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# **Sent by Email**

June 20, 2023

Licensing Nunavut Water Board P.O. Box 119 Gjoa Haven, NU X0B 1J0

# Re: May 2023 – Monthly Monitoring Report for Water License 2BE-HOP2232

This report is comprised of monitoring requirements as set out in Part J, Items 2 through 8, and 10 of water license 2BE-HOP2232. Some monitoring requirements stipulated in this license refer to facilities that have not been constructed, facilities that no longer exist, or facilities where activity is seasonal. Water levels in Windy Lake will be monitored in accordance with Part J, Item 9 during open water season. Sampling locations monitored under this license (seasonally or when facilities are operational) are provided in Figure 1 at the end of this report.

During the period of this report, the focus of activities under the Windy Regional Exploration license was on-land surface exploration drilling, on-ice exploration drilling, water management and environmental compliance.

# Part I Conditions Applying to Abandonment and Restoration

No abandonment or restoration work was conducted during the month.

## Part J Items 2, 3, 4, 5, 6, 10: Sewage Treatment Effluent, Bulk Fuel Containments, and Quarries

Windy Camp has been closed for operations since October 23, 2008 and New Windy Camp has not been constructed. Therefore, the license requirements relating to the Wastewater Treatment Facility (HOP-2 and HOP-3) are not applicable at this time. HOP-5 (Bulk Fuel Storage – Windy Camp) and HOP-6 (Bulk Fuel Storage Facility – Patch Lake) were dismantled in 2012. HOP-8 (Bulk Fuel Storage Facility at New Windy Camp) has not been constructed.

Water quality sampling and management was not required at HOP-7A, B or D (quarries A, B and D) as no discharge of water occurred from these areas this month.

## Part J Item 7: Under-Ice Drilling Samples

Under-ice water quality sampling was conducted this month as on-ice surface exploration drilling was continued in the license area. Results of water quality monitoring are provided in Appendix B attached to this report. No under-ice samples were able to be taken after May 22, 2023 due to safety issues regarding ice thickness.

#### Part J Item 8: Water Use Volumes

Geographical locations for all water sources and usage are maintained on file. All usage from water sources during the month were metered at the source. Daily water usage for the month is presented in Table 1.

Table 1: Daily water usage in cubic meters, May 2023.

Date	Regional Drill Water
	Usage (m3)
1-May	21.71
2-May	15.16
3-May	18.93
4-May	20.62
5-May	24.04
6-May	22.67
7-May	14.35
8-May	15.14
9-May	7.71
10-May	11.96
11-May	11.38
12-May	9.23
13-May	20.25
14-May	7.16
15-May	17.16
16-May	10.00
17-May	10.43
18-May	9.69
19-May	32.16
20-May	12.06
21-May	9.73
22-May	9.24
23-May	15.07
24-May	16.47
25-May	15.66
26-May	16.35
27-May	21.95
28-May	19.28
29-May	46.48
30-May	34.67
31-May	35.65
Monthly Total	552.36
Annual Total	2703.34

Water quality monitoring results and volumes extracted from the Windy Lake freshwater intake (HOP-1) for domestic, industrial, dust suppression and winter tracks are presented in the monthly monitoring report for license 2AM-DOH1335, Schedule I for Station ST-7A.

#### Incident Reporting

Two incidents pertaining to this licence occurred this month.

**NU Spill #2023-176 -** On May 01, 2023, at 7:00 am, a spill of less than 1L of glycol occurred at an exploration drill rig on Patch Lake. (Coordinates: 68o2'33"N, 106o32'40"W).

During regular operations, a leak from a pick-up truck used by the drill crew to get to and from the rig location was noted to be leaking glycol from the power steering system.

Following an investigation, it was concluded that the root cause of the spill was inadequate work standards and wear and tear accumulated on the vehicle.

## Mitigation measures

Following the initial observation, the truck was removed from the ice and locked out awaiting maintenance. A spill tray was placed underneath to avoid any further environmental impacts. No fluid entered the water body as it was contained on the surface of the ice. The surface was scraped and the contaminated ice was disposed of by the waste management department. As per the cleanup procedure for the drill pads, once the drill was moved, the pad was scraped and the resulting ice was disposed of.

In order to reduce the risk of reoccurrence, a modification in the drill crew work standard was communicated to the workers. Vehicle pre-operation inspections are now carried out at every change in shift rather than once per day.

**NU Spill #2023-178 -** On May 01, 2023, at 12:30 pm, a spill of approximately 100L of recirculation water occurred at an exploration drill rig on Patch Lake. (Coordinates: 68o3'10"N, 106o34'24"W).

The incident involves recirculation water. The recirculation water keeps the drill bit cool while the drill is in operation. When exiting the hole, the water carries the cuttings out of the drill hole which are then settled out in a sedimentation tank. As per company policy, no salt brine is used for on-ice drilling. During final shutdown of the rig, the pump box containing a submersible pump overflowed. This was due to the hole producing fresh water and the power being switched off for the demobilization. The water overflowed to the secondary containment which was pierced and leaked to the ice. No recirculation water entered the water body as it was contained on the surface of the ice.

Following an investigation, it was concluded that the root causes of the spill were two-fold. The primary cause was the failure of the secondary containment liner which was pierced during ice removal operations. The second root cause was operator error as the operators had not evaluated the hazards associated to a deviation from planned work and the liner inspection was not detailed enough.

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Should there be any questions regarding this monthly report, please contact me at <a href="mailto:guillaume.dumont@agnicoeagle.com">guillaume.dumont@agnicoeagle.com</a>.

Yours sincerely,

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Figure 1. 2BE-HOP2232 SNP Monitoring Locations

