



CHALICE MINING INC.

LOG NO: 0127	RD.
ACTION:	
FILE NO:	

**GEOPHYSICAL REPORT
ON THE**

**GG GROUP OF CLAIMS GEOPHYSICAL BRANCH
PENROSE CREEK, GUN LAKE AREA GEOPHYSICAL REPORT**

**LILLOOET MINING DIVISION
BRITISH COLUMBIA**

16,912

PROPERTY:

5 km due west of the Town of Goldbridge on immediate west side of Gun Lake, 50 122 NW N.T.S. 92J/15W

WRITTEN FOR:

CHALICE MINING INC.
#470, 475 W. Georgia St.
Vancouver, B.C. V6B 4M9

SURVEYED BY:

Bill Chase & Associates

WRITTEN BY:

Steven Hodgson
Chalice Mining Inc.

50° 51' ; 122° 56'

**SUB-RECORDER
RECEIVED**

JAN 22 1988

M.R. # \$.....
VANCOUVER, B.C.

DATED:

January 5th, 1988



Province of
British Columbia

RECEIPT

038086 J

THE SUM OF

nil

DOLLARS

\$ *nil*

ON ACCOUNT OF

*Assess. Rpts GG WEST I,
VERITAS etc.*

Lillooet M.D.

RECEIVED FROM

Chalice Mining Inc ON

ISSUING OFFICE

Kamloops

ISSUING OFFICER'S SIGNATURE

[Signature] Jan 22 1988

TABLE OF CONTENTS

	Page #
Introduction and General Remarks	1
Property and Ownership	1
Location and Access	1
Physiography	1&2
History of Previous Work	2
Geology	2&3
Instrumentation and Theory	4
(a) Magnetic Survey	
(b) VLF Survey	
Survey Procedure	4
Data Reduction and Compilation	4
Discussion of Results	4&5
Selected Bibliography	6
Author's Certificate	7
Statement of Costs	8

LIST OF ILLUSTRATIONS

At Back of Report		Map
Property Location Map	1:10,000,000	1
Claim Map	1:50,000	2
Survey Location Map	1:50,000	2A
 <u>In Back Pocket</u>		
Magnetic Map		3
VLF Map		4

**GEOPHYSICAL REPORT
ON THE
GG GROUP OF CLAIMS
OF
CHALICE MINING INC.**

INTRODUCTION AND GENERAL REMARKS:

This report discusses the survey procedure, compilation of data and the interpretation of a ground conducted VLF and magnetic survey carried out in October of 1987 by Bill Chase & Assoc., Louis Dionne, Field Director. A total of 16.2 line km of survey were done over the property.

The object of the surveys was to aid in the geological mapping of Lithology and structure for the purpose of exploration of the type of gold mineralization as found in the Goldbridge and Bralorne Areas.

PROPERTY AND OWNERSHIP:

<u>Claim Name</u>	<u># of Units</u>	<u>Record #</u>
GG West	12	2245
GG West #1	18	2184
GG North	18	2185
GG Fraction	1	2186
Rev. GG Veritas	1	2358

LOCATION AND ACCESS:

The property is located on the southeastern slope of Mount Penrose and abuts the western edges of Gun Lake and Lajoie Lake as well as the northern edge of Downton Lake.

The geographical coordinates are 50 52'N latitude and 122 56'W longitude. Access can be gained by a series of two-wheel drive roads from Goldbridge which run westerly towards and around Gun Lake. The distance from Goldbridge to the property is about six (6) kilometers.

PHYSIOGRAPHY:

The property lies at the southeastern part of the Pacific Ranges which is a physiographic division of the Coast Mountains. The terrain is, in general, steep and mountainous with the general slope facing towards the south and southeast. The claims are dissected by the southeasterly-draining Penrose Creek.

Elevations vary from 762 meters a.s.l. at the southwestern corner of the property close to the edge of Downton Lake, to 2,627 meters a.s.l. at the northwestern edge of the property on Mount Penrose.

The main water source would be Penrose Creek as well as Downton Lake, Gun Lake and Lajoie Lakes.

The forest cover consists primarily of fir and spruce, moderate in density and with an undergrowth light to moderate.

HISTORY OF PREVIOUS WORK:

The following is quoted from L. Sookochoff, P.Eng., September 1983 report on the property:

"The history of the area is centered around the Bralorne and the Pioneer Mines where lode gold production was carried on from the early 1900's.

The Bralorne and Pioneer, situated on Cadwallader Creek within thirteen kilometers southwest of the Chalice property, in addition to other significant former properties such as the Ben d'Or and the Wayside, are located within a mineralized belt on the western flank of the Ben d'Or Mountains.

During the early 1900's, production initially utilizing arrastras was carried out at these properties with the Bralorne producing to 1972 when it was shut down for economic reasons.

The history of the Chalice property stems from the Veritas crown grant where former exploration included a 'tunnel 225 feet long and several open cuts' on a vein cutting an augite-diorite and serpentine. A total of a 'thousand feet' of underground work in three tunnels is reported.

Preliminary geophysical and geochemical surveys were carried out by Chalice personnel in 1979 with a diamond drill hole put down on an anomalous zone.

In 1982, trenching by Chalice personnel was completed at the southwest corner of the Gwendolyn's Glory Claim".

A biogeochemical orientation survey was completed in 1986.

GEOLOGY:

The following is also quoted from Sookochoff's same report:

"In the area of the Chalice property, Triassic sedimentary and volcanic rocks, including variable metamorphosed units, are intruded by three or more intrusive episodes, including an ultrabasic or intrusive. Generally, the Triassic formations include the middle Triassic Fergusson group of cherts to limestone in addition to biotite schists, the younger Noel Formation, Pioneer Formation and the Youngest Hyrly Formation which, in addition to fine grained and sedimentary rocks, include conglomerate, agglomerates and andesites.

The individual formations are exposed to a greater irregularity towards the central Cadwallader Creek extending northwesterly to Mount Penrose west of Gun Lake. The bank is generally enveloped by diorite to syenodiorite intrusives with localized ultrabasic and augite diorite. Bralorne intrusive plugs and northwesterly stretched stocks are associated with the central formations.

The major aerial structural feature is a broad northwesterly trending and plunging anticlinal arch centered east of Cadwallader Creek in the Ben d'Or range of mountains. The western limb in which the principal ore deposits of the area occur extends into the Cadwallader Creek Valley, which reflects a major structure. The major structure results in secondary and minor folds which resulted in complex distortion of the formations in addition to providing a locus for the ultrabasic and gold associated Bralorne intrusives. The lenticular intrusives extend to the Chalice property area where topographical structural features are not as obvious as along the Cadwallader Creek Valley.

The gold-bearing quartz fissure veins of the Bralorne intrusives and more specifically the veins in the Bralorne and Pioneer Mines are conspicuous for the exhibited ribboning effect where quartz ribbons are separated by thin, dark grey films of ground-up sulphides, sericite, white mica and gouge and occasional slickensided free gold.

The vein fissures extending from the augite diorite are persistent into the Pioneer greenstone with weaker indications in thinly bedded sediments and 'feathering out' in serpentine.

Associated indicator minerals that are found in the Bralorne Pioneer veins and reflect gold mineralization are mariposite, scheelite, arsenopyrite, sphalerite and galena. Other metallic minerals include pyrite, chalcopyrite, stibnite, tetrahedrite, marcasite and sylvanite (?) or calaverite (?).

On the Gun Lake road west to the southwest corner of the property, a reported sequence of mixed sandstone, siltstone and carbonate rich conglomerate with minor thin rhyolite/dacite volcanic members trending NW and dipping SW occur.

On the Chalice property, the Veritas vein is described as a vein trending at 120° with a dip varying from 64° NE to vertical. The vein formed along a fracture system in altered volcanics (greenstone) which is locally intruded by a Bralorne-like micro-diorite pluton.

The micro-diorite is serpentized near the contact. Quartz veins are irregular lenses in NW trending shears. The outcrop and workings reveal one thousand (1000) feet of vein zone with a vertical height of four hundred (400) feet (old workings). Veins are of milky white quartz "three inches to four feet" wide with erratic sulphide content. The vein appears to be cut off by the micro-diorite pluton.

On Penrose Creek, along the western boundary of the property, the geology is reported as altered volcanics and serpentines occurring as large inclusions (pendants, within micro-diorite. Calcite, ankerite and quartz stockworks occur in the serpentine with pyrite, chalcopyrite and arsenopyrite. Carbonate quartz veins also occur within becciated green volcanics of a serpentine lens."

INSTRUMENTATION AND THEORY:

(a) Magnetic Survey

The magnetic data was obtained using a proton magnetometer, manufactured by Scintrex , Model MP 2. The instrument measures the Earth's total magnetic field intensity with a sensitivity of one gamma.

The magnetic patterns obtained from the survey are generally related to the distribution of magnetite in the survey area.

A contoured plan of the magnetic data is present in the back pocket of this report.

(b) VLF. EM Survey

The VLF receiver unit, Serial # 283, manufactured by Sabre Electronics Instruments Ltd. of Burnaby, B.C., was used for the VLF survey. The transmitter used was NLK Arlington (Seattle), Washington, operating on 24.8 KHz. This signal is used due to its ideal orientation with respect to North-west and South-east geological structures. The measurements taken during the survey are the variations in the horizontal component of the signal strength and the dip angle of the field. All data is Fraser Filtered.

Profile of the Fraser Filtered data is present in the back pocket of this report.

SURVEY PROCEDURE:

The survey was conducted on a 16.2 km grid with lines of 200 meters and stations of 50 meters. Compass and hip chain were used. The 2.2 km baseline was cut and controlled by pickets.

DATA REDUCTION AND COMPILATION:

The data from the survey was reduced and compiled on two 1:5000 maps by RPM Mapping and Computer Services Ltd. of Vancouver.

DISCUSSION OF RESULTS:

(a) Magnetic Survey

The magnetic data is divided into two groups - values from 58,000 grams to over 60,000 grams are associated with serpentinites in the eastern and north-eastern section of the grid, and values less than 58,000 are generally associated with diorite and/or gabbro of the Bralorne intrusives. The data in areas underlain by diorites exhibits a strong north-westerly fabric which may be reflecting a foliation in the diorite sub-parallel to the trend of the extension of the Veritas vein, and/or reflecting a regional magnetic field associated with a deep-seated serpentinite intrusion.

The magnetic high at 4 + 50 West in L1000 North is probably related to a discrete gabbroic plug. There is an inflection in the magnetic contour in the vicinity of L400N 200W in the area of the possible extension of the Veritas vein system.

(b) VLF - EM Survey

No significant VLF-Em conductors were located by the survey.

However, a weakly conductive zone striking from 1+50 to 3+00 W on L 1100N to approximately L1400 N, 2+50 to 3+50W was noted. Peak to peak dip angles vary from 6 to 19°, and relative field strengths from 20% to 23% above background. This weak zone approximately correlates with locally higher magnetic values and is probably associated with a more conductive gabbroic intrusive in contact with more resistive diorites.

SELECTED BIBLIOGRAPHY

Annual Report of the Minister of Mines of the Province of B.C., 1933 p. A 268

Hodgson, Steven, Geological, Geophysical, and Physical Work on the G.G. Group, Goldbridge Area, Lillooet Mining Division, B.C., for Chalice Mining Inc., November 7, 1983.

McCann, W.S., Geology and Mineral Deposits of the Bridge River Map Area, B.C., G.S.C. Memoir 130, 1922.

Roddrick, M.S., et al, Pemberton (East Half) Map-area, B.C., Geological Survey of Canada Paper 72-17, 1973.

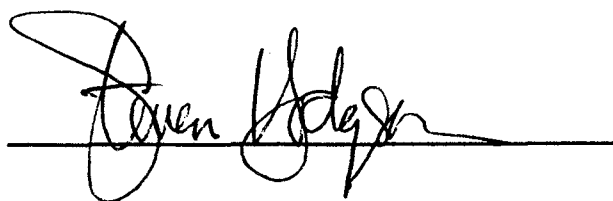
Sookchohoff, L., Geological Report on the Goldbridge Property of Chalice Mining Inc., Lillooet Mining Division, B.C., September 26, 1983.

Stevenson, J.S., Lode-Gold Deposits Southwestern British Columbia, B.C. Department of Mines, Bulletin No. 20, Part IV p.p. 31-35, 1947.

AUTHOR'S QUALIFICATIONS

I, Steven Hodgson, certify that:

1. I attended Pasadena City College and the University of Colorado as a major in Geology.
2. I attended the Mineral Exploration course at Nelson, B.C. in 1979.
3. I have been a Prospector in British Columbia for eleven (11) years.
4. The information for the accompanying report was based on work personally supervised by myself and from previous assessment reports and government publications.

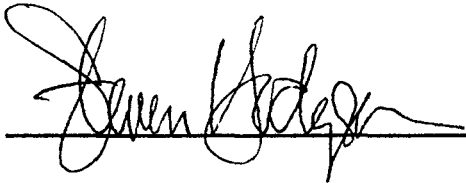


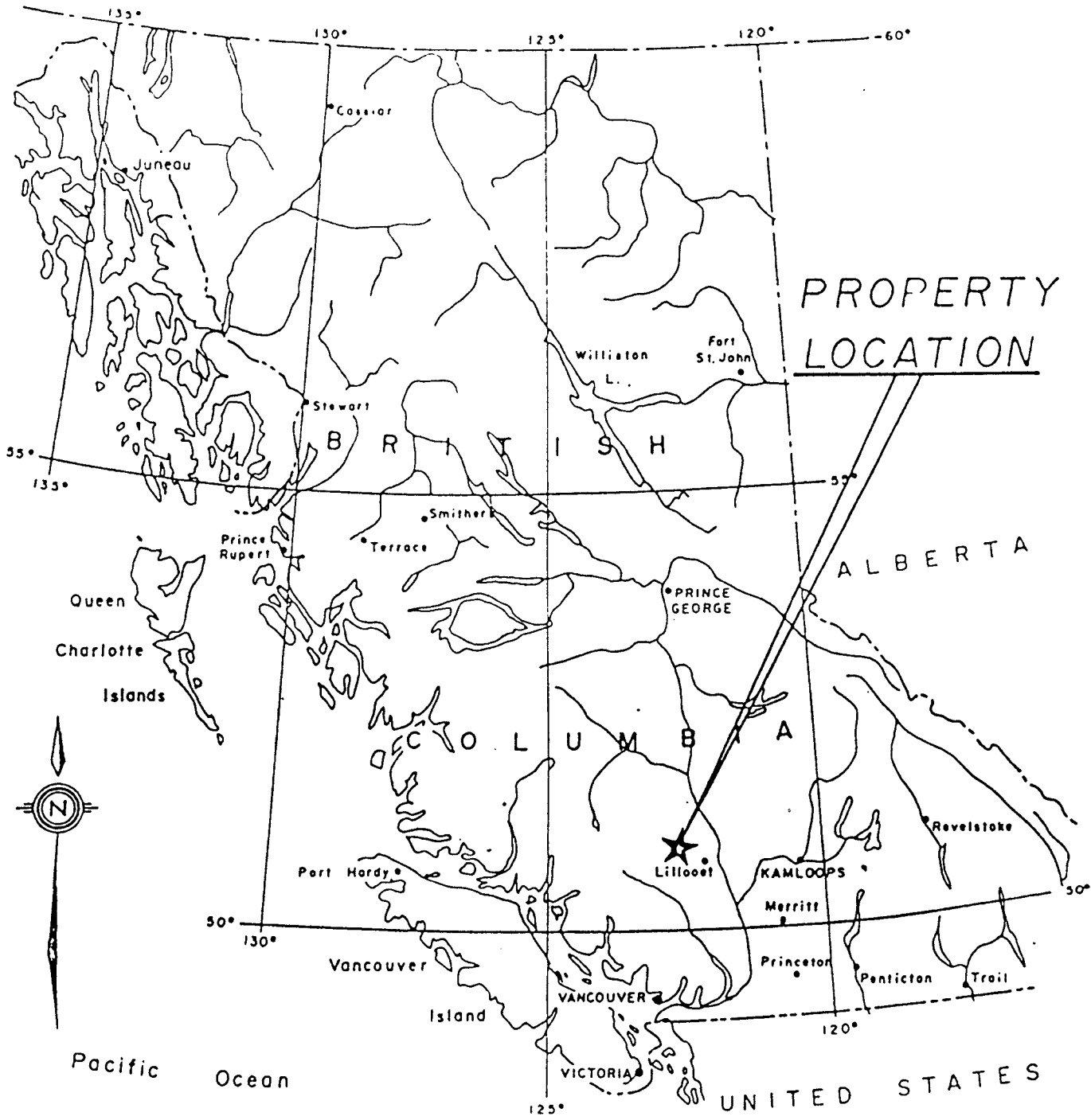
A handwritten signature in black ink, appearing to read "Steven Hodgson", is written over a solid horizontal line. The signature is cursive and somewhat stylized.

STATEMENT OF EXPENSES

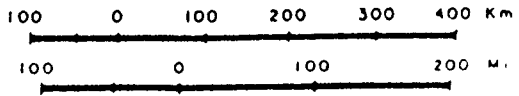
The survey, line cutting and grid establishment took place from the 12th day of September 1987, to the 18th day of October 1987. All field work was performed by Bill Chase & Associates, 13014 Summerhill Crescent, White Rock, B.C.

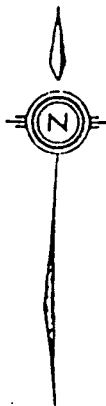
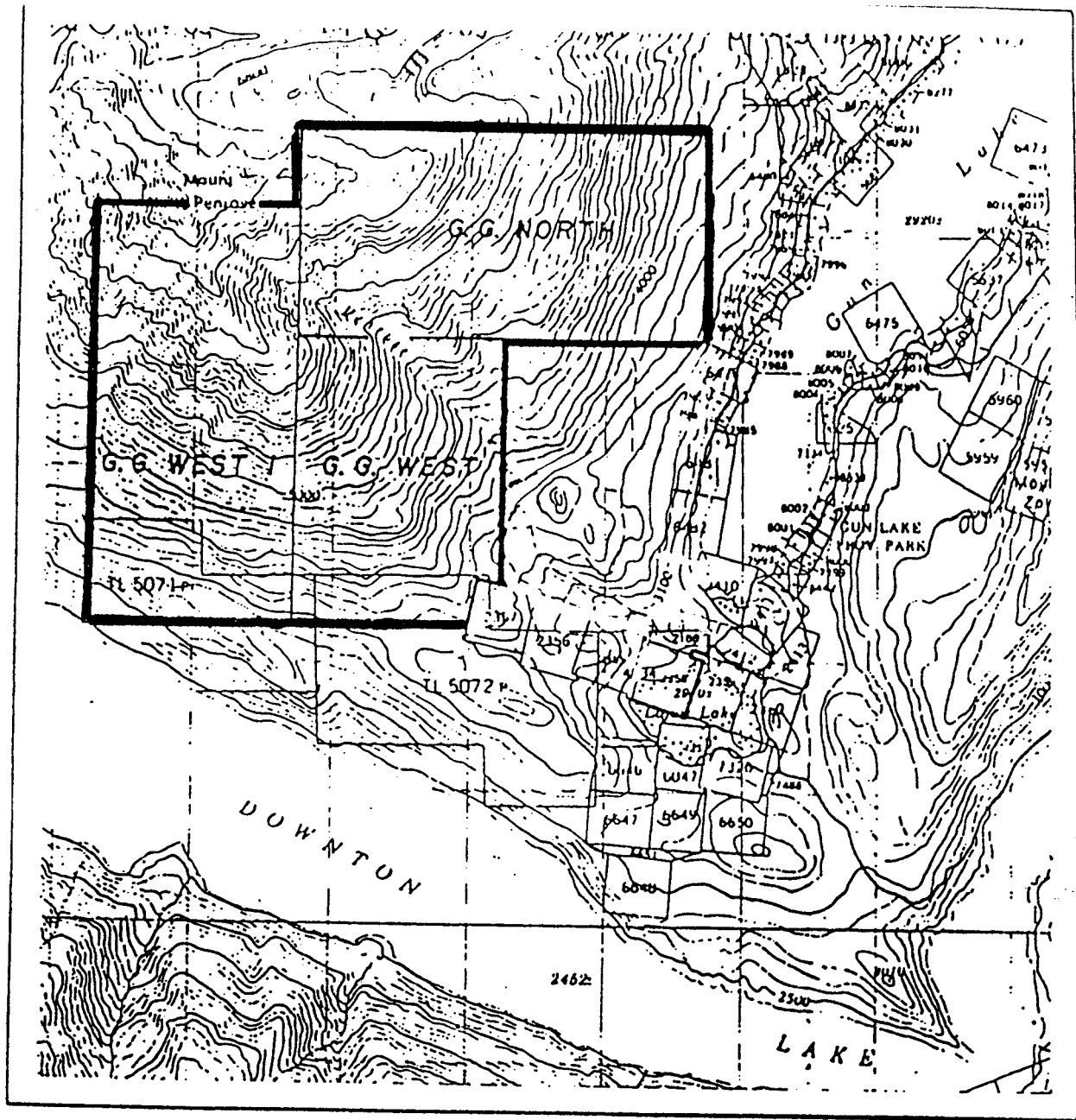
Bill Chase & Associates	\$9,227.11
Mob & DeMob and Vehicle Rental	1,830.21
Supplies - flagging, thread, pickets	94.08
Report Writing, maps and copies	300.00
	<hr/>
	\$ 11,451.40
	<hr/> <hr/>





GOLD BRIDGE PROPERTY





CHALICE MINING INC.

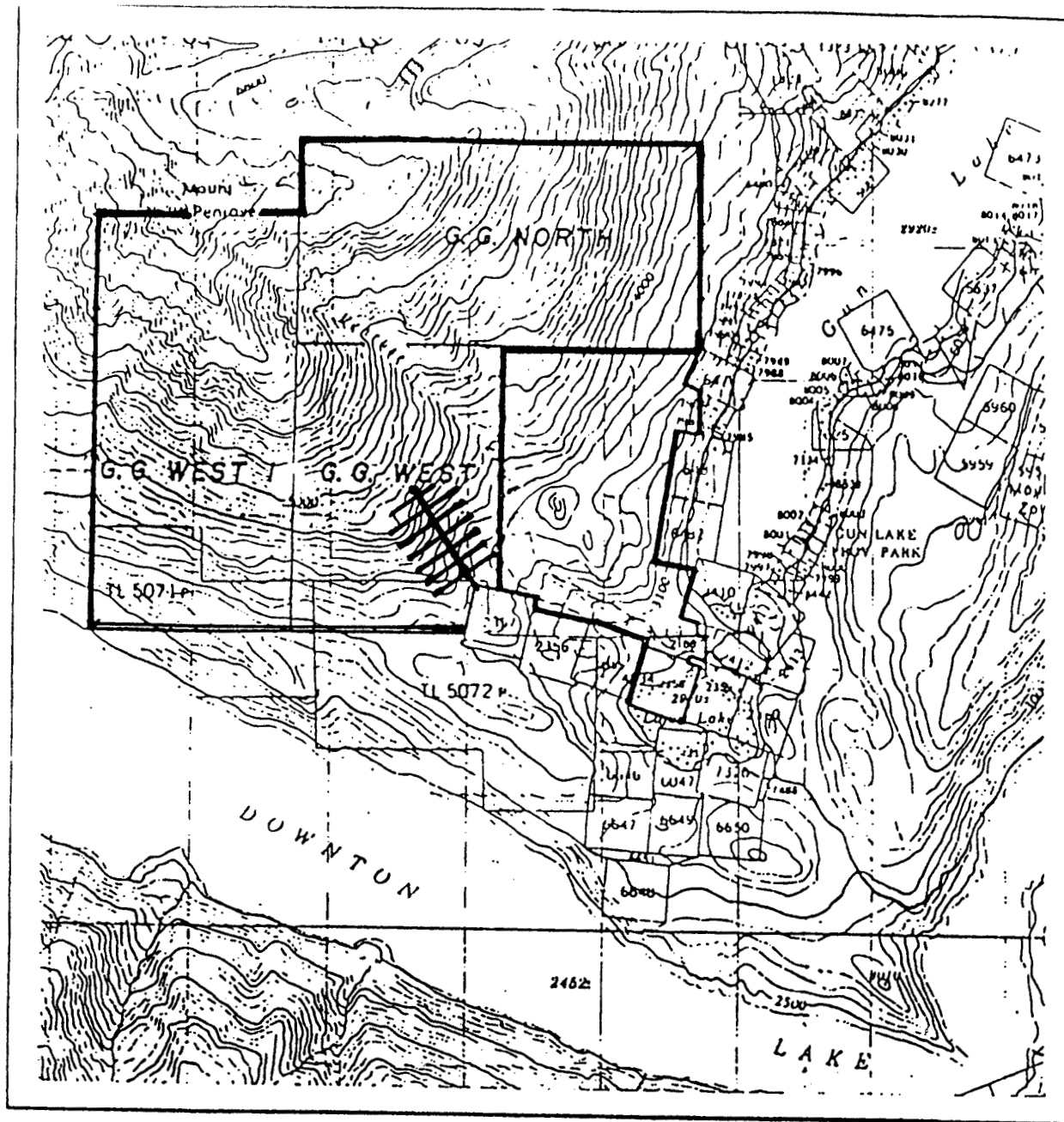
GOLD BRIDGE PROPERTY

PENROSE CREEK, GUN LAKE AREA, B.C.

LILLOOET M.D.

CLAIM LOCATION MAP

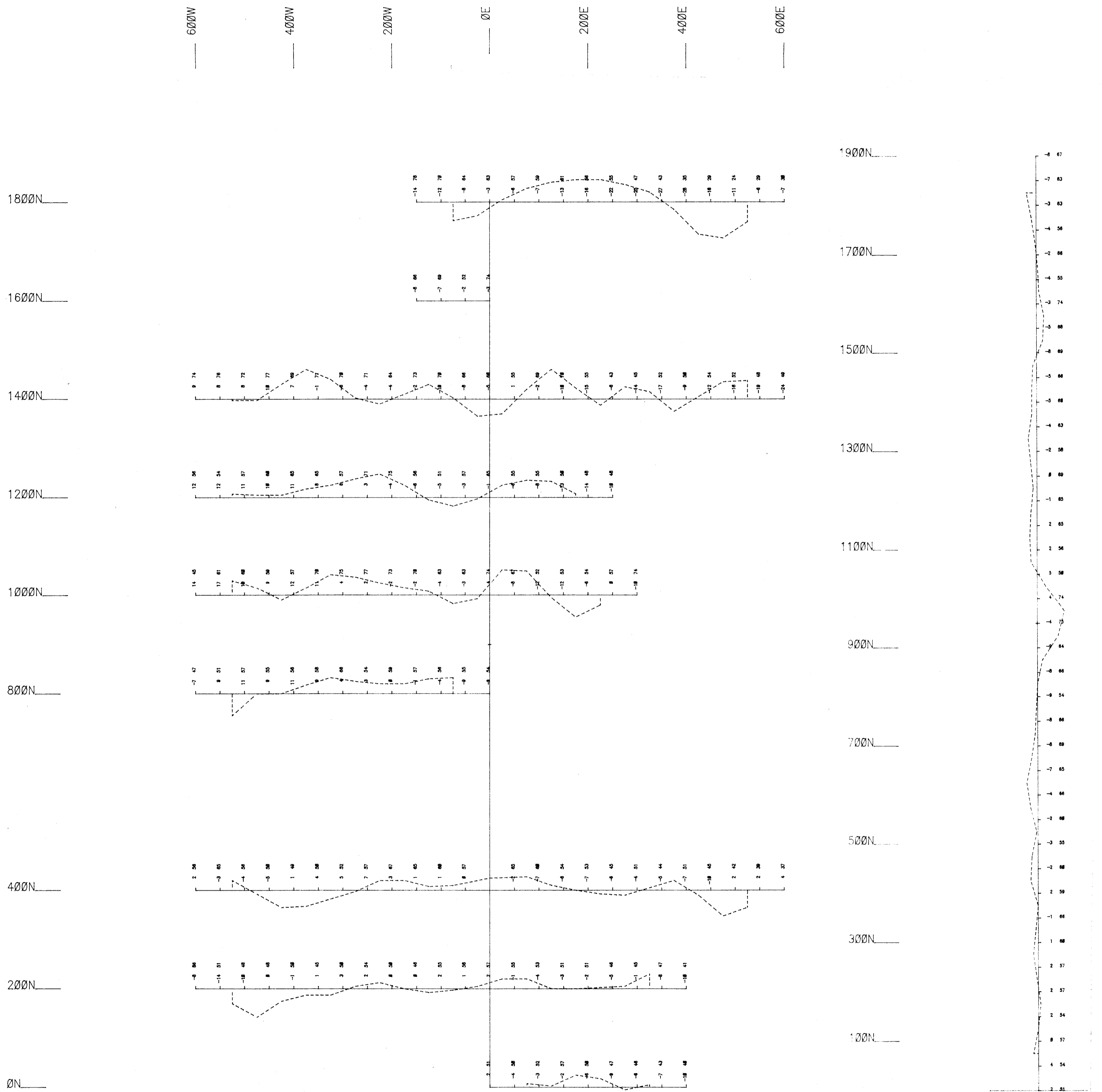
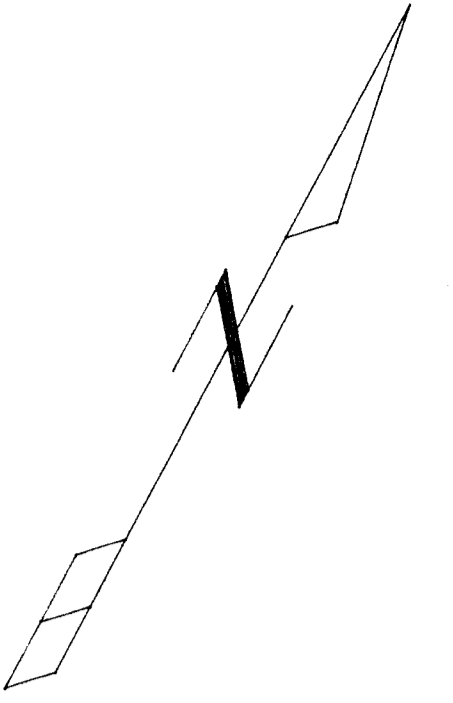
SCALE: 1:50,000	DATE: MARCH 26	MAP: 2	M.T.S. 92 J/15 W
--------------------	-------------------	-----------	---------------------



50° 52'



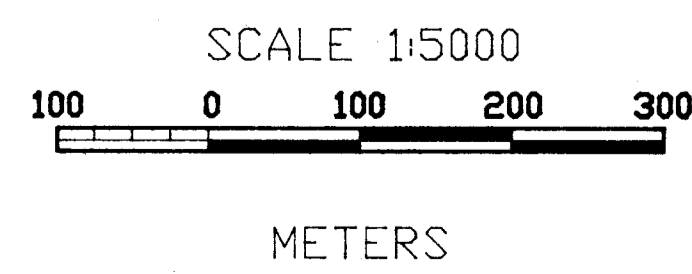
CHALICE MINING INC.			
GOLD BRIDGE PROPERTY			
PENROSE CREEK, GUN LAKE AREA, B. C.			
LILLOOET M.D.			
SURVEY LOCATION			
SCALE:	DATE:	MAP:	N.T.S.
1:50,000	MARCH 26	2	92 J/15 W



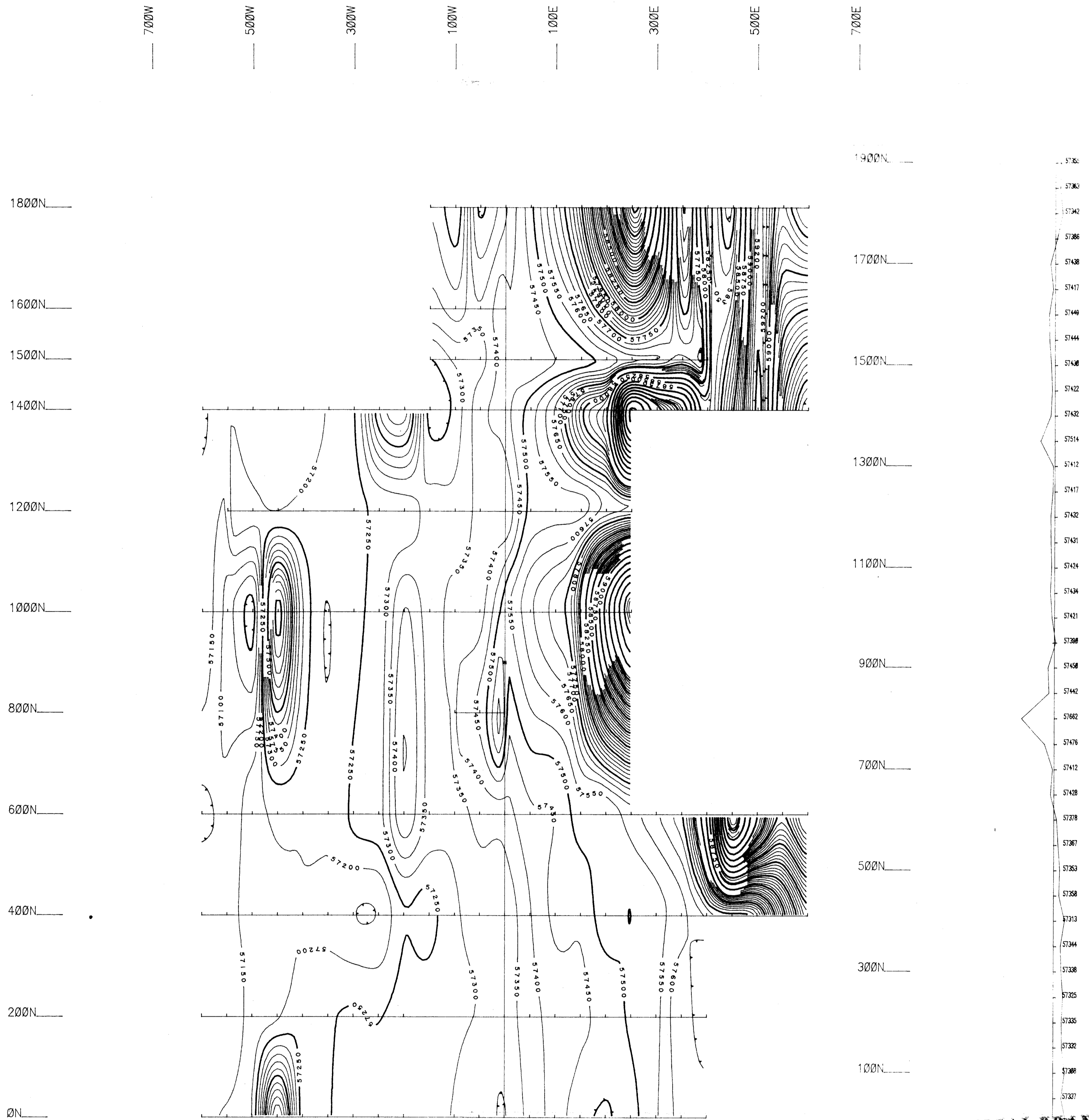
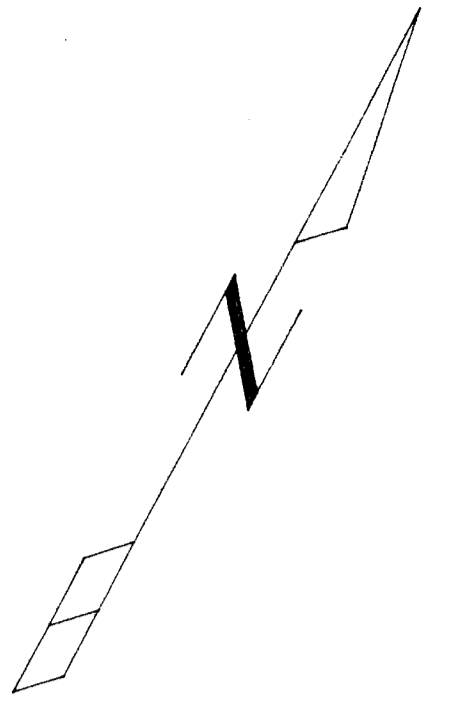
BASELINE PROFILE:
GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,912

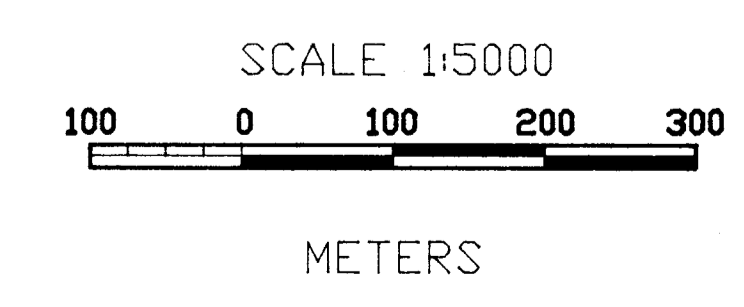
PROFILE AMPLITUDE: 20 DEG. / CM.



CHALICE MINING INC.	
G.G. CLAIM GROUP (BRALORNE AREA)	
FIELDWORK BY: BILL CHASE AND ASSOCIATES LTD.	
PLOTTED BY: RPM MAPPING AND COMPUTER SERVICES LTD.	
VLF - EM (SEATTLE) FRASER FILTERED DIP ANGLES (WITH UNFILTERED VALUES FOR DIP ANGLE AND FIELD STRENGTH)	
LILLODET M.D., B.C.	
N.T.S.: 92J / 15V	DATE: DECEMBER 1987
PLOTTED BY R.P.M.	FIGURE NO.



CONTOUR INTERVAL:
50 GAMMAS



GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,912

BASELINE PROFILE:
CENTER = 57400 GAMMAS
AMPLITUDE = 200 GAMMAS /CM.

CHALICE MINING INC.	
G.G. CLAIM GROUP (BRALORNE AREA)	
FIELDWORK BY: BILL CHASE AND ASSOCIATES LTD. PLOTTED BY: RPM MAPPING AND COMPUTER SERVICES LTD.	
TOTAL MAGNETIC FIELD STRENGTH	
LILLOOET M.D., B.C.	
N.T.S. 92J / 15V	DATE: DECEMBER 1987
PLOTTED BY R.P.H.	FIGURE NO.