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Assessment Report
on
Geophysical Survey

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VANCOUVER, B.C.

conducted on the
DOMINIC GROUP
NTS 92I/10E

Lat 50° 35' N Long 120° 43' W

Owned and Operated
by
Charles Boitard

Author:
John P. La Rue
June 15, 1990
Lillooet, B.C.

20,467

GEOLOGICAL
BRANCH
ASSESSMENT
REPORT

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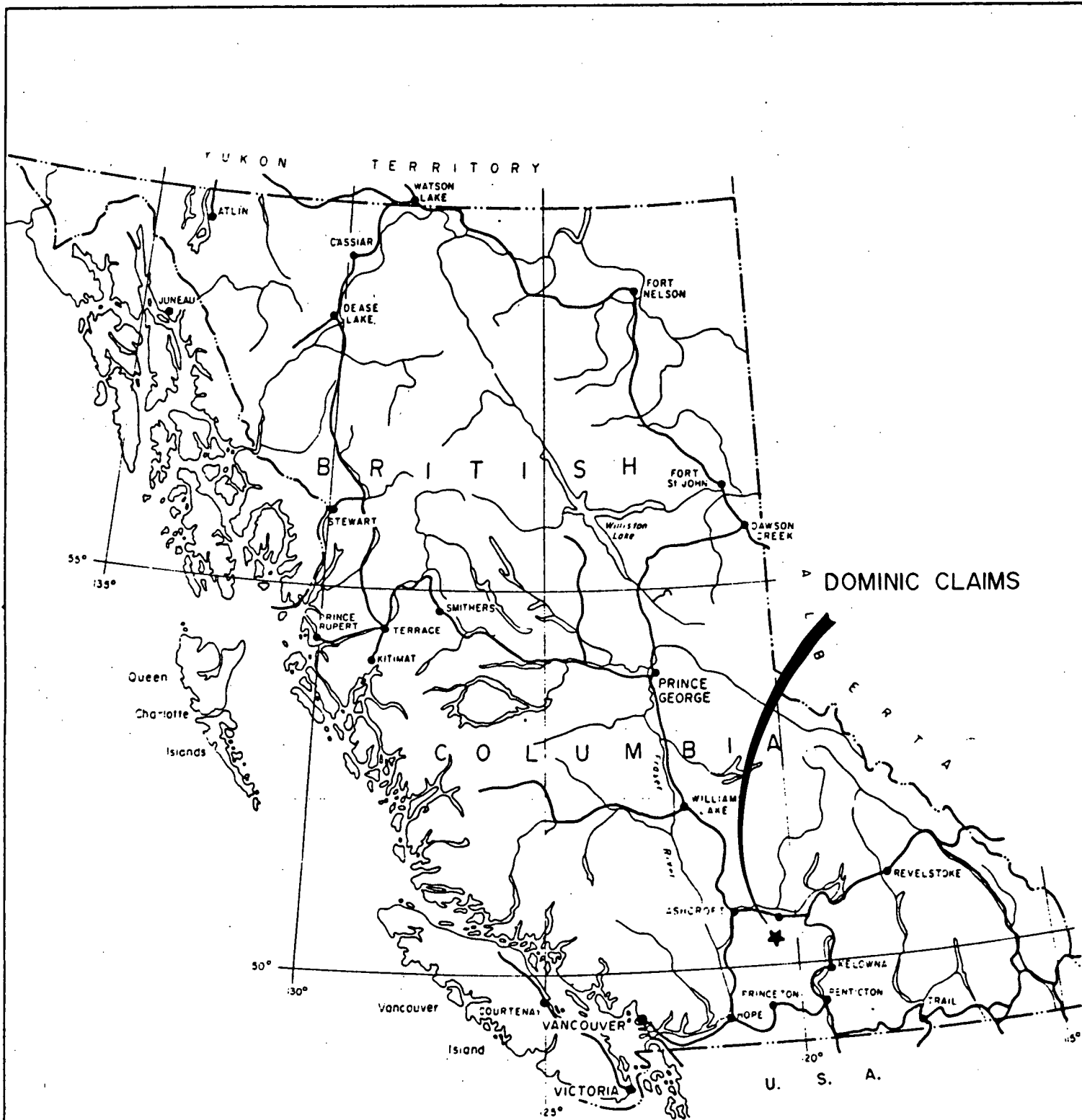
INTRODUCTION

- (i) The Dominic Property owned by Charles Boitard is situated at Lat. $50^{\circ} 35'$, Long. $120^{\circ} 43'$ west of Dominic Lake in the headwaters region of the Chartrand Creek drainage basin. Kamloops, B.C. lies 27 air kilometers north east of the claim group. (fig. 1)

Access to the claim group is gained from Tunkwa Lake road; leaving Savona, one drives 15.6 km. to the Evans Products Co. Durand Creek spur road, thence 10.9 km. along the two-wheel drive logging road to Line 0 of the claim group itself. A recently constructed sub-grade road crosses the central portion of the property, and ongoing logging activity continues to provide new access to other interior portions of the property. (fig. 3)

The claim group is located within the Thompson Plateau, The topography ranges from flat swampy areas to moderate slopes along the Chartrand Creek Valley with elevation relief of 170 m. from 1430 to 1600 m. Vegetation is primarily open to moderate jack pine cover with local areas of grassland; topographic depressions are commonly marshy with several swamps within the property boundaries.

Water supplies for all phases of exploration and development is adequate. The headwaters of three creeks as well as the western end of Dominic Lake are located near the property. Commercial power sources would not be available in the exploratory stages.



LOCATION MAP

0 100 200 300 Km.

Fig 1

- (ii) The Dominic Claim Group is wholly owned by Charles Boitard of Vancouver, B.C. and is comprised of two contiguously located claims totalling 24 units:

<u>Claim Name</u>	<u>Units</u>	<u>Record #</u>	<u>Expiry Date</u>
Dominic North	8	474	Aug. 16/91
Dominic South	16	475	Aug. 16/91

These expiry dates take into account the surveys under discussion as being accepted for assessment credits.

The following excerpts are taken from a Diamond Drilling Report of the Dominic Claim Group by L. Sookochoff, P. Eng. Nov. 12, 1985.

"The Nicola Volcanic belt from the U.S. border south of Princeton north to Kamloops and within which the Dominic Property is located, has been the object of continued mineral exploration since the late 1800's. From the original discovery of gold and platinum placer deposits along the Tulameen and Similkameen Rivers, continued exploration led to the discovery of numerous copper-silver occurrences. The more significant discoveries which were placed in production were the Copper Mountain deposit, the Craigmont deposit and more recently the Afton deposit.

Prior to the staking of the claims in 1976 and 1978, comprising the Dominic Property any confined exploration is not known of to the writer.

In May, June and August '78 a soil geochemistry program and induced polarization survey were carried out over a portion of the Dominic property by Geotronics Surveys of Vancouver for Green Valley Mine Incorporated. D. Mark of Geotronics Surveys reported that the geochemistry survey revealed five main zones that were anomalous in all or some of the lead, zinc, silver and copper values. The I.P. survey revealed five anomalies - one of which was most interesting because of its size and its correlation with a resistivity low. In January and February 1980 a program of percussion drilling was carried out on the Dominic property by Green Valley Mine Incorporated.

In a report by Goldsmith et. al. the geochemical results of the drilling were low and flat but could be correlated with lithology.

In 1984 an exploration program of 3.6 line kilometers of grid relocating for induced Polarization and VLF-EM surveys, trenching and 42 rock and soil geochemical assays were completed by Green Valley Mine Incorporated. The results as reported on by D.R. MacQuarrie in an October 10, 1984 report indicated that:

(1) The I.P. survey disclosed very weak percent frequency effects (below 3.5) and apparent resistivity values of less than 400 ohm meters. The $n=1$ resistivities indicating generally thin overburden conditions.

(2) The VLF-EM survey data suggested the presence of three wide northerly conductive zones. These zones "are all co-incident with apparent resistivity and I.P. low areas".

(3) The rock and soil geochemistry disclosed one sample of an anomalous CU values at a road cut 6N 1+15E. The sample was reportedly taken from an outcrop of rock containing pyrite.

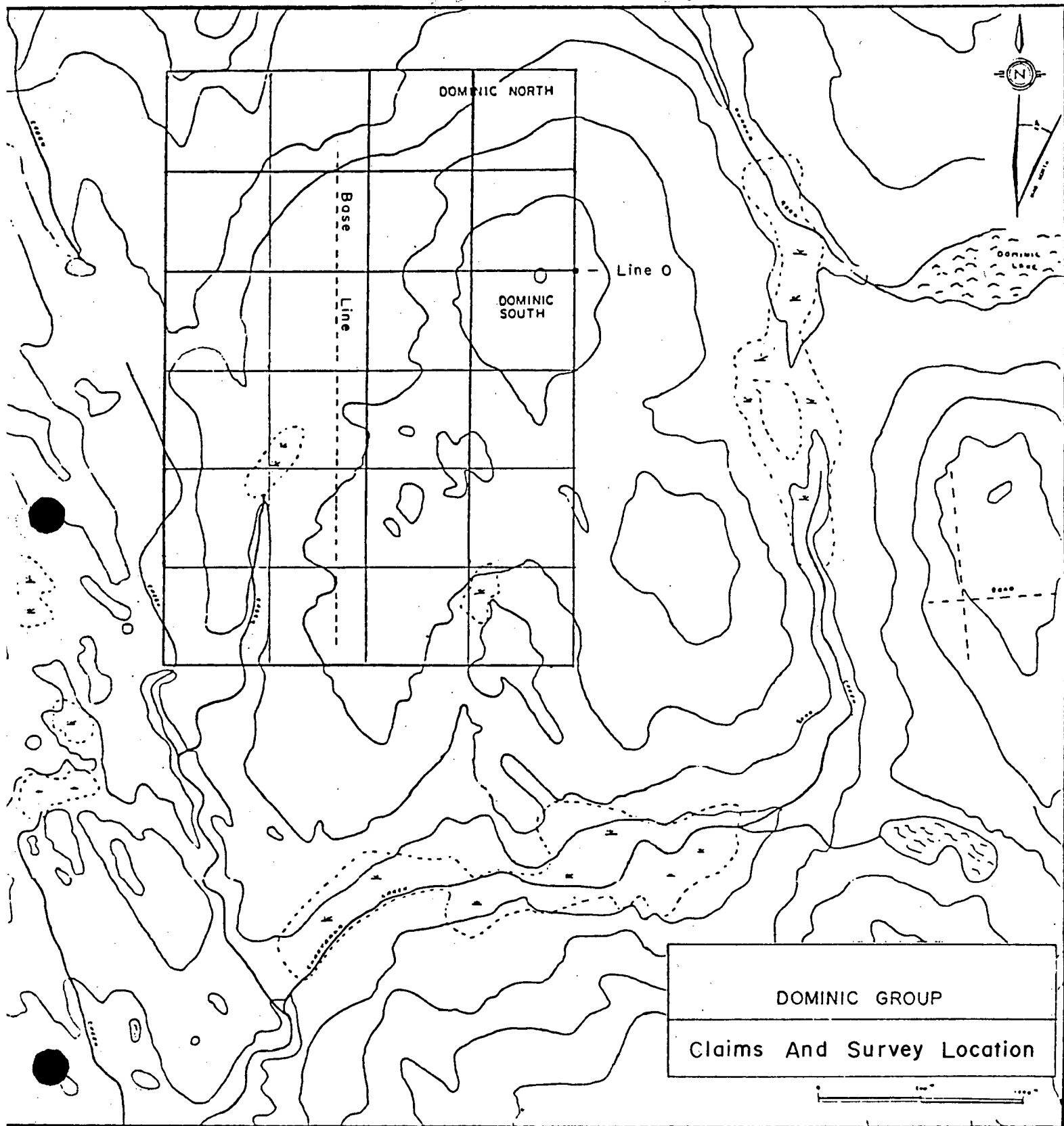
A 200 ppm arsenic value was taken from a "rusty quartz and calcite" outcrop at 1+40S 3+00W.

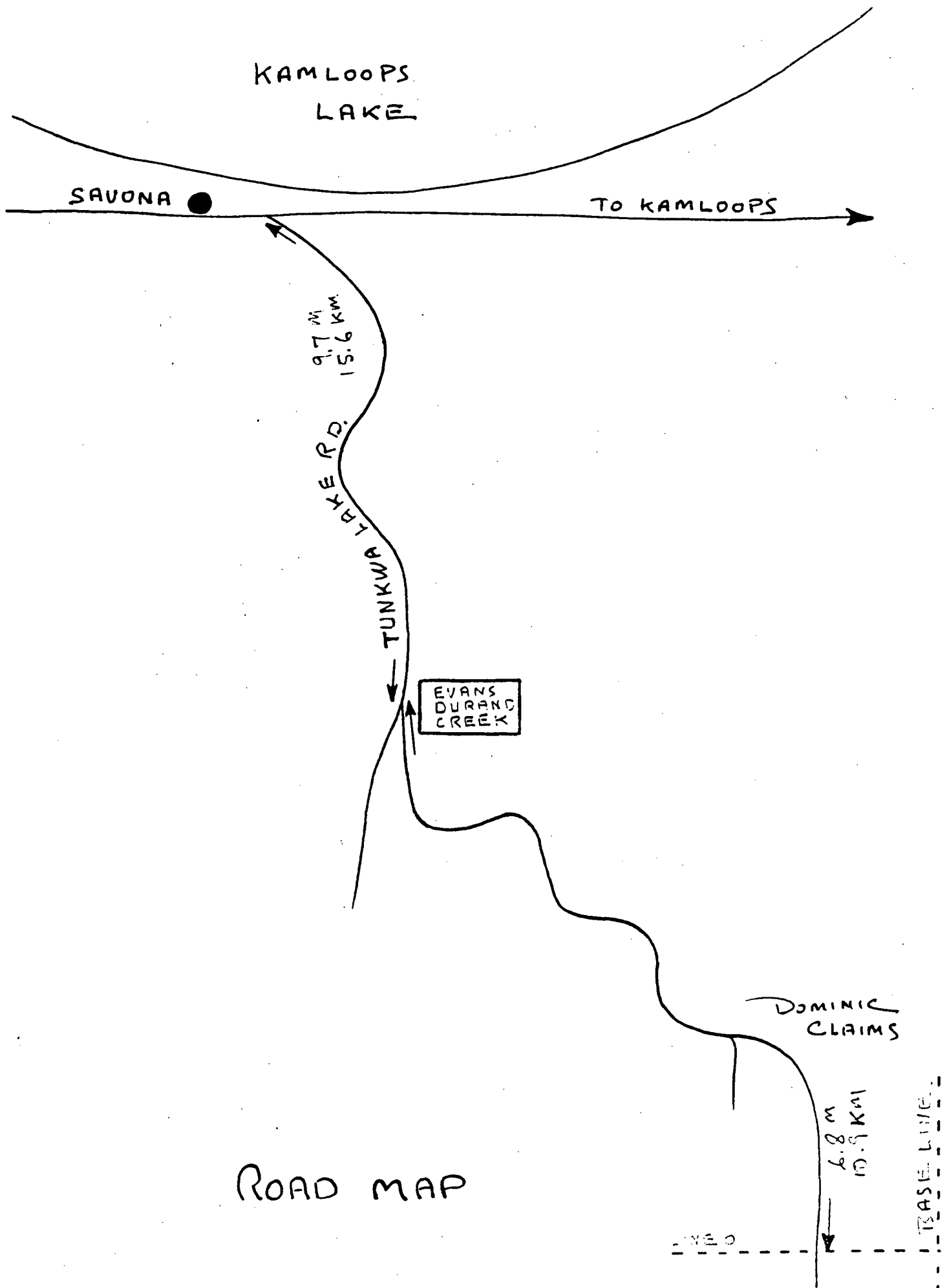
(4) Two trenches cut at 1+40S 3+00W revealed an arkosic sandstone hosting rusty quartz-calcite zones.

GEOLOGY AN MINERALIZATION

The G.S.C. Map 886A - Nicola indicates the Dominic property covers the Upper Triassic Nicola Group which consists essentially of Greenstone, andesite, basalt, agglomerate, breccia, tuff, minor argillite, limestone and conglomerate.

In an examination of the percussion drill hole cutting Goldsmith et. al. report that "the flows encountered range from balsaltic andesite to predominantly andesite in composition". Alteration appears only to a minor degree and generally consists of propylitization resulting in alteration products of hematite, chlorite, epidote, calcite and minor hornblende.





ROAD MAP

Figure 3

Drill cutting assay for molybdenite, copper lead zinc, silver and occasional mercury did not indicate any significant zones of mineralization. Copper and molybdenum values trend up to one and one-half times background generally at the top or bottom of flows.

1984 DIAMOND DRILLING PROGRAM

The diamond drilling program consisted of one drill hole put down for the purpose of testing the highest chargeability site of an I.P. survey (n1=3, N2=3.5) in a general area of a high arsenic geochem value obtained from an arkosic sandstone unite exposed within a trench.

(iii) A summary of work performed on the Dominic Claim Group for assessment purposes during the 1989 exploration season is as follows:

On August 23 and August 24, 2.5 km. of survey lines were established on Lines 300 and 400 south, the work was carried out with a hipchain and compass. The lines are blazed and flagged at 50 m. intervals.

(iv) Work for assessment purposes was completed on the north-east corner to the Dominic South Claim. (fig. 2)

DETAILED TECHNICAL DATA AND INTERPRETATION

2.5 km. of survey lines were established in the east-west direction (90° - 270°), the survey lines were blazed and flagged at 50 meter intervals.

1.4 km. of I.P. Survey was completed over the Dominic South consisting of 22 readings taken at 50 meter intervals, with a dipole-dipole array of 100 meters spacing $n=2$.

The purpose of the I.P. was to locate fracture filling or disseminated sulphides which could mean locating pyrite-zation associated with economic sulphide mineralization. A dipole-dipole array of 100 meter spacing between the transmitter electrodes and the receiver electrodes, and a distance of 200 meters between the transmitter and the receiver. This arrangement is called a dipole-dipole array with 100 meter separation $n=2$ this increases the penetration by about 20%.

22 readings were taken with a dipole-dipole array of 100 meter $n=2$ at 50 meter intervals on Line 300 and Line 400 south.

The following notes on the theory and method of field operation for the Induced Polarization method are taken from context of a geophysical report completed for McPhar Geophysics by Phillip G. Hallof, PhD. (Geophysics).

The following notes on the theory and method of field operation for the Induced Polarization method are taken from context of a geophysical report completed for McPhar Geophysics by Phillip G. Hallof, Ph.D. (Geophysics)

"Induced Polarization as a geophysical measurement refers to the blocking action or polarization of metallic or electronic conductors in a medium or ionic solution conduction. This electrochemical phenomenon occurs wherever electrical current is passed through an area which contains metallic minerals such as base metal sulphides. Normally when current is passed through ground, as in resistivity measurements, all of the conduction takes place through ions present in the water content or the rock, or soil, i.e. by ionic conduction. This is because almost all minerals have a much higher specific resistivity than water. The group of minerals commonly described as 'metallic' however, have specific resistivities much lower than ground waters. The Induced Polarization effect takes place at those interfaces where the mode of conduction changes from ionic in the solutions filling the interstices of the rock to electronic in the metallic minerals present in the rock. The blocking action or induced polarization mentioned above, which depends upon the chemical energies necessary to allow the ions to give up or receive electrons from the metallic surface, increases with the time that a d.c. current is allowed to flow through the rock; i.e. as ions pile up against the metallic interface the resistance to current flow increases. Eventually, there is

enough polarization in the form of excess ions at the interfaces to appreciably reduce the amount of current flow through the metallic particle. This polarization takes place at each of the infinite number of solution-metal interface in a mineralized rock ... when the d.c. voltage used to create this d.c. current flow is cut off, the Coulomb forces between the charged ions forming the polarization cause them to return to their normal position.

SUMMARY

The property has recently been partly logged, and the logging operation exposed some interesting floats. The reason for the survey was to determine if the results would improve with depth. The survey proved to be very conclusive and a big improvement from the survey carried out at 100 m. spacing $n=1$. The weak F.E. anomaly on the east side of the base line on Line 300 and Line 400 South shows an excellent correlation with the low resistivity. Additional surveys should be carried out to extend the anomaly. (Fig 4 & 5)

(The I.P. Survey of 100 m. spacing was carried out in 1987).

INSTRUMENT

The survey was conducted with a Sabre Model 21, Induced Polarization unit system. This equipment is designed to measure the I.P. effect in the frequency domain using 0.3Hz. and 10Hz.

The current is provided by a battery connected to the transmitter which is transformed with an output capacity of 100 to 500 volts, at a minimum of 100 milliamperes, according to the setting. The frequency is 10Hz and 0.3Hz.

The receiver is a sensitive A.C.-D.C. millivolt meter with a circuit capable of measuring small voltage deviation, measured as a percent change, is read directly as % frequency effect.

The apparent resistivity at each setup is calculated using the following formula:

$$2 \pi \frac{V}{I} (x) (G)$$

$$2 \pi 2.68$$

V = millivolts

I = milliamperes

X = electrode spread

G = geometric constant

$$G = n1 = 3$$

$$G = N2 = 12$$

$$G = n3 = 30$$

$$G = n4 = 60$$

$$\text{MV} \times \frac{\text{spread} \times G \times 2.68}{\text{M.A.}} = \text{ohm meters}$$

MALASPINA COLLEGE

Statement of Course Completion

JOHN P. LARUE

has

Successfully Completed 180 Hours of Instruction
in

MINERAL EXPLORATION FOR PROSPECTORS

PRESENTED BY B.C. MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES
B.C. MINISTRY OF EDUCATION

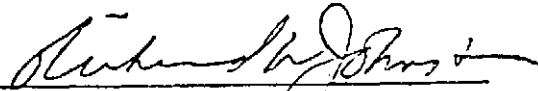
APRIL 16 to 30, 1983 - MESACHIE LAKE, B.C.

MAY 2, 1983

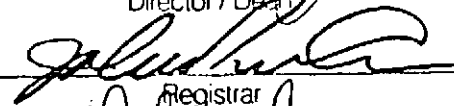
Dated at Nanaimo,
British Columbia, Canada



Malaspina
College



Director / Dean



Registrar



Instructor

STATEMENT OF COSTS

Detailed costs and expenses incurred during 1989 on the
Dominic Group of Mineral Claims, Kamloops, Mining Division:

Re-establishing the survey grid at 50 m. intervals	\$ 100.00
1.4 km. of Induced Polarization at \$1900 per km. all included, rental board & room, transportation 5 men, 2 days	2,660.00
Drafting and copies	400.00
Typing	150.00
Report	<u>750.00</u>
	\$4,060.00

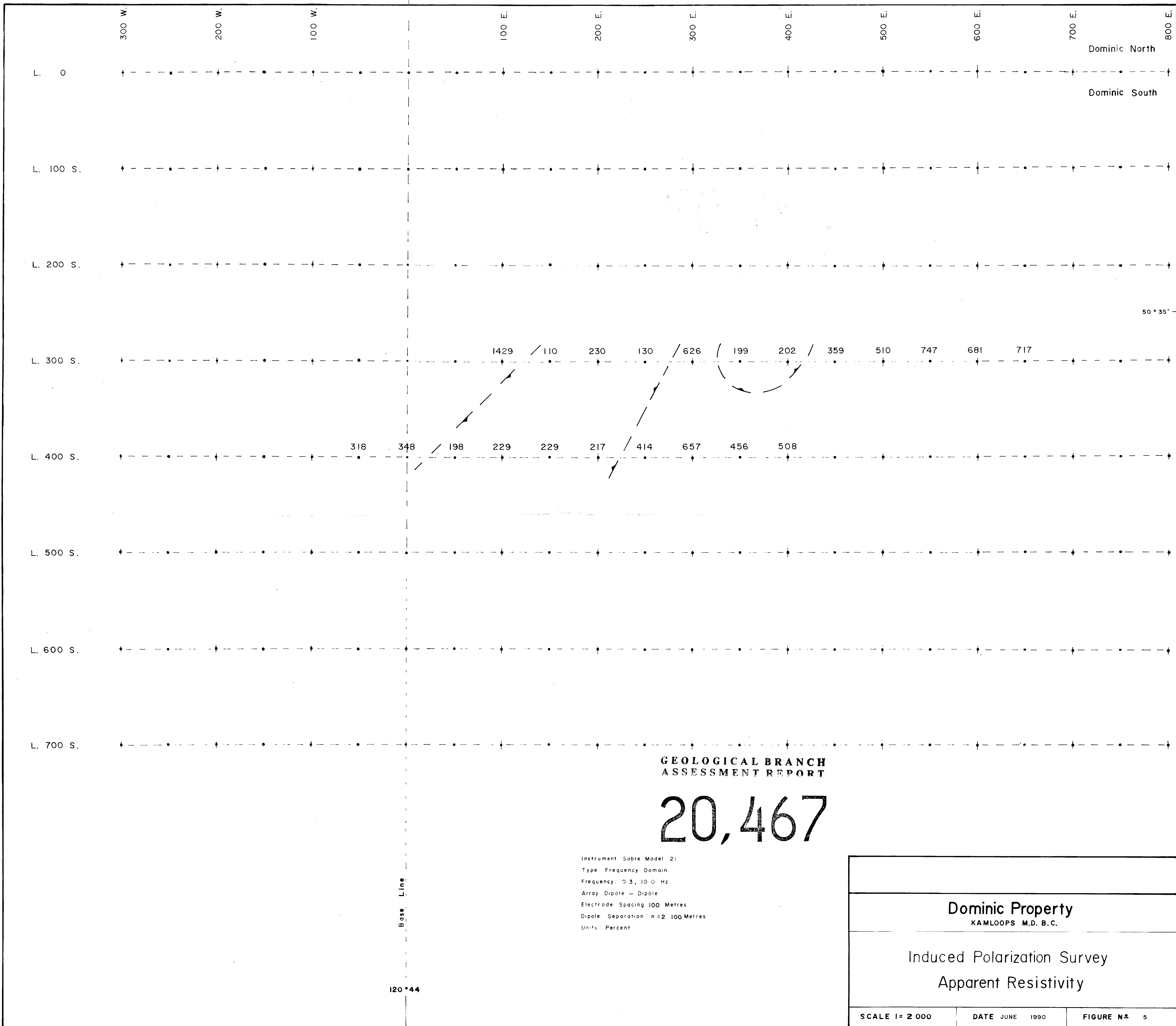
Respectfully submitted,



Charles Boitard

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,467

Instrument: Sabre Model 21
 Type: Frequency Domain
 Frequency: 0.3, 10.0 Hz.
 Array: Dipole - Dipole
 Electrode Spacing: 100 Metres
 Dipole Separation: n=2 100 Metres
 Units: Percent

Dominic Property KAMLOOPS M.D. B.C.		
Induced Polarization Survey Apparent Resistivity		
SCALE 1 = 2 000	DATE JUNE 1990	FIGURE N ^o 5

