Appendix B

Borehole Reports

List of Abbreviations and Terms Used in the Borehole Reports

(Sheet 1)

General

Elevations
Elevations are referenced to datum indicated.

Depth
All depths are given in meters (feet) measured from the ground surface unless otherwise noted.

Sample Recovery
Indicates the length retained in millimeters (inches) in a split spoon sampler or percentage recovery of sample retained in the core barrel sampler.

Sample Number
Samples are numbered consecutively in the order in which they were obtained or attempted in the borehole.

Sample Type
The first letter describes the sampling method and the second, the shipping container.

Sampling Method

A – Split Tube	E – Auger
B – Thin Wall Tube	F – Wash
C – Piston Sampler	G – Shovel Grab Sample
D – Core Barrel	K – Slotted Sampler

Shipping Container

O – Tube	U – Not Recovered
P – Water Content Tin	X – Plastic & PVC Sleeve (Sonic)
Q – Jar	Y – Core Box
S – Plastic Bag	Z – Discarded

Abbreviations
N/A – Not applicable
N/E – Not encountered
N/O – Not observed

Soil

Soil Description, Label and Symbol
Soil description under the "Description" column conforms generally, but not rigorously, to the Unified Soils Classification System. For a given soil unit, defined by depth boundaries, the descriptive text constitutes the definitive soil unit description and takes precedence over both the brief label and the symbol used to graphically represent the soil unit.

Grain Size

Clay		<0.002 mm
Silt	0.002 –	0.075 mm
Sand	0.075 –	4.75 mm
Fine	0.075 –	0.42 mm
Medium	0.42 –	2.00 mm
Course	2.00 –	4.75 mm
Gravel	4.75 –	75 mm
Fine	4.75 –	19.00 mm
Coarse	19.00 –	75.00mm
Cobbles	75 –	300 mm
Boulder		>300 mm

Relative Quantities

Term	*Example*	*(%)*
Trace	Trace sand	1 – 10
Some	Some sand	10 – 20
With (adjective)	With Sand (Sandy)	20 – 35
And	And sand	>35
Noun	Sand	>50

Standard Penetration Test (SPT)
The test is carried out in accordance with ASTM D-1586 and the 'N' value corresponds to the sum of the number of blows required by a 63.5-kg (140-lb) hammer, dropped 760 mm (30 in.), to drive a 50-mm (2-in.) diameter split tube sampler the second and third 150 mm (6 in.) of penetration.

Density (Granular Soils)

	N(SPT)
Very loose	0 – 4
Loose	4 – 10
Compact	10 – 30
Dense	30 – 50
Very dense	>50

Consistency (Cohesive Soils)

	N(SPT)
Very soft	<2
Soft	2 – 4
Firm	4 – 8
Stiff	8 – 15
Very stiff	15 – 30
Hard	>30

Plasticity/Compressibility

		Liquid Limit (%)
Low plasticity clays	Low compressibility silts	<30
Medium plasticity clays	Medium compressibility silts	30 – 50
High plasticity clays	High compressibility silts	>50

Dilatancy
None - No visible change, during shaking or squeezing
Slow - Water appears slowly on surface of specimen during shaking and does not disappear or disappears slowly upon squeezing.
Rapid - Water appears quickly on the surface of specimen during shaking and disappears quickly upon squeezing.

Sensitivity

Insensitive	<2
Low	2 – 4
Medium	4 – 8
High	8 – 16
Quick	>16

List of Abbreviations and Terms Used in the Borehole Reports

(Sheet 2)

Rock

Core Recovery
Sum of lengths of rock core recovered from a core run, divided by the length of the core run and expressed as a percentage.

RQD (Rock Quality Designation)
Sum of lengths of hard, sound pieces of rock core equal to or greater than 100 mm from a core run, divided by the length of the core run and expressed as a percentage. Measured along centerline of core. Core fractured by drilling is considered intact. RQD normally quoted for N-size core.

RQD (%) Rock Quality

90	-	100	Excellent
75	-	90	Good
50	-	75	Fair
25	-	50	Poor
0	-	25	Very Poor

Grain Size

Term	*Grain Size*
Very coarse-grained	>60 mm
Coarse-grained	2 mm - 60 mm
Medium-grained	60 μm - 2 mm
Fine-grained	2 μm - 60 μm
Very fine-grained	< 2 μm

Bedding

Term	*Bed Thickness*			
Very thickly bedded		>2 m		>6.50 ft
Thickly bedded	600 mm -	2 m	2.00 -	6.50 ft
Medium bedded	200 mm -	600 mm	0.65 -	2.00 ft
Thinly bedded	60 mm -	200 mm	0.20 -	0.65 ft
Very thinly bedded	20 mm -	60 mm	0.06 -	0.20 ft
Laminated	6 mm -	20 mm	0.02 -	0.06 ft
Thinly laminated		<6 mm		<0.02 ft

Discontinuity Frequency
Expressed as the number of discontinuities per meter or discontinuities per foot. Excludes drill-induced fractures and fragmented zones.

Discontinuity Spacing

Term	*Average Spacing*			
Extremely widely spaced		>6 m		>20.00 ft
Very widely spaced	2 m -	6 m	6.50 -	20.00 ft
Widely spaced	600 mm -	2 m	2.00 -	6.50 ft
Moderately spaced	200 mm -	600 mm	0.65 -	2.00 ft
Closely spaced	60 mm -	200 mm	0.20 -	0.65 ft
Very closely spaced	20 mm -	60 mm	0.06 -	0.20 ft
Extremely closely spaced		<20 mm		<0.06 ft

Note: Excludes drill-induced fractures and fragmented rock.

Broken Zone
Zone of full diameter core of very low RQD which may include some drill-induced fractures.

Fragmented Zone
Zone where core is less than full diameter and RQD = 0.

Strength

Term	*Description*	*Unconfined Compressive Strength (MPa)*	*(psi)*
Extremely weak rock	Indented by thumbnail	0.25 – 1.0	36 – 145
Very weak	Crumbles under firm blows with point of geological hammer, can be peeled by a pocket knife	1.0 – 5.0	145 – 725
Weak rock	Can be peeled by a pocket knife with difficulty, shallow indentations made by firm blow with point of geological hammer	5.0 – 25	725 – 3625
Medium strong rock	Cannot be scraped or peeled with a pocket knife, specimen can be fractured with single firm blow of geological hammer to facture it	25 – 50	3625 –7250
Strong rock	Specimen requires more than one blow of geological hammer to fracture it	50 – 100	7250 – 14500
Very strong rock	Specimen requires many blows of geological hammer to fracture it	100 – 250	14500 – 36250
Extremely strong rock	Specimen can only be chipped with geological hammer	>250	>36250

Weathering

Term	*Description*
Fresh	No Visible sign of rock material weathering
Faintly weathered	Discoloration on major discontinuity surfaces.
Slightly weathered	Discoloration indicates weathering of rock material and discontinuity surfaces. All the rock material may be discolored by weathering and may be somewhat weaker than in its fresh condition.
Moderately weathered	Less than half of the rock material is decomposed and/or disintegrated to a soil. Fresh or discolored rock is present either as a continuous framework or as corestones.
Highly weathered	More than half of the rock material is decomposed and/or disintegrated to a soil. Fresh or discolored rock is present either as a discontinuous framework or as corestones.
Completely weathered	All rock material is decomposed and/or disintegrated to soil. The original mass structure is still largely intact.
Residual soil	All rock material is converted to soil. The mass structure and material fabric are destroyed. There is a large change in volume, but the soil has not been significantly transported.

BASIS FOR SOIL DESCRIPTION

(Based on AS1726-1993 - Geotechnical Site Investigations, with modifications)

GRAPHIC SYMBOLS FOR SOILS

GRAVEL – poorly graded - 

well graded - 

SAND – poorly graded - 

well graded - 

SILT – of low plasticity - 

of high plasticity - 

CLAY – of low plasticity - 

of high plasticity - 

ICE - 

COBBLES AND BOULDERS - 

ORGANIC/ PEATY SOIL - 

FILL/ MADE GROUND - 

Composite soil types are presented using combined symbols, eg. **Gravelly Sandy CLAY** 

GROUNDWATER OBSERVATIONS

Permanent Water Level 

Temporary Water Level 

Inflow into Pit or Borehole

Outflow/ Water Loss in Borehole 

Slow Inflow/ Seepage into Pit or Borehole 

SAMPLE TYPES

Disturbed bag sample 

Bulk Disturbed (>20kg) 

Hollow Stem Auger Core 

Auger Flight Cuttings 

Standard Penetration Test (SPT), with Disturbed Split-Spoon Sample 

SPT (no recovery) 

Thin walled "undisturbed" push tube sample eg. U60, U100 etc 

Sample attempted with no recovery 

BASIS FOR ROCK DESCRIPTION

(Based on AS1726-1993 - Geotechnical Site Investigations, with modifications)

GRAPHIC SYMBOLS FOR SOILS

GRAVEL – poorly graded - 

well graded - 

SAND – poorly graded - 

well graded - 

SILT – of low plasticity - 

of high plasticity - 

CLAY – of low plasticity - 

of high plasticity - 

FINE GRAINED TAILINGS - 

COBBLES AND BOULDERS - 

ORGANIC/ PEATY SOIL - 

FILL/ MADE GROUND - 

Composite soil types are presented using combined symbols, eg. **Gravelly Sandy CLAY** 

GRAPHIC SYMBOLS FOR ROCKS

SEDIMENTARY

SHALE 

CLAYSTONE 

SILTSTONE 

SANDSTONE 

CONGLOMERATE 

BRECCIA 

CORE LOSS 

CARBONATE

LIMESTONE 

Calcareous CLAYSTONE 

Calcareous SILTSTONE 

CALCARENITE 

CALCIRUDITE 

CALCRETE 

EVAPORITES

GYPSUM 

IGNEOUS

COARSE GRAINED 

MEDIUM GRAINED 

FINE GRAINED 

DOLERITE 

METAMORPHIC

COARSE GRAINED 

MEDIUM GRAINED 

FINE GRAINED 

Additional rock graphics may be added for specific projects.

GROUNDWATER OBSERVATIONS

Permanent Water Level 

Temporary Water Level 

Inflow into Pit or Borehole 

Outflow/ Water Loss in Borehole 

Slow Inflow/ Seepage into Pit or Borehole 

SAMPLE TYPES

Disturbed bag sample 

Bulk Disturbed (>20kg) 

Hollow Stem Auger Core 

Auger Flight Cuttings 

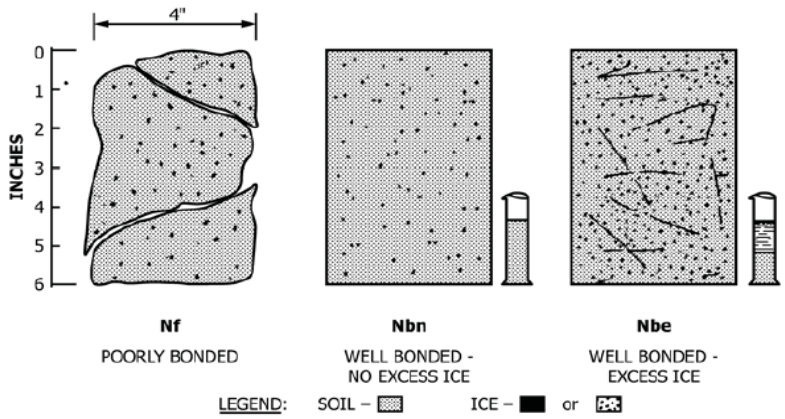
Standard Penetration Test (SPT), with Disturbed Split-Spoon Sample 

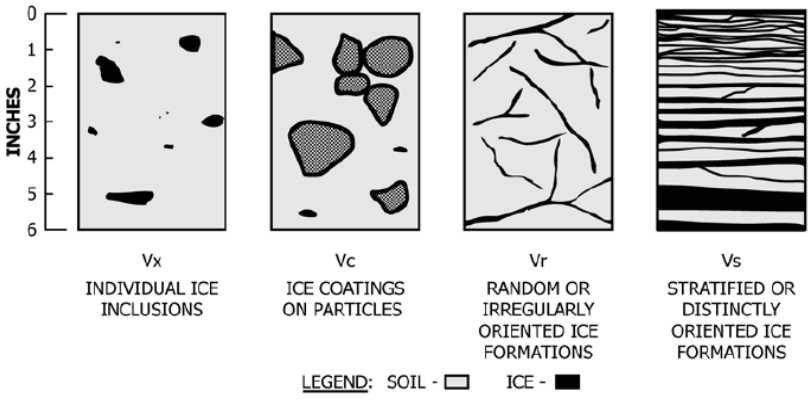
SPT (no recovery) 

Thin walled "undisturbed" push tube sample eg. U60, U100 etc 

Sample attempted with no recovery 

Symbol	Description
Nf	Poorly bonded with no visible excess ice
Nbn	Well bonded with no visible excess ice
Nbe	Well bonded with excess cie
Vx	Individual ice inclusions
Vc	Ice coatings on particles
Vr	Random or Irregularly oriented ice formations
Vs	Stratified or distrinctly oriented ice formations





HATCH BOREHOLE REPORT

BH16-M001

Sheet 1 of 1

Client: Baffinland Iron Mines
Project: Mary River Expansion Study Stage 2
Location: Milne Inlet (Reclaimer Berm)

Project No.: H352034
Datum: NAD83
Platform: Ground

Easting: 503,504.0 m
Northing: 7,976,237.0 m
Surface Elevation: 12.75 m
Bottom Elevation: -2.45 m
Total Depth: 15.2 m
Logged By: MR
Reviewed By: SH/WH

Contractor: Boart Longyear
Driller: Michael Scott
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 96
Date Logged: 12/8/2016
Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 50 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to Permafrost	10.8	2.0	Vibracore	H-Casing		GRAVELLY SAND, trace COBBLES: Light brown to grey, fine to medium grained sand, rounded to subangular gravel	D												
						1.50 m to 2.00 m: Trace gravel and silt, rounded gravel	M						18						
	8.8	4.0											18						
						4.60 m to 6.10 m: Trace silt													
	6.8	6.0				6.10 m to 9.10 m: Some silt, fine to coarse grained sand							19	0	82	17			
													16						
	4.8	8.0											16						
						9.10 m to 10.60 m: Some gravel													
	2.8	10.0											16						
						10.60 m to 12.10 m: With gravel, trace excess ice							16						
	0.8	12.0				12.10 m to 13.70 m: Trace gravel and silt, rounded to subangular gravel							18						
	-1.3	14.0				13.70 m to 15.20 m: Some silt, some gravel													
				[15.2]									16						
	-3.3	16.0				To Target Depth.													
	-5.3	18.0				**Drillhole BH16-M001 terminated at 15.2m.**													
	-7.3	20.0																	

Notes:

BOREHOLE REPORT

BH16-M002
Sheet 1 of 1

Client: Baffinland Iron Mines
Project: Mary River Expansion Study Stage 2
Location: Milne Port Tank 1

Project No.: H352034
Datum: NAD83
Platform: Ground

Easting: 503,757.0 m
Northing: 7,975,894.0 m
Surface Elevation: 12.50 m
Bottom Elevation: -2.70 m
Total Depth: 15.2 m
Logged By: MR
Reviewed By: SH/WH

Contractor: Boart Longyear
Driller: Michael Scott
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 96
Date Logged: 12/4/2016
Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 50 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to permafrost	10.5	2.0	Vibracore	H-Casing		SILT and SAND, trace GRAVEL: Light brown, fine to medium grained sand, subangular to angular gravel						>>	100						
						1.20 m to 1.50 m: Light brown, medium to coarse grained sand													
						1.50 m to 3.00 m: Some gravel, light brown to grey and white, medium to coarse grained	M						21	6	37	57			
						ORGANIC SILT and SAND													
	8.5	4.0				GRAVELLY SAND, some SILT: Light brown, fine to medium grained sand, subrounded gravel							11	27	61	12			
	6.5	6.0				SILT, some SAND: Organic, dark brown, coarse grained sand with fine organic material													
	4.5	8.0				GRAVELLY SAND, some SILT: Light brown to grey, medium to coarse grained sand, rounded to subangular gravel							19						
	2.5	10.0											14						
	0.5	12.0											14						
	-1.5	14.0		[15.2]									16						
													18						
	-3.5	16.0				To Target Depth.													
	-5.5	18.0				**Drillhole BH16-M002 terminated at 15.2m.**													
	-7.5	20.0																	

Notes:

BOREHOLE REPORT

BH16-M003

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Tank 2

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,714.0 m

Northing: 7,975,892.0 m

Surface Elevation: 10.50 m

Bottom Elevation: -4.70 m

Total Depth: 15.2 m

Logged By: UK

Reviewed By: SH/WH

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 12/4/2016

Driller: E.Beachamp

Hole Diameter (mm): 96

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 50 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to permafrost	8.5	2.0	Vibracore	H-Casing		SAND and SILT, some GRAVEL: Grey, angular gravel, coarse grained sand							18	17	63	20			
	6.5	4.0				SILT, trace SAND: Organic, dark grey, fine grained sand							33	0	4	96			
	4.5	6.0																	
	2.5	8.0																	
	0.5	10.0																	
	-1.5	12.0																	
	-3.5	14.0				SANDY GRAVEL, some SILT: Reddish brown to grey, coarse grained sand, angular gravel													
		[15.2]																	
	-5.5	16.0				To Target Depth. **Drillhole BH16-M003 terminated at 15.2m.**													
	-7.5	18.0																	
	-9.5	20.0																	

Notes:

BOREHOLE REPORT

BH16-M004

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Reclaimer Berm

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,302.0 m

Northing: 7,975,591.0 m

Surface Elevation: 10.20 m

Bottom Elevation: -5.00 m

Total Depth: 15.2 m

Logged By: UK

Reviewed By: SH/WH

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 12/8/2016

Driller: E.Beachamp

Hole Diameter (mm): 96

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 50 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to Permafrost	8.2	2.0	Vibracore	H-Casing		SILTY SAND with GRAVEL: Grey, coarse grained sand, angular gravel							19						
	6.2	4.0				SAND, trace SILT: Coarse grained sand								0	95	4			
	4.2	6.0				5.50 m to 6.10 m: Trace to some SILT													
	2.2	8.0				SAND and GRAVEL, some SILT: Grey, coarse grained sand, angular gravel							14						
	0.2	10.0																	
	-1.8	12.0				SANDY SILT: Dark grey, mottled black, fine organic material													
	-3.8	14.0				SAND, some SILT: Grey, coarse grained sand													
		[15.2]																	
	-5.8	16.0				To Target Depth. **Drillhole BH16-M004 terminated at 15.2m.**													
	-7.8	18.0																	
	-9.8	20.0																	

Notes:

BOREHOLE REPORT

BH16-M005

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Reclaimer Berm

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,270.0 m

Northing: 7,975,606.0 m

Surface Elevation: 10.00 m

Bottom Elevation: -5.20 m

Total Depth: 15.2 m

Logged By: UK

Reviewed By: SH/WH

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 12/8/2016

Driller: E.Beachamp

Hole Diameter (mm): 96

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 50 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to permafrost	8.0	2.0	Vibracore	H-Casing		SAND and GRAVEL, Some SILT: Grey, angular to rounded gravel													
						SAND, some SILT: Grey, fine to coarse grained sand							13	35	53	12			
	6.0	4.0																	
	4.0	6.0											20						
	2.0	8.0																	
	0.0	10.0											16						
	-2.0	12.0				GRAVELLY SAND, Trace SILT: Grey, subangular gravel, coarse grained sand													
	-4.0	14.0				SANDY GRAVEL: Grey, angular to sub-angular and well graded gravel													
					[15.2]														
	-6.0	16.0				To Target Depth. **Drillhole BH16-M005 terminated at 15.2m.**													
	-8.0	18.0																	
	-10.0	20.0																	

Notes:

BOREHOLE REPORT

BH16-M006

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Reclaimer Berm

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,136.0 m

Northing: 7,975,081.0 m

Surface Elevation: 10.00 m

Bottom Elevation: -5.20 m

Total Depth: 15.2 m

Logged By: MR

Reviewed By: SH/WH

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 12/8/2016

Driller: Michael Scott

Hole Diameter (mm): 96

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile 0 50 100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	8.0	2.0	Vibracore	H-Casing		GRAVELLY SAND, some SILT, some COBBLES: Grey to light brown, subangluar to rounded gravel							9	32	55	13			
	6.0	4.0				SILTY SAND: Brown, coarse grained							18						
	4.0	6.0				4.90 m to 5.80 m: Some GRAVEL													
	2.0	8.0																	
	0.0	10.0				SILT, some SAND, trace GRAVEL: Grey, coarse grained and angular gravel													
	-2.0	12.0																	
	-4.0	14.0		[15.2]		SILT, trace to some SAND													
	-6.0	16.0				To Target Depth. **Drillhole BH16-M006 terminated at 15.2m.**													
	-8.0	18.0																	
	-10.0	20.0																	

Notes:

BOREHOLE REPORT

BH16-M007
Sheet 1 of 2

Client: Baffinland Iron Mines
Project: Mary River Expansion Study Stage 2
Location: Milne Port Train Unloading

Project No.: H352034
Datum: NAD83
Platform: Ground

Easting: 503,822.0 m
Northing: 7,974,945.0 m
Surface Elevation: 54.00 m
Bottom Elevation: 44.86 m
Total Depth: 9.1 m
Logged By: UK
Reviewed By: SH/WH

Contractor: Boart Longyear
Driller: E.Beachamp
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 96
Date Logged: 10/3/2016
Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to Permafrost	52.0	2.0	Vibracore	H-Casing		SAND and GRAVEL: Grey, coarse grained sand, angular to sub-angular gravel		L				22						
	50.0	4.0				SAND: Grey, coarse grained						19	0	100	0			
						4.70 m to 6.10 m: Some GRAVEL		L										
	48.0	6.0		[6.1]		***Start of Coring at 6.1m.*** ***Continued on Rock Core Log sheet.***												
	46.0	8.0																
	44.0	10.0																
	42.0	12.0																
	40.0	14.0																
	38.0	16.0																
	36.0	18.0																
	34.0	20.0																

Notes:

BOREHOLE LOG

ROCK CORE FORMAT

BH16-M007

Sheet 2 of 2

Client: Baffinland Iron Mines

Project: Mary River Expansion

Location: Milne Port Train Unloading

Project No.: H352034

Datum: NAD83

Platform:

Easting: 503,822.0 m

Northing: 7,974,945.0 m

Surface Elevation: 54.00 m

Bottom Elevation: 44.86 m

Total Depth: 9.1 m

Logged By: UK

Reviewed By: SH/WH

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 10/3/2016

Driller: E.Beachamp **Hole Diameter (mm):** 96 **Plunge:** Vertical **Date Checked:** 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 [100] 60 20)	RQD %
	52.0	2.0										
	50.0	4.0										
	48.0	6.0					***Resuming in Rock Core Format 6.1m.***					
			NQ-3 Coring	/			GRANITE: Pink to dark pink, coarse grained, thickly banded gneiss in part, weakly fractured in part, faintly weathered	SW-Fr				
	46.0	8.0		/			7.70 m to 9.10 m: Dark pink, dark green, minor medium grained					
	44.0	10.0					To Target Depth. **Drillhole BH16-M007 terminated at 9.1m.**					
	42.0	12.0										
	40.0	14.0										
	38.0	16.0										
	36.0	18.0										
	34.0	20.0										

Notes:

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	Dl	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE REPORT

BH16-M008

Sheet 1 of 3

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Train Unloading

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,771.0 m

Northing: 7,974,959.0 m

Surface Elevation: 52.00 m

Bottom Elevation: 30.66 m

Total Depth: 21.3 m

Logged By: UK

Reviewed By: SH/WH

Contractor: Boart Longyear

Driller: E.Beachamp

Rig Type/ Mounting: MiniSonic Rig

Hole Diameter (mm): 96

Date Logged: 10/4/2016

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to Permafrost	50.0	2.0	Vibracore	H-Casing		SANDY GRAVEL: Rounded to sub angular gravel, coarse grained sand, well graded												
						SAND: Coarse to fine grained 3.00 m to 4.60 m: Some SILT						18	0	73	27			
	48.0	4.0				SAND and GRAVEL: Coarse grained sand												
	46.0	6.0				6.90 m to 7.60 m: Zone of inferred cobbles						20						
	44.0	8.0																
	42.0	10.0				SILTY SAND, some GRAVEL: TILL, fine to coarse, subangular gravel						9						
	40.0	12.0				12.20 m to 12.60 m: GRAVELLY SILTY SAND						12						
	38.0	14.0				13.80 m to 15.40 m: SILTY SAND												
	36.0	16.0																
	34.0	18.0																
				[18.8]														
Notes:	32.0	20.0				***Start of Coring at 18.8m.*** ***Continued on Rock Core Log sheet.***												

BOREHOLE LOG

ROCK CORE FORMAT

BH16-M008

Client: Baffinland Iron Mines

Project: Mary River Expansion

Location: Milne Port Train Unloading

Project No.: H352034

Datum: NAD83

Platform:

Easting: 503,771.0 m

Northing: 7,974,959.0 m

Surface Elevation: 52.00 m

Bottom Elevation: 30.66 m

Total Depth: 21.3 m

Logged By: UK

Reviewed By: SH/WH

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 10/4/2016

Driller: E.Beachamp **Hole Diameter (mm):** 96 **Plunge:** Vertical **Date Checked:** 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description: ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 [100] 60 20)	RQD %
	50.0	2.0										
	48.0	4.0										
	46.0	6.0										
	44.0	8.0										
	42.0	10.0										
	40.0	12.0										
	38.0	14.0										
	36.0	16.0										
	34.0	18.0					***Resuming in Rock Core Format 18.8m.***					
	32.0	20.0					GRANITE: Pink, weathered					

Notes:

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	Dl	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE LOG

ROCK CORE FORMAT

BH16-M008

Sheet 3 of 3

Client: Baffinland Iron Mines

Project: Mary River Expansion

Location: Milne Port Train Unloading

Project No.: H352034

Datum: NAD83

Platform:

Easting: 503,771.0 m

Northing: 7,974,959.0 m

Surface Elevation: 52.00 m

Bottom Elevation: 30.66 m

Total Depth: 21.3 m

Logged By: UK

Reviewed By: SH/WH

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 10/4/2016

Driller: E.Beachamp **Hole Diameter (mm):** 96 **Plunge:** Vertical **Date Checked:** 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 [100] 60 20)	RQD %
			NQ-3 Coring				GRANITE: Pink, bedrock, angular, broken *(Continued)*					
	30.0	22.0					To Target Depth. **Drillhole BH16-M008 terminated at 21.3m.**					
	28.0	24.0										
	26.0	26.0										
	24.0	28.0										
	22.0	30.0										
	20.0	32.0										
	18.0	34.0										
	16.0	36.0										
	14.0	38.0										
	12.0	40.0										

Notes:

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	Dl	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE REPORT

BH16-M009
Sheet 1 of 2

Client: Baffinland Iron Mines
Project No.: H352034
Project: Mary River Expansion Study Stage 2
Datum: NAD83
Location: Milne Port Train Unloading
Platform: Ground

Easting: 503,904.0 m
Northing: 7,974,935.0 m
Surface Elevation: 57.50 m
Bottom Elevation: 52.32 m
Total Depth: 5.2 m
Logged By: MR
Reviewed By: SH/WH

Contractor: Boart Longyear
Rig Type/ Mounting: MiniSonic Rig
Date Logged: 10/4/2016
Driller: Samuel Flynn
Hole Diameter (mm): 96
Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to Permafrost	55.5	2.0	Vibracore	H-Casing		ORGANICS: Organic soil												
						GRAVELLY SAND: Light brown to grey, angular to subgranular gravel, medium to coarse grained sand												
						SAND and GRAVEL: Grey to light brown, Fine to coarse grained sand, angular to subangular gravel												
				[3.7]		Inferred BOULDERS with SAND: Coarse to fine grained sand												
	53.5	4.0				***Start of Coring at 3.7m.*** ***Continued on Rock Core Log sheet.***												
	51.5	6.0																
	49.5	8.0																
	47.5	10.0																
	45.5	12.0																
	43.5	14.0																
	41.5	16.0																
	39.5	18.0																
	37.5	20.0																

Notes:

BOREHOLE LOG

ROCK CORE FORMAT

BH16-M009

Sheet 2 of 2

Client: Baffinland Iron Mines

Project: Mary River Expansion

Location: Milne Port Train Unloading

Project No.: H352034

Datum: NAD83

Platform:

Easting: 503,904.0 m

Northing: 7,974,935.0 m

Surface Elevation: 57.50 m

Bottom Elevation: 52.32 m

Total Depth: 5.2 m

Logged By: MR

Reviewed By: SH/WH

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 10/4/2016

Driller: Samuel Flynn **Hole Diameter (mm):** 96 **Plunge:** Vertical **Date Checked:** 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 [100] 60 20)	RQD %
	55.5	2.0					***Resuming in Rock Core Format 3.7m.***					
	53.5	4.0	HQ-3 Coring				GRANITE: Pink, fractured, darker streaks, coarse grained, banded					
	51.5	6.0					To Target Depth. **Drillhole BH16-M009 terminated at 5.2m.**					
	49.5	8.0										
	47.5	10.0										
	45.5	12.0										
	43.5	14.0										
	41.5	16.0										
	39.5	18.0										
	37.5	20.0										

Notes:

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	Dl	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE REPORT

BH16-M010

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Crusher

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,394.0 m

Northing: 7,974,877.0 m

Surface Elevation: 13.30 m

Bottom Elevation: -1.90 m

Total Depth: 15.2 m

Logged By: MR

Reviewed By: SH/WH

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 12/9/2016

Driller: Michael Scott

Hole Diameter (mm): 96

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 – 50 – 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	11.3	2.0	Vibrocore	H-Casing		SILT, some SAND: Brown, moist							28	0	16	84			
						ICE: Soft, white, cloudy texture													
	9.3	4.0				GRAVELLY SILTY SAND: Light brown and grey						>>	100	0	4	96			
						SILT and SAND: Organic silt, brown, moist													
	7.3	6.0				SILT, trace SAND: Organic, dark grey to brown, moist							32						
	5.3	8.0																	
	3.3	10.0																	
	1.3	12.0																	
	-0.7	14.0		[15.2]															
	-2.7	16.0				To Target Depth. **Drillhole BH16-M010 terminated at 15.2m.**													
	-4.7	18.0																	
	-6.7	20.0																	

Notes:

BOREHOLE REPORT

BH16-M011

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Crusher

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,339.0 m

Northing: 7,974,868.0 m

Surface Elevation: 12.00 m

Bottom Elevation: -3.20 m

Total Depth: 15.2 m

Logged By: MR

Reviewed By: SH/WH

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 12/4/2016

Driller: Michael Scott

Hole Diameter (mm): 96

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 – 50 – 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	10.0	2.0	Vibrocore	H-Casing		SILTY SAND: Light brown, moist							16	0	68	32			
	8.0	4.0				SAND and GRAVEL: Light brown, moist, subangular gravel							10						
	6.0	6.0				SILT, trace SAND: Dark grey, moist													
	4.0	8.0																	
	2.0	10.0																	
	0.0	12.0																	
	-2.0	14.0			[15.2]														
	-4.0	16.0				To Target Depth. **Drillhole BH16-M011 terminated at 15.2m.**													
	-6.0	18.0																	
	-8.0	20.0																	

Notes:

BOREHOLE REPORT

BH16-M012

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Generator

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,268.0 m

Northing: 7,974,848.0 m

Surface Elevation: 12.00 m

Bottom Elevation: -3.20 m

Total Depth: 15.2 m

Logged By: MR

Reviewed By: SH/WH

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 12/8/2016

Driller: Michael Scott

Hole Diameter (mm): 96

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 50 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	10.0	2.0	Vibrocore	H-Casing		SAND and GRAVEL, some SILT, trace COBBLES: Light brown, rounded							6	39	45	17			
	8.0	4.0				SILT, some SAND: Dark grey							21	0	16	84			
	6.0	6.0																	
	4.0	8.0																	
	2.0	10.0																	
	0.0	12.0																	
	-2.0	14.0		[15.2]															
	-4.0	16.0				To Target Depth. **Drillhole BH16-M012 terminated at 15.2m.**													
	-6.0	18.0																	
	-8.0	20.0																	

Notes:

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BOREHOLE REPORT

BH16-M013

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Screening

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,140.0 m

Northing: 7,974,820.0 m

Surface Elevation: 11.00 m

Bottom Elevation: -4.20 m

Total Depth: 15.2 m

Logged By: MR

Reviewed By: SH/WH

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 12/5/2016

Driller: Michael Scott

Hole Diameter (mm): 96

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 50 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	9.0	2.0	Vibrocore	H-Casing		Organic soil and GRAVEL GRAVELLY SAND, some SILT: Light brown, medium to coarse grained sand, rounded to subangular gravel							25	32	48	20			
	7.0	4.0				SILT, some SAND: Dark grey							21	5	33	61			
	5.0	6.0																	
	3.0	8.0																	
	1.0	10.0																	
	-1.0	12.0																	
	-3.0	14.0			[15.2]														
	-5.0	16.0				To Target Depth. **Drillhole BH16-M013 terminated at 15.2m.**													
	-7.0	18.0																	
	-9.0	20.0																	

Notes:

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BOREHOLE REPORT

BH16-M014
Sheet 1 of 1

Client: Baffinland Iron Mines
Project: Mary River Expansion Study Stage 2
Location: Milne Port Tail Pulley

Project No.: H352034
Datum: NAD83
Platform: Ground

Easting: 503,052.0 m
Northing: 7,974,782.0 m
Surface Elevation: 11.00 m
Bottom Elevation: -4.20 m
Total Depth: 15.2 m
Logged By: MR
Reviewed By: SH/WH

Contractor: Boart Longyear
Driller: Michael Scott
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 96
Date Logged: 12/5/2016
Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 50 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	9.0	2.0	Vibrocore	H-Casing		GRAVELLY SILTY SAND: Grey to brown, angular to subangular gravel							6	22	52	26			
	7.0	4.0				SILTY SAND: Grey							21	0	78	22			
	5.0	6.0																	
	3.0	8.0				SILT, some SAND: Dark grey, fine grained sand													
	1.0	10.0																	
	-1.0	12.0																	
	-3.0	14.0																	
		[15.2]																	
	-5.0	16.0				To Target Depth. **Drillhole BH16-M014 terminated at 15.2m.**													
	-7.0	18.0																	
	-9.0	20.0																	

Notes:

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BOREHOLE REPORT

BH16-M015

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Milne Port Tail Pulley Alt.

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,007.0 m

Northing: 7,974,799.0 m

Surface Elevation: 11.00 m

Bottom Elevation: -4.20 m

Total Depth: 15.2 m

Logged By: MR

Reviewed By: SH/WH

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged:

Driller: Michael Scott

Hole Diameter (mm): 96

Date Reviewed: 2/10/2017

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Moisture Condition	Consistency/ Density	Sample Type	Recovery %	Blows	Moisture Content Profile (0 – 50 – 100)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	9.0	2.0	Vibrocore	H-Casing		SAND and GRAVEL, trace SILT, trace COBBLES: Light brown to grey, fine to coarse grained sand, rounded gravel							1	32	59	10			
	7.0	4.0				SAND, trace SILT: Light brown, fine to coarse grained sand,							14	15	71	14			
	5.0	6.0				SILT, some SAND: Dark grey to brown													
	3.0	8.0																	
	1.0	10.0																	
	-1.0	12.0											24						
	-3.0	14.0																	
		[15.2]											27						
	-5.0	16.0				To Target Depth. **Drillhole BH16-M015 terminated at 15.2m.**													
	-7.0	18.0																	
	-9.0	20.0																	

Notes:

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BOREHOLE REPORT

BH17-10

Sheet 1 of 2

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Transfer Conveyor

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,476.0 m

Northing: 7,974,905.0 m

Surface Elevation: 17.00 m

Bottom Elevation: 0.28 m

Total Depth: 16.7 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 10/29/2017

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 1/18/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	16.0	1.0				SILT with SAND, trace Gravel trace Ice: Brown, particles up to 80 mm. Unfrozen to 1.6 m, frozen beyond 1.6 m with ice lenses up to 4 mm thick. Ice poor soil.	Nbe - Vs				26	10	42	48			
	15.0	2.0															
	14.0	3.0															
	13.0	4.0															
	12.0	5.0									19	10	35	55			
	11.0	6.0															
	10.0	7.0															
	9.0	8.0				SILT, trace Sand, trace Organics trace Ice: Brown and dark grey with ocasional thin black seams of organics and ice lenses. Ice poor soil	Nbn trace Vs				9	8	36	56			
	8.0	9.0									37	0	1	99			
	7.0	10.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-10
Sheet 2 of 2

Client: Baffinland Iron Mines
Project: Mary River Expansion Study Stage 2
Location: Transfer Conveyor

Project No.: H353004
Datum: NAD 83
Platform: Ground

Easting: 503,476.0 m
Northing: 7,974,905.0 m
Surface Elevation: 17.00 m
Bottom Elevation: 0.28 m
Total Depth: 16.7 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 10/29/2017
Date Reviewed: 1/18/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	6.0	11.0				SILT, trace Sand, trace Organics trace Ice: Brown and dark grey with ocasional thin black seams of organics and ice lenses. Ice poor soil *(Continued)* 10.3 m to 10.6 m: Some thin ice lenses.	Nbn trace Vs *(Continued)*				21	0	2	98			
	5.0	12.0									18	0	30	70			
	4.0	13.0															
	3.0	14.0				SAND, some SILT, some GRAVEL: TILL, beige, well graded. Ice poor soil.	Nbn				8	15	69	16			
	2.0	15.0															
	1.0	16.0									8	13	60	27			
	0.0	17.0				To Target Depth. **Drillhole BH17-10 terminated at 16.7m.**											
	-1.0	18.0															
	-2.0	19.0															
	-3.0	20.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-11

Sheet 1 of 2

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: New Transfer Tower

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,268.0 m

Northing: 7,976,025.0 m

Surface Elevation: m

Bottom Elevation: m

Total Depth: 15.2 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged:

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 3/21/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		0.0				Iron Ore (from stockplie base)	Unfrozen										
		1.0				Rockfill (base material)	unfrozen										
		2.0				GRAVEL and SAND with Silt: Grey. Ice poor soil.	Nbn										
		3.0									6						
		4.0				SAND and GRAVEL: Brown, particles up to 80 mm. Ice poor soil	Nbn										
		5.0															
		6.0									29						
		7.0															
		8.0				SAND: Beige, poorly graded. Ice poor soil.	Nbn				18						
		9.0				SAND, trace Silt: Brown, fine, unfrozen. Ice poor soil,	Unfrozen				18						
		10.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-11
Sheet 2 of 2

Client: Baffinland Iron Mines
Project: Mary River Expansion Study Stage 2
Location: New Transfer Tower

Project No.: H353004
Datum: NAD 83
Platform: Ground

Easting: 503,268.0 m
Northing: 7,976,025.0 m
Surface Elevation: m
Bottom Elevation: m
Total Depth: 15.2 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged:
Date Reviewed: 3/21/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						SILTY SAND some Gravel and Organis: Dark brown to black.	Nbn				16						
		11.0				SAND: Brown, well graded. Ice poor soil. 11.1 m: Trace gravel. 11.34 m to 11.35 m: Trace orgaics, dark grey. 12.16 m to 12.66 m: Trace gravel. loose, dry and unfrozen.	Nbn				19						
		15.0				To Target Depth. **Drillhole BH17-11 terminated at 15.2m.**											
		20.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-12

Sheet 1 of 2

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: New Tail of Conveyor

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,180.0 m

Northing: 7,975,752.0 m

Surface Elevation: m

Bottom Elevation: m

Total Depth: 15.2 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged:

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 3/21/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		0				Iron Ore (from stockplie base)	Unfrozen										
						Rockfill (base material)	unfrozen										
		1.0				SAND and ICE. Soil rich ice.	ICE				13						
		2.0				ICE, trace Sand. Soil poor ice.	ICE										
		3.0				SAND: Brown, poorly graded. Ice poor soil.	Nbn				32						
		4.0				SILT and fine SAND: Beige and brown to blackish-grey, thinly bedded layers with occasional organics. Ice poor soil.	Nbn				27						
		5.0									22						
		6.0				SAND: Biege and brown, poorly graded. Ice poor soil.	Nbn										
		7.0															
		8.0															
		9.0									24						
		10.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-12
Sheet 2 of 2

Client: Baffinland Iron Mines
Project: Mary River Expansion Study Stage 2
Location: New Tail of Conveyor

Project No.: H353004
Datum: NAD 83
Platform: Ground

Easting: 503,180.0 m
Northing: 7,975,752.0 m
Surface Elevation: m
Bottom Elevation: m
Total Depth: 15.2 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged:
Date Reviewed: 3/21/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		11.0				SAND: Biege and brown, poorly graded. Ice poor soil. *(Continued)*	Nbn *(Continued)*				25						
		12.0															
		13.0															
		14.0															
		15.0				To Target Depth. **Drillhole BH17-12 terminated at 15.2m.**											
		16.0															
		17.0															
		18.0															
		19.0															
		20.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-13

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Center of Ore Pile

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,158.8 m

Northing: 7,975,912.1 m

Surface Elevation: 10.52 m

Bottom Elevation: 4.42 m

Total Depth: 6.1 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Driller: Brent McAndrew

Rig Type/ Mounting: MiniSonic Rig

Hole Diameter (mm): 100 mm

Date Logged: 10/8/2017

Date Reviewed: 3/21/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile 0 25 50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						Iron Ore (from stockplie base)	Unfrozen										
						Rockfill (base material)	Unfrozen										
	9.5	1.0				SAND and GRAVEL: Brown, particles up to 50 mm. Ice poor soil	Unfrozen										
	8.5	2.0				SAND some GRAVEL some SILT: Brown to beige, particles up to 20 mm, rounded. Ice poor soil.	Nbn										
	7.5	3.0															
	6.5	4.0															
	5.5	5.0															
	4.5	6.0				To Target Depth. **Drillhole BH17-13 terminated at 6.1m.**											
	3.5	7.0															
	2.5	8.0															
	1.5	9.0															
	0.5	10.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-14

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Mid-Slope of Ore Pile

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,187.2 m

Northing: 7,975,912.6 m

Surface Elevation: 10.63 m

Bottom Elevation: 4.53 m

Total Depth: 6.1 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Driller: Brent McAndrew

Rig Type/ Mounting: MiniSonic Rig

Hole Diameter (mm): 100 mm

Date Logged: 10/8/2017

Date Reviewed: 3/21/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	9.6	1.0				Iron Ore (from stockplie base)	Unfrozen										
						Rockfill (base material)	Unfrozen										
						SAND and GRAVEL trace Silt: Brown, frozen beyond 1.5. Ice poor soil.	Unfrozen to Nbn										
	8.6	2.0				0.60 m to 4.00 m: Colour changes to biege, particles up to 20 mm.	Nbn										
	7.6	3.0															
	6.6	4.0				SAND: Grey, well graded with thin brown silt lenses. Ice poor soil.	Nbn										
						4.15 m: Thin seam of black organics.											
	5.6	5.0				SAND and GRAVEL trace SILT: Biege. Ice poor soil	Nbn										
	4.6	6.0															
						To Target Depth. **Drillhole BH17-14 terminated at 6.1m.**											
	3.6	7.0															
	2.6	8.0															
	1.6	9.0															
	0.6	10.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-15

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Toe of Ore Pile

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,222.0 m

Northing: 7,975,913.4 m

Surface Elevation: 10.25 m

Bottom Elevation: 4.15 m

Total Depth: 6.1 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 10/8/2017

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 3/21/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						Iron Ore (from stockplie base)	Unfrozen										
	9.2	1.0				SAND and GRAVEL some Silt: Brown. Ice poor soil. Frozen below 1.5 m.	Unfrozen to Nbn										
	8.2	2.0				1.50 mto 4.20: Colour changes to beige. Particles up to 80 mm. m	Nbn										
	7.2	3.0															
	6.2	4.0				SAND: Grey, well graded with thin brown silt lenses. Ice poor soil.	Nbn										
	5.2	5.0				SAND and GRAVEL trace SILT: Biege. Ice poor soil	Nbn										
	4.2	6.0															
						To Target Depth. **Drillhole BH17-15 terminated at 6.1m.**											
	3.2	7.0															
	2.2	8.0															
	1.2	9.0															
	0.2	10.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-Camp-1

Sheet 1 of 1

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Proposed Camp Extension Area

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,961.0 m

Northing: 7,976,147.0 m

Surface Elevation: m

Bottom Elevation: m

Total Depth: 6.1 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged:

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 3/21/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		0				SAND and GRAVEL: Brown, road topping / fill.											
		1.0				SAND and GRAVEL trace Silt: Biege, particles up to 80 mm, round. Ice poor soil.											
		2.0				SILT and SAND trace Clay trace Organics: Brown, fine grained, thin layers of orgaics. Ice poor soil.											
		3.0				3.50 m to 6.10 m: Colour changes from brown to grey.											
		4.0															
		5.0															
		6.0				To Target Depth. **Drillhole BH17-Camp-1 terminated at 6.1m.**											
		7.0															
		8.0															
		9.0															
		10.0															

Notes: BH colar elevation is estimated fro Lidar information.

BOREHOLE REPORT

BH17-EBC-1

Sheet 1 of 4

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Rail Indexer Foundation

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,783.4 m

Northing: 7,974,920.8 m

Surface Elevation: 51.59 m

Bottom Elevation: 29.92 m

Total Depth: 21.7 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Driller: Brent McAndrew

Rig Type/ Mounting: MiniSonic Rig

Hole Diameter (mm): 100 mm

Date Logged: 9/19/2017

Date Reviewed: 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Consistency/ Density	Sample Type	Additional Observations	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	50.6	1.0				SAND and GRAVEL (FILL): Brown. Material placed to create level drilling platform.	Unfrozen										
	49.6	2.0															
	48.6	3.0				SAND and GRAVEL with Silt: Brown and grey, frozen.	Nbn			DQ1 taken from 3.20-3.30m.							
						ICE, trace Silt: Grey to white.	ICE										
	47.6	4.0								DQ2 taken from 4.60-4.70m.							
	46.6	5.0				SAND, trace Silt: Brown, frozen. Ice poor soil.	Nbn			DQ3 taken from 5.10-5.20m.							
						ICE, trace Silt: White/clear.	ICE										
	45.6	6.0								DQ4 taken from 6.20-6.30m.							
	44.6	7.0															
	43.6	8.0								DQ5 taken from 8.30-8.40m.							
	42.6	9.0															
						SAND, trace Silt: Light brown, occasional thin ice lenses. Ice poor soil.	Nbn-Vs			DQ6 taken from 9.70-9.80m.							
	41.6	10.0															

Notes:

BOREHOLE REPORT

BH17-EBC-1
Sheet 2 of 4

Client: Baffinland Iron Mines
Project: Mary River Expansion Study Stage 2
Location: Rail Indexer Foundation

Project No.: H352034
Datum: NAD83
Platform: Ground

Easting: 503,783.4 m
Northing: 7,974,920.8 m
Surface Elevation: 51.59 m
Bottom Elevation: 29.92 m
Total Depth: 21.7 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 9/19/2017
Date Reviewed: 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Consistency/ Density	Sample Type	Additional Observations	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	40.6	11.0				SAND and GRAVEL some Silt: TILL, brown. Ice poor soil.	Nbn			DQ7 taken from 11.20-11.30m.							
	39.6	12.0								DQ8 taken from 12.50-12.60m.							
	38.6	13.0								DQ9 taken from 13.40-13.50m.							
	37.6	14.0				COBBLES and BEDROCK: Biege and brown, pulverized cobbles and bedrock, dry powdery, with layers of brown silty sand and gravel, moist. Top of poor quality bedrock, 14.04 m.				DQ10 taken from 14.00-14.10m.							
	36.6	15.0				***Start of Coring at 14.0m.*** ***Continued on Rock Core Log sheet.***											
	35.6	16.0															
	34.6	17.0															
	33.6	18.0															
	32.6	19.0															
	31.6	20.0															

Notes:

BOREHOLE LOG

ROCK CORE FORMAT

BH17-EBC-1

Sheet 3 of 4

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Rail Indexer Foundation

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,783.4 m

Northing: 7,974,920.8 m

Surface Elevation: 51.59 m

Bottom Elevation: 29.92 m

Total Depth: 21.7 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 9/19/2017

Driller: Brent McAndrew **Hole Diameter (mm):** 100 mm **Plunge:** Vertical **Date Checked:** 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description: ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 [100] 60 20)	RQD %	Defect Log	Defect Description: Inclination, type, infill, amount, aperture, planarity, roughness, frequency (Specific / General)
	40.6	11.0												
	39.6	12.0												
	38.6	13.0												
	37.6	14.0					***Resuming in Rock Core Format 14.0m.***							
				2/ 100			BEDROCK: Granitic Gneiss, medium to coarse grained, hard to very hard, pinkish-grey colour. Fractures are generally vertical, between 0 to 15 degrees and horizontal, from 70 to 90 degrees. Numerous joints and fractures infilled with clayey-silt and fine sand throughout.					0		Cz
														70° Jt Pl Sm Silt sn
														Cz
	36.6	15.0		3 / 96						Dia 75.5		44		80° Jt Pl Sm sn
														Cz
														Jt
														10° Dl Ir Ro
														75° Jt Pl Sm 1 -2 mm clay sn
														0° Dl Ir Ro
														10° Dl Ir Ro
	35.6	16.0		4 / 88						Dia 182.5				Cz
	34.6	17.0										6		60° Jt Pl Sm 1 -2 mm clay sn
														Fz
														20° Jt Pl Sm 1 mm clay sn
														40° Jt Pl Sm 1 mm clay sn
														10° Dl Ir Ro
														0° Dl Ir Ro
	33.6	18.0		5 / 106								56		70° Jt Pl Sm 1 -2 mm clay sn
														60° Jt Pl Sm 1 mm clay cn
														90° Dl Ir Ro
														0° Dl Ir Ro
														0° Dl Ir Ro
														0° Dl Ir Ro
	32.6	19.0								Dia 151.7 [164]				0° Dl Ir Ro
				6 / 99										0° Dl Ir Ro
														60° Jt Pl Sm 1 mm clay sn
														10° Jt Pl Sm sn
												62		Jt
														10° Jt Pl Sm 5mm Clay sn
										Dia 119.6				10° Jt Pl Sm Silt sn
	31.6	20.0												10° Jt Pl Sm Silt sn

Notes:

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	Dl	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE LOG

ROCK CORE FORMAT

BH17-EBC-1

Sheet 4 of 4

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Rail Indexer Foundation

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,783.4 m

Northing: 7,974,920.8 m

Surface Elevation: 51.59 m

Bottom Elevation: 29.92 m

Total Depth: 21.7 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 9/19/2017

Driller: Brent McAndrew **Hole Diameter (mm):** 100 mm **Plunge:** Vertical **Date Checked:** 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description (ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.)	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 [100] 60 20)	RQD %	Defect Log	Defect Description (Inclination, type, infill, amount, aperture, planarity, roughness, frequency) Specific / General
	30.6	21.0		7 / 100			BEDROCK: Granitic Gneiss, medium to coarse grained, hard to very hard, pinkish-grey colour. Fractures are generally vertical, between 0 to 15 degrees and horizontal, from 70 to 90 degrees. *(Continued)*			Dia 147.9		66		85° Jt Pl Sm Silt sn 85° Jt Pl Sm Silt sn 85° Jt Pl Sm Silt sn 85° Jt Pl Sm Silt sn 85° Jt Pl Sm 1 mm clay sn 85° Jt Pl Sm Silt sn 85° Jt Pl Sm Silt sn 85° Jt Pl Sm Silt sn 85° Jt Pl Sm Silt sn 85° Jt Pl Sm Silt sn 10° Cz Ir Ro Silt
	29.6	22.0					To Target Depth. **Drillhole BH17-EBC-1 terminated at 21.7m.**							10° Dl Ir Ro Silt 10° Dl Ir Ro Silt 10° Dl Ir Ro Silt 10° Dl Ir Ro Silt
	28.6	23.0												
	27.6	24.0												
	26.6	25.0												
	25.6	26.0												
	24.6	27.0												
	23.6	28.0												
	22.6	29.0												
	21.6	30.0												

Notes:

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	Dl	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE REPORT

BH17-EBC-2
Sheet 1 of 4

Client: Baffinland Iron Mines
Project: Mary River Expansion Study Stage 2
Location: Rail Indexer Foundation

Project No.: H352034
Datum: NAD83
Platform: Ground

Easting: 503,790.9 m
Northing: 7,974,895.2 m
Surface Elevation: 54.05 m
Bottom Elevation: 32.21 m
Total Depth: 21.8 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 9/24/2017
Date Reviewed: 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Consistency/ Density	Sample Type	Additional Observations	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	53.1	1.0				SAND and GRAVEL trace Cobbles: Brown, well graded up to 75 mm. Cobbles recovered are partially pulverisized to dry, beige rock flour. Ice poor soil.	Unfrozen			DQ1 taken from 1.00-1.10m.							
	52.1	2.0				SAND trace Silt: Brown, well graded. Ice poor soil.	Nbn			DQ2 taken from 1.52-1.62m. DQ3 taken from 2.00-2.10m.							
	51.1	3.0								DQ4 taken from 3.05-3.15m.							
	50.1	4.0				SAND and GRAVEL trace Silt: Brown, wet, well graded. Ice poor soil. GRAVEL with SAND, trace Silt. Brown, well graded. Ice poor soil.	Nbn Nbn			DQ5 taken from 4.30-4.40m.							
	49.1	5.0								DQ6 taken from 5.00-5.10m.							
	48.1	6.0								DQ7 taken from 5.80-5.90m.							
	47.1	7.0								DQ8 taken from 6.90-7.00m.							
	46.1	8.0								DQ9 taken from 8.10-8.20m.							
	45.1	9.0				GRAVEL and SAND, some SILT: TILL, brown and grey. Recovery by HQ core barrel. Silt and sand content is estimated from wash water recovery.											
	44.1	10.0															

Notes:

BOREHOLE REPORT

BH17-EBC-2

Sheet 2 of 4

Client: Baffinland Iron Mines

Project: Mary River Expansion Study Stage 2

Location: Rail Indexer Foundation

Project No.: H352034

Datum: NAD83

Platform: Ground

Easting: 503,790.9 m

Northing: 7,974,895.2 m

Surface Elevation: 54.05 m

Bottom Elevation: 32.21 m

Total Depth: 21.8 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Driller: Brent McAndrew

Rig Type/ Mounting: MiniSonic Rig

Hole Diameter (mm): 100 mm

Date Logged: 9/24/2017

Date Reviewed: 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Consistency/ Density	Sample Type	Additional Observations	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	43.1	11.0				GRAVEL and SAND, some SILT: TILL, brown and grey. Recovery by HQ core barrel. Silt and sand content is estimated from wash water recovery. *(Continued)*											
	42.1	12.0															
	41.1	13.0				***Start of Coring at 13.3m.*** ***Continued on Rock Core Log sheet.***											
	40.1	14.0															
	39.1	15.0															
	38.1	16.0															
	37.1	17.0															
	36.1	18.0															
	35.1	19.0															
	34.1	20.0															

Notes:

BOREHOLE LOG

ROCK CORE FORMAT

BH17-EBC-2

Sheet 3 of 4

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Rail Indexer Foundation

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,790.9 m

Northing: 7,974,895.2 m

Surface Elevation: 54.05 m

Bottom Elevation: 32.21 m

Total Depth: 21.8 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 9/24/2017

Driller: Brent McAndrew **Hole Diameter (mm):** 100 mm **Plunge:** Vertical **Date Checked:** 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description (ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.)	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 60 20) [100]	RQD %	Defect Log	Defect Description (Specific / General)
	43.1	11.0												
	42.1	12.0												
	41.1	13.0					***Resuming in Rock Core Format 13.3m.***							
	40.1	14.0		9 / 107			BEDROCK: Granitic Gneiss, medium to coarse grained, hard to very hard, pinkish-grey colour. Fractures are generally vertical, between 0 to 15 degrees and horizontal, from 70 to 90 degrees. Numerous joints and fractures infilled with clayey-silt and fine sand throughout.			Dia 100.7 Dia 157.4		48		DI 10° DI Ir Ro 10° Cz Ir Ro Silt 10° Jt Pl Ro 3 mm clay sn 10° Jt Pl Ro Silt sn 10° Cz Ir Ro 65° Jt Pl Sm Silt Cz
	39.1	15.0		10 / 103								74		10° Jt Pl Sm Silt 10° Jt Pl Sm Silt 10° DI Ir Ro Silt 10° DI Ir Ro Silt 10° DI Ir Ro Silt 10° DI Ir Ro Silt 10° DI Ir Ro Silt 10° DI Ir Ro Silt 10° DI Ir Ro Silt Cz 75° Jt Pl Sm 4mm Clayey sn
	38.1	16.0		11 / 130								39		10° Jt Pl Sm Silt 10° Jt Pl Sm Silt sn Cz
	37.1	17.0		12 / 105						[161.5]		59		75° Jt Pl Ro sn 10° Jt Pl Sm Silt sn 10° Jt Pl Sm Silt sn 5° Jt Pl Sm Silt sn 0° Jt Pl Sm Silt sn 0° DI Ir Ro 60° Jt Pl Sm Silt cg 0° DI Ir Ro 15° Jt Pl Sm Silt sn 20° Jt Pl Sm Silt sn 20° DI Ir Ro 85° Jt Pl Sm Silt sn 20° Jt Pl DI
	36.1	18.0												
	35.1	19.0		13 / 97						Dia 133.8 Dia 70.81		42		20° Jt Pl Sm Silt sn 10° Jt Pl Sm Silt sn Cz 85° Jt Pl Sm Silt sn DI
	34.1	20.0												

Notes:

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	DI	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE LOG

ROCK CORE FORMAT

BH17-EBC-2

Sheet 4 of 4

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Rail Indexer Foundation

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,790.9 m

Northing: 7,974,895.2 m

Surface Elevation: 54.05 m

Bottom Elevation: 32.21 m

Total Depth: 21.8 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 9/24/2017

Driller: Brent McAndrew **Hole Diameter (mm):** 100 mm **Plunge:** Vertical **Date Checked:** 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description (ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.)	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 [100] 60 20)	RQD %	Defect Log	Defect Description (Inclination, type, infill, amount, aperture, planarity, roughness, frequency) Specific / General
	33.1	21.0		14 / 100			BEDROCK: Granitic Gneiss, medium to coarse grained, hard to very hard, pinkish-grey colour. Fractures are generally vertical, between 0 to 15 degrees and horizontal, from 70 to 90 degrees. *(Continued)*					42	42	85° Jt Pl Sm Silt sn 20° Jt Pl Sm Silt sn 15° Jt Pl Sm Silt sn 30° Jt Pl Sm Silt sn 0° Dl Ir Ro 85° Jt Pl Sm Silt sn 0° Dl Ir Ro 20° Jt Pl Sm Silt sn 15° Jt Pl Sm Silt sn 25° Dl Ir Ro 10° Jt Pl Sm Silt sn Cz 5° Jt Pl Sl vn Cz 0° Dl Ir Ro
	32.1	22.0					To Target Depth. **Drillhole BH17-EBC-2 terminated at 21.8m.**							0° Dl Ir Ro 0° Dl Ir Ro 0° Dl Ir Ro 0° Dl Ir Ro 0° Jt Pl Ro Silt sn 0° Jt Pl Ro Silt sn 0° Jt Pl Ro Silt sn 0° Jt Pl Ro Silt sn 0° Dl Ir Ro
	31.1	23.0												
	30.1	24.0												
	29.1	25.0												
	28.1	26.0												
	27.1	27.0												
	26.1	28.0												
	25.1	29.0												
	24.1	30.0												

Notes:

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	Dl	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE REPORT

BH17-M008-R

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Rail Indexer Foundation

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,772.0 m

Northing: 7,974,960.0 m

Surface Elevation: 52.00 m

Bottom Elevation: 30.01 m

Total Depth: 22.0 m

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 9/17/2017

Logged By: R.S

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 1/26/2018

Reviewed By: G.Q

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile 0 50 100	Other Tests
	52.0	0.0				NO SAMPLES TAKEN IN OVERBURDEN. Advanced sonic tube to refusal and began diamond coring bedrock.					
	51.0	1.0									
	50.0	2.0									
	49.0	3.0									
	48.0	4.0									
	47.0	5.0									
	46.0	6.0									
	45.0	7.0									
	44.0	8.0									
	43.0	9.0									
	42.0	10.0									

Notes: Redrill of BH16-M008. Elevation is approximate.

BOREHOLE REPORT

BH17-M008-R
Sheet 2 of 4

Client: Baffinland Iron Mines Corporation
Project: Mary River Expansion Project
Location: Rail Indexer Foundation

Project No.: H353004
Datum: NAD 83
Platform: Ground

Easting: 503,772.0 m
Northing: 7,974,960.0 m
Surface Elevation: 52.00 m
Bottom Elevation: 30.01 m
Total Depth: 22.0 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 9/17/2017
Date Reviewed: 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile 0 50 100	Other Tests
	41.0	11.0				NO SAMPLES TAKEN IN OVERBURDEN. Advanced sonic tube to refusal and began diamond coring bedrock. *(Continued)*					
	40.0	12.0									
	39.0	13.0									
	38.0	14.0									
	37.0	15.0									
	36.0	16.0									
	35.0	17.0									
	34.0	18.0				***Start of Coring at 17.4m.*** ***Continued on Rock Core Log sheet.***					
	33.0	19.0									
	32.0	20.0									

Notes: Redrill of BH16-M008. Elevation is approximate.

BOREHOLE LOG

ROCK CORE FORMAT

BH17-M008-R

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Rail Indexer Foundation

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,772.0 m

Northing: 7,974,960.0 m

Surface Elevation: 52.00 m

Bottom Elevation: 30.01 m

Total Depth: 22.0 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 9/17/2017

Driller: Brent McAndrew **Hole Diameter (mm):** 100 mm **Plunge:** Vertical **Date Checked:** 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description (ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.)	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 [100] 60 20)	RQD %	Defect Log	Defect Description (Inclination, type, infill, amount, aperture, planarity, roughness, frequency) Specific / General
	41.0	11.0												
	40.0	12.0												
	39.0	13.0												
	38.0	14.0												
	37.0	15.0												
	36.0	16.0												
	35.0	17.0					***Resuming in Rock Core Format 17.4m.***							
	34.0	18.0		1 / 101			BEDROCK: Granitic Gneiss, medium to coarse grained, hard to very hard, pinkish-grey colour. Fractures are generally vertical, between 0 to 15 degrees and horizontal, from 70 to 90 degrees.					0		Fz
	33.0	19.0		2 / 98			Numerous joints and fractures infilled with clayey-silt and fine sand throughout.			Dia 70.8 Dia 47.2 Dia 23.6		64		10° Dl Ir Ro 10° Jt Ir Sm Clay infill 40mm sn Dl Dl Fz
	32.0	20.0												10° Jt Pl Sm Silt sn

Notes: Redrill of BH16-M008. Elevation is approximate.

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	Dl	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE LOG

ROCK CORE FORMAT

BH17-M008-R

Sheet 4 of 4

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Rail Indexer Foundation

Project No.: H353004

Datum: NAD 83

Platform: Ground

Easting: 503,772.0 m

Northing: 7,974,960.0 m

Surface Elevation: 52.00 m

Bottom Elevation: 30.01 m

Total Depth: 22.0 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear **Rig Type/ Mounting:** MiniSonic Rig **Bearing:** N/A **Date Logged:** 9/17/2017

Driller: Brent McAndrew **Hole Diameter (mm):** 100 mm **Plunge:** Vertical **Date Checked:** 1/26/2018

Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	Rock Description (ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.)	Weathering/ Cementation	Estimated Strength (EH VH H M L VL EL)	$Is_{(50)}$ [UCS] MPa	Defect Spacing mm (2000 600 200 60 20 [100])	RQD %	Defect Log	Defect Description (Inclination, type, infill, amount, aperture, planarity, roughness, frequency) Specific / General
	31.0	21.0		2 / 98 3 / 97			BEDROCK: Granitic Gneiss, medium to coarse grained, hard to very hard, pinkish-grey colour. Fractures are generally vertical, between 0 to 15 degrees and horizontal, from 70 to 90 degrees. *(Continued)*			Dia 94.4 [57.9] [46.1] [94.8] Dia 100.7		64 68		10° Dl Ir Ro 10° Dl Ir Ro 10° Dl Ir Ro 10° Dl Ir Ro 30° Jt Pl Sm Silt sn 10° Dl Ir Ro 10° Dl Ir Ro 10° Jt Cu Sm Silt sn 45° Dl Ir Ro 0° Dl Ir Ro 10° Jt Ir Ro Silt sn 50° Jt Ir Ro Silt sn 0° Dl Ir Ro 0° Jt Ir Sm Silt sn 10° Dl Ir Ro
	30.0	22.0					To Target Depth. **Drillhole BH17-M008-R terminated at 22.0m.**							
	29.0	23.0												
	28.0	24.0												
	27.0	25.0												
	26.0	26.0												
	25.0	27.0												
	24.0	28.0												
	23.0	29.0												
	22.0	30.0												

Notes: Redrill of BH16-M008. Elevation is approximate.

Defect Description Legend

Planarity		Type				Roughness		Infill Amount	
Pl	Planar	Dl	Drilling Induced	Sm	Seam	Ro	Rough	cn	Clean
Ir	Irregular	Jt	Joint	Cz	Crushed Zone	Sm	Smooth	sn	Stained
Cu	Curved	Pt	Parting on Contact	Fz	Fractured Zone	Po	Polished	vn	Veneer
Un	Undulose	Sh	Shear Seam	Band	Weak Band	Sl	Slickenside	cg	Coating
St	Stepped	Cs	Crushed Seam						

BOREHOLE REPORT

BH17-EBC-8

Sheet 1 of 4

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Drive House-South End

Project No.: H353004

Datum: Ground

Platform: 0

Easting: 503,534.5 m

Northing: 7,976,327.5 m

Surface Elevation: 7.66 m

Bottom Elevation: -31.86 m

Total Depth: 39.5 m

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 8/26/2017

Logged By: R.S

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 4/5/2018

Reviewed By: G.Q

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	6.7	1.0				SAND, some GRAVEL, trace Silt: Brown, particles up to 50 mm. Unfrozen to 1.2 m otherwise frozen. Ice poor soil.	Unfrozen to Nf				3	15	72	13			
	5.7	2.0															
	4.7	3.0									11	15	76	10			
	3.7	4.0															
	2.7	5.0									21	7	88	5			
	1.7	6.0				SAND: Brown, medium to coarse. Ice poor soil.	Nf				15	2	93	5			
	0.7	7.0				SAND and GRAVEL trace Silt: Brown, well graded. Ice poor soil.	Nf				10	33	55	11			
	-0.3	8.0															
	-1.3	9.0									8	42	53	4			
	-2.3	10.0															
	-3.3	11.0															

Notes:

BOREHOLE REPORT

BH17-EBC-8

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Drive House-South End

Project No.: H353004

Datum: Ground

Platform: 0

Easting: 503,534.5 m

Northing: 7,976,327.5 m

Surface Elevation: 7.66 m

Bottom Elevation: -31.86 m

Total Depth: 39.5 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 8/26/2017

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 4/5/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-4.3	12.0				SAND and GRAVEL trace Silt: Brown, well graded. Ice poor soil. *(Continued)*	Nf *(Continued)*				23						
											6	46	45	9			
						12.16 m to 12.76 m: Recovered wet / unfrozen sample.											
	-5.3	13.0															
	-6.3	14.0															
						13.68 m to 15.20 m: Recovered wet / unfrozen sample.											
	-7.3	15.0									9	29	61	10			
	-8.3	16.0															
	-9.3	17.0				SAND, trace Gravel trace Silt: Brown. Ice poor soil	Nf to Unfrozen										
						17.32 to 19.8: Material is wet and unfrozen.					17	0	89	11			
	-10.3	18.0									17	2	85	13			
	-11.3	19.0															
	-12.3	20.0															
	-13.3	21.0									20	2	98	0			
	-14.3	22.0															

Notes:

BOREHOLE REPORT

BH17-EBC-8

Sheet 3 of 4

Client: Baffinland Iron Mines Corporation
Project: Mary River Expansion Project
Location: Drive House-South End

Project No.: H353004
Datum: Ground
Platform: 0

Easting: 503,534.5 m
Northing: 7,976,327.5 m
Surface Elevation: 7.66 m
Bottom Elevation: -31.86 m
Total Depth: 39.5 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 8/26/2017
Date Reviewed: 4/5/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						SAND, trace Gravel trace Silt: Brown. Ice poor soil *(Continued)*	Nf to Unfrozen *(Continued)*										
	-15.3	23.0				SAND with GRAVEL trace SIlt: Brown. Ice poor soil.	Nf				11	25	63	12			
	-16.3	24.0															
	-17.3	25.0															
	-18.3	26.0				SAND trace Silt : Brown, well graded. Occasionl layers of thinly bedded, dark grey and black organics as noted. Ice poor soil. 25.8 m to 26.7 m: Trace organics, greyish-black.	Nf				17	2	86	12			
	-19.3	27.0															
	-20.3	28.0				27.7 m: Trace organics, black.											
	-21.3	29.0				28.8 m to 29.0 m: Trace organics, greyish-black.											
	-22.3	30.0									23	0	95	5			
	-23.3	31.0															
	-24.3	32.0															
	-25.3	33.0															

Notes:

BOREHOLE REPORT

BH17-EBC-8

Sheet 4 of 4

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Drive House-South End

Project No.: H353004

Datum: Ground

Platform: 0

Easting: 503,534.5 m

Northing: 7,976,327.5 m

Surface Elevation: 7.66 m

Bottom Elevation: -31.86 m

Total Depth: 39.5 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 8/26/2017

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 4/5/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						SAND trace Silt : Brown, well graded. Occasionl layers of thinly bedded, dark grey and black organics as noted. Ice poor soil. *(Continued)*	Nf *(Continued)*				22	0	92	8			
	-26.3	34.0				33.2 m to 33.5 m: Some silty organics, greyish-black.											
	-27.3	35.0				35.4 m to 35.5 m: Some organics, black.											
	-28.3	36.0				36.4 m to 36.5 m: Trace organics, greyish-black.											
	-29.3	37.0									21	0	92	8			
	-30.3	38.0				38.3 m to 38.4 m: Some organics, greyish-black.											
	-31.3	39.0									13 19	0	93	7			
	-32.3	40.0				To Target Depth. **Drillhole BH17-EBC-8 terminated at 39.5m.**											
	-33.3	41.0															
	-34.3	42.0															
	-35.3	43.0															
	-36.3	44.0															

Notes:

BOREHOLE REPORT

BH17-EBC-9

Sheet 1 of 4

Client: Baffinland Iron Mines Corporation
Project: Mary River Expansion Project
Location: Drive House-North End

Project No.: H353004
Datum: Ground
Platform: 0

Easting: 503,548.5 m
Northing: 7,976,371.4 m
Surface Elevation: 7.44 m
Bottom Elevation: -32.08 m
Total Depth: 39.5 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 8/28/2017
Date Reviewed: 4/5/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	6.4	1.0				SAND with GRAVEL, trace Silt: Brown. Unfrozen to 1.4 m, otherwise frozen. Ice poor soil.	Unfrozen to Nf										
	5.4	2.0															
	4.4	3.0									11	23	73	5			
	3.4	4.0									10	33	59	8			
	2.4	5.0															
	1.4	6.0									13	17	73	10			
	0.4	7.0															
	-0.6	8.0															
	-1.6	9.0				SAND, trace Silt: Brown, fine grained. Ice poor soil.	Nf				23	0	88	12			
											20	0	90	10			
	-2.6	10.0															
	-3.6	11.0															

Notes:

HATCH BOREHOLE REPORT

BH17-EBC-9

Sheet 2 of 4

Client: Baffinland Iron Mines Corporation
Project: Mary River Expansion Project
Location: Drive House-North End

Project No.: H353004
Datum: Ground
Platform: 0

Easting: 503,548.5 m
Northing: 7,976,371.4 m
Surface Elevation: 7.44 m
Bottom Elevation: -32.08 m
Total Depth: 39.5 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 8/28/2017
Date Reviewed: 4/5/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						SAND, some Gravel: Brown, Ice poor soil.	Nf				11	16	78	6			
	-4.6	12.0															
	-5.6	13.0															
						SAND: Brown, fine to medium. Ice poor soil.	Nf										
	-6.6	14.0				14.0 m to 14.5 m: Some rganics: Dark brown, .Ice poor soil.					18	3	88	10			
	-7.6	15.0				** 14.5 m to 15.7 m: Material is unfrozen, damp with oily texture. Salty.	UNFROZEN				13						
	-8.6	16.0															
	-9.6	17.0				17.0 m to 17.5 m: Organics and Sand, dark grey, distinct organic odour.					21	0	89	11			
	-10.6	18.0				SAND, some GRAVEL trace Silt: Brown. Ice poor soil.	Nf				22	0	93	7			
	-11.6	19.0															
	-12.6	20.0				SAND: Brown to greyish-brown, well graded. Ice poor soil	Nf				12	9	82	9			
	-13.6	21.0															
	-14.6	22.0															

Notes:

HATCH BOREHOLE REPORT

BH17-EBC-9

Sheet 3 of 4

Client: Baffinland Iron Mines Corporation
Project: Mary River Expansion Project
Location: Drive House-North End

Project No.: H353004
Datum: Ground
Platform: 0

Easting: 503,548.5 m
Northing: 7,976,371.4 m
Surface Elevation: 7.44 m
Bottom Elevation: -32.08 m
Total Depth: 39.5 m
Logged By: R.S
Reviewed By: G.Q

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 8/28/2017
Date Reviewed: 4/5/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-15.6	23.0				SAND: Brown to greyish-brown, well graded. Ice poor soil *(Continued)*	Nf *(Continued)*				21	0	95	5			
	-16.6	24.0									24	0	92	8			
	-17.6	25.0															
	-18.6	26.0															
	-19.6	27.0									19	7	86	8			
						27.3 m to 27.6 m: Organics and Sand, black, distinct organic odour.					19	0	84	16			
	-20.6	28.0															
	-21.6	29.0									26	0	97	3			
	-22.6	30.0															
	-23.6	31.0															
	-24.6	32.0									20	0	94	6			
	-25.6	33.0															

Notes:

BOREHOLE REPORT

BH17-EBC-9

Sheet 4 of 4

Client: Baffinland Iron Mines Corporation

Project: Mary River Expansion Project

Location: Drive House-North End

Project No.: H353004

Datum: Ground

Platform: 0

Easting: 503,548.5 m

Northing: 7,976,371.4 m

Surface Elevation: 7.44 m

Bottom Elevation: -32.08 m

Total Depth: 39.5 m

Logged By: R.S

Reviewed By: G.Q

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 8/28/2017

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 4/5/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-26.6	34.0				SAND: Brown to greyish-brown, well graded. Ice poor soil *(Continued)*	Nf *(Continued)*										
	-27.6	35.0															
	-28.6	36.0															
	-29.6	37.0				36.8 m to 37.0 m: Silty-Organics, black, distinct organic odour.											
	-30.6	38.0															
	-31.6	39.0									22	0	98	2			
	-32.6	40.0				To Target Depth. **Drillhole BH17-EBC-9 terminated at 39.5m.**											
	-33.6	41.0															
	-34.6	42.0															
	-35.6	43.0															
	-36.6	44.0															

Notes:

BOREHOLE REPORT

BH17-RD-1

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation
Project: SPMT Road Investigation
Location: Milne Port Area

Project No.: H/353004
Datum: NAD 83
Platform: Ground

Easting: 504,095.0 m
Northing: 7,976,552.0 m
Surface Elevation: 2.10 m
Bottom Elevation: -4.00 m
Total Depth: 6.1 m
Logged By: R.S
Reviewed By: H.G

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 10/17/2017
Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	1.1	1.0				SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen										
						ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozen										
	0.1	2.0															
	-0.9	3.0															
	-1.9	4.0				SAND and GRAVEL with Organics: Grey, wet, fine sand to fine gravel, rounded.	Unfrozen										
						SAND, some GRAVEL, trace Silt: Brown, moist to wet, medium sand to medium gravel, rounded.	Unfrozen										
	-2.9	5.0									11	15	80	5			
	-3.9	6.0															
						To Target Depth. **Drillhole BH17-RD-1 terminated at 6.1m.**											
	-4.9	7.0															
	-5.9	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH17-RD-1A

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation

Project: SPMT Road Investigation

Location: Milne Port Area

Project No.: H/353004

Datum: NAD 83

Platform: Ground

Easting: 504,090.0 m

Northing: 7,976,463.0 m

Surface Elevation: 3.50 m

Bottom Elevation: -1.07 m

Total Depth: 4.6 m

Logged By: R.S

Reviewed By: H.G

Contractor: Boart Longyear

Driller: Brent McAndrew

Rig Type/ Mounting: MiniSonic Rig

Hole Diameter (mm): 100 mm

Date Logged: 10/17/2017

Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	3.5	0				ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozen										
	2.5	1.0				SAND with GRAVEL, trace Silt: Brown, moist to wet, medium to coarse. Frozen beyond 1.6 m.	Nbn										
	1.5	2.0															
	0.5	3.0															
	-0.5	4.0															
	-1.5	5.0				To Target Depth. **Drillhole BH17-RD-1A terminated at 4.6m.**											
	-2.5	6.0															
	-3.5	7.0															
	-4.5	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH17-RD-1B

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation

Project: SPMT Road Investigation

Location: Milne Port Area

Project No.: H/353004

Datum: NAD 83

Platform: Ground

Easting: 504,100.0 m

Northing: 7,976,358.0 m

Surface Elevation: 9.00 m

Bottom Elevation: 4.10 m

Total Depth: 4.9 m

Logged By: R.S

Reviewed By: H.G

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 10/17/2017

Driller: Brent McAndrew

Hole Diameter (mm): 100 mm

Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	9.0	0.0				SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen										
						ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Frozen										
	8.0	1.0															
	7.0	2.0															
	6.0	3.0				With ICE from 3.05 m to 4.90 m.											
	5.0	4.0															
	4.0	5.0				To Target Depth. **Drillhole BH17-RD-1B terminated at 4.9m.**											
	3.0	6.0															
	2.0	7.0															
	1.0	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH17-RD-1C

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation
Project: SPMT Road Investigation
Location: Milne Port Area

Project No.: H/353004
Datum: NAD 83
Platform: Ground

Easting: 504,075.0 m
Northing: 7,976,302.0 m
Surface Elevation: 10.00 m
Bottom Elevation: 3.90 m
Total Depth: 6.1 m
Logged By: R.S
Reviewed By: H.G

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 10/17/2017
Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	10.0	0.0				SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen										
	9.0	1.0				SAND, trace Gravel, trace Silt: Brown. Frozen beyond 1.5 m.	Nbn										
						SAND, some Silt, some Gravel, trace Organics: Dark grey.	Nbn				10	14	71	15			
	8.0	2.0				SAND with Silt, trace to some Organics: Brown and brown with black layers (varved), fine grained.	Nbn				25	0	68	32			
	7.0	3.0															
	6.0	4.0				SILT with Sand,..					21	1	23	76			
	5.0	5.0															
	4.0	6.0				SAND: Brown, fine to medium grained.	Nbn										
	3.0	7.0				To Target Depth. **Drillhole BH17-RD-1C terminated at 6.1m.**											
	2.0	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH17-RD-2

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation
Project: SPMT Road Investigation
Location: Milne Port Area

Project No.: H/353004
Datum: NAD 83
Platform: Ground

Easting: 503,872.0 m
Northing: 7,976,162.0 m
Surface Elevation: 10.00 m
Bottom Elevation: 5.43 m
Total Depth: 4.6 m
Logged By: R.S
Reviewed By: H.G

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 10/5/2017
Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	10.0	0.0				SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen										
	9.0	1.0				SAND, some Gravel, trace Silt: Brown, moist. **Thin seam of PEAT at 0.80 m	Unfrozen				9	18	73	9			
	8.0	2.0				SILT with SAND, trace Gravel: Greyish-black. Thin layers of orgaincs throughout, black. Distinct organic odour.Unfrozen to 1.4 m.	Nbn				22	7	30	63			
						SAND some Gravel, trace Silt: Light brown.	Nbn				12	15	74	11			
	7.0	3.0				SILT and SAND, trace Organics: Blackish-brown, distinct organic odour, fine grained.	Nbn										
	6.0	4.0									23	0	44	56			
	5.0	5.0				To Target Depth. **Drillhole BH17-RD-2 terminated at 4.6m.**											
	4.0	6.0															
	3.0	7.0															
	2.0	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH17-RD-3

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation
Project No.: H/353004
Project: SPMT Road Investigation
Datum: NAD 83
Location: Milne Port Area
Platform: Ground

Easting: 503,599.0 m
Northing: 7,975,985.0 m
Surface Elevation: 12.00 m
Bottom Elevation: 7.43 m
Total Depth: 4.6 m
Logged By: R.S
Reviewed By: H.G

Contractor: Boart Longyear
Rig Type/ Mounting: MiniSonic Rig
Date Logged: 10/5/2017
Driller: Brent McAndrew
Hole Diameter (mm): 100 mm
Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	11.0	1.0				SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen										
						ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozen										
						SAND and GRAVEL: Brown, particles up to 25 mm.											
	10.0	2.0				SAND and COBBLES: Brown, particles up to 100 mm.	Unfrozen										
						SAND, trace Silt, trace Gravel: Brown, gravel rounded up to 20 mm.	Nbn										
	9.0	3.0															
	8.0	4.0									12	5	86	10			
	7.0	5.0				To Target Depth. **Drillhole BH17-RD-3 terminated at 4.6m.**											
	6.0	6.0															
	5.0	7.0															
	4.0	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH17-RD-4

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation
Project: SPMT Road Investigation
Location: Milne Port Area

Project No.: H/353004
Datum: NAD 83
Platform: Ground

Easting: 503,594.0 m
Northing: 7,975,136.0 m
Surface Elevation: 20.00 m
Bottom Elevation: 15.43 m
Total Depth: 4.6 m
Logged By: R.S
Reviewed By: H.G

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 10/5/2017
Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen										
						ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozen										
	19.0	1.0				GRAVEL, some Sand, some Silt: brown, frozen.	Nbn Vs										
						ICE, with SILT, with SAND, trace Gravel: Brown. Ice lenses up to 20 mm thick throughout. Approximately 60% ice content. Ice rich soil.											
	18.0	2.0								>>	72	4	29	67			
	17.0	3.0															
	16.0	4.0															
	15.0	5.0				To Target Depth. **Drillhole BH17-RD-4 terminated at 4.6m.**											
	14.0	6.0															
	13.0	7.0															
	12.0	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH17-RD-5

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation
Project: SPMT Road Investigation
Location: Milne Port Area

Project No.: H/353004
Datum: NAD 83
Platform: Ground

Easting: 503,596.0 m
Northing: 7,974,811.0 m
Surface Elevation: 30.00 m
Bottom Elevation: 27.35 m
Total Depth: 2.7 m
Logged By: R.S
Reviewed By: H.G

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 10/5/2017
Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen										
						ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozen										
	29.0	1.0				GRAVEL, some SAND trace Silt: Brownish-grey. (Till)	Unfrozen										
	28.0	2.0				SILT and SAND, trace Gravel, brown.	Nbn										
						GRAVEL, some SAND trace Silt: Brownish-grey. (Till)	Nbn			●	17	3	42	55			
						Drilling Refusal. **Drillhole BH17-RD-5 terminated at 2.7m.**											
	27.0	3.0															
	26.0	4.0															
	25.0	5.0															
	24.0	6.0															
	23.0	7.0															
	22.0	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH17-RD-6

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation
Project: SPMT Road Investigation
Location: Milne Port Area

Project No.: H/353004
Datum: NAD 83
Platform: Ground

Easting: 503,922.0 m
Northing: 7,974,286.0 m
Surface Elevation: 30.50 m
Bottom Elevation: 24.40 m
Total Depth: 6.1 m
Logged By: R.S
Reviewed By: H.G

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 10/5/2017
Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	30.5	0.0				SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen										
						ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozen										
	29.5	1.0															
	28.5	2.0															
	27.5	3.0				SILT and SAND, with GRAVEL: Grey. particles are rounded, up to 75 mm.	Nbn										
						SAND: Brown, coarse grained.	Nbn										
						ICE, trace Silt: White/clear.	ICE										
	26.5	4.0															
						GRAVEL and SAND, trace Silt: Grey,	Nbn										
	25.5	5.0				ICE, trace Silt, trace Sand: Grey. Soil poor ice.	ICE										
	24.5	6.0															
						To Target Depth. **Drillhole BH17-RD-6 terminated at 6.1m.**											
	23.5	7.0															
	22.5	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH17-RD-7

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation
Project: SPMT Road Investigation
Location: Milne Port Area

Project No.: H/353004
Datum: NAD 83
Platform: Ground

Easting: 503,896.0 m
Northing: 7,974,423.0 m
Surface Elevation: 56.00 m
Bottom Elevation: 52.35 m
Total Depth: 3.7 m
Logged By: R.S
Reviewed By: H.G

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: MiniSonic Rig
Hole Diameter (mm): 100 mm
Date Logged: 10/5/2017
Date Reviewed: 1/30/2018

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	56.0	0.0				SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen										
	55.0	1.0				ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozen										
	54.0	2.0				SAND with SILT, some Gravel: Brown, well graded. (Till)	Nbn				7	13	59	28			
	53.0	3.0				SAND with GRAVEL with SILT: Grey, well graded. (Till)	Nbn				5	31	49	20			
	52.0	4.0				Drilling Refusal. **Drillhole BH17-RD-7 terminated at 3.7m.**											
	51.0	5.0															
	50.0	6.0															
	49.0	7.0															
	48.0	8.0															

Notes: BH colar elevation is estimated from Lidar survey

BOREHOLE REPORT

BH18-004

Sheet 1 of 8

Client: Baffinland Iron Mine

Project: Mary River Expansion Study

Location: Milne Port

Project No.: H353004

Datum: NAD83

Platform:

Easting: 563,499.0 m

Northing: 7,975,260.0 m

Surface Elevation: 11.50 m

Bottom Elevation: -66.20 m

Total Depth: 77.7 m

Logged By: YF/MY

Reviewed By:

Contractor: Boart Longyear

Rig Type/ Mounting: Sonic Drill Rig

Date Logged: 4/1/2018

Driller: Brent McAndrew

Hole Diameter (mm): 100

Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	11.5	0				SANDY SNOW: Road area.	Nf inferred										
	10.5	1.0				GRAVELLY SAND, trace COBBLES, trace SILT: Coarse grained sand, brown.	Nf inferred										
	9.5	2.0					Nbn - Nbe				21 14	0 6	86 77	14 17			
	8.5	3.0				SAND, some GRAVEL, trace SILT: Coarse grained, greyish brown, subrounded.	Nbe - Vc										
	7.5	4.0															
	6.5	5.0															
	5.5	6.0															
	4.5	7.0															
	3.5	8.0					Nbn										
	2.5	9.0					Vbe										
	1.5	10.0															

Notes:

BOREHOLE REPORT

BH18-004
Sheet 2 of 8

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 563,499.0 m
Northing: 7,975,260.0 m
Surface Elevation: 11.50 m
Bottom Elevation: -66.20 m
Total Depth: 77.7 m
Logged By: YF/MY
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 4/1/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	0.5	11.0				SAND, some GRAVEL, trace SILT: Coarse grained, greyish brown, subrounded. *(Continued)*	Nbe - Vc *(Continued)* I+S										
	-0.5	12.0				SAND, some SILT: Fine to coarse grained, light brown.	Nf inferred				9	14	70	16			
	-1.5	13.0				GRAVELLY SAND, trace SILT: Fine to coarse grained, light brown.	Nf inferred										
	-2.5	14.0															
	-3.5	15.0															
	-4.5	16.0															
	-5.5	17.0				17.70 m - 18.20 m: Trace silt.					7	34	52	14			
	-6.5	18.0				SAND, trace GRAVEL, trace SILT: Fine to medium grained, light brown. 18.75 m: Organic layer.	Nbn to Vx										
	-7.5	19.0															
	-8.5	20.0															

Notes:

HATCH BOREHOLE REPORT

BH18-004
Sheet 3 of 8

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 563,499.0 m
Northing: 7,975,260.0 m
Surface Elevation: 11.50 m
Bottom Elevation: -66.20 m
Total Depth: 77.7 m
Logged By: YF/MY
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 4/1/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-9.5	21.0				SAND, trace GRAVEL, trace SILT: Fine to medium grained, light brown. *(Continued)*	Nbn to Vx *(Continued)*										
						20.80 m: Black organics.					22	0	59	41			
	-10.5	22.0				GRAVELLY SAND, trace SILT: Fine to coarse grained, brown to red.	Nf inferred										
	-11.5	23.0															
	-12.5	24.0					Nbn - Vx										
	-13.5	25.0					Nbn - Nf										
	-14.5	26.0															
	-15.5	27.0					Nf inferred				14	11	81	8			
	-16.5	28.0				27.70 m - 30.20 m: Water, soft packed.											
	-17.5	29.0															
	-18.5	30.0															

Notes:

BOREHOLE REPORT

BH18-004
Sheet 4 of 8

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 563,499.0 m
Northing: 7,975,260.0 m
Surface Elevation: 11.50 m
Bottom Elevation: -66.20 m
Total Depth: 77.7 m
Logged By: YF/MY
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 4/1/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-19.5	31.0				GRAVELLY SAND, trace SILT: Fine to coarse grained, brown to red. *(Continued)* 30.10 m - 30.20 m: Organics in dark fine sand. 31.50 m - 31.60 m: Wet.	Nf inferred *(Continued)*										
	-20.5	32.0					Nf										
	-21.5	33.0					Nf inferred										
	-22.5	34.0					Nbn - Vx										
	-23.5	35.0					Nf inferred										
							Nbn - Vx										
	-24.5	36.0					Nf										
	-25.5	37.0					Nbn										
	-26.5	38.0					Nf										
	-27.5	39.0															
	-28.5	40.0					Nf inferred										

Notes:

BOREHOLE REPORT

BH18-004
Sheet 5 of 8

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 563,499.0 m
Northing: 7,975,260.0 m
Surface Elevation: 11.50 m
Bottom Elevation: -66.20 m
Total Depth: 77.7 m
Logged By: YF/MY
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 4/1/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						GRAVEL, some SAND, some SILT, trace COBBLES: Highly disturbed, centre of much of core is hollow, wet rounded gravel. *(Continued)*	Nf inferred *(Continued)*				7	32	45	23			
	-29.5	41.0															
	-30.5	42.0															
						CLAYEY SILT, ORGANIC: Brown black.	Nb				20	0	12	88			
	-31.5	43.0				SILT with SAND: grey with fine sand.	Nb										
						SAND, some SILT: Grey brown, fine to medium grained sand.	Nb										
	-32.5	44.0															
	-33.5	45.0															
						SAND with SILT: Beige fine sand.	Nb										
	-34.5	46.0				SAND, trace SILT: Meidum grained, grey brown.	Nb										
	-35.5	47.0										0	98	2			
	-36.5	48.0															
	-37.5	49.0				49.00 m: Silt lenses below, fine, <2 mm.											
	-38.5	50.0															

Notes:

BOREHOLE REPORT

BH18-004

Sheet 6 of 8

Client: Baffinland Iron Mine

Project: Mary River Expansion Study

Location: Milne Port

Project No.: H353004

Datum: NAD83

Platform:

Easting: 563,499.0 m

Northing: 7,975,260.0 m

Surface Elevation: 11.50 m

Bottom Elevation: -66.20 m

Total Depth: 77.7 m

Logged By: YF/MY

Contractor: Boart Longyear

Rig Type/ Mounting: Sonic Drill Rig

Date Logged: 4/1/2018

Driller: Brent McAndrew

Hole Diameter (mm): 100

Date Reviewed:

Reviewed By:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						SAND, trace SILT: Meidum grained, grey brown. *(Continued)*	Nb *(Continued)*										
	-39.5	51.0															
						51.80 m: Many silt lenses, 3 mm, wet.	Unfrozen										
	-40.5	52.0															
	-41.5	53.0															
	-42.5	54.0				SAND, some SILT: Fine, light brown.											
	-43.5	55.0				SAND, trace SILT: Medium to coarse grained, light brown, wet, silt lenses.	Nb assumed										
	-44.5	56.0															
	-45.5	57.0															
	-46.5	58.0				NO RECOVERY											
	-47.5	59.0															
	-48.5	60.0				SILTY SAND: Fine to medium grained, greyish brown, wet.	Possibly non-frozen										

Notes:

BOREHOLE REPORT

BH18-004
Sheet 7 of 8

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 563,499.0 m
Northing: 7,975,260.0 m
Surface Elevation: 11.50 m
Bottom Elevation: -66.20 m
Total Depth: 77.7 m
Logged By: YF/MY
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 4/1/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-49.5	61.0				SILTY SAND: Fine to medium grained, greyish brown, wet. *(Continued)*	Possibly non-frozen *(Continued)*										
						61.00 m: Reddish brown and grey layers, stratified, fine sand, with organic layers.											
	-50.5	62.0				SAND, trace SILT: Brown, fine to medium grained sand.					18	0	23	77			
						SILT, some SAND: Reddish brown to brown, low plasticity, organic layers.	Nf inferred										
	-51.5	63.0									18	0	6	94			
	-52.5	64.0															
	-53.5	65.0				SILTY SAND: Fine to medium grained, light brown.											
	-54.5	66.0					Nbn										
	-55.5	67.0															
	-56.5	68.0					Vx										
						SANDY SILT: Light grey to reddish brown, layered dark organics.	Vs										
	-57.5	69.0									20	0	1	99			
	-58.5	70.0															

Notes:

BOREHOLE REPORT

BH18-004

Sheet 8 of 8

Client: Baffinland Iron Mine

Project: Mary River Expansion Study

Location: Milne Port

Project No.: H353004

Datum: NAD83

Platform:

Easting: 563,499.0 m

Northing: 7,975,260.0 m

Surface Elevation: 11.50 m

Bottom Elevation: -66.20 m

Total Depth: 77.7 m

Logged By: YF/MY

Contractor: Boart Longyear

Rig Type/ Mounting: Sonic Drill Rig

Date Logged: 4/1/2018

Driller: Brent McAndrew

Hole Diameter (mm): 100

Date Reviewed:

Reviewed By:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						SILT, some SAND: Light brownish grey, layered dark organics.	Nbn					0	1	99			
	-59.5	71.0															
						SILTY CLAY: Brown, layered black organics, iron smelling.	Nbn				20	0	1	99	33	13	
	-60.5	72.0															
	-61.5	73.0															
	-62.5	74.0															
	-63.5	75.0				74.80 m - 75.00 m: Ice lense, with banding of black silt.	Nbn										
	-64.5	76.0															
	-65.5	77.0				77.50 m - 77.60 m: Ice lense.	Nbn										
	-66.5	78.0				To Target Depth. **Drillhole BH18-004 terminated at 77.7m.**											
	-67.5	79.0															
	-68.5	80.0															

Notes:

BOREHOLE REPORT

BH18-M001

Sheet 1 of 3

Client: Baffinland Iron Mine

Project: Mary River Expansion Study

Location: Milne Port

Project No.: H353004

Datum: NAD83

Platform:

Easting: 503,423.0 m

Northing: 7,974,892.0 m

Surface Elevation: 15.00 m

Bottom Elevation: -10.90 m

Total Depth: 25.9 m

Logged By: MY/PS

Reviewed By:

Contractor: Boart Longyear

Rig Type/ Mounting: Sonic Drill Rig

Date Logged: 3/5/2018

Driller: Brent McAndrew

Hole Diameter (mm): 100

Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	15.0	0.0				SANDY SILT: Poorly graded, reddish brown.	Nf inferred										
	14.0	1.0				ICE and SOIL: Sandy silt inclusions.	ICE				20	2	23	75			
						1.25 m: Layered sand particles in ice, multicoloured, subangular, frosted large ice crystals coating gravel / sand pieces.	I+S										
	13.0	2.0				1.50 m: Inclusions becoming sandy gravel, some silt, brownish grey, subangular.					17	2	19	79			
	12.0	3.0				3.00 m: Becoming gravel to ice matrix with soil, 30% soil, subrounded to subangular gravel.											
	11.0	4.0															
	10.0	5.0															
	9.0	6.0															
						SILT, trace SAND: Ice lenses, with stratified organics, brownish grey	Vs										
	8.0	7.0					Vx				27	0	1	99			
	7.0	8.0				8.40 m, 8.50 m, and 8.60 m: Ice lense.											
	6.0	9.0															
	5.0	10.0				9.70 m - 9.75 m: Sand layer bounded by											

Notes:

BOREHOLE REPORT

BH18-M001
Sheet 2 of 3

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 503,423.0 m
Northing: 7,974,892.0 m
Surface Elevation: 15.00 m
Bottom Elevation: -10.90 m
Total Depth: 25.9 m
Logged By: MY/PS
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 3/5/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						ice lense, reddish brown to grey.	Vs										
						SILT, trace SAND: Ice lenses, with stratified organics, brownish grey *(Continued)*	*(Continued)*				23	0	3	97			
	4.0	11.0				11.00 m: Sand pockets, reddish brown.											
	3.0	12.0				12.20 m: Increase in organic bands, increase in ice lense thickness (1 mm-1 cm).	Vr Nbn										
	2.0	13.0															
						13.70 m: Thicker banding of organics (up to 2 mm).	Vx Vr										
	1.0	14.0					Vc										
	0.0	15.0															
	-1.0	16.0					Nbn with Vs lenses										
	-2.0	17.0					Nbn										
	-3.0	18.0															
	-4.0	19.0				TILL: Sand and silt, with gravel, well graded, coarse gravel (10 mm - 75 mm), reddish brown.	Nbn				1	21	41	38			
	-5.0	20.0				19.70 m: Grey, subangular cobbles,											

Notes:

BOREHOLE REPORT

BH18-M001
Sheet 3 of 3

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 503,423.0 m
Northing: 7,974,892.0 m
Surface Elevation: 15.00 m
Bottom Elevation: -10.90 m
Total Depth: 25.9 m
Logged By: MY/PS
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 3/5/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						white.	Nbn										
						19.80 m: Silty sand, greyish, subrounded to subangular.	*(Continued)*										
	-6.0	21.0				TILL: Sand and silt, with gravel, well graded, coarse gravel (10 mm - 75 mm), reddish brown. *(Continued)*											
						21.40 m - 21.60 m: Boulders.											
	-7.0	22.0									6	21	41	38			
						22.70 m - 22.90 m: Boulders.											
	-8.0	23.0									6	22	42	36			
						23.60 m - 23.70 m: Boulder, subangular.	Nbn										
	-9.0	24.0															
						24.40 m: Boulders, becomes brownish red.											
	-10.0	25.0									7	13	52	35			
	-11.0	26.0				To Target Depth. **Drillhole BH18-M001 terminated at 25.9m.**											
	-12.0	27.0															
	-13.0	28.0															
	-14.0	29.0															
	-15.0	30.0															

Notes:

BOREHOLE REPORT

BH18-M002

Client: Baffinland Iron Mine

Project: Mary River Expansion Study

Location: Milne Port

Project No.: H353004

Datum: NAD83

Platform:

Easting: 503,328.0 m

Northing: 7,974,867.0 m

Surface Elevation: 12.00 m

Bottom Elevation: -27.60 m

Total Depth: 39.6 m

Logged By: MY/PS

Reviewed By:

Contractor: Boart Longyear

Driller: Brent McAndrew

Rig Type/ Mounting: Sonic Drill Rig

Hole Diameter (mm): 100

Date Logged: 3/5/2018

Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description (TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.)	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	12.0	0.0				GRAVELLY SAND: Light grey with red, dry.	No ice										
	11.0	1.0				0.90 m: Inferred cobbles, brownish grey, subrounded multicoloured gravel.	Nf to Nbn				9	25	63	12			
	10.0	2.0															
	9.0	3.0				SAND and GRAVEL: Light grey	Melted										
	8.0	4.0				SANDY SILT: Thinly bedded to laminated, grey, black organic bands.	Nbn				20	0	2	98			
											20	0	13	87			
						SILTY SAND: Light grey.	Nbn										
	7.0	5.0				SILT, trace to some SAND: Grey, trace organics, with thin silt beds (1 cm thick).	Nbn										
											21	0	17	83			
	6.0	6.0															
	5.0	7.0															
	4.0	8.0									20	0	4	96			
	3.0	9.0				9.40 m: Organic silt layer, 2.6 mm thick.	Nbn										
	2.0	10.0															

Notes:

HATCH BOREHOLE REPORT

BH18-M002

Client: Baffinland Iron Mine

Project: Mary River Expansion Study

Location: Milne Port

Project No.: H353004

Datum: NAD83

Platform:

Easting: 503,328.0 m

Northing: 7,974,867.0 m

Surface Elevation: 12.00 m

Bottom Elevation: -27.60 m

Total Depth: 39.6 m

Logged By: MY/PS

Reviewed By:

Contractor: Boart Longyear

Driller: Brent McAndrew

Rig Type/ Mounting: Sonic Drill Rig

Hole Diameter (mm): 100

Date Logged: 3/5/2018

Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	1.0	11.0				SILT, trace to some SAND: Grey, trace organics, with thin silt beds (1 cm thick). *(Continued)*	Nbn *(Continued)*										
						10.85 m: Solid ice (5x2x2 cm)	Nbn										
						11.30 m: Solid ice lense 0.5 cm thick across core diameter.					25	0	0	100			
	0.0	12.0															
	-1.0	13.0															
	-2.0	14.0															
	-3.0	15.0															
	-4.0	16.0															
	-5.0	17.0					Vx										
							Nbn										
	-6.0	18.0															
	-7.0	19.0															
	-8.0	20.0					Vc Vs Vc										

Notes:

HATCH BOREHOLE REPORT

BH18-M002
Sheet 3 of 4

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 503,328.0 m
Northing: 7,974,867.0 m
Surface Elevation: 12.00 m
Bottom Elevation: -27.60 m
Total Depth: 39.6 m
Logged By: MY/PS
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 3/5/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile 0 25 50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						SILT, trace to some SAND: Grey, trace organics, with thin silt beds (1 cm thick). *(Continued)*	Nbn Nbn *(Continued)*										
	-9.0	21.0					Vc Nbn										
	-10.0	22.0				22.40 m - 22.90 m: Increase in organic bands.	Nbe										
	-11.0	23.0					Nbn										
	-12.0	24.0					Vx										
	-13.0	25.0					Vs Vx										
	-14.0	26.0															
	-15.0	27.0					Vs Nbn				23	0	0	100	31	12	
	-16.0	28.0															
	-17.0	29.0				SANDY SILT to SILTY SAND, some GRAVEL: Reddish brown.	Vx										
	-18.0	30.0				TILL: Sandy gravel, some silt, light brown, angular to subrounded gravel.	Nf				5 5	10 16	48 44	42 40			

Notes:

HATCH BOREHOLE REPORT

BH18-M002

Sheet 4 of 4

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 503,328.0 m
Northing: 7,974,867.0 m
Surface Elevation: 12.00 m
Bottom Elevation: -27.60 m
Total Depth: 39.6 m
Logged By: MY/PS
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 3/5/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
						TILL: Sandy gravel, some silt, light brown, angular to subrounded gravel. *(Continued)*	Nf *(Continued)*										
	-19.0	31.0															
	-20.0	32.0				32.60 m - 32.90 m: Cobbles, grey, subrounded.											
	-21.0	33.0															
	-22.0	34.0															
	-23.0	35.0					Nbn										
	-24.0	36.0				35.90 m: Boulder.											
						36.40 m: Boulder.	Nf				2						
	-25.0	37.0															
	-26.0	38.0															
	-27.0	39.0									3	45	26	29			
	-28.0	40.0				To Target Depth. **Drillhole BH18-M002 terminated at 39.6m.**											

Notes:

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BOREHOLE REPORT

BH18-M003

Sheet 1 of 6

Client: Baffinland Iron Mine

Project: Mary River Expansion Study

Location: Milne Port

Project No.: H353004

Datum: NAD83

Platform:

Easting: 503,055.0 m

Northing: 7,974,868.0 m

Surface Elevation: 11.00 m

Bottom Elevation: -40.80 m

Total Depth: 51.8 m

Logged By: MY/PS

Reviewed By:

Contractor: Boart Longyear

Rig Type/ Mounting: Sonic Drill Rig

Date Logged: 3/6/2018

Driller: Brent McAndrew

Hole Diameter (mm): 100

Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 – 25 – 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	10.0	1.0				SANDY GRAVEL, trace SILT: Brownish grey, subangular to subrounded.	Nf Vx				8	37	43	20			
	9.0	2.0				SAND and SILT: Medium to fine grained, stratified sand and silt layers, reddish grey.	Nbn Vr				27	0	10	90			
	8.0	3.0				2.75 m: Organic layer.											
	7.0	4.0									21	0	13	87			
	6.0	5.0				5.00 m: Organic layer.											
	5.0	6.0				SILTY SAND: Stratified, fine to medium grained, reddish grey.	Nbn										
	4.0	7.0									24	0	40	60			
	3.0	8.0															
	2.0	9.0															
	1.0	10.0															

Notes:

BOREHOLE REPORT

BH18-M003
Sheet 2 of 6

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 503,055.0 m
Northing: 7,974,868.0 m
Surface Elevation: 11.00 m
Bottom Elevation: -40.80 m
Total Depth: 51.8 m
Logged By: MY/PS
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 3/6/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	0.0	11.0				SILTY SAND: Stratified, fine to medium grained, reddish grey. *(Continued)*	Nbn *(Continued)*										
	-1.0	12.0				SANDY SILT: Stratified silt and fine sand, grey.	Nbn										
	-2.0	13.0				13.30 m: Organic layer.					22	0	1	99			
	-3.0	14.0															
	-4.0	15.0				15.20 m - 16.45 m: Sand with organic layer interbeds.	Nbn - Nf										
	-5.0	16.0															
	-6.0	17.0															
	-7.0	18.0				17.65 m, 17.90 m, 18.05 m, 18.20 m: Interbedded sand and silt with organics, fine sand grains, reddish grey.											
	-8.0	19.0				18.30 m: Return to silt with sand, interbedded with organics and sand, brownish grey.					21	0	15	85			
	-9.0	20.0															

Notes:

BOREHOLE REPORT

BH18-M003
Sheet 3 of 6

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 503,055.0 m
Northing: 7,974,868.0 m
Surface Elevation: 11.00 m
Bottom Elevation: -40.80 m
Total Depth: 51.8 m
Logged By: MY/PS
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 3/6/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description: TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 / 25 / 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-10.0	21.0				SANDY SILT: Stratified silt and fine sand, grey. *(Continued)*	Nbn *(Continued)*										
						21.05 m - 21.30 m: Sand layers, medium grained, bounded by organic layer.											
	-11.0	22.0				21.78 m - 22.00 m: Sand layers, medium grained, bounded by organic layer.											
						22.45 m: Organic layer.	Vs-Vc										
	-12.0	23.0															
	-13.0	24.0									25	0	1	99			
						24.40 m: Silty sand with organic banding.											
	-14.0	25.0															
	-15.0	26.0					Vr										
							Nbn										
	-16.0	27.0				27.10 m - 29.0 m: Interbedded organic bands in silt and sand.					20	0	14	86			
	-17.0	28.0															
	-18.0	29.0															
	-19.0	30.0															

Notes:

BOREHOLE REPORT

BH18-M003
Sheet 4 of 6

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 503,055.0 m
Northing: 7,974,868.0 m
Surface Elevation: 11.00 m
Bottom Elevation: -40.80 m
Total Depth: 51.8 m
Logged By: MY/PS
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 3/6/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile 0 25 50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-20.0	31.0				SANDY SILT: Stratified silt and fine sand, grey. *(Continued)*	Nbn *(Continued)*										
	-21.0	32.0															
	-22.0	33.0															
	-23.0	34.0				33.50 m: Mottled organic layers, brownish grey, organic layers at 34.75 m, 33.85 m, and 34.10 m.											
	-24.0	35.0				34.95 m - 35.10 m: More sand present. 35.30 m, and 36.06 m: Organic layers.											
	-25.0	36.0															
	-26.0	37.0															
	-27.0	38.0				37.55 m: Brownish grey dipping organic layer (10 cm).											
	-28.0	39.0				38.50 m, 38.80 m, 39.40 m: Organic layering.	Vs										
	-29.0	40.0															

Notes:

BOREHOLE REPORT

BH18-M003
Sheet 5 of 6

Client: Baffinland Iron Mine
Project: Mary River Expansion Study
Location: Milne Port

Project No.: H353004
Datum: NAD83
Platform:

Easting: 503,055.0 m
Northing: 7,974,868.0 m
Surface Elevation: 11.00 m
Bottom Elevation: -40.80 m
Total Depth: 51.8 m
Logged By: MY/PS
Reviewed By:

Contractor: Boart Longyear
Driller: Brent McAndrew
Rig Type/ Mounting: Sonic Drill Rig
Hole Diameter (mm): 100
Date Logged: 3/6/2018
Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile (0 25 50)	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-30.0	41.0				SANDY SILT: Stratified silt and fine sand, grey. *(Continued)* 40.20 m: Interbedded horizontal organic layer, reddish brown (possible grey). 41.40 m - 42.60 m: Interbedded sand and organics approximately every 20cm.	Nbn *(Continued)* Nbn										
	-31.0	42.0															
	-32.0	43.0															
	-33.0	44.0					Vx Vr Vx Vs										
	-34.0	45.0															
	-35.0	46.0															
	-36.0	47.0				TILL: Sand and gravel to sandy gravel, fine to coarse grained, grey, subangular to subrounded.	Nf										
	-37.0	48.0									6 7	25	45	30			
	-38.0	49.0					Nbn										
	-39.0	50.0															

Notes:

BOREHOLE REPORT

BH18-M003

Sheet 6 of 6

Client: Baffinland Iron Mine

Project: Mary River Expansion Study

Location: Milne Port

Project No.: H353004

Datum: NAD83

Platform:

Easting: 503,055.0 m

Northing: 7,974,868.0 m

Surface Elevation: 11.00 m

Bottom Elevation: -40.80 m

Total Depth: 51.8 m

Logged By: MY/PS

Reviewed By:

Contractor: Boart Longyear

Rig Type/ Mounting: Sonic Drill Rig

Date Logged: 3/6/2018

Driller: Brent McAndrew

Hole Diameter (mm): 100

Date Reviewed:

Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	Moisture Content Profile 0 25 50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-40.0	51.0				TILL: Sand and gravel to sandy gravel, fine to coarse grained, grey, subangular to subrounded. *(Continued)*	Nf *(Continued)*										
	-41.0	52.0				To Target Depth. **Drillhole BH18-M003 terminated at 51.8m.**											
	-42.0	53.0															
	-43.0	54.0															
	-44.0	55.0															
	-45.0	56.0															
	-46.0	57.0															
	-47.0	58.0															
	-48.0	59.0															
	-49.0	60.0															

Notes:

Appendix C

Sample Photographs

HATCH

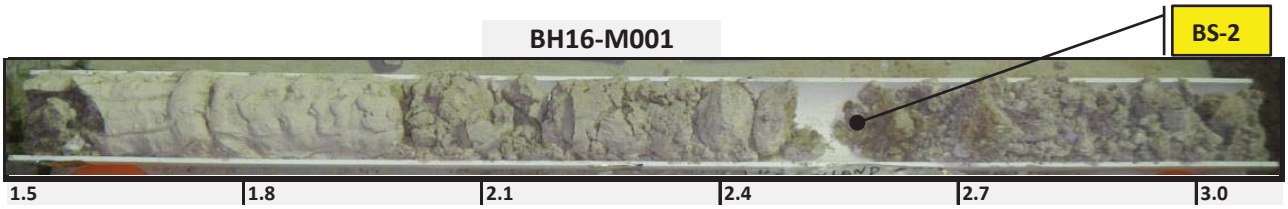
Sample Photographs

Borehole Name:	BH16-M001	Mary River 12 MTPA Mine Expansion
Location:	17 W 503504 7976237	Pre-feasibility Study
Completion Date:	8/12/2016	Baffinland Iron Mines

BH16-M001

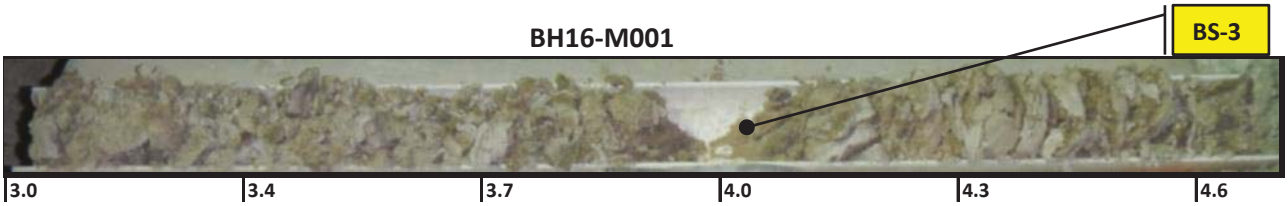
0 | 0.3 | 0.6 | 0.9 | 1.2 | 1.5

BH16-M001



1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 3.0

BH16-M001



3.0 | 3.4 | 3.7 | 4.0 | 4.3 | 4.6

BH16-M001

4.6 | 4.9 | 5.2 | 5.5 | 5.8 | 6.1

BH16-M001

6.1 | 6.4 | 6.7 | 7.0 | 7.3 | 7.6

BH16-M001

7.6 | 7.9 | 8.2 | 8.5 | 8.8 | 9.1

BH16-M001

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M001

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M001

12.2	12.5	12.8	13.1	13.4	13.7

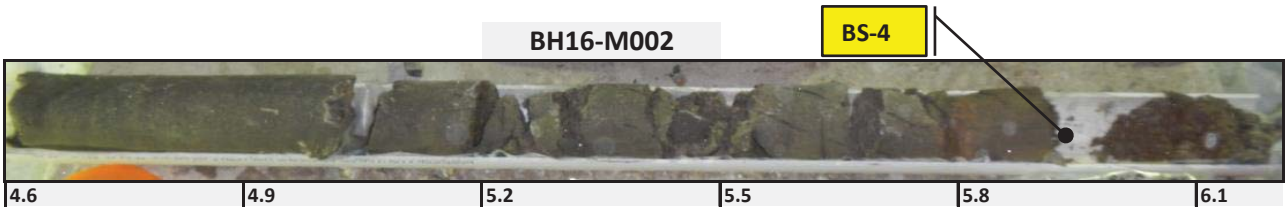
BH16-M001

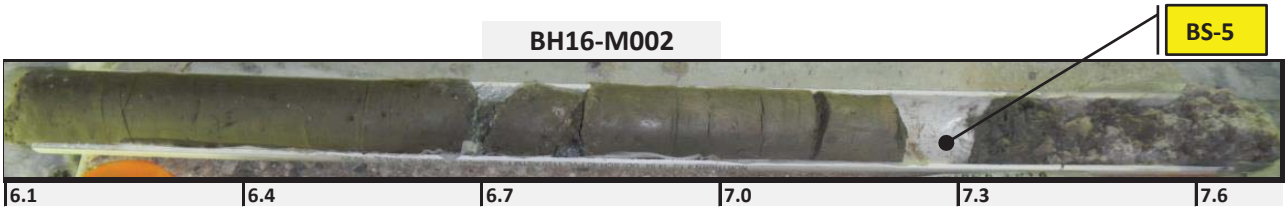
13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH16-M002	Mary River 12 MTPA Mine Expansion
Location:	17 W 503757 7975894	Pre-feasibility Study
Completion Date:	4/12/2016	Baffinland Iron Mines





BH16-M002

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M002

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M002

12.2	12.5	12.8	13.1	13.4	13.7

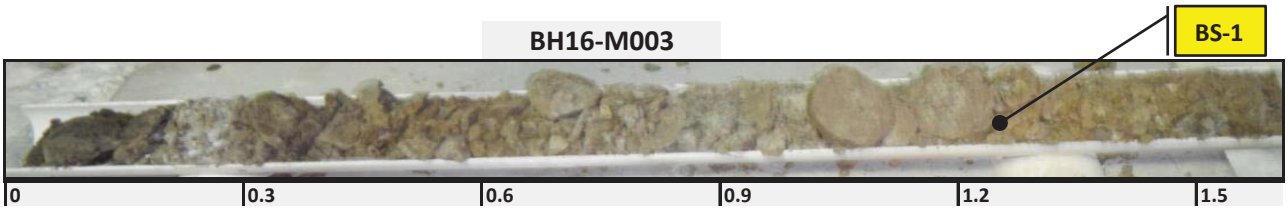
BH16-M002

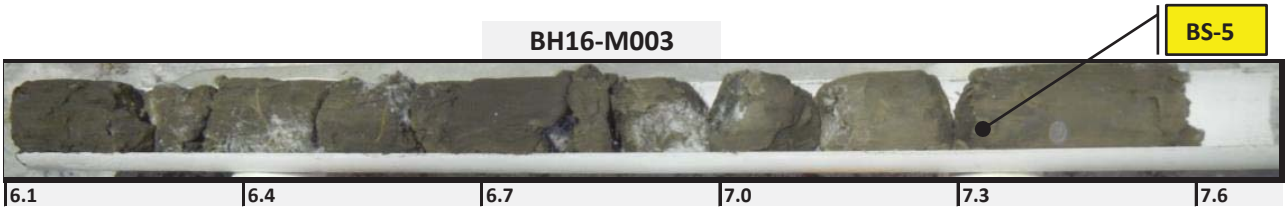
13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH16-M003	Mary River 12 MTPA Mine Expansion
Location:	17 W 503714 7975892	Pre-feasibility Study
Completion Date:	4/12/2016	Baffinland Iron Mines





BH16-M003

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M003

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M003

12.2	12.5	12.8	13.1	13.4	13.7

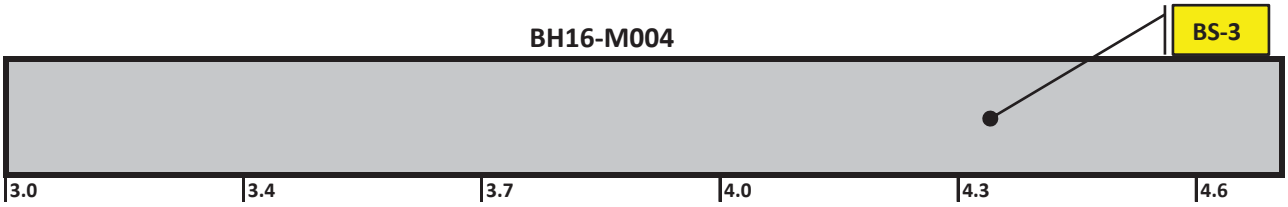
BH16-M003

13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH16-M004	Mary River 12 MTPA Mine Expansion
Location:	17 W 503302 7975591	Pre-feasibility Study
Completion Date:	8/12/2016	Baffinland Iron Mines



BH16-M004

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M004

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M004

12.2	12.5	12.8	13.1	13.4	13.7

BH16-M004

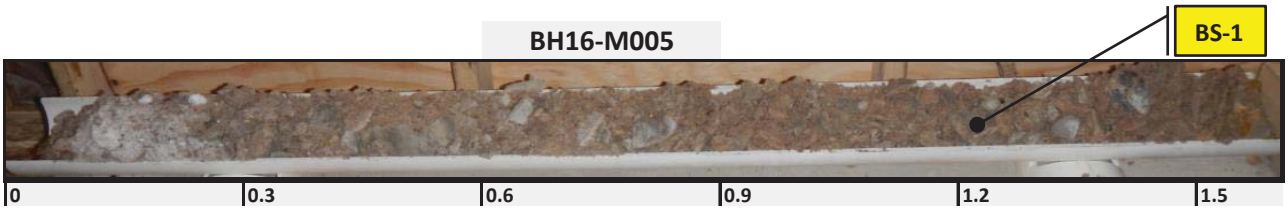
13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH16-M005	Mary River 12 MTPA Mine Expansion
Location:	17 W 503270 7975606	Pre-feasibility Study
Completion Date:	8/12/2016	Baffinland Iron Mines

BH16-M005



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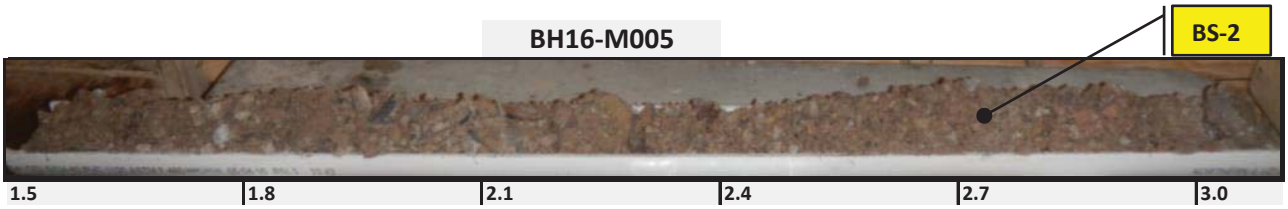
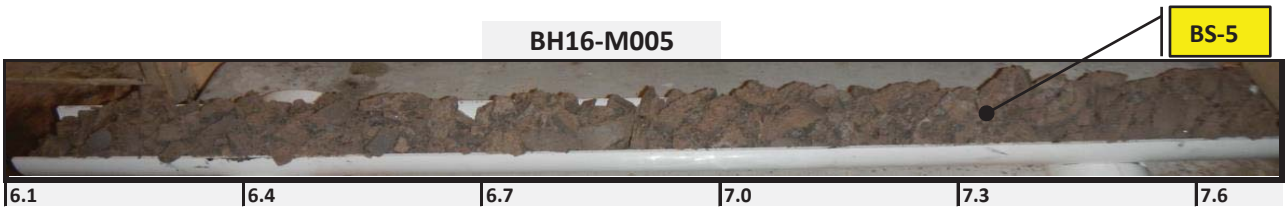


BH16-M005

BH16-M005

BH16-M005



BH16-M005

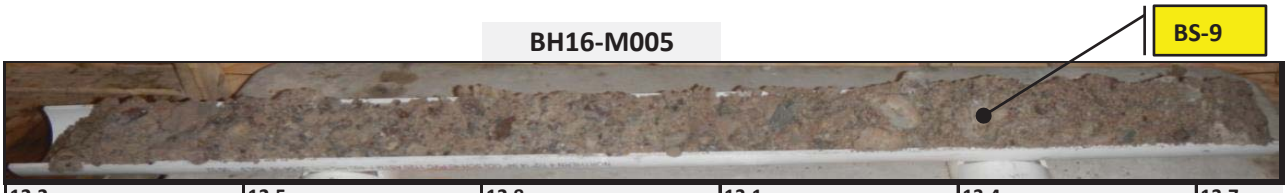
BH16-M005

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M005

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M005



12.2	12.5	12.8	13.1	13.4	13.7

BH16-M005

13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH16-M006	Mary River 12 MTPA Mine Expansion
Location:	17 W 503136 7975081	Pre-feasibility Study
Completion Date:	8/12/2016	Baffinland Iron Mines

BH16-M006

BH16-M006

BH16-M006

BH16-M006

BH16-M006

BH16-M006

HATCH

BH16-M006

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M006

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M006

12.2	12.5	12.8	13.1	13.4	13.7

BH16-M006

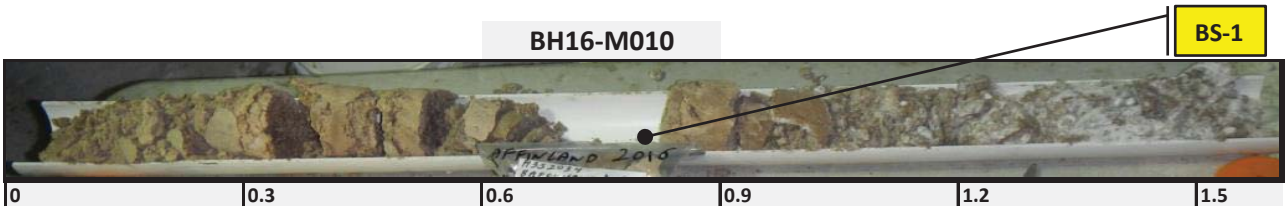
13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

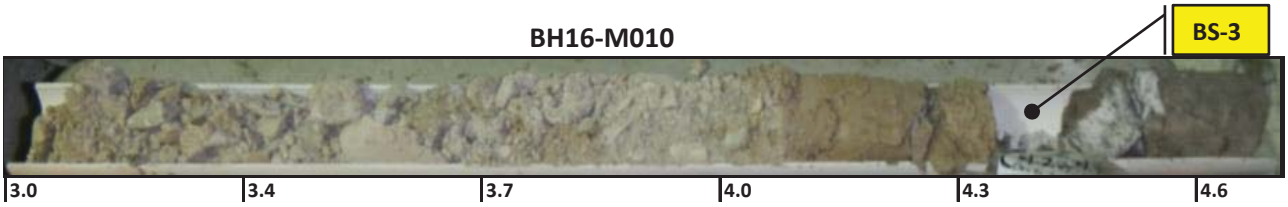
Borehole Name:	BH16-M010	Mary River 12 MTPA Mine Expansion
Location:	17 W 503394 7974877	Pre-feasibility Study
Completion Date:	9/12/2016	Baffinland Iron Mines

BH16-M010

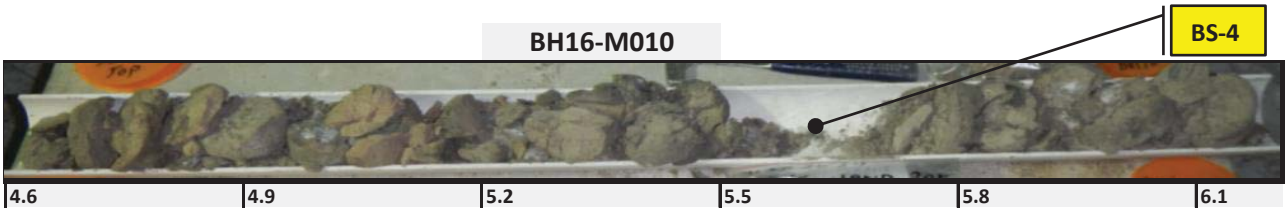


BH16-M010

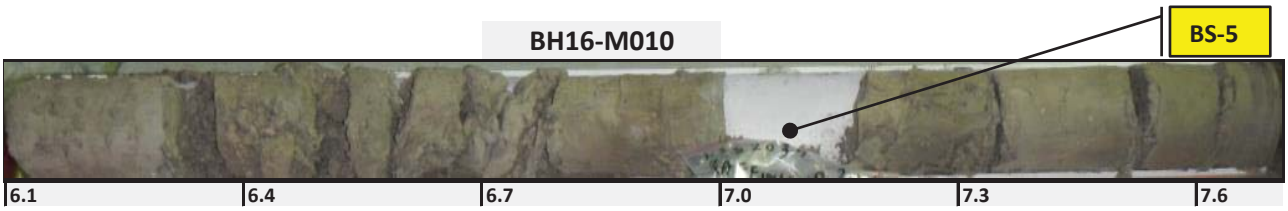
BH16-M010



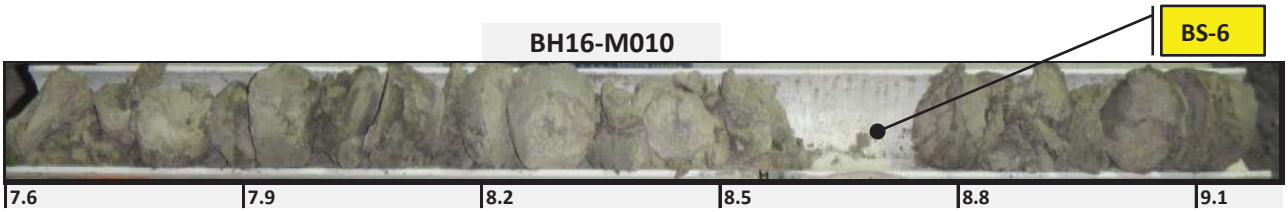
BH16-M010



BH16-M010



BH16-M010



HATCH

BH16-M010

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M010

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M010

12.2	12.5	12.8	13.1	13.4	13.7

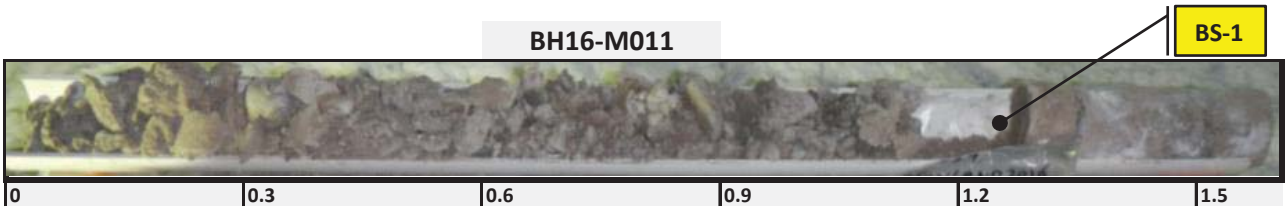
BH16-M010

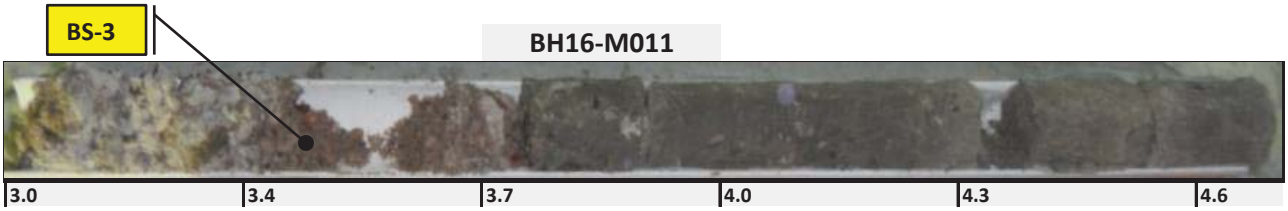
13.7	14.0	14.3	14.6	14.9	15.2

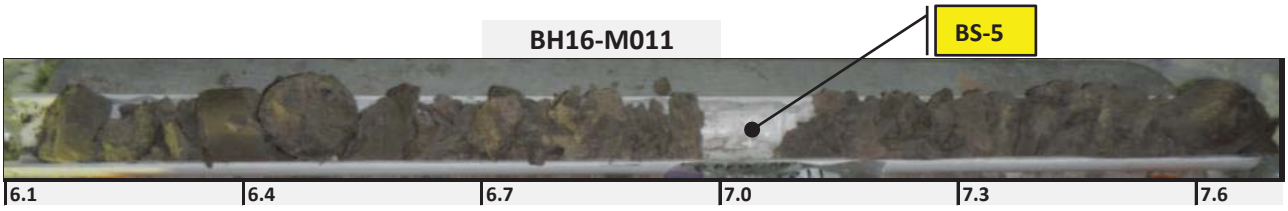
HATCH

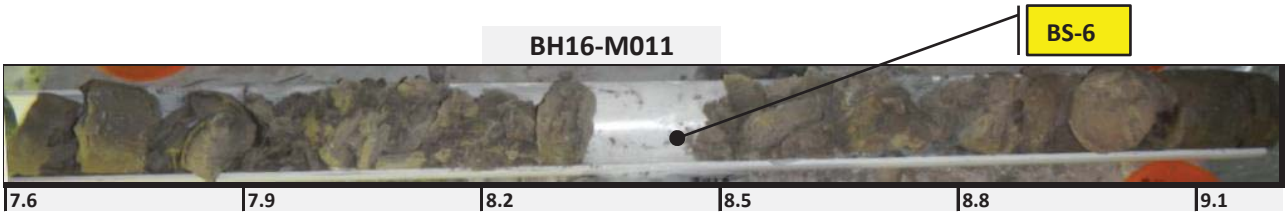
Sample Photographs

Borehole Name:	BH16-M011	Mary River 12 MTPA Mine Expansion
Location:	17 W 503339 7974868	Pre-feasibility Study
Completion Date:	4/12/2016	Baffinland Iron Mines









HATCH

BH16-M011

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M011

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M011

12.2	12.5	12.8	13.1	13.4	13.7

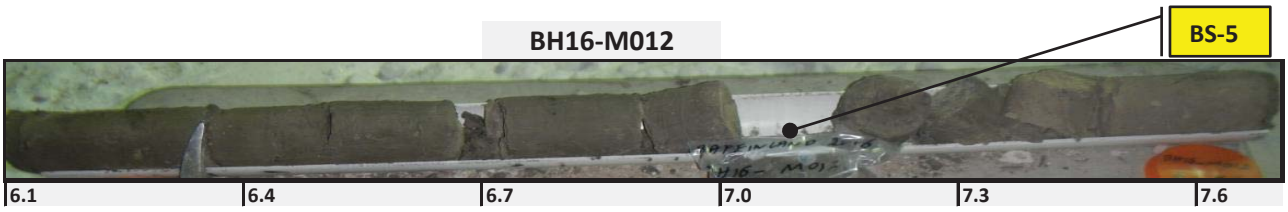
BH16-M011

13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH16-M012	Mary River 12 MTPA Mine Expansion
Location:	17 W 503268 7974848	Pre-feasibility Study
Completion Date:	9/12/2016	Baffinland Iron Mines



BH16-M012

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M012

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M012

12.2	12.5	12.8	13.1	13.4	13.7

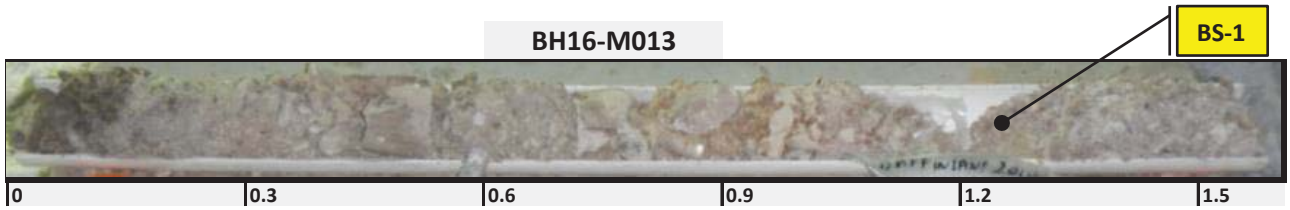
BH16-M012

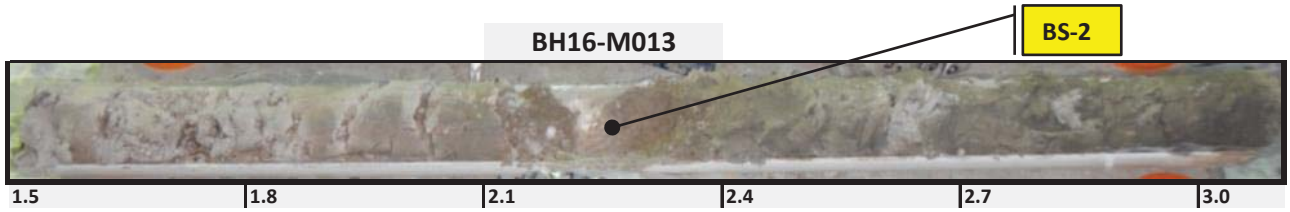
13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH16-M013	Mary River 12 MTPA Mine Expansion
Location:	17 W 503140 7974820	Pre-feasibility Study
Completion Date:	5/12/2016	Baffinland Iron Mines





BH16-M013

9.1	9.4	9.8	10.1	10.4	10.7

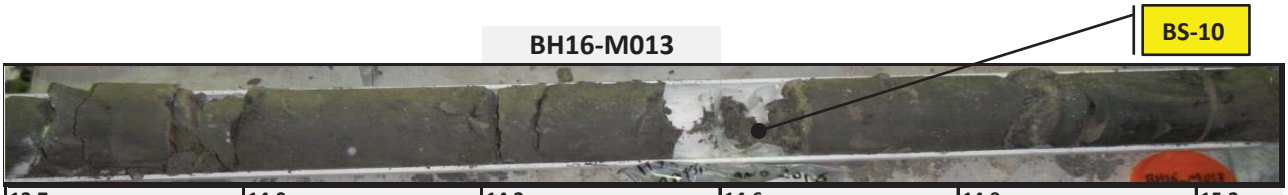
BH16-M013

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M013

12.2	12.5	12.8	13.1	13.4	13.7

BH16-M013

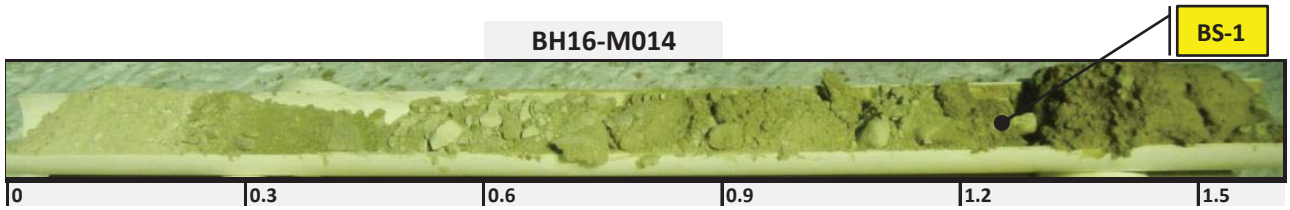


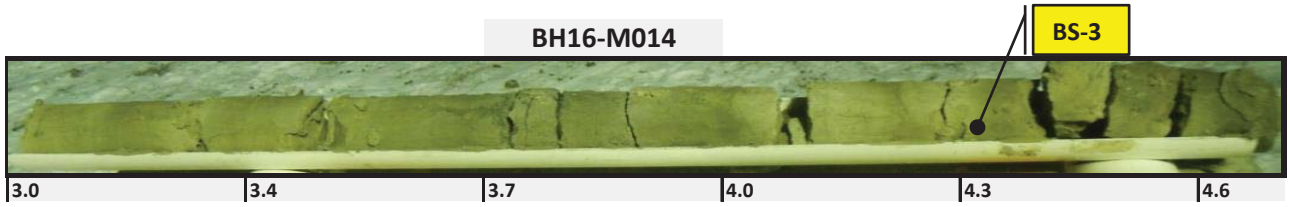
13.7	14.0	14.3	14.6	14.9	15.2

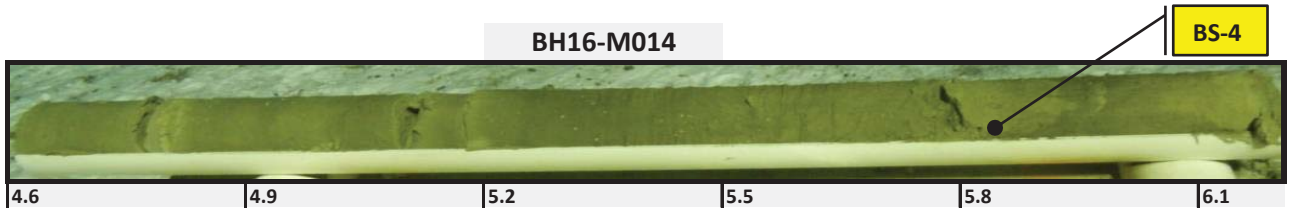
HATCH

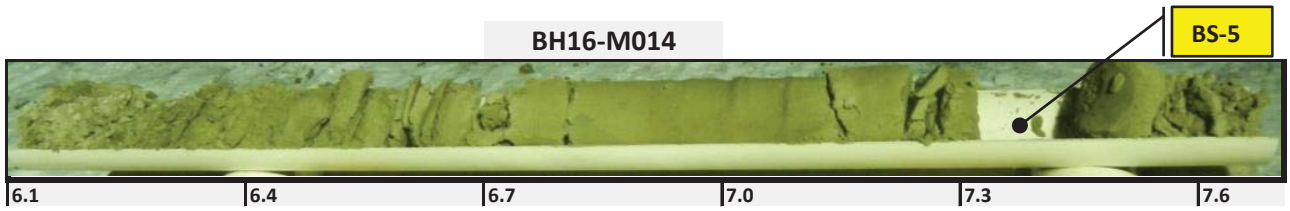
Sample Photographs

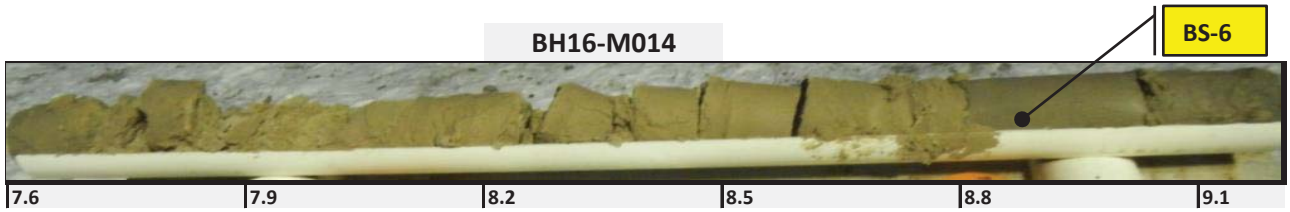
Borehole Name:	BH16-M014	Mary River 12 MTPA Mine Expansion
Location:	17 W 503052 7974782	Pre-feasibility Study
Completion Date:	5/12/2016	Baffinland Iron Mines











BH16-M014

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M014

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M014

12.2	12.5	12.8	13.1	13.4	13.7

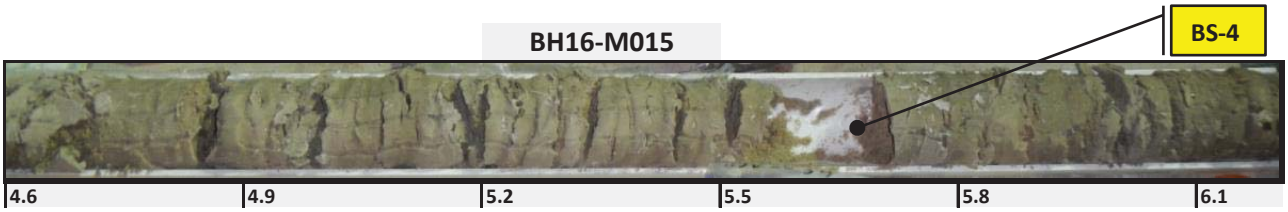
BH16-M014

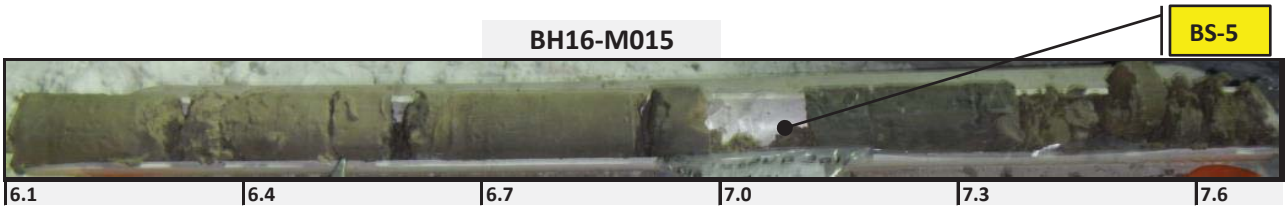
13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH16-M015	Mary River 12 MTPA Mine Expansion
Location:	17 W 503007 7974799	Pre-feasibility Study
Completion Date:	5/12/2016	Baffinland Iron Mines





BS-7

BH16-M015

9.1	9.4	9.8	10.1	10.4	10.7

BH16-M015

BS-8

10.7	11.0	11.3	11.6	11.9	12.2

BH16-M015

BS-9

12.2	12.5	12.8	13.1	13.4	13.7

BH16-M015

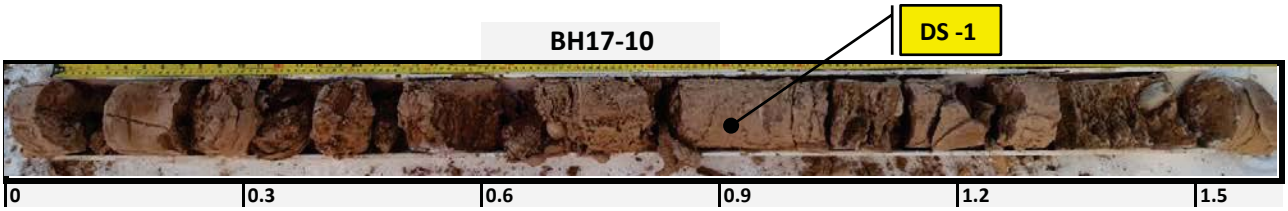
BS-10

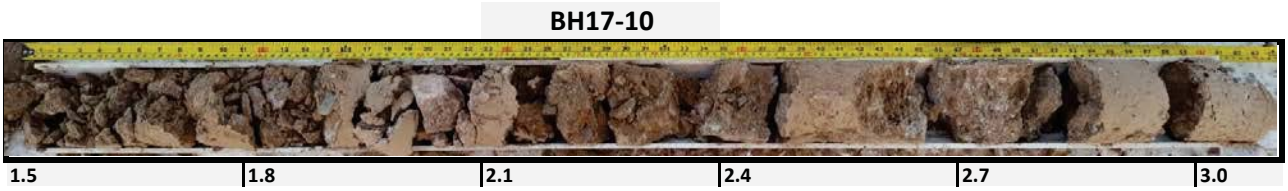
13.7	14.0	14.3	14.6	14.9	15.2

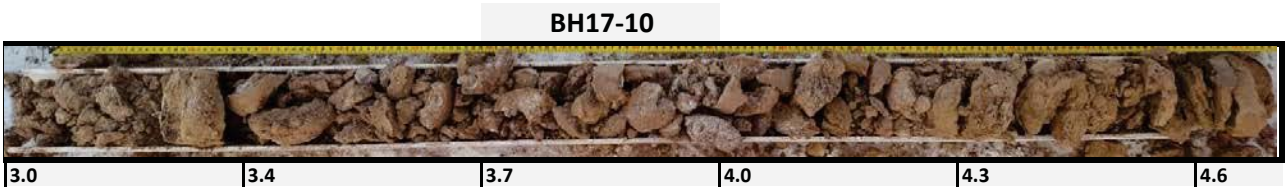
HATCH

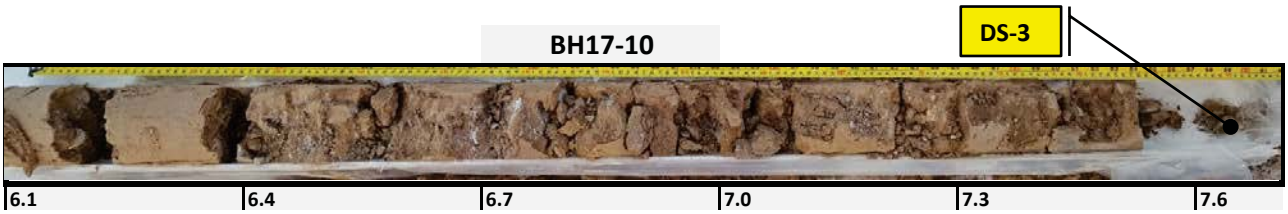
Sample Photographs

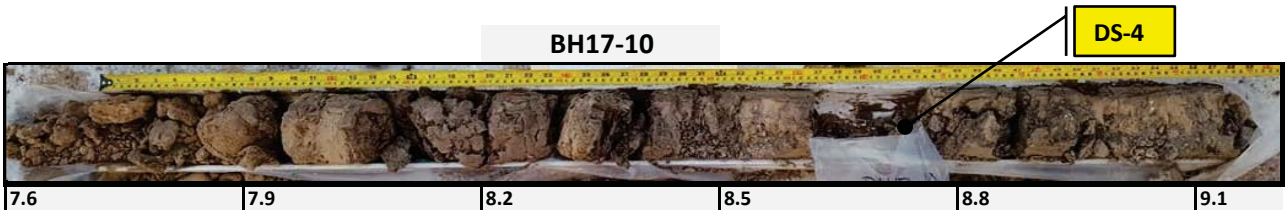
Borehole Name:	BH17-10	Mary River Expansion Study Stage 2
Location:	17 W 503476 7974905	2017 Geotechnical Investigation
Completion Date:	October 29, 2017	Baffinland Iron Mines











HATCH

Sample Photographs

Borehole Name:	BH17-10	Mary River Expansion Study Stage 2
Location:	17 W 503476 7974905	
Completion Date:	October 29, 2017	Baffinland Iron Mines

BH17-10

9.1 | 9.4 | 9.8 | 10.1 | 10.4 | 10.7

BH17-10

10.7 | 11.0 | 11.3 | 11.6 | 11.9 | 12.2

BH17-10

12.2 | 12.5 | 12.8 | 13.1 | 13.4 | 13.7

BH17-10

13.7 | 14.0 | 14.3 | 14.6 | 14.9 | 15.2

BH17-10

15.2 | 15.5 | 15.8 | 16.2 | 16.5 | 16.8

HATCH

Sample Photographs

Borehole Name:	BH17-11	Mary River Expansion Study Stage 2
Location:	17 W 503268 7976025	2017 Geotechnical Investigation
Completion Date:	October 30, 2017	Baffinland Iron Mines

BH17-11

BH17-11

DS-1

BH17-11

BH17-11

DS-2

BH17-11

DS-3

BH17-11

DS-4

HATCH

Sample Photographs

Borehole Name:	BH17-11	Mary River Expansion Study Stage 2
Location:	17 W 503268 7976025	
Completion Date:	October 30, 2017	Baffinland Iron Mines

BH17-11

9.1	9.4	9.8	10.1	10.4	10.7

BH17-11

10.7	11.0	11.3	11.6	11.9	12.2

BH17-11

12.2	12.5	12.8	13.1	13.4	13.7

BH17-11

13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH17-12	Mary River Expansion Study Stage 2
Location:	17 W 503180 7975752	2017 Geotechnical Investigation
Completion Date:	October 30, 2017	Baffinland Iron Mines

BH17-12

BH17-12

BH17-12

BH17-12

BH17-12

BH17-12

Sample Photographs

Borehole Name:	BH17-12	Mary River Expansion Study Stage 2
Location:	17 W 503180 7975752	
Completion Date:	October 30, 2017	Baffinland Iron Mines

BH17-12

9.1	9.4	9.8	10.1	10.4	10.7

BH17-12

10.7	11.0	11.3	11.6	11.9	12.2

BH17-12

12.2	12.5	12.8	13.1	13.4	13.7

BH17-12

13.7	14.0	14.3	14.6	14.9	15.2

HATCH

Sample Photographs

Borehole Name:	BH17-13	Mary River Expansion Study Stage 2
Location:	17 W 503159 7975912	2017 Geotechnical Investigation
Completion Date:	October 8, 2017	Baffinland Iron Mines

BH17-13

0 | 0.3 | 0.6 | 0.9 | 1.2 | 1.5

BH17-13

1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 3.0

BH17-13

3.0 | 3.4 | 3.7 | 4.0 | 4.3 | 4.6

BH17-13

4.6 | 4.9 | 5.2 | 5.5 | 5.8 | 6.1

HATCH

Sample Photographs

Borehole Name:	BH17-14	Mary River Expansion Study Stage 2
Location:	17 W 503187 7975913	2017 Geotechnical Investigation
Completion Date:	October 8, 2017	Baffinland Iron Mines

BH17-14

0 | 0.3 | 0.6 | 0.9 | 1.2 | 1.5

BH17-14

1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 3.0

BH17-14

3.0 | 3.4 | 3.7 | 4.0 | 4.3 | 4.6

BH17-14

4.6 | 4.9 | 5.2 | 5.5 | 5.8 | 6.1

HATCH

Sample Photographs

Borehole Name:	BH17-15	Mary River Expansion Study Stage 2
Location:	17 W 50322 7975913	2017 Geotechnical Investigation
Completion Date:	October 8, 2017	Baffinland Iron Mines

BH17-15

BH17-15

BH17-15

BH17-15

HATCH

Sample Photographs

Borehole Name:	BH17-CAMP-1	Mary River Expansion Study Stage 2
Location:	17 W 529031 7976147	2017 Geotechnical Investigation
Completion Date:	October 7, 2017	Baffinland Iron Mines

BH17-CAMP-1

DS-1

0 | 0.3 | 0.6 | 0.9 | 1.2 | 1.5

DS-3

BH17-CAMP-1

1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 3.0

BH17-CAMP-1

DS-3

3.0 | 3.4 | 3.7 | 4.0 | 4.3 | 4.6

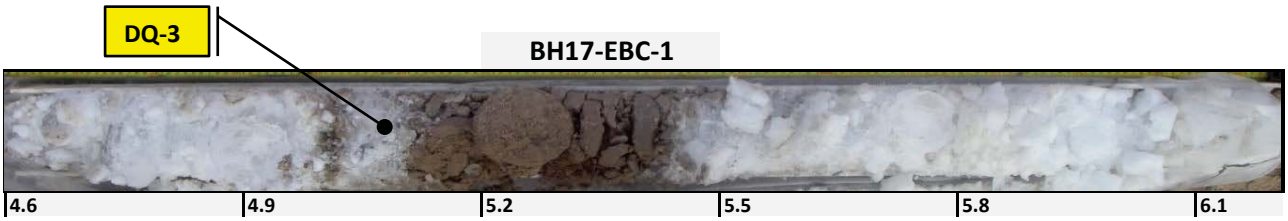
BH17-CAMP-1

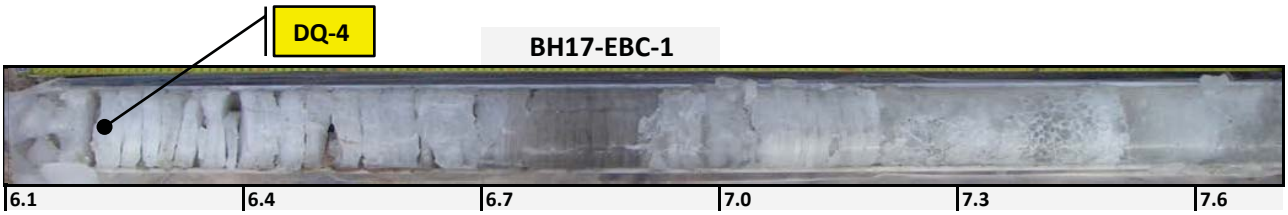
4.6 | 4.9 | 5.2 | 5.5 | 5.8 | 6.1

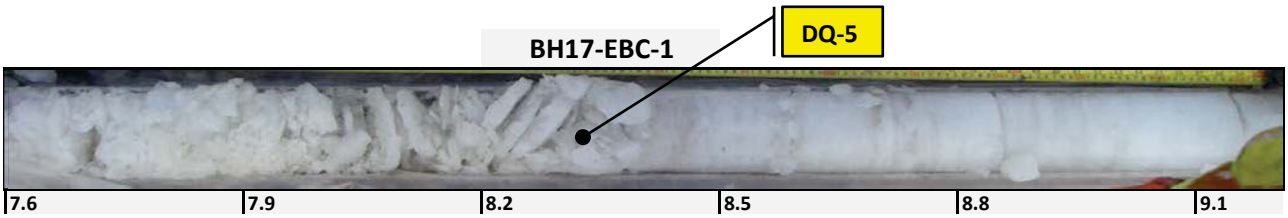
HATCH

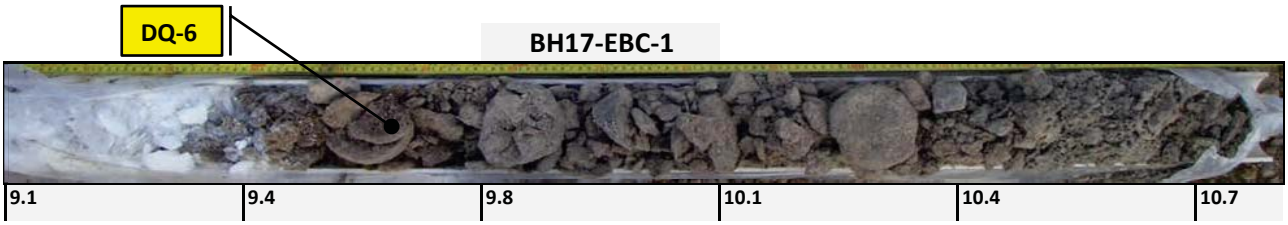
Sample Photographs

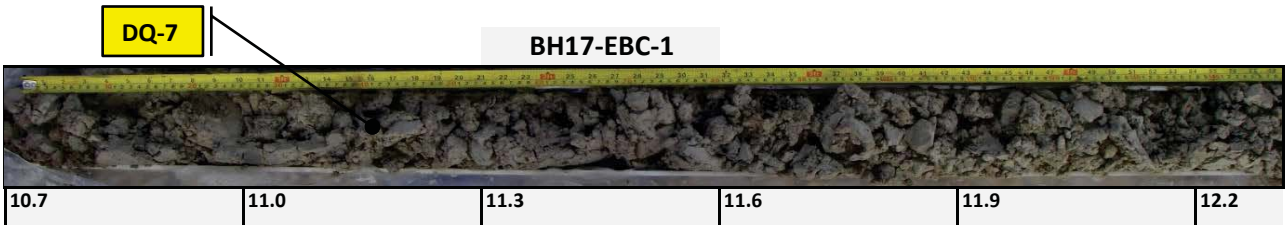
Borehole Name:	BH17-EBC-1	Mary River Expansion Study Stage 2
Location:	17 W 503783.38 7974920.79	2017 Geotechnical Investigation
Completion Date:	September 20, 2017	Baffinland Iron Mines





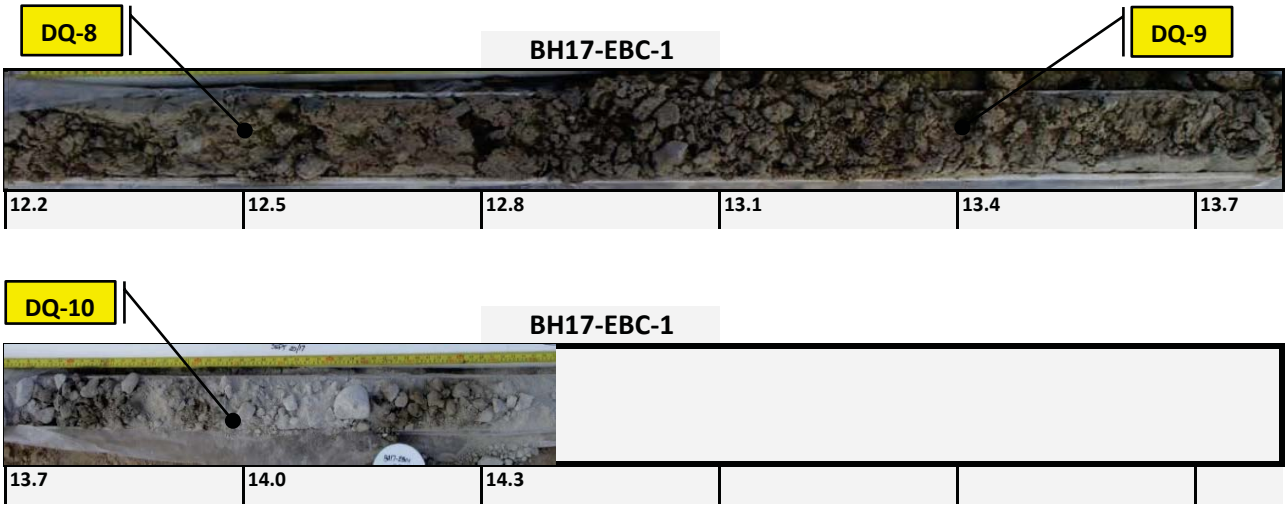






Sample Photographs

Borehole Name:	BH17-EBC-1	Mary River Expansion Study Stage 2
Location:	17 W 503779 7974925	2017 Geotechnical Investigation
Completion Date:	September 20, 2017	Baffinland Iron Mines

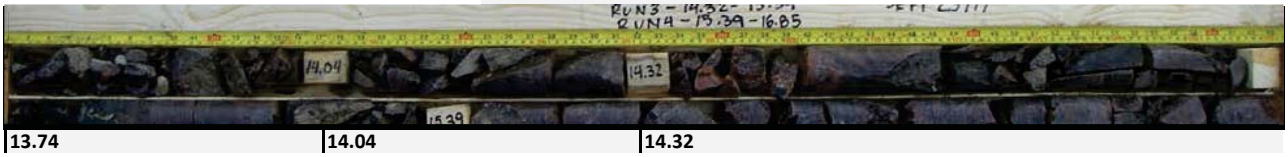


HATCH

Sample Photographs

Borehole Name:	BH17-EBC-1A	Mary River Expansion Study Stage 2
Location:	17 W 503783.38 7974920.79	2017 Geotechnical Investigation
Completion Date:	September 23, 2017	Baffinland Iron Mines

BH17-EBC-1A



13.74 | 14.04 | 14.32

BH17-EBC-1A

15.39

BH17-EBC-1A

16.99

BH17-EBC-1A

18.59

BH17-EBC-1A

20.10

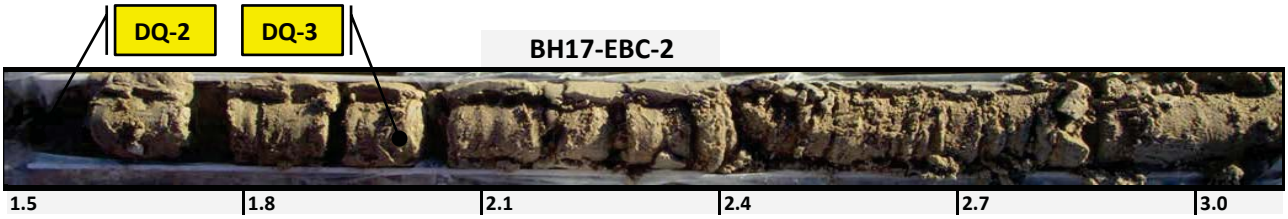
BH17-EBC-1A

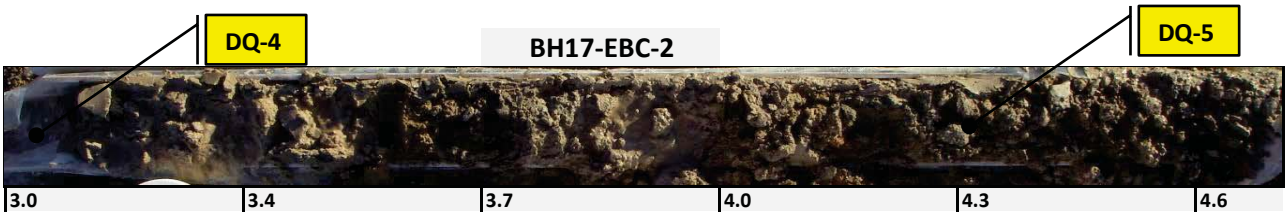
21.67

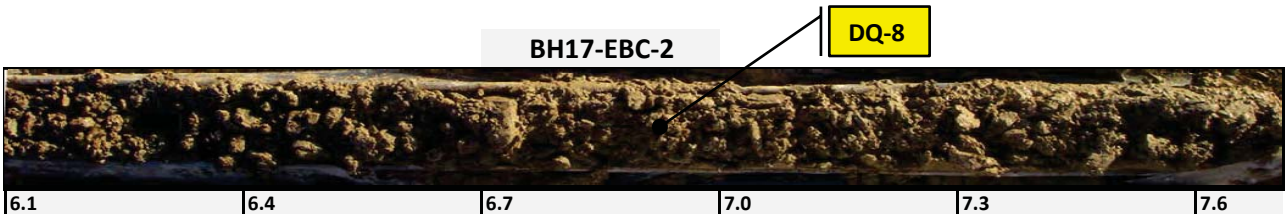
HATCH

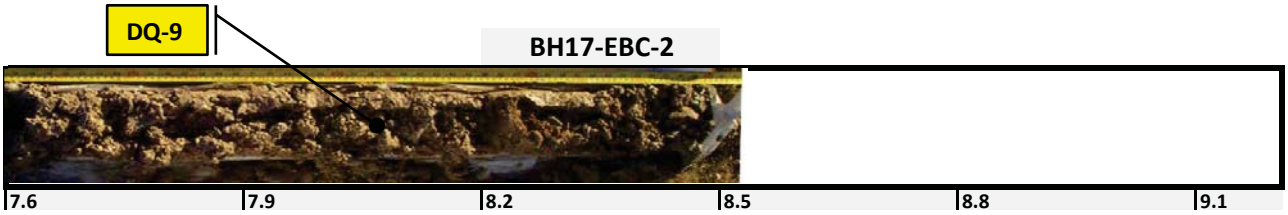
Sample Photographs

Borehole Name:	BH17-EBC-2	Mary River Expansion Study Stage 2
Location:	17 W 503790.94 7974895.17	2017 Geotechnical Investigation
Completion Date:	September 25, 2017	Baffinland Iron Mines









HATCH

Sample Photographs

Borehole Name:	BH17-EBC-2	Mary River Expansion Study Stage 2
Location:	17 W 503790.94 7974895.17	
Completion Date:	September 25, 2017	Baffinland Iron Mines

BH17-EBC-2

8.4 | 9.1 | 9.9

BH17-EBC-2

10.4 | 11.1 | 11.6

BH17-EBC-2

12.3 | 12.7

BH17-EBC-2

13.3

BH17-EBC-2

14.575

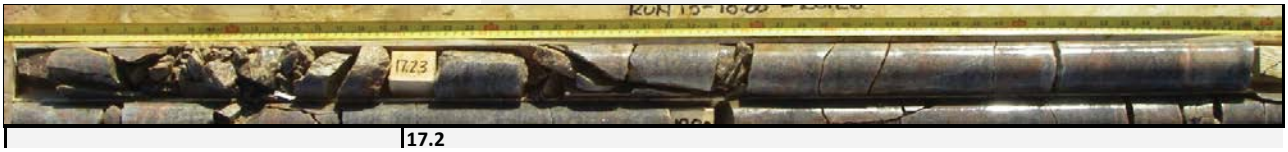
BH17-EBC-2

16.2

Sample Photographs

Borehole Name:	BH17-EBC-2	Mary River Expansion Study Stage 2
Location:	17 W 503790.94 7974895.17	
Completion Date:	September 25, 2017	Baffinland Iron Mines

BH17-EBC-2

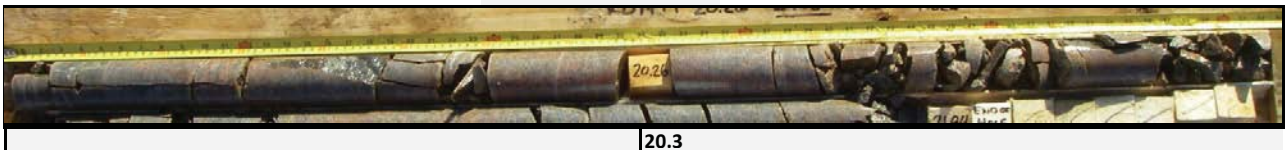


17.2

BH17-EBC-2

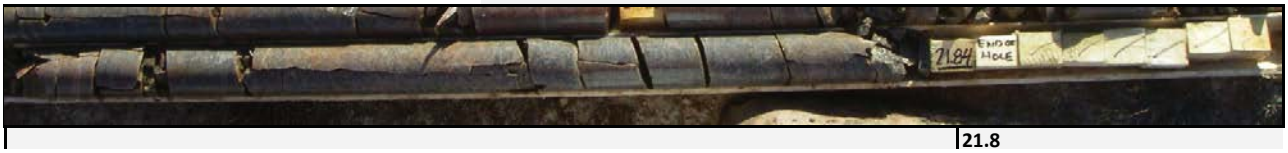
18.8

BH17-EBC-2



20.3

BH17-EBC-2

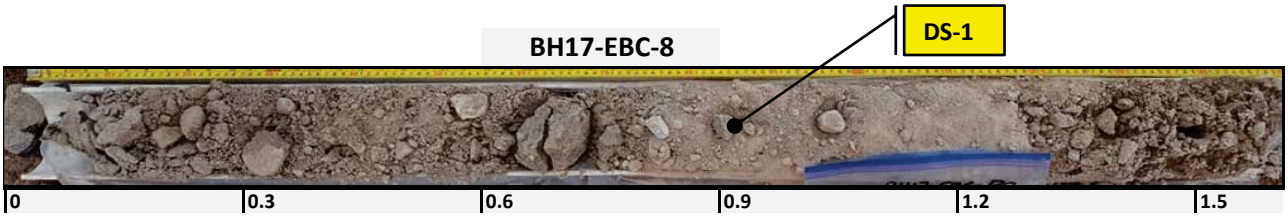


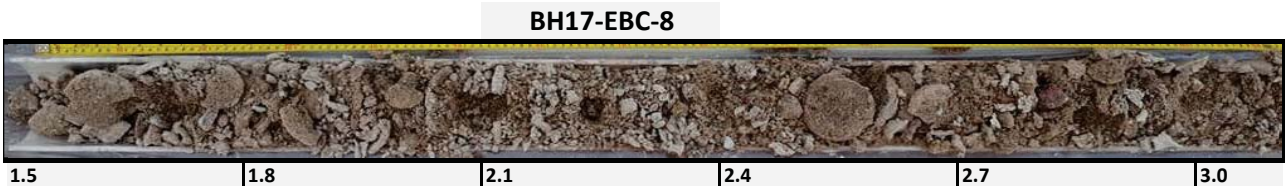
21.8

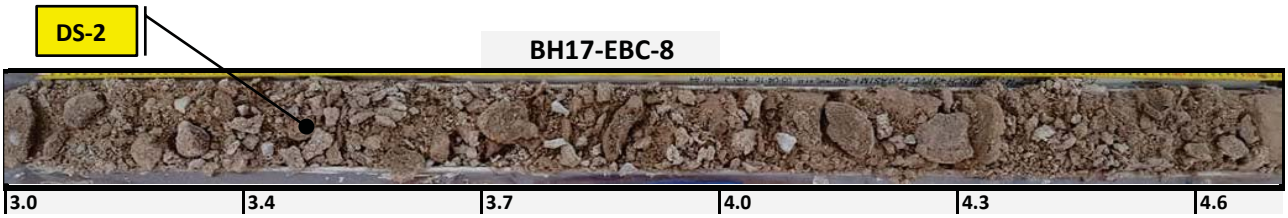
HATCH

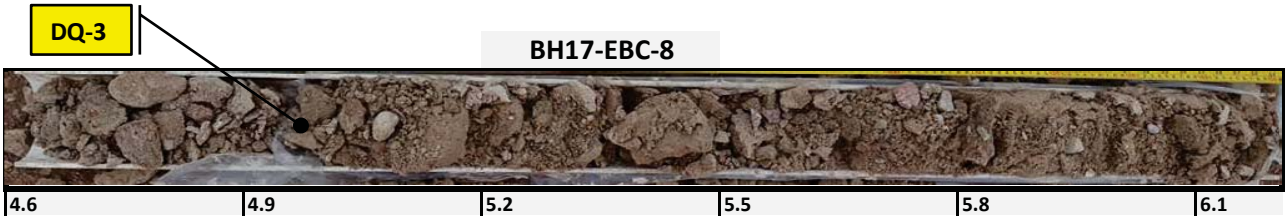
Sample Photographs

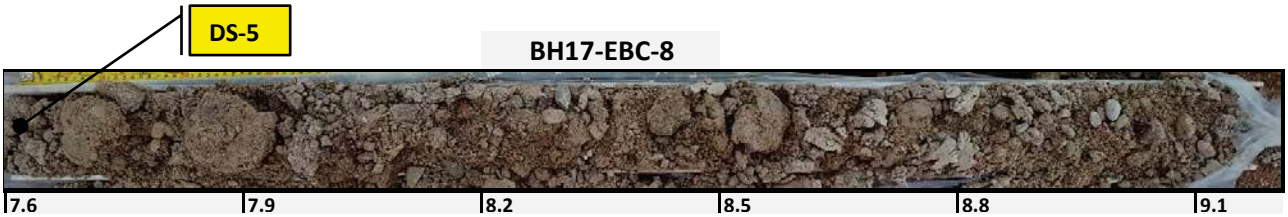
Borehole Name:	BH17-EBC-8	Mary River Expansion Study Stage 2
Location:	17 W 503534.503 7976327.453	2017 Geotechnical Investigation
Completion Date:	September 27, 2017	Baffinland Iron Mines







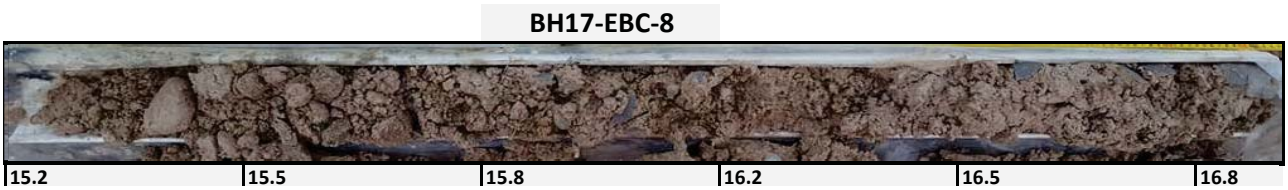


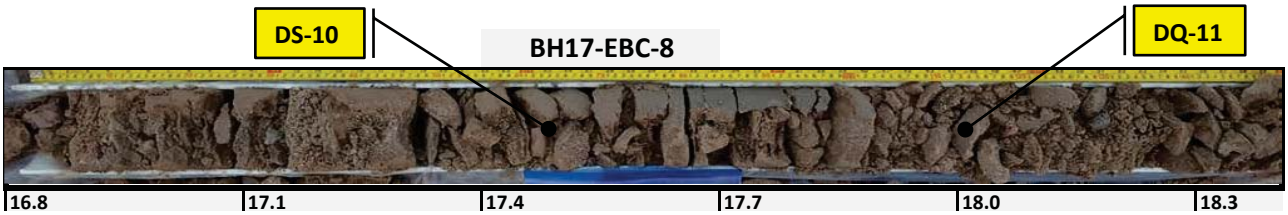


HATCH

Sample Photographs

Borehole Name:	BH17-EBC-8	Mary River Expansion Study Stage 2
Location:	17 W 503534.503 7976327.453	
Completion Date:	September 27, 2017	Baffinland Iron Mines

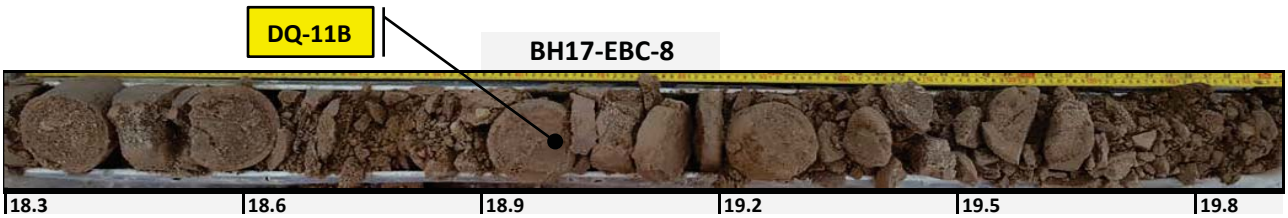


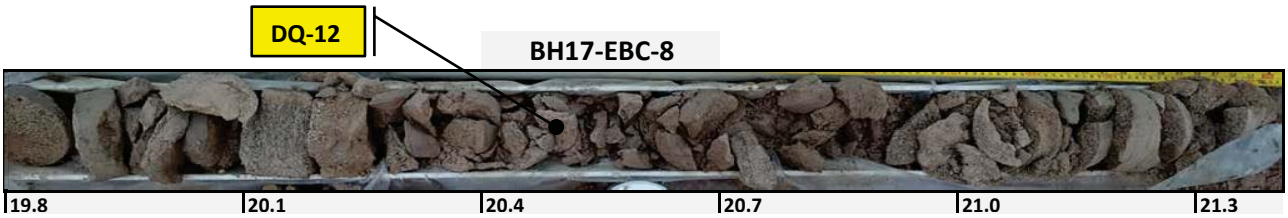


HATCH

Sample Photographs

Borehole Name:	BH17-EBC-8	Mary River Expansion Study Stage 2
Location:	17 W 503534.503 7976327.453	
Completion Date:	September 27, 2017	Baffinland Iron Mines





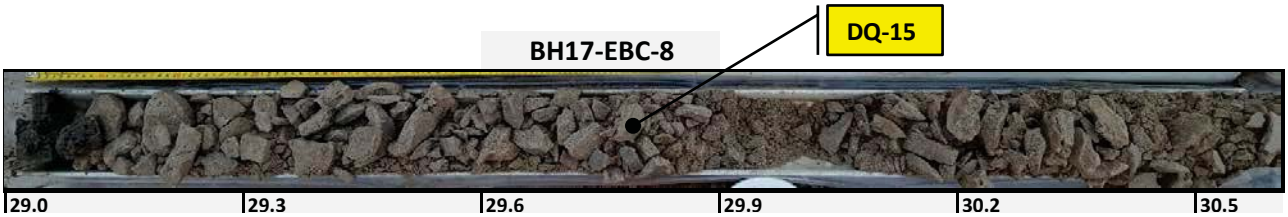
HATCH

Sample Photographs

Borehole Name:	BH17-EBC-8	Mary River Expansion Study Stage 2
Location:	17 W 503534.503 7976327.453	
Completion Date:	September 27, 2017	Baffinland Iron Mines

BH17-EBC-8

BH17-EBC-8



BH17-EBC-8

BH17-EBC-8

BH17-EBC-8

BH17-EBC-8

Sample Photographs

Borehole Name:	BH17-EBC-8	Mary River Expansion Study Stage 2
Location:	17 W 503534.503 7976327.453	
Completion Date:	September 27, 2017	Baffinland Iron Mines

HATCH

Sample Photographs

Borehole Name:	BH17-EBC-9	Mary River Expansion Study Stage 2
Location:	17 W 503548.47 7976371.396	2017 Geotechnical Investigation
Completion Date:	October 29, 2017	Baffinland Iron Mines

BH17-EBC-9

BH17-EBC-9

BH17-EBC-9

BH17-EBC-9

BH17-EBC-9

BH17-EBC-9

HATCH

Sample Photographs

Borehole Name:	BH17-EBC-9	Mary River Expansion Study Stage 2
Location:	17 W 503548.47 7976371.396	
Completion Date:	October 29, 2017	Baffinland Iron Mines