



WHALE TAIL PROJECT

## **Monitoring Program Summary Report**

**January 2020**

Type A Water License 2AM-WTP1826

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## **SECTION 1 • BACKGROUND**

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As required under Part I, Item 23 of Type A Water License 2AM-WTP1826, this report documents the water management and monitoring activities at the mine site for the month. This includes water usage, water and seepage monitoring around site, sewage treatment plan discharge, Whale Tail North Basin dewatering, Quarry 1 discharge and Whale Tail South Basin water transfer.

In addition, a summary of spills/actions for the month is reported.

## SECTION 2 • WATER MANAGEMENT

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### 2.1 WATER USAGE

All water withdrawals related to Exploration activities is currently managed by Part C Item 1 of the Exploration Water License 2BB-MEA1828. All of the information regarding the use under this License 2BB-MEA1828 will be provided via the Annual Report required by Part B Item 6.

Agnico Eagle is authorized as per Part E Item 1 of the Water License 2AM-WTP1826 to intake water from Nemo Lake for a total year to date of 240,000 m<sup>3</sup>/year. A total volume of 3,579 m<sup>3</sup> was withdrawn from Nemo Lake in January. Details are provided in Table 2.1.1 below.

**Table 2.1.1: January 2020 – Freshwater Consumption**

Water Location	Source Lake	Jan	Total
Camp	Nemo	2 062	2 062
Construction/Operation	Nemo	1 518	1 518
Dust Suppression	Nemo / WTHR Pond	0	0
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>3 579</b>	<b>3 579</b>

### 2.2 LAKE WATER MONITORING

Lake around the Whale Tail Project were monitored on a monthly basis during the open water season. In January, no monthly samples were taken at Lake A47 (ST-WT-6), Lake A45 (ST-WT-13), Lake A16 (ST-WT-14) and Lake A15 (ST-WT-15) due to freezing conditions.

### 2.3 WHALE TAIL DIKE SEEPAGE MONITORING

In January, the Whale Tail North dewatering continued and seepage water was still observed at the toe of the structure. Seepage was estimated in average at 350 m<sup>3</sup>/h based on pumping rate.

Work continued on the construction of a downstream grouting blanket (50 % completed) at Whale Tail DiKE in an effort to reduce the seepage reporting to WTN.

Agnico continue to manage water from WTD seepage as part of the dewatering of the Whale Tail North Basin and is be monitored for Water License 2AM-WTP1826 Part D Item 7. Refer to Section 2.5 below for the water quality monitoring results.

Seepage water quality is also monitored as per the requirement of the Water License. The sampling station is named ST-WT-17 and is sampled on a monthly basis for Group 1.

## 2.4 SEWAGE TREATMENT PLANT

The Sewage Treatment Plan located in the permanent camp associated with the Water License 2AM-WTP1826 was commissioned on April 12, 2019. Effluent is discharged in the future Whale Tail Attenuation Pond. As per Water License Schedule I Sampling Station ST-WT-11, effluent is to be sample four time per calendar year. Agnico is currently sampling the STP on a monthly basis and thus sample was taken in January. A total of 2,065 m<sup>3</sup> was discharged during the month.

## 2.5 WHALE TAIL NORTH BASIN DEWATERING

As describe in Section 2.3 above, Agnico has discharged the Whale Tail Dike (WTD) seepage as part of the Whale Tail North Dewatering to Whale Tail South Basin (ST-DD-7). A total volume of 217,066 m<sup>3</sup> was discharged in January.

No dewatering of the Whale Tail North Basin to Mammoth Lake (ST-DD-9), via the temporary diffuser, in January.

As per Water License Part D Item 7, the effluent from Whale Tail North dewatering, either to Whale Tail South or Mammoth Lake shall not exceed the following quality limits:

Parameter	Maximum Monthly Mean	Short Term Maximum
Total Suspended Solids	15.0 mg/L	22.5 mg/L
Turbidity	15 NTU	30 NTU
pH	6.0 to 9.0	6.0 to 9.0
Total Aluminum	1.5 mg/L	3.0 mg/L

The pH and Aluminum concentrations were as follows for ST-DD-7:

- pH 24 hour minimum/maximum: 6.60 / 7.50 (Limit is 6-9 units)
- pH 30 days minimum/maximum: 7.08 / 7.14 (Limit is 6-9 units)
- Al 24 hour maximum concentration: 0.011 mg/L (Limit is 3.0 mg/L)
- Al 30 days maximum concentration: 0.007 mg/L (Limit is 1.5 mg/L)

The turbidity and Total Suspended Solids (TSS) concentrations were as follows:

- NTU 24 hour maximum concentration: 1.89 NTU (Maximum Limit is 30 NTU)
- NTU 30 days mean maximum concentration: 1.04 NTU (Maximum Limit is 15 NTU).
- TSS 24 hour maximum concentration: 7 mg/L (Maximum Limit is 22.5 mg/L)
- TSS 30 days mean maximum concentration: 3.96 mg/L (Maximum Limit is 15 mg/L)

Table 2.5.1 summarizes the dewatering monitoring results for pH, aluminum, turbidity and TSS for the month. No non-compliance was observed in January.

**Table 2.5.1: Whale Tail North Basin Dewatering Monitoring ST-DD-7**

Date	ST-DD-7				License Requirement			
	Turbidity <sup>1</sup>	TSS <sup>2</sup>	pH <sup>1</sup>	Total Al <sup>2</sup>	NTU 30-day Mean	TSS 30-day Mean	pH 30-day Mean	Al 30-day Mean
	NTU	mg/L		mg/L	15	15	6.0 - 9.0	3
01-01-2020	1.66	2	7.13	<0.005	0.96	3.09	7.11	0.002
02-01-2020	1.53	4	7.36	0.01	0.91	2.98	7.13	0.003
03-01-2020	1.89	3	7.07		0.96	2.84	7.12	
04-01-2020	1.28	3	7.11		0.98	2.64	7.11	
05-01-2020	0.66	2	6.98		0.98	2.40	7.11	
06-01-2020	1.34	3	6.92	0.007	0.94	2.33	7.09	0.004
07-01-2020	1.12	4	7.10		0.95	2.29	7.08	
08-01-2020	0.74	6	7.09		0.94	2.33	7.08	
09-01-2020	1.41	7	7.03	0.01	0.96	2.50	7.08	0.005
10-01-2020	0.85	6	7.18		0.96	2.64	7.08	
11-01-2020	0.84	7	7.50		0.96	2.78	7.09	
12-01-2020	0.63	7	7.32		0.96	2.91	7.10	
13-01-2020	0.51	3	7.38		0.95	2.88	7.12	
14-01-2020	0.92	7	7.32		0.96	3.02	7.14	
15-01-2020	0.96	3	7.20		0.98	3.02	7.13	
16-01-2020	1.4	Sample Frozen	7.14	Sample Frozen	1.02	2.88	7.12	
17-01-2020	0.84	2	7.18		1.03	2.84	7.13	
18-01-2020	0.85	6	7.14		1.04	3.02	7.11	
19-01-2020	0.59	4	6.96		1.01	3.09	7.12	
20-01-2020	0.68	7	6.60	0.011	1.00	3.29	7.11	0.007
21-01-2020	0.95	5	6.94		1.00	3.40	7.10	
22-01-2020	0.75	Sample Frozen	6.86		0.99	3.48	7.10	
23-01-2020	0.90	Sample Frozen	7.10	Sample Frozen	0.97	3.59	7.12	
24-01-2020	0.79	4	7.15		0.97	3.72	7.11	
25-01-2020	1.02	3	7.01		0.97	3.81	7.11	
26-01-2020	0.57	5	7.07		0.96	3.96	7.10	
27-01-2020	No discharge							
28-01-2020	No discharge							
29-01-2020	No discharge							
30-01-2020	No discharge							
31-01-2020	No discharge							
1 - Measures taken in the field								
2- Results from the certified laboratory								
Half-detection limit use in the mean calculation								

## **2.6 QUARRY 1 DISCHARGE**

No discharge from Quarry to Mammoth Lake in January.

## **2.7 WHALE TAIL SOUTH WATER TRANSFER**

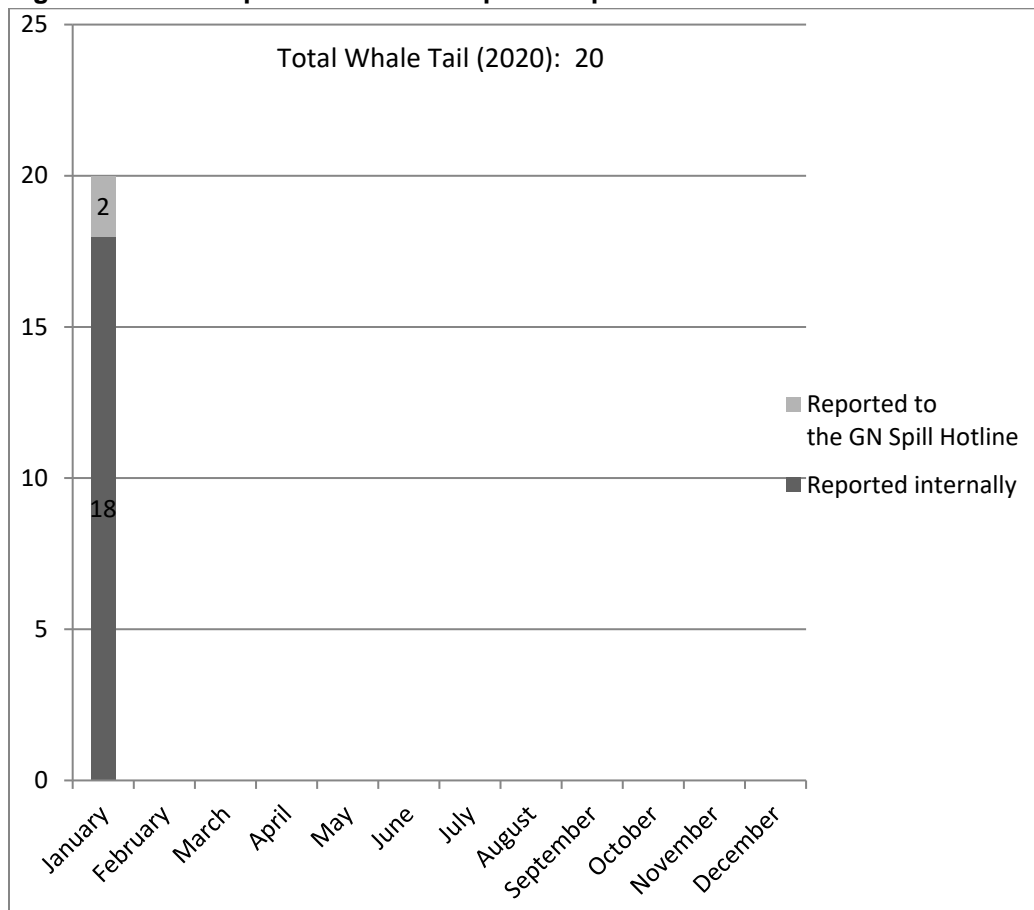
No water transfer between Whale Tail South to Mammoth Lake in January.

### SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2020 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for January.

All spills reported internally (18) were managed appropriately on site according to Agnico's spill contingency plan. Two (2) spills were reported to regulators in January. Spills were contained and cleaned, contaminated material was disposed to the appropriate area, and the clean-up actions were monitored closely by the Environment Department. There was no off site impact to any watercourses.

**Figure 3.1 2020 Reported and Non-Reported Spills**





**Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, January 2020**

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
January 2, 2020	Hydraulic Oil	20	L	Construction Pad H	Hydraulic hose failure on equipment	The operator stopped the equipment right away and called the supervisor. Spill was contained and contaminated soil picked up and disposed of appropriately in the roll-off bin
January 4, 2020	Hydraulic Oil	20	L	Beside wing 8 explo	Hydraulic tank oil cap pop-off and release a splash of oil on the snow	Operator call the team leader right away and stop the loader. Call the loader 6 operator to remove the spill as soon as possible. Contaminated soil picked up and disposed of appropriately
January 6, 2020	Hydraulic Oil	15	L	WRSF	Equipment failure	Called supervisor and shut off the engine. Spill was picked up and brought to the yellow bin
January 6, 2020	Coolant	10	L	WTHR KM 121	Equipment failure	Service truck was sent to fix the leak. Contaminated soil picked up and disposed of appropriately
January 7, 2020	Coolant	45	L	Waste dump parking	Coolant leak on the engine	Shut the truck down and called dispatch to inform the service shop of the breakdown and to fix the haul truck. Contaminated soil picked up and disposed of appropriately at the MBK tailings
January 9, 2020	Hydraulic Oil	10	L	Sana parking	During a cold start of the truck, the wheel seals did not replace, which caused the hydraulic oil present in the hose to flow	Spill was picked up and brought to the yellow bin
January 13, 2020	Hydraulic Oil	20	L	Whale Tail Pit	Quick attach hose loose	Stop Equipment and called mechanic to get it repair. Spill was picked up and brought to the yellow bin

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January 16, 2020	Hydraulic oil	71	L	Whale Tail Pit	Hydraulic hose fan failure	Contaminated soil picked up and disposed of appropriately
January 17, 2020	Coolant	5	L	WTHR KM 123	Fan belt broken and cut coolant line	Absorbent pads used to contain the spill. Contaminated soil picked up and disposed of appropriately
January 20, 2020	Engine Oil	8	L	Q2 5137MSW65	O-ring failure	The mechanic was called to repair the leak. Contaminated soil picked up and disposed of appropriately in the yellow roll-off bin
January 20, 2020	Hydraulic Oil	30	L	Whale Tail Pit	Hydraulic hose failure	Contaminated soil picked up and disposed of appropriately in the yellow roll-off bin
January 20, 2020	Engine oil	150	L	Maintenance shop	A worker was moving totes in and out of a sea-can. The operator was unaware he punctured a tote. During night shift, another worker went to get a tote from the sea-can and discovered the spill.	Contaminated soil picked up and disposed of appropriately in the yellow roll-off bin
January 21, 2020	Waste oil	200	L	Hazmat area	An operator was moving totes at the hazmat area and punctured a waste oil tote with the forks	Contaminated soil picked up and disposed of appropriately in the yellow roll-off bin
January 24, 2020	Hydraulic Oil	32	L	Channel Road	Hydraulic hose fitting failure	Contaminated soil picked up and disposed of appropriately in the yellow roll-off bin
January 25, 2020	Hydraulic Oil	45	L	Whale Tail Pit	The cylinder of the bucket broke down	Contaminated soil picked up and disposed of appropriately in the yellow roll-off bin
January 26, 2020	Compressor Oil	25	L	Whale Tail Pit	Victaulic seal busted	Absorbent pads used to contain the spill. Contaminated soil picked up and disposed of appropriately in the yellow roll-off bin

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January 28, 2020	Coolant	75	L	Amaruq truck shop	45Gallon drum got punctured in the waste container by a forklift fork.	Rags were put down to absorb most of the coolant but some spilled out of the container. Contaminated soil picked up and disposed of appropriately in the yellow roll-off bin (goes to MBK tailings)
January 30, 2020	Hydraulic Oil	40	L	WTHR KM 154	Equipment failure	Contaminated soil picked up and disposed of appropriately at the MBK landfarm
January 31, 2020	Hydraulic Oil	20	L	Whale Tail Pit	Hydraulic hose failure during drilling operations	The drill was stopped and absorbent pads were placed. The equipment was tagged out and the hydraulic hose was changed right away. Most of the spill was contained within the bottom of the rig. Spill was contained and contaminated soil picked up and disposed of appropriately
January 31, 2020	Hydraulic Oil	60	L	Ring road, near WT Pit entrance	Hydraulic hose of the traction engine broke	The contaminated soil was removed during the night shift and brought to yellow bin