NiMo PROJECT

PROPERTY: Rich

HOLE: RI07-16

Easting	Northing	Elev.	Depth (m)
443054	7359059		121.92

Contractor: North Star
Drill: MD-002

SURVEY							
Depth (m)	Azimuth	Dip	Method	Depth (m)	Azimuth	Dip	Method
collar	060°	-75°	compass				

Core size: BTW
Casing depth: 30.48 (m) out

Drilling dates: August 9 to 10, 2007

Logged by: J. Lane

Target: _____

SUMMARY				
From (m)	To (m)	Interval	Unit	Comments
0.00	16.02	16.02	OVB	
16.02	91.90	75.88	DME	
91.90	91.91	0.01	NiMo	
91.91	121.92	30.01	OSR	

SAMPLES

Numbers: C488403 - C488414

Total: 12
Date sent:

COMMENTS

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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:	als			py	car	cpy		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	16.02	16.02	OVB				overburden																												
BD	60	16.02	54.02	38.00	SHL	DME	FG	BK	The core is very hard- cherty, it is generally black in colour and is very fine grained NOTE: from 16.02-24.38, the core is slightly softer. Very thin lamina (<1mm) of pyrite are present and spaced 3-4mm apart throughout the core. Slightly coarser grained shale occurs in generally 2-3 cm thickness (but occurs up to 10cm),is intermittent within the shale and can contain pyrite lamina. Blebs of pyrite also occur throughout the black shale. Aluminosilicate occurs as a white powder on the fractured surfaces. 2-3cm thick quartz veins occur running parallel to bedding (generally) but also see some very thin quartz veinlets perpendicular to bedding (tension filled?)	m			m												16.02	18.24	2.22	2.27	102	0.00	0	SW	S	15	80	1	2	ALS
																								18.28	21.35	3.07	2.84	93	0.60	20	FR	S	10	70	1	2	ALS
													w	w																							
									19.29-20.11: carbonaceous rock containing circular nodules ~1cm in diameter with pyrite and some chalcopyrite visible within.															21.35	24.38	3.03	3.20	106	0.35	12	FR	S	12	70	1	2	ALS
																								24.38	27.43	3.05	2.84	93	0.24	8	FR	S	15	70	1	2	ALS
																								27.43	30.48	3.05	2.24	73	0.44	14	FR	S	13	70	1	2	ALS
																								30.48	33.53	3.05	2.93	96	0.11	4	FR	S	14	70	1	2	ALS
																								33.53	36.58	3.05	2.47	81	0.55	18	FR	S	9	70	1	2	ALS
																								36.58	39.62	3.04	2.55	84	0.10	3	FR	S	12	60	1	2	ALS
																								39.62	42.67	3.05	2.63	86	0.11	4	FR	S	14	60	1	2	ALS
																								42.67	45.72	3.05	2.70	89	0.11	4	FR	S	14	60	1	2	ALS
																								45.72	48.77	3.05	2.93	96	0.39	13	FR	S	12	60	1	2	ALS
																								48.77	51.82	3.05	2.98	98	0.48	16	FR	S	9	60	1	2	ALS
																								51.82	54.87	3.05	2.95	97	0.67	22	FR	S	9	60	1	2	ALS

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Struct. Type	Struct. Attitude	LITHOLOGY From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:	ALT. als			MINERALS py	car	cpy		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
		54.02	57.41	3.39	CBR	DME	FG	GY	fine grained light to medium grey carbonaceous shale containing a few thin (<1mm) carbonate veinlets, upper and lower contacts are gradational. Similar carbonate horizons occur intermixed within the black shale in generally 20 cm spacing.					st										54.87	57.91	3.04	2.96	97	0.11	4	FR	S	12	50	1	2	ALS
		57.41	77.27	19.86	SHL	DME	FG	BK	the shale has become quite organic rich with graphitic like surfaces to the fractures. 65.80-65.82 - pyrite layers are starting to occur in the core which are internally laminated and slightly swaley, similar to the NiMo- but only composed of pyrite. In general the core does not contain as much pyrite as the thin pyrite laminations have decreased in concentration.				tr													57.91	60.93	3.02	2.84	94	0.91	30	FR	S	6	60	1	2	ALS
																								60.93	64.01	3.08	1.40	45	0.00	0	FR	S	9	60	1	2	ALS
																								64.01	67.06	3.05	3.25	107	0.76	25	FR	S	10	60	1	2	ALS
																								67.06	70.10	3.04	2.98	98	0.74	24	FR	S	7	10	1	2	ALS
																								70.10	73.15	3.05	2.94	96	0.96	31	FR	S	8	60	1	2	ALS
																								73.15	76.20	3.05	2.95	97	0.49	16	FR	S	11	60	1	2	ALS
																								76.20	79.25	3.05	2.80	92	0.31	10	FR	S	11	60	1	2	Qz
		77.27	77.39	0.12	CBR	DME	FG	GY	carbonaceous horizon medium to light grey in colour					st																								
		77.39	91.90	14.51	SHL	DME	FG	BK	similar shale as above; at 83.26 sulphide layer somewhat granular looking occurs . Core becomes very blocky and irregularly broken up at around 87.09. Broken and fractured surfaces show white aluminosilicate powder on them.	st																79.25	82.30	3.05	2.68	88	0.75	25	FR	S	10	60	1	2	Qz
																								82.30	85.34	3.04	3.08	101	0.67	22	FR	S	11	60	1	2	Qz
																								85.34	88.39	3.05	2.97	97	0.10	3	FR	S	30	60	1	2	Qz
																	86.50	88.00	1.50	C488403	146.0	152	50.3														
																	88.00	89.50	1.50	C488404	158.5	129	54.7														
																	89.50	90.44	0.94	C488405	193.0	159	74.7	88.39	91.44	3.05	2.00	66	0.00	0	FR	S	30	60	1	2	Qz
																	90.44	91.44	1.00	C488406	149.5	369	43.2														
																	91.44	91.90	0.46	C488407	735.0	594	54.9														
		91.90	91.91	0.01	MSX	NiMo			1.0-1.5cm thick quite broken up and fractured looking with visible displacement of 1cm occurring on flat slip surface. The top 0.5 cm is quite massive looking with quite planar laminations, while the bottom 0.5 cm is much more disturbed looking with swaly bedding and an even granular looking texture.								91.90	91.91	0.01	C488408	4.56%	1.05%	2890	91.44	94.49	3.05	2.76	90	1.42	47	FR	MS	4	60	1	2	Cb
		91.91	92.54	0.63	SHL	OSR	FG	BK	Noticeably softer shale that is black in colour. May contain barite nodules- can see lens shaped somewhat granular looking nodules within the shale, also the core is quite heavy. The core begins to fizz slightly at 92.31.								91.91	92.54	0.63	C488409	263.0	654	79.5														
		92.54	94.48	1.94	LBM	OSR	RG	GY	layered light grey coloured very carbonaceous rock. The rock is quite hard showing some very thin carbonate veinlets; there is some visible internal structure at 93.88 which almost looks like cross bedding.					st			92.54	93.27	0.73	C488411	135.0	435	33.8														
		94.48	121.92	27.44	SHL	OSR	FG	BK	The core has become very hard, almost								93.27	94.48	1.21	C488412	22.4	38	7.1	94.49	97.54	3.05	3.03	99	1.74	57	FR	MS	2	30	1	2	Cb
																	94.48	96.00	1.52	C488413	109.0	359	31.2														

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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:	als			py	car	cpy		From (m)	To (m)	Interval (m)	Sample	Ni (ppm)	Zn (ppm)	Mo (ppm)	From (m)	To (m)	Intv/. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling
									The core has become very hard- almost chert like. The shale is black in colour, contains pyrite blebs to 3mm by 1.5cm in size that are sometimes surrounded by a thin layer of carbonate, carbonate veinlets running parallel to bedding also occurs. The core fizzes moderately. Around the 96.67 the core gradually becomes softer, there does not however seem to be any noticeable change in the reaction of the rock to acid. Core is quite massive with few natural breaks, In general the core is quite uniform until the end of the hole; there is however a section from 113.68-113.78 of a coarser grained layered carbonate. Also large (1cm) pyrite @ 155.37 has blurry upper contacts and a sharp lower contact.								96.00	97.54	1.54	C488414	98.4	314	27.1																
																	BLANK			C488410	10.8	25	1.53	97.54	100.58	3.04	2.97	98	2.23	73	FR	MS	3	30	1	2	Cb
																								100.58	103.63	3.05	3.25	107	1.84	60	FR	MS	9	70	1	2	Cb
																								103.63	106.68	3.05	3.09	101	0.98	32	FR	MS	9	40	1	2	Cb
																								106.68	109.73	3.05	2.94	96	1.42	47	FR	MS	11	70	1	2	Cb
																								109.73	112.78	3.05	3.07	101	1.53	50	FR	MS	3	60	1	2	Cb
																								112.78	115.83	3.05	2.98	98	1.95	64	FR	MS	2	60	1	2	Cb
																								115.83	118.87	3.04	0.68	22	0.00	0	FR	MS	3	30	1	2	Cb
																								118.87	121.92	3.05	2.25	74	0.54	18	FR	MS	13	60	1	2	Cb
		121.92							END OF HOLE!																												