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By clerk at 11:34 am, Apr 11, 2011

NWB Annual Report **Year being reported:** 2010

License No: 2BE-HOP0712 **Issued Date:** May 20, 2007
Expiry Date: June 30, 2012

Project Name: Hope Bay Regional Exploration Project

Licensee: Hope Bay Mining Ltd.

Mailing Address: 300-889 Harbourside Dr.
North Vancouver, BC
V7P 3S1

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):
This licence was re-assigned in 2008 from Miramar Hope Bay Ltd. to Hope Bay Mining Ltd.

General Background Information on the Project (*optional):
Licence 2BE-HOP0712 allows HBML to carry out activities in support of exploration drilling at the Hope Bay Regional Exploration Project and the Windy Camp, which supports exploration activities.

Licence Requirements: the licensee must provide the following information in accordance with
Part B Item 2

A. A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management [see Part B Item 2(i)]

Water Source(s): Domestic from Windy Lake; drill water from local water sources

Water Quantity:

20 cu.m/day	Quantity Allowable Domestic (cu.m)
0 cu.m/day	Actual Quantity Used Domestic (cu.m)
80 cu.m/day	Quantity Allowable Drilling (cu.m)
32.3 cu.m/day	Total Quantity Used Drilling (cu.m)

Waste Management and/or Disposal

- ☐ Solid Waste Disposal
- ☐ Sewage
- ☑ Drill Waste
- ☐ Greywater
- ☐ Hazardous
- ☑ Other: Fuel Farm Berm Effluent

Additional Details:

When Windy Camp is operating, water for domestic use is obtained from Windy Lake via a 2 inch diameter submerged pipe with a DFO compliant fish screen. This intake pipe is linked to a pumphouse located approximately 30 metres from shore.

Water used for drilling is taken from the closest lake using a similar system to the domestic system. In the case of regional drilling, water is taken from the closest lake to the drill site in accordance with the June 2007 "Hope Bay Exploration Drilling Water Sources" authorized water sources map. Further to this, Amendment No. 3 to the 2BE-HOP0712 Licence issued July 20, 2010 permits water extraction for drilling from additional water bodies in accordance with the specific condictions of the amendment.

Water was not used at Windy Camp for domestic purposes in 2010 as the camp was closed,

When the facilities are open at Windy Camp, waste produced on site is generally treated according to Part D of the license, with specifics as follows:

-Food waste, wood waste, paper waste and untreated wood products is burned in the incinerator as per Part D Item 3.

-Solid waste that cannot be burned is taken offsite for disposal.

-Drill cuttings produced under this license are being stored at Doris by Quarry 2 and near Windy camp in Trench #1. These cuttings are planned to be used as part of the reclamation program for historical drill holes from the previous drilling contractor.

-Hazardous materials such as waste oil, glycol, and contaminated soil are being shipped offsite for disposal at an approved facility as per Part D Item 5.

-Berm effluent is sampled for water quality against the dicharge criteria of the licence. Effluent that meets the standards for discharge is released in accordance with the licence following a notification to the Inspector; effluent that does not meet the licence criteria is treated onsite until it is remediated to acceptable levels for discharge, or it is removed offsite for treatment/disposal.

- The Windy Camp sewage treatment plant was removed and re-installed at the Boston Camp in June 2010 as part of an upgrade to that facility.

- Eight of the former Windy Camp cabins were removed in April - May 2010 and re-used at Doris North as temporary offices and accomodations.

- Construction of the Windy all-weather road commenced in January 2010, working south from Doris North.

B. A list of unauthorized discharges and a summary of follow-up actions taken. [see Part B Item 2(iii)]

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: Jan. 20, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Cuttings settling tanks at drills #21 (Hole 10TDD691) and #23 (Hole 10TDD693) on Doris Lake overflowed out of the tank shed and onto ice. No cuttings escaped down water intake hole into lake. Cuttings were scraped off the ice by machine and removed to the appropriate cuttings deposition area on land. Work is ongoing to improve the operations of the new settling tank systems.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: Jan. 21, 2010
Date of Notification to an Inspector: Jan. 25, 2010
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Multiple occurrences of "spontaneous water flow" observed at several drill rigs on Doris Lake commencing Jan. 21, 2010. Ongoing water quality sampling and tracking of occurrences led to modelling of previously unmapped underground fault structure.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: Jan. 22, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Spill of antifreeze at drill rig #3 (Hole 10TDD692) from zoom-boom equipment. Approximately 2-3 litres spilled onto ice on Doris Lake. Machine removed from service and taken to shop. Fluid scraped up from ice and contained in a marked barrel for treatment/disposal.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: Feb. 2, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Drill contractor was in the process of moving a cutting bin from rig #2 on Doris Lake (Hole 10TDD698). The forks on the forklift slid together and caused the bin to overturn on the ice spilling entire contents of drill cuttings.The spilled cuttings were immediately scooped up and placed back in the bin.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: Feb. 3, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Drill rig #23 was reaming down casing which caused the cuttings to push up onto the ice, resulting in a spill of cuttings on Doris Lake (Hole 10TDD696). Cuttings were removed from the ice using a loader and brought to the cutting disposal area.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: Feb. 10, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Spill of hydraulic oil at drill rig #24 as a result of a broken hydraulic line. Approximately 20 liters spilled into the containment tray but none contacted the environment. Hose replaced and repositioned to prevent premature failure. Oil cleaned up from tray.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: March 10, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 8 L of hydraulic fluid spilled from hose on drill head inside the shack at drill rig #23 at Hole 10TDD701A. There was no release to environment. Spill cleaned up with sorbent pads.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: March 20, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 5 L of hydraulic oil was spilled as a result of a broken brake line on a Challenger while working on Doris Lake. Contaminated snow cleaned-up and contained for treatment and disposal.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: March 29, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Hydraulic hose developed a leak on a 730 haul truck on the Doris-Windy all-weather road. Approximately 10 litres of hydraulic fluid leaked on the road. Spill was cleaned up with absorbent pads, and material scraped up and removed.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: March 31, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Minor cuttings spill (~1 cu.m) by drill contractor at cuttings disposal area on Windy Upper laydown. Operator was hauling cutting tub over uneven surface and some spilled out when tub tipped. Cuttings were shovelled up and put into disposal area.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: April 19, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

A pin hole in a fuel line (diesel) of a drill at the culvert crossing # 2 of Doris-Windy all-weather road leaked less than 1L on to the crushed rock. Fuel line replaced. Contaminated rock was removed.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: April 27, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

A worn hydraulic hose on a D-250 Haul truck (#218) resulted in a spill of approximately 40 litres of hydraulic oil on the Doris-Windy all-weather road south of culvert crossing # 2. Sorbent pads were used to soak up the spill immediately below the truck when parked and the grader scraped the surface of the snow-covered road and a loader scopped it up and placed it into a truck, where it was hauled back to the 5 million liter tank farm containment berm pending disposal.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: April 28, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

A drill working in Quarry B had a blown hydraulic hose failure as a result of a blown crimp fitting, resulting in approximately 45 litres spilling onto the gravel beneath the drill. Sorbent pads were used to soak up the oil from the drill and the contaminated gravel was shoveled into a 45 gallon drum and brought to waste management.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: April 29, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Deposition of sediment immediately downstream of culvert crossing #1 on the Doris-Windy all-weather road as a result of grouting the culvert pilings. Area affected estimated at 20m2. Silt control fencing was erected. Workers manually chipped out sedimented ice. Clean crush/stabilizing coconut matting was placed along the disturbed sections between the pilings and the rockfill embankments on each side.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: May 25, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

A mega bag of cuttings being lifted off the ground at drill #23 (Hole 10TDD717) released approximately 0.5 cu.m of cuttings on to the ground within 2 ft. of the drill. Cuttings were cleaned up and removed.

Spill No.: 10-192 (as reported to the Spill Hot-line)
Date of Spill: May 29, 2010
Date of Notification to an Inspector: May 30, 2010
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

During night shift at drill rig #22 (Hole 10TDD719), approximately 30 g (135 L) of hydraulic fluid spilled in the drill and out onto the ground from a loose hose. Sorbent pads were used to soak up as much oil as possible in and under the drill. Follow up inspection was conducted by site environmental personnel once the drill was moved and the area confirmed to have been cleaned adequately. No trace of product was noted.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: July 11, 2010
Date of Notification to an Inspector: N/A

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 50 L of hydraulic fluid spilled from a broken hydraulic hose on the drill head at drill rig #22 (Hole 10PST241). The spill was cleaned up with sorbents and driller's mechanics inspected all rigs to preventatively identify further potential issues.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: Aug. 28, 2010
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 16 litres of fuel leaked from a punctured 22 litre jerry can adjacent the Orbit-Garant pump shack near the Doris pumphouse. The contaminated soil was shovelled up and sent to waste management for proper disposal. The punctured jerry can was removed from service.

C. Revisions to the Spill Contingency Plan [see Part B Item 2(v)]

SCP submitted and approved - no revision required or proposed

Additional Details:

The NWB approved the revised Spill Contingency Plan in October 2010. No updates have been made since approval was received.

D. Revisions to the Abandonment and Restoration Plan [see Part I Item 3]

Other: (see additional details)

Additional Details:

A revised Closure Plan for this licence was not submitted in 2010 but one was submitted in early 2011. The revised plan is currently in the review process with the NWB.

E. Progressive Reclamation Work Undertaken [See Part B Item 2(vi)]

Additional Details (i.e., work completed and future works proposed)

During 2010, a comprehensive work program was commenced in the main core storage areas, adjacent to Windy Camp. Core was secured, re-strapped, and mounted on pallets for removal with machinery once winter ground conditions permitted access to the area. At the end of 2010, all core within 30 m of the Windy lakeshore was ready for removal and relocation.

The Patch Lake bulk fuel storage diesel tanks were removed from the containment berm at HOP-6 and transferred to Doris North for temporary storage pending their untilization in other areas of the operation. During 2010, all bulk fuel storage tanks on the Hope Bay belt underwent integrity inspections by a professionally qualified company. These inspection reports are maintained at site with the HBML Facilities Department.

A clean-up of loose rock/disturbed tundra along the edges of the newly

constructed section of the all-weather road between Doris Camp and Windy Camp was undertaken, and the temporary vehicle turnouts utilized during the construction period removed.

Reclamation work on-going under the regional licence includes the clean-up of winter land-based and ice drilling sites. Upon completion of a winter ice drilling hole the drill crew cleans the site and removes all drill equipment. Drill cuttings are contained throughout the drilling process, dewatered and taken to a designated site on land. Due to safety concerns, the contractor may need to wait until the drill site refreezes for the final clean up. Following clean up by the drill crew, an inspection is made by the environmental department (ESR) or the Newmont Drill Services Manager. If further clean up is required, an inspection report stating the corrective actions is generated and follow up is performed by the drill contractor. Follow up inspections are then conducted by ESR or the Newmont Services Manager.

Summer land-based drill site reclamation efforts involve complete clean-up of each drill site with back-filling of drill holes with cuttings and then permanently capping casings, and tundra stabilization using coconut fibre matting and peat moss. Every land-based drill hole on the belt in 2010 was inspected at the end of season by ESR and any outstanding clean-up was performed.

F. Results of the Monitoring Program Part J, items 1-8] including:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;

Details described below

Additional Details:

Drilling water source coordinates are maintined on file in the HBML Geology Department for all water sources utilized proximal to the drill targets.

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited [Part J, Item 10];

Details described below

Additional Details:

Monitoring Stations HOP-2 and HOP-3 had no discharge because Windy Camp was closed in 2008 and these facilities were not operational. Discharges did not occur at the monitoring station HOP-4 because the land farm at the location was dismantled in 2008.

Water quality at HOP-5 was sampled and discharge occurred in 2010 in compliance with the licence. Details of the discharge location for HOP-5 are in the summary report attached. No discharges occurred at HOP-6.

Results of any additional sampling and/or analysis that was requested by an Inspector

No additional sampling requested by an Inspector or the Board

Additional Details: (date of request, analysis of results, data attached, etc)

N/A

G. Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported [See Part B Item 2(vix)]

No additional sampling requested by an Inspector or the Board

Additional Details: (Attached or provided below)

N/A

H. Any responses or follow-up actions on inspection/compliance reports [see Part B Item 7(xi)

No inspection and/or compliance report issued by INAC

Additional Details: (Dates of Report, Follow-up by the Licensee)

Details are set out at Item 2 of the attached supplement.

I. Any additional comments or information for the Board to consider

Please see attached supplement for additional information requirements set out in Licence No. 2BE-HOP0712.

Date Submitted:	May 31, 2011	
Submitted/Prepared by:	Chris Hanks	
Contact Information:	**Tel:**	(720) 917-4489
	Fax:	(604) 980-0731
	email:	chris.hanks@newmont.com

GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	° Deg	' Min	" Sec	° Deg	' Min	" Sec
HOP-1 - Raw water supply intake at Windy Lake	68	3	38	106	37	6

GPS Locations of areas of waste disposal

Location Description (type)	Latitude			Longitude		
	° Deg	' Min	" Sec	° Deg	' Min	" Sec
HOP-2 - WWTF effluent discharge at the surge tank prior to being pumped over the ridge east of the Windy Camp facilities	68	3	50.4	106	37	3.4
HOP-3 - WWTF effluent at a point of entry into Windy Lake	68	3	58.5	106	37	16.2

2010 2BE-HOP0712 Type B Water License Annual Report Supplemental Document

Windy Camp

Nunavut Water Board

Prepared by
Hope Bay Mining Ltd.
North Vancouver, BC

Prepared for
Nunavut Water Board
Gjoa Haven, NU

March 2011

Executive Summary
2BE-HOP0712 Annual Report

Hope Bay Mining Ltd. ("HBML") has filed its Annual Report on its activities during 2010 under Water Licence No. 2BE-HOP0712 issued by the Nunavut Water Board on May 27, 2007. Note in 2008 this licence was transferred from the previous owner, Miramar Hope Bay Mining Ltd., to HBML. As set out in Part B of the Licence, the report includes information with respect to the following topics:

- a summary of water use and waste disposal activities
- a summary of all information requested and results of the Monitoring Program
- a list of unauthorized discharges and a summary of follow-up actions taken
- a brief description of follow-up actions taken to address concerns detailed in inspection and compliance reports prepared by the Inspector
- up to date contact information with respect to the Spill Contingency Plan
- A description of all progressive and/or final reclamation work undertaken
- A summary of modification and/or major maintenance work carried out on the water supply and waste disposal facilities
- A brief description of future studies currently planned or proposed

Aolapkaeyin Naetomik Okaohen
2BE-HOP0712 Ukeogoagaagan Unipkaak

Hope Bay Mining Ltd.-kon (“HBML”) tonihihimaliktun Ukeotoagaagan Unipkamiknik havaamigun 2010-mi ukeommi ilagani Imaknik Atogeagani Laeseoyum Napaa 2BE-HOP0712 toniyaohimayok Nunavumi Imalikiyin katimayenin May 27-mi 2007-mi. Kaoyimalogo 2008-mi una laeseoyok nuhimayok hivoagun nanminikaktugaloamin, Miramar-konin Kapihiliktumi Oyagaktakvik-kunin ukunuga HBML-kunin. Okakhimayumi Naonaepkun B-mi, Ilikuktok 1 Laeseoyumi, unipkak ilakaktok hivunikhiyotikhanik ukununa:

- naetomik okaoheoyonik imaknik atoknigagun ikagolikiyotilo
- naetomik okaoheoyonik tamaeta hivunikhiyotikhan tukhiktaohimayun kanogilinigilo Amigiyotinun Havaani
- titigakhimayonik agiktaohimagitun kuvigaeyun naetomilo okaoheoyunik upiyotinik kigoagun
- naetomik okaoheoyonik upiyotinik ihoakhiyaagani ihomalutaoyun titigakhimayun ilitokhaeyutinin maligoateakmagaalunen makpigaagini ihoakhakhimayaeni Ilitokhaeyim
- nutaanik okakatikhanik hivunikhiyumanikan Kuveyokakan Havaagiyakhaenun Upalogaeyaonmik
- okateaklogin tamaeta hivumuginaktun kigolelo nunan utiktitpaleayagani ilitkuhenun havaagiyaovaleayun
- naetomik okaoheoyonik notaguktitiyutinik ihoakhaotiniklunen imiktakvikon havaoheoyun ikagukvelo pikotaoyunik
- naetomik okaoheoyonik hivunikhami ilitokhaotikhanik taya ihoakhaktaoliktun atoktaoyumayolunen

ᓄᐃᓐᓯᕐᓚᕋᑦ ᑐᓴᖅᓴᓕᐅᔨᕐᓚᕋᑦ
2BE-HOP0712 ᐅᑭᐅᒧᑦ ᐊᑐᕆᐅᕋᑦ ᑐᓴᖅᓴᓕᐅᔨᕐᓚᕋᑦ

Hope Bay Mining Ltd. ᐅᓴᖅᓯᐅᔨᕆᑦ ᐅᑭᐅᒧᑦ ᐊᑐᖅᑕᖅᓂᖅ ᐅᓂᒃᓕᐅᔨᑐᑦ ᑐᓴᖅᓴᓕᐅᔨᑐᑦ ᐱᓕᓚᐊᓚᓴᒥᖅᓂᖅᓂᑦ ᐅᑭᐅᒧᑦ 2010 ᐃᒪᖅᒧᑦ ᓕᐃᓴᖅᑕᑦ ᓄᓴᐅᑦ 2BE-HOP0712 ᐊᖏᑕᐅᓕᐅᔨᑐᖅ ᓄᓇᕐᒥ ᐃᒪᓕᓚᓵᔨᑦ ᑲᑎᒪᔨᖏᖅᓂᑦ ᒪᐃ 27, 2007. ᑐᑭᓯᐊᓕᒃ 2008-ᒧᑦ ᓕᐃᓴ ᑭᖅᓄ ᓄᑎᖅᑕᐅᓕᐅᔨᑐᖅ ᓯᕗᖅᓕᐅᔭᓂᑦ ᑕᐃᔪᓚᖅᑎᑦ ᓄᑉᒥᖅᑕᐅᓕᐅᔨᑐᑦ, ᓕᓂᑭᖅᒪᒪᑭᑭ Hope Bay Mining_ᔪᖅᓂᑦ, HBML_ᔪᖅᓄᑦ. ᐊᖏᑕᐅᓯᒪᔪᖅ ᒪᓕᒃᓗᒍ Part B, ᓄᓴᐅᑎᖅᑐᖅ 1 ᓕᐃᓴᒥ, ᑐᓴᖅᓴᓕᐅᔨᕐᓚᔪᖅ ᐅᓂᒃᓕᐅᔨᕐᓚᔪᖅ ᑐᖅᓯᖅᓴᖅ ᑕᔪᓄᖅᓴ ᐊᑕᓂ ᑎᑎᖅᔨᕐᓚᔪᓄᑦ:

- ᓄᐃᓵᖅᓯᕐᓚᓪᓕᐅᒃ ᐅᓂᒃᖅᔨᕐᓚᔪᑦ ᐃᒪᐅᑦ ᐊᑐᖅᑕᐅᓂᖅᓄᓂᑦ ᐊᓴᒪᓗ ᐊᒃᑕᔪᖅᓯᖅᑕᖅᓂᔨᒧᑦ
- ᓄᐃᓵᖅᓯᕐᓚᑦᓗᓕᐅᒃ ᐅᓂᒃᖅᔨᕐᓚᔪᑦ ᑕᒪᖏᑦ ᑐᓴᖅᑕᐅᔪᒪᓕᐅᔨᑐᑦ ᐊᓴᒪᓗ ᖃᐅᔨᓴᖅᑕᐅᓯᓕᓕᐅᓂᓄᑦ ᐊᑐᖅᑐᑦ
- ᑎᑎᖅᔨᕐᓚᔪᑦ ᐊᖏᑕᐅᓕᐅᕐᓚᑦᑐᑦ ᓴᖏᐊᓕᓕᐊᔪᑦ ᐊᓴᒪᓗ ᖃᓄᖃᖅ ᐊᖏᑕᐅᓕᐅᔨᓂᕐᓚᑦ ᑎᑎᖃᖅᔨᕐᓚᓪᓕᐅᒃ
- ᓄᐃᓵᖅᓯᕐᓚᑦᓗᓕᐅᒃ ᑎᑎᖅᔨᕐᓚᔪᑦ ᖃᐅᔨᓴᖅᑕᐅᖃᖅᑕᓕᐊᖃᖅᑐᑦ ᓕᓇᑐᐃᓐᓇᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᕐᓚᑦ ᐊᓴᒪᓗ ᐃᓕᓴᕐᓂᕐᕿᐅᕐᓇᔪᓄᑦ ᑭᐅᔨᑐᑦᑕᐅᖃᖅᑐᓄᑦ ᐅᖃᐅᓕᐅᔨᑐᑦ
- ᐅᑦᓴᒥᒪᑦ ᐊᖏᑕᐅᓕᐅᔨᑦ ᐞᐃᔪᖃᖅᑦᑦ ᐊᑐᖅᑕᐅᔪᓴᑦ ᐊᖏᐅᒪᔨᑦ ᐊᑐᐃᓐᓇᐅᔨᑦ
- ᐊᑐᖅᑕᐅᔨᑦ ᓕᓇᑐᐃᓐᓇᐃᑦ ᐊᓴᒪᓗ ᓴᓂᔪᑕᐅᓂᔪᒧᑦ ᓄᑦᓯᔪᖅᑎᑕᐅᓂᐊᖏᓂᖅᓄᑦ ᓄᓇᑦ ᓴᓇᕐᓯᐅᓓᓕᐅᔨᑦ
- ᓄᐃᓵᖅᓯᕐᓚᓪᓕᐅᒃ ᑎᑎᖅᔨᕐᓚᔪᑦ ᓄᑦᓯᔪᖅᑎᑕᐅᓂᔪᒧᑦ ᐊᖏᑭᐊᖅᑕᐅᔨᑦ ᐊᖏᓕᓴᕐᑕᐅᔨᑦ ᓴᓇᕐᓯᐅᓓᓕᐅᔨᑦ ᐊᑐᖅᑐᑦ ᐊᓴᒪᓗ ᐃᒪᖅᒧᑦ ᐞᐃᐱᖅᑎᑦ
- ᓄᐃᓵᖅᓯᕐᓚᓪᓕᐅᒃ ᑎᑎᖅᔨᕐᓚᔪᑦ ᓯᕗᓂᓴᒥᑦ ᐅᑉᐱᖅᑕᐅᓂᐊᖅᓂᑦ ᒪᓐᓇᒧᑦ ᐸᖅᓴᕐᑕᐅᓯᓕᓕᐊᔪᑦ ᐅᓯᓗᓐᓂᑦ ᑐᓴᖅᓯᕐᓚᔪᑦ

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1. **A summary of results of Monitoring Program [see Part B Item 2 (ii) and Part J Item 18]**

This information is set out at Appendix A to this document.

2. **A brief description of follow-up action taken to address concerns detailed in inspection and compliance reports prepared by the Inspector [see Part B Item 2 (iv)]**

No inspection or compliance reports were issued by the Inspector in 2010. However, HBML sent a letter to the Inspector dated September 2, 2010, summarizing some of the actions taken by HBML since the inspection of August 2-3, 2010. With regards to licence 2BE-HOP0712, the inspector wanted copies of the current Spill Contingency Plan and the Closure Plans for Windy Camp and the Patch Lake facility. At the time of the September 2 letter, only the Spill Contingency Plan was available. HBML has since submitted the closure plans for Windy Camp and the Patch Lake facility to the NWB. These are now available on the NWB registry at:
ftp://nunavutwaterboard.org/1%20PRUC/2%20MINING%20MILLING/2B/2BE%20-%20Exploration/2BE-HOP0712%20Newmont/3%20TECH/10%20A%20%20R%20(I)/

3. **An up-to-date copy of the Spill Contingency Plan, including contact information [see Part B Item 2 (v)]**

The Spill Contingency Plan was approved by the NWB in October 2010. No updates have been made since approval was received.

4. **A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion or operations [see Part B Item 2 (vi)]**

Please refer to Item E of the Annual Report Form for a description of progressive reclamation undertaken in 2010 as part of this license.

5. **A summary of modification and/or major maintenance work carried out on the Water Supply and the Waste Disposal Facilities, including all associated structures, and an outline of any work anticipated for the next year [see Part B Item 2 (vii)]**

Windy Camp was closed on October 23, 2008. No modification and/or maintenance work was carried out on the Water Supply and the Waste Disposal Facilities in 2010; however, the sewage treatment plant was removed and re-installed at the Boston camp in June 2010

as part of an upgrade at that location. This action was approved the NWB in a letter dated July 16, 2010.

6. A summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed [see Part B Item 2 viii)]

No specific studies or reports were requested by the Board in 2010 and no studies are planned or proposed for 2011.

7. Where drilling activity has penetrated below the permafrost layer, the NWB requests that the proponent record the depth of permafrost and location of the drill hole to be included within the Annual Report [see Part F Item 4]

For the Hope Bay Project, depth of permafrost is calculated using thermistor strings that measure ground temperature, installed in geotechnical drill holes (thermistor strings are not installed in all drill holes). The thermistor stings are used because it is not possible to visually assess when a drill hole has passed through the permafrost layer. Results obtained from the thermistor strings are used to extrapolate the lower depth of permafrost using thermal gradient. There are several such thermistor strings throughout the Hope Bay Belt and measurements are taken on an on-going basis. The depth of permafrost extrapolated from data collected at thermistor string SRK-50 (200 m in length) is 570 m. The depth of permafrost extrapolated from data collected at thermistor string 08TDD632 (350 m in length) is 435 m. Results of all thermistor strings are presented in the 2AM-DOH0713 Annual Geotechnical Inspection Report.

Appendix A

Annual Monitoring Report – 2BE-HOP0712

a) Summary of Monitoring Information

The following tables summarize the results of sampling undertaken as part of the monitoring program detailed in Part J of 2BE-HOP0712.

The camp water treatment and wastewater treatment facility (WWTF) under the Windy Exploration license were not operational in 2010, therefore no monitoring was conducted at stations HOP-1 (freshwater intake), HOP-2 (WWTF discharge), or HOP-3 (point of entry of WWTF discharge to Windy Lake). The landfarm at Windy Camp was dismantled in 2008 so no sampling was conducted at the monitoring station, HOP-4, associated with this facility.

The Bulk Fuel Storage tanks at Windy Camp were moved to Doris Camp in winter 2009 for use there. The containment berm surrounding the tanks at Windy Camp has not been dismantled however and the HOP-5 monitoring station within the berm continued to be monitored in 2010. Effluent samples were collected in June and found to exceed license water quality parameters for lead so no discharge occurred at that time. The effluent was processed through an oil/water/activated carbon separator and re-sampled on July 5, 2010. This effluent was found to be compliant for discharge for all parameters. Dewatering in 2010 at this location was conducted in August after notification to an Inspector. The effluent at HOP-5 was directed through the oil/water separator at the rate of approximately 12 L/min. prior to being discharged to the tundra. The discharge location on the tundra was an area approximately 30 m southeast of the containment area and more than 50 m away from Windy Lake. Approximately 57,000 liters of water was discharged from the Windy Camp Bulk Fuel Storage facility during August. Sample results are shown in Table 1.

A tank, located on the Windy Camp upper lay down area, filled with the effluent evacuated from temporary containment berms that previously contained drummed fuel and waste oil, was sampled in September. This effluent was not in compliance for lead and so no discharge occurred. The effluent continued to be circulated through an oil/water/activated carbon separator until freezing conditions prevented further treatment. This tank will be treated and sampled again in the summer of 2011. Sample results from 2010 are shown in Table 1.

The fuel storage tanks at the Patch Lake Bulk Fuel Storage Facility were relocated to temporary storage at the Doris North Camp in 2010 in anticipation of upgrades and new infrastructure at Windy Camp. No monitoring was conducted at monitoring station HOP-6 as there was minimal effluent at this location for sampling.

In accordance with Part F Item 7 and Part J Item 5, samples were taken to establish water quality prior to and upon completion of the 2010 winter drilling program through lake ice on Doris, Patch, and Windy Lakes. For Doris Lake, pre-drilling samples were taken January 10, 2010 before the January 13, 2010 drilling start date and post-drilling samples were taken May 31, 2010 after the drill program was completed. For Patch Lake, pre-drilling samples were taken February 14, 2010 before the February 22, 2010 drilling start date and post-drilling samples were taken May 25, 2010 after the drill program was

completed. The period of winter drilling on Windy Lake was brief, taking place between April 24 and April 30, 2010. Samples were not taken prior to drilling because the drilling start date was not communicated to environmental team. Samples were taken on May 1, 2010 with a second sampling occurring on May 25, 2010. Sample results can be found in Tables 2 through 6.

Table 1 - Summary of monitoring information gathered for HOP-5 and HOP-6 in 2010 in mg/L

Month	Status	Date	Lab Work Order	Parameter	Sites		
					HOP-5	HOP-6	Temp Effluent Tank
January	No Discharge/Stations Frozen	-	-	-	-	-	-
February	No Discharge/Stations Frozen	-	-	-	-	-	-
March	No Discharge/Stations Frozen	-	-	-	-	-	-
April	No Discharge/Stations Frozen	-	-	-	-	-	-
May	No Discharge/Stations Frozen	-	-	-	-	-	-
June	Effluent Sampling	24/06/10	L889502-1	Oil and Grease	1.2	-	-
			L889502-1	Oil and Grease – visible sheen	NVS	-	-
			L889502-1	Benzene	<0.00050	-	-
			L889502-1	Toluene	0.00193	-	-
			L889502-1	Ethylbenzene	<0.00050	-	-
			L889502-1	Lead	**0.00292**	-	-
July	Effluent Sampling	05/07/10	L905779-1	Oil and Grease	<1.0	-	-
			L905779-1	Oil and Grease – visible sheen	NVS	-	-
			L905779-1	Benzene	<0.00050	-	-
			L905779-1	Toluene	<0.00050	-	-
			L905779-1	Ethylbenzene	<0.00050	-	-
			L905779-1	Lead	<0.00040	-	-
August	Effluent Discharge (HOP-5)	-	-	-	-	-	-
September	Sampling/No Discharge	23/09/10	L935945-1	Oil and Grease	-	-	<1.0
			L935945-1	Oil and Grease – visible sheen	-	-	NVS
			L935945-1	Benzene	-	-	<0.00050
			L935945-1	Toluene	-	-	<0.00050
			L935945-1	Ethylbenzene	-	-	<0.00050
			L935945-1	Lead	-	-	**0.0426**
October	No Discharge/Stations Frozen	-	-	-	-	-	-
November	No Discharge/Stations Frozen	-	-	-	-	-	-
December	No Discharge/Stations Frozen	-	-	-	-	-	-

**NVS = no visible sheen*

Table 2 – Water quality samples from Doris Lake pre-ice drilling, January 2010, in mg/L

Parameters	Water Source: Doris Lake				
Field Sample Details	DL-HOP # 1	DL-HOP # 2	DL-HOP # 3	DL-HOP # 4	DL-HOP # 5
Date	Jan 10/2010	Jan 10/2010	Jan 10/2010	Jan 10/2010	Jan 10/2010
Coordinates	68°08.3''N/106°35.4'W	68°08.0'N/106°35.6'W	68°07.9'N/106°35.8'W	68°07.7'N/106°35.8'W	68°07.4'N/106°35.2'W
ALS Lab Reference#	L853597-1	L853597-2	L853597-3	L853597-4	L853597-5
Mercury (Hg) Total	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Aluminum (Al) Total	0.016	0.012	0.019	0.012	0.014
Antimony (Sb) Total	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Arsenic (As) Total	0.00062	0.00057	0.00061	0.00062	0.00053
Barium (BA) Total	0.0033	<0.0030	0.0030	<0.0030	<0.0030
Beryllium (BE) Total	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron (B) Total	<0.050	<0.050	<0.050	<0.050	<0.050
Cadmium (Cd) Total	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Chromium (Cr) Total	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt (Co) Total	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Copper (Cu) Total	0.0019	0.0018	0.0019	0.0017	0.0035
Lead (Pb) Total	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Lithium (Li) Total	<0.010	<0.010	<0.010	<0.010	<0.010
Molybdenum (Mo) Total	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nickel (Ni) Total	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Selenium (Se) Total	0.00054	0.00054	0.00057	0.00060	0.00069
Silver (Ag) Total	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Thallium (Ti) Total	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn) Total	<0.050	<0.050	<0.050	<0.050	<0.050
Titanium (Ti) Total	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U) Total	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Vanadium (V) Total	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc (Zn) Total	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Calcium (Ca) Total	10.9	9.97	9.92	10.2	9.88
Iron (Fe) Total	0.021	0.016	0.027	0.019	0.028
Magnesium (Mg) Total	8.73	8.05	7.90	8.31	7.94
Manganese (Mn) Total	0.0035	<0.0020	<0.0020	<0.0020	<0.0020
Potassium (K) Total	3.02	2.69	2.79	2.86	2.84
Sodium (Na) Total	43.8	39.8	40.2	40.8	39.5
Total Suspended Solids	5.0	5.0	4.0	4.0	<3.0
Chloride (Cl)	82.2	74.0	73.7	73.7	72.9
Calcium (Ca) Dissolved	10.4	9.50	9.65	9.54	9.41
Magnesium (Mg) Dissolved	8.35	7.71	7.83	7.66	7.52
Potassium (K) Dissolved	2.84	2.60	2.35	2.35	2.36
Sodium (Na) Dissolved	38.8	34.9	33.7	35.0	34.7
Fluoride (F)	0.065	0.060	0.060	0.059	0.060
TDS (Calculated)	169	153	151	152	150
Hardness (as CaCO3)	60.4	55.5	56.3	55.4	54.5
Nitrate (as N)	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate + Nitrite (as N)	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite (as N)	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate (SO4)	3.64	3.26	3.25	3.24	3.21
pH	7.61	7.61	7.59	7.61	7.61
Conductivity (EC)	356	322	322	323	317
Bicarbonate (HCO3)	45.6	42.0	41.2	40.7	40.4
Carbonate (CO3)	<5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide (OH)	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Total (as CaCO3)	37.4	34.4	33.7	33.4	33.1

Table 3 – Water quality samples from Doris Lake post-ice drilling, May 2010, in mg/L

Parameters	Water Source: Doris Lake				
Field Sample Details	DL-HOP#1	DL-HOP#2	DL-HOP#3	DL-HOP#4	DL-HOP#5
Date	May 31/10	May 31/10	May 31/10	May 31/10	May 31/10
Coordinates	68°08.3'N/106°35.4'W	68°08.0'N/106°35.6'W	68°07.9'N/106°35.8'W	68°07.7'N/106°35.8'W	68°07.4'N/106°34.2'W
ALS Lab Reference #	L893185-1	L893185-2	L893185-3	L893185-4	L893185-5
Total Suspended Solids	4	3	15	<3.0	<3.0
Alkalinity, Total (as CaCO3)	26.7	26.4	30.8	31.3	32.9
Bicarbonate (HCO3)	32.6	32.2	37.6	38.1	40.1
Carbonate (CO3)	<5.0	<5.0	<5.0	<5.0	<5.0
Chloride (Cl)	53.6	54.1	64.8	66.7	68.8
Conductivity (EC)	241	244	290	308	321
Fluoride (F)	<0.050	<0.050	<0.050	<0.050	<0.050
Hardness (as CaCO3)	42.3	45.2	49.9	49.9	57.4
Hydroxide (OH)	<5.0	<5.0	<5.0	<5.0	<5.0
Ion Balance	98	103	98.6	97.1	107
Nitrate and Nitrite as N	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrate (as N)	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrite (as N)	<0.050	<0.050	<0.050	<0.050	<0.050
pH	7.47	7.4	7.78	7.49	7.52
TDS (Calculated)	114	116	136	139	149
Sulfate (SO4)	2.39	2.35	2.8	2.82	2.96
Aluminum (Al)-Total	0.05	0.057	0.026	0.015	0.015
Antimony (Sb)-Total	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Arsenic (As)-Total	0.00061	0.00062	0.00075	0.00087	0.00082
Barium (Ba)-Total	<0.0030	0.0034	0.0031	<0.0030	<0.0030
Beryllium (Be)-Total	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron (B)-Total	<0.050	<0.050	<0.050	<0.050	<0.050
Cadmium (Cd)-Total	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	6.39	6.8	7.26	7.86	7.99
Chromium (Cr)-Total	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Copper (Cu)-Total	0.0017	0.0017	0.0041	0.0017	0.0018
Iron (Fe)-Total	0.093	0.106	0.049	0.024	0.027
Lead (Pb)-Total	0.00012	0.00072	0.00045	0.00012	0.00013
Lithium (Li)-Total	<0.010	<0.010	<0.010	<0.010	<0.010
Magnesium (Mg)-Total	4.18	4.35	5.11	5.76	5.6
Manganese (Mn)-Total	0.0132	0.0077	0.0065	0.0053	0.0054
Mercury (Hg)-Total	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum (Mo)-Total	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nickel (Ni)-Total	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Potassium (K)-Total	1.82	1.97	2.34	2.43	2.34
Selenium (Se)-Total	0.00108	0.0009	0.00104	0.00109	0.00108
Silver (Ag)-Total	<0.00050 *	<0.00050 *	<0.00050 *	<0.00050 *	<0.00050 *
Sodium (Na)-Total	22.8	23.8	27.6	29.4	30.5
Thallium (Tl)-Total	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	<0.050	<0.050	<0.050	<0.050	<0.050
Titanium (Ti)-Total	0.0012	0.001	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	<0.0010	<0.0010	<0.0010	0.0011	0.001
Zinc (Zn)-Total	<0.0040	<0.0040	<0.0040	<0.0040	0.0063
Calcium (Ca)-Dissolved	7.3	8.16	8.62	8.66	9.92
Magnesium (Mg)-Dissolved	5.84	6.04	6.89	6.87	7.92
Potassium (K)-Dissolved	1.87	1.96	2.25	2.24	2.65
Sodium (Na)-Dissolved	26.7	27.9	32.5	33	37.3

Table 4 – Water quality samples from Patch Lake pre-ice drilling, February 2010, in mg/L

Parameters	Water Source: Patch Lake		
Field Sample Details	PL-HOP #1	PL-HOP #2	PL-HOP #3
Date	Feb 14/10	Feb 14/10	Feb 14/10
Geographical Coordinates	68°021.0'N/106°32.8'W	68°01.5'N/106°32.7'W	68°01.4'N/106°32.5'W
ALS Lab Reference #	L861990-1	L861990-2	L861990-3
TSS	6.0	<3.0	<3.0
Alkalinity, Total (as CaCO3)	50.6	52.5	57.2
Bicarbonate (HCO3)	61.8	64.1	69.7
Carbonate (CO3)	<5.0	<5.0	<5.0
Chloride (Cl)	108	116	123
Conductivity (EC)	472	502	542
Fluoride (F)	0.056	0.061	0.062
Hardness (as CaCO3)	85.3	92.9	103
Hydroxide (OH)	<5.0	<5.0	<5.0
Ion Balance	95.3	96	99.8
Nitrate and Nitrite as N	<0.071	<0.071	<0.071
Nitrate (as N)	<0.050	<0.050	<0.050
Nitrite (as N)	<0.050	<0.050	<0.050
Total Nitrogen	0.65	0.65	0.89
Nitrogen, Total	0.65	0.65	0.89
pH	7.52	7.53	7.53
Phosphorus, Total	<0.020	<0.020	<0.020
TDS (Calculated)	222	237	256
Sulfate (SO4)	3.51	3.86	4.01
Total Organic Carbon	6.9	7.5	7.2
Aluminum (Al)-Total	0.051	0.063	0.047
Antimony (Sb)-Total	<0.00040	<0.00040	<0.00040
Arsenic (As)-Total	<0.0020 *	<0.0020 *	<0.0020 *
Barium (Ba)-Total	0.0053	0.0083	0.0069
Beryllium (Be)-Total	<0.0010	<0.0010	<0.0010
Boron (B)-Total	<0.050	<0.050	<0.050
Cadmium (Cd)-Total	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	16.1	18.1	19.2
Chromium (Cr)-Total	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	<0.0020	<0.0020	<0.0020
Copper (Cu)-Total	0.0016	0.002	0.0023
Iron (Fe)-Total	0.015	0.025	0.019
Lead (Pb)-Total	0.00011	0.00014	0.00022
Lithium (Li)-Total	<0.010	<0.010	<0.010
Magnesium (Mg)-Total	11.1	12.7	13.4
Manganese (Mn)-Total	0.0023	0.0039	0.0026
Mercury (Hg)-Total	<0.00010	<0.00010	<0.00010
Molybdenum (Mo)-Total	<0.0050	<0.0050	<0.0050
Nickel (Ni)-Total	<0.0020	<0.0020	<0.0020
Potassium (K)-Total	3.76	4.19	4.54
Selenium (Se)-Total	<0.0020 *	<0.0020 *	<0.0020 *
Silver (Ag)-Total	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	50.7	55.8	59.2
Thallium (Tl)-Total	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	<0.050	<0.050	<0.050
Titanium (Ti)-Total	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	0.0018	0.0019	0.002
Zinc (Zn)-Total	<0.0040	0.0045	<0.0040
Calcium (Ca)-Dissolved	16	17.4	19.3
Magnesium (Mg)-Diss.	11	12	13.3
Potassium (K)-Dissolved	3.59	3.84	4.41
Sodium (Na)-Dissolved	49.3	52.3	57.9

**Detection Limit Adjustment for sample matrix*

Table 5 – Water quality samples from Patch Lake post-ice drilling, May 2010, in mg/L

Parameters	Water Source: Patch Lake			
Field Sample Details	PL-HOP#1	PL-HOP#2	PL-HOP#3	PL-HOP#4
Date	5/25/2010	5/25/2010	5/25/2010	5/25/2010
Coordinates	68°01.4'N/106°32.6'W	68°01.5'N/106°32.6'W	68°01.6'N/106°32.7'W	68°01.7'N/106°32.7'W
ALS Lab Reference #	L891532-1	L891532-2	L891532-3	L891532-4
Total Suspended Solids	3	<3.0	<3.0	3
Alkalinity, Total (as CaCO3)	50.1	51.4	51.1	52.3
Bicarbonate (HCO3)	61.1	62.7	62.3	63.8
Carbonate (CO3)	<5.0	<5.0	<5.0	<5.0
Chloride (Cl)	110	114	111	116
Conductivity (EC)	461	476	461	476
Fluoride (F)	0.072	0.07	0.074	0.073
Hardness (as CaCO3)	87.7	97.3	90.4	95.1
Hydroxide (OH)	<5.0	<5.0	<5.0	<5.0
Ion Balance	96.8	103	97	98.7
Nitrate and Nitrite as N	<0.071	<0.071	<0.071	<0.071
Nitrate (as N)	<0.050	<0.050	<0.050	<0.050
Nitrite (as N)	<0.050	<0.050	<0.050	<0.050
pH	7.69	7.69	7.65	7.69
TDS (Calculated)	226	239	228	239
Sulfate (SO4)	3.75	3.68	3.63	3.73
Aluminum (Al)-Total	0.023	0.019	0.02	0.017
Antimony (Sb)-Total	<0.00040	<0.00040	<0.00040	<0.00040
Arsenic (As)-Total	0.00094	0.00108	0.00109	0.00119
Barium (Ba)-Total	0.006	0.0061	0.0045	0.0046
Beryllium (Be)-Total	<0.0010	<0.0010	<0.0010	<0.0010
Boron (B)-Total	<0.050	<0.050	<0.050	<0.050
Cadmium (Cd)-Total	<0.000050	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	17	16.1	16.8	17.7
Chromium (Cr)-Total	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	<0.0020	<0.0020	<0.0020	<0.0020
Copper (Cu)-Total	0.0016	0.0015	0.0017	0.0016
Iron (Fe)-Total	0.027	0.014	0.017	0.013
Lead (Pb)-Total	<0.00010	<0.00010	0.00014	<0.00010
Lithium (Li)-Total	<0.010	<0.010	<0.010	<0.010
Magnesium (Mg)-Total	11.5	11.2	11.7	12
Manganese (Mn)-Total	0.0023	0.0029	<0.0020	0.002
Mercury (Hg)-Total	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum (Mo)-Total	<0.0050	<0.0050	<0.0050	<0.0050
Nickel (Ni)-Total	<0.0020	<0.0020	<0.0020	<0.0020
Potassium (K)-Total	3.7	3.39	3.66	3.72
Selenium (Se)-Total	0.00111	0.00109	0.00104	0.00104
Silver (Ag)-Total	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	51.2	48.5	51.5	53.2
Thallium (Tl)-Total	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	<0.050	<0.050	<0.050	<0.050
Titanium (Ti)-Total	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	<0.00010	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	0.001	0.0013	0.0014	0.0016
Zinc (Zn)-Total	<0.0040	<0.0040	<0.0040	<0.0040
Calcium (Ca)-Dissolved	16.5	18.2	16.9	17.8
Magnesium (Mg)-Dissolved	11.3	12.6	11.7	12.3
Potassium (K)-Dissolved	3.52	4.03	3.7	3.97
Sodium (Na)-Dissolved	50.8	55.3	50.7	53.8

Table 6 – Water quality samples from Windy Lake pre- and post-ice drilling, May 2010, in mg/L

Parameters	Water Source: Windy Lake			
	Pre-Drilling		Post-Drilling	
Field Sample Details	WL-HOP#1	WL-HOP #2	WL-HOP#1	WL-HOP#2
Date	May 1/10	May 1/10	May 25/10	May 25/10
Coordinates	68°04.6'N/106°37.5'W	68°04.6'N/106°37.7'W	68°04.6'N/106°37.5'W	68°04.6'N/106°37.7'W
ALS Lab Reference #	L884426-1	L884426-2	L891533-1	L891533-2
TSS	<3.0	<3.0	<3.0	<3.0
Alkalinity, Total (as CaCO3)	56.9	56.9	56.4	58.2
Bicarbonate (HCO3)	69.4	69.4	68.9	71.0
Carbonate (CO3)	<5.0	<5.0	<5.0	<5.0
Chloride (Cl)	118	124	113	115
Conductivity (EC)	502	502	492	499
Fluoride (F)	0.083	0.090	0.078	0.078
Hardness (as CaCO3)	82.1	81.8	86.5	79.9
Hydroxide (OH)	<5.0	<5.0	<5.0	<5.0
Ion Balance	95.4	90.9	101	93.4
Nitrate and Nitrite as N	<0.071	<0.071	<0.071	<0.071
Nitrate (as N)	<0.050	<0.050	<0.050	<0.050
Nitrite (as N)	<0.050	<0.050	<0.050	<0.050
Total Nitrogen	<0.20	<0.20	n/a	n/a
Nitrogen, Total	<0.20	<0.20	n/a	n/a
pH	7.99	7.99	7.92	7.94
Phosphorus, Total	<0.020	<0.020	n/a	n/a
TDS (Calculated)	254	259	250	248
Sulfate (SO4)	9.72	10.3	9.42	9.42
Total Organic Carbon	n/a	n/a	n/a	n/a
Aluminum (Al)-Total	<0.010	<0.010	<0.010	<0.010
Antimony (Sb)-Total	<0.00040	<0.00040	<0.00040	<0.00040
Arsenic (As)-Total	<0.00080	0.00092	0.00104	0.00119
Barium (Ba)-Total	<0.0030	<0.0030	<0.0030	<0.0030
Beryllium (Be)-Total	<0.0010	<0.0010	<0.0010	<0.0010
Boron (B)-Total	0.052	0.051	0.052	0.052
Cadmium (Cd)-Total	<0.000050	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	12.9	14.3	14.1	13.9
Chromium (Cr)-Total	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	<0.0020	<0.0020	<0.0020	<0.0020
Copper (Cu)-Total	0.0024	0.0023	0.0012	0.0011
Iron (Fe)-Total	<0.010	<0.010	<0.010	<0.010
Lead (Pb)-Total	0.00020	0.00015	<0.00010	<0.00010
Lithium (Li)-Total	<0.010	<0.010	<0.010	<0.010
Magnesium (Mg)-Total	10.5	11.6	11.2	11.0
Manganese (Mn)-Total	<0.0020	<0.0020	<0.0020	<0.0020
Mercury (Hg)-Total	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum (Mo)-Total	<0.0050	<0.0050	<0.0050	<0.0050
Nickel (Ni)-Total	<0.0020	<0.0020	<0.0020	<0.0020
Potassium (K)-Total	4.40	4.58	4.05	4.20
Selenium (Se)-Total	0.00103	0.00103	0.00127	0.00128
Silver (Ag)-Total	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	62.2	61.5	60.5	61.7
Thallium (Tl)-Total	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	<0.050	<0.050	<0.050	<0.050
Titanium (Ti)-Total	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	0.00021	0.00020	0.00019	0.00019
Vanadium (V)-Total	<0.0010	<0.0010	0.0017	0.0018
Zinc (Zn)-Total	<0.0040	<0.0040	<0.0040	<0.0040
Calcium (Ca)-Dissolved	13.9	13.8	14.7	13.7
Magnesium (Mg)-Diss.	11.5	11.5	12.1	11.1
Potassium (K)-Dissolved	4.09	4.35	4.46	4.22
Sodium (Na)-Dissolved	54.9	61.3	62.8	59.7

b) Quantities of water utilized for camp, drilling and other purposes

Monthly and daily water usage volumes for drilling can be found in Tables 7 and 8. Note Windy Camp was closed and no drilling activity occurred from September through December 2010. Also, problems were being experienced with some of the water meters and as a result some of the volumes reported for 2010 are estimates.

Table 7 – 2010 monthly water use totals for 2BE-HOP0712, in cubic meters (m^3)

Month	Volume Domestic Use (m^3) Windy Lake (HOP-1)	Drilling Volume (m^3) from Lakes Proximal to Drill Targets	Total by month (m^3)
January	Windy Camp Closed	542.0	542.0
February	Windy Camp Closed	1201.8*	1201.8*
March	Windy Camp Closed	1574.7*	1574.7*
April	Windy Camp Closed	1470.0	1470.0
May	Windy Camp Closed	1027.6*	1027.6*
June	Windy Camp Closed	871.2*	871.2*
July	Windy Camp Closed	607.9*	607.9*
August	Windy Camp Closed	530.0*	530.0*
September	Windy Camp Closed	-	-
October	Windy Camp Closed	-	-
November	Windy Camp Closed	-	-
December	Windy Camp Closed	-	-
Total	**0**	**7825.2***	**7825.2***

***** *Total of the recorded and the estimated volumes*

Table 8 – 2010 daily domestic and drilling water use totals for 2BE-HOP0712, in cubic meters (m^3)

ND = No Drilling

(MB) = Meter Broken (an estimated volume is used for calculating purposes, marked by an '*')

Date	Domestic Use	RIG GEO 1	RIG GEO 2	RIG GEO 3	RIG Orbit 21	RIG Orbit 22	RIG Orbit 23	RIG Orbit 24
January 1, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 2, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 3, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 4, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 5, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 6, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 7, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 8, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 9, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 10, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 11, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 12, 2010	-	ND	ND	ND	ND	ND	ND	ND
January 13, 2010	-	ND	0.9	ND	0.449	ND	ND	1.93
January 14, 2010	-	ND	0	ND	4.641	ND	ND	15.07
January 15, 2010	-	ND	1.7	ND	0	ND	ND	16
January 16, 2010	-	ND	2.5	ND	2.6	ND	1.21	10.52
January 17, 2010	-	ND	1	ND	16.08	ND	3	5.17
January 18, 2010	-	ND	4	ND	19.31	ND	2.9	8.432
January 19, 2010	-	ND	2.8	ND	23.798	ND	2.9	6.663
January 20, 2010	-	ND	1.9	ND	19.602	ND	2.9	9.502
January 21, 2010	-	ND	5.1	ND	17.03	ND	2.9	12.333
January 22, 2010	-	ND	5.5	ND	0	ND	2.9	7.18
January 23, 2010	-	ND	2.6	ND	5.64	ND	21.85	13.78
January 24, 2010	-	ND	10	ND	5.63	ND	18.72	17.197
January 25, 2010	-	ND	12.3	ND	5.29	ND	2.9	3.01
January 26, 2010	-	ND	7.5	ND	5.36	ND	2.9	3.19
January 27, 2010	-	ND	17	ND	15.95	ND	2.9	3.876
January 28, 2010	-	ND	8.9	ND	18.59	ND	2.9	4.01
January 29, 2010	-	ND	0	ND	10.09	ND	2.9	3.25
January 30, 2010	-	ND	3.9	ND	12.91	5	2.9	2.83
January 31, 2010	-	ND	3.5	ND	25.04	5	2.9	4.65
February 1, 2010	-	ND	5.1	1.5	17.8	**(MB) 8.6***	**(MB) 5.9***	6.8
February 2, 2010	-	ND	1.2	8.5	4.1	8.7	MB	3.2
February 3, 2010	-	ND	0	10.6	17.6	7.6	9.6	9.3
February 4, 2010	-	ND	0	5.6	6.2	5.7	4.8	10.8
February 5, 2010	-	ND	1.8	5.5	9	5	4.2	12
February 6, 2010	-	ND	3.4	9.2	6.5	4.5	4.1	13.3
February 7, 2010	-	ND	3.3	8.9	5.6	13.5	3.1	6
February 8, 2010	-	ND	0.5	9.8	4.6	9.1	6.9	3.1
February 9, 2010	-	ND	1.2	5.6	6.9	11.7	5.4	2.5
February 10, 2010	-	ND	6.2	0.6	10.9	13.3	2.33	3.8
February 11, 2010	-	ND	4.1	9.1	9.7	3.9	1.67	2
February 12, 2010	-	ND	7.6	3.1	6.7	15.1	8.4	5.7
February 13, 2010	-	ND	3.1	4.7	8.2	11.9	8.8	5.4
February 14, 2010	-	ND	3.9	6.3	12.5	13.5	13.9	6.3
February 15, 2010	-	ND	6	9.4	7.1	7.7	6.8	8.6
February 16, 2010	-	ND	3.7	8.6	13.8	7.2	5.92	8.9
February 17, 2010	-	ND	3.9	5.8	15.9	5.5	14.9	11.3

Date	Domestic Use	RIG GEO 1	RIG GEO 2	RIG GEO 3	RIG Orbit 21	RIG Orbit 22	RIG Orbit 23	RIG Orbit 24
February 18, 2010	-	ND	2.1	1.8	12.5	10.9	5.68	9
February 19, 2010	-	ND	2	0	5.6	4.9	5.2	6.6
February 20, 2010	-	ND	2.4	6	1.5	3.2	2.2	3.4
February 21, 2010	-	ND	0	0	6.1	**(MB) 8.6***	1.7	**(MB) 7.3***
February 22, 2010	-	ND	2	3.2	17.4	**(MB) 8.6***	**(MB) 5.9***	**(MB) 7.3***
February 23, 2010	-	ND	1.2	13.3	22.09	**(MB) 8.6***	**(MB) 5.9***	**(MB) 7.3***
February 24, 2010	-	ND	0.6	22.8	17.21	**(MB) 8.6***	**(MB) 5.9***	**(MB) 7.3***
February 25, 2010	-	ND	1.1	4.6	18.04	**(MB) 8.6***	**(MB) 5.9***	**(MB) 7.3***
February 26, 2010	-	ND	2.6	13.7	12.32	**(MB) 8.6***	**(MB) 5.9***	**(MB) 7.3***
February 27, 2010	-	ND	2.6	24.7	17.87	**(MB) 8.6***	**(MB) 5.9***	**(MB) 7.3***
February 28, 2010	-	ND	4.4	7.3	18.18	**(MB) 8.6***	2.75	15.1
March 1, 2010	-	ND	4.6	8.8	10.25	ND	10.72	5.2
March 2, 2010	-	ND	2.7	15.8	24.16	ND	6.61	11.53
March 3, 2010	-	ND	3.2	2.1	16.86	ND	14.19	7.35
March 4, 2010	-	ND	2.6	11.9	22.95	ND	8.64	0
March 5, 2010	-	ND	1.4	2.4	18.41	ND	13.63	0.12
March 6, 2010	-	ND	2.7	4.9	13.22	10.85	7.36	0
March 7, 2010	-	ND	1.8	5.6	4.81	7.6	23.68	0.07
March 8, 2010	-	ND	0.2	8.8	1.36	7.15	10.3	0
March 9, 2010	-	ND	1.7	23.4	5.99	8.94	23.58	0.54
March 10, 2010	-	ND	6.5	16	8.46	6.17	5.13	0
March 11, 2010	-	ND	6.8	6.3	15.38	5.68	12.08	0
March 12, 2010	-	ND	0	4.6	15.07	5.2	0.61	0
March 13, 2010	-	ND	11.1	6	10	5.11	12.9	0
March 14, 2010	-	ND	4	12.9	**(MB) 12.1***	4.9	7.6	6
March 15, 2010	-	ND	4.3	5.5	**(MB) 12.1***	12.2	4.8	6
March 16, 2010	-	ND	0	9	**(MB) 12.1***	5.4	5.1	6
March 17, 2010	-	ND	5.8	13	**(MB) 12.1***	5.86	12.75	6
March 18, 2010	-	ND	7.3	7.2	**(MB) 12.1***	8.4	22.55	6
March 19, 2010	-	ND	21.4	7.1	**(MB) 12.1***	6.79	24.42	3
March 20, 2010	-	ND	12	7.8	**(MB) 12.1***	0	10.58	3
March 21, 2010	-	ND	13	5.8	13.9	13.15	35.8	3
March 22, 2010	-	ND	9.9	8.2	9.5	7.1	20.9	3
March 23, 2010	-	ND	6.4	3.1	10	0	18.2	3
March 24, 2010	-	ND	4.6	5.3	20.4	11.5	18.7	4.9
March 25, 2010	-	ND	6.4	12.7	7.3	13.3	18.7	8.9
March 26, 2010	-	ND	9.6	11.9	14.7	11.9	19	2
March 27, 2010	-	ND	9.2	9.6	7.3	11.2	6	11.2
March 28, 2010	-	ND	12.2	8.5	10.6	11.5	11.2	0
March 29, 2010	-	ND	3	7.2	10.9	12.6	3.5	0.8
March 30, 2010	-	ND	5.9	3.5	7	3.2	10.1	18.9
March 31, 2010	-	ND	4.8	12	11.8	12.6	9.6	14.5
April 1, 2010	-	ND	3.2	8.8	15.2	10	17	11.2
April 2, 2010	-	ND	5.2	4	8.9	13.8	8.4	12.6
April 3, 2010	-	ND	5.3	4	5.1	14.1	9.5	9.9
April 4, 2010	-	ND	5.1	6.3	5.7	12.5	19.2	18.8
April 5, 2010	-	ND	1.5	6.8	12.3	4.7	13.2	9.7
April 6, 2010	-	ND	2.2	1.7	11.7	15.9	5.5	11.6
April 7, 2010	-	ND	2.2	18.6	7.2	15.1	3.5	8.5
April 8, 2010	-	ND	2.3	16.3	8.1	13.4	5	10.9
April 9, 2010	-	ND	4.6	10.5	5	16.6	5	5
April 10, 2010	-	ND	12.3	22.2	5	11.1	5	5
April 11, 2010	-	ND	12	17	5	13.8	5	5
April 12, 2010	-	ND	9.7	15.1	5	5.7	5	5

Date	Domestic Use	RIG GEO 1	RIG GEO 2	RIG GEO 3	RIG Orbit 21	RIG Orbit 22	RIG Orbit 23	RIG Orbit 24
April 13, 2010	-	ND	15.3	15.3	5	18.5	5	5
April 14, 2010	-	ND	8.8	23.4	1.2	13.8	5	5
April 15, 2010	-	ND	9	14.2	7.6	14.1	16.6	5
April 16, 2010	-	ND	8.6	16.8	6.5	0	11.3	6.6
April 17, 2010	-	ND	11	18.8	5.8	10.4	10.7	3.4
April 18, 2010	-	ND	11	4.4	5.8	6.6	10.7	7
April 19, 2010	-	ND	4.3	17.7	3.2	5.3	12.3	4.4
April 20, 2010	-	ND	7.6	7.1	1.7	7.7	4.6	8.6
April 21, 2010	-	ND	5.7	10.8	0	11	3.4	12.3
April 22, 2010	-	ND	3.6	6.1	0	12.4	13.5	5
April 23, 2010	-	ND	2	7	2.8	10.1	16.1	5.6
April 24, 2010	-	ND	1.2	6.4	1.2	9.5	19.6	2.9
April 25, 2010	-	ND	2.4	6.6	0.8	2	36.3	0
April 26, 2010	-	ND	3.2	6.2	1.8	4.7	10.5	9.6
April 27, 2010	-	ND	3.8	3.4	4.7	4.4	18.4	1.7
April 28, 2010	-	ND	2.6	3.8	5.8	8.1	17.5	0
April 29, 2010	-	ND	2.6	5.1	4.9	2.1	25.2	0
April 30, 2010	-	ND	2	4.8	6.7	0	10.6	0
May 1, 2010	-	ND	ND	ND	11	14.5	ND	ND
May 2, 2010	-	ND	ND	ND	10	24	ND	ND
May 3, 2010	-	ND	ND	ND	10.1	11.9	ND	ND
May 4, 2010	-	ND	ND	ND	6.3	21.2	ND	2.8
May 5, 2010	-	ND	ND	ND	4.7	13.4	ND	2.3
May 6, 2010	-	ND	ND	ND	3.6	3.1	ND	0.5
May 7, 2010	-	ND	ND	ND	3.3	13.4	ND	0.7
May 8, 2010	-	ND	ND	ND	10	10.9	15.2	1.1
May 9, 2010	-	ND	ND	ND	1.8	10.6	6.5	1.4
May 10, 2010	-	ND	ND	ND	1.1	8.9	20.5	1.5
May 11, 2010	-	ND	5.6	ND	4.3	7.8	15.8	1.5
May 12, 2010	-	ND	**(MB) 3.6***	ND	ND	31	**(MB) 9.4***	1.7
May 13, 2010	-	ND	**(MB) 3.6***	3.4	ND	12.5	**(MB) 9.4***	1.1
May 14, 2010	-	ND	2.1	7.9	ND	18.6	**(MB) 9.4***	0.6
May 15, 2010	-	ND	1.3	15	ND	13.7	12.1	1.4
May 16, 2010	-	ND	1.5	10.2	ND	9.9	10	1.3
May 17, 2010	-	ND	7.7	15.2	ND	5.8	4.7	1.8
May 18, 2010	-	ND	3.1	10.9	ND	4.2	23.9	0.6
May 19, 2010	-	ND	3.5	17.4	ND	0	9.5	0.7
May 20, 2010	-	ND	2.2	16.3	7.4	2.7	3.7	0
May 21, 2010	-	ND	1.1	10.2	3.3	ND	5.7	0
May 22, 2010	-	ND	3.7	12.5	1.2	ND	1.7	8.1
May 23, 2010	-	ND	4.6	3.3	1.5	ND	2	5.6
May 24, 2010	-	ND	6.5	0.7	0.6	ND	4	5.4
May 25, 2010	-	ND	1.8	5.6	10.5	ND	11.4	5.8
May 26, 2010	-	ND	7	4.4	7.8	ND	10.7	6.8
May 27, 2010	-	ND	0	2	5	10.2	7.8	7.5
May 28, 2010	-	ND	0	0	14.2	3.6	4.5	6.8
May 29, 2010	-	ND	3.9	3.4	10.2	5.9	10.2	2.3
May 30, 2010	-	ND	3.5	7.8	6.1	8.6	3.4	34.7
May 31, 2010	-	ND	1.7	3.4	16	7.9	13.8	**(MB) 4.2***
June 1, 2010	-	ND	**(MB) 4.7***	3.3	1.6	5.2	5.6	9.4
June 2, 2010	-	ND	**(MB) 4.7***	0.7	3	5.8	6.7	8.6
June 3, 2010	-	ND	**(MB) 4.7***	2	0.9	10.8	6.7	19
June 4, 2010	-	ND	**(MB) 4.7***	10.6	0.5	4.9	3	10.6
June 5, 2010	-	ND	**(MB) 4.7***	2.5	0.5	6.4	3.4	12.4

Date	Domestic Use	RIG GEO 1	RIG GEO 2	RIG GEO 3	RIG Orbit 21	RIG Orbit 22	RIG Orbit 23	RIG Orbit 24
June 6, 2010	-	ND	**(MB) 4.7***	9	0.3	3.5	4.8	8.7
June 7, 2010	-	ND	**(MB) 4.7***	10.5	0.6	9	9.8	7.8
June 8, 2010	-	ND	**(MB) 4.7***	17	0.9	7.6	ND	11.4
June 9, 2010	-	ND	**(MB) 4.7***	12.5	1.2	5.6	ND	3.1
June 10, 2010	-	ND	**(MB) 4.7***	7.3	0.4	4.1	15.9	4.6
June 11, 2010	-	ND	**(MB) 4.7***	8	0.27	4.64	15.6	13.4
June 12, 2010	-	ND	**(MB) 4.7***	8.1	0.23	16.36	18.94	12.7
June 13, 2010	-	ND	**(MB) 4.7***	11.1	0.8	6.48	6.22	ND
June 14, 2010	-	ND	**(MB) 4.7***	10.5	0.8	7.07	4.56	ND
June 15, 2010	-	ND	**(MB) 4.7***	4.6	0.9	9.5	4.13	ND
June 16, 2010	-	ND	**(MB) 4.7***	4.5	0.7	2.13	4.65	ND
June 17, 2010	-	ND	**(MB) 4.7***	4.9	0.6	7.02	4.8	ND
June 18, 2010	-	ND	**(MB) 4.7***	9.8	0.9	7.4	4.4	ND
June 19, 2010	-	ND	**(MB) 4.7***	5.2	0.6	9.2	3.9	ND
June 20, 2010	-	ND	**(MB) 4.7***	4.3	2.1	8.3	5.8	ND
June 21, 2010	-	ND	**(MB) 4.7***	3.4	0.6	6.3	6.6	ND
June 22, 2010	-	ND	**(MB) 4.7***	2.9	0.9	4.9	8.3	ND
June 23, 2010	-	ND	**(MB) 4.7***	3.7	0.6	13.7	11.4	ND
June 24, 2010	-	ND	**(MB) 4.7***	2.5	1.7	13.3	5.9	ND
June 25, 2010	-	ND	**(MB) 4.7***	4	2.4	12.4	0.8	ND
June 26, 2010	-	ND	**(MB) 4.7***	3.5	1.3	4.6	ND	ND
June 27, 2010	-	ND	**(MB) 4.7***	4.2	1.6	5.5	ND	ND
June 28, 2010	-	ND	**(MB) 4.7***	3.8	2.4	5.6	9.8	ND
June 29, 2010	-	ND	**(MB) 4.7***	4	1	3	6.1	ND
June 30, 2010	-	ND	**(MB) 4.7***	2.5	0.7	3.9	4.6	ND
July 1, 2010	-	ND	**(MB) 4.7***	2.5	0.2	3.2	4.9	ND
July 2, 2010	-	ND	**(MB) 4.7***	4	0.2	2.1	5.4	ND
July 3, 2010	-	ND	**(MB) 4.7***	3	0	6.5	7.6	ND
July 4, 2010	-	ND	**(MB) 4.7***	0	0.1	0	2.1	ND
July 5, 2010	-	ND	**(MB) 4.7***	6	0.3	1.7	6.8	ND
July 6, 2010	-	ND	**(MB) 4.7***	5	1	0	3.6	ND
July 7, 2010	-	ND	**(MB) 4.7***	3	0.2	7.7	2.6	ND
July 8, 2010	-	ND	**(MB) 4.7***	5	1.7	1.8	2.8	ND
July 9, 2010	-	ND	**(MB) 4.7***	3.1	7.8	4.6	0	ND
July 10, 2010	-	ND	**(MB) 4.7***	3.5	0	0	0	ND
July 11, 2010	-	ND	**(MB) 4.7***	2	7	0.3	0	ND
July 12, 2010	-	ND	**(MB) 4.7***	6.9	3	3.5	0	ND
July 13, 2010	-	ND	**(MB) 4.7***	10.7	6.54	1.4	7.7	ND
July 14, 2010	-	ND	**(MB) 4.7***	4.4	7.13	5.61	4.4	ND
July 15, 2010	-	ND	**(MB) 4.7***	2.8	5.81	3.88	2.5	ND
July 16, 2010	-	ND	**(MB) 4.7***	1.9	7.21	3.82	2.1	ND
July 17, 2010	-	ND	**(MB) 4.7***	1.9	6.86	3.58	3.3	ND
July 18, 2010	-	ND	**(MB) 4.7***	3.9	8.65	8.83	0.3	ND
July 19, 2010	-	ND	**(MB) 4.7***	5.5	6.75	7.13	0.3	ND
July 20, 2010	-	ND	**(MB) 4.7***	3	8.14	4.85	1.4	ND
July 21, 2010	-	ND	**(MB) 4.7***	2.8	5.5	3.8	2.5	ND
July 22, 2010	-	ND	**(MB) 4.7***	1.2	7.86	7	2.5	ND
July 23, 2010	-	ND	**(MB) 4.7***	1	6.39	0.29	1.6	ND
July 24, 2010	-	ND	**(MB) 4.7***	2.9	8.55	6.27	3	ND
July 25, 2010	-	ND	**(MB) 4.7***	1.9	9.23	6.97	3.1	ND
July 26, 2010	-	ND	**(MB) 4.7***	2.7	9.28	6.15	1.5	ND
July 27, 2010	-	ND	**(MB) 4.7***	2	10.96	6.93	1.7	ND
July 28, 2010	-	ND	**(MB) 4.7***	4.8	10.19	6.48	1.4	ND
July 29, 2010	-	ND	**(MB) 4.7***	3.9	5.17	4.9	1.8	ND

Date	Domestic Use	RIG GEO 1	RIG GEO 2	RIG GEO 3	RIG Orbit 21	RIG Orbit 22	RIG Orbit 23	RIG Orbit 24
July 30, 2010	-	ND	**(MB) 4.7***	3.9	ND	3.9	ND	ND
July 31, 2010	-	ND	**(MB) 4.7***	2.3	ND	2.9	ND	ND
August 1, 2010	-	ND	**(MB) 4.7***	2.8	ND	3.7	ND	ND
August 2, 2010	-	ND	**(MB) 4.7***	2.8	ND	4.9	ND	ND
August 3, 2010	-	ND	**(MB) 4.7***	4.3	ND	7.3	ND	ND
August 4, 2010	-	ND	**(MB) 4.7***	3.1	ND	7.4	ND	ND
August 5, 2010	-	ND	**(MB) 4.7***	3.4	ND	7.7	6.8	ND
August 6, 2010	-	ND	**(MB) 4.7***	11.2	ND	9.5	4.1	ND
August 7, 2010	-	ND	2.3	6.4	ND	5.6	10.3	ND
August 8, 2010	-	ND	4.1	16.3	ND	5.9	3.9	ND
August 9, 2010	-	ND	4.6	5.6	ND	6.1	3.2	ND
August 10, 2010	-	ND	4.7	5.4	ND	2.9	4.3	ND
August 11, 2010	-	ND	0.3	5.6	ND	3.7	4.6	ND
August 12, 2010	-	ND	7.6	5.9	ND	5.1	4.2	ND
August 13, 2010	-	ND	2.6	5	ND	11.4	ND	ND
August 14, 2010	-	ND	2.4	5	ND	10	ND	ND
August 15, 2010	-	ND	4.1	10.6	6.18	8.3	ND	ND
August 16, 2010	-	ND	0.8	22.5	5.9	9.8	ND	ND
August 17, 2010	-	ND	5.4	7.1	9.2	4	ND	ND
August 18, 2010	-	ND	5.1	7.8	7.6	5.4	ND	ND
August 19, 2010	-	ND	3.8	7.5	6.9	7.2	ND	ND
August 20, 2010	-	ND	0.7	5.4	6.6	ND	ND	ND
August 21, 2010	-	ND	8.3	ND	6.4	ND	ND	ND
August 22, 2010	-	ND	8.6	ND	8	3.1	ND	ND
August 23, 2010	-	ND	5.2	ND	5.1	3.4	ND	ND
August 24, 2010	-	ND	4.5	ND	5	2.3	ND	ND
August 25, 2010	-	ND	**(MB) 4.7***	ND	5.7	1.4	ND	ND
August 26, 2010	-	ND	**(MB) 4.7***	ND	ND	ND	ND	ND
August 27, 2010	-	ND	**(MB) 4.7***	ND	ND	ND	ND	ND
August 28, 2010	-	ND	**(MB) 4.7***	ND	ND	ND	ND	ND
August 29, 2010	-	ND	**(MB) 4.7***	ND	ND	ND	ND	ND
August 30, 2010	-	ND	**(MB) 4.7***	ND	ND	ND	ND	ND
August 31, 2010	-	ND	**(MB) 4.7***	ND	ND	ND	ND	ND
September 2010	-	No Drilling						
October 2010	-	No Drilling						
November 2010	-	No Drilling						
December 2010	-	No Drilling						

c) Quantity of effluent discharged

Windy Camp was closed throughout 2010 therefore no discharges occurred related to the waste water treatment facility (WWTF) at monitoring station HOP-2.

Effluent was discharged from the HOP-5 Windy Camp bulk fuel storage facility containment berm in August 2010 after compliant effluent sample results were obtained and the Inspector was notified. The discharge location on the tundra was an area approximately 30 m southeast of the containment area and more than 50 m away from Windy Lake. Approximately 57 m^3 was discharged. See section a, above, for more details.

No discharges occurred at the Patch Lake bulk fuel storage facility HOP-6 in 2010 due to lack of effluent accumulation.

d) Volume of sludge removed from sewage disposal facility

No sludge was removed from the Windy Camp WWTF in 2010 because this facility was not operational and the camp was closed.

e) Results of Toxicity Testing

HBML did not carry out the following toxicity testing to demonstrate non-acute toxicity of the effluent discharged from the WWTF at HOP-3, conducted in accordance with the following test procedures:

i. Acute lethality to Rainbow Trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13); and
ii. Acute lethality to the crustacean, Daphnia magna(as per Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/14).

No effluent was available for sampling at this location because no effluent was being discharged to the tundra due to the closure of Windy Camp throughout 2010.