



Baffinland Iron Mines Corporation - Mary River Expansion Project 2016-2017-2018 Milne Port Geotechnical Investigation Factual Data Report - October 5, 2018

Appendix B Borehole Reports

 \triangle

■ HATCH

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

 $\begin{array}{lll} A- \dot{S} plit \, Tube & E- Auger \\ B- Thin \, Wall \, Tube & F- Wash \end{array}$

 $\begin{array}{ll} {\sf C-Piston\ Sampler} & {\sf G-Shovel\ Grab\ Sample} \\ {\sf D-Core\ Barrel} & {\sf K-Slotted\ Sampler} \end{array}$

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 claysHigh	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

Insensit	ive	<2
Low		2 – 4
Medium		4 – 8
High		8 – 16
Quick	>16	

■ HATCH List of Abbreviations and Terms Used in the Borehole Reports

(Sheet 2)

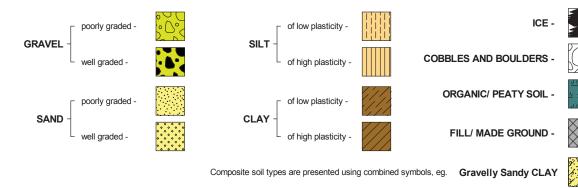
Rock

ROCK						
Core Recovery Sum of lengths of rock core the length of the core run ar			Strength Term	Description	Unconfined Strength	d Compressive
RQD (Rock Quality Design Sum of lengths of hard, sou	nation) nd pieces of rock core e	equal to or greater	Extremely weak rock	Indented by thumbnail	(MPa) 0.25 – 1.0	(psi) 36 – 145
than 100 mm from a core ru and expressed as a percent Core fractured by drilling is for N-size core.	tage. Measured along c	enterline of core.	Very weak	Crumbles under firm blows with point of geological hammer, can be peeled by a pocket knife	1.0 – 5.0	145 – 725
RQD (%) Rock Quality 90 - 100 Excellent 75 - 90 Good 50 - 75 Fair 25 - 50 Poor 0 - 25 Very Poor			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
Grain Size Term Very coarse-grained Coarse-grained Medium-grained Fine-grained	>60 mm 2 mm - 60 mm 60 μm - 2 mm 2 μm - 60 μm		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
Very fine-grained Bedding Term	< 2 μm Bed Thickness		Strong rock	Specimen requires more than one blow of geological hammer to fracture it	50 – 100	7250 – 14500
Very thickly bedded Thickly bedded Medium bedded Thinly bedded	>2 m 600 mm - 2 m 200 mm - 600 mm 60 mm - 200 mm	>6.50 ft 2.00 - 6.50 ft 0.65 - 2.00 ft 0.20 - 0.65 ft	Very strong rock	Specimen requires many blows of geological hammer to fracture it	100 – 250	14500 – 36250
Very thinly bedded Laminated Thinly laminated	20 mm - 60 mm 6 mm - 20 mm <6 mm	0.06 - 0.20 ft 0.02 - 0.06 ft <0.02 ft	Extremely strong rock	Specimen can only be chipped with geological hammer	>250	>36250
Discontinuity Frequency	f diamentine itien anno anno		Weathering Term	Description		
Expressed as the number of discontinuities per foot. Exc fragmented zones.	r discontinuities per met cludes drill-induced fract	er or ures and	Fresh	No Visible sign of rock mater	rial weathering	I
			Faintly weathered	Discoloration on major disco	ntinuity surfac	es.
Discontinuity Spacing Term Extremely widely spaced Very widely spaced Widely spaced	Average Spacing >6 m 2 m - 6 m 600 mm - 2 m	>20.00 ft 6.50 - 20.00 ft 2.00 - 6.50 ft	Slightly weathered	Discoloration indicates weath discontinuity surfaces. All th discolored by weathering and than in its fresh condition.	e rock materia	al may be
Moderately spaced Closely spaced Very closely spaced Extremely closely spaced	200 mm - 600 mm 60 mm - 200 mm 20 mm - 60 mm <20 mm	0.65 - 2.00 ft 0.20 - 0.65 ft 0.06 - 0.20 ft <0.06 ft	Moderately weathered	Less than half of the rock madisintegrated to a soil. Fresheither as a continuous frame	or discolored	rock is present
Note: Excludes drill-induced	d fractures and fragmen	ted rock.	Highly weathered	More than half of the rock madisintegrated to a soil. Fresheither as a discontinuous fra	or discolored	rock is present
Broken Zone Zone of full diameter core of drill-induced fractures.	f very low RQD which m	nay include some	Completely weathered	All rock material is decomposoil. The original mass struc	sed and/or dis	integrated to
Fragmented Zone Zone where core is less tha	n full diameter and RQD) = 0.	Residual soil	All rock material is converted and material fabric are destrechange in volume, but the so transported.	oyed. There is	s a large

BASIS FOR SOIL DESCRIPTION

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

GRAPHIC SYMBOLS FOR SOILS



GROUNDWATER OBSERVATIONS

Permanent Water Level	Ā	Inflow into Pit or Borehole	-	Slow Inflow/ Seepage into Pit or Borehole	₩
Temporary Water Level	$\bar{\triangle}$	Outflow/ Water Loss in Borehole	⊸		
SAMDI E TVDES					

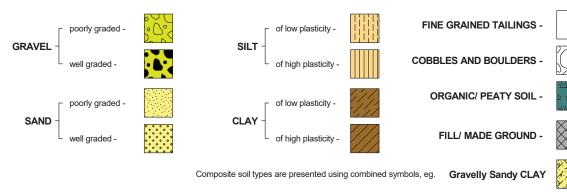
SAMPLE TYPES

Disturbed bag sample	Auger Flight Cuttings	Thin walled "undisturbed" push tube sample eg. U60, U100 etc	
Bulk Disturbed (>20kg)	Standard Penetration Test (SPT), with Disturbed Split-Spoon Sample		
Hollow Stem Auger Core	SPT (no recovery)	Sample attempted with no recovery	

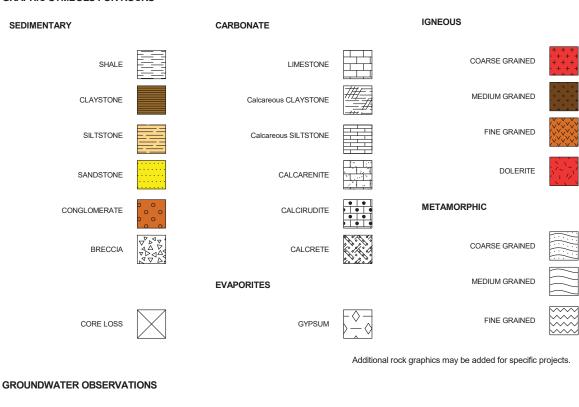
BASIS FOR ROCK DESCRIPTION

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

GRAPHIC SYMBOLS FOR SOILS



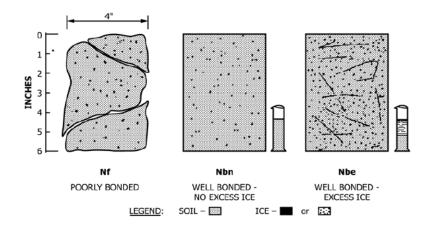
GRAPHIC SYMBOLS FOR ROCKS

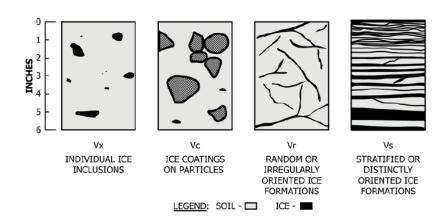


Slow Inflow/ Seepage into Pit Permanent Water Level Inflow into Pit or Borehole or Borehole ∇ Temporary Water Level Outflow/ Water Loss in **SAMPLE TYPES** Thin walled "undisturbed" push tube sample eg. U60, U100 etc Disturbed bag sample Auger Flight Cuttings Standard Penetration Test Bulk Disturbed (>20kg) (SPT), with Disturbed Split-Spoon Sample Sample attempted with no Hollow Stem Auger Core SPT (no recovery) 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





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BOREHOLE REPORT

BH16-M001

Easting:

Surface Elevation:

Sheet 1 of 1

503,504.0 m

Client: **Baffinland Iron Mines** Project No.: H352034

Project: Mary River Expansion Study Stage 2

Location: Milne Inlet (Reclaimer Berm)

Datum: NAD83

Platform: Ground Northing: 7,976,237.0 m

12.75 m **Bottom Elevation:** -2.45 m

Total Depth: 15.2 m Logged By:

С	ontract	or: Bo	art l	_ong	ıyear	Rig Type/ Mounting: MiniSonic Rig		Dat	te Lo	gge	ed:	12/8/2016			otai L ogge	-				MR
D	riller:	Mi	cha	el Sc	ott	Hole Diameter (mm): 96		Dat	te Re	vie	wed	:2/10/2017		Re	view	ved E	By:			SH/WH
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	Blows	0	Moisture Content Profile	100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to Permafrost	- - - - - - - - - - - - - - 8.8	- - 2.0- - - - 4.0-				GRAVELLY SAND, trace COBBLES: Light brown to grey, fine to medium grained sand, rounded to subangular gravel 1.50 m to 2.00 m: Trace gravel and silt, rounded gravel	M							18						-
25.17 1.050	- - 6.8 - - - 4.8	6.0-	ibracore	H-Casing		4.60 m to 6.10 m: Trace silt 6.10 m to 9.10 m: Some silt, fine to coarse grained sand								19 16	0	82	17			-
	- - 2.8	10.0-				9.10 m to 10.60 m: Some gravel 10.60 m to 12.10 m: With gravel, trace excess ice								16						- - -
		12.0-				12.10 m to 13.70 m: Trace gravel and silt, rounded to subangular gravel								18						-
Vale Ael Grantinia	1.3 	14.0-		[15.2]		13.70 m to 15.20 m: Some silt, some gravel To Target Depth.								16						
מואן בופאארן יסבים בספ סטיב וסטיבווסבים		16.0- - - - 18.0- -				Drillhole BH16-M001 terminated at 15.2m.														-
No	tes:	20.0-				1										<u> </u>				

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BOREHOLE REPORT

BH16-M002

Sheet 1 of 1

503,757.0 m

7,975,894.0 m

12.50 m

-2.70 m

Client: **Baffinland Iron Mines** Project No.: H352034

Project: Mary River Expansion Study Stage 2

Location: Milne Port Tank 1

Datum: NAD83

Platform: Ground

Bottom Elevation:

Surface Elevation:

Easting:

Northing:

Contractor: Boart Longwar Rig Typel Mounting: MiniSonic Rig Date Logged: 12/4/2016 Logged By: MR ShIWH Driller: Michael Scott Hole Diameter (mm): 96 Date Reviewed: 2/10/2017 Reviewed By: ShIWH Date Reviewed: 2/10/2017 Reviewed By: ShIWH Date Reviewed: 2/10/2017 Reviewed By: ShIWH Date Reviewed: 2/10/2017 Revie	0	1 D.	()			Pla Tara (Manustiana Mini Caria Pia		Piè			Ground	1		Dept				15.2 m
Soil Description TyPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components. SILT and SAND, trace GRAVELL; Light brown, fine to medium grained sand, subangular to angular gravel 1.20 m to 1.50 m: Light brown, fine to medium to coarse grained sand 1.50 m to 3.00 m: Some gravel, light brown, fine to medium grained sand, subrounded gravel SILT, some SAND: Organic, dark brown, coarse grained sand with fine organic material SILT, some SAND: Organic, dark brown, coarse grained sand, rounded to subangular gravel GRAVELLY SAND, some SILT: Light brown, coarse grained sand, subrounded gravel SILT, some SAND: Organic, dark brown, coarse grained sand, rounded to subangular gravel GRAVELLY SAND, some SILT: Light brown, coarse grained sand, subrounded gravel SILT, some SAND: Organic, dark brown, coarse grained sand, rounded to subangular gravel				_	-									_				
SILT and SAND, trace GRAVEL: Light brown, fine to medium grained sand, subangular to angular gravel 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 ORGANIC SILT and SAND GRAVELLY SAND, some SILT: Light brown, fine to medium grained sand, subangular gravel SILT, some SAND: Organic, dark brown, coarse grained sand with fine organic material GRAVELLY SAND, some SILT: Light brown, coarse grained sand with fine organic material	ion (m)				Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour,	Aoisture Condition				Moisture Content Profile	+				Liquid Limit	Plastic Index	Other
To Target Depth. Drillhole BH16-M002 terminated at 15.2m. Notes:		2.0- 4.0- 6.0- 10.0- 14.0- 16.0-	Vibracore	H-Casing		SILT and SAND, trace GRAVEL: Light brown, fine to medium grained sand, subangular to angular gravel 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 ORGANIC SILT and SAND GRAVELLY SAND, some SILT: Light brown, fine to medium grained sand, subrounded gravel SILT, some SAND: Organic, dark brown, coarse grained sand with fine organic material GRAVELLY SAND, some SILT: Light brown to grey, medium to coarse grained sand, rounded to subangular gravel To Target Depth. Drillhole BH16-M002 terminated at		(F)	221	200		100 21 11 19 14 14	6	37	57		ld.	

BOREHOLE REPORT

BH16-M003

Sheet 1 of 1

503,714.0 m

7,975,892.0 m

Client: **Baffinland Iron Mines** Project No.: H352034

Project: Mary River Expansion Study Stage 2

Location: Milne Port Tank 2

Datum: NAD83

Platform: Ground

Bottom Elevation:

10.50 m -4.70 m

Total Depth:

Surface Elevation:

Easting:

Northing:

15.2 m

ייניים	ler:		Book	ham	n	Holo Diameter (mm): 06		Do	-	0.0	io	. الم	1.2/10/2017		D.		, a d	D. /-			
ווזכ		□.	bea0	ham	h	Hole Diameter (mm): 96	\top	Т	Le K	ev	iew	ea	d: 2/10/2017		-	viev	ved E	∍y: □		Ι	SH/W
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	0	Moisture Content Profile	100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Othe Test
marrost		-				SAND and SILT, some GRAVEL: Grey, angular gravel, coarse grained sand															
Unobserved due to permatrost	· 	-											•		18	17	63	20			
erved at	 8.5	2.0-				SILT, trace SAND: Organic, dark grey,	-								33	0	4	96			
Unobs	-	-				fine grained sand											ľ				
F	 6.5 -	4.0-																			
	- 4.5	6.0-																			
		-		g																	
	 2.5	8.0-	Vibracore	H-Casing																	
	.	-																			
ŀ	—0.5	10.0-																			
		-							\square												
-	1.5	12.0-				CANDY CDAYEL OUT D. LI'L															
ŀ		-			. O°	SANDY GRAVEL, some SILT: Reddish brown to grey, coarse grained sand, angular gravel							įįį								
-	· 3.5	14.0-			° 0°																
_				[15.2]	. 0. . 0 (_														
-	5.5 ·	16.0-				Drillhole BH16-M003 terminated at 15.2m.															
-	.	-																			
-	—-7.5 ·	18.0-																			
-	.	-																			
lote	-9.5	20.0									_										

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Notes:

BOREHOLE REPORT

BH16-M004

Easting:

Northing:

Surface Elevation:

Sheet 1 of 1

503,302.0 m

7,975,591.0 m

10.20 m

Client: **Baffinland Iron Mines** Project No.: H352034

Project: Mary River Expansion Study Stage 2

Location: Milne Port Reclaimer Berm

NAD83

Platform: Ground

Datum:

Bottom Elevation: -5.00 m

Total Depth: 15.2 m

Co	ontract	or: Bo	art l	ong	year	Rig Type/ Mounting: MiniSonic Rig		Da	te L	ogg	ged:	12/8/2016	Lo	ogge	d By	:			UK
Dr	iller:	E.I	Bea	chan	пр	Hole Diameter (mm): 96		Dat	te R	evi	ewe	ed:2/10/2017	R	evie	wed I	Ву:			SH/WH
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	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Unobserved due to Permafrost		2.0	Vibracore	H-Casing		SILTY SAND with GRAVEL: Grey, coarse grained sand, angular gravel SAND, trace SILT: Coarse grained sand 5.50 m to 6.10 m: Trace to some SILT SAND and GRAVEL, some SILT: Grey, coarse grained sand, angular gravel SANDY SILT: Dark grey, mottled black, fine organic material SAND, some SILT: Grey, coarse grained sand							19	0	95	4			
200 800		16.0-				Drillhole BH16-M004 terminated at 15.2m.													- - - - -
	-9.8	20.0=																	_

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BOREHOLE REPORT

BH16-M005

Easting:

Sheet 1 of 1

503,270.0 m

Client: **Baffinland Iron Mines** Project No.: H352034

Project: Mary River Expansion Study Stage 2

Location: Milne Port Reclaimer Berm

Datum: NAD83

Platform: Ground

Northing: 7,975,606.0 m Surface Elevation: 10.00 m

Bottom Elevation: -5.20 m

Total Depth: 15.2 m Logged By: UK

c	ontra	ctor: E	Boai	rt Lo	ong	year	Rig Type/ Mounting: MiniSonic Rig		Da	te L	ogg	ed:	12/8/2016				d By				15.2 m UK
D	riller:	E	E.Be	eac	han	пр	Hole Diameter (mm): 96		Da	te R	evie	ewe	ed:2/10/2017		Re	eviev	ved E	Зу:			SH/WH
Water	Elevation (m)						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 permafros		10 12			H-Casing		SAND, some SILT: Grey, fine to coarse grained sand GRAVELLY SAND, Trace SILT: Grey, subangular gravel, coarse grained sand SANDY GRAVEL: Grey, angular to sub-angular and well graded gravel To Target Depth.								13 20	35	53	12			-
GIN I LIBRARY.GLB LOG SOIL BOREHOLE J		18					Drillhole BH16-M005 terminated at 15.2m.														-
N	otes:	0 1 20	.0					<u> </u>		<u>· </u>							<u> </u>				

BOREHOLE REPORT

BH16-M006

Sheet 1 of 1

Easting: 503,136.0 m Client: **Baffinland Iron Mines** Project No.: H352034

Northing: 7,975,081.0 m Project: Mary River Expansion Study Stage 2 Datum: Surface Elevation: 10.00 m NAD83

Bottom Elevation: -5.20 m Location: Milne Port Reclaimer Berm Platform: Ground **Total Depth:** 15.2 m

Date Logged: 12/8/2016 Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Logged By: MR

L	Driller:	Mi	chae	l Sc	ott	Hole Diameter (mm): 96		Dat	e Re	view	/ed	:2/10/2017		Re	viev	ved E	Зу:			SH/WH
	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	1	Moisture Content Profile	100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	8.0	2.0-				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-		g																
	- 2.0 -	8.0-	Vibracore	H-Casing		4.90 m to 5.80 m: Some GRAVEL														-
		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														_
		16.0-				To Target Depth. Drillhole BH16-M006 terminated at 15.2m.														
ביבו ביבו ביבו ביבו ביבו ביבו ביבו ביבו		18.0-																		-
<u>;</u>	Notes:	20.0																		

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BOREHOLE REPORT

BH16-M007

Total Depth:

Sheet 1 of 2

9.1 m

Easting: 503,822.0 m Client: **Baffinland Iron Mines** Project No.: H352034

Northing: 7,974,945.0 m Project: Mary River Expansion Study Stage 2 Datum: Surface Elevation: 54.00 m NAD83

Bottom Elevation: 44.86 m Location: Milne Port Train Unloading Platform: Ground

Contractor: Boart Longye	ar Rig Type/ Mounting: MiniSonic Rig	Date Logged: 10/3/2016 Logged By:	UK
Driller: E.Beachamp	Hole Diameter (mm): 96	Date Reviewed: 2/10/2017 Reviewed By:	SH/WH
Water Elevation (m) Depth (m) Method Casing	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	Othe Tests
Mul Q No O No	SAND and GRAVEL: Grev. coarse		



Baffinland Iron Mines

Mary River Expansion

Client:

Project:

BOREHOLE LOG

ROCK CORE FORMAT

Datum:

Project No.: H352034

NAD83

Sheet 2 of 2

BH16-M007

Easting:

503,822.0 m

Northing:

7,974,945.0 m

Surface Elevation: **Bottom Elevation:**

54.00 m 44.86 m

		Loc	atio	n:	Ν	1ilne	Port	Train Unloading	Pla	atfor	m:				ottom Elevation:	44.86 m
	Con	ntracto	or: Bo	oart L	ong	year	Rig Typ	oe/ Mounting: MiniSonic Rig Bearing: 1	N/A	D	ate Logged:	10/3/20)16		otal Depth: ogged By:	9.1 m UK
	Dril	ler:	E.	Bead	cham	пр	Hole Di	iameter (mm): 96 Plunge:	Vertica	al D	ate Checked:	2/10/20)17	Re	eviewed By:	SH/WH
	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 플ુ로 프로그렇品	Is ₍₅₀₎ [UCS] MPa	Defect Spacing mm	%		
		- - - - - - - - - -	-	-								- - - - -				
_	_	- - - 48.0	6.0 —			+ + + - + + + + +		Resuming in Rock Core Format 6.1n GRANITE: Pink to dark pink, coarse grained, thickly banded gneiss in part		SW-Fr		- - - -	- I - I - I			
30/04/2018 09:34		- - 46.0 -	8.0 —	NQ-3 Coring	/	+ + + + + + + + + + + + + + + + + + +	+ <u>+</u> +	weakly fractured in part, faintly weathered 7.70 m to 9.10 m: Dark pink, dark gree minor medium grained				- - - -				
J < <drawingfile>> 30</drawingfile>		- 44.0 	10.0 —					To Target Depth. Drillhole BH16-M007 terminated at 9.1m.				- - -				
HOLES_REV 1.GP.	-	- 42.0 	12.0 —									- -				
BAFFINLAND BORE	-	- 40.0 	14.0 —									- - -				
ORED BOREHOLE		- 38.0 	16.0 —									- - -				
MENT COPY.GLB Log Co		- 36.0 	- 18.0 — - -									- - - -				
HATCH LIBRARY DEVELOPMENT COPY.GLB Log CORED BOREHOLE BAFFINLAND BOREHOLES_REV1.GPJ < <drawingfire>></drawingfire>	Note		20.0 —					Defect PI Planarity Description Ir Irregula Legend Cu Curved Un Undulos St Stepper	se	Jt J Pt F Sh S	Orilling Induced oint 'arting on Contact Shear Seam Trushed Seam	Cz Cı t Fz Fı	eam rushed Zone ractured Zon reak Band		Roughness Ro Rough Sm Smooth Po Polished SI Slickenside	Infill Amount cn Clean sn Stained vn Veneer cg Coating

BOREHOLE REPORT

BH16-M008

Sheet 1 of 3

Easting: 503,771.0 m Client: **Baffinland Iron Mines** Project No.: H352034

Northing: 7,974,959.0 m Project: Mary River Expansion Study Stage 2 Datum: Surface Elevation: 52.00 m NAD83

Bottom Elevation: 30.66 m Location: Milne Port Train Unloading Platform: Ground **Total Depth:** 21.3 m

Contract	or: Bo	art Lo	ongy	ear	Rig Type/ Mounting: MiniSonic Rig		Dat	e Log	iged: 10/-	4/2016	Lo	gge	d By	:			UK
Driller:	E.E	Beacl	nam	р	Hole Diameter (mm): 96		Dat	e Rev	riewed:2/1	0/2017	Re	view	ed E	Зу:			SH/WH
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
Nuopserved due to Permatuost	2.0—		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 SAND and GRAVEL: Coarse grained sand 6.90 m to 7.60 m: Zone of inferred cobbles SILTY SAND, some GRAVEL: TILL, fine to coarse, subangular gravel	DW .	00	25 A A A A A A A A A A A A A A A A A A A			18 20 9	0	73	27			
-38.0 - - -36.0 - - -34.0	14.0-				SAND 13.80 m to 15.40 m: SILTY SAND												
Notes:	-	[18.8]	<i>478</i> 2	Start of Coring at 18.8m. Continued on Rock Core Log sheet.												



E.Beachamp

Baffinland Iron Mines

Client:

BOREHOLE LOG

ROCK CORE FORMAT

Vertical

Plunge:

Project No.: H352034

Date Checked: 2/10/2017

Project: Mary River Expansion Datum: NAD83

Location: Milne Port Train Unloading Platform:

Hole Diameter (mm): 96

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

BH16-M008

Sheet 2 of 3

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

	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	Is ₍₅₀₎ [UCS] MPa	Defect Spacing mm [001] 0000 0000 0000	RQD %		
		- - - 50.0 -	2.0 —								- - -				
	-	- 48.0 - 48.0	4.0 —								-				
	- - -	- - 46.0 -	6.0 —								- - -				
30/04/2018 09:37	-	- 44.0 	8.0 —								-				
PJ < <drawingfile>></drawingfile>	-	- 42.0 - 42.0	10.0 —								-				
DREHOLES_REV 1.G		- 40.0 	12.0 —								-				
CORED BOREHOLE BAFFINLAND BOREHOLES_REV 1.GPJ < <drawingfile>> 30/04/2018 09:37</drawingfile>	-	- 38.0 - -	14.0 —								-				
	-	- 36.0 - -	16.0 —								-				
DPMENT COPY.GLB L	_	-	18.0 -			+ + + + + + - + + - + +		Resuming in Rock Core Format 18.8m. GRANITE: Pink, weathered	-		-			_	
HATCH LIBRARY DEVELOPMENT COPY.GLB Log	Note		20.0 —	•				Defect Pl Planarity Description Ir Irregular Legend Cu Curved Un Undulose St Stepped	Type DI E Jt J Pt F Sh S Cs C	Orilling Induced Joint Parting on Conta Shear Seam Crushed Seam	Sm Si Cz Ci act Fz Fr Band W	eam rushed Zone ractured Zone reak Band	 	Roughness Infill Amount Ro Rough cn Clean Sm Smooth sn Stained Po Polished vn Veneer Sl Slickenside cg Coating	



Client:

Project:

Location:

HATCH LIBRARY DEVELOPMENT COPY.GLB LOG CORED BOREHOLE BAFFINLAND BOREHOLES_REV 1.GPJ <<DrawingFile>> 30/04/2018 09:37

BOREHOLE LOG

ROCK CORE FORMAT

Datum:

BH16-M008

Sheet 3 of 3

Easting:

503,771.0 m

Northing:

7,974,959.0 m 52.00 m

Surface Elevation: **Bottom Elevation:**

30.66 m

Total Depth:

21.3 m

Logged By:

UK

Milne Port Train Unloading Platform:

Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Bearing: N/A Driller: F Reachamn Hole Diameter (mm): 96

Baffinland Iron Mines

Mary River Expansion

Date Logged: 10/4/2016

NAD83

Project No.: H352034

Dri	ller:	E.f	Bead	cham	np l	Hole Di	iameter (mm): 96 Plunge: Ver	rtical D	ate Checked	l: 2/10/20	17	Revi	iewed By:	SH/WH
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 표동ェョ기	Is ₍₅₀₎ [UCS] MPa	Defect Spacing mm [001]	RQD %		
	-	-	NQ-3 Coring		+ + + - + + + + + - + + - + +		GRANITE: Pink, bedrock, angular, broken (Continued)			-				
	- - 30.0 -	22.0 — -	Q				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 —								- - -				
Note		40.0 —					<u>Planarity</u>	Type		_			Roughness	Infill Amount

Defect Description Legend

Planarity

Planar Irregular Curved Undulose Stepped

<u>Type</u> DI Jt Pt Sh Cs Drilling Induced Joint Cz
Parting on Contact Fz
Shear Seam Banc
Crushed Seam

Seam Crushed Zone Fractured Zone Weak Band Band

Roughness Rough Smooth Polished Slickenside Rο

Infill Amount Clean Stained Veneer Coating cg

BOREHOLE REPORT

BH16-M009

Easting:

Sheet 1 of 2

503,904.0 m

Client: **Baffinland Iron Mines** Project No.: H352034

Project: Mary River Expansion Study Stage 2 Datum:

Location: Milne Port Train Unloading

NAD83

Platform: Ground

Northing: 7,974,935.0 m Surface Elevation: 57.50 m

Bottom Elevation: 52.32 m

Total Depth: 5.2 m

	(m) (m) d				Rig Type/ Mounting: MiniSonic Rig				_	_	d: 10/4/2016	Lo	ogge	а Ву	:			M
Driller:	Sa	mue	l Fly	nn	Hole Diameter (mm): 96		Da	te R	Rev	iew	red:2/10/2017	Re	eviev	ved I	Зу:			SH/W
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	Othe Test
		Vibracore			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 Inferred BOULDERS with SAND: Coarse to fine grained sand Start of Coring at 3.7m. Continued on Rock Core Log sheet.				400									



Client:

HATCH LIBRARY DEVELOPMENT COPY.GLB LOG CORED BOREHOLE BAFFINLAND BOREHOLES_REV 1.GPJ <<DrawingFile>> 30/04/2018 09:38

BOREHOLE LOG

ROCK CORE FORMAT

Project No.: H352034

Project: Mary River Expansion Datum: NAD83

Location: Milne Port Train Unloading Platform:

Baffinland Iron Mines

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

Defect

Legend

Description

Planar

Irregular Curved Undulose Stepped

DI Jt Pt Sh Cs

Drilling Induced

Joint Cz
Parting on Contact Fz
Shear Seam Banc
Crushed Seam

Band

BH16-M009

Easting:

Seam Crushed Zone Fractured Zone Weak Band

Rough Smooth Polished Slickenside

Ro

Clean Stained Veneer Coating

cn sn vn cg

Sheet 2 of 2

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

Dr	iller:	Sa	mue	el Fly	'nn	Hole Di	iameter (mm): 96 Plunge: Vert	Date Checked: 2/10/2017 Reviewed By:	SH/WH
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.	Estimated Strength Is ₍₅₀₎ Defect Spacing mm	
	_ _ _ 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.	- I - I - I - I	
	- - 49.5 -	8.0 —							
	47.5 	10.0 —							
)	45.5 - -	12.0 —						-	
	43.5 - -	- -							
	- 41.5 - -	-							
	- 39.5 - -	-							
Not		20.0 —					<u>Planarity</u>	Type Roughness	Infill Amount

BAFFINLAND GINT LIBRARY.GLB Log SOIL BOREHOLE RAIL ALLGNMENT ALL_WITH ICE LOG_REV 3.GPJ <<DrawingFile>> 02/10/2017 17:43

BOREHOLE REPORT

BH16-M010

Sheet 1 of 1

503,394.0 m

Client: Baffinland Iron Mines Project No.: H352034

Project: Mary River Expansion Study Stage 2 Datum: NAD83

Location: Milne Port Crusher Platform: Ground

Pig Type/ Mounting: MiniSonic Rig Date Logged: 12/9/2016

 Northing:
 7,974,877.0 m

 Surface Elevation:
 13.30 m

Bottom Elevation: -1.90 m

Total Depth: 15.2 m

Co	ntract	or: Bo	art L	ong	year	Rig Type/ Mounting: MiniSonic Rig		Da	te L	ogg	ed:	12/9/2016		Lo	gge	d By	:			MR	
Dr	iller:	Mi	chae	el Sc	ott	Hole Diameter (mm): 96		Da	te R	evie	we	d:2/10/2017		Re	viev	ved I	Зу:			SH/WH	
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	100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests	
O ONTE EDITATIONE ENG SOME DOTATIONE THE THEORY OF THE THE THEORY OF THE			Vibrocore	H-Casing		SILT, some SAND: Brown, moist ICE: Soft, white, cloudy texture GRAVELLY SILTY SAND: Light brown and grey SILT and SAND: Organic silt, brown, moist SILT, trace SAND: Organic, dark grey to brown, moist To Target Depth. Drillhole BH16-M010 terminated at 15.2m.							→	28	0	16	96			-	
Not	tes:																				Γ

BOREHOLE REPORT

BH16-M011

Sheet 1 of 1

503,339.0 m

7,974,868.0 m

12.00 m

-3.20 m

15.2 m

Client: **Baffinland Iron Mines** Project No.: H352034

Project: Mary River Expansion Study Stage 2

Location: Milne Port Crusher

Datum: NAD83

Platform: Ground

Bottom Elevation:

Easting:

Northing:

Total Depth:

Surface Elevation:

Co	ntract	or: Bo	art l	_ong	ıyear	Rig Type/ Mounting: MiniSonic Rig		Da	te Lo	ogge	d:	12/4/2016		1		Jepti d By				15.2 m MR	
Dri	ller:	Mi	chae	el Sc	ott	Hole Diameter (mm): 96		Da	te R	evie	wed	1:2/10/2017		Re	viev	ved E	Зу:			SH/WH	
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 %	0	Moisture Content Profile	100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests	
THE PERGYROLEN TALE, WITH OLD LOOK AS SOLD STORMING THE WORLD THE WAY	- 10.0 -	20- - - - - - - - - - - - - - - - - - -	Vibrocore	H-Casing		SAND and GRAVEL: Light brown, moist, subangular gravel SILT, trace SAND: Dark grey, moist						•		16	0	68	32				
OGINI EIDNAN I GEB EUG GOLF BONETIOLE TAIL		16.0- - - 18.0- - - - 20.0-				Drillhole BH16-M011 terminated at 15.2m.														-	
Not	es:		_	_			_	_	_	_	_						_	_			

BAFFINLAND GINT LIBRARY.GLB Log SOIL BOREHOLE RAIL ALLGNMENT ALL_WITH ICE LOG_REV 3.GPJ <<DrawingFile>> 02/10/2017 17:43

BOREHOLE REPORT

BH16-M012

503,268.0 m

7,974,848.0 m

Easting: Client: **Baffinland Iron Mines** Project No.: H352034 Northing:

Project: Mary River Expansion Study Stage 2

Location: Milne Port Generator

Datum: NAD83

Platform: Ground

12.00 m -3.20 m

Surface Elevation:

Bottom Elevation:

Dri	ller:	Mi	chae	el Sc	ott	Hole Diameter (mm): 96		Dat	te F	Rev	iew	ed:	:2/10/2017		Re	viev	ved E	Зу:			SH/W
Water	Elevation (m)	Depth (m)		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	0	Moisture Content Profile	100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Othe Test
	-	-				SAND and GRAVEL, some SILT, trace COBBLES: Light brown, rounded SILT, some SAND: Dark grey							•		6	39	45	17			
	—10.0 — — — — — 8.0	2.0-	-			SILT, Some SAND. Dark grey									21	0	16	84			
	- - 6.0	6.0-																			
	- - 4.0 -	- 8.0- -	Vibrocore	H-Casing																	
	- 2.0 -	10.0-																			
	- 0.0 	12.0-																			
		14.0-		[15.2]																	
		16.0-				To Target Depth. Drillhole BH16-M012 terminated at 15.2m.															
		18.0-																			
	-8.0	20.0					<u></u>														

BAFFINLAND GINT LIBRARY.GLB Log SOIL BOREHOLE RAIL ALLGNMENT ALL_WITH ICE LOG_REV 3.GPJ <<DrawingFile>> 02/10/2017 17:43

BOREHOLE REPORT

BH16-M013

503,140.0 m

7,974,820.0 m

11.00 m

-4.20 m

Client: **Baffinland Iron Mines** Project No.: H352034

Project: Mary River Expansion Study Stage 2

Location: Milne Port Screening

Datum: NAD83

Platform: Ground

Easting:

Northing:

Surface Elevation:

Bottom Elevation:

Total Depth:

15.2 m Logged By: MR

Contra	actor: Bo	art L	ong	year	Rig Type/ Mounting: MiniSonic Rig		Da	te Lo	gge	d : 1	12/5/2016		1	ogge	-				15.∠ m MR	
Driller	: Mi	chae	l Sc	ott	Hole Diameter (mm): 96		Dat	te Re	eviev	ved:2	2/10/2017		Re	eviev	ved E	Ву:			SH/WH	
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	Blows		Moisture Content Profile	100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests	
- - 9.1	0 2.0-				Organic soil and GRAVEL GRAVELLY SAND, some SILT: Light brown, medium to coarse grained sand, rounded to subangular gravel								25	32	48	20			-	_ _ _ _
	0 4.0-				SILT, some SAND: Dark grey	-							21	5	33	61			-	- - - -
——5.I	0 6.0-	core	sing																-	_ _ _
-3.0	0 8.0-	Vibrocore	H-Casing																-	_ _ _
——————————————————————————————————————	-																		-	
—-3.	.0 14.0-	-	[15.2]																-	-
	- .0 16.0- - -				To Target Depth. Drillhole BH16-M013 terminated at 15.2m.														-	- - -
7.		-																	-	- - -
Notes:																				

BOREHOLE REPORT

BH16-M014

Sheet 1 of 1

Easting: 503,052.0 m Client: **Baffinland Iron Mines** Project No.: H352034

Northing: 7,974,782.0 m Project: Mary River Expansion Study Stage 2 Datum: Surface Elevation: 11.00 m NAD83

Bottom Elevation: -4.20 m Location: Milne Port Tail Pulley Platform: Ground **Total Depth:** 15.2 m

Date Logged: 12/5/2016 Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Logged By:

	Con	tracto	or: Bo	art L	ong	year	Rig Type/ Mounting: MiniSonic Rig		Dat	te Lo	gge	d: 12/5/2016		Lo	gge	d By	:			MR	
	Drill	ler:	Mi	chae	el Sc	ott	Hole Diameter (mm): 96		Dat	te Re	viev	ved:2/10/2017		Re	view	ed E	Зу:			SH/WH	
	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	Blows	Moisture Content Profile	100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests	
	-	- - -9.0	- 2.0-	-			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-	Vibrocore	H-Casing															-	
	-	-3.0	8.0-	Vibro	H H H		SILT, some SAND: Dark grey, fine grained sand													-	
5000	- - -	—1.0 ·	10.0- - -																	-	
	- - -	1.0	12.0- - -																	-	
	-	3.0	14.0-		[15.2]		To Target Depth.													-	
	-	—-5.0	16.0-				Drillhole BH16-M014 terminated at 15.2m.													-	-
The state of the s	-	7.0	18.0-																	-	
=		-9.0	20.0-																		F
	Note:	s.																			1

BAFFINLAND GINT LIBRARY.GLB Log SOIL BOREHOLE RAIL ALLGNMENT ALL_WITH ICE LOG_REV 3.GPJ <<DrawingFile>> 02/10/2017 17:43 Notes:

BAFFINLAND GINT LIBRARY.GLB Log SOIL BOREHOLE RAIL ALLGNMENT ALL_WITH ICE LOG_REV 3.GPJ <<DrawingFile>> 02/10/2017 17:43

BOREHOLE REPORT

BH16-M015

Sheet 1 of 1

503,007.0 m

7,974,799.0 m

11.00 m

Client: **Baffinland Iron Mines** Project No.: H352034

Project: Mary River Expansion Study Stage 2

Location: Milne Port Tail Pulley Alt.

Datum: NAD83

Platform: Ground

Bottom Elevation: -4.20 m

Easting:

Northing:

Surface Elevation:

Total Depth: 15.2 m Logged By:

		D.	ort I			Dia Tyme/ Mayortings MiniConic Dia		Da	40.1		. d.			l		epth				15.2 m	
	ontract					Rig Type/ Mounting: MiniSonic Rig			te L							d By				MR	
D	riller:	Mi	chae	el Sc	ott	Hole Diameter (mm): 96		Da	te R	evie	we	d:2/10/2017		_	view	ed E	By:			SH/WH	-
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	100	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests	
		2.0-				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														-	-
24:11:10:201:25	-3.0	8.0-	Vibrocore	H-Casing																-	- - - -
or o volawingriie/	- 1.0	10.0-																		-	-
VIIII IOE LOG_REV 3.0	- 1.0 -	- 12.0- -												24						-	-
ALIGNMEN I ALL_V	-3.0	14.0-		[15.2]										27						-	-
SOIL BOREHOLE KAIL A		16.0-		, <u></u>		To Target Depth. Drillhole BH16-M015 terminated at 15.2m.								27						-	 - - -
NI LIBRARY.GLB LOG SC		- 18.0- - -																		-	-
	-9.0	20.0-																			ļ
E N	otes:																				

BOREHOLE REPORT

BH17-10

Easting:

Sheet 1 of 2

503,476.0 m

Client: **Baffinland Iron Mines** Project No.: H353004

Rig Type/ Mounting: MiniSonic Rig

Project: Mary River Expansion Study Stage 2

Location: Transfer Conveyor

Contractor: Boart Longyear

Datum: **NAD 83**

Platform: Ground

Date Logged: 10/29/2017

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

	or: Boan	Long	year	RIG Type/ Mounting: WilniSonic Rig	Date L	.og	gea	: 10/29/2017			Log	ged	Бу.				R.
Driller:	Brent	McAr	ndrew	Hole Diameter (mm): 100 mm	Date F	Revi	ew	ed: 1/18/2018			Rev	iewe	d B	y:			G.
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 Profil	e 5	O States	valer content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Othe Test
				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	2	Ö			2				48			
	5.0- - - - - - - - - - - - - - - - - - -									1	9	3	855	55			
	8.0- - - - - 9.0-			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		N						1	99			

BOREHOLE REPORT

BH17-10

Easting:

Sheet 2 of 2

503,476.0 m

17.00 m

Client: **Baffinland Iron Mines** Project No.: H353004

Rig Type/ Mounting: MiniSonic Rig

Project: Mary River Expansion Study Stage 2

Location: Transfer Conveyor

Contractor: Boart Longyear

NAD 83

Platform: Ground

Date Logged: 10/29/2017

Datum:

Northing: 7,974,905.0 m Surface Elevation:

Bottom Elevation: 0.28 m

Total Depth: 16.7 m Logged By: R.S

	Dri	ller:	Bre	ent N	/lcAn	drew	Hole Diameter (mm): 100 mm	Date F	Revi	ew	ed:	1/18/2018		Re	view	ed E	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	0	Moisture Content Profile 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 (Continue	∌d)					21	0	2	98				-
.28		5.0 	12.0— — — — — — — — —											18	0	30	70				
REHOLE MILNE PORT SUPPLIMENTARY BOREHOLES 2017.GPJ < <drawingfile>> 04/04/2018 15:28</drawingfile>		- - - -3.0 - -	- - 14.0- - -				SAND, some SILT, some GRAVEL: TILL, beige, well graded. Ice poor soil.	Nbn				•		8	15	69	16				-
UPPLIMENTARY BOREHOLES 2017.		2.0 -	15.0— — — — — — — — — — — — — — — — — — —									•		8	13	60	27				
		- 	- 17.0- - - - - - 18.0-			<u>/V-X/0</u>	To Target Depth. Drillhole BH17-10 terminated at 16.7m.														+
HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BO		2.0	19.0—																		-
HATCH LIBRARY DEVEL	Note	- - _{-3.0} es: Bh	_{20.0}	elev	ation	ı is esi	imated fro Lidar information.														

BOREHOLE REPORT

BH17-11

Sheet 1 of 2

503,268.0 m

Easting: Client: **Baffinland Iron Mines** Project No.: H353004

Project: Mary River Expansion Study Stage 2 Datum: **NAD 83**

Location: **New Transfer Tower** Platform:

Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Date Logged: Ground

Northing: 7,976,025.0 m Surface Elevation:

Bottom Elevation: m

Total Depth: 15.2 m Logged By: R.S

				0.	yeai	Rig Type/ Mounting. Willisonic Rig	Date	3	3					55	и Бу				R.S
Dril	ler:	Br	ent N	ЛсАr	ndrew	Hole Diameter (mm): 100 mm	Date F	Rev	iew	ed: 3	3/21/2018		_	view	ed E	By:			G.C
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	0	Moisture Content Profile	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		-				Iron Ore (from stockplie base)	Unfrozer												
		1.0-				Rockfill (base material)	unfrozen	l											
		2.0-				GRAVEL and SAND with Silt: Grey. Ice poor soil.	Nbn												
		3.0-																	
		- - -				SAND and GRAVEL: Brown, particles up to 80 mm. Ice poor soil	Nbn		/				6						
		4.0-																	
		5.0— —																	
		6.0-							N				29						
		- - 7.0-																	
		-				SAND: Beige, poorly graded. Ice poor	Nbn												
		8.0— —				soil.							18						
		9.0-				SAND, trace Silt: Brown, fine, unfrozen. Ice poor soil,	Unfrozer						18						
		- - 10.0 -																	

Baffinland Iron Mines

Client:

BOREHOLE REPORT

BH17-11

Sheet 2 of 2

Project No.: H353004 Easting: 503,268.0 m

Northing: 7,976,025.0 m

Project: Mary River Expansion Study Stage 2 Datum: Surface Elevation: **NAD 83 Bottom Elevation:** m Location: **New Transfer Tower** Platform: Ground **Total Depth:** 15.2 m Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Date Logged: Logged By: R.S Driller: Hole Diameter (mm): 100 mm Date Reviewed: 3/21/2018 Brent McAndrew Reviewed By: G.Q Elevation (m) Field Water Conten Soil Description $\widehat{\Xi}$ Moisture Percent Sand Graphic L Other ype Method Liquid Limit Casing TYPE; plasticity or particle characteristics Content Profile Depth (Frozen Soil **Tests** Water (size, grading, shape, roundness), colour, structure, accessory components. Description Sample. 0 25 50 SILTY SAND some Gravel and Organis: Nbn Dark brown to black. 16 SAND: Brown, well graded. Ice poor Nbn 11.0 11.1 m: Trace gravel. 11.34 m to 11.35 m: Trace orgaics, dark grey. 12.0 12.16 m to 12.66 m: Trace gravel. loose, dry and unfrozen. 13.0 14.0-15.0-19 To Target Depth. Drillhole BH17-11 terminated at 15.2m. 16.0 17.0-18.0-

Notes: BH colar elevation is estimated fro Lidar information.

19.0-

HATCH LIBRARY DEVELOPMENT COPY,GLB Log ICE BOREHOLE MILNE PORT SUPPLIMENTARY BOREHOLES 2017.GPJ <<DrawingFile>> 04/04/2018 15:28

Baffinland Iron Mines

Mary River Expansion Study Stage 2

Client:

Project:

BOREHOLE REPORT

BH17-12

Sheet 1 of 2

Easting:

503,180.0 m 7,975,752.0 m

Northing: Surface Elevation:

NAD 83

Project No.: H353004

Datum:

	Lo	catio	ղ։	Ν	lew 7	Γail of Conveyor	Platf	orı	m:	Ground				n Ele Depti		on:		m	
	ontrac	tor: Bo	art L	.ong	year	Rig Type/ Mounting: MiniSonic Rig	Date L	.og	ged	l:				Jeри d By				15.2 m R.S	
	riller:	Br	ent N	/lcAr	ndrew	Hole Diameter (mm): 100 mm	Date F	Revi	iew	ed:3/21/2018		Re	viev	ved I	Зу:			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	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests	
IBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE MILNE PORT SUPPLIMENTARY BOREHOLES 2017.GPJ «DrawingFile» 04/04/2018 15:28		1.0	M	S S		Iron Ore (from stockplie base) Rockfill (base material) SAND and ICE. Soil rich ice. ICE, trace Sand. Soil poor ice. SAND: Brown, poorly graded. Ice poor soil. SILT and fine SAND: Beige and brown to blackish-grey, thinly bedded layers with occasional organics. Ice poor soil. SAND: Biege and brown, poorly graded. Ice poor soil.	Unfrozen unfrozen ICE ICE Nbn Nbn	Rec				13 32 27 22	84	ad a second seco	ad	The state of the s	id.		

Contractor: Boart Longyear

BOREHOLE REPORT

BH17-12

Easting:

Sheet 2 of 2

503,180.0 m

m

Client: **Baffinland Iron Mines** Project No.: H353004

Rig Type/ Mounting: MiniSonic Rig

Project: Mary River Expansion Study Stage 2

Location: New Tail of Conveyor

Datum: **NAD 83**

Platform: Ground

Date Logged:

Northing: 7,975,752.0 m

Surface Elevation: **Bottom Elevation:**

Total Depth: 15.2 m Logged By: R.S

	oi. Boait L	.0.19	, oui	rig Type/ Mounting. Willingonic rig	Date	.09;	,,,,					ggc	и Бу				R.S
Driller:	Brent N	ЛсАn	drew	Hole Diameter (mm): 100 mm	Date F	Revi	ew	ed:	3/21/2018		Re	view	ed E	Зу:			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	0	Moisture Content Profile 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 (Continue		Ö				25						
HATCH LIBRARY DEVELOPMENT COPY GLB Log ICE BOREHOLE MILNE PORT SUPPLIMENTARY BOREHOLES 2017 GPJ << Drawing Files> 04/04/2018 15:28 GP	16.0			To Target Depth. Drillhole BH17-12 terminated at 15.2m.													
Notes: B		ation	ı is est	imated fro Lidar information.													

BOREHOLE REPORT

BH17-13

Sheet 1 of 1

Client: **Baffinland Iron Mines** Project No.: H353004

Rig Type/ Mounting: MiniSonic Rig

Project: Mary River Expansion Study Stage 2

Location: Center of Ore Pile

Contractor: Boart Longyear

Datum: **NAD 83**

Platform: Ground

Date Logged: 10/8/2017

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

Soil Description Woisture Output Description Soil Description Output Description Outpu					_		,	rag type mountaingeeme rag		9,	,	-			-	990	,				K.S
Iron Ore (from stockplie base) Rockfill (base material) SAND and GRAVEL: Brown, particles up to 50 mm. Ice poor soil SAND some GRAVEL some SILT: Brown to beige, particles up to 20 mm, rounded. Ice poor soil.		Dri	ller:	Br	ent N	ЛсАr	ndrew	Hole Diameter (mm): 100 mm	Date F	Revi	ewe	ed:	3/21/2018		Re	view	ed E	Зу:			G.Q
Iron Ore (from stockplie base) Rockfill (base material) SAND and GRAVEL: Brown, particles up to 50 mm. Ice poor soil SAND some GRAVEL some SILT: Brown to beige, particles up to 20 mm, rounded. Ice poor soil.		Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour,	Frozen Soil Description	Recovery	Sample Type		Content Profile	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
SAND and GRAVEL: Brown, particles up to 50 mm. Ice poor soil SAND some GRAVEL some SILT: Brown to beige, particles up to 20 mm, rounded. Ice poor soil.	Ī		_	_				Iron Ore (from stockplie base)	Unfrozer												
up to 50 mm. Ice poor soil SAND some GRAVEL some SILT: Brown to beige, particles up to 20 mm, rounded. Ice poor soil.			-	-			$\mathcal{S}($	Rockfill (base material)	Unfrozer												
SAND some GRAVEL some SILT: Brown to beige, particles up to 20 mm, rounded. Ice poor soil.				1.0-			· 0.		Unfrozer	l											
			- - 8.5 -	- - 2.0- -				Brown to beige, particles up to 20 mm,	Nbn												
- - - - - - - - - -	28		- - 7.5	3.0-																	
1	4/04/2018 15:		- - -	-																	
To Target Depth. Drillhole BH17-13 terminated at 6.1m. Drillhole BH17-13 termina	wingFile>> 0.		- 6.5 -	4.0-	1																
-5.5 5.0 -7.	.GPJ < <drav< td=""><td></td><td>- - -</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></drav<>		- - -	-																	
Notes: BH colar elevation is estimated fro Lidar information.	HOLES 2017.		5.5 	5.0-																	
Notes: BH colar elevation is estimated fro Lidar information.	TARY BORE		- - 4.5	- 6.0-																	
The state of the	ORT SUPPLIMEN		- - -	- - -				_ · · · · · · · · · · · · · · · · · · ·				•		•							
Notes: BH colar elevation is estimated fro Lidar information.	OLE MILNE P		3.5 	7.0- - -																	
Notes: BH colar elevation is estimated fro Lidar information.	ICE BOREH		_ _ 2.5	8.0-																	-
Notes: BH colar elevation is estimated fro Lidar information.	Y.GLB Log		- -	-	1																
Notes: BH colar elevation is estimated fro Lidar information.	MENT COF		— 1.5 —	9.0-	1																
Notes: BH colar elevation is estimated fro Lidar information.	Y DEVELOR		- - -	-	-																
	HATCH LIBRAF	Note	<u></u>		r elev	/atior	n is est	Limated fro Lidar information.								<u> </u>		<u> </u>			

BOREHOLE REPORT

BH17-14

Sheet 1 of 1

503,187.2 m

7,975,912.6 m

10.63 m

4.53 m

Easting: Client: **Baffinland Iron Mines** Project No.: H353004 Northing:

Project: Mary River Expansion Study Stage 2 Datum: **NAD 83**

Location: Mid-Slope of Ore Pile Platform: Ground

Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Date Logged: 10/8/2017

Bottom Elevation:

Total Depth: 6.1 m Logged By: R.S

Surface Elevation:

				·	•			•					-	•				14.0
Dr	iller:	Bre	ent N	ЛсАr	ndrew	Hole Diameter (mm): 100 mm	Date I	Revi	ew	ved	:3/21/2018	R	evie	wed	Ву:			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	0	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
0.101.01.01.01		1.0				Iron Ore (from stockplie base) Rockfill (base material) SAND and GRAVEL trace Silt: Brown, frozen beyond 1.5. Ice poor soil. 0.60 m to 4.00 m: Colour changes to biege, particles up to 20 mm.	Unfrozer Unfrozer Unfrozer to Nbn Nbn											
						SAND: Grey, well graded with thin brown silt lenses. Ice poor soil. 4.15 m: Thin seam of black organics. SAND and GRAVEL trace SILT: Biege. Ice poor soil	Nbn Nbn											-
מאו בבי בכת שבו כני וכנים באל נים בכן יינים בי היינים בי					<u> </u>	To Target Depth. Drillhole BH17-14 terminated at 6.1m.												

Notes: BH colar elevation is estimated fro Lidar information.

HATCH LIBRARY DEVELOPMENT COPY.GLB LOG ICE BOREHOLE MILNE PORT SUPPLIMENTARY BOREHOLES 2017.GPJ <<DrawingFile>> 04/04/2018 15:28

BOREHOLE REPORT

BH17-15

Sheet 1 of 1

Client: **Baffinland Iron Mines** Project No.: H353004

Rig Type/ Mounting: MiniSonic Rig

Project: Mary River Expansion Study Stage 2 Datum:

Location: Toe of Ore Pile

Contractor: Boart Longyear

NAD 83

Platform: Ground

Date Logged: 10/8/2017

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

Dri	iller:	Bre	ent N	/lcAr	drew	Hole Diameter (mm): 100 mm	Date F	Rev	iew	red	l:3/21/	2018			Re	view	ed E	Зу:			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		Sample Type	0	Cont	loisture ent Prof 25	file	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests	
HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE MILNE PORT SUPPLIMENTARY BOREHOLES 2017.GPJ «DrawingFile» > 04/04/2018 15:28		1.0	M No. of the second sec	0		SAND and GRAVEL some Silt: Brown. Ice poor soil. Frozen below 1.5 m. 1.50 mto 4.20: Colour changes to beige. Particles up to 80 mm. m SAND: Grey, well graded with thin brown silt lenses. Ice poor soil. SAND and GRAVEL trace SILT: Biege. Ice poor soil To Target Depth. Drillhole BH17-15 terminated at 6.1m.	Unfrozer Unfrozer to Nbn Nbn Nbn		Sar Sar								ď.	ă.		d e		
HATCH LIBRA	L _{0.2} tes: Bi	10.0 H colar	elev	atior	n is est	l imated fro Lidar information.	1															

Contractor: Boart Longyear

BOREHOLE REPORT

BH17-Camp-1

Easting:

Sheet 1 of 1

503,961.0 m

m

Client: **Baffinland Iron Mines**

Rig Type/ Mounting: MiniSonic Rig

Project: Mary River Expansion Study Stage 2

Location: Proposed Camp Extension Area Project No.: H353004

Datum: **NAD 83**

Platform: Ground

Date Logged:

Northing: 7,976,147.0 m

Surface Elevation: **Bottom Elevation:**

Total Depth: 6.1 m Logged By: R.S

Conti	actor.	Doant	Luily	yeai	rig Type/ Mounting. Willisonic rig	Date	.og	yeu	4.			LC	yye	и Бу				R.S
Drille	r:	Brent	McAi	ndrew	Hole Diameter (mm): 100 mm	Date F	Rev	iew	ed	1 :3/21/2018		Re	viev	ved E	Зу:			G.Q
Water	Elevation (m)	Deptn (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	0 1	Moisture Content Profile	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE MILNE PORT SUPPLIMENTARY BOREHOLES 2017.GPJ << DrawingFile>> 04/04/2018 15:28 Water Water	Elevation	0.00 Nethod	Casing	Table to the state of the state	(size, grading, shape, roundness), colour,		Recovery	Sample Type	0	Content Profile	50	Field Water C	Percent Grav	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	
LIBRARY DEVELOPMENT COPY.GLB Log	BLO	9.0-) votice	n in on	timeted for Lidar information													
HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE ON Signature	: ВН с	9.0-	evatio	n is es	timated fro Lidar information.													

Project:

BOREHOLE REPORT

BH17-EBC-1

503,783.4 m

7,974,920.8 m

Client: **Baffinland Iron Mines**

Mary River Expansion Study Stage 2

Location: Rail Indexer Foundation Project No.: H352034

NAD83

Platform: Ground

Datum:

Total Depth:

Easting:

Northing:

Surface Elevation:

Bottom Elevation:

29.92 m 21.7 m

51.59 m

Date Reviewed: 1/26/2018	Reviewed By:	G.Q

Contractor: Boart Longyear Driller: Brent McAndrew		-	Rig Type/ Mounting: MiniSonic Rig		-		l: 9/19/2017	Lo	Logged By: Reviewed By:							
		/lcAr	ndrew	Hole Diameter (mm): 100 mm	Date Reviewed: 1/26/2018					eviev			C			
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	Oth Tes
- - - - 50.6	- - - 1.0-				SAND and GRAVEL (FILL): Brown. Material placed to create level drilling platform.	Unfrozer										
	-															
— 48.6 —	3.0-				SAND and GRAVEL with Silt: Brown and grey, frozen. ICE, trace Silt: Grey to white.	Nbn		И	DQ1 taken from 3.20-3.30m.							
47.6 -	4.0-							Z	DQ2 taken from 4.60-4.70m.							
—46.6 - - -	5.0-			•••••	SAND, trace Silt: Brown, frozen. Ice poor soil. ICE, trace Silt: White/clear.	Nbn ICE		N	DQ3 taken from 5.10-5.20m.							
- 45.6 - -	6.0-							V	DQ4 taken from 6.20-6.30m.							
	7.0-															
- 43.6 - -	8.0-							N	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		V	DQ6 taken from 9.70-9.80m.							

BOREHOLE REPORT

BH17-EBC-1

Sheet 2 of 4

Easting: 503,783.4 m Client: **Baffinland Iron Mines** Project No.: H352034

Northing: 7,974,920.8 m Project: Mary River Expansion Study Stage 2 Datum: Surface Elevation: 51.59 m NAD83

Bottom Elevation: 29.92 m Location: Rail Indexer Foundation Platform: Ground **Total Depth:** 21.7 m

Date Logged: 9/19/2017 Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Logged By:

	Co	ntracto	or: Bo	art L	.ong	year	Rig Type/ Mounting: MiniSonic Rig	Date I	Log	ged	: 9/19/2017	Lo	gge	d By	:			R.S
	Dri	ller:	Bre	ent N	/lcAr	ndrew	Hole Diameter (mm): 100 mm	Date	Revi	ew	ed: 1/26/2018	Re	view	ed E	Зу:			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	Consistency/ Density	Sample Type	Additional Observations	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
HATCHCANADA2015 DRAFT REV3_MY.GLB Log ICE BOREHOLE JIA_CYN_RAIL ALIGNMENT ALL_WITH ICE LOG_REV 5.GPJ < <drawingfile>> 29/05/2018 10:30</drawingfile>	Note		11.0- 12.0- 13.0- 15.0- -				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. Start of Coring at 14.0m. Continued on Rock Core Log sheet.	Nbn			DQ7 taken from 11.20-11.30m. DQ8 taken from 12.50-12.60m. DQ9 taken from 13.40-13.50m.							
HATCH																		

Baffinland Iron Mines Corporation

Client:

BOREHOLE LOG

ROCK CORE FORMAT

Project No.: H353004

BH17-EBC-1

Sheet 3 of 4

Easting: 503,783.4 m

Northing: 7,974,920.8 m

Project: Mary River Expansion Project Datum: Surface Elevation: 51.59 m **NAD 83 Bottom Elevation:** 29.92 m Location: Rail Indexer Foundation Platform: Ground **Total Depth:** 21.7 m Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Bearing: N/A Date Logged: 9/19/2017 Logged By: R.S Driller: Brent McAndrew Hole Diameter (mm): 100 mm Plunge: Vertical **Date Checked: 1/26/2018** Reviewed By: GΩ Ξ **Rock Description Defect Description** Graphic Log Geological Unit Defect Run #/TCR Weathering/ Estimated Is₍₅₀₎ Cementation Spacing Ξ Elevation Log **ROCK TYPE**; Strength Inclination, type, infill, amount, aperture, planarity, Method mm Depth (Grain size, texture and fabric. Water Defect I 100 % roughness, frequency colour, general defect conditions, ROD 2000 2000 2000 2000 2000 minor constituents. ᇁᆂᄑᄝᄀᆃᆿ Specific General 40.6 11.0 39.6 12.0 13.0 38.6 Resuming in Rock Core Format 14.0m. 14.0 37.6 BEDROCK: Granitic Gneiss, medium to 0 70° Jt PI Sm Silt sn 5 coarse grained, hard to very hard, Cz pinkish-grey colour. Fractures are 96 generally vertical, between 0 to 15 -80° Jt PI Sm sn Cz 3/ degrees and horizontal, from 70 to 90 15.0 36.6 75.5 Jt 10° DI Ir Ro degrees. 75° Jt PI Sm 1 -2 mm clay sn Numerous joints and fractures infilled -0° DI Ir Ro -10° DI Ir Ro with clayey-silt and fine sand throughout. Dia 182.5 35.6 16.0 88 ဖ 34.6 17.0 -60° Jt PI Sm 1 -2 mm clay sn -00 of P13iii 1 -2 iiiii days Fz -20° Jt Pl Sm 1 mm clay sn -40° Jt Pl Sm 1 mm clay sn -10° Dl Ir Ro 106 -0° DI Ir Ro 56 70° Jt PI Sm 1 -2 mm clav sn 2/ 33.6 18.0 60° Jt PI Sm 1 mm clay cn 90° DI Ir Ro -0° DI Ir Ro 0° DI Ir Ro 0° DI Ir Ro 0° DI Ir Ro 0° DI Ir Ro 19.0 -|151₁7 66 10° Jt PI Sm 1 mm clay sn 10° Jt PI Sm sn 62 9 −Jt ∼10° Jt Pl Sm 5mm Clay sn Dia

Notes:

04/04/2018 14:53

HATCH LIBRARY DEVELOPMENT COPY,GLB Log CORED BOREHOLE RAIL INDEXER BOREHOLES 2017, REV B.GPJ <<DrawngFile>>

Defect Description Legend Planarity
PI Planar
Ir Irregular
Cu Curved
Un Undulose
St Stepped

Type
DI Drilling Induced Sm
Jt Joint Cz
Pt Parting on Contact Fz
Sh Shear Seam Ban
Cs Crushed Seam

Sm Seam
Cz Crushed Zone
t Fz Fractured Zone
Band Weak Band

Roughness
Ro Rough
Sm Smooth
Po Polished

Slickenside

nfill Amount

cn Clean
sn Stained
vn Veneer
cq Coating



Project:

BOREHOLE LOG

ROCK CORE FORMAT

BH17-EBC-1

Sheet 4 of 4

Client: **Baffinland Iron Mines Corporation**

Project No.: H353004

Mary River Expansion Project Datum: **NAD 83**

Location: Rail Indexer Foundation Platform: Ground

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

D

503,783.4 m Easting: 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

	Dril	ler:	Br	ent l	ИсАr	ndrew	Hole Di	ameter (mm): 100 mm Plunge: Vertic	al D	ate Chec	ked:	1/26/20	18	Re	view	ved By: G.Q
	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	Estimate Strengt	th	Is ₍₅₀₎ [UCS] MPa	Defect Spacing mm [001] 0008 0008	RQD %	Defect Log	Defect Description Inclination, type, infill, amount, aperture, planarity, roughness, frequency Specific General
			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)		m>±≥1	Φ	- - - - - Dia - 147.9				Specific General - 85° Jt PI Sm Silt sn - 80° Jt PI Sm Silt sn
		- 29.6 -	22.0 —					To Target Depth. Drillhole BH17-EBC-1 terminated at 21.7m.				- - -	 			C10° D1 ir Ro Silt -10° D1 ir Ro Silt -10° D1 ir Ro Silt -10° D1 ir Ro Silt
53	-	- - 28.6 -	23.0 —									- - - -				
< <drawingfile>> 04/04/2018 14:53</drawingfile>		· - 27.6 ·	24.0 —									- - - -				
B.GPJ < <drawingfi< td=""><td></td><td>- - 26.6 -</td><td>25.0 —</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>- - - -</td><td></td><td></td><td></td><td></td></drawingfi<>		- - 26.6 -	25.0 —									- - - -				
EHOLES 2017_REV		- - 25.6 -	26.0 —									- - - -				
RAIL INDEXER BOR		- - 24.6 -	27.0 —									- - - -				
ORED BOREHOLE		- 23.6 - 23.6	28.0									- - - - -				
COPY.GLB Log CO		- - 22.6 -	29.0 —									- - - - -				
EVELOPMENT	Note		30.0					Dianarit	Type			-			Po	ughness Infill Amount
HATCH LIBRARY DEVELOPMENT COPY.GLB Log CORED BOREHOLE RAIL INDEXER BOREHOLES 2017_REV B.GPJ	. 1016	.						Defect Pl Planarity Description Ir Inregular Legend Cu Curved Un Undulose St Stepped	Jt J Pt F Sh S	Drilling Induction Joint Parting on C Shear Seam Crushed Sea	ontac	Cz Cri	am ushed Zone actured Zone eak Band		Ro Sm Po SI	ughness Infill Amount Rough cn Clean Smooth sn Stained Polished vn Veneer Slickenside cg Coating

BOREHOLE REPORT

BH17-EBC-2

503,790.9 m

7,974,895.2 m

Client: **Baffinland Iron Mines**

Project No.: H352034

Project:

Location:

Mary River Expansion Study Stage 2

Rail Indexer Foundation

Datum:

NAD83

Bottom Elevation:

Surface Elevation:

Easting:

Northing:

32.21 m

54.05 m

Platform: Ground

Co	ntracto	or: Bo	art L	.ong	year	Rig Type/ Mounting: MiniSonic Rig	Date I			Ground 1: 9/24/2017		otal [ogge					21.8 m R.S
Dri	iller:	Bre	ent N	ЛсАr	ndrew	Hole Diameter (mm): 100 mm	Date I	Rev	iew	ed: 1/26/2018		eviev	ved	Ву:			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	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 pulveriszed to dry, beige rock flour. Ice poor soil.	Unfrozer			DQ1 taken from 1.00-1.10m.							
	-	-				SAND trace Silt: Brown, well graded. Ice poor soil.	Nbn		И	DQ2 taken from 1.52-1.62m.							
	52.1 	2.0-							И	DQ3 taken from 2.00-2.10m.							
	—51.1 —	3.0-							N	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— -							И	DQ6 taken from 5.00-5.10m.							
	- 48.1 -	6.0—							И	DQ7 taken from 5.80-5.90m.							
	- 47.1 -	7.0—							N	DQ8 taken from 6.90-7.00m.							
	46.1 	8.0—				CDAVEL and CAND some CHT. THE			И	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.											
Not	es:	10.0															

BOREHOLE REPORT

BH17-EBC-2

Client: **Baffinland Iron Mines**

Project No.: H352034

Project:

Mary River Expansion Study Stage 2

NAD83

Surface Elevation: **Bottom Elevation:**

Easting:

Northing:

Total Depth:

7,974,895.2 m 54.05 m

503,790.9 m

Location: Rail Indexer Foundation

Platform: Ground 32.21 m 21.8 m

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 9/24/2017

Datum:

Logged By: R.S Driller: Hole Diameter (mm): 100 mm Date Reviewed: 1/26/2018 Brent McAndrew Reviewed By: G.Q Elevation (m) Field Water Conten Soil Description Consistency/ Density Depth (m) Percent Sand Graphic L Other Additional Method ype Liquid Limit Casing TYPE; plasticity or particle characteristics Frozen Soil Description Water Tests Observations (size, grading, shape, roundness), colour, structure, accessory components. 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) 11.0 12.0 13.0 Start of Coring at 13.3m. Continued on Rock Core Log sheet. 14.0 15.0-16.0 17.0-18.0-19.0-

HATCHCANADA2015 DRAFT REV3, MY.GLB Log ICE BOREHOLE JIA, CYN RAIL ALIGNMENT ALL, WITH ICE LOG, REV 5.GPJ <<DrawingFile>> 29/05/2018 10:30 Notes:

Baffinland Iron Mines Corporation

Client:

BOREHOLE LOG

ROCK CORE FORMAT

Project No.: H353004

BH17-EBC-2

Sheet 3 of 4

Easting: 503,790.9 m

Northing: 7,974,895.2 m Surface Elevation: 54.05 m

	F	Proj	ect:		N	1ary	River	Expansion	n Project		Da	atum	:	NA	D 83		Su	rfac	e Elevation:	54.05 m	1
	L	_oc	atior	ո։	R	ail Ir	ndexe	r Foundat	ion		DI	atfor	m·	C-	ound		Во	tton	n Elevation:	32.21 m	
							Ισολο	n i canaat	1011		FI	atioi		Gi	ound		То	tal E	epth:	21.8 m	
	Cont	racto	or: Bo	art L	.ong	year	Rig Typ	e/ Mounting:	MiniSonic Rig	Bearing:	N/A		ate L	.ogged:	9/24/20)17	Lo	gge	d By:	R.S	
L	Orille		Bre	ent N	/lcAr	ndrew	Hole Di	ameter (mm):	100 mm	Plunge:	Vertica	al C	ate C	Checked	: 1/26/20)18	Re	view	red By:	G.Q	1
	water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	colour,	Rock Descrip ROCK TYP n size, texture general defect minor constitu	PE; and fabric, ct condition		Weathering/ Cementation	St	timated rength	Is ₍₅₀₎ [UCS] MPa	Defect Spacing mm IooLI	%		Inclination, amount, aperturoughness,	type, infill, ure, planarity,	
SET OUT TAKE TO SET WITH THE THOUSEN BUTLETONES OF THE THOUSEN BUTLETONES OF THOUSENING THOUSENING		43.1 42.1 41.1 40.1 39.1 36.1	11.0 —		13/97 12/105 11/130 10/103 9/107	* * * * * * * * * * * * * * * * * * *		Resuming BEDROCK coarse grai pinkish-gre generally videgrees andegrees. Numerous	in Rock Core: Granitic Gneined, hard to vig colour. Fractertical, betweed horizontal, figinits and fracesilt and fine sa	Format 13 iss, mediui ery hard, ures are en 0 to 15 rom 70 to 9 tures infille	m to			, c	Dia 100.7 - Dia 157.4 - 133.8 Dia 70.81		- 42		DI I PRO 3 mm clay 10° Cz Ir Ro Silt 10° Jt PI Ro 3 mm clay 10° Lz Ir Ro Silt 10° Jt PI Ro Silt 10° Jt PI Ro Silt 10° Jt PI Sm Silt 10° Jt PI Sm Silt 10° Jt Ir Ro Silt 10° Jt PI Sm Silt 10° Jt	y sn	
<u> </u>	lotes		20.0 —			+ + +										<u> </u>			LDI		-

Notes:

HATCH LIBRARY DEVELOPMENT COPY.GLB Log CORED BOREHOLE RAIL INDEXER BOREHOLES 2017_REV B.GPJ <<DrawingFile>> 04/04/2018 14:53

Defect Description <u>Legend</u>

Planarity Planar Irregular Curved Undulose Stepped

<u>Type</u> Drilling Induced Sm Joint Cz Parting on Contact Fz Shear Seam Band Crushed Seam DI Jt Pt Sh Cs

Seam Crushed Zone Fractured Zone Weak Band

Roughness Rough Smooth Polished Slickenside Ro Sm Po Sl

Infill Amount Clean Stained Veneer Coating cn sn vn cg



Client:

Location:

BOREHOLE LOG

ROCK CORE FORMAT

BH17-EBC-2

Easting:

Northing:

Sheet 4 of 4

503,790.9 m

7,974,895.2 m

Baffinland Iron Mines Corporation

Project No.: H353004

Project: Mary River Expansion Project

Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Bearing: N/A

NAD 83

Date Logged: 9/24/2017

Ground

Datum:

Rail Indexer Foundation Platform: Surface Elevation: 54.05 m

Bottom Elevation: 32.21 m

Total Depth: 21.8 m Logged By: R.S

	Dril	ler:	Br	ent N	ИсАr	ndrew	Hole Di	ameter (mm): 100 mm Plunge: Vertica	al D	ate Checked	: 1/26/2018	R	evie	ewed By: G.Q
Ī		Œ.			~	g	٦	Rock Description	_		Defect	Τ		Defect Description
	Water	Elevation (m)	Depth (m)	Method	Run #/TCR	Graphic Log	Geological Unit	ROCK TYPE; Grain size, texture and fabric, colour, general defect conditions, minor constituents.	Weathering/ Cementation	Estimated Strength	IS ₍₅₀₎ Spacin [UCS] mm MPa Spacin 000000000000000000000000000000000000	g 	RQD %	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)		W>T2-J>W	-		42 42 K	185" IT PI'Sm Silt sn 20° Jt PI'Sm Silt sn -15° Jt PI'Sm Silt sn -30° Jt PI'Sm Silt sn -0° DI Ir Ro 85° Jt PI'Sm Silt sn -0° DI Ir Ro -10° Jt PI'Sm Silt sn -15° Jt PI'Sm Silt sn -25° DI Ir Ro -10° Jt PI'Sm Silt sn -25° Jt PI'Sm Silt sn
	-	- 32.1 - -	22.0 — - -			++,		To Target Depth. Drillhole BH17-EBC-2 terminated at 21.8m.			-			-0° D I Ir Ro -0° DI Ir Ro -0° DI Ir Ro -0° DI Ir Ro -0° DI Ir Ro -0° Jt PI Ro Silt sn
14:53	-	- 31.1 - -	23.0 — - -											L _{0°} DI Ir Ro
BOREHOLE RAIL INDEXER BOREHOLES 2017_REV B.GPJ < <drawingfile>> 04/04/2018 14:53</drawingfile>	-	- - 30.1 - -	24.0 — - -											
REV B.GPJ < <drawi< td=""><td>-</td><td>- 29.1 - - -</td><td>25.0 — - -</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></drawi<>	-	- 29.1 - - -	25.0 — - -											
BOREHOLES 2017_	-	28.1 - -	26.0											
HOLE RAIL INDEXER	-	27.1 - - -	27.0											
	-	- - -	28.0 —											
OPMENT COPY.GLB	-	- - -	29.0 — - - - 30.0 —											
HATCH LIBRARY DEVELOPMENT COPY,GLB Log CORED	Note	<u>24.1</u>	30.0					Defect Planarity Description Legend Cu Curved Un Undulose St Stepped	Jt S Pt F Sh S	Orilling Induced Joint Parting on Contac Shear Seam Crushed Seam	Sm Seam Cz Crushed Zon tt Fz Fractured Zo Band Weak Band	e ne	S F	Roughness Infill Amount Ro Rough cn Clean m Smooth sn Stained Po Polished vn Veneer SI Slickenside cg Coating

BOREHOLE REPORT

BH17-M008-R

Sheet 1 of 4

503,772.0 m

7,974,960.0 m

52.00 m

30.01 m

Client: **Baffinland Iron Mines Corporation**

Project No.: H353004

Project:

Mary River Expansion Project

NAD 83

Location: Rail Indexer Foundation

Surface Elevation: **Bottom Elevation:**

Easting:

Northing:

Total Depth:

Logged By:

Platform: Ground

Datum:

22.0 m R.S

Contractor: Boart Longyear

Rig Type/ Mounting: MiniSonic Rig

Date Logged: 9/17/2017

Journal Boart Longyou.	rug Typo meaning.		G	Loggod Dy.	K.S
Driller: Brent McAndrev	Hole Diameter (mm): 100 mm	Date Review	ved: 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.	Erozen Soil Description Sample Type	Moisture Content Profile 0 50 100		Other Tests
	NO SAMPLES TAKEN IN OVERBURDEN. Advanced sonic tube to refusal and began diamond coring bedrock.				

Contractor: Boart Longyear

BOREHOLE REPORT

BH17-M008-R

Sheet 2 of 4

Client: Baffinland Iron Mines Corporation Project No.: H353004

Project: Mary River Expansion Project Datum: NAD 83

Rig Type/ Mounting: MiniSonic Rig

Location: Rail Indexer Foundation

OJECT NO.: H353004

Platform: Ground

Date Logged: 9/17/2017

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

D	riller:	Bre	ent N	ИсАr	drew	Hole Diameter (mm): 100 mm	Date F	Revi	ew	/ed: 1/26	6/2018		Revie	wed I	Зу:		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	Cor	Moisture ntent Profile	00					Other Tests
	- - - -41.0 - - - - -40.0	11.0-				NO SAMPLES TAKEN IN OVERBURDEN. Advanced sonic tube to refusal and began diamond coring bedrock. (Continued)											-
	- - - -39.0 - - - - -38.0	13.0—															-
	- - - - - 37.0	15.0—															- - - - - - - -
	-36.0 - - - - -35.0	16.0— — — — — — — — — — — — — — — — — — —				Start of Coring at 17.4m.			_								- - - - - - -
	-34.0 	18.0— — — — — — —				Continued on Rock Core Log sheet.											- - - - -
	32.0	20.0															-

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

BAFFINLAND GINT LIBRARY.GLB Log ICE BOREHOLE RAIL INDEXER BOREHOLES 2017_REV B.GFJ <<DrawingFile>> 04/04/2018 14:30



Client:

BOREHOLE LOG

ROCK CORE FORMAT

Baffinland Iron Mines Corporation Project No.: H353004

Project: Mary River Expansion Project Datum: **NAD 83**

Location: Rail Indexer Foundation Platform: Ground

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

BH17-M008-R

Sheet 3 of 4

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

					5.	,	3 - 71	gg				- 33					33-	K.5
ļ	Dril	ler:	Br	ent N	ИсАr	drew	Hole Di	ameter (mm): 100 mm Plunge: Ve	rtical	D	ate C	hecl	ked:	1/26/20	18	Re	view	ved By: G.Q
	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	St	timate rengti	h	Is ₍₅₀₎ [UCS] MPa	Defect Spacing mm [001]		Defect Log	Defect Description Inclination, type, infill, amount, aperture, planarity, roughness, frequency Specific General
BOREHOLE PAIL INDEXER BOREHOLES 2017_REV B.GPJ < <drawingfile>> 04/04/2018 14:57</drawingfile>		- 40.0 - 40.0 39.0 37.0 36.0	13.0 —					Resuming in Rock Core Format 17.4m										
HATCH LIBRARY DEVELOPMENT COPY.GLB Log CORED BOREHOLE RAIL	-	- 34.0 - 34.0 	18.0 —		2/98 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. Numerous joints and fractures infilled with clayey-silt and fine sand throughou)				0			0 0		— 10° DI Ir Ro ~ 10° JI Ir Ro ~ 10° Jt Ir Sm Clay infill 40mm sn — DI — DI
MEN					(4	+ + +								∑Dia = 23.6 =				Fz
LOP		_ 32.0	20.0 —			+ + +									<u> </u>			10° Jt PI Sm Silt sn
HATCH LIBRARY DEVE	Note	es: Ro	edrill o	f BH	16-M	008. E	levation	is approximate. Defect PI Planarity Description Legend Curved Un Undulose St Stepped		Jt J Pt P Sh S	oint Parting Shear	Induc on Co Seam ed Sea	ontac	Cz Cri t Fz Fra	am ushed Zone actured Zon eak Band		Ro Sm Po SI	Rough cn Clean Smooth sn Stained Polished vn Veneer Slickenside cg Coating



Baffinland Iron Mines Corporation

Mary River Expansion Project

Rail Indexer Foundation

Client:

Project:

Location:

BOREHOLE LOG

ROCK CORE FORMAT

BH17-M008-R

Sheet 4 of 4

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

NAD 83

Ground

Project No.: H353004

	(n				g	_		Rock Descrin	tion					Dofoot				Defect De	escription	_
Dri	ller:	Bre	ent M	cAn	drew	Hole Di	iameter (mm):	100 mm	Plunge:	Vertica	al D	ate Checked	: 1/26/20	18	Revi	iew	ed By	y:	G.	.Q
Co	ntracto	or: Bo	art Lo	ngy	/ear	Rig Typ	oe/ Mounting:	MiniSonic Rig	Bearing:	N/A	D	ate Logged:	9/17/20)17	Log	ged	Ву:		R	.S
1																	-	-		

Datum:

Platform:

	Dril	ler:	Bre	ent N	/lcAr	drew	Hole Di	ameter (mm): 100 mm Plunge: Vertic	al D	ate Checked	: 1/26/20	18	Revi	ewed	Ву:	G.Q
	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	Is ₍₅₀₎ [UCS] MPa	Defect Spacing mm	RQD %	Defect Log	Defect Descript Inclination, type, in amount, aperture, pla roughness, frequent pecific.	fill, narity, ncy
HATCH LIBRARY DEVELOPMENT COPY,GLB Log CORED BOREHOLE RAIL INDEXER BOREHOLES 2017_REV B.GPJ < <drawingfile>> 04/04/2018 14:57</drawingfile>	W		21.0 —	Me	3/97 2/98 Ru	G	9	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) To Target Depth. Drillhole BH17-M008-R terminated at 22.0m.	We Ce	日日	Dia - 94.4 - [57.9]			10 10 10 10 10 10 10 10 10 10 10 10 10 1	pecific Polir Ro Dir Ro	General
RARY DEVELOPA	Note	<u>22.0</u>		BH′	16-M	008. E	levation	is approximate. Defect Description Planarity Planar Ir Irregular	Jt J	Drilling Induced loint		ushed Zone	1	Sm Sr	ough cn Cle mooth sn Sta	an
HATCH LI								Legend Cu Curved Un Undulose St Stepped	Sh S	Parting on Contac Shear Seam Crushed Seam	Band We	actured Zone eak Band				neer ating

Project:

HATCH LIBRARY DEVELOPMENT COPY.GLB LOG ICE BOREHOLE NEW DRIVE HOUSE INVESTIGATION 2017.GPJ <<DrawingFile>> 04/04/2018 15:19

Notes:

BOREHOLE REPORT

BH17-EBC-8

Sheet 1 of 4

Client: Baffinland Iron Mines Corporation

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

	Contrac	tor: Bo	art l	ong	year	Rig Type/ Mounting: MiniSonic Rig	Date I	_ogge	ed:	8/26/2017		Lo	gge	d By	:			R.S
L	Driller:	Br	ent l	VICA	ndrew	Hole Diameter (mm): 100 mm	Date F	Revie	we	d:4/5/2018		Re	view	ved E	Зу:			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	Sample Lype	Moisture Content Profile 0 25	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		1.0-				SAND, some GRAVEL, trace Silt: Brown, particles up to 50 mm. Unfrozen to 1.2 m otherwise frozen. Ice poor soil.	Unfrozer to Nf			 		3	15	72	13			-
		4.0-						-	-			11	15	76	10			-
		5.0-	-									21	7	88	5			-
		6.0-				SAND: Brown, medium to coarse. Ice poor soil. SAND and GRAVEL trace Silt: Brown, well graded. Ice poor soil.	Nf Nf					15	2	93	5			-
	- - - 0.3	8.0-										10	33	55	11			-
MEN COLLISCE ESS ISE DON	- 1.3 - - - - 2.3	9.0-								•		8	42	53	4			-
	-3.3	11.0=																

BOREHOLE REPORT

BH17-EBC-8

Sheet 2 of 4

503,534.5 m

7,976,327.5 m

Client: **Baffinland Iron Mines Corporation**

Project No.: H353004

Project:

Mary River Expansion Project

Ground

Location:

Drive House-South End

Platform:

Datum:

7.66 m **Bottom Elevation:** -31.86 m

0

Total Depth:

Easting:

Northing:

Surface Elevation:

C	ontracto	or: Boa	rt Lo	ongy	/ear	Rig Type/ Mounting: MiniSonic Rig	Date L	og	ged	i: 8/26/2017			otal C gge	-				39.5 m R.S
Di	riller:	Brei	nt M	cAn	drew	Hole Diameter (mm): 100 mm	Date R	evi	iew	red:4/5/2018		Re	view	ed E	Зу:			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	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
IBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE NEW DRIVE HOUSE INVESTIGATION 2017.GPJ < <drawingfile>> 04/04/2018 15:19</drawingfile>		12.0- 13.0- 14.0- 15.0- 16.0- 17.0- 18.0- 19.0- 21.0- 21.0- 21.0- 22.0- 21.0-	WK .		19 1. 4. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	SAND and GRAVEL trace Silt: Brown, well graded. Ice poor soil. (Continued) 12.16 m to 12.76 m: Recovered wet / unfrozen sample. 13.68 m to 15.20 m: Recovered wet / unfrozen sample. SAND, trace Gravel trace Silt: Brown. Ice poor soil 17.32 to 19.8: Material is wet and unfrozen.	Nf (Continue		Sam			23 6 9 17 17 20	46 29 2	45 61 89 85	9 10 0	Trid	34	
HATCH LIBF	otes:	22.0																

Project:

HATCH LIBRARY DEVELOPMENT COPY.GLB LOG ICE BOREHOLE NEW DRIVE HOUSE INVESTIGATION 2017.GPJ <<DrawingFile>> 04/04/2018 15:19

Notes:

BOREHOLE REPORT

BH17-EBC-8

Sheet 3 of 4

Client: Baffinland Iron Mines Corporation

Mary River Expansion Project

Location: Drive House-South End

Project No.: H353004

Datum: Ground

Platform: (

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

	Contrac	tor: Bo	art L	ong	year	Rig Type/ Mounting: MiniSonic Rig	Date Lo	gg	ed:	8/26/2017	Lo	ogge	d By	:			R.S
	Driller:	Br	ent N	ИсАı	ndrew	Hole Diameter (mm): 100 mm	Date Re	vie	we	d :4/5/2018	R	eviev	ved E	Зу:			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	Some Time	Sample Lype	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		23.0				SAND, trace Gravel trace Silt: Brown. Ice poor soil (Continued) SAND with GRAVEL trace Sllt: Brown. Ice poor soil.	Nf to Unfrozen (Continuea				11	25	63	12			
o columnia non carona con		26.0- - - 27.0-				SAND trace Silt: Brown, well graded. OccasionI 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			-
		28.0-				27.7 m: Trace organics, black. 28.8 m to 29.0 m: Trace organics, greyish-black.											-
יסבו ביש יסב בסייביים ייייים ביייים ייייים		30.0-									23	0	95	5			-
		32.0-															_

Project:

HATCH LIBRARY DEVELOPMENT COPY.GLB LOG ICE BOREHOLE NEW DRIVE HOUSE INVESTIGATION 2017.GPJ <<DrawingFile>> 04/04/2018 15:19

Notes:

Contractor: Boart Longyear

BOREHOLE REPORT

BH17-EBC-8

Sheet 4 of 4

Client: **Baffinland Iron Mines Corporation**

Rig Type/ Mounting: MiniSonic Rig

Mary River Expansion Project

Location: Drive House-South End Project No.: H353004

Datum: Ground

Platform:

Date Logged: 8/26/2017

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

Dr	iller:	Bre	ent N	AoN	ndrew	Hole Diameter (mm): 100 mm	Date Re	vie	we	d :4/5/2018	R	eviev	ved I	Зу:			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	Sample Tune	Sample Lype	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		34.0— - 35.0—				SAND trace Silt: Brown, well graded. Occasionl layers of thinly bedded, dark grey and black organics as noted. Ice poor soil. (Continued) 33.2 m to 33.5 m: Some silty organics, greyish-black.	Nf (Continuea	"			22	0	92	8			- - - - - - - - - -
		- - - 36.0-				35.4 m to 35.5 m: Some organics, black.											- - - - -
	- - 29.3 -	37.0—				36.4 m to 36.5 m: Trace organics, greyish-black.					21	0	92	8			- - - - -
		38.0— 38.0— — — — — 39.0—				38.3 m to 38.4 m: Some organics, greyish-black.					21	0	92	8			- - - - - - -
<u></u>		_								••	13 18	0	93	7			
		40.0-				To Target Depth. Drillhole BH17-EBC-8 terminated at 39.5m.											-
	- 33.3 - -	41.0— - -															-
2	- 34.3 - -	42.0— - -															-
		43.0— — — —															- - - -
		44.0															

Project:

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE NEW DRIVE HOUSE INVESTIGATION 2017.GPJ <<DrawingFile>> 04/04/2018 15;20

BOREHOLE REPORT

BH17-EBC-9

-32.08 m

Client: **Baffinland Iron Mines Corporation**

Mary River Expansion Project

Location: Drive House-North End Project No.: H353004

Datum: Ground

Platform:

Easting: 503,548.5 m Northing: 7,976,371.4 m

Surface Elevation: 7.44 m

Total Depth: 39.5 m Logged By: R.S

Bottom Elevation:

	Contract	or: Bo	oart l	ong	ıyear	Rig Type/ Mounting: MiniSonic Rig	Date L	.og	ged	l: 8/28/2017		ogge					39.5 m R.S
	Driller:				ndrew	Hole Diameter (mm): 100 mm				ed:4/5/2018		Reviev					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	Water Content		Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		1.0-				SAND with GRAVEL, trace Silt: Brown. Unfrozen to 1.4 m, otherwise frozen. Ice poor soil.	Unfrozer to Nf										- - - - - - - - - - - - - - - - - - -
27:21	4.4 3.4	3.0- - - - - 4.0-									11		73	5			- - - - - - - -
ייי יייייייייייייייייייייייייייייייייי	- -24 - - - - -	5.0-															- - - - - - -
	- - - - - - - - - - - - - - - - - - -	7.0-									13	3 17	73	10			- - - - - - -
ביירוביי יייני ביש יייני ביש יייני ביייני בייני בייני ביייני ביייני ביייני ביייני ביייני בייני ביייני בייני בייניני ביייני בייני בייני בייני ביייני ביייני ביייני בייני בייני בייני בייני בייני בייני		9.0-	-			SAND, trace Silt: Brown, fine grained. Ice poor soil.	Nf				23		88				
=	Notes:	11.0	<u></u>								<u></u>						-

Project:

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE NEW DRIVE HOUSE INVESTIGATION 2017.GPJ <<DrawingFile>> 04/04/2018 15;20

Notes:

Contractor: Boart Longyear

BOREHOLE REPORT

BH17-EBC-9

Easting:

Sheet 2 of 4

503,548.5 m

7.44 m

Client: **Baffinland Iron Mines Corporation**

Mary River Expansion Project

Project No.: H353004

Location: Drive House-North End

Rig Type/ Mounting: MiniSonic Rig

Datum: Ground

Platform:

Date Logged: 8/28/2017

Northing: 7,976,371.4 m Surface Elevation:

Bottom Elevation: -32.08 m

Total Depth: 39.5 m Logged By: R.S

D	riller:	Bre	ent N	ЛсАr	ndrew	Hole Diameter (mm): 100 mm	Date F	levi	ewe	ed:4/5/2018	R	eviev	ved E	Зу:			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	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		12.0-				SAND; some Gravel: Brown, Ice poor soil. SAND: Brown, fine to medium. Ice poor soil.	Nf				111	16	78	6			-
	- - 7.6	15.0—				14.0 m to 14.5 m: Some rganics: Dark brown, .lce poor soil. ** 14.5 m to 15.7 m: Material is unfrozen, damp with oily texture. Salty.	UNFRO2	ΈŊ			18	3	88	10			-
		16.0— — — — — — — — — — — — — — — — — — —				17.0 m to 17.5 m: Organics and Sand, dark grey, distinct organic odour.					21	0	89	11			+
	- 	18.0—				SAND, some GRAVEL trace Silt: Brown. Ice poor soil.	Nf				22	0	93	7			-
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- - 12.6 - - - - 13.6	20.0-				SAND: Brown to greyish-brown, well graded. Ice poor soil	Nf				12	9	82	9			
	-14.6	22.0															-

Project:

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE NEW DRIVE HOUSE INVESTIGATION 2017.GPJ <<DrawingFile>> 04/04/2018 15;20

Notes:

Contractor: Boart Longyear

BOREHOLE REPORT

BH17-EBC-9

Sheet 3 of 4

503,548.5 m

7.44 m

Client: **Baffinland Iron Mines Corporation**

Mary River Expansion Project

Rig Type/ Mounting: MiniSonic Rig

Location: Drive House-North End Project No.: H353004

Datum: Ground

Platform:

Date Logged: 8/28/2017

Northing: 7,976,371.4 m

Easting:

Surface Elevation:

Bottom Elevation: -32.08 m

Total Depth: 39.5 m Logged By: R.S

	Oontra			uit L	-09	you	rig Type/ Mounting. Willingonic rig	Date Logged. 0/20/2017		-	'aac	и Бу				R.S
L	Driller:	: ,	Bre	ent N	ΛοΛ	ndrew	Hole Diameter (mm): 100 mm	Date Reviewed: 4/5/2018		+	viev	ved E	Зу:			G.Q
	vvater Elevation (m)	Elevation (iii)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description Description O 25	e 50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	- - - - 15	5.6	23.0-				SAND: Brown to greyish-brown, well graded. Ice poor soil (Continued)	Nf (Continued)		21	0	95	5			-
	- - 16 - - -	3.6	- 24.0- - - -						 	24	0	92	8			-
24.0	17 - - - - - 18		25.0— — — — — — — 26.0—						 							-
	- - - - 19	9.6	- - - 27.0-							19	7	86	8			-
	- - 	0.6	- 28.0- - -				27.3 m to 27.6 m: Organics and Sand, black, distinct organic odour.		 	19		04	16			-
	- 21 - - - - - -		29.0—						 	26	0	97	3			-
ארם במלו ומר ממורוו מרד	- - - - 23	3.6	- - - 31.0-													-
	- - 24 - -	4.6	- 32.0- - -						 	20	0	94	6			-
		5.6	33.0						<u>i </u>							

BOREHOLE REPORT

BH17-EBC-9

Total Depth:

Sheet 4 of 4

503,548.5 m

39.5 m

Easting: Client: **Baffinland Iron Mines Corporation** Project No.: H353004

Northing: 7,976,371.4 m Project: Mary River Expansion Project Datum: Surface Elevation: 7.44 m Ground

Bottom Elevation: -32.08 m Location: Drive House-North End Platform:

Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Date Logged: 8/28/2017 Logged By: R.S

	Dril	ler:	Bre	ent N	ЛсАr	ndrew	Hole Diameter (mm): 100 mm	Date I	Rev	iew	ved:4	1/5/2018		Re	view	ed E	Зу:			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	0	Moisture Content Profile 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 (Continue	∌d)												
20	-		36.0-																		
J < <drawingfile>> 04/04/2018 15:20</drawingfile>	-		37.0- - - - - - 38.0-				36.8 m to 37.0 m: Silty-Organics, black, distinct organic odour.														
FIGATION 2017.GPJ	-	- 31.6 -	39.0— —											22	0	98	2			-	-
RIVE HOUSE INVEST	-	- 	40.0— — —				To Target Depth. Drillhole BH17-EBC-9 terminated at 39.5m.													-	[- - -
ARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE NEW DRIVE HOUSE INVESTIGATION 2017.GPU	-	- 	41.0-																	-	
COPY.GLB Log ICE	-		42.0-																	-	
ARY DEVELOPMENT	-	35.6 	43.0-																	-	-

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE NEW DRIVE HOUSE INVESTIGATION 2017.GPJ <<DrawingFile>> 04/04/2018 15;20 Notes:

BOREHOLE REPORT

BH17-RD-1

Easting: 504,095.0 m Client: **Baffinland Iron Mines Corporation** Project No.: H/353004

Northing: 7,976,552.0 m Project: SPMT Road Investigation Datum: Surface Elevation: **NAD 83** 2.10 m

Bottom Elevation: -4.00 m Location: Milne Port Area Platform: Ground **Total Depth:** 6.1 m

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

Dr	iller:	Brer	nt M	cAn	drew	Hole Diameter (mm): 100 mm	Date F	lev	iew	red	l:1/30/2018		Re	view	ed E	Зу:			H.G
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	0	Moisture Content Profile	1	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
SPMT.GPJ < <drawingfile>> 06/03/2018 15:34</drawingfile>		1.0-				SAND and GRAVEL: Brown, well graded (Road Topping) ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss. SAND and GRAVEL with Organics: Grey, wet, fine sand to fine gravel, rounded. SAND, some GRAVEL, trace Silt: Brown, moist to wet, medium sand to medium gravel, rounded.	Unfrozer Unfrozer Unfrozer Unfrozer						111	15	80	5			
BRARY V1.01.GLB LOG ICE BOREHOLE NEW	-4.9	7.0-				To Target Depth. Drillhole BH17-RD-1 terminated at 6.1m.													
HATCH LIBRA	L_ _{5.9} tes: E		eleva	ation	is est	imated from Lidar survey	1												

BOREHOLE REPORT

BH17-RD-1A

Easting:

504,090.0 m

Client: **Baffinland Iron Mines Corporation** Project No.: H/353004

Rig Type/ Mounting: MiniSonic Rig

SPMT Road Investigation Datum: **NAD 83**

Location: Milne Port Area

Project:

Contractor: Boart Longyear

Platform: Ground

Date Logged: 10/17/2017

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

oriller:	Brer	nt Mc	And	Irew	Hole Diameter (mm): 100 mm	Date F	Revi	ew	ed:	:1/30/2018	R	eviev	ved E	Зу:			H.G
Elevation (m)	Depth (m)	Method	- 1	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Recovery	Sample Type	0	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	1.0-		- 1	Ŏ. O.	ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss. SAND with GRAVEL, trace Silt: Brown, moist to wet, medium to coarse. Frozen beyond 1.6 m.	Unfrozer											
	5.0-		8 8 8 8 8		To Target Depth. Drillhole BH17-RD-1A terminated at 4.6m.												
	6.0-																
otes: RI	H colar e	alevati	ion	is est	imated from Lidar survey												

BOREHOLE REPORT

BH17-RD-1B

504,100.0 m

7,976,358.0 m

9.00 m

4.10 m

Easting: Client: **Baffinland Iron Mines Corporation** Project No.: H/353004 Northing:

Project: SPMT Road Investigation Datum: **NAD 83**

Location: Milne Port Area Platform:

Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Date Logged: 10/17/2017

Ground

Total Depth: 4.9 m Logged By: R.S

Surface Elevation:

Bottom Elevation:

	D:II		D	4 N	1 - A -		Hala Biamatan (mm), 400 mm	Deta I				1-4/20/2040		_						14.0
H	Drill		BIG	entiv	/ICAI	ndrew	Hole Diameter (mm): 100 mm	Date	kevi	ew	rea	l: 1/30/2018			viev	ed E	sy:			H.G
	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	0	Moisture Content Profile	50 —	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
							SAND and GRAVEL: Brown, well graded (Road Topping) ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss. With ICE from 3.05 m to 4.90 m.	Unfrozer												
3KAKY V1.01.GLB LOG ICE BUREHULE NEW SPMI.GPJ < <drawngrile>> U6/03/2018 15:34</drawngrile>			5.0- - - - - - - - - - - - - - - - - - -			,	To Target Depth. Drillhole BH17-RD-1B terminated at 4.9m.													
RARY		_1.0	8.0-																	

HATCH LIBRARY V1.01.GLB Log ICE BOREHOLE NEW SPMT.GPJ <<DrawingFile>> 06/03/2018 15:34

BOREHOLE REPORT

BH17-RD-1C

Easting: 504,075.0 m Client: **Baffinland Iron Mines Corporation** Project No.: H/353004

Northing: 7,976,302.0 m Project: SPMT Road Investigation Datum: Surface Elevation: **NAD 83** 10.00 m

Bottom Elevation: 3.90 m Location: Milne Port Area Platform: Ground **Total Depth:** 6.1 m

Date Logged: 10/17/2017 Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Logged By: R.S

Dr	iller:	Br	ent N	ИсАr	ndrew	Hole Diameter (mm): 100 mm	Date I	Rev	iew	ed	d: 1/30/2018		Re	eviev	ved E	Зу:			H.G
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	0	Moisture Content Profile	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-	-			X	SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozer												
	-	-				SAND, trace Gravel, trace Silt: Brown. Frozen beyond 1.5 m.	Nbn												
	9.0 	1.0-				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-																	-
18 15:34	6.0 	4.0- - - -				SILT with Sand,							21	1	23	76			_
< <drawing file="">> 06/03/2018 15:34</drawing>	5.0 	5.0-																	-
	-4.0	6.0-				SAND: Brown, fine to medium grained.	Nbn												-
HATCH LIBRARY V1.01.GLB Log ICE BOREHOLE NEW SPMT.GPJ	-	-				To Target Depth. Drillhole BH17-RD-1C terminated at 6.1m.				,		1							
SLB Log ICE BORE	3.0 	7.0-																	_
ARY V1.01.0	_	-	-																
MTCH LIBR,	tes: B	H colar	elev	/atio	n is es	timated from Lidar survey		<u>. </u>	<u> </u>										

BOREHOLE REPORT

BH17-RD-2

Client: **Baffinland Iron Mines Corporation** Project No.: H/353004

Project: SPMT Road Investigation

Location: Milne Port Area

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

Cor	ntracto	or: Bo	art L	.ong	/ear	Rig Type/ Mounting: MiniSonic Rig	Date L	og	ged	l: 1	10/5/2017	- 1		Depti d By				4.6 m R.S
Dril	ler:	Br	ent N	ЛсАn	drew	Hole Diameter (mm): 100 mm	Date F	lev	iew	ed:1	1/30/2018	R	eviev	ved I	Зу:			H.G
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	0	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
7	-	-			H	SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozen											
-	- - -	-		4		SAND, some Gravel, trace Silt: Brown, moist. **Thin seam of PEAT at 0.80 m	Unfrozen				•	9	18	73	9			
-	9.0 	1.0- - -				SILT with SAND, trace Gravel: Greyish-black. Thin layers of orgaincs throughout, black. Distinct organic odour.Unfrozen to 1.4 m.	Nbn Nbn					22	7	30	63			
-	- 8.0 -	2.0-				SAND some Gravel, trace Silt: Light brown.						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- - -																
lote	- <u></u>	8.0 - H colar	elev	/atior	ı is es	imated from Lidar survey												

BOREHOLE REPORT

BH17-RD-3

Sheet 1 of 1

503,599.0 m

Easting: Client: **Baffinland Iron Mines Corporation** Project No.: H/353004

Project: SPMT Road Investigation Datum: **NAD 83**

Location: Milne Port Area

Platform: Ground

Northing: 7,975,985.0 m Surface Elevation: 12.00 m

Bottom Elevation: 7.43 m

Total Depth: 4.6 m Logged By:

BOREHOLE REPORT

BH17-RD-4

Easting: Client: **Baffinland Iron Mines Corporation** Project No.: H/353004

Project: SPMT Road Investigation Datum:

Rig Type/ Mounting: MiniSonic Rig

Location: Milne Port Area

Contractor: Boart Longyear

NAD 83

Platform: Ground

Date Logged: 10/5/2017

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

							•	•					990	-				K
riller:	Br	ent I	AON	ndrew	Hole Diameter (mm): 100 mm	Date F	Revi	iew	ed	l:1/30/2018	_	Re	view	ed E	Зу:			Н
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	0	Moisture Content Profile	60	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Oth Tes
-				X	SAND and GRAVEL: Brown, well graded (Road Topping)	Unfrozer												
	- - 1.0-				ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozer	1											
-	-				GRAVEL, some Sand, some Silt: brown, frozen. ICE, with SILT, with SAND, trace	Nbn / Vs												
18.0	2.0-				Gravel: Brown. Ice lenses up to 20 mm thick throughout. Approximately 60% ice content. Ice rich soil.													
-	-											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-																	
-	-																	

Contractor: Boart Longyear

BOREHOLE REPORT

BH17-RD-5

Easting:

Northing:

Surface Elevation:

Sheet 1 of 1

503,596.0 m

7,974,811.0 m

Client: **Baffinland Iron Mines Corporation** Project No.: H/353004

Rig Type/ Mounting: MiniSonic Rig

Datum: **NAD 83**

Project: SPMT Road Investigation Location:

Milne Port Area

Platform: Ground

Date Logged: 10/5/2017

30.00 m **Bottom Elevation:** 27.35 m

Total Depth: 2.7 m Logged By: R.S

	Dril	ler:	Br	ent N	ИсАr	drew	Hole Diameter (mm): 100 mm	Date I	Rev	iew	ed	d: 1/30/2018		Re	view	ved E	Зу:			H.G
	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	0	Moisture Content Profile	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
			- - - 1.0-				SAND and GRAVEL: Brown, well graded (Road Topping) ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozer Unfrozer												
	-	- -	-	-			GRAVEL, some SAND trace Silt: Brownish-grey. (Till)	Unfrozer												-
			2.0-	-			SILT and SAND, trace Gravel, brown. GRAVEL, some SAND trace Silt:	Nbn Nbn						17	3	42	55			-
		- - 27.0 -	3.0-				Brownish-grey. (Till) Drilling Refusal. Drillhole BH17-RD-5 terminated at 2.7m.	, INSIII												-
	-	- 26.0 -	4.0-																	-
SPMT.GPJ < <drawingfile>> 06/03/2018 15:34</drawingfile>		- 25.0 -	5.0-																	-
LE NEW SPMT.GPJ < <dra< td=""><td>-</td><td></td><td>6.0-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td></dra<>	-		6.0-																	-
HATCH LIBRARY V1.01.GLB Log ICE BOREHOLE NEW	-	- 23.0 - -	- 7.0- - - -	-																-
HATCH LIBRAR	Note	<u></u>	8.0- H colai	r elev	/atior	n is es	timated from Lidar survey													

BOREHOLE REPORT

BH17-RD-6

Sheet 1 of 1

Client: Baffinland Iron Mines Corporation Project No.: H/353004

Project: SPMT Road Investigation Datum: NAD 83

Rig Type/ Mounting: MiniSonic Rig

Location: Milne Port Area

Contractor: Boart Longyear

1,,00000

Platform: Ground

Date Logged: 10/5/2017

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

Total Depth: 6.1 m Logged By: R.S

Dri	iller:	Bre	ent N	/lcAr	ndrew	Hole Diameter (mm): 100 mm	Date F	Revie	we	ed: 1/30/2018	F	Revie	wed l	Ву:			H.G
Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Description		Sample I ype	Moisture Content Profile 0 25 50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		1.0				SAND and GRAVEL: Brown, well graded (Road Topping) ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozer Unfrozer										
	- 27.5 - - - - 26.5	3.0				SILT and SAND, with GRAVEL: Grey. particles are rounded, up to 75 mm. SAND: Brown, coarse grained. ICE, trace Silt: White/clear.	Nbn Nbn ICE										-
	- 25.5 - - - -	5.0-				GRAVEL and SAND, trace Silt: Grey, ICE, trace Silt, trace Sand: Grey. Soil poor ice.	Nbn										-
	- - - -23.5 - - - -	7.0-				To Target Depth. Drillhole BH17-RD-6 terminated at 6.1m.											-

Notes: BH colar elevation is estimated from Lidar survey

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BOREHOLE REPORT

BH17-RD-7

Easting: 503,896.0 m Client: **Baffinland Iron Mines Corporation** Project No.: H/353004

Northing: 7,974,423.0 m Project: SPMT Road Investigation Datum: Surface Elevation: **NAD 83** 56.00 m

Bottom Elevation: 52.35 m Location: Milne Port Area Platform: Ground **Total Depth:** 3.7 m

Contractor: Boart Longyear Rig Type/ Mounting: MiniSonic Rig Date Logged: 10/5/2017 Logged By: R.S Driller: Reviewed Bv: Brent McAndrew Hole Diameter (mm): 100 mm **Date Reviewed:** 1/30/2018 НG

Dri	ller:	Brei	nt M	cAn	drew	Hole Diameter (mm): 100 mm	Date F	levi	iew	ed:	:1/30/2018		Re	eviev	ved I	Ву:			H.G
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	0	Moisture Content Profile 25	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	- - - 55.0	1.0-				SAND and GRAVEL: Brown, well graded (Road Topping) ROCK FILL: Beige, dry, pulverized by sonic motion, fragments up to 100mm. Source material is Granitic Gneiss.	Unfrozen												-
	- -54.0 - - - - - -53.0	2.0-				SAND with SILT, some Gravel: Brown, well graded. (Till)	Nbn				•		7	13	59	28			-
	-					SAND with GRAVEL with SILT: Grey, well graded. (Till)	Nbn				<u>• i i i</u>		5	31	49	20			
HATCH LIBRARY V1.01.GLB Log ICE BOREHOLE NEW SPMT.GPJ < <drawingfile>> 06/03/2018 15:34</drawingfile>		6.0-				Drilling Refusal. Drillhole BH17-RD-7 terminated at 3.7m.													-
Note	<u>L__{48.0} </u> es: Bl	l _{8.0} ⊥ H colar €	eleva	ation	is est	I imated from Lidar survey													

BOREHOLE REPORT

BH18-004

Sheet 1 of 8

-66.20 m

Client: Baffinland Iron Mine Project No.: H353004

Rig Type/ Mounting: Sonic Drill Rig

Project: Mary River Expansion Study

Location: Milne Port

Contractor: Boart Longyear

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Notes:

Datum: NAD83

Platform:

Date Logged: 4/1/2018

Easting: 563,499.0 m

Northing: 7,975,260.0 m Surface Elevation: 11.50 m

Total Depth: 77.7 m

Logged By: YF/MY

Bottom Elevation:

	Contract	oi. Do	art	Jong	you	rag Type/ mounting. Come Dim rag	Dute I	.ogs	jec	ч.	4/1/2010	-	Jyyc	и Бу	•			Y F/IVIY
ļ	Driller:	Bre	ent N	ιΑοΝ	ndrew	Hole Diameter (mm): 100	Date F	Revi	ew	ved	:	R	eviev	ved I	Ву:			
	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	0	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
Ī		-				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 -		M			21 14	06	86 77	14 17			-
	- - 8.5 -	3.0-			000	SAND, some GRAVEL, trace SILT: Coarse grained, greyish brown, subrounded.	Nbe Nbe - Vc					14	6	77	17			-
	- - 7.5 -	4.0-																-
	- - 6.5 - -	5.0-																-
	- - 5.5 - -	6.0-																-
	- - 4.5 - -	7.0-																-
10.60	- - -3.5 - -	8.0-					Nbn											-
	- - 2.5 -	9.0-					Vbe											-
1000	1.5	10.0																

BOREHOLE REPORT

BH18-004

Sheet 2 of 8

563,499.0 m

Client: Baffinland Iron Mine Project No.: H353004

Project: Mary River Expansion Study Datum: NAD83

Location: Milne Port Platform:

Northing: 7,975,260.0 m Surface Elevation: 11.50 m

Easting:

Bottom Elevation: -66.20 m

Total Depth:

c	ontract	or: Bo	art L	.ong	year	Rig Type/ Mounting: Sonic Drill Rig	Date L	.ogg	jed:	4/1/2018		1	otal C ogge					77.7 m YF/MY
0	riller:	Bre	ent N	/lcAr	ndrew	Hole Diameter (mm): 100	Date F	Revie	ewe	d:		Re	view	ved E	Ву:			
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	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
0.1.1	-0.5	11.0				SAND, some GRAVEL, trace SILT: Coarse grained, greyish brown, subrounded. (Continued) SAND, some SILT: Fine to coarse grained, light brown.	Nbe - Vc (Continue I+S		M			9	14	70	16			- - - - - - - - - - - - - - - - - - -
		13.0— ———————————————————————————————————				GRAVELLY SAND, trace SILT: Fine to coarse grained, light brown.	Nf inferred											- - - - - - - - - - - - - - - - - - -
						SAND, trace GRAVEL, trace SILT: Fine	Nbn	8 / /				7	34	52	14			- - - - - - - - - - -
		19.0— — — — — — 20.0—				to medium grained, light brown. 18.75 m: Organic layer.	to Vx											-

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BOREHOLE REPORT

BH18-004

Sheet 3 of 8

Client: Baffinland Iron Mine Project No.

Rig Type/ Mounting: Sonic Drill Rig

Project: Mary River Expansion Study

Location: Milne Port

Contractor: Boart Longyear

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Notes:

Project No.: H353004

Datum: NAD83

Platform:

Date Logged: 4/1/2018

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

	Contra		. 500	41 L	Jing	you	rag Type/ Mounting. Conic Dill rag	Date Logge	۵.	1, 1,2010	"	-yy	шьу	•			Y F/IVIY
L	Driller:	:	Bre	nt N	/lcAr	ndrew	Hole Diameter (mm): 100	Date Review	ve	d:	R	evie	wed	Ву:			
	Water Flevation (m)		Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Recovery Sample Type	(Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-		-				SAND, trace GRAVEL, trace SILT: Fine to medium grained, light brown. (Continued)	Nbn to Vx (Continued)									
	9.5	5	21.0-				20.80 m: Black organics.				22	0	59	41			-
	_ _ _ 10	1.5	22.0-				GRAVELLY SAND, trace SILT: Fine to coarse grained, brown to red.	Nf inferred									-
	- - - 11	.5	23.0-														-
Collaming Inc.	_ _ 12	1.5	24.0-					Nbn - Vx									-
	13	1.5	25.0-					Nbn - Nf									-
	- 14 - -	.5	26.0-														-
	_ 15 -	i.5	27.0-					Nf inferred			14	11	81	8			-
GED LOG IOE BONEL	_ 	i.5	28.0-				27.70 m - 30.20 m: Water, soft packed.										-
VELOPINIEN I COP 1.6		7.5	29.0-														-
ואיין וייין		1.5	30.0			° 0 °											

BOREHOLE REPORT

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Sheet 4 of 8

Client: Baffinland Iron Mine

Mary River Expansion Study

Rig Type/ Mounting: Sonic Drill Rig

Location: Milne Port

Contractor: Boart Longyear

Project:

Project No.: H353004

Datum: NAD83

Platform:

Date Logged: 4/1/2018

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

	Contrac	ior: Bo	Jail L	Jorig	ıyear	Rig Type/ Mounting: Sonic Drill Rig	Date L	uyg	eu:	4/1/2018	"	ogge	u By				YF/MY
L	Driller:	Br	ent N	ИсΑ	ndrew	Hole Diameter (mm): 100	Date R	evie	ewe	ed:	R	eviev	ved E	Зу:			
	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.	Nf inferred (Continue										- - - - -
	- - 	32.0-				31.50 m - 31.60 m: Wet.	Nf		V								- - - - -
	- 	33.0-					Nf inferred Nbn -										- - - - -
200	- 	34.0-			0000		Vx Nf inferred										- - - - -
		35.0-	-		· 0 · 0		Nbn - Vx Nf	\$	V								- - - -
		36.0- - - - - 37.0-					Nbn										+ - - -
בר ברייבו	- - - - 26.5	- - - 38.0-	-		. O . O . O . O . O . O . O . O . O . O		Nf										 - - - -
MEN (0) : (1)	- - - 27.5	39.0-			.00												-
מיני מיני	-28.5						Nf inferred										-

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Client:

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Notes:

Contractor: Boart Longyear

BOREHOLE REPORT

BH18-004

Easting:

Sheet 5 of 8

563,499.0 m

Baffinland Iron Mine Project No.: H353004

Project: Mary River Expansion Study Datum: NAD83

Rig Type/ Mounting: Sonic Drill Rig

Location: Milne Port Platform:

Date Logged: 4/1/2018

 Northing:
 7,975,260.0 m

 Surface Elevation:
 11.50 m

Bottom Elevation: -66.20 m

Total Depth: 77.7 m

Total Depth: 77.7 m
Logged By: YF/MY

	Contract	01. D0	ait L	Jong	you	rag Type/ mounting. Conic Dill rag	Date Log	goc	u. 4/1/2010	-	Jyye	и Бу	•			Y F/IVIY
	Driller:	Bre	ent N	ιΑοΝ	ndrew	Hole Diameter (mm): 100	Date Revi	ew	ved:	R	eviev	ved I	Ву:			
	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	Sample Type	Moisture Content Profile 0 25 50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	- - 	41.0-				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			-
500000000000000000000000000000000000000	- - - 31.5	43.0—				CLAYEY SILT, ORGANIC: Brown black. SILT with SAND: grey with fine sand.	Nb Nb	//////		20	0	12	88			-
		44.0— ——————————————————————————————————				SAND, some SILT: Grey brown, fine to medium grained sand.	Nb									-
	33.5 - - - - - 34.5	45.0— — — — 46.0—				SAND with SILT: Beige fine sand.	Nb									-
	_ _ _ 35.5	47.0—				SAND, trace SILT: Meidum grained, grey brown.	Nb				0	98	2			-
1.0LD 1.0g 1.0L 0.01.1.1.1	- 36.5 - -	48.0— ———————————————————————————————————														-
		49.0— — — — — — — 50.0—				49.00 m: Silt lenses below, fine, <2 mm.										_

BOREHOLE REPORT

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Sheet 6 of 8

563,499.0 m

Client: Baffinland Iron Mine

Project No.: H353004

Project: Mary River Expansion Study

NAD83

Northing: 7,975,260.0 m Surface Elevation: 11.50 m

Location: Milne Port

Contractor: Boart Longyear

Platform:

Datum:

Bottom Elevation: -66.20 m

Rig Type/ Mounting: Sonic Drill Rig **Date Logged:** 4/1/2018 **Total Depth:** Logged By:

Easting:

77.7 m YF/MY

D	riller:	Bre	ent N	ИсАr	ndrew	Hole Diameter (mm): 100	Date Reviewed:		Re	eviev	ved I	Ву:			,
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 Process of the Content Profile Content Profile O 25 5	0	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		51.0-				SAND, trace SILT: Meidum grained, grey brown. (Continued)	Nb								-
0.1.1		52.0— — — — — — — — — 53.0—				51.80 m: Many silt lenses, 3 mm, wet.	Unfrozen								-
	- - - 42.5	54.0—				SAND, some SILT: Fine, light brown.									-
		55.0— - - - - - 56.0—				SAND, trace SILT: Medium to coarse grained, light brown, wet, silt lenses.	Nb								-
	- - -45.5 - -	57.0—				NO DECOVERY									-
100 MEIN (00)	46.5 47.5	58.0— — — — — — — — — — — — — — — — — — —				NO RECOVERY									- - -
	-48.5	60.0				SILTY SAND: Fine to medium grained, greyish brown, wet.	Possibly								

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BOREHOLE REPORT

BH18-004

Sheet 7 of 8

563,499.0 m

7,975,260.0 m

11.50 m

Client: Baffinland Iron Mine

Project No.: H353004

Project:

Mary River Expansion Study

Northing: Surface Elevation: NAD83

Easting:

Location: Milne Port

Platform:

Datum:

Bottom Elevation: -66.20 m

Total Depth: 77.7 m

	Contrac	ctor: E	Boar	t Lo	ngy	year	Rig Type/ Mounting: Sonic Drill Rig	Date Logg	geo	d: 4/	1/2018			d By				YF/MY
L	Driller:	E	3ren	t Mo	An	drew	Hole Diameter (mm): 100	Date Revi	ew	ved:		Re	viev	ved E	Зу:			
	Water Elevation (m)	Depth (m)	Mothod	Metrion .	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description	Sample Type	C(Moisture ontent Pr 25	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	- - -		-				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.					18	0	23	77			- , , , ,
		5 63	3.0-				SAND, trace SILT: Brown, fine to medium grained sand. SILT, some SAND: Reddish brown to brown, low plasticity, organic layers.	Nf inferred				18	0	6	94			
		5 64	0-								 							
			-				SILTY SAND: Fine to medium grained, light brown.	Nbn										-
			-															-
חבערהטן ייינין ייינין ייינין	57.5	5 69	1.0-				SANDY SILT: Light grey to reddish brown, layered dark organics.	Vx Vs				20	0	1	99			-
į		5 70				址址												

HATCH LIBRARY DEVELOPMENT COPY GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7. GPJ. <<DrawingFile>> 29/08/2018 14:18 Notes:

BOREHOLE REPORT

BH18-004

Easting:

Northing:

Sheet 8 of 8

563,499.0 m

7,975,260.0 m

Client: Baffinland Iron Mine

Project No.: H353004

Project:

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Mary River Expansion Study

Rig Type/ Mounting: Sonic Drill Rig

NAD83

Location: Milne Port

Contractor: Boart Longyear

Platform:

Surface Elevation: 11.50 m **Bottom Elevation:** -66.20 m

Datum:

Total Depth: 77.7 m

Date Logged: 4/1/2018

Logged By: YF/MY

	Contrac	tor. bu	ait L	Long	year	RIG Type/ Mounting: Sonic Drill Rig	Date L	ogge	a:	4/1/2018	"	ogge	d By	:			YF/MY
	Driller:	Bre	ent N	AoN	ndrew	Hole Diameter (mm): 100	Date R	evie	we	d:	R	eviev	ved I	Ву:			
	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	odk oddino	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	- - - - 59.5	71.0-				SILT, some SAND: Light brownish grey, layered dark organics.	Nbn	V A				0	1	99			-
	- - 	72.0-				SILTY CLAY: Brown, layered black organics, iron smelling.	Nbn		1//		20	0	1	99	33	13	-
awilly lier coloured the		73.0-															-
INTERNITION - NOTICE AND INTERNITION - NOTICE	62.5 - - - - - 63.5	74.0-				74.80 m - 75.00 m: Ice lense, with banding of black silt.	Nbn										-
MIN 2010 GEO LECTINICAL III	- - 64.5 - -	76.0-															-
VEHICLE GINI LOGS		77.0—				77.50 m - 77.60 m: Ice lense.	Nbn										-
T.GLD LOG IOL CO.		78.0-				To Target Depth. Drillhole BH18-004 terminated at 77.7m.											-
DEVELOPINIES: 00:	- 	79.0— — — —															-
į		80.0-								<u>i i i </u>							
IDRART DEVELO	-68.5 Notes:	80.0															

BOREHOLE REPORT

BH18-M001

Sheet 1 of 3

503,423.0 m

Client: Baffinland Iron Mine Project No.: H353004

Project: Mary River Expansion Study Datum: NAD83

Location: Milne Port Platform: Northing: 7,974,892.0 m

Easting:

Surface Elevation:

15.00 m **Bottom Elevation:** -10.90 m

Total Depth: 25.9 m Logged By: MY/PS

0	ontract	or: Bo	art L	.ong	year	Rig Type/ Mounting: Sonic Drill Rig	Date L	.ogg	ed:	3/5/2018			ed By				MY/PS
	riller:	Br	ent N	ЛсAı	ndrew	Hole Diameter (mm): 100	Date F	Revie	we	d:	R	evie	wed	Ву:			
Wotor	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 I ype	Moisture Content Profile 0 25 50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	-	-				SANDY SILT: Poorly graded, reddish brown.	Nf inferred										-
	- 14.0 -	1.0-				ICE and SOIL: Sandy silt inclusions.	ICE	/ / / / /	////		20	2	23	75			-
	_ _ _ 13.0	2.0-				1.25 m: Layered sand particles in ice, multicoloured, subangular, frosted large ice crystals coating gravel / sand pieces. 1.50 m: Inclusions becoming sandy	I+S		Z								-
	- - -	-				gravel, some silt, brownish grey, subangular.		/ / //			17	2	19	79			-
0700.07 Coll 1811W	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-				endanied enganies, premieri grey	Vx	V A	7		27	0	1	99			- - - - -
בכל וכר בכויבוע	- - -7.0	8.0-															 - - -
	6.0	9.0-				8.40 m, 8.50 m, and 8.60 m: Ice lense.											- - - -
	5.0	10.0-				9.70 m - 9.75 m: Sand layer bounded by											-

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.GPJ <-DrawingFile>> 29/08/2018 11:47 Notes:

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.GPJ <-DrawingFile>> 29/08/2018 11:47

Notes:

BOREHOLE REPORT

BH18-M001

Sheet 2 of 3

503,423.0 m

Client: Baffinland Iron Mine Project No.: H353004

Project: Mary River Expansion Study Datum: NAD83

Location: Milne Port Platform:

g Date Logged: 3/5/2018

 Northing:
 7,974,892.0 m

 Surface Elevation:
 15.00 m

Easting:

Bottom Elevation: -10.90 m

Total Depth: 25.9 m Logged By: MY/PS

	Con	tracto	or: Bo	art L	ong	year	Rig Type/ Mounting: Sonic Drill Rig	Date Logged:	3/5/2018	Lo	ogge	d By	:			MY/PS
	Drill	er:	Br	ent N	ИсАr	ndrew	Hole Diameter (mm): 100	Date Reviewe	d:	R	eviev	ved I	Зу:			
	Water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Recovery Sample Type	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
14.11 01.07	- - - -	-4.0 -3.0	11.0-				ice lense, reddish brown to grey. SILT, trace SAND: Ice lenses, with stratified organics, brownish grey (Continued) 11.00 m: Sand pockets, reddish brown. 12.20 m: Increase in organic bands, increase in ice lense thickness (1 mm-1 cm).	Vs (Continued)		23	0	3	97			- - - - - - - - - - - - - - - - - - -
AL INVESTIGATION - V7.3F3 SSDIAMILIGNIESS 29/06/2	- - -	-1.0	- - 14.0- - - - 15.0-				13.70 m: Thicker banding of organics (up to 2 mm).	Vx Vr Vc								- - - - - - - - - -
GINT LUGS MR 2010 GEOTECHING	- - - -	1.0	- 16.0- - - - - - 17.0-					Nbn with Vs lenses Nbn								- - - - - - -
ELUPIMENT CUPT.GLB LOG ICE BUREHULE	- - - - - -	3.0	- 18.0— - - - 19.0—				TILL: Sand and silt, with gravel, well graded, coarse gravel (10 mm - 75 mm), reddish brown.	Nbn		1	21	41	38			
AAR I DEVE	-	-50	20.0-				19.70 m: Grey, subangular cobbles,			'	21	41	30			-

BOREHOLE REPORT

BH18-M001

Sheet 3 of 3

503,423.0 m

Client: Baffinland Iron Mine

Project No.: H353004

Project:

Mary River Expansion Study

NAD83

Northing: 7,974,892.0 m Surface Elevation: 15.00 m

Location: Milne Port

Contractor: Boart Longyear

Platform:

Datum:

Bottom Elevation: -10.90 m

Rig Type/ Mounting: Sonic Drill Rig **Date Logged:** 3/5/2018 **Total Depth:** Logged By:

Easting:

25.9 m MY/PS

Drill	ler:	Br	ent N	ИсАr	ndrew	Hole Diameter (mm): 100	Date I	Rev	iew	ed	:	R	eviev	ved E	Зу:			
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	0	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
-		- - - 21.0-				white. 19.80 m: Silty sand, greyish, subrounded to subangular. TILL: Sand and silt, with gravel, well graded, coarse gravel (10 mm - 75 mm), reddish brown. (Continued)	Nbn (Continu	∌d)										
-		22.0- -				21.40 m - 21.60 m: Boulders.			N		•	6	21	41	38			
-		23.0-				22.70 m - 22.90 m: Boulders. 23.60 m - 23.70 m: Boulder, subangular.	Nbn				•	6	22	42	36			
-	—-9.0	24.0-				24.40 m: Boulders, becomes brownish red.												
-	—-11.0	- 26.0-				To Target Depth.					•	7	13	52	35			
-		-				Drillhole BH18-M001 terminated at 25.9m.												
-	—-12.0	27.0- - - -																
-	—-13.0 ·	28.0-																
-	—-14.0	29.0-																
Note	- - 15.0	- - - 30.0=	-															

BOREHOLE REPORT

BH18-M002

Sheet 1 of 4

503,328.0 m

7,974,867.0 m

Client: Baffinland Iron Mine

Project No.: H353004

Project:

Mary River Expansion Study

NAD83

Surface Elevation: 12.00 m

Location: Milne Port

Platform:

Datum:

Bottom Elevation: -27.60 m

Contractor: Boart Longyear Rig Type/ Mounting: Sonic Drill Rig **Date Logged:** 3/5/2018 **Total Depth:** Logged By:

39.6 m MY/PS

Easting:

Northing:

Di	riller:	Bre	nt M	cAn	drew	Hole Diameter (mm): 100	Date F	Revi	ewe	d:			Re	view	ed E	Ву:			
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	Co 0	Moisture ontent Profile 25	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	- - - -11.0 - - - - -10.0	1.0-		000 0 000 0 000 0 000 0 000 0 000 0 000 0		GRAVELLY SAND: Light grey with red, dry. 0.90 m: Inferred cobbles, brownish grey, subrounded multicoloured gravel.	No ice Nf to Nbn		M				9	25	63	12			
< <drawingfile>> 29/08/2018 14:20</drawingfile>	- 9.0 - -	3.0-		000000000000000000000000000000000000000		SAND and GRAVEL: Light grey SANDY SILT: Thinly bedded to	Melted Nbn												
VESTIGATION - V7.GPJ < <drav< td=""><td></td><td>4.0-</td><td></td><td></td><td></td><td>laminated, grey, black organic bands. SILTY SAND: Light grey. SILT, trace to some SAND: Grey, trace organics, with thin silt beds (1 cm thick).</td><td>Nbn Nbn</td><td></td><td>N</td><td></td><td> • </td><td></td><td>20 20</td><td>0 0</td><td>13</td><td>98 87</td><td></td><td></td><td></td></drav<>		4.0-				laminated, grey, black organic bands. SILTY SAND: Light grey. SILT, trace to some SAND: Grey, trace organics, with thin silt beds (1 cm thick).	Nbn Nbn		N		• 		20 20	0 0	13	98 87			
HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.GPJ	- - -6.0 - - - -5.0	6.0-											21	0	17	83			
PPMENT COPY.GLB Log ICE BORE	- -4.0 - - - - - - - -	8.0— ———————————————————————————————————											20	0	4	96			
CH LIBRARY DEVELO	otes:	10.0				9.40 m: Organic silt layer, 2.6 mm thick.	Nbn												

BOREHOLE REPORT

BH18-M002

Sheet 2 of 4

Client: Baffinland Iron Mine

Mary River Expansion Study

Rig Type/ Mounting: Sonic Drill Rig

Location: Milne Port

Project:

Contractor: Boart Longyear

Project No.: H353004

Datum: NAD83

Platform:

Date Logged: 3/5/2018

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

					0.		3 7/1 11 3 3 1 - 111 1 1 9		. 3					55-	,				WITTES
	Drill	er:	Bre	ent N	/lcAn	drew	Hole Diameter (mm): 100	Date I	Rev	iew	ved:		Re	view	ed E	Зу:			
	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	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 (Continue											-
	-	-1.0	11.0-				10.85 m: Solid ice (5x2x2 cm)	Nbn											+
	-	-0.0	12.0—				11.30 m: Solid ice lense 0.5 cm thick across core diameter.			M			25	0	0	100			-
29/08/2018 14:20	-	 -1.0	13.0—																-
< <drawingfile>></drawingfile>	- - - -	2.0	- - 14.0-							N									-
VVESTIGATION - V7.GPJ	-	3.0	 _ _ 15.0—																-
118 GEOTECHNICAL IN	-	-4.0	- 16.0- -																-
EHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.	-		- 17.0- -					Vx Nbn		MM									-
GLB Log ICE BOREH	- - - -	6.0	18.0— —																-
BRARY DEVELOPMENT COPY.GLB Log ICE BOR	-	7.0 -	19.0— — —					Vc Vs Vc											-
3RARY		-8.0	20.0					VC											

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.GPJ <-DrawingFile>> 29/08/2018 14:20 Notes:

BOREHOLE REPORT

BH18-M002

Sheet 3 of 4

503,328.0 m

7,974,867.0 m

12.00 m

Client: Baffinland Iron Mine

Project No.: H353004

Project:

Mary River Expansion Study

Rig Type/ Mounting: Sonic Drill Rig

NAD83

Surface Elevation:

Easting:

Northing:

Location: Milne Port

Platform:

Datum:

Bottom Elevation: -27.60 m **Total Depth:**

Contractor: Boart Longyear

Date Logged: 3/5/2018

39.6 m Logged By: MY/PS

	Driller	:	Bre	ent N	ИсАr	drew	Hole Diameter (mm): 100	Date Review	we	d:	Re	eviev	ved E	Зу:			,. 5
	Water Flevation (m)	Егеуацоп (пп)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.	Frozen Soil Description Sample Top	Cample 13pe	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
		9.0	21.0-				SILT, trace to some SAND: Grey, trace organics, with thin silt beds (1 cm thick). (Continued)	Nbn Nbn (Continued) Vc Nbn									
02:41 01 02:00 %2	-	0.0	22.0— — — — — — — — 23.0—				22.40 m - 22.90 m: Increase in organic bands.	Nbe Nbn									-
Compliance Co.	- - -	2.0	24.0-					Vx									-
	-	4.0	26.0-					Vs Vx	KI								-
EGG ICE BONEHOLE GINT LOGS IN		6.0	27.0- - - - - 28.0-					Vs Nbn	171		23	0	0	100	31	12	
DEVELORIMENT COLT. SEB EC	- - - 17	7.0	- - 29.0- - -				SANDY SILT to SILTY SAND, some GRAVEL: Reddish brown. TILL: Sandy gravel, some silt, light	Vx Nf			5	10	48	42			-
	Notes:	8.0	30.0				brown, angular to subrounded gravel.		<u>1</u>	•	5	16	44	40			

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.GPJ <-DrawingFile>> 29/08/2018 14:20

BOREHOLE REPORT

BH18-M002

Easting:

Northing:

Surface Elevation:

Bottom Elevation:

Sheet 4 of 4

503,328.0 m

7,974,867.0 m

12.00 m

-27.60 m

Client: Baffinland Iron Mine Project No.: H353004

Project: Mary River Expansion Study Datum: NAD83

Location: Milne Port Platform:

Total Depth: 39.6 m Logged By:

Cor	ntracto	or: Bo	art L	.ong	year	Rig Type/ Mounting: Sonic Drill Rig	Date L	ogge	ed:	3/5/2018			ogge	-				MY/PS
Dril	ler:	Bre	ent N	ЛсАr	ndrew	Hole Diameter (mm): 100	Date F	evie	we	d:		Re	eview	ved E	Зу:			
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 Lype	Moisture Content Profile	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	- - - - 19.0	31.0—				TILL: Sandy gravel, some silt, light brown, angular to subrounded gravel. (Continued)	Nf (Continue											
-	- - 	32.0—				32.60 m - 32.90 m: Cobbles, grey,			NII/									
-		33.0— — — — — — 34.0—				subrounded.												
	- - - 23.0	35.0—					Nbn											
		36.0—				35.90 m: Boulder. 36.40 m: Boulder.	Nf			•		2						
		37.0— — — — — — 38.0—																
	- - - 27.0	- - - 39.0-								•		3	45	26	29			
		40.0				To Target Depth. Drillhole BH18-M002 terminated at 39.6m.			1									

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Notes:

BOREHOLE REPORT

BH18-M003

Sheet 1 of 6

Client: Baffinland Iron Mine Project No.: H353004

Project: Mary River Expansion Study Datum:

Location: Milne Port Platform: NAD83

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

	Contr	acto	r: Bo	art L	ong	ıyear	Rig Type/ Mounting: Sonic Drill Rig	Date L	.ogg	ged	l: :	3/6/2018			Jepti d By				51.8 m MY/PS
L	Driller	:	Bre	ent N	/ΙсΑ	ndrew	Hole Diameter (mm): 100	Date F	Revi	ew	ed:		Re	viev	ved E	Зу:			
	Water	Elevation (III)	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	0	Moisture Content Profile	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests
	- - - - 10	0.0	1.0-				SANDY GRAVEL, trace SILT: Brownish grey, subangular to subrounded.	Nf Vx		N V///		•	8	37	43	20			-
	- - -9.	0	2.0-				SAND and SILT: Medium to fine grained, stratified sand and silt layers, reddish grey.	Nbn Vr		NN			27	0	10	90			- - - - -
awilly her	- 	0	3.0-				2.75 m: Organic layer.												- - - - -
			4.0				5.00 m; Organia lavor			И		•	21	0	13	87			- - - - -
	- - - - -5.	0	6.0-				5.00 m: Organic layer. SILTY SAND: Stratified, fine to medium grained, reddish grey.	Nbn											- - - - - -
	-4. - - - - - - -		7.0-							ИИ			24	0	40	60			-
	- 3. 2.		9.0-																-
	- - - -	0	10.0																-

BOREHOLE REPORT

BH18-M003

Sheet 2 of 6

503,055.0 m

7,974,868.0 m

-40.80 m

Client: Baffinland Iron Mine

Project No.: H353004

Project: Mary River Expansion Study

NAD83

Surface Elevation: 11.00 m

Easting:

Northing:

Bottom Elevation:

Location: Milne Port

Platform:

Datum:

Total Depth: 51.8 m

Rig Type/ Mounting: Sonic Drill Rig Contractor: Boart Longyear

Date Logged: 3/6/2018

Logged By: MY/PS

1_			_										_		Ţ.	_			WITH	
1	Drille		Bre	ent N	1AoN	ndrew	Hole Diameter (mm): 100	Date F	Revi	ew	ed:		_	viev	ved E	Зу:				1
Wotor	vvalei	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	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests	
	- - - -	1.0	- - - - 11.0-				SILTY SAND: Stratified, fine to medium grained, reddish grey. (Continued)	Nbn (Continue	∌d)										-	
00/2010 10:00	- - -	1.0	12.0-				SANDY SILT: Stratified silt and fine sand, grey.	Nbn											-	
STIGATION - VI. GP3 - VDIAWIIIGHIBY 28/	- - -	3.0	14.0-				13.30 m: Organic layer.						22	0	1	99			-	
LOGO MIN 2010 GEO LECTINICAL INVEN	- - -	5.0	16.0-				15.20 m - 16.45 m: Sand with organic layer interbeds.	Nbn - Nf											-	
MANT DEVELOPMENT COPTIGED LOGICE BOREHOLE GIN	-	6.0	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. 18.30 m: Return to silt with sand, interbedded with organics and sand, brownish grey.						21	0	15	85			-	

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.GPJ < <DrawingFile>> 29/08/2018 13:56 Notes:

BOREHOLE REPORT

BH18-M003

Sheet 3 of 6

503,055.0 m

11.00 m

Client: Baffinland Iron Mine Project No.: H353004

Project: Mary River Expansion Study

Location: Milne Port

Datum: NAD83

Platform:

Northing: 7,974,868.0 m

Easting:

Surface Elevation:

Bottom Elevation: -40.80 m

Total Depth: 51.8 m Logged By:

Con Orill	tracto			-	year ndrew	Rig Type/ Mounting: Sonic Drill Rig Hole Diameter (mm): 100	Date L			2018		Lo	gge	-				MY/PS
water	Elevation (m)	Depth (m)	Method	Casing	Graphic Log	Soil Description TYPE; plasticity or particle characteristics (size, grading, shape, roundness), colour, structure, accessory components.		Recovery		Moisture ntent Profile	50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Othe Tests
-	10.0	21.0-				SANDY SILT: Stratified silt and fine sand, grey. (Continued) 21.05 m - 21.30 m: Sand layers, medium grained, bounded by organic layer.	Nbn (Continue											
	11.0 12.0	22.0-				21.78 m - 22.00 m: Sand layers, medium grained, bounded by organic layer. 22.45 m: Organic layer.	Vs-Vc											
-	13.0 14.0	24.0				24.40 m: Silty sand with organic banding.			N			25	0	1	99			
	15.0 16.0	26.0-				27.10 m - 29.0 m: Interbedded organic bands in silt and sand.	Vr Nbn		N			20	0	14	86			
-	17.0 18.0	28.0- - - - - 29.0- -							И									

BOREHOLE REPORT

BH18-M003

Sheet 4 of 6

11.00 m

Client: Baffinland Iron Mine

Rig Type/ Mounting: Sonic Drill Rig

Project: Mary River Expansion Study

Location: Milne Port

Contractor: Boart Longyear

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.GPJ < <DrawingFile>> 29/08/2018 13:56

Notes:

Project No.: H353004

Datum: NAD83

Platform:

Date Logged: 3/6/2018

Easting: 503,055.0 m Northing: 7,974,868.0 m

Bottom Elevation: -40.80 m

Total Depth: 51.8 m Logged By: MY/PS

Surface Elevation:

_D	.:	D	4 N	4 - A		Hele Diemeter (mm), 100	Data Davida						_			WITH O	
Dr	iller:	Bre	ent i	/ICAr	drew	Hole Diameter (mm): 100	Date Review	we	PG:	_	eviev	ved I	By:				4
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 Laboratory	odf. oddino	Moisture Content Profile 0 25 50	Field Water Content	Percent Gravel	Percent Sand	Percent Fines	Liquid Limit	Plastic Index	Other Tests	
		31.0				SANDY SILT: Stratified silt and fine sand, grey. (Continued)	Nbn (Continued)									-	
	- - - 22.0 -	33.0-				33.50 m: Mottled organic layers,										-	
		34.0— — — — — — — 35.0—				brownish grey, organic layers at 34.75 m, 33.85 m, and 34.10 m. 34.95 m - 35.10 m: More sand present. 35.30 m, and 36.06 m: Organic layers.										-	
	- 	36.0— — — — — — —				33.30 III, and 30.00 III. Organic layers.										-	
	- - - - 27.0	38.0-				37.55 m: Brownish grey dipping organic layer (10 cm).										-	
		39.0— — — — — 40.0—				38.50 m, 38.80 m, 39.40 m: Organic layering.	Vs									-	

BOREHOLE REPORT

BH18-M003

Sheet 5 of 6

503,055.0 m

7,974,868.0 m

11.00 m

Client: Baffinland Iron Mine

Project No.: H353004

Project:

HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.GPJ < <DrawingFile>> 29/08/2018 13:56

Notes:

Mary River Expansion Study

Northing: Surface Elevation: NAD83

Location: Milne Port

Contractor: Boart Longyear

Platform:

Datum:

Bottom Elevation: -40.80 m

Total Depth: 51.8 m

Rig Type/ Mounting: Sonic Drill Rig **Date Logged:** 3/6/2018 Logged By: MY/PS

Easting:

	D.:		-		4- ^		Hala Diamatan (1991), 400	B. ()			. al.		_						WIT/I O	
F	Driller: Brent McAndrew				IAON	ndrew	Hole Diameter (mm): 100	Date F	evie	we	ea:		_	viev	ved I		-			
	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	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 (Continue Nbn	ed)										-	- - - - - -
3F3	-	32.0	43.0-					Vx Vr Vx Vs		Z									-	
GINT LOGS MR 2018 GEOTECHINICAL INVESTIGATION - V.C.	- - - - - -	335.0	45.0— 45.0— 46.0— 47.0—				TILL: Sand and gravel to sandy gravel, fine to coarse grained, grey, subangular to subrounded.	Nf											-	
YANT DEVELOPINIENT COPT. GLB LOG TOE BOREHOLE	- - - -	337.0	48.0					Nbn	V # W /V		%		67	25	45	30			-	



Contractor: Boart Longyear

BOREHOLE REPORT

BH18-M003

Sheet 6 of 6

503,055.0 m

7,974,868.0 m

11.00 m

-40.80 m

Client: Baffinland Iron Mine Project No.: H353004

Project: Mary River Expansion Study Datum: NAD83

Rig Type/ Mounting: Sonic Drill Rig

Location: Milne Port Platform:

Date Logged: 3/6/2018

Bottom Elevation:

Total Depth: 51.8 m Logged By: MY/PS

Easting:

Northing:

Surface Elevation:

	Dril	ller:	Bre	nt M	lcAn	drew	Hole Diameter (mm): 100	Date F	Rev	iew	ed	l:	R	eviev	ved l	Ву:			
	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	0	Moisture Content Profile	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 (Continue	∌d)										
< <drawingfile>> 29/08/2018 13:56</drawingfile>			52.0-			W. V.	To Target Depth. Drillhole BH18-M003 terminated at 51.8m.												-
2018 GEOTECHNICAL INVESTIGATION - V7.GPJ			55.0—																-
HATCH LIBRARY DEVELOPMENT COPY.GLB Log ICE BOREHOLE GINT LOGS MR 2018 GEOTECHNICAL INVESTIGATION - V7.GPJ <-DrawingFile>> 29/08/2018 13:56			58.0																-
HATCH LIBRA	Note	—-49.0 PS:	60.0										1						





Baffinland Iron Mines Corporation - Mary River Expansion Project 2016-2017-2018 Milne Port Geotechnical Investigation Factual Data Report - October 5, 2018

Appendix CSample Photographs

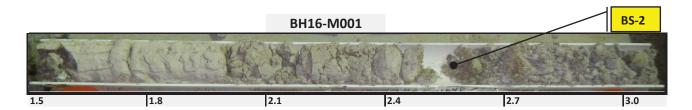
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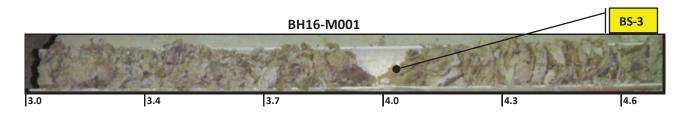


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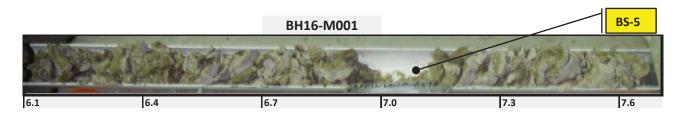
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Completion Date: 8/12/2016 Baffinland Iron Mines



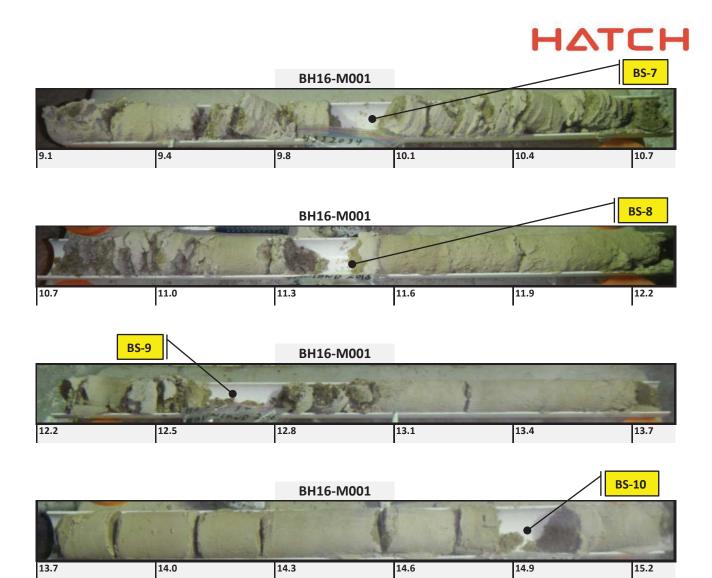








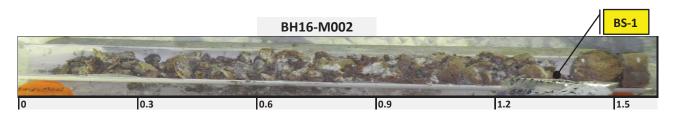






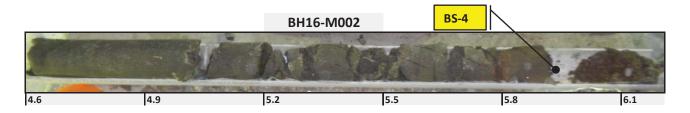
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Completion Date: 4/12/2016 Baffinland Iron Mines



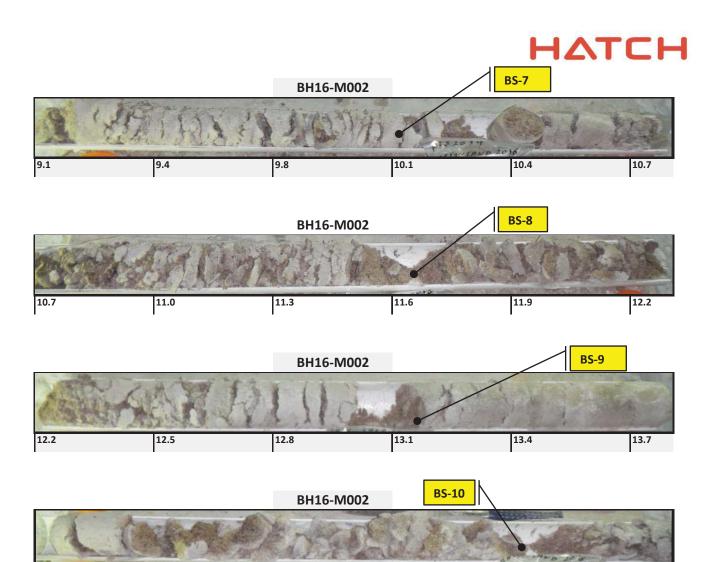












14.6

14.3

14.0



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Completion Date: 4/12/2016 Baffinland Iron Mines



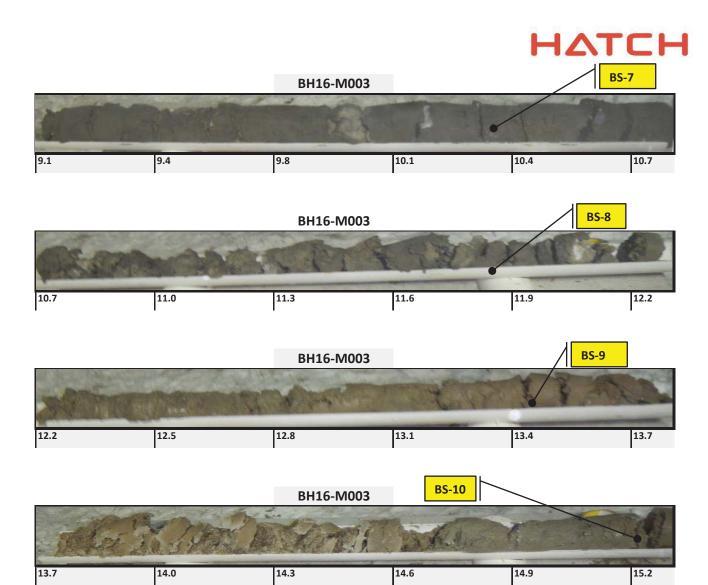








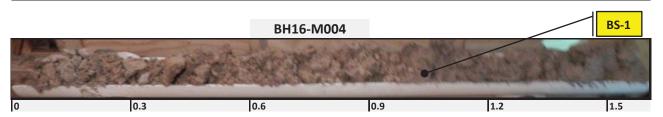


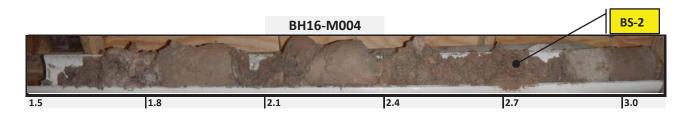


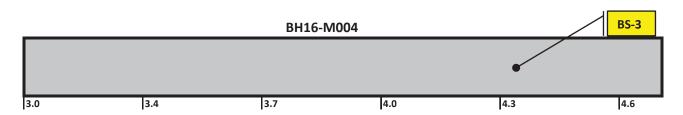


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Completion Date: 8/12/2016 Baffinland Iron Mines











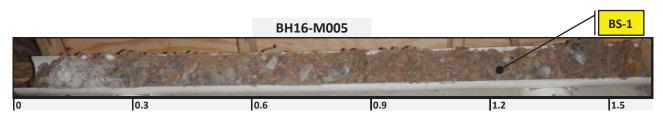


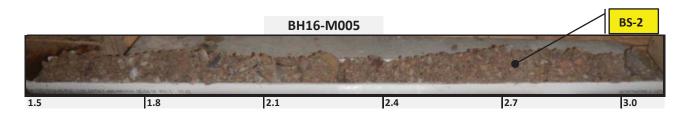


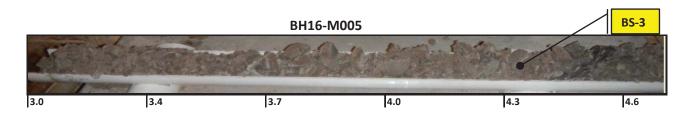


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Completion Date: 8/12/2016 Baffinland Iron Mines



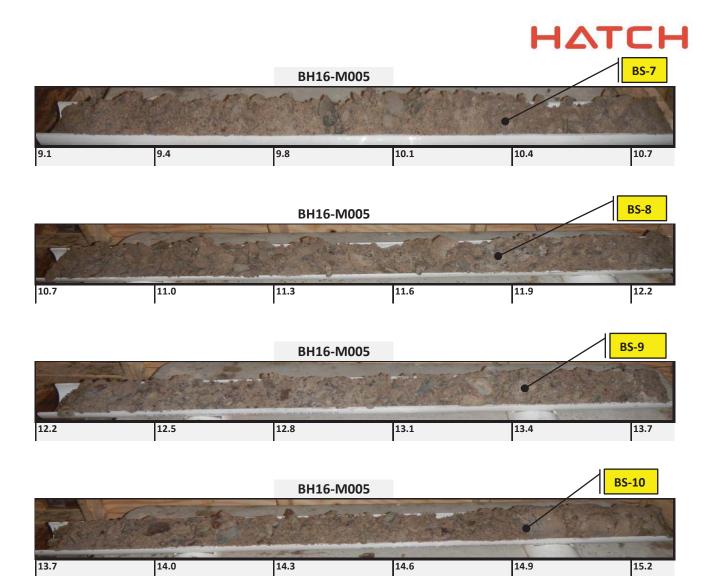








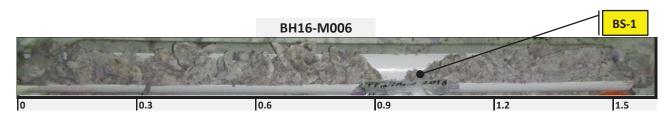






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Completion Date: 8/12/2016 Baffinland Iron Mines

















11.6

11.3

12.2

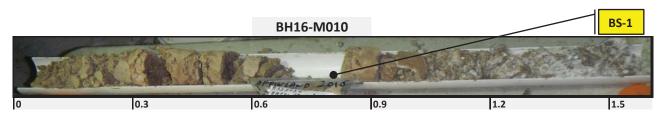
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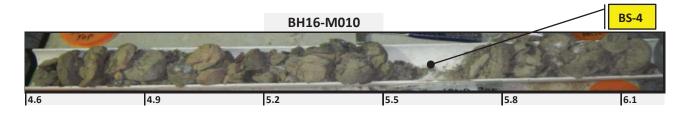
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Completion Date: 9/12/2016 Baffinland Iron Mines

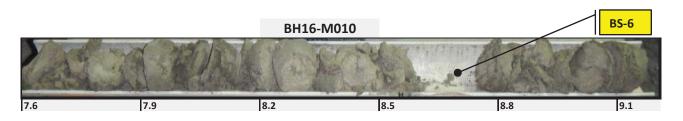


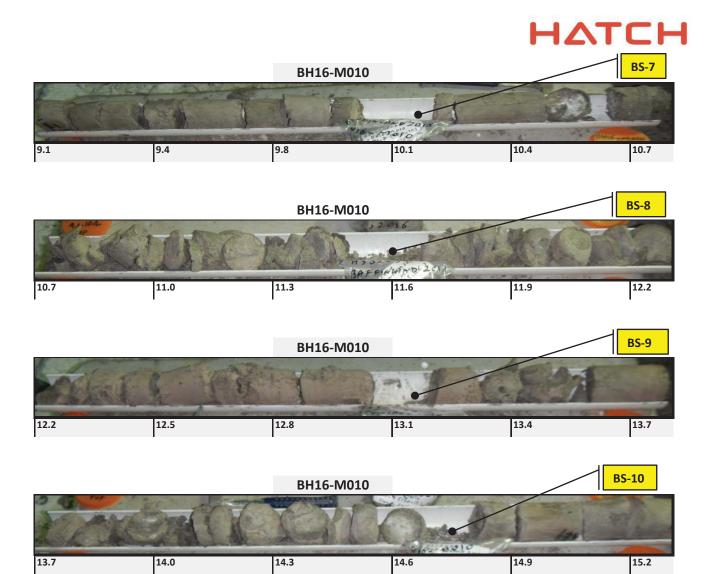








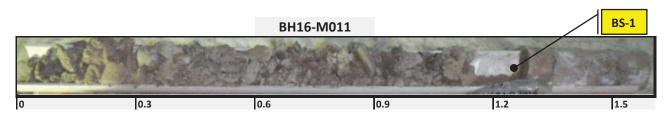


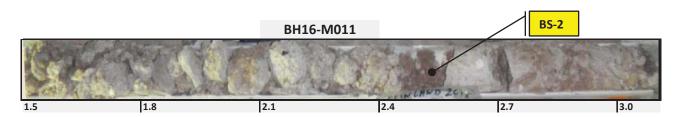




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Completion Date: 4/12/2016 Baffinland Iron Mines

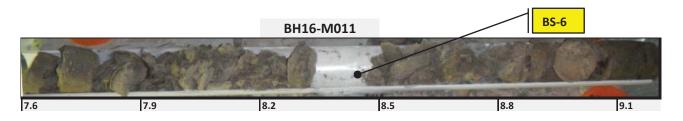


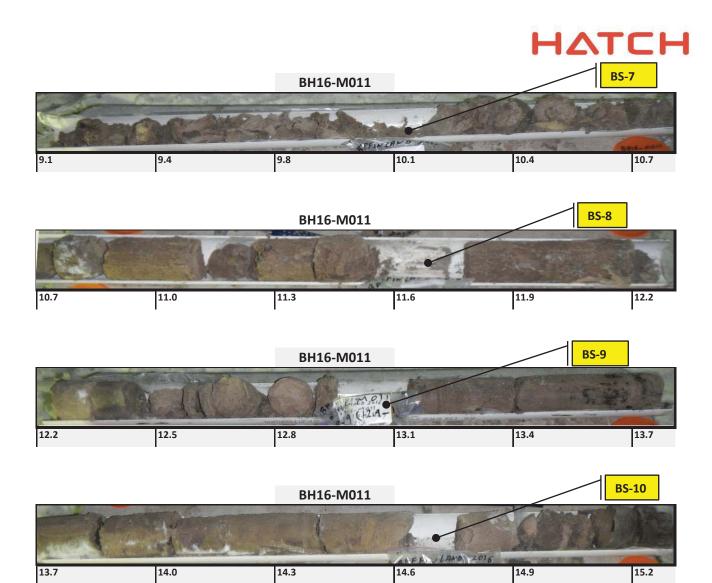








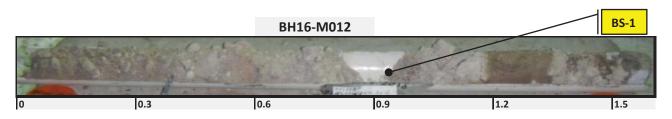


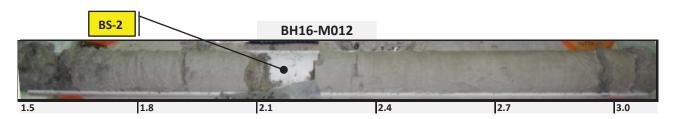




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Completion Date: 9/12/2016 Baffinland Iron Mines



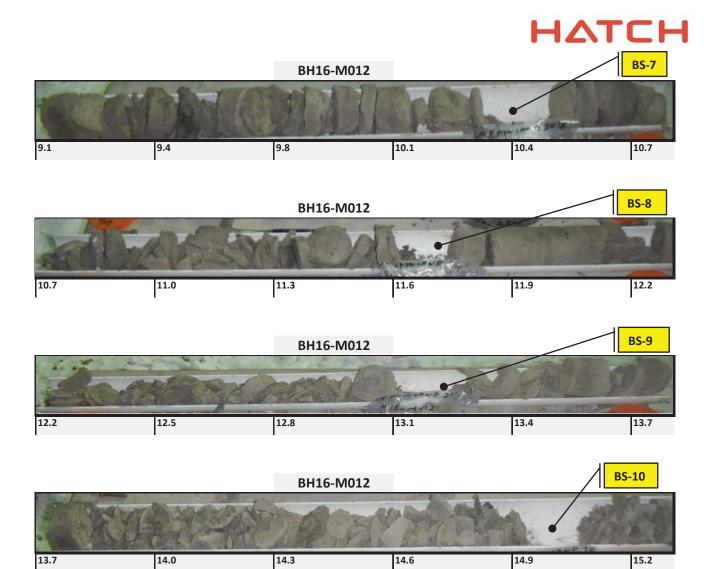








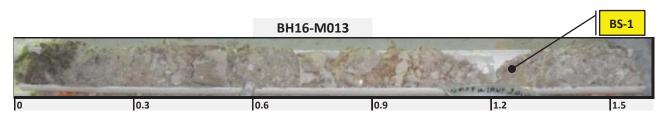


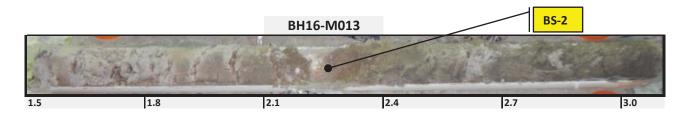


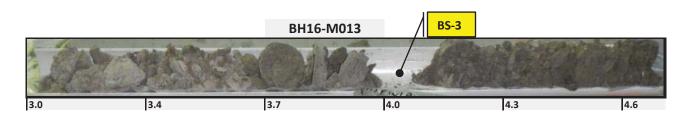


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Completion Date: 5/12/2016 Baffinland Iron Mines











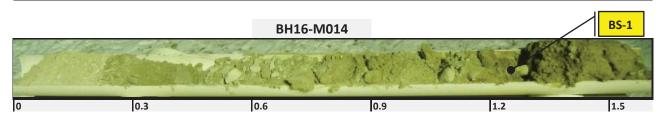






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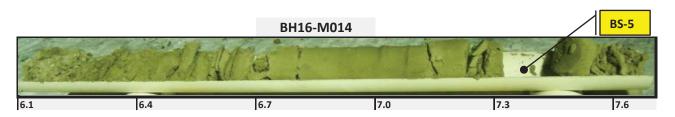
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Completion Date: 5/12/2016 Baffinland Iron Mines



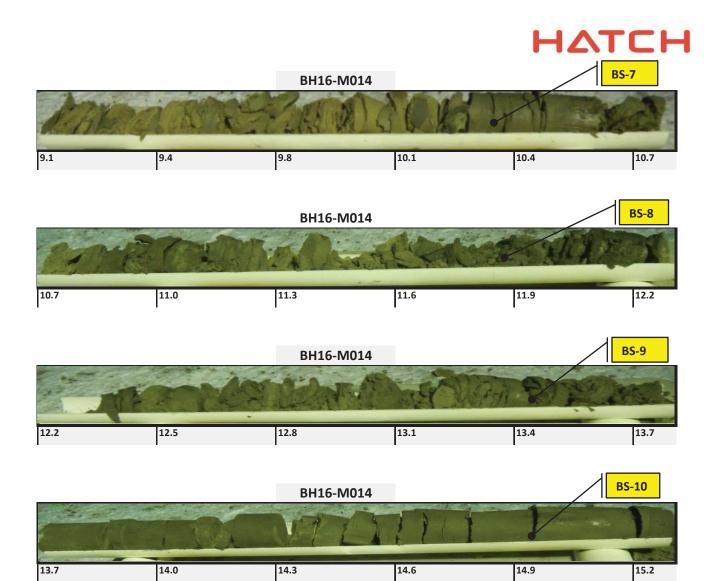














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Location: 17 W 503007 7974799 Pre-feasibility Study
Completion Date: 5/12/2016 Baffinland Iron Mines





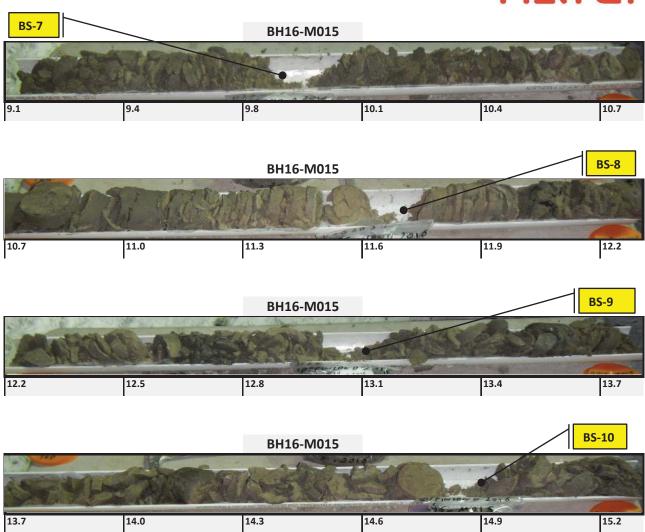










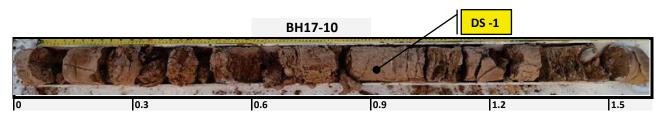


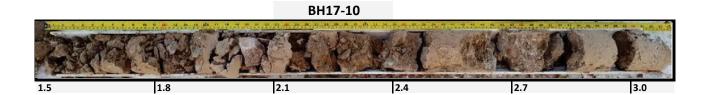
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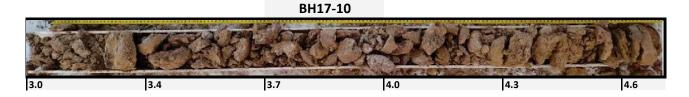


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Location: 17 W 503476 7974905 2017 Geotechnical Investigation

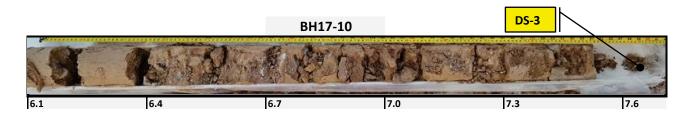
Completion Date: October 29, 2017 Baffinland Iron Mines













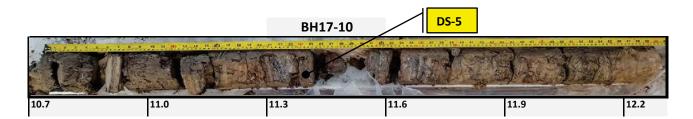


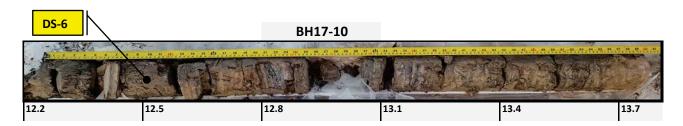
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Location: 17 W 503476 7974905

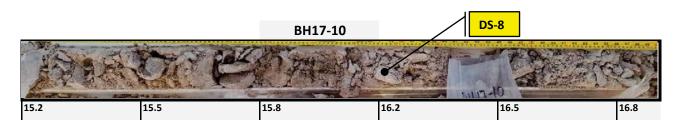
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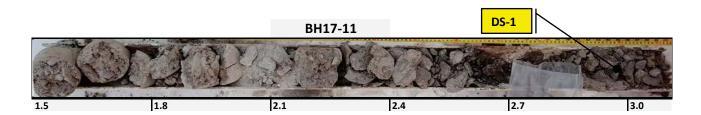


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Location: 17 W 503268 7976025 2017 Geotechnical Investigation

Completion Date: October 30, 2017 Baffinland Iron Mines

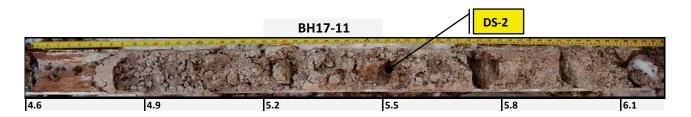
BH17-11





BH17-11







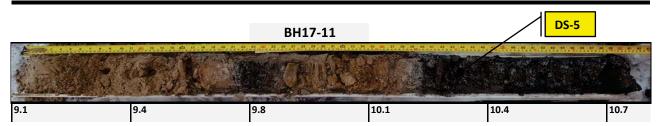




Borehole Name: BH17-11 Mary River Expansion Study Stage 2

Location: 17 W 503268 7976025

Completion Date: October 30, 2017 Baffinland Iron Mines



BH17-11









Borehole Name: BH17-12

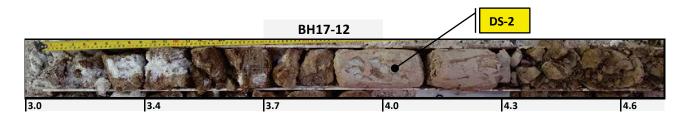
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Baffinland Iron Mines

BH17-12

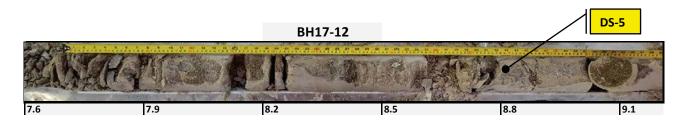














DS-6

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



BH17-12



BH17-12

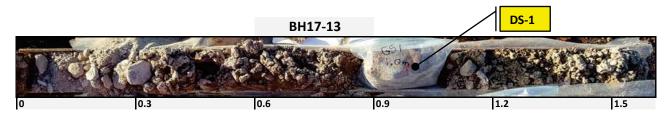






Borehole Name: BH17-13 Mary River Expansion Study Stage 2
Location: 17 W 503159 7975912 2017 Geotechnical Investigation

Completion Date: October 8, 2017 Baffinland Iron Mines











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



BH17-14









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

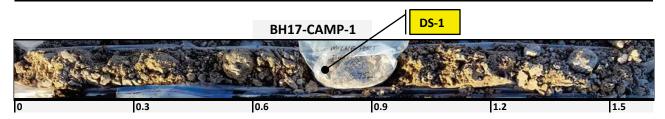






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Location: 17 W 529031 7976147 2017 Geotechnical Investigation

Completion Date: October 7, 2017 Baffinland Iron Mines







BH17-CAMP-1

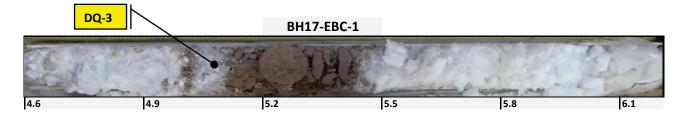


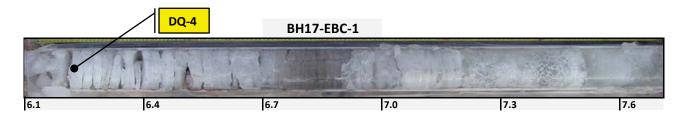


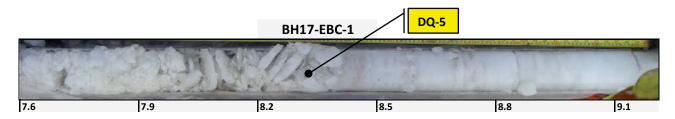
Borehole Name: BH17-EBC-1 Mary River Expansion Study Stage 2
Location: 17 W 503783.38 7974920.79 2017 Geotechnical Investigation

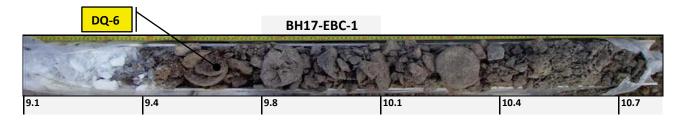
Completion Date: September 20, 2017 Baffinland Iron Mines

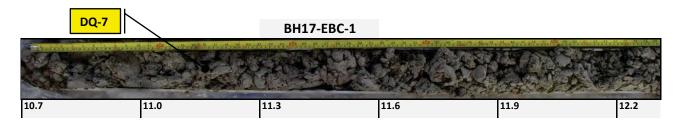








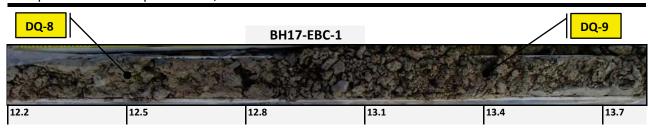


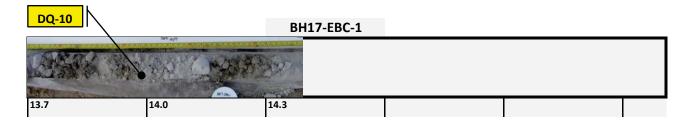




Borehole Name: BH17-EBC-1 Mary River Expansion Study Stage 2
Location: 17 W 503779 7974925 2017 Geotechnical Investigation

Completion Date: September 20, 2017 Baffinland Iron Mines







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



BH17-EBC-1A



BH17-EBC-1A



BH17-EBC-1A



BH17-EBC-1A



BH17-EBC-1A



21.67



Borehole Name: BH17-EBC-2

Location: 17 W 503790.94 7974895.17

Completion Date: September 25, 2017

Mary River Expansion Study Stage 2 2017 Geotechnical Investigation

Baffinland Iron Mines

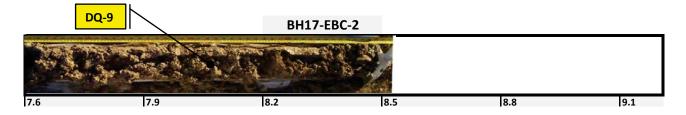














Borehole Name: BH17-EBC-2

Location: 17 W 503790.94 7974895.17

Completion Date: September 25, 2017

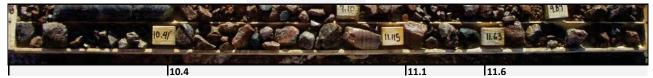
Mary River Expansion Study Stage 2

Baffinland Iron Mines

BH17-EBC-2



BH17-EBC-2



BH17-EBC-2

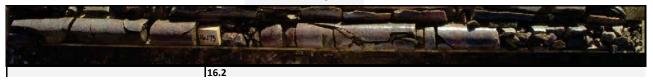


BH17-EBC-2



BH17-EBC-2







Borehole Name: BH17-EBC-2

17 W 503790.94 7974895.17

Location: September 25, 2017 Completion Date:

Mary River Expansion Study Stage 2

Baffinland Iron Mines

BH17-EBC-2



BH17-EBC-2



BH17-EBC-2







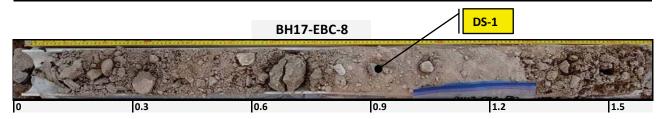
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Location: 17 W 503534.503 7976327.453

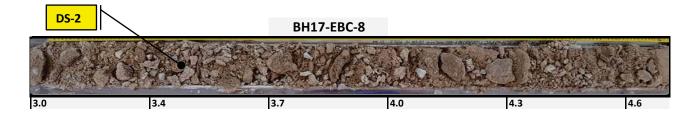
Completion Date: September 27, 2017

Mary River Expansion Study Stage 2 2017 Geotechnical Investigation

Baffinland Iron Mines















Borehole Name: BH17-EBC-8

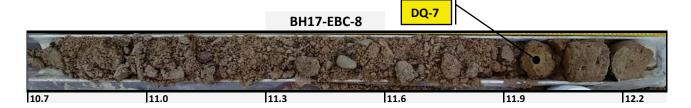
Location:

17 W 503534.503 7976327.453

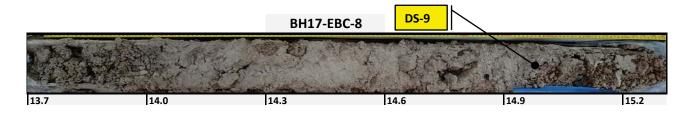
Mary River Expansion Study Stage 2

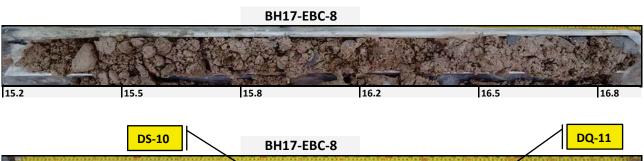
Completion Date: September 27, 2017 Baffinland Iron Mines

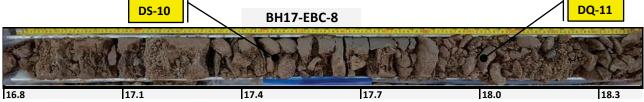










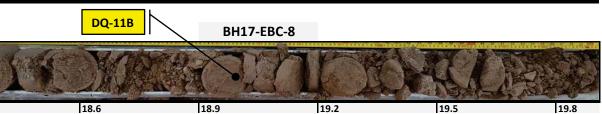




Borehole Name: BH17-EBC-8 Mary River Expansion Study Stage 2

Location: 17 W 503534.503 7976327.453

Completion Date: September 27, 2017 Baffinland Iron Mines





BH17-EBC-8











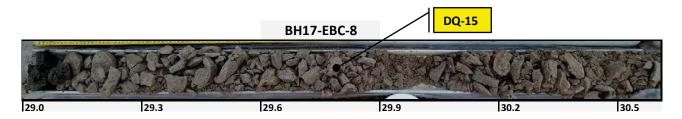
Borehole Name: BH17-EBC-8 Mary River Expansion Study Stage 2

Location: 17 W 503534.503 7976327.453

Completion Date: September 27, 2017 Baffinland Iron Mines

BH17-EBC-8





BH17-EBC-8





BH17-EBC-8



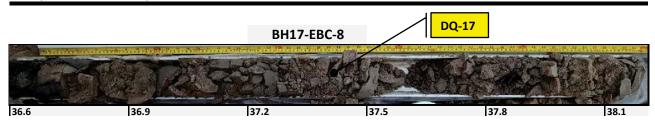


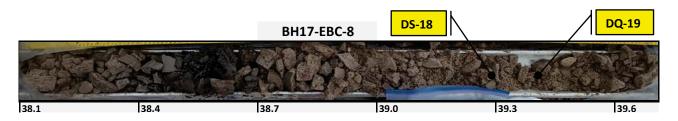


Borehole Name: BH17-EBC-8 Mary River Expansion Study Stage 2

Location: 17 W 503534.503 7976327.453

Completion Date: September 27, 2017 Baffinland Iron Mines







Borehole Name: BH17-EBC-9 Mary River Expansion Study Stage 2
Location: 17 W 503548.47 7976371.396 2017 Geotechnical Investigation

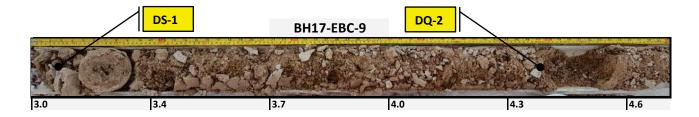
Completion Date: October 29, 2017 Baffinland Iron Mines

BH17-EBC-9



BH17-EBC-9













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



