the lift station to soak up any remaining wastewater on the ground and were disposed of in the incinerator.

Wednesda y, August 30, 2023 7:00:00 AM	Hydraulic Oil	1	L	AWAR KM- 15	A hydraulic hose that connects the control levers to the hydraulic system broke at the connection (screener #19-0710) causing approximately 1L of hydraulic oil to leak on the ground.	The equipment was turned off. Absorbent pads were used to collect the spill and disposed of in a quatrex bag.
Thursday, August 31, 2023 1:00:00 PM	Treated effluent	100	m ³	Directly East of 3 million fuel farm	As pumps were ramped up to increase the volume of water being discharged into Meliadine Lake, a roll-bar clamp was found leaking.	Bolts on roll-bar clamp were tightened and the leak stopped. The water was captured within the site's contact water management infrastructures.

Appendix – Monitoring Analytical Data

MEL-1	8/1/2023	
Parameter		
WQ02- Conventional Pa	rameters	
pH	pH units	6.87
Turbidity	NTU	0.2
Specific conductivity	umhos/cm	97
Hardness, as CaCO3	mg/L	28.1
Total alkalinity, as CaCO3	mg/L	18
Carbonate, as CaCO3	mg/L	< 1.0
Bicarbonate, as CaCO3	mg/L	18
TDS	mg/L	80
TDS, calculated	mg/L	45
TSS	mg/L	1
Total organic carbon	mg/L	3.1
Dissolved organic	mg/L	3.2
carbon		
WQ03- Major Ions		
Chloride	mg/L	11
Cyanide	mg/L	< 0.00050
Cyanide (free)	mg/L	0.0021
Cyanide (WAD)	mg/L	< 0.00050
Silica	mg/L	0.44
Sulfate	mg/L	5.1
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	0.17
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
Aluminum	mg/L	0.0038
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00079
Barium	mg/L	0.0086
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010

Copper	mg/L	0.00082
Iron	mg/L	0.019
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Manganese	mg/L	0.0084
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Selenium	mg/L	< 0.0010
Silver		< 0.00010
Strontium	mg/L	0.0479
Thallium	mg/L	
	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		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00072
Barium	mg/L	0.0084
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	8.66
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00088
Iron	mg/L	< 0.0050
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium	mg/L	1.50
(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	1.09
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	6.30
Strontium	mg/L	0.0470
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050

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Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
WQ10- Volatile Organic	s	
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-1	8/21/2023				
INICT-T	_	0/21/2023			
Parameter	Unit				
WQ02- Conventional Pa	rameters				
рН	pH units	7.54			
Turbidity	NTU	0.5			
Specific conductivity	umhos/cm	2600			
Hardness, as CaCO3	mg/L	424			
Total alkalinity, as CaCO3	mg/L	66			
TDS	mg/L	1440			
TDS, calculated	mg/L	1300			
TSS	mg/L	3			
WQ03- Major Ions					
Chloride	mg/L	570			
Cyanide	mg/L	0.00119			
Fluoride	mg/L	< 0.10			
Silica	mg/L	0.22			
Sulfate	mg/L	210			
WQ04- Nutrients and Ch	nlorophyll a				
Ammonia Nitrogen (as N)	mg/L	0.17			
Nitrate (as N)	mg/L	-			
Nitrite (as N)	mg/L	0.10			
Total phosphorus	mg/L	0.046			
Orthophosphate (P)	mg/L	< 0.010			
WQ06- Total Metals					
Aluminum	mg/L	0.110			

Antimony	mg/L	0.00071
Arsenic	mg/L	0.0181
Barium	mg/L	0.0502
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00263
Iron	mg/L	0.130
Lead	mg/L	0.00022
Lithium	mg/L	0.0366
Manganese	mg/L	0.0416
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0060
Nickel	mg/L	0.0043
Selenium	mg/L	0.00052
Silver	mg/L	< 0.000020
Thallium	mg/L	0.000017
Uranium	mg/L	0.00163
Vanadium	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010
WQ07- Dissolved Metal	s	
Calcium (Dissolved)	mg/L	122
Magnesium	mg/L	38.5
(Dissolved)		
Potassium (Dissolved)	mg/L	23.6
Sodium (Dissolved)	mg/L	276

MEL-13	8/22/2023	
Parameter	Unit	
WQ02- Conventional Pa	rameters	
рН	pH units	7.16
Dissolved Oxygen	mg/L	9.37
Turbidity	NTU	0.4
Specific conductivity	umhos/cm	110
Hardness, as CaCO3	mg/L	31.0
Total alkalinity, as	mg/L	22
CaCO3		
Carbonate, as CaCO3	mg/L	< 1.0
Bicarbonate, as CaCO3	mg/L	22
TDS	mg/L	60
TDS, calculated	mg/L	58
TSS	mg/L	< 1
Total organic carbon	mg/L	3.9
Dissolved organic	mg/L	3.6
carbon		

WQ03- Major Ions			
Chloride	mg/L	14	
Cyanide	mg/L	< 0.00050	
Cyanide (free)	mg/L 0.0028		
Cyanide (WAD)	mg/L	< 0.00050	
Silica	mg/L	0.66	
Sulfate	mg/L	9.8	
WQ04- Nutrients and Ch		5.0	
Ammonia Nitrogen (as	mg/L	< 0.050	
N)	6/ =	0.000	
Nitrate (as N)	mg/L	< 0.10	
Nitrite (as N)	mg/L	< 0.010	
Total Kjeldahl nitrogen	mg/L	0.24	
Total phosphorus	mg/L	< 0.020	
	O.		
Orthophosphate (P)	mg/L	< 0.010	
WQ06- Total Metals			
Aluminum	mg/L	0.00281	
Antimony	mg/L	< 0.000020	
Arsenic	mg/L	0.000660	
Barium	mg/L	0.00844	
Beryllium	mg/L	< 0.000010	
Boron	mg/L	< 0.01	
Cadmium	mg/L	< 0.000050	
Chromium	mg/L	0.00039	
Cobalt	mg/L	0.0000290	
Copper	mg/L	0.000981	
Iron	mg/L	0.0290	
Lead	mg/L	0.0000120	
Lithium	mg/L	0.00111	
Manganese	mg/L	0.0142	
Mercury	mg/L	< 0.00001	
Molybdenum	mg/L	0.000144	
Nickel	mg/L	0.000911	
Selenium	mg/L	0.000049	
Silver	mg/L	< 0.000050	
Strontium	mg/L	0.0537	
Thallium	mg/L	0.0000030	
Tin	mg/L	< 0.00020	
Titanium	mg/L	< 0.00050	
Uranium	mg/L	0.0000200	
Vanadium	mg/L	< 0.00020	
Zinc	mg/L	0.00074	
WQ07- Dissolved Metal	s		
Aluminum	mg/L	0.00134	
		•	

Antimony	mg/L	< 0.000020
Arsenic	mg/L	0.000646
Barium	mg/L	0.00890
Beryllium	mg/L	< 0.000010
Boron	mg/L	0.012
Cadmium	mg/L	0.0000111
Calcium (Dissolved)	mg/L	10.3
Chromium	mg/L	0.00010
Cobalt	mg/L	0.0000148
Copper	mg/L	0.000925
Iron	mg/L	0.0054
Lead	mg/L	< 0.000050
Lithium	mg/L	0.00125
Magnesium	mg/L	1.77
(Dissolved)		
Manganese	mg/L	0.000794
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.000157
Nickel	mg/L	0.000805
Potassium (Dissolved)	mg/L	1.13
Selenium	mg/L	0.000121
Silver	mg/L	< 0.000050
Sodium (Dissolved)	mg/L	7.68
Strontium	mg/L	0.0584
Thallium	mg/L	0.000034
Tin	mg/L	< 0.00020
Titanium	mg/L	< 0.00050
Uranium	mg/L	0.0000226
Vanadium	mg/L	< 0.00020
Zinc	mg/L	0.00050
WQ08- Radionuclides		
Radium-226	Bq/l	< 0.0050
WQ10- Volatile Organics	5	
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-14						8/21/2023
Parameter MO03 Comment in a land	MDMER MAX GRAB	MDMER MAX MONTHLY MEAN	2AM- MEL1631 MEL-14 MAX GRAB	2AM- MEL1631 MEL-14 MAX MEAN	Unit	
WQ02- Conventional Pa	9.5	9.5	9.5	9.5	pH units	7.30
Dissolved Oxygen	9.5	9.3	9.5	9.3	mg/L	9.40
Turbidity					NTU	0.3
Specific conductivity					umhos/cm	2500
Hardness, as CaCO3					mg/L	417
Total alkalinity, as					mg/L	57
CaCO3					ilig/L	37
Carbonate, as CaCO3					mg/L	< 1.0
Bicarbonate, as CaCO3					mg/L	57
TDS			4500	3500	mg/L	1440
TDS, calculated			4500	3500	mg/L	1300
TSS	30	15	30	15	mg/L	3
Total organic carbon					mg/L	8.6
Dissolved organic					mg/L	8.2
carbon						
WQ03- Major lons				T		
Chloride					mg/L	580
Cyanide	1	0.5	1	0.5	mg/L	0.00137
Cyanide (free)					mg/L	< 0.0020
Cyanide (WAD)					mg/L	0.00065
Silica					mg/L	0.12
Sulfate					mg/L	210
WQ04- Nutrients and Cl	hlorophyll)				
Ammonia Nitrogen (as N)			18	14	mg/L	0.16
Nitrate (as N)					mg/L	-
Nitrite (as N)					mg/L	0.10
Total Kjeldahl nitrogen					mg/L	0.97
Total phosphorus			4	2	mg/L	< 0.020
Orthophosphate (P)					mg/L	< 0.010
WQ06- Total Metals						
Aluminum			3	2	mg/L	0.249
Antimony					mg/L	0.00069
Arsenic	0.6	0.3	0.6	0.3	mg/L	0.00467
Barium					mg/L	0.0486

Beryllium					mg/L	< 0.00010
Boron					mg/L	0.280
Cadmium					mg/L	< 0.000010
Chromium					mg/L	< 0.0010
Cobalt					mg/L	0.00075
Copper	0.6	0.3	0.4	0.2	mg/L	0.00245
Iron					mg/L	0.020
Lead	0.2	0.1	0.2	0.1	mg/L	< 0.00020
Lithium					mg/L	0.0327
Manganese					mg/L	0.0235
Mercury					mg/L	< 0.00001
Molybdenum					mg/L	0.0059
Nickel	1	0.5	1	0.5	mg/L	0.0040
Selenium					mg/L	0.00046
Silver					mg/L	< 0.000020
Strontium					mg/L	1.53
Thallium					mg/L	0.000017
Tin					mg/L	< 0.0050
Titanium					mg/L	< 0.0050
Uranium					mg/L	0.00048
Vanadium					mg/L	< 0.0050
Zinc	1	0.5	0.8	0.4	mg/L	< 0.0050
WQ07- Dissolved Metal	s			,		
Aluminum			3	2	mg/L	0.0976
Antimony					mg/L	0.00078
Arsenic	0.6	0.3	0.6	0.3	mg/L	0.00436
Barium					mg/L	0.0545
Beryllium					mg/L	< 0.00010
Boron					mg/L	0.313
Cadmium					mg/L	0.000013
Calcium (Dissolved)					mg/L	122
Chromium					mg/L	< 0.0010
Cobalt					mg/L	0.00083
Copper	0.6	0.3	0.4	0.2	mg/L	0.00225
Iron					mg/L	0.0092
Lead	0.2	0.1	0.2	0.1	mg/L	< 0.00020
Lithium					mg/L	0.0392
Magnesium					mg/L	38.7
(Dissolved)						
11000000000					mg/L	0.0241
Manganese				•	1 .	. 0 00001
Mercury					mg/L	< 0.00001
Mercury Molybdenum					mg/L	0.0066
Mercury Molybdenum Nickel	1	0.5	1	0.5	mg/L mg/L	0.0066 0.0042
Mercury Molybdenum	1	0.5	1	0.5	mg/L	0.0066

Silver					mg/L	< 0.000020
Sodium (Dissolved)					mg/L	281
Strontium					mg/L	1.68
Thallium					mg/L	0.000019
Tin					mg/L	< 0.0050
Titanium					mg/L	< 0.0050
Uranium					mg/L	0.00049
Vanadium					mg/L	< 0.0050
Zinc	1	0.5	0.8	0.4	mg/L	< 0.0050
WQ08- Radionuclides						
Radium-226	1.11	0.37			Bq/I	< 0.0050
WQ10- Volatile Organic	S					
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-1	8/6/2023				
Parameter	Unit				
WQ02- Conventional Pa	rameters				
рН	pH units	7.52			
Turbidity	NTU	0.7			
Specific conductivity	umhos/cm	130			
Hardness, as CaCO3	mg/L	45.7			
Total alkalinity, as CaCO3	mg/L	45			
Carbonate, as CaCO3	mg/L	< 1.0			
Bicarbonate, as CaCO3	mg/L	45			
TDS	mg/L	75			
TDS, calculated	mg/L	66			
TSS	mg/L	1			
Total organic carbon	mg/L	4.6			
Dissolved organic carbon	mg/L	4.8			
WQ03- Major Ions					

Cyanide mg/L < 0.00050	Chloride	mg/L	8.3
Cyanide (free) mg/L 0.0023 Cyanide (WAD) mg/L < 0.00050 Silica mg/L 1.3 Sulfate mg/L 3.9 WQ04- Nutrients and Chlorophyll a Ammonia Nitrogen (as N) mg/L < 0.050 Nitrate (as N) mg/L < 0.010 Mitrite (as N) mg/L < 0.010 Nitrite (as N) mg/L < 0.010 Co.010 Total Kjeldahl nitrogen mg/L < 0.021 Total Kjeldahl nitrogen mg/L < 0.021 Co.020 Orthophosphorus mg/L < 0.020 Orthophosphorus mg/L < 0.020 Orthophosphorus mg/L < 0.020 Orthophosphorus mg/L < 0.020 Orthophosphorus mg/L < 0.020 Orthophosphorus mg/L < 0.020 Orthophosphorus mg/L < 0.020 Orthophosphorus mg/L < 0.0010 Mo0050 Mod051 Mod051 Mod051 Mod051 Mod051 Mod051 Mod052 Mod052 Mod052 Mod052 Mod052		_	
Cyanide (WAD) mg/L < 0.00050	<u> </u>	<u> </u>	
Silica mg/L 1.3 Sulfate mg/L 3.9 WQ04- Nutrients and Chlorophyll a Ammonia Nitrogen (as N) mg/L < 0.050 Nitrate (as N) mg/L < 0.010		_	
Sulfate mg/L 3.9 WQ04-Nutrients and Chlorophyll a Ammonia Nitrogen (as N) mg/L < 0.050 Nitrate (as N) mg/L < 0.010		_	
WQ04- Nutrients and Chlorophyll a Ammonia Nitrogen (as N) mg/L < 0.050		_	
Ammonia Nitrogen (as N) mg/L < 0.050			
N) mg/L < 0.10 Nitrite (as N) mg/L < 0.010		1	< 0.050
Nitrite (as N) mg/L < 0.010 Total Kjeldahl nitrogen mg/L 0.21 Total phosphorus mg/L < 0.020	• •	O.	
Total Kjeldahl nitrogen mg/L 0.21 Total phosphorus mg/L < 0.020	Nitrate (as N)	mg/L	< 0.10
Total phosphorus mg/L < 0.020 Orthophosphate (P) mg/L < 0.010 WQ06-Total Metals Metals Aluminum mg/L 0.0030 Antimony mg/L 0.00050 Arsenic mg/L 0.00221 Barium mg/L 0.00221 Beryllium mg/L < 0.00010	Nitrite (as N)	mg/L	< 0.010
Orthophosphate (P) mg/L < 0.010 WQ06-Total Metals Aluminum mg/L 0.0030 Antimony mg/L 0.00050 Arsenic mg/L 0.00221 Barium mg/L 0.0122 Beryllium mg/L < 0.00010	Total Kjeldahl nitrogen	mg/L	0.21
WQ06-Total Metals Aluminum mg/L 0.0030 Antimony mg/L < 0.00050	Total phosphorus	mg/L	< 0.020
Aluminum mg/L 0.0030 Antimony mg/L < 0.00050 Arsenic mg/L 0.00221 Barium mg/L 0.0122 Beryllium mg/L < 0.00010 Boron mg/L < 0.050 Cadmium mg/L < 0.00001 Chromium mg/L < 0.00010 Cobalt mg/L < 0.00020 Copper mg/L < 0.00020 Copper mg/L < 0.00020 Iron mg/L < 0.00020 Lead mg/L < 0.00020 Lead mg/L < 0.0020 Manganese mg/L < 0.0020 Mercury mg/L < 0.00267 Mercury mg/L < 0.0001 Molybdenum mg/L < 0.0001 Nickel mg/L < 0.00010 Selenium mg/L < 0.00000 Silver mg/L < 0.00000 Strontium mg/L < 0.00000	Orthophosphate (P)	mg/L	< 0.010
Antimony mg/L	WQ06- Total Metals		
Arsenic mg/L 0.00221 Barium mg/L 0.0122 Beryllium mg/L < 0.00010 Boron mg/L < 0.00001 Cadmium mg/L < 0.000010 Chromium mg/L < 0.00010 Cobalt mg/L < 0.00020 Copper mg/L 0.00056 Iron mg/L < 0.00020 Lead mg/L < 0.00020 Lead mg/L < 0.0020 Manganese mg/L < 0.00267 Mercury mg/L < 0.00001 Molybdenum mg/L < 0.0001 Molybdenum mg/L < 0.00010 Selenium mg/L < 0.00010 Silver mg/L < 0.00010 Silver mg/L < 0.000020 Strontium mg/L < 0.000010 Titanium mg/L < 0.00050 Uranium mg/L < 0.00050 WQ07- Dissolved Metals	Aluminum	mg/L	0.0030
Barium mg/L 0.0122 Beryllium mg/L < 0.00010	Antimony	mg/L	< 0.00050
Beryllium mg/L < 0.00010 Boron mg/L < 0.050	Arsenic	mg/L	0.00221
Boron mg/L < 0.050 Cadmium mg/L < 0.000010	Barium	mg/L	0.0122
Cadmium mg/L < 0.00010 Chromium mg/L < 0.0010	Beryllium	mg/L	< 0.00010
Chromium mg/L < 0.0010 Cobalt mg/L < 0.00020	Boron	mg/L	< 0.050
Cobalt mg/L < 0.00020 Copper mg/L 0.00056 Iron mg/L 0.130 Lead mg/L < 0.00020	Cadmium	mg/L	< 0.000010
Copper mg/L 0.00056 Iron mg/L 0.130 Lead mg/L < 0.00020	Chromium	mg/L	< 0.0010
Iron mg/L 0.130 Lead mg/L < 0.00020	Cobalt	mg/L	< 0.00020
Lead mg/L < 0.00020 Lithium mg/L < 0.0020	Copper	mg/L	0.00056
Lithium mg/L < 0.0020 Manganese mg/L 0.0267 Mercury mg/L < 0.00001	Iron	mg/L	0.130
Manganese mg/L 0.0267 Mercury mg/L < 0.00001 Molybdenum mg/L 0.0017 Nickel mg/L < 0.0010 Selenium mg/L < 0.00010 Silver mg/L < 0.00020 Strontium mg/L < 0.00020 Strontium mg/L < 0.00010 Tin mg/L < 0.0050 Titanium mg/L < 0.0050 Uranium mg/L < 0.0050 Vanadium mg/L < 0.0050 WQ07- Dissolved Metals Aluminum mg/L < 0.0030 Antimony mg/L < 0.00050	Lead	mg/L	< 0.00020
Mercury mg/L < 0.00001 Molybdenum mg/L 0.0017 Nickel mg/L < 0.0010	Lithium	mg/L	< 0.0020
Molybdenum mg/L 0.0017 Nickel mg/L < 0.0010 Selenium mg/L < 0.00010 Silver mg/L < 0.000020 Strontium mg/L 0.0784 Thallium mg/L < 0.00010 Tin mg/L < 0.0050 Titanium mg/L < 0.0050 Uranium mg/L < 0.0050 Vanadium mg/L < 0.0050 WQ07- Dissolved Metals Aluminum mg/L < 0.0030 Antimony mg/L < 0.00050	Manganese	mg/L	0.0267
Nickel mg/L < 0.0010 Selenium mg/L < 0.00010 Silver mg/L < 0.00020 Strontium mg/L 0.0784 Thallium mg/L < 0.00010 Tin mg/L < 0.0050 Titanium mg/L < 0.0050 Uranium mg/L < 0.0050 Vanadium mg/L < 0.0050 WQ07- Dissolved Metals Aluminum mg/L < 0.0030 Antimony mg/L < 0.00050	Mercury	mg/L	< 0.00001
Selenium mg/L < 0.00010 Silver mg/L < 0.000020	Molybdenum	mg/L	0.0017
Silver mg/L < 0.000020 Strontium mg/L 0.0784 Thallium mg/L < 0.000010	Nickel	mg/L	< 0.0010
Strontium mg/L 0.0784 Thallium mg/L < 0.00010	Selenium	mg/L	< 0.00010
Thallium mg/L < 0.000010 Tin mg/L < 0.0050	Silver	mg/L	< 0.000020
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 Metals Aluminum mg/L < 0.0030 Antimony mg/L < 0.00050	Strontium	mg/L	0.0784
Titanium mg/L < 0.0050 Uranium mg/L < 0.00010	Thallium	mg/L	< 0.000010
Uranium mg/L < 0.00010 Vanadium mg/L < 0.0050	Tin	mg/L	< 0.0050
Vanadium mg/L < 0.0050 Zinc mg/L < 0.0050	Titanium	mg/L	< 0.0050
Zinc mg/L < 0.0050 WQ07- Dissolved Metals mg/L < 0.0030 Aluminum mg/L < 0.00050	Uranium	mg/L	< 0.00010
WQ07- Dissolved MetalsAluminummg/L< 0.0030Antimonymg/L< 0.00050	Vanadium	mg/L	< 0.0050
Aluminum mg/L < 0.0030 Antimony mg/L < 0.00050	Zinc	mg/L	< 0.0050
Antimony mg/L < 0.00050	WQ07- Dissolved Metal	s	
	Aluminum	mg/L	< 0.0030
Arsenic mg/L 0.00226	Antimony	mg/L	< 0.00050
	Arsenic	mg/L	0.00226

Barium	mg/L	0.0132
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	17.5
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00065
Iron	mg/L	0.0872
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium	mg/L	2.10
(Dissolved)		
Manganese	mg/L	0.0081
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.24
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	5.44
Strontium	mg/L	0.0884
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		8/6/2023
Parameter	Unit	
WQ02- Conventional Pa	rameters	
рН	pH units	7.62
Turbidity	NTU	0.4
Specific conductivity	umhos/cm	150
Hardness, as CaCO3	mg/L	47.7
Total alkalinity, as CaCO3	mg/L	38
Carbonate, as CaCO3	mg/L	< 1.0
·		
Bicarbonate, as CaCO3	mg/L	38
TDS	mg/L	115
TDS, calculated	mg/L	67

TSS	mg/L	1
Total organic carbon	mg/L	4.3
Dissolved organic	mg/L	4.6
carbon		
WQ03- Major Ions		
Chloride	mg/L	15
Cyanide	mg/L	0.00094
Cyanide (free)	mg/L	0.0028
Cyanide (WAD)	mg/L	0.00096
Silica	mg/L	0.67
Sulfate	mg/L	4.0
WQ04- Nutrients and C	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	0.35
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
Aluminum	mg/L	0.0079
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00989
Barium	mg/L	0.0215
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00114
Iron	mg/L	0.085
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Manganese	mg/L	0.0098
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	0.0835
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	0.0080
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.0101
Barium	mg/L	0.0231
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	17.0
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00120
Iron	mg/L	0.0510
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium	mg/L	2.31
(Dissolved)		
Manganese	mg/L	0.0039
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	4.92
Strontium	mg/L	0.0890
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		8/6/2023
Parameter	Unit	
WQ02- Conventional Parameters		
рН	pH units	7.84
Turbidity	NTU	1.4
Specific conductivity	umhos/cm	380
Hardness, as CaCO3	mg/L	146
Total alkalinity, as	mg/L	73
CaCO3		

Carbonate, as CaCO3	mg/L	< 1.0
Bicarbonate, as CaCO3	mg/L	73
TDS	mg/L	295
TDS, calculated	mg/L	200
TSS	mg/L	2
Total organic carbon	mg/L	13
Dissolved organic	mg/L	12
carbon	8/ -	
WQ03- Major Ions		
Chloride	mg/L	50
Cyanide	mg/L	0.00077
Cyanide (free)	mg/L	0.0028
Cyanide (WAD)	mg/L	0.00098
Silica	mg/L	2.3
Sulfate	mg/L	35
WQ04- Nutrients and Cl	hlorophyll 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	0.71
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
Aluminum	mg/L	0.0037
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00157
Barium	mg/L	0.0425
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00135
Iron	mg/L	0.254
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0070
Manganese	mg/L	0.101
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0022
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Strontium	mg/L	0.358
Thallium	mg/L	< 0.000010

Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00013
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
	_	< 0.0030
WQ07- Dissolved Metal Aluminum	l	0.0051
	mg/L	< 0.0051
Antimony	mg/L	
Arsenic	mg/L	0.00140
Barium	mg/L	0.0406
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	46.3
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00124
Iron	mg/L	0.111
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0067
Magnesium	mg/L	6.13
(Dissolved)		
Manganese	mg/L	0.0677
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0019
Potassium (Dissolved)	mg/L	3.11
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	16.5
Strontium	mg/L	0.346
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00014
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
MEL-1		8/6/2023
Parameter	Unit	
WQ02- Conventional Pa	rameters	
рН	pH units	7.72
Turbidity	NTU	0.5
Specific conductivity	umhos/cm	200
Hardness, as CaCO3	mg/L	71.1

Total alkalinity, as CaCO3	mg/L	48
Carbonate, as CaCO3	mg/L	< 1.0
Bicarbonate, as CaCO3	mg/L	48
TDS	mg/L	140
TDS, calculated	mg/L	96
TSS	mg/L	3
Total organic carbon	mg/L	4.8
Dissolved organic	mg/L	4.7
carbon		
WQ03- Major Ions		
Chloride	mg/L	23
Cyanide	mg/L	< 0.00050
Cyanide (free)	mg/L	0.0026
Cyanide (WAD)	mg/L	0.00070
Silica	mg/L	0.95
Sulfate	mg/L	7.8
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	0.36
Total phosphorus	mg/L	0.036
Orthophosphate (P)	mg/L	0.018
WQ06- Total Metals		
Aluminum	mg/L	0.0050
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00496
Barium	mg/L	0.0185
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00085
Iron	mg/L	0.149
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0077
Manganese	mg/L	0.0329
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	0.176
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	<u> </u>	
Aluminum	mg/L	0.0171
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00432
Barium	mg/L	0.0194
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	24.0
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00088
Iron	mg/L	0.0422
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0094
Magnesium	mg/L	3.18
(Dissolved)		
Manganese	mg/L	0.0049
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.56
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	7.07
Strontium	mg/L	0.179
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		8/6/2023
Parameter Unit		
WQ02- Conventional Parameters		

рН	pH units	7.82
Turbidity	NTU	0.4
Hardness, as CaCO3	mg/L	876
Total alkalinity, as	mg/L	100
CaCO3		
TDS	mg/L	2980
TDS, calculated	mg/L	2800
TSS	mg/L	3
WQ03- Major Ions		
Chloride	mg/L	1200
Cyanide	mg/L	-
Fluoride	mg/L	0.17
Silica	mg/L	2.0
Sulfate	mg/L	500
WQ04- Nutrients and C	hlorophyll a	
Ammonia Nitrogen (as	mg/L	0.53
N)	_	
Nitrate (as N)	mg/L	10.4
Nitrite (as N)	mg/L	0.225
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals	T .	
Aluminum	mg/L	0.0317
Antimony	mg/L	0.0038
Arsenic	mg/L	0.0123
Barium	mg/L	0.0854
Beryllium	mg/L	< 0.00020
Boron	mg/L	0.11
Cadmium	mg/L	0.000092
Chromium	mg/L	< 0.0020
Cobalt	mg/L	0.00306
Copper	mg/L	0.0041
Iron	mg/L	0.026
Lead	mg/L	< 0.00040
Lithium	mg/L	0.0117
Manganese	mg/L	0.0509
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0048
Nickel	mg/L	0.0407
Selenium	mg/L	0.00118
Silver	mg/L	< 0.000040
Strontium	mg/L	1.42
Thallium	mg/L	0.000028
Tin	mg/L	< 0.010
Titanium	mg/L	< 0.010

Uranium	mg/L	0.0131
Vanadium	mg/L	< 0.010
Zinc	mg/L	< 0.010
WQ07- Dissolved Metal	s	
Calcium (Dissolved)	mg/L	237
Magnesium (Dissolved)	mg/L	90.1
Potassium (Dissolved)	mg/L	37.8
Sodium (Dissolved)	mg/L	652

MEL-20		8/6/2023			
Parameter Unit					
WQ02- Conventional Parameters					
рН	pH units	7.58			
Turbidity	NTU	3.0			
Specific conductivity	umhos/cm	7600			
Hardness, as CaCO3	mg/L	1410			
Total alkalinity, as CaCO3	mg/L	120			
TDS	mg/L	4630			
TDS, calculated	mg/L	4700			
TSS	mg/L	8			
WQ03- Major Ions					
Chloride	mg/L	1800			
Cyanide	mg/L	0.00452			
Cyanide (free)	mg/L	0.0044			
Cyanide (WAD)	mg/L	0.0027			
Silica	mg/L	5.6			
Sulfate	mg/L	880			
WQ04- Nutrients and Ch	nlorophyll a				
Ammonia Nitrogen (as N)	mg/L	18			
Nitrate (as N)	mg/L	75.3			
Nitrite (as N)	mg/L	2.90			
Total phosphorus	mg/L	0.024			
Orthophosphate (P)	mg/L	0.028			
WQ06- Total Metals					
Aluminum	mg/L	0.198			
Arsenic	mg/L	0.144			
Barium	mg/L	0.117			
Cadmium	mg/L	0.000424			
Chromium	mg/L	< 0.0050			
Cobalt	mg/L	0.0162			
Copper	mg/L	0.0111			

Iron	mg/L	0.648			
Lead	mg/L	0.0069			
Manganese	mg/L	0.931			
Mercury	mg/L	< 0.00001			
Molybdenum	mg/L	0.0120			
Nickel	mg/L	0.0893			
Selenium	mg/L	0.00802			
Silver	mg/L	< 0.00010			
Thallium	mg/L	0.000055			
Zinc	mg/L	< 0.025			
WQ07- Dissolved Metal	WQ07- Dissolved Metals				
Calcium (Dissolved)	mg/L	382			
Magnesium	mg/L	143			
(Dissolved)					
Potassium (Dissolved)	mg/L	61.8			
Sodium (Dissolved)	mg/L	1020			

MEL-21		8/6/2023
Parameter Unit		-
WQ02- Conventional Pa	rameters	
рН	pH units	8.16
Turbidity	NTU	1.0
Hardness, as CaCO3	mg/L	755
Total alkalinity, as	mg/L	120
CaCO3		
TDS	mg/L	2220
TDS, calculated	mg/L	2000
TSS	mg/L	5
WQ03- Major Ions		
Chloride	mg/L	710
Cyanide	mg/L	0.00193
Fluoride	mg/L	0.19
Silica	mg/L	2.3
Sulfate	mg/L	460
WQ04- Nutrients and Ch	nlorophyll a	
Ammonia Nitrogen (as N)	mg/L	0.26
Nitrate (as N)	mg/L	16.9
Nitrite (as N)	mg/L 0.266	
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	Orthophosphate (P) mg/L	
WQ06- Total Metals		
Aluminum	mg/L	0.0436
Arsenic	mg/L	0.0441

Barium	mg/L	0.0679
Cadmium	mg/L	0.000050
Chromium	mg/L	< 0.0020
Copper	mg/L	0.0048
Iron	mg/L	0.081
Lead	mg/L	0.00078
Lithium	mg/L	0.0256
Manganese	mg/L	0.142
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	0.0124
Nickel	mg/L	0.0310
Selenium	mg/L	0.00106
Silver	mg/L	< 0.000040
Thallium	mg/L	0.000020
Zinc	mg/L	< 0.010
WQ07- Dissolved Metal	S	
Calcium (Dissolved)	mg/L	199
Magnesium	mg/L	69.1
(Dissolved)		
Potassium (Dissolved)	mg/L	29.2
Sodium (Dissolved)	mg/L	365

MEL-22		8/6/2023	
Parameter	Parameter Unit		
WQ02- Conventional Pa	rameters		
рН	pH units	7.58	
Turbidity	NTU	13	
Hardness, as CaCO3	mg/L	2410	
Total alkalinity, as CaCO3	mg/L	89	
TDS	mg/L	6240	
TDS, calculated	mg/L	5400	
TSS mg/L		16	
WQ03- Major Ions			
Chloride	mg/L	2700	
Cyanide	mg/L	0.00156	
Fluoride	mg/L	0.15	
Silica	mg/L	3.1	
Sulfate	Sulfate mg/L		
WQ04- Nutrients and Chlorophyll a			
Ammonia Nitrogen (as N)	mg/L	4.4	
Nitrate (as N)	mg/L	1.85	
Nitrite (as N) mg/L		0.140	

Total phosphorus	mg/L	0.042		
Orthophosphate (P)	mg/L	< 0.010		
WQ06- Total Metals				
Aluminum	mg/L	0.069		
Arsenic	mg/L	0.00849		
Barium	mg/L	0.172		
Cadmium	mg/L	< 0.000050		
Chromium	mg/L	< 0.0050		
Copper	mg/L	0.0046		
Iron	mg/L	2.33		
Lead	mg/L	< 0.0010		
Lithium	mg/L	0.384		
Manganese	mg/L	1.22		
Mercury	mg/L	< 0.00001		
Molybdenum	mg/L	0.0082		
Nickel	mg/L	0.0367		
Selenium	mg/L	< 0.00050		
Silver	mg/L	< 0.00010		
Thallium	mg/L	< 0.000050		
Zinc	mg/L	0.045		
WQ07- Dissolved Metals				
Calcium (Dissolved)	mg/L	715		
Magnesium	mg/L	185		
(Dissolved)				
Potassium (Dissolved)	mg/L	66.8		
Sodium (Dissolved)	mg/L	961		

MEL-23		8/6/2023
Parameter	Unit	-
WQ02- Conventional Pa	rameters	
рН	pH units	7.92
Turbidity	NTU	0.3
Hardness, as CaCO3	mg/L	491
Total alkalinity, as	mg/L	100
CaCO3		
TDS	mg/L	1670
TDS, calculated	mg/L	1600
TSS	mg/L	2
WQ03- Major Ions		
Chloride	mg/L	580
Cyanide	mg/L	0.00062
Fluoride	mg/L	0.21
Silica	mg/L	1.8
Sulfate	mg/L	360

WQ04- Nutrients and Chlorophyll a				
Ammonia Nitrogen (as	mg/L	0.41		
N)				
Nitrate (as N)	mg/L	7.60		
Nitrite (as N)	mg/L	0.117		
Total phosphorus	mg/L	< 0.020		
Orthophosphate (P)	mg/L	< 0.010		
WQ06- Total Metals				
Aluminum	mg/L	0.0197		
Barium	mg/L	0.0416		
Cadmium	mg/L	0.000057		
Chromium	mg/L	< 0.0020		
Copper	mg/L	0.0033		
Iron	mg/L	< 0.020		
Lead	mg/L	< 0.00040		
Lithium	mg/L	0.0125		
Manganese	mg/L	0.0716		
Mercury	mg/L	< 0.00001		
Molybdenum	mg/L	0.0070		
Nickel	mg/L	0.0440		
Selenium	mg/L	0.00086		
Silver	mg/L	< 0.000040		
Thallium	mg/L	0.000022		
Zinc	mg/L	< 0.010		
WQ07- Dissolved Metals				
Calcium (Dissolved)	mg/L	107		
Magnesium	mg/L	58.6		
(Dissolved)				
Potassium (Dissolved)	mg/L	25.7		
Sodium (Dissolved)	mg/L	332		

MEL-SR1				8/12/2023
Parameter	MEL-SR MAX GRAB (WSEEP/RO)	MEL-SR MAX MEAN (WSEEP/RO)	Unit	
WQ02- Conventional Pa	rameters			
рH			pH units	7.81
Turbidity			NTU	0.9
Hardness, as CaCO3			mg/L	509
Total alkalinity, as			mg/L	250
CaCO3				
TDS			mg/L	1310
TDS, calculated			mg/L	1200
TSS	100	50	mg/L	8

WQ03- Major Ions		
Chloride	mg/L	480
Cyanide	mg/L	0.00057
Fluoride	mg/L	0.18
Silica	mg/L	5.3
Sulfate	mg/L	150
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as	mg/L	< 0.050
N)		
Nitrate (as N)	mg/L	0.42
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	1.2
WQ06- Total Metals	<u>.</u>	
Aluminum	mg/L	0.0175
Arsenic	mg/L	0.00311
Barium	mg/L	0.0926
Cadmium	mg/L	0.000038
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00409
Iron	mg/L	0.330
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0227
Manganese	mg/L	0.0490
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0221
Selenium	mg/L	0.00013
Silver	mg/L	< 0.000020
Thallium	mg/L	0.000025
Zinc	mg/L	0.257
WQ07- Dissolved Metals		
Calcium (Dissolved)	mg/L	157
Magnesium	mg/L	40.6
(Dissolved)		
Potassium (Dissolved)	mg/L	17.1
Sodium (Dissolved)	mg/L	196

MEL-SR11			8/12/2023	
	MEL-SR MAX MEL-SR MAX GRAB MEAN			
Parameter	(WSEEP/RO)	(WSEEP/RO)	Unit	

WQ02- Conventional Pa	rameters			
pH			pH units	8.08
Turbidity			NTU	0.2
Hardness, as CaCO3			mg/L	407
Total alkalinity, as			mg/L	160
CaCO3			J.	
TDS			mg/L	1110
TDS, calculated			mg/L	1000
TSS	100	50	mg/L	3
WQ03- Major Ions				
Chloride			mg/L	260
Cyanide			mg/L	-
Fluoride			mg/L	0.38
Silica			mg/L	3.3
Sulfate			mg/L	330
WQ04- Nutrients and Ch	nlorophyll a			
Ammonia Nitrogen (as	. ,		mg/L	< 0.050
N)				
Nitrate (as N)			mg/L	1.80
Nitrite (as N)			mg/L	< 0.010
Total phosphorus			mg/L	< 0.020
Orthophosphate (P)			mg/L	< 0.010
WQ05- General Organic	s			
Total oil and grease			mg/L	0.90
WQ06- Total Metals				
Aluminum			mg/L	0.0126
Arsenic			mg/L	0.00186
Barium			mg/L	0.0393
Cadmium			mg/L	0.000014
Chromium			mg/L	< 0.0010
Copper			mg/L	0.00284
Iron			mg/L	0.034
Lead			mg/L	< 0.00020
Lithium			mg/L	0.0125
Manganese			mg/L	0.0065
Mercury			mg/L	< 0.00001
Molybdenum			mg/L	0.0094
Nickel			mg/L	0.0054
Selenium			mg/L	0.00040
Silver			mg/L	< 0.000020
Thallium			mg/L	0.000024
Zinc			mg/L	< 0.0050
WQ07- Dissolved Metal	s			
Calcium (Dissolved)			mg/L	106

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Magnesium (Dissolved)	mg/L	44.6
Potassium (Dissolved)	mg/L	18.4
Sodium (Dissolved)	mg/L	175