NiMo PROJECT

PROPERTY: PE

HOLE: PE07-07

Easting	Northing	Elev.	Depth (m)
452941	7314197	452	164.59

Contractor: North Star
Drill: MD-002

SURVEY							
Depth (m)	Azimuth	Dip	Method	Depth (m)	Azimuth	Dip	Method
collar	045°	-70°	compass				

Core size: BTW
Cassing depth: 11.28 (m) out

Drilling dates: July 12 to 13, 2007

Logged by: D. MacDonald

Target: Lower elevation, attempting to pass through DMI unit

SUMMARY				
From (m)	To (m)	Interval	Unit	Coments
0.00	7.58	7.58	OVB	
7.58	164.59	157.01	DMI	

SAMPLES	
Numbers:	C385555 - C385565
Total:	11
Date sent:	July 23, 2007

COMMENTS

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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	
		0.00	7.58	7.58	OB				Overburden							
BD	80	7.58	164.59	164.59	SHL	DMI	LA	BK	7.58 - 22.40 m Finely laminar, highly fissile and friable black shale with abundant, randomly oriented fractures coated with limonite; common, vfg rusty-orange-brown lenses, beds and nodules (5 - 7 cm diam) with concentric colour zonation pattern (margin : 0.5 cm thick, yellow; core : 5.0 cm diam, dark orange-brown). Commonly, these soft, earthy, Fe-rich layers are associated with organic-rich, jet-black laminae that are wavy laminar and wrap around the Fe-rich layers/nodules. rare, vfg crystallites of Py are found towards the bottom of this interval.	m-s				+	+	
BD	85				SHL	DMI	LA	BK	22.40 - 50.29 m Moderately thickly -bedded; finely laminar blck-grey, clayey shale, very fissile and friable to light pressure; common fractures both parallel and perpendicular to BD; earthy texture overall; BK SHL finely interbedded with fg, silty SS with SS laminae and beds ranging from 1 mm - 15 cm; silty SS beds become more common in lower part of interval (last 5 m) and are much more competent than the shales with which they are interbedded. Rare, vfg flecks of Py are present in the last 1 metre of the interval.	m				+		
BD	85				SHL	DMI	LA	BK	50.29 - 76.81 m Finely laminar, black-grey shale with abundant Py-rich laminae and beds ranging from 1 mm to 7 cm thick and ranging from vfg to mg (coarsely crystalline). Pyrite beds commonly associated with v dark black, carbonaceous shale laminae (wavy-to-flatly laminar) up to 0.5 cm thick at both upper and lower bed boundaries; BK SHL interbedded with fg, grey SS/silty beds ranging in thickness from 0.5 cm to 60 cm, that are also commonly rich in fg, disseminated Py; Py lenses and blebs also	f				+		

SAMPLES From (m)	To (m)	Interval (m)	Sample	Ni (ppm)	Zn (ppm)	Mo (ppm)
49.75	50.05	0.30	C385555	65.6	166	1.78
50.05	50.35	0.30	C385556	84.0	159	2.04
50.35	50.39	0.04	C385557	104.5	105	1.38
50.39	50.69	0.30	C385558	114.5	201	2.49
50.69	50.99	0.30	C385559	65.9	152	1.64
BLANK			C385560	1.7	20	0.17

Blocks From (m)	To (m)	Intvl. (m)	REC (m)	REC Percent	RQD (m)	RQD Percent	Weathering	Hardness	JOINTS Frequency	Attitude	Shape	Roughness	Infilling
7.31	10.36	3.05	1.32	43	0.00	0	MW	VW	30	80	3	3	Li
10.36	12.19	1.83	1.30	71	0.00	0	MW	VW	30	80	3	3	Li
12.19	15.24	3.05	2.95	97	0.00	0	MW	VW	30	75	2	3	Li
15.24	18.28	3.04	3.10	102	0.00	0	MW	W	30	70	2	3	Li
18.28	21.35	3.07	3.09	101	0.00	0	MW	W	20	80	3	2	Li
21.35	24.38	3.03	2.75	91	0.00	0	MW	VW	30	65	2	2	Li
24.38	27.43	3.05	2.10	69	0.00	0	SW	W	30	65	2	3	Li
27.43	30.48	3.05	2.45	80	0.12	4	FR	W	15	20	2	2	gyp
30.48	33.53	3.05	2.80	92	0.22	7	FR	MS	15	10	2	2	gyp
33.53	36.58	3.05	2.75	90	0.00	0	FR	MS	20	75	2	2	gyp
36.58	39.62	3.04	2.58	85	0.00	0	FR	MS	15	80	2	2	gyp
39.62	42.67	3.05	2.50	82	0.00	0	FR	MS	15	70	2	2	gyp
42.67	45.72	3.05	2.87	94	0.13	4	FR	W	20	75	2	2	gyp
45.72	48.77	3.05	2.93	96	0.00	0	FR	W	30	80	2	2	gyp
48.77	51.82	3.05	2.85	93	0.10	3	FR	W	20	70	2	2	gyp
51.82	54.87	3.05	2.97	97	0.23	8	FR	MS	15	75	3	2	gyp
54.87	57.91	3.04	2.96	97	0.10	3	FR	MS	20	65	2	2	gyp
57.91	60.93	3.02	2.77	92	0.40	13	FR	MS	15	30	2	2	gyp
60.93	64.01	3.08	2.97	96	0.55	18	FR	MS	10	30	2	2	gyp

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Struct. Type	Struct. Attitude	LITHOLOGY From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:	ALT.	Ca	Sx	Fe	MINERALS	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
									common; slight overall fining-downwards trends in BK SHLs over this interval, whereas the beds of intercalated fg SS tend to increase slightly with depth overall; disseminated fg Py also abundant in the BK						64.71	65.01	0.30	C385561	109.0	502	4.06	64.01	67.06	3.05	3.02	99	0.35	11	FR	MS	15	70	2	2	gyp
															65.01	65.31	0.30	C385562	102.5	235	5.34														
															65.31	65.36	0.05	C385563	97.4	221	4.42														
															65.36	65.66	0.30	C385564	92.5	224	4.58														
															65.66	65.96	0.30	C385565	104.5	247	6.44	67.06	70.10	3.04	3.01	99	0.67	22	FR	MS	12	75	2	2	gyp
																						70.10	73.15	3.05	3.01	99	0.75	25	FR	MS	12	75	2	2	gyp
																						73.15	76.20	3.05	2.27	74	0.00	0	FR	MS	20	60	2	2	gyp
BD	80				SHL	DMI	LA	BK	76.81 - 154.02 m Finely laminar, black shale, slightly harder than shales in previous intervals; rare, medium thick-bedded siltstone/silty SS beds up to 20 cm thick at 92.10 - 92.50 m; abundant, disseminated, fg Py throughout whole interval, as well as Py lenses, beds and bands up to 3 cm thick, generally conformable to BD, but in case of lenses, BD warps around said lenses. Rare Ca veinlets, 2 cm diam, 45 degrees tca.	w		+	+											76.20	79.25	3.05	2.72	89	0.00	0	FR	MS	5	5	2	2	gyp
																						79.25	82.30	3.05	2.90	95	0.41	13	FR	MS	5	10	2	2	gyp
																						82.30	85.34	3.04	2.97	98	0.16	5	FR	MS	12	5	2	2	gyp
																						85.34	88.39	3.05	3.12	102	2.46	81	FR	MS	10	80	1	1	gyp
																						88.39	91.44	3.05	3.11	102	0.10	3	FR	MS	30	80	1	1	gyp
																						91.44	94.49	3.05	2.88	94	0.73	24	FR	MS	20	80	1	1	gyp
																						94.49	97.54	3.05	3.04	100	1.25	41	FR	MS	21	80	1	1	gyp
																						97.54	100.58	3.04	2.87	94	1.27	42	FR	MS	23	75	1	1	gyp Py
																						100.58	103.63	3.05	3.06	100	1.43	47	FR	MS	20	80	1	1	gyp
																						103.63	106.68	3.05	3.08	101	2.65	87	FR	MS	16	80	1	1	gyp Py
																						106.68	109.73	3.05	3.01	99	2.41	79	FR	MS	12	80	1	1	gyp
																						109.73	112.78	3.05	3.06	100	2.58	85	FR	MS	10	80	1	1	gyp
																						112.78	115.83	3.05	3.09	101	2.68	88	FR	MS	9	80	1	1	gyp
																						115.83	118.87	3.04	3.05	100	2.49	82	FR	MS	6	80	1	1	gyp
																						118.87	121.92	3.05	3.15	103	2.01	66	FR	MS	10	80	1	1	gyp

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LITHOLOGY										ALT.			MINERALS				SAMPLES							Blocks			GEOTECHNICAL						JOINTS				
Struct.																											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
																								121.92	124.97	3.05	3.08	101	1.99	65	FR	MS	12	5	3	2	gyp
																																					Py
																								124.97	128.17	3.20	3.04	95	2.30	72	FR	MS	15	80	1	1	gyp
																								128.01	131.06	3.05	3.01	99	2.57	84	FR	MS	8	5	1	2	gyp
																								131.06	134.11	3.05	3.08	101	2.48	81	FR	MS	6	5	1	2	gyp
																								134.11	137.16	3.05	2.88	94	2.08	68	FR	MS	10	80	1	1	gyp
																								137.16	140.21	3.05	2.91	95	2.45	80	FR	S	5	80	1	1	gyp
																								140.21	143.26	3.05	3.11	102	2.79	91	FR	S	4	80	1	1	gyp
																								143.26	146.30	3.04	3.16	104	2.60	86	FR	S	4	80	1	1	gyp
																								146.30	149.30	3.00	3.15	105	2.78	93	FR	MS	3	80	1	1	gyp
																								149.35	152.40	3.05	3.06	100	2.18	71	FR	MS	6	5	1	2	gyp
																								152.40	155.45	3.05	3.12	102	2.47	81	FR	MS	5	80	1	2	gyp
																																					Py
BD	80				LST	DMI	LA	GY	154.02 - 154.34 m Grey, fg sandy carbonate silt with gradational upper contact (5 cm) into overlying black shale; slight coarsening downward trend, with rare Py lenses at bottom of interval (1 cm x 3 mm)	w			+	+																											
BD	80				SHL	DMI	LA	BK	154.34 - 154.48 m Same BK SHL as in interval 76.81 - 154.02 m	w				+												155.45	158.50	3.05	2.90	95	2.77	91	FR	MS	2	80	1	1	gyp
BD	80				LST	DMI	LA	GY	154.48 - 154.61 m fg - mg grey limestone (silty to fg SS) with sharp upper and lower contacts, finely bedded with rare carbonate lenses (1 cm x 2 cm)	w			+																											
BD	80				SHL	DMI	LA	BK	154.61 - 154.64 m Same BK SHL as above	w				+																									
BD	80				LST	DMI	LA	GY	154.64 - 155.34 m fg, silty grey, flat-bedded carbonate SS with several coarsening-upwards cycles, with overall coarsening-upwards trend.																	158.50	161.54	3.04	3.09	102	2.75	90	FR	MS	2	5	1	1	gyp
BD	80				SHL	DMI	LA	GY	155.34 - 162.81 m Same BK SHL as above, with rare calcite veinlets up to 0.5 cm wide, parallel to BD.	w			+	+																									
BD	80				LST	DMI	LA	GY	162.81 - 163.38 m fg, flat-bedded, silty carbonate SS fining downwards, with rare, thin Sx bands (1 mm thick).																															
BD	80				SHL	DMI	LA	GY	163.38 - 164.59 m EOH Same BK SHL as above	w				+												161.54	164.59	3.05	3.00	98	2.41	79	FR	MS	4	5	1	2	gyp

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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	
		164.59							END OF HOLE																													