



May 8, 2023

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Crown Indigenous Relations and Northern Affairs (CIRNAC)  
P.O Box 100  
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**Re:               2023 Geotechnical Drilling Program**  
**Type 'B' Water Licence 2BE-MRY2131**  
**Commercial Lease No. Q13C301**

Baffinland Iron Mines Corporation (Baffinland) is planning to undertake a geotechnical drilling program in May through July 2023 along the South Railway route from Mary River to Steensby Port (Figure 1). Baffinland plans to drill up to Seventy-nine (79) shallow drill holes (up to a maximum of 30 m deep) along the proposed South Railway. Of these Seventy-nine (79) locations, nineteen (19) locations may encroach within 31m of the high water mark of local water bodies or seasonal drainages. The drilling program is being managed by Baffinland and performed by Geotech Ekutak Ltd. The program is scheduled to commence on May 18, 2023 and expected to be completed by June 30, 2023.

The geotechnical drill program and its associated water use will be undertaken in accordance with Baffinland's Type B Water Licence 2BE-MRY2131 (Type B Water Licence). The drilling program will be completed along the proposed South Railway corridor using a heli-portable Hydracore 2000 drill. Proposed drilling locations are outlined in Table 1 and are shown in Figure 1. Geotech Ekutak Ltd. will be using a refrigerated drilling technique, requiring the use of a water and calcium chloride solution to prevent the drill holes from freezing while coring samples. Two feet of casing will be used per drill hole to prevent return water from infiltrating holes. Casings will be removed or cut below grade at the completion of the drilling program.

Select locations to be drilled in the location of future culvert and bridge installations will be drilled within 31m of the high water mark of local water bodies or seasonal drainages, and these locations are noted in Table 1. Locations will be adjusted in the field to avoid drilling within the 31m of the high water mark wherever possible, however due to design requirements for the bridges and culverts, topography and field conditions, this may not be achievable at all locations. There will be on-ice drilling conducted as part of this program at two bridge pier locations, as noted on Table 1. On-ice drilling will be completed in accordance with the requirements of Part F, Items 7 to 9 of the Type B Water Licence.

Water sources for this program will include Ravn Camp Lake, Nivek lake, Angajurjualuk Lake, Cockburn Lake, 3 km Lake, and ST347 Lake. The locations for the respective water bodies are outlined in Table 2 and shown on Figure 1. These are all large waterbodies that are expected to provide the required water



volumes with negligible drawdown of the waterbodies. In accordance with the Freshwater Intake End-of-Pipe Fish Screen Guideline (DFO, 1995), water intake lines will be equipped with fish screens to prevent the entrapment of fish during periods of withdrawal from identified water sources.

The drilling program will be wholly helicopter supported and no additional supporting vehicles or temporary access roads will be required to drilling locations.

**Table 1: Proposed 2023 Geotechnical Drilling Locations**

| <b>Borehole ID</b> | <b>Easting</b> | <b>Northing</b> |
|--------------------|----------------|-----------------|
| BH23-2             | 565233         | 7910288         |
| BH23-3             | 566358         | 7909477         |
| BH23-6             | 571315         | 7906109         |
| BH23-8             | 572953         | 7904993         |
| BH23-9             | 573264         | 7904898         |
| BH23-10            | 573933         | 7904692         |
| BH23-11            | 574722         | 7904260         |
| BH23-12            | 577958         | 7902703         |
| BH23-15            | 582557         | 7901019         |
| BH23-16            | 583533         | 7900807         |
| BH23-17            | 588575         | 7898101         |
| BH23-19            | 591095         | 7897208         |
| BH23-20            | 591581         | 7897091         |
| BH23-21            | 592063         | 7896960         |
| BH23-22            | 593793         | 7896365         |
| BH23-23            | 594846         | 7896016         |
| BH23-24            | 595073         | 7895439         |
| BH23-25            | 595409         | 7894143         |
| BH23-26* (Bridge)  | 595433         | 7894086         |
| BH23-27* (Bridge)  | 595444         | 7894059         |
| BH23-28* (Bridge)  | 595456         | 7894031         |
| BH23-29* (Bridge)  | 595467         | 7894003         |
| BH23-30            | 595876         | 7892963         |
| BH23-31*           | 595992         | 7892313         |
| BH23-35            | 597623         | 7883551         |
| BH23-36* (Bridge)  | 596654         | 7879394         |
| BH23-37* (Bridge)  | 596655         | 7879380         |
| BH23-38            | 596801         | 7878766         |
| BH23-39            | 599005         | 7875282         |
| BH23-40* (Bridge)  | 598865         | 7872573         |
| BH23-41* (Bridge)  | 598857         | 7872544         |
| BH23-42* (Bridge)  | 598850         | 7872515         |

|                                   |        |         |
|-----------------------------------|--------|---------|
| BH23-43                           | 598463 | 7869051 |
| BH23-44*                          | 598994 | 7867843 |
| BH23-46                           | 600436 | 7865911 |
| BH23-47* (Bridge)                 | 603934 | 7858914 |
| BH23-48* (Bridge)                 | 603952 | 7858892 |
| BH23-49* (Bridge)                 | 604260 | 7858655 |
| BH23-52                           | 606287 | 7847512 |
| BH23-53                           | 606333 | 7846540 |
| BH23-54                           | 606246 | 7845670 |
| BH23-55                           | 606265 | 7845416 |
| BH23-56                           | 606221 | 7843070 |
| BH23-57* (Pier – On-Ice Drilling) | 607939 | 7840799 |
| BH23-58* (Pier – On-Ice Drilling) | 607963 | 7840780 |
| BH23-59                           | 608302 | 7840538 |
| BH23-60                           | 608832 | 7838069 |
| BH23-61                           | 608527 | 7837383 |
| BH23-62* (Bridge)                 | 608410 | 7837197 |
| BH23-63                           | 607765 | 7836400 |
| BH23-64                           | 607339 | 7836183 |
| BH23-65                           | 605991 | 7835654 |
| BH23-66                           | 605975 | 7835598 |
| NTUN23-ADH001                     | 605625 | 7835357 |
| NTUN23-ADH002                     | 605254 | 7834965 |
| BH23-67                           | 605096 | 7834692 |
| BH23-69                           | 604914 | 7834511 |
| BH23-70* (Bridge)                 | 604161 | 7833877 |
| BH23-71* (Bridge)                 | 604092 | 7833821 |
| BH23-72                           | 603875 | 7833648 |
| BH23-74                           | 601788 | 7833241 |
| BH23-75                           | 601519 | 7832717 |
| STUN23-ADH001                     | 601484 | 7832728 |
| BH23-76                           | 600977 | 7832168 |
| BH23-77                           | 600447 | 7831588 |
| BH23-78                           | 600206 | 7831268 |
| BH23-79                           | 598085 | 7828595 |
| BH23-80                           | 597176 | 7826639 |
| BH23-81                           | 597402 | 7826102 |
| BH23-82                           | 598600 | 7823518 |
| BH23-83                           | 598329 | 7821207 |
| BH23-84                           | 598260 | 7820918 |
| BH23-85                           | 598450 | 7819329 |

|         |        |         |
|---------|--------|---------|
| BH23-86 | 598260 | 7817938 |
| BH23-87 | 598270 | 7817852 |
| BH23-88 | 598585 | 7817186 |
| BH23-89 | 598656 | 7815410 |
| BH23-90 | 599422 | 7814449 |
| BH23-91 | 596293 | 7803370 |

\*Locations where drilling may encroach within 31m of the high water mark.

Environmental monitoring will be performed, including pre, during and post drilling inspections. Drill cuttings will be disposed of in natural depressions or used for backfill of boreholes consistent with Part F, Item 4 of the Type B Water Licence. An estimated total volume of 395 m<sup>3</sup> of sump waste will be generated and disposed in local depressions at a minimum distance of 31 m away from any water body. Drill water runoff and siltation mitigation measures consistent with Baffinland's Environmental Protection Plan (BAF-PH1-830-P16-0008 Rev. 1) will be implemented as required based on the seasonal timing of the geotechnical program.

**Table 2: Proposed Water Sources**

| Water Source       | Easting | Northing |
|--------------------|---------|----------|
| Angajurjualuk lake | 585000  | 7894040  |
| Ravn Camp Lake     | 594611  | 7895659  |
| Nivek Lake         | 595603  | 7876430  |
| Cockburn Lake      | 597661  | 7820564  |
| 3 KM Lake          | 596698  | 7800206  |
| ST347 Lake         | 596600  | 7804826  |

**Notes:** All coordinates in UTM, NAD 83, Zone 17.

Despite best planning, it should be noted that unforeseen circumstances may necessitate some changes in planning as the program proceeds. Baffinland will endeavor to inform the Inspector and other relevant parties in such circumstances.

In accordance with the conditions of the Type B Water Licence, this letter and attachment provides Baffinland's notification for the drilling of a total of Seventy-nine (79) boreholes, nineteen (19) of which are within the proximity of local water bodies.

We trust that this information meets the notification requirements for geotechnical drilling at the Project. Please do not hesitate to contact the undersigned, should you have any questions or comments.

Regards,



Steve Borcsok  
Approvals Manager

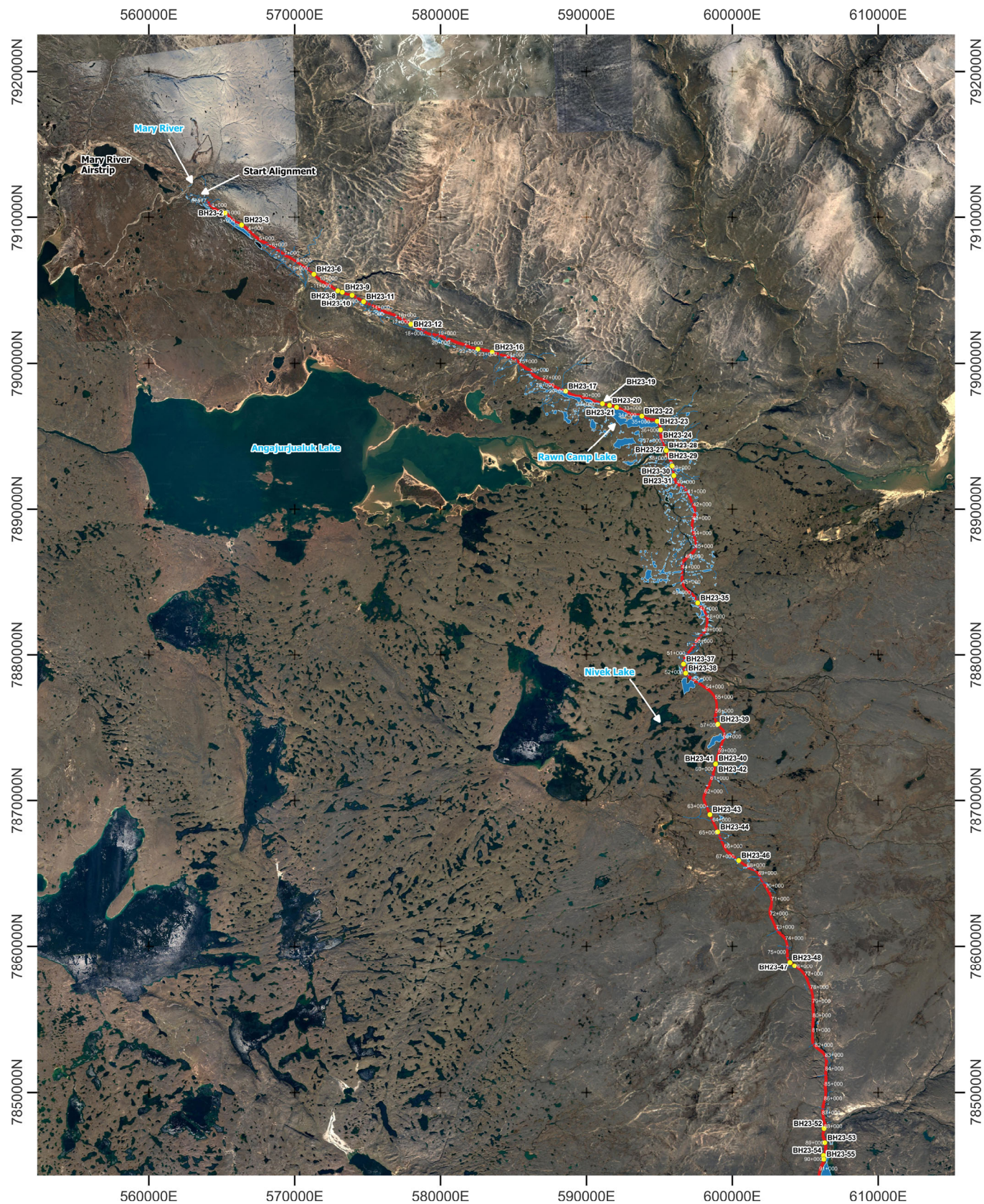


**Attachments:**

Figure 1: 2023 Geotechnical Drilling Program Borehole Location Plan

Cc: Timothy Ray Sewell, Megan Lord-Hoyle, Lou Kamermans, Connor Devereaux, Katie Babin, Todd Swenson,  
Leonel Dabor (Baffinland)  
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## Legend

- Boreholes
- Lakes
- Streams
- Rail Alignment



0 2.5 5 km



Projection NAD UTM Zone 17N  
Base Map: Google Earth

BAFFINLAND IRON MINES CORPORATION

Figure 1 – 2023  
Geotechnical Drilling Program Borehole Location  
Plan

**HATCH** **Baffinland**



