

# ASSESSMENT REPORTS

MAP No. 105-H-9 TYPE OF WORK: GEOLOGICAL & GEOPHYSICAL

REPORT FILED UNDER	NORQUEST JOINT VENTURE
DATE PERFORMED	July, 1965
LOCATION-- LAT.	61°39.5'
LONG.	128°06'
CLAIM Nos.	RAIN 1-6 88754-88759
WORK DONE BY	Albert F. Reeve, P.Eng.
WORK DONE FOR	Norquest Joint Venture
REMARKS	Area underlain by gently folded sediments, cut by felsic porphyry dykes, and covered by overburden. Rusty outcrop of pyritized, silicified & brecciated sedimentary rocks along creek. Copper mineralization (chalcopyrite, pyrihotite) is sparsely disseminated and discontinuous. over...

Magnetic survey indicated no significant anomalies. Also small calcite-galena showing with significant gold & silver values. No further work recommended.

\$600.00

Box 2703,  
WHITEHORSE, YT  
12 Jan 1966.

M.I. M-252

TO: Geological Evaluation Unit  
Ottawa.

FROM: Mining Recorder, Watson Lake.

~~Mining Recorder,  
WATSON LAKE, YT~~

Re: Geological and Geophysical Investi-  
gation of the Rain Claim Group - by  
A.F. Reeve, P. Eng.

Dear Sir:

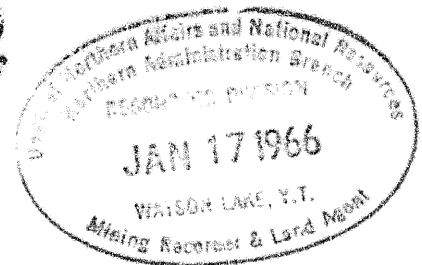
On the recommendation of the Resident Geologist and  
the Mining Inspector, I authorize you to accept the above men-  
tioned report prepared by Albert F. Reeve, P. Eng. as represent-  
ation work for the value of \$600.00.

A copy of the recommendation of the Resident Geologist  
and the Resident Mining Inspector along with a copy of this authori-  
zation should be placed on the claim file. Would you please see  
that a copy of this report and copies of the recommendations are  
sent to the Geological Evaluation Unit in Ottawa and to Central  
Mining Records, Whitehorse.



ADO/wt  
Encl.

(G.R. CAMERON)  
Commissioner



Box 2703,  
WHITEHORSE, YT  
12 Jan 1966.

M.I. M-252

Commissioner.

Re: Geological and Geophysical  
Investigation of the Rain  
Claim Group - by A.F. Reeve,  
P. Eng.

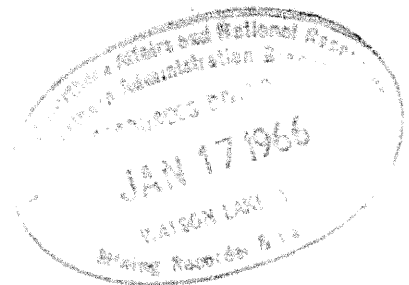
Dear Sir:

The enclosed report is recommended for acceptance  
as representation work at a value of \$600.00.

Attached is a copy of the recommendation of the  
Resident Geologist.

ADO/wt  
Encl.

(A.D. OLIVER)  
Mining Inspector.



Box 969,  
Whitehorse, Y.T.,  
Dec. 17, 1965.

Mr. G.R. Cameron,  
Commissioner of the Yukon,  
P.O. Box 2703,  
Whitehorse, Y.T.

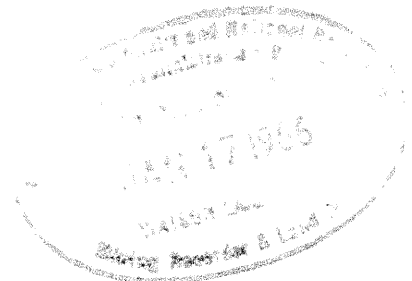
Re: Geological and Geophysical  
Investigation of the Rain  
Claim Group - by A.F. Reeve,  
P. Eng.

Dear Sir:

In my opinion, this report is acceptable as representation  
work under Section 53 (4) of the Yukon Quartz Mining Act.

Yours truly,

L.H. Green,  
Resident Geologist.



GEOLOGICAL AND GEOPHYSICAL INVESTIGATION

of the

RAIN CLAIM GROUP

Located at latitude  $61^{\circ} 39\frac{1}{2}'$   
longitude  $128^{\circ} 06'$

On Claim Sheet #105-H-9

Yukon Territory

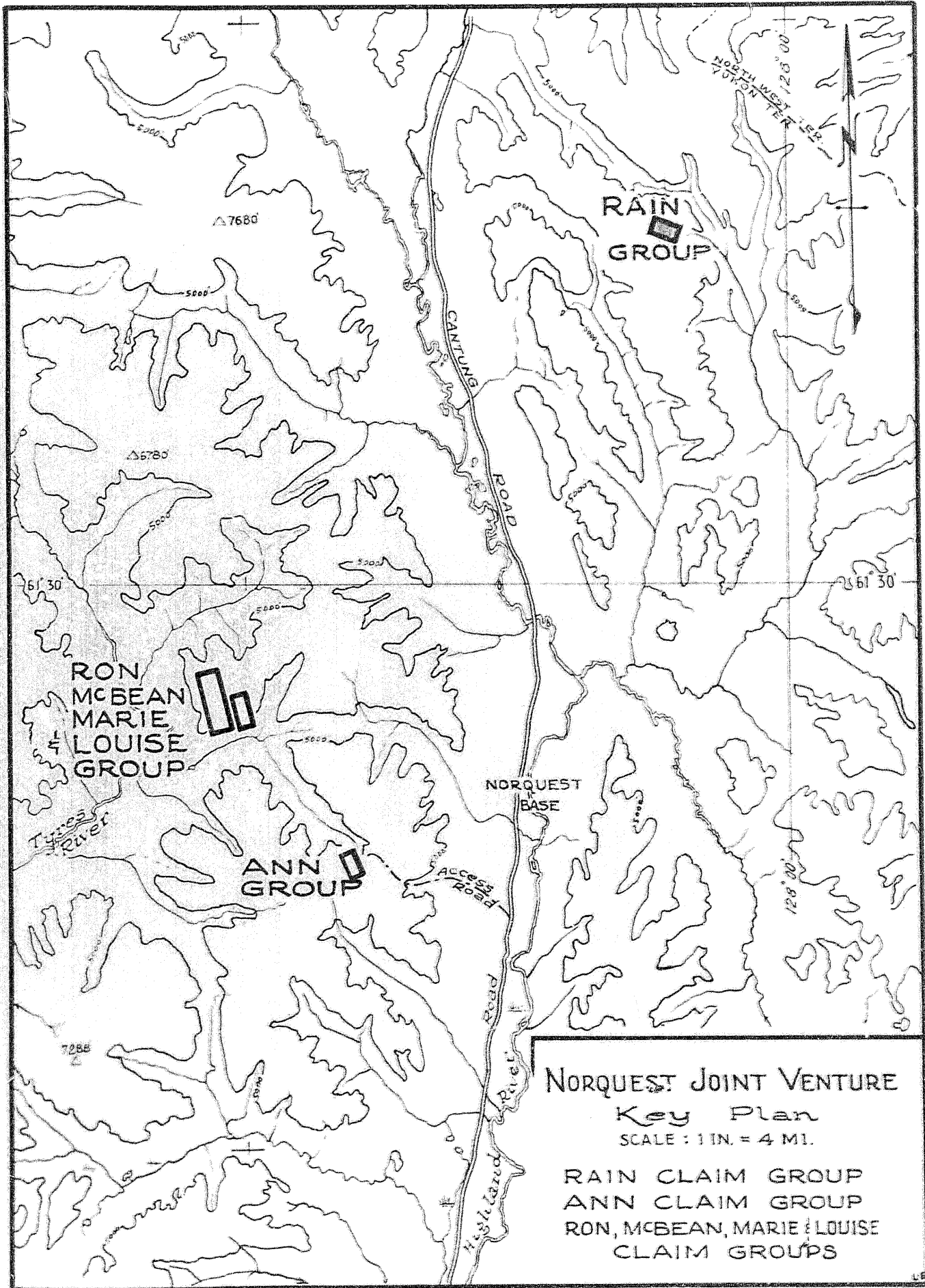
July 20th to 26th Incl., 1965

by

Albert F. Reeve, P.Eng.  
Geological Engineer  
November 17, 1965

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- Detailed magnetics 1" = 20' back	
- General geology 1" = 400' back	
- Typical cross section	back



**NORQUEST JOINT VENTURE**

**Key Plan**

SCALE : 1 IN. = 4 MI.

- RAIN CLAIM GROUP**
- ANN CLAIM GROUP**
- RON, McBEAN, MARIE & LOUISE CLAIM GROUPS**

## INTRODUCTION

During the period of July 20 to July 26, 1965, an investigation of the Rain claim group was carried out by the following persons employed by Norquest Joint Ventures of 320, 355 Burrard Street, Vancouver, B.C. -

J.M. Dawson, Geologist, 1066 Harwood Street,  
Vancouver, B.C.

G.A. Leamy, Geophysical Technician,  
c/o Bralorne Pioneer Mines Ltd.,  
320, 355 Burrard Street,  
Vancouver, B.C.

P.J. Colbert, Field Assistant,  
1066 Harwood Street,  
Vancouver, B.C.

J.H. Heal, Field Assistant,  
Box 339,  
Oliver, B.C.

M. Davenport, Labourer, 725 Greenwood,  
West Vancouver, B.C.

The work was supervised by the writer,  
(certificate enclosed).

WORK DONE

- (a) Control - 23,600 feet of picket lines were cut, taped and surveyed by compass, with stations at 100' intervals.
  
- (b) Geology - the entire claim group and adjacent areas was mapped at a scale of 1" = 400'.  
An area 450' x 100' was mapped at a scale of 1" = 20'.
  
- (c) Geophysical Survey - 19,200' line feet of magnetic readings were taken at 50' intervals on lines 400' apart.  
3,700 line feet of detailed magnetic readings were taken at 20' intervals on lines 20' apart.

PROPERTY

<u>Claim Name</u>	<u>Record Numbers</u>	<u>Record Date</u>	<u>Owner</u>
Rain #1 to #6	88754 to 88759	July 31, 1964	Bralorne Pioneer Mines Ltd.

GEOLOGY

Table of Formations

Quaternary - glacial drift, ferruginous conglomerate.

Cretaceous - Porphyritic felsite dikes

Cambrian or earlier - Sediments;

slate, gritty slate, calcareous quartz, pebble grit, minor greywacke, arkosic conglomerate and calcareous argillite

The valley bottom in which the property is situated is largely covered by overburden, at least 10' - 15' thick. Outcrops occur along the creek bed and on the surrounding ridges.

The area is underlain by a sequence of gently folded sediments which plunge south-southeastward. These rocks consist of greenish slate, gritty slate, calcareous quartz pebble grit, and minor greywacke, arkosic conglomerate and calcareous argillite. The sediments are cut by a number of felsite porphyry dikes up to 100' in width.

A number of steeply dipping southwest-trending faults were noted along the creek bottom. Also in the creek bed are exposures of pyritized and silicified, brecciated sedimentary rocks. It appears that the "breccia" cement may be secondary silica and pyrite deposited by surface solutions derived from the weathering of primary mineralization. Also noted in the same area were patches of "gossan conglomerate" consisting of locally derived boulders and a ferruginous matrix.

MINERALIZATION

A number of rusty outcrops are exposed intermittently along the creek for a distance of over one mile. These are principally pyritized, silicified and brecciated sedimentary rocks.

Copper mineralization, consisting of sparsely disseminated chalcopyrite accompanied by fine-grained pyrrhotite, occurs in several irregular pods of pyroxene skarn which occupy an area not more than 360' in length. The largest skarn body is about 20' thick and is exposed along strike for about 120'. It contains two horizons of sulphide mineralization each being about 4' in thickness. Locally, it strikes 160° and dips 20° eastward.

Much of the area in the immediate vicinity of the mineralized outcrops is covered by overburden; however, no evidence of similar occurrences were found in lower portions of the sedimentary sequence exposed in the creek bed or above on the surrounding ridges.

The following samples were taken from the thickest portions of the mineralized horizons:

<u>Sample</u>	<u>W'</u>	<u>Cu.</u>	<u>Au.</u>	<u>Ag.</u>
70282	4'	.46	.01	Tr.
70283	4'	.29	.01	Tr.

Character Samples:

		<u>Au.</u>	<u>Ag.</u>
70310	Composite of pyritic breccia	Tr.	Tr.
70311	Grab-seam of quartz & arseno-pyrite	Tr.	Tr.

It is notable that this occurrence is similar in many respects to numerous other pyrrhotite skarn localities in the region, which are characterized by pod-like discontinuity and very sparse copper mineralization.

Other mineralization; a six inch calcite vein weakly mineralized with galena and pyrite was found 1800' east of the claim group boundary, in the creek bed. It is traceable for about 10'.

<u>Sample</u>	<u>W'</u>	<u>Pb.</u>	<u>Au.</u>	<u>Ag.</u>
70293	grab	3.11	.48	5.2

Some calcite float containing traces of galena was also found on the ridge south of the claims.



MAGNETICS

Magnetic survey work was carried out with a Sharpe MF-IR flux gate magnetometer. Observations were taken to the nearest 10 gammas. All readings were corrected for daily and diurnal variation by tying into a centrally located base station at average time intervals of 1 hour.

Sample calculation:

Arbitrary datum at base station = 4008

<u>Station</u>	<u>Reading</u>	<u>Base Correction</u>	<u>Diurnal Correction</u>	<u>Result</u>	<u>Time</u>
Base	430	- 30	0	400	1 pm.
1	400	- 30	0	370	
2	420	- 30	- 10	380	
3	460	- 30	- 10	420	
4	470	- 30	- 20	420	
5	450	- 30	- 20	400	
6	440	- 30	- 30	380	
Base	460	- 30	- 30	400	2 pm.

Normal "back ground" is in the vicinity of 250 to 350 gammas with occasional results above or below that range. Pyrrhotite carried by the mineralized zones caused locally strong magnetic relief of up to 1300 gammas occurring in a range of +1260 to -280 gammas (see Magnetic Detail plan). Such magnetic disturbances were irregularly confined to an area not more than 360' long x 250' wide in the near vicinity of the mineralized exposures.

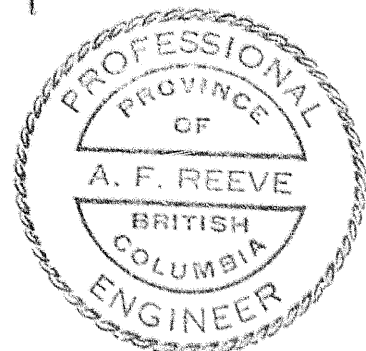
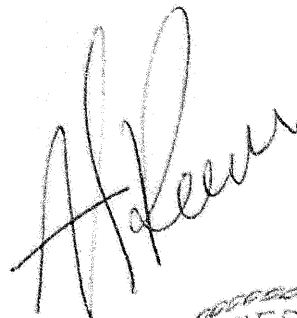


CONCLUSIONS

1. Copper mineralization on the Rain group is weak.
2. Magnetic results and geological mapping suggest that the copper-bearing zones are confined to a small area and generally lack continuity.
3. Experience with this type of deposit in other parts of the project area suggest that this is not a particularly pregnant target towards which further exploration work could be directed.
4. Newly discovered mineralization (vis. calcite-galena vein) which is unrelated to the copper zones, carries significant values in gold and silver; however, the exposed showing is of minor dimensions. The area in the general vicinity of the claims was carefully prospected for additional material of this type and only a few pieces of sparsely mineralized float were found.

RECOMMENDATION

No further work is recommended.



A P P E N D I X

NORQUEST JOINT VENTURES

STATEMENT OF EXPENDITURES

RAIN CLAIM GROUP

Wages

Geologist	7/30 x 600	\$ 140.00
Geophysical Technician	7/30 x 500	116.65
2 Field Assistants	2 x 7/30 x 350	163.35
1 Labourer	7/30 x 250	65.00

Services

Field Supervision & report writing	2/30 x 1000	66.25
Helicopter Support	2 hrs. @ 106.50	213.00

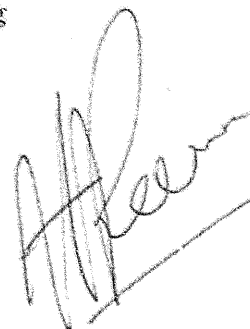
Supplies

Food - 35 man days @ \$4.25	148.75
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Total: \$ 913.40

Note:

Only \$600.00 to be applied, covering one year's assessment requirements.



Canada

~~Province of British Columbia~~

YUKON TERRITORY

To Wit:

In the Matter of

A STATEMENT OF COSTS RESPECTING  
EXPLORATION OF THE  
RAIN CLAIM GROUP

I, ALBERT F. REEVE, of 400, 837 West Hastings St.  
Vancouver, in the Province of British Columbia.

**Do Solemnly Declare that**

1. I am retained as Project Manager for Norquest  
Joint Ventures of 320, 355 Burrard Street,  
Vancouver, B.C.
2. The attached statement of expenditures is true.

And I make this solemn Declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of the Canada Evidence Act.

Declared before me

at Vancouver  
in the Province of British Columbia.

this 23rd day of  
November A.D. 19 65

*Norman Schief*  
A Notary Public in and for the Province of British Columbia  
(A Commissioner for taking affidavits for British Columbia)

*Dated*

19

In the Matter of

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# Statutory Declaration

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Form No. 220 Statutory Declaration

 WILSON STATIONERY COMPANY LIMITED - CLARKE & STUART CO. LTD

ALBERT F. REEVE, P.ENG.  
GEOLOGICAL ENGINEER

ASSOCIATE  
RONALD A. GRANGER

TELEPHONE: RE 6-7073

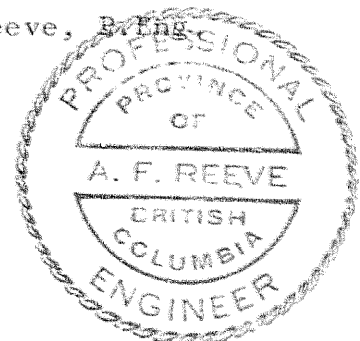
CERTIFICATE

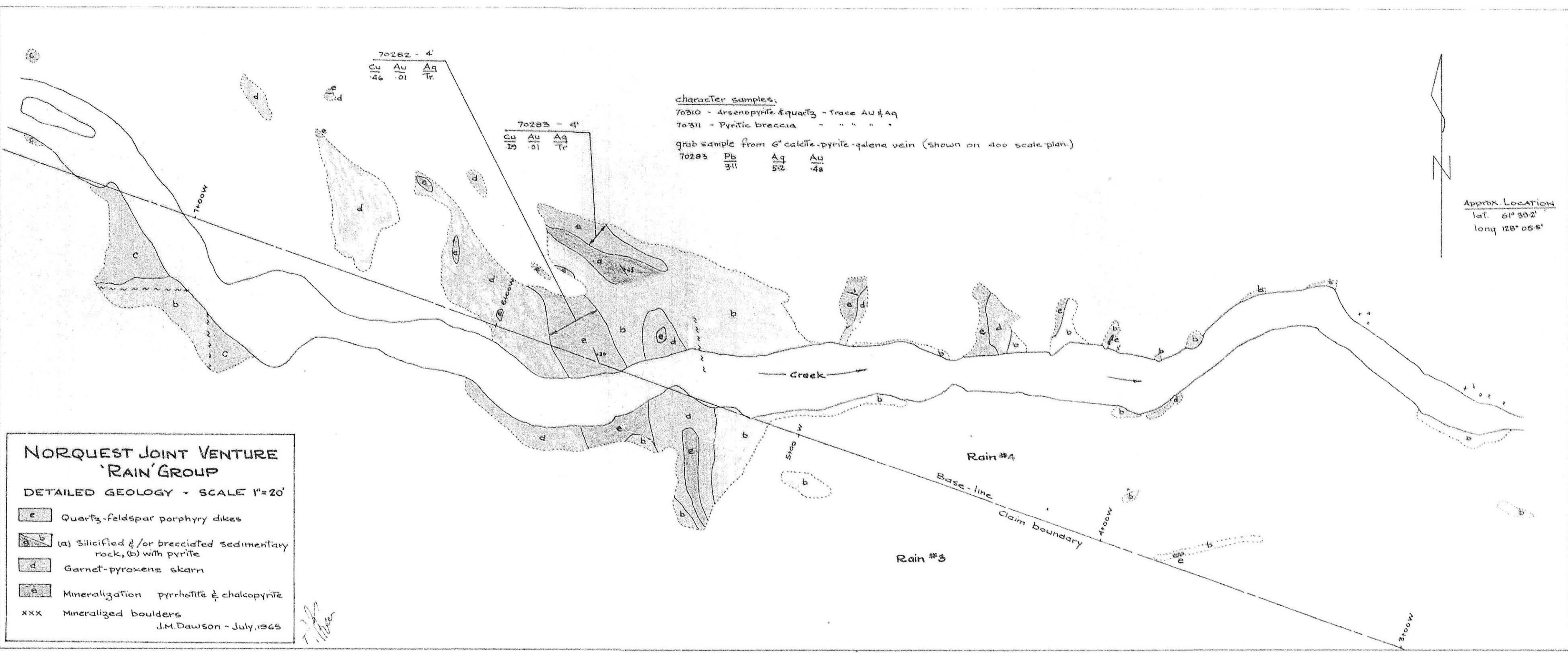
I, Albert F. Reeve, of Vancouver, B.C. hereby  
certify that:

1. I am a geological engineer residing at  
2267 West 2nd Ave., with an office at 400, 837  
West Hastings St.
2. I am a graduate of the Provincial Institute of  
Mining, Haileybury, Ontario (1958) and of Michigan  
College of Mining and Technology, Houghton, Mich.  
(B.Sc. 1961)
3. I am a certified member of the Association of  
Professional Engineers of British Columbia and  
Ontario.
4. I am retained by Norquest Joint Ventures of  
320, 355 Burrard Street, as Project Manager.
5. This report is based on an exploration programme  
carried out by Norquest Joint Ventures, in the  
Yukon Territory, under my supervision during the  
period of June 7 to September 23, 1965.

  
Albert F. Reeve, P.Eng.

November 10, 1965.





70282 - 4'

Cu	Au	Ag
.46	.01	Tr

70283 - 4'

Cu	Au	Ag
.25	.01	Tr

character samples.  
 70310 - Arsenopyrite & quartz - trace Au & Ag  
 70311 - Pyritic breccia - " " " "  
 grab sample from 6" calcite-pyrite-galena vein (shown on 400 scale plan.)  
 70283 

Pb	Ag	Au
311	5.2	.4a



Approx. Location  
 lat. 61° 30' 2"  
 long 128° 05' 5"

**NORQUEST JOINT VENTURE  
 'RAIN' GROUP**  
 DETAILED GEOLOGY - SCALE 1"=20'

- e Quartz-feldspar porphyry dikes
- a/b (a) silicified &/or brecciated sedimentary rock, (b) with pyrite
- d Garnet-pyroxene skarn
- e Mineralization pyrrhotite & chalcopyrite
- xxx Mineralized boulders

J.M. Dawson - July, 1965

*J.M. Dawson*

Rain #6

Rain #4

Rain #2

Approx location of claims

lat 61°30'

long. 128°05'

20 scale magnetic detail

Rain #5

Rain #3

Rain #1

# NORQUEST JOINT VENTURE 'RAIN' GROUP

## RECONNAISSANCE MAGNETIC SURVEY

Scale 1"=400'

Instrument - Sharpe MR12, fluxgate

Corrections - daily & diurnal, to nearest 10γ

G. Leamy July 1965

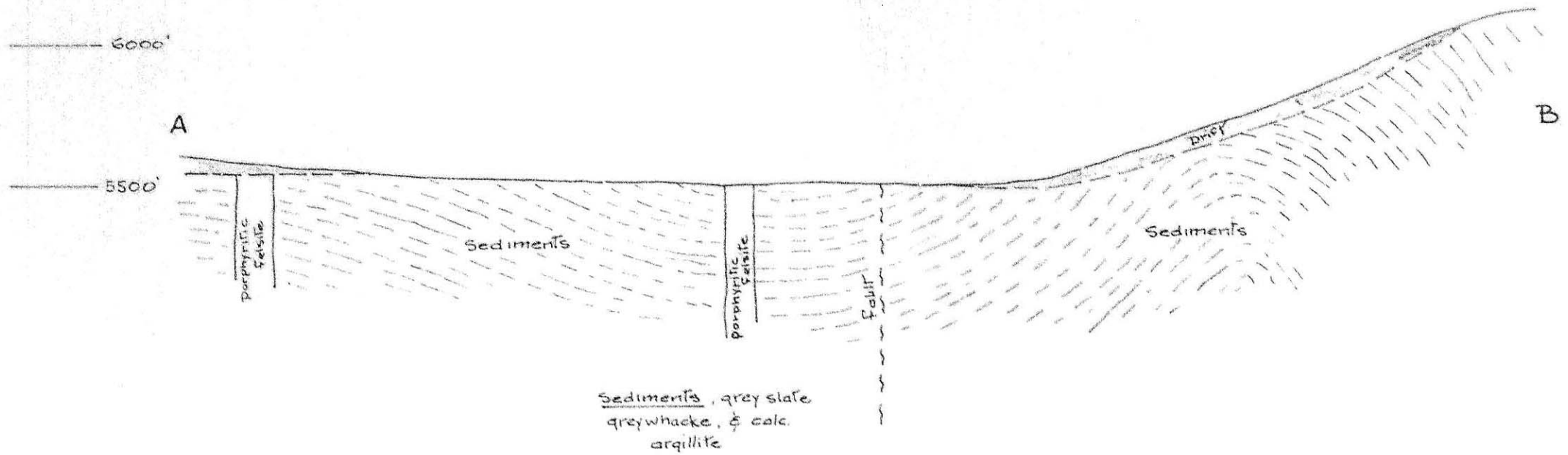


# NORQUEST JOINT VENTURE

RAIN CLAIM GROUP

TYPICAL GEOLOGICAL CROSS SECTION

SCALE 1" = 400'



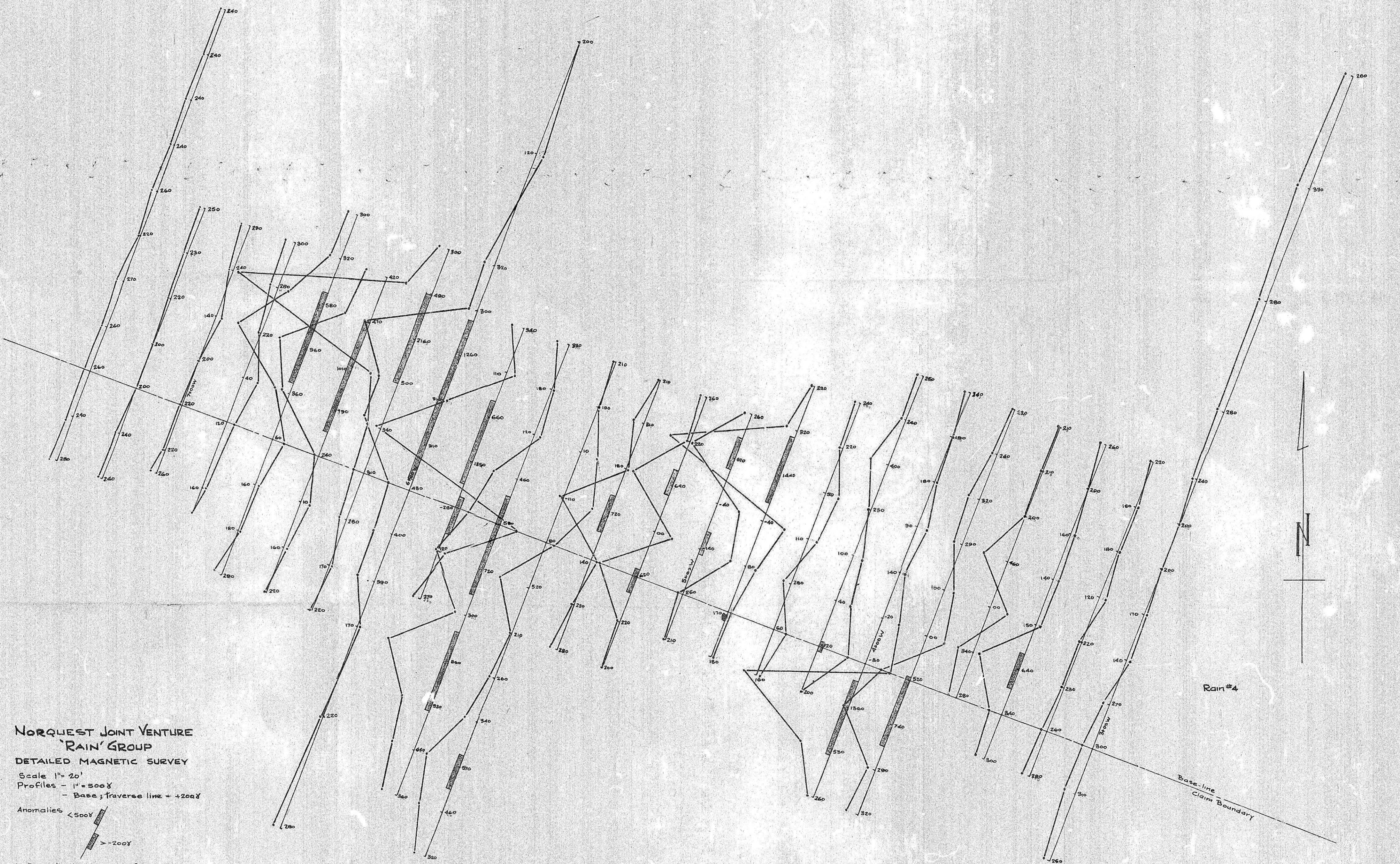
OBSERVER LOOKING NORTH-WESTWARD



Approximate location of Rain group  
 lat. - 61° 39'  
 long. - 128° 05'

**NORQUEST JOINT VENTURE  
 'RAIN' GROUP  
 GENERAL GEOLOGY - SCALE, 1:400**

- Grey slate, arkosic conglomerate, greywacke & calc.-argillite
- Quartz-feldspar porphyry dikes
- (a) silicified &/or brecciated rock  
(b) with pyrite
- Garnet pyroxene skarn
- Mineralization - pyrrhotite, chalcopyrite
- Mineralized float



**NORQUEST JOINT VENTURE  
'RAIN' GROUP  
DETAILED MAGNETIC SURVEY**

Scale 1" = 20'  
 Profiles - 1" = 500γ  
 - Base; Traverse line + 200γ

Anomalies < 500γ  
 > -200γ

Instrument - Sharpe, MFIR, flux-gate  
 Corrections - diurnal ± daily to nearest 10γ

G. Leamy - July, 1965

*ALP*