93L/2E

Geophysical Report

on the

MO 1-20, CO 1-6, CINDY 1-4,

JENNY 101 FR, Mineral Claims

Situated 1 mile S.E. of Owen Lake

in the Omineca Mining Division

N.T.S. 93 L/2

Lat. 54°00'N, Long. 126°40'W.

on behalf of Darkhawk Mines Ltd. (N.P.L.)

Field Work between April 25 and May 25, 1972.

Report by

R. Wolfe, P.Eng.

June 1, 1972.

3661

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FIGURES

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3661 MAP

Mining Recorder's Office
RECORDED
JUN 5 1972
AT
SMITHERS, B.C.

SUMMARY

A Self Potential Survey was conducted over the MO, CD, CINDY, and JENNY claims situated one mile southeast of Owen Lake in the Omineca Mining Division.

Previous work on the claims indicated the possibility of Bradina vein type mineralization occurring in the northeast corner of the property.

Geological, airborne magnetic, and glacial considerations combined with flat S.P. response suggest that the probability of finding economic mineralization on the claims is unlikely. Consequently no further work is recommended.

INTRODUCTION

The following report is a record of the exploration work on the CD, MO, CINDY and JENNY FR. Claims to June 1, 1972 as recommended in a report by D.R. Cochrane, P.Eng. and the present author dated January 28, 1972.

Some of the recommended work had to be somewhat modified since a claim survey indicated less ground than originally expected.

LOCATION AND ACCESS

The claims are situated 24 air miles due south of Houston, B.C., one mile southeast of the south end of Owen Lake. Access is excellent from the Bradina mine road which is kept open all year around. N.T.S. Code is 93 L/2, Lat. 54°00'N, Long. 126°40'W.

CLAIMS AND OWNERSHIP

Darkhawk Mines holds title by option to the following claims:

Claim Name	Record No.	Recording Date
MO 1 - 20	70735 - 54	May 8, 1969.
CD 1 - 6	70864 - 69	May 8, 1969.
CINDY 1 -4	90278 - 81	June 19, 1970.
JENNY 101 FR.	90277	June 19, 1970.

MO 11 - 20, CD 1, 3, and 4 are in good standing until May 8, 1973. One year assessment work was applied on May 8, 1972 to the rest of the claims. MO 1 - 10, CD 2 are therefore also in good standing until May 8, 1973 and CINDY 1 - 4, JENNY 101 FR. until June 19, 1973.

RIDDECK CR.

VENTURE

JOINT

BRADINA

MO 16

MO 15

MO 13

MO 14

CINDY 1

MO 17

MO 18

JVM

JVM

JVM

JVM

TO OWEN LAKE ONE MILE

CD 1

CD 2

MO 11

MO 12

CINDY 2

MO 9

MO 10

CINDY 3

(SURVEY TIE LINE)

MO 2

MO 1

MO 6

MO 5

CINDY 4

MO 4

MO 3

MO 8

MO 7

60 W

50

40

30

20

10

0

70 N
68 N
66 N
64 N
62 N
60 N
58 N
56 N
54 N
52 N
50 N
48 N
46 N
42 N
38 N
34 N
29 N
24 N
20 N
16 N
12 N
8 N
4 N
0

N

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3611 MAP #1

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
R. WOLFE

FIG. 1
DARKHAWK MINES LIMITED
OWEN LAKE PROPERTY

CLAIM MAP & LINE GRID

OMINECA M.D., B.C.
SCALE
Ft. 800 0 800 Ft

MONTGOMERY WOLFE & ASSOCIATES LTD.

MAY, 1972

Note:
To accompany report by R. Wolfe
June 1972

An approximate claim and compass claim survey indicates that some claims (CD 3 - 6, MD 15, 16, 19, 20) might be entirely or partially overlapped by previously located claims.

SELF POTENTIAL SURVEY

a) Line Grid.

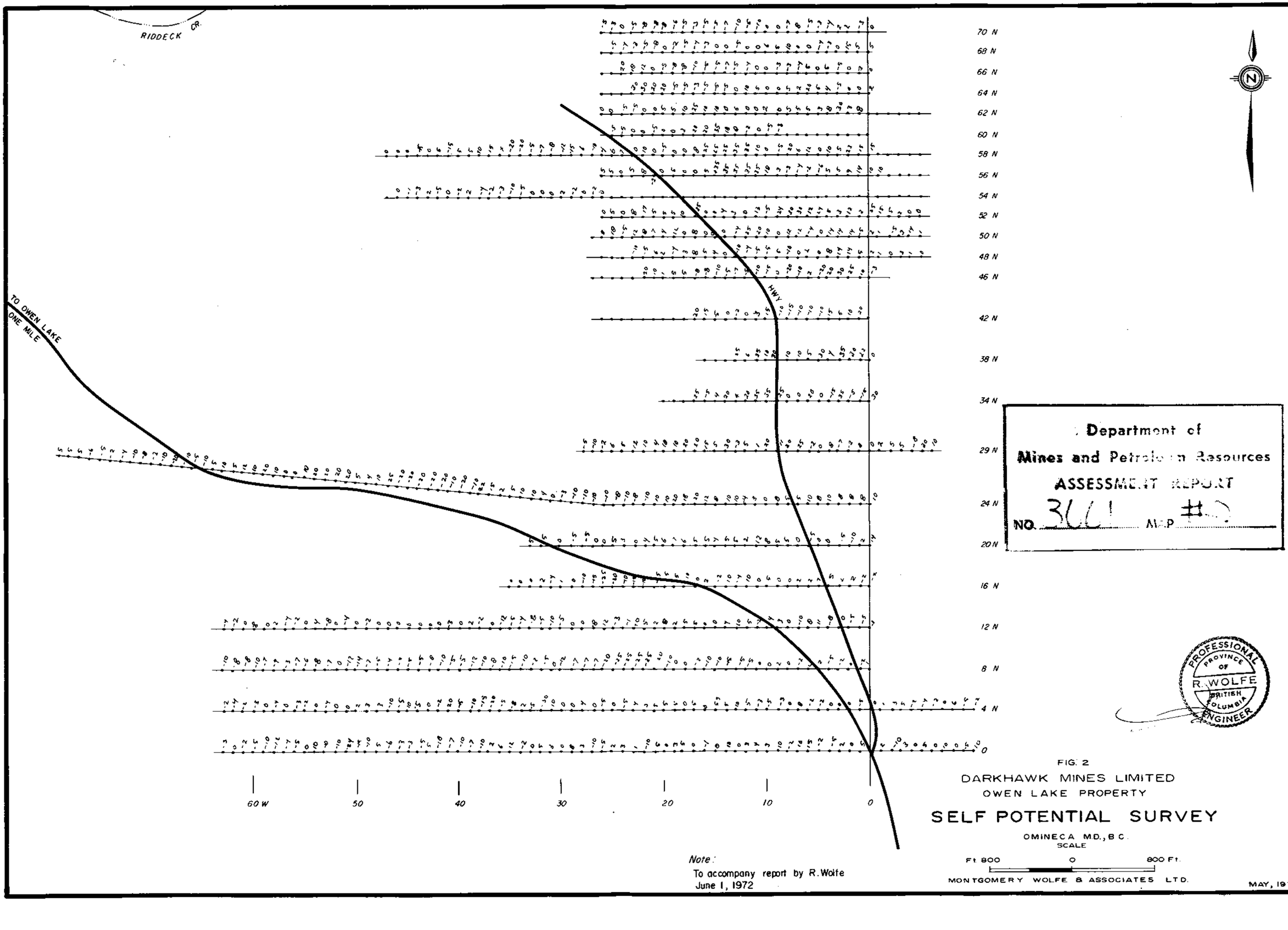
Lines were cut, chained and marked at 100 feet intervals as shown on fig. 1. The two gravel roads which traverse the property were used for control. Some of the lines were cut by previous operators and these only needed remarking.

b) Field Procedure.

Readings were taken every 100 feet on all the lines. The near pot was left on the gravel road which traverses the property in a northerly direction and the far pot was kept with the meter which is mounted on a metal tube. At first, disposable copper wire was used which had proved to be a time saver in the mid western States, but the operator switched to the conventional wire which has to be wound back. Apparently the disposable wire was too expensive to warrant any saving in labour and besides it pollutes the environment to some extent.

c) Discussion of Results

No potential differences of any consequence were outlined. The somewhat unusually flat S.P. response could have been partially caused by an extremely high watertable (snow was still present and some areas were flooded) but this argument would not hold for the higher area at



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3001 MAP #3

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
R. WOLFE

FIG. 2

DARKHAWK MINES LIMITED
OWEN LAKE PROPERTY

SELF POTENTIAL SURVEY

OMINECA M.D., B.C.
SCALE
Ft. 800 0 800 Ft.

MONTGOMERY WOLFE & ASSOCIATES LTD.

MAY, 1972

Note:
To accompany report by R. Wolfe
June 1, 1972

the western end of the property. Self Potential methods have been successful in locating mineralized veins on the Bradina property and potential differences of over 150 millivolts across 50 feet could have been expected.

CONCLUSIONS AND RECOMMENDATIONS

The exploration work to date has been focussed on the possibility that the structure which contains the Bradina Vein system could continue on the property. Indications for this hypothesis were provided by

1) a strong northwest striking linear (almost certainly a fault) in the northeast corner of the property. (see fig. 3).

2) a moderate zinc and a small silver soil anomaly, also occurring in the northeast corner of the property.

3) a weak Crone E.M. anomaly in the same area.

This hypothesis appears now improbable for the following reasons:

1) The inferred fault in the northeast corner of the property consists of a swampy creek valley bordered on the west by the Miocene Buck Creek volcanics and on the east by the Eocene Goosly Lake volcanics. Careful observation in the field concurs with the mapping of the area by Neil Church of the Department of Mines. (see fig. 3). The inferred fault is therefore post Miocene and considerably younger than the age of mineralization of the Bradina vein system.

2) The moderate zinc and small silver soil anomaly have a scatter pattern indicative of glacial movement. As the underlying rock wherever observed is definitely non-mineralized, these anomalies are almost certainly caused by glacial remobilization.

Figure #

GEOLOGY OF THE OWEN LAKE, PARROTT LAKES, GOOSLY LAKE AREA

OMINECA MINING DIVISION B.C.

GEOLOGY BY N. CHURCH 1970

BEDDED ROCKS

PLIOCENE

- POPLAR BUTTES VOLCANICS, COLUMNAR OLIVINE BASALT.

MIOCENE

- BUCK CREEK VOLCANICS, INTERCALATED BASALTIC ANDESITE (locally feldspathic) AND / APHANITIC ANDESITE AND DACITE.

EOCENE

- GOOSLY LAKE VOLCANICS, MAINLY BIOTITE - PYROXENE - PLAGIOCLASE TRACHYANDESITE LAVAS / AND THICK SILLS OR LAVA FLOWS AND SMALL STOCKS OF SIMILAR ROCK.

PALEOCENE OR UPPER CRETACEOUS

- TIP TOP HILL VOLCANICS, MAINLY BIOTITE-HORNBLENDE ANDESITE AND ANDESITIC DACITE LAVAS AND PYROCLASTIC ROCKS.

EARLY MESOZOIC

- ACID AND INTERMEDIATE LAVAS AND PYROCLASTIC ROCKS, SOME ARGILLITE, SANDSTONE, AND CONGLOMERATE.

IGNEOUS INTRUSIONS

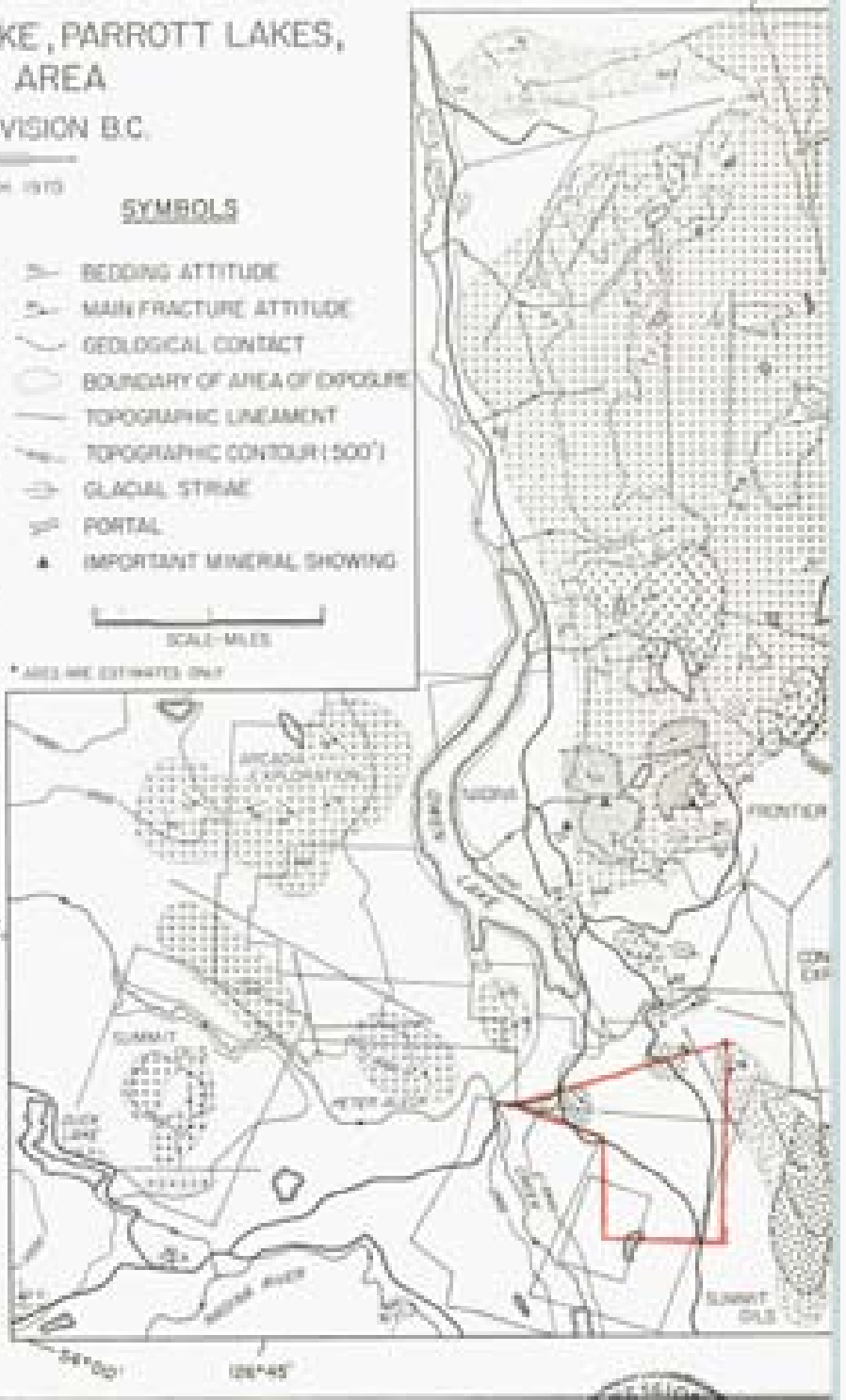
- SYENOMONZONITE - ALKALIC GABBRO STOCKS.
- GOOSLY BIOTITE GRANITIC STOCK.
- DUCK LAKE BIOTITE - PLAGIOCLASE PORPHYRY STOCK.
- MINE HILL MICRODIORITE SILLS AND DYKES.
- OKUSYELDA HILL BIOTITE - QUARTZ PORPHYRY.

SYMBOLS

- BEDDING ATTITUDE
- MAIN FRACTURE ATTITUDE
- GEOLOGICAL CONTACT
- BOUNDARY OF AREA OF EXPOSURE
- TOPOGRAPHIC LINEAMENT
- TOPOGRAPHIC CONTOUR (500')
- GLACIAL STRIAE
- PORTAL
- IMPORTANT MINERAL SHOWING

SCALE - MILES

* AREA ARE ESTIMATES ONLY



Claim Area

To accompany Report by R. Wolfe, June, 1970

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

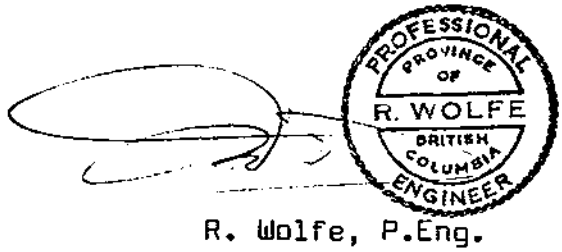
NO. 3611 MAP #1

3) The weak Crone E.M. anomaly can be explained by the swampy, conductive fault zone.

4) A study of the magnetic contours of the area from an aerial survey by Lockwood again suggests that the property is underlain by fresh tertiary volcanics and the lack of S.P. response as shown in the recent survey renders the occurrence of windows of older and possibly mineralized rocks improbable.

In view of the above, no further work is recommended.

Respectfully submitted,



R. Wolfe, P.Eng.

June 1, 1972.

APPENDIX I

CERTIFICATES

NAME: Robert Wolfe, P.Eng.

EDUCATION: B.Sc. 1963, Physics and Geology, University of Alberta.
1964, An extra year (Geology) University of B.C.

EXPERIENCE: Engaged in the profession since 1963 while employed by Kerr Addison Gold Mines, Kennco (Western) Explorations Ltd., Meridian Syndicate, Orequest Syndicate. Consulting since 1968.

NAME: Victor Mukans, Geophysical Operator

EXPERIENCE: Over 20 years, all phases of preliminary geophysical and geochemical exploration. Has worked for the author and associates for the past six years.

NAME: Dennis Hocking, Linecutter

EXPERIENCE: Has worked for the author and associates for two years.

APPENDIX II

PERSONNEL AND DATES WORKED

Victor Mukans	April 27 - May 24	28 Days
Dennis Hocking	April 27 - May 24	28 Days
Robert Wolfe	April 25 (½), 26 (½), 27 (½) May 1 (½), 2, 8 (½), 11 (½), 12 (½), 16 (½), 23 (½), 24, 26 (½), 29 (½), 30, 31.	9½ Days

APPENDIX III

SELF POTENTIAL UNIT

Manufacture:	Hewitt Enterprises, Draper, Utah.
Meter:	Needle centre zero type (visual direct reading).
Sensitivity:	1 millivolt.
Scales:	50, 100, 500, 1000 millivolts.
Electrodes:	Standard $CuSO_4$.
Power Supply:	2 - 9 volt transister radio batteries.

APPENDIX IV

COST BREAKDOWN

Self Potential Survey

Wages:	Mukans	28 days	@	$40.00	$1,120
	Hocking	28 days	@	$30.00	840
					$1,960
	Payroll Benefits, administration 20%				392
					$2,352

Field Expenses

Room and Board	$840	
Truck Rental	600	
S.P. Rental	300	
Gas etc.	60	
	$1,800	1,800

Engineering

Supervision and Report Preparation	
R. Wolfe, P.Eng. 9½ days @ $100	950
Drafting, Typing, Printing	120
TOTAL	$5,222

Declared before me at the City

of Vancouver, in the

Province of British Columbia, this 1st

day of June, 1972, A.D.

L. Gunnalta

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

Sub-mining Recorder