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June 30, 2015

Phyllis Beaulieu,
Manager of Licensing
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P.O. Box 119
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Re: May 2015 – 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. Sampling locations monitored under this licence (seasonally or when facilities are operational) are provided in Figure 1.

During the period of this report the focus of current activities under the Windy Regional Exploration licence was water management, drill exploration, 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; 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 (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 water accumulated in these areas this month.

Part J Item 7: Under-Ice Drilling Samples

The 2015 winter ice drilling program concluded on May 18, 2015. Post-drilling water quality samples were collected from Patch Lake on May 21. Results are presented in Table 1 below.

Table 1. Post-Drilling Under-Ice Water Quality Results (Patch Lake)

Sample ID			PL-21MAY15A	PL-21MAY15B	PL-21MAY15C	PL-21MAY15D	PL-21MAY15E
ALS ID			L1615575-1	L1615575-2	L1615575-3	L1615575-4	L1615575-5
Date Sampled			5/21/2015 4:20:00 PM	5/21/2015 4:35:00 PM	5/21/2015 4:05:00 PM	5/21/2015 4:50:00 PM	5/21/2015 5:10:00 PM
Parameter	Units	Detection Limit	Water	Water	Water	Water	Water
Conductivity	µS/cm	2	558	331	572	469	571
Hardness (as CaCO ₃)	mg/L	0.5	102	60.5	105	88.2	106
pH	pH	0.1	7.97	7.82	7.97	7.9	8.01
Total Suspended Solids	mg/L	3	<3.0	<3.0	<3.0	<3.0	<3.0
Aluminum (Al)-Total	mg/L	0.005	0.0283	0.0645	0.0256	0.0649	0.0369
Antimony (Sb)-Total	mg/L	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic (As)-Total	mg/L	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Barium (Ba)-Total	mg/L	0.02	<0.020	<0.020	<0.020	<0.020	<0.020
Beryllium (Be)-Total	mg/L	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron (B)-Total	mg/L	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.00001	<0.0000050	<0.0000050	<0.0000050	0.0000072	<0.0000050
Calcium (Ca)-Total	mg/L	0.1	18.3	10.8	18.8	15.8	18.9
Chromium (Cr)-Total	mg/L	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L	0.0003	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Copper (Cu)-Total	mg/L	0.001	0.0016	0.001	0.0017	0.0015	0.0016
Iron (Fe)-Total	mg/L	0.03	0.082	0.095	0.095	0.154	0.074
Lead (Pb)-Total	mg/L	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.005	0.0069	0.0049	0.0081	0.0069	0.0082
Magnesium (Mg)-Total	mg/L	0.1	13.7	8.12	14.1	11.9	14.4
Manganese (Mn)-Total	mg/L	0.0003	0.00414	0.00441	0.00493	0.00793	0.00456
Mercury (Hg)-Total	mg/L	0.00001	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel (Ni)-Total	mg/L	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Potassium (K)-Total	mg/L	2	4.8	3.1	5	4.3	5.1
Selenium (Se)-Total	mg/L	0.0001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Silver (Ag)-Total	mg/L	0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium (Na)-Total	mg/L	2	62.2	39	65.1	55.3	65.7
Thallium (Tl)-Total	mg/L	0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Tin (Sn)-Total	mg/L	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Titanium (Ti)-Total	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium (U)-Total	mg/L	0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Vanadium (V)-Total	mg/L	0.001	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	0.005	<0.0050	<0.0050	0.008	<0.0050	<0.0050

Part J Item 8: Water Use Volumes

This month, water was extracted from Windy Lake for domestic use at Doris Camp. Water was also extracted from Patch Lake to support the winter ice drilling program, and from Doris and Windy Lakes as proximal to surface (land) drill targets. No water was used for dust suppression purposes this month. Geographical locations for all water sources and usage is maintained on file. All usage from water sources during the month were metered at the source or measured by truck haul load. Daily water usage for the month is presented in Table 2.

Table 2: Daily water usage in cubic meters, May 2015.

Date	Regional Drill Water Usage Metered (m ³)	Domestic Water Consumption at Doris (m ³)	Total Daily Usage (m ³)
May-01	9.2	0	9.2
May-02	14.6	0	14.6
May-03	5.6	28	33.6
May-04	6.7	0	6.7
May-05	1.3	0	1.3
May-06	21.4	14	35.4
May-07	1.5	0	1.5
May-08	5.6	14	19.6
May-09	21.5	0	21.5
May-10	17.9	28	45.9
May-11	6.6	0	6.6
May-12	15	28	43
May-13	18.7	0	18.7
May-14	16.2	0	16.2
May-15	15.6	40	55.6
May-16	18.1	0	18.1
May-17	14.6	0	14.6
May-18	11.7	28	39.7
May-19	0	14	14
May-20	8.5	0	8.5
May-21	4	27	31
May-22	16	0	16
May-23	5.4	14	19.4
May-24	0	0	0
May-25	20	0	20
May-26	1.5	28	29.5
May-27	6.7	21	27.7
May-28	13	28	41
May-29	14	0	14
May-30	7	0	7
May-31	0	0	0

32 m³ of water was used this month for ice road construction.

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.

Environmental Incident Reporting

No incidents pertaining to this licence occurred this month.

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

Yours sincerely,



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cc. Eva Paul, Water Resources Officer, AANDC

Figure 1. 2BE-HOP1222 SNP Monitoring Locations

