

84-#583 - 12706  
7185

ASSESSMENT REPORT

RE:

MAGNETOMETER, EM AND GEOLOGICAL SURVEYS

ON THE

GOLD PRINCE #1 AND GOLD PRINCE #2

MINERAL CLAIM GROUP (32 UNITS)

RECORD NOS. 4579, 4580(7)

BRIGADE LAKE AREA

KAMLOOPS MINING DIVISION

TWP 17, RANGES 17 AND 18, W6

N. Lat. 50degrees28minutes W. Long. 120degrees21minutes

92-I-8W

OWNER AND OPERATOR OF CLAIMS

HANOVER INDUSTRIES LTD.

Suite 856

409 Granville Street

Vancouver, British Columbia

V6C 1T2

by

J. Paul Stevenson

August 1, 1984

1650 Riverside Dr.

North Vancouver, B.C.

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,706**

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Summary and Conclusions

An area of magnetic "low" has been noted on the airmag map of the area. This low is coincident with a shallow valley and has been further investigated by a VLF EM and ground magnetometer surveys. The survey consisted of 6Km of total field magnetometer survey and 6Km of EM survey. These surveys have indicated an anomalous northerly trend. This anomaly must be followed up with more detailed geophysics and soil geochemistry.

INSTRUMENTATION AND THEORY

A standard VLF-EM was used for the survey. This instrument is designed to measure the magnetic component of a very low frequency (VLF) electromagnetic field. The U.S. Navy submarine transmitter station NPG Jim Creek, Washington, U.S.A. was used facing West.

The EM readings were reduced by applying the Fraser Filter and plotted. Filtered data, as shown on the accompanying map are plotted between reading stations. The positive data were plotted on 5 meter contour intervals.

The Fraser Filter is essentially a 4-point difference operator which transforms zero crossings into peaks, and a low pass smoothing operator which reduces the inherent high frequency noise in the data. Therefore, the noisy, non-contourable data are transformed into less noisy, contourable data. Another advantage of this filter is that a conductor that does not show up as a cross-over on the unfiltered data quite often will show up on the filtered data.

The magnetometer was a total field Scintrex MP1 instrument. No diurnal variation was observed and the data is considered reliable.

REPORT  
ON THE  
GOLD PRINCE #1 AND GOLD PRINCE #2  
MINERAL CLAIM GROUP (32 UNITS)  
RECORD NOS. 4579, 4580(7)  
BRIGADE LAKE AREA  
KAMLOOPS MINING DIVISION  
TWP 17, RANGES 17 AND 18, W6  
KAMLOOPS DIVISION OF THE YALE LAND DISTRICT  
KAMLOOPS, BRITISH COLUMBIA

N. Lat. 50°28'00"

W. Long. 120°21'30"

92-I-8W

for

HANOVER INDUSTRIES LTD.  
Suite 856  
409 Granville Street  
Vancouver, British Columbia  
V6C 1T2

by

DONALD W. TULLY, P. ENG.

August 23, 1983

West Vancouver, B.C.

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MAPS

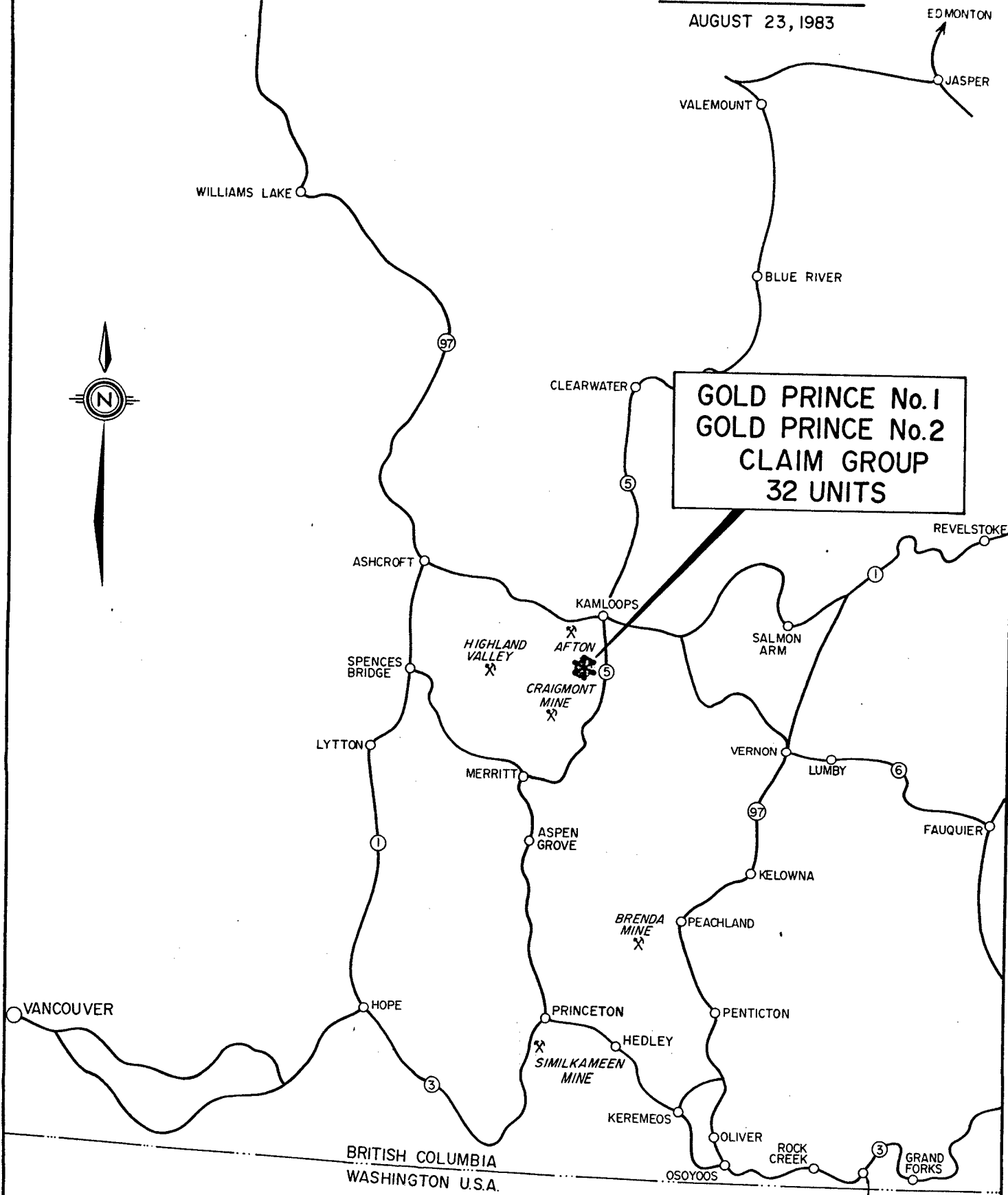
Figure 1 - Location Map.....	(Frontispiece)
Figure 2 - Topographic Plan (Scale 1:50,000).....	(Follows page 1)
Figure 3 - Claim Plan (After M92-I-8W).....	(Follows page 2)
Figure 4 - Regional Geology (After GSC Map 886A).....	(Follows page 3)
Figure 5 - Aeromagnetic Map (After GSC Map 5213G).....	(Follows page 4)

APPENDIX

Assay Certificate # 83-1768

FIGURE 1  
LOCATION MAP

AUGUST 23, 1983



*Donald W. Kelly*

## INTRODUCTION

This report was prepared pursuant to a request from the Directors of Hanover Industries Ltd., Suite 856, 409 Granville Street, Vancouver, British Columbia, V6C 1T2

The purpose of this report is to summarize the results of any previous development work done on the mineral claim area and assess the mine-making potential of the property.

This report is based upon a field examination of the claim area on August 19, 1983.

A program of mineral exploration is recommended.

## SUMMARY AND CONCLUSIONS

The GOLD PRINCE #1 and GOLD PRINCE #2 mineral claims are located about twenty kilometres due south of Kamloops in southwestern British Columbia.

The property consists of two contiguous mineral claims containing twenty and twelve units each respectively for a total of thirty-two mineral claim units.

Access to the ground is readily available by motor vehicle south from Knutsford along the McLeod Lake road to Brigade Lake. The claimed land is situated about one kilometre southwest of Brigade Lake. Several old farm roads occur over the rolling topography of the claim area, which is essentially used for agricultural purposes.

Scattered outcrops of basaltic volcanics were observed, carrying occasional fine grains of pyrite and considerable magnetite, on the GOLD PRINCE #1 and #2 claim area.





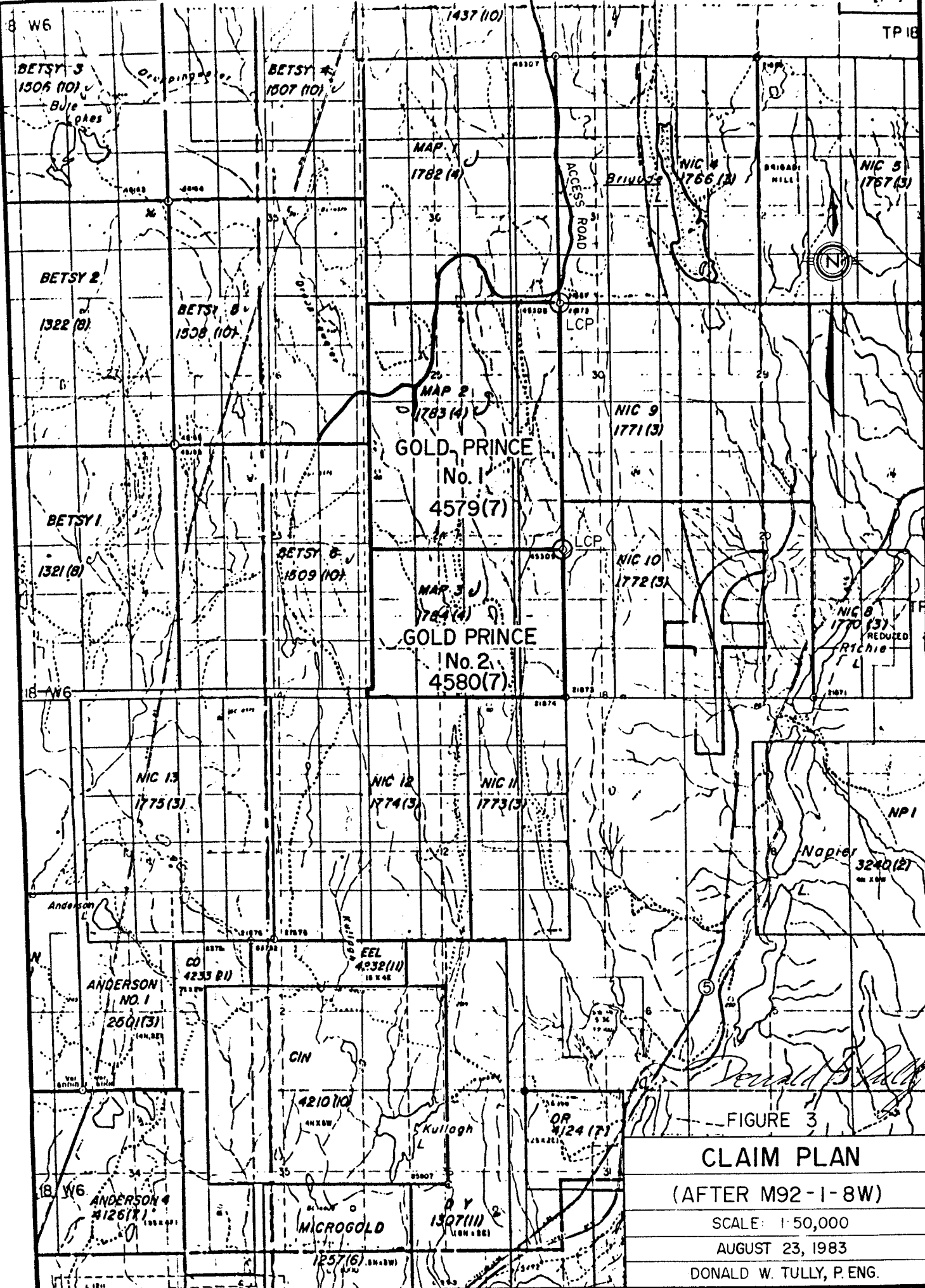


FIGURE 3

### CLAIM PLAN

(AFTER M92-1-8W)

SCALE: 1:50,000

AUGUST 23, 1983

DONALD W. TULLY, P. ENG.

These volcanics apparently belong to the Kamloops Group of Tertiary rocks.

A northwest trending shallow valley occurs in the southwest sector of the GOLD PRINCE #1 claim. This topographic feature appears to coincide with a magnetic "LOW" noted on the aeromagnetic map of the area.

It is concluded the property warrants a program of mineral exploration as there appears to be no record of previous exploration work done on this ground.

A three-phase program of mineral target search and delineation is recommended at a total estimated cost of \$125,525.

PROPERTY - LOCATION, ACCESS, PHYSIOGRAPHY  
AND ENVIRONMENTAL CONSIDERATIONS

The Hanover Industries property consists of two contiguous mineral claims named the GOLD PRINCE #1 and the GOLD PRINCE #2, comprising a total of thirty-two units.

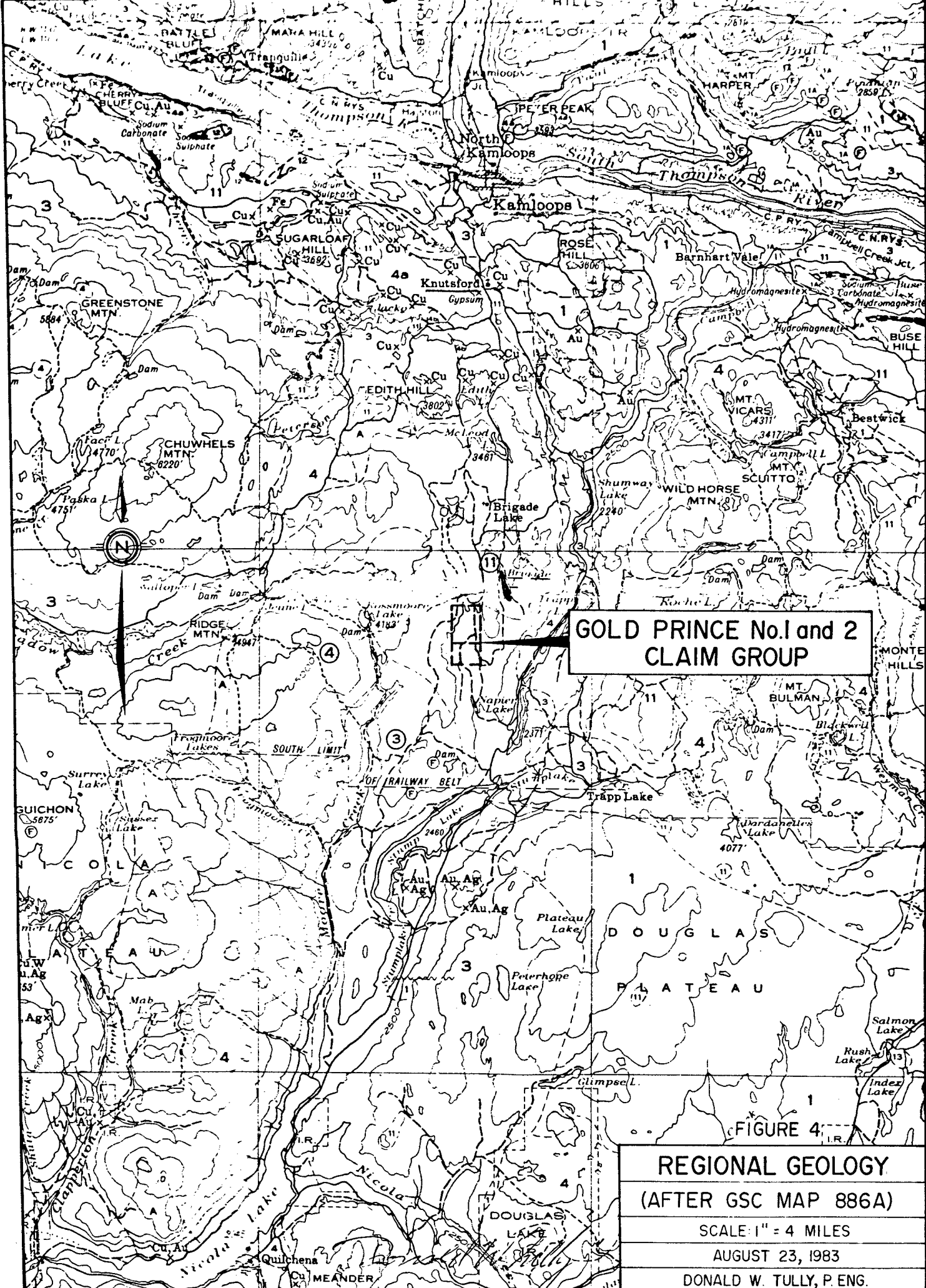
The claims are located near Brigade Lake some twenty kilometres due south of the City of Kamloops, British Columbia.

Road access on to the claim area is available by motor vehicle via the hamlet of Knutsford, south of Kamloops on Hwy 5, and thence southward along the McLeod Lake road to the property, a road distance of some twenty-five kilometres.

The claimed ground is essentially farm land.

**GOLD PRINCE No.1 and 2  
CLAIM GROUP**

**REGIONAL GEOLOGY**  
(AFTER GSC MAP 886A)  
SCALE: 1" = 4 MILES  
AUGUST 23, 1983  
DONALD W. TULLY, P. ENG.



The topography is rolling and open with scattered groves of aspen, spruce and poplar. Elevations range from about 3,200 feet to some 3,500 feet above sea-level over the claims.

The climate in the Kamloops area is temperate with mild winters and relatively dry and warm summers.

Adequate water supply for any immediate industrial needs is available from nearby Brigade Lake.

In the environmental sense, the property is considered to be only moderately sensitive.

#### CLAIMS

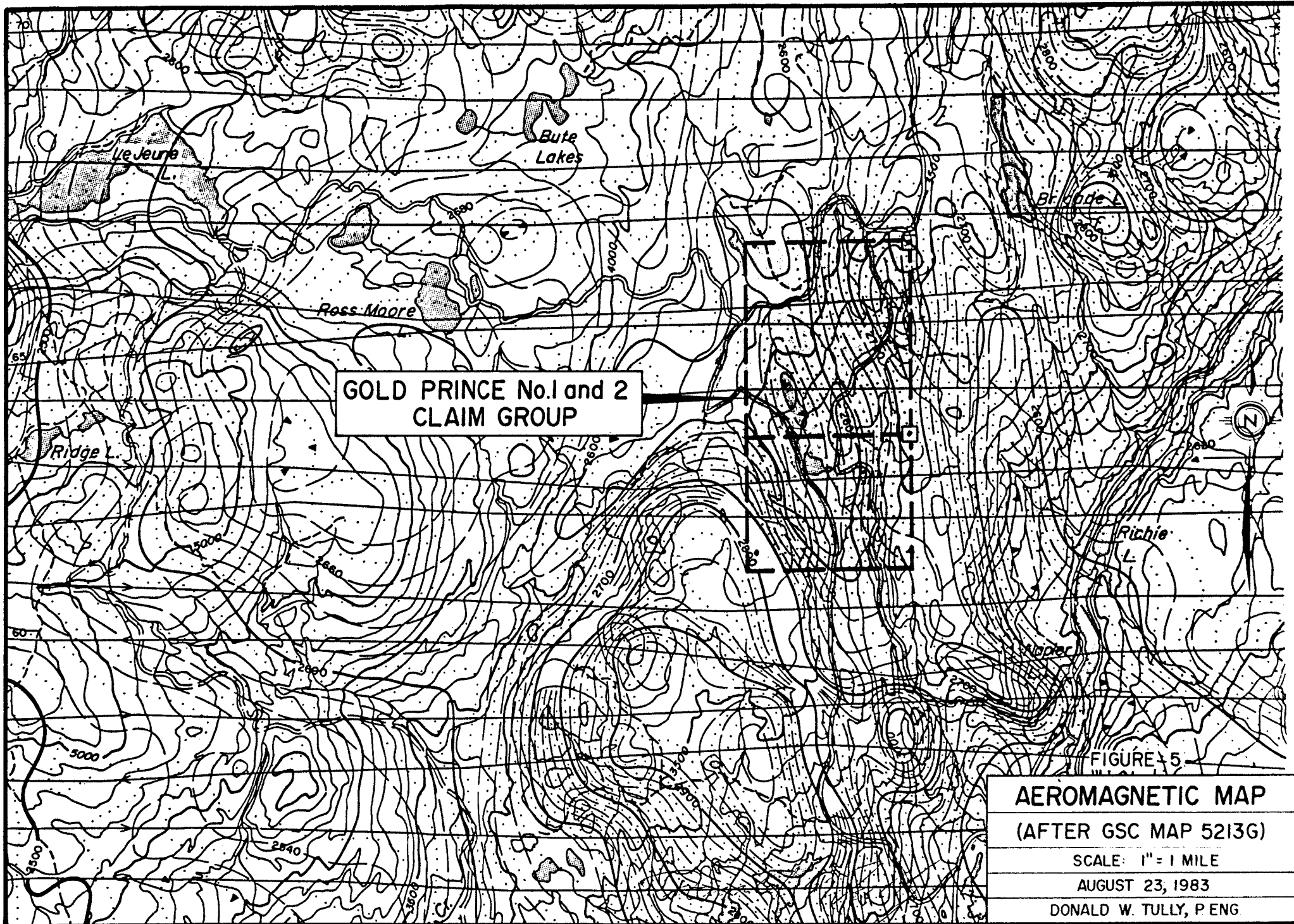
The GOLD PRINCE #1 and the GOLD PRINCE #2 are located in the Kamloops Mining Division, British Columbia.

The GOLD PRINCE #1 claim contains twenty units and the GOLD PRINCE #2 claim contains twelve units.

Information on file with the Gold Commissioner at Kamloops is as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Record Date</u>	<u>Recorded Holder</u>
GOLD PRINCE #1	4579	5S x 4W = 20	July 13, 1983)	100% interest to Jake Penner
GOLD PRINCE #2	4580	3S x 4W = 12	July 13, 1983)	
		Total = 32		

The GOLD PRINCE #1 and #2 mineral claims are indicated on British Columbia Mineral Titles Map M92-I-8W (Figure 3).



GOLD PRINCE No.1 and 2  
CLAIM GROUP

FIGURE 5

**AEROMAGNETIC MAP**

(AFTER GSC MAP 5213G)

SCALE: 1" = 1 MILE

AUGUST 23, 1983

DONALD W. TULLY, P ENG

It is recommended the perimeter of the GOLD PRINCE #1 and #2 claims be surveyed to establish the claimed ground and the working area. A search of the ownership of the surface rights on the GOLD PRINCE #1 and #2 claim area is beyond the scope of this report.

### HISTORY - PREVIOUS DEVELOPMENT

The mineral history of the Kamloops area dates back to the early 1880's when gold and silver were found on the east side of Stump Lake. Since that time, metalliferous deposits of copper, gold, silver, iron, silver, lead, zinc and mercury, as well as coal and gypsum, have been worked.

Total mineral production from the Kamloops Area has now reached many hundreds of millions of dollars in metal value.

The GOLD PRINCE #1 and GOLD PRINCE #2 mineral claims are considered to be located in the environs of a favourable mineral producing area.

There is no record of previous mineral development on the Hanover Industries property.

### REFERENCES

Geological Survey of Canada Memoir 249 and accompanying 886A and 887A

Geological Survey of Canada Aeromagnetic Map 5213G.

REGIONAL AND LOCAL GEOLOGICAL SETTING

Overburden is predominant over the claim area.

According to Geological Survey of Canada Map 886A, the mineral claim area is underlain by Tertiary volcanics belonging to the Kamloops Group.

The writer observed scattered outcrops of basalt during the property examination.

A tentative geologic timetable of events in the general claim area is as follows:

<u>Formation</u>	<u>Description/Event</u>	<u>Age</u>
Sand and loam, gravel and glacial debris	Unconsolidated (Erosional unconformity)	Quaternary
Tertiary volcanics (Kamloops and later Groups)	Basalt, rhyolite and volcanic fragmentals  (Erosional unconformity, folding, faulting and related tectonic activity)	Pre and post Miocene
Mineralization and quartz veining	Gold and silver associated with sulphides of copper, lead, zinc and iron  (Folding, faulting and related tectonic activity)	Tertiary (?)
Granitic Intrusions	Granite, granodiorite and associated porphyry types  (Folding, faulting and related tectonic activity)	Cretaceous (?)

<u>Formation</u>	<u>Description/Event</u>	<u>Age</u>
Nicola Volcanics	Greenstone, basalt and associated volcanics and sediments  (Major unconformity)	Upper Triassic
Cache Creek Group (?)	Sediments and intercalated volcanic horizons	Late Paleozoic (?)

A study of Aeromagnetic Map 5213G suggests the underlying basement geological structure trends northerly and may be dragfolded.

A north-northwest trending magnetic "LOW" occurs in the southwest sector of the GOLD PRINCE #1 area.

#### MINERALIZATION

Four reconnaissance geochemical soil samples were taken on the claim area as shown on Figure 2. The results of the analyses of these samples were as follows:

<u>Sample No.</u>	<u>Gold/ppb</u>	<u>Silver/ppm</u>	<u>Copper/ppm</u>	<u>Lead/ppm</u>	<u>Zinc/ppm</u>
GP1-1	ND	0.1	32	6	67
GP1-2	ND	0.1	33	6	73
GP2-1	ND	0.1	34	4	62
GP2-2	ND	0.1	40	15	63



ESTIMATED COST OF THE PROPOSED WORK PROGRAM

Phase 1

Survey the working area of the mineral claims using a chain and compass	\$ 500	
Geochemical soil sample the claim area on a 100-metre grid, analyze an estimated 775 soil samples using the ICP method of analysis and prepare an engineering report	<u>8,525</u>	
Total estimated cost of Phase 1		\$ 9,025

Phase 2

Carry out a combined magnetometer and VLF-electromagnetic survey on the same grid pattern		
(Estimate 65 line-km x \$350/line-km) and prepare an engineering report	<u>25,000</u>	
Total estimated cost of Phase 2		\$ 25,000

Phase 3

Induced polarization survey over any anomalous zones found in Phases 1 & 2	20,000	
Diamond drill test (assume 750 metres (2460 feet) @ \$82/metre (\$25/ft.))	61,500	
Contingency for supervision, core-handling, assaying and engineering report	<u>10,000</u>	
Total estimated cost of Phase 3		<u>91,500</u>
Total estimated cost of Phases 1, 2 and 3		<u><u>\$125,525</u></u>

Respectfully submitted,

*Donald W. Tully*

Donald W. Tully, P. Eng.

August 23, 1983

CERTIFICATE

I, DONALD WILLIAM TULLY, of the Corporation of West Vancouver, Province of British Columbia, hereby certify as follows:

- 1) I am a Consulting Geologist with an office at Suite 1205, 555 - 13th Street, West Vancouver, B.C.
- 2) I am a registered Professional Engineer of the Provinces of British Columbia and Ontario.
- 3) I graduated with a degree of Bachelor of Science, Honours Geology, from McGill University in 1943.
- 4) I have practiced my profession for thirty-eight years.
- 5) I have no direct, indirect or contingent interest in the shares of Hanover Industries Ltd., or the GOLD PRINCE #1 and GOLD PRINCE #2 mineral claims, subject of this report, nor do I intend to have any interest.
- 6) This report dated August 23, 1983, is based on a field examination I made on August 19, 1983, and from information gathered from available maps and reports.
- 7) I have not examined any mineral claims during the past five years that are located within ten kilometres of the GOLD PRINCE #1 and GOLD PRINCE #2 mineral claims.
- 8) Written permission is required from the author to publish this report dated August 23, 1983 in any Prospectus or Statement of Material Facts.

DATED at West Vancouver, Province of British Columbia, this 29th day of August, 1983.

*Donald W. Tully*

DONALD W. TULLY, P. ENG.,  
Consulting Geologist

**APPENDIX**

**DON TULLY ENGINEERING LTD.  
SUITE 1205, 555-13TH STREET  
WEST VANCOUVER, BRITISH COLUMBIA  
V7T 2N8**

HANOVER

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. PH: 253-3158 TELEX: 04-53124

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.  
THIS LEACH IS PARTIAL FOR: Ca, P, Mg, Al, Ti, La, Na, K, M, Ba, Si, Sr, Cr AND B. Au DETECTION 3 ppm.  
SAMPLE TYPE - SOIL

DATE RECEIVED AUG 22 1983 DATE REPORTS MAILED Aug 26/83 ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

DON TULLY FILE # B3-176B

PAGE # 1

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe I	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca I	P I	La ppm	Cr ppm	Mg I	Ba ppm	Ti I	B ppm	Al I	Na I	K I	N ppm
GP1-1	1	32	6	67	.1	26	11	659	2.19	3	2	ND	2	70	1	2	2	44	.85	.11	9	34	.39	186	.05	5	1.72	.02	.27	2
GP1-2	1	33	6	73	.1	31	11	686	2.59	4	2	ND	2	68	1	2	2	55	.80	.12	9	42	.45	188	.06	6	1.70	.03	.30	2
GP2-1	1	34	4	62	.1	27	11	762	2.39	2	2	ND	2	75	1	2	2	47	.86	.10	10	36	.44	222	.06	4	1.97	.03	.33	2
GP2-2	1	40	15	65	.1	37	12	662	2.83	6	2	ND	2	66	1	2	2	60	.85	.12	10	42	.57	171	.07	5	1.63	.04	.25	2
STD A-1	1	30	38	183	.3	36	13	1027	2.83	10	2	ND	2	37	1	2	2	60	.62	.09	8	74	.76	280	.08	5	2.07	.02	.20	2

III  
A



STRATO GEOLOGICAL ENGINEERING LTD.  
103-709 DUNSMUIR STREET  
VANCOUVER, BRITISH COLUMBIA  
V6C 1M9

TELEPHONE (604) 687-4610

INVOICE

November 8, 1983

HANOVER INDUSTRIES LTD.  
856 - 409 Granville Street,  
Vancouver, B. C. V6C 1T2

ATTN: Mr. Jake Penner

RE: Magnetometer and VLF Electromagnetic Survey over the  
east-central portion of the GOLD PRINCE #1 and #2  
Mineral Claims, Brigade Lake area, B. C.  
- Completed data and maps to be submitted to D.W. Tully  
Engineering Ltd. as per agreed contract.

TO: Field Work (October 6, 7, & 8, 1983)  
- M. Pond, B.Sc., Geologist and J. Langewitz, C.E.T.,  
Geological Technician.  
- Data reduction, plotting of field maps, draftin of  
results, etc. for D.W. Tully.

--- CONTRACT PRICE BAL. DUE \$ 1,500.00

Dec. 28/83  
Incl Notice  
RF

*J. Langewitz*  
*D.W. Tully*

In account with : Mr. J. Penner  
Hanover Industries Ltd  
Suite 856  
409 Granville Street  
Vancouver, B. C.  
V6C 1T2

To preparation of ten copies of a report on the GOLD PRINCE #1 and GOLD PRINCE #2 mineral claim group, Record Nos. 4579 and 4580(7), Kamloops Mining Division, B. C. and dated August 23, 1983 as follows :

August 18 - 26, 1983 - To property examination, portion of travel cost, assaying, drafting and report preparation costs

My fee and apportioned expenses.....	\$1,200.00
Less advance.....	\$ 500.00
	<hr/>
Balance owing.....	\$ 700.00

August 26, 1983

Signed :

*Donald W. Tully*

*Paid ✓*

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INVOICE

HANOVER INDUSTRIES LTD.  
856-409 Granville St.  
Vancouver, B.C.

ATTN: JAKE PENNER

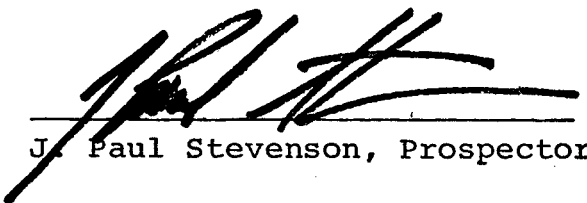
RE: COMPILATION OF DATA  
ASSESSMENT REPORT PREPARATION  
TRIP TO VERIFY GRID AND GRID LOCATION

FOUR DAYS AT \$150.00 per day \$600.00

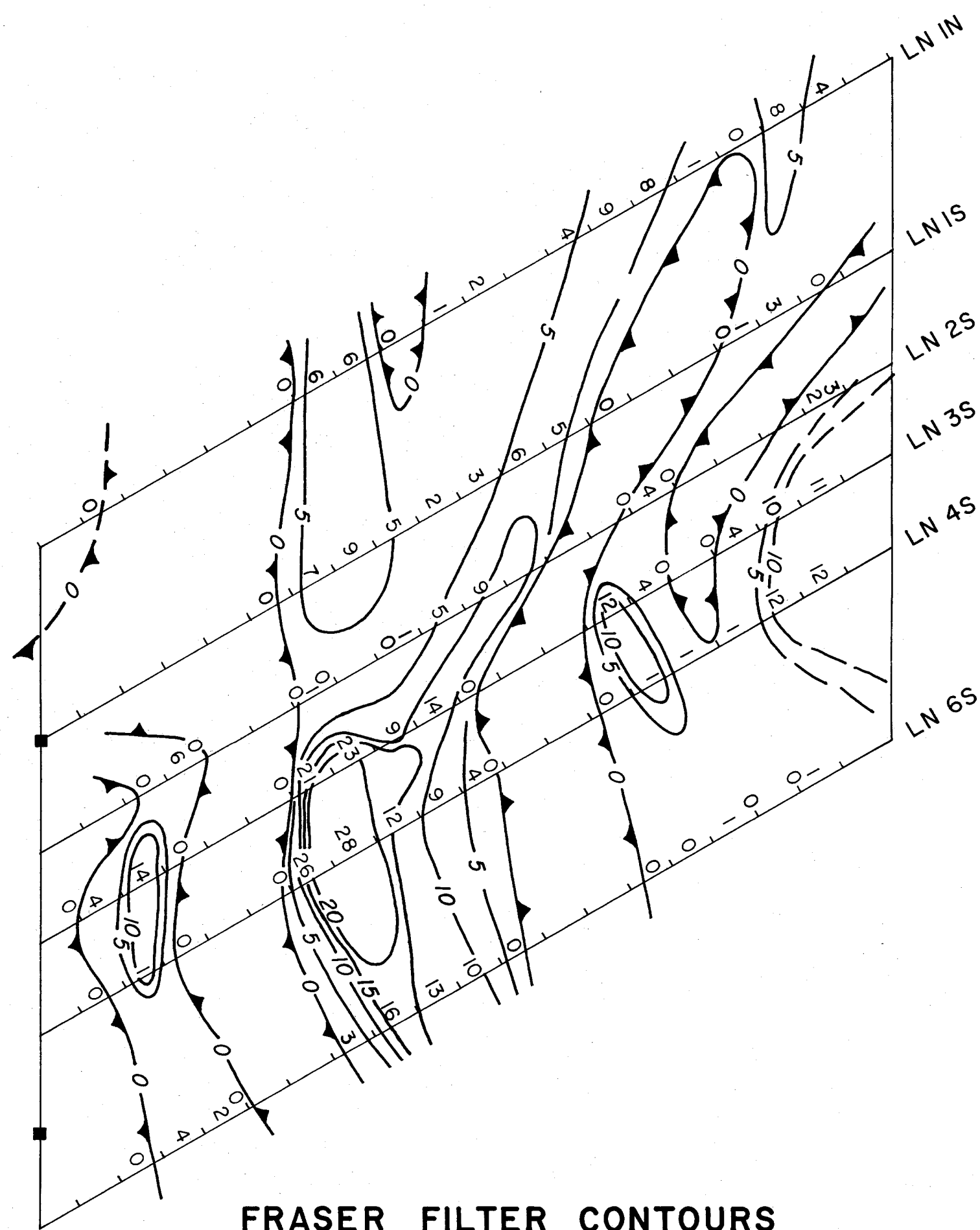
CERTIFICATE

I, J. Paul Stevenson of 1650 Riverside Drive, North Vancouver, B.C. do hereby certify:

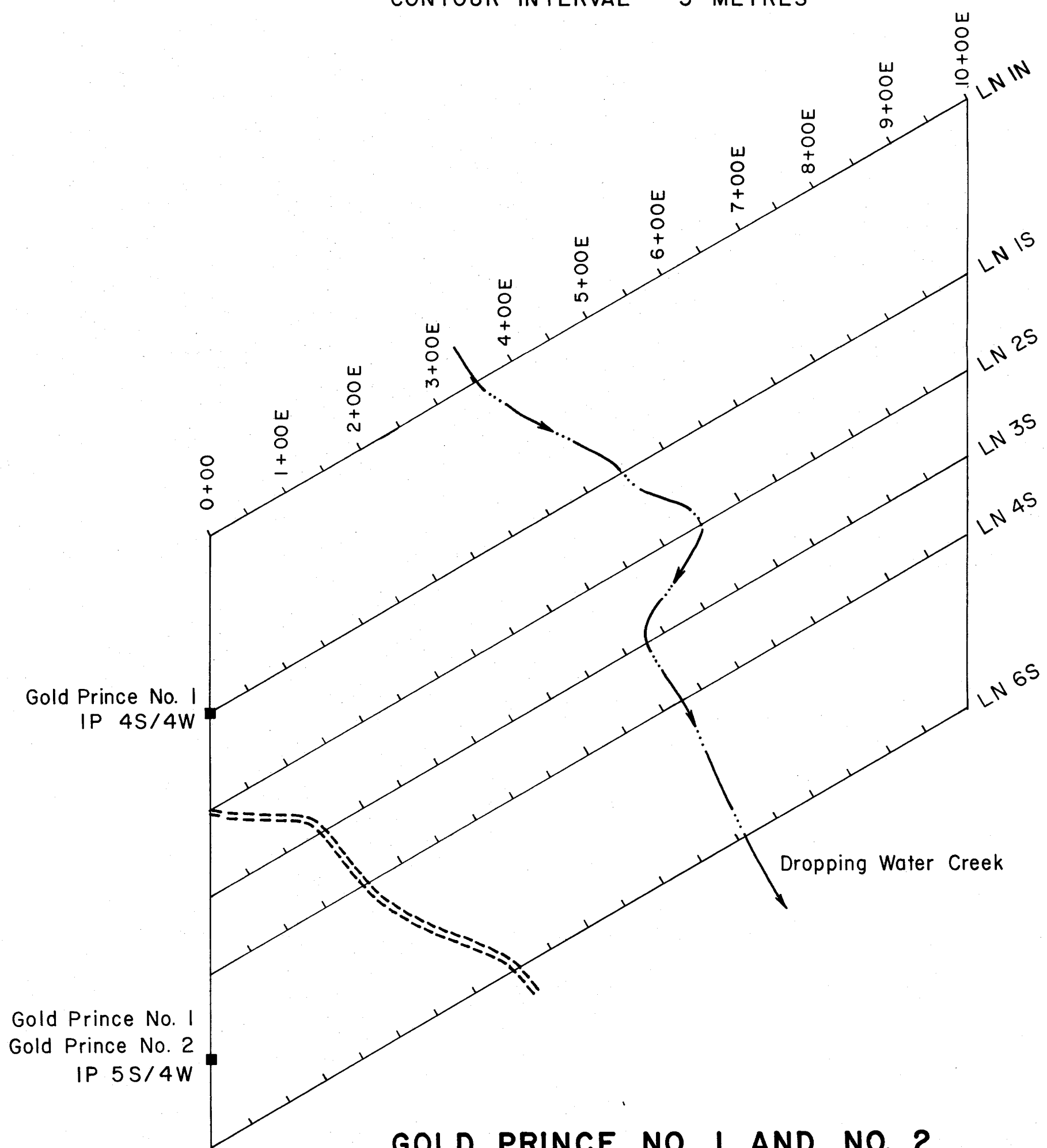
- 1) That I have been involved in mineral exploration since 1965.
- 2) That I have been engaged in prospecting and development in B.C., the Yukon, the Northwest Territories, and the western United States of America.
- 3) That the contractors and their employees are known to be of professional calibre.
- 4) That I am not a professional engineer or professional geologist but that I am qualified to prepare and comment on all of the foregoing data.

  
\_\_\_\_\_  
J. Paul Stevenson, Prospector

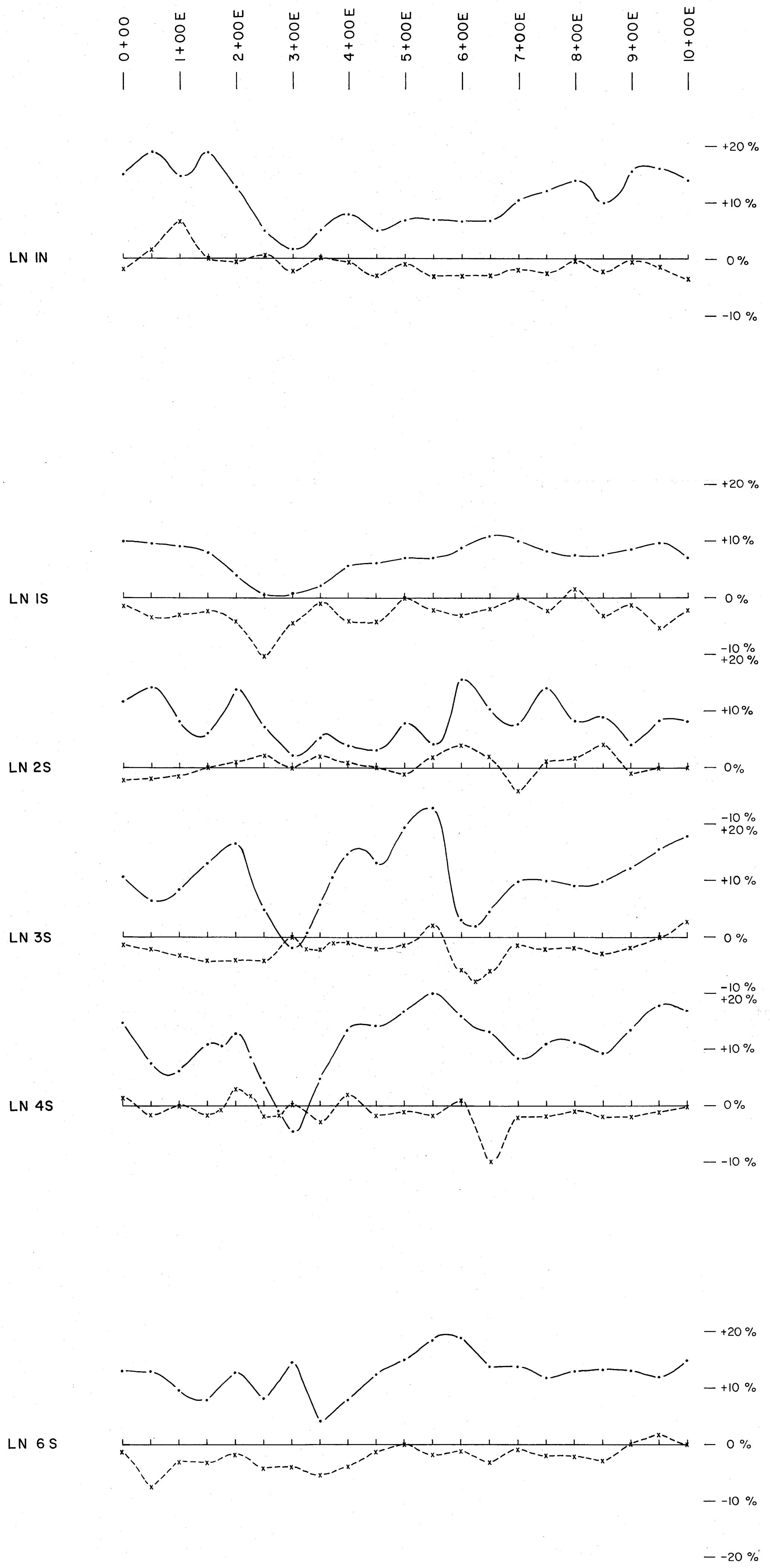
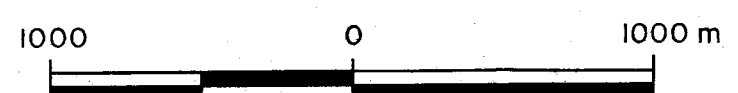
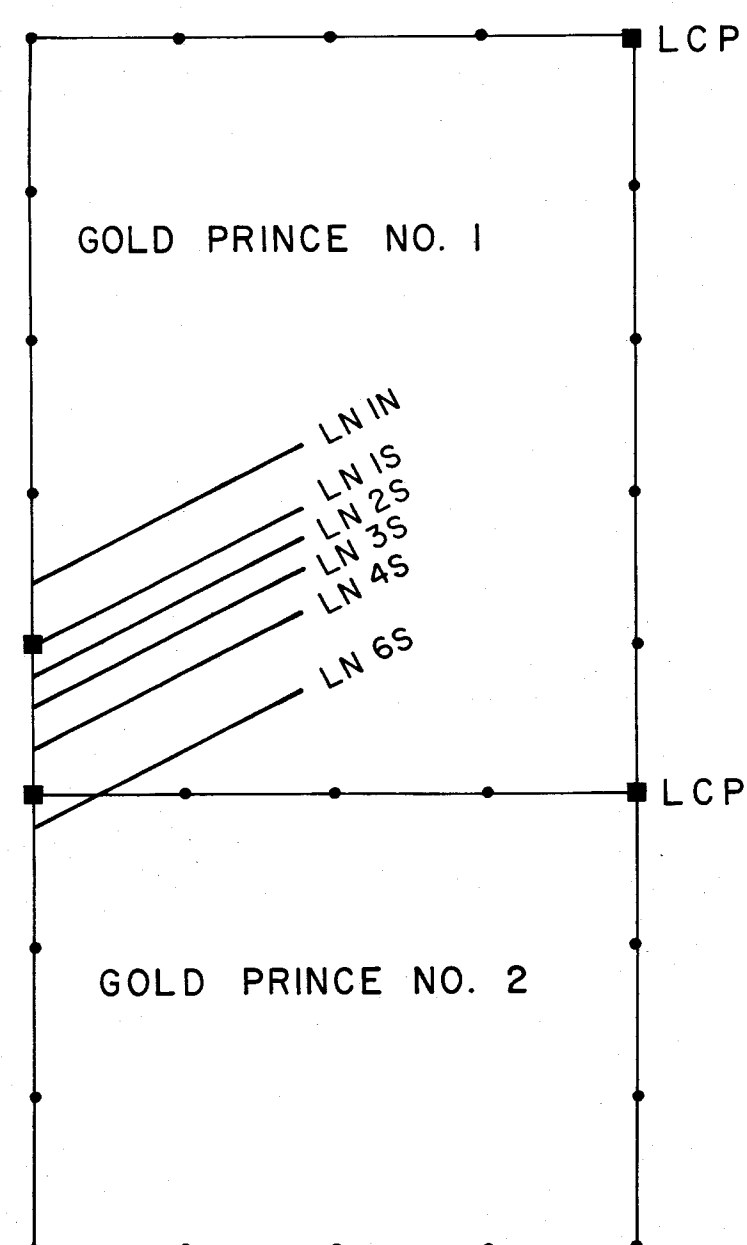




**FRASER FILTER CONTOURS**  
CONTOUR INTERVAL - 5 METRES



**GOLD PRINCE NO. 1 AND NO. 2  
BASE GRID MAP**

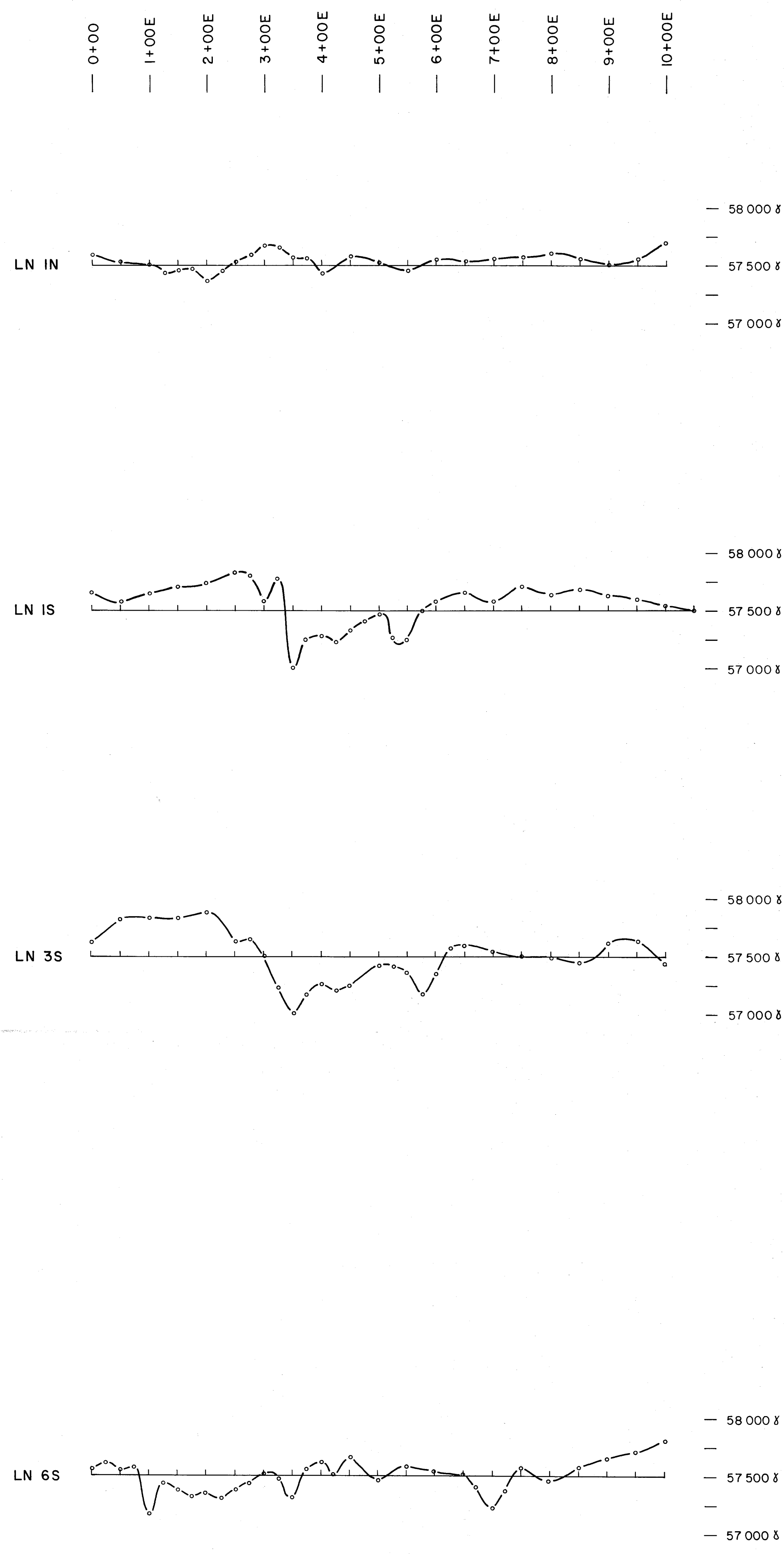


**VLF PROFILES**

EM-16 READING DIRECTION ALL LINES  
FACING WEST  
TRANSMITTER STATION  
NPG - JIM CREEK, WASHINGTON, U.S.A.

**LEGEND**

..... IN PHASE  
x x x x x OUT PHASE QUADRATURE



**MAGNETOMETER PROFILES**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,706**  
FIGURE

**HANOVER INDUSTRIES LTD.**

**GOLD PRINCE NO. 1 AND NO. 2**

KAMLOOPS MINING DIVISION  
BRIGADE LAKE AREA  
92 1/8 W



Field Work Period OCT. 6 & 7, 1983.  
Field Work by M. POND, B.Sc.  
ALL LOCATIONS SUBJECT TO SURVEY

To accompany a report by: D.W. TULLY, P. Eng.  
STRATO GEOLOGICAL ENGINEERING LTD.

DRAWN BY: MP / VJG DATED:

