

86-683-15235

Assessment Report
On
Geophysical Survey

conducted by the **GEOLOGICAL BRANCH**
ASSESSMENT REPORT
DOMINIC CLAIMS

NTS 92I/10E

Lat $50^{\circ} 35.1' N$ Long. $120^{\circ} 43.6' W$

Owned by

Green Valley Mine Incorporated

Operated by

Green Valley Mine Incorporated

and

Charles Boitard, President

Author:

John P. La Rue

November 10, 1986

Lillooet, B.C.

15,235

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MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES
Rec'd NOV 14 1986
SUBJECT _____
FILE _____
VANCOUVER, B.C.

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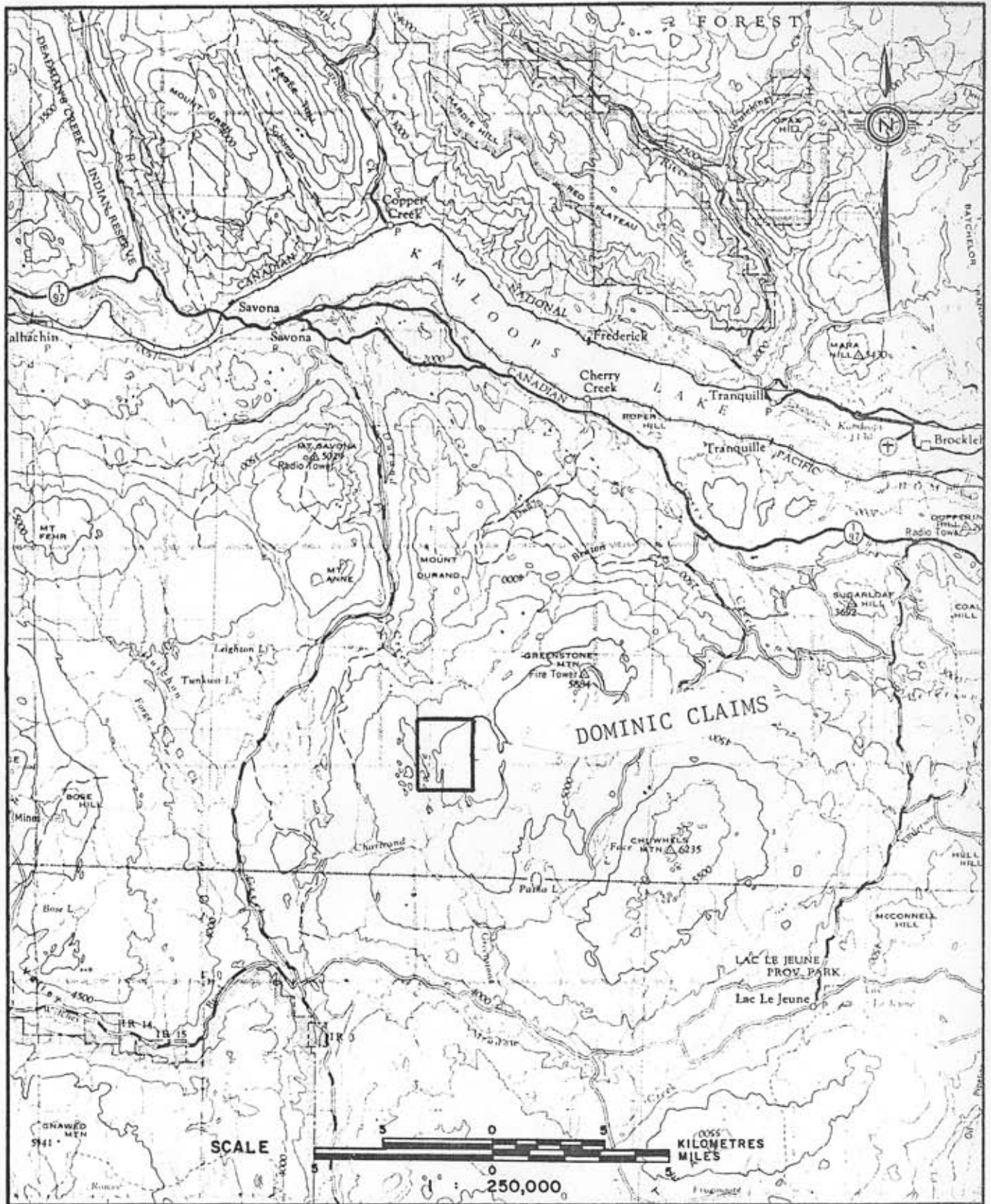
INTRODUCTION

- (i) The Dominic Property owned by Green Valley Mine Incorporated is situated at Lat. $50^{\circ}35'$, Long. $120^{\circ}43'$ adjacent and to the southeast of Dominic Lake in the headwaters region of the Chartrand Creek drainage basin. Kamloops, B.C. lies 27 air km. northeast of the claim group.

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.

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 meters, from 1430 to 1600 meters. 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.

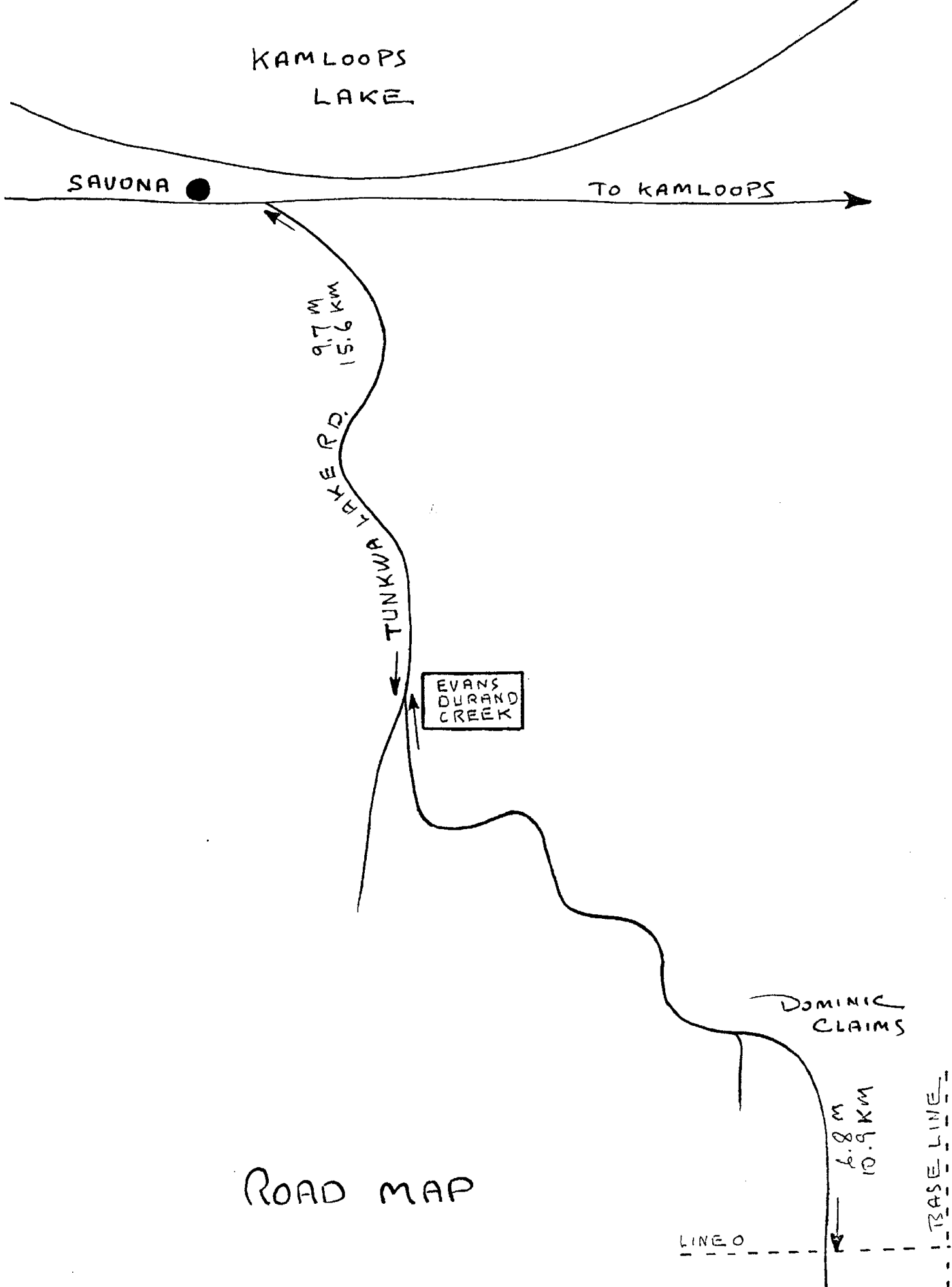
Water supplies for all phases of exploration and development is adequate. The headwaters of three creeks as well as the western end of Dominic Lake are located near the property. Commercial power sources would not be available in the exploratory stages.



N.T.S. 92 I

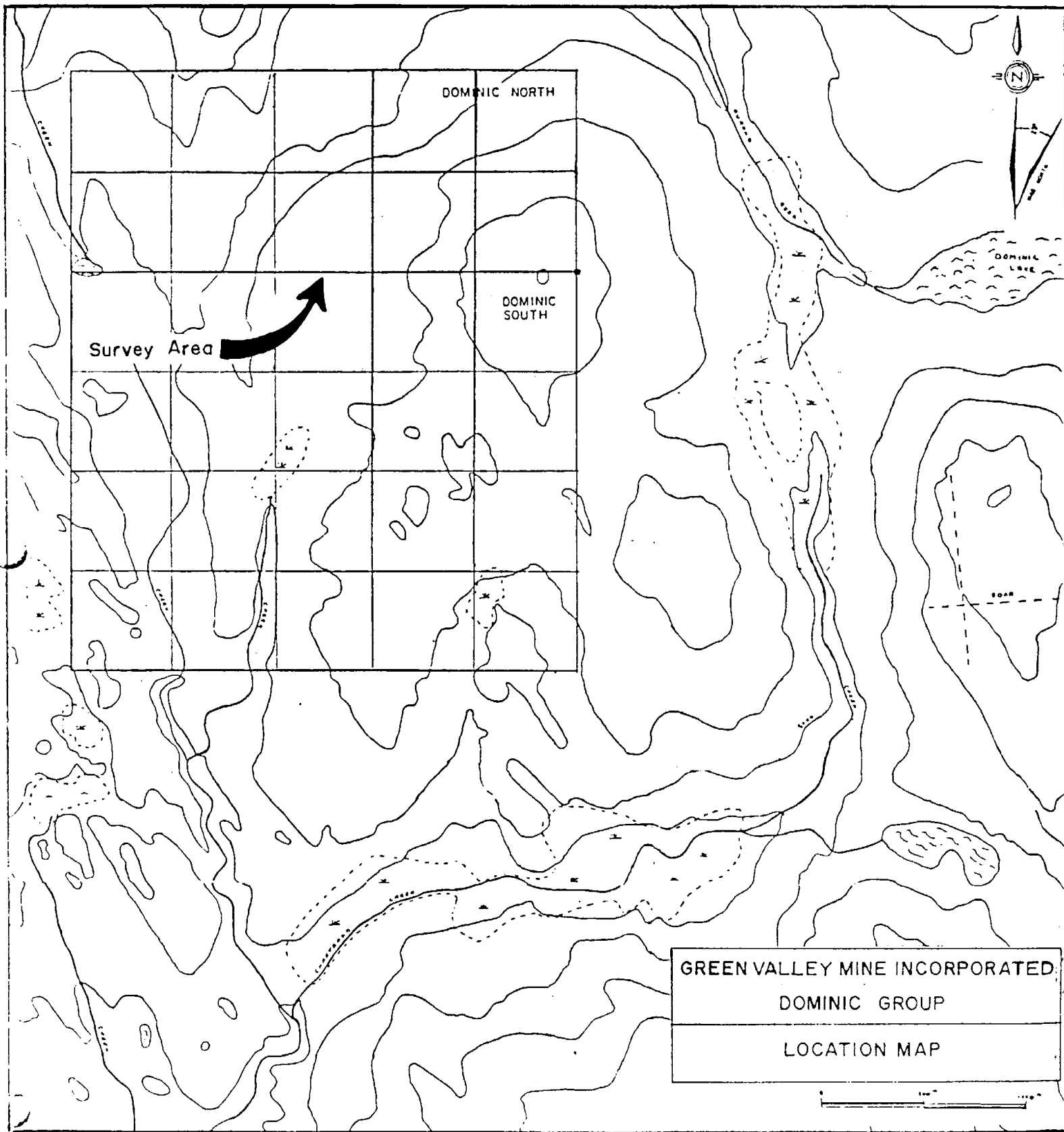
GREEN VALLEY MINE INC.
ACCESS MAP
 DOMINIC CLAIMS

Kamloops Mining Division - British Columbia



ROAD MAP

Figure 2



GREEN VALLEY MINE INCORPORATED
DOMINIC GROUP
LOCATION MAP

Figure 3

- (ii) The Dominic Claim Group is wholly owned by Green Valley Mine Incorporated of Vancouver, B.C. and is comprised of two contiguously located claims totalling 30 units; as follows:

<u>Claim Name</u>	<u>Units</u>	<u>Record #</u>	<u>Expiry Date</u>
Dominic North	10	474	Aug. 16/86
Dominic South	20	475	Aug. 16/86

These expiry dates do not take into account the surveys under discussion as being accepted for assessment credits.

The following excerpts are taken from a Diamond Drilling Report on the DOMINIC CLAIM GROUP By L. Sookochoff, P. Eng. Nov. 12th, 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.

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 DRILL 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 ($n_1=3$, $n_2=3.5$) 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 '85 - '86 exploration season is as follows:
- 3.2 km. of survey grid were established in preparation for the I.P. survey, for a total of 96 stations at 60 meter intervals. 800 meters of baseline were re-established as much of the gridding previously established in earlier surveys had totally disappeared because of ongoing logging in the immediate survey area; many of the markings from even last years work have been totally obliterated in the logging clear-cut process.
- 3.2 km. of multi-level Induced Polarization (I.P.) Survey was completed on the Dominic North and the Dominic South Claims for a total of 96 readings taken at 60 meter intervals.

- (iv) Work for assessment purposes was completed over portions of the Dominic North and Dominic South, over an area comprising 0.35% of the total claim group area.

DETAILED TECHNICAL DATA AND INTERPRETATION

A total of 4 km. of baseline and survey grid were established in preparation for the I.P. Survey. This work was completed with hip chain and compass, and was a re-establishment of the original gridding; nearly all of the original gridding had either deteriorated over the years or had been destroyed in the logging clear-cut process. 800 meters of North-South (0° - 180°) were established with flagging, blazing and limited linecutting.

3.2 km. of survey lines were established perpendicular to baseline orientation, or East-West (90° - 270°); survey lines were blazed and flagged with station intervals of 60 meters marked with numbered flagging ribbons. Stations and gridding are picketed in the clear-cut areas.

3.2 km. of multi-level I.P. Survey was completed over Dominic North and Dominic South, survey gridding for a total of 96 readings. The purpose of the I.P. Survey was to locate fracture-filling or disseminated (i.e. non-massive) sulphides which could mean locating pyritization associated with the economic sulphide mineralization. A dipole-dipole array was used with a 60 meter separation between transmitter and receiver for $n=1$ and a 120 meter separation between transmitter and receiver for $n=2$. 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 of 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 of 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 interfaces 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. This movement of charge creates a small current flow which can be measured on the surface of the ground as a decaying potential difference... The values of the percent frequency effect (%F.E.) are a measurement of the polarization in the rock mass. The induced polarization method is perhaps the most powerful geophysical method for the direct detection of metallic sulphide mineralization, even when this mineralization is of very low concentration... In the field procedure, current is applied to the ground at two points in distance (X) meters apart. The potentials are measured at two other points (X) meters apart; in line with the the current electrodes is and integer number (n) times the basic distance (X). The measurements are made along a surveyed line, with a constant distance (nX) between the nearest current and potential electrodes. In most surveys, several traverses are made with various values of (n); i.e. (n) = 1,2,3, etc. The kind of survey required decides the number of values of (n) used. The separation between sender and receiver electrodes is only one factor which determines the depth to which the ground is being sampled in any particular measurement."

Survey data has been presented in an uncontoured overall map format. Additional surveying and geological mapping will be necessary before a detailed technical interpretation of the survey results will be possible. With the data thus far obtained, however, it is possible to make several observations that may prove useful in future surveys:

The 1986 survey has outlined an area of frequency effect highs with considerably higher overall readings than those encountered in the 1984 surveying and drill program. The general trend of highs seen in these four lines would run NW 335° - 345° in orientation (than 4%FE contour). This same strike is reflected in outcrop jointing/breccia zone attitudes, and also in at least three quite visual fault lineations cutting through the survey area. These faults translate into shallow linear parallel trough like marshy depressions, and are pronounced visual features of the landscape: These lineations were mapped and run from 80W Line 300S through 330W Line 100N; Baseline and Line 200S through 200W Line 100N; and 20E Line 100S through 160W :ine 200N. It is interesting to note that in general the higher resistivities (greater than 400) encountered appear to be associated directly with these fault lineations and indeed can be contoured successfully at 335° - 345° NW; and this could possible reflect an increasing silica content at depth.

SUMMARY

Resultant from the 1986 survey, the delineated area between 60W Line 200N and 120E Line) exhibits moderate to strong anomalous Frequency Effect highs (possible reflecting underlying sulphide mineralization as the causitive source) simultaneous with generally higher resistivity readings (possibly reflecting an increased silica content). This anomalous zone is open to the northwest and would prove a likely target for future surveying and exploration which may delineate an extension.

MALASPINA COLLEGE

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MAY 2, 1983

Dated at Nanaimo,
British Columbia, Canada



[Signature]
Director / Dean

[Signature]
Registrar

[Signature]
Instructor

STATEMENT OF COSTS

Detailed costs and expenses incurred during the year 1986,
in regard to the Dominic North Claim, record \$474, and the
Dominic South Claim, record #475, Mining Division Kamloops.

5 men x 3 days = 15 days

Locating, blazing and flagging grid at 60 meter intervals.

3,200 meters of Induced Polarization n1 and n2

All inclusive -: \$1,500.00 per km.

3.2 km. at \$1,500.00 per km. \$4,800.00

Drafting maps, typing and copies 750.00

Report 250.00
\$5,800.00

Respectfully submitted,



Charles Boitard

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GOLDSMITH, L. B. et al. - Petrology and Geochemistry of percussion drilling Dominic North, Dominic South and Cherise Mineral Claims, Kamloops Mining Division, December, 1980

SOOKOCHOFF, L - Geological Report on the Donimic Property for Green Valley Mine Incorporated, August 24, 1981

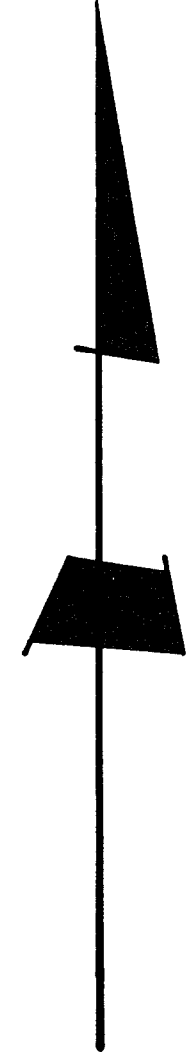
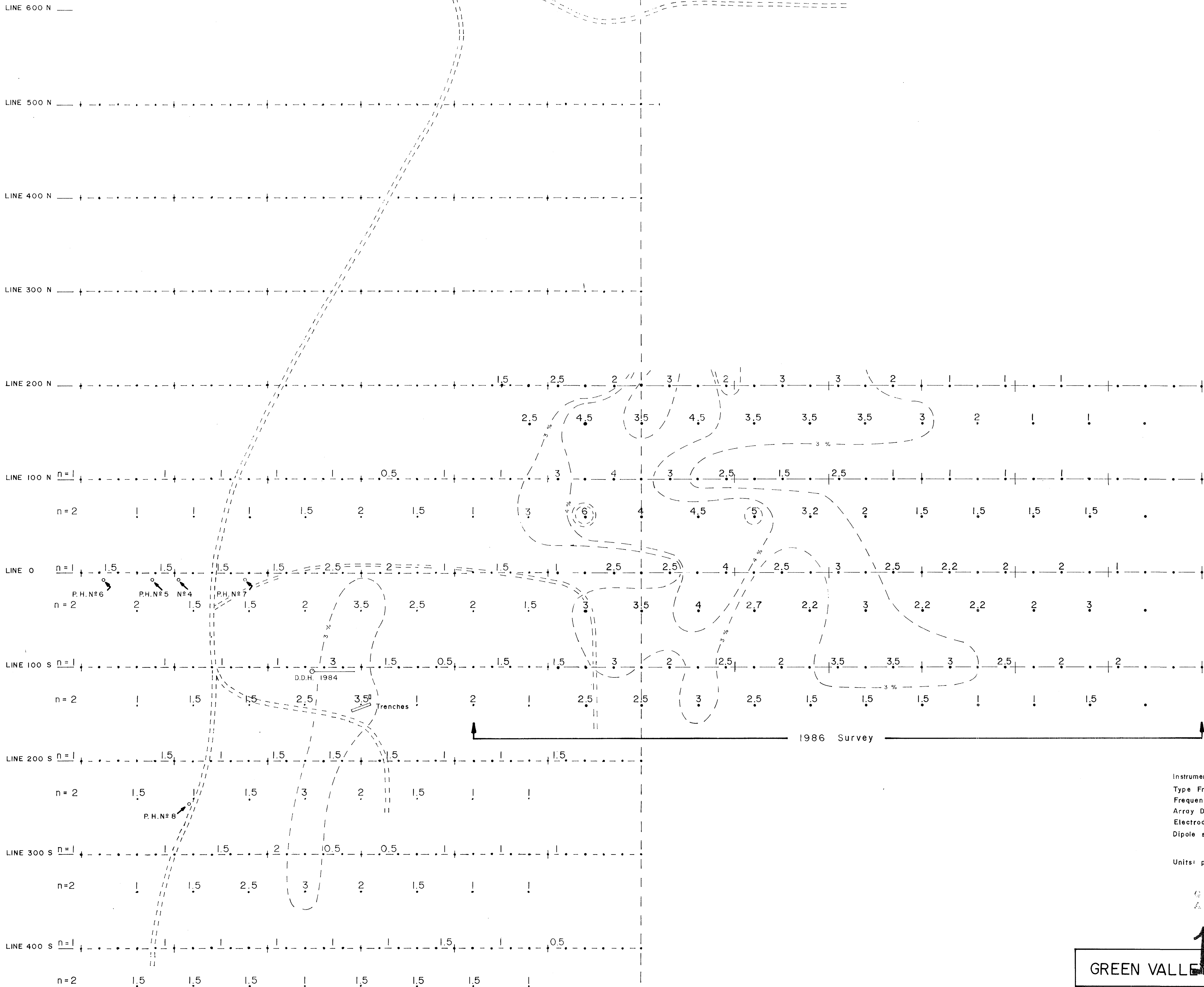
MARK, D. G. - Geophysical-Geochemical Report on Induced Polarization and Soil Sample Surveys over the Dominic Claim Group, Dominic Claim, Kamloops, Mining Division.

MACQUARRIE, D. R. - Geophysical, Geochemical and Physical Report on the Dominic Property for Green Valley Mine Incorporated, October 10, 1984.

SOOKOCHOFF, L. - Diamond Drilling Report on the Dominic Claim Group for Green Valley Mine Incorporated, Kamloops Mining Division, November 15, 1985

HALLOFF, P. G. Geophysical Report for McPhar Geophysics.

600 W 500 W 400 W 300 W 200 W 100 W 0 100 E 200 E 300 E 400 E 500 E 600 E



50°35'

Dominic North

Dominic South

Instrument Sabre Model 21
 Type Frequency Domain
 Frequency: 0.3, 10.0 Hz
 Array Dipole - Dipole
 Electrode spacing 60 metres
 Dipole separation: n=1 60 metres
 n=2 120 metres
 Units: percent

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

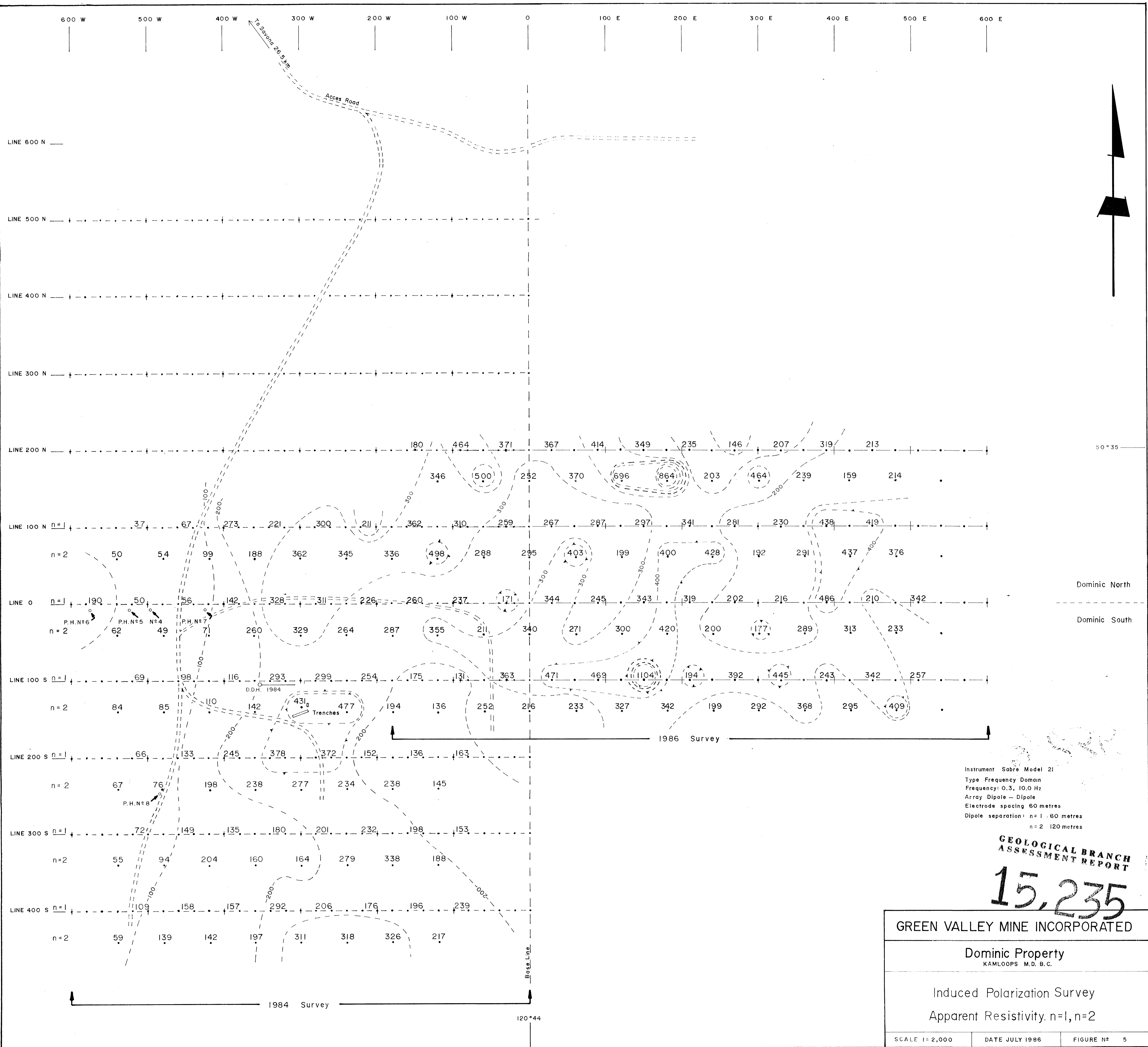
15,235
 GREEN VALLEY MINE, INCORPORATED

Dominic Property
 KAMLOOPS M.D. B.C.

Induced Polarization Survey
 Frequency Effect

SCALE 1:2,000 DATE JULY 1986 FIGURE N° 4

120°44'



50°35

Dominic North

Dominic South

Instrument Sabre Model 21
 Type Frequency Domain
 Frequency: 0.3, 10.0 Hz
 Array Dipole - Dipole
 Electrode spacing 60 metres
 Dipole separation: n=1, 60 metres
 n=2, 120 metres

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,235

GREEN VALLEY MINE INCORPORATED

Dominic Property
 KAMLOOPS M.D. B.C.

Induced Polarization Survey
 Apparent Resistivity, n=1, n=2

SCALE 1=2,000 DATE JULY 1986 FIGURE Nº 5

120°44