



May 25, 2019

Jonathan Mesher  
Resource Management Officer  
Indigenous and Northern Affairs Canada (INAC)  
P.O. Box 100  
Iqaluit, NU XOA 0H0

**Re: 2019 Exploration Drilling Program – Mary River Project**  
**Type B Water Licence 2BE-MRY1421**  
**Commercial Lease No. Q13C301**

Baffinland will be commencing an exploration diamond drilling program to extend and upgrade the resources at Deposits 1 and 3. The program is being managed by Baffinland's Exploration Department, and performed by Boart Longyear's coring division. The program is scheduled to commence on or about May 31, 2019, and end by mid- to late-September 2019. A total of fifteen (15) drill holes are planned, with depths ranging from approximately 160 to 400 metres (m) from surface. Drill holes will require water to support diamond drill coring techniques. Attachment 1 provides a map outlining the proposed drill hole collar locations and proposed water sources. UTM coordinates for the drill hole collar locations and new water sources, presented in Attachment 1, are provided in Attachments 2 and 3, respectively.

The equipment to be utilized for the program includes one (1) LM 55 and two (2) LF 70 rock coring drill rigs. The diameter of the holes to be advanced is approximately 61.1 mm. Supporting equipment will include two A-star B2 helicopters for moving drills, other supporting equipment/supplies and personnel between drill hole locations.

Under Part C, Item 1 of the Type B Water Licence 2BE-MRY1421 (Type B Water Licence), Baffinland is required to provide notification to the Nunavut Water Board (NWB) and the Inspector (INAC) of water sources to be used for drilling activities that are not currently identified. As shown in Attachment 1, there are eight (8) potential water sources (seven ponds and Mary River) that may be used to support the proposed drilling program. A table with the UTM coordinates for the water sources is provided in Attachment 3.

The estimated water usage rate for the drilling program is approximately 1.3 m<sup>3</sup> per linear meter drilled. Assuming 2,305 m and 1,100 m drilled at Deposits 1 and 3, respectively, the total water volume requirements for drilling operations at Deposits 1 and 3 are estimated to be 2,997 m<sup>3</sup> and 1,403 m<sup>3</sup>, respectively. Water use will be tracked using inline flowmeters to ensure compliance with the daily water withdraw limits for drilling activities (250 m<sup>3</sup>/day), stipulated in Part C, Item 1 of the Type B Water Licence.

Based upon visual assessment and knowledge from previous drilling programs in the area, Baffinland believes that the new water sources identified in Attachments 1 and 3 can sustain the required withdrawal volumes. Water sources prefixed with a 'WS' and the Mary River tributary highlighted in Attachment 1 are not believed to be fish habitat and will be visually monitored for drawdown during periods of withdrawal. The Mary River has been used as a water source in previous drilling programs at the Project and has sufficient flow volumes necessary to support the proposed water requirements for Deposits 1 and 3. Pumping stations along the Mary River, prefixed with a 'MRP' and shown in Attachment 1, will be utilized to support the program's drilling operations, as required. 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.

In accordance with Part F, Item 2, of the Type B Water Licence, drill waste will be disposed of in sumps consistent with Part F, Item 4 of Type B Water Licence. Daily environmental monitoring will be performed at drilling operations, including pre-, during, and post-inspections. Drill water runoff and siltation mitigation measures consistent with Baffinland's Environmental Protection Plan (EPP; BAF-PH1-830-P16-0008, Rev. 1) will be employed, as required.

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

We trust that this information meets the notification requirements. Please do not hesitate to contact the undersigned, should you have any question or comments.



William Bowden  
Environmental Superintendent

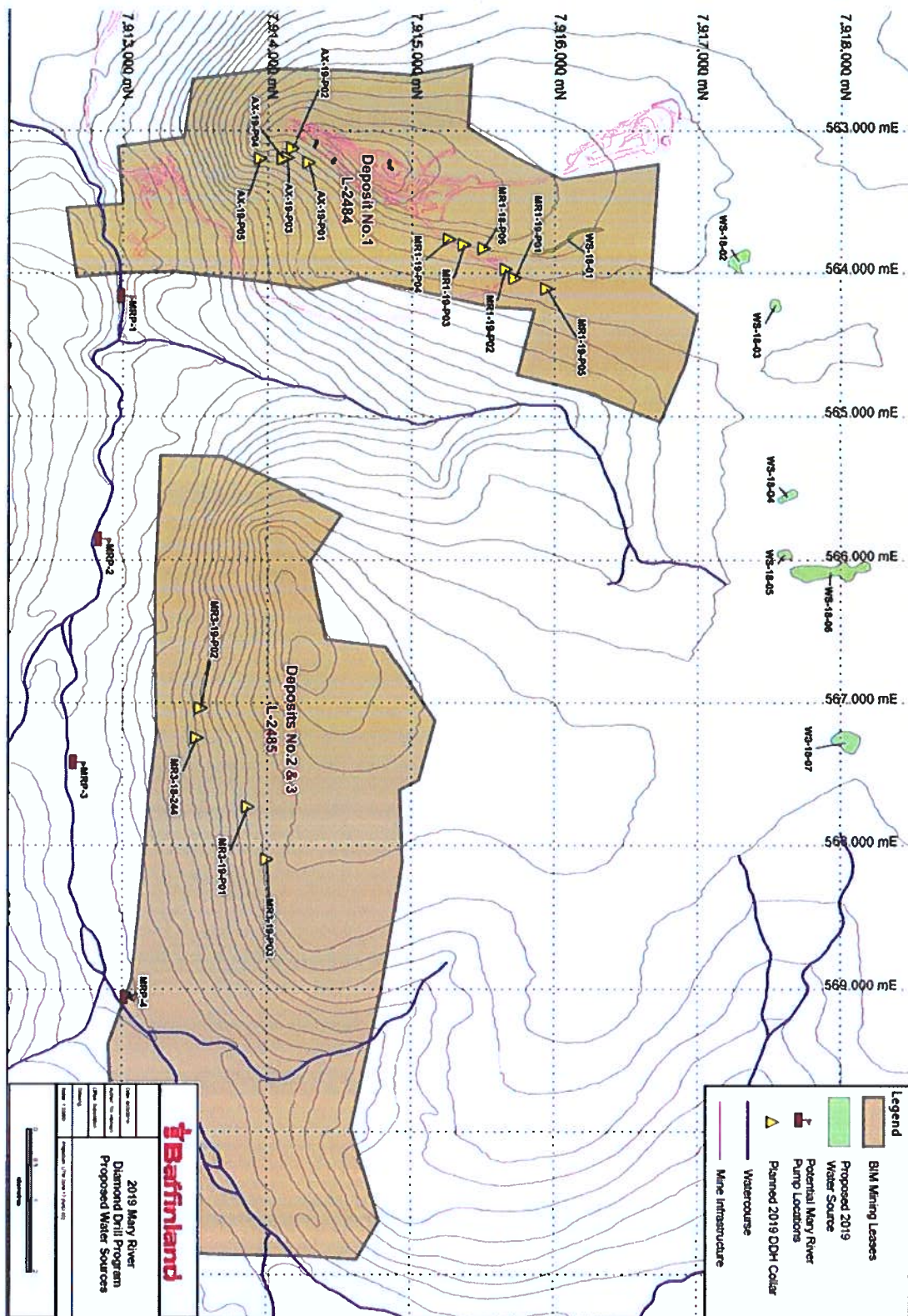
**Attachments:**

- Attachment 1 – 2019 Mary River Diamond Drilling Program
- Attachment 2 – UTM Coordinates of Proposed Drill Hole Locations
- Attachment 3 – UTM Coordinates of Proposed New Water Sources

Cc: Timothy Ray Sewell, Shawn Stevens, Megan Lord-Hoyle, Lou Kamermans, Amanda McKenzie, Christopher Murray, Steve Borcsok, Connor Devereaux, Dick Matthews, Thomas Iannelli, Massoud Robatian (Baffinland)  
Assol Kubeisinova, Karén Kharatyan (NWB)  
Justin Hack, Bridget Campbell, Godwin Okonkwo (CIRNAC)  
Jared Ottenhof (QIA)

## **Attachment 1 - 2019 Mary River Diamond Drilling Program**

2275 Upper Middle Road East, Suite 300 | Oakville, ON, Canada L6H 0C3  
Main: 416.364.8820 | Fax: 416.364.0193 | [www.baffinland.com](http://www.baffinland.com)



2275 Upper Middle Road East, Suite 300 | Oakville, ON, Canada L6H 0C3  
 Main: 416.364.8820 | Fax: 416.364.0193 | [www.baffinland.com](http://www.baffinland.com)

## **Attachment 2 - UTM Coordinates of Proposed Drill Hole Locations**



**Table A-2 – Proposed Drill Hole Locations and Depth from Surface**

<b>DEPOSIT 1 - NORTH LIMB EXTENSION</b>							
Hole ID	X	Y	Z	Length (m)	Azimuth	Dip	Comments
MR1-18-P05	563824	7915502	600	175	296	-45	Drill already in place from 2018, SW definition
MR1-19-P01	564034	7915723	569	250	296	-45	Definition hole, test NLE to 450 level
MR1-19-P02	563971	7915658	573	200	296	-45	test NE extent of north limb at depth/1960s mag trend
MR1-19-P03	563800	7915365	603	250	296	-45	test 1960s inferred HG zone, SW extent of North Limb north of section 1425N
MR1-19-P04	563762	7915262	609	250	296	-45	determine deposit geometry and extend south of section 1425N; determination of collar location and hole length to be finalized dependent upon results from MR1-19-P04
MR1-19-P05	564108	7915944	563	175	296	-45	Tentatively planned condemnation hole targeting northernmost magnetic anomaly in the vicinity of mapped BIF outcrop. To be drilled if time and budget allow.
<b>DEPOSIT 3 WEST</b>							
Hole ID	X	Y	Z	Length (m)	Azimuth	Dip	Comments
MR3-18-244	567244	7913520	466	100	350	-40	Complete frozen hole from 2018 season; Drill in place
MR3-19-P01	567728.1	7913867	528.7	300	170	-45	infill
MR3-19-P02	567035.7	7913546	460.14	300	350	-45	follow-up to MR3-06-108; define thickness and geometry of MR3 West
MR3-19-P03	568096.2	7914002	551.17	400	160	-45	1) infill 2) test south fold limb
<b>DEPOSIT 1 - AXIAL ZONE ORE CHARACTERIZATION</b>							
Hole ID	X	Y	Z	Length (m)	Azimuth	Dip	Zone Intersections
AX-19-P01	563220.65	7914293.39	577	195	296	-36	100 HW&FW
AX-19-P02	563122.08	7914175	595.25	165	296	-35	200 FW / 100 HW&FW
AX-19-P03	563187	7914140	568	235	296	-35	200 FW / 100 HW&FW
AX-19-P04	563195.7	7914109.31	561.5	285	260	-40	200 FW / 100 HW&FW
AX-19-P05	563193.87	7913949.26	560.5	125	224	-35	100 FW

*Table 1 - Proposed 2019 Drill Holes for Deposits 1 and 3*

### **Attachment 3 – UTM Coordinates of Proposed New Water Sources**

**Table A-3-1 – Proposed New Water Sources**

Name	Easting	Northing	Elevation (m)
WS-18-01	563750	7916100	592
WS-18-02	563900	7917290	567
WS-18-03	564220	7917540	565
WS-18-04	565560	7917630	560
WS-18-05	565970	7917610	560
WS-18-06	566080	7917910	560
WS-18-07	567270	7918050	565

**Notes:**

All coordinates in UTM, NAD 83, Zone 17.

**Table A-3-2 – Mary River Pumping Stations (MRPs)**

Name	Easting	Northing	Elevation (m)
MRP-1	564160	7913010	233
MRP-2	565849	7912852	290
MRP-3*	567415	7912675	307
MRP-4	569057	7913037	322

**Notes:**

All coordinates in UTM, NAD 83, Zone 17.

\*Pump already in place at location.