

1984 Assessment Report

DIAMOND DRILLING

Title: PATHFINDER PROPERTY

Claims: Pathfinder, Diamond Hitch, Christina, Derby, Jasper Fr, Iron Bell Fr, London, Little Bertha, Lonestar Fr, Path 1-8, Lucky 1-4, Hike 1-2

Commodity: Silver, Gold, Copper

Location: Pathfinder Creek - Granby River Area
20 km north of Grand Forks
82E 1W; 49° 12'N, 118° 25'W
Greenwood M.D.

Consultant L. Sookochoff, P.Eng.
and Sookochoff Consultants Ltd.

Author 311-409 Granville Street
Vancouver, B.C., V6C 1T2

Owner and

Operator: NU-LADY GOLD MINES LTD.

Work Dates: January 26, 1984 to March 26, 1984

Submittal Date: March 26, 1984
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,123

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1984 Diamond Drilling Assessment Report

on the

Pathfinder Property

for

NU-LADY GOLD MINES LTD.

INTRODUCTION

A diamond drill program consisting of four holes (84-1 to 84-4) totalling 195 meters (640 feet) was completed on the Pathfinder Claim Group during January 1984.

The purpose of the drilling was to test for the extensions of a significant gold bearing zone located as a result of a 1983 drill program.

PROPERTY

The property consists of nine reverted crown granted mineral claims and fourteen located two-post claims - all contiguous. Particulars are as follows:

<u>Claim</u>	<u>Lot No.</u>	<u>Record No.</u>	<u>Expiry Date*</u>
<u>Reverted Crown Grants</u>			
Diamond Hitch	1684	1422	February 28, 1989
Christina	1356	1419	February 23, 1989
Derby	2233	1420	February 23, 1989
Jasper Fr.	3029S	1417	February 23, 1989
Iron Bell Fr.	938	1413	February 21, 1989
London(Bonnock)	2234	1412	February 21, 1989
Little Bertha	959	1411	February 21, 1989
Lonestar Fr.	1446S	1418	February 23, 1989
Pathfinder	782	222	February 17, 1990
<u>Two-Post Claims</u>			
Path 1-8		2046-2058	March 4, 1989
Lucky 1-4		2954-2057	March 4, 1989
Hike 1&2		3605-3606	March 14, 1989

* Upon approval of five years assessment work applied February 2, 1984 for which this report forms a part thereof.

LOCATION AND ACCESS

The property is located 20 km. north of Grand Forks adjacent and to the east of the north fork of the Granby River. The westerly flowing Pathfinder Creek is covered in part by the claim group.

Excellent access is provided by paved highway from Grand Forks to the property.

PHYSIOGRAPHY

The property is within the Christina Range of the Monashee Mountains, a subdivision of the Columbia Mountain System. The topography of the general property area is fairly mature, and most peaks are rounded by glacial action. The relief of the area is moderate - a maximum of 1550 meters.

The Pathfinder Group covers the forested eastern slopes of the Granby River valley and extending onto portions of the plateau to the east. Elevations range from 550 meters at the southwest to 1140 meters at the east.

HISTORY

The history of the property stems from work completed from 1895 to 1920 when shipments were made from the Pathfinder and Little Bertha claims. During this period 264 tons of material assaying 0.09 oz Au/ton, 0.50 oz Ag/ton and 0.97% Cu were shipped from the Pathfinder and 996 tons assaying 0.43 oz/ton and 3.9 oz/ton from the Little Bertha. Other exploration work indicated by pits, trenches and adits occur in other areas of the property.

In the 1960's Alwin Mining Co. carried out an exploration program on the Pathfinder Group. The work consisted of obtaining access to old workings, bulldozer trenching and diamond drilling. Twelve drill holes were reportedly completed on the Little Bertha Claim. However the results are not available

In 1980 Aries Resources Inc. optioned the property from Consolidated Boundary Exploration Ltd. and carried out an exploration program. The exploration work consisted of the establishment of a grid over half the property, geological mapping, a magnetometer survey, and the drilling of three core holes on the Little Bertha claim.

In 1983, Nu-Lady Gold Mines optioned the property from Consolidated Boundary Explorations Ltd. and carried out a preliminary sampling program and a diamond drilling program in July & August 1983.

In January 1984, an additional drill program was completed for which the results are contained herein.

GEOLOGY

The property geology is described by Saunders et al in a December 15, 1980 report on the Pathfinder Group. Their geology is presented in the accompanying map and is described as follows:

"Three map units have been distinguished on the Pathfinder property. From oldest to youngest they are:

Unit 1 - Sedimentary and volcanic rocks of the Anarchist Group.

Unit 2 - Quartz diorite intrusive complex, Nelson Intrusions.

Unit 3 - Feldspar porphyritic monzonite, Coryell Intrusions.

Map Unit 2 contains many fine grained dacites and andesites which grade into diorite. It is believed from the field relationships that most of these are fine grained members of the Unit 2 intrusive complex. However it is impossible to distinguish these rocks from true lavas and tuffs and as a result rocks which property belong to Unit 1 may have been included in Unit 2.

Unit 1

The cherts of this unit are strongly weathered in outcrop due to a consistent content of 2 to 5% pyrite. They are very well bedded, but it is impossible to make any other textural observations without fresh rock exposures. The beds strike uniformly at 100° to 110° and dip steeply to the north. They are associated with andesites which are also pyritic.

The dacites and andesites on the property commonly display white feldspar phenocrysts 1 to 2 mm in size as well as occasional hornblendes. Although the groundmass is often very fine they frequently display heavy chlorite and epidote alteration.

Unit 2

The quartz diorite complex underlies 80% of the property as a large number of small intrusive bodies. The individual rock types represented include quartz diorite, granodiorite, alaskite, diorite, dacite, andesite and rhyodacite. The rocks vary greatly in appearance, they range from fine to medium grain size and from unaltered to very altered.

On the Little Bertha claim an individual body of granodiorite may be traced over an area of 200 m by 300 m, but this is rare. In general the rock type varies from outcrop to outcrop, contacts presumably being gradational, with the finer grained rocks usually showing a much heavier chlorite-epidote alteration. Evidence for a sill-like shape to many of these small bodies comes from the fact that the boundaries of the chert of Unit 1 are subparallel to its bedding. It may also be assumed from the extreme variation in the degree of alteration of rocks in the unit that later bodies brought about contact alteration of earlier intrusions.

Brownish-white pyritic quartzite found in the Little Bertha No. 3 Adit and at various other localities on the Pathfinder and Little Bertha claims is assumed by evidence of its gradational contacts to be the product of intense silicification of dacitic and dioritic rocks of this unit.

Unit 3

This unit primarily consists of medium grained monzonite. It contains both white and pink feldspars, one of which is usually porphyritic, 0-3% quartz, a small amount of hornblende, and some magnetite. Rocks containing only pink feldspar were mapped as syenite; fine grained pink equivalents as trachyte.

Rocks of this unit are uniform in appearance and unaltered. They may be distinguished from Unit 2 by the presence of two feldspars, little or no quartz and a much lower mafic content. The contacts of Unit 3 with Unit 2 are sharp and lobate in shape.

Unit 3 would appear to represent a different differentiation series, lower in quartz and higher in alkali metals, than Unit 2.

RESULTS OF PREVIOUS WORK

1980 Exploration Program

The magnetometer survey indicated no correlation between the magnetometer anomalies and the geology of the property.

The geological survey established that except for a few isolated small pits, all of the old workings and mineral showings occur in three areas: Little Bertha, Pathfinder, and Diamond Hitch.

On the diamond drilling of three holes on the Little Bertha it was concluded that the vein was of good grade but of limited extent as a result of not finding any vein material in the drilling.

Sampling of the Pathfinder showings returned assays of .030 to .07 oz Au/ton with silver and copper values across up to two meters.

1983 Diamond Drill Program

The results of the July and August drill program on the Diamond Hitch showing returned encouraging results. The significant intersections are indicated on the accompanying map and include .120 oz Au/ton over 12.2 feet and 1.4 oz Au/ton over 2.4 feet - both intersections in hole 83-04

As a result of the 1983 intersections a follow-up drill program was initiated.

1984 DIAMOND DRILL PROGRAM

Four holes (84-1 to 84-4) for a total of 640 feet (197.0 meters) were completed - the work done from January 26, 1984 to February 6, 1984. The core was logged by the writer, with sections of indicative mineralization split and assayed. Selected grab samples were also taken as a check for mineralization within core sections of variable rock type, alteration or sulphide content. The core is stored at the Consolidated Boundary warehouse in Grand Forks.

RESULTS

Diamond Drill hole 84-1 was spotted to test the northern extension of the gold bearing zone (1.4 oz Au/ton over 2.4 feet) intersected in 83-03. A high grade zone was not intersected and could possibly be reflected in a core sample of 3.0 feet which was lightly pyritized and assayed .028 oz Au.

Diamond Drill hole 84-2 was spotted to test the southern extension of the gold bearing zone (1.4 oz Au across 2.4 feet) of Drill Hole 83-03. The zone again was not apparent in the core. The highest assay was a two foot intersection of .013 oz Au within a dacitic tuff.

A 1.2 foot zone containing a one inch pyrrhotite stringer assayed .008 oz Au.

Drill Hole 84-3 was spotted to test a mineralized zone in a pit southwest of the trench showings. The hole was wholly within a meta-andesite with variably carbonated and rare pyritic sections.

There were not any significant gold bearing zones - the highest being .005 across four feet.

Drill Hole 84-4 was spotted to test a magnetometer low to the west of the trench showings. Diorite predominated with intermediate andesite sections. The core assayed contained only background gold values.

CONCLUSIONS

The substantial gold bearing zone located in the 1983 diamond drill program could not be duplicated in the 1984 drill holes.

The results of the 1984 drill program have indicated that the gold bearing zones occur as discontinuous pods possibly related to specific dacitic tuff units within a volcanic pile. The higher grade mineralization appears to be terminated vertically by a dioritic unit with significant gold values more often relating directly to pyritic content. Pyrite content however is not always a gold indicator, as in some cases associated gold values occur with a fragmental or barren dacitic tuff (silicified). Gold values do not occur associated with pyrrhotite or a porphyritic silicified (dacitic tuff) or with prolific carbonate with - at times - associated pyrite. The heavily carbonated sections usually occur with the diorite unit.


Andesitic and dioritic rocks which contain fragmental and pyritic sections are relatively barren and envelop the dacitic (silicified) tuff to the west and south.

Additional work should be carried out on the Diamond Hitch area. This work would be laboratory analysis of the rock containing the 1983 gold bearing and adjacent sections in order to determine the geological factors in the gold disposition. This information would be utilized in further exploration on the Diamond Hitch, Little Bertha and Pathfinder zones. These other areas and primarily the Pathfinder where substantial massive sulphide zones occur should be re-examined in a surface exploration program to determine the potential of gold mineralization in relation to the sulphides and volcanic flows.

In addition the area east of the 1984 drill program site where feldspar porphyries, skarns and diabase dykes are reported should be examined.

RECOMMENDATIONS

It is recommended that detailed geological mapping and thin section analysis of gold bearing zones from drill hole 83-03 be completed prior to additional detailed geological mapping and sampling of the three main zones of the property.

Respectfully submitted,

Laurence Sookchoff, P.Eng.
Consulting Geologist

March 26, 1984
Vancouver, B.C.

BIBLIOGRAPHY

BLACK J.M. - Geological Report on the 1983 Exploration Program of the Pathfinder Group, February 4, 1983.

- Report on Pathfinder Property, Grand Forks, B.C. for Nu-Lady Gold Mines Ltd., November 1, 1983.

ELEVATORORSKI, E.A. - Gold Mines of the World, Mindras, Dana Point, California 1981.

SAUNDERS, C.R. et al - Geological, Geophysical and Drilling Report on the Pathfinder Claim Group 15, December 1980

SOOKOCHOFF, L. - Geological Report on the Pathfinder Group for Aries Resources Ltd. February 22, 1980.

Geology of Canadian Gold Deposits - Special Volume 24, CIM 1982

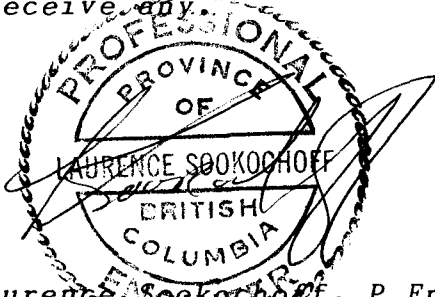
CERTIFICATE AND CONSENT

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist with offices at 311-409 Granville Street, Vancouver, B.C., V6C 1T2.

I further certify that:

1. I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
2. I have been practising my profession for the past seventeen years.
3. I am registered with the Association of Professional Engineers of British Columbia.
4. The information for this report was obtained from sources as cited under bibliography and from work done by the writer on the Pathfinder Property since 1980.
5. I have no direct, indirect or contingent interest in the property described herein or in the securities of NU-LADY GOLD MINES LTD. nor do I expect to receive any.



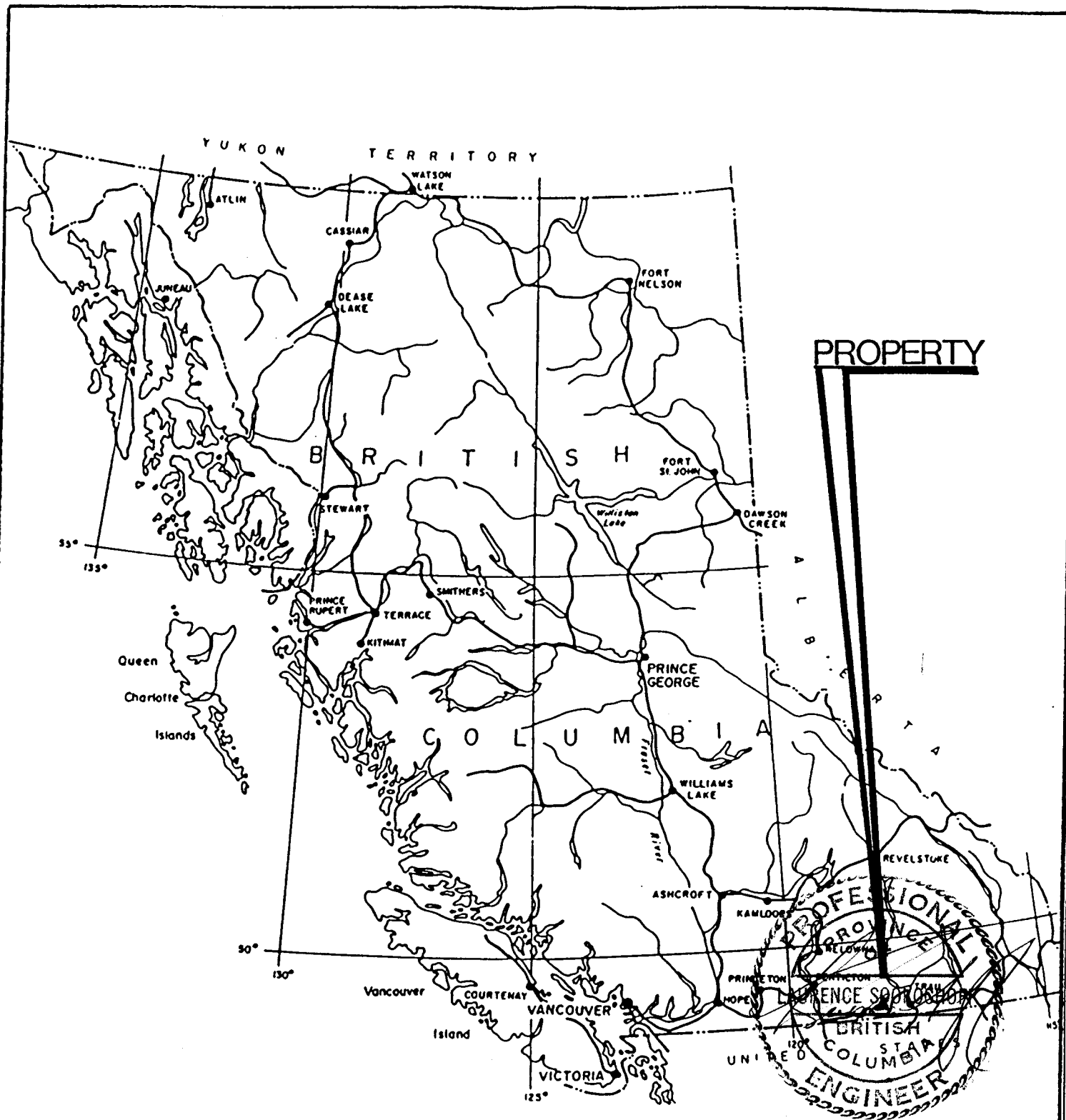
Laurence Sookochoff, P.Eng.
Consulting Geologist

March 26, 1984
Vancouver, B.C.

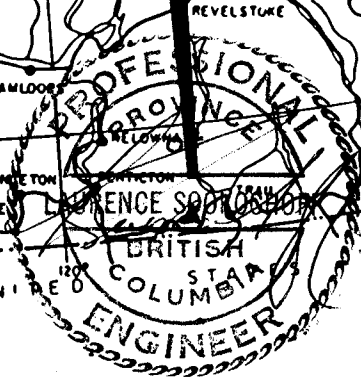
STATEMENT OF COSTS

The 1984 diamond drilling program (84-1 to 84-4) on the Pathfinder Group, Greenwood M.D. was carried out from January 26, 1984 to March 26, 1984 to the value as follows:

Diamond Drilling - Bergeron Drilling - B Q core size - 640 feet @\$25	\$16,000
<u>Support Costs</u>	
Snow clearing & cat stand by	950
Supervision - G. Nakade January 24 - February 7, 1984 15 days @\$135	2,025
Truck rental - 4x4 - 15 days \$ \$50	750
Gas	45
Accommodation & meals	275
L. Sookochoff 4 days \$ \$400 January 26-27, 1984 January 30-February 1, 1984	1,600
Expenses - P.W.A., car rental, accommodation	822
Assays	228
Compilation of data	365
Drafting	620
Printing, xerox typing	320
Report	<u>1,500</u>
	\$25,500
	=====



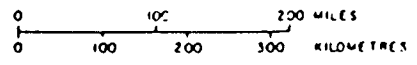
PROPERTY



SOOKOCHOFF CONSULTANTS INC.

NU-LADY GOLD MINES LTD.

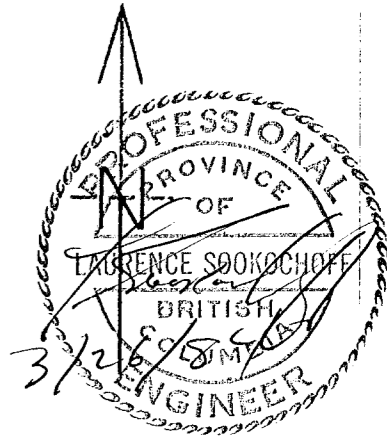
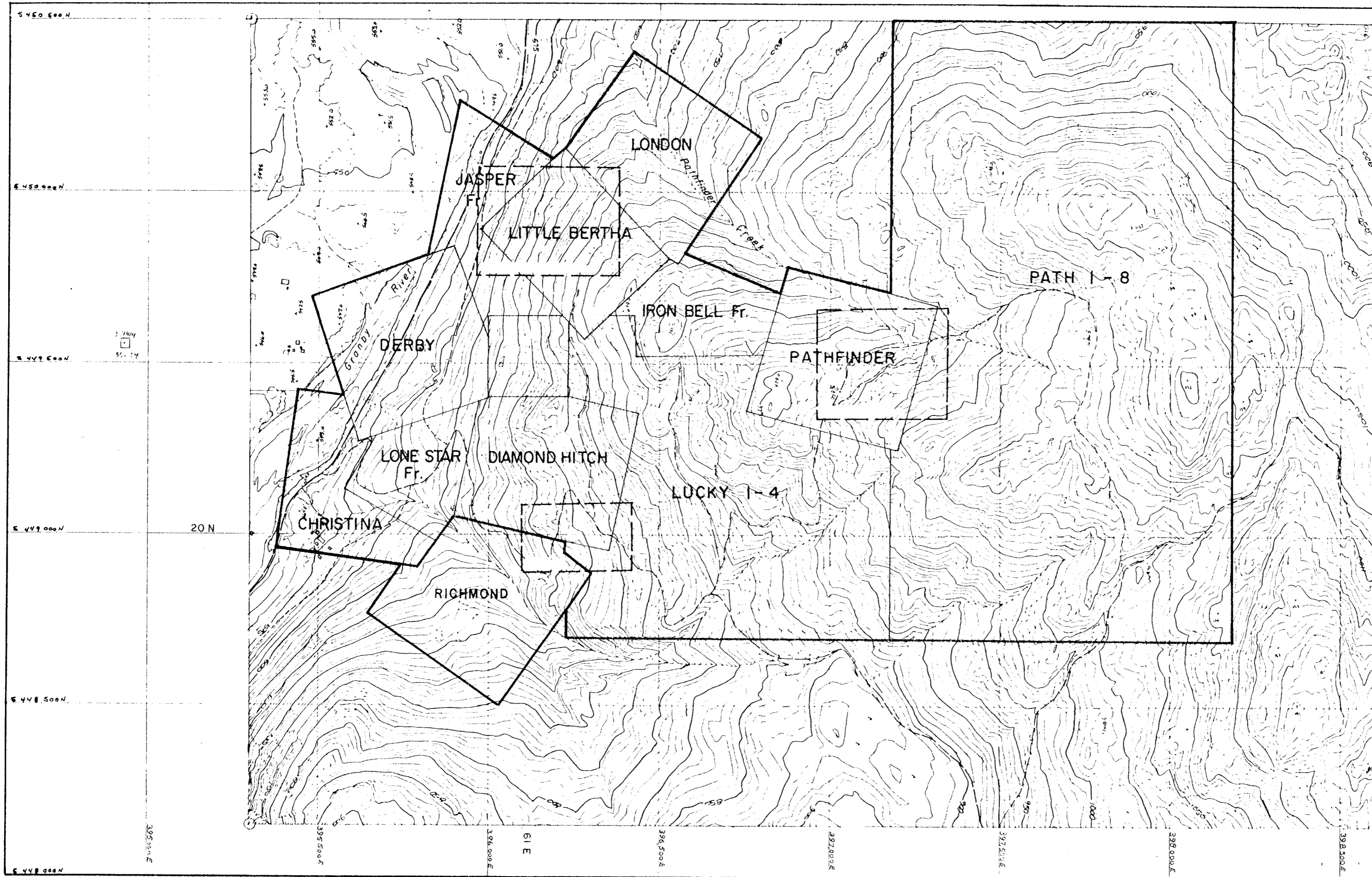
PATHFINDER PROPERTY
PROPERTY LOCATION MAP



N T S 82E/1W,

Greenwood M D

DRAWN	PROJECT	DATE	FIG.
		March 1984	1



After Dolmage, Campbell & Associates Ltd. Dec. 1980



12123

NU LADY GOLD MINES LTD. VANCOUVER, CANADA		
PATHFINDER PROPERTY		
INDEX AND CLAIM MAP*		
SCALE 1:10,000	March 1984	FIG. 2

CLAIM NO. Diamond Hitch**DIAMOND DRILL RECORD**PROPERTY PathfinderHOLE NO. 84-1LATITUDE ELEVATION BEARING 270° DEPTH 162' (49.4m) STARTED Jan. 26/84 COMPLETED Jan. 28DEPARTURE SECTION 20.15 N DIP -55 DRILLED BY Bergeron Drilling LOGGED BY L. Sookochoff, P. Eng.

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						Cu	Ag	Au
0-6	CASING							
6-40	SYENITE - Lt. gray, m.g. top cont @ 010° loc lim on fr planes lower cont. @ 40 lt to med Kaol'n 18' 1.0' zone reddish skarn zone contact irregular @ 010-045° 32' heavily carbonated w/ > sulph. to 34' 34' massive gray to blackish silicious unit @ 045° w/ carb stringres							
40-45	Diorite - Gray coarse grained							
45-162	Dacitic Tuff - Lt gray, variably silicified w/ lt diss py. random cal. stringers, loc. heavy f. diss py. to mil, variable chlorite 80' 1.2' reddish skarn zone cont @ 070° w/ occ cal str. ll to cont. 93-94. mod py on fr & calcite 96 fg, lt. pinkish heavily carbonated 116 "dykes" of cg. dioritic @ 85° 134-136.5 c.g. dioritic @ 65° 146 patches py. 151-152 pyrite zone-locally massive 60% carb 150 + >pyrite 162 END OF HOLE							
		84908	93	94	1.0'	.01	.01	.001
		84909	136.5	138.5	3.0	.02	.03	.028

CLAIM NO. RICHMOND**DIAMOND DRILL RECORD**PROPERTY PathfinderHOLE NO. 84-2LATITUDE ELEVATION BEARING 295° (50.6°) DEPTH 166 STARTED 01/28/84 COMPLETED 01/30/84DEPARTURE SECTION 18.85 N DIP -45° DRILLED BY Bergeron Drilling LOGGED BY L. Sookochoff, P.Eng.

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						Cu	Ag	Au
0-14	Casing							
14-64	DACITIC TUFF W DIORITE SECTIONS. DACITIC TUFF-F.g. silicified w/fine diss py DIORITE - 41-47, 51-64 coarse grained cont @ 30° + v.l. of calcite + f. diss py							
64-141	DACITIC TUFF: lt gray w/f. disspy. + lt. occ. to rare dioritic sections. Cont. @35°, @90' more chloritic-andesitic w/cal on fr + str @ 85 to 90° to c/a.	84906	121	123	2.0'	.13	.04	.013
82-83	broken to mylonitic-slickensides - mod py.							
129-130	dioritic texture. - cont @ 50° lt to mod diss py	84907	127	129	2.0	.06	.03	.010
127-128	pyritic, calcitic, broken							
128,5	heavy py @ 35° - carbonated							
129-131	broken core loss 30%							
134-137	broken core loss							
41-146	Dacite - dark gray aphanitic w/cal vl @ 70° lt. diss py							
146-165	DACITIC TUFF sil'd gray lt. diss py	84910	151	152	1.0	.01	.01	.003
153 - 1"	massive sulphide @20° lt to mod cal str @40°	84905	153.2	154.5	1.2	.04	.03	.008
165-166	DACITIC TUFF - Pinkish to gray to greenish gray -aph							
166	END OF HOLE							

CLAIM NO. RICHMOND

DIAMOND DRILL RECORD

PROPERTY Pathfinder

HOLE NO. 84-3

LATITUDE

ELEVATION

BEARING

323°

DEPTH

156 (47.5m)

STARTED

01/31/84

COMPLETED

02/01/84

DEPARTURE

SECTION

18.85N

DIP

-50°

DRILLED BY

Bergeron Drilling

LOGGED BY

L. Sookochoff, P.Eng.

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						Cu	Ag	Au
0-23	CASING					ppm	ppm	ppb
23-156	Meta-andesite - greenish gray, mod to lt py. diss + on fr @ 070°, 010° porph texture, rand. v.l. cal. locally brec'd mod. ep. patches; rounded frags of diorite up to 1.5 cm 61- carb str @ 010° - to 66 - heavilly carb'd - str. + fr diss py 74 - frags of meta andesite healed w; syenite 76 locally syenitic @ 035° 81-86 heavy carbonate 126 local section syeno-diorite py diss + v.l + blebs also po. 139-140 local soft diorite, lt. py, cont @ 80° 140-142 diorite 151-152 prolific cal str. 156 END OF HOLE							
		3-66					.3	40
		3-82					.1	35
		3-151					.2	40
		3-47				29	.1	60
						Cu %	Ag oz/ton	Au oz/ton
		84916	126	128.5	2.5	.07	.01	.011
		84917	128.5	131.5	3.0	.07	.02	.013
		84918	133.5	137.0	3.5	.16	.06	.020

CLAIM NO. RICHMOND

DIAMOND DRILL RECORD

PROPERTY Pathfinder

HOLE NO. 84-4

LATITUDE

ELEVATION

BEARING 087°

DEPTH 156 (47.5m) STARTED 02/04/84

COMPLETED 02/06/84

DEPARTURE

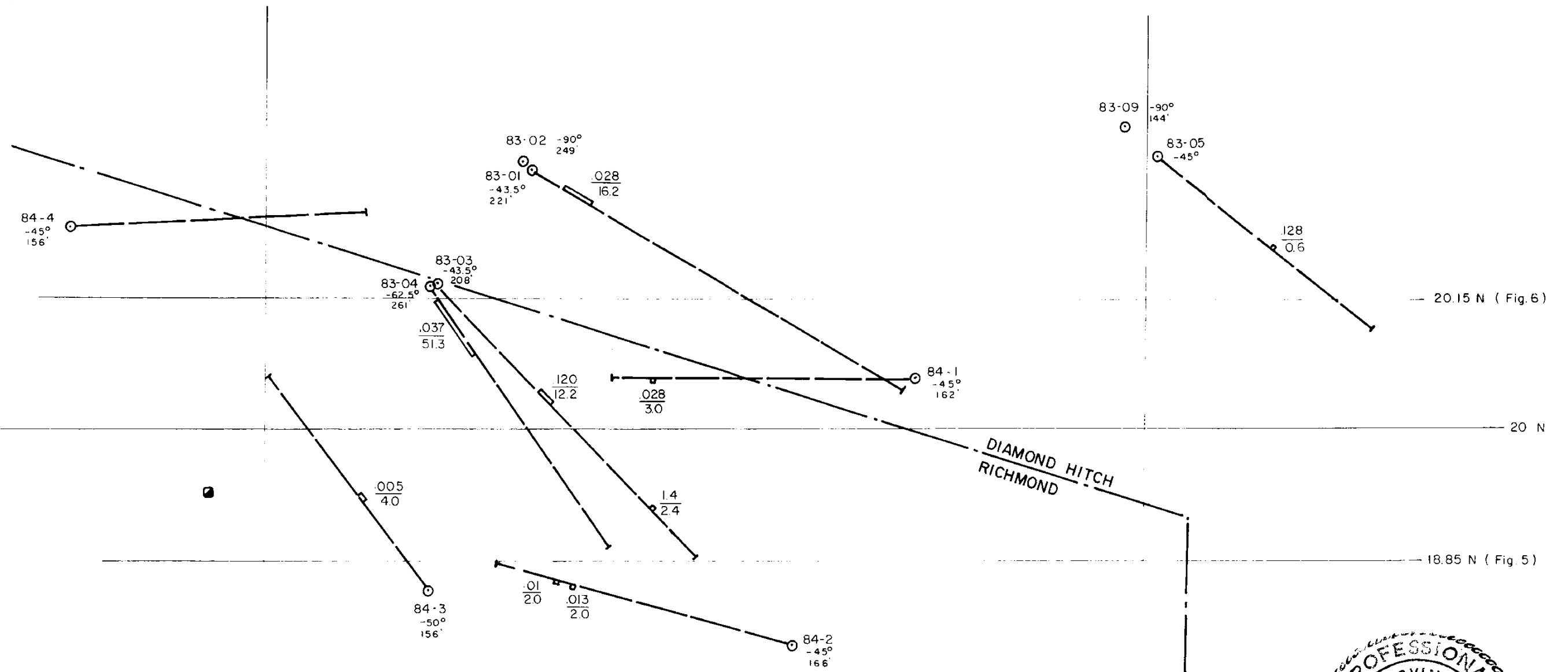
SECTION 20.25N

DIP -45°

DRILLED BY Bergeron Drilling

LOGGED BY L. Sookochoff, P.Eng.

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						Cu %	Ag oz/ton	Au oz/ton
0-14	Diorite - Gray - M to f.g,							
14-53	Andesite - greenish gray, aphanitic chloritic, silicified w/diss py + locally brec'd							
	30-53 rhyolitic cont. @ 30° diss	84915	46	50	4.0'	.01	.01	.001
	py w/hem. variable brec'n w/ 1" frags. cemented w/ c.g					Cu	Ag	Au
	syenitic py on fr. @ 55° cal v.l 25-45° to c/a	4-21				-	.1	5
	53 breccia cont w/ diorite	4-31					.1	5
53-125	Diorite - Gray m to f.g. with intervals	4-41				-	.1	25
	of meta andesite + diss py.	4-86				-	.1	5
	62-76 dior + m.a w/blebs py + po	4-136				-	.1	15
	76-103 coarse grained - pinkish, fr @ 45°							
	106-112 diorite w/occ frag m.a.							
125-156	Andesite - meta contact @25°					Cu	Ag	Au
	128-134 >chlorite brec'd	8914	151	156	5.0'	-	.01	.001
	to 141 dior + brec frags							
	<1.5", mod py + carb stringers							
	136-146 <siliceous brc'n							
	>carb. @40°							
	156 END OF HOLE							



LEGEND

- DIAMOND DRILL HOLE
- $\frac{0.028}{16.2}$ $\frac{\text{oz Au / ton}}{\text{Feet}}$



FIGURE 4 12123

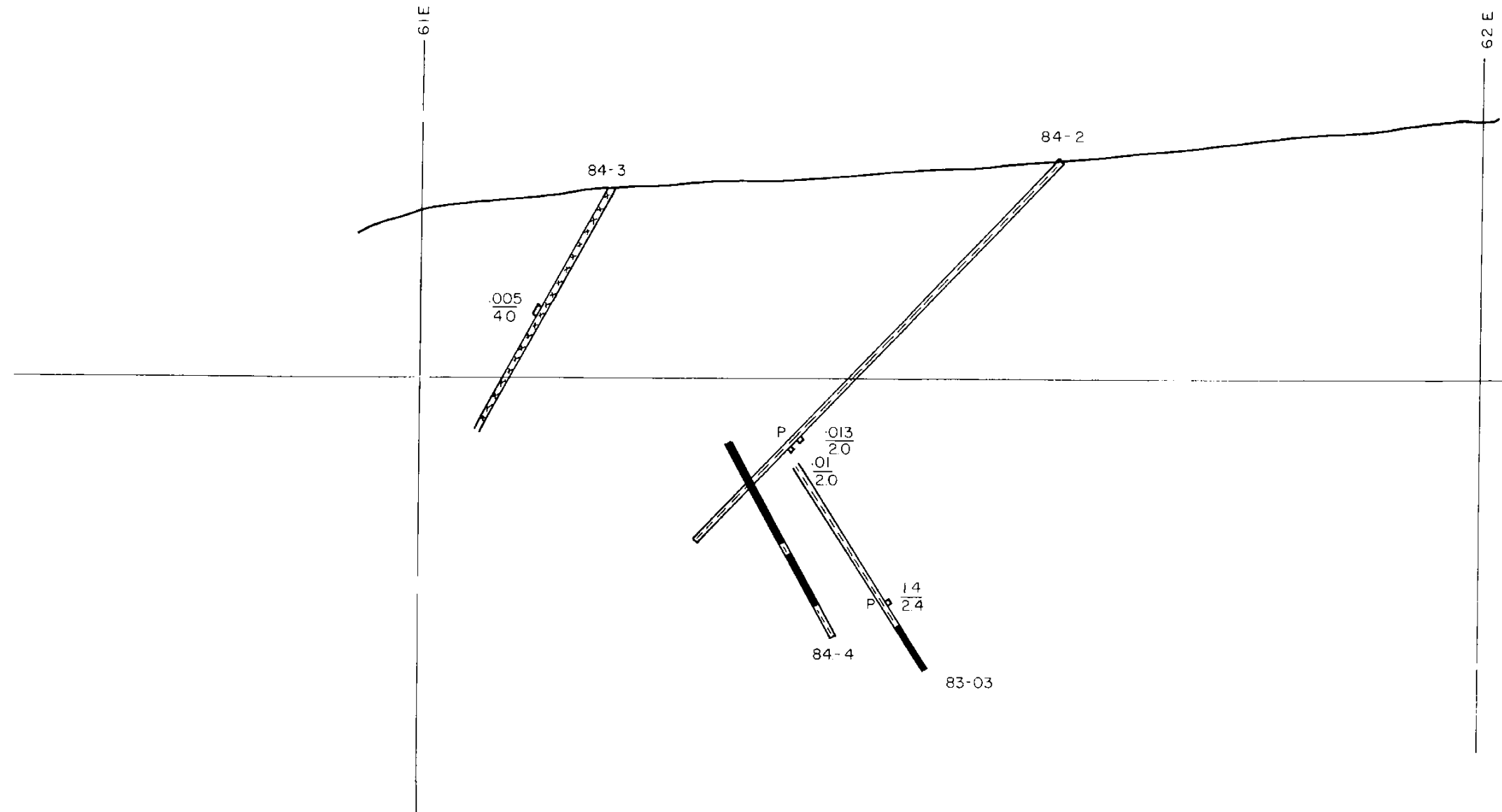
SOOKOCHOFF CONSULTANTS LTD.

NU-LADY GOLD MINES LTD.
PATHFINDER PROPERTY

DIAMOND DRILL HOLE LOCATIONS

0 5 10 20 Metres

SCALE 1:500 March 1984



LEGEND

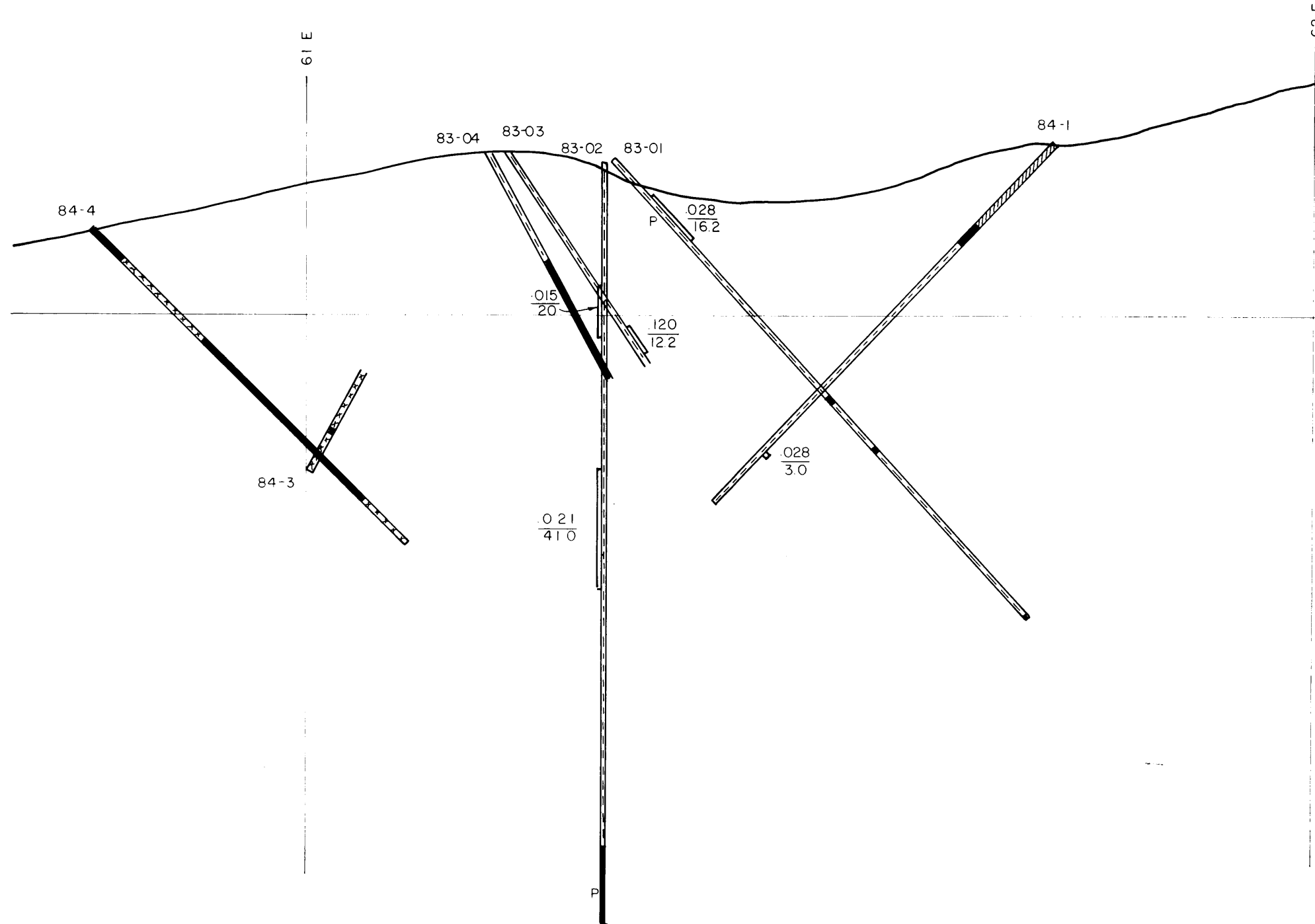
- | | |
|---------------------|-------------------|
| $\frac{.028}{16.2}$ | oz Au/ton
Feet |
| P | Pyrite |
| | Syenite |
| | Diorite |
| | Dacitic Tuff |
| | Andesite |



FIGURE 5

SOOKOCHOFF CONSULTANTS LTD.
 NU-LADY GOLD MINES LTD.
 PATHFINDER PROPERTY
SECTION 18.85 N

0 5 10 20 Metres
 SCALE 1:500 March 1984



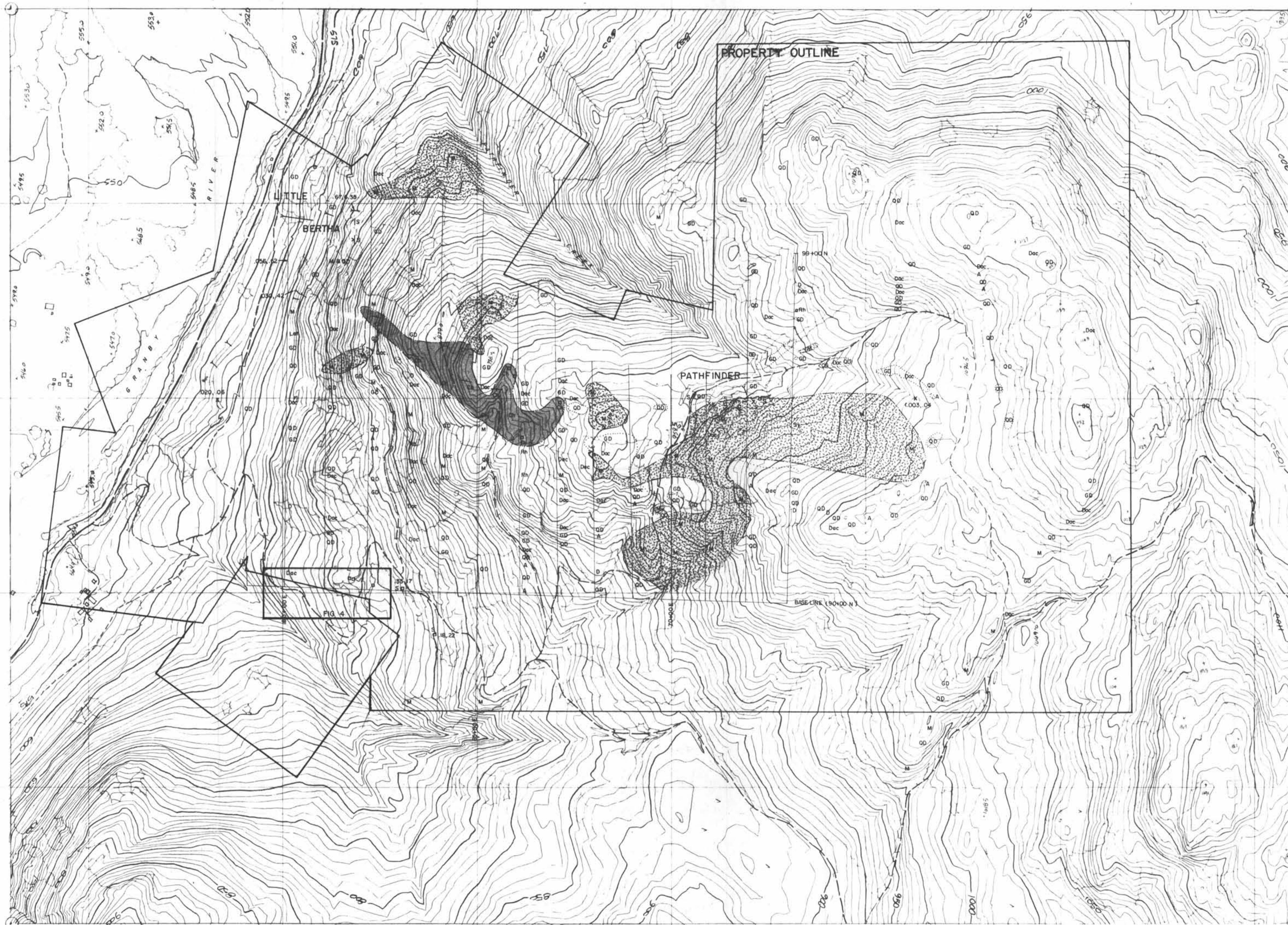
LEGEND

- | | |
|---------------------|-------------------|
| $\frac{.120}{12.2}$ | oz Au/ton
Feet |
| P | Pyrite |
| | Syenite |
| | Diorite |
| | Dacitic Tuff |
| | Andesite |



FIGURE 6
 SOOKOCHOFF CONSULTANTS LTD.
 NU-LADY GOLD MINES LTD.
 PATHFINDER PROPERTY
SECTION 20.15 N

0 5 10 20Metres
 SCALE 1:500 March 1984



LEGEND

- GEOLOGICAL CONTACT
- OUTCROP BOUNDARY
- TRENCH
- ADIT
- PIT OR SHAFT
- X MINERALIZATION
- .33, .17 Au (oz/ton), Ag (oz/ton)
- S SULPHIDES
- UNIT 1: Ch CHERT
- UNIT 2: Gd GRANODIORITE
- Qd QUARTZ DIORITE
- D DIORITE
- Dac DACITE
- A ALASKITE
- Rn RHYODACITE
- UNIT 3: M MONZONITE
- Lat LATITE
- Sy SYENITE



After Dolmage Campbell & Associates Ltd, Oct, 1980

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,123

Map based on limited ground control results. Accuracy not guaranteed. Computed from aerial photography of an approximate scale of 1:50,000.



Nu LADY GOLD MINES LTD.		
PATHFINDER PROPERTY		
PROPERTY GEOLOGY		
Scale 1:5000	March 1984	Figure 3