



DIAMOND DRILLING ASSESSMENT REPORT

on

H AND PEAK MINERAL CLAIMS



61°37'N                      105 F 10                      132°48'W

NORANDA EXPLORATION COMPANY LIMITED

(No Personal Liability)

090701  
G. Macdonald

December 1980



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$ 14,800.00

*[Handwritten Signature]*

Resident Geologist or  
Resident Mining Engineer

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER  
Supervising Mining Recorder

*[Handwritten Signature]*  
Commissioner of Yukon Territory

DIAMOND DRILLING ASSESSMENT REPORT

OR

H AND PEAK MINERAL

102 Y 10

132 48 W

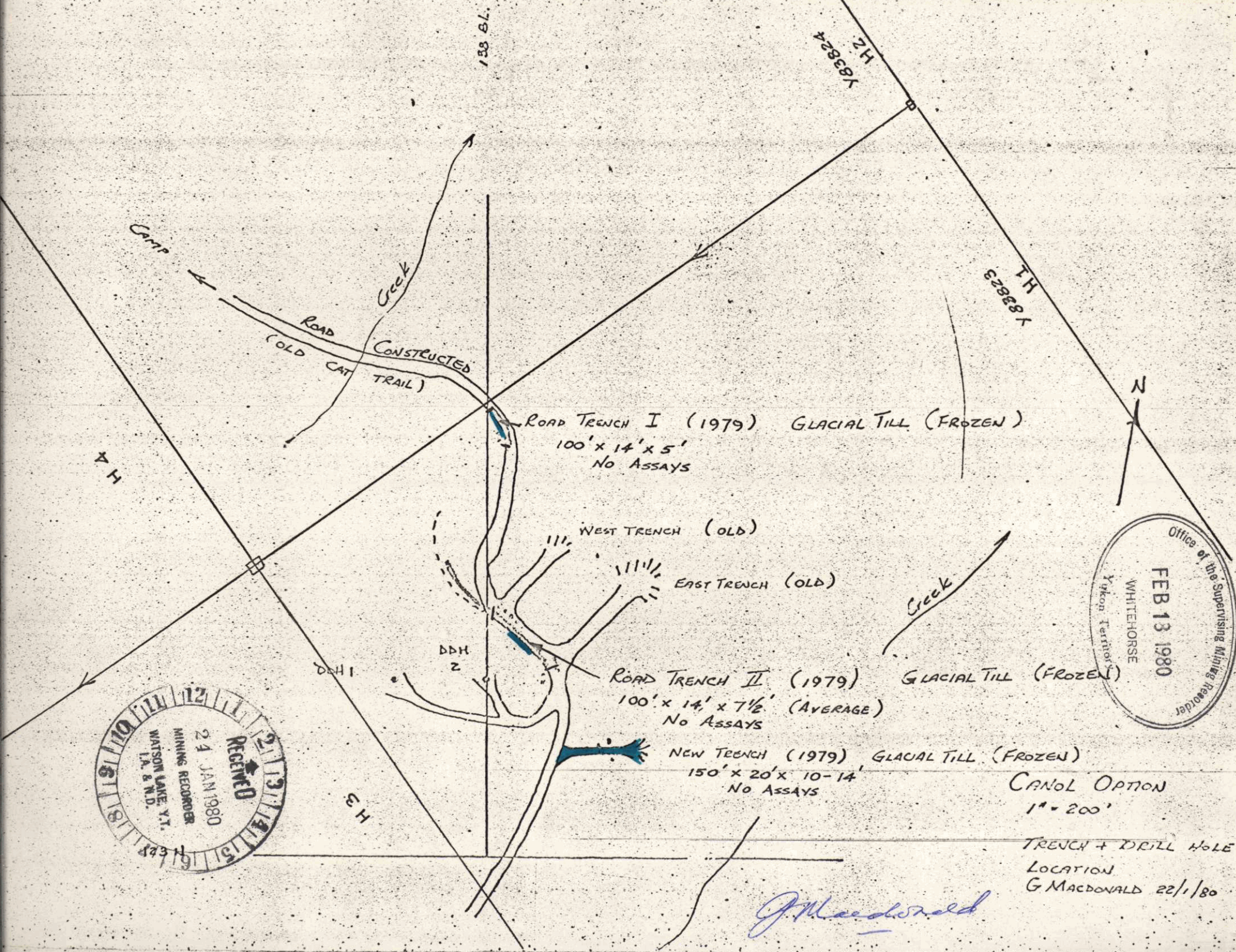
61 37 W

NORANDA EXPLORATION COMPANY LIMITED

(No Personal Liability)

December 1980

040701  
G. McDonald



ROAD TRENCH I (1979) GLACIAL TILL (FROZEN)  
 100' x 14' x 5'  
 NO ASSAYS

WEST TRENCH (OLD)  
 EAST TRENCH (OLD)

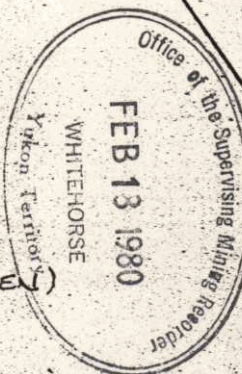
ROAD TRENCH II (1979) GLACIAL TILL (FROZEN)  
 100' x 14' x 7 1/2' (AVERAGE)  
 NO ASSAYS

NEW TRENCH (1979) GLACIAL TILL (FROZEN)  
 150' x 20' x 10-14'  
 NO ASSAYS

CANOL OPTION  
 1" = 200'

TRENCH + DRILL HOLE  
 LOCATION  
 G MACDONALD 22/1/80

*G. Macdonald*



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DIAMOND DRILLING ASSESSMENT REPORT

on

H AND PEAK MINERAL CLAIMS

INTRODUCTION

The claims referred to in this report are held by Noranda Exploration Company Limited (No Personal Liability) under option from Canol Mines Ltd. and are as follows:

- List of Claims - (as on attached sheet)

Diamond drilling was conducted on the following claims:

H 1 -----YA83823

H 2 -----YA83825

Diamond drilling was contracted for Noranda by Drilcor Industries Ltd. of Richmond, B.C. Holes 7 and 9 were drilled between September 3 and October 1st, 1980. A total of 873 feet (BQ size) was drilled in three holes. The core is stored in Whitehorse. Drilling was directed by R. McIntyre under direction of G. Macdonald and G. Dirom. All are employees of Noranda Exploration Company Ltd.

DRILL LOGS

The following drill logs summarize the results of the programme:



CANADA  
DEPARTMENT OF  
MINES AND TECHNICAL SURVEYS  
SURVEYS AND MAPPING BRANCH

# YUKON TERRITORY

SCALE 1:444,444

1 inch equals approximately 71 miles



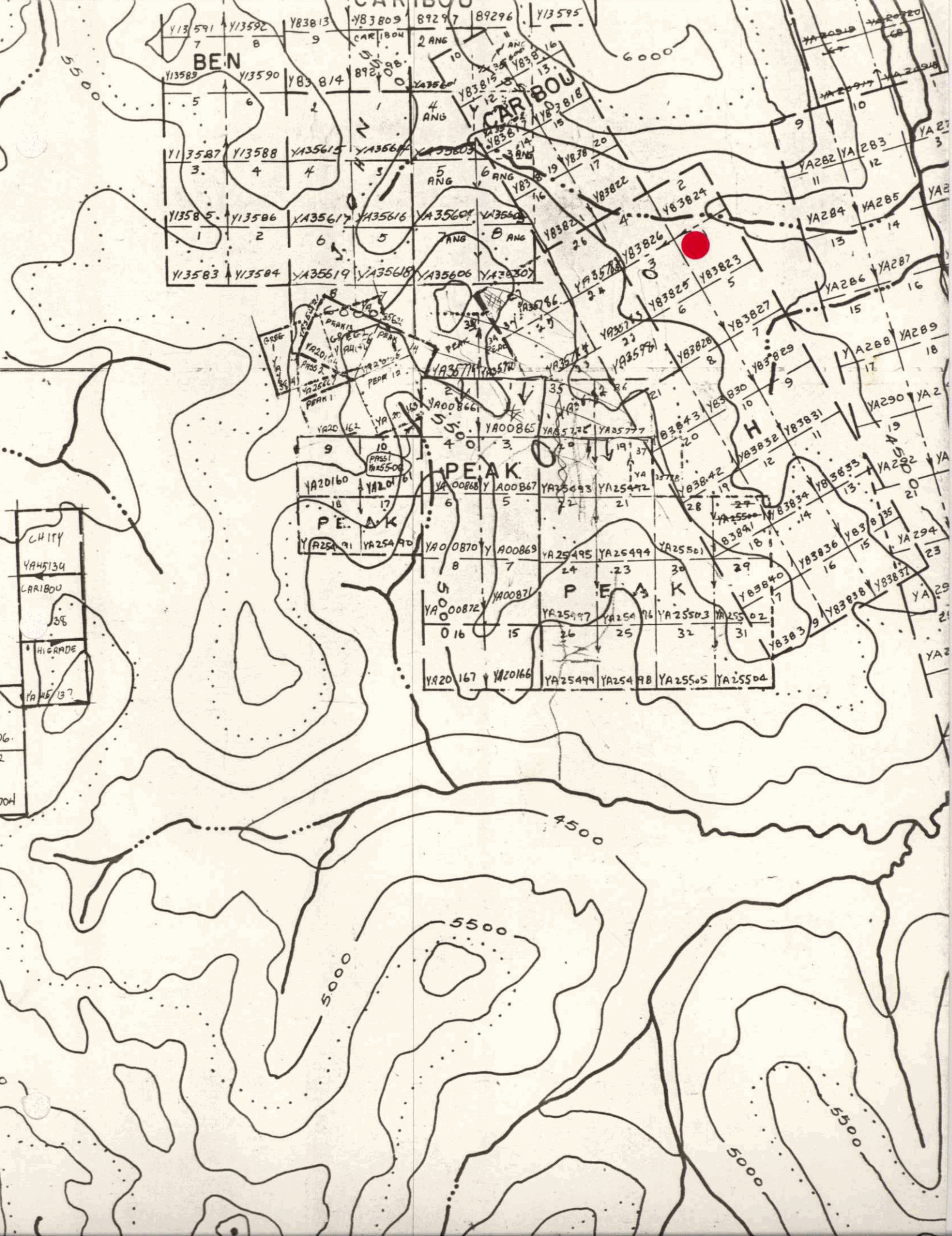
Rail .....  
Highway .....  
Territorial capital .....

### POPULATED PLACES

500 to 2,000 .....  
Under 500 .....

Lambert Conformal Conic Projection with Standard Parallels at 69°N and 77°N

Reproduced from the 1:2,000,000 map of Canada by the  
Survey and Mapping Branch, Ottawa, 1963.



## NORANDA EXPLORATION COMPANY, LIMITED

Collared		Completed		Core Size BQ		Property CANOL OPTION			Project No 933		NTS No. 105 F/10			
FIELD COORDINATES						SURVEYED COORDINATES						Sheet 1 of 3		
Lat. 126 + 00N		Elev. 161.010'		Dip -52°E		Lat.		Elev.		Dip		Hole No.		
Dep. 134 + 00E		Depth 427'		Bearing N 89°E		Dep.		Depth		Bearing		DDH 80-7		
Footage	Rec'y	Graphic Log	Description				% Sulp.	Est. Grade	Sample No.	Lt.				
0-42'			Over burden - large Dolomitic boulders				-							
42-47.5	100%		Black thinly laminated shales; parallel and cross-cutting fractured quartz stringers and miniature boudins. Minor disseminated Pyrite crystals. Core Angle $\approx 50^\circ$				0.5%							
47.5-48.5	100%		Light grey Quartzite; large ( $\frac{1}{4}$ - $\frac{1}{2}$ " ) Pyrite cubes				2%							
48.5-56			Black thinly laminated wavy convoluted graphitic shales fractured cross-cutting quartz veinlets. Core Angle $\approx 50^\circ$											
56-82	50-60%		Same rocks as above; 61-63' quartzite lens with Pyrite cubes $\frac{1}{8}$ "- $\frac{1}{4}$ " through cut 63-82': highly contorted shales Core Angle difficult to ascertain due to contortion											
82-89'	80%		Black thinly laminated wavy contorted graphitic shales many cross-cutting + = quartz veinlets; quartz contains finely disseminated Pyrite.				25%							
89-92.5	100%		Light grey grained Dolomite; many cross-cutting quartz veinlets; finely disseminated Pyrite throughout with occas. $\frac{1}{2}$ - $\frac{3}{4}$ " Pyrite cubes. Pyrite also occurs in quartz veinlets.				25%							
92.5-104'	100%		Black thinly laminated wavy contorted graphite shales; many cross-cutting + = veinlets quartz; finely disseminated Pyrite.				20%							
104-134	80%		Black very graphitic shales, heavily fractured, minor small scale folding ( $\frac{1}{8}$ "- $\frac{1}{4}$ " ) No Core Angle evident				0-2%							
134-138	50%		Grey intercalated chert/shales with quartz veining - minor Pyrite and CuPy as blebs $\frac{1}{4}$ "											
138-144	100%		Very graphitic black shales.											
144-145	100%		Rocks as 134-138											
145-152	100%		Rocks as 138-144											
152-167			Black graphitic shales brecciated to varying extents Minor Pyrite in the quartz-chert members. No evident core											
167-176	80%		Black very graphitic shales; less quartz Core Angle $\approx 55^\circ$											

DATE \_\_\_\_\_

LOGGED BY *Walter J. Miller*

NORANDA EXPLORATION COMPANY, LIMITED

Collared		Completed		Core Size		Property			Project No			NTS No.		
FIELD COORDINATES						SURVEYED COORDINATES						Sheet 2 of 3		
Lat.		Elev.		Dip		Lat.		Elev.		Dip		Hole No.		
Dep.		Depth		Bearing		Dep.		Depth		Bearing		DDH 80-7		
Footage	Rec'y	Graphic Log	Description				% Sulp.	Est. Grade	Sample No.	Lt.				
176-182			Black wavy-contorted shales; abundant quartz folded boudins. Pyrite, Chalcopyrite, Pbs at 175.5-179 Grab sample at 176.5 - 177.											
182-192	50%		Extremely contorted very graphitic intercalated shales/ chert. Very minor Pyrite disseminations.											
192-230	80%		As 182-192 with more quartz stringers cross-cuttings; pinched and swollen. No Core Angle evident.											
			Pyrite, Minor Chalcopyrite to 25% occurs as pyrite-rimmed quartz stringers at 223-225'. Minor fine grain Pbs in same section.				15%							
230.5-232.5			Grey cherty member, Core Angle 70° approximately											
232.5			Back into 192-230 rocks with occasional quartz blob to 1/2" thick rimmed with Pyrite.				10%							
			- Pyrite and Chalcopyrite becoming more abundant from 235 on											
			- 250-255 mainly black graphitic shales.				10%							
			- 262-267 sulphides (Pyrite, Chalcopyrite, Minor Pbs) form nearly 40% of rocks.				40%							
			- increasing pyrite apparently associated with increase in quartz content											
-267			- Major quartz storkwork(?) mineralization conspicuously absent											
			- Changes abruptly to black graphitic sludge, which grades into a breccia of quartz, framboidal Pyrite minor Chalcopyrite.				5%							
-280			280-270: Back into banded shales. - Pyrite and Chalcopyrite in bands 1/8" thick, parallel to bedding, Core Angle ≈ 55°											

DATE

LOGGED BY

*W. S. ...*

NORANDA EXPLORATION COMPANY, LIMITED

Collared	Completed	Core Size	Property	Project No	NTS No.
FIELD COORDINATES			SURVEYED COORDINATES		
Lat.	Elev.	Dip	Lat.	Elev.	Dip
Dep.	Depth	Bearing	Dep.	Depth	Bearing

Sheet 3 of 3  
Hole No. DDH 80-7

Footage	Rec'y	Graphic Log	Description	% Sulp.	Est. Grade	Sample No.	Lt.						
280-394			Grey non graphitic shales, intermittent parallel and cross-cutting quartz stringers, occasional calcite (siderite?) stringers (1/4" wide) Gore Angle 50°. Minor thrust fault (4") at 328'. Mineralization at: Minor Pyrite disseminations throughout										
			331-332: Quartz vein with Pyrite										
			334-336.5: Quartz vein with Pyrite.										
			337-338: Massive Pyrite in shales										
			348-349: Quartz vein with Pyrite.										
			376.5 - 377.5: Massive Pyrite cutting shales.										
			381-383: Pyrite, Chalcopyrite, Pb in calcite veins.										
397-405			Greenish Dyke, well mineralized with 1/16 - 1/8 Pyrite cubes.										
405-407			Black thrust, minor Pyrite, very graphitic - sludge.										
407-427 E.O.H.			Black graphite shales, wavy contorted.										
			<u>SAMPLES</u>										
			331-332										
			334-336.5										
			373-405										

DATE \_\_\_\_\_ LOGGED BY *Robert J. McEwen*



NORANDA EXPLORATION COMPANY, LIMITED

Collared	Completed	Core Size BQ	Property CANOL OPTION	Project No 933	NIS No. 105 F/10
FIELD COORDINATES			SURVEYED COORDINATES		
Lat. 120 +00N	Elev. 92.200'	Dip -50°	Lat.	Elev.	Dip
Dep. 138 +00E	Depth 246'	Bearing E	Dep.	Depth	Bearing
					Hole No. DDH #9

Footage	Rec'y	Graphic Log	Description	% Sulp.	Est. Grade	Sample No.	Lt.				
0-24'			Overburden								
24-48'	80%		Grey non graphitic shales, stringers of quartz, calcite with disseminated pyrite, chalcopyrite.								
48-106'	80%		Dark graphitic shales. Minor disseminated Pyrite.								
106-109'	80%		Dark graphitic shales. Some galena, disseminated Pyrite								
109-111'	80%		Dark graphitic shales, same as above with small stringers of (Sphalerite?)								
111-121'	80%		Same as above (with disseminated Pyrite).								
121-125.5'	60%		Grey non graphitic shales, brecciated containing Pyrite (appears to be thrust fault).								
125.5-135'	60%		Black graphitic shales also containing Pyrite and brecciated.								
135-143'	75%		Black graphitic shales.								
143-147'	75%		Quartz vein containing some Pyrite stringers.								
147-161'	80%		Black graphitic shales with occasional quartz stringer containing Pyrite.								
161-184'	80%		Black graphitic shales.								
184-212'	80%		Black graphitic shales contains disseminated Pyrite throughout.								
212-215.5'	80%		Greenish Dyke containing some Pyrite.								
215.5-246'	80%		Black graphitic shale.								

DATE \_\_\_\_\_

LOGGED BY \_\_\_\_\_

*Robert S. McLean*

ATTACHED SHEET

LIST OF CLAIMS

H 1 - 21	Y 83823 - 843
H 22 - 27	YA34781 - 786
PEAK 33 - 34	YA35779 - 780
35 - 37	YA35776 - 779

CANOL MINES OPTION    PROJECT 933

<u>SAMPLE No.</u>	<u>FOOTAGE</u>	<u>HOLE #</u>	<u>%Pb</u>	<u>%Zn</u>	<u>OPT Ag</u>
6676	370-375	7	0.26	Tr	0.23
6677	375-380	7	0.58	Tr	1.60
6678	380-385	7	0.05	0.01	0.07
6679	385-390	7	0.06	0.01	0.05
6680	390-395	7	0.01	0.01	Tr
6681	395-400	7	0.04	0.01	0.26
6682	400-405	7	0.03	0.01	0.22
6683	87-92	7	0.01	0.04	0.05
6684	202-210	7	0.02	0.03	Tr
6685	118-123	9	0.47	0.02	0.73
6686	123-128	9	0.09	0.01	0.29
6687	128-133	9	0.18	0.31	0.39
6688	133-138	9	0.01	0.01	Tr
6689	138-143	9	0.01	0.01	Tr
6690	143-148	9	Tr	0.01	Tr
6691	51-56	9	0.28	0.01	0.24
6692	193-198	9	0.01	0.01	Tr
6693	198-203	9	0.01	0.01	Tr
6694	148-153	8	0.01	0.01	Tr

NOTES

- 1.) ALL ASSAYS BY BONDAR-CLEGG & Co. , WHITEHORSE Y.T.
- 2.) CORE IS STORED IN WHITEHORSE
- 3,) SAMPLES ARE A 50% SPLIT OF RECOVERED CORE FOR INTERVAL

**A P P E N D I C E S**  
=====

STATEMENT OF QUALIFICATIONS

I, GLEN MACDONALD, of the City of Whitehorse, in the Yukon Territory,

DO HEREBY CERTIFY that:

1. I have been employed as a Geologist by Noranda Exploration Company Limited (No Personal Liability) since May 1976.
2. I am a graduate of the University of British Columbia, with a Bachelor of Science degree in Geology.
3. I am a member of the Canadian Institute of Mining and Metallurgy.

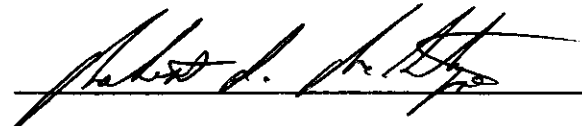
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G. Macdonald, Geologist,  
Noranda Exploration Company Limited  
(N.P.L.).

STATEMENT OF QUALIFICATIONS

I, ROBERT MCINTRYE, of the City of Whitehorse, in the Yukon Territory  
DO HEREBY CERTIFY that:

1. I have been employed as a Geological Technician by Noranda  
Exploration Company Limited (N.P.L.) since February 1980.
2. I am a graduate of Sir Sanford Fleming College with a  
Technicians diploma in Geology.

  
Robert L. McIntyre, Geological Technician  
Noranda Exploration Company Limited  
(N.P.L.)

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT Canol Option - Peak Claims DATE December 18, 1980

TYPE OF REPORT Diamond Drilling

a) Wages:

No. of Days 48  
Rate per Day \$173.6494  
Months of January - December 1980  
Total Wages 48 X \$173.6494 \$ 8,335.17

b) Food and Accomodation:

No. of Days 48  
Rate per Day \$129.45583  
Months of January - December 1980  
Total Cost 48 X \$129.45583 6,213.88

c) Transportation:

No. of Days 48  
Rate per Day \$391.04125  
Months of January - December 1980  
Total Cost 48 X \$391.04125 18,769.98

d) CAT Rental.

No. of Days 48  
Rate per Day \$377.0833  
Months of January - December 1980  
Total Cost 48 X \$377.0833 18,100.00

f) Analysis 569.80  
(See attached schedule)

g) Cost of Preparation of Report

Author 694.60  
Drafting 564.53  
Typing 694.60

h) Other:

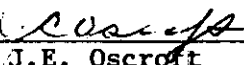
Field Supplies	857.56
Contractors	35,023.21
Recording Fees	<u>10.00</u>

Total Cost \$89,833.33

e) Unit Costs for:

No. of Units	873 Feet	
Unit Costs	102.901867/Foot	
Total Cost	873 X \$102.901867	<u>\$89,833.33</u>

I Certify the above  
Costs to be Correct

  
\_\_\_\_\_  
J.E. Oscroft  
Br. Accountant

NORANDA EXPLORATION COMPANY, LIMITED

WESTERN DIVISION

DETAILS OF ANALYSIS COSTS

PROJECT: Canol Option - Peak Claims

<u>Element</u>	<u>Number of Determinations</u>	<u>Cost Per Determinations</u>	<u>Total</u>
Ba	6	3.00	18.00
BaSo <sub>4</sub>	4	8.00	32.00
Cu	2	4.00	8.00
PbZn	20	9.50	190.00
Au	10	4.50	45.00
AuAg	25	7.50	187.50
Co	3	5.00	15.00
CuPb	1	8.50	-8.50
Less 10% Discount			(48.60)
AgCu	26	1.95	50.70
PbZn	26	1.95	50.70
Soil Preparation	26	.50	<u>13.00</u>
			\$ <u>569.80</u>

SILVER ARROW SYNDICATE  
BOX 5319 WHITEHORSE

SEPT 2nd 1979

DB CAT RENTAL FOR AUG. 1979 *260*

31 hrs @ 75.<sup>00</sup> PER HR = 2,325.<sup>00</sup>

*ADD* #933

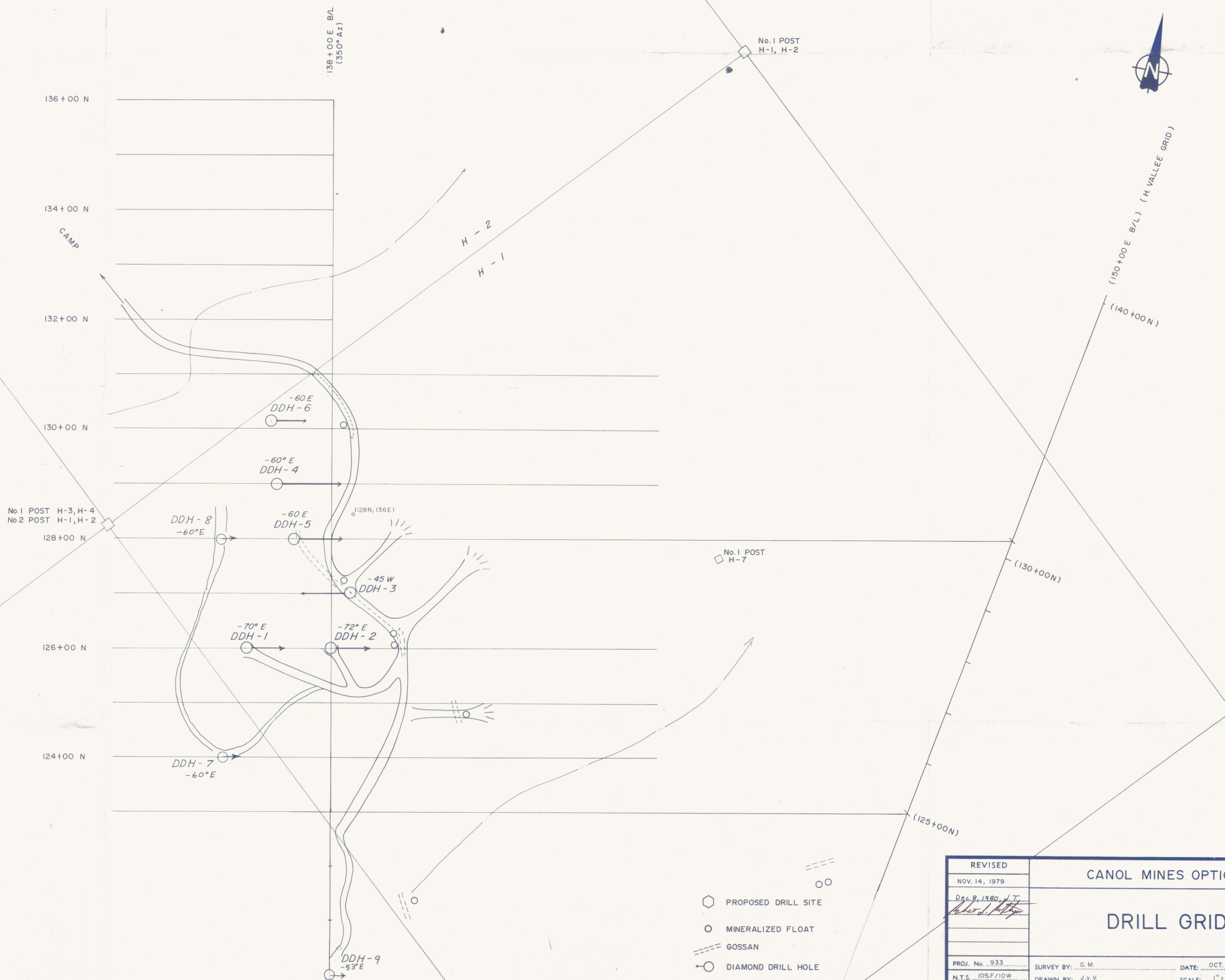
*- ?  
K*

4133 #202 4th Ave  
Whitehorse Yukon.

*J Macdonald*

933-J-30





REVISED	CANOL MINES OPTION	
NOV. 14, 1979		
<i>Dec 8, 1980 J.T.</i>		
<i>Richard J. Kelly</i>		
PROJ. No. 933	SURVEY BY: G.M.	DATE: OCT. 1979
N.T.S. 105.F/10.W	DRAWN BY: J.v.v.	SCALE: 1" = 100'
DWG. No.	<b>NORANDA EXPLORATION</b>	
	OFFICE: VANCOUVER	