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July 29, 2013

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Manager of Licensing
Nunavut Water Board
P.O. Box 119
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Re: June 2013 – Monthly Monitoring Report for Water Licence 2BB-BOS1217

Boston Camp was shut down in November 2011 and has not been reopened since that time.

1. Part D Items 9 and 19 (also Part J Items 8 and 11): Containment Pond, Bulk Fuel Containment, and Landfarm

Samples were taken at BOS-5 (Tank Farm) on June 2, 2013 (pre-treatment) and June 12, 2013 (post treatment) to determine whether the water was compliant with discharge criteria in advance of discharge. Water quality results are presented in Table 1. No discharge occurred from this containment area in June. With regards to BOS-6 (landfarm), no water was present to sample or discharge.

Table 1: BOS-5 (Tank Farm) Water Quality Results, June 2013

Sample ID		BOS5-02JUN13 Pre-Treatment	BOS5-12JUN13 Post-Treatment	Maximum Allowable Grab Sample Concentration (mg/L)
ALS ID		L1311314-9	L1317160-4	
Sample Date/Time		6/2/2013 17:00	6/12/2013 17:45	
Parameter	Units	Results		
Hardness (as CaCO ₃)	mg/L	753	696	
Alkalinity, Total (as CaCO ₃)	mg/L	65.5	57.2	
Bicarbonate (HCO ₃)	mg/L	80	69.8	
Carbonate (CO ₃)	mg/L	<5.0	<5.0	
Chloride (Cl)	mg/L	15.8	17.4	
Conductivity (EC)	uS/cm	1290	1210	
Hardness (as CaCO ₃)	mg/L	734	673	
Hydroxide (OH)	mg/L	<5.0	<5.0	
Ion Balance	%	106	105	
Nitrate and Nitrite (as N)	mg/L	<0.071	<0.071	
Nitrate (as N)	mg/L	<0.050	<0.050	
Nitrite (as N)	mg/L	<0.050	<0.050	
pH	pH	7.7	8	
TDS (Calculated)	mg/L	950	875	
Sulfate (SO ₄)	mg/L	618	570	
Aluminum (Al)-Total	mg/L	0.0295	0.0318	
Antimony (Sb)-Total	mg/L	0.0101	0.0095	
Arsenic (As)-Total	mg/L	0.358	0.217	
Barium (Ba)-Total	mg/L	0.0129	0.0366	
Beryllium (Be)-Total	mg/L	<0.0010	<0.0010	
Boron (B)-Total	mg/L	0.282	<0.050	
Cadmium (Cd)-Total	mg/L	0.000078	0.000024	

Sample ID		BOSS-02JUN13 Pre-Treatment	BOSS-12JUN13 Post-Treatment	Maximum Allowable Grab Sample Concentration (mg/L)
ALS ID		L1311314-9	L1317160-4	
Sample Date/Time		6/2/2013 17:00	6/12/2013 17:45	
Parameter	Units	Results		
Calcium (Ca)-Total	mg/L	200	183	
Chromium (Cr)-Total	mg/L	<0.0010	<0.0010	
Cobalt (Co)-Total	mg/L	0.0549	0.0085	
Copper (Cu)-Total	mg/L	0.0194	0.001	
Iron (Fe)-Total	mg/L	0.272	0.443	
Lead (Pb)-Total	mg/L	0.025	0.0288	1
Lithium (Li)-Total	mg/L	0.014	0.012	
Magnesium (Mg)-Total	mg/L	61.6	57.9	
Manganese (Mn)-Total	mg/L	0.0575	0.0077	
Mercury (Hg)-Total	mg/L	<0.000020	<0.000020	
Molybdenum (Mo)-Total	mg/L	<0.0050	<0.0050	
Nickel (Ni)-Total	mg/L	0.232	0.0556	
Potassium (K)-Total	mg/L	10.9	9.57	
Selenium (Se)-Total	mg/L	0.00075	0.00051	
Silver (Ag)-Total	mg/L	0.000047	<0.000020	
Sodium (Na)-Total	mg/L	11.7	10.9	
Thallium (Tl)-Total	mg/L	<0.00010	<0.00010	
Tin (Sn)-Total	mg/L	<0.050	<0.050	
Titanium (Ti)-Total	mg/L	<0.0010	<0.0010	
Uranium (U)-Total	mg/L	0.00013	0.00426	
Vanadium (V)-Total	mg/L	<0.0010	0.0032	
Zinc (Zn)-Total	mg/L	0.0166	0.0162	
Calcium (Ca)-Dissolved	mg/L	190	175	
Magnesium (Mg)-Dissolved	mg/L	63.1	57.3	
Potassium (K)-Dissolved	mg/L	11.6	9.9	
Sodium (Na)-Dissolved	mg/L	12.6	11.4	
Oil and Grease	mg/L	<1.0	<1.0	15.0
Oil And Grease (Visible Sheen)		No visible sheen	No visible sheen	No visible sheen
Phenols (4AAP)	mg/L	0.0095	0.0025	
Benzene	mg/L	<0.00050	<0.00050	370
Ethylbenzene	mg/L	<0.00050	<0.00050	90
Toluene	mg/L	<0.00050	<0.00050	2
o-Xylene	mg/L	<0.00050	<0.00050	
m+p-Xylene	mg/L	<0.00050	<0.00050	
Xylenes	mg/L	<0.00071	<0.00071	
F1(C6-C10)	mg/L	<0.10	<0.10	
F1-BTEX	mg/L	<0.10	<0.10	
F2 (>C10-C16)	mg/L	<0.25	<0.25	
F3 (C16-C34)	mg/L	<0.25	<0.25	
F4 (C34-C50)	mg/L	<0.25	<0.25	
2-Bromobenzotrifluoride	%	104.4	98.6	
Acenaphthene	mg/L	<0.000020	<0.000020	
Acridine	mg/L	<0.000020	<0.000020	
Anthracene	mg/L	<0.000010	<0.000010	
Benzo(a)anthracene	mg/L	<0.000010	<0.000010	
Benzo(a)pyrene	mg/L	<0.0000050	<0.0000050	
Benzo(b&j)fluoranthene	mg/L	<0.000010	<0.000010	
Benzo(g,h,i)perylene	mg/L	<0.000020	<0.000020	
Benzo(k)fluoranthene	mg/L	<0.000010	<0.000010	
Chrysene	mg/L	<0.000020	<0.000020	
Dibenzo(a,h)anthracene	mg/L	<0.0000050	<0.0000050	
Fluoranthene	mg/L	<0.000020	<0.000020	
Fluorene	mg/L	<0.000020	<0.000020	
Indeno(1,2,3-cd)pyrene	mg/L	<0.000010	<0.000010	
Naphthalene	mg/L	<0.000050	<0.000050	

Sample ID	BOS5-02JUN13 Pre-Treatment	BOS5-12JUN13 Post-Treatment	Maximum Allowable Grab Sample Concentration (mg/L)
ALS ID	L1311314-9	L1317160-4	
Sample Date/Time	6/2/2013 17:00	6/12/2013 17:45	
Parameter	Units	Results	
Phenanthrene	mg/L	<0.000050	
Pyrene	mg/L	<0.000020	
Quinoline	mg/L	<0.000020	
2-Fluorobiphenyl	%	73.3	79.5
Nitrobenzene d5	%	69.5	75.3
p-Terphenyl d14	%	93.5	104.6
B(A)P Total Potency Equivalent	mg/L	<0.000010	

Water at BOS-2P (Portal) and BOS-2C (Containment Pond) was sampled on June 12, 2013 to determine whether the water was compliant with discharge criteria in advance of discharge. Water quality results are presented in Table 2 for BOS-2C and in Table 3 for BOS-2P. No discharge occurred in June from these containment areas.

Table 2: BOS-2C (Containment Pond) Water Quality Results, June 2013

Sample ID	BOS2C-12JUN13A Pre-Treatment	BOS2C-12JUN13B Post-Treatment	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
ALS ID	L1317160-2	L1317160-3		
Sample Date/Time	6/12/2013 12:40	6/12/2013 12:50		
Parameter	Units	Results		
Hardness (as CaCO ₃)	mg/L	243	218	
Total Suspended Solids	mg/L	8	-	25
Alkalinity, Total (as CaCO ₃)	mg/L	57.5	63.8	
Bicarbonate (HCO ₃)	mg/L	70.2	77.9	
Carbonate (CO ₃)	mg/L	<5.0	<5.0	
Chloride (Cl)	mg/L	27.1	27.8	
Conductivity (EC)	uS/cm	476	492	
Hardness (as CaCO ₃)	mg/L	217	219	
Hydroxide (OH)	mg/L	<5.0	<5.0	
Ion Balance	%	101	100	
Nitrate and Nitrite (as N)	mg/L	<0.071	<0.071	
Nitrate (as N)	mg/L	<0.050	<0.050	
Nitrite (as N)	mg/L	<0.050	<0.050	
pH	pH	7.88	8.01	6.0-9.5
TDS (Calculated)	mg/L	283	288	
Sulfate (SO ₄)	mg/L	134	133	
Aluminum (Al)-Total	mg/L	0.238	0.023	
Antimony (Sb)-Total	mg/L	0.00248	0.00221	
Arsenic (As)-Total	mg/L	0.046	0.0168	0.5
Barium (Ba)-Total	mg/L	0.0175	0.0334	
Beryllium (Be)-Total	mg/L	<0.0010	<0.0010	
Boron (B)-Total	mg/L	0.073	<0.050	
Cadmium (Cd)-Total	mg/L	0.00001	<0.000010	
Calcium (Ca)-Total	mg/L	68	58.7	
Chromium (Cr)-Total	mg/L	0.0025	<0.0010	
Cobalt (Co)-Total	mg/L	0.0064	<0.0020	
Copper (Cu)-Total	mg/L	0.0088	<0.0010	0.30
Iron (Fe)-Total	mg/L	0.838	0.117	
Lead (Pb)-Total	mg/L	0.00055	0.00015	0.20
Lithium (Li)-Total	mg/L	0.011	<0.010	
Magnesium (Mg)-Total	mg/L	17.7	17.4	
Manganese (Mn)-Total	mg/L	0.032	0.0081	
Mercury (Hg)-Total	mg/L	<0.000020	<0.000020	
Molybdenum (Mo)-Total	mg/L	<0.0050	<0.0050	
Nickel (Ni)-Total	mg/L	0.0308	0.01	0.50

Sample ID		BOS2C-12JUN13A Pre-Treatment	BOS2C-12JUN13B Post-Treatment	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
ALS ID		L1317160-2	L1317160-3		
Sample Date/Time		6/12/2013 12:40	6/12/2013 12:50		
Parameter	Units	Results			
Potassium (K)-Total	mg/L	4.76	4.69		
Selenium (Se)-Total	mg/L	<0.00040	<0.00040		
Silver (Ag)-Total	mg/L	0.000038	<0.000020		
Sodium (Na)-Total	mg/L	7.1	7.2		
Thallium (Tl)-Total	mg/L	<0.00010	<0.00010		
Tin (Sn)-Total	mg/L	<0.050	<0.050		
Titanium (Ti)-Total	mg/L	0.0026	<0.0010		
Uranium (U)-Total	mg/L	0.00038	0.00154		
Vanadium (V)-Total	mg/L	0.0017	0.0016		
Zinc (Zn)-Total	mg/L	0.0066	0.0052	0.50	1.00
Calcium (Ca)-Dissolved	mg/L	57.9	59.2		
Magnesium (Mg)-Dissolved	mg/L	17.5	17.3		
Potassium (K)-Dissolved	mg/L	4.74	5.1		
Sodium (Na)-Dissolved	mg/L	7.3	7.8		
Oil and Grease	mg/L	<1.0	<1.0		
Oil And Grease (Visible Sheen)		No visible sheen	No visible sheen		
Phenols (4AAP)	mg/L	<0.0010	<0.0010		
Benzene	mg/L	<0.00050	<0.00050		
Ethylbenzene	mg/L	<0.00050	<0.00050		
Toluene	mg/L	0.00168	<0.00050		
o-Xylene	mg/L	<0.00050	<0.00050		
m+p-Xylene	mg/L	0.00055	<0.00050		
Xylenes	mg/L	<0.00071	<0.00071		
F1 (C6-C10)	mg/L	<0.10	<0.10		
F1-BTEX	mg/L	<0.10	<0.10		
F2 (>C10-C16)	mg/L	<0.25	<0.25		
F3 (C16-C34)	mg/L	<0.25	<0.25		
F4 (C34-C50)	mg/L	<0.25	<0.25		
2-Bromobenzotrifluoride	%	98.2	99		
Acenaphthene	mg/L	<0.000020	<0.000020		
Acridine	mg/L	<0.000020	<0.000020		
Anthracene	mg/L	<0.000010	<0.000010		
Benzo(a)anthracene	mg/L	<0.000010	<0.000010		
Benzo(a)pyrene	mg/L	<0.0000050	<0.0000050		
Benzo(b&j)fluoranthene	mg/L	<0.000010	<0.000010		
Benzo(g,h,i)perylene	mg/L	<0.000020	<0.000020		
Benzo(k)fluoranthene	mg/L	<0.000010	<0.000010		
Chrysene	mg/L	<0.000020	<0.000020		
Dibenzo(a,h)anthracene	mg/L	<0.0000050	<0.0000050		
Fluoranthene	mg/L	<0.000020	<0.000020		
Fluorene	mg/L	<0.000020	<0.000020		
Indeno(1,2,3-cd)pyrene	mg/L	<0.000010	<0.000010		
Naphthalene	mg/L	<0.000050	<0.000050		
Phenanthrene	mg/L	<0.000050	<0.000050		
Pyrene	mg/L	<0.000020	<0.000020		
Quinoline	mg/L	<0.000020	<0.000020		
2-Fluorobiphenyl	%	88	66.7		
Nitrobenzene d5	%	85.6	66.6		
p-Terphenyl d14	%	109.8	92.2		
B(A)P Total Potency Equivalent	mg/L	<0.000010	<0.000010		

Table 3: BOS-2P (Portal) Water Quality Results, June 2013

Sample ID		BOS2P-12JUN13	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
ALS ID		L1317160-1		
Sample Date/Time		6/12/2013 10:00		
Parameter	Units	Results		
Conductivity (EC)	uS/cm	94.3		
Hardness (as CaCO ₃)	mg/L	38.2		
pH	pH	7.32		6.0-9.0
Total Suspended Solids	mg/L	<3.0	25	50
Aluminum (Al)-Total	mg/L	0.112		
Antimony (Sb)-Total	mg/L	0.00105		
Arsenic (As)-Total	mg/L	0.0371	0.5	1.00
Barium (Ba)-Total	mg/L	<0.0030		
Beryllium (Be)-Total	mg/L	<0.0010		
Boron (B)-Total	mg/L	<0.050		
Cadmium (Cd)-Total	mg/L	<0.000010		
Calcium (Ca)-Total	mg/L	12.4		
Chromium (Cr)-Total	mg/L	0.0014		
Cobalt (Co)-Total	mg/L	0.0061		
Copper (Cu)-Total	mg/L	0.0022	0.30	0.60
Iron (Fe)-Total	mg/L	0.513		
Lead (Pb)-Total	mg/L	0.00147	0.20	0.40
Lithium (Li)-Total	mg/L	<0.010		
Magnesium (Mg)-Total	mg/L	3.44		
Manganese (Mn)-Total	mg/L	0.0157		
Mercury (Hg)-Total	mg/L	<0.000020		
Molybdenum (Mo)-Total	mg/L	<0.0050		
Nickel (Ni)-Total	mg/L	0.0154	0.50	1.00
Potassium (K)-Total	mg/L	0.64		
Selenium (Se)-Total	mg/L	<0.00040		
Silver (Ag)-Total	mg/L	<0.000020		
Sodium (Na)-Total	mg/L	2.5		
Thallium (Tl)-Total	mg/L	<0.00010		
Tin (Sn)-Total	mg/L	<0.050		
Titanium (Ti)-Total	mg/L	0.0017		
Uranium (U)-Total	mg/L	<0.00010		
Vanadium (V)-Total	mg/L	<0.0010		
Zinc (Zn)-Total	mg/L	0.0103	0.50	1.00
Calcium (Ca)-Dissolved	mg/L	10.5		
Magnesium (Mg)-Dissolved	mg/L	2.88		
Oil and Grease	mg/L	<1.0		
Oil And Grease (Visible Sheen)		No visible sheen		No visible sheen

2. Part J Item 2: Water Use Volumes

No water was used as the camp was not operational.

3. Part J Item 3: Mine Water Discharge Volumes

Mine water was not pumped from underground during this period.

4. Part J Items 4 and 5: Sewage Treatment Effluent and Sewage Sludge

Effluent was not discharged at BOS-3 and no sludge was removed from the sewage disposal facility.

5. Part J Items 6 and 7: Water Source Coordinates

GPS coordinates of locations of water sources and waste associated with camp and drilling activities are kept on file. At this time, there are no water sources being used and no wastes being produced.

6. Part J Item 9 and 10: Sewage Treatment Plant Effluent

No samples were taken from monitoring station BOS-3 or BOS-4 as the sewage disposal facility was not operational.

7. Part J Item 11 and 12: Seepage monitoring

Seepage at Boston (BOS-8) was monitored when enough water was available to sample. Water quality results are presented in Table 4.

Table 4: BOS-8 (Seeps) Water Quality Results, June 2013

Sample ID		BOS8-21JUN13
ALS ID		L1322373-7
Sample Date/Time		6/21/2013 10:42
Parameter	Units	Results
Conductivity (EC)	uS/cm	1320
Hardness (as CaCO ₃)	mg/L	687
pH	pH	8.28
Total Suspended Solids	mg/L	15
Ammonia, Total (as N)	mg/L	<0.050
Sulfate (SO ₄)	mg/L	387
Aluminum (Al)-Total	mg/L	0.292
Antimony (Sb)-Total	mg/L	0.00322
Arsenic (As)-Total	mg/L	0.359
Barium (Ba)-Total	mg/L	0.0355
Beryllium (Be)-Total	mg/L	<0.0010
Boron (B)-Total	mg/L	0.118
Cadmium (Cd)-Total	mg/L	0.000052
Calcium (Ca)-Total	mg/L	157
Chromium (Cr)-Total	mg/L	0.0041
Cobalt (Co)-Total	mg/L	0.114
Copper (Cu)-Total	mg/L	0.0085
Iron (Fe)-Total	mg/L	7.04
Lead (Pb)-Total	mg/L	0.00137
Lithium (Li)-Total	mg/L	<0.010
Magnesium (Mg)-Total	mg/L	57.6
Manganese (Mn)-Total	mg/L	0.695
Mercury (Hg)-Total	mg/L	<0.000020
Molybdenum (Mo)-Total	mg/L	<0.0050
Nickel (Ni)-Total	mg/L	0.239
Potassium (K)-Total	mg/L	10.4
Selenium (Se)-Total	mg/L	0.00062
Silver (Ag)-Total	mg/L	0.000066
Sodium (Na)-Total	mg/L	40.5
Thallium (Tl)-Total	mg/L	<0.00010
Tin (Sn)-Total	mg/L	<0.050
Titanium (Ti)-Total	mg/L	0.0036
Uranium (U)-Total	mg/L	0.00058
Vanadium (V)-Total	mg/L	0.0021
Zinc (Zn)-Total	mg/L	0.0079
Calcium (Ca)-Dissolved	mg/L	178
Magnesium (Mg)-Dissolved	mg/L	58.7

8. Part J Item 14: Under-Ice Drilling Sampling

Under-ice water quality samples were not collected because no drilling took place this month.

Incident Reporting

No incidents pertaining to this licence occurred during this month.

Should there be any questions regarding this monthly report, please contact Katsky Venter or Léa-Marie Bowes-Lyon, ESR Site Managers for TMAC Resources Inc. at (867) 998-0569 or Katsky.Venter@Newmont.com or Lea-Marie.Bowes-Lyon@Newmont.com.

Yours sincerely,

Léa-Marie Bowes-Lyon

Environmental and Social Responsibility Site Manager