

March 24, 2010

Technical Advisor – Mining  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0

**Re: February 2010 – Monthly Monitoring Report for Water License 2BE-HOP0712 under Part J –  
Items 2 – 8.**

---

Following is the monthly report for February 2010 as required under Water license 2BE-HOP0712. Note that Windy Camp closed for operation in 2008. Drilling water consumption will be reported under Part J: Item 6 of this report.

**1. PART J: ITEM 2**

During the month of February 2010, no water quality sampling was done at SNP stations HOP-2 and HOP-3 located at Windy Lake. The Windy Camp was closed for operation as of October 23, 2008.

**2. PART J: ITEM 3**

No sampling was conducted for Non-acute Toxicity at HOP-3 during the month of February as the WWTF facility was not operational and there is no effluent available for sampling at the point of entry into Windy Lake.

**3. PART J: ITEM 4**

No samples were taken from monitoring station HOP-5 and HOP-6 in February as any water accumulation is frozen.

**4. PART J: ITEM 5**

Water quality samples under Part F: Item 7 - Drilling through Lake Ice were collected in February before drilling commenced on Patch Lake. Results from the sampling are provided in Table 1.

Table 1. Pre-drilling water quality data – Doris Lake, February 2010.

Sample ID #		PL-HOP#1	PL-HOP#2	PL-HOP#3
ALS Lab #		L861990-1	L861990-2	L861990-3
Sample Date		2/14/2010 5:00:00 PM	2/14/2010 5:00:00 PM	2/14/2010 5:00:00 PM
Sample Location		Patch Lake	Patch Lake	Patch Lake
TSS	mg/L	6.0	<3.0	<3.0
Alkalinity, Total (as CaCO <sub>3</sub> )	mg/L	50.6	52.5	57.2
Bicarbonate (HCO <sub>3</sub> )	mg/L	61.8	64.1	69.7
Carbonate (CO <sub>3</sub> )	mg/L	<5.0	<5.0	<5.0
Chloride (Cl)	mg/L	108	116	123
Conductivity (EC)	uS/cm	472	502	542
Fluoride (F)	mg/L	0.056	0.061	0.062
Hardness (as CaCO <sub>3</sub> )	mg/L	85.3	92.9	103
Hydroxide (OH)	mg/L	<5.0	<5.0	<5.0
Ion Balance	%	95.3	96	99.8
Nitrate and Nitrite as N	mg/L	<0.071	<0.071	<0.071
Nitrate (as N)	mg/L	<0.050	<0.050	<0.050
Nitrite (as N)	mg/L	<0.050	<0.050	<0.050
Total Kjeldahl Nitrogen	mg/L	0.65	0.65	0.89
Nitrogen, Total	mg/L	0.65	0.65	0.89
pH	pH	7.52	7.53	7.53
Phosphorus, Total	mg/L	<0.020	<0.020	<0.020
TDS (Calculated)	mg/L	222	237	256
Sulfate (SO <sub>4</sub> )	mg/L	3.51	3.86	4.01
Total Organic Carbon	mg/L	6.9	7.5	7.2
Aluminum (Al)-Total	mg/L	0.051	0.063	0.047
Antimony (Sb)-Total	mg/L	<0.00040	<0.00040	<0.00040
Arsenic (As)-Total	mg/L	<0.0020 *	<0.0020 *	<0.0020 *
Barium (Ba)-Total	mg/L	0.0053	0.0083	0.0069
Beryllium (Be)-Total	mg/L	<0.0010	<0.0010	<0.0010
Boron (B)-Total	mg/L	<0.050	<0.050	<0.050
Cadmium (Cd)-Total	mg/L	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	16.1	18.1	19.2
Chromium (Cr)-Total	mg/L	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	<0.0020	<0.0020	<0.0020
Copper (Cu)-Total	mg/L	0.0016	0.002	0.0023
Iron (Fe)-Total	mg/L	0.015	0.025	0.019
Lead (Pb)-Total	mg/L	0.00011	0.00014	0.00022
Lithium (Li)-Total	mg/L	<0.010	<0.010	<0.010
Magnesium (Mg)-Total	mg/L	11.1	12.7	13.4
Manganese (Mn)-Total	mg/L	0.0023	0.0039	0.0026
Mercury (Hg)-Total	mg/L	<0.00010	<0.00010	<0.00010
Molybdenum (Mo)-Total	mg/L	<0.0050	<0.0050	<0.0050
Nickel (Ni)-Total	mg/L	<0.0020	<0.0020	<0.0020
Potassium (K)-Total	mg/L	3.76	4.19	4.54
Selenium (Se)-Total	mg/L	<0.0020 *	<0.0020 *	<0.0020 *
Silver (Ag)-Total	mg/L	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L	50.7	55.8	59.2
Thallium (Tl)-Total	mg/L	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	<0.050	<0.050	<0.050
Titanium (Ti)-Total	mg/L	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	mg/L	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	mg/L	0.0018	0.0019	0.002
Zinc (Zn)-Total	mg/L	<0.0040	0.0045	<0.0040
Calcium (Ca)-Dissolved	mg/L	16	17.4	19.3
Magnesium (Mg)-Diss.	mg/L	11	12	13.3
Potassium (K)-Dissolved	mg/L	3.59	3.84	4.41
Sodium (Na)-Dissolved	mg/L	49.3	52.3	57.9

## 5. PART J: ITEM 6

Water for domestic use was not utilized from Windy Lake during February as the camp at Windy Lake is closed. Drilling was conducted pertaining to regional exploration licence 2BE-HOP0712 and drill water usage numbers and water sources are detailed in Table 2. All water usage for drilling purposes was in compliance with the licence consumption limits.

Table 2. Domestic and Drill Water Usage in cubic meters (m<sup>3</sup>), February 2010

Parameters	ORB 21	ORB 22	ORB23	ORB24	GEO 2	GEO 3	Total Usage m <sup>3</sup>	2BE-HOP0712
Water Source	Doris Lake	Doris Lake	Doris Lake	Doris Lake	Doris Lake/Patch Lake	Doris Lake/Patch Lake	All Water Sources	Compliance Values
Geographical Coordinates	On file	On file	On file	On file	On file	On file		Part J: Item 9
Drilling days	28	19	20	23	25	26		Part J: Item 6
Monthly Cumulative	312	163	118	153	76	210	1032	2,480 m <sup>3</sup> monthly
Volume Average (Daily)	11.14	8.57	5.92	7.29	3.04	6.78	42.74	80* m <sup>3</sup> daily
Maximum	22.09	15.1	14.9	15.1	7.6	24.7	-	80 m <sup>3</sup> daily
Minimum	1.5	3.2	1.67	2	0.5	0.6	-	80 m <sup>3</sup> daily

\*For drilling purposes only

\*\* Estimated (meter malfunction)

## 6. PART J: ITEM 7

No treated effluent was discharged from the WWTF at monitoring station HOP-2 due to the closure of Windy Lake Camp, and no volumes were measurable at HOP-3. The Land farm no longer exists at HOP-4, and no volumes were pumped at HOP-5 Windy Camp Bulk Fuel Storage or HOP-6 Patch Lake Bulk Fuel Storage during the month as these facilities are frozen. As reported in the September monthly SNP report, effluent in the Instant berms was transferred to containment tanks and drums for removal and further treatment as soon as the ice road is available to access this location.

## 7. PART J: ITEM 8

No sludge was removed from the WWTF during the month of February as the facility is not operational.

## INCIDENT REPORTING

There were 3 incidents reported pertaining to the licence during the period:

- February, 2010, there will several incidents regarding “blow back” water from drilling operations on Doris Lake. These incidents, including the quantity and quality of water discharged from the drill holes, are described in more detail in a separate report submitted to INAC on March 8, 2010.
- Feb 2/10 – Level 1 (Insignificant) Geotech driller was in the process of moving a cuttings bin from Geotech 2 on Doris Lake (Hole # 10 TDD-698) . The forks on the forklift slid together and caused the bin to overturn on the ice spilling entire contents of drill cuttings.
- Feb 3/10 – Level 1 (Insignificant) Orbit 23 were reaming down casing which caused the cuttings to push up onto the ice, resulting in a spill of cuttings (Hole # 10 TDD-696) on Doris Lake. Cuttings were removed from the ice using a loader and brought to the cutting disposal area.

Should there be any questions regarding the monthly report for February 2010, please contact Chris Hanks, Director, Environment and Social Responsibility, Hope Bay Mining Limited on phone number: 720-917-4489 or email: [Chris.Hanks@Newmont.com](mailto:Chris.Hanks@Newmont.com)

Yours sincerely,

**Chris Hanks**

Director, Environment and Social Responsibility  
Hope Bay Mining Limited