



ENGINEER'S PRELIMINARY REPORT  
ON THE  
ORE ORO GROUP  
White River Area  
Whitehorse Mining District, Yukon  
° °  
(61 47'N, 140 51'W)

R. E. Renshaw, P. Eng.

1 May 69

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 \$1600.00

*R. E. Renshaw*

~~Resident Geologist~~  
Resident Mining Engineer

Considered as representation work under Section 59 (4) Yukon Quartz Mining Act.

*[Signature]*  
Commissioner of Yukon Territory

ENGINEER'S PRELIMINARY REPORT

ON THE

ORE GROUP

WHITE RIVER AREA

WHITEHORSE MINING DISTRICT, YUKON  
(61°47'N, 140°51'W)

by

R. E. Renshaw, P. Eng.

Vancouver, B. C.

1 May 69

**R. E. RENSHAW, P.ENG.  
CONSULTING GEOLOGIST**

## INDEX

Introduction	1
Summary	1
Location and Access	2
Topography and Timber	3
Water	3
Power	3
Supplies	3
Accomodation	3
History of Area	4
Claims	5
Geology	5
Procedure	6
Conclusions	7
Estimated Costs	7
Table of Estimated Costs	Appendix A
Certificate of Qualification	Appendix B
Location and Claim Maps	1 and 2
Geophysical Profile	3
Proposed Picket Lines	3

R. E. RENSHAW P.ENG.  
GEOLOGICAL ENGINEER  
MINING GEOLOGIST

ENGINEER'S PRELIMINARY REPORT  
ON THE  
ORE GROUP  
WHITE RIVER AREA  
WHITEHORSE MINING DISTRICT, YUKON

INTRODUCTION

This report was prepared at the request of the principals of Ronex Mines Ltd. (NPL), of Vancouver, B. C.

The object of the examination was to check the validity of the staking, map any exposed geology, and to recommend and layout an exploration program for its development.

The examination was made 4 Apr 69. The following personell were also present. Mr. A. R. Parker, Mining Engineer, Mr. M. V. Currie, and Mr. George Wing, all of Whitehorse, Yukon Territory. Messrs. Parker and Currie acted as instruemnt operators and Mr. Wing as guide.

SUMMARY

The Ore group consists of thirty-to (32) contiguous mineral claims all held by the right of location and situated in the White River Area of the Yukon near the confluence of Boulder Creek and the White River some one mile southwest of the Silver City Mines diamond drill camp.

These claims cover an anomalous structural enviroment, including volcanic and sedimentary rocks of the Mush Lake

group, and also a portion of a negative magnetic anomaly which is shown on a recently published Aeromagnetic Survey of the area issued by the Geological Survey of Canada, Mines and Technical Branch.

The property is of particular importance because of its structural relation to the high-grade and relatively unexplored chalcocite copper showings of Silver City Mines Ltd. and the fact that similar mineralization has been reported on the present claims. Further work is recommended.

#### LOCATION AND ACCESS

The Ore group is situated 225 air miles northwest of the City of Whitehorse, Y. T. and 17 miles air miles southwest of the Alaska Highway at Mile Post 1168

The claims claims lie approximately two air miles southwest of the mouth of Boulder Creek, a tributary of the White River at its upper Canyon.

The approximate geographical location of the Ore group is  $61^{\circ}-47'$  north latitude and  $140^{\circ}-51'$  west longitude.

Currently a winter tote road leads from the Alaska Highway to within three miles of the property.

The Haines Road, the Alaska Highway and 25 miles of local access road could provide a 325 mile long road connection between the property and deep sea facilities at the port of Haines, Alaska.

TOPOGRAPHY AND RELIEF

The Ore group covers glaciated upland topography with very little change in relief. Elevations on the claims range from 3,000 feet to 4,000 feet

A thin veneer of glacial and residual soil is present and which may be covered by six inches to two feet of volcanic-pumice ash.

Vegetation mainly consists of several varieties of "buck brush", scrub white spruce and pine.

WATER

Ample supplies of water is present from numerous small lakes, ponds, and streams present for all mining, milling, diamond drilling, and domestic requirements.

POWER

No close source of electric power is present. At a later date diesel-electric power will be required.

SUPPLIES

Whitehorse is the closest supply center some 225 miles southeast. They can be trucked as far as Mile 1168 on the Alaska Highway and then to the claims either by helicopter any time of the year or by a winter tote road.

ACCOMMODATION

No accomodation is present on the property and a temporary camp will be required during the early stages of exploration. Tents with ply wood frames and floors will be sufficient.

HISTORY OF AREA

Indians first reported the presence of placer native copper to agents of the Hudsons Bay Company as early as 1850. In 1891 Dr. C. W. Hayes of the United States Geological Survey, Lieutenant Schwatka, and a prospector named Mark Russel confirmed the presence of copper in the area when they traversed into the headwaters of the White River from Fort Selkirk

Later in 1905 copper was discovered by Solomon Albert, J. R. Slaggard, and E. C. Harris in the walls of the upper canyon of the White River and staked claims on their discovery.

The immediate area of the discovery showing was examined by various groups between 1905 and 1965 with only minor success due to unfavourable economic, access problems, the concealing effects of overburden and the general misunderstanding of the deposits.

In 1966 some 144 claims were staked for Silver City Mines. Ltd. Since that date they have conducted extensive exploration of their property consisting of geophysical and geochemical surveys, stripping, and diamond drilling. This work resulted in locating several new mineralized zones of reported ore grade.

On the Ore claims native copper is reported to have been found. The airborne magnetic survey flown by the Geological Survey of Canada shows a magnetic low anomaly to be partially located on the ground. These two factors were of considered in staking the Ore claims plus the similarity of geology to the adjacent Silver City claims.

CLAIMS

The Ore group consists of 32 full size claims (1500x1500) all held by the right of location and contain approximately 1600 acres, more or less. All claims are correctly staked and there appears to be no overlap of adjacent claims.

The names of the claims are Ore 1 to 32 and have Grant Numbers Y 31126 to Y 31149 and shown on Claim Sheet 115-F-5 of the Whitehorse Mining District and dated 21 Apr 69.

GEOLOGY

At the time of the examination snow conditions made geological mapping difficult but the following rock types are present.

The claims are underlain by Upper Triassic (?) volcanics of the Mush Lake group and consist of andesite, basalt, and tuff. They vary in grain size from fine to medium and may be dark, green red or purple in colour. Amygdaloidal or porphyritic flows are also present. They have been highly altered, sheared, and faulted in several directions. Alteration consists of the formation of chlorite, carbonate, and epidote. The amygdaloidal filling is either chalcedony or epidote.

No outcroppings of granitic rocks were observed and are believed not to occur.

Several major faults are present including the north-east trending White River fault as defined by the upper canyon of the White River and the northwest trending Generc-Tchawsehon thrust fault. Numerous subsidiary faults and

lineations are also present and are believed to be related to the control of mineralization in the area.

Mineralization on the adjacent Silver City property consists of fissure filling and replacements of chalcocite and bornite. Native copper is also present. This may be of secondary or primary origin but not enough study has been made to determine its origin.

#### PROCEDURE

As very little could be done in the way of geological mapping I decided to test by geophysical methods for the confirmation or indication of the magnetic low outlined on the Government aeromagnetic map.

Accordingly a base line was cut following the approximate direction of the Ore Ore 9 to 16 and Ore 25 to 32 location line and was 10,000 feet long. Magnetometer and electromagnetic readings were taken at least every 100 feet or oftener along the Base line and the results plotted as profiles on the attached drawing.

The machines used were a Ronka EM 16 and a Jalander fluxgate magnetometer.

The Ronka 16 consists of a very sensitive radio receiver covering the frequency band of a VHF transmitting station and has a patented means of measuring the vertical field components in-phase and quadrature components at right angles to the direction of transmission.

The Jalander magnetometer consists of a hand held, light weight instrument, which measures the vertical component of the magnetic field by means of an oil dampened fluxgate. The range of this magnetometer is 250,000 gammas over five

CANYON CITY  
MINES

BOULDER  
CREEK

SILVER CITY  
MINES

C-CU GROUP

WHITE  
RIVER

LOCATION SKETCH

ORE GROUP  
(32 M.C.)

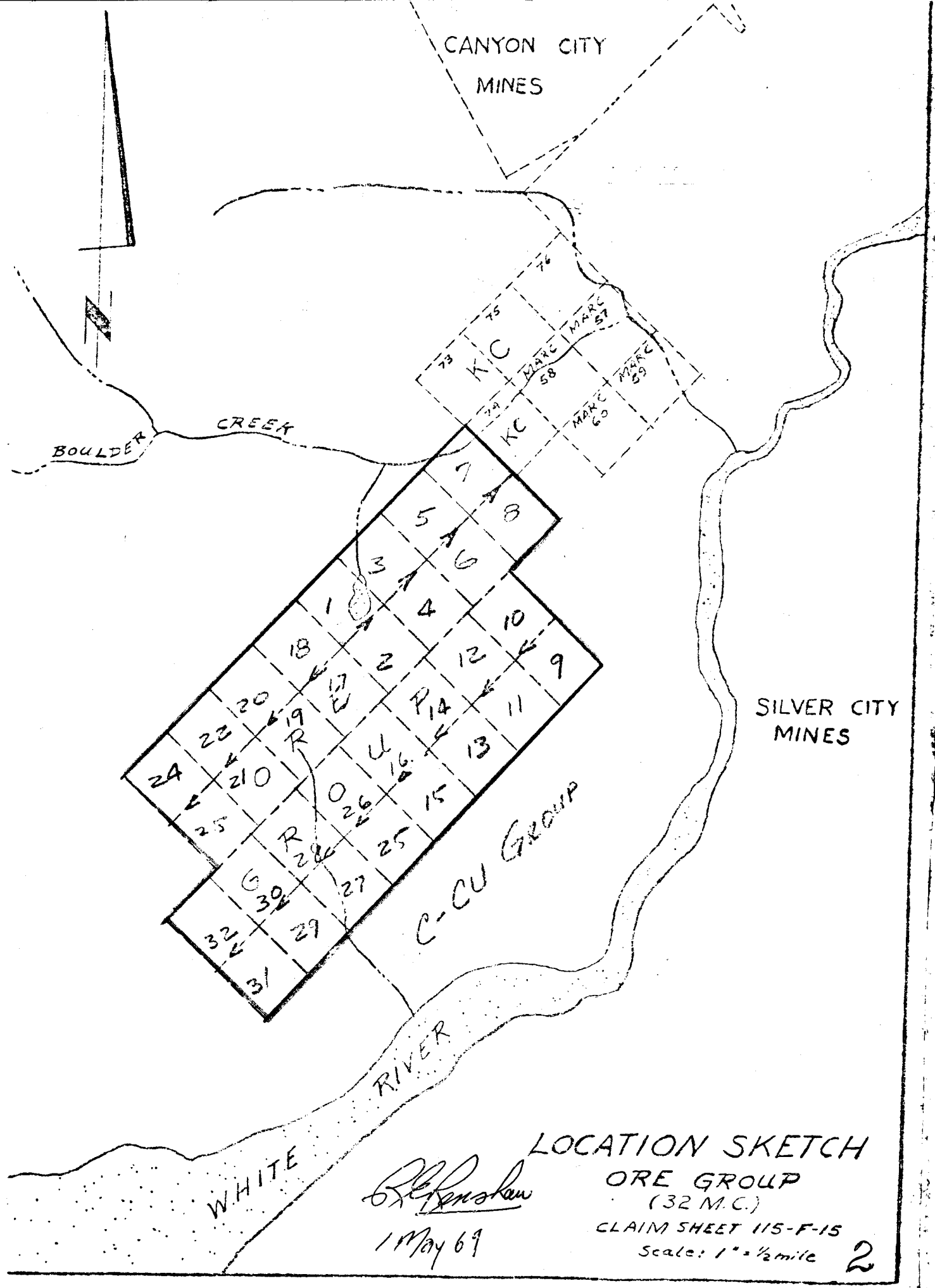
CLAIM SHEET 115-F-15

Scale: 1" = 1/2 mile

*W. H. ...*

1 May 69

2



7.

sensitivity ranges with the lowest being 10 gammas per scale division and all requiring conversion factors before gamma values can be determined.

The results of the traverse along the base line showed indications that the "magnetic low" to be present

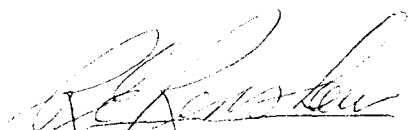
#### CONCLUSIONS

There is a reasonable chance that the Ore group may contain structurally controlled copper and nickel deposits similar to that of the adjacent Silver City Mines Ltd. as the geology and structure appears to be the same. Also native copper float has been reported to have been found on the claims.

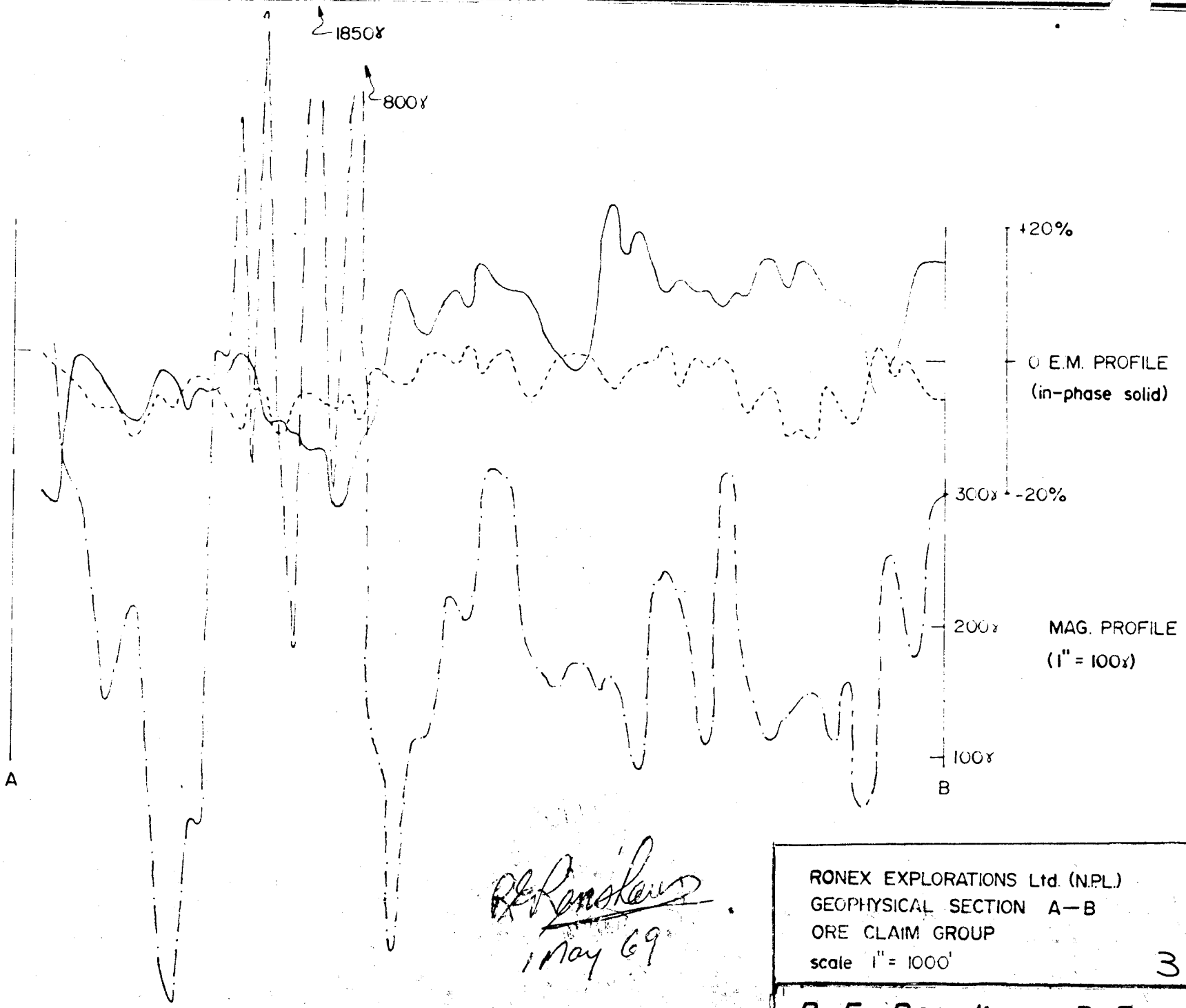
An exploration program for the development of the property is warranted. Such work will consist of line cutting, geological, geochemical, and geophysical surveys, stripping, and diamond drilling.

#### ESTIMATED COSTS

My Table of Estimated Costs to carry out the above work is shown in the attached Appendix "A".

  
R. E. Renshaw, P. Eng.  
Consulting Geologist  
Vancouver, B. C.  
1 May 69

**R. E. RENSHAW, P.ENG.  
CONSULTING GEOLOGIST**



*R. E. Renshaw*  
 1 May 69

RONEX EXPLORATIONS Ltd. (N.P.L.)  
 GEOPHYSICAL SECTION A-B  
 ORE CLAIM GROUP  
 scale 1" = 1000' 3

**R. E. Renshaw, P. Eng.**


APPENDIX "A"- TABLE OF ESTIMATED COSTS - ORE GROUP

1. Geological prospecting, mapping, sampling etc.--	\$4,000.00
2. Ground magnetometer survey, 10 miles @ \$100.00--	1,000.00
3. Line cutting and picketing, spaced 400 feet apart with stations every 100 feet, 10 miles a cost of \$125.00 per mile	1,250.00
4. Ground electromagnetic survey 10 miles at \$150.00 per mile	1,500.00
5. Geochemical survey and assays, 10 miles at a cost of \$200.00 per mile	2,000.00
6. Engineering and supervision	3,500.00
7. Camp and subsistence	4,000.00
8. Transportation and communication	7,000.00
9. Reserve for Head Office and contingencies	5,750.00
	<hr/>
TOTAL-----	\$30,000.00

Upon suitable results and target zones outlined by the above surveys Stage "B" would be justified.

STAGE "B"

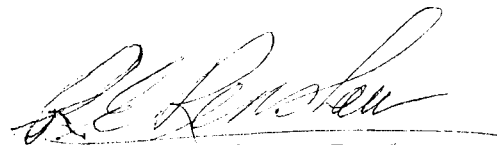
1. Road building, diamond drill set ups, stripping and trenching.	\$25,000.00
2. Diamond drilling 3000 ft B <sub>3</sub> core	45,000.00
3. Support facilities and contingencies	25,000.00
	<hr/>
	\$95,000.00
Total Stages "A" and "B" -----	\$125,000.00

  
R. E. Renshaw, P. Eng.  
Consulting Geologist  
Vancouver, B. C.  
1 May 69

CERTIFICATE OF QUALIFICATION - APPENDIX "B"

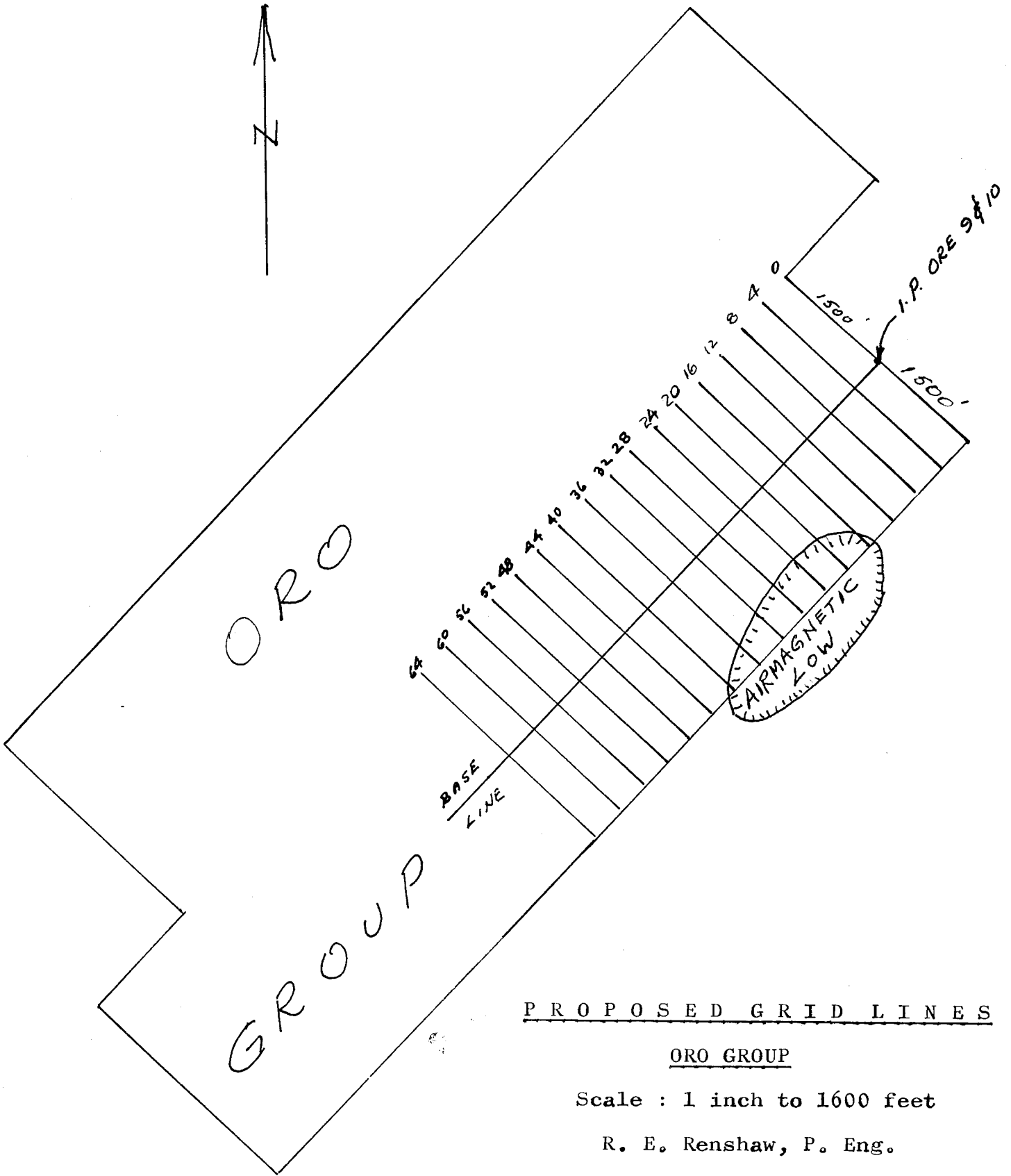
I Rodney E. Renshaw hereby certify that;

1. I reside at and maintain an office at #201-1345 Nelson Street, Vancouver, British Columbia.
2. I am a graduate of the University of British Columbia and hold the degree of Bachelor of Applied Science in Geological Engineering. I have also taken two years post graduate studies in specialized courses in geology and geophysics.
3. I am a Registered Professional Engineer of the Province of British Columbia and hold Certificate #2135.
4. I have been practising my profession as a Consulting Geologist and Engineer since 1946.
5. I have no interest in the ORE claims or shares of the Company direct or indirect nor do I expect to receive any.
6. That this report is based upon my personal examination and supervision.



R. E. Renshaw, P. Eng.  
Consulting Geologist  
Vancouver, B. C.  
1 May 69

**R. E. RENSHAW, P.ENG.  
CONSULTING GEOLOGIST**



PROPOSED GRID LINES

ORO GROUP

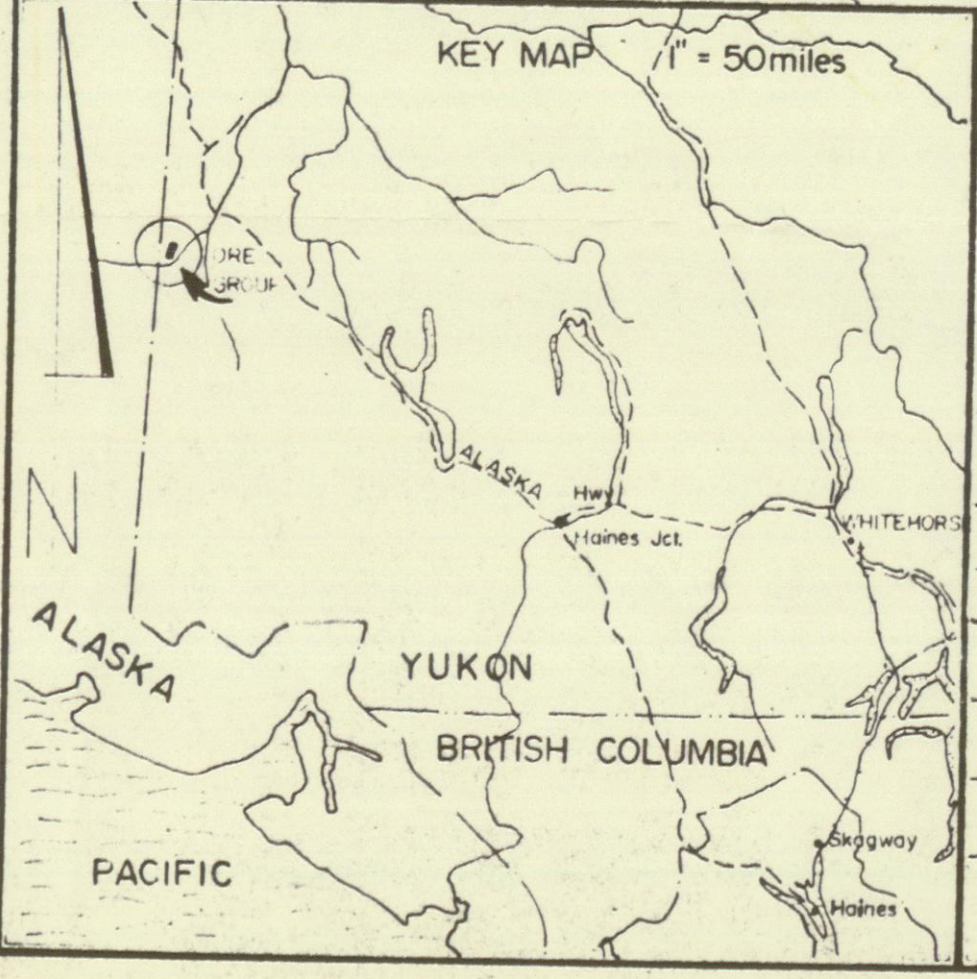
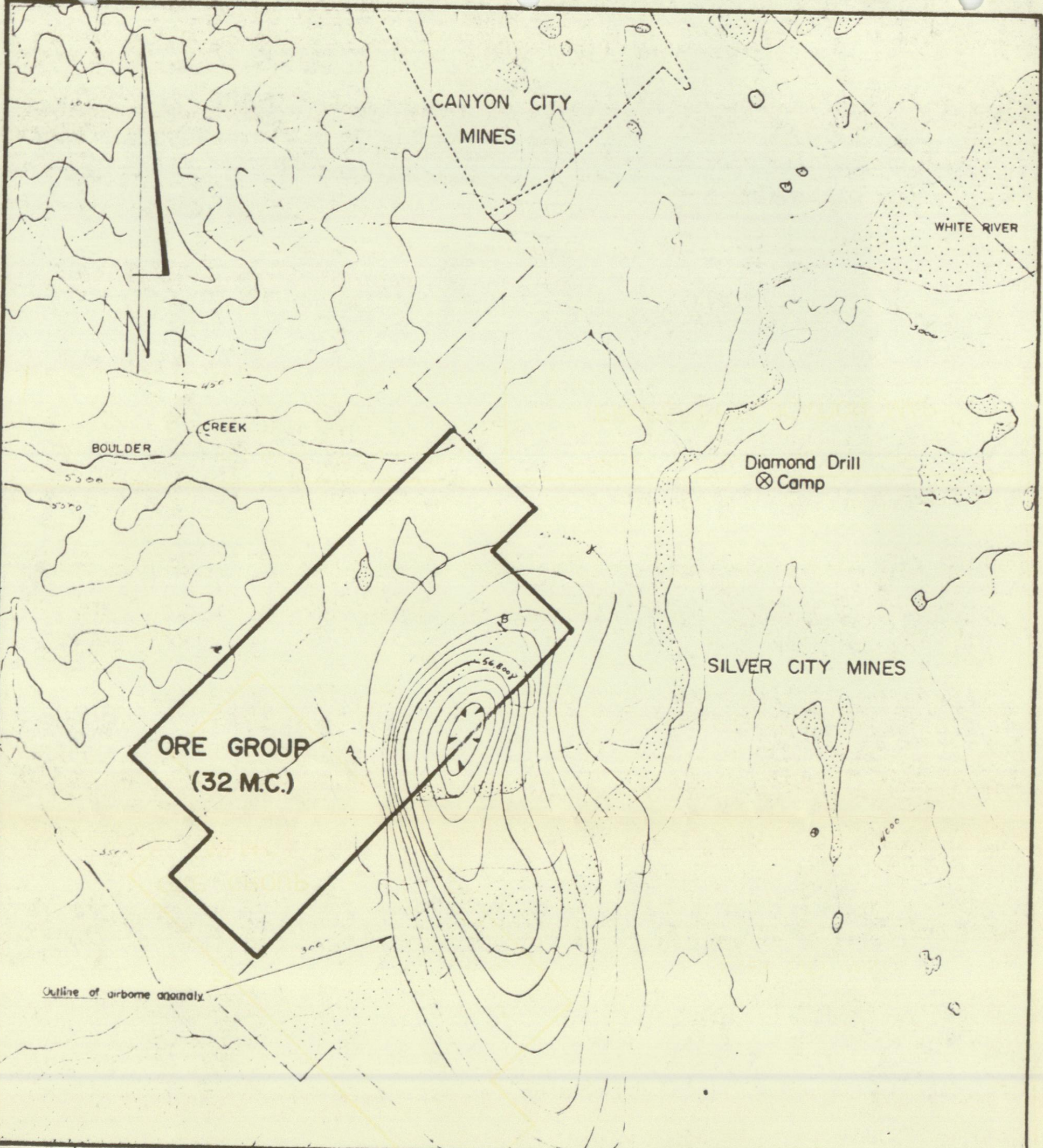
Scale : 1 inch to 1600 feet

R. E. Renshaw, P. Eng.


Consulting Geologist

1 May 69

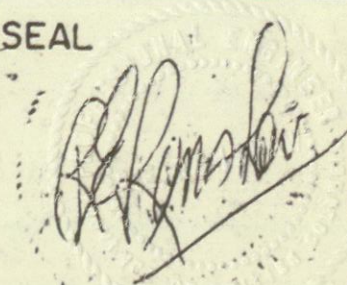
R. E. RENSHAW, P.ENG.  
CONSULTING GEOLOGIST



RONEX EXPLORATIONS Ltd. (N.P.L.)  
**PROPERTY LOCATION MAP**  
**ORE CLAIM GROUP**  
 WHITE RIVER AREA  
 WHITEHORSE MINING DISTRICT Y.T.

 magnetic low   
 A   B   preliminary E.M.B. MAGNETOMETER SURVEY  
 Claim location approximate

**R.E. Renshaw, P. Eng.**

DATE	+MAY 69	SEAL
SCALE	1" = 1/2 mile	
DRAWN	R.E.R.	
	/	