NiMo PROJECT

PROPERTY: Rich

HOLE: RI07-12

Easting	Northing	Elev.	Depth (m)
443936	7357825		94.49

Contractor: North Star
Drill: MD-002

SURVEY							
Depth (m)	Azimuth	Dip	Method	Depth (m)	Azimuth	Dip	Method
collar	070°	-60°	compass				

Core size: BTW
Casing depth: 15.24 (m) out

Drilling dates: July 27 to 30, 2007

Logged by: D. MacDonald

Target: _____

SUMMARY				
From (m)	To (m)	Interval	Unit	Comments
0.00	15.24	15.24	OVB	
15.24	83.12	67.88	DME	
83.12	83.17	0.05	NiMo	
83.17	94.49	11.32	OSR	

SAMPLES	
Numbers:	C488264 - C488286
	C488292 - C488293
Total:	23
Date sent:	August 12, 2007

COMMENTS

Additional sulphide layer identified during splitting, two samples inserted into sequence.

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Struct.		LITHOLOGY								ALT.			MINERALS				SAMPLES							Blocks			GEOTECHNICAL						JOINTS				
																											REC		RQD									
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:				Ca	Sx	Fe		From (m)	To (m)	Interval (m)	Sample	Ni (ppm)	Zn (ppm)	Mo (ppm)	From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling
		0.00	15.24	15.24	OVB				0 - 15.24 m Overburden																												
BD	75-8	15.24	83.12	67.88	SHL	DME	LA	BK		w			+	+										15.24	18.28	3.04	1.91	63	0.00	0	MW	VW	30	85	2	2	Li
									15.24 - 44.68 Interval starts with highly fissile and slightly friable laminar BK SHL, interbedded with abundant, GY siliceous SLT (gradationally and sharply contacts with the BK SHL) ranging in thickness from 1 cm - 25 cm, and with rare, GY calcareous SLT (slightly sandy) - comprises first of 6 coarsening downwards cycles in the DME of BK SHL grading into GY sandy SLT by end of interval; transition in grainsize is gradual, over ~5 m. Rare Sx (Py) flecks; common veinlets mostly parallel to BD up to 1 cm wide and filled with quartz. Almost no veinlets occur below this first interval.																	18.28	21.35	3.07	2.95	96	0.00	0	SW	MS	30	85	2	2	GYP
																								21.35	24.38	3.03	2.87	95	0.00	0	SW	MS	25	80	2	2	GYP
																								24.38	27.43	3.05	3.00	98	0.00	0	FR	MS	25	80	2	2	GYP
																								27.43	30.48	3.05	2.80	92	0.12	4	FR	MS	20	70	2	2	GYP
																								30.48	33.53	3.05	2.85	93	0.00	0	FR	MS	20	70	2	2	Cb
																								33.53	36.58	3.05	3.00	98	0.00	0	FR	MS	20	70	2	2	Cb
																								36.58	39.62	3.04	2.39	79	0.00	0	FR	MS	20	70	2	2	Cb
																								39.62	42.67	3.05	1.45	48	0.00	0	FR	MS	25	70	2	2	Cb
																								42.67	45.72	3.05	2.76	90	0.00	0	FR	MS	20	80	2	2	Cb
BD	80				SHL	DME	LA	BK		w			+																								
									44.68 - 49.58 m 2nd coarsening downward cycle; Mostly finely laminar BK SHL interbedded with abundant GY siliceous SLT-fg SS (up to ~20 cm thick with gradational, subtle upper boundaries) + rare GY calcareous GY SLT.													45.72	48.77	3.05	2.98	98	1.05	34	FR	MS	8	80	2	2	Cb
																								48.77	51.82	3.05	3.07	101	0.75	25	FR	MS	10	80	2	2	ALS

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Struct. Type	Struct. Attitude	LITHOLOGY From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:	ALT.	MINERALS Ca	Sx	Fe	SAMPLES From (m)	To (m)	Interval (m)	Sample	Ni (ppm)	Zn (ppm)	Mo (ppm)	Blocks From (m)	To (m)	Intvl. (m)	GEOTECHNICAL REC (m)	REC Percent	RQD (m)	RQD Percent	Weathering	Hardness	JOINTS Frequency	Attitude	Shape	Roughness	Infilling
BD	80-75				SHL	DME	LA	BK-	49.58 - 54.59 m 3rd coarsening downward cycle (BK SHL to GY sandy SLT); Finely laminar BK-GY SHL interbedded with GY siliceous SLT (up to 30 cm thick, graded beds with gradational upper contacts) and rare, calcareous GY SLT beds up to 8 cm thick; rare, disseminated vfg flakes of Py in last 2 m of interval.	w	+	+																												
																					51.82	54.87	3.05	3.02	99	1.28	42	FR	MS	10	80	2	2	ALS
BD	80				SHL	DME	LA	BK-	54.59 - 57.75 m 4th coarsening downward cycle (BK-GY SHL to GY fg-mg SS); finely laminar BK SHL interbedded with common GY siliceous SLT to sandy SLT beds ~8 cm thick; rare calcareous GY SLT beds with rare X-stratification; sharp, erosional lower contact	w	+																													
																					54.87	57.91	3.04	3.06	101	1.04	34	FR	MS	11	80	2	2	ALS
BD	80				SHL	DME	LA	BK-	cycle; Sharp upper contact (erosional scour) into finely laminar BK SHL interbedded with abundant GY siliceous SLT beds up to several cm thick, and with v rare laminar GY silty LST; interval ends in mg-cg siliceous SS.	w	+																													
																					57.91	60.93	3.02	3.04	101	0.56	19	FR	MS	18	80	2	2	ALS
																					60.93	64.01	3.08	3.09	100	0.56	18	FR	MS	18	80	2	2	ALS
																					64.01	67.06	3.05	3.07	101	1.35	44	FR	MS	9	80	2	2	ALS
BD	85				SHL	DME	LA	BK	65.24 - 69.09 m 6th coarsening downward cycle; Moderately finely laminar, flat-bedded BK SHL interbedded with GY siliceous SLT (almost fg silty SS) beds up to 20 cm thick; rare Sx (Py) bands (1 - 2 mm thick); grainsize increases to fg SS at end of interval; sharp upper contact.	w		+																												
																					67.06	70.10	3.04	3.06	101	1.39	46	FR	MS	10	80	2	2	ALS
BD	85				SHL	DME	LA	BK	69.09 - 83.12 m 7th coarsening downward cycle; interval starts with finely laminar BK SHL interbedded with GY silty LST beds (uncommon, up to 20 cm thick; uncommon Py lenses parallel to bedding (3mm x 2 cm); almost no veinlets in this interval; gradational lower and upper contacts (`5 cm)	w	+	+		82.72	82.74	0.02	C488292	3.04%	0.32%	1270																				
														82.74	83.12	0.38	C488293	3900	1030	264	70.10	73.15	3.05	2.93	96	1.75	57	FR	MS	7	80	2	2	ALS
																					73.15	76.20	3.05	3.00	98	1.17	38	FR	MS	9	80	2	2	ALS
														72.25	73.75	1.50	C488264	123.0	1010	39.7														
														73.75	75.25	1.50	C488265	117.5	529	43.9														
														75.25	76.25	1.00	C488266	164.5	698	44.5	76.20	79.25	3.05	2.60	85	0.50	16	FR	MS	20	80	2	2	ALS
														76.25	77.25	1.00	C488267	169.5	309	46.1														
														77.25	78.25	1.00	C488268	132.0	218	37.9														
														78.25	78.75	0.50	C488269	96.5	146	32.4	79.25	82.30	3.05	0.28	9	0.00	0	FR	MS	20	80	2	2	ALS
														78.75	79.25	0.50	C488270	137.5	171	46.1														
									79.25 TO 82.60 poor recovery (30 cm)					79.25	82.60	3.35	C488271	133.0	347	36.9														

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																										REC		RQD									
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:				Ca	Sx	Fe	From (m)	To (m)	Interval (m)	Sample	Ni (ppm)	Zn (ppm)	Mo (ppm)	From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling	
									82.97 BK SHL becomes abruptly softer until 83.47 m mark, after which depth the BK SHL becomes harder than overlying SHLs.							82.60	83.12	0.52	C488272	179.0	683	41.8	82.30	85.34	3.04	2.72	89	1.05	35	FR	MS	15	80	2	2	Cb	
BD	var	83.12	83.17	0.05	SX	NIMO	LA/I	BZ	83.12 - 83.17 m Finely laminar, mildly bioturbated bronze Sx bands up to 0.8 cm thick; some delamination of laminae which form floating rafts in underlying BK SHL	w				+		83.12	83.17	0.05	C488273	1.78%	0.98%	930															
BD	85	83.17	94.99	11.82	SHL	OSR	LA	BK	83.17 - 83.89 m Finely laminar, flat-bedded BK SHL that becomes slightly harder and darker, as well as becoming calcareous at the 83.47 m mark. Rare Py laminae up to 2 mm thick.	w			+	+		83.17	83.47	0.30	C488274	395.0	946	83.5															
BA					BAL	OSR	BA/I	GY	83.89 - 84.41 m GY, slightly brecciated LST BALL; fizzes intensely with HCl; internally brecciated, and veinlets are common (fragments 3 cm x 3 cm; calcite matrix ~1 cm wide at maximum point)	w			+			83.47	83.89	0.42	C488275	62.3	205	19.3	85.34	88.39	3.05	2.91	95	1.44	47	FR	MS	3	80	2	2	Cb	
BD	85-90				SHL	OSR	LA	BK		w			+	+		83.89	84.41	0.52	C488277	24.5	73	7.08															
																84.41	84.91	0.50	C488278	113.5	224	31.6															
									84.41 - 84.99 m (EOH) BK SHL ctd. Finely laminar, almost massive, flat-bedded, dark BK SHL that is calcareous from 84.50 m to EOH, and has recrystallization textures on fresh fracture surfaces; almost free of veinlets and natural fractures; common Sx (Py) bands and lenses (up to 1 cm diam/width); BK SHL in this interval is harder than that between the NIMO and LST BALL, and harder than the DME SHLs above.							84.91	85.91	1.00	C488279	121.5	365	32.5	88.39	91.44	3.05	3.00	98	2.27	74	FR	MS	3	80	2	2	Cb	
																85.91	86.91	1.00	C488280	101.0	290	28.3															
																86.91	87.91	1.00	C488281	126.0	294	35.3															
																87.91	89.41	1.50	C488282	129.5	196	36.8	91.44	94.49	3.05	3.12	102	2.39	78	FR	MS	3	80	2	2	Cb	
																89.41	90.91	1.50	C488283	127.0	176	38.2															
																93.85	94.15	0.30	C488284	123.5	371	50.3															
																94.15	94.16	0.01	C488285	157.0	974	34.4															
																94.16	94.46	0.30	C488286	152.0	119	51.2															
		94.49							END OF HOLE							BLANK			C488276	3.5	21	0.57															