

## INTER-OFFICE CORRESPONDENCE

55 YONGE STREET, TORONTO, ONT.

E. V. KIRKHAM

DATE September 16th, 1969

ATTENTION OF W. P. Hammond

SUBJECT Centura Option - Review of Data (as requested)Recommendation

The red shaded area between claims JAN 13 and JAN 11 on the attached sketch deserves a review of the I. P. results by a geophysicist familiar with Highland Valley geology and geophysical responses. Following this a field reexamination of the area and some percussion drilling might prove warranted.

The red area in the SW corner of the Centura property, although small, might also prove worth reconsidering.

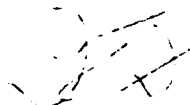
Reasons for Above Recommendation

- 1) Proximity of contact between Skeena and Chataway phases of the Guichon Batholith.
- 2) I. P. (chargeability and resistivity) response which could be significant considering the nature of these Highland Valley porphyry copper deposits (see attached appendix).
- 3) Low magnetics over SE portion of the area possibly indicate alteration.
- 4) Minor fracture controlled chalcopyrite mineralization in SW corner of property.

Negative Factors

- 1) No general geochemical high; only four small isolated copper highs over this SE corner of the Centura group.
- 2) No reported mineralization in outcrops within area of highest I. P. response. These outcrops could, however, represent relatively unfractured and unaltered blocks less prone to weathering than surrounding fractured and altered material.

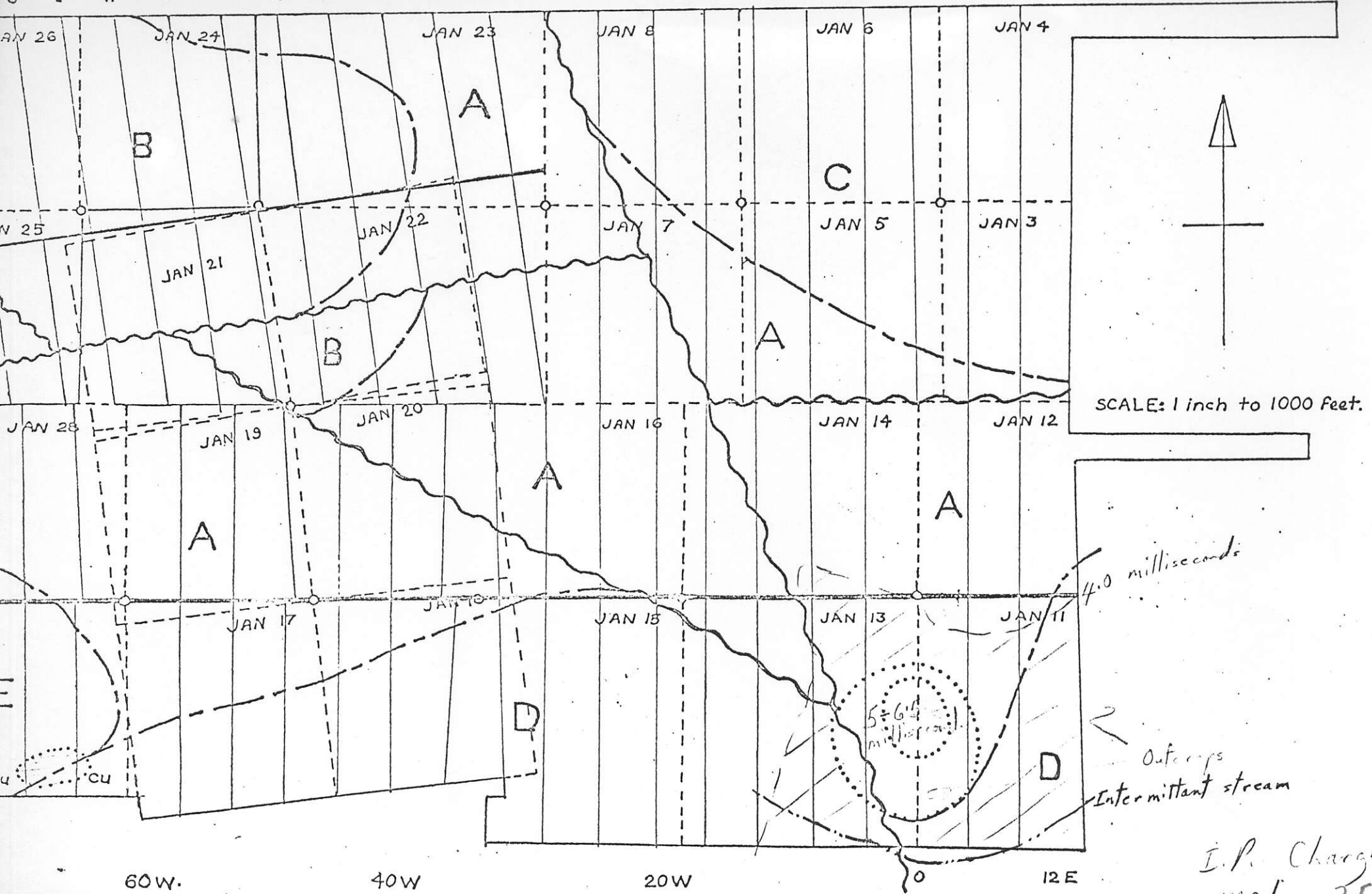
3) Number of outcrops would suggest that area probably has relatively shallow overburden compared to what writer feels is at Valley Copper. One thus should get a better I. P. response on the Centura than on the Valley Copper property, if disseminated sulphides are present.



D. W. Davis

DWD/lm

J I H G F E D C B A



CENTURA OPTION-HIGHLAND VALLEY AREA B.C.

I.P. Charge  
median 205  
milliseconds.

## APPENDIX

### Gortdrum Deposit - Geological Characteristics & I. P. Response

- 25 feet cover over deposit over width of 200 feet
- Extend to at least 200 feet in depth
- Grade 1.33% Cu., 1.20 oz. Ag/T
- Disseminated in dolomitic limestones
- Reserves 3,430,000 T

<u>Max. Chargeability</u> (Milliseconds)	<u>Resistivity</u> (Ohm meters)	<u>Electrode Spacing</u> (Feet)
about 15		200
about 17	about 1300	100
about 11		50

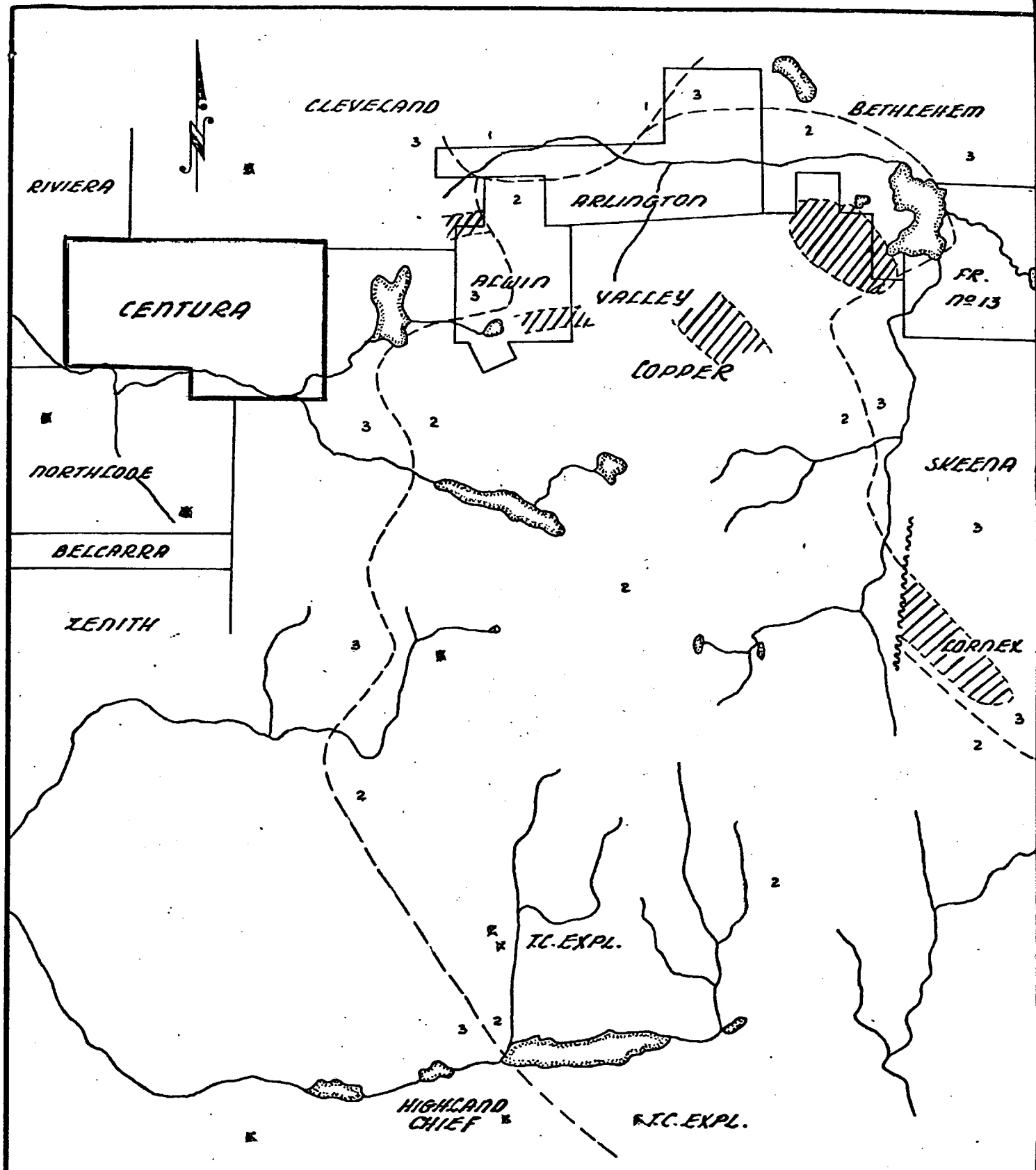
Background chargeability about 3 to 4 milliseconds.

### Highland Valley Copper Deposits (an attempted comparison with above)


- 25 feet or more overburden over much larger deposit than Gortdrum
- Depth of deposit, 200 feet plus
- Grade 0.40% Cu
- Disseminated in altered quartz diorite
- Reserves potentially greater than 25 million tons

Considering the grade and other characteristics of such a deposit one would expect an I. P. response of less than  $15 \times \frac{0.40}{1.33} = 4.5$  at 200 foot spacing of

electrodes. Median or background chargeability on Centura property is about 2.5 milliseconds.



**LEGEND:**

- 1 Volcanics
- 2 Bethsaida Granodiorite
- 3 Skeena Granodiorite
-  Copper Occurrence

**M'INTYRE PORCUPINE MINES LIMITED**  
**CENTURA OPTION**  
**BRITISH COLUMBIA**  
**GENERAL GEOLOGY**  
 SCALE: 1"=1mile    DATE: Oct., 1969.

## Centura Option, British Columbia

### Claims and Location

The Centura Option covers a block of 28 mineral claims in the Highland Valley area, B.C. Since the agreement was made (26/11/68) 4 full and 4 fractional claims have been grouped with the Centura claims.

### Geology

Available geological data suggest that contacts between phases of the Guichon Batholith (granodiorite) probably occur on the generally overburded property. These contact zones are considered fair prospecting bets in the Highland Valley area.

### Work to Date

1968 - a ground magnetometer survey and soil sampling for copper and molybdenum

1969 - induced polarization (chargeability and resistivity) survey, geological mapping, and further soil sampling.

The above work outlined a zone (approx. 1200' x 1400') of interest in the southeast corner of the property. An I. P. anomaly twice background, two slightly anomalous copper zones and three small fractured, but unmineralized granodiorite outcrops characterize the area. Also, it may be cut by an east-west (Alwin) shear trend.

Two drill holes are to be put in shortly to check the slightly anomalous zone. These were decided on after learning that only a weak I. P. response outlined Valley Copper's mineralization.

### Principals

Centura Mining Company Limited (N. P. L.) incorporated under laws of B.C.

### Terms (Agreement made 26 November, 1968)

a) McIntyre to commence with exploration immediately and not to stop for period of more than 150 days.

b) McIntyre may form new company before 30 November, 1970. Authorized capital 1,000,000 common shares with or without par value and 2,000,000 three percent (3%) non-cumulative redeemable (at par of \$1.00) non voting preference shares.

c) 1,000,000 non-assessable common shares to be issued - 350,000 to Centura and 650,000 to McIntyre.

Centura Option ... (cont'd)

d) McIntyre to receive non-assessable preference shares in equal number to dollars expended up to date of company incorporation. After incorporation, McIntyre may either purchase or continue to do work for remaining preference shares.

e) 80% of net earnings to be devoted to redeeming preference shares.

Costs of End of September - \$20,177

D. W. Davis

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