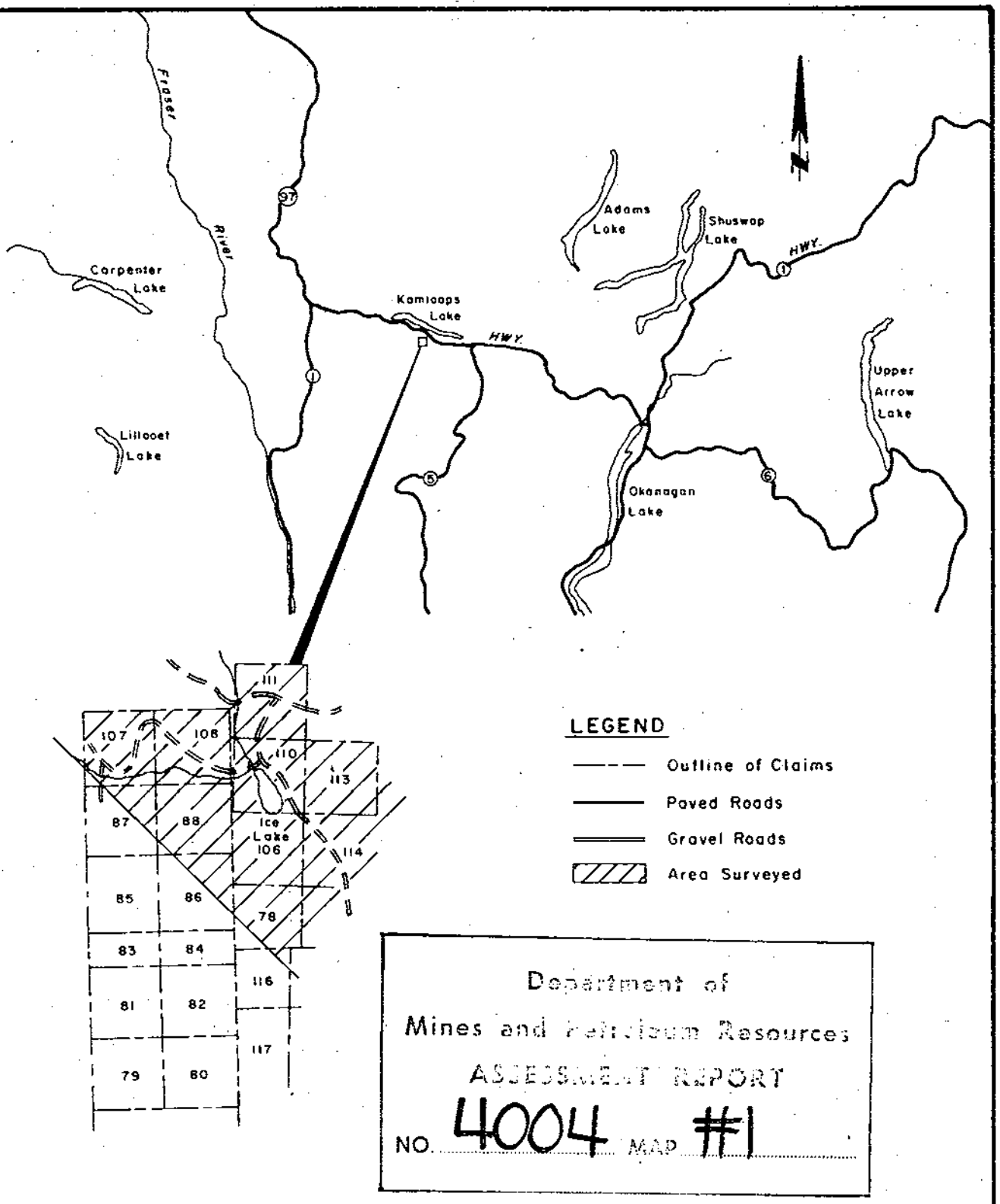
GEOPHYSICAL REPORT
On An
INDUCED POLARIZATION SURVEY
on behalf of
BOW RIVER RESOURCES LTD.

92I/10E

T.T. claim group 13 miles west of Kamloops
B.C., Kamloops Mining Division
Lat. 50°40'N Long. 120°35'W N.T.S. 92I/10E

AUTHOR: Glen E. White B.Sc. Geophysicist
P. ENG.: D. Parent
DATE OF WORK: March 27, 1972 - April 4, 1972
DATE OF REPORT: April 17, 1972

4004



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4004 MAP #1

BOW RIVER RESOURCES LTD.

TT CLAIMS

LOCATION AND CLAIMS MAP

SCALE : LOCATION MAP : 1" = 39 MILES APPROX. CLAIMS MAP : 1" = 3000' APPROX.

Fig. 1
APRIL 17, 1972

C O N T E N T S

INTRODUCTION

During the period March 27, 1972 to April 4, 1972 Glen E. White Geophysical Consulting and Services Ltd. conducted an induced polarization survey, on behalf of Bow River Resources Ltd., over the T.T. group of mineral claims located in the Iron Mask Batholith area, Kamloops Mining Division, Province of British Columbia.

The purpose of the survey was to examine at depth an area surrounding a local intrusion of the Iron Mask Batholith for anomalous chargeability responses which could possibly be associated with copper mineralization.

PROPERTY

The induced polarization survey discussed in this report was conducted over a portion of the T.T. group of mineral claims T.T. 69, 71, 73, 77-88, 105-108, 110, 111, 113-118 as illustrated in Figure 1.

Previous work consists of a ground magnetometer survey completed in March 1972 by Geotronics Surveys Ltd. and a geological survey conducted in March - April 1972 by R. Phendler of Cannon-Hicks Associates Ltd.

LOCATION AND ACCESS

The T.T. mineral claims are located some 13 miles west of Kamloops B.C. near Cherry Creek. Latitude 50°40'N Longitude 120°35'W N.T.S. 92I/10E

Access to the survey area is by the Beaton Lake road some 11 miles west of Kamloops on Highway No. 1 and then some 1.5 miles along this secondary road to Ice Lake which lies within the claim group.

GENERAL GEOLOGY

The terrain on the claim group varies some 800 feet in elevation, from 1700 feet A.S.L. to 2500 feet A.S.L. Good exposures of outcrop occur in the areas of higher elevation whereas the flat valley bottom containing Ice Lake would appear to contain a considerable amount of glacial drift.

Geologically the property is underlain by the Nicola group of sedimentary and volcanic rocks of upper Triassic age which have been intruded by the Iron Mask Batholith of Jurassic age and later by small stocks such as the Sugarloaf Hill and the Cherry Creek stocks. These units were then covered by the Tertiary coldwater sedimentary beds and volcanic flows of the Kamloops Group.

Copper mineralization has generally been structurally controlled, and has been deposited in the Nicola and Iron Mask Batholith, near the periphery of the Iron Mask Batholith, and in shears associated with the Cherry Creek and Sugarloaf Hill stocks.

SURVEY SPECIFICATIONS

Electrode Array

The data was obtained using the "three electrode" array. This array consists of one current (C_1) and two potential electrodes (P_1 and P_2) which are moved together along the survey line at a fixed distance apart, which is known as the "a" spacing. The second current electrode (C_2) is placed at "infinity".

Induced Polarization System

The equipment used on this survey was the Huntec pulse-type unit. Power was obtained from a JLO motor, coupled to a 2.5 KW 400 cycle three-phase generator, providing a maximum of 2.5 KW D.C. to the ground. The cycling rate is 1.5 seconds "current on" and 0.5 seconds "current off", the pulses reversing continuously in polarity. Power was transmitted to the ground through two current electrodes C_1 and C_2, and measurements taken across two potential electrodes, P_1 and P_2.

The data recorded in the field consist of careful measurements of the current (I) in amperes flowing through electrodes C_1 and C_2, the primary voltage (V_p) appearing between electrodes P_1 and P_2 during the "current on" part of the cycle, and the secondary voltage (V_s) appearing between electrodes P_1 and P_2 during the "current off" part of the cycle.

The apparent chargeability (M_a), in milliseconds, is calculated by dividing the secondary voltage by the primary voltage and multiplying by 400, which is the sampling time in milliseconds of the receiver unit. The apparent resistivity, in ohm-feet, is proportional to the ratio of the primary voltage to the measured current, the proportionality factor depending of the geometry of the electrode array used. The chargeability and resistivity obtained are called "apparent" as they are values which that portion of the earth sampled by the array would have if it were homogeneous. As the earth sampled is usually inhomogeneous, the calculated apparent chargeability and apparent resistivity are functions of the actual chargeabilities and resistivities of the rocks sampled and of the geometry of these rocks.

Survey Grid

The induced polarization survey was conducted on the northern half of a previously established survey grid, along north-south directed lines flagged at 100 foot intervals and spaced 400 feet apart. Some 10.8 line miles of induced polarization surveying with an "a" spacing of 400 feet, and 0.4 line miles of detail induced polarization surveying with an "a" spacing of 200 feet were conducted for a total of 11.2 line miles of surveying.

DATA PRESENTATION

The chargeability and apparent resistivity data obtained from this survey are depicted in contour form at a horizontal scale of 1" = 400 feet as follows:

Figure 2 - Induced polarization - chargeability contoured at an interval of one millisecond

Figure 3 - Induced polarization - apparent resistivity, contoured at 2, 3, 4, 5 and 6 ohm-feet levels.

DISCUSSION OF RESULTS

The induced polarization results have been correlated with the following data:

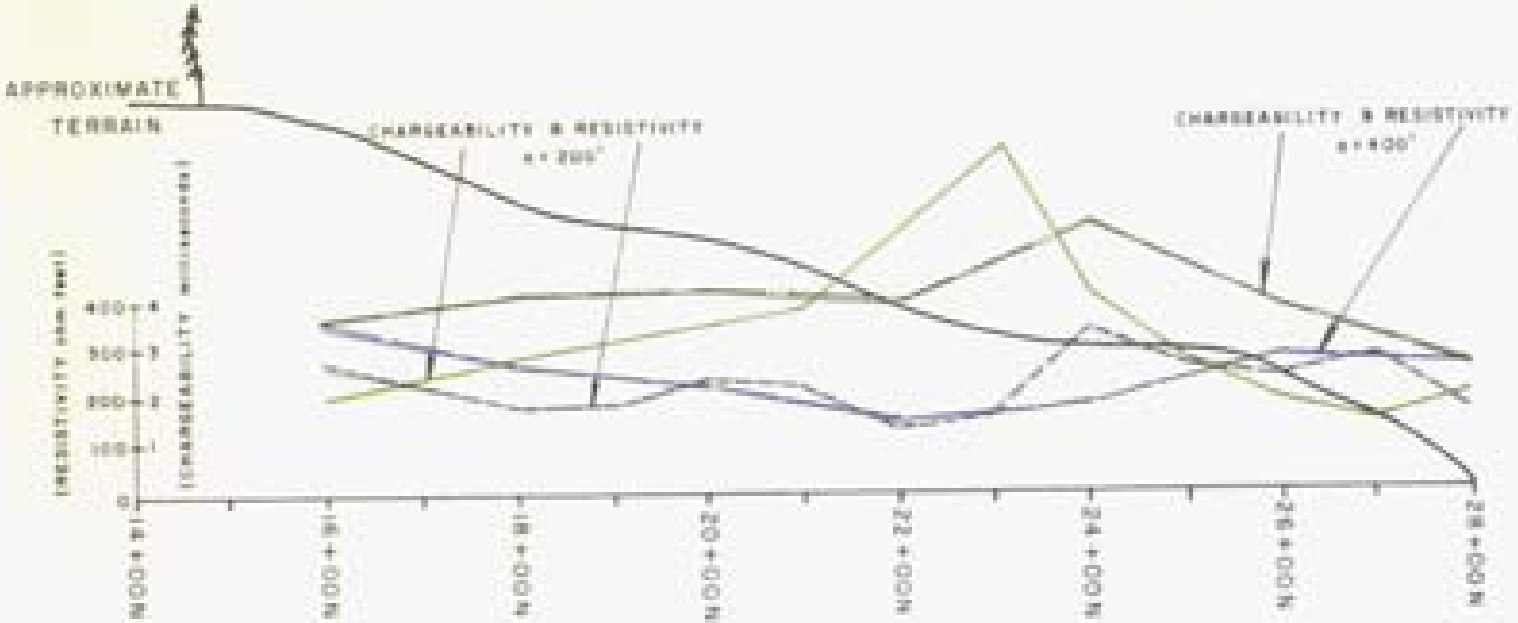
Cannon-Hicks Associates Ltd. - R. Phendler P.ENG
"Geological Report of the T.T. Claim Group for Bow River Resources Ltd."

Geotronic Surveys Ltd. - D. Mark et.al.
"Geophysical Report on a Magnetic Survey for Bow River Resources Ltd. T.T. Claim Group"

The resistivity data varied from a low of 58 ohm-feet near Ice Lake to a high of 6500 ohm-feet on the northern end of line 40E. This area of high resistivity is a topographic high and is underlain by porphyrytic monzonite. The variations in resistivity, in general, can be attributed to changes in the conductivity of the overburden and depth of overburden. The two areas of high resistivity, one near the baseline on lines 32E - 56E and the other on the northern end of lines 28E - 48E are on topographic highs. The strong WNW - ESE directed resistivity low trend which passes through Ice Lake, may possibly reflect a fault zone, since the main topographic low follows the creek which trends in a northerly direction from Ice Lake.

The chargeability data shows moderate variations around a mean of some 2.5 milliseconds. Three areas of over 5 milliseconds chargeability were located. The first is on lines 8E and 12E at 24N, the second at 20E - 4N and the third at 60E - 32N. The first anomalous area showed the strongest response and was subsequently detailed using an "a" spacing of 200 feet. See Plate 1. Here it can be seen that the 200 foot "a" spacing gives a response of 7.2, almost three times background, and that the chargeability highs are associated with low resistivity values which may possibly indicate that the chargeable material is structurally controlled. The sharp peak-like response of the "a" = 200 foot spacing would indicate a narrower near surface vein-like chargeable feature at a depth of 100 - 150 feet, whereas the "a" = 400 foot spacing shows a slight but definite increase in per volume chargeability at depth, possibly near 300 feet.

DETAIL INDUCED POLARIZATION PROFILE
CHARGEABILITY & RESISTIVITY
12+00E



12+00E

In Figure 2, it can be seen that the high chargeability values (above 4) in this area, trend in a WNW - ESE direction parallel to the aforementioned low resistivity trend.

The geological contacts as determined by R. Phendler are shown on the chargeability map Figure 2. A study of the geology and induced polarization data shows no definite correlatable features. Examination of the ground magnetometer data however, indicated that the three principle chargeability highs are on or near areas of low magnetic intensity. The values of low magnetic intensity show a definite bias for the WNW - ESE and NNW - SSE directions coincident with regional fault structures. Correlation of the geology and ground magnetometer data showed no coincident patterns which would aid in tracing the various lithologic units beneath the overburden.

CONCLUSION

During the latter part of March and early April 1972 an induced polarization survey was conducted over a portion of the T.T. claim group on behalf of Bow River Resources Ltd.

The induced polarization survey data was then correlated with ground magnetometer and geological surveys also completed in the spring of 1972.

The induced polarization survey located an interesting overburden covered chargeability anomaly situated near a known intrusion of porphyrytic monzonite. The chargeability anomaly is associated with values of low magnetic intensity and would appear to be associated with WNW - ESE directed structural features.

RECOMMENDATIONS

It is recommended that the principle induced polarization anomaly delineated by this survey be investigated by diamond drilling. It is felt that a hole collared at 12E - 21+50N and drilled at a steep anble of 70 - 80° to the N for a length of some 500 feet, would effectively evaluate the chargeability anomaly.

Respectfully submitted,
GLEN E. WHITE GEOPHYSICAL
CONSULTING AND SERVICES LTD.

Glen E. White B.Sc.
Geophysicist

STATEMENT OF QUALIFICATIONS

Name: WHITE, Glen E.

Profession: Geophysicist

Education: B.Sc. Geophysics - Geology
University of British Columbia.

Professional Associations: Associate member of Society of Exploration Geophysicists.
Active member B.C. Society of Mining Geophysicists

Experience: Pre-Graduate experience in Geology - Geochemistry - Geophysics with Anaconda American Brass.

Two years Mining Geophysicist with Sulmac Explorations Ltd. and Airborne Geophysics with Spartan Air Services Ltd.

One year Mining Geophysicist and technical Sales Manager in the Pacific north-west for W.P. McGill and Associates.

Two years Mining Geophysicist and supervisor Airborne and Ground Geophysical Divisions, with Geo - X Surveys Ltd.

Two years Chief Geophysicist Tri-Con Exploration Surveys Ltd.

One year Consulting Geophysicist

Active experience in all Geologic provinces of Canada.

A P P E N D I X

Instrument Specifications

Method of Survey - Induced Polarization

A. Instruments

(a) Type - Pulse
(b) Make - Huntec
(c) Serial No. - transmitter #107 - receiver #207

B. Specifications

(a) Size and Power - 2.5 KW
(b) Sensitivity - 300 x 10.5 volts
(c) Power Sources - 2.5 KW 400 cycle - three-phase generator
(d) Power by JLO motor, 5.2 H.P. @ 3,600 R.P.M.
(e) Timing - electronic, remote and direct
(f) Readings - (i) amps (ii) volts primary and secondary
(g) Calculate (i) Resistivity - ohm - meters
(ii) Chargeability - milliseconds

C. Survey Procedures

(a) method - power supplied to mobile probe along TW 18 stranded wire from stationary set-up
(b) configuration - Pole - dipole (three electrode array) Plot point midway between C_1 and P_1

D. Presentation

Contour Maps (i) Chargeability - milliseconds
(ii) Resistivity - ohm-feet

C E R T I F I C A T E

I, Douglas Parent, DO HEREBY CERTIFY AS FOLLOWS:

(1) That I am a Consulting Mining Engineer with a business office at 4495 Wallace St., Vancouver 8, B.C.

(2) That I am a Graduate of New Mexico Institute of Mining and Technology having received the degree of B.Sc. in Mining Engineering in 1934.

(3) That I am a registered P. ENG in the Association of Professional Engineers in the provinces of British Columbia and Quebec.

(4) That I have practised my profession as a Mining Engineer for the past 36 years.

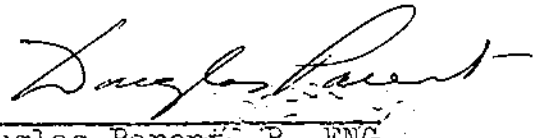
(5) That I have reviewed a report dated April 17, 1972 based on work conducted by Glen E. White Geophysical Consulting and Services Ltd. under the supervision of Glen E. White B.Sc. Geophysicist, and concur with the findings therein.

(6) That this report consists of 9 typewritten pages and two maps.

(7) That I have no interest directly or indirectly in the T.T. mineral claims or the securities of Bow River Resources Ltd. nor do I expect to acquire or receive any.

DATED at Vancouver, British Columbia, this 17th day of April, 1972.

DOUGLAS PARENT, P. ENG



Douglas Parent, P. ENG

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4004 MAP

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA. } In the Matter of
TO WIT:

An Induced Polarization Survey
For Bow River Resources Ltd.

I, Glen E. White

of Glen E. White Geophysical Consulting and Services Ltd.

in the Province of British Columbia, do solemnly declare that the costs for the above survey were as follows:

Personnel	Wages	Period	Total
G. White (Geophysicist Operator)	$80/day	March 27 - April 4, 1972	$720
T. Swann	$40/day	" "	$360
G. Darby	$30/day	" "	$270
J. Behenna	$30/day	" "	$270

Meals and Accomodation 20 x 4 x 9	$720
Instrument Lease 70 x 9	$630
Vehicle Lease ;	$440
Interpretation Maps and Report	$800
TOTAL	$4210

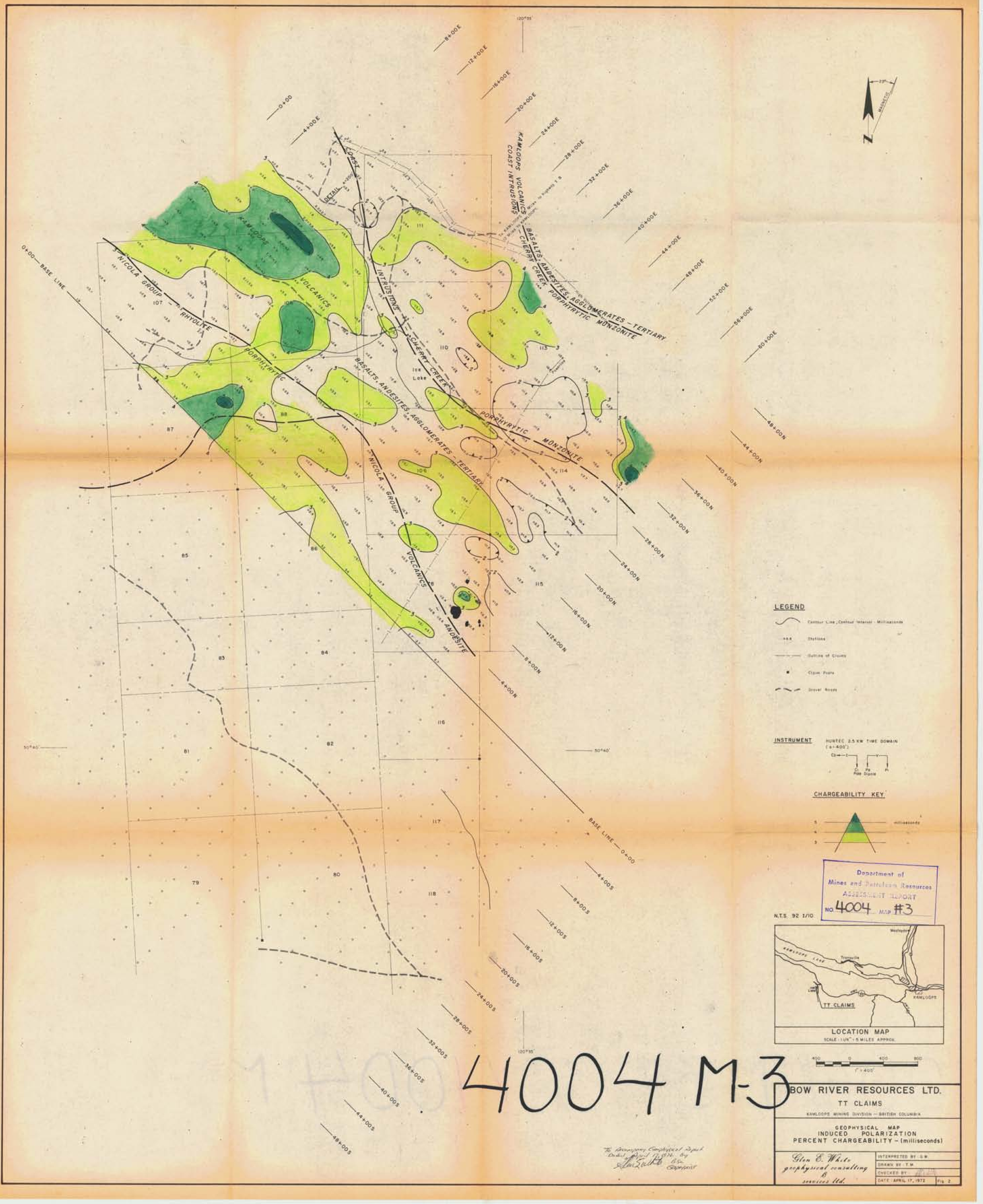
And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

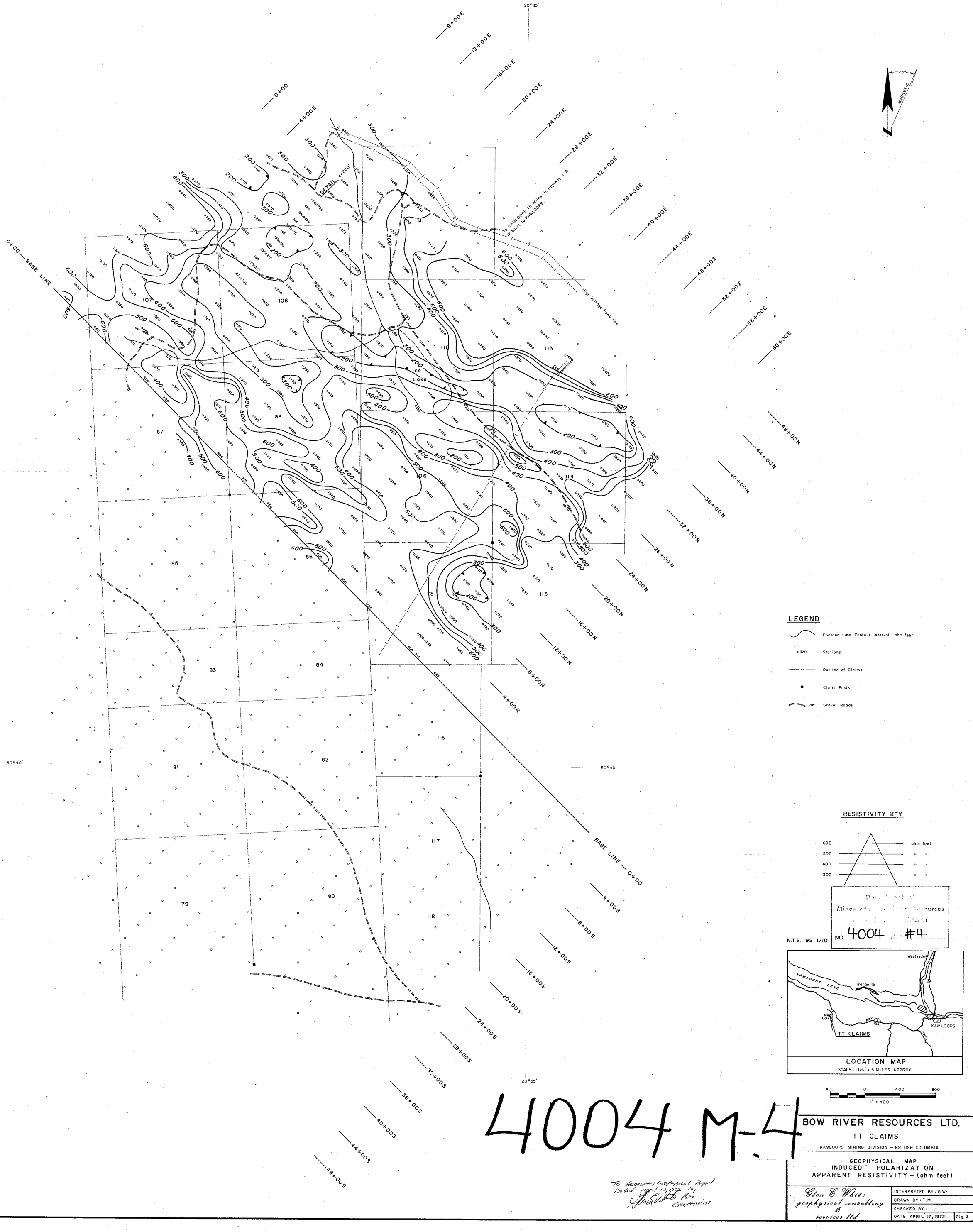
Declared before me at the
of VANCOUVER, B. C.
Province of British Columbia, this
day of APR 17 1972 A.D.

Glen E. White

Sub-Mining Recorder

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


KAMLOOPS VOLCANICS
COAST INTRUSIONS
BASALTS, ANDESITES, AGGLOMERATES - TERTIARY
CHERRY CREEK PORPHYRYTIC MONZONITE
NICOLA GROUP - RHYOLITE PORPHYRYTIC
NICOLA GROUP VOLCANICS
ANDESITE
Ice Lake
BASE LINE 0+00
MAGNETIC
120°35'
50°40'
LEGEND
Contour Line, Contour Interval - Milliseconds
Stations
Outline of Claims
Claim Posts
Gravel Roads
INSTRUMENT
HUNTEC 2.5 KW TIME DOMAIN (a=400')
Pole Dipole
CHARGEABILITY KEY
milliseconds
Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 4004 MAP #3
N.T.S. 92 I/10
KAMLOOPS LAKE
Tranquille
Westsyde
KAMLOOPS
TT CLAIMS
LOCATION MAP
SCALE: 1 1/4" = 5 MILES APPROX.
1" = 400'
4004 M-3
BOW RIVER RESOURCES LTD.
TT CLAIMS
KAMLOOPS MINING DIVISION - BRITISH COLUMBIA
GEOPHYSICAL MAP
INDUCED POLARIZATION
PERCENT CHARGEABILITY - (milliseconds)
Glen E. White geophysical consulting & services ltd.
INTERPRETED BY: G.W.
DRAWN BY: T.M.
CHECKED BY:
DATE: APRIL 17, 1972
Fig. 2



LEGEND

- Contour Line, Contour Interval : ohm feet
- o320 Stations
- Outline of Claims
- Claim Posts
- Gravel Roads

RESISTIVITY KEY

600 ohm feet
500 " "
400 " "
300 " "

Department of Mines and Petroleum Resources
Assessment Report
NO. 4004 #4

N.T.S. 92 I/10

LOCATION MAP
SCALE : 11/4" = 5 MILES APPROX.

400 0 400 800
1" = 400'

4004 M-4

To Accompany Geophysical Report
Dated April 17, 1972 By
Glen E. White B.Sc
Geophysicist

BOW RIVER RESOURCES LTD.

TT CLAIMS

KAMLOOPS MINING DIVISION — BRITISH COLUMBIA

GEOPHYSICAL MAP
INDUCED POLARIZATION
APPARENT RESISTIVITY — (ohm feet)

Glen E. White
geophysical consulting
&
services ltd

INTERPRETED BY : G.W.	
DRAWN BY : T.M.	
CHECKED BY :	
DATE : APRIL 17, 1972	Fig. 3