

Hole ID:	MR1-07-129	UTM:	E 563152
PROJECT:	MARY RIVER		N 7914368
AREA:	BAFFIN ISLAND	DIP:	-43
NTS:	37G/5	AZIMUTH:	65
ELEV'N	613m	EOH:	249.5m

DATES DRILLED:	Aug 15 to Aug 21, 200	)7
DRILLED BY:	Boart Longyear	Drill#1(LY-38)
CASING DRILLED:	10.5m	
CASING RECOVERED:	10.5 m	
OVERBURDEN DEPTH:	10.3m	
WATER SOURCE:	Mary River	
DRILL COLLARS MARKED BY:	Wooden picket	
METALLURGY BY:	SGS, Sudbury, Ontari	0
	SGA, Liebenberg, Ger	rmany

DESCRIPTION OF OVERBURDEN:

SPECIAL DRILLING PROCEDURES:

Drilling with a calcium chloride solution (average concentration: 30% - 35%), potassium chloride and magic mud solution.

PURPOSE OF HOLE:

Combined geomechanical and geology hole inNorth limb.

CORE STORED: Mary River Camp

DOWN HOLE SURVEY DATA:		
No Maxibore II survey co	mpleted due to stuck rods	
RESULTS:	DRILL HOLE SKETCH	N
High Grade Iron Formation Bands intersected:		Λ
from 14 to 25.8m		
from 30.6 to 37.7m		
from 41.7 to 48.5m		
from 49.7 to 53.1m and		
from 163 to 165.4m		
The cumulative thickness of high grade iron formation		
was 31.5 m.		
COMMENTS.		
Hele shandened (collensed) at 240 5 due to sink hele		
that was operautored by drill		
The last core box (box 83) is missing.	SCALE:	

#### MARY RIVER PROJECT, BAFFINLAND IRON MINES

#### List of Boxes and Metres of Drill Core for MR1-07-129

Hole - ID	BOX #	Core Size	FROM	то	BOX #	Core Size	FROM	то
MR1-07-129	1	HQ	10.3	13.2	57	HQ	172.3	175.2
MR1-07-129	2	HQ	13.2	15.9	58	HQ	175.2	177.7
MR1-07-129	3	HQ	15.9	18.9	59	HQ	177.7	180.0
MR1-07-129	4	HQ	18.9	21.5	60	HQ	180.0	183.0
MR1-07-129	5	HQ	21.5	24.2	61	HQ	183.0	186.0
MR1-07-129	6	HQ	24.2	27.0	62	HQ	186.0	189.0
MR1-07-129	7	HQ	27.0	30.0	63	HQ	189.0	192.0
MR1-07-129	8	HQ	30.0	33.0	64	HQ	192.0	195.0
MR1-07-129	9	HQ	33.0	36.0	65	HQ	195.0	198.0
MR1-07-129	10	HQ	36.0	38.7	66	HQ	198.0	200.8
MR1-07-129	11	HQ	38.7	41.5	67	HQ	200.8	203.8
MR1-07-129	12	HQ	41.5	44.4	68	HQ	203.8	206.7
MR1-07-129	13	HQ	44.4	46.8	69	HQ	206.7	209.7
MR1-07-129	14	HQ	46.8	49.5	70	HQ	209.7	212.6
MR1-07-129	15	HQ	49.5	52.4	71	HQ	212.6	215.3
MR1-07-129	16	HQ	52.4	55.4	72	HQ	215.3	218.0
MR1-07-129	17	HQ	55.4	58.5	73	HQ	218.0	220.8
MR1-07-129	18	HQ	58.5	61.0	74	HQ	220.8	223.5
MR1-07-129	19	HQ	61.0	64.0	75	HQ	223.5	226.4
MR1-07-129	20	HQ	64.0	66.8	76	HQ	226.4	229.5
MR1-07-129	21	HQ	66.8	69.8	77	HQ	229.5	232.5
MR1-07-129	22	HQ	69.8	72.7	78	HQ	232.5	235.5
MR1-07-129	23	HQ	72.7	75.6	79	HQ	235.5	238.5
MR1-07-129	24	HQ	75.6	78.6	80	HQ	238.5	241.5
MR1-07-129	25	HQ	78.6	81.5	81	HQ	241.5	244.5
MR1-07-129	26	HQ	81.5	84.4	82	HQ	244.5	247.5
MR1-07-129	27	HQ	84.4	87.4	83	HQ	247.5	249.5
MR1-07-129	28	HQ	87.4	90.2			FOH	
MR1-07-129	29	HQ	90.2	93.2	missing la	st box		
MR1-07-129	30	HQ	93.2	96.4				
MR1-07-129	31	HQ	96.4	99.2				
MR1-07-129	32	HQ	99.2	101.9				
MR1-07-129	33	HQ	101.9	105.0				
MR1-07-129	34	HQ	105.0	108.0				
MR1-07-129	35	HQ	108.0	111.0				
MR1-07-129	36	HQ	111.0	114.0				
MR1-07-129	37	HQ	114.0	117.0				
MR1-07-129	38	HQ	117.0	120.0				
MP1 07 129	39		120.0	123				
MP1-07-129	40		123.0	120.7				
MP1 07 129	41		120.7	120.0				
MP1-07-129	42		120.0	131.3				
MR1-07-129	43		131.3	134.0				
MP1_07_120	44		134.0	130.7				
MR1-07-129	40		130.7	142 5				
MR1-07-129	40		1/2 5	142.0				
MR1-07-129	41		142.0	140.0				
MR1-07-129	40 <u>4</u> 0		143.5	151 0				
MR1-07-129		HO	151.0	154.5				
MR1-07-129	51	HO	154.5	157.5				
MR1-07-129	52	HO	157.5	160.5				
MR1-07-129	53	HO	160.5	163.5				
MR1-07-129	54	HO	163.5	166.4				
MR1-07-120	55	HO	166.4	169 4				
MR1-07-129	56	HO	169.4	172.3				
123	00	1104	100.4	112.0				

## MARY RIVER PROJECT, BAFFINLAND IRON MINES

### Geological Summary Log for MR1-07-129

Hole Id	From (m)	To (m)	Width(m)	Rock Code	Subcode	Comments
MR1-07-129	0.00	10.30	10.30	1,2		Casing/Owerburden
MR1-07-129	10.30	12.60	2.30	 4c/10b		Fe-Alt'd garnetiferous Amphibolite Schist/Fe-oxide Lean Alt'd If
MR1-07-129	12.60	14.00	1.40	4c		Garnetiferous Amphibolite-Chlorite Schis
MR1-07-129	14.00	25.80	11.80	7d		High Grade Hematite Iron Formation (with minor magnetite
MR1-07-129	25.80	30.60	4.80	4c		Garnetiferous Amphibolite-Chlorite Schis
MR1-07-129	30.60	37.70	7.10	7d		High Grade Hematite Iron Formation (with less magnetite
MR1-07-129	37.70	41.70	4.00	4c		Garnetiferous Chlorite-Amphibole Schis
MR1-07-129	41.70	48.50	6.80	7d		High Grade Hematite Iron Formation
MR1-07-129	48.50	49.70	1.20	4c		Garnetiferous Chlorite-Amphibole Schis
MR1-07-129	49.70	53.10	3.40	7d		High Grade Hematite Iron Formation
MR1-07-129	53.10	71.00	17.90	4a		Garnetiferous Amphibole-Chlorite-Biotite Schis
MR1-07-129	71.00	106.00	35.00	11a/4d		Fe-oxide Alt'd Int. volcanic Tuff/Amphibole-Biotite Schist
MR1-07-129	106.00	118.50	12.50	4b,a		Garnetiferous Amphibole-Chlorite-Mica Schis
MR1-07-129	118.50	142.70	24.20	4c		Garnetiferous Chlorite-Amphibole Schis
MR1-07-129	142.70	157.50	14.80	11a/4d		Fe-oxide Alt'd Int. volcanic Tuff/Amphibole-Biotite Schist
MR1-07-129	157.50	159.50	2.00	11a/4a		Intermediate volcanic Tuff/Chlorite Schis
MR1-07-129	159.50	163.00	3.50	4c		Garnetiferous Chlorite-Amphibole Schis
MR1-07-129	163.00	165.40	2.40	7e		High Grade Mixed (Mag dom'd with Minor Hematite) If
MR1-07-129	165.40	167.80	2.40	4c		Garnetiferous Chlorite-Amphibole Schis
MR1-07-129	167.80	189.90	22.10	11a/4a		Intermediate volcanic Tuff/Amphibole-Chlorite Schis
MR1-07-129	189.90	235.50	45.60	4a		Garnetiferous Amphibole-Chlorite Schis
MR1-07-129	235.50	249.50	14.00	 3,4c		Chlorite-Amphibole Schist/Amphibolite
		EOH				

#### MARY RIVER PROJECT, BAFFINLAND IRON MINES

### Geotechnical log for hole MR1-07-129

From	То	Run Length (m)	Recovered Length (m)	Length > 10 cm	Recovery %	RQD	# of Joints	Weathering and gouge material	Angle to CA (Dom set)	Point Load (0-5)	Comments
	NOT REQUIRED, SEE GEOMECHANICAL LOG FOR KP-07-06c										

MARY RIN	/ER PRO	JECT, BAFFINLAND IRON MINES ging for Hole MR1-07-129	Page 1
FROM	то	DESCRIPTION	Rock Code
0.00	10.30	Casing/Overburden	1
10.30	12.6	Fe-Altered garnetiferous Amphibole Schist/Fe-oxide Lean Iron formation	4c/10b
		Light red to dark red, light brown to ( commonly) dark brown fine crystalline to medium	
		grained Altered garnetiferous Amphibole Schist/Fe-oxide Lean Iron formation.	
		Recessive to semi- recessive, moderately foliated at 40 degrees to CA. Non magnetic and becoming weakly magnetic toward the end of interval at 12.3 to 12.6m. Streak is light red,	
		light brown to dark brown. Core strongly weathered and altered to hematite and minor limonite with light brown altered garnet throughout. Core moderately jointed and fractured,	
		Joint and fracture oriented at 30 to 60 degrees to CA. Porosity typically 2% to 5% and	
		locally (12.3 to 12.6m) up to 10%+. Gradually contact to unite below	
		Sample: 14141	
12.60	14.00	Garnetiferous Chlorite-Amphibole Schist	4c
		Light green to dark green, fine crystalline Garnetiferous Chlorite-Amphibole Schist (fine	
		crystalline matrix with abundant coarse brown altered garnet throughout).	
		Recessive to semi-recessive. Massive to locally foliated. Non magnetic. Core is weakly	
		oxidized and weathered to hematite and limonite (mostly in joint/fracture planes) with light	
	+	benocrysts up to 2cm in diameter, amount: up to 10%) contain limonitic alteration rim	
		Core moderately jointed and fractured Joint and fracture planes with hematite and limonite	
	1	Foliation and schistose texture oriented at 30 to 40 degrees to CA.	
		Porosity is low, amount: 1% to 2%. Lower contact to next unit is almost sharp at 40 degrees	
		to CA.	
		aamala: 44442	
		sample: 14142	
14.00	25.80	High Grade Hematite Iron Formation (with minor magnetite)	7d
14.00	20.00	Dark red, red/brown to dark brown, fine-crystalline high grade hematite iron formation with	, u
		minor magnetite; resistant to semi-resistant, massive to relict banded in part. Weakly to	
		(commonly) moderately magnetic. Streak is red, dark-red to (commonly) dark brown.	
		Core is weakly weathered and oxidized to hematite/limonite specially in joints/fracture	
		surfaces. Trace of pyrite and alteration to white clay (sulfate?) especially in joints faces ( at	
		20 to 21m) observed. Core is moderately fractured and jointed; joints and relict banding	
		oriented at 30 to 40 degrees to CA; core weakly brecciated from 14 to 14.8m.	
		upon primary banding. Lower contact to payt units is sharp at 45 degrees to CA with 2cm	
		reaction zone ( with silky lustre and concentration of limonite).	
		Samples: 14143 to 14148	
25.00	30.60	Garnetiferous Chlorite-Amphibole Schist	4c
		Green to dark green, tine crystalline Garnetiferous Chlorite-Amphibole Schist. Recessive	
		Non magnetic. Core is weakly oxidized and weathered to hematite and limonite mostly in	
•••••		ioint and fracture surfaces. Abundant altered dark brown garnets up to 2 cm in diameter	
	1	throughout. Core weakly jointed and fractured, Joint and fracture planes with hematite and	
		limonite and oriented at 30 to 40 degrees to CA. possible fault zone at 27.8 to 27.9m.	
		porosity is very low, amount: 0% to 1%. Lower contact to next unit is interfinger	
		Samples: 14149, 14150	
	1		
30.60	37.70	High Grade Hematite Iron Formation (with less magnetite	7d
		Dark red, red/brown to dark brown, fine-crystalline high grade hematite iron formation with	
		less magnetite ; resistant to semi-resistant, massive to weakly banded toward end of unite	
		(36 to 37.7m) at 20 degrees to CA. Weakly to (commonly) moderately magnetic.	
	-	(red/blue) hematite+ limonite/noethite specially in joints/fracture surfaces	
		noused nonaliter information good into speciality in jointo/nacture surfaces.	

MARY RIV	/ER PRO	JECT, BAFFINLAND IRON MINES ging for Hole MR1-07-129	Page 2
EROM		DESCRIPTION	Book Codo
FROM	10	Core is moderately fractured and jointed: joints and relict banding oriented, at 20 to 50	KOCK COUE
		degrees to CA.	
		Alteration to white clay (gypsum?) especially in joints faces (37.4 to 37.5m) observed.	
		Porosity typically 2% to 3% and locally (further down in unit ) up to 8%+; porosity planes	
		superimposed (in part) upon primary banding. Lower contact to next unit is gradually.	
		Samples: 14151 to 14154	
27 70	41 70	Carnatifaraus Chlarita. Amphihala Schiet	40
37.70	41.70	Light green to dark green, fine crystalline Garnetiferous Chlorite-Amphibole Schist	40
	1	Recessive to semi -recessive Massive to locally weakly foliated with narrow band of hematite	
	1	up to 10cm and tiny band of secondary mineral (ovpsum?) up to 0.2 cm. Non magnetic.	
	1	Core is moderately oxidized and weathered to hematite and limonite mostly in joint and	
		fracture surfaces. Disseminated altered dark brown garnets up to 2 cm in diameter	
	1	throughout in unite. Core weakly jointed and fractured, Joint and fracture planes with	
	1	hematite and limonite and oriented at 20 to 60 degrees to CA. Porosity is very low, amount:	
	1	up to 1%. Lower contact to next unit is interfinger	
	1		
	1	Samples: 14155, 14156	
41.70	48.50	High Grade Hematite Iron Formation	7d
	4	Dark red, red/brown to dark brown, fine-crystalline high grade hematite with minor magnetite	
		iron formation; resistant to semi-resistant, massive to weakly banded (from 45.5 to 48m) at	
		30 to 40 degrees to CA. weakly to (commonly) moderately magnetic. Streak is red, dark-red	
		to (commonly) dark blown. Core is weakly weathered and oxidized to riematter minorite	
		surfaces (12.1 to 12.5m) observed. Core is moderately fractured and jointed: joints and	
		relict banding oriented at 30 to 40 degrees to CA	
	+	Porosity typically 2% to 3% and locally up to 5%+: porosity planes superimposed (in part)	
	1	upon primary banding. Lower contact to next unit is sharp at 40 degrees to CA	
		Samples: 14157 to 14160	
48.50	49.70	Garnetiferous Chlorite-Amphibole Schist	4c
		Light green, green to dark green, fine crystalline Garnetiferous Chlorite-Amphibole Schist.	
		Recessive to semi- recessive. Massive to locally weakly foliated and banded. Non magnetic.	
		Core is moderately oxidized and weathered to hematite and limonite (narrow band of hematite	
		and limonite, banding is generally at 30 to 40 degrees to CA). Abundant altered dark	
		brown garnets (almandine) up to 3 cm in diameter throughout. Core moderately jointed and	
••		Joint and tracture planes with nematite and limonite and oriented at 30 to 40 degrees to CA.	
	+	superimposed (in part) upon primary banding	
	+	Lower contact to next unit is almost sharp at 30 degrees to CA	
	1	Sample: 14161	
49.70	53.10	High Grade Hematite Iron Formation	7d
		Dark red, red/brown to dark brown/grey, fine-crystalline high grade hematite iron formation	
		Resistant to semi-resistant, massive to weakly banded and foliated (from 51.1 to 52.5m)	
		Weakly to moderately magnetic. Streak is red, dark-red to (commonly) dark-brown.	
		Core is weakly weathered and oxidized to hematite/limonite specially in joints/fracture plane.	
	-	Alteration to white clay (gypsum?) especially in joints surfaces (51 to 51.4m) observed.	
		Core is moderately tractured and jointed; joints and relict banding oriented at 30 to 40	
	+	degrees to CA. Porosity is low amount: 1% to 3% upon primary banding.	
		Lower contact to next unit is possibly a faulted contact.	
		Samples: 1/162 1/163	
			1
53 10	71.00	Garnetiferous Amphibole-Chlorite-Biotite Schist	4a
55.10	11.00	Light green to dark green, fine crystalline Garnetiferous Amphibole-Chlorite Schist (fine	4a
	1	crystalline matrix with abundant coarse brown altered garnet "almandine" throughout).	1
	1		

MARY RIVER PROJECT, BAFFINLAND IRON MINES	

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FROM	то	DESCRIPTION	Rock Code
	ļ		
	<u> </u>	Recessive to semi- recessive. Massive to moderately foliated. Non magnetic. Core weakly	
		brown to dark brown garnets ( almandino) up to 2 cm in diameter which replaced by bematite	
		and also biotite alteration further down unit observed. Core moderately jointed and fractured	
	1	strong jointing and broken core at (55 to 58 and 60 to 62 2m). Foliation and schistose texture	
	1	generally oriented at 30 to 50 degrees to CA. No pyrite observed and lower contact to next	
		unit is gradually.	
		an interval 67.4 to 68.2m green to light green-brown fine grained to medium grained altered	
		intermediate volcanic tuff, recessive with minor amount of hematite and highly alteration,	
		which appears to have altered serpentine. No pyrite observed	
		Samples : 14164 and 14166 to 14169	
71.00	106.00	Fe-oxide Altered Intermediate volcanic Tuff/Amphibole-Biotite Schist	11a/4d
	1	Light green, light brown, green-brown, red-brown to brown grey, fine crystalline Fe-oxide	
		Altered Intermediate volcanic Tuff interlayerd with Amphibole-Biotite Schist. Recessive to	
		( commonly) Simi-recessive, massive to (locally) foliated. Non magnetic.	
		Core is weakly to (commonly) weathered and oxidized to fine crystalline hematite/limonite.	
		Contain moderate to pervasive Fe-oxide alteration, moderately biotite alteration.	
	ļ	Fair amount of altered amphibole which replaced by hematite at 85.5 to 88m and disseminated	
	ļ	highly altered brown garnet up to 10% at 92.2 to 97m and 98.6 to 102.7m observed.	
		(altered almandine up to 3cm in diameter and mostly almost completely replaced by hematite	
	ļ	/limonite). Core weakly jointed and fractured, strong jointing and broken core at (79.2 to 81m	
		and 82 to 82.4m ) noticed, Joints and fractures planes with minor hematite/ limonite and	
		oriented at 20 to 50 degrees to CA	
		No pyrite observed. Lower contact to next unit is gradually.	
	<u>}</u>	on interval 07.6 to 09.7m light group to group to dark group find on statelling highling highling	
		chlorite schist recessive massive to locally foliated non magnetic noticeable biotite and	
		chlorite alteration throughout. Core strongly jointed and fractured toward the end of unit	
	+	and oriented at 30 to 40 degrees to CA (possible minor fault zone). No pyrite observed	
	1	Upper and lower contact are gradually.	
	1		
106.00	118.50	Garnetiferous Amphibole-Chlorite-Mica Schist	4b,a
	1	Light green, green to dark green, medium crystalline Garnetiferous Amphibolite-Chlorite-	
	1	Mica Schist. Recessive to semi- recessive. Massive to locally weakly foliated and banded.	
	1	Non magnetic. Core is weakly oxidized and weathered to hematite and limonite (mostly in	
		joints and fractures surfaces). Disseminated highly altered dark brown garnets (almandine?)	
		up to 3 cm in diameter, amount: up to 25% which appear (locally) almost completely replaced	
		by hematite and also core contain (moderately) biotite alteration throughout. No pyrite	
	Ļ	observed. Core moderately jointed and fractured, Joints/fractures slightly planes with hematite	
	4	/limonite and oriented at 20 to 60 degrees to CA, strong jointing and broken core at (106 to	
	ļ	107.2m and 117.2 to 118.2m, possible fault zone). Foliation and schistose texture oriented at	
		30 to 40 degrees to CA.	
		Porosity is low, amount: 1% to 2%. Lower contact to next unit is almost gradually.	
110 50	142 70	Cornetifereus Chlerite Amphibele Schief	40
110.00	142.70	I after a constructed and the second se	40
		Garnetiferous Chlorite-Amphibole Schiet, Recessive to semi- recessive Massive to (commonly)	
		mederately feliated and weakly banded. Non magnetic. Core is weakly to (locally) mederately	
	1	oxidized and weathered to hematite and limonite (mostly in joints and fractures surfaces)	
		Highly Ee-oxide alteration (from 118.5 to 125.6m and 133.5 to 142.7m) which appear with	
	1	altered dark brown garnets (almandine?) up to 3 cm in diameter, amount: up to 25% and	1
	1	high altered light green to red-brown fibrous amphibole up to 2cm in length, amount: up to	l
	1	20% which appear (locally) almost completely replaced by hematite.	
	1	Core moderately jointed and fractured, Joints/fractures oriented at 20 to 60 degrees to CA	1
	1	strong jointing and broken core infilled with hematite/limonite and with cay (gypsum?) at 135	1
	1	to 136.5m). No pyrite observed. Minor narrow red to red-brown (with variable amount)	
	1	altered garnet which completely replaced by hematite up to 3cm thick at 138.5m observed.	
		Foliation and schistose texture oriented at approximately 10 to 30 degrees to CA.	
	]	Porosity is low, amount: 1% to 2%. Lower contact to next unit is gradually.	
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MARY RIV Lithologi	ER PRO	JECT, BAFFINLAND IRON MINES ging for Hole MR1-07-129	Page 4
FROM	то	DESCRIPTION	Rock Code
142.70	157.50	Fe-oxide Altered Intermediate volcanic Tuff/Amphibole-Biotite Schist	11a/4d
		Light brown, green-brown, red-brown to brown-grey, fine to medium crystalline Fe-oxide Altered Intermediate volcanic Tuff interlayerd with Amphibole-Biotite Schist. Recessive to	
		( commonly) Simi-recessive, massive to (locally) foliated. Non magnetic.	
	ļ	Core weakly weathered and oxidized to fine crystalline hematite/limonite.	
		Highly Fe-oxide alteration, miserably blottle alteration and weakly chlorite alteration observed.	
		with fair amount of fine to medium crystalline altered biotite overall and locally up to 20%	
		Core moderately jointed and fractured, strong jointing and broken core at (154 to 156.7m)	
		noticed, Joints and fractures planes with minor hematite/limonite and oriented at 20 to 50 degrees to CA. No pyrite observed.	
		Lower contact to next unit is gradually.	
		intervals 147 to 148.5m and 151.7 to 153.5 light green, green to dark green fine crystalline	
		garnetiferous amphibole-biotite schist, recessive, massive to locally foliated, non magnetic,	
		dark brown garnets up to 15% throughout. Upper and lower contacts are gradually.	
		Samples: 14170, 14171	
157 50	159 50	Intermediate volcanic Tuff/Chlorite Schist	119//9
107.00	133.30	Light green, green, light brown, red-brown to brown-grey, dark grey fine crystalline	110/40
		Intermediate volcanic Tuff/Chlorite Schist, Recessive to (commonly) Semi- recessive,	
		Core is weakly weathered and oxidized to fine crystalline hematite/limonite (mostly in joints	
		and fractures surfaces). Moderate chlorite alteration with fair amount of fine crystalline	
	1	altered biotite (chlorite) overall and locally up to 20% throughout.	
		Core moderately jointed and fractured, Joints and fractures planes oriented at 20 to 40	
		No pyrite observed.	
		Sample: 14172	
159.50	163.00	Garnetiferous Chlorite-Amphibole Schist	4c
		Light green, green to dark green, light brown to red brown fine to medium crystalline	
		Gametierous Chionie-Amphibole Schist, (the crystalline mains with abundant coarse brown	
		foliated and banded. Non magnetic. Core is weakly to (locally) moderately oxidized and	
		weathered to hematite and limonite (mostly in joints and fractures surfaces) becoming more .	
		toward end of unit up to 30%.	
		Highly Fe-oxide alteration (from 161.8 to 163m ) which appear with highly altered dark brown	
	Į	garnets (almandine?) up to 1 cm in diameter, amount: up to 35% which (locally) almost	
		Completely replaced by nemalite and limonite.	
	<u>}</u>	No pyrite observed.	
		Porosity is low, amount: 1% to 2%. Lower contact to next unit is gradually.	
		Samples: 14173, 14174	
163.00	165.40	High Grade Mixed (Dominate Magnetite and Minor Hematite) Iron Formation	7e
	ļ	Dark red, red-brown, dark steel grey, dark brown, black, fine-crystalline high grade mixed	
		(Dominate Magnetite and Minor Hematite) iron formation; resistant to semi-resistant, unit is	
	<u> </u>	very competent, predominantily nato iron ore; massive to relict banded. Moderately to	
		moderately weathered to hematite and limonite especially in ioints surfaces ( more hematite in	
	1	further done in unit). Weakly alteration to white clay (sulphate?) and dispersed pyrite	
		(chalcopyrite) up to 5% observed.	
		Core is weakly fractured and jointed; joints and parting planes oriented at 20 to 40 degrees	
		to CA. Porosity is low averages 1% to 2%.	
	<b> </b>	Lower contact to next unit is almost sharp at 10 to 20 degrees to CA.	
		Sample : 14175	

MARY RIV	ER PRO.	JECT, BAFFINLAND IRON MINES	Page 5
Lithologi	cal Logg	ging for Hole MR1-07-129	Baak Cada
FROM	10	DESCRIPTION	ROCK Code
165.40	167.80	Garnetiferous Chlorite-Amphibole Schist	4c
		Light green, green to dark green, light brown to red brown, yellow-green fine to medium	
		crystalline Garnetiferous Chlorite-Amphibole Schist. (fine crystalline matrix with abundant	
		coarse brown altered garnet throughout). Recessive to semi- recessive. Commonly massive	
		to weakly foliated and banded. Non magnetic.	
		Core oxidized and weathered to hematite and limonite (mostly in joints and fractures	
		Surfaces) with finition yearow to red verifion frematie/informe Highly Equovide alteration which appear with highly altered dark brown gamets (almanding?)	-
		up to 1 cm in diameter, amount: up to 35%+ which (locally) almost completely replaced by	
		hematite and limonite.	
		Core weakly jointed and fractured, Joints/fractures oriented at 20 to 40 degrees to CA.	
		No pyrite observed.	
		Porosity is low, amount: 1% to 2%. Lower contact to next unit is gradually.	
		Sample: 14176	
167.80	180.00	Intermediate volcanic Tuff/Amphibole-Chlorite Schist	119/40
107.00	109.90	Light green, (commonly) green, dark green, light brown red-brown to brown-grey, dark grey	11d/4d
		fine crystalline Intermediate volcanic Tuff/Amphibole-Chlorite Schist. Recessive to	
		(commonly) Semi- recessive, massive to foliated and banded (with minor yellow to red vein	
		hematite/limonite). Non magnetic. Core weakly weathered and oxidized to fine crystalline	
		hematite/limonite (mostly in joints and fractures surfaces).	
		Moderate chlorite and biotite alteration with fair amount of fine crystalline altered biotite	
		(chlorite) overall and locally up to 20% throughout.	
		Weakly Fe-oxide alteration which appear (locally) with slightly altered red to dark brown,	
		yellow-brown, yellow-green hematite and limonite up to 10%+ as a partial replacement of	
		Core moderately jointed and fractured lights and fractures planes originated at 10 to 50	
		degrees to CA. From 173 to 177 dispersed fine crystalline pyrite ( chalcopyrite) up to 3%	-
		observed. Lower contact to next unit is gradually.	
		Samples: 14177 to 14180	
100.00	005 50		
189.90	235.50	Garnetiferous Amphibole-Chlorite Schist	4a
		Garnetiferous Amphibola-Chlorita Schist, Simi, resistant to semi, recessive	-
		Massive to (commonly) moderately foliated and weakly banded. Non magnetic	-
		Core is weakly (locally) axidized and weathered to hematite and limonite (mostly in joints and	
		fractures surfaces).	
		Highly chlorite alteration which appear with high altered light green to dark green altered	
		amphibole up to 40% which replaced by chlorite. Weakly Fe-oxide alteration which appear	
		by slightly altered dark brown to black garnets (almandine?) in part.	
		Abundant phenocrysts of light to dark brown, red-brown garnet (almandine) up to 20%	
		throughout and becoming weak towards end of unit, also dispersed fine crystalline pyrite	-
		( chalcopyrite) up to 1% from 195 to 218m observed.	
		10 to 20 degree to CA	-
		Small narrow band of white to light green guartzite up to 3cm thick at 199m observed	
		Foliation and schistose texture oriented at approximately 10 to 30 degrees to CA.	
		Porosity is very low. Lower contact to next unit is gradually.	
235.50	249.50	Chlorite-Amphibole Schist/Amphibolite	3,4c
		Light green, green to (commonly) dark green, tine to medium crystalline Chlorite-Amphibole	-
		SchsvAmphibolite, time crystalline matrix with abundant coarse green amphibole throughout)	1
		Commonly massive to moderately foliated and banded [thin layered schistose texture to	
		(commonly) more massive and competent texture). Non magnetic.	
		Core is weakly to (locally) moderately oxidized and weathered to hematite and limonite	1
		(mostly in joints and fractures surfaces).	
		Chlorite alteration comprises partial to (locally) near complete replacement of host unit by	
		chlorite (specially in lower portion of unit from 245 to 247.5m).	
			1

MARY RIVER PROJECT, BAFFINLAND IRON MINES Lithological Logging for Hole MR1-07-129						
FROM	то	DESCRIPTION				
		Core moderately foliated at approximately 10 to 20 degrees to CA.				
		Also minor narrow veins of white to grey quartz up to 5mm thick interlayered with chlorite				
		at 237 to 245m observed.				
		Relict banding trend at 10 to 20 degrees to CA. Core weakly jointed and fractured, Joints				
		and fractures oriented at 20 to 40 degrees to CA. No pyrite observed.				
		End of hole at 249.5m.				

#### Mary River Project, Baffinland Iron Mines

Sample intervals and key rock attributes for MR1-07-129

Hole-ID	From	То	Sample	%	Fe	Proceio	Banding/	> of Bands	of Bands Silica% Sulph% Porosity		Porosity	Commonte		
	From		ID	Specular	Texture	Dreccia	Bedding	to CA			%	Comments		
MR1-07-129	10.3	12.6	14141	1	В	1	Yes	30	1	1	1	moderatly broken Lean iron formation 4c/10c		
MR1-07-129	12.6	14	14142							1		waste moderatly broken ground in 4c		
MR1-07-129	14	16	14143	1	В	1	Yes	40	1	1	2	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	16	18	14144	1	В	1	Yes	40	1	1	2	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	18	20	14145	1	В	1	Yes	30	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	20	22	14146	1	В	1	Yes	undulated	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	22	24	14147	1	В	1	Yes	30	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	24	25.8	14148	1	В	1	Yes	30	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	25.8	28	14149							1		waste weakly broken ground in 4c		
MR1-07-129	28	30.5	14150							1		waste weakly broken ground in 4c		
MR1-07-129	30.5	32.5	14151	1	В	1	Yes	40	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	32.5	34.5	14152	1	В	1	Yes	undulated	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	34.5	36.5	14153	1	В	1	Yes	20	1	1	2	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	36.5	37.7	14154	1	В	1	Yes	undulated	1	1	2	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	37.7	39.7	14155							1		waste weakly broken ground in 4c		
MR1-07-129	39.7	41.7	14156							1		waste weakly broken ground in 4c		
MR1-07-129	41.7	43	14157	1	В	1	Yes	undulated	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	43	45	14158	1	В	1	Yes	undulated	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	45	47	14159	1	В	1	Yes	30	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	47	48.5	14160	1	В	1	Yes	undulated	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	48.5	49.9	14161							1		waste moderatly broken ground in 4c		
MR1-07-129	49.9	51.5	14162	1	В	1	Yes	30	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	51.5	53.1	14163	1	В	1	Yes	undulated	1	1	1	Moderately broken H.G.hem IFM (7d)		
MR1-07-129	53.1	55	14164							1		waste weakly broken ground in 4c		
MR1-07-129	standard		14165									#1267946		
MR1-07-129	55	57	14166							1		waste weakly broken ground in 4c		
MR1-07-129	57	59	14167							1		waste weakly broken ground in 4c		
MR1-07-129	59	61	14168							1		waste weakly broken ground in 4c		
MR1-07-129	61	63	14169							1		waste weakly broken ground in 4c		
MR1-07-129	63	153.5	NS							1		waste 4a,4b,4c,4d,11a,NS		
MR1-07-129	153.5	155.5	14170							1		waste moderately broken ground in 11a/4d		
MR1-07-129	155.5	157.5	14171							1		waste moderately broken ground in 11a/4d		
MR1-07-129	157.5	159.5	14172							1		waste moderately broken ground in 11a/4a		
MR1-07-129	159.5	161	14173							1		waste weakly broken ground in 4c		
MR1-07-129	161	163	14174							1		waste weakly broken ground in 4c		
MR1-07-129	163	165.4	14175							2		Weakly broken H.G.mag+hem IFM (7e)		
MR1-07-129	165.4	167.8	14176							1		waste weakly broken ground in 4c		
MR1-07-129	167.8	169.8	14177							1		waste moderately broken ground in 11a/4a		
MR1-07-129	169.8	171.8	14178							1		waste moderately broken ground in 11a/4a		
MR1-07-129	171.8	174	14179							2		waste moderately broken ground in 11a/4a		
MR1-07-129	174	176	14180							2		waste moderately broken ground in 11a/4a		
MR1-07-129	176	195	NS							1		waste moderately broken ground in 11a/4a		
MR1-07-129	195	218	NS							2		waste weakly broken ground in 11a/4a		
MR1-07-129	218	249.5	NS							1		waste weakly broken ground in 4a/4c/3		
	FOH													

## 2007 Drilling for Mary River Project

# Sample Tracking Table for MR1-07-129

Hole ID	From	То	Sample #	Date Sampled	Sampler	Pail Wt (lbs)	Pail #	Pallet #	Shipping Date	Shipment #
MR1-07-129	10.3	12.6	14141	Oct 17,2007	T,I	55	860	29	Oct 25,2007	
MR1-07-129	12.6	14	14142	Oct 17,2007	T,I	55	860	29	Oct 25,2007	
MR1-07-129	14	16	14143	Oct 17,2007	T,I	55	861	29	Oct 25,2007	
MR1-07-129	16	18	14144	Oct 17,2007	T&I	55	861	29	Oct 25,2007	
MR1-07-129	18	20	14145	Oct 17,2007	T&I	52	862	29	Oct 25,2007	
MR1-07-129	20	22	14146	Oct 17,2007	T&I	52	862	29	Oct 25,2007	
MR1-07-129	22	24	14147	Oct 17,2007	T&I	60	863	29	Oct 25,2007	
MR1-07-129	24	25.8	14148	Oct 17,2007	T&I	60	863	29	Oct 25,2007	
MR1-07-129	25.8	28	14149	Oct 17,2007	T&I	45	864	29	Oct 25,2007	
MR1-07-129	28	30.5	14150	Oct 17,2007	T&I	45	864	29	Oct 25,2007	
MR1-07-129	30.5	32.5	14151	Oct 17,2007	T&I	50	865	29	Oct 25,2007	
MR1-07-129	32.5	34.5	14152	Oct 17,2007	T&I	50	865	29	Oct 25,2007	
MR1-07-129	34.5	36.5	14153	Oct 17,2007	T&I	44	866	29	Oct 25,2007	
MR1-07-129	36.5	37.7	14154	Oct 17,2007	T&I	44	866	29	Oct 25,2007	
MR1-07-129	37.7	39.7	14155	Oct 17,2007	T&I	35	867	30	Oct 27,2007	
MR1-07-129	39.7	41.7	14156	Oct 17,2007	T&I	35	867	30	Oct 27,2007	
MR1-07-129	41.7	43	14157	Oct 17,2007	T&I	44	868	30	Oct 27,2007	
MR1-07-129	43	45	14158	Oct 17,2007	T&I	44	868	30	Oct 27,2007	
MR1-07-129	45	47	14159	Oct 17,2007	T&I	36	869	30	Oct 27,2007	
MR1-07-129	47	48.5	14160	Oct 17,2007	T&I	36	869	30	Oct 27,2007	
MR1-07-129	48.5	49.9	14161	Oct 17,2007	T&I	42	870	30	Oct 27,2007	
MR1-07-129	49.9	51.5	14162	Oct 17,2007	T&I	42	870	30	Oct 27,2007	
MR1-07-129	51.5	53.1	14163	Oct 17,2007	T&I	32	871	30	Oct 27,2007	
MR1-07-129	53.1	55	14164	Oct 17,2007	T&I	32	871	30	Oct 27,2007	
MR1-07-129	standard	#1267946	14165	Oct 17,2007	T&I	32	871	30	Oct 27,2007	
MR1-07-129	55	57	14166	Oct 17,2007	T&I	34	872	30	Oct 27,2007	
MR1-07-129	57	59	14167	Oct 17,2007	T&I	34	872	30	Oct 27,2007	
MR1-07-129	59	61	14168	Oct 17,2007	T&I	35	873	30	Oct 27,2007	
MR1-07-129	61	63	14169	Oct 17,2007	T&I	35	873	30	Oct 27,2007	
MR1-07-129	63	153.5	NS							
MR1-07-129	153.5	155.5	14170	Oct 17,2007	T&I	30	874	30	Oct 27,2007	
MR1-07-129	155.5	157.5	14171	Oct 17,2007	T&I	30	874	30	Oct 27,2007	
MR1-07-129	157.5	159.5	14172	Oct 17,2007	T&I	32	875	30	Oct 27,2007	
MR1-07-129	159.5	161	14173	Oct 17,2007	T&I	32	875	30	Oct 27,2007	
MR1-07-129	161	163	14174	Oct 17,2007	T&I	44	876	30	Oct 27,2007	
MR1-07-129	163	165.4	14175	Oct 17,2007	T&I	44	876	30	Oct 27,2007	
MR1-07-129	165.4	167.8	14176	Oct 17,2007	T&I	48	877	30	Oct 27,2007	
MR1-07-129	167.8	169.8	14177	Oct 17,2007	T&I	48	877	30	Oct 27,2007	
MR1-07-129	169.8	171.8	14178	Oct 17,2007	T&I	56	878	30	Oct 27,2007	
MR1-07-129	171.8	174	14179	Oct 17,2007	T&I	56	878	30	Oct 27,2007	
MR1-07-129	174	176	14180	Oct 17,2007	T&I	56	878	30	Oct 27,2007	
MR1-07-129	176	249.5	NS							
	EOH									