



July 29, 2014

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

Re: June 2014 – Monthly Monitoring Report for Water Licence 2BE-HOP1222

This report is comprised of monitoring requirements as set out in Part J, Items 2 through 8, and 10 of water licence 2BE-HOP1222. Some monitoring requirements stipulated in this Part 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.

The project is currently operating in a care and maintenance status with water management, drill exploration, and environmental compliance being the focus of current activities.

Part I Conditions Applying to Abandonment and Restoration

No reclamation work was completed at Windy Camp this 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; therefore the licence requirements relating to the WWTF (HOP-2 and HOP-3) are not applicable. HOP-5 (Bulk Fuel Storage – Windy Camp) and HOP-6 (Bulk Fuel Storage Facility – Patch Lake) were dismantled in 2012. HOP-8 has not been constructed. Water quality sampling and management was not required at HOP-7A, B or D (quarries A, B and D) as these facilities are presently frozen.

Part J Item 7: Under-Ice Drilling Samples

Post-drilling water quality samples were collected from Patch, Doris and Wolverine Lakes on completion of the winter lake drilling program. Results are provided in Table 2 at the end of this report.

Part J Item 8: Water Use Volumes

This month, water was extracted from Windy Lake for domestic use at Doris Camp. Water for exploration drilling was extracted from Patch, Doris, Windy and Wolverine Lakes for drilling purposes. Geographical locations for all water sources and usage is maintained on file. All usage from water sources was metered or measured by truck haul load for drills adjacent to the road network. Water usage for drilling was also augmented with water from compliant berm effluent authorized for dust suppression use, reducing the amount of fresh lake water consumed. This recycled water is not reflected in the table below, but tracking of these amounts is retained on file. Daily water usage for the month is presented in Table 1.

Table 1: Daily water usage in cubic meters, June 2014.

Date	Dust Suppression	Drill Water Usage Metered (m³)	Drill Usage Trucked (m³)	Drill Usage Total (m³)	Domestic Consumption at Doris (m³)
Jun-01	0	21.7	0	22	0
Jun-02	0	7.4	0	7	24

Date	Dust Suppression	Drill Water Usage Metered (m³)	Drill Usage Trucked (m³)	Drill Usage Total (m³)	Domestic Consumption at Doris (m³)
Jun-03	0	4.2	12	16	0
Jun-04	0	7.2	0	7	24
Jun-05	0	3.8	12	16	0
Jun-06	0	2.5	0	3	12
Jun-07	0	10.6	14	25	24
Jun-08	0	13.1	2	15	0
Jun-09	0	16.9	1	18	26
Jun-10	0	1.7	2	3	0
Jun-11	0	0.1	0	0	24
Jun-12	0	0	13	13	0
Jun-13	0	0	0	0	24
Jun-14	0	0	10	10	0
Jun-15	0	8.7	7	15	24
Jun-16	0	1.7	4	6	0
Jun-17	0	0.5	5	5	0
Jun-18	0	2	11	13	31
Jun-19	0	5	0	5	0
Jun-20	0	0	0	0	0
Jun-21	0	3.6	0	4	36
Jun-22	0	0	0	0	0
Jun-23	0	15.9	5	21	0
Jun-24	0	9.1	0	9	24
Jun-25	0	2.7	0	3	29.5
Jun-26	0	8	0	8	20
Jun-27	0	7.2	15	22	36
Jun-28	0	8	0	8	0
Jun-29	0	5	2	7	0
Jun-30	0	5.6	0	6	36

No water was used during the month for dust suppression under licence 2BE-HOP1222.

Water quality monitoring results from licence 2AM-DOH1323, Schedule J for Station ST-7a, freshwater pumped from the Windy Lake freshwater intake, are presented in the monthly monitoring report for 2AM-DOH1323.

Incident Reporting

No incidents pertaining to this licence occurred this month.

Should there be any questions regarding this monthly report, please contact Katsky Venter or John Roberts at Katsky.Venter@tmacresources.com or John.Roberts@tmacresources.com

Yours sincerely,

Katsky Venter

Site Environmental Manager

Hope Bay Project

cc. Eva Paul, Water Resources Officer, AANDC

Table 2: Post Drilling Under Ice Water Quality Sampling on Patch, Wolverine and Doris Lakes, June 2014.

	Sample ID	PLS-05JUN14	PLN-05JUN14	WLV-08JUN14	DLN-12JUN14	DLS-12JUN14
	ALS ID	L1467046-1	L1467046-2	L1468539-1	L1470648-1	L1470648-2
Sample Date/Time		6/5/2014	6/5/2014 4:00:00	6/8/2014	6/12/2014	6/12/2014
		3:31:00 PM	PM	10:20:00 AM	9:45:00 AM	10:25:00 AM
Parameter	Units			Results		
Hardness (as CaCO3)	mg/L	11.9	36.1	20.9	26.5	27.8
pН	рН	7.03	7.51	7.64	7.36	7.28
Total Suspended Solids	mg/L	3.8	3.4	6.6	<3.0	<3.0
Alkalinity, Total (as CaCO3)	mg/L	8.3	23.9	65.5	12.7	14.8
Ammonia, Total (as N)	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Bromide (Br)	mg/L	< 0.050	0.151	0.38	0.075	0.112
Chloride (Cl)	mg/L	11.1	49.9	161	22	32.1
Fluoride (F)	mg/L	0.023	0.049	0.16	0.032	0.038
Nitrate (as N)	mg/L	< 0.0050	< 0.0050	<0.025 *	< 0.0050	< 0.0050
Nitrite (as N)	mg/L	< 0.0010	< 0.0010	<0.0050 *	< 0.0010	< 0.0010
Sulfate (SO4)	mg/L	0.56	1.77	<2.5 *	1.2	1.5
Cyanide, Total	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Aluminum (Al)-Total	mg/L	0.0402	0.0241	0.0107	0.0105	0.0119
Antimony (Sb)-Total	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic (As)-Total	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Barium (Ba)-Total	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Beryllium (Be)-Total	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Boron (B)-Total	mg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Cadmium (Cd)-Total	mg/L	< 0.000010	0.000018	< 0.000010	< 0.000010	< 0.000010
Calcium (Ca)-Total	mg/L	1.96	6.69	3.5	5.42	5.23
Chromium (Cr)-Total	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cobalt (Co)-Total	mg/L	< 0.00030	< 0.00030	< 0.00030	< 0.00030	< 0.00030
Copper (Cu)-Total	mg/L	< 0.0010	0.001	< 0.0010	< 0.0010	< 0.0010
Iron (Fe)-Total	mg/L	0.075	0.037	0.043	< 0.030	< 0.030
Lead (Pb)-Total	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Lithium (Li)-Total	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Magnesium (Mg)-Total	mg/L	1.7	4.71	2.96	3.15	3.58
Manganese (Mn)-Total	mg/L	0.0129	0.00555	0.038	0.00956	0.00885
Molybdenum (Mo)-Total	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel (Ni)-Total	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Potassium (K)-Total	mg/L	2.8	<2.0	2	<2.0	<2.0
Selenium (Se)-Total	mg/L	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver (Ag)-Total	mg/L	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Sodium (Na)-Total	mg/L	5.5	22.6	15.6	15.8	17.8
Thallium (Tl)-Total	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Tin (Sn)-Total	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Titanium (Ti)-Total	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Uranium (U)-Total	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Vanadium (V)-Total	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Zinc (Zn)-Total	mg/L	0.0062	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Oil and Grease	mg/L	<5.0	<5.0	< 5.0	<5.0	<5.0
Oil And Grease (Visible		No	No	No	No	No
Sheen)		140	110	110	140	110