

4411

GOVERNMENT OF
[RECORDED]
1973

MERRITT, B. C.

GEOPHYSICAL REPORT
ON
THE SVEN GROUP OF MINERAL CLAIMS
MERRITT AREA
NICOLA MINING DIVISION, B. C.
BY

J. BUCHHOLZ, F.G.A.C.

June 12, 1973

92 I / 8W

CLAIMS: SVEN 1 - 10
SVEN 1 Fr., 2 Fr.

LOCATION: 50⁰ 120⁰ SE
Headwaters Moore Creek

DATE OF WORK: March 24 - April 20, 1973

CLAIM OWNER: LAGUNA RESOURCES LTD. [NPL]

Department of Mines and Petroleum Resources ASSESSMENT REPORT	
NO. 4411	MAP.....

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY AND CONCLUSIONS.....	1
INTRODUCTION.....	2
CLAIMS.....	3
GEOLOGY.....	3
GEOPHYSICAL SURVEY.....	4
Magnetometer Survey.....	4
Electro-magnetic Survey.....	5
RECOMMENDATIONS.....	6

APPENDIX A - STATUTORY DECLARATION

APPENDIX B - LIST OF PERSONNEL AND EXPENDITURES

MAPS:

- #1 Fig. 1 - INDEX MAP.....[following page 2]
- #2 Fig. 2 - MAGNETOMETER SURVEY.....[in pocket]
- #3 Fig. 3 - ELFCTROMAGNETIC SURVEY.....[in pocket]

SUMMARY AND CONCLUSIONS

During the latter part of March and the early part of April 1973 a programme of line cutting, magnetometer and electromagnetic surveying was initiated on the Sven Group of Mineral Claims on behalf of Laguna Resources Ltd. [NPL] of Vancouver, B. C.

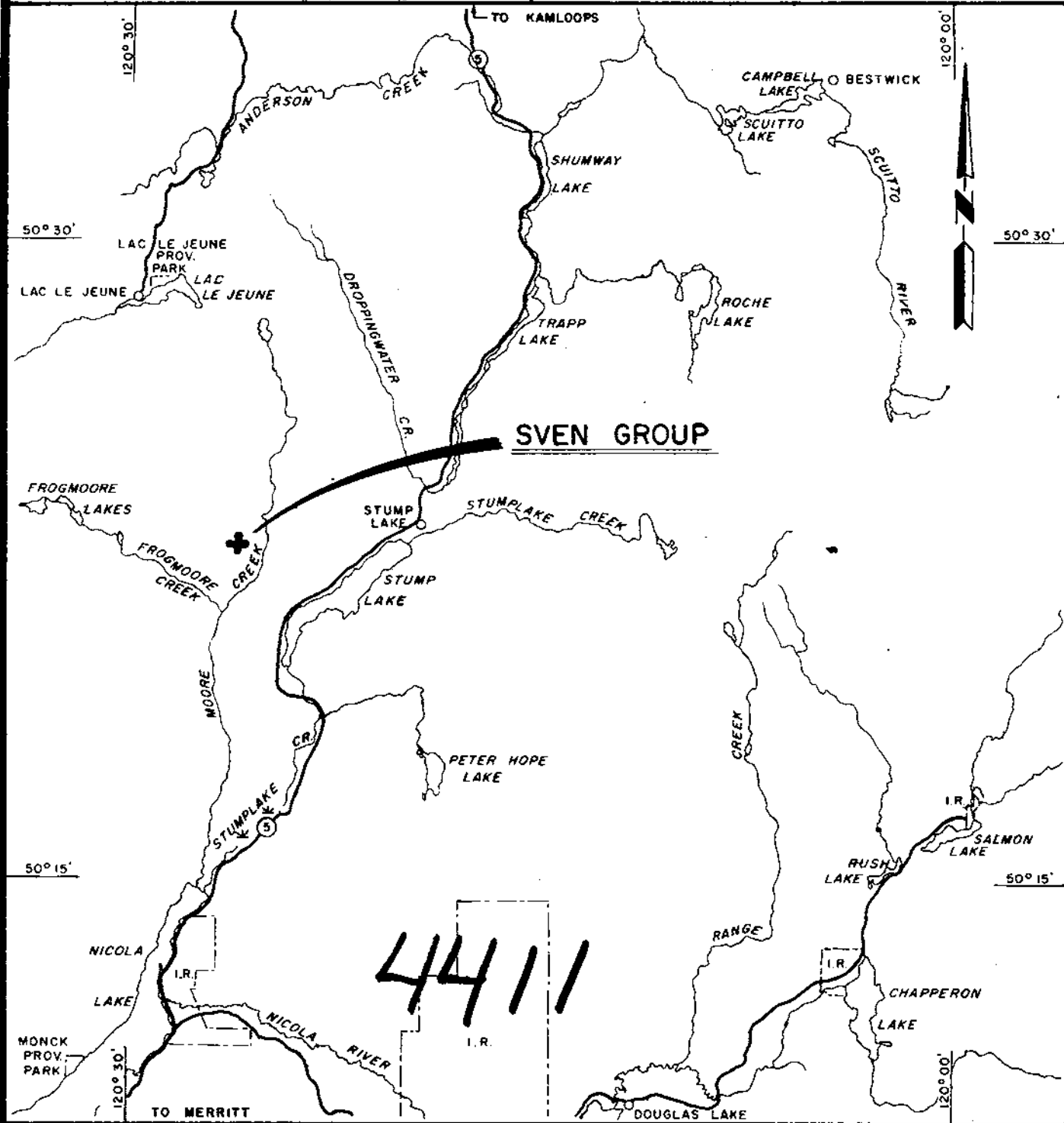
The survey failed to establish the existence of any anomalies of significance. It is concluded that the property is not worthy of further investigation.

INTRODUCTION

The following report is based on field work carried out by the writer with the assistance of R. W. Nusbaum, Geologist, on behalf of Laguna Resources Ltd. [NPL] of Vancouver, British Columbia. The work was completed during the early part of spring 1973 and involved the preparation of 11.5 miles of grid covering the entire area within the claim boundaries. Subsequent work included magnetometer and electromagnetic surveys over the entire grid, which was established in a northeasterly direction with cross lines intersecting at right angles to the assumed strike of regional geological features and structures. Cross lines were spread 400 feet apart running southeast-northwest and stations were located every 100 feet along cross lines. Results of the surveys are attached to this report.

The property is located approximately twenty-five miles south of Kamloops, British Columbia, in the Nicola Mining Division. The claims cover open ranch land divided by the upper waters of Moore Creek, which flows southerly and which is approximately 4.5 miles west of Stump Lake.

Access is by means of paved highway from Merritt or Kamloops to the south end of Stump Lake, then by means of 3.5 miles of privately owned dirt road to the north end of the claim block. Access on the property is excellent due to the open, gently undulating terrain. The southwest corner of the property and the upper portion of Moore Creek exhibit moderate relief and moderately dense covering of scrub timber.



LAGUNA RESOURCES LTD.

LOCATION MAP

SVEN GROUP

NICOLA MINING DIVISION, BRITISH COLUMBIA

4 0 4 8
SCALE IN MILES

TO ACCOMPANY GEOPHYSICAL
REPORT BY J. BUCHHOLZ
DATED JUNE 12, 1973.

FIG. 1

CLAIMS

The claim group comprises ten full-sized and two fractional contiguous mineral claims. All claims are located within the Nicola Mining Division. Expiry dates and other pertinent data are tabulated below:

<u>Claim Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Sven 1	52285E	May 2, 1975
2	52286E	May 2, 1975
3	52287E	May 2, 1975
4	52288E	May 2, 1975
5	52289E	May 2, 1975
6	52290E	May 2, 1975
7	52291E	May 2, 1975
8	52292E	May 2, 1975
9	52293E	May 2, 1975
10	52294E	May 2, 1975
Sven 1 Fr.	58792	May 18, 1974
Sven 2 Fr.	58793	May 18, 1974

The location of the claim boundaries is indicated in Figure 2.

GEOLOGY

The Regional Geology of the area has been described by W.E. Cockfield in G.S.C. Memoir 249 - "Geology and Mineral Deposits of Nicola Map-Area, British Columbia" published in 1948. According to Cockfield's work, the Sven claim group is underlain predominantly by various phases of Triassic volcanic rocks [greenstones] of the Nicola group, intruded by coarse grained granodiorites or quartz diorites of Jurassic age. Contacts and fracture patterns trend northeasterly and south of the Sven group occupy the channel of Moore Creek.

Outcroppings within the claim boundaries were found only on the extreme southwest corner of the property. Gneissic granodiorite [coast intrusion?] cut by small bodies of rhyolite supply the only indication of the nature of the bedrock which underlies the property. The remainder of the property is covered by overburden of undetermined [but probably substantial] thickness. No contacts were observed in the field. The two outcrops examined contained no visible sulphide mineralization.

GEOPHYSICAL SURVEY

Magnetometer Survey

The survey was completed by J. Buchholz using a McPhar M-700 vertical field, fluxgate magnetometer with a maximum sensitivity of 10 gammas and a maximum range of plus or minus 300,000 gammas.

Prior to initiating the magnetometer survey along grid lines, readings were taken along random traverses to enable the operator to select background areas for control points. Control points were then established at the following locations: BL, 12+00N; BL, 4+00S; BL, 20+00S. Control points were checked by repeated "tie-ins". All other stations were tied to one of these three base stations. Diurnal variations did not exceed 60 gammas, and variations during "tie-in" periods [two hour maximum] did not exceed 40 gammas. Corrected readings were plotted and contoured as shown in Figure 2 accompanying this report. Readings were taken at 100 foot intervals. Results of the survey are shown in relative gammas.

Results of the magnetometer survey do not indicate any change in the lithology within the claim boundaries. No contacts or faults were outlined by the magnetometer work. The only anomaly of note covers the area through which an underground pipeline traverses. The remainder of the survey area exhibits consistent flat and uniform readings varying between 200 - 600 gammas. The writer was unable to discern any "sensible" pattern inherent in the contoured results except for a weak northeasterly trend over the central portion of the claim block.

Electro-magnetic Survey

The survey was completed by J. Buchholz and R. W. Nusbaum using a McPhar Mark V dual frequency Reconnaissance Electro-magnetic system employing the "In-Line" method and a 200 foot spread between transmitter and receiver. Readings for both frequencies [1,000 and 5,000 cps] were recorded at 100 foot intervals and results plotted as shown in Figure 3 accompanying this report.

The system as employed in this configuration is capable of maximum depth penetration of 100 feet.

The results of this survey indicate no anomalies of economic significance. The only "cross-over" of note was obtained over the area through which an underground pipeline traverses on Line 24+00N; 28+00N and 32+00N - on the east side of the grid. The survey was extended to include the pipeline as a check on both instrument and operators.

RECOMMENDATIONS

No further work is recommended on this property.

A handwritten signature in cursive script, appearing to read "J. Buchholz".

J. Buchholz, F.G.A.C.

Vancouver, B.C.,
June 12, 1973.

APPENDIX A

STATUTORY DECLARATION

DOMINION OF CANADA:] IN THE MATTER OF Cost of the Geo-
Province of British] physical Survey of the SVEN Group
Columbia] of Mineral Claims, Nicola Mining
] Division, British Columbia
TO WIT:]

I, J. Buchholz of 2219 Kelly Avenue, Port Coquitlam, in the Province of British Columbia, do solemnly declare that the property related costs of the geophysical survey including Line Cutting completed on behalf of Laguna Resources Ltd. [NPL] on the Sven Group of Claims totalled \$4,270.25, of which \$3,000.00 is claimed for assessment purposes as follows:

- \$ 500.00 - Grid Preparation
- 1,000.00 - Magnetometer Survey
- 1,500.00 - Electromagnetic Survey

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 City of Vancouver, in the Province of British Columbia, this 1st day of June, 1973

[Handwritten signature]

[Handwritten signature]

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

APPENDIX B

LIST OF PERSONNEL AND EXPENDITURES

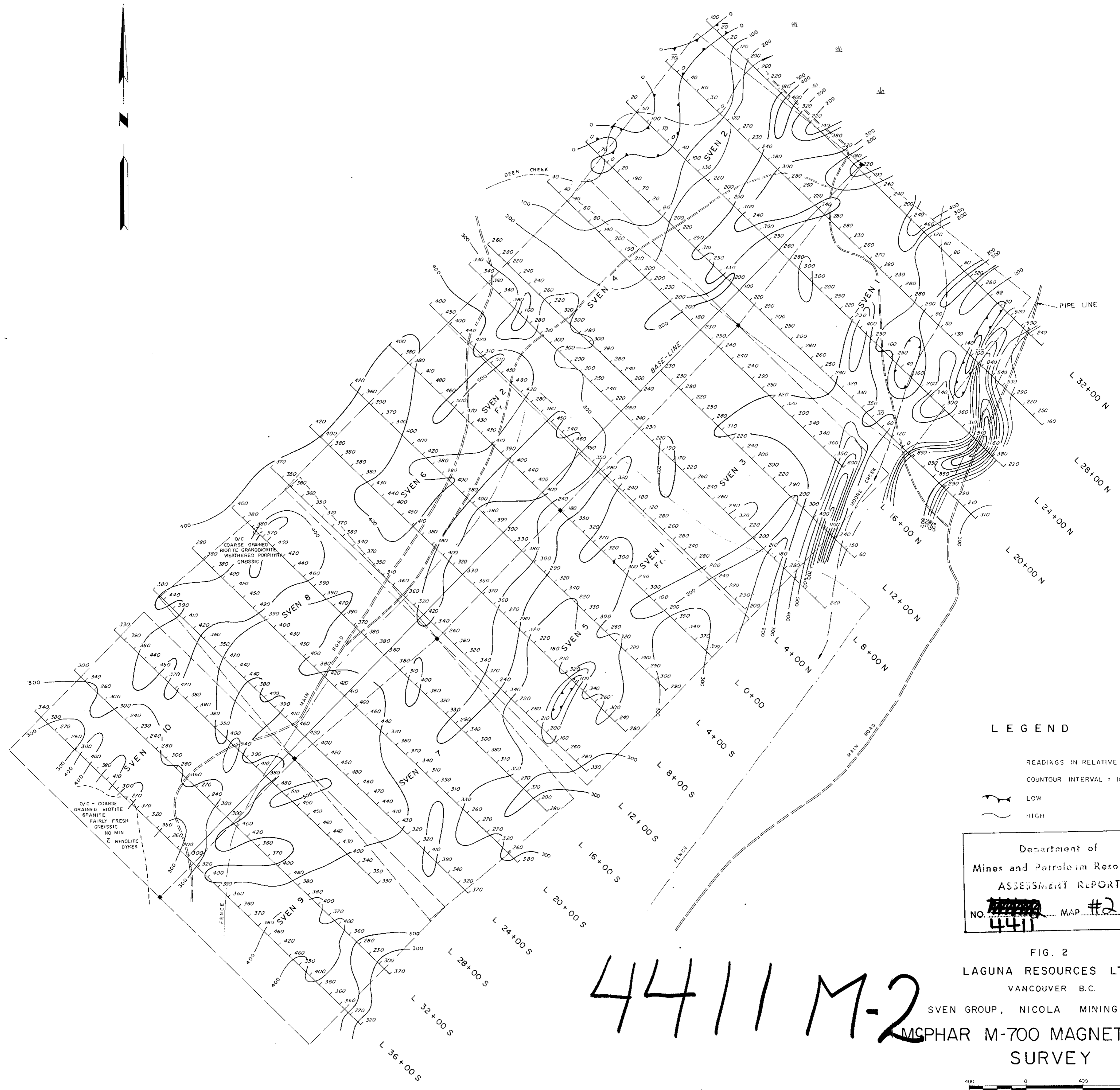
<u>Name</u>	<u>Date</u>	<u>Salary</u>
J. Buchholz, Geologist, 2219 Kelly Avenue, Port Coquitlam, B. C.	March 24-April 20 22 days @ \$90/day	\$1,980.00
R. W. Nusbaum, Geologist, 660 Chatsworth Road, Richmond, B. C.	March 24-April 23 20 days @ \$90/day	1,800.00
Drafting	Versatile Drafting Services	160.75
Rentals:	Truck 4x4	215.00
	McPhar Magnetometer & E-M	114.50
	Total	<u>\$4,270.25</u>

Declared before me at the
of
Province of British Columbia, this
day of

, in the
, A.D.



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



LEGEND

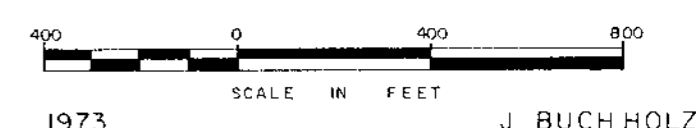
READINGS IN RELATIVE GAMMAS
 COUNTOUR INTERVAL = 100 GAMMAS

LOW
 HIGH

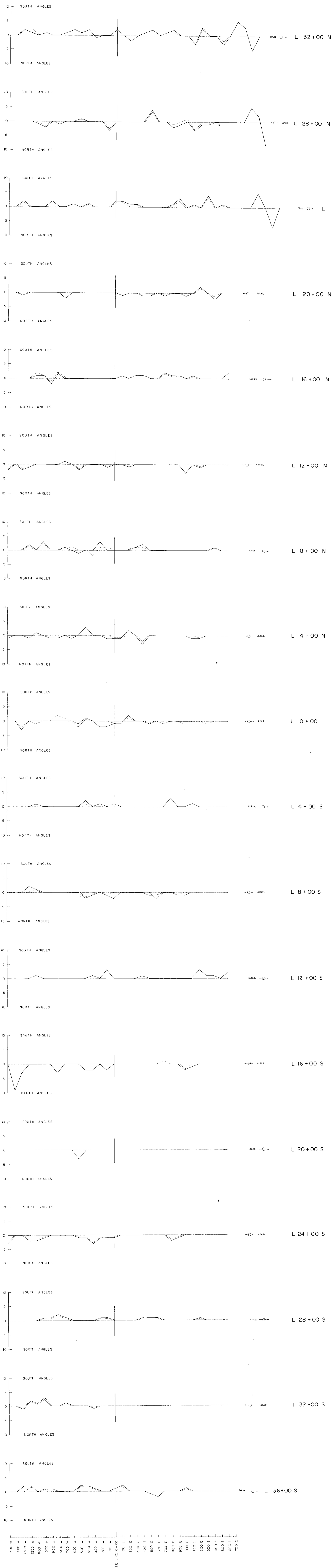
Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. ~~4411~~ MAP #2
 4411

4411 M-2

FIG. 2
 LAGUNA RESOURCES LTD.
 VANCOUVER B.C.
 SVEN GROUP, NICOLA MINING DIVISION
 MCFAR M-700 MAGNETOMETER
 SURVEY



TO ACCOMPANY GEOPHYSICAL REPORT BY J BUCHHOLZ
 ON THE SVEN GROUP, STUMP LAKE, NICOLA M.D. DATED JUNE 12, 1973.



MCFAR HARK V. DUAL FREQUENCY
 RECONNAISSANCE ELECTROMAGNETIC SYSTEM
 VERTICAL SCALE 1" = 10 DEGREES
 HORIZONTAL SCALE 1" = 400 FEET
 - - - 5700 CYCLES PER SECOND
 - - - 1000 CYCLES PER SECOND
 --- TRANSMITTER
 --- RECEIVER

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. ~~4411~~ MAP #3
 4411

FIG. 3
 LAGUNA RESOURCES LTD
 VANCOUVER B.C.
 SVEN GROUP, NICOLA MINING DIVISION
 MCFAR R.E.M. SURVEY

