

Geophysical Report

Emil 5 (in part) 6 and 8 Claims
Ten Miles South of Whitehorse Y.P.

Sheet 105=D=10

Latitude 60-36, Longitude 134-55

For

Quatsino Copper-Gold Mines Ltd.
Vancouver B. C.

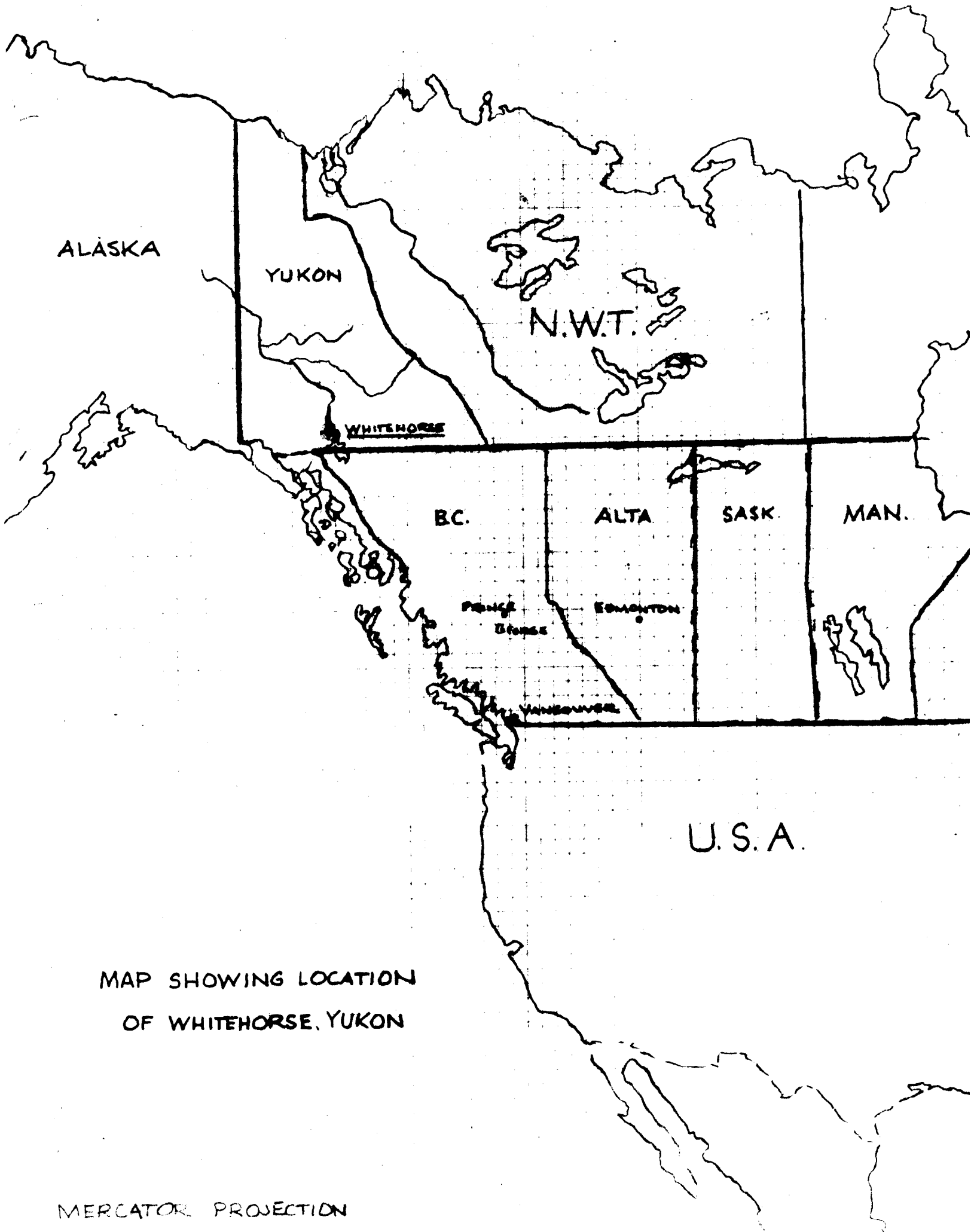
May 14 to 20, 1965.

Alfred R. Allen, P. Eng.,
Consulting Geological Engineer,
and
John C. Lund, Geologist.

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MAP: Location of Whitehorse Y. P.
Location of Claims



ALASKA

YUKON

N.W.T.

WHITEHORSE

BC.

ALTA

SASK.

MAN.

PRINCE
GEORGE

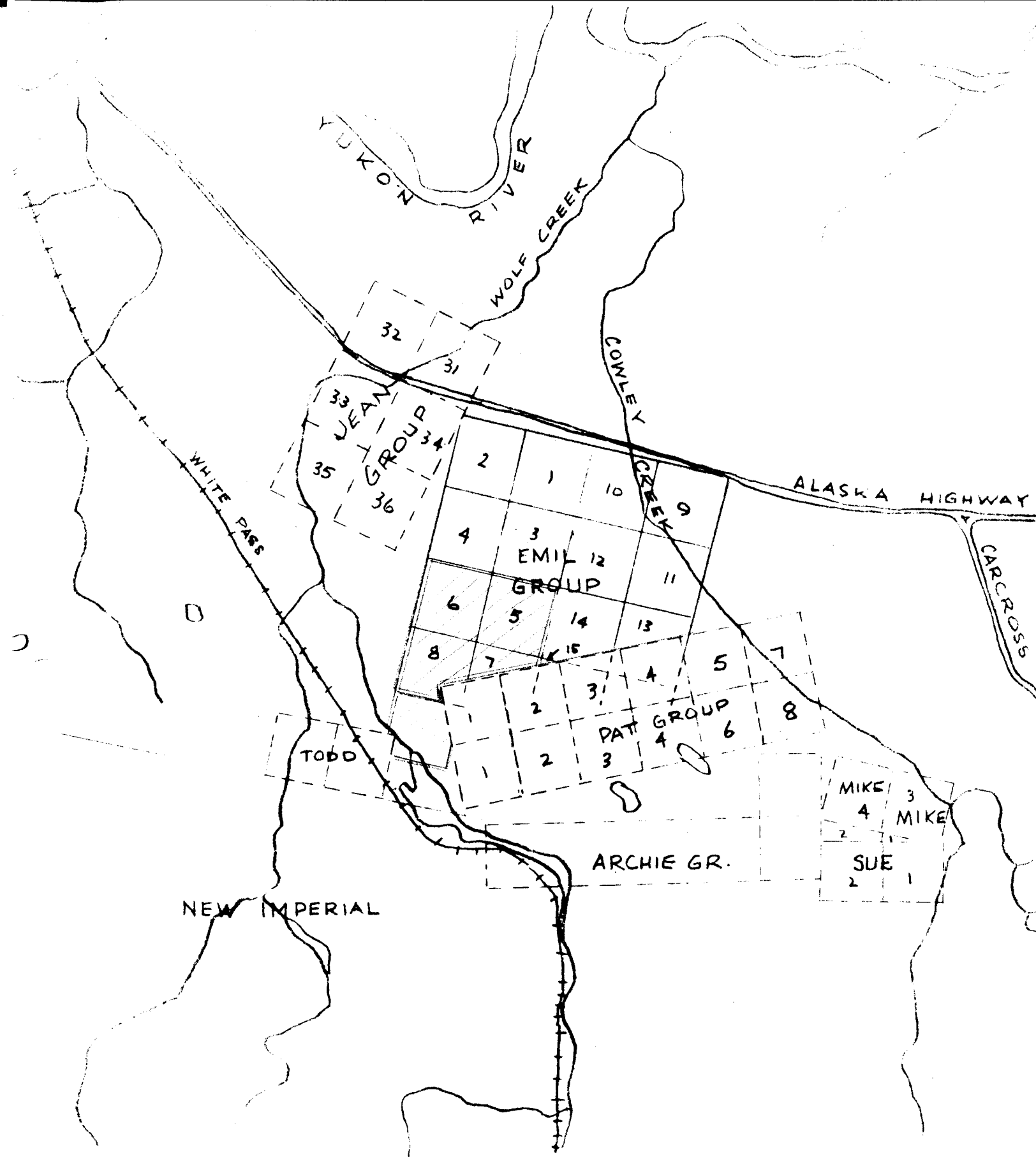
EDMONTON

VANCOUVER

U.S.A.

MAP SHOWING LOCATION
OF WHITEHORSE, YUKON

MERCATOR PROJECTION



- Quatsino claims
- survey on claims

QUATSINO COPPER-GOLD CLAIMS
LOCATION OF CLAIMS

REPORT ON THE EMIL GROUP OF MINERAL CLAIMS

WHITEHORSE, YUKON TERRITORIES

INTRODUCTION

The Emil Group consists of 16 located claims (Emil #1 - 16 inclusive) which lie within the Whitehorse copper belt approximately 12 miles southeast of Whitehorse. They form a south - southeast trending block that lies adjacent to, and south of, the Alaska Highway. A gravel road extends from the highway across the four westerly claims into the Moon and Ann claims west and south of the Emil claims. White Pass and Yukon railway lies approximately one mile to the southwest of the property.

Survey was carried out between May 14th and May 20th by the writer accompanied by Hans Glosslee of Whitehorse.

Four men were employed by Mr. Glosslee to cut line for the magnetometer survey. Transportation also was provided by Mr. Glosslee from Whitehorse to the property.

Weather during the period was generally sunny and warm; cool and frosty at night,

OWNERSHIP

Claims are owned by Quatsino Copper-Gold Mines Ltd. of Vancouver, B. C.

Claim position of Pat and Peter were found to be different than plotted on Government Claims Map. These are plotted in their proper position in Fig. 1.

GEOLOGY

The property is situated in an area of low relative relief covered by a moderate growth of pine, spruce and poplars. Fine sands, glacial material and gravels underlie the claims, and no outcrops were observed. Some rock exposures are reported in the northeast corner of the group in the Cowley Creek; these were not examined.

E.D. Kindle (G.S.C. Special Paper 63-41) maps the area as granitic intrusive rocks, and large boulders of granite indicate this to be essentially true.

One large boulder of limestone was noted, perhaps significantly in the area in which anomalous readings were obtained on the magnetometer. This may suggest a possible horse or remnant of limestone in the intrusive rock similar to that in which the Sue and Cowley Creek mineralization occurs, and hence provide a favourable environment for mineralization.

GEOPHYSICS

Area chosen was selected to correspond with anomaly shown on Government Aeromagnetic Map 1341 G. MacRae Sheet, Yukon Territory (1961). Initial post of Emil #6 M.C. was taken as control point with location line (bearing approximately 190° - 200°) as base line. Lines were run westerly and easterly off base line at 250 foot intervals and readings taken at 100 foot intervals. A total of 25,900 feet of cross lines were cut and 3250 feet of base line cleared.

Area covered by survey included Emil #6, 8, part of Ann and part of Emil #5, M.C. A Jolanda double coil fluxgate magnetometer was used for the survey.

An anomalous zone approximately 800 feet long with an average width of possibly 125 feet was outlined, trending in a northeasterly direction. Maximum readings obtained above background were 3500 gammas. (See Map in pocket).

Eight soil samples were taken at points of high magnetic readings and tested for copper by rubeanic acid method. Four gave very weak positive tests.

SUMMARY AND CONCLUSIONS

The claims lie in a drift covered area with few outcrops to guide geological interpretation, hence geophysics and possibly geochemistry must be used to test the potential of the ground. The present survey covering 2½ claims indicates a magnetic anomaly 800 feet by 125 feet which warrants further investigation. Soil samples taken over this anomalous zone gave weak positive tests for copper. It is felt that a combined geophysical and geochemical survey would prove most useful in delineating potential ground.

Water for drilling, if property eventually warrants it, should be no serious problem; Wolf Creek and Cowley Creek run through the property. Also there is a small lake two claim lengths immediately south of the Emil #8 claim which could be utilized.

RECOMMENDATIONS

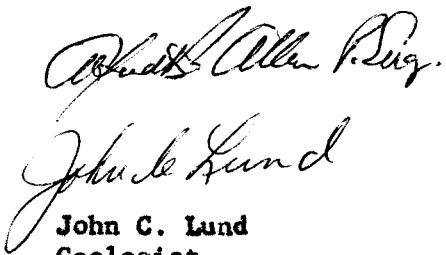
Further exploration is recommended as follows:

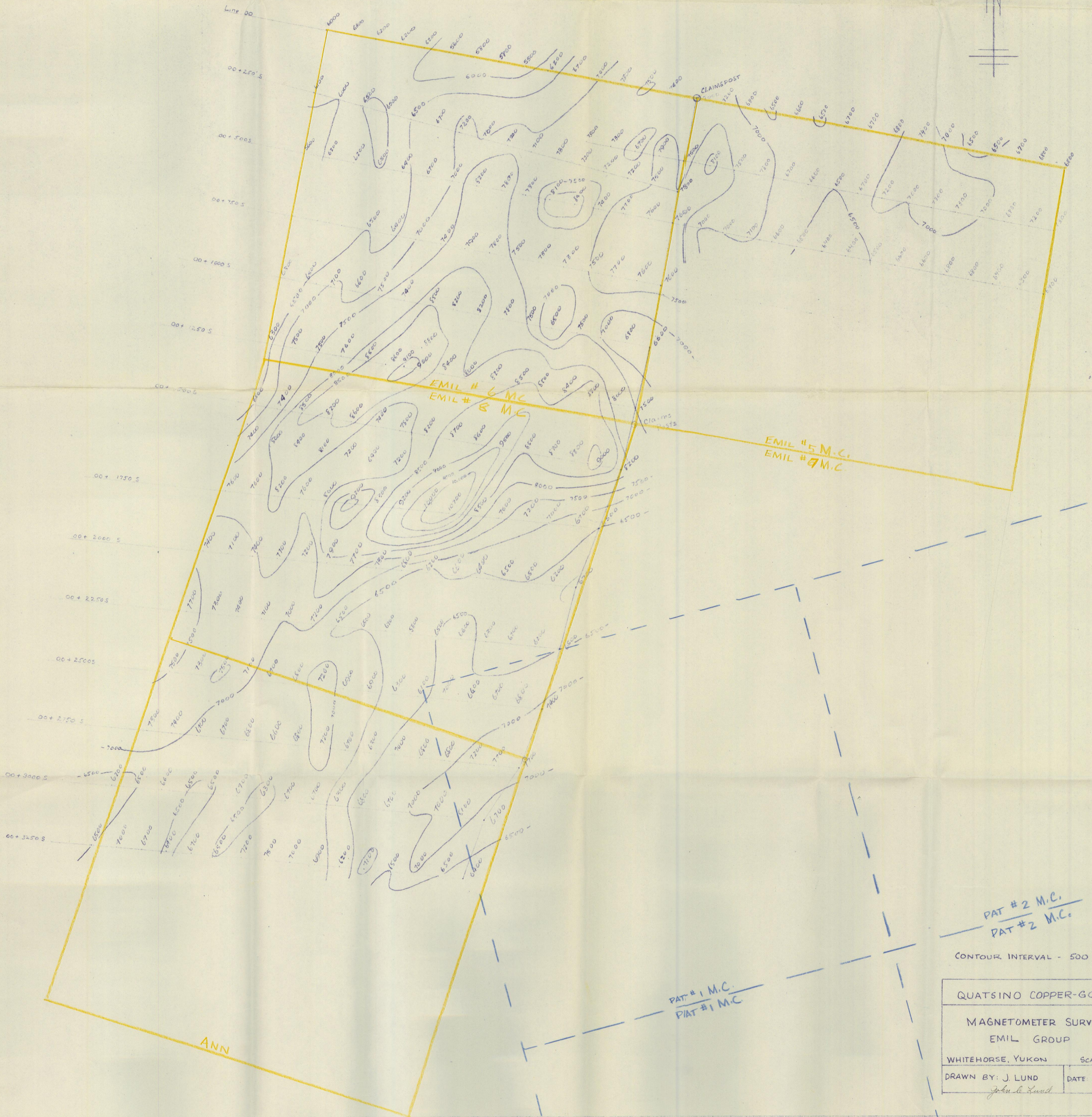
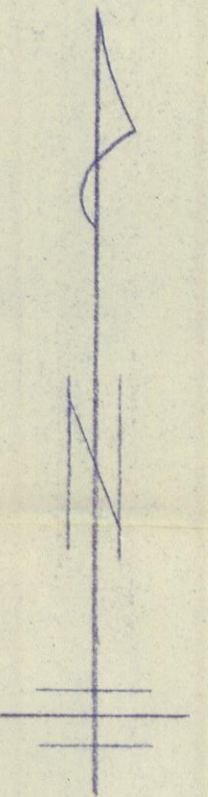
- 1) Soil samples taken at present survey points within the area bounded by line 00 + 1000S and 00 + 2250S. Soils should be taken at the base of the root layer. An effective and easily applied test for copper is the rubeanic acid method, which does not require skilled personnel.
- 2) If soil sampling supports magnetic anomaly, close in the magnetometer survey within this zone by running cross lines off base line at 125 foot intervals and take readings at 100 foot intervals.

Further work on this zone would be dependent on results of above work.

- 3) For exploration beyond present survey soil sampling is recommended as first step followed by detailed magnetometer work where sampling warrants it. Immediate area of interest is Emil #5 and #7 claims to east and Moon and Ann claims immediately west and southwest of Emil #6 and #8 M.C. The present grid should be extended into these areas and soil samples taken.

May, 1965


John C. Lund
Geologist



CONTOUR INTERVAL - 500 gammaes

QUATSINO COPPER-GOLD CO.	
MAGNETOMETER SURVEY	
EMIL GROUP	
WHITEHORSE, YUKON	SCALE 1" = 200'
DRAWN BY: J. LUND	DATE MAY 21, 1965
<i>John L. Lund</i>	