

**BAFFINLAND IRON MINES CORPORATION**  
**MARY RIVER PROJECT**

MR1-06-105

## GEOMECHANICAL DRILLHOLE LOGGING DATA SHEET

**White = Calculated**      **Yellow = User Specified**

Project: Mary River Project  
Client: Baffinland Iron Mines Corporation  
Drilling Company: Boart Longyear  
Location: Deposit 1  
Coordinates: 7914594 N, 563403 E

Surface Elevation:	591	m
	1,939	ft

Total Depth:	219.5	m
	720	ft

Azimuth:	295	deg	
Dip:	-40	deg	(down is negative)

<b>Drill Type:</b>	Longyear 38				
<b>Core Diameter:</b> From	0.0	m	to	219.5	m
		m	to		m
				61.1	mm
					mm

Drillhole Number: MR1-06-105

Logged By: \_\_\_\_\_

Reviewed By: \_\_\_\_\_

Date Started:	31-Aug-06
Date Completed:	12-Sep-06

New Run	End of Hole	Verify Data	Delete Rows	Add New Joint
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[illegible]

MR1-06-105

## GEOMECHANICAL DRILLHOLE LOGGING DATA SHEET

White = Calculated Yellow = User Specified

Project: Mary River Project  
Client: Baffinland Iron Mines Corporation  
Drilling Company: Boart Longyear  
Location: Deposit 1  
Coordinates: 7914594 N, 563403 E

Surface Elevation: 591 m  
1,939 ft  
Total Depth: 219.5 m  
720 ft  
Azimuth: 295 deg  
Dip: -40 deg (down is negative)

Drill Type: Longyear 38  
Core Diameter: From 0.0 m to 219.5 m 61.1 mm

Drillhole Number: MR1-06-105  
Logged By:  
Reviewed By:  
Date Started: 31-Aug-06  
Date Completed: 12-Sep-06

New Run End of Hole Verify Data Delete Rows Add New Joint

Drill Run Data														Joint Data														RMR89 Drill Run Rating						Rock Quality Index (Q)		Summary																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Rock Type	Depth From	Depth To	Elev From	Elev To	Run Length	Recov Length	Recov	RQD Length	RQD	Jn	# of Joints	Joint Set Spac. (mm)	Ravg	UCS (Est.) (MPa)	Incremental Depth	Depth	Elev.	Alpha	Beta	Joint Condition Rating										Ground-water Rating	Discont Type	Fill Type 1	Fill Type 2	Fill Type 3	Orientation Quality	RMR <sub>89</sub> UCS Rating	RMR <sub>89</sub> RQD Rating	RMR <sub>89</sub> Joint Spac. Rating	RMR <sub>89</sub> Joint Condition Rating	RMR <sub>89</sub> Water Rating	RMR <sub>89</sub> Total	RQD	Q'	RMR <sub>89</sub> Final	Q' Final	RMR (Calc from Q')	Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	(m)	(m)			(m)	(m)	(%)	(m)	(%)							(m)	(m)	(deg.)	(deg.)	Discont Number	Persis-P	Apert-A	Roughness R JRC    (stk)	JRC ± (dip)	Jr	Infill I	Ja	Ja Manual	Weath W	Ravg	JCS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

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1,939 ft  
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720 ft  
Azimuth: 295 deg  
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Drill Type: Longyear 38  
Core Diameter: From 0.0 m to 219.5 m 61.1 mm

Drillhole Number: MR1-06-105  
Logged By:  
Reviewed By:  
Date Started: 31-Aug-06  
Date Completed: 12-Sep-06

New Run End of Hole Verify Data Delete Rows Add New Joint

Drill Run Data														Joint Data														RMR89 Drill Run Rating						Rock Quality Index (Q)		Summary																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Rock Type	Depth From	Depth To	Elev From	Elev To	Run Length	Recov Length	Recov	RQD Length	RQD	Jn	# of Joints	Joint Set Spac. (mm)	Ravg	UCS (Est.)	Incremental Depth	Depth	Elev.	Alpha	Beta	Joint Condition Rating										Ground water Rating	Discont Type	Fill Type 1	Fill Type 2	Fill Type 3	Orientation Quality	RMR <sub>89</sub> UCS Rating	RMR <sub>89</sub> RQD Rating	RMR <sub>89</sub> Joint Spac. Rating	RMR <sub>89</sub> Joint Condition Rating	RMR <sub>89</sub> Water Rating	RMR <sub>89</sub> Total	RQD	Q'	RMR <sub>89</sub> Final	Q' Final	RMR (Calc from Q') Final	Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	(m)	(m)			(m)	(m)	(%)	(m)	(%)					(MPa)	Depth	(m)	(m)	(deg.)	(deg.)	Discont Number	Persis-P	Apert-A	R	JRC    (stk)	JRC ⊥ (dip)	Jr	Infill I	Ja Manual	Ja Weath W	Ravg	JCS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	



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<b>Drill Type:</b>	Longyear 38			
<b>Core Diameter:</b> From	0.0	m to	219.5	m
		m to		m

Drillhole Number:	MR1-06-105
Logged By:	
Reviewed By:	
Date Started:	31-Aug-06
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Drill Run Data														Joint Data														RMR89 Drill Run Rating							Rock Quality Index (Q)		Summary												
Rock Type	Depth From	Depth To	Elev From	Elev To	Run Length	Recov Length	Recov	RQD Length	RQD	Jn	# of Joints	Joint Set Spac. (mm)	Ravg	UCS (Est.) (MPa)	Incremental Depth	Depth	Elev.	Alpha	Beta	Joint Condition Rating										Ground-water Rating	Discont Type	Fill Type 1	Fill Type 2	Fill Type 3	Orientation Quality	RMR <sub>89</sub> UCS Rating	RMR <sub>89</sub> RQD Rating	RMR <sub>89</sub> Joint Spac. Rating	RMR <sub>89</sub> Joint Condition Rating	RMR <sub>89</sub> Water Rating	RMR <sub>89</sub> Total	RQD	Q'	RMR <sub>89</sub> Final	Q' Final	RMR (Calc from Q')	Comments		
																				Discont Number	Persis-P	Aperit-A	R	JRC II (stk)	JRC ± (dip)	Jr	Infill I	Ja	Ja Manual																			Weath W	Ravg
4a	48.12	51.70	560.1	557.8	3.58	3.51	98.0	2.83	79.1	12	30	113	22	35		48.22	560.0	11	242	1	>20m	0.1-1.0 SL Rough	5	8	1.0	None	4.00	Unweathered	SW	14		Dry	J			VG (45°)	4.4	15.5	6.5	18.0	15	59	79	1.647	55	1.647	43.490	Chlorite in rock mass.	
																0.20	48.42	559.9	63	14	2	>20m	0.1-1.0 V Rough	7	12	1.0	Soft <5mm	4.00	Unweathered	SW	5		Dry	J	chl	ox	VG (45°)	4.4	15.5	6.5	18.0	15	59	79	1.647				
																0.04	48.46	559.9	56	97	3	>20m	0.1-1.0 V Rough	19	19	1.5	Soft <5mm	4.00	Unweathered	SW	2		Dry	J	chl	ox	VG (45°)	4.4	15.5	6.5	18.0	15	59	79	2.470				
																0.29	48.75	559.7	66	52	4	>20m	0.1-1.0 SL Rough	6	10	1.0	Soft <5mm	4.00	Unweathered	SW	8		Dry	J	chl		G (±20°)	4.4	15.5	6.5	15.0	15	56	79	1.647				
																0.33	49.08	559.5	33	45	5	<1m	<0.1mm Rough	9	12	4.0	None	2.00	Unweathered	SW	5		Dry	VI			G (±20°)	4.4	15.5	6.5	27.0	15	68	79	13.175				
																0.02	49.10	559.4	33	66	6	>20m	0.1-1.0 Rough	18	12	1.5	Soft <5mm	4.00	Unweathered	SW	5		Dry	J	chl		G (±20°)	4.4	15.5	6.5	17.0	15	58	79	2.470				
																0.09	49.19	559.4	52	24	7	>20m	0.1-1.0 Rough	11	8	1.5	Soft <5mm	4.00	Unweathered	SW	2		Dry	J	chl		G (±20°)	4.4	15.5	6.5	17.0	15	58	79	2.470				Partially spun.
																0.06	49.25	559.3	38	33	8	<1m	<0.1mm Rough	14	14	4.0	Soft <5mm	4.00	Unweathered	SW	2		Dry	VI	chl	dly	G (±20°)	4.4	15.5	6.5	24.0	15	65	79	6.588				
																0.07	49.30	559.3	55	268	9	<1m	<0.1mm Rough	10	10	1.0	Soft <5mm	4.00	Unweathered	SW	2		Dry	VI	chl	dly	G (±20°)	4.4	15.5	6.5	24.0	15	65	79	6.588				
																0.15	49.47	559.2	53	38	10	>20m	0.1-1.0 Rough	11	12	1.5	Soft <5mm	4.00	Unweathered	SW	2		Dry	J	dly		G (±20°)	4.4	15.5	6.5	17.0	15	58	79	2.470				
																0.04	49.51	559.2	54	52	11	>20m	<0.1mm Rough	12	14	1.5	Soft <5mm																						

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[New Run](#)
[End of Hole](#)
[Verify Data](#)
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NB102-00181/8-4  
Revision 0  
April 30, 2010

MR1-06-105

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New Run    End of Hole    Verify Data    Delete Rows    Add New Joint

Drill Run Data															Joint Data															RMR89 Drill Run Rating							Rock Quality Index (Q)		Summary																			
Rock Type	Depth From	Depth To	Elev From	Elev To	Run Length	Recov Length	Recov	RQD Length	RQD	Jn	# of Joints	Joint Set Spac. (mm)	Ravg	UCS (Est.) (MPa)	Incremental Depth	Depth	Elev.	Alpha	Beta	Joint Condition Rating										Ground water Rating	Discont Type	Fill Type 1	Fill Type 2	Fill Type 3	Orientation Quality	RMR <sub>89</sub> UCS Rating	RMR <sub>89</sub> RQD Rating	RMR <sub>89</sub> Joint Spac. Rating	RMR <sub>89</sub> Joint Condition Rating	RMR <sub>89</sub> Water Rating	RMR <sub>89</sub> Total	RQD	Q'	RMR <sub>89</sub> Final	Q' Final	RMR (Calc from Q')	Comments											
																				Discont Number	Persis-P	Apert-A	Roughness			Infill I	Ja	Ja Manual	Weath W																			Ravg	JCS									
	(m)	(m)			(m)	(m)	(%)	(m)	(%)							(m)	(m)	(deg.)	(deg.)																																							
																0.08	87.97	534.5	56	77	4	>20m	<0.1mm	Rough	15	14	1.5	None	1.00	Unweathered		Dry	Br				G (±20°)	14.2	16.2	7.7	22.0	15	75	82	10.274													
																0.07	88.04	534.4	76	20	5	>20m	0.1-1.0	Rough	13	12	1.5	None	1.00	Unweathered		Dry	J				G (±20°)	14.2	16.2	7.7	21.0	15	74	82	10.274							Partially spoun.						
																0.34	88.38	534.2	78	129	6	>20m	0.1-1.0	Rough	11	14	1.5	None	1.00	Unweathered		Dry	J				G (±20°)	14.2	16.2	7.7	20.0	15	73	82	10.274													
																0.22	88.60	534.0	72	100	7	>20m	0.1-1.0	Rough	12	12	1.5	None	1.00	Unweathered		Dry	J				G (±20°)	14.2	16.2	7.7	21.0	15	74	82	10.274													
																0.27	88.87	533.9	71	33	8	>20m	<0.1mm	Rough	14	10	1.5	None	1.00	Unweathered		Dry	J				G (±20°)	14.2	16.2	7.7	22.0	15	75	82	10.274													
																0.08	88.95	533.8	70	246	9	>20m	0.1-1.0	Rough	9	11	1.5	None	1.00	Unweathered		Dry	J				G (±20°)	14.2	16.2	7.7	21.0	15	74	82	10.274													
																0.12	89.07	533.7	13	112	10	>20m	0.1-1.0	SL Rough	4	8	1.0	None	1.00	Unweathered		Dry	J				G (±20°)	14.2	16.2	7.7	18.0	15	71	82	6.849													
																0.30	89.37	533.6	67	16	11	>20m	<0.1mm	SL Rough	9	9	1.0	None	1.00	Unweathered		Dry	J				G (±20°)	14.2	16.2	7.7	20.0	15	73	82	6.849													
																0.28	89.65	533.4	50	5	12	>20m	0.1-1.0	SL Rough	7	10	1.0	None	1.00	Unweathered		Dry	J				G (±20°)	14.2	16.2	7.7	19.0	15	72	82	6.849													
																0.37	90.02	533.1	57	60	13	>20m	0.1-1.0	Rough	10	14	1.5	None	1.00	Unweathered		Dry	J				G (±20°)	14.2	16.2	7.7	20.0	15	73	82	10.274													
12b	90.37	91.00	532.9	532.5	0.63	0.58	92.1	0.50	79.4	12	5	97	10	18		90.39	532.9	50	62	1	>20m	0.1-1.0	V Rough	16	19	1.5	Soft <5mm	4.00	Unweathered		35		Dry	J	chl	tlc		G (±20°)	2.8	15.6	6.3	18.0	15	58	79	2.480	53	2.480	47.175									
																0.05	90.44	532.9			2	>20m	1-5	Rough	12	10	1.5	Soft <5mm	4.00	Unweathered				Dry	Br			G (±20°)	2.8	15.6	6.3	0.0	15		79													
																0.17	90.61	532.8	63	38	3	>20m	1-5	Rough	12	10	1.5	Soft <5mm	4.00	Unweathered		10		Dry	Un-M	chl	tlc		G (±20°)	2.8	15.6	6.3	14.0	15	54	79	2.480							Partially spoun joint; unmatched				
																0.05	90.66	532.7	62	285	4	>20m	1-5	Rough	14	8	1.5	Soft <5mm	4.00	Unweathered				Dry	Un-M	chl	tlc		G (±20°)	2.8	15.6	6.3	13.0	15	53	79	2.480							Partially spoun joint; unmatched				
																0.28	90.94	532.5	60	87	5	>20m	1-5	Rough	14	8	1.5	Soft <5mm	4.00	Unweathered				Dry	J	chl	tlc		G (±20°)	2.8	15.6	6.3	13.0	15	53	79	2.480											
7f	91.00	94.00	532.5	530.6	3.00	3.00	100.0	2.95	98.3	12	7	375	50	275		91.13	532.4	52	63	1	>20m	0.1-1.0	SL Rough	6	8	1.0	None	1.00	Unweathered				Dry	J				G3	15.2	19.8	9.5	19.0	15	79	98	8.194	77	3.073	49.104	Partially spoun joint								
																0.45	91.58	532.1	63	50	2	>20m	0.1-1.0	Rough	14	16	1.5	None	1.00	Unweathered				Dry	J				G3	15.2	19.8	9.5	21.0	15	81	98	12.292											
																0.11	91.69	532.1	58	60	3	>20m	0.1-1.0	Smooth	2	2	1.0	None	1.00	Unweathered				Dry	J				G3	15.2	19.8	9.5	17.0	15	77	98	8.194											
																0.30	91.99	531.9	39	268	4	>20m	0.1-1.0	SL Rough	2	10	1.0	None	1.00	Unweathered				Dry	J				G3	15.2	19.8	9.5	19.0	15	79	98	8.194											
																1.33	93.32	531.0	60	75	5	>20m	0.1-1.0	Rough	10	14	1.5	Soft <5mm	4.00	Unweathered		30		Dry	J	sul	ox		F (±35°)	15.2	19.8	9.5	17.0	15	77	98	8.3073											
																0.03	93.35	531.0	60	72	6	>20m	<0.1mm	SL Rough	8	10	1.0	None	1.00	Unweathered				Dry	J				F (±35°)	15.2	19.8	9.5	20.0	15	80	98	8.194											
																0.24	93.59	530.8	43	78	7	>20m	<0.1mm	SL Rough	6	10	1.0	None	1.00	Unweathered				Dry	J				F (±35°)	15.2	19.8	9.5	20.0	15	80	98	8.194											
7f	94.00	97.13	530.6	528.6	3.13	3.13	100.0	3.13	100.0	12	12	241	35	100		94.00	530.6	73	2	1	>20m	1-5	SL Rough	8	10	1.0	Soft <5mm	4.00	Unweathered		35		Dry	Un-M	ox	sul		G2	9.4	20.0	8.1	12.0	15	64	100	2.083	64	2.083	45.606	Partially spoun joint; unmatched								
																0.17	94.17	530.5			2	>20m	1-5	Rough	12	16	1.5	None	1.00	Unweathered				Dry	Br				G2	9.4	20.0	8.1	0.0	0	100													
																0.30	94.47	530.3	60	48	3	>20m	1-5	Rough	12	16	1.5	None	1.00	Unweather																												



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<b>Drill Type:</b>	Longyear 38			
<b>Core Diameter:</b> From	0.0	m to	219.5	m
		m to		m

Drillhole Number:	MR1-06-105
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Date Started:	31-Aug-06
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(down is negative)

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Revision 0  
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## GEOMECHANICAL DRILLHOLE LOGGING DATA SHEET

White = Calculated      Yellow = User Specified

Project: Mary River Project  
Client: Baffinland Iron Mines Corporation  
Drilling Company: Boart Longyear  
Location: Deposit 1  
Coordinates: 7914594 N, 563403 E

Surface Elevation: 591 m  
1,939 ft  
Total Depth: 219.5 m  
720 ft  
Azimuth: 295 deg  
Dip: -40 deg (down is negative)

Drill Type: Longyear 38  
Core Diameter: From 0.0 m to 219.5 m 61.1 mm

Drillhole Number: MR1-06-105  
Logged By:  
Reviewed By:  
Date Started: 31-Aug-06  
Date Completed: 12-Sep-06

New Run    End of Hole    Verify Data    Delete Rows    Add New Joint

Drill Run Data														Joint Data														RMR89 Drill Run Rating						Rock Quality Index (Q)		Summary																		
Rock Type	Depth From	Depth To	Elev From	Elev To	Run Length	Recov Length	Recov	RQD Length	RQD	Jn	# of Joints	Joint Set Spac. (mm)	Ravg	UCS (Est.) (MPa)	Incremental Depth	Depth	Elev.	Alpha	Beta	Joint Condition Rating										Ground water Rating	Discont Type	Fill Type 1	Fill Type 2	Fill Type 3	Orientation Quality	RMR <sub>89</sub> UCS Rating	RMR <sub>89</sub> RQD Rating	RMR <sub>89</sub> Joint Spac. Rating	RMR <sub>89</sub> Joint Condition Rating	RMR <sub>89</sub> Water Rating	RMR <sub>89</sub> Total	RQD	Q'	RMR <sub>89</sub> Final	Q' Final	RMR (Calc from Q')	Comments							
	(m)	(m)			(m)	(m)	(%)	(m)	(%)						Depth	(m)	(m)	(deg.)	(deg.)	Discont Number	Persis-P	Apert-A	R	JRC    (stk)	JRC ⊥ (dip)	Jr	I	Ja Manual	Ja Weath W	Ravg	JCS		Type	Type 1	Type 2	Type 3		UCS Rating	RQD Rating	Joint Spac. Rating	Joint Condition Rating	Water Rating	Total			Final	Final	Final						
															0.34	158.66	489.0	68	65	2	>20mm	0.1-1.0 SL Rough	8	8	1.0	None	1.00	Unweathered		Dry	J				VG (±5°)	14.1	18.4	9.0	19.0	15	76	92	7.694											
															0.27	158.93	488.8	58	64	3	>20mm	1-5 Rough	9	12	1.5	Soft <5mm	4.00	Unweathered		Dry	J	ox	cl	cl	VG (±5°)	14.1	18.4	9.0	14.0	15	71	92	2.885											could be weathering, but a thick (5mm) coating on the joint, including sulphates
															0.34	159.27	488.6	68	69	4	>20mm	<0.1mm SL Rough	10	8	1.0	None	1.00	Unweathered		Dry	J				VG (±5°)	14.1	18.4	9.0	20.0	15	77	92	7.694											
															0.10	159.37	488.6	74	61	5	>20mm	0.1-1.0 Rough	11	11	1.5	None	1.00	Unweathered		Dry	J				VG (±5°)	14.1	18.4	9.0	21.0	15	78	92	11.542											
															0.07	159.44	488.5			6										Dry	Br					VG (±5°)	14.1	18.4	9.0	0.0	15	78	92											
															0.49	159.93	488.2	82	75	7	>20mm	0.1-1.0 SL Rough	10	11	1.5	None	1.00	Unweathered		Dry	J				G (±20°)	14.1	18.4	9.0	21.0	15	78	92	11.542											
															0.53	160.46	487.9	84	96	8	>20mm	0.1-1.0 SL Rough	8	8	1.0	None	1.00	Unweathered		Dry	J				G (±20°)	14.1	18.4	9.0	19.0	15	76	92	7.694											
7f	161.00	164.00	487.5	485.6	3.00	2.93	97.7	2.70	90.0	12	9	293	50	275		161.17	487.4	53	130	1	>20mm	<0.1mm SL Rough	9	9	1.0	Soft <5mm	4.00	Unweathered		Dry	J	chl			P (>35°)	15.2	17.9	8.7	16.0	15	73	90	1.875	73	1.875	44.657	soft, waxy coating, feels like chlorite, but no greenish tinge							
															0.07	161.24	487.4	52	105	2	>20mm	<0.1mm SL Rough	7	9	1.0	None	1.00	Unweathered		Dry	J				P (>35°)	15.2	17.9	8.7	20.0	15	77	90	7.500											
															0.56	161.80	487.0	90	3	>20mm	<0.1mm Rough	11	13	1.5	None	1.00	Unweathered		Dry	J				P (>35°)	15.2	17.9	8.7	22.0	15	79	90	11.250											perpendicular to core axis	
															0.21	162.01	486.9	50	113	4	>20mm	<0.1mm Rough	9	14	1.5	None	1.00	Unweathered		Dry	J				P (>35°)	15.2	17.9	8.7	22.0	15	79	90	11.250											
															0.28	162.29	486.7			5										Dry	Br					P (>35°)	15.2	17.9	8.7	0.0	15	79	90											orientation match with previous run differs by 135 degrees c/w for Joints 5-9. Next run is off by 130.
															0.25	162.54	486.5	44	240	6	>20mm	<0.1mm V Rough	19	17	1.5	None	1.00	Unweathered		Dry	J				P (>35°)	15.2	17.9	8.7	23.0	15	80	90	11.250											
															0.43	162.97	486.2	82	185	7	>20mm	<0.1mm SL Rough	8	11	1.0	None	1.00	Unweathered		Dry	J				P (>35°)	15.2	17.9	8.7	20.0	15	77	90	7.500											
															0.66	163.63	485.8	82	164	8	>20mm	<0.1mm SL Rough	10	8	1.0	None	1.00	Unweathered		Dry	J				P (>35°)	15.2	17.9	8.7	20.0	15	77	90	7.500											
															0.14	163.77	485.7	78	177	9	>20mm	<0.1mm SL Rough	10	10	1.0	None	1.00	Unweathered		Dry	J				P (>35°)	15.2	17.9	8.7	20.0	15	77	90	7.500											
7f	164.00	166.41	485.6	484.0	2.41	2.41	100.0	2.37	98.3	12	6	344	50	275		164.14	485.5	73	100	1	>20mm	0.1-1.0 SL Rough	9	8	1.0	None	1.00	Unweathered		Dry	J				G (±20°)	15.2	19.8	9.2	19.0	15	78	98	8.195	78	8.195	57.932	partially spun joint							
															0.40	164.54	485.2	80	100	2	>20mm	0.1-1.0 SL Rough	4	9	1.0	None	1.00	Unweathered		Dry	J				G (±20°)	15.2	19.8	9.2	19.0	15	78	98	8.195											partially spun joint
															0.64	165.18	484.8	76	30	3	>20mm	<0.1mm SL Rough	13	6	1.0	None	1.00	Unweathered		Dry	J				G (±20°)	15.2	19.8	9.2	20.0	15	79	98	8.195											
															0.13	165.31	484.7	80	95	4	>20mm	<0.1mm SL Rough	5	12	1.0	None	1.00	Unweathered		Dry	J				G (±20°)	15.2	19.8	9.2	20.0	15	79	98	8.195											
															0.17	165.48	484.6	60	30	5	<1m	<0.1mm Smooth	5	4	4.0	None	1.00		SW	8				G (±20°)	15.2	19.8	9.2	23.0	15	82	98	32.780												
															0.73	166.21	484.2	70	36	6	>20mm	0.1-1.0 SL Rough	5	8	1.0	None	1.00	Unweathered		Dry	J				F (±35°)	15.2	19.8	9.2	19.0	15	78	98	8.195											partially spun joint
4a	166.41	167.22	484.0	483.5	0.81	0.81	100.0	0.60	74.1	12	8	90	22	33		166.55	483.9	60	39	1	>20mm	<0.1mm SL Rough	12	7	1.0	Soft <5mm	4.00	Unweathered	20					F (±35°)	4.2	14.5	6.2	16.0	15	56	74	1.543	54	1.543	42.905	partially spun joint								
															0.13	166.68	483.9	68	75	2	>20mm	<0.1mm SL Rough	8	9	1.0	None	1.00	Unweathered		Dry	J				F (±35°)	4.2	14.5	6.2	20.0	15	60	74	6.173											
															0.15	166.83	483.8	82	74	3	>20																																	

MR1-06-105

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Drilling Company: Boart Longyear  
Location: Deposit 1  
Coordinates: 7914594 N, 563403 E

Surface Elevation: 591 m  
1,939 ft  
Total Depth: 219.5 m  
720 ft  
Azimuth: 295 deg  
Dip: -40 deg (down is negative)

Drill Type: Longyear 38  
Core Diameter: From 0.0 m to 219.5 m 61.1 mm

Drillhole Number: MR1-06-105  
Logged By:  
Reviewed By:  
Date Started: 31-Aug-06  
Date Completed: 12-Sep-06

New Run    End of Hole    Verify Data    Delete Rows    Add New Joint

Drill Run Data														Joint Data														RMR89 Drill Run Rating						Rock Quality Index (Q)		Summary																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Rock Type	Depth From	Depth To	Elev From	Elev To	Run Length	Recov Length	Recov. (%)	RQD Length	RQD (%)	Jn	# of Joints	Joint Set Spac. (mm)	Ravg	UCS (Est.) (MPa)	Incremental Depth	Depth	Elev.	Alpha	Beta	Joint Condition Rating										Groundwater Rating	Discont Type	Fill Type 1	Fill Type 2	Fill Type 3	Orientation Quality	RMR <sub>89</sub> UCS Rating	RMR <sub>89</sub> RQD Rating	RMR <sub>89</sub> Joint Spac. Rating	RMR <sub>89</sub> Joint Condition Rating	RMR <sub>89</sub> Water Rating	RMR <sub>89</sub> Total	RQD	Q'	RMR <sub>89</sub> Final	Q' Final	RMR (Calc from Q')	Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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	(m)	(m)			(m)	(m)	(%)	(m)	(%)							(m)	(m)	(deg.)	(deg.)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

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<b>Drill Type:</b>	Longyear 38			
<b>Core Diameter:</b> From	0.0	m to	219.5	m
		m to		61.1
				mm

Drillhole Number:	MR1-06-105
Logged By:	
Reviewed By:	
Date Started:	31-Aug-06
Date Completed:	12-Sep-06

Azimuth:	295	deg	
Dip:	-40	deg	(down is negative)

NB102-00181/8-4  
Revision 0  
April 30, 2010



MR1-06-105

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1,939 ft

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New Run

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Drill Run Data															Joint Data																	RMR89 Drill Run Rating						Rock Quality Index (Q)		Summary										
Rock Type	Depth From	Depth To	Elev From	Elev To	Run Length	Recov Length	Recov. (%)	RQD Length	RQD (%)	Jn	# of Joints	Joint Set Spac. (mm)	Ravg	UCS (Est.) (MPa)	Incremental Depth	Depth	Elev.	Alpha	Beta	Joint Condition Rating											Ground-water Rating	Discont Type	Fill. Type 1	Fill. Type 2	Fill. Type 3	Orientation Quality	RMR <sub>89</sub> UCS Rating	RMR <sub>89</sub> RQD Rating	RMR <sub>89</sub> Joint Spac. Rating	RMR <sub>89</sub> Joint Condition Rating	RMR <sub>89</sub> Water Rating	RMR <sub>89</sub> Total	RQD	Q'	RMR <sub>89</sub> Final	Q' Final	RMR (Calc from Q') Final	Comments		
																				Discont Number	Persis- P	Apert- A	Roughness				Infill I	Ja	Ja Manual	Weath W																			Ravg	JCS
																							R	JRC    (stk)	JRC ⊥ (dip)	Jr																								
															0.03	218.55	450.5			7	>20m	1-5	Smooth	2	2	1.0	Soft <5mm	4.00		SW			Dry	Brok	clt	chl		G3	8.7	16.5	6.8	9.0	15	56	83	1.736				
															0.41	218.96	450.3	40	84	8	>20m	0.1-1.0	Rough	10	14	1.5	Soft <5mm	4.00		Unweathered		Dry	J	clt	chl		G3	8.7	16.5	6.8	17.0	15	64	83	2.604					
															0.29	219.25	450.1	75	358	9	>20m	<0.1mm	Rough	12	8	1.5	None	1.00		Unweathered		Dry	J				G3	8.7	16.5	6.8	22.0	15	69	83	10.417					
															0.15	219.40	450.0	59	14	10	>20m	<0.1mm	Rough	12	10	1.5	Soft <5mm	4.00		Unweathered		Dry	J	clt			G3	8.7	16.5	6.8	18.0	15	65	83	2.604					
EOH															EOH															EOH						EOH		EOH: 219.5m				EOH								