WELCOME NORTH MINES LTD. DIAMOND DRILL LOG 016173

Collar:	
NORTH	0+25N
EAST	14+00W
ELEVATION	5960'
LOGGED BY	B. Holland
DATE LOGGED	Sept. 22, 1977
MAP REFERENCE	105K-6

Hole Survey		
Footage	Azimuth	Dip
0		-90°
200		-89°
454		-86°
EOH		
Method: Acid		

PROJECT VANGORDA PROJECT
PROPERTY NAME RAZ CLAIM GROUP
DRILLING CONTRACTOR CANADIAN LONGYEAR
ASSAYER
PURPOSE OF HOLE TEST COINCIDENT MAG AND E.M. ANOMALIES

HOLE NO. 77VZ-1
CLAIM NAME RAZ #2
COMMENCED August 16, 1977
FINISHED August 18, 1977

From	To	Rcvy %		Sample From	Sample To	Sample Width	Sample No.	Assays Zn%	Assays Pb%	Visual Log
0	20		OVERBURDEN							
20	135	90	1A5 - abundant rusty laminae of fine-grained quartz and altered feldspar give an otherwise speckled schist a distinct banded texture. Speckled texture due to disseminated white to greenish blebs of quartz and feldspar in a purplish biotite-quartz-chlorite-feldspar groundmass. Locally contains abundant rounded reddish garnet porphyroblasts up to 1/2" in size - also locally get F_1 well developed on small scale.							
			- 63-77': grades into quartzofeldspathic chloritic schist which appears to be a metasomatized equivalent to 1A5 and locally contains abundant unaltered or partly altered bands and blebs of 1A5. Core recovery 65%.							
			- other minor chloritic schist zones at 91', 96', 99-100' and 114.5-116.5'.							
135	172	85	1E4 - broken greenish chlorite-quartz schist with abundant rusty fractures, faintly to distinctly laminated. Grades from biotite-rich to poorly laminated biotite-poor. Appears to be a metasomatized phase of 1A5 similar to that found at 63-77'.							
			1' Pegmatitic dyke occurs at 149' containing abundant coarse muscovite.							
			2' aplitic dyke with finely disseminated black hornblende occurs at 164'.							

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From	To	Rcvy %	Description	Sample From	Sample To	Sample Width	Sample No.	Assays Zn%	Assays Pb%	Visual Log
1.72	220	95	1A5 - same as previous with chloritic bands and envelopes around fractures. -181': 2' pegmatitic dyke containing quartz-feldspar-muscovite with minor hornblende and red garnets. Underlain by 3-1/2' of 1E5 - fine-grained chloritic schist, strongly sheared and broken; 183' to 185' - grades into 1A5 -198-205': similar to 63-77'.							
220	263	90	1B5 - similar composition to 1A5 but generally lacks speckled texture and generally contains larger and more abundant garnets. Also F_1 folding is less abundant and much less well developed. Still distinctly thinly laminated and locally appears to be partly metasomatized to chlorite-rich schist. -227.5': 3" aplitic dyke -245.5': 1' pegmatite dyke -257-263': highly broken. Core recovery 65% - abundant chloritic schist bands - increasing in abundance to 263'.							
263	299	75	1E8 - faintly poorly laminated greenish chlorite-quartz schist, fine-grained - locally abundant fine sericite - also locally abundant black biotite-rich clots possibly containing chiastolite? - similar texture to partly metasomatized 1A5 (63-77'). Also contains some reddish garnets similar to 1B5. -289-297': approximately 15% recovery.							
299	301.5	95	1B5 - actually transitional phase between 1E8 and 1B5 - texturally similar to 1B5 but with abundant chlorite - chlorite appears to be alteration of biotite - large reddish garnets common - distinctly laminated.							

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From	To	Rcvy %	Description	Sample From	Sample To	Sample Width	Sample No.	Assays Zn%	Assays Pb%	Visual Log
301.5	345	95	1B5 - biotite dominant with some chlorite and locally chlorite-rich bands and zones - garnets generally abundant and large (up to 1/2") to 306' - less abundant after 306' - rock generally quite well laminated. -308': have 6" white quartz sweat with minor disseminated pyrite - pyrite also in hair fractures radiating from quartz sweat - smaller quartz sweats with minor pyrite also occur occasionally. -328.5-337': becomes rusty (along fractures) and more broken - appears to be due to pyrite in fractures and also due to alteration of feldspars.							
345	352.5	90	1B8 - strong chloritic and sericitic metasomatism often almost completely replacing original rock - much more fissile and schistose -345': have a 1'-thick band of chlorite-muscovite-quartz schist possibly completely replaced 1B8 - grade into 1B8							
352.5	371	75	1B6 - clotted texture of biotite - garnetiferous - biotite less abundant and quartz and greenish feldspar more abundant - still distinctly but poorly laminated - includes several bands of fine-grained biotite-chlorite quartzite with chlorite replacing biotite, locally giving rock a patchy green-brown texture - generally purplish grey in color - faint laminations locally apparent due to occasional thin discontinuous fine-grained quartz laminae - minor disseminated pyrrhotite and stringers of pyrite. -362-363': Quartzite band capped by 1" to 3" greenish zone containing large garnet porphyroblasts (up to 3/4" -369-371': similar to 362-363'.							

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371	420	90	1B5 - similar to previous except more biotite-rich and hence darker colour and generally tends to be more garnetiferous - biotite occurs in wispy laminations around slightly granoblastic greenish quartz feldspar.								
			-372-373': broken altered (chloritized) 1B5								
			-373-375': slightly altered (faintly rusty)								
			-377-379': fine-grained greenish to brownish chlorite-biotite quartzite containing large reddish garnets (up to 1") - gradational contact - some pyrite in or near garnets								
			-379-381': 1B5 with chlorite-muscovite replacement of biotite along fractures - also occurs 383-384' and 388.5-389'.								
			-389-392': slightly rusty								
			-406.5': quartzite band (2" thick)								
			Includes some 1B6 in lower sections - increasi[illegible]mounts downward.								
420	454	85	1C6 - gradational contact with 1B5 over few fe[illegible]t 423' have distinct clotted texture with clots of biotite in a quartz-chlorite-muscovite rock - appears to be at least partly metasomatic chlorite-muscovite replace biotite.								
			-423-426': chlorite and muscovite rich - becomes more biotite-rich downward.								
			-430.5': 2-1/2' aplite-pegmatite dyke - several other smaller ones further down.								
			-451.5-454': becomes chlorite and muscovite-rich, crumbly and broken - little biotite								
454			END OF HOLE								