



Baffinland Iron Mines Corporation
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Mary River Project
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2018 Qikiqtani Inuit Association (QIA) and Nunavut Water Board (NWB)
Annual Report for Exploration and Geotechnical Activities

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Water Licence 2BE-MRY1421 and Commercial Lease Q13C301

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March 31, 2019 / ᐱᑦᑕ 31, 2019



BAFFINLAND IRON MINES CORPORATION

MARY RIVER PROJECT

2018 QIKIQTANI INUIT ASSOCIATION (QIA) AND
NUNAVUT WATER BOARD (NWB) ANNUAL REPORT FOR EXPLORATION
AND GEOTECHNICAL ACTIVITIES

Rev 0



2019-03-31	0		
		A. Vermeer	C. Murray
Date	Rev.	Prepared By	Reviewed and Approved By

TABLE 0 – REPORT SUBMISSION SUMMARY - 2018

Year of Annual Report	2018
Annual Report Submission Date:	March 31, 2019
Name and contact information of the Baffinland representative responsible for the preparation and approval of the Annual Report.	Christopher Murray Christopher.murray@baffinland.com T: +1 416 364 8820 x5072 C: +1 647 472 9842
The name and contact information of the Baffinland representative that QIA can contact should it have any questions or comments regarding the Annual Report.	Christopher Murray Christopher.murray@baffinland.com T: +1 416 364 8820 x5072 C: +1 647 472 9842

2018 QIKIQTANI INUIT ASSOCIATION (QIA) AND NUNAVUT WATER BOARD (NWB) ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES

EXECUTIVE SUMMARY

This report to the Qikiqtani Inuit Association (QIA) and the Nunavut Water Board (NWB) has been prepared to summarize the 2018 exploration and geotechnical activities conducted under Baffinland Iron Mines Corporation's (Baffinland) Type 'B' Water Licence 2BE-MRY1421 (Type 'B' Water Licence) and the Commercial Lease No. Q13C301 (Commercial Lease) between the QIA and Baffinland for the Mary River Project (the Project). A separate annual report has been prepared for the QIA and NWB to summarize the 2018 Project activities and monitoring conducted under Baffinland's Type 'A' Water Licence 2AM-MRY1325 – Amendment No. 1 (Type 'A' Water Licence) and addresses the remaining annual reporting requirements set forth in the Commercial Lease.

The scope of the Type 'B' Water Licence focuses on exploration and geotechnical drilling activities and includes provisions and conditions regarding water use, waste management, construction and operation of satellite camps, exploration and geotechnical drilling programs, spill contingency and environmental monitoring.

During 2018, activities carried out under the scope of the Type 'B' Water Licence involved continued geotechnical drilling programs and assessments to support ongoing design studies for future Project infrastructure, an exploration drilling program to increase mine pit model confidence at Deposit No. 1 and further characterize Deposit Nos. 2 and 3, and the continued exploration of prospects and Baffinland's mineral leases. No satellite camps were constructed or operated in 2018, with all personnel involved with the exploration and geotechnical activities being based out of the Mine Site and Milne Port accommodation camps.

Water withdrawn under the authorization of the Type 'B' Water Licence in 2018 was used solely to support exploration and geotechnical drilling operations. The daily water withdrawal limits stipulated in the Type 'B' Water Licence were not exceeded in 2018.

In addition to tracking water use, environmental monitoring conducted in 2018 consisted of daily monitoring of drilling activities to ensure activities adhered to the practices outlined in the Project's Environmental Protection Plan (EPP). A marine under-ice water quality monitoring program at Milne Inlet was also conducted during the spring of 2018 to monitor turbidity and total suspended solids (TSS) levels near on-ice geotechnical testing activities.

Reclamation works carried out under the Type 'B' Water Licence during 2018 involved the reclamation of borehole and geotechnical testing locations associated with the 2018 exploration and geotechnical activities.

As outlined in the 2019 Work Plan, exploration activities for 2019 have not yet been finalized however it is anticipated that activities at a minimum will include mapping, sampling and geophysical and

geochemical surveys of prospects and Baffinland's mineral leases, and will include exploration drilling programs on Deposit Nos. 1, 2 and 3. Operation of the Steensby and Mid Rail camps to support exploration activities in 2019 are not anticipated however the establishment of a new exploration camp at the Ege Bay location is currently planned, pending land use agreements with QIA and the issuance of a separate Type 'B Water Licence currently under consideration by the NWB. It is anticipated that Baffinland will continue to conduct geotechnical assessments, including drilling programs, during 2019 to support on-going engineering design studies for future Project infrastructure. Preliminary locations for geotechnical assessments and drilling in 2019 include the Mine Site Aerodrome. As additional details for the 2019 exploration and geotechnical programs become available, this information will be provided to the NWB, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and the QIA prior to the commencement of activities.

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SECTION 1.0 - INTRODUCTION

1.1 PURPOSE AND SCOPE

This report to the Qikiqtani Inuit Association (QIA) and the Nunavut Water Board (NWB) has been prepared to summarize the 2018 exploration and geotechnical drilling activities conducted under Baffinland Iron Mines Corporation's (Baffinland) Type 'B' Water Licence 2BE-MRY1421 (Type 'B' Water Licence) and the Commercial Lease No. Q13C301 (Commercial Lease) between the QIA and Baffinland for the Mary River Project (the Project). A separate annual report has been prepared for the QIA and NWB to summarize the 2018 Project activities and monitoring conducted under Baffinland's Type 'A' Water Licence 2AM-MRY1325 – Amendment No. 1 (Type 'A' Water Licence) and addresses the remaining annual reporting requirements set forth in the Commercial Lease. Concordance tables referencing where in this report annual reporting requirements outlined in the Commercial Lease and Type 'B' Water Licence have been met are presented in Appendix A.

The scope of the Type 'B' Water Licence focuses on exploration and geotechnical drilling activities and includes provisions and conditions regarding water use, waste management, construction and operation of satellite camps, exploration and geotechnical drilling programs, spill contingency and environmental monitoring. Activities and data discussed in this report are summarized and referenced in the completed NWB Annual Report Forms, included as Appendix B of this report.

Figures 1 and 2 present the locations of the key areas associated with the Project where activities in 2018 were undertaken. Key areas involved with exploration and geotechnical activities in 2018 included Milne Port, the Milne Inlet Tote Road (Tote Road), the Mary River Mine Site (Mine Site) and Steensby Port.

1.2 REGULATORY FRAMEWORK

Although the key regulatory and legal documents that relate to this report are the Commercial Lease and the Type 'B' Water Licence, this report is presented in the context of other applicable regulatory authorizations and schedules for the Project. A list of the key regulatory permits, approvals and authorizations that allowed for the work to be completed at the Project in 2018 is presented in Table 1.0 below.

TABLE 1.0 – CURRENT PERMITS, APPROVALS AND AUTHORIZATIONS - 2018

Permit or Licence No.	Licence Name	Status Update for 2018	Expiry
Nunavut Impact Review Board			
No. 005	Amended Project Certificate	All works and activities have been screened by the Nunavut Impact Review Board (NIRB) and have been considered in the Project Certificate amendments issued by the NIRB in May 2014 (ERP) and October 2018 (Production Increase). A NIRB Annual Report is submitted by March 31 st of each year that summarizes the status of the Project relative to the conditions outlined in the Project Certificate.	N/A
Nunavut Water Board			
2AM-MRY1325	Type 'A' Water Licence – Amendment No. 1	In good standing; no amendments were issued by the NWB in 2018.	June 10, 2025
2BE-MRY1421	Type 'B' Water Licence	In good standing; no amendments were issued by the NWB in 2018.	April 16, 2021
Qikiqtani Inuit Association			
Q13C301	Inuit Owned Land Commercial Lease	Compliance with the lease is outlined in the 2018 QIA and NWB Annual Reports submitted by March 31 st of each year.	December 31, 2043
-	Inuit Impact and Benefit Agreement (IIBA)	Compliance with the agreement is outlined in the Annual IIBA Implementation Report submitted by March 31 st of each year.	N/A
Crown Land Use Permits and Quarry Permits			
47H16-1-2	Foreshore Area for Milne Port Ore Dock Lease	In good standing; no changes from previous year.	June 30, 2035
N2014Q0016	Tote Road and Borrow Area Land Use Permit	In good standing; no changes from previous year. Planned to be renewed.	June 30, 2019
N2014C0013	Steensby and Milne Land Use Permit	In good standing; no changes from previous year. Planned to be renewed.	June 30, 2019
N2014J0011	Bruce Head Land Use Permit	In good standing; no changes from previous year. Planned to be renewed.	June 30, 2019
N2014X0012	Milne Foreshore Land Use Permit	In good standing; no changes from previous year. Planned to be renewed.	June 30, 2019

Permit or Licence No.	Licence Name	Status Update for 2018	Expiry
Authorizations under the Fisheries Act			
06-HCAA-CA7-0084	Crossings along the Milne Inlet Tote Road Authorization	The authorization remains valid and has been amended over the years. A monitoring report for the water crossings was submitted to DFO on December 31, 2018.	N/A
14-HCAA-00525	Fisheries Authorization – Milne Ore Dock	A monitoring report for the ore dock was submitted to DFO on December 31, 2018.	December 31, 2020
NU-06-0084	Fisheries Authorization – Tote Road	-	N/A
Various Letter of Advice	Project crossings along Tote Road and at quarries, culvert extensions and replacements.	-	N/A
Approvals under the Navigable Waters Protection Act (Transport Canada)			
8200-07-10273, 10267, 10269, 10268, 10274, 10272, 10266, 10271	Construction of Watercourse Crossings (Bridges and Culverts)	In good standing, no changes from previous year.	Until complete
Licence under the Explosives Act			
F76068	Division 1 Factor Licence	Held by explosives contractor for the Project.	-

SECTION 2.0 - EXPLORATION AND GEOTECHNICAL ACTIVITIES

2.1 EXPLORATION ACTIVITIES AND DRILLING PROGRAMS

During 2018, exploration activities were based out of the Mine Site and consisted of day trips by helicopter to prospects and Baffinland's mineral leases to conduct mapping, sampling and geophysical and geochemical surveys. No new satellite camps were constructed and/or operated to support exploration activities in 2018. Although Steensby Port was used as a refuelling location for helicopters transporting exploration field crews in 2018, the site remained closed throughout the year and was not used to house personnel.

In addition to the exploration activities described above, an exploration diamond drilling program was conducted from June to September 2018 to increase mine pit model confidence at Deposit No. 1 and further characterize ore bodies at Deposit Nos. 2 and 3. The drilling program consisted of thirteen (13) boreholes; four (4) on Deposit No. 1, two (2) on Deposit No. 2, and seven (7) on Deposit No. 3. Equipment used in the diamond drilling program was transported between borehole sites using helicopters, and consisted of non-skid mounted drill rigs, drill rods and other supplies. Borehole locations associated with the 2018 exploration drilling program are presented in Table 2.0 and Figure 5.

Prior to commencing exploration drilling activities, a notification was submitted to the NWB, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and the QIA to ensure compliance with the conditions set out in the Type 'B' Water Licence and Commercial Lease. A copy of the notification is provided in Appendix C.

Exploration activities and drilling program were consistent with the activities proposed in Section 4.1 of the 2018 Work Plan (Rev. 1). No new exploration activities and drilling programs were proposed in the 2018 Work Plan Addendum.

2.2 GEOTECHNICAL ASSESSMENTS AND DRILLING PROGRAMS

To support on-going engineering design studies for planned future infrastructure at the Project, Baffinland continued to conduct geotechnical assessments in 2018, including two (2) geotechnical programs.

During April 2018, a marine on-ice geotechnical program, consisting of twenty-two (22) cone penetration tests (CPT), was conducted at Milne Inlet to evaluate the geotechnical conditions for the proposed second ore dock at Milne Port. The second ore dock at Milne Port is included in the scope of Baffinland's Phase 2 Expansion Proposal and is currently being reviewed by the relevant regulatory bodies and stakeholders. Table 2.0 and Figure 3 present the CPT locations associated with the 2018 marine on-ice geotechnical program at Milne Inlet.

Between March and June 2018, a land-based geotechnical drilling program was completed at the Project. The land-based geotechnical drilling program consisted of nineteen (19) boreholes situated at specific areas

of Milne Port, the Tote Road and the Mine Site. Borehole locations for the land-based geotechnical drilling program are presented in Figures 3, 4 & 5 and detailed in Table 2.0.

The equipment utilized for the land-based geotechnical drilling program consisted of a tracked drill rig capable of using both sonic and rotary coring drilling techniques. Other supporting equipment included a tracked flatbed vehicle (Nodwell type) for hauling water and other supplies as well as a skid steer for moving drill rods and other equipment/supplies.

Although the 2018 geotechnical programs were not included in the 2018 Work Plan (Rev. 1) and 2018 Work Plan Addendum, to ensure compliance with the relevant conditions outlined in the Type 'B' Water Licence and Commercial Lease, Baffinland submitted notifications to the NWB, CIRNAC and the QIA prior to commencement of activities. Copies of these notifications are provided in Appendix C of this report.

SECTION 3.0 - MODIFICATIONS, INFRASTRUCTURE CHANGES AND CONSTRUCTION

No modifications, infrastructure changes or construction were conducted in 2018 under the Type 'B' Water Licence or Commercial Lease to support exploration and/or geotechnical activities.

SECTION 4.0 - WATER USE

4.1 QUANTITIES OF FRESHWATER USED FOR DOMESTIC PURPOSES

During 2018, water was not withdrawn under the authorization of the Type 'B' Water Licence for domestic (camp) purposes. No satellite camps were operated to support exploration and drilling activities in 2018.

4.2 QUANTITIES OF FRESHWATER USED FOR DRILLING ACTIVITIES

During 2018, water was withdrawn under the authorization of the Type 'B' Water Licence for drilling purposes.

To support the 2018 land-based geotechnical drilling program, approximately 31 cubic metres (m³) of water was withdrawn from water sources: Km 32 Lake, Camp Lake and PWS-4. The low water volume requirements for the drilling program are attributed to the fact that the majority of geotechnical boreholes were performed using a sonic drilling technique which requires minimal volumes of water to perform. Water requirements during the 2018 geotechnical drilling program are attributed to the few boreholes that required the use of the rotary core diamond drilling technique.

During the 2018 exploration drilling program at Deposit Nos. 1, 2 and 3, approximately 7,600 m³ of water was used to support exploration drilling activities. For boreholes at Deposit No. 1, water was sourced from Camp Lake via water truck and nearby water sources WS-18-01 and WS-18-02 via water pumps. Water requirements for the drilling program at Deposit Nos. 2 and 3 were supplied by pumping water from two (2) locations along the Mary River; Mary River – 1 and Mary River – 2.

All water sources used to support 2018 drilling activities were identified by Baffinland as potential water sources in the drilling notifications submitted to the NWB, CIRNAC and QIA (refer to Appendix C) .

Locations of the water sources used for the 2018 drilling programs are provided in Table 4.0 and are presented in Figures 3 through 5. Daily and monthly water use volumes for drilling activities by water source are detailed in Table 4.1. There were no exceedances of the daily water use limit for drilling activities (250 m³), stipulated in the Type 'B' Water Licence, in 2018.

SECTION 5.0 - ENVIRONMENTAL MONITORING

5.1 ENVIRONMENTAL MONITORING FOR DRILLING/TESTING ACTIVITIES

Daily environmental monitoring, including the completion of pre, daily and post inspections, were performed at borehole and CPT locations by on-site Environment Department personnel. Protocols and mitigation measures consistent with the Project's *Environmental Protection Plan (EPP; BAF-PH1-830-P16-0008)* for the management of fuel, hazardous materials, and waste were employed during the 2018 drilling programs and associated activities. Copies of the available environmental monitoring logs completed for the 2018 borehole and CPT locations are provided in Appendix E (refer to Table 5.0).

Areas that were drilled in 2018 were previously assessed for the presence of archaeological sites. To minimize the potential for disturbance of cultural heritage resources and prior to the commencement of drilling operations, identified archaeological sites near areas to be drilled in 2018 were staked off and their locations communicated to the appropriate drilling crews, as per the Project's *Cultural Heritage Resource Protection Plan (BAF-PH1-830-P16-0006)*.

5.2 2018 MARINE WATER QUALITY MONITORING PROGRAM – MILNE INLET

During April 2018, a marine under-ice water quality monitoring program was conducted in Milne Inlet during the execution of the marine on-ice geotechnical program involving cone penetration tests (CPTs). The objective of the water quality monitoring program was to monitor total suspended solids (TSS) and turbidity levels within the immediate vicinity of the geotechnical testing activities.

The water quality monitoring program consisted of collecting under-ice, discrete water samples within 12 hours before the commencement of geotechnical activities, and within 12 hours following the completion of activities at select cone penetration test locations. Pre and post water samples were generally collected at a depth of approximately one (1) metre above the bottom of the water column using a Kemmerer water sampler. Water samples were collected as described in the Project's *Surface Water Sampling Program – Quality Assurance and Quality Control Plan (BAF-PH1-830-P16-0001)* and analyzed for trace metals (total) and general parameters, including turbidity and TSS. Monitoring results for the water quality monitoring program are presented in Table 5.1.

Due to the transient and intermittent nature of the on-ice geotechnical activities, the CCME TSS and turbidity guidelines for short-term exposure in marine environments (clear flow)¹ were the applicable criteria utilized for TSS and turbidity results collected during the marine under-ice water quality monitoring program.

¹ CCME. 1999. Canadian Water Quality Guidelines for the Protection of Aquatic Life – Total Particulate Matter.

In comparing the CCME TSS guidelines with the changes in TSS concentrations documented between pre and post water samples at CPT locations, changes in TSS levels did not exceed the CCME TSS guideline of a maximum increase of 25 mg/L TSS from background (pre-testing) levels.

Similarly, in comparing the CCME turbidity guidelines with the changes in turbidity levels documented between pre and post water samples at CPT locations, changes in turbidity levels did not exceed the CCME turbidity guideline of a maximum increase of 8 NTUs from background (pre-testing) levels.

The TSS and turbidity results from the marine under-ice water quality monitoring program indicate that any re-suspension of sediments caused by the CPT activities was negligible.

Baffinland will continue to monitor changes in TSS and turbidity within the proximity of on-ice drilling and/or geotechnical testing operations and implement the appropriate mitigation measures, as outlined in the Project's EPP.

SECTION 6.0 - WASTE MANAGEMENT

Satellite camps were not operated to support exploration and geotechnical drilling activities in 2018. Personnel associated with exploration and geotechnical drilling activities were based out of the Mine Site and Milne Port camps, operated under the Type 'A' Water Licence. As a result the sewage, greywater and solid waste generated by the 2018 exploration and geotechnical drilling activities was captured under the Project's Type 'A' Water Licence. The reader is referred to the *2018 QIA and NWB Annual Report for Operations* for additional details on sewage, greywater and waste generated and managed under the Type 'A' Water Licence during 2018.

Small amounts of drilling wastes (i.e. cuttings) generated from 2018 drilling programs were deposited in boreholes and/or sumps near borehole locations. Table 6.0 details the approximate quantities and locations of drilling wastes deposited during the 2018 drilling programs. Locations of the two sumps used to support the exploration drilling program at Deposit No. 1 are presented in Figure 5.

SECTION 7.0 - REPORTED INCIDENTS

7.1 SPIILLS

Under the Type 'B' Water Licence, there were no spills in 2018 that met or exceeded the reporting thresholds outlined in the Nunavut Spill Contingency Planning and Reporting Regulations. As a result, no spills were reported by Baffinland in 2018 under the Type 'B' Water Licence.

7.2 HEALTH & SAFETY INCIDENTS

Under the Commercial Lease, no health & safety incidents were reported to the QIA and/or the Workers' Safety and Compensation Commission (WSCC) that pertained to the 2018 exploration and geotechnical activities.

SECTION 8.0 - RECLAMATION, CLOSURE AND FINANCIAL SECURITY

8.1 PROGRESSIVE AND FINAL RECLAMATION

New impacts from 2018 exploration and geotechnical activities were minimal and are summarized in Table 8.0.

Progressive and final reclamation works undertaken in 2018 are summarized in Table 8.1. As shown in Table 8.1, progressive and final reclamation works undertaken in 2018 solely consisted of reclaiming borehole and CPT locations associated with the 2018 exploration and geotechnical programs.

Following the completion of a borehole and/or CPT, as per Part I, Item 9 of the Type 'B' Water Licence, drilling equipment was removed and sites were restored to their natural condition. For exploration borehole locations, casing was cut off near ground surface. For geotechnical borehole locations, all holes were backfilled using native material and reinstated to natural conditions, with exception of one (1) partially backfilled borehole identified during the 2018 QIA Annual Audit. In this incident, it is suspected that drill crews had backfilled the borehole during winter months with soil mixed with snow, which had subsequently melted and subsided during summer months. To prevent similar incidents from occurring in the future, Baffinland will conduct a routine inspection during summer months of boreholes locations completed during the previous winter months.

To support exploration drilling activities at Deposit Nos. 1 and 3 in 2019, select drilling equipment and supplies were secured, winterized and left at borehole locations MR1-18-P05, MR1-18-247 and MR3-18-244.

Available photographs of conditions before, during and after drilling activities at each 2018 borehole and CPT performed are provided in Appendix D.

8.2 CURRENT RESTORATION LIABILITY

The current status of restoration liability for the Project, including exploration and drilling activities conducted under the Type 'B' Water Licence, is summarized in Table 8.2.

SECTION 9.0 - PLANS, REPORTS AND STUDIES

9.1 SUMMARY OF STUDIES REQUESTED BY THE BOARD

In 2018, studies under the Type 'B' Water Licence were not requested by the NWB.

9.2 REVISIONS TO PLANS, REPORTS AND MANUALS

An annual review of the management plans developed under the Type 'B' Water Licence was completed in 2018. The current versions of the Exploration Spill Contingency Plan (BAF-PH1-830-P16-0037; Rev. 0; June 2014) and the Exploration Closure and Reclamation Plan (BAF-PH1-830-P16-0038; Rev. 1; July 2014) reflect current operations, protocols and procedures. The reader is referred to the *2018 QIA and NWB Annual Report for Operations* for a complete list of the Project's current management and monitoring plans and the recent revisions undertaken during 2018 and early 2019.

9.3 SUMMARY OF FUEL STORAGE

Fuel storage and refueling facilities at the Mine Site, Milne Port and Steensby Port were used to support exploration and geotechnical drilling activities in 2018.

Fuel requirements for exploration activities in 2018 consisted of Jet-A1 fuel, for on-site helicopters transporting crews and equipment to prospects, mineral leases and borehole locations, and Arctic Diesel, for drill operations and support equipment (i.e. pick-up trucks). Jet-A1 fuel requirements for exploration activities were supplied using drummed Jet-A1 fuel stored in lined containment areas at the Mine Site and Steensby Port. Arctic Diesel requirements for exploration activities were supplied by the Mine Site and Milne Port bulk fuel storage facilities.

Fuel requirements for the 2018 geotechnical drilling programs consisted of Arctic Diesel supplied by the Mine Site and Milne Port bulk fuel storage facilities. The drill rig and supporting equipment (Nodwell flatdeck, skidsteer) were refueled using pick-up trucks equipped with double walled portable tanks (tidy tanks).

To safeguard impacts to freshwater bodies and mitigate fuel spills, fueling activities adhered to the protocols and mitigation measures (i.e. spill trays, spill kits) outlined in Baffinland's current EPP and Exploration Spill Contingency Plan (BAF-PH1-830-P16-0037).

As of December 31st, 2018 there were approximately 1,172 drums (205 L) of fuel (624 Arctic Diesel and 548 Jet-A1) stored at Steensby Port and 715 drums (205 L) of fuel (674 Jet-A1 and 41 gasoline) at the Mine Site. Drummed fuel at the Mine Site and Steensby Port are stored within lined secondary containment areas. End of year fuel inventories for the Mine Site and Milne Port bulk fuel storage facilities, operated under the Type 'A' Water Licence, are provided in the *2018 QIA and NWB Annual Report for Operations*.

9.4 INSPECTION AND COMPLIANCE REPORTS

9.4.1 CIRNAC Inspections

During 2018, Baffinland did not receive any inspection and/or compliance reports from CIRNAC Water Resources Officers (the Inspector) outlining concerns pertaining to the scope of the Type 'B' Water Licence.

9.4.2 QIA Inspections

During 2018, the QIA conducted several inspections and an annual audit at the Project. During the annual audit in September 2018, it was identified that a geotechnical borehole completed in 2018 along the Tote Road had not been fully backfilled. It is suspected that drill crews had backfilled the borehole during winter months with soil mixed with snow, which had subsequently melted and subsided during summer months. To prevent similar incidents from occurring in the future, Baffinland will conduct a routine inspection during summer months of boreholes locations completed during the previous winter months.

During the annual audit, QIA also noted concerns regarding the management of drill cuttings near watercourses. To improve the management drill cuttings, Baffinland will implement the use of sand bags at borehole locations, where feasible, to increase sump capacity and the settling time of drill water in sumps as well as support silt fences downstream.

9.5 SUMMARY OF ARTESIAN FLOWS

During the 2018 geotechnical and exploration drilling programs, artesian flows were not observed at any of the borehole locations.

9.6 SUMMARY OF GEOCHEMICAL ANALYSIS OF DRILL CORES

As of March 31, 2019, geochemical analysis of the geotechnical drill cores collected during 2018 has not been completed and is not planned at this time.

As of March 31, 2019, geochemical analysis of the drill cores collected during the exploration drilling programs at Deposit Nos. 1, 2 and 3 has not been completed and is currently under review.

SECTION 10.0 - PUBLIC CONSULTATIONS

Throughout 2018, Baffinland continued to consult with the North Baffin communities and organizations regarding; ongoing construction and operational activities at the Project, the 2018 shipping season, progress regarding employment from the North Baffin communities, environmental monitoring activities and results, exploration activities and future phases of the Project. Baffinland's senior management team continued to participate in these meetings.

A list of the 2018 community group meetings and consultations undertaken by Baffinland that pertained to exploration and drilling activities is provided in Table 10.0. The reader is referred to the *2018 NIRB Annual Report* and the *2018 QIA and NWB Annual Report for Operations* for a complete list of consultations and meetings held with regulators, stakeholders and the public by Baffinland during 2018.

SECTION 11.0 - 2019 EXPLORATION AND GEOTECHNICAL ACTIVITIES

The 2019 Work Plan was prepared and provided by Baffinland to relevant parties on November 1, 2018 as required under Section 6.1 of the Commercial Lease and under Part J, Item 3 of the Type 'A' Water Licence, for the purposes of an Annual Security Review (ASR) for activities undertaken on an annual basis. The 2019 Work Plan described the planned development and operation of the Project in 2019, including planned exploration and geotechnical drilling activities.

The scope of Baffinland's Type 'B' Water Licence and Commercial Lease allows for Baffinland to continue to undertake exploration activities and drilling programs at Project areas and Baffinland's mineral leases within the Qikiqtani Region of Nunavut. This includes exploration land use areas as defined in Section 2.2 of the Commercial Lease.

Exploration activities for 2019 have not yet been finalized however it is anticipated that activities at a minimum will include mapping, sampling and geophysical and geochemical surveys of prospects and Baffinland's mineral leases and will include additional exploration drilling programs on Deposit Nos. 1, 2 and 3. Notification will be provided to the NWB, CIRNAC and the QIA prior to the commencement of exploration drilling activities.

During 2019, Baffinland plans to establish a new exploration camp within the Ege Bay Area (refer to Figure 2) to support a drilling program planned for early 2020 as well as other exploration activities within the Ege bay Area. Regulatory approvals required for these planned activities, including a new Type 'B' Water Licence and Inuit-Owned Land Use permits, were applied for by Baffinland in 2018 and continue to proceed through their respective regulatory processes outlined by the NWB and QIA.

Geotechnical activities, including drilling programs, will be conducted during 2019 to support on-going engineering design studies for future Project infrastructure. To date, notifications provided to the NWB, CIRNAC and the QIA for 2019 geotechnical activities include the notification, dated February 7, 2019, detailing Baffinland's plans to undertake a geotechnical drilling program at the Mine Site in late February 2019. The drilling program consists of fourteen (14) boreholes on and near the Mine Site Aerodrome. Should additional geotechnical drilling activities be identified for 2019, Baffinland will provide notification to the NWB, CIRNAC and the QIA prior to commencement of the activities.

Operation of the Steensby and Mid Rail camps to support exploration and geotechnical activities are not anticipated to be required during 2019.

TABLES



TABLE 2.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
EXPLORATION AND GEOTECHNICAL ACTIVITIES AND DRILLING SUMMARY – 2018

Property Section	Description of Activity	Description of Drilling Plan	ID	Location (UTM; NAD 83)	Status ⁵	Results
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-08	17 W 503970 7976660	Completed April 14, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-01	17 W 503619 7976751	Completed April 15, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-02	17 W 503757 7976767	Completed April 15, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-11	17 W 503970 7976545	Completed April 15, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-03	17 W 503764 7976718	Completed April 16, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-04	17 W 503700 7976702	Completed April 16, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-05	17 W 503624 7976695	Completed April 16, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-07	17 W 503773 7976640	Completed April 16, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-09	17 W 503651 7976576	Completed April 16, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-10	17 W 503591 7976472	Completed April 16, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-06	17 W 503572 7976628	Completed April 17, 2018	Geotechnical conditions characterized.

Notes:

¹Crown Lands - Foreshore - Milne Inlet
²Inuit-Owned Lands - Parcel PI-19
³Inuit-Owned Lands - Parcel PI-16
⁴Inuit-Owned Lands - Parcel PI-17
⁵In cases where a site's completion date is not available, the date of the site's final cleanup is provided.



TABLE 2.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
EXPLORATION AND GEOTECHNICAL ACTIVITIES AND DRILLING SUMMARY – 2018

Property Section	Description of Activity	Description of Drilling Plan	ID	Location (UTM; NAD 83)	Status ⁵	Results
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-01B	17 W 503621 7976742	Completed April 18, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-12	17 W 503972 7976671	Completed April 22, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-13	17 W 503972 7976585	Completed April 22, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-14	17 W 503974 7976699	Completed April 22, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-15	17 W 503704 7976678	Completed April 22, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-16	17 W 503695 7976729	Completed April 22, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-17	17 W 503691 7976752	Completed April 23, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-18	17 W 503684 7976778	Completed April 23, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-19	17 W 503569 7976705	Completed April 25, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-20	17 W 503821 7976738	Completed April 25, 2018	Geotechnical conditions characterized.
Milne Port ¹	Marine On-Ice Geotechnical (Cone Penetration Testing)	Characterize geotechnical conditions at potential locations for dock infrastructure in Milne Inlet.	CPT-21	17 W 503831 7976671	Completed April 25, 2018	Geotechnical conditions characterized.
Milne Port ²	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for ore management facilities.	BH18-M002	17 W 5033287974867	Completed March 5, 2018	Geotechnical conditions characterized.

Notes:

¹Crown Lands - Foreshore - Milne Inlet
²Inuit-Owned Lands - Parcel PI-19
³Inuit-Owned Lands - Parcel PI-16
⁴Inuit-Owned Lands - Parcel PI-17
⁵In cases where a site's completion date is not available, the date of the site's final cleanup is provided.



TABLE 2.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
EXPLORATION AND GEOTECHNICAL ACTIVITIES AND DRILLING SUMMARY – 2018

Property Section	Description of Activity	Description of Drilling Plan	ID	Location (UTM; NAD 83)	Status ⁵	Results
Milne Port ²	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for ore management facilities.	BH18-M001	17 W 503423 7974892	Completed March 6, 2018	Geotechnical conditions characterized.
Milne Port ²	Land Geotechnical Drilling	Characterize geotechnical conditions at potential location for new ore management infrastructure.	BH18-M003	17 W 503055 7974868	Completed March 6, 2018	Geotechnical conditions characterized.
Milne Port ²	Land Geotechnical Drilling	Characterize geotechnical conditions at potential location for new ore management infrastructure.	BH18-004	17 W 503499 7975260	Completed April 3, 2018	Geotechnical conditions characterized.
Tote Road ²	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for railway bridge abutments.	BH18-BR15-2	17 W 514211 7965645	Completed March 12, 2018	Geotechnical conditions characterized.
Tote Road ²	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for railway bridge abutments.	BH18-BR15-1	17 W 514260 7965610	Completed March 14, 2018	Geotechnical conditions characterized.
Tote Road ³	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for railway bridge abutments.	BH18-BR102-1	17 W 555763 7915435	Completed April 7, 2018.	Geotechnical conditions characterized.
Tote Road ³	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for railway bridge abutments.	BH18-BR102-2	17 W 555674 7915409	Completed April 10, 2018	Geotechnical conditions characterized.
Tote Road ³	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for railway bridge abutments.	BH18-BR70-1	17 W 529138 7916667	Completed April 16, 2018	Geotechnical conditions characterized.
Tote Road ³	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for railway bridge abutments.	BH18-BR70-2	17 W 529107 7916700	Completed April 18, 2018	Geotechnical conditions characterized.
Mine Site ⁴	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for new Mine Site Bulk Fuel Facility.	BH18-TF-05	17 W 561203 7913478	Complete June 20, 2018	Geotechnical conditions characterized.
Mine Site ⁴	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for new Mine Site Bulk Fuel Facility.	BH18-TF-04	17 W 561002 7913499	Complete June 24, 2018.	Geotechnical conditions characterized.
Mine Site ⁴	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for new mobile maintenance facilities.	BH18-TW-01	17 W 561477 7913189	Completed June 17, 2018	Geotechnical conditions characterized.

Notes:

¹Crown Lands - Foreshore - Milne Inlet
²Inuit-Owned Lands - Parcel PI-19
³Inuit-Owned Lands - Parcel PI-16
⁴Inuit-Owned Lands - Parcel PI-17
⁵In cases where a site's completion date is not available, the date of the site's final cleanup is provided.



TABLE 2.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
EXPLORATION AND GEOTECHNICAL ACTIVITIES AND DRILLING SUMMARY – 2018

Property Section	Description of Activity	Description of Drilling Plan	ID	Location (UTM; NAD 83)	Status ⁵	Results
Mine Site ⁴	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for new mobile maintenance facilities.	BH18-TW-02	17 W 561532 7913323	Completed June 17, 2018	Geotechnical conditions characterized.
Mine Site ⁴	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for new Mine Site Bulk Fuel Facility.	BH18-TF-03	17 W 561094 7913477	Completed June 22, 2018	Geotechnical conditions characterized.
Mine Site ⁴	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for new Mine Site Bulk Fuel Facility.	BH18-TF-02	17 W 560988 7913441	Completed June 24, 2018	Geotechnical conditions characterized.
Mine Site ⁴	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for new Mine Site Bulk Fuel Facility.	BH18-TF-01	17 W 561154 7913396	Completed June 25, 2018	Geotechnical conditions characterized.
Mine Site ⁴	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for new Mine Site Bulk Fuel Facility.	BH18-TF-7N	17 W 561064 7913438	Completed June 26, 2018	Geotechnical conditions characterized.
Mine Site ⁴	Land Geotechnical Drilling	Characterize geotechnical conditions at potential locations for new Mine Site Bulk Fuel Facility.	BH18-TF-8N	17 W 561166 7913449	Completed June 27, 2018	Geotechnical conditions characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 3 ore body.	MR3-18-239	17 W 567597 7913639	Completed June 25, 2018	Deposit No. 3 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 3 ore body.	MR3-18-240	17 W 567355 7913559	Completed June 27, 2018	Deposit No. 3 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 3 ore body.	MR3-18-241	17 W 567775 7913614	Completed July 6, 2018	Deposit No. 3 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 3 ore body.	MR3-18-244	17 W 567244 7911352	Completed July 18, 2018	Deposit No. 3 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 3 ore body.	MR3-18-243	17 W 567137 7913539	Completed July 23, 2018	Deposit No. 3 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 2 ore body.	MR2-18-242	17 W 566066 7913720	Completed July 24, 2018	Deposit No. 2 ore body further characterized.

Notes:

¹Crown Lands - Foreshore - Milne Inlet
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³Inuit-Owned Lands - Parcel PI-16
⁴Inuit-Owned Lands - Parcel PI-17
⁵In cases where a site's completion date is not available, the date of the site's final cleanup is provided.



TABLE 2.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
EXPLORATION AND GEOTECHNICAL ACTIVITIES AND DRILLING SUMMARY – 2018

Property Section	Description of Activity	Description of Drilling Plan	ID	Location (UTM; NAD 83)	Status ⁵	Results
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 3 ore body.	MR3-18-246	17 W 567137 7913539	Completed August 2, 2018	Deposit No. 3 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 2 ore body.	MR2-18-245	17 W 565894 7914235	Completed August 8, 2018	Deposit No. 2 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 3 ore body.	MR3-18-248	17 W 566976 7913790	Completed August 22, 2018	Deposit No. 3 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 1 ore body.	MR1-18-249	17 W 563138 7914004	Completed September 3, 2018	Deposit No. 1 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 1 ore body.	MR1-18-247	17 W 563868 7915565	Completed September 4, 2018	Deposit No. 1 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 1 ore body.	MR1-18-P05	17 W 563771 7915525	Completed September 9, 2018	Deposit No. 1 ore body further characterized.
Mine Site ⁴	Exploration Diamond Drilling	Further characterize Deposit No. 1 ore body.	MR1-18-250	17 W 563114 7914043	Completed September 18, 2018	Deposit No. 1 ore body further characterized.

Notes:

¹Crown Lands - Foreshore - Milne Inlet

²Inuit-Owned Lands - Parcel PI-19

³Inuit-Owned Lands - Parcel PI-16

⁴Inuit-Owned Lands - Parcel PI-17

⁵In cases where a site's completion date is not available, the date of the site's final cleanup is provided.

TABLE 4.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
ANNUAL VOLUMES OF WATER USED FOR DRILLING ACTIVITIES
ON INUIT-OWNED AND CROWN LANDS BY SOURCE – 2018

Property Section	Water Source ID	Water Source Location (UTM; NAD 83)	Annual Volume Used (m ³) ¹	Percent of Total Annual Volume Used (%)
Tote Road	Km 32 Lake	17 W 521547 7953735	17	0.22%
Tote Road	PWS-4	17 W 528345 7922100	4	0.05%
Mine Site	Camp Lake	17 W 557793 7914684	442	5.76%
Mine Site	WS-18-01/02	17 W 563750 7916100 17 W 563900 7917290	556	7.25%
Mine Site	Mary River - 1	17 W 565886 7912804	2,341	30.52%
Mine Site	Mary River - 2	17 W 567812 7912689	4,310	56.19%
TOTAL			7,670	100.00%

Notes:

¹Refer to Table 4.1 for 2018 daily and monthly water use volumes by water source.



TABLE 4.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
DAILY AND MONTHLY VOLUMES OF WATER USED FOR DRILLING ACTIVITIES
ON INUIT-OWNED AND CROWN LANDS BY SOURCE – 2018

Day	March	April			June		July	
	KM 32 Lake	KM 32 Lake	PWS-4	Camp Lake	Mary River -2	Camp Lake	Mary River -1	Mary River -2
1	-	-	-	-	-	-	-	67
2	-	-	-	-	-	-	-	67
3	-	-	-	-	-	-	-	67
4	3	-	-	-	-	-	-	67
5	3	-	-	-	-	-	-	67
6	-	-	-	-	-	-	-	67
7	-	-	-	4	-	-	52	67
8	-	-	-	4	-	-	52	67
9	-	-	-	-	-	-	52	67
10	-	-	-	-	-	-	52	67
11	3	-	-	-	-	-	52	67
12	1.5	-	-	-	-	-	52	67
13	1.5	5	-	-	-	-	52	67
14	-	-	-	-	-	-	52	67
15	-	-	-	-	-	-	52	67
16	-	-	-	-	-	-	52	67
17	-	-	4	-	-	-	52	67
18	-	-	-	-	-	-	52	67
19	-	-	-	-	67	2	52	67
20	-	-	-	-	67	-	52	67
21	-	-	-	-	67	-	52	67
22	-	-	-	-	67	-	52	67
23	-	-	-	-	67	-	52	67
24	-	-	-	-	67	-	52	67
25	-	-	-	-	67	-	52	67
26	-	-	-	-	59	-	52	64
27	-	-	-	-	56	-	52	94
28	-	-	-	-	67	-	63	67
29	-	-	-	-	49	-	32.6	67
30	-	-	-	-	53	-	52	67
31	-	-	-	-	-	-	52	67
TOTAL	12	5	4	8	752	2	1,292	2,095
MONTHLY TOTAL	12	17			754		3,387	

Notes:

All volumes in cubic metres (m³).
No exceedances of the daily drilling water use limit (250 m³/day) occurred in 2018.

TABLE 4.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
DAILY AND MONTHLY VOLUMES OF WATER USED FOR DRILLING ACTIVITIES
ON INUIT-OWNED AND CROWN LANDS BY SOURCE – 2018

Day	August				September	
	Mary River -1	Mary River - 2	Camp Lake	WS-18-01/02	Camp Lake	WS-18-01/02
1	52	67	-	-	53	62
2	52	76	-	-	52	43
3	52	67	-	-	8	43
4	52	67	-	-	-	13
5	52	67	-	-	15	-
6	52	70	-	-	31	-
7	52	90	-	-	31	-
8	52	79	-	-	27	-
9	52	80	-	-	16	-
10	52	66	-	-	25	-
11	52	67	-	-	25	-
12	52	65	-	-	-	-
13	52	60	-	-	-	-
14	57	64	-	-	-	-
15	70	70	-	-	-	-
16	36	40	-	-	-	-
17	52	57	-	-	-	-
18	52	71	-	-	-	-
19	52	71	-	-	-	-
20	52	75	-	-	-	-
21	-	70	-	-	-	-
22	-	25	-	-	-	-
23	-	-	-	-	-	-
24	-	-	-	-	-	-
25	-	-	15	26	-	-
26	-	-	31	52	-	-
27	-	-	31	75	-	-
28	-	-	25	50	-	-
29	-	-		58	-	-
30	-	-	31	55	-	-
31	-	-	15	80	-	-
TOTAL	1,049	1,463	149	395	283	161
MONTHLY TOTAL	3,057				445	

Notes:

All volumes in cubic metres (m³).
No exceedances of the daily drilling water use limit (250 m³/day) occurred in 2018.

TABLE 5.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
EXPLORATION AND GEOTECHNICAL ENVIRONMENTAL MONITORING LOGS – 2018

Property Section	ID	Location (UTM; NAD 83)	Environmental Monitoring Logs (Pre, Daily, Post)
Milne Port ¹	CPT-01	17 W 503619 7976751	CPT-01 - Appendix E.1.1
Milne Port ¹	CPT-01B	17 W 503621 7976742	CPT-01B - Appendix E.1.2
Milne Port ¹	CPT-02	17 W 503757 7976767	CPT-02 - Appendix E.1.3
Milne Port ¹	CPT-03	17 W 503764 7976718	CPT-03 - Appendix E.1.4
Milne Port ¹	CPT-04	17 W 503700 7976702	CPT-04 - Appendix E.1.5
Milne Port ¹	CPT-05	17 W 503624 7976695	CPT-05 - Appendix E.1.6
Milne Port ¹	CPT-06	17 W 503572 7976628	CPT-06 - Appendix E.1.7
Milne Port ¹	CPT-07	17 W 503773 7976640	CPT-07 - Appendix E.1.8
Milne Port ¹	CPT-08	17 W 503970 7976660	CPT-08 - Appendix E.1.9
Milne Port ¹	CPT-09	17 W 503651 7976576	CPT-09 - Appendix E.1.10
Milne Port ¹	CPT-10	17 W 503591 7976472	CPT-10 - Appendix E.1.11
Milne Port ¹	CPT-11	17 W 503970 7976545	CPT-11 - Appendix E.1.12
Milne Port ¹	CPT-12	17 W 503972 7976671	CPT-12 - Appendix E.1.13
Milne Port ¹	CPT-13	17 W 503972 7976585	CPT-13 - Appendix E.1.14
Milne Port ¹	CPT-14	17 W 503974 7976699	CPT-14 - Appendix E.1.15
Milne Port ¹	CPT-15	17 W 503704 7976678	CPT-15 - Appendix E.1.16
Milne Port ¹	CPT-16	17 W 503695 7976729	CPT-16 - Appendix E.1.17
Milne Port ¹	CPT-17	17 W 503691 7976752	CPT-17 - Appendix E.1.18
Milne Port ¹	CPT-18	17 W 503684 7976778	CPT-18 - Appendix E.1.19
Milne Port ¹	CPT-19	17 W 503569 7976705	CPT-19 - Appendix E.1.20
Milne Port ¹	CPT-20	17 W 503821 7976738	CPT-20 - Appendix E.1.21

Notes:

¹Crown Lands - Foreshore - Milne Inlet

²Inuit-Owned Lands - Parcel PI-19

³Inuit-Owned Lands - Parcel PI-16

⁴Inuit-Owned Lands - Parcel PI-17

TABLE 5.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
EXPLORATION AND GEOTECHNICAL ENVIRONMENTAL MONITORING LOGS – 2018

Property Section	ID	Location (UTM; NAD 83)	Environmental Monitoring Logs (Pre, Daily, Post)
Milne Port ¹	CPT-21	17 W 503831 7976671	CPT-21 - Appendix E.1.22
Milne Port ²	BH18-004	17 W 503499 7975260	BH18-004 - Appendix E.2.1
Milne Port ²	BH18-M001	17 W 503423 7974892	BH18-M001 - Appendix E.2.2
Milne Port ²	BH18-M002	17 W 5033287974867	BH18-M002 - Appendix E.2.3
Milne Port ²	BH18-M003	17 W 503055 7974868	BH18-M003 - Appendix E.2.4
Tote Road ²	BH18-BR15-1	17 W 514260 7965610	BH18-BR15-1 - Appendix E.3.1
Tote Road ²	BH18-BR15-2	17 W 514211 7965645	BH18-BR15-2 - Appendix E.3.2
Tote Road ³	BH18-BR102-1	17 W 555763 7915435	BH18-BR102-1 - Appendix E.3.3
Tote Road ³	BH18-BR102-2	17 W 555674 7915409	BH18-BR102-2 - Appendix E.3.4
Tote Road ³	BH18-BR70-1	17 W 529138 7916667	BH18-BR70-1 - Appendix E.3.5
Tote Road ³	BH18-BR70-2	17 W 529107 7916700	BH18-BR70-2 - Appendix E.3.6
Mine Site ⁴	BH18-TF-01	17 W 561154 7913396	BH18-TF-01 - Appendix E.4.1
Mine Site ⁴	BH18-TF-02	17 W 560988 7913441	BH18-TF-02 - Appendix E.4.2
Mine Site ⁴	BH18-TF-03	17 W 561094 7913477	BH18-TF-03 - Appendix E.4.3
Mine Site ⁴	BH18-TF-04	17 W 561002 7913499	BH18-TF-04 - Appendix E.4.4
Mine Site ⁴	BH18-TF-05	17 W 561203 7913478	BH18-TF-05 - Appendix E.4.5
Mine Site ⁴	BH18-TF-7N	17 W 561064 7913438	BH18-TF-7N - Appendix E.4.6
Mine Site ⁴	BH18-TF-8N	17 W 561166 7913449	BH18-TF-8N - Appendix E.4.7
Mine Site ⁴	BH18-TW-01	17 W 561477 7913189	BH18-TW-01 - Appendix E.4.8
Mine Site ⁴	BH18-TW-02	17 W 561532 7913323	BH18-TW-02 - Appendix E.4.9
Mine Site ⁴	MR3-18-239	17 W 567597 7913639	MR3-18-239 - Appendix E.5.1

Notes:

¹Crown Lands - Foreshore - Milne Inlet

²Inuit-Owned Lands - Parcel PI-19

³Inuit-Owned Lands - Parcel PI-16

⁴Inuit-Owned Lands - Parcel PI-17

TABLE 5.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
EXPLORATION AND GEOTECHNICAL ENVIRONMENTAL MONITORING LOGS – 2018

Property Section	ID	Location (UTM; NAD 83)	Environmental Monitoring Logs (Pre, Daily, Post)
Mine Site ⁴	MR3-18-240	17 W 567355 7913559	MR3-18-240 - Appendix E.5.2
Mine Site ⁴	MR3-18-241	17 W 567775 7913614	MR3-18-241 - Appendix E.5.3
Mine Site ⁴	MR3-18-244	17 W 567244 7911352	MR3-18-244 - Appendix E.5.4
Mine Site ⁴	MR3-18-243	17 W 567137 7913539	MR3-18-243 - Appendix E.5.5
Mine Site ⁴	MR2-18-242	17 W 566066 7913720	MR2-18-242 - Appendix E.5.6
Mine Site ⁴	MR3-18-246	17 W 567137 7913539	MR3-18-246 - Appendix E.5.7
Mine Site ⁴	MR2-18-245	17 W 565894 7914235	MR2-18-245 - Appendix E.5.8
Mine Site ⁴	MR3-18-248	17 W 566976 7913790	MR3-18-248 - Appendix E.5.9
Mine Site ⁴	MR1-18-249	17 W 563138 7914004	MR1-18-249 - Appendix E.5.10
Mine Site ⁴	MR1-18-247	17 W 563868 7915565	MR1-18-247 - Appendix E.5.11
Mine Site ⁴	MR1-18-P05	17 W 563771 7915525	MR1-18-P05 - Appendix E.5.12
Mine Site ⁴	MR1-18-250	17 W 563114 7914043	MR1-18-250 - Appendix E.5.13

Notes:

¹Crown Lands - Foreshore - Milne Inlet

²Inuit-Owned Lands - Parcel PI-19

³Inuit-Owned Lands - Parcel PI-16

⁴Inuit-Owned Lands - Parcel PI-17

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
MARINE WATER QUALITY MONITORING RESULTS - MILNE INLET - 2018

ANALYTE	CPT ID			CPT-01 ³	
	Date			15-Apr-18	15-Apr-18
	Time			-	-
	Sample ID			BH18-CPT18-01-A	BH18-CPT18-01-B
	ALS Laboratory ID			L2082628-1	L2082628-2
	Sample Type			Pre-Drilling	Post-Drilling
General Parameters	Unit	MDL	CCME Criteria		
pH	<i>pH Units</i>	0.1	-	7.86	7.86
Total Suspended Solids (TSS)	<i>mg/L</i>	2	25 ¹	33.9	16.9
Total Dissolved Solids (TDS)	<i>mg/L</i>	20	-	30900	31300
Turbidity	<i>NTU</i>	0.1	8 ¹	2.27	1.89
Total Metals					
Aluminum (Al)-Total	<i>mg/L</i>	0.01	-	<0.50	<0.50
Antimony (Sb)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Arsenic (As)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Barium (Ba)-Total	<i>mg/L</i>	0.0002	-	<0.010	0.023
Beryllium (Be)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Bismuth (Bi)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Boron (B)-Total	<i>mg/L</i>	0.01	-	4	3.9
Cadmium (Cd)-Total	<i>mg/L</i>	0.00001	-	<0.00050	<0.00050
Calcium (Ca)-Total	<i>mg/L</i>	0.5	-	386	375
Cesium (Cs)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Chromium (Cr)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Cobalt (Co)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Copper (Cu)-Total	<i>mg/L</i>	0.001	-	<0.10	<0.10
Iron (Fe)-Total	<i>mg/L</i>	0.05	-	<1.0	<1.0
Lead (Pb)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Lithium (Li)-Total	<i>mg/L</i>	0.001	-	0.17	0.17
Magnesium (Mg)-Total	<i>mg/L</i>	0.05	-	1170	1180
Manganese (Mn)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Molybdenum (Mo)-Total	<i>mg/L</i>	0.00005	-	0.0095	0.0106
Nickel (Ni)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Phosphorus (P)-Total	<i>mg/L</i>	0.05	-	<5.0	<5.0
Potassium (K)-Total	<i>mg/L</i>	0.05	-	393	380
Rubidium (Rb)-Total	<i>mg/L</i>	0.0002	-	0.109	0.104
Selenium (Se)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Silicon (Si)-Total	<i>mg/L</i>	0.1	-	<10	<10
Silver (Ag)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Sodium (Na)-Total	<i>mg/L</i>	0.5	-	9820	9980
Strontium (Sr)-Total	<i>mg/L</i>	0.001	-	7.25	6.96
Sulfur (S)-Total	<i>mg/L</i>	0.5	-	899	894
Tellurium (Te)-Total	<i>mg/L</i>	0.0002	-	<0.020	<0.020
Thallium (Tl)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Thorium (Th)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Tin (Sn)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Titanium (Ti)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030
Tungsten (W)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Uranium (U)-Total	<i>mg/L</i>	0.00001	-	0.0029	0.003
Vanadium (V)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Zinc (Zn)-Total	<i>mg/L</i>	0.003	-	<0.30	<0.30
Zirconium (Zr)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030

Notes:

¹TSS criteria - 25 mg/L above background (pre-testing) levels (CCME, 2002)
²Turbidity criteria - 8 NTUs above background (pre-testing) levels (CCME, 2002)
³Sample time not available.
Table excludes results at CPT-07 and CPT-09 due to the lack of either a corresponding pre-testing or post-testing sample.

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
MARINE WATER QUALITY MONITORING RESULTS - MILNE INLET - 2018

ANALYTE	CPT ID			CPT-01B	
	Date			16-Apr-18	18-Apr-18
	Time			17:15	8:20
	Sample ID			BH18-CPT18-01B-A	BH18-CPT18-01B-B
	ALS Laboratory ID			L2082628-12	L2082628-14
	Sample Type			Pre-Drilling	Post-Drilling
General Parameters	Unit	MDL	CCME Criteria		
pH	<i>pH Units</i>	0.1	-	7.82	7.83
Total Suspended Solids (TSS)	<i>mg/L</i>	2	25 ¹	50.1	<2.0
Total Dissolved Solids (TDS)	<i>mg/L</i>	20	-	32600	32300
Turbidity	<i>NTU</i>	0.1	8 ¹	17.1	0.79
Total Metals					
Aluminum (Al)-Total	<i>mg/L</i>	0.01	-	<0.50	<0.50
Antimony (Sb)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Arsenic (As)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Barium (Ba)-Total	<i>mg/L</i>	0.0002	-	<0.010	<0.010
Beryllium (Be)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Bismuth (Bi)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Boron (B)-Total	<i>mg/L</i>	0.01	-	4.1	4.1
Cadmium (Cd)-Total	<i>mg/L</i>	0.00001	-	<0.00050	<0.00050
Calcium (Ca)-Total	<i>mg/L</i>	0.5	-	389	389
Cesium (Cs)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Chromium (Cr)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Cobalt (Co)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Copper (Cu)-Total	<i>mg/L</i>	0.001	-	<0.10	<0.10
Iron (Fe)-Total	<i>mg/L</i>	0.05	-	<1.0	<1.0
Lead (Pb)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Lithium (Li)-Total	<i>mg/L</i>	0.001	-	0.2	0.2
Magnesium (Mg)-Total	<i>mg/L</i>	0.05	-	1140	1170
Manganese (Mn)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Molybdenum (Mo)-Total	<i>mg/L</i>	0.00005	-	0.0106	0.0098
Nickel (Ni)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Phosphorus (P)-Total	<i>mg/L</i>	0.05	-	<5.0	<5.0
Potassium (K)-Total	<i>mg/L</i>	0.05	-	405	390
Rubidium (Rb)-Total	<i>mg/L</i>	0.0002	-	0.104	0.105
Selenium (Se)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Silicon (Si)-Total	<i>mg/L</i>	0.1	-	<10	<10
Silver (Ag)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Sodium (Na)-Total	<i>mg/L</i>	0.5	-	9880	10100
Strontium (Sr)-Total	<i>mg/L</i>	0.001	-	7.48	7.33
Sulfur (S)-Total	<i>mg/L</i>	0.5	-	939	929
Tellurium (Te)-Total	<i>mg/L</i>	0.0002	-	<0.020	<0.020
Thallium (Tl)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Thorium (Th)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Tin (Sn)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Titanium (Ti)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030
Tungsten (W)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Uranium (U)-Total	<i>mg/L</i>	0.00001	-	0.0027	0.003
Vanadium (V)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Zinc (Zn)-Total	<i>mg/L</i>	0.003	-	<0.30	<0.30
Zirconium (Zr)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030

Notes:

¹TSS criteria - 25 mg/L above background (pre-testing) levels (CCME, 2002)
²Turbidity criteria - 8 NTUs above background (pre-testing) levels (CCME, 2002)
³Sample time not available.
Table excludes results at CPT-07 and CPT-09 due to the lack of either a corresponding pre-testing or post-testing sample.

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
MARINE WATER QUALITY MONITORING RESULTS - MILNE INLET - 2018

ANALYTE	CPT ID			CPT-01B cont'd	
	Date			18-Apr-18	18-Apr-18
	Time			8:20	11:20
	Sample ID			BH18-CPT18-01B-B01	BH18-CPT18-01B-B04
	ALS Laboratory ID			L2082628-15	L2082628-16
	Sample Type			Duplicate	Equipment Blank
General Parameters	Unit	MDL	CCME Criteria		
pH	<i>pH Units</i>	0.1	-	7.84	6.28
Total Suspended Solids (TSS)	<i>mg/L</i>	2	25 ¹	10.2	<2.0
Total Dissolved Solids (TDS)	<i>mg/L</i>	20	-	33500	57
Turbidity	<i>NTU</i>	0.1	8 ¹	1.07	0.52
Total Metals					
Aluminum (Al)-Total	<i>mg/L</i>	0.01	-	<0.50	<0.0050
Antimony (Sb)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.00010
Arsenic (As)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.00010
Barium (Ba)-Total	<i>mg/L</i>	0.0002	-	<0.010	<0.00010
Beryllium (Be)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.00010
Bismuth (Bi)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.000050
Boron (B)-Total	<i>mg/L</i>	0.01	-	4.1	<0.010
Cadmium (Cd)-Total	<i>mg/L</i>	0.00001	-	<0.00050	<0.0000050
Calcium (Ca)-Total	<i>mg/L</i>	0.5	-	383	0.056
Cesium (Cs)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.000010
Chromium (Cr)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.00050
Cobalt (Co)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.00010
Copper (Cu)-Total	<i>mg/L</i>	0.001	-	<0.10	<0.0010
Iron (Fe)-Total	<i>mg/L</i>	0.05	-	<1.0	<0.010
Lead (Pb)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.000050
Lithium (Li)-Total	<i>mg/L</i>	0.001	-	0.2	<0.0010
Magnesium (Mg)-Total	<i>mg/L</i>	0.05	-	1170	0.0443
Manganese (Mn)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.00050
Molybdenum (Mo)-Total	<i>mg/L</i>	0.00005	-	0.0102	<0.000050
Nickel (Ni)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.00050
Phosphorus (P)-Total	<i>mg/L</i>	0.05	-	<5.0	<0.050
Potassium (K)-Total	<i>mg/L</i>	0.05	-	393	<0.050
Rubidium (Rb)-Total	<i>mg/L</i>	0.0002	-	0.104	<0.00020
Selenium (Se)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.000050
Silicon (Si)-Total	<i>mg/L</i>	0.1	-	<10	<0.10
Silver (Ag)-Total	<i>mg/L</i>	0.00005	-	<0.0050	0.000104
Sodium (Na)-Total	<i>mg/L</i>	0.5	-	10100	0.326
Strontium (Sr)-Total	<i>mg/L</i>	0.001	-	7.22	<0.0010
Sulfur (S)-Total	<i>mg/L</i>	0.5	-	928	<0.50
Tellurium (Te)-Total	<i>mg/L</i>	0.0002	-	<0.020	<0.00020
Thallium (Tl)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.000010
Thorium (Th)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.00010
Tin (Sn)-Total	<i>mg/L</i>	0.0001	-	<0.010	0.00778
Titanium (Ti)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.00030
Tungsten (W)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.00010
Uranium (U)-Total	<i>mg/L</i>	0.00001	-	0.0029	<0.000010
Vanadium (V)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.00050
Zinc (Zn)-Total	<i>mg/L</i>	0.003	-	<0.30	<0.0030
Zirconium (Zr)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.00030

Notes:

¹TSS criteria - 25 mg/L above background (pre-testing) levels (CCME, 2002)
²Turbidity criteria - 8 NTUs above background (pre-testing) levels (CCME, 2002)
³Sample time not available.
Table excludes results at CPT-07 and CPT-09 due to the lack of either a corresponding pre-testing or post-testing sample.

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
MARINE WATER QUALITY MONITORING RESULTS - MILNE INLET - 2018

ANALYTE	CPT ID			CPT-02	
	Date			15-Apr-18	16-Apr-18
	Time			12:00	19:00
	Sample ID			BH18-CPT18-02A	BH18-CPT18-02-B
	ALS Laboratory ID			L2082628-10	L2082628-5
	Sample Type			Pre-Drilling	Post-Drilling
General Parameters	Unit	MDL	CCME Criteria		
pH	<i>pH Units</i>	0.1	-	7.86	7.83
Total Suspended Solids (TSS)	<i>mg/L</i>	2	25 ¹	44.7	20.8
Total Dissolved Solids (TDS)	<i>mg/L</i>	20	-	30700	30900
Turbidity	<i>NTU</i>	0.1	8 ¹	8.78	1.3
Total Metals					
Aluminum (Al)-Total	<i>mg/L</i>	0.01	-	<0.50	<0.50
Antimony (Sb)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Arsenic (As)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Barium (Ba)-Total	<i>mg/L</i>	0.0002	-	<0.010	<0.010
Beryllium (Be)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Bismuth (Bi)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Boron (B)-Total	<i>mg/L</i>	0.01	-	4	4.1
Cadmium (Cd)-Total	<i>mg/L</i>	0.00001	-	<0.00050	<0.00050
Calcium (Ca)-Total	<i>mg/L</i>	0.5	-	382	382
Cesium (Cs)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Chromium (Cr)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Cobalt (Co)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Copper (Cu)-Total	<i>mg/L</i>	0.001	-	<0.10	<0.10
Iron (Fe)-Total	<i>mg/L</i>	0.05	-	<1.0	<1.0
Lead (Pb)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Lithium (Li)-Total	<i>mg/L</i>	0.001	-	0.19	0.18
Magnesium (Mg)-Total	<i>mg/L</i>	0.05	-	1180	1170
Manganese (Mn)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Molybdenum (Mo)-Total	<i>mg/L</i>	0.00005	-	0.0101	0.0126
Nickel (Ni)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Phosphorus (P)-Total	<i>mg/L</i>	0.05	-	<5.0	<5.0
Potassium (K)-Total	<i>mg/L</i>	0.05	-	385	398
Rubidium (Rb)-Total	<i>mg/L</i>	0.0002	-	0.104	0.114
Selenium (Se)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Silicon (Si)-Total	<i>mg/L</i>	0.1	-	<10	<10
Silver (Ag)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Sodium (Na)-Total	<i>mg/L</i>	0.5	-	9990	10000
Strontium (Sr)-Total	<i>mg/L</i>	0.001	-	7.16	7.17
Sulfur (S)-Total	<i>mg/L</i>	0.5	-	896	893
Tellurium (Te)-Total	<i>mg/L</i>	0.0002	-	<0.020	<0.020
Thallium (Tl)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Thorium (Th)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Tin (Sn)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Titanium (Ti)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030
Tungsten (W)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Uranium (U)-Total	<i>mg/L</i>	0.00001	-	0.0029	0.0029
Vanadium (V)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Zinc (Zn)-Total	<i>mg/L</i>	0.003	-	<0.30	<0.30
Zirconium (Zr)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030

Notes:

¹TSS criteria - 25 mg/L above background (pre-testing) levels (CCME, 2002)
²Turbidity criteria - 8 NTUs above background (pre-testing) levels (CCME, 2002)
³Sample time not available.
Table excludes results at CPT-07 and CPT-09 due to the lack of either a corresponding pre-testing or post-testing sample.



TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
MARINE WATER QUALITY MONITORING RESULTS - MILNE INLET - 2018

ANALYTE	CPT ID			CPT-03	
	Date			15-Apr-18	16-Apr-18
	Time			20:05	20:00
	Sample ID			BH18-CPT18-03-A	BH18-CPT-03-B
	ALS Laboratory ID			L2082628-6	L2082628-11
	Sample Type			Pre-Drilling	Post Drilling
General Parameters	Unit	MDL	CCME Criteria		
pH	<i>pH Units</i>	0.1	-	7.86	7.83
Total Suspended Solids (TSS)	<i>mg/L</i>	2	25 ¹	27.6	21.1
Total Dissolved Solids (TDS)	<i>mg/L</i>	20	-	32300	31800
Turbidity	<i>NTU</i>	0.1	8 ¹	3.84	0.63
Total Metals					
Aluminum (Al)-Total	<i>mg/L</i>	0.01	-	<0.50	<0.50
Antimony (Sb)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Arsenic (As)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Barium (Ba)-Total	<i>mg/L</i>	0.0002	-	<0.010	<0.010
Beryllium (Be)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Bismuth (Bi)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Boron (B)-Total	<i>mg/L</i>	0.01	-	4	4.1
Cadmium (Cd)-Total	<i>mg/L</i>	0.00001	-	<0.00050	<0.00050
Calcium (Ca)-Total	<i>mg/L</i>	0.5	-	387	385
Cesium (Cs)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Chromium (Cr)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Cobalt (Co)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Copper (Cu)-Total	<i>mg/L</i>	0.001	-	<0.10	<0.10
Iron (Fe)-Total	<i>mg/L</i>	0.05	-	<1.0	<1.0
Lead (Pb)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Lithium (Li)-Total	<i>mg/L</i>	0.001	-	0.19	0.19
Magnesium (Mg)-Total	<i>mg/L</i>	0.05	-	1170	1180
Manganese (Mn)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Molybdenum (Mo)-Total	<i>mg/L</i>	0.00005	-	0.0106	0.0103
Nickel (Ni)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Phosphorus (P)-Total	<i>mg/L</i>	0.05	-	<5.0	<5.0
Potassium (K)-Total	<i>mg/L</i>	0.05	-	417	405
Rubidium (Rb)-Total	<i>mg/L</i>	0.0002	-	0.104	0.104
Selenium (Se)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Silicon (Si)-Total	<i>mg/L</i>	0.1	-	<10	<10
Silver (Ag)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Sodium (Na)-Total	<i>mg/L</i>	0.5	-	9960	9910
Strontium (Sr)-Total	<i>mg/L</i>	0.001	-	7.08	7.21
Sulfur (S)-Total	<i>mg/L</i>	0.5	-	889	910
Tellurium (Te)-Total	<i>mg/L</i>	0.0002	-	<0.020	<0.020
Thallium (Tl)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Thorium (Th)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Tin (Sn)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Titanium (Ti)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030
Tungsten (W)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Uranium (U)-Total	<i>mg/L</i>	0.00001	-	0.0029	0.003
Vanadium (V)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Zinc (Zn)-Total	<i>mg/L</i>	0.003	-	<0.30	<0.30
Zirconium (Zr)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030

Notes:

¹TSS criteria - 25 mg/L above background (pre-testing) levels (CCME, 2002)
²Turbidity criteria - 8 NTUs above background (pre-testing) levels (CCME, 2002)
³Sample time not available.
Table excludes results at CPT-07 and CPT-09 due to the lack of either a corresponding pre-testing or post-testing sample.

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
MARINE WATER QUALITY MONITORING RESULTS - MILNE INLET - 2018

ANALYTE	CPT ID			CPT-04	
	Date			15-Apr-18	16-Apr-18
	Time			20:00	20:30
	Sample ID			BH18-CPT18-04-A	BH18-CPT18-04-B
	ALS Laboratory ID			L2082628-7	L2082628-3
	Sample Type			Pre-Drilling	Post-Drilling
General Parameters	Unit	MDL	CCME Criteria		
pH	<i>pH Units</i>	0.1	-	7.86	7.84
Total Suspended Solids (TSS)	<i>mg/L</i>	2	25 ¹	29.9	14.9
Total Dissolved Solids (TDS)	<i>mg/L</i>	20	-	31600	32500
Turbidity	<i>NTU</i>	0.1	8 ¹	0.58	1.42
Total Metals					
Aluminum (Al)-Total	<i>mg/L</i>	0.01	-	<0.50	<0.50
Antimony (Sb)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Arsenic (As)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Barium (Ba)-Total	<i>mg/L</i>	0.0002	-	<0.010	<0.010
Beryllium (Be)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Bismuth (Bi)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Boron (B)-Total	<i>mg/L</i>	0.01	-	4	3.9
Cadmium (Cd)-Total	<i>mg/L</i>	0.00001	-	<0.00050	<0.00050
Calcium (Ca)-Total	<i>mg/L</i>	0.5	-	377	379
Cesium (Cs)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Chromium (Cr)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Cobalt (Co)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Copper (Cu)-Total	<i>mg/L</i>	0.001	-	<0.10	<0.10
Iron (Fe)-Total	<i>mg/L</i>	0.05	-	<1.0	<1.0
Lead (Pb)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Lithium (Li)-Total	<i>mg/L</i>	0.001	-	0.18	0.16
Magnesium (Mg)-Total	<i>mg/L</i>	0.05	-	1160	1200
Manganese (Mn)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Molybdenum (Mo)-Total	<i>mg/L</i>	0.00005	-	0.0104	0.0098
Nickel (Ni)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Phosphorus (P)-Total	<i>mg/L</i>	0.05	-	<5.0	<5.0
Potassium (K)-Total	<i>mg/L</i>	0.05	-	384	395
Rubidium (Rb)-Total	<i>mg/L</i>	0.0002	-	0.105	0.108
Selenium (Se)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Silicon (Si)-Total	<i>mg/L</i>	0.1	-	<10	<10
Silver (Ag)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Sodium (Na)-Total	<i>mg/L</i>	0.5	-	9920	9890
Strontium (Sr)-Total	<i>mg/L</i>	0.001	-	6.96	6.97
Sulfur (S)-Total	<i>mg/L</i>	0.5	-	911	910
Tellurium (Te)-Total	<i>mg/L</i>	0.0002	-	<0.020	<0.020
Thallium (Tl)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Thorium (Th)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Tin (Sn)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Titanium (Ti)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030
Tungsten (W)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Uranium (U)-Total	<i>mg/L</i>	0.00001	-	0.0031	0.0029
Vanadium (V)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Zinc (Zn)-Total	<i>mg/L</i>	0.003	-	<0.30	<0.30
Zirconium (Zr)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030

Notes:

¹TSS criteria - 25 mg/L above background (pre-testing) levels (CCME, 2002)
²Turbidity criteria - 8 NTUs above background (pre-testing) levels (CCME, 2002)
³Sample time not available.
Table excludes results at CPT-07 and CPT-09 due to the lack of either a corresponding pre-testing or post-testing sample.

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
MARINE WATER QUALITY MONITORING RESULTS - MILNE INLET - 2018

ANALYTE	CPT ID			CPT-05	
	Date			15-Apr-18	16-Apr-18
	Time			19:45	12:20
	Sample ID			BH18-CPT18-05-A	BH18-CPT18-05-B
	ALS Laboratory ID			L2082628-8	L2082628-9
	Sample Type			Pre-Drilling	Post-Drilling
General Parameters	Unit	MDL	CCME Criteria		
pH	<i>pH Units</i>	0.1	-	7.86	7.83
Total Suspended Solids (TSS)	<i>mg/L</i>	2	25 ¹	15.7	16.3
Total Dissolved Solids (TDS)	<i>mg/L</i>	20	-	32500	32600
Turbidity	<i>NTU</i>	0.1	8 ¹	0.94	2.06
Total Metals					
Aluminum (Al)-Total	<i>mg/L</i>	0.01	-	<0.50	<0.50
Antimony (Sb)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Arsenic (As)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Barium (Ba)-Total	<i>mg/L</i>	0.0002	-	<0.010	<0.010
Beryllium (Be)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Bismuth (Bi)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Boron (B)-Total	<i>mg/L</i>	0.01	-	4	4.1
Cadmium (Cd)-Total	<i>mg/L</i>	0.00001	-	<0.00050	<0.00050
Calcium (Ca)-Total	<i>mg/L</i>	0.5	-	379	380
Cesium (Cs)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Chromium (Cr)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Cobalt (Co)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Copper (Cu)-Total	<i>mg/L</i>	0.001	-	<0.10	<0.10
Iron (Fe)-Total	<i>mg/L</i>	0.05	-	<1.0	<1.0
Lead (Pb)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Lithium (Li)-Total	<i>mg/L</i>	0.001	-	0.18	0.19
Magnesium (Mg)-Total	<i>mg/L</i>	0.05	-	1120	1150
Manganese (Mn)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Molybdenum (Mo)-Total	<i>mg/L</i>	0.00005	-	0.0101	0.0121
Nickel (Ni)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Phosphorus (P)-Total	<i>mg/L</i>	0.05	-	<5.0	<5.0
Potassium (K)-Total	<i>mg/L</i>	0.05	-	384	386
Rubidium (Rb)-Total	<i>mg/L</i>	0.0002	-	0.102	0.098
Selenium (Se)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Silicon (Si)-Total	<i>mg/L</i>	0.1	-	<10	<10
Silver (Ag)-Total	<i>mg/L</i>	0.00005	-	<0.0050	<0.0050
Sodium (Na)-Total	<i>mg/L</i>	0.5	-	9680	9880
Strontium (Sr)-Total	<i>mg/L</i>	0.001	-	7.36	7.12
Sulfur (S)-Total	<i>mg/L</i>	0.5	-	884	887
Tellurium (Te)-Total	<i>mg/L</i>	0.0002	-	<0.020	<0.020
Thallium (Tl)-Total	<i>mg/L</i>	0.00001	-	<0.0010	<0.0010
Thorium (Th)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Tin (Sn)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Titanium (Ti)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030
Tungsten (W)-Total	<i>mg/L</i>	0.0001	-	<0.010	<0.010
Uranium (U)-Total	<i>mg/L</i>	0.00001	-	0.0029	0.0029
Vanadium (V)-Total	<i>mg/L</i>	0.0005	-	<0.050	<0.050
Zinc (Zn)-Total	<i>mg/L</i>	0.003	-	<0.30	<0.30
Zirconium (Zr)-Total	<i>mg/L</i>	0.0003	-	<0.030	<0.030

Notes:

¹TSS criteria - 25 mg/L above background (pre-testing) levels (CCME, 2002)
²Turbidity criteria - 8 NTUs above background (pre-testing) levels (CCME, 2002)
³Sample time not available.
Table excludes results at CPT-07 and CPT-09 due to the lack of either a corresponding pre-testing or post-testing sample.

TABLE 6.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
DRILLING WASTES MANAGED AND DEPOSITED ON INUIT-OWNED AND CROWN LANDS - 2018¹

Property Section	Type of Drilling Waste Produced (e.g. drill cuttings, drill mud)	Waste Storage Area / Type ²	Waste Storage Location (UTM; NAD83)	Annual Drilling Waste Deposited (m ³) ³
Mine Site - Deposit No. 1 ⁴	Drill Cuttings	In-Ground Sump - MR1-18-247	17 W 563878 7915547	1
Mine Site - Deposit No. 1 ⁴	Drill Cuttings	In-Ground Sump - MR1-18-249 / MR1-18-250	17 W 563152 7914008	1
TOTAL				2

Notes:

¹Other small volumes of drill cuttings were deposited within or within close proximity to land based geotechnical and exploration boreholes (refer to Table 2.0 for borehole coordinates).

²In-Ground Sump IDs correspond to the exploration boreholes IDs that generated the deposited cuttings.

³Approximate volumes based on visual assessment.

⁴Inuit-Owned Lands - Parcel PI-17

TABLE 8.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
NEW IMPACTS RELATED TO EXPLORATION AND GEOTECHNICAL ACTIVITIES ON INUIT-OWNED AND CROWN LANDS - 2018

Property Section	Land Type / Parcel ID	Description of New Impact	Impact on Financial Security
Milne Port (Foreshore - Milne Inlet)	Crown Lands	Twelve (22) marine on-ice geotechnical cone penetration tests (CPT) on Milne Inlet (Crown Lands). Includes CPT locations: CPT-01, CPT-01B, CPT-02 through CPT-21.	No impact on financial security. All equipment promptly removed from on-ice CPT locations following completion. Disturbance to the Milne Inlet sea floor from CPTs negligible.
Milne Port	Inuit-Owned Lands - Surface (PI-19)	Three (3) land-based geotechnical boreholes at Milne Port on undisturbed Inuit-Owned Lands. Includes boreholes: BH18-M001, BH18-M002 and BH18-003.	No impact on financial security. Boreholes promptly backfilled and equipment removed from site following completion of each borehole. No outstanding reclamation works.
Milne Port	Inuit-Owned Lands - Surface (PI-19)	One (1) land-based geotechnical borehole (BH18-004) at Milne Port on the existing Ore Haul Truck Services Pad (disturbed) situated on Inuit-Owned Lands.	No impact on financial security. Borehole promptly backfilled and equipment removed from site following completion. No outstanding reclamation works.
Tote Road	Inuit-Owned Lands - Surface (PI-19, PI-16)	Six (6) land-based geotechnical boreholes along the Tote Road and proposed northern railway alignment on undisturbed Inuit-Owned Lands. Includes boreholes: BH18-BR15-1, BH18-BR15-2, BH18-BR102-1, BH18-BR102-2, BH18-BR70-1 and BG18-BR70-2.	No impact on financial security. Boreholes promptly backfilled and equipment removed from site following completion of each borehole. No outstanding reclamation works, with exception of the minimal works anticipated to address the partially backfilled borehole identified during the 2018 QIA Annual Audit. Negligible costs anticipated for addressing this concern.
Mine Site	Inuit-Owned Lands - Surface and Subsurface (PI-17)	Nine (9) land-based geotechnical boreholes at the Mine Site on existing laydowns (disturbed) situated on Inuit-Owned Lands. Includes boreholes: BH18-TF-01, BH18-TF-02, BH18-TF-03, BH18-TF-04, BH18-TF-05, BH18-TF-7N, BH18-TF-8N, BH18-TW-01, BH18-TW-02.	No impact on financial security. Boreholes promptly backfilled and equipment removed from site following completion of each borehole. No outstanding reclamation works.
Mine Site (Deposit No. 1)	Inuit-Owned Lands - Surface and Subsurface (PI-17)	Four (4) exploration boreholes at the Mine Site on Deposit No. 1 situated on Inuit-Owned Lands. Boreholes included: MR1-18-P05, MR1-18-247, MR1-18-249 and MR1-18-250. Drilling equipment remains at exploration boreholes MR1-18-P05 and MR1-18-247 on Deposit No. 1 for 2019 drilling activities, including drill platforms, casing, drill rods, lumber, water tubs and a survival shack.	No impact on financial security. Exploration boreholes MR1-18-249 and MR1-18-250 are situated within the disturbed active mining area limits and have no reclamation works outstanding (i.e. equipment). Exploration boreholes MR1-18-P05 and MR1-18-247 are within close proximity to the Mine Haul Road and active mining area resulting in negligible costs to reclaim equipment (refer to Figure 5).
Mine Site (Deposit Nos. 2 & 3)	Inuit-Owned Lands - Surface and Subsurface (PI-17)	Nine (9) exploration boreholes at the Mine Site on Deposit Nos. 2 and 3 situated on Inuit-Owned Lands. Includes boreholes: MR2-18-242, MR2-18-245, MR3-18-239, MR3-18-240, MR3-18-241, MR3-18-243, MR3-18-244, MR3-18-246 and MR3-18-248. Drilling equipment remains at exploration borehole MR3-18-244 on Deposit No. 3 for 2019 exploration drilling activities, including a drill rig, drill platform, casing, drill rods, lumber and water tubs.	No impact on financial security, with exception of borehole MR3-18-244. Minor costs associated with the reclamation of drilling equipment at MR3-18-244.

TABLE 8.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
RECLAMATION WORKS RELATED TO EXPLORATION AND GEOTECHNICAL ACTIVITIES ON INUIT-OWNED AND CROWN LANDS - 2018

Property Section	Land Type / Parcel ID	Reclamation Objectives	Reclamation Principle	Description of Reclamation Works	Regulatory Authority	Impact on Financial Security
Milne Port (Foreshore - Milne Inlet)	Crown Lands	<ul style="list-style-type: none"> • Provide for the long term physical, biological and chemical stability of the Exploration Project areas so as to protect the public health and safety and ecosystem integrity. • Allow for productive use of the land where exploration activities are undertaken and ensures all disturbed areas are restored to a pre-disturbed state upon completion of work. • Ensure that the land is reclaimed in a manner that minimize or prevents erosion, and negates the requirement for long term maintenance and monitoring. 	Progressive Reclamation	Removal of drilling equipment associated with the marine on-ice geotechnical program on Milne Inlet.	CIRNAC	No change in financial security held by the Crown (CIRNAC). No reclamation works outstanding for 2018 impacts.
Milne Port	Inuit-Owned Lands - Surface (PI-19)		Progressive Reclamation	Boreholes backfilled and drilling equipment removed at the three (3) 2018 land-based geotechnical borehole locations at Milne Port.	QIA	No impact on financial security held by the QIA. No reclamation works outstanding for 2018 impacts.
Milne Port	Inuit-Owned Lands - Surface (PI-19)		Progressive Reclamation	Borehole backfilled and drilling equipment removed at one (1) 2018 land-based geotechnical borehole (BH18-004) at Milne Port situated on existing Ore Haul Truck Services Pad.	QIA	No impact on financial security held by the QIA. No reclamation works outstanding for 2018 impacts.
Tote Road	Inuit-Owned Lands - Surface (PI-19, PI-16)		Progressive Reclamation	Boreholes backfilled and drilling equipment removed at the six (6) 2018 land-based geotechnical boreholes along the Tote Road and proposed northern railway alignment.	QIA	No impact on financial security held by the QIA. No reclamation works outstanding for 2018 impacts. ¹
Mine Site	Inuit-Owned Lands - Surface and Subsurface (PI-17)		Progressive Reclamation	Boreholes backfilled and drilling equipment removed at the nine (9) 2018 land-based geotechnical boreholes at the Mine Site on existing laydowns.	QIA	No impact on financial security held by the QIA. No reclamation works outstanding for 2018 impacts.

Notes:

¹Negligible costs associated with backfilling borehole identified during 2018 QIA Annual Audit.

TABLE 8.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
RECLAMATION WORKS RELATED TO EXPLORATION AND GEOTECHNICAL ACTIVITIES ON INUIT-OWNED AND CROWN LANDS - 2018

Property Section	Land Type / Parcel ID	Reclamation Objectives	Reclamation Principle	Description of Reclamation Works	Regulatory Authority	Impact on Financial Security
Mine Site (Deposit No. 1)	Inuit-Owned Lands - Surface and Subsurface (PI-17)	<ul style="list-style-type: none"> • Provide for the long term physical, biological and chemical stability of the Exploration Project areas so as to protect the public health and safety and ecosystem integrity. • Allow for productive use of the land where exploration activities are undertaken and ensures all disturbed areas are restored to a pre-disturbed state upon completion of work. • Ensure that the land is reclaimed in a manner that minimize or prevents erosion, and negates the requirement for long term maintenance and monitoring. 	Progressive Reclamation	Drilling equipment removed from two (2) of the four (4) 2018 exploration boreholes at the Mine Site on Deposit No. 1. ²	QIA	No impact on financial security held by QIA. Exploration boreholes MR1-18-249 and MR1-18-250 are situated within the disturbed active mining area limits and have no reclamation works outstanding. Exploration boreholes MR1-18-P05 and MR1-18-247 are within close proximity to the Mine Haul Road and active mining area resulting in negligible costs to reclaim equipment (refer to Figure 5).
Mine Site (Deposit Nos. 2 & 3)	Inuit-Owned Lands - Surface and Subsurface (PI-17)		Progressive Reclamation	Drilling equipment removed from eight (8) of the nine (9) 2018 exploration boreholes at the Mine Site on Deposit Nos. 2 and 3. ³	QIA	No impact on financial security, with exception of exploration borehole MR3-18-244. Minor costs associated with the reclamation of drilling equipment at MR3-18-244.

Notes:

²Drilling equipment remains at exploration boreholes MR1-18-P05 and MR1-18-247 on Deposit No. 1 for 2019 drilling activities, including drill platforms, casing, drill rods, lumber, water tubs and a survival shack.

³Drilling equipment remains at exploration borehole MR3-18-244 on Deposit No. 3 for 2019 exploration drilling activities, including a drill rig, drill platform, casing, drill rods, lumber and water tubs.

TABLE 8.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
MARY RIVER PROJECT TOTAL CLOSURE AND RECLAMATION SECURITY SUMMARY - 2018¹

Authorization	Liability	Securities Held on 1 Jan 2018 (Actual) (\$)	Adjustment for 2018 ASR (Actual) (\$)	Adjustment for 2018 Addendum ASR (Actual) (\$)	Securities Held on 31 Dec 2018 (Actual) (\$)
					F-D
Type 'A' Water Licence 2AM-MRY1325	IOL ²	61,641,771	10,328,000	1,860,000	73,829,771
	Crown	1,298,555	-	-	1,298,555
Subtotal Type 'A' Water Licence		62,940,326	10,328,000	1,860,000	75,128,326
Type 'B' Water Licence 2BE-MRY1421	IOL ²	-	-	-	-
	Crown	1,250,000	-	-	1,250,000
Subtotal Type 'B' Water Licence		1,250,000	-	-	1,250,000
GRAND TOTAL		66,818,000	10,328,000	1,860,000	79,006,000

Notes:

¹ Totals rounded to nearest '000 in CAD

² All security relating to IOL held by Qikiqtani Inuit Association (QIA) under Commercial Lease No. Q13C301



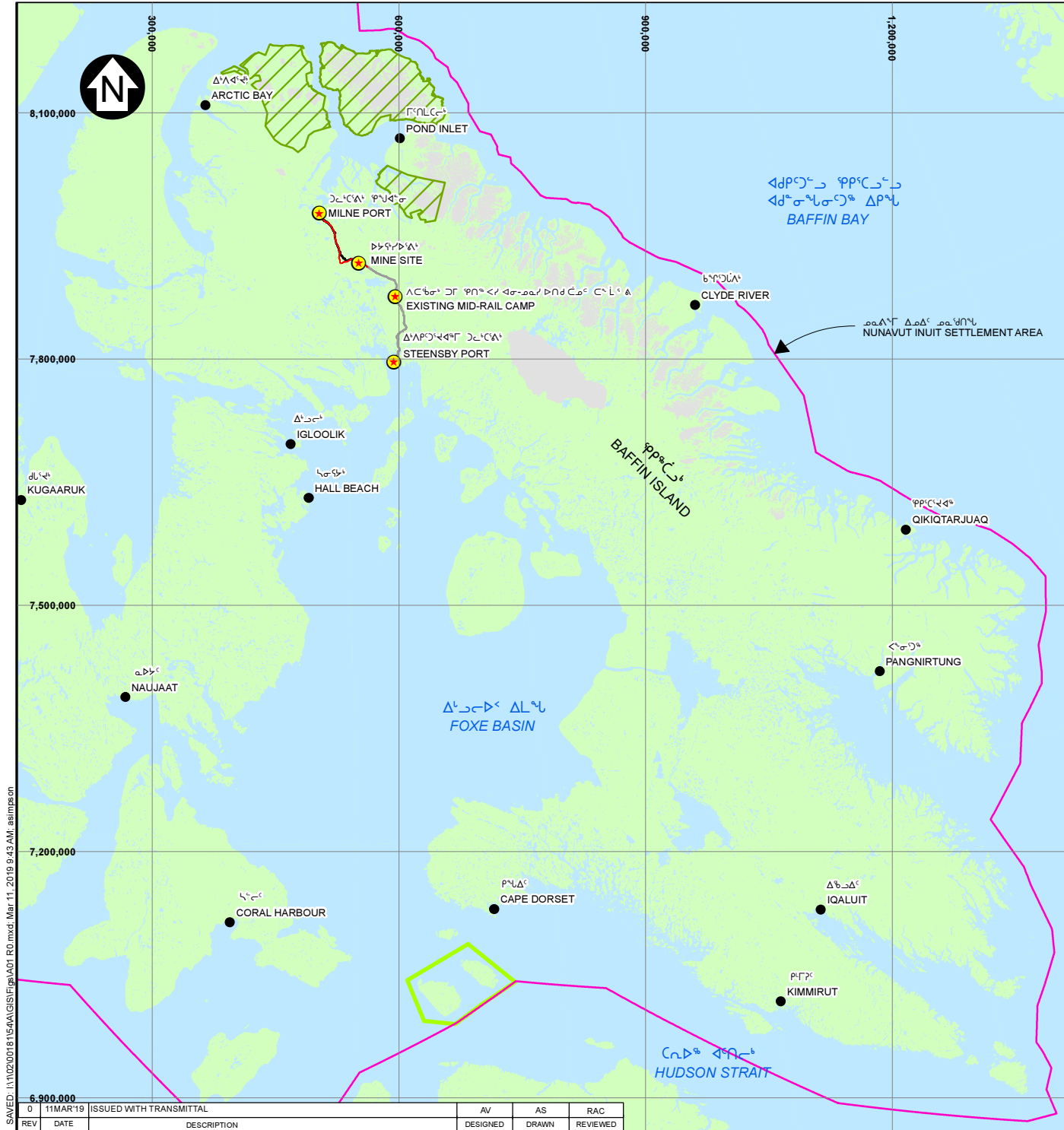
TABLE 10.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR EXPLORATION AND GEOTECHNICAL ACTIVITIES
COMMUNITY GROUP MEETINGS AND CONSULTATIONS - 2018

Date	Community	Organization / Agency	Description
05-Apr-18	Hall Beach	Mayor and Hamlet Council Hall Beach Hunters and Trappers Organization (HTO)	Eqe Bay Exploration Program
06-Apr-18	Igloolik	Mayor and Hamlet Council Igloolik Hunters and Trappers Organization (HTO)	Eqe Bay Exploration Program
12-Apr-18	Iqaluit	Qikiqtani Inuit Association	Eqe Bay Exploration Program
27-Nov-18	Igloolik	Mayor and Hamlet Council Igloolik Hunters and Trappers Organization (HTO)	Eqe Bay Exploration Program

FIGURES



LEGEND:

- COMMUNITY
- MILNE INLET TOTE ROAD
- PROPOSED SOUTHERN RAILWAY ALIGNMENT
- PROPOSED NORTHERN RAILWAY ALIGNMENT
- AREA OF EQUAL USE AND OCCUPANCY NUNAVUT AND NUNAVIK
- NUNAVUT INUIT SETTLEMENT AREA
- Δ WATER
- ▨ SIRMILIK NATIONAL PARK
- ▨ GLACIER

NOTES:

- BASE MAP: © HER MAJESTY THE QUEEN IN RIGHTS OF CANADA, DEPARTMENT OF NATURAL RESOURCES (2004). ALL RIGHTS RESERVED.
- COORDINATE GRID IS SHOWN IN UTM (NAD83) ZONE 17 AND IS IN METRES.

60 30 0 60 120 180 240 300 km

SCALE

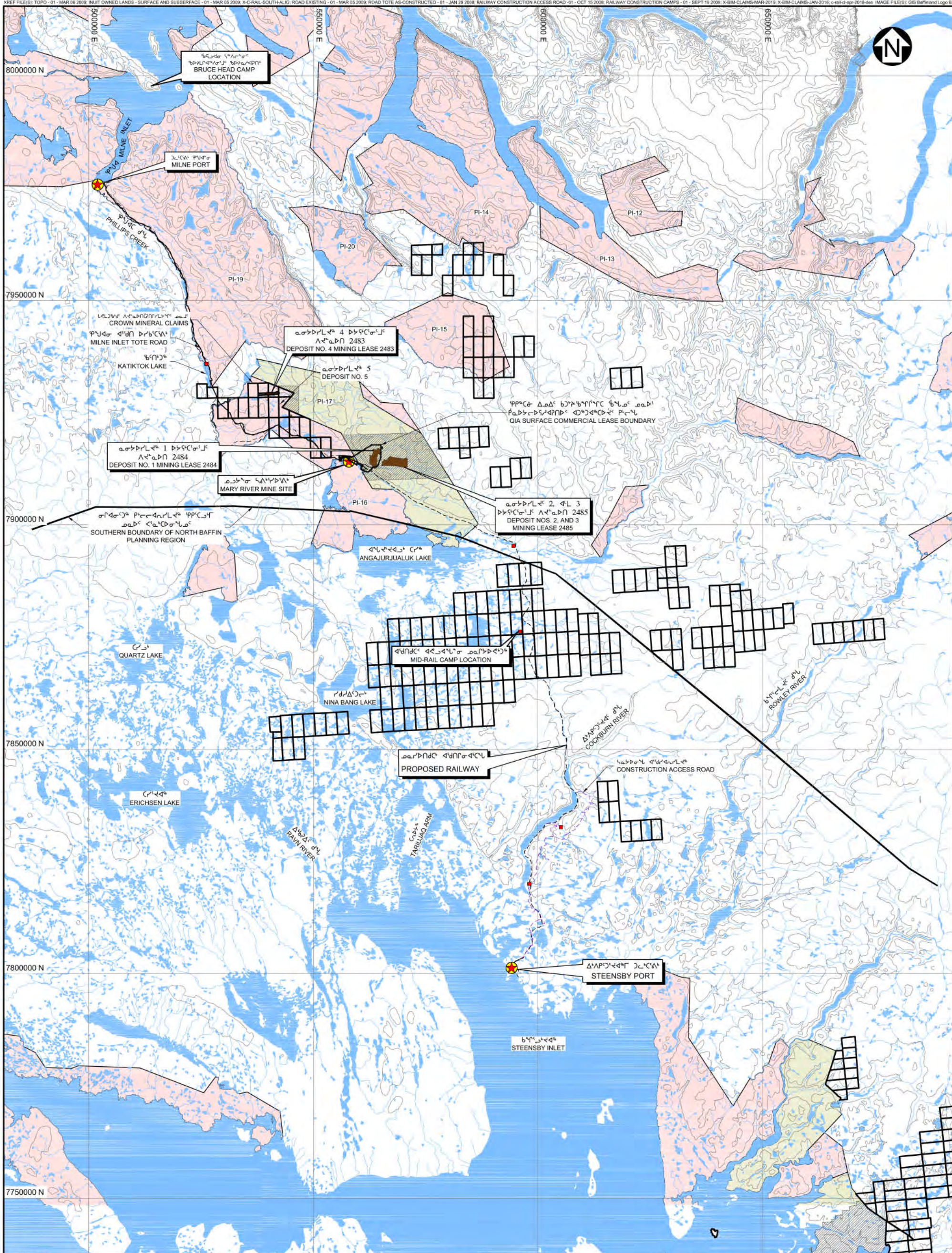
MARY RIVER PROJECT















PROJECT LOCATION MAP

	Knight Piésold CONSULTING	P/A NO. NB102-181/54	REF NO. NB19-00190
	FIGURE 1		REV 0

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REV	DATE	DESCRIPTION	AV DESIGNED	AS DRAWN	RAC REVIEWED
0	11MAR19	ISSUED WITH TRANSMITTAL			



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|--|---|---|--------------------------------------|
|  | ፈገግ
WATER |  | MILNE INLET TOTE ROAD |
|  | ፌዴራል ወንጀል - ጽሑፍ አላላፈ ለጽሑፍ ስጦታ
INUIT OWNED LAND - SURFACE ONLY EXCLUDING MINERALS |  | PROPOSED NORTHERN RAILWAY |
|  | ፌዴራል ወንጀል - ጽሑፍ ለጽሑፍ አላላፈ
INUIT OWNED LAND - SURFACE AND SUBSURFACE INCLUDING MINERALS |  | PROPOSED RAIL ALIGNMENT |
|  | አላገዛፍነት ጽሑፍ ወንጀል ለጽሑፍ
MINERAL LEASE BOUNDARY |  | PROPOSED CONSTRUCTION ACCESS ROAD |
|  | ፌዴራል ወንጀል
CROWN LAND |  | RIVER/STREAM/DRAINAGE |
|  | ፌዴራል ወንጀል ጽሑፍ ለጽሑፍ
NTI EXPLORATION AREA |  | CONTOUR |
|  | ፌዴራል ወንጀል ለጽሑፍ ለጽሑፍ
CROWN MINERAL CLAIMS HELD BY BAFFINLAND |  | PROPOSED TEMPORARY CONSTRUCTION CAMP |

1. BASE MAP: © HER MAJESTY THE QUEEN IN RIGHTS OF CANADA, DEPARTMENT OF NATURAL RESOURCES (2004). ALL RIGHTS RESERVED.
2. COORDINATE GRID IS SHOWN IN UTM (NAD83) ZONE 17 AND IS IN METRES.
3. CONTOURS ARE IN METRES, CONTOUR INTERVAL VARIES.
4. PROPOSED RAIL ALIGNMENT PROVIDED BY CANARAIL CONSULTANTS INC.
5. CLAIM BOUNDARIES PROVIDED BY BAFFINLAND IRON MINES CORPORATION, MARCH 2 2018.

1. መኅረው ሐርጊ፣ d.d* ba.CJ፤
2. መኅረው በበየተማሪ ራስን UTM (NAD83) ZONE 17
3. በበየተማሪ ፎቶ ምልክት ይጠቀም፤ ትዕዛዝ
4. መለያ ተመሳሳይ CANARAIL CONSULTANTS INC

Baffinland

MARY RIVER PROJECT

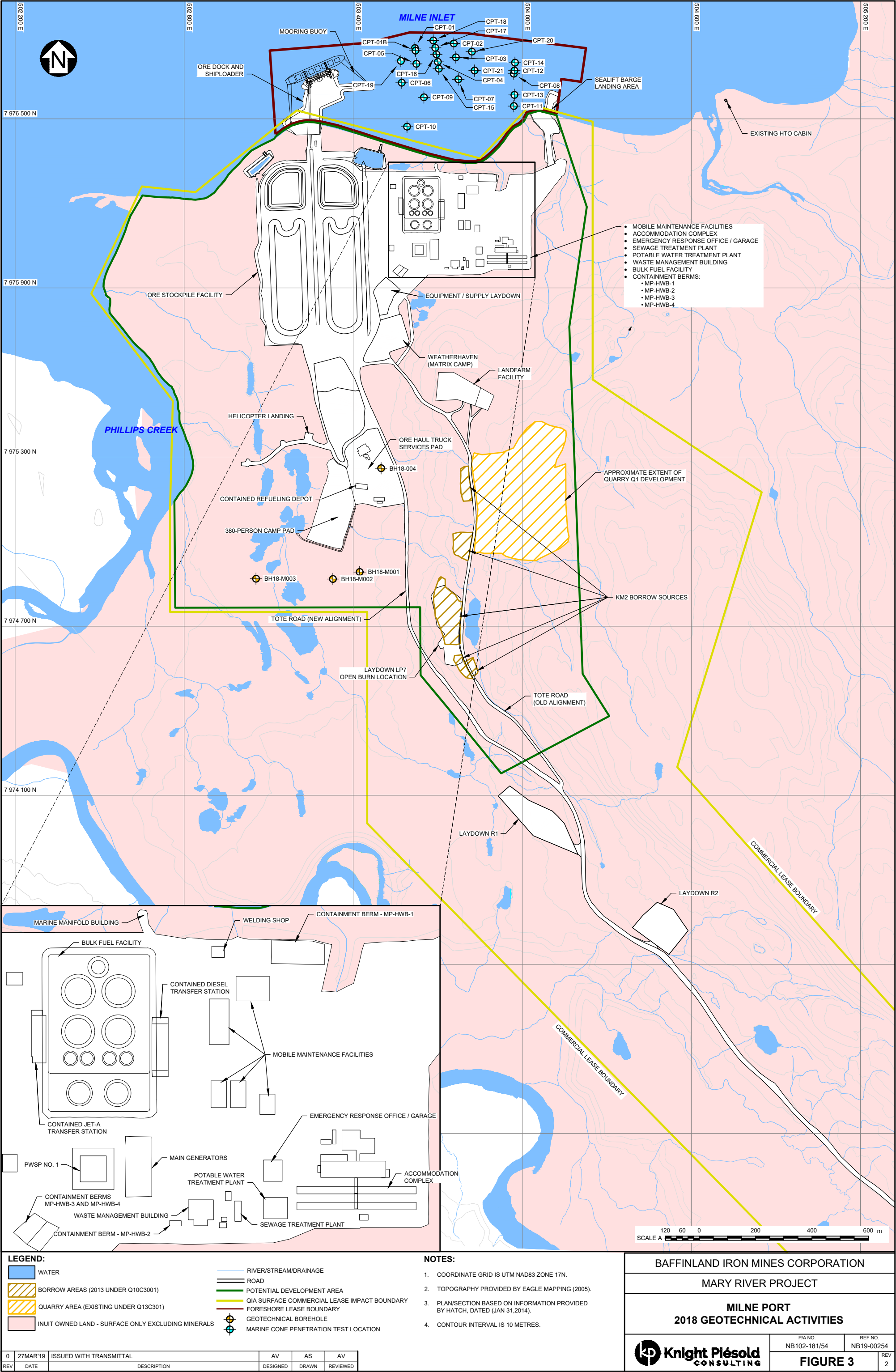
Δσ₁ > γ_c γ_b Δσ₁ Δ < γ_c

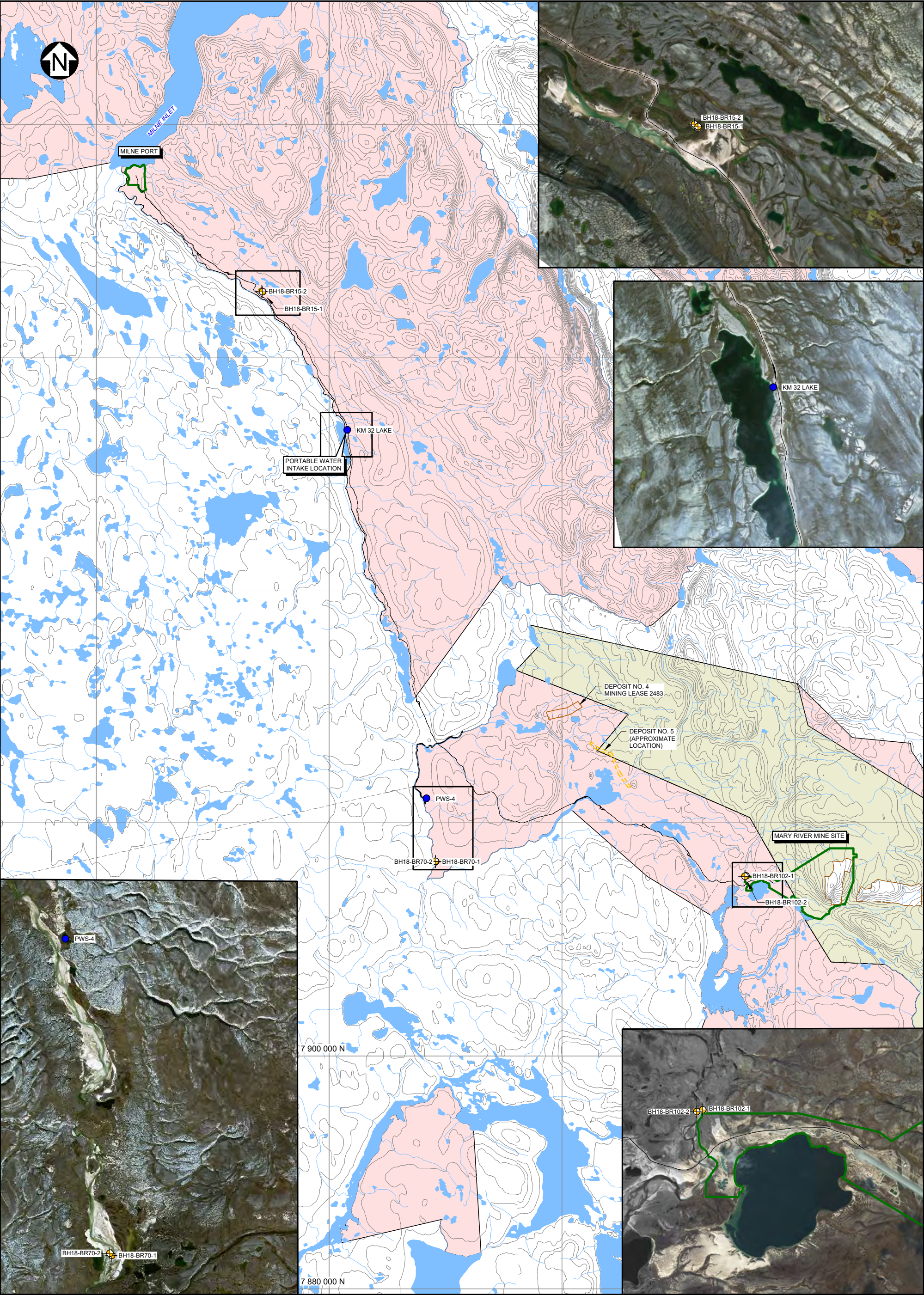
LOCATION OF PROJECT ACTIVITIES

P/A NO.	REF NO.
NB102-181/54	NB19-00190

2	RE
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0	13MAR'19	ISSUED WITH TRANSMITTAL	AV	AS	AV
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED





LEGEND:

WATER

INUIT OWNED LAND SURFACE AND SUBSURFACE

INUIT OWNED LAND SURFACE ONLY

CROWN LAND

MINERAL LEASE BOUNDARY

DEPOSIT NO. 5 (APPROXIMATE LOCATION)

POTENTIAL DEVELOPMENT AREA

CONTOUR

GEOTECHNICAL BOREHOLE

WATER SOURCE LOCATION

NOTES:
1. COORDINATE GRID IS UTM NAD83, ZONE 17.
2. DETAILED WATER AND CONTOURS FROM EAGLE MAPPING (2005). CONTOUR INTERVAL IS 60 m.
3. IMAGERY BASED ON INFORMATION PROVIDED BY BAFFINLAND IRON MINES CORPORATION, OCTOBER 2018.

BAFFINLAND IRON MINES CORPORATION

MARY RIVER PROJECT

TOTE ROAD

2018 GEOTECHNICAL ACTIVITIES

Knight Piésold

CONSULTING

P/A NO.

NB102-181/54

REF NO.

NB19-00179

FIGURE 4

REV 0

0	06MAR'19	ISSUED WITH TRANSMITTAL	AV	AS	AV
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED

31.5051015

SCALE A

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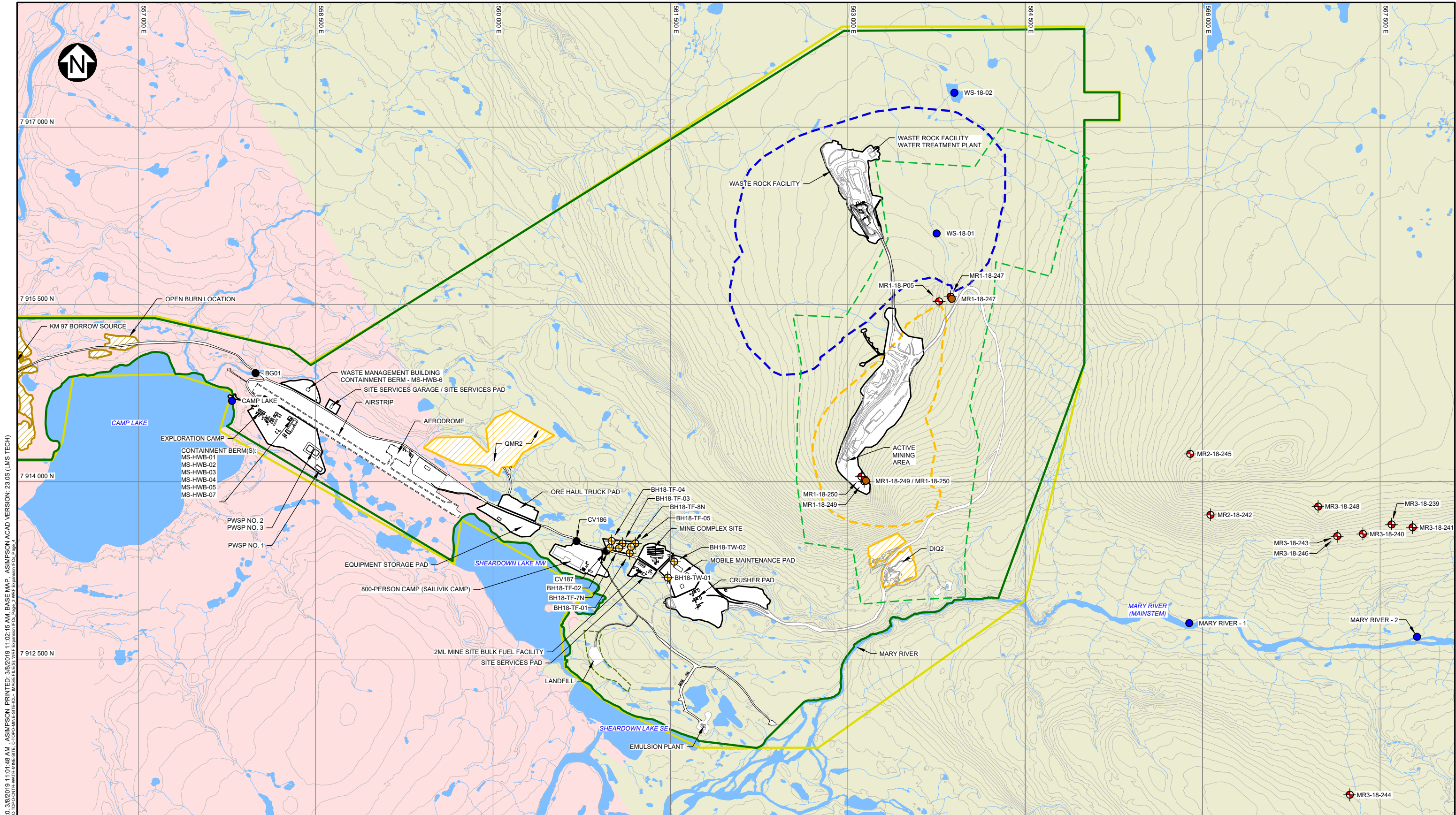
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10

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km



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LEGEND:

QUARRY

BORROW AREA

INUIT OWNED LAND SURFACE AND SUBSURFACE

INUIT OWNED LAND SURFACE ONLY

WATER

QIA SURFACE COMMERCIAL LEASE BOUNDARY

POTENTIAL DEVELOPMENT AREA BOUNDARY

ULTIMATE DEPOSIT 1 PIT LIMITS

ULTIMATE WASTE ROCK STOCKPILE LIMITS

DEPOSIT NO. 1 MINING LEASE 2484

ULTIMATE LANDFILL LIMITS

CONTOUR

CULVERT

EXPLORATION BOREHOLE

GEOTECHNICAL BOREHOLE

WATER SOURCE LOCATION

IN GROUND SUMP

0	06MAR'19	ISSUED WITH TRANSMITTAL	AV	AS	AV
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED

NOTES:

- COORDINATE GRID IS UTM NAD83, ZONE 17.
- DETAILED WATER AND CONTOURS FROM EAGLE MAPPING (2005). CONTOUR INTERVAL IS 10 m.
- CURRENT MINE AREA FROM THE WASTE DUMP TO THE CRUSHER PAD, AND DITCHES ALONG THE HAUL ROAD PROVIDED BY BIM (MARCH 12, 2018).
- ALL OTHER SITE INFRASTRUCTURE PROVIDED BY HATCH (AUGUST 2, 2016), AND SIMPLIFIED BY KP STAFF (JAN, 2018).

BAFFINLAND IRON MINES CORPORATION

MARY RIVER PROJECT

MINE SITE
2018 EXPLORATION AND
GEOTECHNICAL ACTIVITIES

Knight Piésold
CONSULTING

P/A NO.
NB102-181/54

REF NO.
NB19-00179

FIGURE 5

REV
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