010

Diamond Drilling

Township of Horwood

Report Nº: 20

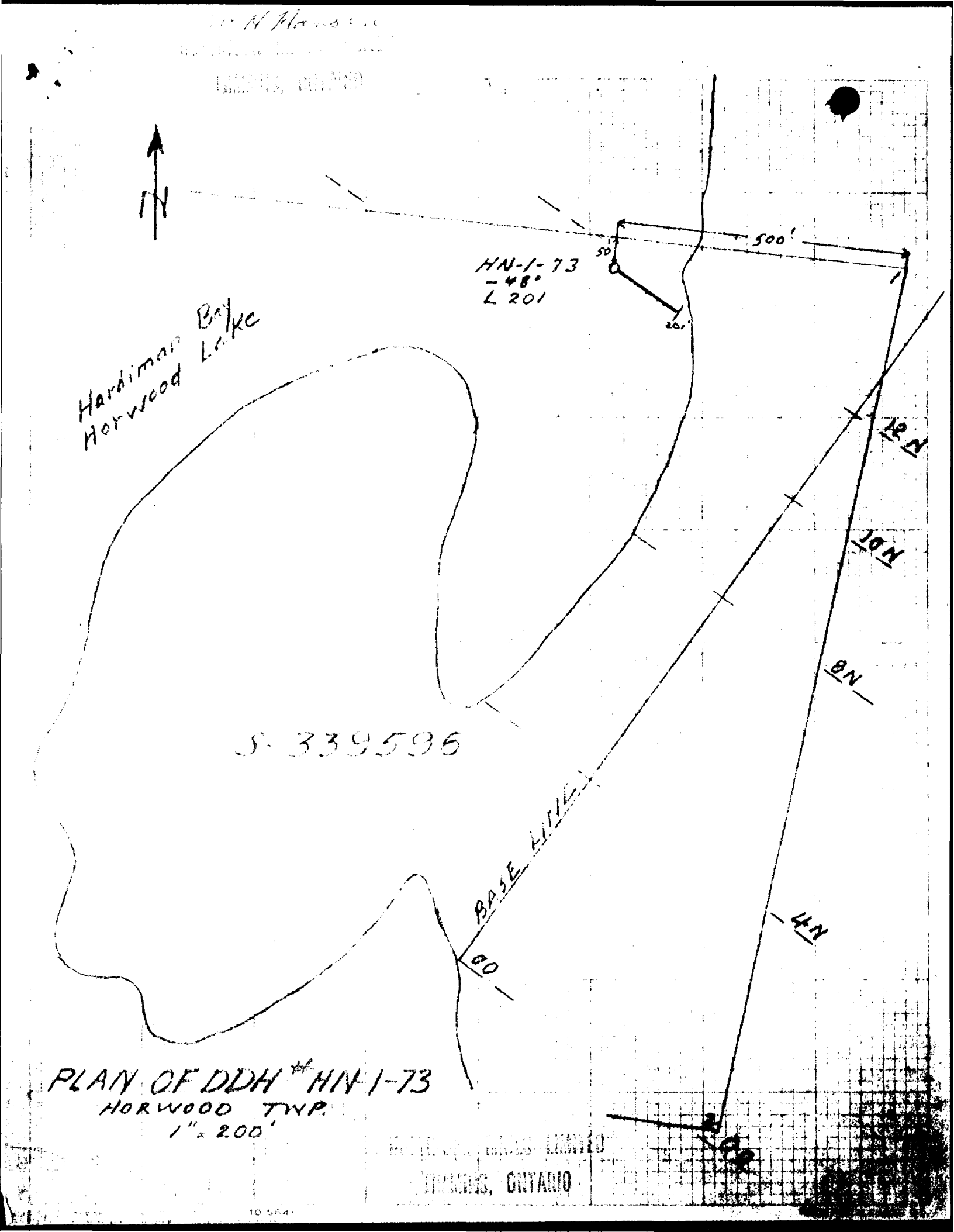
Work performed by: Hollinger Mines Ltd.

Claim Nº	Hole Nº	Footage	Date	Note
S 339596	HN-1-73	201'	Feb/73	(1)
S339597	HN-2-73	199'	Feb/73	(2)
	HN-3-73	197'	Feb/73	(2)
S 339598	HN-4073	254'	Feb/73	(2)
	HN-5-73	208'	Feb/73	(2)
	HN-6-73	350.5'	Feb/73	(2)
	HN-7-73	307'	Mar/73	(2)
S 339601	HN-8-73	303'	Mar/73	(2)
S 339600	HN-9-73	303'	Mar/73	(2)

2322.5

2322.5

Notes:


N
500'
50'
20'
HN-1-73
-48.
L 201
Hardiman Bay
Horwood Lake
12 N
10 N
8 N
4 N
BASE LINE
S. 339596
PLAN OF DDH # HN-1-73
HORWOOD TWP.
1" = 200'

Location of Collar from #1 Post of S-339596

FORM 822
NORTH 11 + 70 N W 520'
EAST 5 + 00 W S 50'
ELEV.
AZIM. 126° (as.)
DIP Collar - 48°; 200' - 44°

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN
Claim S-339596 NX core Horwood Twp., Ont.

HOLE NO. HN-1-73
COMMENCED Feb. 4, 1973
FINISHED Feb. 5, 1973
PURPOSE OF HOLE to test geology & structure for molybdenum mineralisation.

Fracture Densities in av. No./ft.	FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
	0	56'	Overburden - lake, silt and clay.						
	56'	121'	Talc-Chlorite-Biotite Schist - fine-grained, dark-green, composed predominantly of greenish talc and/or sericite, white carbonate, dark to light green chlorite, actinolite/tremolite locally, and numerous sections with considerable black biotite; a few sections are made up of mostly chlorite or talc and sericite; the overall section is very soft, has a sheen, a soapy feel and an intense schistosity suggesting similarity with the talc serpentine schists of the property; core angles with schistosity are listed at end of log; much of the core is magnetic because of very finely disseminated grains of magnetite, and finely disseminated sulphides some of which may be pyrrhotite; pyrite is present throughout as scattered blebs and narrow streaks along fractures and quartz veinlets; core is cut by narrow quartz-carbonate stringers (0.75 mm to 6.25 mm) throughout; fracture orientations and densities follow:						

FORM 822

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-HEMLAN

HOLE NO. HW-1-73 2.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		orientation density/ft.						
		61° to C.A. 8 to 12						
		46° to C.A. 1 to 2						
		(curving) Parallel to 28° to C.A. 1 to 2 (est.)						
		'clean' fractures @ 62° to C.A. cut and offset fractures filled with quarts-carbonate @ 27° to C.A. by 1 veinlet width.						
		- 96'-99' - section of tight crenulated colour banding between biotite-chlorite and quartz-carbonate, light grey in overall colour, still very soft.	104	108.5'		4.5		
		- 107'-108' - a few subangular to sub-rounded fragments of pinkish white porphyritic quartz monzonite to granodiorite in the schist; larger one has sericite envelope; vary in size from 5 cm by 3.7 cm to 9.5 mm diameter.						
		- 108.5' to 110' - white quartz veins and narrow lens of quartz monzonite to granodiorite porphyry, trace of carbonate; from 1%-2% py as blebs along vein & schist foliation; small blebs and	108.5	110'		2.5'		

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-1-73 3.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		scattered flakes of molybdenite (tr. to 1%) both in veins and in schist adjacent to veins; traces of orange to pale pink Kspar alteration along quartz vein margins (veins make angles from 47° to 52° with C.A.)	110'	116'		6'		
		- 113.7' - fragment of white quartz vein; 5.0 cm by 3.7 cm; both fragment and host somewhite vuggy; trace of pink Kspar alteration; small quartz carbonate veinlets near here broken and locally dragfolded.						
		- 115.6'-116.3' - section of fine colour banding between black biotite and green chlorite; @ 43° to C.A.	116'	121'		5'		
		- 119' - very thin fracture @ 17° to C.A. with reddish-pink alteration, quartz filling, traces of pyrite, and pin specks of molybdenite.						
		- 121' - lower contact sharp @ 47° to C.A.						
		Lost core @ 94.6' to 95.9', 105' to 106.8', and 110.6' to 113.6'						

FORM 922

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-1-73 4.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
121'	131.1'	Porphyritic Quartz Monzonite to Granodiorite - grey, medium-grained, with subangular to subrounded (resorbed ?) phenocrysts of cream to pinkish-cream Kspar (?) from 1.5 to 6.4 mm length, considerable quartz, the principal mafic mineral is biotite, disseminated blebs of pyrite (1% to 5%) throughout; pale green-paste green alteration around some pyrite blebs; minute flakes and blebs of molybdenite along quartz veinlets @ 50° to C.A. or @ intersection of fractures @ 50° to C.A. & subparallel to C.A., moly @ 121.4', 124', 124.4', 126.4', 128.3', and 130.6'; core cut by white to white-clear quartz veinlets from 6.4 to 25 mm wide - cut C.A. @ angles from 83° to 50° (50°-60° set has density of 2 to 3; 75° to 85° set has a density of 4 to 6) - @ 125.4' - foliation warped and crimped to angles between 45° and 0° to C.A. - 129.7' to 130.1' - cream coloured section with considerable cream to pink Kspar, and quartz; dark	121'	124'		3'		
			124'	127'		3'		
			127'	129'		2'		
			129'	131.1'		2.1'		

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-1-73 5.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		green to green 'spots' lending speckled						
		appearance to core (possibly chlorite).						
		- 130.3'-130.5' - narrow band of						
		biotite-rich schistose material						
		with chlorite and sharp but						
		irregular contacts.						
		- 130.5'-131.1' - quartz monzonite to						
		granodiorite as above only dark						
		grey matrix and white to cream						
		phenocrysts rather than pinkish-						
		cream.						
131.1'	134.2'	Chlorite-Biotite Schist - fine-grained,	131.1'	134.2'		3.1'		
		black to dark green, composed prin-						
		cipally of biotite, chlorite, some talc						
		and possible tremolite, some quartz-						
		carbonate veinlets and fragments, and						
		several fragments of granodiorite to						
		quartz monzonite; some banding between						
		feldspar-quartz and biotite, usually						
		crenulated or tightly crimped; traces						
		of pink Kspar alteration on the margins						
		of quartz 'fragments' and along						
		fractures @ 65° to C.A.; veinlets						
		(generally @ 60°-80° to C.A.) are cut						
		by several fractures (@ 35° to C.A.						

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-1-73 6.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		usually); swirling of biotite grains around irregular-shaped quartz monzonite fragments (up to 5 cm diameter) suggests chaotic mix; pyrite cubes and blebs are scattered throughout (1%-5%).						
134.2'	141.9'	Quartzitic Sediments - fine-grained, greenish-grey with distinctive pinkish-rod tinge; considerable quartz with clastic appearance; up to 5% pyrite specks; probably equivalent to sedimentary unit mapped on surface to east; core has some suggestion of chilled margin to 'granitic' intrusive; cut by narrow quartz-carbonate veinlet @ 18° to C.A., and by reddish-pink alteration fractures @ 16° to C.A. (probably equivalent to 125° az. fracture set mapped on surface); light green to green chlorite band (2.5 cm wide) forms lower irregular contact with underlying quartz monzonite.	134.2'	137.5'		3.3'		
			137.5'	141.9'		4.4'		
141.9'	153'	Porphyritic Quartz Monzonite to Granodiorite - grey, medium-grained, with subangular to subrounded phenocrysts	141.9'	145'		3.1'		

FORM 822

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-1-73 7.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		of cream to pinkish-cream Kspar from	145'	148'		3'		
		2.3 to 6.4 mm length, considerable						
		quarts, the principal mafic mineral is						
		biotite; fractures are quite numerous	148'	150'		2'		
		with a prominent set characterized by						
		pinkish-red Kspar alteration cutting	150'	153'		3'		
		the C.A. @ an angle of 18° to 26° with						
		a fracture density of 5 to 10 (probably						
		corresponds to set striking @ 125° as.						
		D 60° NE as mapped on surface); also						
		white quarts veinlets cutting C.A. @						
		angles from 65° to 75°; one hairline						
		fracture @ ~ 20° to C.A. (rotated ~ 90°						
		around core from pink set) has white						
		'bleached' alteration envelope ~ 0.75						
		mm wide; sericitic alteration along						
		some fractures and particularly adjacent						
		to quarts veinlets with Kspar envelopes,						
		and as a large part of the matrix from						
		147.8' to 149.5'; some grey, almost						
		chorty quarts veinlets @ 60° to C.A. @						
		148.4' and 151.3' - these veinlets are						
		cut by the red Kspar altered fractures						
		without visible displacement; a few						
		hairline fractures @ 15° to C.A.						
		(opposite 'red' fractures) and without						

FORM 852
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-1-73 8.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		associated alteration, cut the Kspar alteration fracture set with slight displacement (estimated to be left-hand lateral from orientation of core and known attitude of fracture set); @ 153' the 'red' Kspar fracture set has a core angle of 13° and is intersected by another Kspar altered fracture @ 6° to core axis and rotated 90° from 1st set; up to 5% disseminated pyrite (tiny blebs, cubes, and specks) throughout the unit; tr. of molybdenite @ 146'.						
		- 142.6'-143.8' - band of chlorite-biotite schist; contacts @ 30° to 40° to C.A.; contains fractured white quartz veinlet with pink alteration on fractures.						
		- 150.4' and 151' - thin (5 to 2.5 cm) lens of chloritic, talcose schist.						
		- 153' - contact with underlying schist sharp, wavy, and @ 28° to C.A.						
153'	162.3'	Chloritic Metasediment (?) - fine-grained, green to dark green, somewhat schistose, apparently silicified, some biotite	153'	158'		5'		

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-1-73 9.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		throughout; small 'fragments' or	158'	162.3'		4.3'		
		crystal grains (up to 1.5 mm) in						
		coarser sections; scattered reddish-						
		pink Kspar grains; cut by Kspar						
		alteration fracture set similar to						
		overlying unit, some of these fractures						
		filled by white to bluish-clear quartz						
		from 3 to 25 mm wide; fractures @						
		56°-65° to C.A. (with thin chloritic						
		pale green alteration) cut and, in						
		places, truncated, along with 'red'						
		Kspar set by quartz-carbonate break @						
		26° to C.A.; possible trace of chalco-						
		pyrite and molybdenite @ 158.7' and						
		159.5'; heaviest Kspar-quartz concen-						
		tration @ 158.6' and from 160.2' to						
		161.3'						
162.3'	201'	Porphyritic Quartz Monzonite -	162.3'	165'		2.7'		
		phenocrysts of cream to reddish-pink						
		Kspar up to 9 mm long and white rounded						
		'phenocrysts' of plagioclase (?) and	165'	168'		3'		
		quartz are abundant, set in a dark-						
		green to cream matrix of chlorite,	168'	171'		3'		
		biotite and quartz.						
		- from 167.3' to 182.7' the section	171'	174'		3'		

FORM 888

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-1-73 10.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		is particularly distinctive as						
		it is characterized by pervasive	174'	177'		3'		
		Kspar reddish-pink alteration and						
		numerous Kspar-altered fractures	177'	180'		3'		
		@ 10°-20° to C.A. with a density						
		of 7 to 8, and @ 40° to C.A.	180'	183'		3'		
		with a density of 2 to 3; white						
		quartz veinlets @ 70° to C.A.	183'	186'		3'		
		have a density of 2; prominent						
		quartz veins (7.5 mm wide) @						
		168.1' and 181.5' with core angles						
		of 10° have (particularly @ 168.1')						
		alteration envelopes (~ 0.7 mm wide)						
		of coarse sericite; sericite also						
		abundant between 177.6' and 180'						
		generally within a zone of intense	186'	189'		3'		
		Kspar alteration and fracturing						
		that makes an angle of ~ 10° with	189'	192'		3'		
		the C.A.; black, angular to sub-						
		rounded biotite-chlorite clots	192'	195'		3'		
		up to 3.0 mm are numerous @						
		176.7' to 179.5'; 1%-5% dissem-						
		inated tiny pyrite blebs throughout	195'	198'		3'		
		possible trace of chalcopyrite						
		- from 182.7' to 201', similar rock	198'	201'		3'		
		without the pervasive Kspar						

FORM 822

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-1-73 11.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		alteration; grey-pink colour; wide (5.0 cm) pinkish-brown quartz (near cherty) vein cuts core @ 78° @ 193.2'; narrow fracture with chlorite, sericite & pyrite cuts core @ 29° @ 196.5'; a few narrow quartz veinlets cut core axis @ angles from 0° to 30° but fracturing and alteration less intense than preceding sections; scattered euhedral feldspar phenocrysts 9.0 mm long; 1%-5% disseminated pyrite throughout.						
		E.O.H. 201'						
		HOLLINGER MINES LIMITED TIMMINS, ONTARIO						

REGISTERED PROFESSIONAL ENGINEER
P. J. BATEMAN
PROVINCE OF ONTARIO

FORM 822

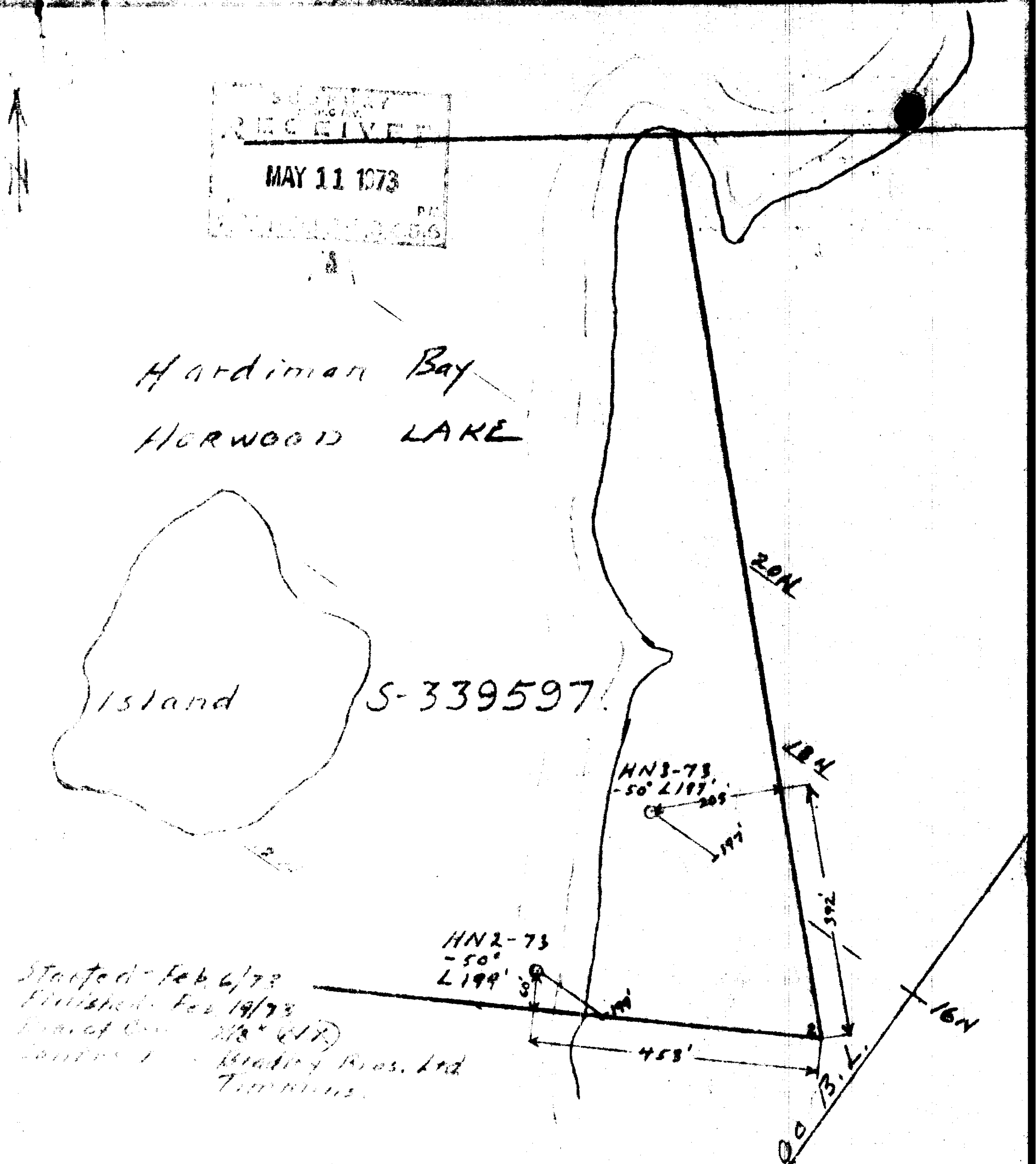
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-HEYMAN

HOLE NO. HH-1-73 12.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Foliation Angles with C.A.						
		62' - 58°						
		73.5' - 71°						
		89.5' - 61°						
		97' - 68°						
		107' - 35°						
		118' - 42°						
		120.5' - 52° - chlorite-biot. schist						
		127' - 61° - porphyry						
		134' - 65° - 'contact'						
		142.6' - 53° - irregular intrus. 'contact'						
		144.5' - 51° - porphyry						
		152.5' - 61° - porphyry						
		169.5' - 52° - porphyry						
		178' - 31° - porphyry(?) (disturbed by fracturing)						
		187' - 70° - porphyry						
		199.5' - 62° - porphyry						



PLAN OF DDH# HN2-73 & HN3-73
CLAIM S-339597, NORWOOD TWP.
Scale - 1" = 200'

W.H. Hansen
HOLLINGER MINES LIMITED
TIMMINS, ONTARIO

Location of Collar from #1 Post of S-339596

FORM S22

NORTH 13 + 00 N — N 60'

EAST 5 + 00 W — W 453'

ELEV.

AZIM. 126° az. (Grid East)

DIP Collar - 47°; 199' - 46.5°

DIAMOND DRILL REPORT

PROPERTY HORWOOD-HEWMAN OPTION

Horwood Twp., Ontario

HOLE NO. HN-2-73

COMMENCED Feb. 6, 1973

FINISHED Feb. 8, 1973

PURPOSE OF HOLE To test geology and drill under first Moly Showing.

NX Core

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	MoS_2 ASSAY	DESCRIPTION OF SAMPLE
0	22'	OVERBURDEN.						
22'	115.8'	TALC-CHLORITE SCHIST - fine-grained green to dark-green, soft, variably schistose; composed principally of talc and chlorite with some carbonate, biotite and local concentrations of actinolite; magnetic; cut by narrow quartz-carbonate stringers and veinlets @ angles from 50° to 80° to C.A.; some sections are notably coarser and a mottled greenish-grey and brownish-black in colour - these sections apparently contain more altered feldspar, carbonate, biotite and actinolite/tremolite than the overall unit; chicken-track type structures are visible in parts of core; foliations are commonly contorted and a few veinlets show dragfolding and fragmentation; pyrite (~1%) occurs as blebs in the upper part of the unit, either disseminated or along quartz-carbonate stringers; the lower part of the unit (64' to 106.4') features 2%-5% pyrite cubes and blebs up to 6 mm and is						

FORM 888

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-2-73 2.

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	MoS_2 ASSAY	DESCRIPTION OF SAMPLE
		probably equivalent to an exposure of						
		altered andesite as mapped on surface;						
		faulting is evidenced by contorted						
		foliation, fragmentation, some shearing,						
		and fault gouge @ 27.5', 60'-61.6' and						
		a trace @ 70.6'; molybdenite occurs as						
		described below; lost core @ 35.4'-						
		36.4', 37.2'-38', 39.2'-40', 61.7'-						
		62.9', 71.9'-72.8', 77.8'-78.5', 83.1'-						
		85.4', 86.4'-89' and 111.7'-113.1'						
		- 23.7-25.5' - coarse section.						
		- 31.1'-33.6' - fine, sugary, biotite						
		with quarts section, still soft,						
		purplish tinge to rock; very						
		biotite-rich @ upper and lower						
		contacts (20° to C.A.)						
		- 52.6'-60' - greyer than overall unit	60'	65'		5'	0.01	
		probably due to greater concen-						
		tration of quarts-carbonate						
		stringers.						
		- 65'-66' - white quarts vein with	65'	66'		1'	0.15	
		purplish-tinged section in contact,						
		visible actinolite-tremolite; tiny						
		filaments of molybdenite (1%)						
		apparently conformable with schist						

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-2-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	CORE SAMPLES TO	CORE SAMPLES RECOV.	CORE SAMPLES WIDTH	MoS_2 ASSAY	DESCRIPTION OF SAMPLE
		foliation, one or two filaments						
		bent to conform(?) with contorted						
		foliation, moly along both contacts	66'	67.4'		1.4'	0.01	
		of vein only richer on upper con-						
		tact; approx. 1% pyrite cubes and						
		blebs along lower contact; little						
		visible Kspar alteration other	67.4'	67.8'		0.4'	0.01	
		than hairline pink fracture cutting						
		lower contact @ 25° to C.A., and						
		orange-pink tinge to quartz and						
		possibly some feldspar just above						
		lower contact; lower contact @ 45°						
		to C.A. and consists of an 18 to	67.8'	69.1'		1.3'	0.01	
		19 mm wide zone of biotite.						
		- 66'-67.4' - mica-tremolite/actinolite-						
		rich section, particularly @ 67.3'						
		where tremolite-actinolite occurs						
		as coarse (12 mm) blades and fans.						
		- 67.4'-67.8' - fine-grained, grey,						
		siliceous-looking (though soft)						
		section with 1%-2% disseminated fine						
		pyrite and possible trace of molyb-						
		denite.						
		- 67.8'-69.1' - coarse blades and fans						
		of tremolite/actinolite as above.						

FORM 852
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-2-73 4.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	MoS_2 ASSAY	DESCRIPTION OF SAMPLE
		- 69.1'-69.9' - grey-white to cream quartz veins or vein fragment with pink Kspar alteration rims (approx. 0.7 mm) on edges; bleb of molybdenite (filament) within quartz @ 69.8'.	69.1'	70'		0.9'	0.01	
		- 70'-71.5' - broken core.	70'	75'		5'	0.01	
		- 70'-71.3' - coarse tremolite/actinolite, mica section as above.						
		- 71.3'-73' - grey, fine-grained, more siliceous section with fine disseminated pyrite up to 2%; 12 mm wide zone of biotite on lower contact.	75'	80.5'		5.5'	0.01	
		- 74.9'-75.2' - grey, siliceous, fine-grained section; considerable tremolite/actinolite and up to 3% disseminated pyrite.						
		- 80.7'-80.9' - grey-white lens of granodiorite porphyry.	80.5'	83.1'		2.6'	0.01	
		- 86.1' - bleb of molybdenite in schist.						
		- 91.3'-91.5' - grey-white quartz vein; blebs of molybdenite in schist above upper contact and right on lower contact.	85.5'	86.5'		1'	Tr.	
		92.5'-93.5' - possible trace of molybdenite in schist.	89.0'	91'		2.0'	0.01	
			91'	95.6'		4.6'	0.01	

FORM 822

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-2-73 5.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	MoS_2 ASSAY	DESCRIPTION OF SAMPLE
		- 95.1' - small grey-white quartz veinlet						
		- 96.1'-96.2' - grey-white quartz vein, fractured with blebs of molybdenite with chlorite-tremolite-talc along fractures; 14 mm wide biotite zone on lower contact with some molybdenite blebs also; contacts @ 62° to C.A.	95.6'	96.6'		1.0'	0.01	
			96.6'	101'		4.4'	0.01	
			101'	105'		4.0'	Tr.	
		- 109.3'-114.3' - alternating quartz veins, lenses of quartz monzonite porphyry (grey-pink), pinkish-purple siliceous sections, and narrow bands of chlorite-talc-tremolite/actinolite schist; red-pink Kspar alteration around edges of quartz monzonite porphyry; blebs of molybdenite (approx. 2%) in Kspar alteration @ contact between porphyry and schist @ 109.3', and with or near Kspar fractures in the schists from 109.5' to 109.7'.	105'	109'		4.0'	0.02	
			109'	110'		1.0'	Tr.	
			110'	114.2'		4.2'	0.02	
		- 110.9'-111.5' - lens of grey-pink-cream quartz monzonite porphyry.						
		- 114.2'-115.8' - contorted, dragfolded, and broken white quartz veinlets with pinkish Kspar alteration with	114.2'	115.8'		1.6'	Tr.	

FORM 522
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-2-73 6.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	MoS_2 ASSAY	DESCRIPTION OF SAMPLE
		them and along fractures in schist;						
		blebs of molybdenite along slips(?)						
115.8'	188.5'	PORPHYRITIC QUARTZ MONZONITE -	115.8'	120'		4.2'	0.03	
		medium-grained, generally dark grey						
		to cream with pink-red tinges where	120'	125'		5.0'	0.02	
		Kspar-altered fractures abundant; cream	125'	130'		5.0'	0.02	
		to orange-pink phenocrysts of Kspar						
		up to 4.5 mm long are abundant along	130'	135'		5.0'		
		with white feldspar phenocrysts up to						
		2.0 mm; biotite and chlorite are the	135'	140'		5.0'		
		principal mafic minerals; Kspar-altered						
		fractures with red alteration envelopes	140'	145'		5.0'		
		up to 1 mm wide are especially common						
		from 124.5' to 133.3', cut the core	145'	150'		5.0'	Nil	
		parallel to subparallel to core axis,	150'	155'		5.0'		
		and have a fracture density of 8 to 12						
		(estimated over 3"); wide white quartz	155'	160'		5.0'		
		veins from 115.8' to 116.7', 121' to						
		122.4', 131.2' to 132.8', 133.5' to	160'	165'		5.0'		
		142.4', 145.8' to 145.9', @ 146.1',	165'	170'		5.0'		
		@ 161', 162.4' to 162.6', 162.7' to						
		163', 165.7' to 166.6', 171.5' to 171.9',						
		173.7' to 175', 175.5' to 175.6',						
		183.5' to 183.6', 186.9' to 187.1';						
		pyrite occurs as small cubes and blebs						

FORM S22
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-2-73 7.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		throughout and as large blebs along the margins of some quartz veins, particularly @ 142', 175.4' and 183.7'.						
		- 161.3'-165' - lens of dark grey, fine-grained biotite-rich meta-sediment; upper contact relatively sharp although biotite content and dark grey colour prevalent in quartz monzonite from 158.6' to 161.3'; small sections of 'dark' monzonite with sediment; a few quartz veinlets are vuggy.	170'	175'		5.0'		
			175'	179.7'		4.7'		
		- 171.5' - pink alteration along upper contact of quartz vein @ 35° to C.A.						
		- 175.5' - cherty, cream quartz vein to lens of very light quartz monzonite porphyry.						
		- 176.8' - red Kspar alteration along fracture @ 12° to C.A. with density of approx. 3.						
		- 179.7'-180.7' - small lens of diabase, very fine-grained, black, magnetic; upper contact sharp, slightly chilled, and @ 45° to C.A.						
		except where offset by shallow fracture @ 15° to C.A.; lower	180.7'	184.6'		3.9'		

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-HEMMAN OPTION

HOLE NO. HH-2-73 8.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		contact sharp and @ 45° to C.A.						
		with chloritic edge	184.6'	188.5'		3.9'		
		- @ 172', 183.7', and 185.4' - narrow fractures with coarse muscovite at 15° to 30° to C.A.						
188.5'	199'	DIABASE - fine-grained, black, magnetic quartz diabase; upper contact sharp and @ 58° to C.A.; green chlorite 'skim' along contact; main fracturing @ 32° to C.A. and either clean or filled by narrow quartz-carbonate seams (approx. 0.6 mm) rimmed by narrow brownish, very fine-grained alteration zones (approx. 0.6 mm).						
		E.O.H. - 199'						

REGISTERED PROFESSIONAL ENGINEER
P. J. BATEMAN
PROVINCE OF ONTARIO

FORM 522
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-2-73 9.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Foliation Angles with Core Axis						
		Footage Angle						
		24.1' 56° coarser material						
		30.4' 43° fine-grained & sheared						
		41.1' 33° "						
		43.4' 56° 'contact' between coarse & fine material						
		56.7' 59° fine, contorted, sheared						
		63.2' 50° "						
		73.8' 70° "						
		74.4' 37° contorted, 'contact' with fine schist and coarse tremolitic, sericitic section.						
		82.1' 48° mica-rich section						
		92.8' 75° contorted fine schist						
		103.2' 35° "						
		115.4' 45° schistose, mica-chlorite						
		117.2' 52° porphyritic monzonite						
		128' 59° "						
		158' 70° "						
		173.5' 67° "						
		183' 68° "						

Location of Collar from #2 Post of S-339597 N ~~880~~ 392'
W ~~85~~ 205'

FORM 822

NORTH 16 + 00 N
EAST 5 + 00 W
ELEV.
AZIM. 126° az. (Grid East)
DIP Collar - 50°; 197' - 48°

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Claim S-339597 Horwood Twp., Ontario

HOLE NO. HN-3-73
COMMENCED Feb. 9/73
FINISHED Feb.11/73
PURPOSE OF HOLE to test geology and probe for molybdenite mineralization
NX Core

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0'	20'	OVERBURDEN.						
20'	93.1'	TALC-CHLORITE-BIOTITE SCHIST - fine-grained, dark grey-green to dark grey, composed of talc, chlorite, and varying amounts of biotite and tremolite/actinolite; soft, semi-schistose and/or sheared; commonly banded; schistosity commonly contorted and wavy; cut by narrow quartz-carbonate veins @ 45° - 70° to C.A. with fracture density of 5 to 7, some quartz carbonate 'fragments' also, particularly @ 46.5', 56.8', 60.3', 65.9', 73.7', 76.5', 82.2' and 87'; short grey to light grey more silicified sections from 32.7' to 32.9', 38.7' to 40', 52' to 52.5', 75.6' to 75.9', and 82.5' to 82.9'; light grey soft sections (apparently talc) occur from 49.5' to 49.9' and 90.2' to 92.1'; a narrow lens of greyish quartz monsonite porphyry is cut from 89' to 89.4' and 92.6' to 93.1'; sections from 28.2' to 34.5', 40.3' to 44', 50.6' to 52', 56' to 62.3', 71.7' to 74', and 86.5' to 92.1'	40'	45.5'		5.5'		
			45.5'	46.6'		1.1'		
			46.6'	47.6'		1.0'		
			47.6'	48.7'		1.1'		
			48.7'	49.7'		1.0'		
			49.7'	50.7'		1.0'		
			50.7'	52.5'		1.8'		
			55'	56.5'		1.5'		
			56.5'	57.5'		1.0'		
			57.5'	60.0'		2.5'		
			60'	61'		1.0'		
			61'	62'		1.0'		
			62'	63'		1.0'		
			63'	64'		1.0'		
			64'	67'		3.0'		

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-3-73 2.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		(fine-grained blebs and stringers)	67'	68'		1.0'		
		contain 1%-2% pyrite cubes and blebs	68'	69'		1.0'		
		up to 6 mm diameter; parts of the unit	69'	70'		1.0'		
		are vuggy, particularly @ 56.7' to	70'	71'		1.0'		
		57.5', 60.2' to 60.5', 76.5' to 76.6',	71'	72'		1.0'		
		and core has been lost from 35' to	72'	73'		1.0'		
		37.1', 52.5' to 55', and from 79' to	73'	74.5'		1.5'		
		80'; sections composed almost entirely	74.5'	76'		1.5'		
		of biotite (to phlogopite) occur from	76'	77'		1.0'		
		38.5' to 38.6', 46.7', 56.7' to 57.5',	77'	79'		2.0'		
		61.5' to 63.4', 66.8' to 68.2', and						
		70.7' to 71.4'; section of coarse						
		tremolite-actinolite @ 74.8' to 75',						
		and considerable tremolite from 80' to						
		90'; small flakes, blebs, and filaments						
		of molybdenite within quartz and on						
		adjacent biotite-chlorite schist margins						
		@ 45.6', 46.1', 46.5', 47.5', 48.6',						
		49.3', 50.2', 56.8', 57.1', 60.3',						
		60.6', 61.7', 62.1'-62.3', 63.1', 63.3',						
		67.2', 68.1', 68.6', 70.5', 70.9',						
		71.2', 73.2', 75.7'(in q.v.), and						
		76.5'.						
93.1'	109.5'	DIABASE - very fine-grained, black,						
		magnetic, quartz diabase; jointing and/or						

FORM 822

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-3-73 3.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		fracturing subparallel to C.A. and clean; upper contact broken, lower contact sharp and marked by green chlorite, and @ 56° to C.A.; disseminated pyrite blebs (up to 1%) throughout.						
109.5'	197'	PORPHYRITIC QUARTZ MONZONITE - medium-grained, pinkish-grey, with euhedral to subhedral phenocrysts (some are zoned) (up to 9 mm long) of cream to reddish-pink Kspar, and smaller white phenocrysts to sub-phenocrysts of feldspar and quartz set in a fine to medium-grained matrix of biotite, chlorite, sericite, and quartz; from 109.5' to 111.5', rock is dark grey; sections with abundant reddish-pink Kspar and Kspar alteration occur from 143.3' to 156', 157.5' to 161', 168' to 170', 175' to 178.5', and 187.5' to 193.5'; wide white to clearish quartz veins occur @ 113.2' (40° to C.A.), 115' to 115.8' (35°-45° to C.A.), 123.2' to 123.6' (25° to C.A.), 127.8' to 128.6' (20° to 25° to C.A.), 138.7'	109.5'	115'		5.5'		
			115'	120'		5.0'		
			120'	125'		5.0'		
			125'	130'		5.0'		
			130'	135'		5.0'		
			135'	140'		5.0'		
			140'	145'		5.0'		
			145'	150'		5.0'		
			150'	152.5'		2.5'		
			152.5'	155'		2.5'		
			155'	160'		5.0'		

FORM 522
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-3-73 4.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		@ 139.1' (40° to C.A.), 141.7' to	160'	165'		5.0'		
		142.2' (approx. 20° to C.A.) 157.6' to	165'	170'		5.0'		
		159.9' (20° to C.A.), 160.4' to 160.6'	170'	175'		5.0'		
		(20° to subparallel to C.A.), 167' to	175'	180'		5.0'		
		167.4' (35° to C.A.), 169.6' (20° to	180'	185'		5.0'		
		C.A. until truncated or deflected into	185'	190'		5.0'		
		fracture @ 20° to C.A. in opposite	190'	191.9'		2.0'		
		sense, both vein & fracture have pyrite	191.9'	193'		1.0'		
		and sericite envelopes), 176.6' to 177'	193'	197'		4.0'		
		(approx. 20° to C.A.), and @ 189.6',						
		194.3' and 194.6' (@ 80° to C.A.); veins						
		composed of brownish-pink-cream cherty						
		material with creamy-pink Kspar borders						
		cut the core axis @ approx. 80° @						
		126.9', 127.3', 122.7', 143.3', 168.2'						
		and 194.6'; fractures cutting core axis						
		@ 20° and 'filled' with coarse musco-						
		vite and commonly quartz are @ 128.6',						
		133', 138.3', 146.1', 147.1', 151.6',						
		152.2', 155.1', 161.2', 164.1', 165.2',						
		169.6', 175.7', 177.8', 188.3' and						
		188.7'; also some clean fractures with						
		same attitude giving this fracture set						
		a density of approx. 3; paste-green						
		alteration mineral with quartz veinlet						
		@ 192.1'; 1%-2% disseminated pyrite						

FORM 522
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-3-73 5.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		throughout the unit; tr. chalcopyrite(?) @ 151.9' to 152.5', and 177.5'; some coarse phenocrysts (7 mm) of Kspar(?) with black to dark green rims and mantles in/finer grained pink monzonite @ 153', 175' to 178', 188' to 189.2', and 190.6' to 193.1'; fine flakes and filaments of molybdenite @ 192.1' and 192.5'.						
		E.O.H. - 197'						

REGISTERED PROFESSIONAL ENGINEER
P. J. BATEMAN
PROVINCE OF ONTARIO

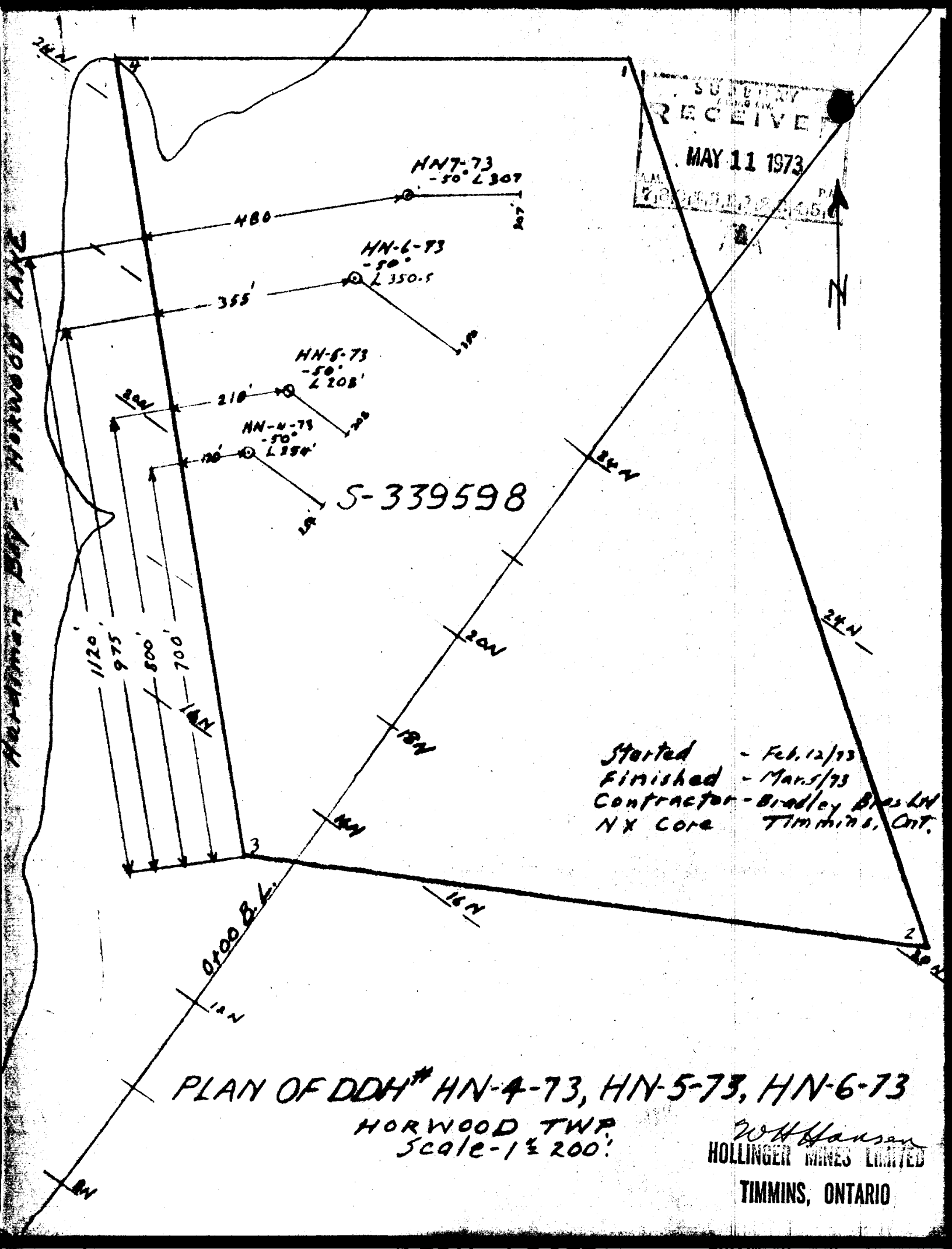
FORM 522
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-3-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Foliation Angles with Core Axis						
		20.7' - 20° to 35° - contorted schistosity						
		40.3' - 34° - 'contact' between fine and coarser material						
		46.5' - 55° - green and black 'banding'						
		61.6' - 53° - mica foliation						
		77' - 74° - 'banding' with quartz						
		93.5' - 65° - schistosity						
		111.7' - 58° - porphyritic monzonite						
		122' - 67° - "						
		137.5' - 63° - "						
		156.8' - 56° - "						
		184' - 50° - "						
		196' - 54° - "						



PLAN OF DDH# HN-4-73, HN-5-73, HN-6-73

HORWOOD TWP.
Scale-1" = 200'

W. H. Hanson

HOLLINGER MINES LIMITED
TIMMINS, ONTARIO

Location of Collar from #3 Post of S-339598 N 700'
E 120'

FORM 822

NORTH 20+50N
EAST 4+90W
ELEV.
AZIM. 126° az. (Grid East)
DIP Collar - 50°; 250' - 46.5°

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Claim S-339598 Horwood Twp., Ont.

HOLE NO. HN-4-73
COMMENCED Feb. 12, 1973
FINISHED Feb. 16, 1973
PURPOSE OF HOLE to test geology and probe for molybdenite mineralization
NX Core

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	16'	OVERBURDEN						
16'	72.5'	BIOTITE-CHLORITE-TREMOLITE SCHIST - fine-grained, dark green to dark grey, semi-schistose to schistose, and commonly intercalated with narrow light grey, more siliceous sections of fine-grained cherty material (somewhat porphyritic in places); intercalated lenses of biotite-rich, grey, quartz monzonite porphyry usually with sharp contacts, occur from 20.9' to 22.8', 23.3' to 25.3', 46.5' to 46.9', 50.5' to 51.8', @ 58.6', 59.6' to 60', 61.6' to 65' (this section contains widely spaced phenocrysts of white feldspar in a matrix very similar to the main biotite-chlorite schist unit), and @ 66'; short sections of soft, talcose schist occur from 16' to 16.5', 16.8' to 17.4', and 17.7' to 18.3'; white quartz vein @ 73° to C.A. @ 21' with side truncated by another veinlet @ 44° to C.A. (fracture density of 75° set is 4 to 6, that of the 45° to						

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-4-73 2.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		50° set is 1 to 2); narrow (6 mm)						
		veinlet of whitish-cream to pink						
		quartz monzonite porphyry @ 54° to						
		C.A. @ 48.6'; white quartz vein @ 70°						
		to C.A. @ 60'; from 60.5' to 61.7'						
		and much of unit below, rock has						
		brownish tinge, appears more siliceous,						
		and near lower contact is very similar						
		to metasediments mapped on surface						
		(possibly border phase of quartz						
		monzonite); white quartz vein @ 80°						
		to C.A. @ 66.9' to 67'; fractures @						
		65° to C.A. @ 56.5' with pink Kspar						
		alteration; sections coarser tremolite						
		from 19.5' to 20.8', 22.8' to 23.3'	60'	63.5'		3.5'		
		and 29.2' to 30'; schistosity con-						
		torted and kinked @ 26' to 27.2' and	63.5'	66.5'		3.0'		
		40.7' to 41.5'; 1% to 5% pyrite						
		disseminated as cubes and blebs	67.5'	72.5'		5.0'		
		throughout, particularly along						
		fractures and margins of small quartz						
		veinlets; up to 1% blebs of pyrrhotite						
		with traces of chalcopyrite in 'banded'						
		siliceous section @ 66.8', possible						
		traces of chalcopyrite @ 32.2', 33.2',						
		50.1', 60.4', 60.8', 61.3', and 62.9';						

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-4-73 3.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		small filaments of molybdenite with quarts in 'banded' siliceous section from 66.8' to 66.9'; lower contact @ 74° to C.A.						
72.5'	254'	PORPHYRITIC QUARTZ MONZONITE - white to pink subhedral & euhedral phenocrysts (1.5 mm to 12 mm) of Kspar and plagioclase set in a fine to medium-grained matrix composed largely of biotite, chlorite, quartz, and feldspar grains; sericite is locally abundant; overall unit is grey to reddish-pink in colour depending on whether Kspar or biotite predominates; quartz content high throughout (core translucent in places) and large white to clear zoned phenocrysts (8 to 12 mm) abundant; white quartz veins @ 80' and 80.6' (60° to C.A.) 84.8' and 85.3' (40° to C.A.), 91' and 91.8' (30° to C.A.), 101.8' (48° to C.A.), 103.8' (40° to C.A.), 106.5' and 107.5' (multiple @ 40° to 60° to C.A.), 108.3' to 109.2' (multiple @ 30° to C.A.	72.5'	75'		2.5'		
			75'	79'		4.0'		
			79'	83'		4.0'		
			83'	84'		1.0'		
			84'	85'		1.0'		
			85'	86'		1.0'		
			86'	87'		1.0'		
			87'	89'		2.0'		
			89'	91'		2.0'		

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-4-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		to subparallel), 122' (narrow @ 15° to C.A.), 122' to 122.5' (subparallel to 45° to C.A.), 127.1' to 127.6' (31' to 43° to C.A.), 130.5' (10° to C.A.), 136' (10° to C.A.), 141.2' to 142.3' (multiple from 30° to 50° to C.A.), 144.1' (5° to C.A.), 145.7' (70° to C.A.), 146.3' (26° to C.A.), 145.7' (70° to C.A.), 146.3' (26° to C.A.), 149.3' and 149.9' (26° to C.A.), 150.3', 161.4' (16° to C.A.); 166.9' (43° to C.A.), 170' & 170.7' (25° to 30° to C.A.), 173' (15° to C.A.), 177' (10° to C.A.), 178.3' (10° to 20° to C.A.), 181.3' (35° to C.A.), 184.5' (47° to C.A.), 191.5', 192.8' (multiple @ 80° to C.A.), 194.4' to 204.5' (multiple, SiO_2 flooding, largely @ 60° to C.A.), 210.3' (22° to C.A.), 214.8' to 215.2' (80° to C.A.), 229.2' & 229.7' to 230.2' (55° to C.A.), 230.8' & 232' & 235.6', 236.5' (10° to C.A.), 239.2' (49° to C.A.), and 242.8' (28° to C.A.); a number of fractures, generally @ 7° to 15° to C.A., are 'filled' with coarse muscovite and						

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-4-73 5.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		occur @ 83', 85.5', 100.1', 100.7',	91'	92'		1.0'		
		173', 223.7', 231.5', and 235.6';	92'	93'		1.0'		
		similar fractures @ 95.5' to 96.9',	93'	95'		2.0'		
		111.5', 134.3' to 135', 210.3' (with	95'	99'		4.0'		
		light green sericite), 223.6', 228.7'	99'	103'		4.0'		
		and 239.4' are clean or 'coated' with	103'	104'		1.0'		
		chlorite and carbonate; fractures @	104'	105'		1.0'		
		210° to C.A. with potassic alteration	105'	106'		1.0'		
		envelopes also cut the core, and the	106'	107'		1.0'		
		total fracture density for the 10° set	107'	108'		1.0'		
		is 4 to 6; trace of pale yellow-green	108'	110'		2.0'		
		epidote(?) with quartz veining @	110'	115'		5.0'		
		181.3' and 208'; short sections of	115'	118'		3.0'		
		biotite-chlorite schist from 242.1'	118'	119'		1.0'		
		to 242.9' and 246.9' to 247.5'; rock	119'	122'		3.0'		
		is pinkish-orange in tinge down to	122'	125'		3.0'		
		137.8', from 172.2' to 178.2' and from	125'	130'		5.0'		
		193' to 206' ((this interval also	130'	135'		5.0'		
		characterized by SiO_2-flooding, a						
		fracture density of 6 to 7, and						
		visible molybdenite (1%)); rock is						
		light grey with very few large zoned						
		phenocrysts from 137.8' to 172.2',						
		and dark grey (with relatively sharp						
		contact) from 239.9' to E.O.H. --						
		possibly finer-grained and less large						

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-4-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		clear phenocrysts; pyrite (approx. 1%)	135'	140'		5.0'		
		is disseminated throughout as cubes	140'	145'		5.0'		
		and blebs, commonly along fracture	145'	150'		5.0'		
		margins; molybdenite occurs as flakes,	150'	155'		5.0'		
		blebs, and less commonly as filaments	155'	160'		5.0'		
		from 83.1' to 83.3', 84.4' to 86.7',	160'	165'		5.0'		
		92.2' to 92.4', 103' to 109.6' and	165'	170'		5.0'		
		118.7' to 118.8' (with large pinkish-	170'	175'		5.0'		
		cream phenocryst of Kspar); moly is	175'	180'		5.0'		
		largely disseminated and occurs inter-	180'	185'		5.0'		
		stitial to large feldspar and quartz	185'	190'		5.0'		
		grains -- however, @ 84.4' to 84.7',	190'	191'		1.0'		
		moly is concentrated along a narrow	191'	192'		1.0'		
		fracture @ 40° to C.A.; molybdenite	192'	193'		1.0'		
		also occurs (commonly in large ag-	193'	195'		2.0'		
		gregates (up to 2 mm) of flakes	195'	197'		2.0'		
		approaching rosettes) from 191' to	197'	199'		2.0'		
		191.7', 192.7' to 192.9', 193.6' to	199'	201'		2.0'		
		201.7', 202.4' to 203', 203.7' to	201'	203'		2.0'		
		204.7', 205.4' to 205.6', 206.5' to	203'	205'		2.0'		
		206.8', 207' to 207.3', 208' to 209.6',	205'	206'		1.0'		
		210.6' to 213.3', 214.7' to 215',	206'	208'		2.0'		
		218.2' to 219.4', and 220.1' to 220.3';	208'	210'		2.0'		
		traces of chalcopyrite from 194' to	210'	212'		2.0'		
		206' and @ 223.7'.	212'	214'		2.0'		
			214'	215'		1.0'		
		E.O.H. - 254'	215'	218'		3.0'		

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PROVINCE OF ONTARIO

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-4-73 7.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Foliation Angles with Core Axis						
			218'	220'		2.0'		
		16.1' - 80° - schistosity & quartz veining	220'	221'		1.0'		
		26.3' - 75° - " "	221'	225'		4.0'		
		38.7' - 73° - "	225'	230'		5.0'		
		49.3' - 71° - "	230'	235'		5.0'		
		56.7' - 70° - "	235'	240'		5.0'		
		66.3' - 78° - " and 'banding'	240'	245'		5.0'		
		71.5' - 70° - "	245'	250'		5.0'		
		73.2' - 69° - porphyritic quartz monzonite	250'	254'		4.0'		
		79' - 56° - "						
		87.7' - 61° - "						
		98' - 59° - "						
		113' - 65° - "						
		128.3' - 58° - "						
		134' - 58° - "						
		173' - 57° - "						
		192' - 71° - "						
		210.8' - 51° - "						
		233.5' - 58° - "						
		247' - 36° - 'cont.' with schist						
		254.5' - 65° - porphyritic quartz monzonite						

Location of Collar from #3 Post of S-339598 N 800'
E 210'

FORM 822

NORTH 21+70N
EAST 5+00W
ELEV.
AZIM. 126° az. (Grid East)
DIP Collar - 50°;

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Claim S-339598 Horwood Twp., Ontario

HOLE NO. HN-5-73
COMMENCED Feb. 17, 1973
FINISHED Feb. 19, 1973
PURPOSE OF HOLE to test geology and drill under small moly showing.
NX Core

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0'	18'	OVERBURDEN						
18'	67.7'	CHLORITE-TALC-BIOTITE SCHIST - fine-grained, green to light-grey, semi-schistose to schistose, moderately soft to very soft; commonly 'banded' as result of chlorite-rich layers alternating with quartz-carbonate-rich and/or talc-rich layers; 'banding' crenulated in places; composed chiefly of chlorite, biotite, talc, carbonate, some tremolite-actinolite, and varying amounts of quartz (usually as veinlets); some fractures (clean) subparallel to C.A., a few @ 40°-50° to C.A., and a few parallel to foliation; pyrite (tr. to 1%) is disseminated as cubes throughout; small lenses of quartz-feldspar porphyry to quartz-monzonite porphyry are also cut within this unit; vuggy from 33.1' to 33.7'; moly where noted	22'	26'		4.0'		
			26'	27'		1.0'		
			27'	28'		1.0'		
			28'	32'		4.0'		
		- 18' - 26.3' - chlorite-rich; 'banded' section						

FORM 982

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-5-73 2.

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		- 26.3'-28' - grey, relatively fine-grained quartz-feldspar porphyry (phenocrysts approx. 0.8 mm); very fine disseminated flakes of molybdenite (tr. to 0.5%).						
		- 28'-34.4' - chlorite-rich section.						
		- 34.4'-39.1' - talc-carbonate section						
		- 39.1'-40.9' - chlorite-rich section.						
		- 40.9'-42.7' - lost core.	53'	57'		4.0'		
		- 42.7'-51.2' - talcose section.	57'	60.6'		3.6'		
		- 51.2'-51.8' - biotite-chlorite section	60.6'	62.1'		1.5'		
		- 51.8'-53.1' - talcose section.	62.1'	63.6'		1.5'		
		- 53.1'-57.1' - biotite-chlorite section, parts similar to quartzitic metasediment.	63.6'	67.7'		4.1'		
			67.7'	71.0'		3.3'		
			71.0'	75.0'		4.0'		
		- 57.1'-59.7' - talcose section.	75'	80'		5.0'		
		- 59.7'-60.7' - biotite-chlorite section similar to 53.1'-57.1'	80'	85'		5.0'		
			85'	90'		5.0'		
		- 60.7'-63.6' - light grey quartz monzonite porphyry section; SiO_2-rich and somewhat translucent; fine disseminated blebs of molybdenite particularly near top.	90'	95'		5.0'		
			95'	100'		5.0'		
			100'	105'		5.0'		
			105'	110'		5.0'		
			110'	115'		5.0'		
		- 63.6'-67.7' - biotite-chlorite section; similar to metasediment	115'	120'		5.0'		

FORM 852

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-5-73 3.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		considerable quartz; scattered						
		porphyritic lenses.						
67.7'	208'	PORPHYRITIC QUARTZ MONZONITE	120'	125'		5.0'		
		- medium-grained, pinkish-orange grey	125'	130'		5.0'		
		to grey, composed mainly of pinkish-	130'	135'		5.0'		
		orange to white feldspar phenocrysts	135'	139'		4.0'		
		(up to 7 mm) set in a matrix of Kspar,	139'	141'		2.0'		
		plagioclase, quartz and biotite;	141'	145'		4.0'		
		from 106.2' to 113.5' biotite content	145'	150'		5.0'		
		apparently greater and core darker	150'	155'		5.0'		
		grey; 67.7' to 75' core is pinkish-	155'	160'		5.0'		
		cream in colour with black to dark-	160'	165'		5.0'		
		green biotite clots (approx. 1.5 mm);	165'	170'		5.0'		
		from 131.5' to 182.5' rock becomes	170'	175'		5.0'		
		coarser and less pink except for	175'	180'		5.0'		
		short pinker section from 148' to	180'	185'		5.0'		
		153.2' -- below 182.5', rock	185'	190'		5.0'		
		becomes progressively pinker although	190'	195'		5.0'		
		from 183.8' to 185.3' core is	195'	200'		5.0'		
		generally cream in colour with small	200	204'		4.0'		
		clots of biotite and sericite;	204'	208'		4.0'		
		shallow fractures 'filled' with mus-						
		covite cut the core @ angles to C.A.						
		varying from 5° to 25° @ 81.5' to						
		83' (22° set truncated by 5° set of						

FORM 982
NORTH.
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-5-73 4.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		opposite sense) 133.3' to 133.8', 156.4' to 156.8', 184.4' to 185.3', 190.6' and 191.4'; the shallow fracture set sub-parallel to the C.A. is prevalent throughout, and is usually clean or chloritic -- it has an estimated fracture density of 3 to 5; a few narrow quartz veinlets cut the core @ 35°-40° to C.A. such as @ 92°, 178.6' and 206.1'; a trace of yellow-green epidote(?) occurs with pyrite along the margins of some quartz veinlets; small lenses of pink cherty siliceous material cut the C.A. @ 60° to 65° @ 111.7', 150.4', 153' to 153.3' and 203.2' to 203.5'; short section of pink coarse porphyritic quartz monzonite from 148' to 148.3'; pyrite occurs as small blebs and cubes disseminated throughout and along the margins of quartz veinlets; a few blebs of pyrrhotite and chalcopyrite occur @ 139.8' to 140.2' (partly along fracture @ 30° to C.A.); lost core from 114.4' to 116' and 197.2' to 198'.						
		E.O.H. - 208'						

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PROVINCE OF ONTARIO

FORM 882

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION

HOLE NO. HN-5-73 5.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Foliation Angles with Core Axis						
		21.5' - 68° - schistosity, 'banding'						
		26.5' - 65° - qtz-feldsp. porphyry						
		31.4' - 77° - schistosity, 'banding'						
		51.3' - 68° - biotite						
		60.3' - 85° - chlorite-biotite						
		67.7' - 72° - 'contact'						
		95.5' - 65° - porphyritic						
		106' - 53° - porphyritic						
		112.5' - 65° - "						
		117.5' - 65° - "						
		126' - 60° - "						
		134.3' - 55° - " and biotite						
		136.8' - 55° - " "						
		147.5' - 72° - "						
		151.5' - 52° - "						
		161.7' - 68° - "						
		176.3' - 58° - "						
		182.5' - 65° - "						
		192' - 68° - "						
		201.5' - 61° - "						

Location of Collar from #3 Post of S-339598 N 975'
E 355'

FORM 822

NORTH 24+00N
EAST 5+24W
ELEV. 57.1' above B.M.#1
AZIM. 126° az. (Grid East)
DIP Collar - 50°; 350' - 51°

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Claim S-339598 Horwood Twp., Ont.

HOLE NO. HN-6-73
COMMENCED Feb. 21, 1973
FINISHED Mar. 1, 1973
PURPOSE OF HOLE to test geology and drill under main moly showing.
NX Core

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0'	8'	OVERBURDEN						
8'	17.2'	CHLORITE-BIOTITE SCHIST - green to dark green, fine-grained, schistose; some talc and carbonate; some biotite in 'clots' or as thin black 'bands' alternating with green chlorite; possible shearing; pyrite throughout (tr. to 1%) as cubes and blebs; schistosity contorted in places. - @ 13.5' - short section of porphyry.						
17.2'	18.2'	QUARTZ-FELDSPAR PORPHYRY - grey to light grey, fine to medium-grained with white to light greenish-cream phenocrysts (0.7 to 1.5 mm) of feldspar and some quartz; phenocrysts are subhedral to euhedral; tr. to 1% pyrite disseminated throughout; upper contact @ 70° to C.A.						
18.2'	36.3'	CHLORITE-BIOTITE-TALC SCHIST - similar to unit described above; greyer and more siliceous sections from 20.3' to 21' and 28' to 28.9'; contacts relatively sharp @ 60° to 70° to C.A.; narrow cream to grey-white quartz						

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		section cut by green chlorite-filled fractures near top of latter siliceous section; from 27.2' to 27.6', section with some green tremolite and grey-white quartz 'fragments'(?); disseminated pyrite (chiefly cubes) throughout @ 33.5', quartz vein (6 mm wide @ 78° to C.A.) displaced by quartz-filled fracture (5 mm wide @ 30° to C.A.); lower contact @ 58° to C.A.						
36.3'	48.3'	QUARTZ-FELDSPAR PORPHYRY - similar to unit above down to 39.6', below which unit is coarser, creamier with more abundant phenocrysts to 43.8'; then grey with scattered white phenocrysts to 46.3', creamy and coarse to 47.1', grey with sparse white phenocrysts gradually becoming more abundant downhole to 47.4', then coarse and creamy to 47.9', and grey-brown-cream porphyry - 'chert' to 48.3'; cut by fractures subparallel to C.A.						

FORM 822
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73 3.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
48.3'	58.9'	ALTERNATING CHLORITE-BIOTITE SCHIST	58.9	63'		4.1'		
		and QUARTZ-FELDSPAR PORPHYRY -	63'	67'		4.0'		
		- green to dark green, fine-grained	67'	71'		4.0'		
		chlorite-biotite schist alternating	71'	75'		4.0'		
		with grey to light grey more siliceous	75'	79'		4.0'		
		sections with white phenocrysts; 'banded'	79'	81'		2.0'		
		in places; creamy 'chert' section from	81'	84'		3.0'		
		53' to 53.4' cut by late fractures	84'	86'		2.0'		
		filled with biotite; parts of this unit	86'	89'		3.0'		
		vary from fine-grained porphyry to	89'	92'		3.0'		
		metasediment as logged in previous	92'	96'		4.0'		
		holes; contact with underlying monzonite	96'	100'		4.0'		
		@ 70° to C.A.	100'	105'		5.0'		
		- lost core from 49° to 50° and	105'	110'		5.0'		
		54.6' to 55'.	110'	115'		5.0'		
			115'	120'		5.0'		
58.9'	350.5'	PORPHYRITIC QUARTZ MONSONITE -	120'	125'		5.0'		
		medium to coarse-grained, grey-cream	125'	130'		5.0'		
		to pinkish orange; phenocrysts (some	130'	135'		5.0'		
		rounded) of pink to clear cream Kspar	135'	140'		5.0'		
		(6 to 8 mm long) and white feldspar	140'	145'		5.0'		
		(orthoclase and plagioclase) (1 to 2 mm	145'	150'		5.0'		
		biotite and chlorite are main mafic	150'	155'		5.0'		
		minerals; sericite/muscovite is locally	155'	160'		5.0'		
		abundant; cut by narrow quartz-filled	160'	165'		5.0'		
		fractures @ 25° to 27° to C.A., @ 50°	165'	170'		5.0'		

FORM 928

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73 4.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		to 60° to C.A. and @ 70° to 75° to C.A.,	170'	175'		5.0'		
		also by fractures (commonly with quartz,	175'	179'		4.0'		
		traces of epidote, and pyrite) @ 5° to	179'	181'		2.0'		
		10° to C.A. with an estimated fracture	181'	183'		2.0'		
		density of 5 to 10, also by generally	183'	185'		2.0'		
		clean fractures @ 15° to 20° to C.A.	185'	190'		5.0'		
		with a fracture density of about 2;	190'	195'		5.0'		
		also a few fractures with reddish	195'	197'		2.0'		
		potassic alteration @ 20° to C.A. and	197'	202'		5.0'		
		subparallel; core broken and chewed up	202'	207'		5.0'		
		from 103.5' to 112.2'; lost core from	207'	212'		5.0'		
		115.1' to 117.9', 122.1' to 122.9' and	212'	217'		5.0'		
		from 142.2' to 143.4'; pyrite dissem-	217'	219'		2.0'		
		inated throughout or as blebs along	219'	223'		4.0'		
		fractures subparallel to C.A. (tr. to	223'	227'		4.0'		
		1%); molybdenite where noted; large	227'	231'		4.0'		
		zoned feldspar phenocrysts (6 to 8 mm)	231'	235'		4.0'		
		throughout.	235'	240'		5.0'		
		- 58.9 - 59.5' - somewhat bleached.	240'	245'		5.0'		
		- 59.5' - 78.5' - grey section.	245'	250'		5.0'		
		- 78.5' - 78.6' - lens of chlorite-	250'	255'		5.0'		
		biotite schist underlain by white	255'	260'		5.0'		
		quartz veinlet.	260'	265'		5.0'		
		- 78.6' - 92.7' - slightly coarser,	265'	270'		5.0'		
		featuring multiple quartz veining,	270'	275'		5.0'		
		and pinkish-cream colour in upper	275'	280'		5.0'		

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		7 feet; large zoned feldspar	280'	285'		5.0'		
		phenocrysts (6 by 8 mm) near or	285'	290'		5.0'		
		rimmed by biotite 'clots' @ 82.5';	290'	295'		5.0'		
		sericite/muscovite abundant with	295'	300'		5.0'		
		quartz as books and 'clots';	300'	305'		5.0'		
		molybdenite flakes from 79' to	305'	310'		5.0'		
		79.1' in quartz and along vein	310'	315'		5.0'		
		margins, and as filaments with	315'	320'		5.0'		
		quartz and along veinlet margins	320'	325'		5.0'		
		from 79.4' to 86.8', also @ 90.1'	325'	330'		5.0'		
		and 91.6'; a few hairline potassic	330'	335'		5.0'		
		altered fractures subparallel to	335'	337'		2.0'		
		C.A.; possible trace of chalco-	337'	339'		2.0'		
		pyrite from 82.5' to 83'.	339'	341.5'		2.5'		
		- 92.7' - 95.2' - lens of chlorite-	341.5'	346.5'		5.0'		
		biotite schist; contacts sharp -	346.5'	350.5'		4.0'		
		lower of which is @ 47° to C.A.;						
		possibly some tremolite.						
		- 95.2' - 97.6' - grey to pinkish-orange						
		quartz monzonite.						
		- 97.6' - 102' - pink to reddish-orange						
		section of quartz monzonite.						
		- 102' - 106.2' - greyish-cream colour						
		to section.						
		- 106.2' - 135.5' - pinkish-orange						
		quartz monzonite.						

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73 6.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		- 135.5' - 135.9' - white quarts vein and small lens of chlorite - biotite schist.						
		- 135.9' - 152' - pink section with considerable grey-white to clear-white quarts veining accompanied by sericite/muscovite and pyrite; quartz vein with traces of epidote and chlorite on margins @ 18° to C.A. from 137.9' to 138.3'; sections from 139.3' to 141.9' and from 147.9' to 151' are relatively coarse and uniformly pink except for scattered biotite and sericite/muscovite 'clots'; sericite is abundant throughout this section and epidote is quite conspicuous along fractures and interstitial to large feldspars; large quartz vein from 140.6' to 141.4'.						
		- 152' - 178.5' - orange-pink section, relatively uniform; narrow grey quartz veinlet with red Kspar, epidote and pyrite alteration @ 3° to C.A. from 170' to 171';						

FORM 522

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		white qtz veinlet @ 29° to C.A. @ 177.4'.						
		- 178.5' - 206' - section is creamy-pink-grey to grey in colour; 180'-183' lost core; molybdenite flakes @ 179.8' to 180' and 183' to 183.1' with quartz @ 70° to C.A., and from 184.6' to 184.7' with pinkish narrow quartz vein @ 80° to 85° to C.A. (also 190.3' to 190.4' very fine dissem. moly and pyrite); tr. of chalcopyrite with pink q.v. @ 196.2'						
		- 206' - 208.6' - cut quartz (grey-white) veinlet subparallel to C.A. with considerable orange-red Kspar alteration and muscovite/sericite.						
		- 210' - 225.3' - cut white quartz vein (poss. 5 cm wide) and veining sub-parallel to C.A., with cream to pink Kspar alteration, some yellow-green epidote, sericite, and considerable pyrite as relatively large blebs (1.5 mm to 9 mm); blebs of molybdenite @ 218.3' with quartz vein @ approx. 32° to C.A.						

FORM 522

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73 8.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		- 225.8' - 234' - either same quarts vein as above or another closely spaced, subparallel to C.A. and probably only 10 to 15 mm wide; prominent alteration envelope in parts consisting of coarse books and 'blades' of muscovite/ sericite and phlogopite (up to 4.5 mm by 1.5 mm).						
		- 236.5' - 269.4' - section is characterized by very dark grey to black matrix and white and orange-pink phenocrysts; a few areas are biotite-chlorite clots; well-foliated; similar to section @ bottom of hole #4; lost core from 245' to 246'; 18 mm-wide grey-quartz vein cuts core @ 15° @ 247.4' to 247.8' (very thin) epidote alteration envelope; quartz (grey) veinlets @ 254.3' (@ 38° to C.A.) and 261.5' (@ 75° to C.A.), both with pyrite blebs; white-grey quarts vein from 267.7' to 267.9' @ 70° to C.A. and @ 269.5' @ 57° to C.A. (both enveloped by reddish-pink potassic alteration in surrounding rock); fractures subparallel to C.A. here						

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		are usually red from potassic alteration;						
		- 269.4' - 272.3' - section is quite reddish-pink with quartz veining (white and grey-white) @ 70°, 21°, and 53° to C.A.						
		- 272.3' - 306.4' - section is grey to dark grey with phenocrysts mainly white to cream; lost core from 275.7' to 276.9', from 287.2' to 288.1', and from 298.4' to 299'; grey-white quartz veinlet @ 48° to C.A. @ 286', and quartz veining with pink alteration @ 288.6'; large bleb of pyrite strung along fracture @ 45° to C.A. @ 278.7'.						
		- 306.4' - 330.8' - subtle change from unit above, with more pink phenocrysts and reddish-pink Kapar in matrix; white quartz vein with pink alteration and pyrite intersected subparallel to C.A. from 309.6' to 311', narrow quartz veinlets @ 70° to 80° to C.A. cut @ 317.8', 318', 318.4', 318.7', and 319'; core lost from 326.7' to 328'.						

FORM S22

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		- 330.8' - 332.4' - narrow 'band' or lens of chlorite-biotite schist with sharp upper contact @ 58° to C.A. to 331.2', followed by grey-white massive quartz vein with contained small sections of quartz-feldspar porphyry, pyrite and lower contact @ 19° to C.A.						
		- 332.4' - 335.5' - section of porphyritic quartz monzonite varying from mottled reddish-pink and dark grey to dark grey.						
		- 335.5' - 336.8' - another lens of green to light pinkish green chlorite-biotite schist with intercalated sections of grey quartz-feldspar porphyry; upper contact sharp but irregular (almost lobate), lower contact sharp @ approx. 50° to C.A.						
		- 336.8' - 350.5' - grey to creamy-pink porphyritic quartz monzonite with considerable quartz veining from 20° to C.A. to subparallel (338.8' to 341' and 344.7' to 346.4'); narrow quartz veinlet with epidote and sericite and fine disseminated pyrite @ 73° to C.A. @ 348.5'; trace of						

FORM 822

NORTH
EAST
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AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73 11.

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		molybdenite as small flake in grey-						
		white quartz @ 339.4'.						
		E.O.H. 350.5'						

REGISTERED PROFESSIONAL ENGINEER
P. J. BATEMAN
PROVINCE OF ONTARIO

FORM 522

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN OPTION
Horwood Twp., Ont.

HOLE NO. HN-6-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Foliation Angle with Core Axis						
		11.9' - 65° - schistosity						
		27.8' - 69° - "						
		36' - 56° - "						
		58.2' - 71° - 'banding'						
		59.5' - 59° - porphyritic						
		80.2' - 65° - "						
		102.4' - 50° - "						
		119' - 50° - " and biotite						
		127.3' - 47° - porphyritic						
		144.5' - 50° - "						
		171' - 67° - " and biotite						
		196' - 73° - "						
		217' - 56° - "						
		237' - 63° - "						
		252' - 57° - "						
		262' - 57° - "						
		267' - 55° - "						
		277.5' - 56° - "						
		298' - 53° - "						
		311.5' - 63° - "						
		329.4' - 52° - "						
		342.5' - 45° - "						

Location of Collar from #3 Post of S-339598 N 1120'
E 480'

FORM 822

DIAMOND DRILL REPORT

NORTH 25+75N
EAST 5+25W
ELEV.
AZIM. 126° az. (Grid East)
DIP Collar - 50°; 306° - 48.5°

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-7-73
COMMENCED Mar. 2, 1973
FINISHED Mar. 5, 1973
PURPOSE OF HOLE to test geology and probe 'favourable' site for molybdenite mineralization.

NX Core

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	12'	OVERBURDEN						
12'	56.8'	ALTERNATING LENSES OF CHLORITE - BIOTITE SCHIST AND FELDSPAR PORPHYRY: light green to green, grey, and 'banded' schistose lenses composed mainly of chlorite, biotite (phlogopite?), some quarts, feldspar and carbonate alternating and possibly intercalated with lenses of grey siliceous feldspar porphyry; porphyry phenocrysts of cream to white feldspar (subhedral) from 0.7 to 3.0 mm; contacts between units generally sharp though commonly irregular (and lobate); a few porphyry units feature a prominent foliation (generally parallel to schistose lenses above and below) marked by orientation of phenocrysts and shear planes along which are found chlorite 'clots' and smears; contacts of porphyry commonly accented by concentrations of creamy-pink feldspar; pyrite common throughout as blebs cubes and smears; schistosity						

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-7-73 2.

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		of schists crenulated, even dragfolded between 38.2' and 56.8'; a few narrow quartz-feldspar seams (5 to 10 mm wide) @ 60° to C.A.						
		- 12' - 13.8' - schist unit						
		- 13.8'-16.2' - feldspar porphyry						
		- 16.2'-18.4' - lost core						
		- 18.4'-18.6' - feldspar porphyry						
		- 18.6' - 19.0' - schist						
		- 19.0'-19.2' - feldspar porphyry						
		- 19.2'-19.6' - schist						
		- 19.6'-22' - feldspar porphyry						
		- 22' - 26.1' - schist with some talc						
		- 26.1'-28.1' - lost core						
		- 28.1'-30.3' - schist with some talc						
		- 30.3'-30.4' - narrow lens of cream quartz monzonite.						
		- 30.4'-31.2' - schist						
		- 31.2'-31.6' - feldspar porphyry						
		- 31.6'-33.5' - schist						
		- 33.5'-33.7' - feldspar porphyry						
		- 33.7'-35.4' - schist						
		- 35.4'-36.8' - fine-grained siliceous unit similar to porphyry matrix.						
		- 36.8'-37.5' - schist with some talc(?) and pyrite cubes.						

FORM 822

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-7-73 3.

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		- 37.5'-38.2' - schist unit with considerable silica content.						
		- 38.2'-48.7' - schist with dark-green fine-grained lenses apparently more siliceous and possibly equivalent to fine-grained dark grey to black siliceous ('baked'?) exposure mapped on surface (L24N) just west of main showing.						
		- 48.7'-50' - lost core						
		- 50'-52.6' - similar to schist above.						
		- 52.6'-53' - feldspar porphyry	52.6'	56.8'		4.2'		
		- 53'-55' - schist						
		- 55'-55.9' - lost core						
		- 55.9'-56.8' - schist with lower contact @ 52° to C.A.						
56.8'	307'	PORPHYRITIC QUARTZ MONZONITE: grey to orangy-pink matrix set with creamy-white to pinkish-orange phenocrysts (up to 5 mm) (some zoned and clear) of Kspar and plagioclase; down to about 100' and numerous white or pink subhedral to euhedral smaller feldspar phenocrysts (up to 1.5 mm); disseminated pyrite as cubes, and blebs throughout;	56.8'	60.0'		3.2'		

FORM 822

NORTH
EAST.
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DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-7-73 4.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		fine-grained siliceous banding with pyrite						
		from 56.8' to 58.3' with biotite ((phlogo-						
		pite(?)) - rich unit from 56.9' to 57.5';						
		numerous quarts veins and veinlets cut						
		the unit @ 65.1'-66.7' (upper contact @						
		63° to C.A., lower contact @ 70° to C.A.),						
		69'-69.2' (@ 65° to C.A.), 91.9'-93'	60'	64'		4.0'		
		(subparallel to 30° to C.A. with a	64'	65'		1.0'		
		fracture density of 7 to 9), 103.5'-104.2'	65'	70'		5.0'		
		(@ 12° to C.A.), 113.1'-117.5' (sub-	70'	75'		5.0'		
		parallel to C.A.), 119'-121.8' (sub-	75'	77'		2.0'		
		parallel to C.A.), 130.2'-130.6' (@ 27°	77'	80'		3.0'		
		to C.A.), 132.8'-135' (narrow with dark	80'	85'		5.0'		
		green chlorite and subparallel to C.A. -	85'	90'		5.0'		
		apparently cuts and offsets number of	90'	95'		5.0'		
		white quarts veinlets nearly ⊥ to C.A.);	95'	100'		5.0'		
		135'-136.4' (considerable number of white	100'	105'		5.0'		
		q.v. @ 70° to 90° to C.A. - fracture	105'	110'		5.0'		
		density of 3 to 5), 140.8'-141.1'(narrow	110'	115'		5.0'		
		@ 25° to C.A.), 143.1'-145' (various	115'	120'		5.0'		
		narrow veinlets subparallel to C.A. (with	120'	125'		5.0'		
		chlorite), @ 60° to C.A. (with or without	125'	130'		5.0'		
		chlorite) and @ 25° to C.A. all cutting	130'	135'		5.0'		
		each other and apparently synchronous),	135'	140'		5.0'		
		163'-164.7' (system of narrow grey-white	140'	145'		5.0'		
		q.v. with chlorite, sericite, and sur-	145'	150'		5.0'		

FORM 822

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DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-7-73 5.

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		rounding pink Kspar with considerable						
		silica @ varying angles to C.A. from 15°						
		to 33° but part of same set having						
		fracture density of 8 to 10), 167.6' (q.v.						
		with chlorite @ 24° to C.A.), 177.9'-	150'	155'		5.0'		
		178.7' (blue to grey-white quartz veinlet	155'	160'		5.0'		
		with green chlorite margins @ 14° to C.A.	160'	163'		3.0'		
		- also considerable pink Kspar and	163'	165'		2.0'		
		sericite in surrounding rock - this	165'	170'		5.0'		
		veinlet cut and displaced by narrow	170'	175'		5.0'		
		chlorite-filled fracture @ 35° to C.A.	175'	180'		5.0'		
		in opposite sense), 186.5'-187.5' (sub-	180'	185'		5.0'		
		parallel to 20° to C.A. with biotite-	185'	190'		5.0'		
		muscovite, chlorite and pyrite), 188.4'-	190'	195'		5.0'		
		188.8' (subparallel with some pale pink	195'	200'		5.0'		
		Kspar), 191.2'-191.6' (narrow @ 20° to	200'	205'		5.0'		
		C.A.), 195.2'-200' (considerable veining	205'	210'		5.0'		
		@ 40° to C.A. to subparallel in pink Kspar	210'	215'		5.0'		
		-rich section with scattered small black	215'	220'		5.0'		
		biotite 'spots' - also 1%-2% pyrite as	220'	225'		5.0'		
		blebs and seams), 202.1' (@ 65° to C.A.),	225'	230'		5.0'		
		225.5'-230.6' (number of grey-white q.v.	230'	235'		5.0'		
		@ 40° to C.A. with estimated fracture	235'	240'		5.0'		
		density of 2 to 3), 233'-234' (a few small	240'	245'		5.0'		
		'bands' of coarse pink Kspar-plagioclase	245'	250'		5.0'		
		@ 80° to 90° to C.A.) (also @ 247.8'),	250'	255'		5.0'		

FORM 822

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DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-7-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		249'-250.6' (grey-white q.v. @ 7° and	255'	260'		5.0'		
		50° to C.A.), 259.7'-268.8' (wide white	260'	265'		5.0'		
		to grey-white quartz vein with some Kspar	265'	270'		5.0'		
		and sericite, and pyrite blebs along both	270'	275'		5.0'		
		contacts @ 40° to C.A.), 264.9'-266.4'	275'	280'		5.0'		
		(as above with more muscovite/sericite,	280'	285'		5.0'		
		and chlorite, and subparallel curving	285'	290'		5.0'		
		fractures), 273'-273.3' (grey-white quartz	290'	295'		5.0'		
		veinlet @ 40° to C.A. with some sericite,	295'	299'		4.0'		
		chlorite, and epidote) 277.3' and 279.4'	299'	303'		4.0'		
		(narrow veinlets with epidote and	303'	307'		4.0'		
		sericite(?) @ 30° to C.A.), 284'-284.5'						
		(grey-white quartz veinlet @ 40° to 65°						
		to C.A., with some marginal Kspar, pyrite						
		and sericite), 287.3'-290.2' (grey-white						
		quartz veinlets from 60° to C.A. to sub-						
		parallel, with subparallel cross-fracturing,						
		chlorite, epidote, pyrite, and some mus-						
		covite/sericite), 290.8'-307' (number of						
		narrow grey-white quartz veinlets @						
		generally 45° to 75° to C.A. with estimated						
		fracture density of 2 to 3, some with red						
		Kspar envelopes), 296.2' (epidote-chlorite						
		seam @ 35° to C.A. surrounded by reddish-						
		pink Kspar-rich rock).						
		- from about 100' to about 180', the						

FORM 822

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DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-7-73 7.

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		overall colour of the section is creamy-grey to pinkish-grey; gray sections with some clear coarse phenocrysts from 189.3' to 193', 225' to 228', and 230' to 236'; pink Kspar-rich sections from 195.2' to 200' and 229.5' to 230'; core is dark grey from 240.9' to 245' and 250.6' to 259.7'; otherwise core generally grey to pinkish-grey with cream to pink phenocrysts - core ground from 65.5' to 66.5', 106.5' to 107.8', 178.9' to 180', 192.3' to 193.3', 231' to 235', 262' to 262.5', 272' to 272.5', and 306'-306.5'. - core lost from 158.9' to 160' and 170' to 171'. - molybdenite @ 64.9' (as blebs along margin of q.v. @ 62° to C.A.), @ 75.3' (as small blebs with quartz) and 163.9' to 165' (blebs approaching rosettes up to 1.5 mm, disseminated throughout quartz and quartz monzonite; some pyrite blebs concentrated along chloritic fractures, with coarse muscovite/sericite).						
		E.O.H. 307'						

REGISTERED PROFESSIONAL ENGINEER
P. J. BATEMAN
PROVINCE OF ONTARIO

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

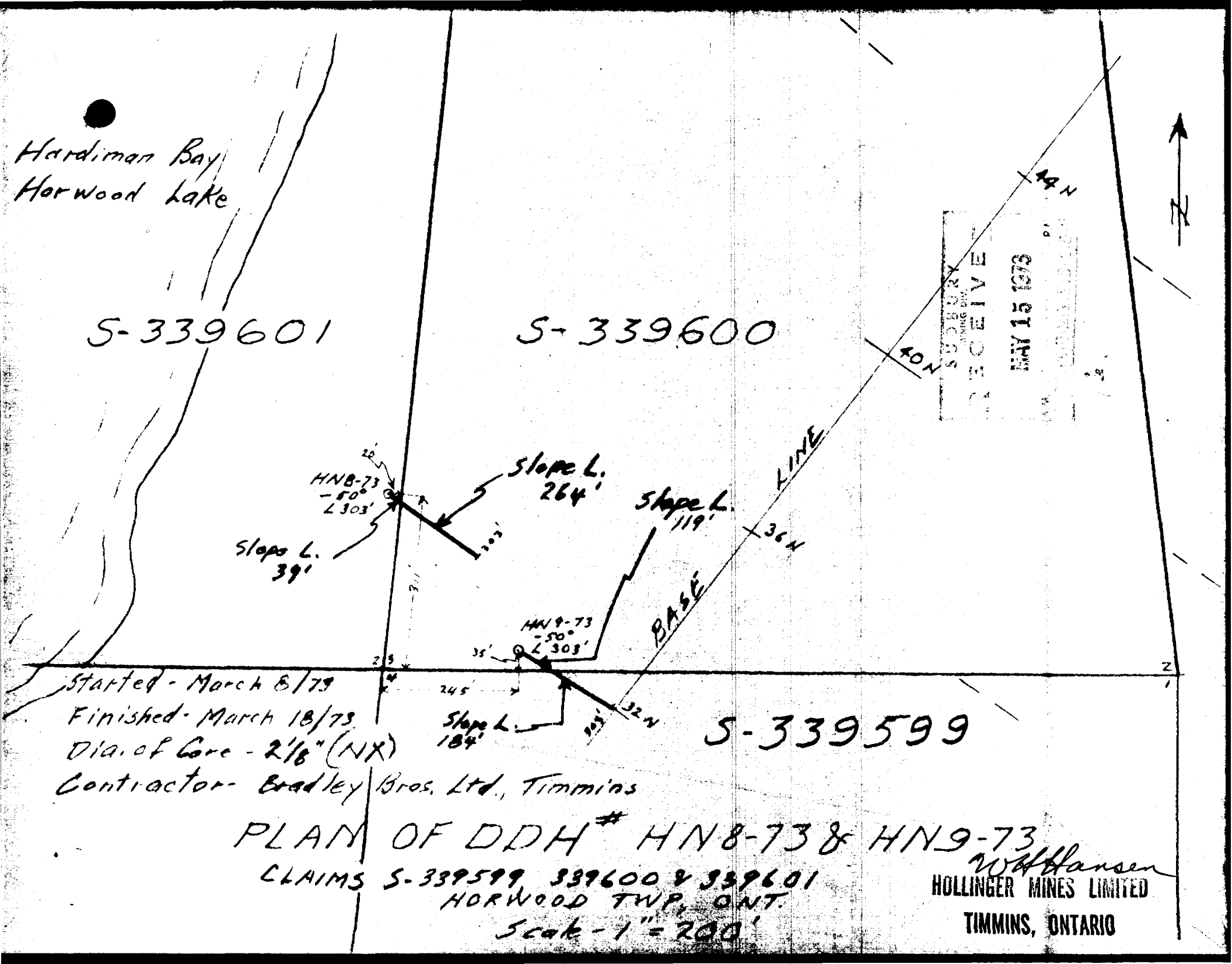
DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-7-73 8.

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		FOLIATION ANGLES WITH CORE AXIS						
		13.5' - 61° - schistosity						
		23' - 70° - "						
		31.4' - 69° - porphyry, shearing						
		51.4' - 40° - schistosity (crenulated)						
		57.6' - 52° - porphyry, 'banding' (siliceous)						
		79.6' - 50° - porphyry						
		93.4' - 60° - "						
		101.8' - 54° - "						
		118.2' - 35° - "						
		128.5' - 66° - "						
		150.8' - 65° - "						
		167' - 54° - "						
		188' - 65° - "						
		209' - 60° - "						
		239' - 60° - "						
		251.3' - 50° - "						
		279' - 65° - "						
		295.7' - 60° - "						
		306' - 70° - "						



Started - March 6/73
Finished - March 18/73
Dia. of Core - 2 1/8" (NX)
Contractor - Bradley Bros. Ltd., Timmins

PLAN OF DDH # HN8-73 & HN9-73

CLAIMS S-339599, 339600 & 339601
HORWOOD TWP., ONT.
Scale - 1" = 200'

Wolf Hansen
HOLLINGER MINES LIMITED
TIMMINS, ONTARIO

Location of Callar from #2 Post of S-339601 N 311' W 20'

FORM 822

NORTH 33+00N
EAST. 5+50W
ELEV.
AZIM. Grid East
DIP Collar - 50°; 300' - 49°

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

Claim S-339601 Horwood Township NX Core

HOLE NO. HN-8-73
COMMENCED March 8, 1973
FINISHED March 11, 1973
PURPOSE OF HOLE To test geology and probe 'favourable site' for molybdenite mineralization.

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0'	6'	OVERBURDEN.						
6'	43.1'	QUARTZ VEIN - generally white, grey-white or glassy; probably drilled down-dip to give such a wide intersection; core angles quite shallow and generally subparallel to C.A.; numerous fractures subparallel to C.A. also and lined with fine and coarse-grained greenish sericite/muscovite (in coarse books near perpendicular to walls where vein or similar vein re-appears @ 44.4' to 45'), possibly some chlorite, biotite, and varying amounts of pyrite usually as small blebs; some sections, particularly near fractures, characterized by orange-red Kspar alteration; narrow lenses of quartz monzonite where noted - 18.4'-19.4' - lost core. - 21.1'-23.1' - lost core. - 23.4'-25' - qtz monzonite lens, probably wall rock to vein, creamy-orange colour. - 28.6'-30' - lost core.						

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-8-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		- 30.8'-31.4' - short biotite-rich lenses of qtz monzonite.						
		- 32.4'-33' - as above with biotite alteration envelope adjacent to quartz vein.						
43.1'	303'	PORPHYRITIC QUARTZ MONZONITE - medium to coarse-grained, pinkish-grey to orange-pink, varying amounts of biotite, pink subhedral Kspar phenocrysts quite abundant up to 4 mm; a few, clear zoned, euhedral to subhedral feldspar phenocrysts up to 6 or 7 mm; some narrow grey-white quartz veins @ 60° to 65° to C.A. with fracture density of 2 to 3; clean fractures with Kspar alteration @ 30° to C.A. with F.D. up to 8; pyrite blebs (tr. to 2%) commonly occur with quartz veinlets particularly along margins;	70'	75'		5.0'		
			75'	80'		5.0'		
		- from 72.4, colour changes slightly with texture as rock seems generally finer-grained than above and colour through orange-cream to grey to pinkish grey, as distinct from creamy-pink above; quartz veining and fracturing	80'	85'		5.0'		
			85'	90'		5.0'		
			90'	94'		4.0'		
			94'	96'		2.0'		
			96'	100'		4.0'		

FORM 822

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-8-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		as above only more clean fractures	100'	105'		5.0'		
		subparallel to C.A. (approx. 8°) with	105'	110'		5.0'		
		fracture density from 1 to 2 and less	110'	113'		3.0'		
		fracturing @ 30° to C.A.	113'	115'		2.0'		
		- from 197.3', number of fine-grained	115'	120'		5.0'		
		dark-coloured 'mafic' lenses below	120'	123'		3.0'		
		which (approx. 226.1') core coarser-	123'	125'		2.0'		
		grained and pinker than above, also	125'	130'		5.0'		
		fracture density of q.v. @ 65° to 75°	130'	135'		5.0'		
		to C.A. up to 3 to 4 down to 256.7',	135'	140'		5.0'		
		after which core greyer again.	140'	145'		5.0'		
		- molybdenite where noted.	145'	150'		5.0'		
			150'	152.5'		2.5'		
		- 64.3' - large pyrite blebs.	152.5'	155'		2.6'		
		- 71.4'-72.4' - grey-white quartz vein	155'	160'		5.0'		
		with margins and internal fractures						
		lined with coarse books of muscovite.						
		- 72.4'-72.9' - dark green with pinkish						
		tinge, fine-grained, phase of						
		quartz monzonite(?), considerable						
		biotite-chlorite.						
		- 81.3'-81.7' - as above with lower						
		contact sharp and @ 37° to C.A.						
		- 91'-92.6' - as above, (probably mafic						
		remnant or inclusion?)						
		Lower contact @ 60° to C.A. and sharp.						

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-8-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		- 97.6'-100' - broken core.						
		- molybdenite as very tiny disseminated specks and blebs along margins of quartz veinlets @ 95'-95.1' and 113.9' to 114'; both veinlets @ 60° to 65° to C.A.						
		- 120.6'-121.8' - lost core.						
		- molybdenite specks disseminated along margins of quartz veinlets @ 65° to 75° to C.A. @ 123.4' and 153.2'.						
		- 160'-161' - lost core.						
		- 171'-171.9' - lost core.						
		- 172.8'-174.6' - cut quartz vein with red potassic alteration, coarse muscovite/sericite, and some pyrite along margins, @ 9° to C.A.						
		- 174.6'-178.9' - core as before only considerable muscovite/sericite in matrix.						
		- 178.9'-180' - lost core.						
		- 182.4'-183.3' - quartz vein @ 22° to C.A. with sericite, red Kspar alteration, traces of epidote, and pyrite along margins and internal fractures.						
		- 197.3'-199.2' - dark green-grey, fine-grained, 'mafic' lens similar to those						

FORM S22

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-8-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		higher in hole; contacts sharp and						
		@ 68° to C.A.						
		- 211'-214.2' - section characterized by						
		abundant pink to reddish-pink Kspar						
		alteration with scattered biotite-						
		chlorite 'clots' or spots lending	220'	225'		5.0'		
		speckled appearance to core; one	225'	227'		2.0'		
		larger 'clot' contains considerable	227'	230'		3.0'		
		pyrite as cubes.	230'	232'		2.0'		
		- 216.5'-226' - 'mafic' lens as above;	232'	235'		3.0'		
		lower contact @ 64° to C.A.	235'	237'		2.0'		
		- 228.7'-230' - 'mafic' lens as above.	237'	240'		3.0'		
		- 234.4' and 234.6' - narrow grey-white	240'	242'		2.0'		
		quartz veinlets @ 70° to 75° to C.A.	242'	245'		3.0'		
		- 235.7'-235.9' - grey-white quartz vein	245'	247'		2.0'		
		@ 78° to C.A.	247'	250'		3.0'		
		- 238.4'-242.8' - lost core.	250'	252'		2.0'		
		- 256.6'-258.5' - lost core.	252'	255'		3.0'		
		- 268.7'-274.2' - grey-white quartz	255'	257'		2.0'		
		veinlet subparallel to C.A., with	257'	260'		3.0'		
		minor Kspar alteration, sericite and						
		pyrite; other similar fractures down						
		hole, either with quartz or clean -						
		F.D. of approx. 1 to 2.						
		E.O.H. - 303'						

REGISTERED PROFESSIONAL ENGINEER
P. J. BATEMAN
PROVINCE OF ONTARIO

FORM 822

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-8-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Foliation Angles with Core Axis						
		52.6' - 68° - grain alignment and biotite						
		71' - 68° - "						
		88.6' - 59° - "						
		112.4' - 60° - "						
		132.6' - 65° - "						
		152.6' - 57° - "						
		172.2' - 56° - "						
		191.8' - 60° - "						
		218.3' - 63° - " and schistosity						
		233.2' - 66° - "						
		265.7' - 55° - "						
		292.3' - 54° - "						

Location of Collar from #3 Post of S-339600 E 245'
N 35'

FORM 822

DIAMOND DRILL REPORT

HOLE NO. HN-9-73

NORTH L 32+00 N
EAST 2+00 W
ELEV.
AZIM. 126° az. (Grid East)
DIP Collar - 50°; 300' - 50°

COMMENCED March 15, 1973
FINISHED March 18, 1973
PURPOSE OF HOLE to test geology and 'favourable site' for molybdenite mineralization.

PROPERTY HORWOOD-NEWMAN
Claim S-339600 Horwood Township NX Core

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0'	10'	OVERBURDEN.						
10'	303'	PORPHYRITIC QUARTZ MONZONITE -	10'	15'		5.0'		
		medium to coarse-grained reddish-orange	15'	20'		5.0'		
		to pinkish-grey with varying amounts of	20'	25'		5.0'		
		biotite, contains feldspar phenocrysts	25'	30'		5.0'		
		(up to 8 mm long) which are commonly	30'	35'		5.0'		
		euhedral, zoned and clear, also pink	35'	40'		5.0'		
		to cream-pink Kspar phenocrysts	40'	45'		5.0'		
		(subhedral) up to 4 or 5 mm long; some	45'	50'		5.0'		
		sections are heavily concentrated in	50'	55'		5.0'		
		pink Kspar particularly bordering	55'	60'		5.0'		
		certain fractures which carry	60'	65'		5.0'		
		sericite/muscovite, chlorite, grey to	65'	70'		5.0'		
		bluish-white quartz and pyrite (this	70'	75'		5.0'		
		fracture set mainly @ 10° to 25° to	75'	80'		5.0'		
		C.A. with a fracture density of 2 to 3)	80'	85'		5.0'		
		Kspar alteration around these fracture	85'	90'		5.0'		
		zones usually accompanied by increase	90'	95'		5.0'		
		in silica and considerable coarse	95'	100'		5.0'		
		flakes/books of muscovite/sericite;	100'	105'		5.0'		
		also fractures (either with grey-white						
		quartz or clean) @ 40° to C.A. (with						
		F.D. of approx. 2) and @ 60° to C.A.						
		- major change in colour below 105.2'						

FORM S22

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-9-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		to dark grey matrix with abundant white to cream feldspar grains and phenocrysts (up to 7 mm) some of which are euhedral to subhedral, clear, and zoned; biotite (some altered to chlorite) content greater than preceding section; disseminated pyrite (tr. to 1%) within core and along fractures; biotite clots @ places; apparently less fracturing (particularly with quartz filling) than upper section; white grains and phenocrysts very closely packed in some sections; foliation more distinct; molybdenite is very sparse and is visible only where noted below.						
		- 29.8'-32.1' - Kspar-rich section with minor biotite, surrounding fractures @ 20° to C.A.						
		- 34'-35.8' - Kspar and sericite/muscovite-rich section.						
		- 46'-47.1' - Kspar, sericite/muscovite, and silica-rich section.						
		- 56.5'-57.1' - Kspar-rich with abundant quartz, pyrite, some sericite/muscovite, and long						

FORM 522

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-9-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		acicular to rod-like needles (6 to 24 mm) of a dark green mineral (actinolite?) in the quartz.						
		- 59.2'-59.5' - wide grey-white quartz vein.						
		- 61'-61.8' - ground core.						
		- 66'-72.5' - ground core.						
		- 91.2'-92.9' - Kspar-rich section surrounding q.v. with chlorite and some sericite/muscovite.						
		- 92.9'-105.2' - creamy section; 99.3'-99.8' - biotite & pyrite-rich.						
		- 102.4'-103' - Kspar-rich section and fractures.						
		- 102.8'-103.4' - ground core.						
		- 103.8'-106.2' - grey-white quartz vein subparallel to C.A. with thin chlorite-sericite envelope and biotite 'clots' along internal fractures, all in Kspar-rich section.						
		- 113.5'-115' - lost core.						
		- 115'-120' - ground core.						
		- 122.9'-125' - ground core.						
		- 133' - fracture with qtz and pyrite @ 14° to C.A. and another fracture with qtz and biotite(?) @ 3° to C.A. in opposite sense.						

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-9-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		- 135.3' to 135.8' and 136.1' to 136.8' creamy sections with more Kspar and less biotite.						
		- 166' - slightly contorted grey-white q.v. @ approx. 30° to C.A.						
		- 190.7-190.9' - wide greyish-brown quartz vein @ 75° to C.A.						
		- 198.5' and below - a few hairline fractures with reddish-pink potassic alteration - estimated fracture density of 2 to 3 @ 30° to C.A. to subparallel.						
		- 207'-207.7' - broken core.						
		- 211.1'-211.2' - greyish quartz vein @ 85° to C.A.						
		- 215'-215.2' - greyish-white q.v. @ 30° to C.A. with narrow reddish Kspar envelope and sericite/muscovite.						
		- 234.8'-235' - greyish-white q.v. @ 75° to C.A.						
		- 244.4'-245' - ground core.						
		- 256.6'-256.9' - greyish-white quartz vein with pyrite (blebs up to 20 mm) and minor pink Kspar alteration, @ 40° to C.A.						

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-9-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		- 281' - narrow white q.v. @ 60° to C.A. with blebs of pyrite and disseminated specks of molybdenite.						
		- 285.7'-286' - pinkish-white quartz vein @ 12° to C.A. with Kspar alteration and pyrite blebs, - 25 mm true width, slightly vuggy along margins.						
		- 294.8' - narrow white quartz veinlet @ 53° to C.A.	275'	280'		5.0'		
			280'	282'		2.0'		
		- 300.1' - small blebs of molybdenite with quartz (creamy) in fracture @ 53° to C.A.	282'	285'		3.0'		
			285'	290'		5.0'		
			290'	295'		5.0'		
			295'	300'		5.0'		
			300'	303'		3.0'		
		E.O.H. - 303'						

REGISTERED PROFESSIONAL ENGINEER
P. J. BATEMAN
PROVINCE OF ONTARIO

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY HORWOOD-NEWMAN

HOLE NO. HN-9-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Foliation Angles with Core Axis						
		12.7' - 65° - Porphyry and biotite						
		26.8' - 56° - "						
		48.3' - 55° - "						
		58.5' - 56° - "						
		78.3' - 62° - "						
		99.8' - 48° - contact between biotite-rich phase and creamy qtz monzonite						
		111.9' - 50° - grain alignment						
		122.2' - 54° - " and biotite						
		147.5' - 67° - " and porphyry						
		162' - 66° - closely packed grains, phenocrysts						
		177.5' - 64° - grain alignment and porphyry						
		188.4' - 67° - "						
		202.7' - 67° - "						
		219.5' - 61° - "						
		238.6' - 57° - "						
		246.2' - 64° - "						
		262.5' - 63° - "						
		281.7' - 58° - "						
		291.5' - 63° - "						
		300.7' - 67° - "						