NWB Annual Report **Year being reported:** 2014

License No: 2BB-BOS1217 **Issued Date:** August 2, 2012
Expiry Date: July 31, 2017

Project Name: Boston Advanced Exploration Project

Licensee: TMAC Resources Inc.

Mailing Address:
95 Wellington St. W.
Suite 1010, PO Box 44
Toronto, Ontario M5J 2N7

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

Licence 2BB-BOS1217 was issued Aug 2, 2012 to Hope Bay Mining Ltd. Effective June 18, 2013, the NWB authorized the assignment of Licence 2BB-BOS1217 from Hope Bay Mining Ltd. to TMAC Resources Inc.

General Background Information on the Project (*optional):

The Boston site supports advanced mineral exploration in the south end of the Hope Bay Greenstone Belt.

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

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.

Water Source(s): Aimaokatalok (Spyder) Lake for domestic use and drilling purposes. The total quantity of water allowable by the licence is 36,500 m3/yr or 100 m3/day. There is no differentiation between quantities to be used domestically or for drilling.

Water Quantity:

not specified	Quantity Allowable Domestic (cu.m)
0	Actual Quantity Used Domestic (cu.m)
not specified	Quantity Allowable Drilling (cu.m)
0	Total Quantity Used Drilling (cu.m)

Waste Management and/or Disposal

- [ ] Solid Waste Disposal
- [ ] Sewage
- [ ] Drill Waste
- [ ] Greywater
- [ ] Hazardous
- [x] Other: Fuel Farm Berm, Containment Pond and Mine Portal discharges

Additional Details:

The Hope Bay Project was placed into Care and Maintenance in October 2012. Activities in 2014 at the Boston Camp were limited to water management and licence compliance.

When the camp is open, the following applies:
Water for domestic use at Boston Camp is obtained from Aimaokatalok 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. In winter, the pumphouse is moved onto the ice to decrease the length of heat-traced line required to reach the location where the water is open under the ice. Boston camp was not operational in 2014.

Waste produced on site will be treated according to Part D of the licence, and in accordance with the relevant Management Plans *(Incineration Management Plan, Non-Hazardous Waste Management Plan, and Hazardous Waste Management Plan*). Some specifics are as follows:

-Food waste, paper waste and untreated wood waste is burned in the incinerator as per Part D Item 3.
-Solid waste that cannot be burned is transfered to the Roberts Bay waste management facility for packaging and is taken offsite for disposal.
-Drill cuttings produced under this licence are disposed of in depressions as per Part F Item 2.
-Sewage and greywater produced on site is processed in the sewage treatment plant as per Part D Item 11. No sludge was removed from the sewage treatment plant because it was not operational in 2014.
-Waste hazardous materials such as waste oil, glycol, and contaminated soil are shipped to Doris North either to be reclaimed or shipped offsite for disposal in an approved facility as per Part D Item 6. Contaminated soil is also located at the Boston Landfarm.
-Fuel berm effluent is sampled for water quality against the discharge 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. No water from fuel berms was discharged to the tundra in 2014.
-Effluent from the landfarm is sampled in accordance with the licence criteria for discharge when water is available - no discharges occurred from the facility in 2014.
- Effluent from the mine portal/decline is sampled in accordance with the criteria specified for Monitoring Station BOS-2 (Containment Pond). Approximately 699 cu.m. of water was pumped from the mine portal to the tundra in 2014. No water was discharged from BOS-2 to the tundra in 2014.

A list of unauthorized discharges and a summary of follow-up actions taken.

Spill No.: (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

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

No unauthorized discharges occurred in 2014 under licence 2BB-BOS1217.

Revisions to the Spill Contingency Plan

Other: (see additional details)

Additional Details:

See Item 12 of attached Annual Report Supplement for details.

Revisions to the Abandonment and Restoration Plan

Other: (see additional details)

Additional Details:

See Item 12 of attached Annual Report Supplement for details

Progressive Reclamation Work Undertaken

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

See Item 14 of the attached Annual Report Supplement for details.

Results of the Monitoring Program including:

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

Details attached

Additional Details:

The coordinates for the freshwater intake (BOS-1) are in the attached coordinates file.
Drilling water source coordinates are maintained on file by the Exploration Department for all water sources utilized proximal to the drill targets. No drilling occurred in 2014 so there are no drill water sources to report.

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

Details attached

Additional Details:

The coordinates for waste discharge locations (BOS-2, 3, 4, 5, 6) are in the attached coordinates file.

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

Additional sampling requested by an Inspector or the Board (See below)

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

No additional sampling or analysis was requested.

Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

Select

Additional Details: (Attached or provided below)

N/A

Any responses or follow-up actions on inspection/compliance reports

Inspection Report received by the Licensee (Date):

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

See Item 13 of attached Annual Report Supplement for details on inspection action items and how these were addressed.

Any additional comments or information for the Board to consider

Please see attached Annual Report Supplement for additional information requirements set out in Licence No. 2BB-BOS1217.

Date Submitted:	March 31, 2014	
Submitted/Prepared by:	John Roberts	
Contact Information:	**Tel:**	(416) 628-0216
	Fax:	
	email:	john.roberts@tmacresources.com

GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	Deg °	Min ′	Sec ″	Deg °	Min ′	Sec ″
BOS-1 - Raw water supply intake at Spyder Lake	67	39	34.7	106	23	39.9

GPS Locations of areas of waste disposal

Location Description (type)	Latitude			Longitude		
	Deg °	Min ′	Sec ″	Deg °	Min ′	Sec ″
BOS-2 - Containment Pond Discharge	67	39	29.3	106	22	58.2
BOS-3 - Sewage Disposal Facility Final Discharge	67	39	33.9	106	23	10.5
BOS-4 - Treated sewage effluent point prior to entry into Aimaokatuk (Spyder) Lake	67	39	41.2	106	23	10.1
BOS-5 - Effluent from the bulk fuel storage facility prior to release	67	39	27.5	106	23	1.2
BOS-6 - Effluent from the landfarm treatment facility prior to release	67	39	29.3	106	23	3.5

2014 2BB-BOS1217 Type B Water Licence Annual Report Supplemental Document

Boston Advanced Exploration Project

Nunavut Water Board

Prepared by
TMAC Resources Inc.
Toronto, ON

Prepared for
Nunavut Water Board
Gjoa Haven, NU

March 2015

Executive Summary
2BB-BOS1217 Annual Report

TMAC Resources Inc. ("TMAC") has filed its Annual Report on its activities during 2014 under Water Licence No. 2BB-BOS1217 issued by the Nunavut Water Board. As set out in Part B, Item 6 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 data generated under 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
- updates or revisions to the Abandonment and Restoration Plan, QA/QC Plan, Waste Rock and Ore Storage Plan, Spill Contingency Plan, and Landfarm 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, and an outline of any work anticipated for the next year
- a summary of drilling activities and progressive reclamation
- any updates with respect to the Boston restoration liability and any modifications to the site plan
- an estimate of both the current and anticipated volume of waste rock and ore stockpiled on site
- a summary of public consultation/participation with local organizations and residents of nearby communities, if any were conducted
- a summary of abandonment and restoration work completed
- an update on the status of the V-notch weir at Stickleback Lake
- a summary of any specific studies or reports requested by the board, and a brief description of future studies currently planned or proposed
- any other details on water use and waste disposal requested by the board

Atanguyan Naetomik Okaohen
2BB-BOS1217 Ukeotoagaagan Unipkaak

TMAC-kon Oyagakheoktin ("TMAC-kon") titigakhimaliktun Ukeotoagaagan Unipkaamik havaamigun 2014-mi ilagani Imaknik Atoknigagun laeseoyum Napaa 2BB-BOS1217 tuniyaohimayok Nunavumi Imalikiyin Katimayenin. Okaotaoyomi Ilagani B, Okaohik 6 Laeseoyomi, unipkaak ilakaktok hivonikhiyutikhanik ukuniga okaoheoyonik:

- naetomik okaohik imaknik atoknigagun atakugutiniklo
- naetomik okaohik naonaepkotink pihimayonik ilagani Amigiyotinun Havaani
- titigaknigin agiktaohimagitun kuvigaeyotinik naetomilo okaohik kigoagun havaanik
- naetomik okateagun kigoagun havaanik ihoakhiyaagani ihomalutaoyun okateakhimayun ihivgeokhikmata maligoateakmagalo unipkaagini Ihivgeokhiyum
- kanogilivaleanigin nutaguktiknigilo Kimaktaokpan Utiktitaaganilo Ilitkoheanun Opalogaeyaon, Haohiven Opalogaeyagaoyok okateagun tamaenik atoenaktun kiguliklunen nunan utiktitaagani ilitkohenun havaagiyaoyun
- naetomik okaohik ihoakhakniginik hanakiyotiloalunen Imiktakviknik Anagukvikniklo, kanoklo havaohikhaenik nahogiyaoyonik atoktukhami ukeomi
- naetomik okaohik ikutaktun havaaginik atoenaktomiklo nunan utiktitaagani ilitkohenun
- kanogilivaleayotin Boston-mi nunan utiktiniganik ilitkohenun maneyaotaoyok ihoakhaotikakalunelo iglukpakakvikmi opalogaeyaon
- nalaotaknigin tamaknik taya nahogiyaoyulo ikagun oyakan oyagaktaaniklo katitigivik iglukpakakvikmi
- naetomik okaohik kitulikaa okakatiginikun nahogiyaoyulunen nunagiyaoyoni timeoyonik inukniklo kanitoani nunagiyaoyoni, pihimanikata
- naetomik okaohik kimaliktaokpan nunalo utiktiniginik ilitkohenun havaan inikhiayun
- kanogiliniganik V-tun itomik hapotinik Stickleback-mi Tatimi
- naetomik okaohik hunaniklikaa ilitokhaotinik unipkaaniklo tukhigaoyun katimayinin, naetomik okateagun hivunikhami ilitokhaotikhanik taya opalogaeyagaoyonik atoktaoyomayoniklo
- ahenik okateagutinik imaknik atoknigagun atakuknikulo tukhigaoyun katimayinin

ᑐᓴᒐᒃᓴᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ
2BB-BOS1217 ᐊᕐᕌᖑᑕᒫᑦ ᑐᓴᒐᒃᓴᑦ

ᐅᑯᐊ TMAC Resources Inc.−ᑯᑦ (“TMAC”) ᑎᑎᕋᖅᓯᒪᓕᖅᑐᑦ ᐊᕐᕌᒍᓕᒫᖅᓯᐅᑎᒥᓂᒃ ᐊᐅᓚᑕᒥᓃᑦ ᐅᕙᓂ 2014 ᐊᑑᑎᑎᓪᓗᒋᑦ ᐃᒪᓕᕆᔾᔪᑖ ᓚᐃᓴᑦ No. 2BB-BOS1217 ᑐᓂᔭᐅᔪᔪᑦ ᓄᓇᕗᑦ ᐃᒪᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᑦᑕ. ᐅᑯᐊ ᐃᓚᖓᓅᖓᔪᑦ B, ᐱᔾᔪᑦ 6 ᓚᐃᓴᕐᑲᕈᑎᖓᑦ, ᑐᓴᒐᒃᓴᑦ ᒪᑯᓂᖓ ᐃᓚᖏᑦ:

- ᑐᓴᒐᒃᓴᑦ ᐃᒥᖅ ᖃᓄᖅ ᐊᑐᖅᑕᐅᕐᑲᑦᑕᕐᓂᖓ ᐊᒻᒪᓗ ᐊᒃᑐᖅᑕᐅᕐᑲᑦᑕᕐᓂᖓ ᐊᐅᓚᑦᓯᔪᓄᑦ
- ᑐᓴᒐᒃᓴᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ ᑎᑎᖅᑕᐅᕙᒃᑐᑦ ᖃᐅᔨᒪᔾᔪᑕᐅᓂᐊᕐᒪᑕ ᓄᐊᑕᐅᓪᓗᑎᒃ ᒪᓕᒃᑐᑦ ᖃᐅᔨᓴᕈᑎᓂᒃ ᐱᓕᕆᔾᔪᑎᓂᒃ
- ᐊᑑᑎᒍᑎᕐᑲᓐᓂᖏᑦᑐᑦ ᐱᔪᓇᐅᕈᑎᓂᒃ ᐊᓯᐊᓅᖅᐸᒃᑐᑦ ᐱᔾᔪᑕᐅᓪᓗᑎᒃ ᐊᒻᒪᓗ ᓇᐃᓈᖅᓯᒪᔪᑦ ᑐᓴᒐᒃᓴᑦ ᖃᓄᖅ ᐊᑑᑕᐅᕐᑯᔭᑦ ᑲᒪᕐᑯᔭᐅᓪᓗᑎᒃ
- ᐅᓂᒃᑳᑦ ᓇᐃᑦᑑᒐᓗᐊᑦ ᖃᓄᖅ ᐊᑑᑕᐅᕐᑯᔭᓂᒃ ᒪᓕᒃᑐᑦ ᐅᔾᔨᑐᑦᓯᐊᕐᑯᔭᐅᓪᓗᑎᒃ ᐃᓯᒫᓗᙵᖅᑐᓂᒃ ᖃᐅᔨᓴᖅᑕᒥᓂᕐᓂᒃ ᐊᒻᒪᓗ ᒪᓕᒃᑐᑦ ᐊᑑᑕᐅᕐᑯᔭᐅᓯᒪᔪᓂᒃ ᐱᕐᑯᔭᖅᑎᒍᑦ ᑐᓴᒐᒃᓴᑦ ᐋᕿᒃᓯᒪᔭᖕᒋᑦ ᖃᐅᔨᓴᖅᑎᐅᑉ ᓇᐅᑦᓯᑐᖅᑎᐅᑉ
- ᒫᓇᕐᓂᑕᑦ ᑐᓴᒐᒃᓴᑦ ᐅᐤᕙᓗᑭᐊᖅ ᐋᕿᖕᒋᐊᖅᓯᒪᔭᑦ ᕿᒪᒃᑕᐅᓃᑦ ᐊᒻᒪᓗ ᓴᓗᒪᖅᓴᐃᒍᑎᑦ, ᕿᑭᖅᑕᓂ ᑲᑐᔾᔮᕐᑲᑎᕆᑦ/ᕿᑭᖅᑕᓂ ᑯᐊᐳᓇᓴᓐ, ᐅᔭᕐᑲᑦ ᐊᒃᑕᑯᑦ ᐊᒻᒪᓗ ᓯᕐᓗᐊᖅ ᓄᐊᑕᒥᓂᖅᑕᓕᒃ ᐅᔭᕐᑲᓂᒃ, ᓄᓇᓕᕆᕓᕕᓂᖅ ᖃᓄᖅ ᐊᐅᓚᑕᐅᒐᔭᕐᓂᖏᑦ ᐅᓂᒃᖄᑦ ᐃᑑᓇᐃᓐᓂᒃ ᐱᔾᔪᑎᓖᑦ ᐱᕙᓪᓕᐊᔪᓕᒫᓂᒃ ᐅᕙᓗᑭᐊᖅ ᑭᖑᓪᓕᖅᐸᓂ ᓴᓗᒪᖅᓴᕋᒃᓴᑦ ᐱᓕᕆᐊᖑᓕᖅᑐᑦ
- ᑐᓴᒐᒃᓴᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ ᐱᔾᔪᑎᓕᒃ ᖃᓄᖅ ᐋᕿᒋᐊᕆᐊᓕᖕᓂᒃ ᐅᕙᓗᑭᐊᖅ ᐊᖏᕚᑎᓂᒃ ᓴᓇᔪᑦ ᐃᒪᕐᑲᕈᒻᒨᖓᔪᑦ ᐊᒻᒪᓗ ᐊᒃᑕᑯᓄᑦ ᐃᒥᕐᒨᖓᔪᑦ, ᓇᓗᓇᐃᔭᖅᓯᒪᔪᑦ ᖃᓄᐃᑦᑐᑦ ᓱᓕ ᑲᒪᒋᔭᐅᒋᐊᖏᑦ ᐊᕐᕌᒍᓖᖅᑐᑦ
- ᑐᓴᒐᒃᓴᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ ᐃᑯᑕᕐᓂᓕᕆᔪᑦ ᐊᐅᓚᑕᑦ, ᐱᕙᓪᓕᐊᔪᑦ ᓴᓗᒪᓴᖅᑕᐅᒋᐊᖏᓪᓗ
- ᖃᓄᑐᐃᓐᓇᖅ ᒫᓇᕐᓂᑕᑦ ᑐᓴᒐᒃᓴᑦ ᐅᕗᖓᖓᔪᑦ Boston ᓴᓇᒋᐊᕈᑏᑦ ᐱᕐᑯᑎᒋᔭᒥᒃ ᐊᒻᒪᓗ ᐋᕿᒃᑕᐅᒋᐊᕈᑎᖏᑦ ᓄᓇᐅᑉ ᖃᓄᐃᓕᖓᓂᖓᑕ
- ᒥᒃᓴᐅᓴᒃᑐᑦ ᑕᒪᒃᑭᓐᓅᖓᔪᑦ ᒫᓇ ᐊᒻᒪᓗ ᖃᓄᐃᓕᖓᖁᖅᑐᑦ ᐅᔭᕐᑲᑦ ᐊᑐᖅᑕᐅᓂᐊᖏᑦᑐᑦ ᐊᒃᑕᑯᑦ ᐊᒻᒪᓗ ᐅᔭᕋᓂᐊᖅᑕᒥᓃᑦ ᓄᐊᑕᐅᓯᒪᔪᑦ ᐃᓂᒥᓈᑦᑐᑦ
- ᑐᓴᒐᒃᓴᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ ᐅᕐᑲᕐᑲᑕᐅᕙᖕᓂᖏᑦ ᐃᓄᐃᑦ ᑲᑎᒪᑎᑕᐅᓪᓗᑎᒃ ᐃᓚᐅᔪᓪᓗ ᓄᓇᓕᖕᓂ ᑲᑐᔾᔮᕐᑲᑎᕆᑦ ᐊᒻᒪᓗ ᓄᓇᓖᑦ ᖃᓂᒋᔭᖏᑦ, ᐱᑕᕐᑲᐸᐸᑕ ᖃᓄᖅ ᐊᐅᓚᑕᓂᒃ
- ᑐᓴᒐᒃᓴᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ ᕿᒪᒃᑕᐅᓕᖅᐸᑦ ᐊᒻᒪᓗ ᓄᓇ ᐅᑎᖅᑎᑕᐅᓕᖅᐸᑦ ᓴᓗᒪᓴᖅᑕᐅᓗᓂ ᐃᕐᑲᓇᐃᔾᔪᑦ ᐱᔭᕇᐸᐸᑕ
- ᒫᓇᕐᓂᑕᑦ ᑐᓴᒐᒃᓴᑦ ᐱᔾᔪᑎᓖᑦ ᐃᕐᑲᓗᓕᖕᒥᒃ ᓴᐳᑎᑦ ᑕᓯᖓᓂ Stickleback Lake−ᒥ
- ᑐᓴᒐᒃᓴᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ ᖃᓄᑐᐃᓐᓇᖅ ᐃᓕᓴᕈᑕᐅᓯᓐᓈᑦ ᖃᐅᔨᓴᖅᑕᑦ ᐅᕙᓗᑭᐊᖅ ᑐᓴᒐᒃᓴᑦ ᑐᒃᓯᕌᕆᓯᒪᔭᖕᒋᑦ ᑲᑎᒪᔩᑦ, ᐊᒻᒪᓗ ᐅᓂᒃᑳᑦ ᐱᔾᔪᑎᓖᑦ ᓇᐃᓈᖅᓯᒪᔪᓂᒃ ᓯᕗᓂᒃᓴᒧᑦ ᐊᑑᑕᐅᕐᑲᑦᑖᖅᑐᑦ ᐃᓕᓐᓂᐊᕈᑕᐅᓯᓐᓇᖅᓱᑎᒃ ᒫᓇ ᐸᕐᓇᑕᑦ ᐅᕙᓗᑭᐊᖅ ᑐᒃᓯᕋᖑᓯᒪᔪᑦ
- ᖃᓄᑐᐃᓐᓇᖅ ᐊᓯᖏᑦ ᐅᓂᒃᑳᑦ ᐱᔾᔪᑎᓖᑦ ᐃᒥᖅ ᖃᓄᖅ ᐊᑐᖅᑕᐅᕐᑲᑦᑕᕐᓂᖓᓂᒃ ᐊᒻᒪᓗ ᐊᒃᑕᖅᑕᐅᕐᑲᑦᑕᕐᓂᖓ ᐊᑐᖅᑕᐅᓂᑯ ᑐᒃᓯᕋᖏᑦ ᑲᑎᒪᔩᑦ

Résumé opérationnel
2BB-BOS1217 Rapport annuel

TMAC Resources Inc. (« TMAC ») a déposé son rapport annuel sur ses activités au cours de l'année 2014 en conformité avec le Permis no 2BB-BOS1217 émis par l'Office des eaux du Nunavut (Nunavut Water Board), tel qu'énoncé dans la partie B, point 6, du permis. Le rapport comprend des renseignements sur les sujets suivants :

- un aperçu de l'utilisation et du traitement de l'eau et de l'évacuation des rejets
- un aperçu des données générées dans le cadre du programme de surveillance
- une liste des déversements non autorisés et un résumé des mesures de suivi prises à la suite de ces incidents
- une brève description des mesures de suivi prises pour régler les problèmes décrits dans les rapports d'inspection et de conformité établies par l'inspecteur
- des mises à jour et révisions du plan d'abandon et de restauration « Abandonment and Restoration Plan », du plan d'assurance/contrôle de la qualité (AQ/CQ), du plan de gérance des haldes de stériles et des piles de stockage de minerai « Waste Rock and Ore Storage Plan », plan d'urgence en cas de déversement « Spill Contingency Plan » et du plan de restauration du site par bio-remédiation « Landfarm Plan »
- une description des travaux de remise en état progressive et des travaux de remise en état terminé
- un aperçu des travaux d'entretien mineurs ou des travaux majeurs effectués sur les réserves d'eau potable, les installations de l'évacuation des rejets et de toutes leurs composantes s'y rattachant, ainsi qu'un aperçu des travaux prévus l'année suivante
- un aperçu des activités de forage et des travaux de remise en état progressive
- toute mise à jour du dépôt de garantie relatif aux travaux de remise en état en accord avec le « Boston restoration liability » et toute modification effectuée au plan du site
- une estimation du volume actuel et prévu des haldes de stériles et piles de stockage de minerai sur le site
- un aperçu décrivant la participation et la réalisation de consultations avec les organisations locales et les habitants des communautés voisines, si elles ont été menées
- un aperçu des travaux d'abandon et de restauration effectués
- une mise à jour sur l'état de la barrière de dénombrement (V-notch weir) au Lac de l'épinoche « Stickleback Lake »
- un aperçu des rapports ou études scientifiques exigés par l'Office et une brève description des éventuelles recherches ou celles prévues par l'Office
- tout autre détail en lien avec l'utilisation et du traitement de l'eau et de l'évacuation des rejets

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1. The monthly and annual quantities in cubic meters of all freshwater obtained from Aimaokatalok (Spyder) Lake at Monitoring Station BOS-1 [as per Part B Item 6 (a)]

Boston Camp was not open during 2014. No water was obtained from monitoring station BOS-1 in Aimaokatalok (Spyder) Lake for domestic or drilling use.

2. The monthly and annual quantities in cubic meters of Mine water pumped from the underground [as per Part B Item 6 (b)]

No minewater was pumped from the underground in 2014.

3. The monthly and annual quantities in cubic meters of treated Mine water and surface drainage discharged at Monitoring Station Number BOS-2 [as per Part B Item 6 (c)]

A total of 699 m^3 of surface water accumulation was discharged from the Boston portal in 2014 (545 m^3 on July 7, 59 m^3 on August 12, and 95 m^3 on August 28). The water was discharged onto the tundra to the west of the portal at UTM 7505312 N, 441358 E as approved by the Inspector. Prior notification of the planned discharge was provided May 24, 2014.

Historically, the BOS-2 Containment Pond has been used to contain water pumped from the Bulk Fuel Storage Facility BOS-5 as a water management strategy pending analytical water quality results. Water in BOS-2 was sampled in June and found to be compliant for discharge, but no discharges occurred. Water was transferred in June and July to BOS-2 from BOS-5 to facilitate prompt evacuation of water from the fuel farm berm. While in BOS-2 this water was treated though an oil/water separator in preparation for discharge, and found to be compliant for discharge post-treatment, but no water was discharged from BOS-2 in 2014 due to early onset of freezing conditions.

4. The monthly and annual quantities in cubic meters of treated Sewage effluent discharged at Monitoring Station Number BOS-3 [as per Part B Item 6 (d)]

Boston Camp was not open during 2014. No treated sewage effluent was discharged at monitoring station BOS-3.

5. The monthly and annual quantities in cubic meters of Sludge removed from the Sewage Disposal Facility [as per Part B Item 6 (e)]

No sludge was removed from the sewage disposal facility during 2014.

6. The annual quantities in cubic meters of all soil and types of contaminants from all locations that are placed within the Land farm facility [as per Part B Item 6 (f)]

In 2014, no new material was deposited in the Landfarm facility at Boston Camp.

7. Report all artesian flow occurrences as identified under Part F, Item 3 [as per Part B Item 6 (g)]

No artesian flow occurrences were encountered in 2014. No drilling occurred pertaining to the Licence.

8. Report all drilling activity that has penetrated below the permafrost as identified under Part F, Item 4 [as per Part B Item 6 (h)]

Drilling activity did not occur in 2014 in the Boston area. For areas where exploration is carried out, 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 collected from all thermistor strings are presented in the Annual Geotechnical Inspection Reports filed under Water Licence 2AM-DOH1323.

9. Tabular summary of all data generated under the Monitoring Program [as per Part B Item 6 (i) and Part J Item 21]

Tables setting out data generated under the Monitoring Program appear at Appendix A of this document.

10. A summary of modifications 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 [as per Part B Item 6 (j)]

No changes were made to the water supply or waste disposal facilities in 2014. No work is anticipated for 2015.

11. A list of unauthorized discharges and follow-up action taken [as per Part B Item 6 (k)]

No unauthorized discharges occurred pertaining to this licence in 2014.

12. Updates or revisions to the Abandonment and Restoration Plan, QA/QC, Waste Rock and Ore Storage Plan, Spill Contingency Plan, and Landfarm Plan [as per Part B Item 6 (l)]

The Abandonment and Restoration Plan has been revised to take into consideration comments received on the last version and to update the plan to reflect new Project ownership. This revised plan was submitted to the NWB May 26, 2014 and a letter approving the Plan was received from the NWB August 17, 2014.

The 2012 revision of the Hope Bay Mining Ltd., Quality Assurance and Quality Control Plan, 2AM-DOH0713, 2BB-BOS1217, 2BE-HOP1222, HB-QA-ENV-MP-001 (rev. 7.1), acceptable to an Analyst, was submitted to the NWB in November 2012. This QA/QC Plan, applicable to the Boston monitoring program during the Care and Maintenance phase, is still operationally valid.

The Water and Ore/Waste Rock Management Plan for the Boston Site (SRK, 2009) was not updated in 2014.

The Hope Bay Project Spill Contingency Plan was revised to appropriately reflect the Care and Maintenance phase of the project under the new Project ownership and to update all contact information. The revised Plan was submitted to the NWB on February 5, 2014. The Plan is scheduled for further revision to incorporate party review comments.

During 2014, no changes were made to the Boston Land Treatment Area Management and Monitoring Plan, SRK Consulting (Canada) Inc., January 2012.

13. A brief description of follow-up action taken to address concerns detailed in inspection and compliance reports prepared by the Inspector [as per Part B Item 6 (m)]

An inspection of Boston Camp and area was conducted by AANDC July 17, 2014. Four non-compliances were noted by the Inspector, with action items prescribed for each non-compliance:

Non-compliances

1. *Part D Item 17 No cover letter was submitted with the geotechnical report to respond to the Engineer's recommendations.*
2. *Part D Item 24 Failure to maintain the landfarm to the satisfaction of the Inspector.*
3. *Part E Item 7 Failure to implement the Boston Land Treatment Area Management and Monitoring Plan.*
4. *Part E Item 8 Failure to implement the 2009 water and ore/waste rock management plan.*

Action Items

1. *Provide a written response to the 2013 Geotechnical Report with a timeline to implement the recommendations. This report is to be submitted August 31, 2014.*
2. *Please clarify which is the latest approved Plan which describes the management of the landfarm at Boston by July 31, 2014. It is unclear from the documents accessible on the NWB FTP site. If no approved plan supercedes it, then the Boston Land Treatment Area Monitoring and Management Plan is to be implemented.*
3. *Progressive remediation of drill sites is to continue. Please provide an updated inventory and prioritization of drill sites by August 31, 2014.*

The non-compliances and action items were addressed as follows:

1. On August 29, 2014, a summary of the 2013 Boston Geotechnical report and timeline for implementation of the recommendations was provided to the Inspector. The responses provided included information on the implementation of the water and ore/waste rock management plan to address seepage from the site ore stockpiles and waste rock, and the monitoring of seepage and ephemeral streams that indicate that at present, no alternative to water management for the seepage is required. The 2014 Annual Geotechnical Inspection was conducted in July and updated recommendations and responses to those recommendations provided to the NWB in February 2015.

2. TMAC confirmed to the Inspector by July 31, 2014, that the *Boston Land Treatment Area Management and Monitoring Plan, SRK Consulting (Canada) Inc., January 2012* is still the current plan. This was followed up with an email November 6, 2014 referencing the previously submitted (January 23, 2013) updated site-wide Monitoring and Follow-up Plan (2013) that outlined the current management and monitoring strategy for the Boston Landfarm during Care and Maintenance. The Monitoring and Follow-up Plan confirms that the Boston Landfarm is full to capacity and that no further additions are allowed. Phase II (2009) and Phase III (2012) Assessments have indicated the soils inside the landfarm are not readily amenable to remediation in situ and the best option for this facility is to package the contaminated soil for removal and offsite disposal.

3. An inventory of all Hope Bay drill sites and their reclamation priority and remediation progress was forwarded to the Inspector August 29, 2014. Work continued during September through November 2014, with most efforts occurring at the north end of the belt. A total of 43 drill sites were visited and reclamation work completed. For simplicity, belt-wide drill site reclamation information was consolidated and reported monthly in the SNP reports for Hope Bay Regional Exploration Licence 2BE-HOP1222, and will continue to be included in the monthly and Annual Reports under that licence. TMAC will continue to remediate new drill sites as they are completed, and opportunistically remediate historic drill sites as resources become available.

14. A summary of drilling activities and progressive reclamation of drill sites [as per Part B Item 6 (n)]

No drilling activities occurred in 2014 in the Boston water licence area. Progressive reclamation of drill sites in 2014 was focused on the North end of the belt and summary reporting of beltwide progress on reclamation of the historical drill holes is consolidated and provided with the Annual Report for 2BE-HOP1222.

15. An updated estimate of the current Boston restoration liability based upon the results of the restoration research, project development monitoring, and any modifications to the site plan [as per Part B Item 6 (o)]

As per the Boston Camp Revised Interim Closure Plan (2014) submitted to the NWB May 26, 2014, the current closure cost estimate is $5,988,000. This amount includes cost escalation, management of mineralized rock, reclaiming drill sites and other areas of permafrost degradation, remediation of hydrocarbon contaminated soils, indirect costs, and a contingency.

16. An estimate of both the current and anticipated volume of waste rock and ore stockpiled on site [as per Part B Item 6 (p)]

It is estimated that there are approximately 47,400 m^3 of ore stockpiled on site at Boston Camp based on digital models of the ore removed historically from the underground workings at Boston. There is no estimate for the anticipated waste rock and ore to be stockpiled, because there is no mining activity occurring or currently planned for Boston.

17. A public consultation/participation report describing consultation with local organizations and residents of the nearby communities, if any were conducted [as per Part B Item 6 (q)]

Community consultations continued in accordance with the Community Relations Plan, which is a responsibility of the Cambridge Bay office of TMAC Resources Inc.

Alex Buchan, Director of Community Relations, based in Cambridge Bay is primarily responsible for implementing this Plan, with support from Julia Micks, VP of Human Resources, and supported by Ikey Evalik, Inuit Impact and Benefit Agreement Coordinator. As the Doris North IIBA has been held in abeyance during Care and Maintenance, Mr. Evalik's interim role has been expanded to include support to Site Environmental Compliance monitoring.

Community relations in 2014 focused on providing information to the public on Doris North Care and Maintenance activities, Advanced Exploration activities, supporting the

TMAC/KIA/NTI Inuit Land Tenure negotiations, and explaining Hope Bay permitting efforts.

TMAC vacated the storefront office at #4 Omingmak Street in Cambridge Bay during the 2nd Quarter of 2014. The TMAC Office was moved to vacant office space on the 2nd floor of the Kitikmeot Center, above the Northern Store at #18 Mitik Street. This new location provides greater public exposure and easier access for walk-in traffic. TMAC maintains an open door policy and Cambridge Bay residents and Beneficiaries regularly visit the TMAC office for their own interest.

TMAC continues to participate in key Nunavut, regional and community organizations and groups aligned to support community relations and consultation efforts. These groups include the NWT/Nunavut Chamber of Mines, the Nunavut Mining Symposium Society, the Nunavut Mine Training Roundtable, the KIA regional ASETS Stakeholder group, Cambridge Bay Community Readiness Committee, and the Cambridge Bay Canadian High Arctic Research Station Committee.

TMAC involvement in the Chamber of Mines and Mining Symposium promotes industry awareness and advocacy and mine focused dialogue at a territorial level. Participation in the Mine Training Roundtable and ASETS Stakeholder group promotes understanding and coordination of training and education initiatives in the region and territory. Involvement in Community Readiness and CHARS committees supports sustaining community development and planning.

Cambridge Bay Logistics Hub

Cambridge Bay continues to be the logistics hub for TMAC in the Kitikmeot. Employees from across the region are flown to Cambridge Bay via commercial airline service, and are transported to and from Site utilizing a charter aircraft stationed at Cambridge Bay. Use of locally available aircraft has supported the continued positioning of these assets in Cambridge Bay.

Other Communications

In 2014, TMAC continued the use of a project/company Facebook page to provide information on Hope Bay primarily to northern stakeholders. Content of this page includes permitting information, meeting notices, and pictures of site activities linked to Kitikmeot community news pages. Use of and exposure for the TMAC Facebook page typically runs in the range of 2-300 views per post. Some feedback is received through the Page, including employment inquiries. The page can be viewed at the following link: https://www.facebook.com/tmacresources.

TMAC periodically generates Newsletters that provide for company and project updates. These publications are directed primarily to the investor community. However copies are made available to our northern stakeholder contacts.

TMAC continues to respond to various media requests. In 2014, Nunatsiaq News, News North, Up Here Business Magazine and CBC North all ran stories related to Hope Bay for primarily northern stakeholders.

Community Relations Monthly Summary

January

- A number of activities were conducted this month towards supporting the negotiation of a Mineral Exploration Agreement for the Hope Bay project with NTI Lands Division.
- A surface tenure negotiation session was held between TMAC and KIA in Toronto this month, supported by TMAC Cambridge Bay staff.
- TMAC attended a KIA ASETS program Kitikmeot Stakeholder Working Group training planning meeting in Cambridge Bay this month.
- At the end of the month, TMAC attended the Cordilleran Roundup in Vancouver. Meetings were held with the KIA on surface access matters, several Kitikmeot Corporation affiliated contractors, and the new Nunavut Mines Minister Kuksuk.

February

- The 2013 Doris North Socio-Economic Monitoring Report was finalized and submitted this month to the NIRB and Kitikmeot Socio-Economic Monitoring Committee.
- Several comments received from the KIA on the previously circulated TMAC Community Complaints Policy were responded to this month.
- Various communications were handled through the TMAC Cambridge Bay office related to the definition of Water Use under Nunavut Water Board guidelines and as interpreted in Federal Nunavut legislation. This legal interpretation was understood to affect planned 2014 diamond drilling activities in the Hope Bay belt.
- TMAC submitted specific comments to the Nunavut Planning Commission on the draft Nunavut General Land Use Plan this month related to Land Use designations in the central Kitikmeot area.
- At the end of the month, TMAC Cambridge Bay staff attended the 2014 PDAC conference in Toronto. During this event, a KIA negotiation session was conducted.
- TMAC worked with the Ekaluktutiak Hunters and Trappers Organization this month to renew the Hope Bay Wildlife Research license to allow for 2014 planned activities under the Wildlife Mitigation and Monitoring Program.

March

- This month work was conducted to respond to socio-economic Information Requests made by interveners related to the 2013 submission of a Project Certificate Amendment application.
- The TMAC Cambridge Bay office assisted in returning a husky dog to its owner that wandered into Doris Camp this month.
- The TMAC office at #4 Omingmak was packed up this month and re-established at #18 Mitik Street.

April

- TMAC attended the 2014 Nunavut Mining Symposium in Iqaluit this month. A number of meetings with regulators were held during this event, and a project update provided to delegates.
- A deceased red fox found on Hope Bay infrastructure was turned over to the GN-DOE wildlife office in Cambridge Bay this month for analysis.
- Seasonal Staff recruitment began this month for the 2014 field program. Hiring focused on Environmental Field Assistants and Geo-technician Assistants.
- In April, TMAC consulted with the KIA on Inuit Hope Bay staff requests to be allowed to subsistence fish at site during work rotations.
- A project update was provided to the KIA Board of Directors and Kitikmeot Corporation in Cambridge Bay during their regularly scheduled meetings.
- At the end of the month, TMAC attended a NIRB Kitikmeot Community consultation tour aimed at soliciting feedback on our Project Certificate amendment application.

May

- Logistical work began this month to facilitate regular crew changes for Kitikmeot workers conducting seasonal field work at Hope Bay. This work continued throughout the summer and fall, ending in November.

June

- In June, TMAC attended another KIA ASETS Stakeholder Working Group meeting to discuss regional training needs.
- TMAC facilitated a KIA Lands Site inspection this month.
- A project briefing was held in Cambridge Bay to CanNor senior management this month.
- TMAC attended the 2014 Nunasi Corporation Kitikmeot Tour this month with Inuk NHL player Jordin Tootoo. The purpose of this tour was to encourage Kitikmeot youth to stay in school and lead healthy productive lives. TMAC role during this tour was to highlight future careers in mining in the region.
- TMAC supported a site wildlife response with the GN-DOE Wildlife in Cambridge Bay this month in relation to deterring a herd of Muskox from the vicinity of the Doris Helipad. The muskox were deterred successfully.

July

- TMAC facilitated a community visit this month with a number of stakeholder groups with a Conference Board of Canada representative interested in conducting Community Readiness work in Cambridge Bay.
- Work began this month to support the submission of a Type B Water Licence application to allow for a Bulk Sample of the Madrid Deposit. The community consultation and socio-economic sections of this application was the focus of this work. The completed application was subsequently submitted in December 2014.

- TMAC provided support to the Canada/Nunavut Geoscience Office conducting geological research in the Elu Inlet basin this month with camp and helicopter support.
- Progress was made this month on securing mineral tenure through NTI lands with the receipt and review of a revised MEA document.
- The annual NIRB Site Visit pursuant to the Doris North Project Certificate monitoring requirements was facilitated this month.

August

- TMAC supported a Television production crew undertaking filming in the Hope Bay area this month. "Canada Over the Edge" series helicopter flew to Doris Camp to capture video footage of our operation. Results of this filming will be shown late March on the TVO television channel.
- In August, TMAC initiated the KIA Traditional Knowledge Study agreement in support of future environmental assessments in the Hope Bay district. It is anticipated that in 2015 traditional knowledge collected under this agreement will be incorporated in the Phase II project design.

September

- A negotiation session in Cambridge Bay was held this month between TMAC and KIA furthering talks on surface land access. During this session, TMAC representatives presented to the KIA and Kitikmeot Corporation Board of Directors.
- The second annual KIA Site Inspection made by KIA Lands staff was facilitated this month.

October

- During this month, a number of key negotiation documents between TMAC and KIA were traded and reviewed related to reaching an agreement in principle on a future Framework Agreement that would govern future surface access to the Hope Bay project area. A face to face meeting was held with KIA negotiators early in the month. Additionally, a counterproposal to the NTI Mineral Exploration Agreement was developed and provided to the NTI Lands Department.
- A presentation was prepared this month for the annual Kitikmeot Mayor`s meeting. However, due to weather problems, the meeting was postponed until 2015.
- TMAC communicated with a number of Kitikmeot Businesses and stakeholders this month regarding the status of the NTCL Barge containing community shipments that subsequently was iced in at Roberts Bay jetty due to the lateness of the season.

November

- TMAC representatives attended the 2014 Geoscience Forum conference in Yellowknife this month. In addition to providing a project update as part of the general sessions, a regulatory presentation was made at the Can-Nor Yellowknife offices with a number of agencies attending.

- An additional session in Toronto was held this month between TMAC and KIA furthering talks on surface land access.

December

- TMAC conducted a Kitikmeot Community Tour this month. The primary purpose of this tour was to conduct public meetings in all Kitikmeot communities to provide information on the Hope Bay project, 2014 activities, 2015 plans, and in particular, information on the planned Madrid Bulk Sample. All Kitikmeot communities were visited during this tour.

18. Summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year [as per Part B Item 6 (r)]

No abandonment or restoration work was completed in 2014 at Boston aside from the deposition of some non-saline drill cuttings (generated under Hope Bay Regional Exploration Program drilling near the Boston Advanced Exploration Project) to a location to the south of Boston camp at N67º 39' 10.8" W106º 22' 53.6" to fill some permafrost degraded areas near the airstrip. No work is planned for 2015, aside from opportunistic reclamation of historic drill holes if staff resources and site access limitations permits.

19. An update on the status of the v-notch weir located at Stickleback Lake, an item transferred through the amalgamation of Licence NWB4WEI0002 with 2BB-BOS0106 (now the current Licence) and addressed through Part E, Item 9 [as per Part B Item 6 (s)]

The v-notch weir at Stickleback Lake was removed on August 9, 2012. A report on the removal of the weir was submitted to the NWB on September 6, 2012.

20. 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 6 (t)]

No specific studies or reports were requested by the Board in 2014.

21. Any other details on Water use or Waste disposal requested by the Board by November 1st of the year being reported [see Part B Item 6 (u)]

No other details on water use or waste disposal were requested by the Board by November 1, 2014.

Appendix A

Annual Monitoring Report – 2BB-BOS1217

a) Tabular Summary of Monitoring Information

The following section summarizes the results of sampling undertaken in 2014 as part of the monitoring program detailed in Part J of licence 2BB-BOS1217.

Monitoring was not undertaken at the following stations because the camp was not operational in 2014: BOS-1 (raw water supply intake at Aimaokatalok Lake), BOS-3 (sewage disposal facility final discharge), and BOS-4 (treated sewage effluent point prior to entry to Aimaokatalok Lake).

Water from the Containment Pond (BOS-2) was sampled in June and found to be compliant for discharge (under Part D, Item 19), but no water was discharged. Samples were analyzed for the criteria for both BOS-2 and BOS-5 due to the fact that water from the smaller fuel containment berms and occasionally from the bulk fuel farm BOS-5 has been transferred into the Containment Pond to facilitate consolidated sampling, and treatment as needed, prior to discharge. Water was transferred from BOS-5 to BOS-2 during June and July, and subsequent samples were collected and analyzed from BOS-2. The sampling found the water to be non-compliant for discharge (under Part D, Item 19) due to elevated lead levels. During August, the water in BOS-2 was treated through an oil/water separator with activated carbon, and sampled before and after treatment. The water post-treatment was compliant with the discharge criteria from Part D, Item 19 of the licence, but due to the onset of freezing and limited ability to access the Boston site, no opportunity was available in 2014 to discharge from BOS-2. Analytical results are provided in Table 1. With respect to discharges of water at Boston, it is important to note that the threshold for discharges under Part D, Item 9 (Containment Pond BOS-2), for lead is 0.4mg/L in any grab sample. This threshold is two orders of magnitude less sensitive than those applied to discharges from BOS-5 (0.001 mg/L). Also, the criteria specified in the Doris North Water Licence 2AM-DOH1232 for discharges from any bulk fuel storage facility, for lead in any grab sample (0.02 mg/L), is one order of magnitude less sensitive than for discharges from the Boston bulk fuel storage facility. TMAC is interested in discussing with the NWB an approach to standardization of bulk fuel facility effluent discharge quality limits across the project.

Mine water was not pumped from underground during 2014. The surface water accumulated at the portal was sampled against criteria for BOS-2 (Containment Pond) and discharged directly to the tundra at UTM 7505312 N, 441358 E as approved by the AANDC Inspector. Table 2 shows the sampling results for this water. A notification of the discharge was provided to the Inspector May 24, 2014.

Water from BOS-5 (effluent from the bulk fuel storage facility) was transferred into the Containment Pond BOS-2 during June and July as described above. Table 3 shows the sampling results for this effluent.

Water was not discharged from BOS-6 (Landfarm) in 2014 because there was no water to sample at this location.

No landfill exists at Boston and the status of monitoring station BOS-7 is in-active.

During 2014, TMAC opportunistically sampled at locations where seepage was observed during periods of runoff near the waste rock and ore storage pad (BOS-8). Table 4 shows sampling results of this effluent.

Table 1 - Results of 2014 water quality sampling from containment pond monitoring station BOS-2, in mg/L, unless specified otherwise

	Sample ID	BOS2C-16JUN14	BOS2C-31JUL14	BOS2C-12AUG14	BOS2C-28AUG14A	BOS2C-28AUG14B	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
	ALS ID	L1472437-1	L1496362-3	L1503333-1	L1510550-1	L1510550-2		
	Sample Date/Time	6/16/2014 9:30	7/31/2014 17:20	8/12/2014 16:30	8/28/2014 11:15	8/28/2014 15:50		
Parameter	**Units**	**Results**						
Conductivity	uS/cm	230	1160	30500[1]	1020	1020		
Hardness (as CaCO3)	mg/L	105	660	544	547	548		
pH	pH	7.76	7.85	7.1	7.98	7.9		6.0-9.5
Total Suspended Solids	mg/L	3.7	3.3	3.8	<3.0	3.1	25	50
Alkalinity, Total (as CaCO3)	mg/L	33.2	74.4	43.9	72.6	71.5		
Nitrate (as N)	mg/L	530	566	<0.050 *	<0.050 *	<0.050 *		
Nitrite (as N)	mg/L	<0.050	<0.050 *	<0.010 *	<0.010 *	<0.010 *		
Sulfate (SO4)	mg/L	60	619	445	469	473		
Aluminum (Al)-Total	mg/L	0.196	0.0297	0.0505	0.0139	0.0177		
Antimony (Sb)-Total	mg/L	0.00097	0.00497	0.00412	0.00387	0.0035		
Arsenic (As)-Total	mg/L	0.0338	0.36	0.118	0.0784	0.0408	0.5	1.00
Barium (Ba)-Total	mg/L	<0.020	0.021	0.023	0.022	0.024		
Beryllium (Be)-Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		
Boron (B)-Total	mg/L	<0.10	<0.10	0.18	0.18	<0.10		
Cadmium (Cd)-Total	mg/L	<0.000010	0.000042	0.000047	0.000028	0.000014		
Calcium (Ca)-Total	mg/L	24.9	158	133	133	134		
Chromium (Cr)-Total	mg/L	0.0022	<0.0010	<0.0010	<0.0010	<0.0010		
Cobalt (Co)-Total	mg/L	0.00652	0.0182	0.0044	0.00325	0.00262		
Copper (Cu)-Total	mg/L	0.0055	0.0012	0.0089	0.0075	<0.0010	0.30	0.60
Iron (Fe)-Total	mg/L	0.256	0.662	0.303	0.154	0.094		
Lead (Pb)-Total	mg/L	0.00082	**0.0166**	**0.00286**	**0.00147**	0.00087	0.20	0.40/0.001^
Lithium (Li)-Total	mg/L	<0.0050	0.012	0.0149	0.0173	0.0175		
Magnesium (Mg)-Total	mg/L	10.4	64.5	51.5	52.4	51.6		
Manganese (Mn)-Total	mg/L	0.0435	0.06	0.00749	0.00312	0.00453		
Mercury (Hg)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Molybdenum (Mo)-Total	mg/L	<0.0010	0.0028	0.0037	0.0035	0.0025		
Nickel (Ni)-Total	mg/L	0.0205	0.0628	0.0483	0.0472	0.031	0.50	1.00
Potassium (K)-Total	mg/L	3.2	12.5	9.3	9.2	9.2		
Selenium (Se)-Total	mg/L	0.0001	0.00018	0.00038	0.00035	0.00028		
Silver (Ag)-Total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		
Sodium (Na)-Total	mg/L	2.9	13.1	11.5	10.7	10.6		
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	0.016	<0.010	0.016	0.016		
Uranium (U)-Total	mg/L	<0.00020	0.00209	0.00039	0.00042	0.00143		

	Sample ID	BOS2C-16JUN14	BOS2C-31JUL14	BOS2C-12AUG14	BOS2C-28AUG14A	BOS2C-28AUG14B	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
	ALS ID	L1472437-1	L1496362-3	L1503333-1	L1510550-1	L1510550-2		
	Sample Date/Time	6/16/2014 9:30	7/31/2014 17:20	8/12/2014 16:30	8/28/2014 11:15	8/28/2014 15:50		
Parameter	Units	Results						
Vanadium (V)-Total	mg/L	0.0011	0.0013	<0.0010	<0.0010	0.002		
Zinc (Zn)-Total	mg/L	<0.0050	0.0123	0.0076	0.0051	0.0213	0.50	1.00
Oil and Grease	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0		
Oil And Grease (Visible Sheen)		No	No	No	No	No	No Visible Sheen	No Visible Sheen^
Phenols (4AAP)	mg/L	<0.0010	0.0014	0.0029 *	0.0013	<0.0010		
Benzene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		0.370^
Ethylbenzene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		0.090^
Methyl t-butyl ether (MTBE)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Toluene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		0.002^
ortho-Xylene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
meta- & para-Xylene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Xylenes	mg/L	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075		
EPH10-19 (sg)	mg/L	<0.25	<0.25	<0.25	<0.25	<0.25		
EPH19-32 (sg)	mg/L	<0.25	<0.25	<0.25	<0.25	<0.25		
Acenaphthene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Acenaphthylene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Acridine	mg/L	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010		
Anthracene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Benz(a)anthracene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Benzo(a)pyrene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Benzo(b)fluoranthene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Benzo(g,h,i)perylene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Benzo(k)fluoranthene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Chrysene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Dibenz(a,h)anthracene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Fluoranthene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Fluorene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Indeno(1,2,3-c,d)pyrene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Naphthalene	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		
Phenanthrene	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		
Pyrene	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Quinoline	mg/L	<0.00010	<0.000010	<0.000040 *	<0.000020 *	<0.000010		

Bold text *indicates exceedance of water licence discharge criteria Maximum Concentration in a Grab Sample.*

^ *Part D, Item 19 criteria for Bulk Fuel Storage Facility BOS-5*

* *Detection limit adjusted due to sample matrix effects.*

[1] *Possible sample collection or analytical error*

Table 2 - Results of 2014 water quality sampling from Boston Portal, in mg/L, unless specified otherwise

Sample ID		BOS2P-16JUN14	BOS2P-31JUL14	BOS2P-12AUG14	BOS2P-28AUG14A	BOS2P-28AUG14B	Maximum Average Concentration (mg/L)^	Maximum Concentration of any Grab Sample (mg/L)^
ALS ID		L1472467-1	L1496362-2	L1503350-1	L1510510-1	L1510510-2		
Sample Date/Time		6/16/2014 10:40	7/31/2014 16:30	8/12/2014 12:25	8/28/2014 10:55	8/28/2014 10:55		
Parameter	**Units**	**Results**						
pH	pH	7.25	7.54	7.71	7.8	7.81		6.0 – 9.5
Total Suspended Solids	mg/L	4	4.2	<3.0	<3.0	<3.0	25	50
Arsenic (As)-Total	mg/L	0.0185	0.0598	0.0703	0.123	0.126	0.5	1.0
Copper (Cu)-Total	mg/L	0.0017	0.003	0.0029	0.0052	0.0059	0.30	0.60
Lead (Pb)-Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.20	0.40
Nickel (Ni)-Total	mg/L	0.0054	0.077	0.0831	0.201	0.2	0.50	1.00
Zinc (Zn)-Total	mg/L	<0.0050	0.0088	0.0092	0.0125	0.0143	0.50	1.00
Oil And Grease (Visible Sheen)		No	No	No	No	No	No Visible Sheen	No Visible Sheen

^ *Part D, Item 9 Discharge Criteria for Containment Pond BOS-2*

Table 3 - Results of 2014 water quality sampling from Bulk Fuel Storage Facility BOS-5, in mg/L, unless specified otherwise

Sample ID		BOS5-08JUN14	BOS5-07JUL14	BOS5-31JUL14	Maximum Concentration of any Grab Sample (mg/L)
ALS ID		L1468658-1	L1483339-1	L1496362-1	
Sample Date/Time		6/8/2014 1:45:00 PM	7/7/2014 3:30:00 PM	7/31/2014 2:15:00 PM	
Parameter	**Units**		**Results**		
Conductivity	uS/cm	667	943	1070	
Hardness (as CaCO3)	mg/L	386	495	601	
pH	pH	7.83	7.88	7.83	
Alkalinity, Total (as CaCO3)	mg/L	33.9	55.8	74	
Nitrate (as N)	mg/L	0.215	<0.050 *	551	
Nitrite (as N)	mg/L	0.0163	<0.010 *	<0.050 *	
Sulfate (SO4)	mg/L	299	448	530	
Aluminum (Al)-Total	mg/L	0.0714	0.0197	0.0564	
Antimony (Sb)-Total	mg/L	0.00494	0.00455	0.00485	
Arsenic (As)-Total	mg/L	0.208	0.135	0.751	
Barium (Ba)-Total	mg/L	<0.020	0.03	<0.020	
Beryllium (Be)-Total	mg/L	<0.0010	<0.0010	<0.0010	
Boron (B)-Total	mg/L	0.14	<0.10	0.38	
Cadmium (Cd)-Total	mg/L	0.00021	0.000264	0.000109	
Calcium (Ca)-Total	mg/L	106	127	145	
Chromium (Cr)-Total	mg/L	<0.0010	<0.0010	<0.0010	
Cobalt (Co)-Total	mg/L	0.0527	0.00598	0.0556	
Copper (Cu)-Total	mg/L	0.0135	0.0013	0.0076	
Iron (Fe)-Total	mg/L	0.257	0.617	0.873	
Lead (Pb)-Total	mg/L	**0.00582**	**0.0149**	**0.0196**	0.001
Lithium (Li)-Total	mg/L	0.0059	0.0118	0.0111	
Magnesium (Mg)-Total	mg/L	29.4	43	58.1	
Manganese (Mn)-Total	mg/L	0.165	0.0226	0.126	
Mercury (Hg)-Total	mg/L	<0.000010	<0.000010	<0.000010	
Molybdenum (Mo)-Total	mg/L	0.0017	<0.0010	0.0059	
Nickel (Ni)-Total	mg/L	0.149	0.0257	0.2	
Potassium (K)-Total	mg/L	6.3	8.7	12.1	
Selenium (Se)-Total	mg/L	0.00035	0.00033	0.00041	
Silver (Ag)-Total	mg/L	0.000045	<0.000020	<0.000020	
Sodium (Na)-Total	mg/L	6	9.4	12.3	
Thallium (Tl)-Total	mg/L	<0.00020	<0.00020	<0.00020	
Tin (Sn)-Total	mg/L	<0.00050	<0.00050	<0.00050	
Titanium (Ti)-Total	mg/L	0.014	<0.010	0.015	
Uranium (U)-Total	mg/L	<0.00020	0.00121	<0.00020	

Sample ID		BOS5-08JUN14	BOS5-07JUL14	BOS5-31JUL14	Maximum Concentration of any Grab Sample (mg/L)
ALS ID		L1468658-1	L1483339-1	L1496362-1	
Sample Date/Time		6/8/2014 1:45:00 PM	7/7/2014 3:30:00 PM	7/31/2014 2:15:00 PM	
Parameter	**Units**		**Results**		
Vanadium (V)-Total	mg/L	<0.0010	0.0012	<0.0010	
Zinc (Zn)-Total	mg/L	0.014	0.0268	0.0066	
Oil and Grease	mg/L	<5.0	<5.0	<5.0	15.0
Oil And Grease (Visible Sheen)		No	No	No	No Visible Sheen
Phenols (4AAP)	mg/L	0.0021	0.0013	0.025	
Benzene	mg/L	<0.00050	<0.00050	<0.00050	0.370
Ethylbenzene	mg/L	<0.00050	<0.00050	<0.00050	0.090
Methyl t-butyl ether (MTBE)	mg/L	<0.00050	<0.00050	<0.00050	
Toluene	mg/L	<0.00050	<0.00050	<0.00050	0.002
ortho-Xylene	mg/L	<0.00050	<0.00050	0.00104	
meta- & para-Xylene	mg/L	<0.00050	<0.00050	0.00084	
Xylenes	mg/L	<0.00075	<0.00075	0.00188	
EPH10-19 (sg)	mg/L	<0.25	<0.25	<0.25	
EPH19-32 (sg)	mg/L	<0.25	<0.25	<0.25	
Acenaphthene	mg/L	<0.000010	<0.000010	<0.000020 *	
Acenaphthylene	mg/L	<0.000010	<0.000010	<0.000010	
Acridine	mg/L	<0.000010	<0.000010	<0.000020 *	
Anthracene	mg/L	<0.000010	<0.000010	<0.000010	
Benz(a)anthracene	mg/L	<0.000010	<0.000010	<0.000010	
Benzo(a)pyrene	mg/L	<0.000010	<0.000010	<0.000010	
Benzo(b)fluoranthene	mg/L	<0.000010	<0.000010	<0.000010	
Benzo(g,h,i)perylene	mg/L	<0.000010	<0.000010	<0.000010	
Benzo(k)fluoranthene	mg/L	<0.000010	<0.000010	<0.000010	
Chrysene	mg/L	<0.000010	<0.000010	<0.000010	
Dibenz(a,h)anthracene	mg/L	<0.000010	<0.000010	<0.000010	
Fluoranthene	mg/L	<0.000010	<0.000010	<0.000010	
Fluorene	mg/L	<0.000010	<0.000010	<0.000020 *	
Indeno(1,2,3-c,d)pyrene	mg/L	<0.000010	<0.000010	<0.000010	
Naphthalene	mg/L	<0.000050	<0.000050	0.000254	
Phenanthrene	mg/L	<0.000020	<0.000020	<0.000020	
Pyrene	mg/L	<0.000010	<0.000010	<0.000010	
Quinoline	mg/L	<0.000010	<0.000010	<0.00020 *	

Bold/shading *indicates exceedance of Part D Item 19 Maximum Concentration in a Grab Sample.*

** Detection Limit raised due to sample matrix effects*

Table 4 - Results of opportunistic sampling at the Boston waste rock and ore storage pad monitoring station BOS-8, where flow was observed in 2014, in mg/L, unless specified otherwise

		Sample ID	BOS8-31JUL14	BOS8A-31JUL14	BOS8C-28AUG14
		ALS ID	L1496362-4	L1496362-5	L1510513-1
		Date Sampled	7/31/2014 16:45	7/31/2014 16:55	8/28/2014 11:50
Parameter	**Units**	**Detection Limit**	**Results**		
Conductivity	uS/cm	2	1610	1320	1500
Hardness (as CaCO3)	mg/L	0.5	885	669	762
pH	pH	0.1	7.72	7.18	7.6
Total Suspended Solids	mg/L	3	4.3	<3.0	<3.0
Alkalinity, Total (as CaCO3)	mg/L	1	-	-	
Ammonia, Total (as N)	mg/L	0.005	0.195	0.0305	0.0146
Nitrate (as N)	mg/L	0.25	-	-	
Nitrite (as N)	mg/L	0.05	-	-	
Sulfate (SO4)	mg/L	5	733	535	575
Aluminum (Al)-Total	mg/L	0.005	0.0579	0.0663	0.0216
Antimony (Sb)-Total	mg/L	0.0005	0.0121	0.0032	0.00317
Arsenic (As)-Total	mg/L	0.0005	0.0615	0.0251	0.0272
Barium (Ba)-Total	mg/L	0.02	0.032	0.021	0.021
Beryllium (Be)-Total	mg/L	0.001	<0.0010	<0.0010	<0.0010
Boron (B)-Total	mg/L	0.1	0.2	0.16	0.14
Cadmium (Cd)-Total	mg/L	0.00001	0.000039	0.000073	0.000018
Calcium (Ca)-Total	mg/L	0.1	227	142	155
Chromium (Cr)-Total	mg/L	0.001	0.0011	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L	0.0003	0.0588	0.0171	0.0105
Copper (Cu)-Total	mg/L	0.001	0.0082	0.006	0.0041
Iron (Fe)-Total	mg/L	0.03	0.117	0.056	0.054
Lead (Pb)-Total	mg/L	0.0005	<0.00050	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.005	0.0134	<0.0050	<0.0050
Magnesium (Mg)-Total	mg/L	0.1	77	75.9	91
Manganese (Mn)-Total	mg/L	0.0003	0.0547	0.701	0.299
Mercury (Hg)-Total	mg/L	0.00001	-	-	
Molybdenum (Mo)-Total	mg/L	0.001	0.0019	<0.0010	<0.0010
Nickel (Ni)-Total	mg/L	0.001	0.272	0.0793	0.132
Potassium (K)-Total	mg/L	2	5.3	13.2	12.7
Selenium (Se)-Total	mg/L	0.0001	0.001	0.00166	0.00084
Silver (Ag)-Total	mg/L	0.00002	<0.000020	0.000026	<0.000020
Sodium (Na)-Total	mg/L	2	44.4	55.9	67.9
Thallium (Tl)-Total	mg/L	0.0002	<0.00020	<0.00020	<0.00020
Tin (Sn)-Total	mg/L	0.0005	<0.00050	<0.00050	<0.00050
Titanium (Ti)-Total	mg/L	0.01	0.019	0.016	0.017
Uranium (U)-Total	mg/L	0.0002	0.00042	0.00067	0.00042
Vanadium (V)-Total	mg/L	0.001	<0.0010	<0.0010	<0.0010
Zinc (Zn)-Total	mg/L	0.005	0.0053	0.0053	<0.0050