6218

REPORT ON

INDUCED POLARIZATION SURVEY

ON THE

COPPERADO PROPERTY

NICOLA MINING DIVISION, B.C.

ON BEHALF OF

DANSTAR MINES LTD.

by

Richard O. Crosby, B.Sc., P.Eng.

July 20, 1976

Claims : Turlight - L 4841

Mar 1-20 - 58098-117

A 1-12 - 59417-28

TM 2, 4, 6, 8 - 58094-7

Tol 1,2 - 117, 118

Location : About 14 miles northeast of Merritt, B.C.
Nicola Mining Division, B.C.
50°12'N 120°36'W

Dates : June 16 - June 29, 1976

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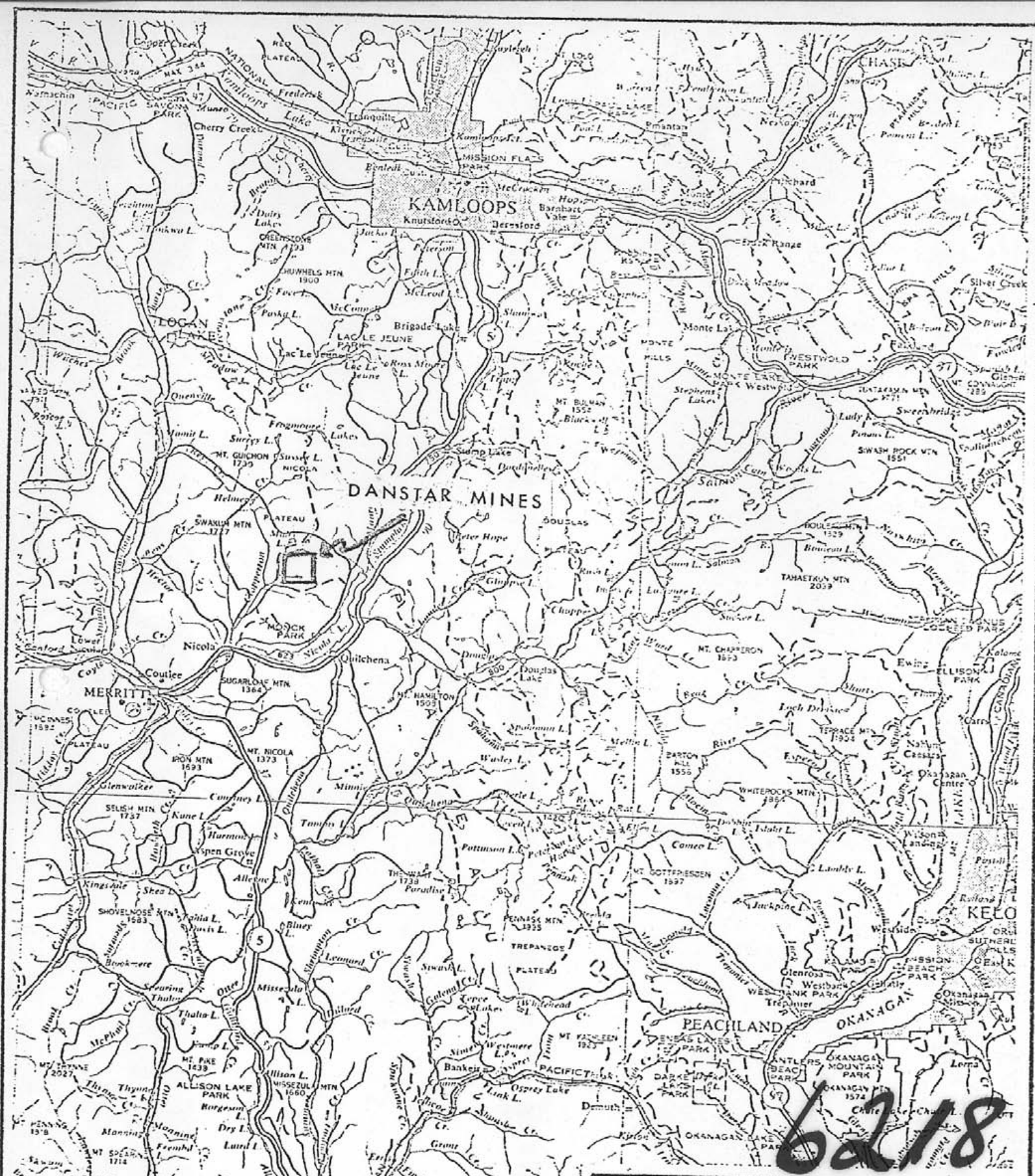

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DANSTAR MINES LTD

LOCATION MAP

DRAWN BY: ROC	SCALE: 1" = 10 MI
DATE: JULY 1976	N.T.S. :

INTRODUCTION

During the period June 16 to June 29, 1976, a combined induced polarization-resistivity survey, under the direction of Mr. R. F. Sheldrake, was executed on behalf of Danstar Mines Ltd. over a portion of the company's claim group. The claims are located on the southwest slopes of Mount Pleasant, east of Clapperton Creek and north of Nicola Lake about 14 miles northeast of Merritt, Nicola Mining Division, British Columbia (Figure 1).

McPhar P660 variable frequency induced polarization equipment has been used on this property. The solid state transmitter has an operating voltage range of 30-700 V.R.M.S., at frequencies of 0.125, 0.3125, 1.25, and 5 Hz. Output power is 2.5 K.V.A. The receiver has a continuously variable damping time constant, which allows the operator to adjust the instrument to the optimum degree of damping for the noise level encountered.

The purpose of the geophysical survey was to map the subsurface distribution of metallic minerals and other material such as graphite and carbonaceous material underlying the survey grid. In this environment, metallic sulphide minerals such as chalcopyrite, pyrite, bornite and molybdenite are known to be present. As well, magnetite, graphite, and other minerals can cause responses not always distinguishable from sulphide mineralization by the electrical characteristics alone.

Nine survey lines spaced 180 meters apart and oriented N60°E were laid out in the vicinity of the assumed contact between the Nicola volcanics and intrusive rocks. Two intermediate lines were also surveyed. The "dipole-dipole" electrode array with 60 meter electrode spacing was employed for the survey.

Readings were taken with spreads of 60, 120 and 180 meters. A total of 9 kilometers of surveying was completed.

GEOLOGY

A description of the regional geology of the area including and surrounding the survey grid is found on GSC map 886 A, and described by W.E. Cockfield in Memoir 249.

The property is located near the southwestern extremity of the Central Nicola Batholith and includes a contact with the older Nicola Group of volcanics and sedimentary rocks on the west, older granitic intrusions on the south and east.

Mineralization on the property consists of bornite in quartz veins, chalcopyrite, chalcocite, malachite and some native copper. Coarse grained molybdenite is found in shears in the gneissic rocks.

PRESENTATION OF RESULTS

Plate 1, on the scale of 1:3000 shows the apparent frequency effect and apparent resistivity in profile form. 0.318 and 5.0 Hz were used for all measurements except for portions of L-180N and 1-360N which were surveyed using 0.318 and 2.5 Hz. The higher frequencies of course, resulting in higher values of apparent frequency effect.

The vertical scales for all profiles are 1cm equals 2 percent for apparent frequency effect and 4cm equals 1 logarithmic cycle for apparent resistivity.

As shown on Plate 1, apparent frequency effect values vary from below 0 percent to a maximum observed value of 4 percent on L-180 N adjacent to the shaft. This value indicates a metal factor of about 6 suggesting that the zone of interest contains less than 1.0% total metallic sulphides. Background frequency effects are from 2 to 3 percent and lie in a range considered normal for intrusive rocks which underlie the survey grid.

The most striking features of the survey are to be seen on the apparent resistivity profiles. Where the contact of the Nicola volcanics and the granodiorite is apparent along the western edge of the grid extending northerly from L720 N to L1440N, the volcanics average less than 1000 ohm-meters and the intrusive rocks range between 1000 to 8000 ohm-meters.

An area of low resistivity was also recorded in the southern portion of the grid between 180W and 420E on lines 90 S, 0 and 180 N. A shaft was sunk approximately 180 meters west of this zone in the vicinity of L 180. Mineralization in the shaft would suggest that this area of low resistivity may be related, since the normal resistivity for intrusive rocks on the property is considerably higher. A slight increase in apparent frequency effect was measured on L-0 between 180 E and 180 W, suggesting the possibility of an increase in metallic mineralization in the area. The low resistivities would also suggest an increased amount of alteration. Figure 2, shows the area in contour form.

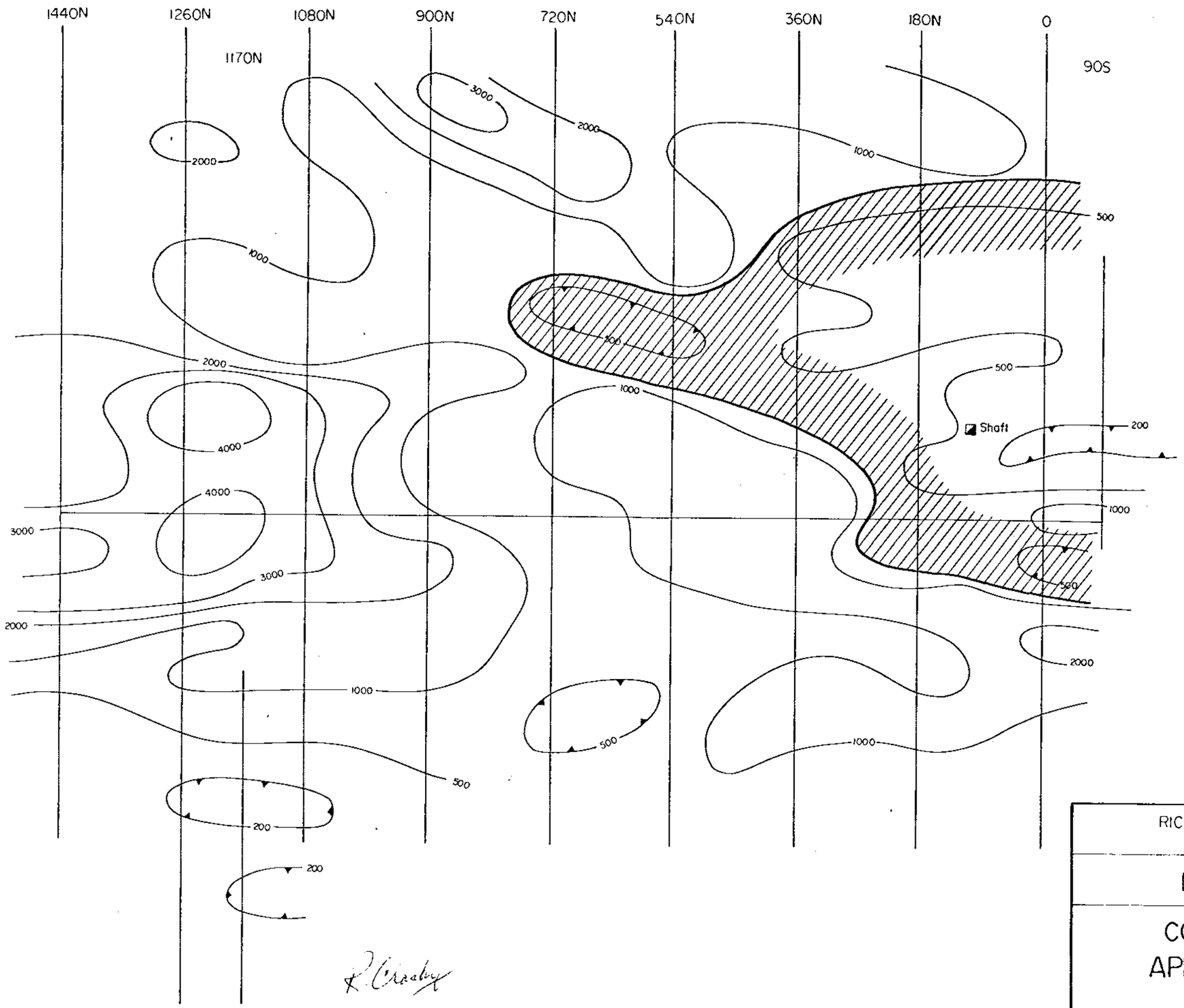

FIGURE 2

RICHARD O. CROSBY & ASSOCIATES
VANCOUVER CANADA

DANSTAR MINES LTD.

COPPERADO PROPERTY
APPARENT RESISTIVITY
CONTOURS OHM/M
120 M. ELECTRODE SPACINGS

SCALE 1 6000 | DATE JULY 1976

ELECTRODE SPACING 120 METERS

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CONCLUSIONS AND RECOMMENDATIONS

The present induced polarization survey has revealed an area of low apparent resistivity and a minor increase in apparent frequency effect which may be caused by metallic sulphide mineralization and alteration. Additional resistivity surveying should be completed to outline the area in detail. In addition to the resistivity profiling mentioned above, it is further recommended to complete V.L.F.-E.M. and self-potential surveys at the same time. These additional traverses will allow a more precise location of the source bodies to assist in determining drill locations.

Respectfully submitted

Richard O. Crosby, B.Sc., P.Eng.
Consulting Geophysicist

Vancouver, B.C.
July 23, 1976

CERTIFICATION

I, Richard O. Crosby, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1) I am a consulting geophysicist with offices located at 701 - 510 W. Hastings Street, Vancouver, British Columbia

2) I am a registered Professional Engineer of British Columbia. I graduated from Washington State University in 1951.

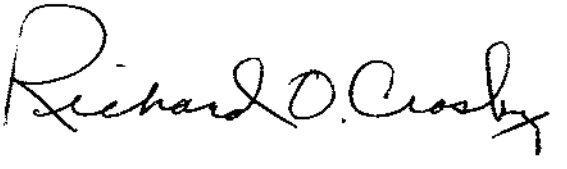
3) I have practiced my profession for 23 years.

4) I have no interest, direct or indirect, in Danstar Mines Limited or in the property discussed in this report..

5) I did not examine the permit area, but I am not aware of any claim conflict and believe that the data presented herein is reliable.

6) I consent to the use of this report in, or in connection with the prospectus, or in a statement of material facts relating to the raising of funds for this project.

DATED at Vancouver, B.C., this 23rd day of July, 1976.



Richard O. Crosby, B.Sc., P.Eng.

1440N
1260N
1080N
900N
720N
540N
360N
180N
0
180S
360S
90S
270S
1170N

A 11
A 9
A 7
A 5
A 3
A 8
A 6
A 4

MAR 12 FR
MAR 10
MAR 11
MAR 9 FR
MAR 8
MAR 6
MAR 4
MAR 7
MAR 5
TURLIGHT
L 4841
MAR 2
MAR 3

BASELINE

FIGURE 2A

RICHARD O CROSBY & ASSOCIATES
VANCOUVER CANADA

DANSTAR MINES LTD.

COPPERADO PROPERTY
GEOPHYSICAL SURVEY GRID

NICOLA MINING DIVISION
B C

SCALE 1:6000

DATE APRIL 1977

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STATEMENT OF COST

Danstar Mines Ltd. - I.P. Survey
Merritt Area, B. C.
Nicola Mining Division

Crew: R. Sheldrake, C. Hrkac, W. Booth, R. Brown, J. Rogers

Period: Reconnaissance Survey June 16 - June 29, 1976
Retail Survey July 28 - July 31, 1976

14 days operating
4 days travel
2 days preparation

13 Kilometers Surveying (Reconnaissance and Detail)
@ $600 per kilometer $7,800.00

EXPENSES

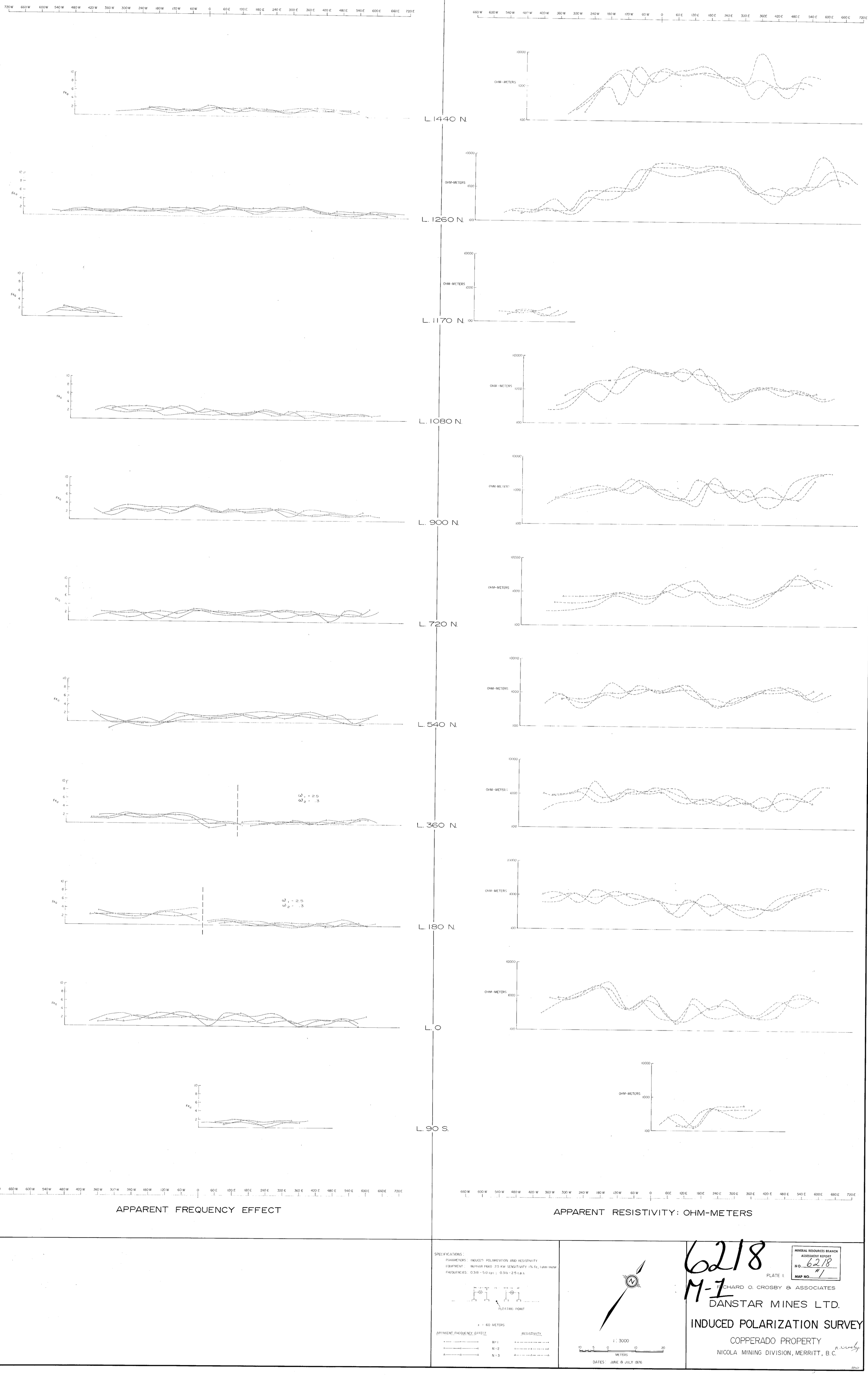
Motel and Telephone	$647.25	
Food	393.14	
Car Rental	320.00	
Travel Expenses (Gas and Fares)	91.68	
Supplies	15.88	
Shipping	3.00	
Equipment Maintenance	19.49	
Local labour	80.00	1,550.00
		$9,350.00

RICHARD O. CROSBY AND ASSOCIATES LTD.

Richard O. Crosby

APPARENT FREQUENCY EFFECT

APPARENT RESISTIVITY : OHM-METERS



SPECIFICATIONS :

PARAMETERS : INDUCED POLARIZATION AND RESISTIVITY

EQUIPMENT : McPHAR P660 2.5 KW SENSITIVITY 1% Fe, 1 ohm-meter

FREQUENCIES : 0.318 - 5.0 cps ; 0.318 - 2.5 c.p.s.

x = 60 METERS

APPARENT FREQUENCY EFFECT — RESISTIVITY

N = 1

N = 2

N = 3

1 : 3000

10 5 0 10 20

METERS

DATES : JUNE & JULY 1976

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M-1

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 6218
MAP NO. #1

PLATE I.

RICHARD O. CROSBY & ASSOCIATES

DANSTAR MINES LTD.

INDUCED POLARIZATION SURVEY

COPPERADO PROPERTY

NICOLA MINING DIVISION, MERRITT, B.C.

Affair