

180-#213-#8627

REPORT

- on the -

DIAMOND DRILLING

at the

CAPTAIN LAKE PROPERTY

LIARD M.D. NTS 104P/12E, 13E

59° 43' N

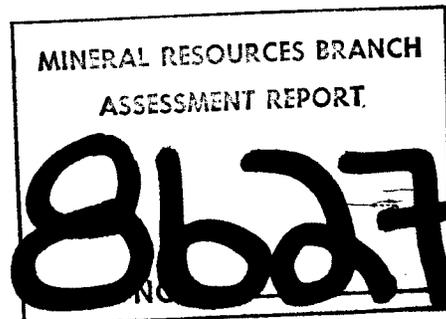
129° 40' W

by

D. J. Copeland.

1979

DONEGAL RESOURCES LTD.



TITLE PAGE, SUMMARY

This report covers the drilling of three diamond drill holes on the Captain Lake property of Donegal Resources Ltd. The object of the drilling was to explore the silicified breccia zone and the EM-16 anomaly.

The property consists of two claims, all in the Liard Mining Division, as follows:

Pip 1. 6 units, Record No. 72

Pip 2. 12 units, Record No. 73

The property has NTS^{104P/12E & 104P/13E} location while the approximate geographic center of the claims is 59° 43' North and 129° 40' West.

The owner and operator of the claims is Donegal Resources Ltd.

A consultant geologist, Mr. R. Hrkac, was employed to supervise the daily field activities while Mr. D. Copeland, President and Company Geologist, managed the program.

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MAPS IN POCKET:	
Area Map with Drill Hole Plots	
Geology of Trenches	
Geology of Drill Holes	

MAP SHEET M104P/12E
SCALE: 1:250 000
NATIONAL TOPOGRAPHIC SERIES



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8888
NO

CAPTAIN LAKE
PROPERTY

PROVENCENCO

YUKON TERRITORY

BLUE

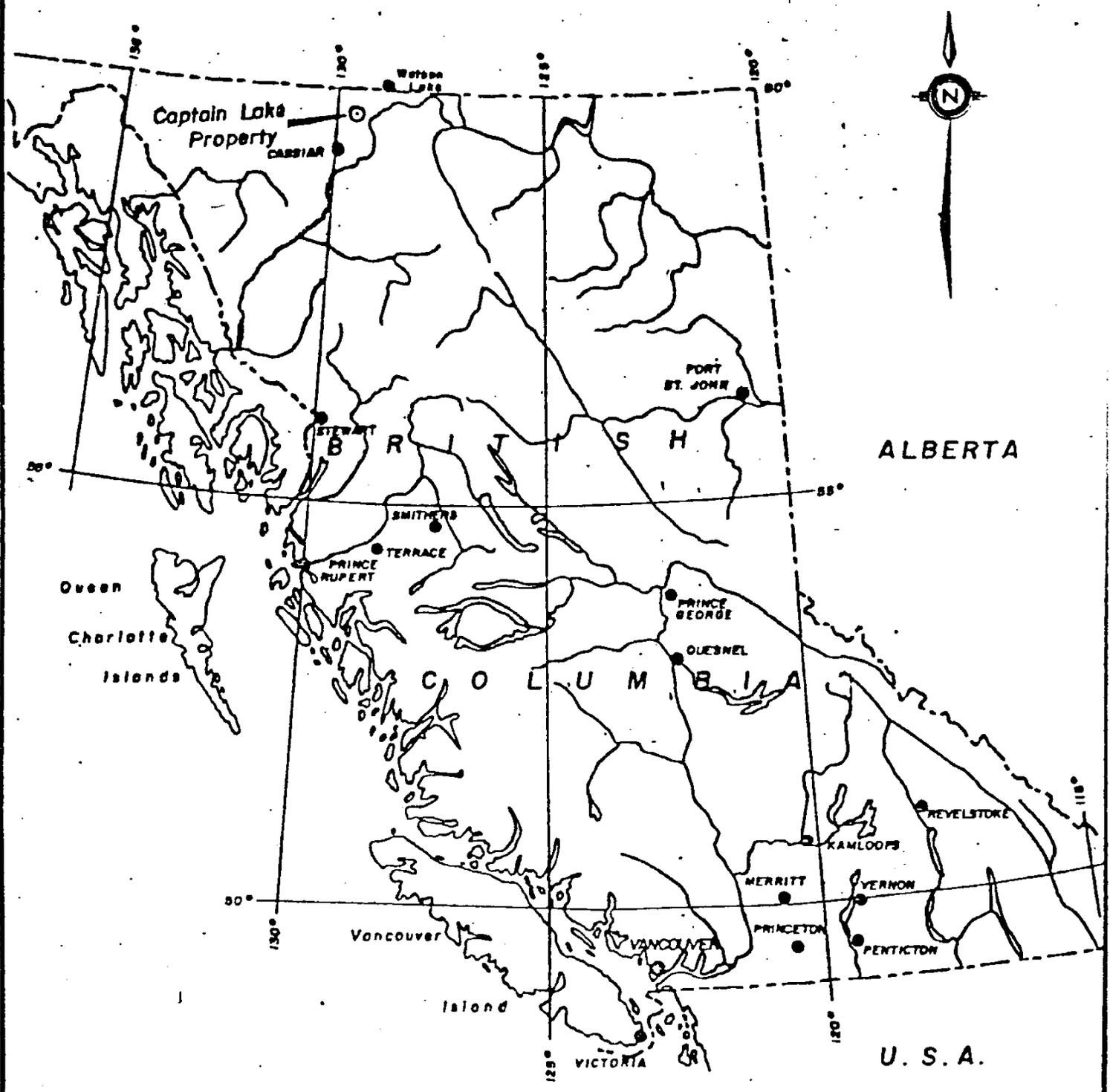
BLUE

EVER

Little Lake

Long Lake

Small Lake



Captain Lake Property

DONEGAL RESOURCES LTD.	
LOCATION MAP	
CAPTAIN LAKE PROPERTY	
LIARD MINING DIVISION, B.C.	
Technical Work by: Kerr, Dawson & Assoc. Ltd.	Date : Nov. 1978.
Scale : 1cm = 87km.	Dwg No. 188-1

To accompany a report by JM Dawson, P.Eng.

INTRODUCTION

General: P.1

The property is located on the south shore of Captain Lake, 110 kms southwest of Watson Lake, Y.T. Access is most convenient by float plane, though a winter tractor road extends into the area from the Cassiar highway some 25 kms to the east. A good tractor road leads from Captain Lake to the showing.

Elevations range from 1020 m at Captain Lake to a maximum of 1180 m above sea level. Most of the property is forested with open lodgepole pine but the area in the immediate vicinity of the showing is covered with stunted spruce and alpine fir.

CLAIMS

The property consists of two claims, all in the Liard Mining Division, as follows:

Pip 1. 6 units, Record No. 72
Pip 2. 12 units, Record No. 73

HISTORY AND PREVIOUS WORK

Mineralization was discovered, probably by prospecting and more than 50 years ago, as hand pits, etc., dating back at least that far were seen. The prospect was acquired by Rackla River Mines in 1968 and they bulldozed a small grid and several trenches in 1969. No records of other work could be found. The claims lapsed, were staked by Exaton Resources in 1975 and optioned by Craigmont Mines Limited in 1976.

RECENT FIELD WORK

During the field season of 1976 Craigmont Mines carried out a detailed program of geological mapping, prospecting, geochemical soil sampling, and magnetometer and electromagnetic surveys.

EXPLORATION TARGET

A consulting engineer, J. M. Dawson, was retained in late 1978 by Donegal Resources to review the material and assist in the planning of an exploration campaign. It was decided that a heavily silicified breccia zone containing disseminated chalcopyrite should be delineated further. The mineralized zone appeared to be conformable within enclosing limestone and shale and has an exposed strike length of 125 meters while dipping to the southwest.

The property is underlain by shale, shaly limestone, limestone and sandstone of the Ketchika and Atan groups (G.S.C. Map 1110A, McDame, Price & Gabrielse, 1963). These strike northwesterly and dip southwesterly at low to moderate angles.

DRILL DATA

Three drill holes were laid out, as shown on drawing number 1979A. Holes one and two, (#1 and #2) were to test the down dip extension of the surface mineralization. Hole three, (#3) was to test the EM-16 anomaly.

Hole #1 location: Pip #2 M.C. bearing N30°E;
dip - 70°; core size BQ Collar; North 1004.5
East 10123.0.

Holes #2 location: Pip #2 M.C. azimuth 030,
dip - 60°; core size BQ Collar; North 9990
East 10172.

Hole #2A location: Pip #2 M.C. azimuth 055°
dip - 60°; core size BQ Collar; North 9990
East 10172.

Hole #3 location: Pip #1 M.C. azimuth 032°
dip - 53.5°; core size BQ; Collar; North 10118,
East 10515.

DRILLING RESULTS

Drill holes #1, #2 and #2A encountered a large fault striking N45W and dipping to the NE at 50 degrees or less.

Core recovery was very poor (see drill logs) and the three holes were lost.

Hole #3 also intersected the fault zone and was unable to penetrate the zone. However, pyrite and possibly chalcopyrite were seen in the core; the pyrite being the probable source of the EM-16 anomaly.

The geology of the holes is plotted on the drill hole profiles (see diagrams 1979 B.C.).

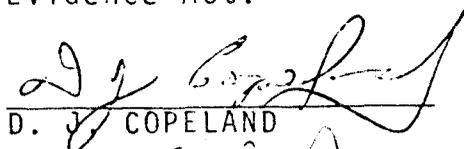
CONCLUSIONS

To determine if mineralization continues below the fault, a number of drill holes should be collared southwest of the present holes. These holes should be drilled vertically.

AFFIDAVIT OF EXPENDITURES

Drafting	\$	40.00
Airfare		400.00
Consulting by R.H. Kac		
)		2,645.30
Travel Expenses R.H. Kac		
Helicopter Expenses (Frontier)		15,197.40
Fuel Supplies (Whitepass)		935.36
Diamond Drilling (Amity)		29,804.05
Assays		<u>53.85</u>
Total:		<u>\$48,675.96</u>

I, D. J. COPELAND, of the City of Vancouver, in the Province of British Columbia, make the above declaration, conscientiously believing it to be true and knowing it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.


D. J. COPELAND

DECLARED BEFORE ME at the City of Vancouver, in the Province of British Columbia this 9 day of February, 1980, A.D.


A Commissioner for taking affidavits for British Columbia.

APPENDIX I.

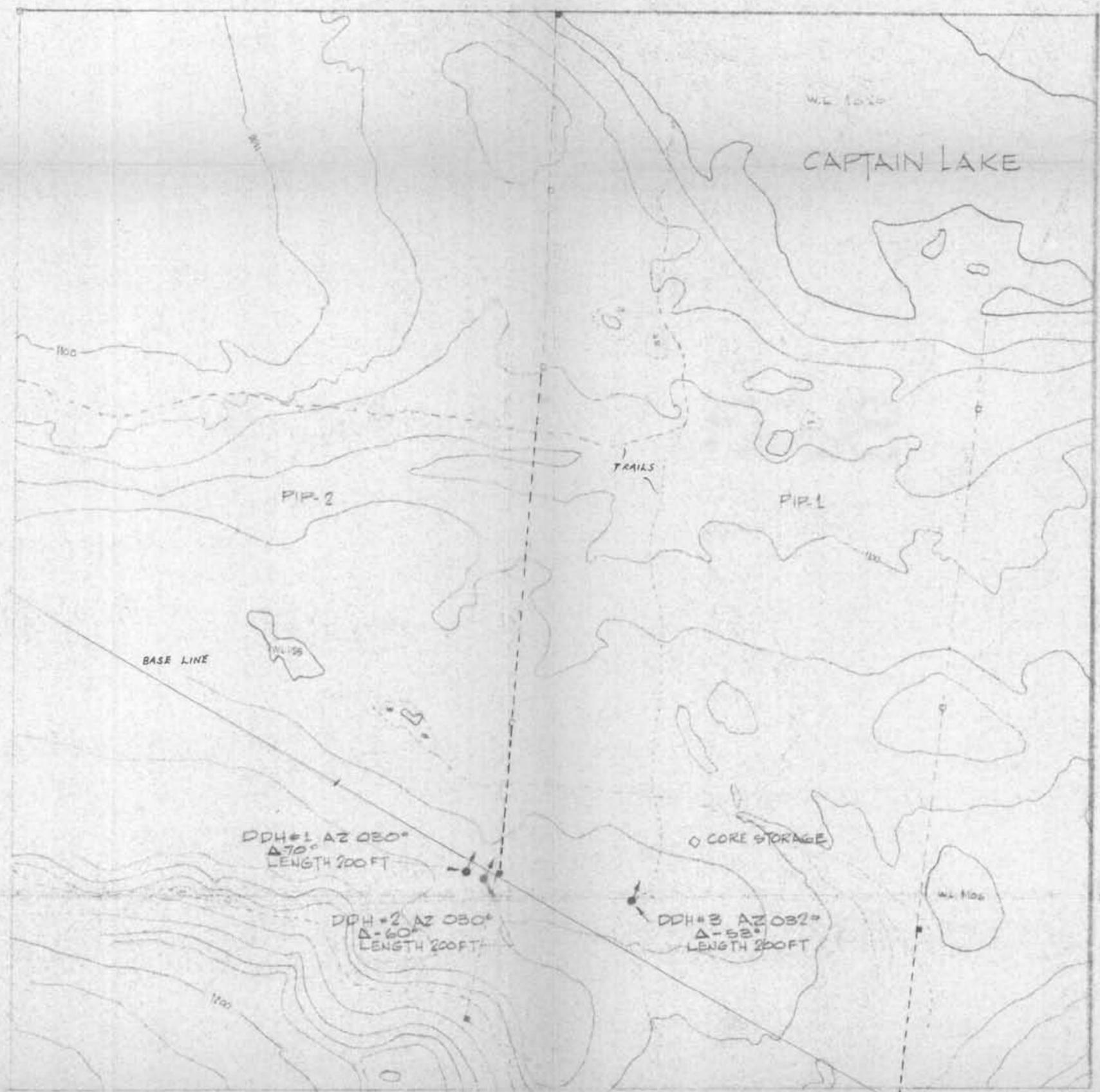
STATEMENT OF QUALIFICATIONS

Ray A. Hrkac
867 Thermal Drive
Coquitlam, B.C.

- In 1960 I completed all the requirements in a majors program in Geology and Economics, except a second year language, at the University of British Columbia.
- I have worked as a geologist continuously since 1960, and in mineral exploration since 1955.
- I have been working as a self employed geologist since 1972.

R.A.Hrkac

April 1981

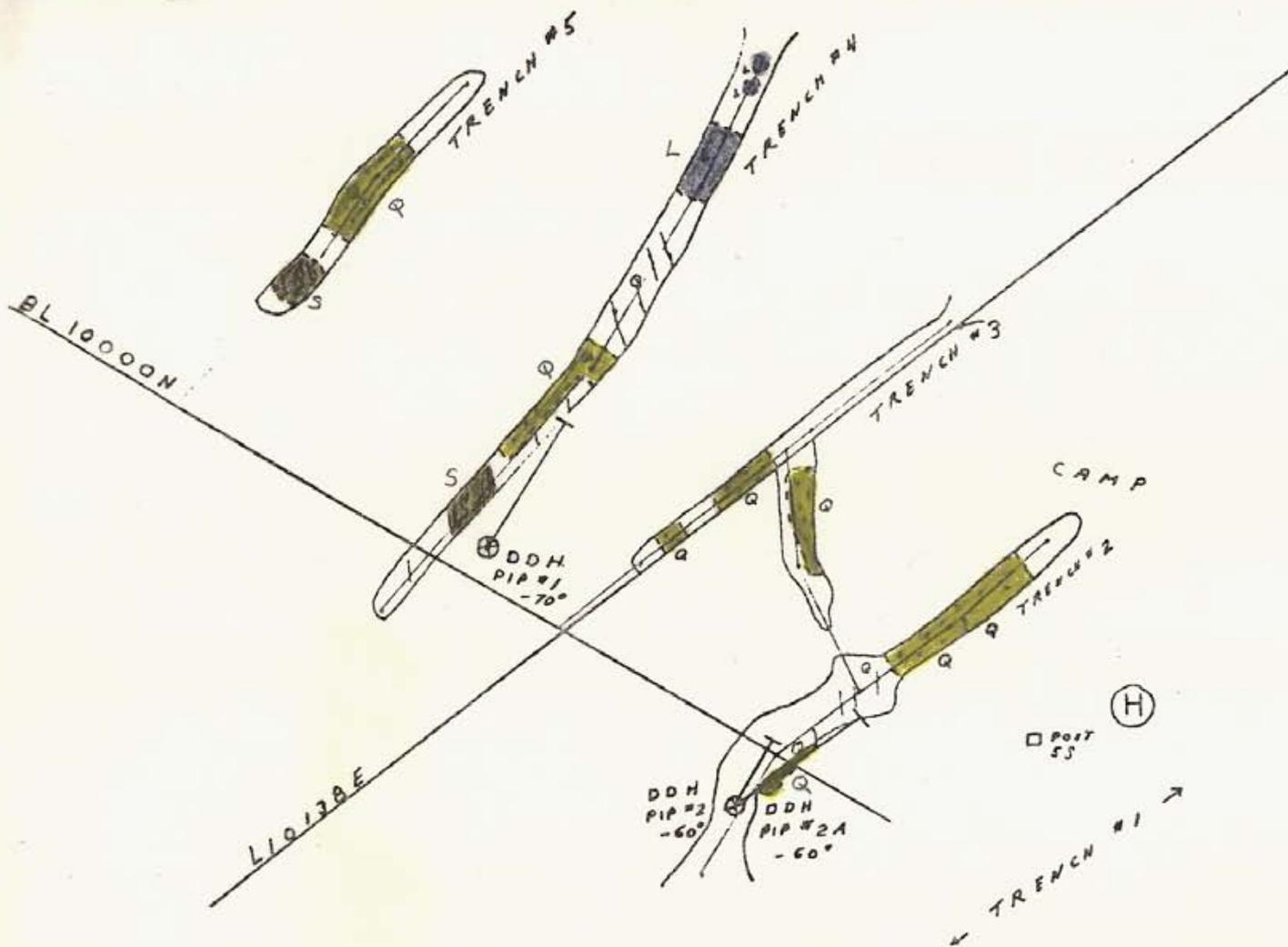


MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8627
NO.

LEGEND

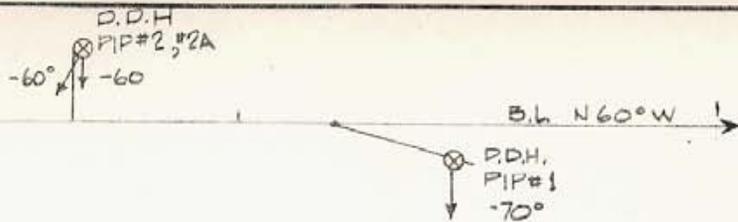
- 1. DIAMOND DRILL HOLE LOCATION AND HOLE DIRECTION
- 2. AZIMUTH OF DRILL HOLE AZ 032°
- 3. ANGLE OF HOLE FROM VERTICLE -53°
- 4. CONTOUR INTERVAL IN FEET
- 5. WATER ELEVATION W.L. 1106
- 6. CLAIM BOUNDARIES LOCATED BY TAPE AND COMPASS
- 7. CLAIM POST KNOWN ASSUMED
- 8. CLAIM BOUNDARY - - - -

DONEGAL RESOURCES LTD.		
scale 1: 5000 ^{50M}	approved	drawn by
date SEPT 1979	D. J. COPBLAND P. ENG.	revised
LOCATION OF DIAMOND DRILL HOLES ON PIP N°1 & PIP N°2 CLAIMS		
		drawing no.



- S SHALE
- Q SILICIFIED ZONE MINERALIZED
- L LIMESTONE
- BEDROCK?

DONEGAL RESOURCES LTD. PIP No. 2 M.C. 104P/12E & 13E		
SCALE: 1cm = 10m	APPROVED BY:	DRAWN BY RAH
DATE: Sept. 1979		REVISED
GEOLOGY of TRENCHES & LOCATION of D.D.H. 1-2 & 2A		
		DRAWING NUMBER

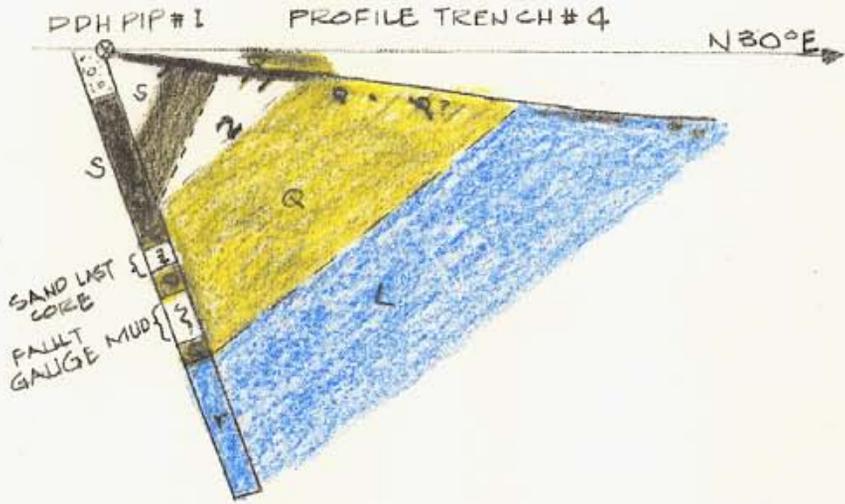


PLAN PROFILE

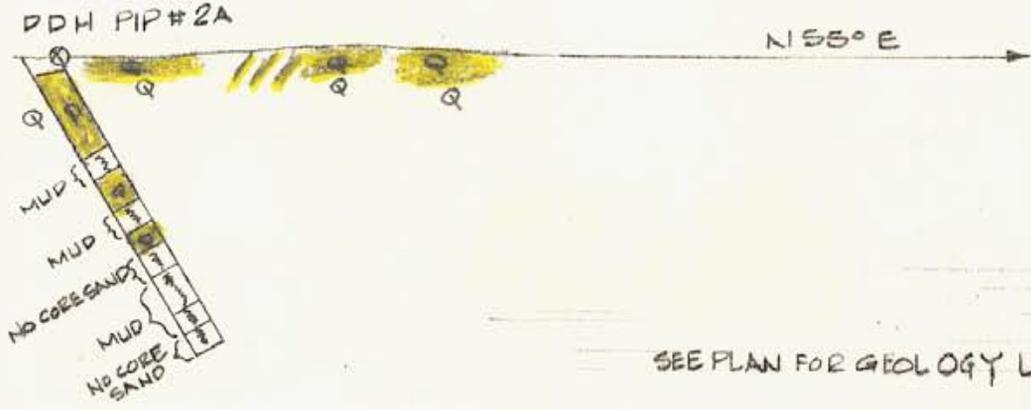
COLLARS OF DDH PIP#2 & #2A ARE 2.9 METERS OR 9.5 FEET BELOW COLLAR OF PIP#1

PIP#2, #2A
ELEV ⊗
-2.9M

PIP#1
⊗ ELEV OM.



PROFILE TRENCH#2



SEE PLAN FOR GEOLOGY LEGEND

DONEGAL RESOURCES LTD.
PIP No 2 M.C. 104P/12E & 13E

approved by:

scale 1CM= 10M

date APRIL 1981

drawn by V. REED

revised

PIP CLAIMS DRILL HOLE SECTIONS

drawing no.

DIAMOND DRILL RECORD

COLLAR:—

NORTH _____
 EAST _____
 ELEVATION _____
 DIP _____
 LOCATION _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

PROPERTY _____

CORE SIZE _____
 COMMENCED _____
 FINISHED _____
 PURPOSE OF HOLE _____

HOLE NO. PIP #1
 SHEET NO. 3
 LENGTH _____
 LOGGED BY _____

METRES

METRES		DESCRIPTION	ALTERATION				% SULPHIDES				CORE SAMPLE			ASSAYS				
FROM	TO		C	E	Q	CA	T	Py	Cu	MoS ₂	NUMBER	FOOTAGE			OZ/TON Au	OZ/TON AG.	% CU.	MoS ₂
												FROM	TO	TOTAL				
40.23	45.72	Broken core, mainly pale blue-grey and white mottled lst, with gossaned sections and irregular calcite veinlets																
45.72	53.94	Med. Blue lst, some breccia-like with white calcite, some with salt and pepper sandstone texture 7.5 cm mud at 45.72m, gossaned sections 46.32 - 47.85m; 15cm black lst. at 51.2 and 51.81m																
53.94	55.47	Pale grey, gossaned, vuggy, lst. breccia																
55.47	59.13	Med. dark blue, mottled with light blue grey lst. Some white calcite as blebs and veinlets Note 60° banding at 55.47m Some fine disc. chalcopryite																
59.13	61.26	Mainly white calcite with short blue lst. sections																
		END					CORE RECOVERY				56.4%							

DIAMOND DRILL RECORD

COLLAR:—

NORTH _____
 EAST _____
 ELEVATION _____
 DIP _____
 LOCATION _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

PROPERTY _____

CORE SIZE _____
 COMMENCED _____
 FINISHED _____
 PURPOSE OF HOLE _____

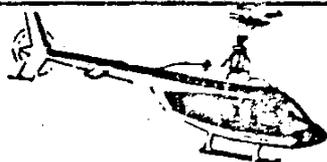
HOLE NO. PIP #2A
 SHEET NO. 2
 LENGTH _____
 LOGGED BY _____

METRES

FOOTAGE		DESCRIPTION	ALTERATION				% SULPHIDES				CORE SAMPLE			ASSAYS								
FROM	TO		C	E	Q	Ca	T	Py	Cu	MoS ₂	NUMBER	FOOTAGE		OZ/TON Au	OZ/TON Ag	% Cu	MoS ₂					
												FROM	TO								TOTAL	
15.24	15.84	Dark brown to black, mud-soft, with hard fragments as at 5.18m																				
15.84	16.50	As at 13.71 to 15.24																				
16.50	21.94	Dark blue silicified lst. with white quartz and some breccia, Core fragmented, several pieces from 2.5 cm to 15 cm																				
21.94	24.99	No core, milky white return																				
24.99	28.04	Dark to med blue siliceous lst. with white calcite veinlets.																				
28.04	31.08	No core, milky white return																				
31.08	37.18	As at 13.71 to 15.24																				
37.18	40.23	As at 13.71 to 15.24 but color is greenish brown, 15 cm of sil lst. at 40.23																				
40.23	43.28	No Core - Lost water - END																				
RECOVERY											21.33%											

APPENDIX II

FRONTIER HELICOPTERS LTD.



CHARTER FLYING

PHONE: 536-7766
BOX 10, WATSON LAKE B.C.

Donegal Resources Ltd
1075 West 50th Avenue,
VANCOUVER, B.C.
V6P 1A7

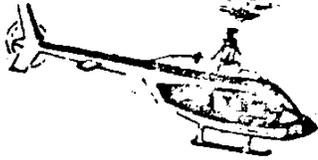
INVOICE No.: 858-79
INVOICE DATE: September 21, 1979
P.O. No.: _____

STAR PRINTING WHITEHORSE

DATE		DEBIT	CREDIT	BALANCE
TO COVER CHARTER FLYING SERVICES				
September 5	Charter Ticket No. 2854 -----	6,636.00		
September 6	Charter Ticket No. 2961 -----	744.00		
September 9	Charter Ticket No. 4356 -----	3,075.00		
September 10	Charter Ticket No. 2856 -----	225.00		
September 13	Charter Ticket No. 4381 -----	1,086.00		
	Sub-Total this invoice -----			11,766.00
August 25	Charter Ticket No. 4158 ----- (Previously billed)	446.40		
August 29	Your Cheque No. 0011605 -----		1,200.00	
September 14	Bank transfer to our account - -		10,000.00	
TOTAL THIS INVOICE -----				\$1,012.40

ACCOUNT DUE WHEN RENDERED
OVERDUE ACCOUNT SERVICE CHARGE AT RATE OF 2% PER MONTH
COMPOUNDED MONTHLY WILL BE CHARGED ON ALL ACCOUNTS
30 DAYS OR MORE IN ARREARS.

FRONTIER HELICOPTERS LTD.



CHARTER FLYING

PHONE: 536-7766
BOX 10, WATSON LAKE Y.T.

Donegal Resources Ltd
1075 West 50th Avenue,
VANCOUVER, B.C.
V6P 1A7

INVOICE No.: 930-79
INVOICE DATE: October 10, 1979
P.O. No.: _____

STAR PRINTING 7-41

DATE		DEBIT	CREDIT	BALANCE
	TO COVER CHARTER FLYING SERVICES			
September 16	Charter Ticket No. 4383 -----	3,960. 00		
		725		
		187		
	<i>Total 10,172.90</i>			
	TOTAL THIS INVOICE -----			\$3,960. 00

ACCOUNT DUE WHEN RENDERED
OVERDUE ACCOUNT SERVICE CHARGE AT RATE OF 2% PER MONTH
COMPOUNDED MONTHLY WILL BE CHARGED ON ALL ACCOUNTS
30 DAYS OR MORE IN ARREARS.

Amity Drilling Limited

Contract Diamond Drilling

10 - 12th Avenue,
Whitehorse, Yukon
Y1A 4J4

403-668 2595
Phone: 403 - 633-2834

Invoice #150

September 16, 1979

IN ACCOUNT WITH:

Donegal Resources Limited
1075 West 50th Avenue
Vancouver, B.C.

3049605

Drilling charges September 5 - 16, 1979. (Captain Lake Project)

Mobilization/Demobilization Charge:

Re: Clause 11 of Contract @ \$4,000.00 = \$ 4,000.00

Moving In (from Blue River bridge):

Labour:

92 man hrs. @ \$15.25 per hr. = \$ 1,403.00

Room/Board (Sept. 4/79 - due to helicopter not flying)

Room

4 men @ \$19.00 ea. = \$ 76.00
1 man @ \$33.00 ea. = 33.00 109.00

Board

5 men @ \$20.00 ea. = 100.00 1,612.00

Hole: 1x70°xBQ

Reaming Cave

2 man hrs. @ \$15.25 per hr. = \$ 30.50
1 machine hr. @ \$7.50 per hr. = 7.50 \$ 38.00

Mud Time

2 man hrs. @ \$15.25 per hr. = \$ 30.50
1 machine hrs. @ \$7.50 per hr. = 7.50 38.00

Casing

0-10=10 ft. @ \$31.60 (NW) per ft. = \$ 316.00
0-48=48 ft. @ \$30.60 (BW) per ft. = 1,468.80 1,784.80

Coring

18-201=183 ft. @ \$29.60 per ft. = 5,416.80 7,277.60

Hole: 2x60°xBQ

Moving

34 man hrs. @ \$15.25 per hr. = \$ 518.50

Reaming Cave

6 man hrs. @ \$15.25 per hr. = \$ 91.50
3 machine hrs. @ \$7.50 per hr. = 22.50 114.00

Amity Drilling Limited

Contract Diamond Drilling

10 - 12th Avenue,
Whitehorse, Yukon
Y1A 4J4

403-668 2595
Phone: 403 - 633-2834

Invoice #150 (Cont.)

Mud Time

8 man hrs. @ \$15.25 per hr. =	\$ 122.00	
4 machine hrs. @ \$7.50 per hr. =	<u>30.00</u>	\$ 152.00

Casing

0-12=12 ft. @ \$31.60 (NW) per ft. =	\$ 379.20	
0-34=34 ft. @ \$30.60 (BW) per ft. =	<u>1,040.40</u>	1,419.60

Coring

12-72=60 ft. @ \$29.60 per ft. =		<u>1,776.00</u>	\$ 3,980.10
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Hole: 2Ax60°xBQ:

Moving

8 man hrs. @ \$15.25 per hr. =		\$ 122.00	
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Mud Time

6 man hrs. @ \$15.25 per hr. =	\$ 91.50	
3 machine hrs. @ \$7.50 per hr. =	<u>22.50</u>	114.00

Casing

0-6=6 ft. @ \$31.60 (NW) per ft. =	\$ 189.60	
0-40=40 ft. @ \$30.60 (BW) per ft. =	<u>1,224.00</u>	1,413.60

Coring

6-142=136 ft. @ \$29.60 per ft. =		<u>4,025.60</u>	5,675.20
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Hole: 3x55°xBQ

Moving

58 man hrs. @ \$15.25 per hr. =		\$ 884.50	
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Reaming Cave

30 man hrs. @ \$15.25 per hr. =	\$ 457.50	
15 machine hrs. @ \$7.50 per hr. =	<u>112.50</u>	570.00

Casing

0-6=6 ft. @ \$31.60 (NW) per ft. =	\$ 189.60	
0-30=30 ft. @ \$30.60 (BW) per ft. =	<u>918.00</u>	1,107.60

Coring

30-176=146 ft. @ \$29.60 per ft. =		<u>4,321.60</u>	6,883.70
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Moving Out (to Blue River Bridge):

Labour

70 man hrs. @ \$15.25 per hr. =			1,067.50
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Amity Drilling Limited

10 - 12th Avenue,
Whitehorse, Yukon
Y1A 4J4

Contract Diamond Drilling

403-668
Phone: 403 - 633-

Invoice #150 (Cont.).

SUPPLIES CHARGEABLE:

27 only bags Quik gel @ \$8.50 ea. =	\$ 229.50	
16 only bags Quik trol @ \$8.90 ea. =	142.40	
2 only pails of Poly Drill @ \$141.00 ea. =	282.00	
21 only BQ core boxes @ \$5.45 ea. =	114.45	
5 only BQ lids. @ \$1.60 ea. =	8.00	\$ 7

BOARD CHARGE:

(one Company representative)
Sept. 5-15/79, 11 man days @ \$15.00 per man day = 1

SUPPLIES LEFT IN HOLE #1 (sand & cave):

1 only BQ bit #18623 @ \$485.84 ea. =	\$ 485.84	
1 only BQ shell #7U17255 @ \$290.25 ea. =	290.25	
1 only BQ 5' outer tube @ \$157.45 ea. =	157.45	
4 only BQ 10' rods @ \$74.30 ea. =	297.20	1,2

TOTAL INVOICE

\$32.6

(Total Footage = 591' BQ)

INVOICE 32,662.17
LESS 1st. PAYMENT -10,000.00
LESS SUPPLIES - 1230.74
LESS DISCOUNT - 1633.40
BALANCE \$ 19,804.05

Paid in full Oct. 9/79
J. Cooper

Dave Copeland
Donegal Resources Ltd.
1625 - 355 Burrard St. 688-3521
Vancouver B.C.

Ray Hrkac
949 Jarvis St.
Coquitlam, B.C.
V3J 4Z8
Sept. 19, 1979

INVOICE Re: Services and expenses, PIP Claims Diamond Drilling Project

Services: Ray Hrkac Sept. 4 to 16 inclusive, 12½ days @ \$200/day = \$2500.00

Expences:	Sept. 4,	Taxi Watson Lake airport to W.L.	Receipt	#1	8.00
		Sportsman Motel		" #2	27.00
		Meal		" #3	7.35
	Sept. 5,	Breakfast		" #4	4.05
		Lunch		" #5	5.25
		Belvedere Hotel		" #6	33.00
	Sept. 6,	Breakfast		" #7	3.25
		Lunch sandwich		" #8	2.55
	Sept.15,	Belvedere Hotel		" #9	33.00
		Meal		" #10	6.95
	Sept.16,	Breakfast		" #11	4.90
		Lunch		" #12	5.00
		Split fare to airport	No Receipt		4.00

Total Expences = \$144.30

Total Services plus expences \$2644.30
Less Advance 1000.00

Invoice Total \$1644.30

Ray Hrkac

DATE

PARTICULARS

AMOUNT

Aug. 28, 1979

Remitted by Donegal Resources

\$1,615.86*

No 00011668

WHITEPASS & YUKON FUEL & CAPTAIN LAKE PROJECT

PLEASE DETACH & RETAIN FOR YOUR RECORDS



1013-5-75



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8627
NO. _____

LEGEND

- 1- DIAMOND DRILL HOLE LOCATION AND HOLE DIRECTION DDH#3
- 2- AZIMUTH OF DRILL HOLE AZ 032°
- 3- ANGLE OF HOLE FROM VERTICLE -53°
- 4- CONTOUR INTERVAL IN FEET 100
- 5- WATER ELEVATION w.l. 1106
- 6- CLAIM BOUNDARIES LOCATED BY TAPE AND COMPASS
- 7. CLAIM POST KNOWN ASSUMED
- 8. CLAIM BOUNDARY - - - -

DONEGAL RESOURCES LTD.		
scale 1: 5000 ^{50M}	approved	drawn by
date SEPT 1979	D. J. COPELAND P. ENG.	revised
LOCATION OF DIAMOND DRILL HOLES ON PIP N°1 & PIP N°2 CLAIMS		
		drawing no.