

86-650-15146

08/87

Reconnaissance Geochemical and
Geological Assessment Report

on the

PUNCH BOWL CLAIM GROUP

Similkameen Mining Division

Lat. $49^{\circ}16.5'$; Long. $120^{\circ}59.5'$
N.T.S. 92H/6&7

FILMED

(Field work July 18th - 25th, 1986)

for

Mr. Richard A. Rabbitt
2105 - 9380 Cardston Court
Burnaby, B.C.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

Report by:

15,146

Mr. D. G. Cardinal, P. Geol.
Consulting Geologist
Hope, B.C.
Nov. 1986



TABLE OF CONTENTS

	Page
A. INTRODUCTION	1
B. CLAIMS INFORMATION	2
C. LOCATION AND ACCESS	2
D. PHYSIOGRAPHY AND CLIMATE	3
E. REGIONAL GEOLOGY	3
F. OBJECTIVE AND PROCEDURE	4
G. RESULTS AND INTERPRETATIONS	5
H. CONCLUSION	7
I. COST BREAKDOWN	8

FIGURES:

1. Location Map ✓
2. Claims Map ✓
3. Zinc-silver Contour Map
4. Arsenic-gold Contour Map
5. Reconnaissance Geology Map
6. Reconnaissance Geochem - Punch Bowl Creek Area

APPENDICES:

- I. PROFESSIONAL CERTIFICATE ✓
- II. REFERENCES ✓
- III. CERTIFICATE OF RESULTS ✓

A. INTRODUCTION

The Punch Bowl Group is situated along eastern flank of the northern Cascade Mountains at the headwaters of a tributary of the Tulameen River. Both geographic and physiographic changes take place in this area, the rugged coastal mountains give way to the rolling hills of the interior plateau and, is influenced more by the dryer climatic weather conditions.

Presently, the most efficient access into the property is by helicopter although horse pack trails reach into the area developed by the fur traders and prospectors during the late 1800s' and early 1900s'. A logging road is currently being constructed along the headwaters of the Tulameen and passes approximately 2km from the north claim line boundary.

Historically, the claims cover an old fur trading route which was established during the late 1800s' because of narrow pass or divide discovered at the summit of Punch Bowl Lake. The pass linked the interior to the coast allowing for transportation and exchange of goods. Subsequently, prospectors worked the headwaters of the Tulameen and is reported that some placer gold was found along Punch Bowl Creek. More recently, following the staking by Mr. R.A. Rabbitt, anomalous arsenic and gold were discovered by the writer during a brief property examination. The work herein outlined was to follow-up the discovery and to conduct assessment work in order that the property be kept in good standing. The work was carried out during the latter days of July, 1986.

D. PHYSIOGRAPHY AND CLIMATE

The claims are situated along the western flank of the northern Cascade Mountains, in the Hozameen Range. The elevation on the property ranges from 2,311 m. (7,580 ft.) on Snass Mtn. to 1,463 m. (4,800 ft.) near the headwaters of the Tulameen River. The physiographic changes are quite pronounced, from an alpine, grassy environment at higher elevations to meadow and park-like vegetation along the low lying areas. Weather conditions are generally moderate, influenced by the dry interior climate. Surface exploration is conducive for at least 4-5 months of the year.

E. REGIONAL GEOLOGY

The regional area is underlain by northwest - southeast trending formations and structures. The Skagit River Valley and Snass Mtn. areas expose lithological sections of tuff, volcanic breccia, grit, argillite, and conglomerate of the Dewdney Creek Group. Just east of Snass Mtn. and in fault contact with the Dewdney Creek Group is the Pasaysten Group composed mainly of grit and shale. Both groups are Mesozoic in age (90 - 130 million years old).

B. CLAIMS INFORMATION

The Punch Bowl Group consists of the Punch East and West a total of 40 contiguous units which cover 1000 hectares (2,450 acres) of ground. The claims fall in the Similkameen and New Westminster Mining Divisions and claim records can be examined at the Princeton or Vancouver mining record offices.

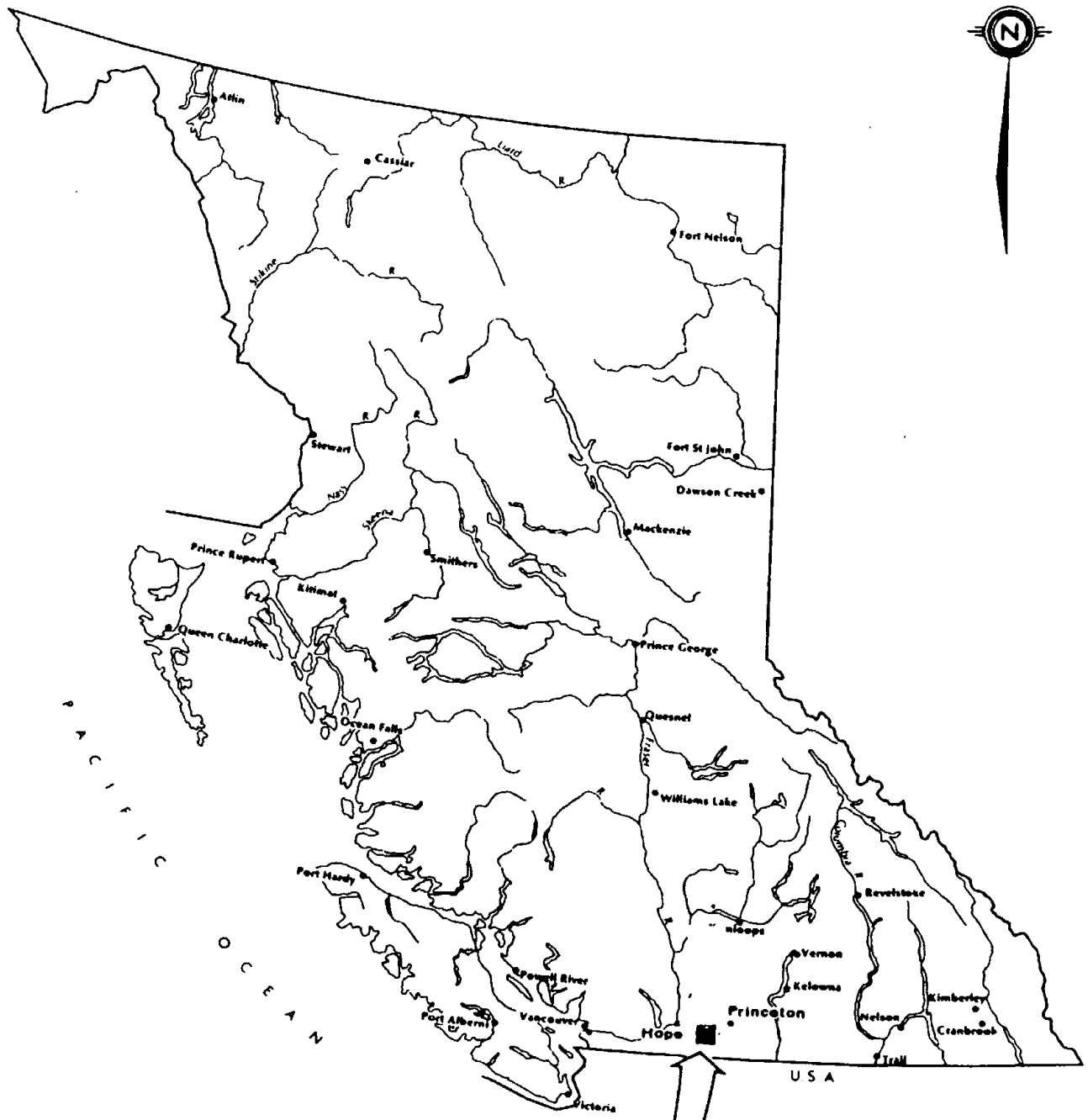
The pertinent data is as follows:

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Anniversary Date</u>
Punch West	20	2208	Aug. 7, 1987
Punch East	20	2207	" " "

C. LOCATION AND ACCESS

The property is located some 30 km. (19 mi.) east - southeast of the town of Hope, B.C.. Presently, the area can only be reached by helicopter.

Highway No.3 (Hope - Princeton Highway) passes approximately 7 km. (4 mi.) south of the property. A well used hiking and horse pack trail leads up Snass Creek valley from the highway and crosses the claims at Punch Bowl Lake.

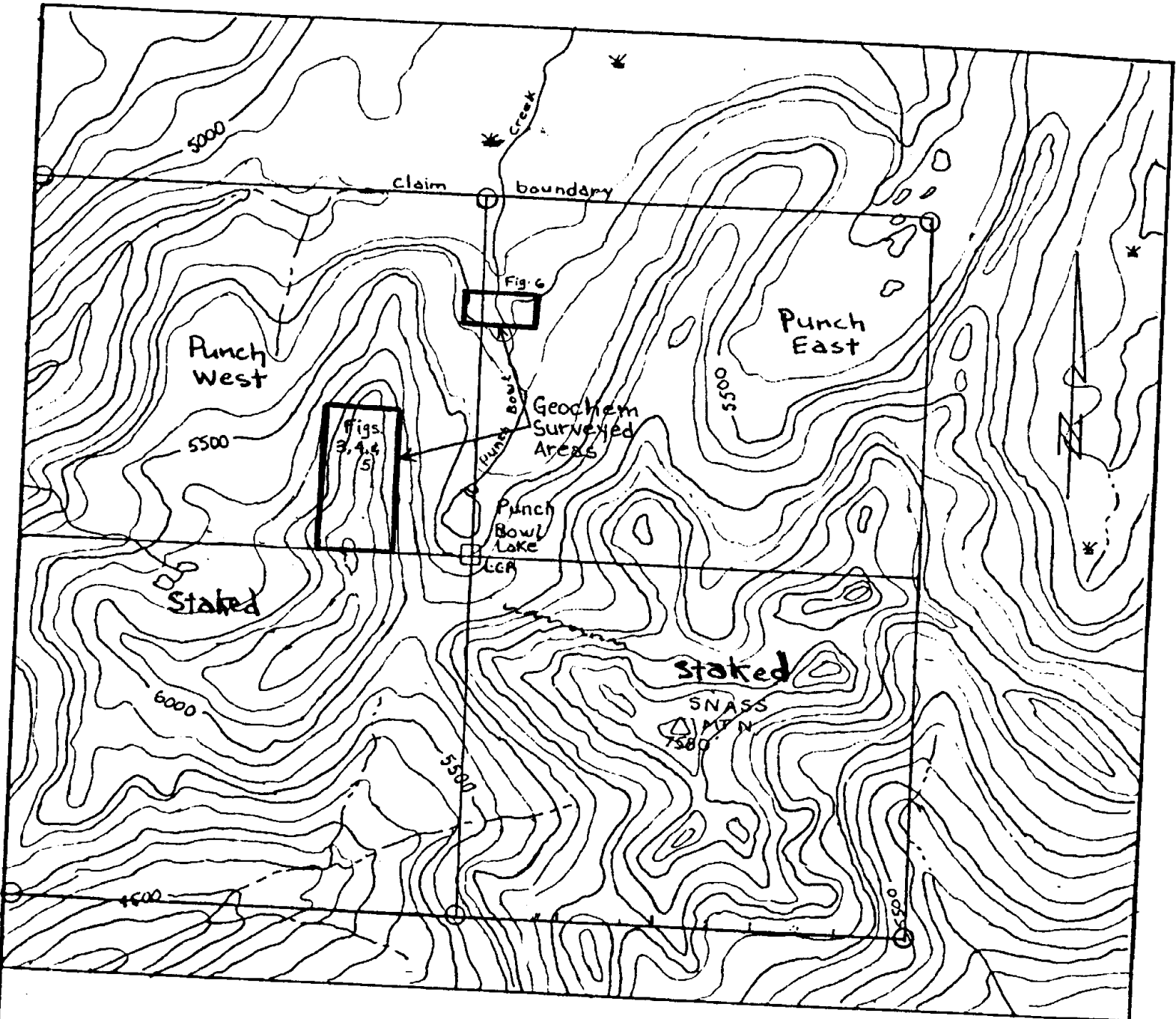


MR RICHARD A. RABBITT

Figure 1.

- Location map

Property
PUNCH BOWL CLAIMS



**CLAIMS
MAP**

MR. RICHARD A. RABBITT

PUNCH BOWL CLAIM
GROUP

Fig. 2 Scale 1/2 mi : 1 inch

Map Sheet 92H/647

D.G.C.

F. OBJECTIVE AND PROCEDURE

Objective of the present work is two-fold, firstly, to attempt to outline or have better control on a geochemically high arsenic-gold associated area discovered by the writer during a brief property examination in 1985 and; secondly, to conduct field work for assessment work credits in order the claims stay in good standing.

Reconnaissance geochem and geological surveys were carried out along a north-south ridge immediately west of Punch Bowl Lake (figs. 3&4) where the initial discovery was made. A brief examination was also conducted on an exposed section along a portion of Punch Bowl Creek where sulphide mineralization was discovered (fig. 2).

Gridlines were established over areas of interest and soil samples collected along each station. West of the lake a 500m long baseline was surveyed by compass and chain, crosslines established every 50m spacing and samples collected at every 20m intervals along the crosslines. The procedure for collecting the soils included, the exposure of the soil horizon using a maddock, normally digging down to about 30cm which exposed a soil profile of a thin shallow organic A horizon underlain by an orange 'B' horizon and, a poorly developed C horizon. Samples were collected from the B horizon and stored in standard soil sample paper bags and, marked and identified according to the gridline station number (eg. L 1+00S-0+60W or, PB 1+00N-0+60W).

OBJECTIVE AND PROCEDURE (Cont'd.)

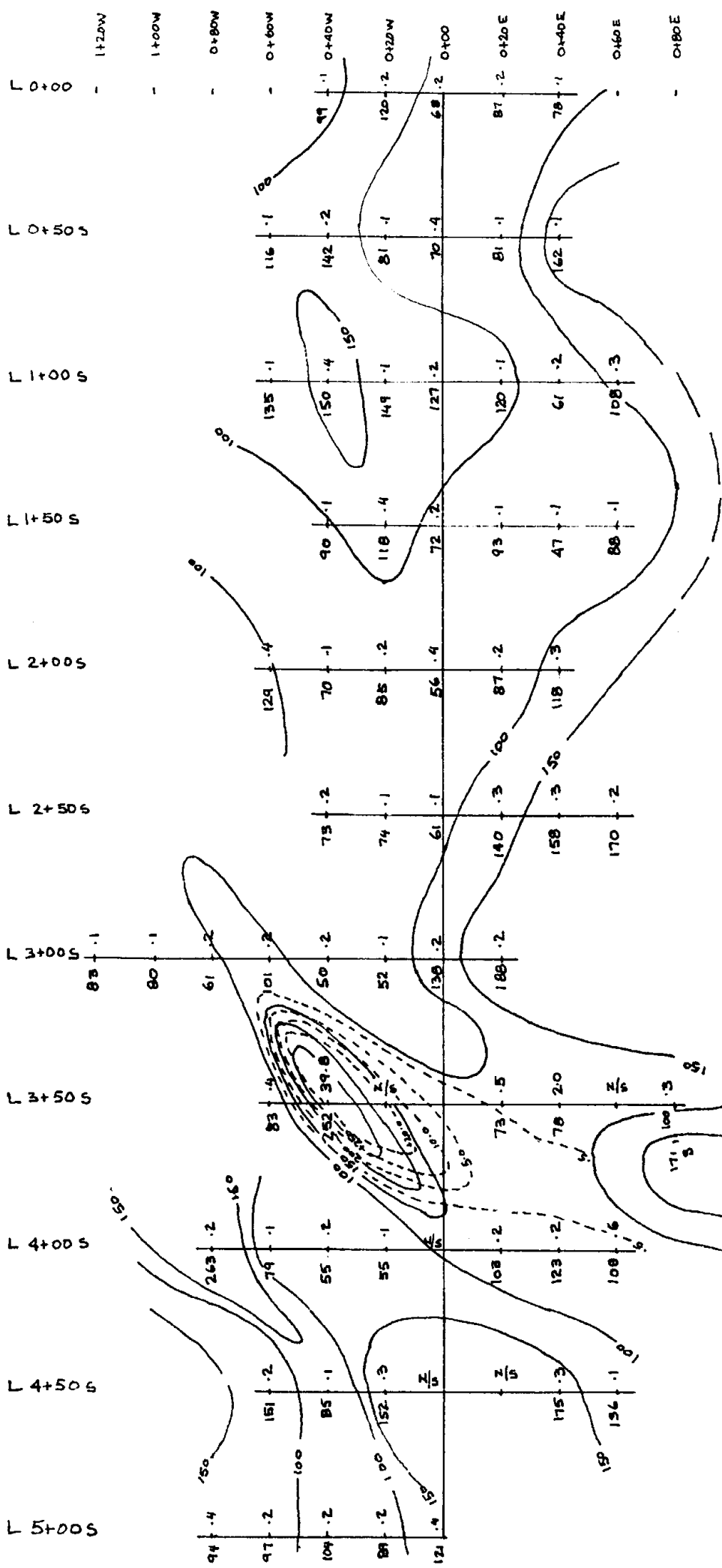
Four (4) silt samples were collected along Punch Bowl Creek and were identified according to elevation (eg. S-5060 ft.) and controlled by using a topographic map and an altimeter. The creek is characteristically fast flowing with large boulders and consequently little silt is left behind. Samples were obtained near the banks along small back eddies. A total of 90 soils and 4 silts were collected from 2 grid areas on the Punch Bowl claims.

G. RESULTS AND INTERPRETATIONS

Zinc-silver geochem results were plotted separately from the arsenic-gold data and two separate maps were drafted at a scale of 1:2000. All the data was plotted and interpreted by contouring the results (figs. 3 & 4). Geochem results obtained along Punch Bowl Creek (Fig. 6) were plotted but not contoured because of the limited data. A general geology map was also drafted at a scale of 1:2000, utilizing the gridlines for control.

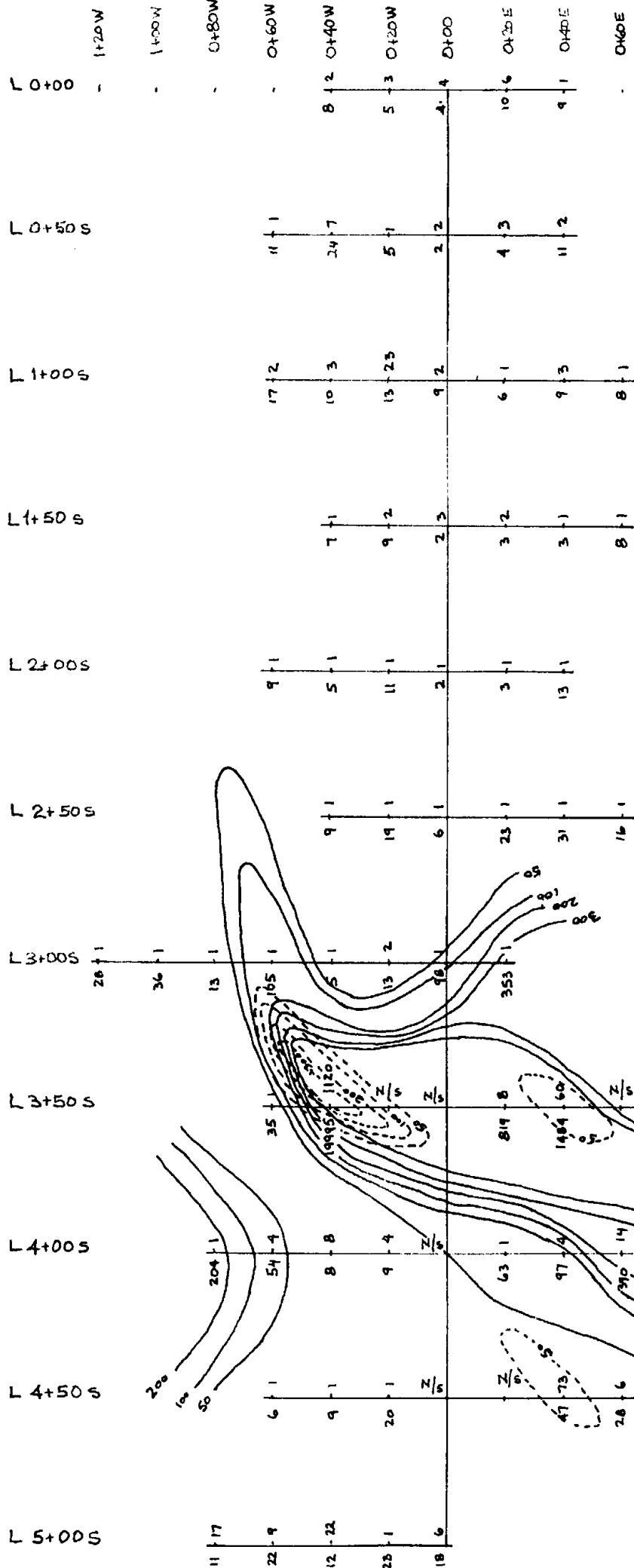
The zinc-silver contours indicate a geochem or an anomalous zone at crosslines L 3+50s & 4+50s (Fig. 3). Both the Zn - Ag values reach as high as 252 ppm and 39.8 ppm respectively. High arsenic-gold values also occur along the same crosslines showing a strong As anomaly coincident with associated anomalous values in Au. The remaining geochem data from

Cont'd



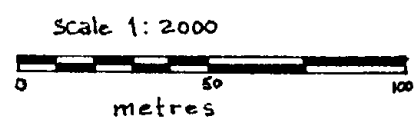
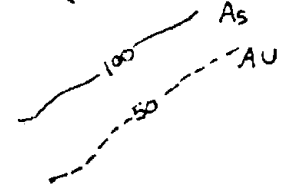
N/S No sample (Talus)

Fig. 3



PUNCH BOWL GROUP
Reconnaissance
Arsenic - Gold Geochem

Arsenic Gold
ppm ppb



N/s - No Sample
(Talus)

Fig. 4



G. RESULTS AND INTERPRETATIONS Cont'd

all 4 of the above elements tend to be of background nature; therefore, the rest of the surveyed grid area shows low geochem response.

The Zn - Ag - As - Au geochem results from the Punch Bowl Creek area (fig.6) are uniformly low with the exception of two stations, PB 0+00 - 0+20W and 0+40W where Zn (111ppm) and Au (145 ppb) are anomalous. A short grid was established in this area to ascertain if the soils were anomalous because of the mineralized rock outcrops exposed along the creek bank. Cherty argillites encountered in this area hosted minor blebs of sphalerite with fine disseminated crystals of arsenopyrite. Pyrite is ubiquitous, found in all rocks encountered along the creek.

A reconnaissance geological survey conducted over the main grid area (fig. 5) encountered predominately interbedded sandstones, siltstones, and shales. Occasional thick beds of conglomeratic sandstone were also mapped. The bedded clastic sandstone were also mapped. The bedded clastic sediments strike north to northwest and dip 60° - 70° to the west. At least 2 structures were identified, a major northwest-southeast fault and an east-west trending fault-shear zone. The zone hosts interesting mineralization and, in part, is strongly brecciated and altered. The shear is well exposed along part of the precipice sandstone face (fig. 5) and forms a steep gully. The breccia-shear zone was tied to the grid and

Cont'd

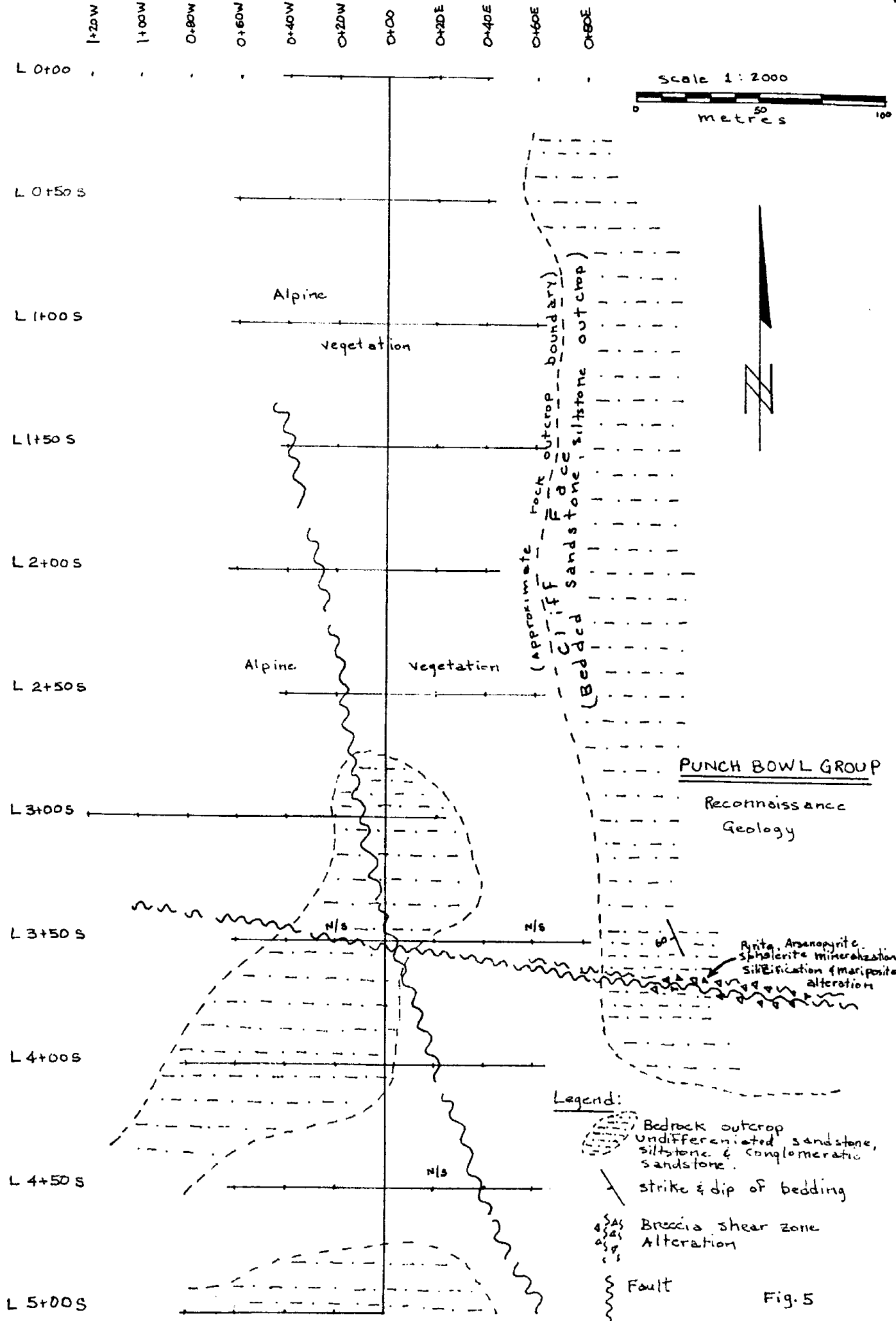


Fig. 5

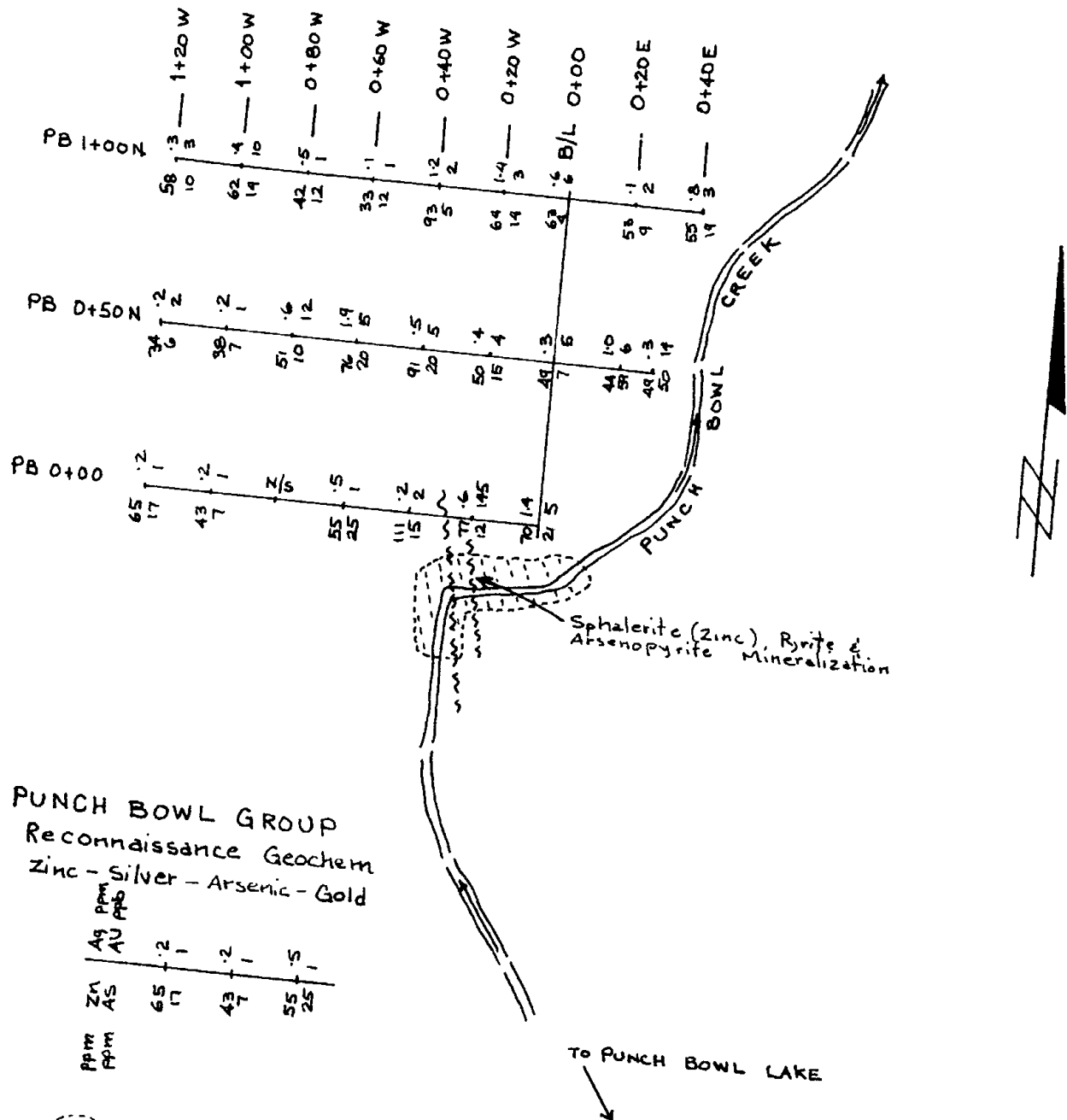


Fig. 6

G. RESULTS AND INTERPRETATIONS Cont'd

intersects the baseline at L 3+50s. Grey, bedded sandstones and siltstones along the shear are, in places, highly mineralized hosting abundant arsenopyrite with minor sphalerite, pyrite, galena and chalcopyrite. In places where the mineralization is strong, silicification can be found associated with a light green mineral identified as mariposite.

H. CONCLUSION

A well defined anomalous zone exists on the grid area located on a ridge just west of Punch Bowl Lake. The geochem survey has outlined combined zinc-silver and arsenic-gold anomalies occurring over the same area, along the south central part of the grid area. The values range as high as 252 ppm Zn, 39.8 ppm Ag, 19995 ppm As, and, 1,120 ppb Au.

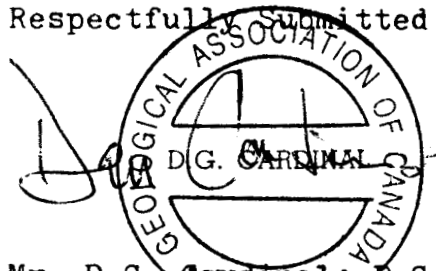
The geochem anomalies have an east-west trending pattern and appear to reflect the east-west trending mineralized shear zone which outcrops just to the east of gridline L 3+50S. This altered shear zone carrying sulphides of arsenopyrite with lesser sphalerite, pyrite and, galena is believed to extend westward which is reflected by the corresponding geochem Zn-Ag-As-Au anomalous highs.

The brecciated, shear zone is believed to have acted as a channelway for hydrothermal-sulphide bearing, mineralized solutions. Silicification and mariposite alteration also suggests epithermal activity. Follow-up surveys should be conducted to the east and west along the shear structure to define its' precious metal potential(s).

I. COST BREAKDOWN

Personnel:	Cost
Consultant Geologist, 3 days @ \$350/day (July 18th - 25th, 1986)	\$ 1,050.00
Prospector/Assistant, 3 days @ \$150/day	450.00
Camp and Materials	660.00
Mobilization:	
Helicopter, 1 hour @ \$450/hr. plus fuel	450.00
Geochem Analyses:	
94 samples analysed for Zn, As, Ag, & Au @ \$8.25/ sample	775.50
Office:	
Report writing, typing and, drafting	1,500.00
	<hr/>
Total	\$ 4,885.50

Respectfully Submitted,


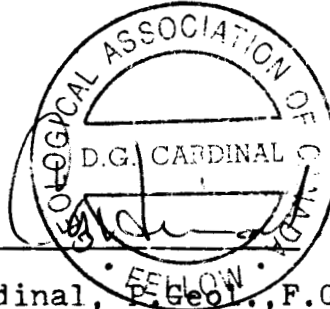


Mr. D.G. Cardinal; P.Geol.
Consulting Geologist.

I. CERTIFICATE

I, Daniel G. Cardinal of the Municipality of Hope,
British Columbia, do hereby certify that:

1. I'am a graduate of the University of Alberta (1975)
and hold a B.Sc. degree in Geology.
2. I'am registered as a Fellow of the Geological
Association of Canada, (F.G.A.C.) and a member
in good standing with the Association of Profess-
ional Engineers, Geologists and Geophysicists of
Alberta, (P.Geol.).
3. I have been practising my profession for the past
eleven years.
4. I'am a professional geologist residing in Hope,
B.C., mailing address, P.O. Box 594, Hope, B.C.
VOX 1L0.
5. The findings in this report are from a personal
property examination conducted by me on the
Punch Bowl Claim Group between July 18th - 25th,
1986.

Mr. D.G. Cardinal, P. Geol., F.G.A.C.
Consulting Geologist.

APPENDIX II

REFERENCES:

Rice, H.M.A.
1960

Geology and Mineral Deposits of the
Princeton Map-Area, British Columbia,
Memoir 243; Geological Survey of Canada.

National Geochemical Reconnaissance
Regional Geochemical Survey - 1981
Ministry of Energy, Mines and Petro-
leum Resources.

Cascade Wilderness Study, Status
Report, 1981; Ministry of Municipal
Affairs.

Mr. R. (Dick) Rabbit - personal communication

APPENDIX III
CERTIFICATE OF RESULTS

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: OCT 14 1986

DATE REPORT MAILED: *Oct. 18/86...*

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SM.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SOILS -BOMESH AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toy* DEAN TOYE. CERTIFIED B.C. ASSAYER.

KAM CREED MINES

FILE # 86-3174

PAGE 1

SAMPLE#	Zn PPM	Ag PPM	As PPM	Au* PPB
L0+00 0+40W	99	.1	8	2
L0+00 0+20W	120	.2	5	3
L0+00 0+00W	68	.5	4	4
L0+00 0+20E	87	.2	10	6
L0+00 0+40E	78	.1	9	1
L0+50S 0+60W	116	.1	11	1
L0+50S 0+40W	142	.2	24	7
L0+50S 0+20W	81	.1	5	1
L0+50S 0+00W	70	.4	2	2
L0+50S 0+20E	81	.1	4	3
L0+50S 0+40E	162	.1	11	2
L1+00S 0+60W	135	.1	17	2
L1+00S 0+40W	150	.4	10	3
L1+00S 0+20W	149	.1	13	23
L1+00S 0+00W	127	.2	9	2
L1+00S 0+20E	120	.1	6	1
L1+00S 0+40E	61	.2	9	3
L1+00S 0+60E	108	.3	8	1
L1+50S 0+40W	90	.1	7	1
L1+50S 0+20W	118	.4	9	2
L1+50S 0+00W	72	.2	2	3
L1+50S 0+20E	93	.1	3	2
L1+50S 0+40E	47	.1	3	1
L1+50S 0+60E	88	.1	8	1
L2+00S 0+60W	129	.4	9	1
L2+00S 0+40W	70	.1	5	1
L2+00S 0+20W	85	.2	11	1
L2+00S 0+00W	56	.4	2	1
L2+00S 0+20E	87	.2	3	1
L2+00S 0+40E	118	.3	13	1
L2+50S 0+40W	73	.2	9	1
L2+50S 0+20W	74	.1	19	1
L2+50S 0+00W	61	.1	6	1
L2+50S 0+20E	140	.3	23	1
L2+50S 0+40E	158	.3	31	1
L2+50S 0+60E	170	.2	16	1
STD C/AU-S	133	7.0	36	54

KAM CREED MINES

FILE # 86-3174

PAGE 2

SAMPLE#	Zn PPM	Ag PPM	As PPM	Au* PPB
L3+00S 1+20W	83	.1	28	1
L3+00S 1+00W	80	.1	36	1
L3+00S 0+80W	61	.2	13	1
L3+00S 0+60W	<u>101</u>	.2	105	1
L3+00S 0+40W	50	.2	5	1
L3+00S 0+20W	52	.1	13	2
L3+00S 0+00W	138	.2	98	1
L3+00S 0+20E	188	.2	353	1
L3+50S 0+60W	83	.4	35	1
L3+50S 0+40W	252	39.8	19995/	1120
L3+50S 0+20E	73	.5	819	8
L3+50S 0+40E	78	2.0	1484	60
L3+50S 0+80E	100	.3	176	1
L3+62S 0+80E	171	.3	668	6
L4+00S 0+80W	263	.2	204	1
L4+00S 0+60W	79	.1	54	4
L4+00S 0+40W	55	.2	8	8
L4+00S 0+20W	55	.1	9	4
L4+00S 0+20E	103	.2	63	1
L4+00S 0+40E	123	.2	97	4
L4+00S 0+60E	108	.6	390	14
L4+50S 0+60W	151	.2	6	1
L4+50S 0+40W	85	.1	9	1
L4+50S 0+20W	152	.3	20	1
L4+50S 0+40E	175	.3	47	73
L4+50S 0+60E	136	.1	28	6
L5+00S 0+80W	94	.4	11	17
L5+00S 0+60W	97	.2	22	9
L5+00S 0+40W	104	.2	12	22
L5+00S 0+20W	89	.2	23	1
L5+00S 0+00W	121	.4	18	6

2. 103
Handwritten note

KAM CREED MINES

FILE # 86-3174

SAMPLE#	Zn PPM	Ag PPM	As PPM	Au* PPB
PB 1+00N 1+20W	58	.3	10	3
PB 1+00N 1+00W	62	.4	14	10
PB 1+00N 0+80W	42	.5	12	1
PB 1+00N 0+60W	33	.1	12	1
PB 1+00N 0+40W	93	1.2	5	2
PB 1+00N 0+20W	64	1.4	14	3
PB 1+00N 0+00W	63	.6	4	6
PB 1+00N 0+20E	53	.1	9	2
PB 1+00N 0+40E	55	.8	19	3
PB 0+50N 1+20W	34	.2	6	2
PB 0+50N 1+00W	38	.2	7	1
PB 0+50N 0+80W	51	.6	10	12
PB 0+50N 0+60W	76	1.9	20	5
PB 0+50N 0+40W	91	.5	20	5
PB 0+50N 0+20W	50	.4	15	4
PB 0+50N 0+00W	49	.3	7	6
PB 0+50N 0+20E	44	1.0	59	6
PB 0+50N 0+30E	49	.3	50	14
PB 0+00 1+20W	65	.2	17	1
PB 0+00 1+00W	43	.2	7	1
PB 0+00 0+60W	55	.5	25	1
PB 0+00 0+40W	111	.2	15	2
PB 0+00 0+20W	77	.6	12	145
PB 0+00 0+00W	70	1.4	21	5
S-5060	144	.2	35	3
S-5160	116	.1	24	4
S-5360	135	.3	26	6
S-5500	124	.2	29	1
STD C/AU-S	134	7.1	37	51