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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 437 MAP

104I/2W

#### APPENDIX "A"

Statement of Qualifications of Murray 0. Hampton
Geologist

Education: Entering final year of the course leading to degree of B.A.Sc. in Geological Engineering

Experience: One season's geological work with Utah

Construction & Mining Co. in Alaska —

1960. One season's geological work

with Bardyke Mines Ltd. in northern

British Columbia — 1961. One season's

geological work with Julian Mining Co.

Ltd. in Northern British Columbia — 1962

#### APPENDIX "B"

SUB-MINING RECORDER

PRINCE GEORGE, B. C.

# STATEMENT OF COSTS OF SURVEY

#### ANT MINERAL CLAIM GROUP

Geologist

30 days @ \$25.00 per day \$750,00 Maintenance 30 days @ \$ 7.00 per day 210.00 960.00

Helper

Wages 30 days @ \$15.00 per day \$450.00 Maintenance 30 days @ \$ 7.00 per day 210.00 660,00

Supervision 30 days @ \$ 7.50 per day 225,00

Mapping and printing 165,00

> TOTAL \$2,010.00

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 the Coly

Province of British Columbia, this /4

1962

A Commissioner for taking Affidavits within British Columbia, or A Notary Public-in and for the Province of British Columbia

### JULIAN MINING CO. LTD.

#### GEOLOGICAL REPORT

on the

#### ANT MINERAL CLAIM GROUP

#### Introduction:

The twenty mineral claim ANT group consists of four ANT mineral claims numbered 1, 2, 3 and 4 located by Kolbjorn Lovang in September, 1961 and sixteen TNA mineral claims numbered 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 29, 30, 31, 32, 37 and 38 located by Roderick Macrae September, 1961. Copper mineralization had been found in float and in place in the central area of the group.

The mineral claims were aquired by Julian Mining Co. Ltd. in 1962.

Julian Mining Co. Ltd. employed the services of the writer and one
assistant to map the geology of the area of the ANT mineral claim group.

Between July 3 and August 2 data was collected from which the enclosed geological map was compiled.

## Description:

The ANT mineral claim group occupies an area approximately 1.5 miles S 10 E of La Marge Lake. It is on the north slope of the ridge at an elevation of approximately 5000 feet above sea level. The southeast corner of the group has latitude and longitude of 58° 10' N and 128° 53' W respectively. Access to the area can be gained by float equipped, fixed-wing aircraft to La Marge Lake and, thence, by tractor trail from La Large Lake to the mineral claim group or from Dease Lake by tractor trail. Much of the area is covered by overburden, scrub forest and/or talus.

#### Procedure:

Central portion of mineral claim group was mapped using a transit and stadia methods. The mapping originated from and was controlled by a transit and tape baseline. Outer portions of the group was mapped by a series of pace and compass traverses originating and terminating on the baseline. All correction adjustments to the traverses were made by graphical methods. The geological map enclosed was compiled by the writer from information of the above surveys on a scale of  $1^n = 400^t$ .

#### Geology:

Rocks within the ANT group of mineral claims are, in the main, limestone and volcanic rocks of Permian and/or Triassic age. The limestone is a white and grey banded variety which is somewhat silicified. The beds of limestone strike N 37 E and dip 50 SE in the central part of the group. The dip and strike varies considerably in the area with irregular minor folds and fracturing. Volcanic rocks in area are a mixture of flows and ejecta mainly of andesite composition. Way-up of the strata is unknown. Rocks of the entire area are highly jointed and fractured. In the central area some of the limestone and volcanic rocks are altered to chloritized and serpentinized schists. These schists have a variety of colors with green and purplash being most common.

The area has undergone faulting with the main fault being north of the northern boundary of the group. From the surrounding area the main fault appears to be a thrust fault which has lowered the southern strata in relation to the northern. Apparent vertical displacement is in excess of 500 feet. The main fault strikes irregularily NW - SE. Schist, mineralization and topography in the central area suggest another fault striking N 60 E.

In trenches in the central area near the common corner of mineral claims ANT No. 1, ANT No. 2, ANT No. 3 and ANT No. 4 veins of quartz and

calcite with chalcopyrite and minor amounts of pyrite are exposed. The mineralized zone lies parallel to bedding with horizontal exposure to 10 feet in width narrowing both ways along strike and is traceable through three trenches for a length of 80 feet. Sulphide mineralization is not found in other trenches farther along strike. These observations suggest a lens-shaped deposit. The quartz and calcite is in contact on both sides with the schist. Minor amounts of sphalerite and pyrrhotite are found in limestone in central part of ANT No. 1.

## Conclusions:

Based on this examination of outcrops of rock and rock exposed in the trenches within the ANT mineral claim group area, it can be concluded that:

- (1) Banded limestone in area strikes northeast and dip to the southeast.
- (2) Volcanic rocks in area are a mixture of andesite flows and ejecta.
- (3) Some of the volcanics and limestone have been altered to chloritized and serpentinized schists.
- (4) All rocks in area are highly jointed and fractured.

- (5) Deposit of chalcopyrite in quartz and calcite is probably lens-shaped.
- (6) Thre are minor amounts of sphalerite and pyrrhotite mineralization in the area.

Respectfully submitted,

Manay O. Hampton

Murray O. Hampton

Dated September 11, 1962

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