Diamond Drilling

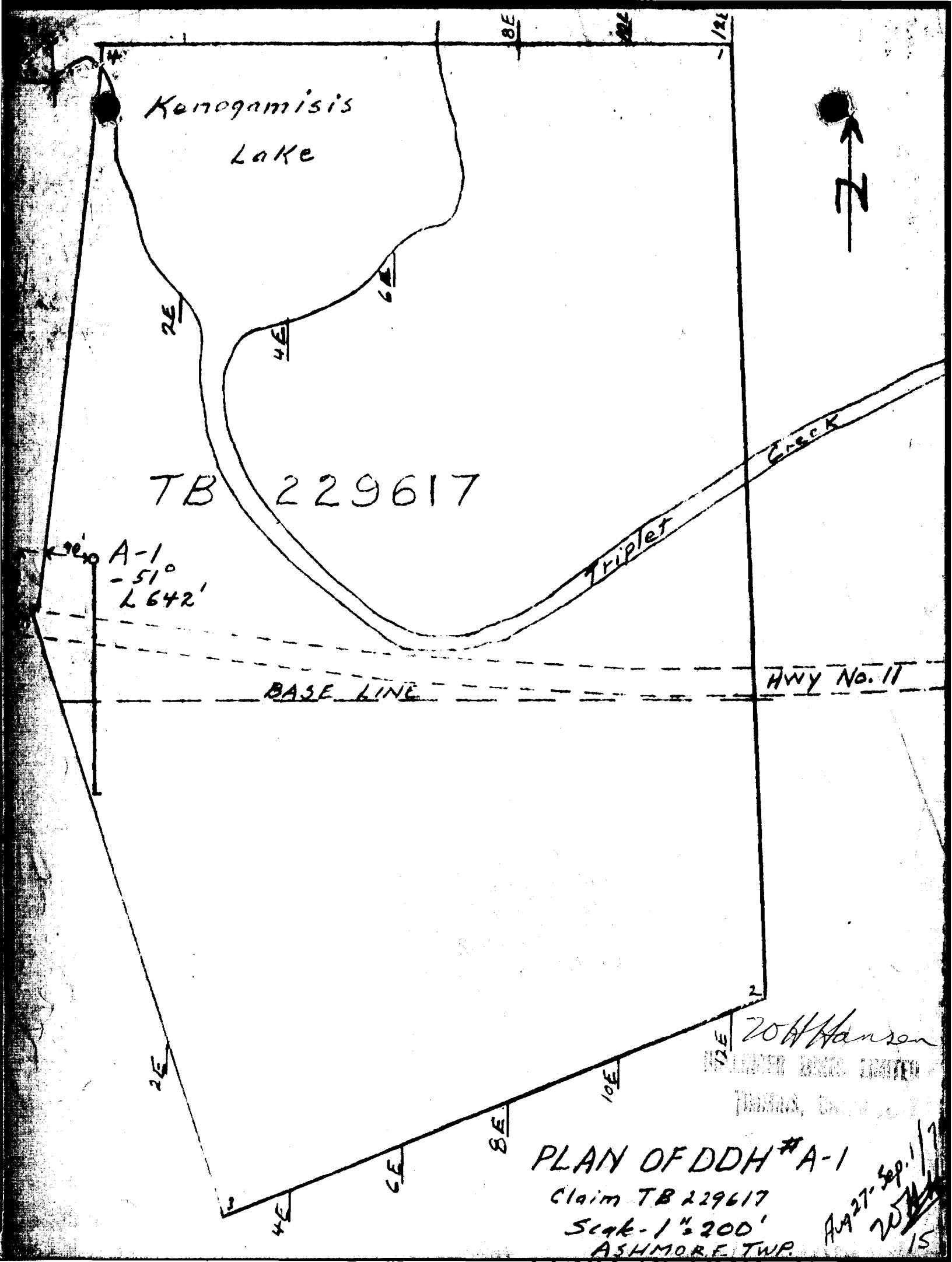
Township OF ASHMORE **Report Nº:** 16

Work performed by: HOLLINGER MINES LTD. (WILSON & KALSON OPTIONS)

Claim Nº	Hole Nº	Footage	Date	Note
TB 229617	A-1-70	642'	Aug/70	(1) (2)
	A-2-70	323.3'	Nov/70	(1) (3)
	A-3-72	443'	Jan/72	(1) (4)
	A-4-72	494'	Jan/72	(1) (4)
	A-5-72	448'	Jan/72	(1) (5)
	A-8-72	301'	Feb/72	(1) (5)
	A-10-73	402'	1973	(1) (6)
	A-12-73	491'	1973	(1) (6)
TB 229616	A-6-72	492'	Jan/72	(1) (5)
	A-7-72	302'	Jan/72	(1) (5)
TB 10971	A-9-73	302'	1973	(1) (6)
	A-11-73	301'	1973	(1) (6)
TB 139353	A-14-73	790'	June/73	(1) (6) (7)

Notes:

(...) date placed on file
(1) (May/74)
(2) 145/70
(3) 228/70
(4) 6/72
(5) 22/72
(6) MEAP GB #33 (cross-sections only)
(7) 102/73



J.A. Hanson
PROFESSIONAL ENGINEER ONTARIO LAND SURVEYOR
THUNDER BAY, ONTARIO

PLAN OF DDH # A-1
Claim TB 229617
Scale-1" = 200'
ASHMORE TWP.

AUG 27. Sep. 15

Location of Collar from W.P. on West Side of Claim TB 229617

FORM 522

NORTH 40' East North 90'

EAST 2 + 50 N of S.L. East 90'

ELEV.

AZIM. Collar 51° 100' 43°

DIP 300 - 50' 600-46°

L.642'

DIAMOND DRILL REPORT

PROPERTY Wilson Option - Ashmore Township
Claim TB 229617

HOLE NO. 1-1
COMMENCED August 27, 1970
FINISHED Sept. 1, 1970
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	48	Casing					50'	Bk f gr'd Andesite
								non magnetic
48	115	Grey green massive non magnetic					98'	Mottled fine gr'd andesite
		Andesite uniform app. to core						non magnetic
							157'	Dacite lt. col. brecciated
114	137	Feldspar Por. Grey to green					215'	Mottled And or dacite?
		with incr. in chlorite numerous phenocrysts					315	Lt. cherty section Pyrr.
		of feldspar 2/10 of an inch in dia.						
		throughout section.						
		Contacts ground 23' Col of Porphry.						
137	331	Banded chloritic Tuff or Sed. brownish						
		bands mica? and green chloritic bands						
		locally min with Pyrr Py + chalco	170	170.5	.5			Chl band Pyrr + chalco.
		banding @ 80° to 60° to C.A.						Very magnetic
		2' Dacitic band at 157.	192	193	1.0	1.0		4" mass Pyrr + Py minor chalc
		162' sm. blebs Pyr. obs.						
		170 sm blebs of pyrr. obs.						
		190 - 261 mottled	242	244.5	2.5	2.5		Qtz. strs. 30° to CA
		Lt. col. Dacitic Tuff?						bleached section yellow
								Sericitic
		At 264' cherty section minor pyrr. and						
		chalco	261	264	3.	3.		Chl. band Pyrr + chalco

THUNDER BAY MINING DIVISION RECEIVED SEP 10 1970 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

145-170

11

FORM S22
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND (2) DRILL REPORT

PROPERTY WILSON OPTION - Ashmore Twp.

HOLE NO.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
			264.5	269.5	5.0	5.0		Cherty chl. ection
								Minor pyrr. V.L. chalco
			269.5	274.5	5.0	5.0		Minor pyrr. V.L. chalco
			274.5	279.5	5.0	5.0		Minor pyrr. V.L. chalco
			279.5	284.5	5.0	5.0		Very little mineral
			284.5	287.5	3.0	3.0		band of Pyrr minor chalco
			287.5	289	1.5	1.5		1" nearly mass Pyrr. + Py
								minor chalco
			289	293.5	4.5	4.5		very little min.
								chl. section
			315	318	3.0	3.0		fair amount of Pyrr chalco
								in section Cherty
			323	328	5.0	5.0		Local streaks of Pyrr minor
								chalco.
331	367	Massive speckled Andesite fine gr'd						
		contact at 70° to CA	464	465	1.0	1.0		Diss. Pyrr + Chalco
367	404.5	Dk. fragmental Andesite non magnetic						
		no min.						
404	442	Mass. dk. gr. Andesite speckled app.						
		to core non magnetic.						

FORM 522
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION - Ashmore Twp.

HOLE NO.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
442	448.5	6.5' Cherty Tuff	497	502	5	5		V.L. Min.
			502	507	5	5		Highly Alt. diss Pyrr.
448.5	487.5	Dk. gp. Andesite						
			517	522	5	5.0		Diss. Pyrr. Alt. Section
487.5	501.5	Fine gr'd Meta-Tuff-Sed						
		banding @ 60° to C.A.	522	527	5.0	5.0		2 sm qtz. strs. Pyrr in section
501.5	607	Mass highly Alt. Andesite	527	532	5.0	5.0		3 sm qtz. strs. min sections
		Min with pyrr minor						
		chalco	532	537	5.0	5.0		Min. Sect. cherty V.L. min
			537	542	5.0	5.0		fair amount of Pyrr. in Alt. Section minor chalco
		572' cherty bands @ 50° to C.A.	572	575	3.0	3.0		2' chert bands
			575	577	2.0	2.0		Diss. Pyrr. sm. chert bands
607	620.5	Bluish chert: fractured	577	579	2.0	2.0		Min. with Pyrr + chalco
		and brecciated minor min.	579	582	3.0	3.0		Diss. Pyrr minor chalco
		619.5 - 619.9 Breccia	587	592	5.0	5.0		Pyrr. min. with chalco
		Gradation to amygdaloidal	592	597	5.0	5.0		Diss. Pyrr. minor chalco
		Bl. Andesite well min	597	602	5.0	5.0		1" qtz. str. min sect.
		highly magnetic pyrr.	602	607	5.0	5.0		Diss. Pyrr in Sect.
		and chalco ~~from~~	607	612	5.0	5.0		Cherty bands V.L. min.
			612	617	5.0	5.0		" " " "
			617	619	2.0	2.0		Very little min.
			619	622	3.0	3.0		Well min Section Pyrr +chalco
			622	624	2.0	2.0		Min. diss Pyrr some chalco

FORM S22
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION - ASHLEY TWP.

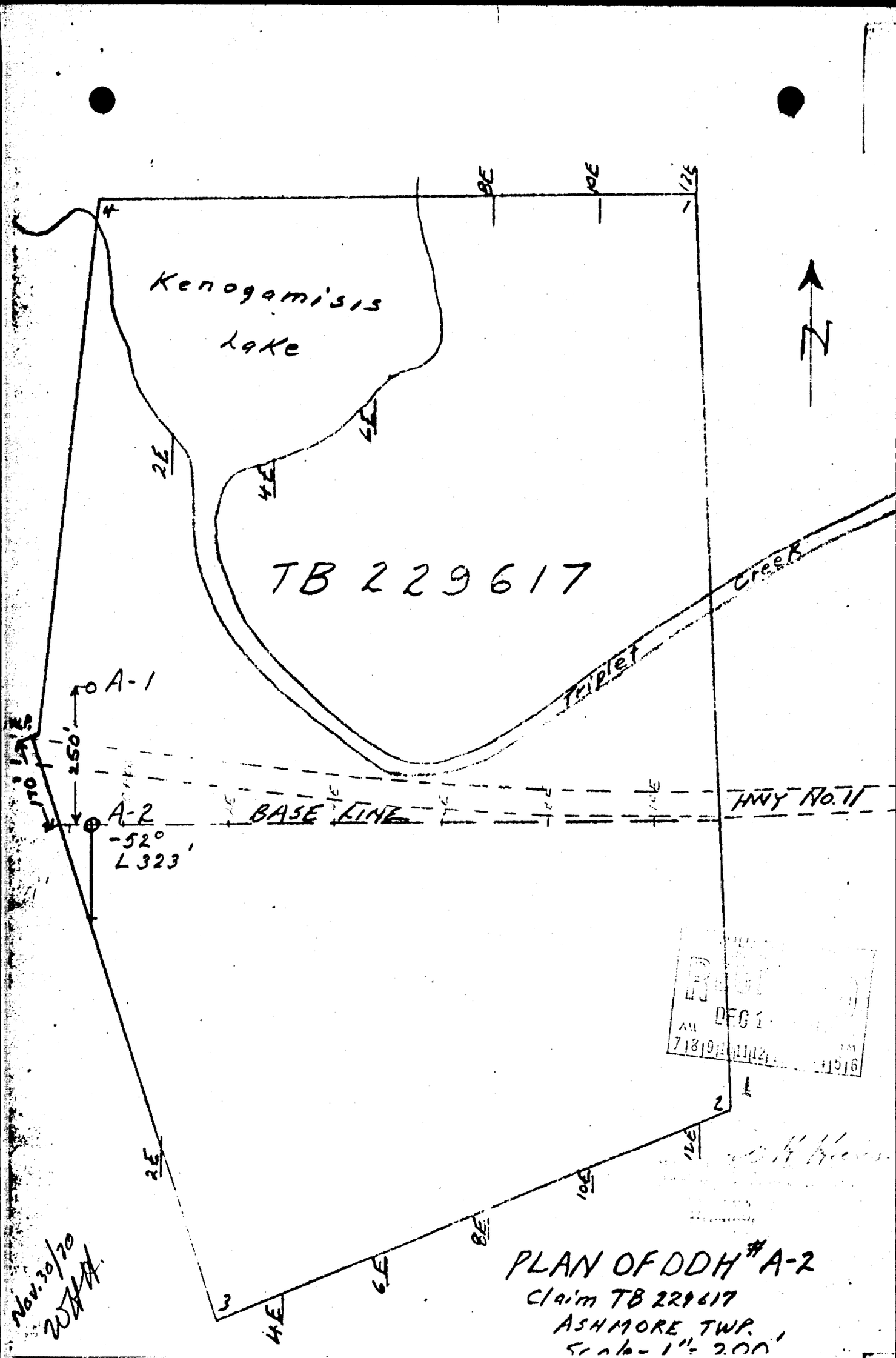
HOLE NO.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
620.5	642	Dk green silicified amygdaloidal	624	627	3.0	3.0		well min. best section
		andesite well min with						spots pyrr + chalco
		Pyrr. and chalco pyrite						very magnetic
		634-642 micaceous section non magnetic	627	629	2.0	2.0		Well min not so much chalco
			629	632	3.0	3.0		Min. with pyrr + chalco
			632	632	2.0	2.0		Very little min.
			634					
		642 END OF HOLE						

E D MacKenzie
HOLLINGER MINES LIMITED
TIMMINS, ONTARIO

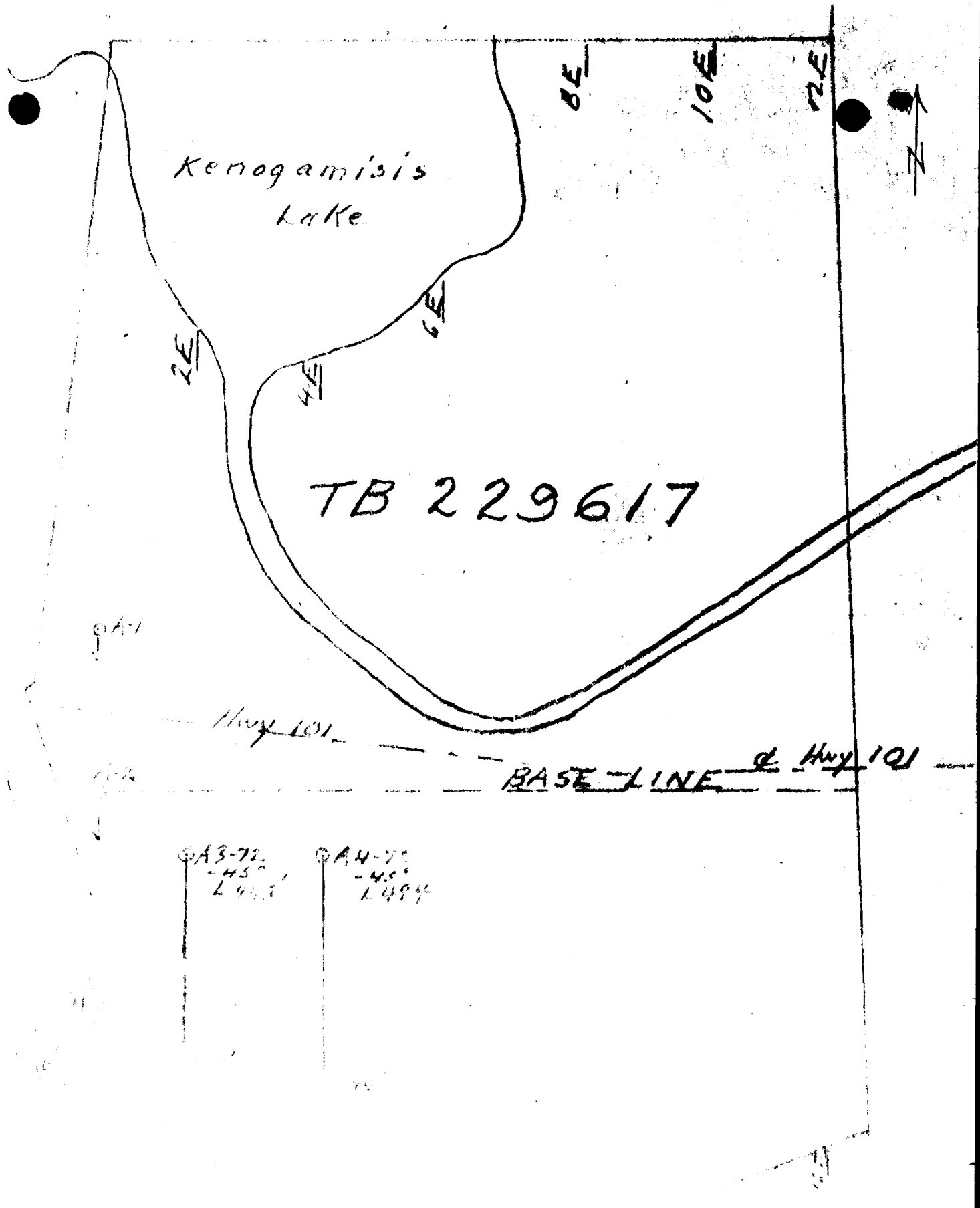
THUNDER BAY MINING DIVISION
RECEIVED
SEP 10 1970
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

14



#228/70 Ashmore Twp

Hockings Mines Ltd



W.A. Hanson

ONTARIO LAND SURVEYOR

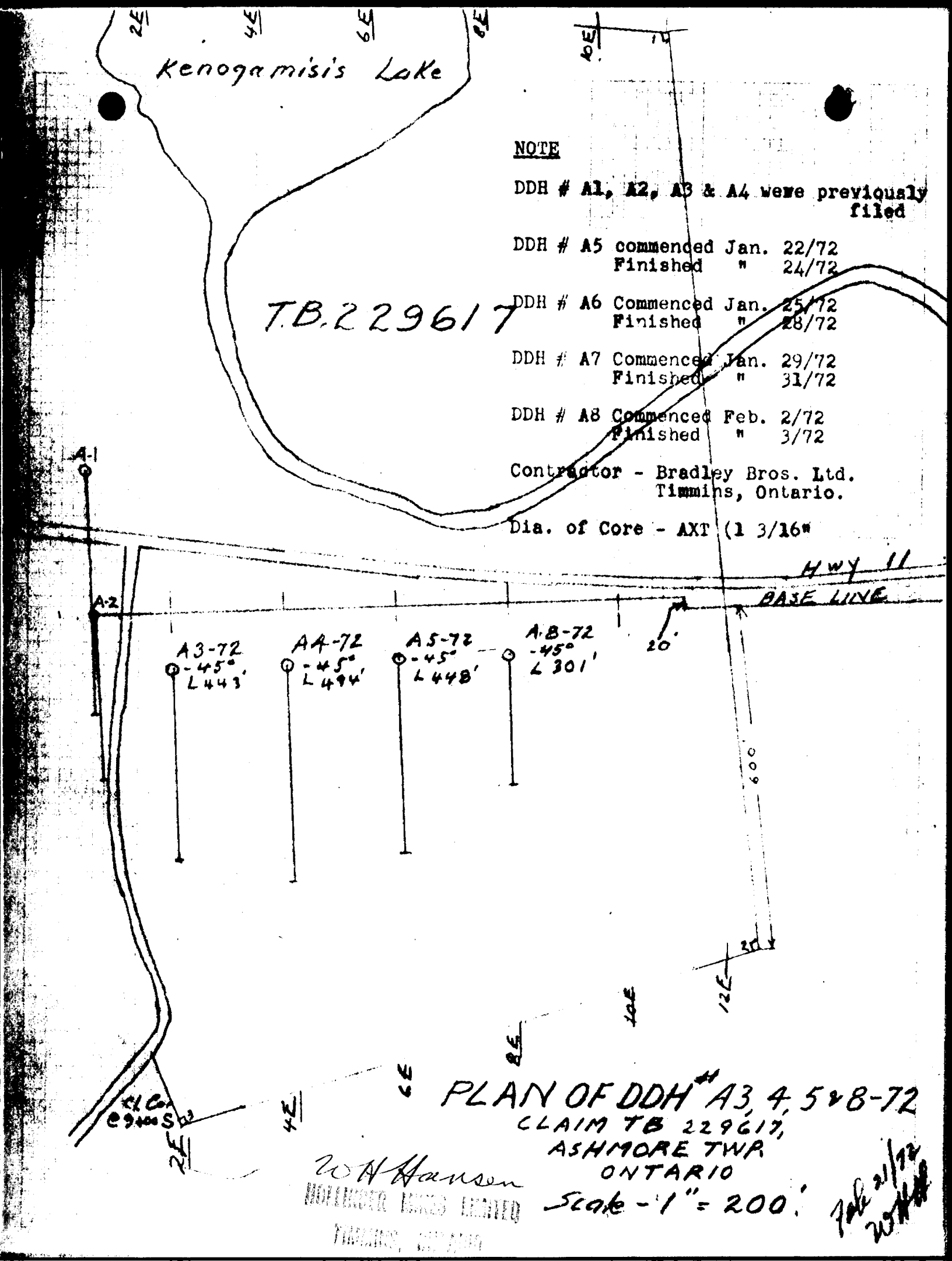
TIMMINS, ONTARIO

W.D.H. 93MAY 22

Claim TB 229617

Twp

Scale - 1" = 200'


Kenogamisis Lake
2E
4E
6E
8E
10E
12E
14E
NOTE
DDH # A1, A2, A3 & A4 were previously filed
DDH # A5 commenced Jan. 22/72
Finished " 24/72
DDH # A6 Commenced Jan. 25/72
Finished " 28/72
DDH # A7 Commenced Jan. 29/72
Finished " 31/72
DDH # A8 Commenced Feb. 2/72
Finished " 3/72
Contractor - Bradley Bros. Ltd.
Timmins, Ontario.
Dia. of Core - AXT (1 3/16"
T.B. 229617
A-1
A-2
HWY 11
BASE LINE
A3-72
-45°
L 443'
A4-72
-45°
L 494'
A5-72
-45°
L 448'
A-B-72
-45°
L 301'
20'
600'
30'
4E
6E
8E
10E
12E
2E
4E
PLAN OF DDH #A3, 4, 5 & 8-72
CLAIM TB 229617,
ASHMORE TWP.
ONTARIO
Scale - 1" = 200'
W. A. Hansen
MINERAL RESOURCES LIMITED
TIMMINS, ONTARIO
Feb 21/72

Location of Collar 250' South of DDH# A-1 (See Sketch)

FORM S22

NORTH 00 + 00N
EAST 00 + 60W
ELEV.
AZIM. 180°
DIP Collar - 52° 100' - 53°
300' - 52°

DIAMOND DRILL REPORT

PROPERTY ASHCROFT TOWNSHIP
Claim TB-229617

HOLE NO. A-2-70
COMMENCED November 16/70
FINISHED November 20/70
PURPOSE OF HOLE Test Hole

Drilled by Bradley Bros.

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	20	Casing						
20	30.5	Silicified andesite fragmental . The fragments are very small-less than ¼" and generally obscure the fragments are siliceous. The andesite is dark green to grey, siliceous, chloritic cut by quartz carbonate stringers. No mineralization.						
30.5	49.7	Amygdaloidal andesite - amygdales are locally well defined - rounded to elliptical in shape and either siliceous or filled with chalcopyrite and pyrrhotite. There are also stringers of pyrrhotite and chalcopyrite in this section.						
		The andesite is greenish to grey with chlorite and silica and cut by quartz-CO_3 stringers.	45	50		5		Amygdaloidal andesite Cp,Po for Cu, Ni, Au,Ag
49.7	71.6	Andesite fragmental-probably a tuff since the fragments are very small ¼" in size. It is separated from the amygdaloidal andesite mainly on the basis that the fragments are very angular and siliceous in nature. Also there does not appear to be any replacement or filling of the fragment structure by pyrrhotite and						
			70	72		2		Lower part of fragmental w. Po-Cp section
		chalcopyrite. Instead the mineral						

FORM S22
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY ASHMORE TOWNSHIP

HOLE NO. A-2-70 2
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		is simply disseminated and localized						
		to stringers. From 49.7 to 55						
		gradational contact with the fragmental.						
		71-71.5 near massive section of						
		pyrrhotite and chalcopyrite-mostly						
		pyrrhotite.						
71.6	79.4	Zone of mixed chert and amygdaloidal	75	77		2		Some chert and amygdaloidal
		material. The amygdaloidal sections						material Cp Po in amygdaloidal
		show abundant po and some cp completely						
		filling the amygdales.						
		Such are: 75-76.3 77.3-79.2						
		The chert is very dark and hard						
		it is brownish in colour, no mineral or						
		very minor py along shears. Often						
		fractured and filled with chlorite.						
79.4	90.7	Andesite fragmental - the fragments						
		are larger here ½" size and only						
		locally were defined. They may be either						
		cherty or chloritic. The andesite is						
		green in colour, fine grained with						
		abundant chlorite - cut by small quartz						
		carbonate stringers.						
90.7	105.4	Another zone of brownish chert-						
		fractured with chlorite, epidote and						
		quartz-carbonate.						

FORM 522
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY ASHMORE TOWNSHIP

HOLE NO. A-2-70 3.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
105.4	149.4	Andesite fragmental - fragments are around ½" size and very numerous. There are cherty, chloritic, epidote and siliceous types. The cherty and siliceous types of fragments may be separated since the certy types are greyish to brown and nearly clear while the siliceous fragments are a bleached white colour and noticeably different. There are numerous small chert bands cutting the core as well (½" across) 113-125 a silicified zone where there are not as many fragments as surrounding. The andesite is greenish (dark) in colour. No min.						
149.4	238.4	Zone of weakly amygdaloidal andesite 149.4 152.3 gradational contact with above. Generally the andesite looks massive to a medium grained variety with occasional amygdales filled with po and py. The andesite is green, contains chlorite, cut by quartz-CO_3 stringers. 197.6 - 200 - small chert breccia						
238.4	248.7	Zone of chert as before - brownish in colour.						

FORM S22
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY ASHMORE TOWNSHIP

HOLE NO. A-2-70
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
248.7	280	Zone of coarse grained andesite hornoblende -carbonate-chlorite Schist. Schistosity at 55° to Core Axis green in colour, cut by quartz carbonate chlorite stringers.						
280	282.9	Zone of brownish chert again.						
282.9	300.4	Andesite fragmental-fragments are ¼" in size and often obscure, occurring as siliceous or chloritic patches rimmed by chalcopyrite and pyrrhotite. There is some Cp and Po disseminated throughout and some mineralization in the quartz-carbonate stringers. There is abundant chlorite and some epidote.	285	290		5		Andesite fragmental Cp, Po
300.4	304.1	Zone of chert - cream coloured and locally brecciated-grades into lower zone- no mineralization.						
304.1	323.3	Amygdaloidal andesite-very similar to the previous horizon with Cp and Po in the amygdales and also in lenses and disseminated throughout. Amygdales locally well defined-small 1/8" size some pyrite may be found in stringers as well.	315	320		5		Amygdaloidal andes. Cp, Po

Dan R Alexander
HOLLINGER MINES LIMITED
TIMMINS, ONTARIO

A2

ALDERS

229617

A-6-72
45°

K1
TR
A2 x
pit
Chert+A2 A2
A2
N8
A2CO3
N8Py
N7
TR
A2
Chert
A2
Chert
A2+CO3
+Tuff

K1 x
TR
A2 x
TR

A-7-72
45°

K1
mgt. A2+Chert
A2CO3
N8
A2
Chert
A2 banded
A2

SPRUCE

ALDERS

229616

A2
60°
Dit

A-3-72
45°

A2
SiO2+A2
Cp
A2
N8

A-4-72
45°

A2
Chert
Cp
A2
N8
A2
N8

A-5-72
45°

A2+ Tuff
SiO2
Chert
A2CO3
Chert
K1Cp
A2
Gravel
N8
A2
N8
A2 Pit
N8
A2
N8

A-8-72
45°

A2+SiO2+CO3
N8
Cp
A2+Chert
A2 banded
N8 A +Chert
A2+SiO2

POPLAR
SLASH

FIR

POPLAR
BIRCH

SPRUCE

Nast.

ALDERS

Flooded

ALDERS

LEGEND

ALGOMAN

N_g — Feldspar (Albite) Porphyry

K_1 — Gabbro (Hornblende)

KEEWATIN

A_2 Andesite

bx - breccia

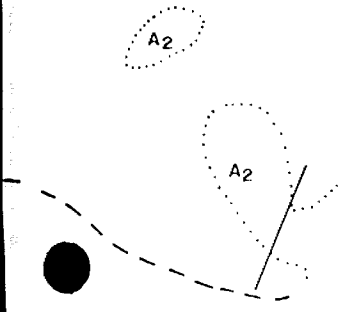
Shearing

Topographic Feature

TR. — Trench

JTS. — Joints

Esker



EA
ED OUTCROPS

K1

JTS

FORM 822

NORTH 1 S
EAST x1 2E
ELEV. Surface
AZIM. 180°
DIP Collar @ 45°
@300 - 41°

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-3-72
COMMENCED January 17/72
FINISHED January 20/72
PURPOSE OF HOLE Test extension of copper zone and mag.
Drilled by: Bradley Brothers

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	60	Casing						
60	342.2	Andesite - dark green - fairly hard chloritic and siliceous - locally carbonatized sections which are slightly more brownish in colour. Locally there are small quartz-carbonate stringers. @ 62 and @ 67.5 there are a few chlorite blebs in the core, which is somewhat leached in these two sections. Mineralization at the first is practically negligible - only rare splashes of py. 186.1-204 Much more siliceous band It is not a chert band though - fairly hard, black. Sulphides are very minor but there is some cp. 190-200 apparently there is some lost core - it is broken up here but no evidence of a fault is indicated. At 204 the rock is less siliceous and more andesitic in appearance. After a short zone of carbonatization, the mineral content increases, around 208.2. The rock here is identical to the rock @ 250 in DDH A-4-72, except that the mineralization here is mainly disseminated. Chalcopyrite content is	208	210		2		A2C03 - 10% sulph. Tr.cp
			210	213		3		" - 7% sulph. Tr.cp

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-3-72 ...2
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		very minor - The main mineral is						Cu,Zn,Ag
		pyrrohotite and some pyrite. Total	215	220		5		A2CO3 - 7% Sulph. minor cp
		mineral - 7-10% Even with 5-7% po	220	225		5		" - 5% " " cp
		the rock is only slightly magnetic.	225	230		5		" - 5% " " cp
		This above rock gradually grades	234	235		.1		" - 7% " " cp
		back to a carbonatized andesite. The	240	245		5		" - 5% " " cp
		pyrrohotite also becomes more magnetic	249	250		1		" - 5% " some cp
		around 230. The mineralization gradually						
		tends to change to a more throughgoing	255	260		5		" - minor Sulph. vis cp
		stringer type of mineralization, There						
		is also a gradual increase in copper						
		content, although pyrrohotite and						
		pyrite are the major minerals present.						
		Where there is a larger amount of						
		sulphides, the pyrrohotite is generally						
		much more strongly magnetic.	285	290		5		" - 10% Sulph 1% cp
		The rock changes gradually from	290	295		5		" - 3% Sulph. smell cp
		silicified to carbonatized zones	295	300		5		" - 5% " minor cp
		throughout this entire section.	300	305		5		" - 5% " " cp
		Around 283 the mineralization	305	310		5		" - minor Sulph. no
		is in the form of both stringers and						visible cp
		disseminations, and increases to	310	315		5		" - 7-10% po py very
		approximately 7% sulphides overall.						minor cp
		The sulphide content remains high	315	320		5		" - 7-10% po py neg. cp
		until around 321, where the mineral						
		content decreases rapidly. As previous,						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WIBSON OPTION # 1
Ashmore Twp.

HOLE NO. A-3-72 ...3
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		most of the mineralization is pyrite						
		and pyrrohotite, with only local splashes						
		of chalcopyrite. This zone is the most						
		strongly magnetic. There is also some						
		biotization developed.						
		Around 321, the rock grades to a						
		dark green, unmineralized andesite -						
		it is chloritized and carbonatized.						
342.2	443	Diorite - grey in colour, with						
		numerous feldspar phenocrysts (or						
		metacrysts) developed - often feldspar						
		shows minor epidote alteration. Silicified						
		Weakly magnetic in the presence of sparse sulphides						
		- being po and py After 360, there						
		does not appear to be any pyrrohotite						
		- only very minor pyrite. Here the						
		rock gradually becomes more massive as						
		well.						
		387-394 strongly carbonatized zone -						
		only vestiges of feldspar crystals						
		remain.						
		394-405 massive as 360-387						
		@ 405 the diorite becomes more highly						
		altered with a much higher epidote content.						
		Some of the feldspar crystals are stained						
		reddish by iron, while others are						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-3-72 ...4
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		completely altered to epidote. The						
		rock now is a limey grey-green as						
		opposed to the original grey colour						
		of the earlier intersection. As before						
		some sparse pyrite.						
	443	End of Hole						
		HOLLINGER MINES LIMITED						
		TIMMINS, ONTARIO						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-3-72 ...5
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	CORE SAMPLES TO	CORE SAMPLES RECOV.	CORE SAMPLES WIDTH	CORE SAMPLES ASSAY	DESCRIPTION OF SAMPLE
		SAMPLES FOR THIN SECTION						
	62	Andesite - a few chlorite blebs in a						
		zone which is cut by a short quartz-						
		carbonate stringer with wall rock leaching						
	100	Andesite - dark, chloritic, siliceous						
	150	Silicified and carbonatized andesite						
	200	zone of dark silicified andesite						
	250	Carbonatized andesite with po and py						
	300	Carbonatized andesite, po, magnetic						
	350	Grey silicified diorite						
	393	Carbonatized diorite						
	438	Altered diorite - some epidote						

Dave R. Alexander
HOLLINGER MINES LIMITED
TIMMINS, ONTARIO

Appendix II

Resident Geologist
Thunder Bay (P)
Ontario

FORM 822
NORTH 1 S
EAST x1 1E
ELEV. Surface Surface
AZIM. collar 145°
DIP 300-41° 454-41°

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Township

HOLE NO. A-4-77
COMMENCED
FINISHED
PURPOSE OF
HOLE Test extension of

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	81	Casing						
81	337	The rock is best described as an andesitic flow, although there are a wide variety of changes in the rock itself. For the most part the andesite is dark green and fairley massive. It is chloritic and generally highly carbonatized. There are a few small quartz-carbonate stringers which locally show leaching and silicifcation into the surrounding rock. Locally the andesite grades into a member which is composed of numerous blebs of chlorite. As these blebs become larger they appear to be altered fragments. There is a small amount of epidote associated with this unit as well. This member is prominent from 100-12[illegible] Small clot of pyrite @ 137 A zone of strong carbonitization starts @ 148, rock is dark green in colour and grades to a much lighter green with increased carbonate content. Around 158 start to get a minor amount of disseminated pyrite with about 3% disseminated pyrite @ 164-167. Here						

FORM 922
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. 4 A-4-72 ...?
COMMENCED
FINISHED
PURPOSE OF
HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		there are occasional splashes of cp						
		with the py, but only a very minor amount.						
		164-178 Short chert band - contacts						
		are diffuse since the andesite is silicified						
		at the contacts. Minor py in first						
		chert band(or flow top) at the contact,						
		otherwise barren. Colour is dark grey to						
		black.						
		After the chert band the andesite is						
		again highly carbonatized; the first	164	167		3		3% disseminated py, minr
		occurrence of po is noted here - only						cp in carbonatized A?
		weakly magnetic though.						
		Around 200 the alteration is quite						
		strong and later around 225 the rock is						
		crudely banded in layers of alteration						
		at 60° to the core axis.- mainly						
		brownish carbonate and chlorite.						
		After 175 there is generally some						
		sulphide mineralization throughout.						
		overall py-3% - in large clots,						
		in stringer fillings, disseminations,						
		and along shear planes,						
		po - minor - usually associated						
		with small clots or blobs of py.						
		cp-minor may be disseminated in small						
		splashes - rarely alone as a larger						

FORM 922
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION # 1
Ashmore Twp.

HOLE NO. 4-4-72 ...3
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		bleb, since usually found with py						
		either with or without po.	@200					small clot of py in
		213.5-214.5 - small white chert band						calcite - Geochem. & au
		Around 230 the cp content begins to						
		increase - still in the carbonatized						
		andesite.						
		cp is the main mineral here - up						Cu, Zn, Ag
		to approximately 254.	230	235		5		A2-C03 -2% cp
		- 230-234 isolated stringers and	250	252		2		" -5% cp 3% po
		blobs of cp. 1-2% overall	252	254		2		" -2-3% cp 2% po
		- 234-249 very minor cp	254	258		4		" -minor cp, po, py
		- 249-250 chert, white	258	259		1		" -4% cp, 4% po py
		250-254 numerous small stringers	259	260		1		" -1.5% cp minor po py
		of cp w/w'out po approximately 5% cp	260	265		5		" -2-3% cp 4% py po
		254-265 brownish, carbonatized,	265	270		5		" -1-2% cp 2% po py
		andesite - blobs calcite, numerous	270	275		5		" -minor cp
		blebs cp, po, some py locally along	275	276		1		" -4% cp
		shears especially after 257.5						
		some biotite? small xls. may be Zn.						
		265-271 mainly stringers of cp						
		again, some po - rock grades back to						
		more grey green carbonatized andesite						
		271-274 grey green carbonatized						
		andesite. Only one small stringer of cp.						
		275-276 some brownish carbonate						
		4% cp						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-4-72 .../4
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		276-291 mostly grey green carbonatized						
		andesite. local blotches of cp with py & po						
		some brown carbonate with cp @ 278.5-						
		280 and 290-291.5						
		291-294 3 short bands of chert, brecciated						
		with minor py po						
		294-302 some stringers of py, a few stringers						
		of cp, very minor po	276	280		4		A2-CO3 - 1% cp # 3% py po
		302-303 small chert band	280	285		5		" - 1 small blob cp
		303-314 strongly silicified zone,	285	290		5		" - very minor cp
		brecciated with substantial blobs of cp	290	295		5		" - minor cp
		dark grey - local patches of chlorite	295	300		5		" - minor cp
		very massive	300	303		3		" - minor cp
		314-320.5 more of a transition zone than	303	305		2		" - 4% cp blobs
		an actual change in rock type. Locally	305	307		2		" - minor cp
		silicified and local patches of	307	310		3		" - 1% cp very minor
		carbonate alteration. minor cp locally	316	318		2		" - minor cp po
		320.5-337 a short unit of tuff -						
		would appear to be more of a dacite than an						
		andesite. - paler green - fragments						
		are generally small and leached whitish in colour						
		Mineralization - negligible - only						
		occasional py. Both contacts are						
		gradational into 5 feet of heavily						
		carbonatized rock.						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY Wilson Option #1
Ashmore Twp.

HOLE NO. A-4-72 ...5
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
337	357.7	Diorite? - this zone is siliceous, grey in colour, with a general developement of feldspar phenocrysts throughout. fairly massive unit, unmineralized - some epidote near contacts. Sugary texture - strongly carbonatized.						
357.7	458	Andesite - darker green and more chloritic at the contacts, while the central portion is lighter in colour and more siliceous. There are a few splashes of cp in the first 20 feet but afterwards the mineralization is negligible. Some small quartz carbonate stringers with local iron stainings. Minor epidote.						
458	494	Diorite - Pale grey to dark grey in colour. Darker than previous intersection. Numerous small blotches of epidote alteration, rock is silicified and carbonatized. Feldspar phenocrysts (or metacrysts), are common as before. No mineralization non-magnetic.						
	494	End of hole.						
		CASING LEFT IN HOLE.						

HOLLINGER MINES LIMITED
TIMMINS, ONTARIO

FORM 922
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

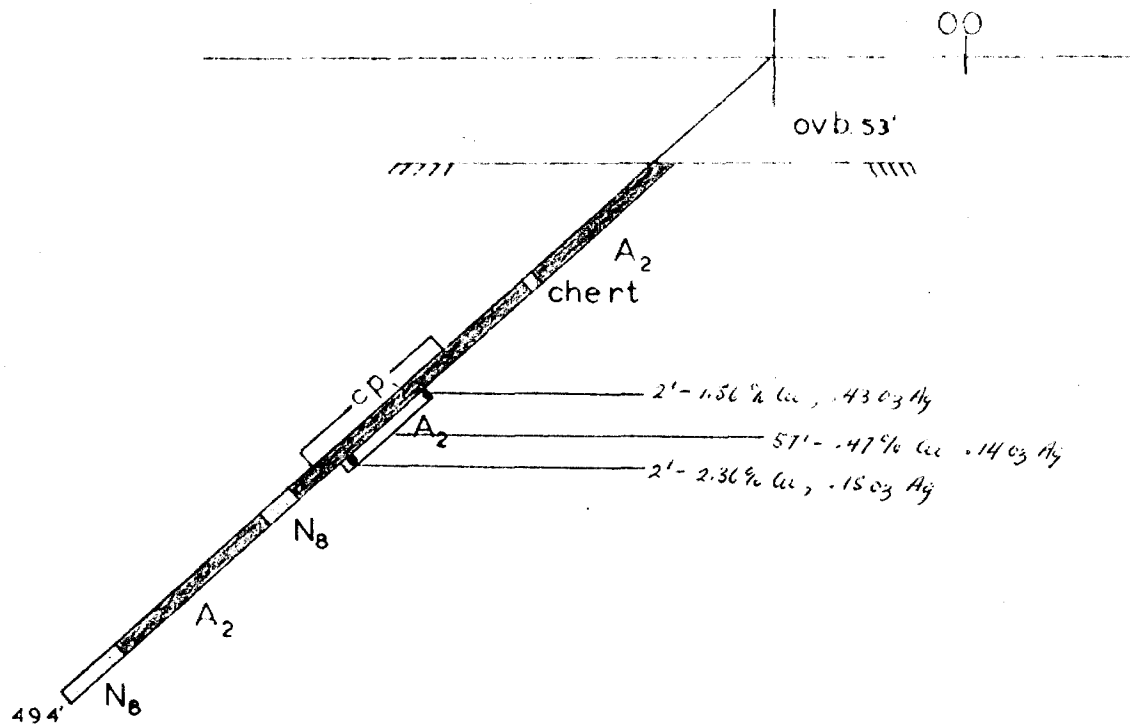
HOLE NO. A-4-72 ...6
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		SAMPLES FOR THIN SECTION						
	117.5	Andesite (tuff?) with chloritic fragments						
	150	Carbonatized andesite with minor						
		disseminated py						
	200	Carbonatized andesite minor py, cp						
	249.5	Just previous to the copper zone -						
		carbonatized andesite						
	300	Pale grey green carbonatized andesite						
		(dacite?) py & cp						
	350	Carbonatized diorite						
	400	Silicified andesite						
	450	Altered andesite						
	479	Carbonatized diorite with epidote						
		Check collar @ 42° Azimuth @ 180°						
								Dan R. Alexander
								HOLLINGER MINES LIMITED
								TIMMINS, ONTARIO

A-4-72

xl 4E @1-00S

Az 180°



scale 1"-100'

FORM 822
NORTH 1S
EAST. x1 6E
ELEV. Surface
AZIM. 180°
DIP Collar @ 45° @300-41°

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Claim TB 229617, Ashmore Twp. Ont.

HOLE NO. A-5-72
COMMENCED January 20, 1972
FINISHED January 21, 1972
PURPOSE OF HOLE Test extension of copper zone
Drilled by : Bradley Bros.

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	76	Casing						
76	235.6	Andesite - massive with tuffaceous sections. The andesite is generally dark green in colour but is often lighter in tuffaceous sections.						
		The first part is unmineralized, non-magnetic, and chloritic						
		The tuffs have a very fine fragment size - usually less than 1/16". In some sections there is a predominance of chlorite blebs throughout the rock :						
		Tuff : 95-97, 103-106, 108-112, @ 117.2 and 122-122.5.						
		@ 112 a crude chicken track structure is developed with numerous blebs of chlorite and some lath-like crystals which appear to be altered to chlorite.						
		There are also some quartz-carbonate stringers with hematite staining in this zone.						
		Some contacts between different units are readily visible and are consistently @ 80° to the core axis. Some other contacts are either irregular or gradational.						
		The first mineralization appears						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-5-72 ...2
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		around 162, as pyrite in a short siliceous band 160.9-162						
		Small amount of tuff ? @ 165 with chlorite blebs.						
		169.8-171.5 , Short zone of chert bands (or flow tops). Same as material in holes A-1 &A-2. A short stringer of pyrite @170.9. The rock is grey in colour and leached whitish.						
		171.5-177.4 - Grey green andesite with minor disseminated pyrite.						
		177.4-181 very dark chloritic andesite - tiny white flecks of leucoxene - may be a diorite since there are vestiges of feldspar.						
		The rock now becomes strongly carbonatized - brownish carbonate with some minor pyrite.						
		200.6-205 small chert bands also @ 214.1-215.4, 217-218.8						
		Around these chert bands, the andesite appears to be tuffaceous, only occasional fragments though.						
		@ 221.5 start of a zone of carbonatization - brownish colour. Extends to 233 where it grades into a very siliceous zone,						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1 Ashmore Twp.

HOLE NO. A-5-72 ...3
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		up to 235.6. First minor cp in this						
		zone - 2 small splashes - one @ 221.5						
		and one @ 230. Minor py						
235.6	254.9	Short dyke of hornblende gabbro -						
		very dark green with numerous small						
		blocky crystals of hornblende 1/16 "						
		size. carbonatized						
		Contacts with the andesite are irregular						
		upper @ 90° to C.A. lower @ 45° to C.A.						
		@ 240.2 a large blob of cp along						
		a quartz-carbonate stringer. No mineral						Cu, Zn, Ag
		before that but afterwards there some	240	241		1		K1 - 2% Cu?
		cp and py all through the dyke. It is	241	245		4		" - neg. sulphides
		usually associated with small quartz-	245	250		5		" - 3% sulph. 1.5% cp
		carbonate stringers but this is not	250	255		5		" - minor sulph. vis. cp
		always the case.						
254.9	264.2	Silicified and carbonatized andesite						
		- very minor py po	302	303		1		A2 - 5% sulph. 2% cp
264.2	267	Diorite (or albite porphyry) - grey						
		with numerous feldspar phenocrysts						
		(or metacrysts). There is some epidote						
		alteration - contacts irregular. Minor						
		disseminated pyrite throughout.						
267	270.1	Andesite, grey-green, ummineralized.						
270.1	279.5	Diorite (or albite porphyry), as						
		previous section, grey, feldspar, epidote						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-5-72 ...4
COMMENCED
FINISHED
PURPOSE OF
HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		and disseminated pyrite.						
279.5	306.5	Andesite - grey-green, locally carbonatized or silicified, minor sericite in streaks. Mineralization is minor, disseminated pyrite, very minor cp. There are two blobs of cp between 302-303 with some po,- just cutting the core.						
306.5	326	Diorite (or albite porphyry), contact @ 80° to the core axis. Sparsely mineralized with py cp - only one tiny splash of cp seen. carbonatized. The rock is similar to before except that from 317-322 it becomes more massive and finer grained.						
326	330.9	Carbonatized andesite - unmineralized						
330.9	336.8	Diorite (or albite porphyry), very dark here, with feldspar as before, there is a lot of epidote alteration in this zone. Only one small splash of cp seen @ 333						
336.8	437	Andesite - grey-green to the variety that is carbonatized and brownish, Very sparsely mineralized - cp is very minor. Mineralization is usually with quartz-carbonate stringers. Around 402 the andesite becomes darker in colour and is weakly amygdaloidal in places. Some						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-5-72 ...5
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		iron staining in the quartz-carbonate						
		stringers. Minor epidote and/or sericite.						
437	448	Diorite (or albite porphyry), as						
		before - a bit coarser grained, minor						
		disseminated pyrite, epidote alteration,						
		carbonatized.						
	448	End Of Hole						

FORM 922
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

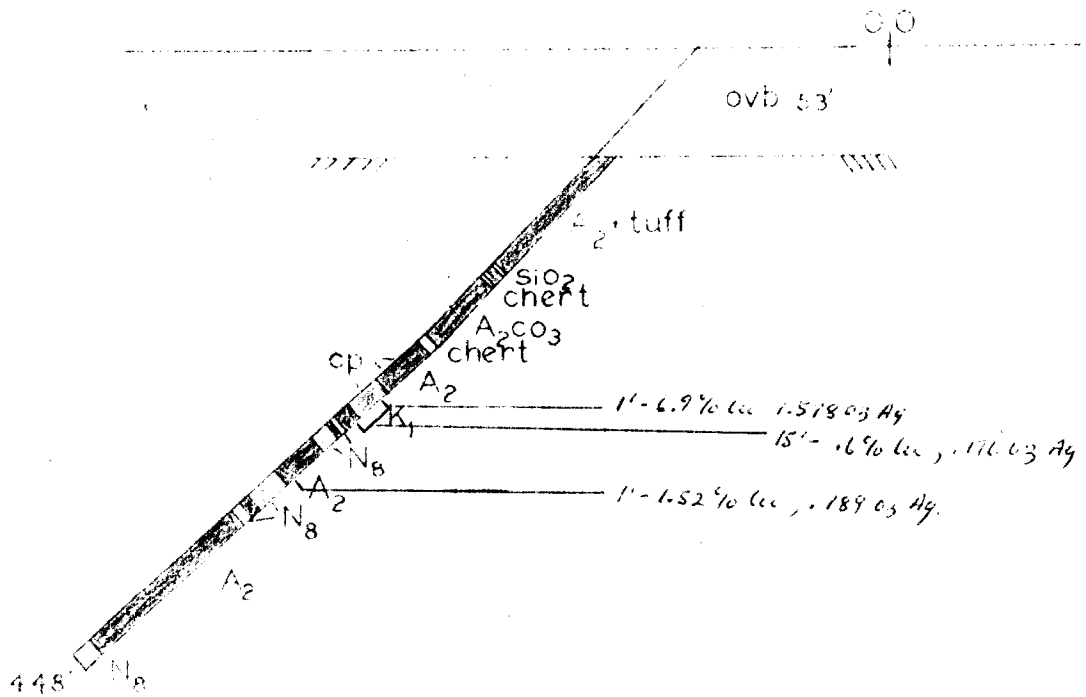
PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-5-72 ...6
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	CORE SAMPLES TO	CORE SAMPLES RECOV.	CORE SAMPLES WIDTH	CORE SAMPLES ASSAY	DESCRIPTION OF SAMPLE
		SAMPLES FOR THIN SECTION						
	76	Grey green andesite - chloritic						
	112	Chicken track structure in tuff ? - chloritic						
	150	Grey green andesite						
	200	Carbonatized andesite						
	250	Hornblende gabbro						
	300	Andesite - grey green						
	350	Andesite - dark green - weakly carbonatized						
	400	Andesite - few quartz-carbonate stringers						
	440	Diorite(or albite porphyry) - pyrite						

HOLLINGER MINES LIMITED
TIMMINS, ONTARIO
Dave R. Alexander

A-5-72
x1.6E@1+00S
Az 180°



scale 1"-100'

FORM 822

NORTH 675 N
EAST. x1 12 E
ELEV. Surface
AZIM. 180°
DIP check collar @45 @ 300-42°

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Claim TB 229616 Ashmore Twp. Ont.

HOLE NO. A-6-72
COMMENCED January 25/72
FINISHED January 28/72
PURPOSE OF HOLE Check EM anomaly

Drilled by: Bradley Bros.

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	4	Casing(AX)						
4	37.4	Hornblende Gabbro - medium to dark green in colour with numerous blocky crystals of hornblende. The rock is quite highly altered with carbonate and talc, local specks of leucoxene. Some shearing with talc and chlorite - 13.5 - 14 @ 45° to Core axis and @ 18.5 - 20 also@ 45° to core axis There are some very fine hairline stringers of quartz-carbonate which usually carry a smell of po and cp. 23.5-23.9 blob of chert very irregular in shape The lower contact of the hornblende gabbro is finer grained @ 45° to the Core Axis along a quartz-carbonate stringer with po, cp						
37.4	40.8	Chert - grey to whitish in colour - rather milky. The first inch is filled with numerous laths of amphibole - very black. The remainder of the zone is weakly banded in darker and lighter patches, massive. There are some blobs of po with some cp. The po is quite strongly magnetic. locally, very fine	37	41		4		Chert - 5% po minor cp

FORM 522
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-6-72 ...2
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		disseminated mineral.						
40.8	46.3	Zone of carbonatized andesite -?-						
		Most of the rock is carbonate and there	41	46		5		A2? - minor po,py,cp
		are local patches of dark grey chert -	47	49		2	5%	" - 5% po cp
		gradational - and irregular in shape.						
		It is also gradational from the more						
		massive cherty material. There is a lot						
		of blue-grey chert as interstitial with						
		the carbonate. Mineralization is mostly						
		po - very minor cp. (5% po)						
46.3	47.9	Short zone of cherty material, banded						
		blue-grey and darker grey @ 45° to the						
		Core Axis. Numerous quartz-carbonate						
		stringers. The upper contact is more or						
		less gradational - lower @ 45° to the Core Axis						
		Some shearing and some biotite along						
		single planes of shearing @ 45° There						
		are some small stringers of po usually						
		with quartz-carbonate often minor cp.						
		@ 47.8 small bit od cp with a po						
		bearing stringer.						
47.9	63.2	Andesite - and carbonatized andesite						
		The first 2 feet is massive andesite with						
		numerous quartz-carbonate stringers @ 45°						
		to the Core Axis, bearing some po and py.						
		Mineralization is erratic though.						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-6-72 ...3
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		After that the andesite is generally						
		massive with carbonatized sections.						
		Very minor disseminated py,cp only						
		locally. Lower contact slightly irregular						
		@ 60° to the Core Axis.						
63.2	76.4	Albite porphyry (logged in previous						
		holes as diorite), There are numerous						
		feldspar phenocrysts or metacrysts,						
		some epidote alteration, and some biotite.						
		Mineralization is minor with some very						
		finely disseminated po,py. The lower						
		contact of the dyke is nearly normal to						
		the Core Axis.						
76.4	84.8	Andesite - brownish, carbonatized,						
		with very minor mineral (some py visible)						
		Contact with dyke @ 84.8 is at 45°						
84.8	128.4	Albite porphyry with numerous						
		feldspars as before, locally finer						
		grained. There is some biotite developed						
		throughout. Epidote alteration is common.						
		There is approximately 3% pyrite disseminated						
		throughout. A quartz-carbonate stringer						
		@ 108.5 has the only po cp seen in this						
		zone - only a minor amount -						
		The pyrite commonly shows a cubic habit.						
		Lower contact @ 45°.						

FORM 622
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-6-72 ...4
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
128.4	187.2	Andesite - the first few feet are massive and chloritic but it grades into a darker carbonatized lava. Mineralization is very minor - usually pyrite but a few specks of cp are seen (rare). Around 160 you start to get some epidote alteration in the andesite. some talc ? in the sections that are strongly chloritic. Around 183 the andesite becomes brecciated with infillings of calcite and numerous bands of alteration. These bands show no consistent strike. @ 185 the andesite becomes quite siliceous and hard with a few of the breccia fractures filled with py,po,and cp. It appears to grade into a chert horizon around		187.2				
187.2	195.6	A short blue-grey chert band, locally layering @ 80 to 85° to the Core Axis. The chert is brecciated as the surrounding andesite with mainly po filling stringers - very minor cp. The EM-17 conductor plots here. The po is magnetic but not strongly so.	185	190		5		5% po minor cp
			190	195		5		5% po minor cp
195.6	492	Andesite - banded @ 90° to the Core Axis in alteration layers of chloritic and carbonatized andesite.						

FORM 922
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-6-72 ...5
COMMENCED
FINISHED
PURPOSE OF
HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		There is some biotite developed. The rock grades to a more uniform carbonatized andesite around 202.- it is more greenish than the ordinary brownish carbonatized andesite. Generally unmineralized but there is a small stringer @ 212.7 with some po,cp and py.						
		- 253-255 blue-grey chert band with some py and minor cp in strimgers.	254	255		1		Chert - minor py cp
		Contacts normal to the Core Axis. After 255 we return to a carbonatized andesite with a speckled type of carbonate alteration. @ 286 and @ 299.8 quartz stringer with some tourmaline.						
		328-329 short black siliceous band with strong alteration at both contacts, Contacts are gradational - 7% disseminated py	328	329		1		10% diss. py
		After that there is minor disseminated po,py and cp in a zone that has patchy alteration - mainly local zones of of silicification and carbonatization.	335	340		5		minor diss. sulph. py po c p
			340	345		5		" " " py po cp
		@ 346.5-348.5 gradational contacts on a paler green tuff unit. The fragments are small - leached white - locally feldspar metacrysts. After the tuff						

FORM 522
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-6-72 ...6
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		there are a few bands of the brownish						
		carbonatized andesite.						
		Around 350 there is some silicification						
		and another tuff unit.-(352.3-353)						
		353-360 zone of strong leaching,						
		chloritization and carbonatization						
		no mineral.						
		After 360 a return to the dark green						
		carbonatized andesite - only rare specks						
		of mineralization - some biotite devel.						
		389.2-389.8 Short altered band						
		containing 15% po 3% cp (EM-16 ?)	389	390		1		A2 alt. - 10% po 2% cp
		Around 415, the rock starts to become						
		strongly silicified and greyer in colour.						
		It is not a chert unit.. unmineralized						
		around 424 this zone ends in a short						
		altered, breccia zone.						
		After 424 - brownish carbonatized						
		andesite. leaching around quartz-carbonate						
		stringers. @435 and @438 chert.						
		440.8-444 short tuff band as before						
		444-463.8 andesite carbonatized						
		463.8-465 a highly contorted zone						
		of mixed andesite and blue-grey chert.						
		465-467 silicified andesite						
		The remainder of the hole is						

FORM 922
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

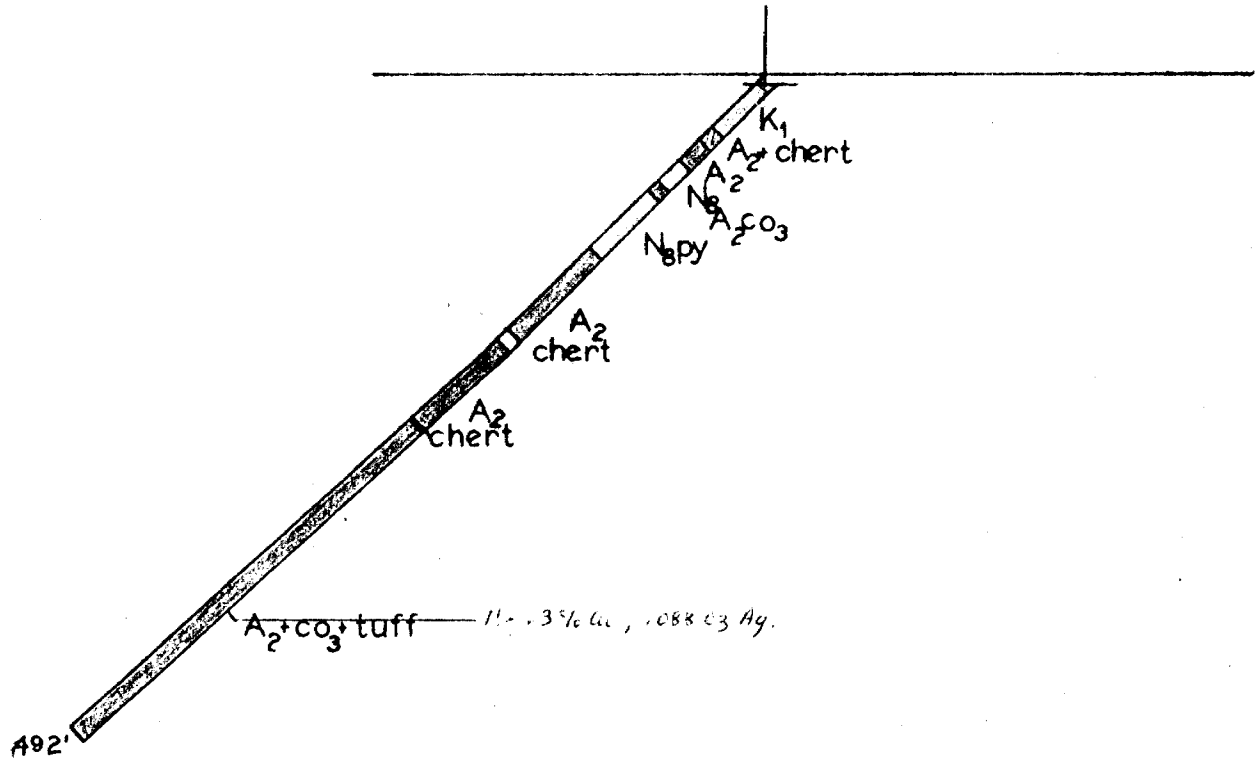
PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-6-72 ...7
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		andesite with short zones of						
		carbonatization.						
	492	END OF HOLE						
		SAMPLES FOR THIN SECTION						
	5	Hornblende Gabbro						
	51	Massive andesite						
	100	Albite porphyry - with epidote						
	150	Chloritic and carbonatized andesite minor py						
	200	Dark green strongly chloritized andesite						
	250	Very dark silicified andesite						
	254	Chert band						
	300	Carbonatized andesite - umminerализed						
	350	Carbonatized band in the andesite						
	356	Strongly altered zone - chlorite carbonate						
	399	Dark green andesite with biotite						
	450	Altered andesite with carbonate chlorite						
	492	massive andesite						

HOLLINGER MINES LIMITED
TIMMINS, ONTARIO
Dave R. Alexander

A-6-72
xl. 12E@6+75N
Az 180°



scale 1"-100'

FORM S22

DIAMOND DRILL REPORT

NORTH 775N
EAST. x1 18E
ELEV. Surface
AZIM. 180°
DIP check collar @ 41°
@ 300 - 41°

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-7-72
COMMENCED January 29/72
FINISHED January 31/72
PURPOSE OF HOLE Test EM & Mag.

Drilled by: Bradley Bros.

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	10	Casing						
10	53	Hornblende Gabbro - after 39 the gabbro is similar to the previous hole. - numerous blocky crystals of hornblende - some altered to chlorite, occasional hairline stringers of quartz-carbonate, nonmagnetic, unmineralized, carbonatized. Previous to 39, the gabbro is much more highly altered - almost all of the hornblende crystals are altered to chlorite, with the pseudomorphic shapes best seen on the fresh surface. There are some large greenish feldspars developed and occasionally you can see some amphibole and biotite. Much more carbonate in this zone - unmineralized. The gabbro becomes finer grained near the contact. Contact broken.						
53	76.3	The first 2 feet here is massive andesite, while after that there is a whole zone of interbedded chert and andesite. Units are too small to be logged individually. 3 main types - grey-green carbonatized andesite, blue-grey chert, and a dark grey to black siliceous member. the latter						

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-7-72 ...2
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		is very massive. Banding is generally						
		normal to the Core Axis. There is some						
		finely disseminated py po locally, while						
		most of the mineralization is in larger	68	70		2		minor cp po
		blobs and stringers as po & cp.	70	73		3		negligible sulphides
		69.5-69.9 iron? very fine grained,	73	75		2		minor sulphides
		black, strongly magnetic, with cp po.						
76.3	131.1	Andesite - the first foot is the						
		brownish carbonatized variety, while						
		after that there is approximately 10'						
		of massive andesite. The rest of the zone						
		is carbonatized andesite but it is dark						
		green in colour. Strong alteration @ 99						
		with some epidote. There is usually some						
		very fine specks of cp throughout the						
		the zone although there is not much cp						
		overall. Some tremolite ? locally.						
		Around 121 some silicification -						
		core changes to a dark grey to black						
		@ 123 After 128, brownish carbonatization.						
131.1	150.6	Albite porphyry - asin previous holes						
		with feldspar, minor epidote, some						
		biotite, and unmineralized. Upper contact						
		@ 90° lower @ 45°.						
150.6	302	Massive grey-green andesite, 2						
		small pyritic bands @ 187.5. The rock						

FORM 922
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-7-72 ...3
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		becomes highly carbonatized and brownish						
		around 194, then the rock grades into						
		one of the dark silicified zones around 203.						
		208-210.2 - Silicified but pale green						
		andesite.	210	212		2		A2 silic - minor po py cp
		210.2-216.5 - Darker andesite grades	212	215		3		" - 5-7% po py cp
		darker grey with cherty and carbonatized	215	217		2		" - 5-7% po py cp
		sections. 5% py po cp	217	220		3		A2 alt. - neg. sulph.
		216.5-218 - banded altered andesite						
		218-219.8 - silicified band - grey						
		219.8-240.2 - banded altered andesite						
		- banding @ 90°, numerous stringers of						
		quartz-carbonate; Some bands are chloritized,						
		some carbonatized andesite with talc?						
		& biotite. @ 225.5 3 tiny bands carrying						
		arsenopyrite ½" of core along quartz-	225.5					grab sample - Aspy for
		carbonate stringers. Very minor mineralization						Geochemistry & Au
		some core broken @ 230.						
		240.2-250 - grey silicified andesite -						
		very minor mineralization - isolated blebs						
		of po cp. 250-302 - Massive andesite only						
		local splashes of mineralization.						
		264-265 Quartz-carbonate stringer	264	265		1		mass. andes. - minor po py cp
		along the core axis with minor po py cp.						
	302	END OF HOLE						

Casing left in hole.

FORM 822
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

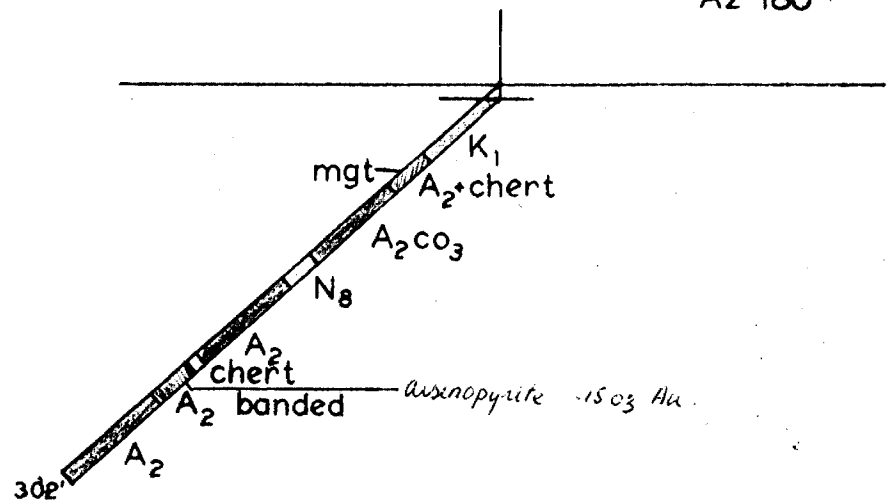
PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-7-72 ...4
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	CORE SAMPLES TO	CORE SAMPLES RECOV.	CORE SAMPLES WIDTH	CORE SAMPLES ASSAY	DESCRIPTION OF SAMPLE
		SAMPLES FOR THIN SECTION						
	10	Hornblende Gabbro - altered						
	50	Hornblende Gabbro						
	100	Carbonatized andesite - tremolite?						
	200	Carbonatized andesite - brownish band.						
	250	Dark green silicified andesite.						
	300	Massive andesite						
	235	Banded altered andesite with talc?						

HOLLINGER MINES LIMITED
TIMMINS, ONTARIO
Dave R. Alexander

A-7-72
xl. 18E @ 7+75N
Az 180°



scale 1"-100'

FORM S22

DIAMOND DRILL REPORT

NORTH 1 + 25 S
EAST XL 8 E
ELEV. Surface
AZIM. 180°
DIP Check collar @ 45°

PROPERTY WILSON OPTION #1
Claim TB 229617, Ashmore Township, Ont.

HOLE NO. A-8-72
COMMENCED Feb. 2, 1972
FINISHED Feb. 3, 1972
PURPOSE OF HOLE Test copper zone
Drilled by: Bradley Bros.

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	69	Casing.						
69	160.4	The first 10 feet is carbonatized andesite - brownish - minor biotite. Then the andesite becomes more massive and grey green in colour. First bit of mineralization seen around 82 - minor pyrite. Around 100 there are a couple of elliptical lenses of po py - magnetic. After that the andesite becomes weakly brecciated with chlorite and minor pyrite along these fractures. Locally the rock is carbonatized brownish. There are a few qtz-CO_3 stringers cutting the core - some are stained brownish. Around 119 there is some dark green silicified andesite which grades to the brownish carbonatized andesite around 124. The intermediary (121-124) is a putty colour. Only minor mineralization - a few specks cp seen. 129-133 grey green silicified andesite. 133-143 brownish carbonatized andesite. 143-144.2 intermediary. 144.2-145.3 dark green silicified andesite. Short band of py @ 145.1						

FORM 522
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Township

HOLE NO. A-8-72
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		145.3-148 grey green silicified andesite						
		grades to a more chorty member @ 147						
		with 15% py.						
		148 dark green carbonatized andesite						
		grades to a grey green massive andesite						
		around 150.						
		153.2 dark green and carbonatized andesite						
		again with minor pyrite, grades to a						
		brownish carbonatized rock around 154.5						
		and then to a massive grey green andesite						
		with local carbonatized patches around 157.5.						
160.4	183.8	Albite porphyry - light grey to dark grey						
		with numerous feldspar phenocrysts (or	184	186		2		A_2 + chert minor sulph.
		metacrysts). This dyke is a bit finer	186	188		2		Cherty .6Cu.
		grained than that usually encountered.						
		Minor biotite developed, epidote alteration						
		common. Upper contact broken. Lower @						
		60° to the Core Axis.						
183.8	212	Up to 185 - short zone of highly car-						
		bonatized andesite, some very fine						
		disseminated mineralization @ 184.7 some						
		py cp.						
		185-193 a whole zone of mixed blue-grey						
		chert and andesite. A few quartz stringers	188	193		5		Cherty neg. sulph.
		and some cp, po, py throughout.	193	196		3		Neg. sulph.
		193-200.9 weakly banded carbonatized	196	201		5		A_2 - minor py, po, cp.

FORM 922
NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Township

HOLE NO. A-3-72
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		andesite, some biotite - siliceous zone	201	202		1		Cherty - minor sulph.
		(dark) 194.5-195 some disseminated py po	202	204		2		Cherty - 1% Cu.
		cp. 200.9-212 zone of mostly blue-grey	204	210		6		" - minor sulph.
		chert fractured with cp and po. Minor py.	210	212		.2		A_2 + chert - .5 Cu.
		Some andesite?						
212	213.6	Albite porphyry - as previous with						
		feldspar, minor epidote, some biotite.						
213.6	301	Andesite - mixed greyish siliceous zones						
		and grey green massive andesite zones in	242	244		2		A_2 - with qtz-CO_3 str.
		general crude contacts at 45° to the						Minor cp, py, po.
		Core Axis. Only minor cp seen in qtz-CO_3						
		stringers. @ 243, 276, 290 the rock						
		itself is generally unmineralized. Some						
		biotite.						
	301	END OF HOLE.						

FORM 922
NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

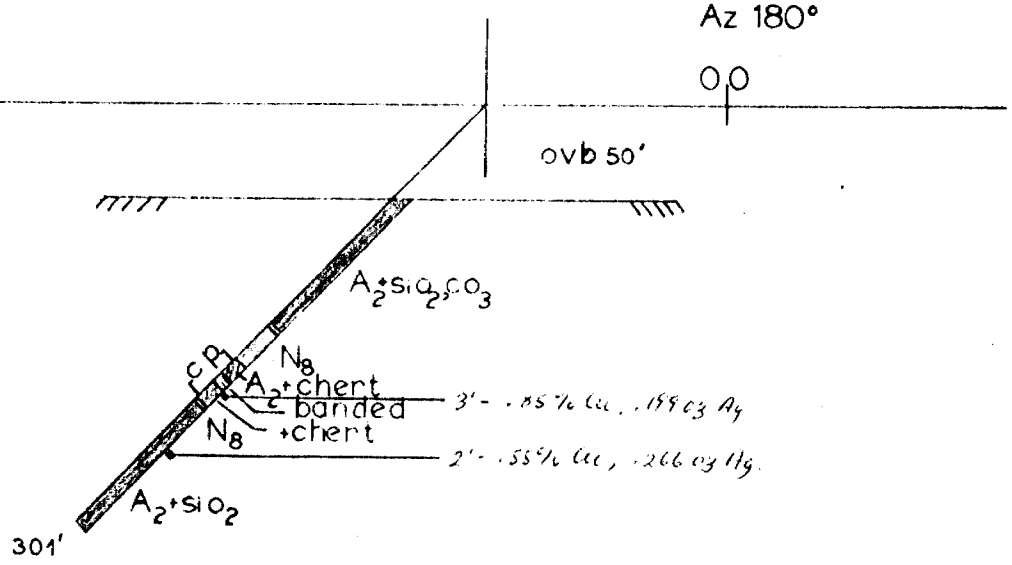
PROPERTY WILSON OPTION #1
Ashmore Township

HOLE NO. A-8-72 4.
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		SAMPLES FOR THIN SECTION						
	69	Brownish carbonatized andesite.						
	100	Massive andesite.						
	150	Dark green carbonatized andesite with py.						
	200	Massive andesite.						
	250	Silicified andesite - biotite.						
	300	Massive andesite.						

Dan R. Alexander.
HOLLINGER MINES LIMITED
TIMMINS, ONTARIO

A-8-72
xl. 8E@1+25S
Az 180°



scale 1"-100'

SUMMARY OF ASSAY RESULTS

Average Values

	Cu(ppm)	Zn(ppm)	Ni(ppm)	Ag(oz)	Pb(ppm)	Au(oz)
DDH A-3-72						
208-213	1174	64		.070		Nil
215-230	779	75		.059		Nil
234-235	1830	67	165	.093	18	Nil
240-245	2940	261	254	.128	209	Nil
249-250	3380	6100	326	.231	2060	Nil
255-260	700	126	183	.073	43	.02
285-320	1026	67	222	.072	21	Nil

Best intersections: 240-245 .294% Cu, .128 oz Ag.
249-250 .338% Cu, .61% Zn, .231 oz Ag.

DDH A-4-72						
164-167	84	60	121	.029	12	Nil
@ 200 - py	173	1050	1410	.082	85	Nil
230-235	4990	132	119	.181	10	.02
250-307	4700	182	139	.14	13	.006
307-310	1630	199	51	.070	10	Nil
316-318	1370	92	171	.073	13	Nil

Best intersections: 250-252 1.56% Cu, .43 oz Ag.
275-276 .69% Cu, .23 oz Ag.
303-305 2.36% Cu, .15 oz Ag.

	Cu(ppm)	Zn(ppm)	Ni(ppm)	Ag(oz)	Pb(ppm)	Au(oz)
DDH A-5-72						
240-255	5987	80	90	.176	18	
302-303	15200	134	299	.789	34	

Best intersections: 240-241 6.9% Cu, 1.578 oz Ag.
302-303 1.52% Cu, .789 oz Ag.

DDH A-6-72						
37-46	176	56	106	.035	27	Nil
47-49	720	38	78	.038	10	.01
185-195	398	33	97	.028	8.5	.005
254-255	1550	108	56	.064	17	.005
328-329	282	137	105	.053	39	Nil
335-345	145	56	139	.034	9	Nil
389-390	3010	71	156	.088	13	.005

Best intersection: 389-390 .3% Cu, .088 oz Ag.

DDH A-7-72						
58-83	151	55	82	.024	12	.017
207-232	95	75	193	.046	14	Nil
@ 225.5 Aspy	8	37	264	.096	27	.15
264-265	454	90	93	.094	10	.05

- 58-75 .025 oz Au.

	Cu(ppm)	Zn(ppm)	Ni(ppm)	Ag(oz)	Pb(ppm)	Au(oz)
DDH A-8-72						
184-212	1540	74	88	.086	14	Nil
242-244	5490	60	110	.266	15	.005

Best intersections: 201-204 .85% Cu, .199 oz Ag.
242-244 .55% Cu, .266 oz Ag.

HOLLINGER MINES LIMITED

REPORT

on

GOVERNMENT EXPLORATION ASSISTANCE PROGRAMME

WILSON and KALSON OPTIONS

ASHMORE TOWNSHIP

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APPENDICES

APPENDIX I - PLANS OF DRILLING

APPENDIX II - DRILL SECTIONS

APPENDIX III - SUMMARY OF ASSAYS

APPENDIX IV - MAP OF PROPERTY

I. SUMMARY OF EXPLORATION

A. Location

Ashmore Township is located in the Thunder Bay Mining Division and comprises part of the Little Long Lac gold mining area.

The property consists of 25 unpatented and two patented claims under option, and is located approximately four miles east of Geraldton along Highway 11.

The unpatented claims included are:

TB 139350-353 incl.; TB 229616-618 incl;
TB 230337-339 incl.; TB 238726-728 incl.;
TB 239955; TB 325351-359 incl.; and
TB 372798-799 incl.

The two patented claims under option are:

TB 10164 and TB 10971.

B. Work Done

The original 14 claim group was acquired in March, 1970, and Hollinger Mines Limited performed geophysical (magnetic and electromagnetic) surveys over most of this group. On the basis of the geophysical data, two holes were drilled in 1970, with a total length of 1117 feet. Later in mid-1971 a geological survey was performed over this original group. Both the drilling results and the geological survey were filed for assessment.

In the last quarter of 1971, Hollinger Mines Limited applied and received a subsidy to do further work on the property through the provisions of the Ontario Government's Exploration Assistance Programme. Under this programme, geophysical (magnetic and electromagnetic) surveys were performed on nine claims that had been added in 1971. These claims (numbered TB 325351-359 incl.) were adjacent to the original group on the eastern boundary.

The assistance programme continued into the first quarter of 1972, when a drilling programme was initiated. Six holes, with a total footage of 2483 feet, were drilled to check anomalous copper values obtained in the 1970 drilling and to test a zone of ground conductivity.

Since that programme expired on March 31, 1972, two patented claims, adjacent to the west boundary of the original group, have been added. In May 1972, a geological survey was completed over the nine claims to the east (TB 325351-359 incl.), and in November 1972, magnetic, electromagnetic and geological surveys were completed over the two patented claims.

In April 1973, a second Exploration Assistance Agreement was signed to cover a drilling programme designed to test:

(a) a coincident magnetic-electromagnetic anomaly on patented claim 10971;

(b) the best intersection obtained in the 1972 drilling at depth; and

(c) a magnetic anomaly assumed to be on or near the contact between the Temiskaming sediments and Keewatin volcanics.

II. OPTION TERMS

An option agreement, dated March 23, 1970, between Donald Wilson of P. O. Box 730, Geraldton, Ontario, of the first part and Hollinger Mines Limited of the second part, gave Hollinger the right to explore the original 14 claims and any subsequent contiguous claims staked by Wilson or Hollinger.

The payments, under which Hollinger may acquire the property, are:

A sum of	$ 1,500.00	upon signing the Option,
	$ 1,000.00	on or before March 23, 1971,
	$ 1,000.00	on or before March 23, 1972,
	$ 1,000.00	on or before March 23, 1973,
	$ 1,000.00	on or before March 23, 1974,
and a further sum of	$100,000.00	on or before March 23, 1975.

Thus, total payments of $105,500.00 are needed to acquire the property.

Also, for any ore mined and milled from said mining lands in excess of the first million tons, Wilson shall receive a 25-cent-per-ton royalty.

A total of $4,500.00 has been paid to date as set out by the above agreement.

By a similar agreement dated October 30, 1972, the two patented claims (TB 10164 and TB 10971) were optioned to Hollinger by Mr. Herbert Kalson of Geraldton, Ontario.

The payments by which Hollinger may acquire this property are:

A sum of $ 1,000.00 on signing the Option,
$ 1,000.00 on or before October 30, 1973;
$ 1,000.00 on or before October 30, 1974;
and a further sum of $125,000.00 on or before October 30, 1975.

A total of $1,000.00 has been paid to date, as outlined in the above agreement.

III. GENERAL GEOLOGY:

The property is largely underlain by a sequence of Keewatin lavas intruded by younger hornblende gabbros, hornblende diorites and albite (or just feldspar) porphyry. The southern portion of the property is underlain by Temiskaming sediments. The Temiskaming sediments encountered were conglomerates and arkose which are similarly intruded by the gabbro, diorite and albite porphyry.

The Keewatin lavas consist of andesitic to dacitic flows and tuffs which are highly metamorphosed. Biotite and chlorite are often found in these volcanics, with accessory carbonate and silica. The tuffs are characterised by numerous, small, subangular fragments in a chloritic matrix. The tuff horizons generally have a gradational contact with the massive flows.

The massive flows often contain narrow chert horizons. Initially these cherty zones were thought to represent flow tops, but there are at least three different types of occurrences:

1. Chert bands gradational with the andesite (flow tops?)

2. Chert bands with abrupt contacts.

3. Zones of mixed blue grey chert and andesite (silicification?)

Although intersections of chert were quite common in the 1972 drilling, very few chert horizons were encountered in the present programme. Hence, no additional interpretations can be made about these units.

The hornblende gabbros are easily distinguished by the numerous blocky crystals of hornblende in a dark green chloritic matrix. Often these blocky crystals are altered to chlorite; however, the crystal habit usually remains. The gabbros, as with the diorites, are presumed to be Early Algoman in age.

The only hornblende diorite encountered was in hole A-14-73, on claim TB 139352. No surface exposures of this unit are noted on the property. Although the blocky crystals of hornblende still persist, as in the gabbro, they are only locally developed and calcic feldspar is the predominant mineral. Unlike the gabbro, the diorite was weakly magnetic, although there is no expression of an anomaly from the geomagnetic survey performed in the area.

The albite porphyry dykes are presumed to be Late Algoman in age, since in a couple of surface exposures the porphyries are seen to intrude the hornblende gabbro. The high sodic feldspar content is diagnostic of all dykes encountered. This rock is usually pale grey in colour and quite hard, with the main alteration noted being slight amounts of epidote after feldspar.

Temiskaming sediments are encountered in surface exposures on the Kalson claims and in drill hole A-14-73, on claim TB 139352. Most of the Temiskaming series here is represented by conglomerates, with only a few zones of arkosic material noted in the drill hole.

The conglomerate contains a variety of pebble types that show a wide range of size and shape. Many of the smaller pebbles (usually less than ½ inch), tend to be quite angular, while the larger ones (1 inch or greater), are distinctly more rounded in nature. The matrix of the conglomerate is brownish and moderately biotitic with small quartz 'eyes' scattered throughout. Local increases in alteration create a much softer, more chloritic matrix.

The arkosic bands seen in the drill hole are relatively narrow and are characterised by numerous small grains of quartz and feldspar, in a greyish to grey-green matrix. Contacts are usually gradational with the conglomerate units.

IV. RESULTS

A. Drilling

Five holes were drilled encountering the rock types previously described under general geology, being: Chert, Andesite, Hornblende Diorite, Hornblende Gabbro, Albite Porphyry, and Temiskaming sediments including arkose and conglomerate.

All of the drill logs will be filed for assessment, hence only a plan of the drilling plus a copy of the drill sections accompany this report. A total of 2391 feet were drilled; 1005 feet to test the magnetic-electromagnetic anomaly on the Kalson claims; 596 feet to check the wide copper bearing zone found in the 1972 drilling, and 790 feet to test the magnetic anomaly in the Temiskaming sediments.

The magnetic-electromagnetic anomaly on the Kalson claims was attributed to a narrow (up to one foot) band of massive pyrrhotite carrying minor pyrite and chalcopyrite. The excellent profiles obtained from the geophysical surveys from such a narrow zone are probably related to the rather shallow overburden depths in the area.

During the 1972 drilling, an intersection of 57 feet assaying .47% copper, .14 ounces/ton silver, was obtained in hole A-4-72. Hole A-12-73 was set out to cross this zone approximately 100 feet vertically below the original intersection. Although a substantial width of rock anomalous in copper was encountered, assays show the zone to be leaner at this depth.

Drill hole A-14-73 was designed to cross section a magnetic anomaly presumed to be in the Keewatin volcanics -- the additional footage allowing the hole to cut the volcanic-sedimentary contact. Unexpectedly, after 126 feet of overburden, the hole collared in Temiskaming conglomerate which extended to a dyke of hornblende diorite at 640.3 feet. The magnetic anomaly was attributed to approximately 45 feet of conglomerate containing numerous disseminated blebs of pyrrhotite.

Previous to the drilling of hole A-14-73, two claims were added along our south boundary to protect any possible results obtained in that hole. Thus, the

present number of claims mentioned at the first of this report is two greater than the number indicated upon signing the Exploration Assistance Agreement. No work was carried out on these two new claims (TB 372798 and TB 372799), so that none of the provisions of the Agreement were violated.

B. Assaying

Assaying of core samples was completed at Hollinger Mines Limited, Assay Department, by the atomic absorption method. Samples were assayed for various elements, including: copper, zinc, nickel, silver, lead and gold.

Each sample is prepared by crushing and grinding the rock to a -100 mesh fraction, then decomposing the product by the addition of hot nitric and hydrochloric acids.

A list of the assay results accompanies this report in summary form.

V. CONCLUSIONS and RECOMMENDATIONS

Exploration to date has revealed two relatively strong electromagnetic anomalies with associated high magnetics, to be related to narrow bands of massive or near massive pyrrhotite with minor accessory pyrite and chalcopyrite. One of these anomalies was outlined and drilled in 1972, the second anomaly lying within the Kalson claims and being drilled during the course of the present programme.

Further, a zone of disseminated sulphides having economic implications was previously outlined by drilling, to the east of the geophysical anomalies more recently located on the Kalson claims. Thus, the Kalson anomalies appeared to be ideal targets for drilling as suggested from the nearby pyrrhotite-chalcopyrite zone. Unfortunately, the data now available indicate that this entire section is not viable for mineral exploitation.

However, due to the intimate relationship between pyrrhotite and chalcopyrite noted in this area, magnetic horizons would appear to be favourable drill targets, either with or without a coincident electromagnetic anomaly. Several untested magnetic anomalies, which do not appear to be indicative of a change in rock type, remain on the Wilson claims. The most probable interpretation to be applied to this is that the anomalies suggest the presence of pyrrhotite - hopefully continuing its association with chalcopyrite.

The presence of Timiskaming sediments on the property may indicate an additional exploration opportunity, in search of gold. Although most of the Timiskaming belt here has been extensively drilled, very little work has been done in the Eldee Lake area. Unfortunately, the results received to date in the sediments have been very poor and no major structural features, which are often closely associated with gold ores, appear to be indicated. In the absence of known stringer zones, or structural controls, a couple of cross-sectional holes may be warranted to test the Keewatin-Timiskaming contact.

August 1, 1973.

Dale R. Alexander

HOLLINGER MINES LIMITED
TIMMINS, ONTARIO

PLAN OF DRILLING - [illegible]
[illegible]
1973

Highway 11

A-1-73
A-2-73
A-3-73
A-4-73
A-5-73
A-8-73
A-9-73
A-10-73
A-12-73

Kaiser Steel 1971
Patented

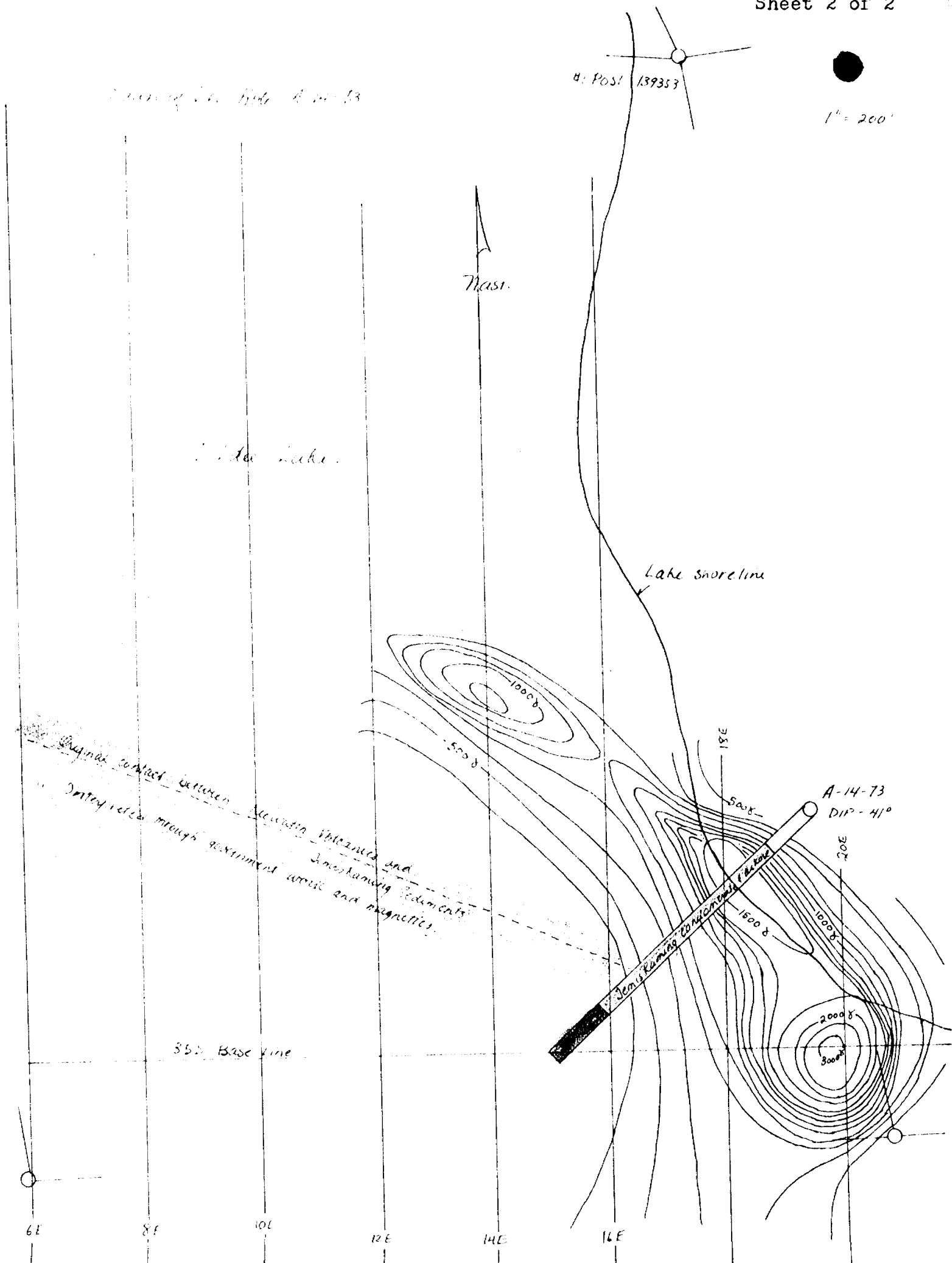
Pyramid Claim
229617

Hornblende Gabbro -
Quartz Porphyry -
Andesite

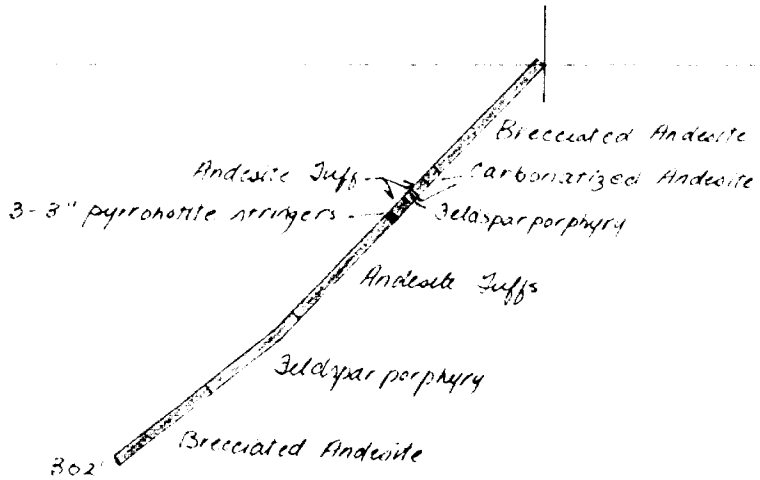
bx - breccia, t - tuff
fragmental
chert
overburden

Scale - 1" = 200'

APPENDIX I
Sheet 1 of 2


A: Post 139353
1" = 200'
Mast.
Lake shoreline
1000 δ
500 δ
Original contact between Jennings Volcanics and Amelia Limestone Sediments
Jennings reflecting horizontal events and magnetics
18E
A-14-73
Dip - 41°
500 δ
20E
Jennings Conformable Contact
1500 δ
1000 δ
2000 δ
3000 δ
35S Base Line
6E
8E
10E
12E
14E
16E

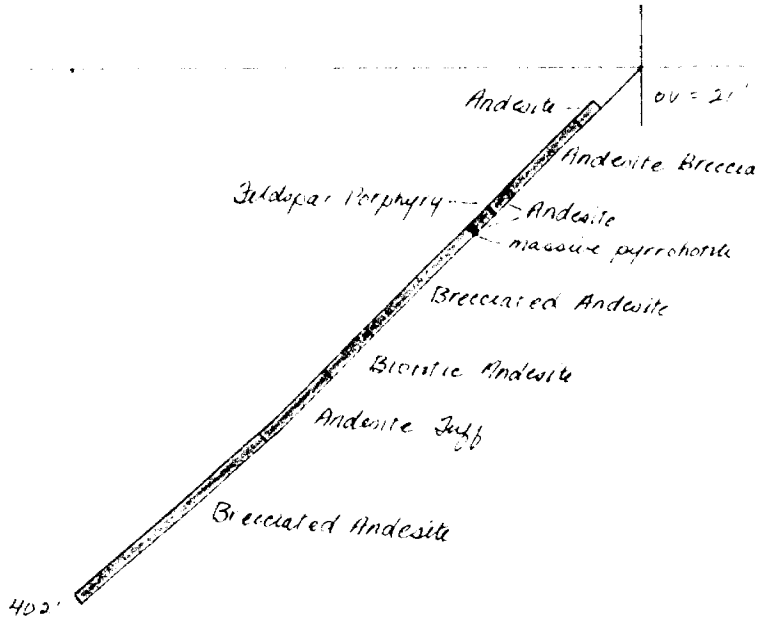
A-9-73
XL2W @ 00 BL.
Az. 180°



Scale 1"=100'

APPENDIX II
Sheet 1 of 5

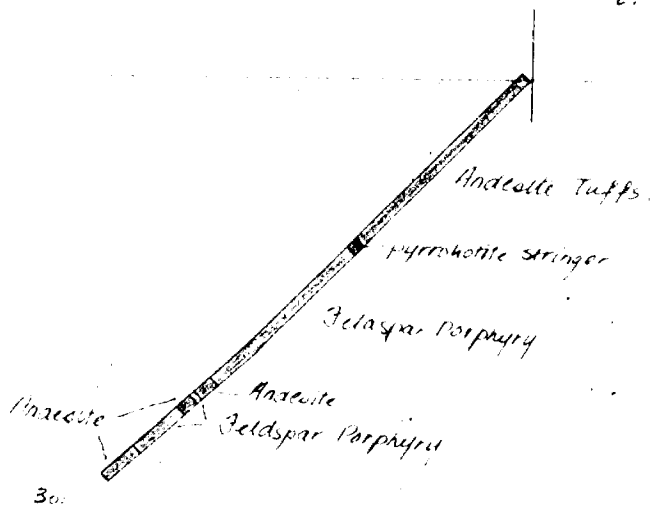
A-10-73
XL 00 @ 0150'N
Az- 180°



Scale 1" = 100'

APPENDIX II
Sheet 2 of 5

A-11-73
3100 W @ 00 BL
Az. - 185°



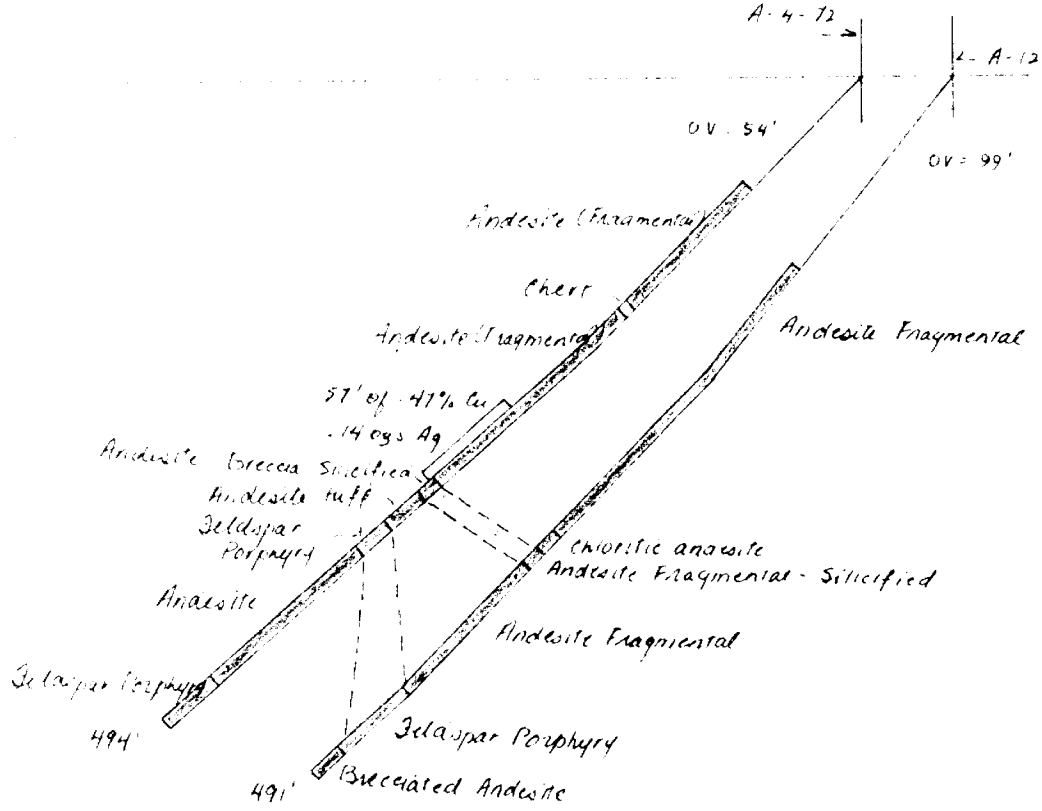
Scale - 1" = 10'

APPENDIX II
Sheet 3 of 5

A-12-73

XL 4E @ 0143'S

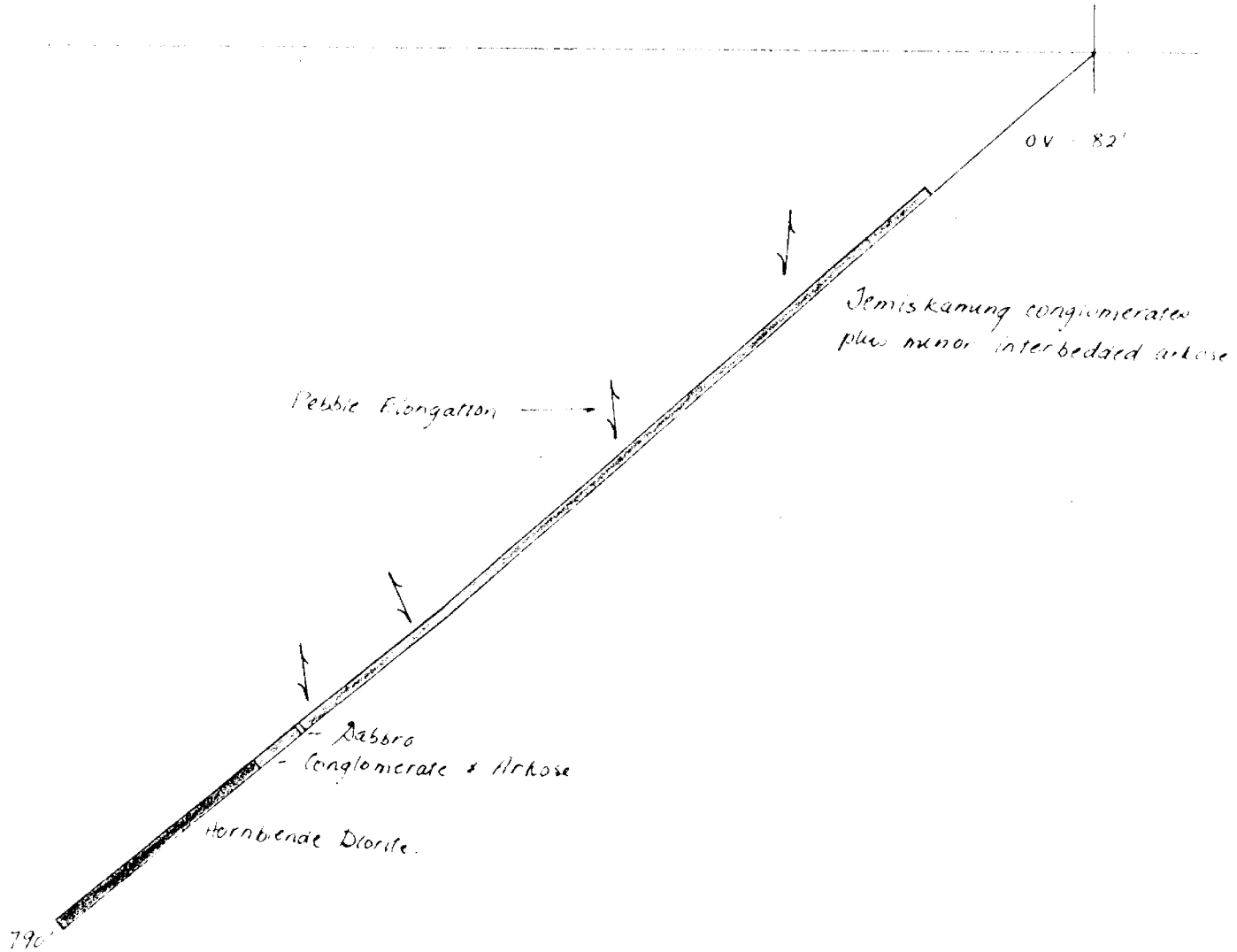
AZ - 180°



Scale

APPENDIX II
Sheet 4 of 5

A-14-73
19150E, 31100S
Az. - 228°



Scale - 1" = 100'

APPENDIX II
Sheet 5 of 5

SUMMARY OF ASSAY RESULTS

A V E R A G E V A L U E S

DDH A-9-73	Cu(ppm)	Zn(ppm)	Ni(ppm)	Ag(oz)	Pb(ppm)	Au(oz)
85-140	385	84	79	.04	12	Nil
265-302	725	53	126	.06	16	Nil

Highest assays: 87-90 .17% Cu, .08 oz Ag
110-112 .26% Cu, .07% Zn, .09 oz Ag - 3 bands of pyrrhotite
132-135 .28% Cu, .11 oz Ag
275-280 .17% Cu, .10 oz Ag

Two sections with gold in trace amounts:
85-87 .07% Cu, .04 oz Ag, .01 oz Au
and 130-132 .01% Cu, .02 oz Ag, .01 oz Au.

The grab samples (at 25 foot intervals) for geochemistry were all background with exception to one sample @ 275 feet: 1.16% Cu, .38 oz Ag, .01 oz Au from a quartz stringer with chalcopyrite.

DDH A-10-73	Cu(ppm)	Zn(ppm)	Ni(ppm)	Ag(oz)	Pb(ppm)	Au(oz)
40-60	329	48	77	.03	20	Nil
80-135	1074	83	82	.05	13	Nil
(88-130)	1358	88	76	.05	12	Nil
240-250	783	58	73	.05	11	Nil
(242-247)	1580	82	90	.09	10	Nil
305-402	492	102	129	.05	32	Nil
(370-380)	2380	78	177	.10	20	Nil

Highest assays: 45-47 .19% Cu; .08 oz Ag
88-90 .32% Cu; .09 oz Ag
90-93 .32% Cu; .12 oz Ag
117-119 .25% Cu, .07 oz Ag
119-121 1.63% Cu, .06% Zn, .25oz Ag - 1.6 feet of massive pyrrhotite with pyrite, chalcopyrite.

A-10-73 (continued)

242-245	.19% Cu; .11 oz Ag
245-247	.10% Cu; .05 oz Ag
370-375	.34% Cu, .13 oz Ag
375-380	.135% Cu, .07 oz Ag

All grab samples showed background values.
All assays for gold were Nil.

DDH A-11-73	Cu(ppm)	Zn(ppm)	Ni(ppm)	Ag(oz)	Pb(ppm)	Au(oz)
40-50	190	45	87	.03	12	Nil
80-130	284	82	84	.03	17	Nil

Highest assays: 100-105 .10% Cu, .05 oz Ag
123-125 .05% Cu, .09 oz Ag - 1 foot of pyrrhotite.

All assays and grab samples in this hole were much poorer.
All assays for gold were Nil.

DDH A-12-73	Cu(ppm)	Zn(ppm)	Ni(ppm)	Ag(oz)	Pb(ppm)	Au(oz)
160-195	334	37	89	.02	12	Nil
(172-177)	1608	38	121	.03	12	Nil
250-265	201	47	111	.03	14	Nil
285-360	372	89	91	.05	11	Nil
(350-360)	510	302	98	.05	10	Nil

Highest assays:

167-170	.08% Cu, .03 oz Ag
172-175	.222% Cu, .05 oz Ag
175-177	.068% Cu, .02 oz Ag
253-255	.077% Cu, .05 oz Ag
292-294	.145% Cu, .05 oz Ag
295-300	.069% Cu, .03 oz Ag
310-315	.06% Cu, .04 oz Ag
320-323	.066% Cu, .21 oz Ag
330-335	.08% Cu, .07 oz Ag
355-360	.09% Cu, .06 oz Ag

A-12-73 (continued)

Most of the grab samples in this hole yielded background values, except for two as follows:

	Cu ppm	Zn ppm	Ni ppm	Ag oz	Pb ppm	Au oz
@ 275'	57	3460	35	.3	16	Nil
@ 300'	3170	85	188	2.6	38	Nil

In the light of high assays for split samples shown above, it thus appears that the interval 275' to 360' is characterized by values which are high background or slightly above.

All assays for gold values were Nil.

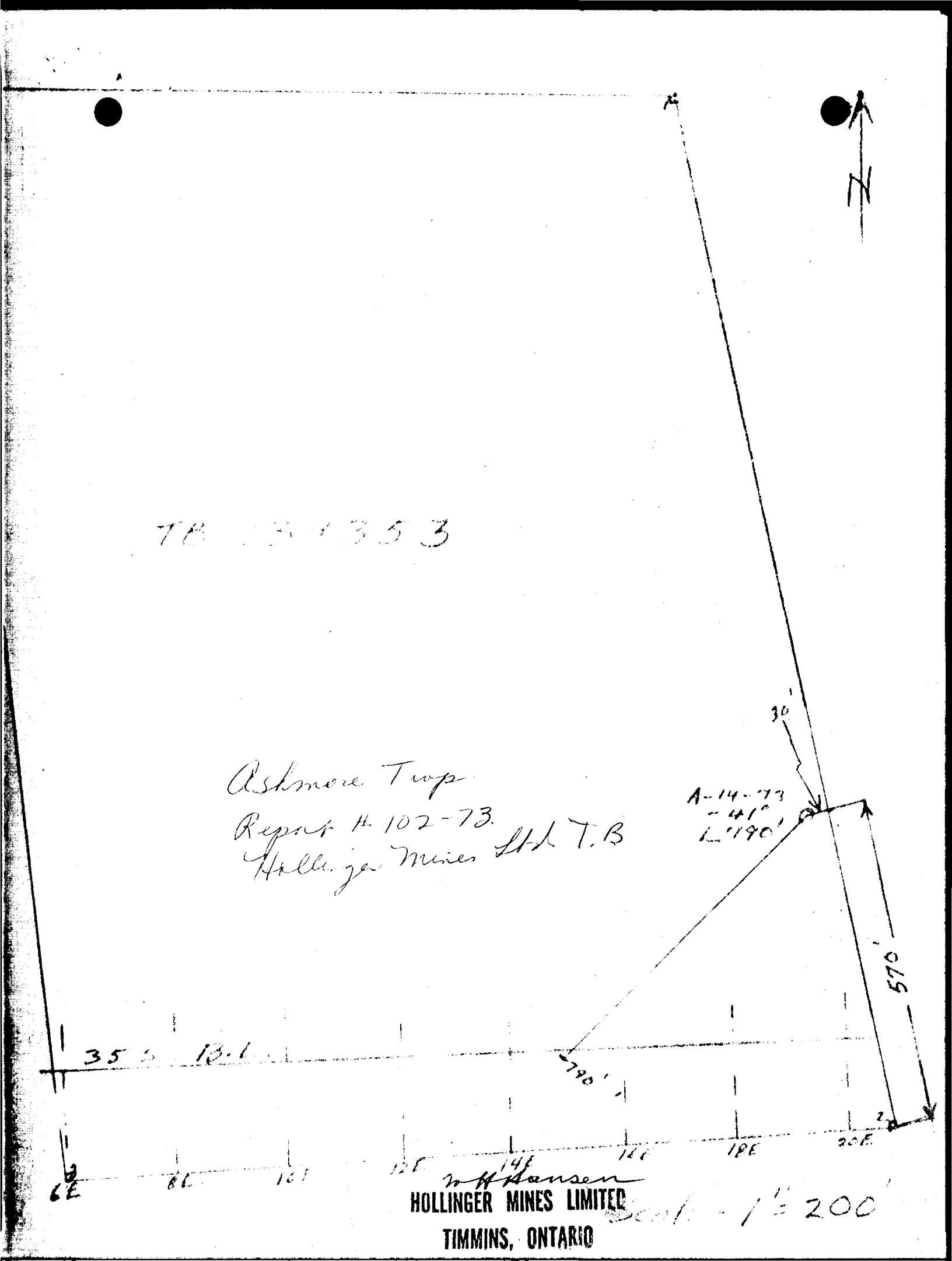
DDH A-14-73	Cu(ppm)	Zn(ppm)	Ni(ppm)	Ag(oz)	Pb(ppm)	Au(oz)
200-360	108	83	97	.02	19	Nil
640-695	500	40	50	.04	10	Nil
(640-655)	1240	58	54	.07	11	Nil
720-745	450	48	59	.04	11	Nil
760-780	523	32	40	.03	12	Nil

Highest assays:

315-320	.03% Cu, .02 oz Ag
640-645	.17% Cu, .10 oz Ag
645-650	.13% Cu, .06 oz Ag
650-655	.08% Cu, .05 oz Ag
732-735	.09% Cu, .07 oz Ag
737-740	.13% Cu, .08 oz Ag
764-765	.32% Cu, .17 oz Ag
768-770	.09% Cu, .04 oz Ag
770-771	.07% Cu, .03 oz Ag

All grab samples yielded background values.

Although this hole intersected Temiskaming conglomerate and arkose which enhanced the prospect of finding gold, all assays for gold were Nil. The sediments would appear to be barren unless affected by a major structural feature and/or host to one or more stringer zones.



TR H 1353

Ashmore Twp
Report # 102-73.
Hollinger Mines Ltd T.B

Location of Collar from #2 - TB 139353 North 570' West 30'

FORM 822

DIAMOND DRILL REPORT

HOLE NO. A-14-73

NORTH 314-00S
EAST 196-50E
ELEV. Surface
AZIM. 228°
DIP Check collar 0 41°; 300' - 39°; 600' - 39°; 790' - 38.5° = 41°

PROPERTY WILSON OPTION #1
Claim TB 139353, Ashmore Township

COMMENCED June 21, 1973
FINISHED July , 1973
PURPOSE OF HOLE test magnetic anomaly

Drilled by Radley Yates

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
0	126	CASING.						
126	640.3	Conglomerate - Temiskaming in age. Up to 180 the conglomerate is slightly greenish grey to grey in colour. After 180 the conglomerate is grey in colour with numerous fragments or pebbles. The more sedimentary nature of the conglomerate is not truly noted until further down the hole where the pebbles are much more rounded. After 180 we start to get a few smoky quartz eyes and the conglomerate tends to look nearly identical to the outcrop on the Kalson Option. The texture also changes somewhat after 180 from the sugary nature over the first 60' to a more massive groundmass with the quartz eyes. About the only other distinguishable mineral in the matrix is biotite which occurs in very tiny brownish flecks. The amount of biotite decreases after 180. The pebble size is generally in the ¼ to ½" range although some fragments are greater than an inch. The larger pebbles are usually elongate at approximately 45° to the core axis. The smaller fragments						

FORM S22

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY Wilson Option #1
Ashmore Tp.

HOLE NO. A-14-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		are generally more angular although this type of occurrence is also seen in the outcrop on the Kalson property. The pebbles are of several types - the dominant type being blue grey and cherty - in some instances almost translucent; grey to buff cherty pebbles; black siliceous pebbles - further down the hole some of these look rather slaty; plus some dark brownish to greenish pebbles which often contain chlorite-biotite.						
		153.4-158 and 167-180 are more massive sections - dark grey green in colour - no distinguishable minerals. The pebble size and number just generally decreases into these zones - arkosic?						
		After 180 the pebble size gradually increases over 2' and then we start to get some better conglomerate and the quartz eyes begin to occur.						
		Mineralization is only minor with a few tiny blebs of sulphides in the early part of the hole - mostly pyrite - some pyrrhotite and rarely chalcopyrite. The pyrrhotite is only weakly magnetic - and the chalcopyrite is generally associated						

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-14-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		with it in tiny splashes. After 210 there						
		is a general increase in the amount of						
		sulphides - here we have mostly dissemin-	200	205		5		Cgl - very minor sulph.
		ated blebs of pyrrhotite and the rock is	205	210		5		" " " "
		more magnetic. Cp is very minor here.	210	215		5		" " " " tr. cp
		Around 282 the size and number of	215	220		5		" minor po py
		pebbles gradually decreases into a short	220	225		5		" " po py, tr cp
		zone of arkose from 304.5 to 330. In the	225	230		5		" " po py
		conglomerate up to the arkose the fragments	230	235		5		" " po py
		are mainly of the bluish grey type;	235	240		5		" " po py
		similarly at the lower contact after 330	240	245		5		" " po py, tr. cp
		although the gradation here (330) is much	245	250		5		" " po py, tr. cp
		faster.	250	255		5		" " po py
		The arkose is greener in colour than	255	260		5		" " po py
		the grey conglomerate and contains a few	260	265		5		" very minor sulph.
		noticeable grains of quartz and feldspar.	265	270		5		" " " "
		Practically unaltered - very minor	270	275		5		" " " "
		chlorite-sericite nearly the same as the	275	280		5		" minor pyrite
		alteration in the conglomerate. Very	280	285		5		" " pyrite
		minor pyrite in the arkose - splash of	285	290		5		" very minor py
		chalcopyrite at 319.5. There are a few	290	295		5		" " " py
		carbonate stringers in the arkose unlike	295	300		5		" minor py
		the conglomerate and there is some minor						
		brecciation and alteration with a few						
		narrow carbonate stringers from 303.5 to						
		310.5.						

FORM S22

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OTTON #1
Ashmore Twp.

HOLE NO. A-14-73

COMMENCED
FINISHED
PURPOSE OF
HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		After the arkose we are into a good						
		conglomerate before 340. There is a						
		notable increase in py po here as well	300	305		5		Cgl - very minor py po
		with numerous blebs all along the core.	305	310		5		Arkose - very minor py po
		Schistosity due to fragment elongation at	310	315		5		" " " py po
		55° to the core. Similar lithology as	315	320		5		" " " py po cp
		previously described conglomerate.	320	325		5		" " " py po
		After 360 the matrix of the conglomerate	325	330		5		" " " py po
		becomes greener and there are very numerous	330	335		5		Cgl minor py po
		well rounded pebbles. Mostly blue grey	335	340		5		" " py po
		cherty, some white, some porphyry, some	340	345		5		" 3% py po
		black, some brown and some dark green.	345	350		5		" minor py po
		Pyrite-pyrrhotite content rapidly	350	355		5		" 3% py po
		decreases after 380.	355	360		5		" 3% py po
		406-407.5 - short arkosic band;						
		speckled nature of qtz-feldspar.						
		419.4-445 - rather sharp upper contact						
		at 40° to dark grey fairly massive, very						
		slightly altered arkose.						
		445-448 - very dark grey conglomerate						
		very small blue grey fragments, some pyrite						
		- contacts gradational.						
		448-456.7 - gradation to greenish						
		arkose, fairly massive, minor pyrite.						
		456.7-501.2 - gradation to a good						
		conglomerate - mostly bluish grey and						

FORM S22

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-14-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		whitish cherty fragments, minor py po. Lineation of fragments at about 75° to the core.						
		501.2-509.1 - short shear (1") at 401.2 at 60° to core then conglomerate with a more arkosic matrix. Fragments are much fewer in number than other conglomerate horizons.						
		509.1-521 - short band of coarse conglomerate - more brownish chloritic alteration. Traces of sulphides.						
		521-543.8 - some arkose but mostly conglomeratic fragments in a more arkosic matrix - similar to the unit 501-509 but here there is some areas with no fragments. Both contacts gradational - lower is more rapid. A little more alteration here - chlorite, sericite. Lineation at 60° to core.						
		543.8-605.8 - return to conglomerate lineated at 60° (long axis of fragments). Much more highly altered than previous - matrix is quite brownish. Large number of pebbles as before - mostly blue grey cherty, some white, some buff cherty, some brownish and sandy. At 554.9 trace of						

FORM 822

NORTH
EAST
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-14-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		chalcopyrite - otherwise very little sulphides. Around 565 we grade into a less altered conglomerate and the colour changes from brownish to grey. Further along the zone the conglomerate also becomes more arkosic and the size and number of pebbles decreases to the end of the zone.						
		605.8-609.8 - contacts at 45° - converging to a short Dyke of gabbro?? Very fine groundmass with some fairly large irregular blebs of brownish biotitic material and some jade green spots of chlorite. It appears to have no effect on the arkosic material at either contact although the dyke seems to be slightly chilled and brownish at its contacts. Non-magnetic, carbonatized.						
		609.8-611.3 - arkosic, grey green as before.						
		611.3-623 - sharp contact at 45° to band of conglomerate, grey, hard, numerous pebbles. Minor sulphides, trace of cp @ 612.1. Lower contact is quite abrupt at 80° to core into the much finer conglomerate.						
		623-640.3 - gradation from the conglomerate for the first 2' then quite a						

FORM S22

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-14-73
COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		dark grey green arkose. Massive. Very						
		minor sulphides. Lower contact along a						
		quartz stringer.	640	645		5		Lq - very minor cp po py
640.3	790	Hornblende diorite dyke, upper contact	645	650		5		" minor py po cp
		along a quartz stringer. Rather high per-	650	655		5		" " cp py
		centage of feldspar here and locally the	655	660		5		" " py cp
		feldspar content is extreme. The rock is	660	665		5		" " py cp
		medium green in colour with fairly numerous	665	670		5		" very minor py, tr. cp
		blebs of pseudomorphic chlorite after horn-	670	675		5		" trace py
		blende. The rock is very slightly magnetic.	675	680		5		" negligible sulph.
		Up to 662 there are quite a few quartz	680	685		5		" few traces of py.
		stringers - usually at a low angle to the	685	690		5		" minor py cp
		core - mostly bluish in colour. Associated	690	695		5		" few traces py
		around these stringers are some sulphides						
		py po with some good sized splashes of						
		chalcopyrite.						
		667.5-670.3 - few quartz-carbonate						
		stringers here, making the diorite quite						
		altered. The diorite becomes finer grained,						
		more silicified, with some brick red						
		staining of the feldspar. Accessory chlorite						
		with the stringers - less than normal						
		chlorite within the diorite.						
		Some chalcopyrite around a quartz						
		stringer at 686.						
		Around 722.5 the diorite becomes a bit						

FORM 822

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-14-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		finer grained and then around 728.8 the						
		rock becomes very brownish and micaceous.						
		After 728.8 to 741.3 the rock looks some-	720	725		5		L_1 - traces of py po cp
		what like the matrix of the brownish con-	725	730		5		" minor qtz, minor py po
		glomeratic. There is so much biotite and	730	732		2		" " " minor py po cp
		quartz around this zone that it is very	732	735		3		" 80% " tr. py cp
		difficult to interpret. There is about	735	737		2		" 30% " minor py po cp
		30% bluish qtz stringers here and some	737	740		3		" 20% " minor py po cp
		sulphides associated with them.	740	742		2		" minor " " py po cp
		741.3-790 - greyer diorite than	742	745		3		" neglig. sulph or qtz
		previous - contact along stringer zone	745	750		5		" " " " "
		with above. Rather mottled appearance						
		with the high feldspar content. Only 3						
		stringers here - white, quartz-carbonate	760	764		4		L_1 mass. (slightly magnetic)
		with very minor sulphides:- 764.8, 778.2	764	765		1		L_1 mass., 1" str. @ 20° to C.A.- bordered by heavy black tourma-
		and 788.						line with minor cp throughout.
			765	768		3		Mass L_1 - minor py @ 30° to C.A. (magnetic).
			768	770		2		Slightly min. - qtz L_1 w. small tourmaline strs. - w. cp & py (magnetic
	790	END OF HOLE	770	771		1		Mass. alt. L_1 with py & cp (magnetic)
			771	775		4		Coarse grained L_1 massive,
		Dale R. Alexander	775	777		2		Coarse gr. L_1 - slightly min.
		HOLLINGER MINES LIMITED	777	779		2		1" green qtz str 20° to C.A., cp + py, shear plain @ 10° to C.A.
		TIMMINS, ONTARIO	779	780		1		Qtz diorite - chloritic and pyritic (magnetic)
			788	789		1		2" qtz calcite str. in an un- mineralized diorite.

FORM S22

NORTH
EAST.
ELEV.
AZIM.
DIP

DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-11-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Geochemistry and Thin Section						
G	126	Temiskaming conglomerate - biotitic						
G + TS	150	Biotitic conglomerate						
G	175	More massive sediment - arkose?						
G + TS	200	Conglomerate						
G	225	"						
G + TS	250	"						
G	275	"						
G + TS	300	More arkosic part of gradation						
G + TS	325	Arkose - greenish						
G + TS	350	Good coarse conglomerate - some py						
G	375	Coarse conglomerate						
G + TS	400	Finer conglomerate						
G	425	Dark grey arkose						
G + TS	450	Arkose with a few dark fragments						
G	475	Conglomerate, blue grey pebbles						
G + TS	500	Dark grey conglomerate						
G	525	Conglomerate - few pebbles - arkosic matrix						
G + TS	550	Conglomerate - more highly altered + py						
G	575	Conglomerate - greyish						
G + TS	600	Conglomerate - more arkosic matrix						
	608	To Dr. Moddle - gabbro?						
G	625	Grey green arkose						
G + TS	650	Quite highly altered diorite, py cp						

FORM S22

NORTH
EAST.
ELEV.
AZIM.
DIP

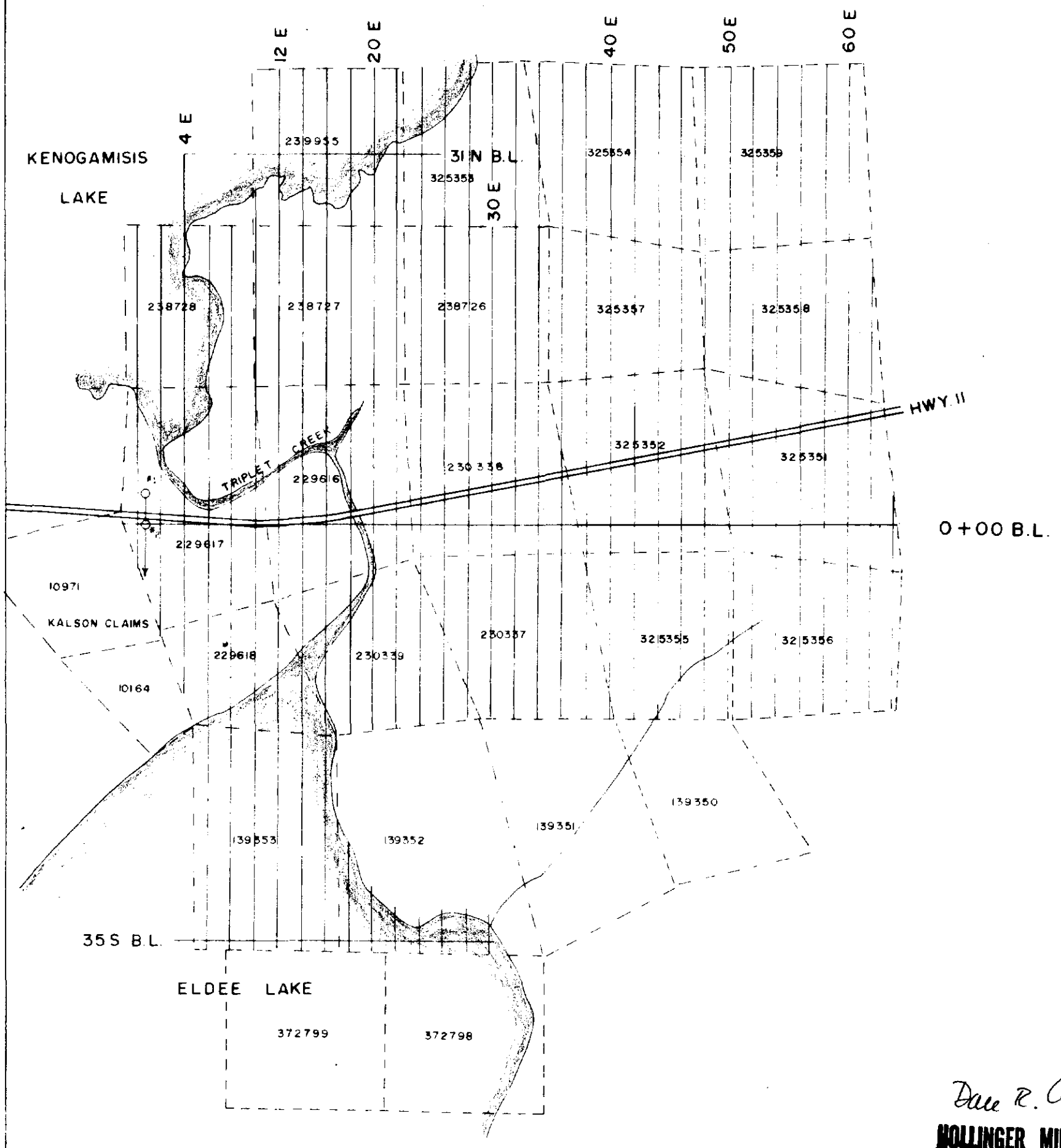
DIAMOND DRILL REPORT

PROPERTY WILSON OPTION #1
Ashmore Twp.

HOLE NO. A-14-73

COMMENCED
FINISHED
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	RECOV.	WIDTH	ASSAY	DESCRIPTION OF SAMPLE
		Geochemistry and Thin Section						
G	675	Diorite with high feldspar content						
G + TS	700	Diorite - some py						
G	725	Diorite - fine grained with quartz						
G + TS	750	Greenish diorite - some po						
G	775	Greyish biotitic diorite						
G + TS	790	" " "						



Dave R. Alexander.

HOLLINGER MINES LIMITED

TIMMINS, ONTARIO

WILSON OPTION No. 1

ASHMORE TWP

Scale: 1" = 1000'