



AGNICO EAGLE

MELIADINE GOLD PROJECT

ENVIRONMENTAL REPORT: JUNE 2017

WATER LICENCE 2BB-MEL1424

**SUBMITTED TO THE
NUNAVUT WATER BOARD**

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A. This monthly report is delivered under water license 2BB-MEL1424, PART J, Item 13.

1. *The Licensee shall maintain Monitoring Stations at the following locations:*

Table 1: Monitoring stations

Monitoring Program Station Number	Description	Status
MEL-1	Raw water supply intake at Meliadine Lake	Active (Volume cubic metres)
MEL-2	Raw water supply intake at Pump, A8 or other Lakes	Active (Volume cubic metres)
MEL-5	Point of discharge for the Bormed Fuel Containment Facilities	Active
MEL-6	Effluent from the Landfarm Treatment Facility prior to release	New
MEL-7	Final Effluent Discharge from the BIODISK treatment system	Active
MEL-8	Point of discharge or runoff from the Non-Hazardous Waste landfill	(New) Active

2. *The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp, drilling and other purposes from all sources.*

Table 2: Water quantities utilized

MEL-1 ¹	Daily average (m ³)
Camp	29.06
Construction	1.00
MEL-2 (A8) ²	
Underground	13.81
Drilling	34.88
Not MEL-1 or MEL-2	
Drilling	15.57
June Daily Average	94.31
Total June	2,829
Total 2017	10,978

¹ MEL-1: 541943E, 6989174N

² MEL-2 (A8): 540076E, 6987731N

3. ***The Licensee shall measure and record the volume of all soil from all locations entering the Landfarm Treatment Facility.***

In June 2017, no contaminated soil was brought to the landfarm.

4. ***The Licensee shall assess and record the concentration of F1 – F4 fractions in petroleum hydrocarbon contaminated soil, according to the CCME Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil that is entering the Land Treatment Unit from all sources and excavations.***

No soil samples were taken in June 2017 from the landfarm.

5. ***The Licensee shall provide the GPS coordinates (in decimal degrees) of all locations where wastes associated with camp operations and exploration activities are deposited.***

Table 3: GPS Coordinates of the landfill and landfarm

	Landfill	Landfarm
Latitude	63.03063	63.02386
Longitude	-92.22089	-92.18639

6. ***Licensee shall sample at Monitoring Program Station MEL-7, monthly during wastewater effluent discharge. Samples shall be analyzed for the parameters listed under Part D Item 11:***

pH

Biochemical Oxygen Demand – BOD5

Total Suspended Solids (TSS)

Fecal Coliforms

Oil and Grease (and visual)

Four (4) samples were collected during the month. A pH exceedance at 5.67 was recorded on June 26th 2017 (the water license limits for pH are 6.0-9.5), caused by a temporarily shortage of the stabilizing chemical agent (soda ash), which was subsequently ordered rush. The next round of testing in the beginning of July showed that pH is within limits.

This was reported as a spill to relevant authorities. Upon the completion, a follow-up report will be issued.

Table 4: Effluent testing results

Station: STP-FINAL		June			
DATE	Limits	6/5/2017	6/12/2017	6/19/2017	6/26/2017
Biochemical Oxygen Demand (BOD5)	80 mg/L	11	17	12	51
pH	6.0 - 9.5	7.05	7.24	7.19	5.67
Total Suspended Solids	100 mg/L	13	4	3	4
Oil & Grease-(IR)	5 mg/L	1.1	1.2	0.6	<0.50
Atypical		>200000	17500	55000	420
Fecal Coliforms (CFU/100mL)	1000	<2	<10	<2	<2
Heterotrophic Plate Count (CFU/100mL)		>30000	36,000	>30000	19,500
Total Coliforms (CFU/100mL)		Not reported	300	1000	60

- 7. The Licensee shall, prior to the release of effluent from the Bermed Fuel Containment Facilities at Monitoring Program Station MEL-5 and the Landfarm Treatment Facility at Monitoring Program Station MEL-6 for the purpose of demonstrating compliance, sample for the parameters listed under Part D item 15.**

In June, no water was released from the Bermed Fuel Containment Facilities (Monitoring station MEL-5) and the Landfarm Treatment Facility (Monitoring Station MEL-6).

- 8. The Licensee shall obtain representative samples of the water column below any ice where required under part F, Items 5 and 6. Monitoring shall include but not limited to the following:**

Total Suspended Solids

pH

Electrical Conductivity, and

Total trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and Trace Arsenic and Mercury.

No on-ice drilling was conducted during the month of June. Sampling will resume next winter.

- 9. Modify the monthly monitoring reports, starting April 2016, to include, at a minimum, waste water treatment options; and modifications of the freshet action plan.**

1. Waste water treatment options:

In June, 3,131 m³ was pumped from the underground mine to the P2 cell. The evaporators started operation in June.

2. Seepage:

The estimated volumes pumped in June are as follows:

- Base of dike DP1-B: 190 m³
- Base of dike DP3-A: 233 m³

Volumes pumped were during freshet and also included snow melt and some surface runoff.