

LOG NO: 11-16	RD
ACT:	
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GENIE HLEM
REPORT ON THE
SUGAR LAKE PROPERTY
LAF IV CLAIM

Record No. 3224
Vernon Mining Division
North Latitude 50°30'30"
West Longitude 118°30'
N.T.S. 82L / 7E

Owner/Operator

GERLE GOLD LTD.

904 - 675 West Hastings Street
Vancouver, B.C. V6B 1N2

20,471

GEOLOGICAL BRANCH
ASSESSMENT REPORT

November 8, 1990

C.A. HRKAC

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Proton Magnetometer Profile Map #1 In Pocket

GENIE HLEM Profile Map #2 In Pocket

INTRODUCTION

In 1986 two massive sulphide showings were discovered near Sugar Lake and the Laf and Laf III claims were staked to cover the showings. The Laf IV claim was staked in September, 1989 to cover adjacent promising ground.

In August of 1990, a GENIE HLEM and proton magnetometer geophysical survey was conducted on the Laf IV mineral claim. The claim is located in the Vernon Mining Division; record number 3224.

LOCATION AND ACCESS

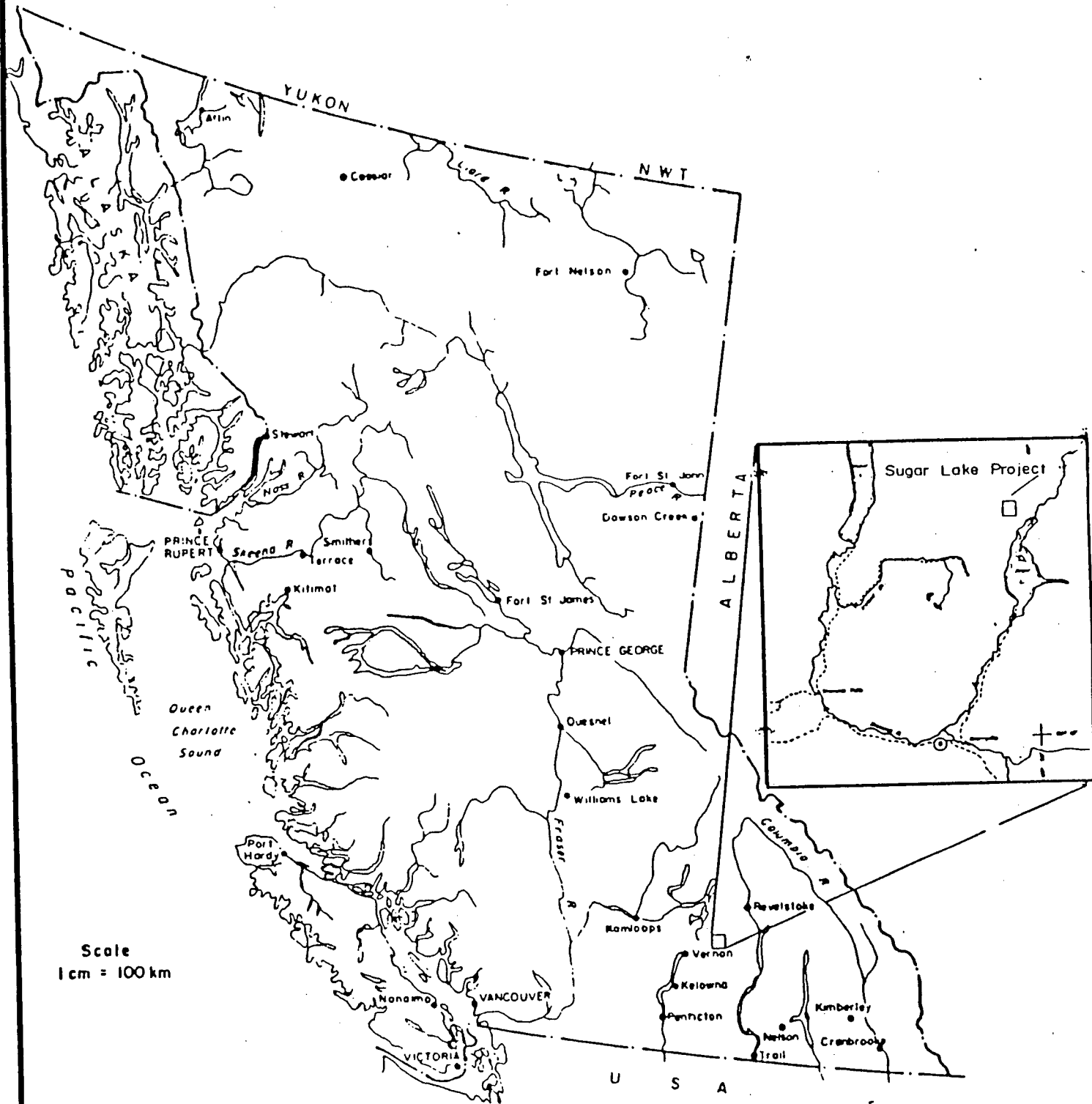
The Laf IV claim is located at the northwest end of Sugar Lake approximately 60 air km east-northeast of the town of Vernon and approximately 40 air km northeast of the village of Lumby.

Access is by paved highway from Lumby to Cherryville and then north via paved road and a good gravel logging road to the northwest end of Sugar Lake. From this point access is by foot up moderate to steep slopes on the west side of Sugar Lake. The claims are centred at about the 1250 m elevation approximately 1 km from the lake shore.

GEOLOGY

The Laf IV claim lies within the Omineca Crystalline belt, a north-northwesterly trending sequence of rocks consisting mostly of volcanics, intrusives, sediments and metamorphic rocks. Locally, the Laf IV claim is underlain by rocks from the Shuswap Metamorphic Complex which is a series of highly to weakly metamorphosed volcanics and sediments of Archean or later age. Rocks in the immediate area of the claims are of the Monashee Group which encompass predominantly highgrade metamorphic rocks and consist mostly of various types of gneiss, with lesser amount of schist, quartzite, marble, slate and limestone.

Within the property itself the rocks are dominated by gneiss of the Monashee Group which contains some minor quartzite beds. At about the 1300 m elevation on the property the gneiss is in contact with a fine to medium grained diorite which is likely related to the Coast Range Intrusions. The contact between these two rock types is usually very sharp but in places can be gradational. Overall the contact on the prospects are less than 10° suggesting the diorite unit may be occurring as sills with the diorite at the upper showing being approximately 100 m thick and capping the gneiss.



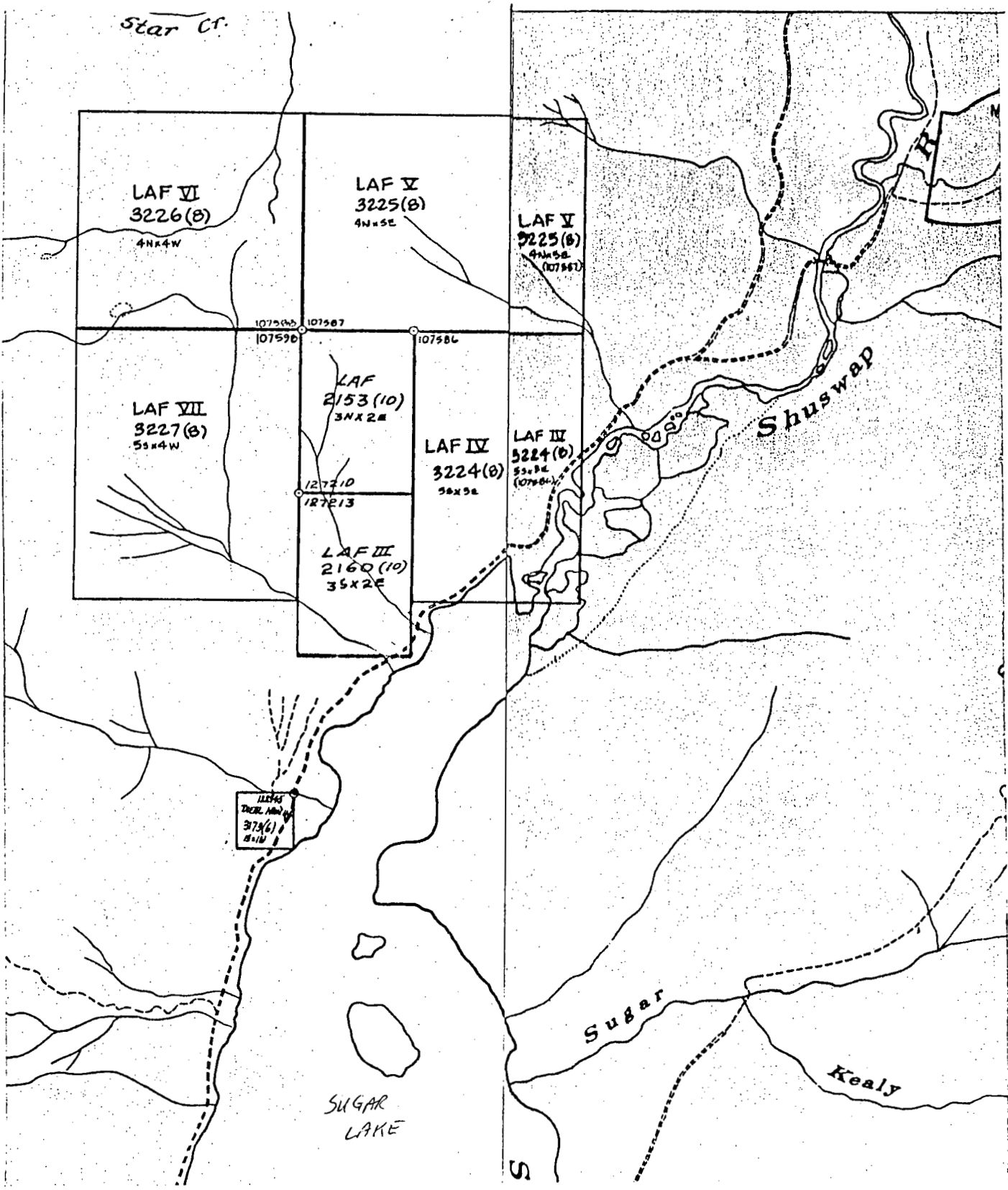
GERLE GOLD LTD.
 SUGAR LAKE PROJECT
 LOCATION MAP

FIGURE 1

118° 30'

50° 30'

Star Cr.



CLAIM MAP LAF IV

figure 2
scale 1:50,000

82L/7E

82L/8W

SURVEY PROCEDURES

In order to test the Laf IV claim for massive sulphide mineralization similar to that discovered on the Laf and Laf III claims, the claim was surveyed using a GENIE HLEM unit. The Scintrex SE-88 Genie EM system uses a portable transmitter consisting of two transmitting coils and power supply, and a receiver with signal detection electronics. The transmitter and receiver coils are normally maintained in the vertical axis coplanar mode, commonly referred to as the horizontal loop mode.

The transmitter simultaneously generates two alternating magnetic fields - one referred to as the "signal frequency" and the other as the "reference frequency". The resultant electromagnetic fields set up in the ground are detected by the receiver coil located at a fixed distance from the transmitter. The receiver measures the received "signal frequency" amplitude, H_s , and the received "reference frequency" amplitude, H_r . The value of $(H_s/H_r) \times 100$ (referred to as "Ratio") is digitally displayed on the receiver.

The survey plotting point is considered to be at the mid-point of the transmitter-receiver separation (L).

The survey was conducted using Tx-Rx separation of 100 m and the high frequency, 3037.5/112.5, was monitored and recorded. Readings were taken every 25 m along the lines. A total of 1.7 km was surveyed using each method.

A proton magnetometer survey was conducted at the same time using an IGS-2 mag. An IGS-2 base station was also used to correct the mag data for diurnal drift.

RESULTS

Both the GENIE HLEM and the magnetometer were unresponsive over the test lines surveyed (see maps 1 & 2 and Appendix II). The zone could not be traced across the Laf IV using either of these survey procedures.

CONCLUSIONS and RECOMMENDATIONS

Depth of overburden and/or narrowing of the projected mineralized zone are the most likely causes of the lack of response across the test lines. Geophysically, an Induced Polarization survey with a wide dipole separation would be appropriate to test for a narrowing of the zone.

APPENDIX I

STATEMENT OF COSTS

August 6 - 8, 1990

Wages		
Geophysicist	3 days @ \$275./day	\$ 825.00
Assistant	3 days @ \$200./day	600.00
Room and Board		246.00
Truck Rental	3 days @ \$50./day	150.00
Supplies and Equipment		27.25
Report and Map Preparation		400.00
		<hr/>
		\$2,248.25

APPENDIX II

<u>Line</u>	<u>Station</u>	<u>Total Field Mag</u>
11000	8575	57514.7
11000	8600	57504.6
11000	8625	57500.1
11000	8650	57526.7
11000	8675	57534
11000	8700	57524.7
11000	8725	57519.2
11000	8750	57502.6
11000	8775	57531.2
11000	8800	57505.1
11000	8825	57577.1
11000	8850	57447.6
11000	8875	57456.7
11000	8900	57407.8
11000	8925	57548.1
11000	8950	57582.8
11000	8975	57594.6
11000	9000	57612.3
11000	9025	57592.1
11000	9050	57578.5
11000	9075	57559.5
11000	9100	57549
11000	9125	57546.3
11000	9150	57536.1
11000	9175	57532.2
11000	9200	57550.6
11000	9225	57527.9
11000	9250	57524.2
11000	9275	57529.5
11000	9300	57540.4
11000	9325	57536.1
11000	9350	57552
11000	9375	57528.1
11000	9400	57524.9
11000	9425	57529.1
11000	9450	57521.5
11000	9475	57519.5
11000	9500	57512.9
11200	8475	57568.7
11200	8500	57575.1
11200	8525	57556.7
11200	8550	57555.7
11200	8575	57496.2
11200	8600	57514.2
11200	8625	57456.9
11200	8650	57445.6
11200	8675	57504.5
11200	8700	57564.1
11200	8725	57577.1
11200	8750	57595.3
11200	8775	57499.6
11200	8800	57576.5
11200	8825	57490.9
11200	8850	57559
11200	8875	57589.7
11200	8900	57556.7
11200	8925	57552.1
11200	8950	57558.5

<u>Line</u>	<u>Station</u>	<u>Total Field Mag</u>
11200	8975	57563.5
11200	9000	57558.9
11200	9025	57549.5
11200	9050	57539.4
11200	9075	57541.7
11200	9100	57548.9
11200	9125	57537.2
11200	9150	57534.3
11200	9175	57539.6
11200	9200	57541.9
11200	9225	57536.2
11200	9250	57538.2
11200	9275	57531.4
11200	9300	57535.3

<u>Line</u>	<u>Station</u>	<u>3037.5/112.5</u>
11000	8575	.1
11000	8600	-.2
11000	8625	1.3
11000	8650	.6
11000	8675	.3
11000	8700	0
11000	8725	.5
11000	8750	.3
11000	8775	.7
11000	8800	.5
11000	8825	.2
11000	8850	.1
11000	8875	.7
11000	8900	-.4
11000	8925	1
11000	8950	-.8
11000	8975	-1.1
11000	9000	-.5
11000	9025	-.3
11000	9050	.4
11000	9075	.1
11000	9100	.1
11000	9125	-.8
11000	9150	1.3
11000	9175	.9
11000	9200	.3
11000	9225	.5
11000	9250	.2
11000	9275	.6
11000	9300	-.5
11000	9325	-.4
11000	9350	1.1
11000	9375	.7
11000	9400	.4
11000	9425	-.6
11000	9450	.6
11000	9475	.6
11000	9500	.3
11200	8475	.9
11200	8500	.4
11200	8525	1
11200	8550	.3
11200	8575	-.5
11200	8600	.4
11200	8625	.1
11200	8650	0
11200	8675	0
11200	8700	.5
11200	8725	.3
11200	8750	.7
11200	8775	.3
11200	8800	.2
11200	8825	.4
11200	8850	-.9
11200	8875	0
11200	8900	.8
11200	8925	.4
11200	8950	.2

<u>Line</u>	<u>Station</u>	<u>3037.5/112.5</u>
11200	8975	.1
11200	9000	.3
11200	9025	-.4
11200	9050	.9
11200	9075	1.0
11200	9100	.7
11200	9125	.3
11200	9150	.4
11200	9175	.8
11200	9200	-.2
11200	9225	-.5
11200	9250	.9
11200	9275	.4
11200	9300	.2

APPENDIX III

I, Christopher Andrew Hrkac of Vancouver, British Columbia, do certify that:

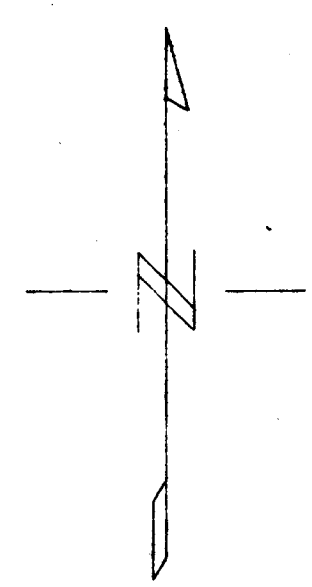
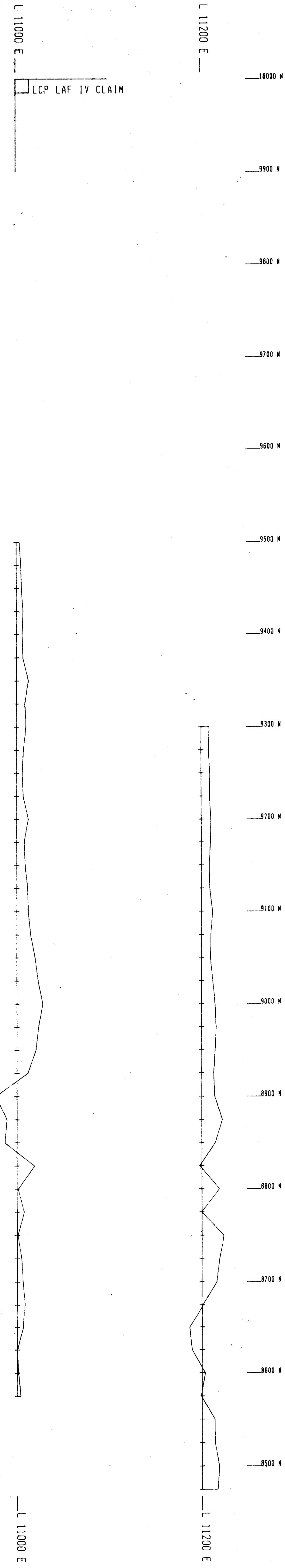
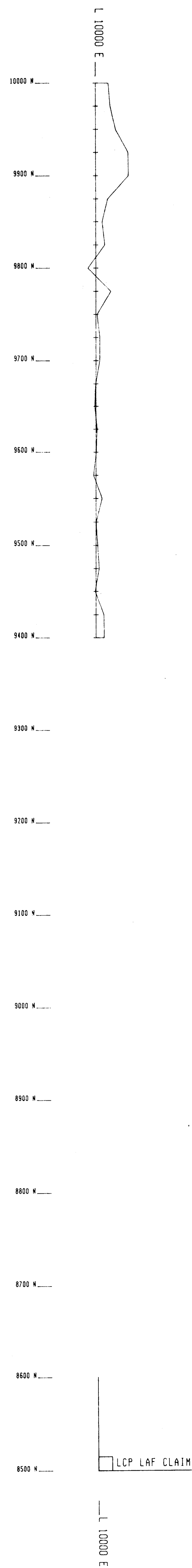
1. I am an exploration geologist residing at 3375 Arbutus Street, Vancouver, B.C.
2. I am a graduate of the University of British Columbia.
3. I have practiced as an exploration geologist in British Columbia for seven years.
4. Information contained in this report was conducted under my supervision, during August, 1990.
5. I have visited the property this report is based upon.

Respectfully submitted



C.A. Hrkac, B.Sc.

Vancouver, B.C.
October, 1990



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

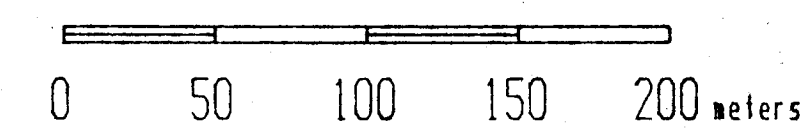
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INSTRUMENT : IGS-2 MAG

Profile Scale : 1cm = 100 nt

Line Trace = 57500nt

SCALE 1:2500



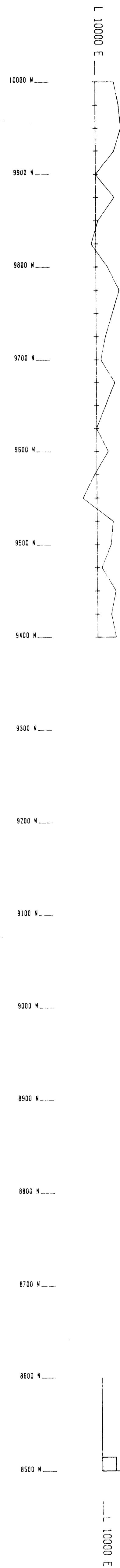
**GERLE GOLD LTD.
SUGAR LAKE PROJECT**

**TOTAL FIELD MAG
PROFILE MAP**

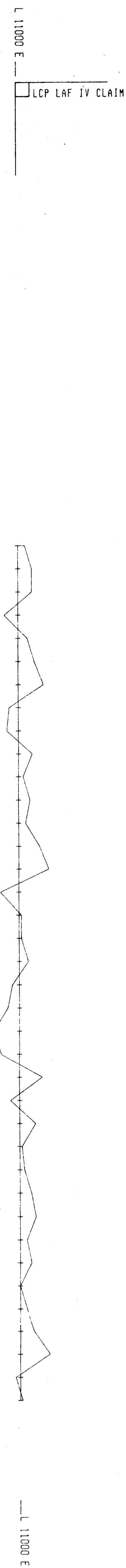
In accompany a report by	
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Drawing No: Vernon	E.L.S.: 82L/7E
Date 10/90	By No: 1
QUEST CANADA EXPLORATION SERVICES INC.	

REVISIONS

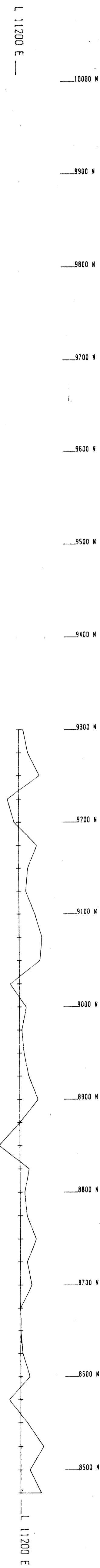
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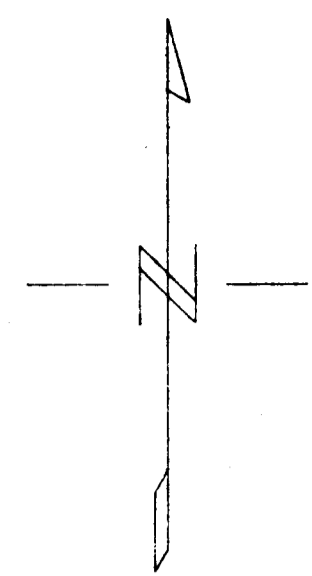
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L 11000 E



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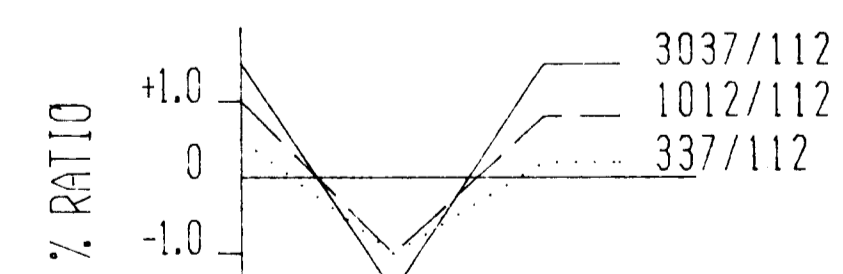


MINERALOGICAL BRANCH
ASSESSMENT REPORT

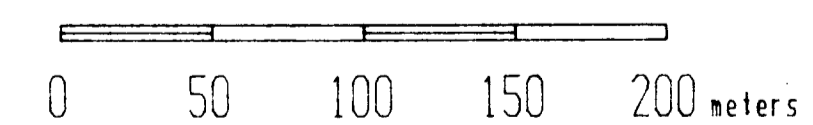
20,471

INSTRUMENT : Tx: Scintrex TM-2

: Rx: IGS-2/EM-4



SCALE 1:2500



GERLE GOLD LTD.
SUGAR LAKE PROJECT
MOVING SOURCE
GENIE HLEM
PROFILE MAP

In accompany a report by

Project No:	Report No:
Drawing No: Vernon	D.T.S.: 82L/7E
Date: 10/90	Map No: 2
QUEST CANADA EXPLORATION SERVICES INC.	

REVISIONS

By	Date	Appov.By