

86-649-15212

08/87

Reconnaissance Geochemical and
Geological Assessment Report

on the

K.C.M. CLAIM GROUP

FILMED

Similkameen Mining Division
~~New Westminster Mining Division~~
Lat. $49^{\circ}16.6'$; Long. $120^{\circ}59.8'$
N.T.S. ~~92H/6E~~ 92H/7W, 92H/6E

for

Owner/Operator: KAM CREED MINES LTD.
815 West Hastings St.
Vancouver, B.C.

Report by:

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

Nov. 3, 1986

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,212

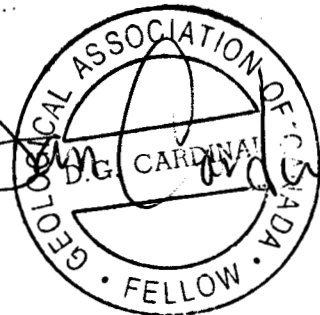


TABLE OF CONTENTS

| | Page |
|---|------|
| A. INTRODUCTION | 1 |
| B. CLAIMS INFORMATION | 2 |
| C. LOCATION AND ACCESS | 2 |
| D. WATER AND POWER RESOURCE | 3 |
| E. PHYSIOGRAPHY AND CLIMATE | 3 |
| F. BACKGROUND AND HISTORY | 3 |
| G. REGIONAL GEOLOGY | 5 |
| H. RECONNAISSANCE GEICHEM SURVEYS | 6 |
| I RECONNAISSANCE GEOLOGY SURVEYS | 7 |
| J. CONCLUSION | 8 |
| K. COST BREAKDOWN | 9 |

FIGURES:

1. Location Map
2. Claims Map
3. Zinc-Silver Geochem
4. Arsenic-Gold Geochem
5. Reconnaissance Geology

APPENDICES:

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

A. INTRODUCTION

Assessment work was carried out on the KCM Group in late July and early August, 1986 for the purpose of keeping the ground in good standing. The work consisted of reconnaissance geology and geochemical surveys over surveyed gridlines.

The property is underlain by faulted, shales, conglomeratic sandstones and, cherty argillites. Major north-south faulting offsets the sediments which in turn are cut by later cross-cutting east-west faults.

The writer was requested by the company to examine the claims and the work here-in described, submitted for assessment work credits.

B. CLAIMS INFORMATION

The K.C.M. Group consists of a total of 40 contiguous units which cover 1,000 hectares (2,450 acres) of ground. The claims fall in the Similakameen and New Westminster Mining Divisions and claim records can be examined at the Princeton or Vancouver mining record offices.

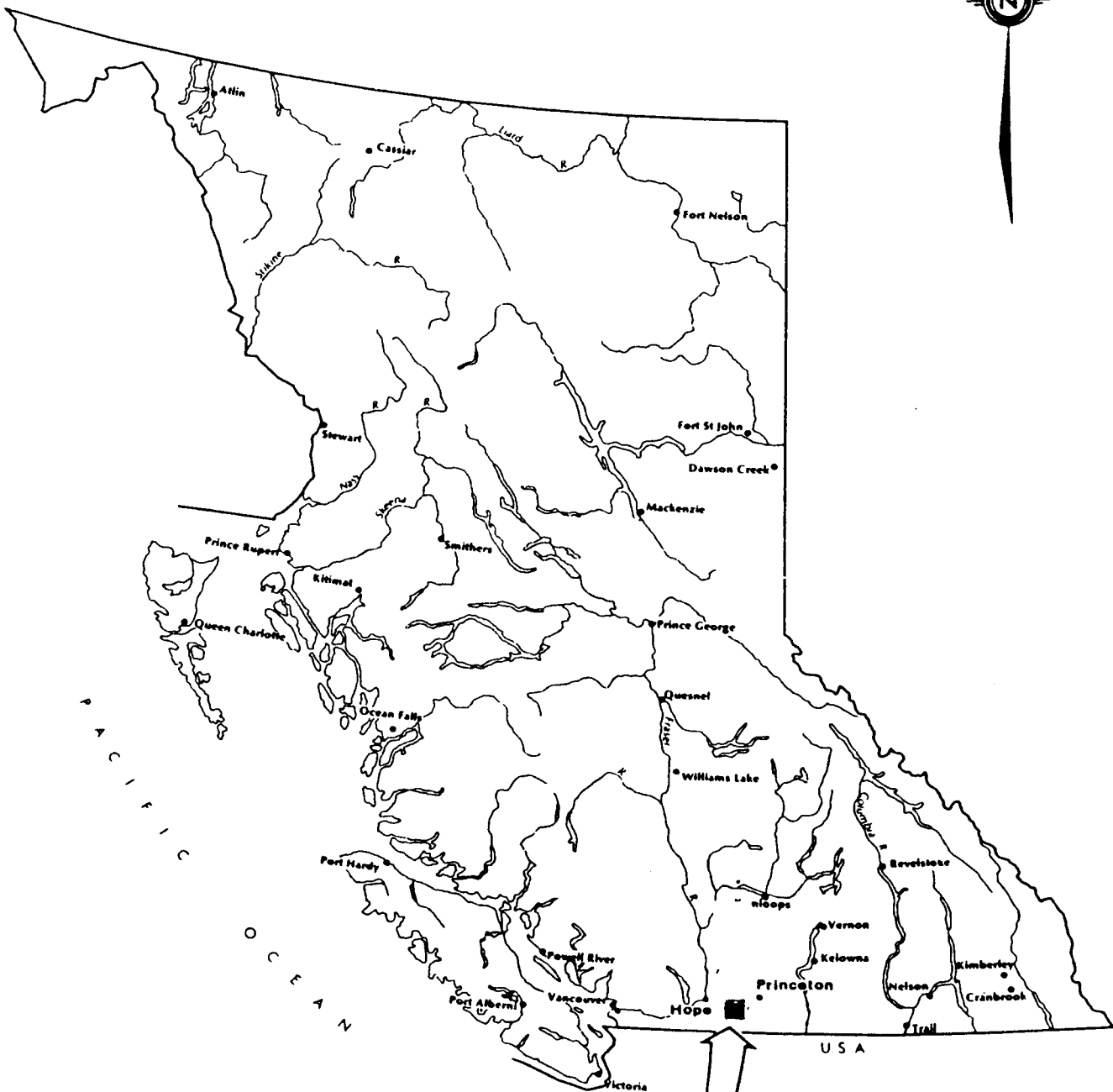
The pertinent data is as follows:

| <u>Claim Name</u> | <u>Units</u> | <u>Record No.</u> | <u>Anniversary Date</u> |
|-------------------|--------------|-------------------|-------------------------|
| K.C.M. West | 20 | 2206 | Aug. 7, 1987 |
| K.C.M. East | 20 | 2205 | " " " |

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.

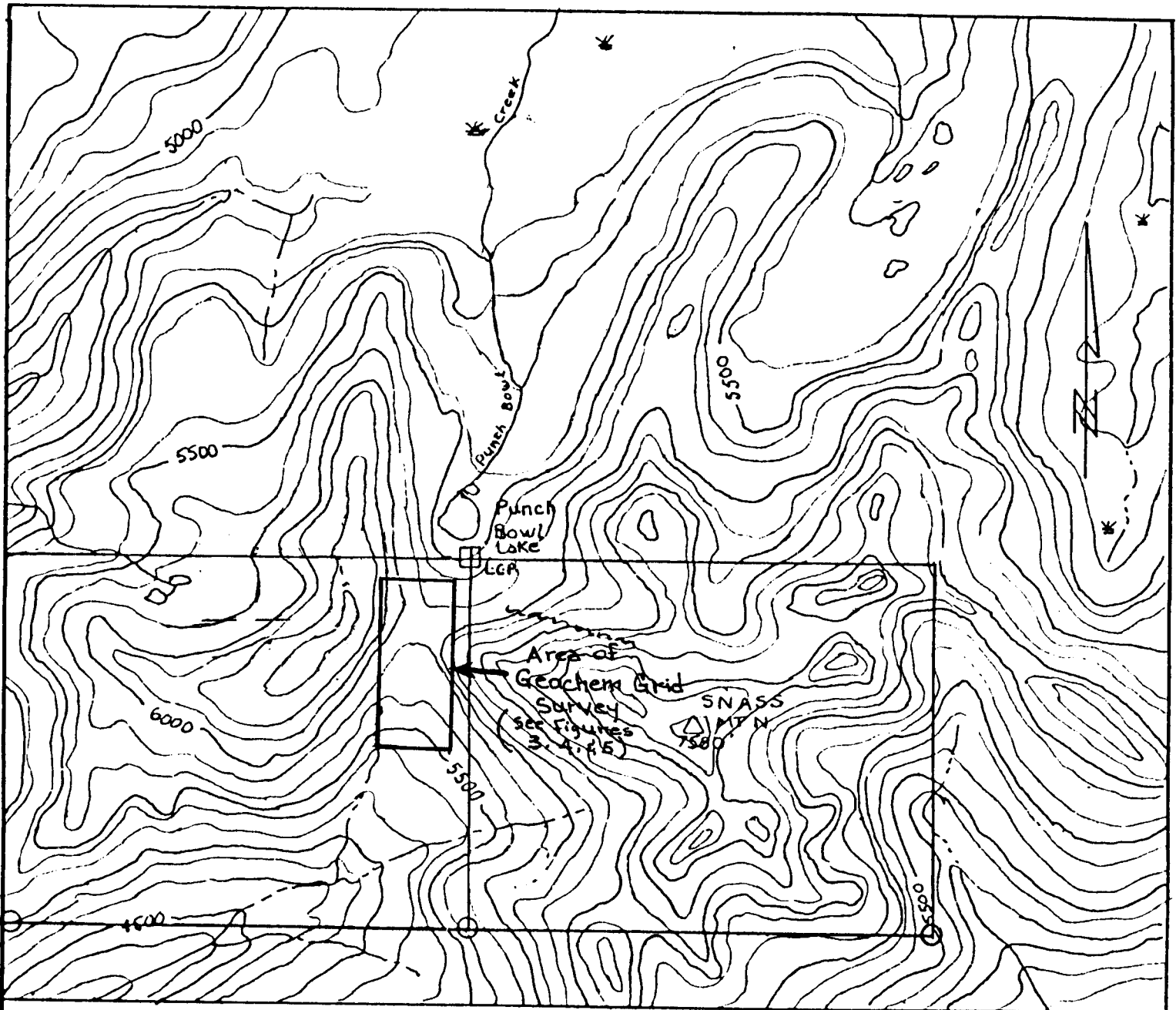


KAM CREED MINES LTD.

Property

Figure 1.

- Location map



KAM CREED MINES LTD.

CLAIMS MAP

K.C.M. CLAIM GROUP

Fig. 2

Scale 1:30,000
 0 300 600 900 1200 metres

L.C.P. - Legal Corner Post

Map Sheet 92H/647

D.G.C.

D. WATER AND POWER RESOURCE

The area has an abundant supply of water with a number of streams and creeks crossing the property. Hope is the nearest source for electrical power. A portable generator would be required for the initial phase of development work.

E. 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 3-4 months of the year.

F. BACKGROUND AND HISTORY

In spring of 1984 Kam Creed staked claims in the Punch Bowl Lake area, following the release, by the B.C. government, of a no-staking freeze on the ground. Prior to the release, the

F. BACKGROUND AND HISTORY CONT'D

area was under a mineral reserve prohibiting staking, exploration and mining activity.

During the mid 1800's, trade routes were established along this region, connecting the B.C. interior to the coast. Punch Bowl Lake was one of the brief stop-overs for the traders, trappers and early prospectors.

The claims do not have any mining history, although, it is reported that some placer gold was found in Punch Bowl Creek. During the property examination, the writer noted old workings along the creek in mineralized shales and argillites. The writer was also informed that the mineralized zone was worked in the early 1960's and anomalous gold was found in the sediments.

A number of potential mineral occurrences have been discovered on adjacent areas. Approximately 13 km. (8 mi.) north, near Podunk Cr., copper (Cu), gold (Au), and zinc (Zn) were discovered in the 1940's. Presently, a tungsten deposit is being evaluated in this area by a junior company. To the east of the claims, are other lead (Pb), silver (Ag), Zn, and Au showings. More important, to the southeast of the property, and on similar geological formation is an Au, Arsenic (As) and antimony (Sb) showing which is reported to be hosted in sandstones. Unfortunately, the showing falls within the

Cont'd

F. BACKGROUND AND HISTORY CONT'D

Manning Park boundary. The majority of the above occurrences were discovered in the 1930's and 1940's; but, have recently attracted more attention because of their Au and Zn potentials, coupled with the increased market price of both metals. Additional attention has also been drawn to this area due to the recent lift of the no staking freeze.

G. REGIONAL GEOLOGY

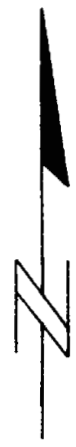
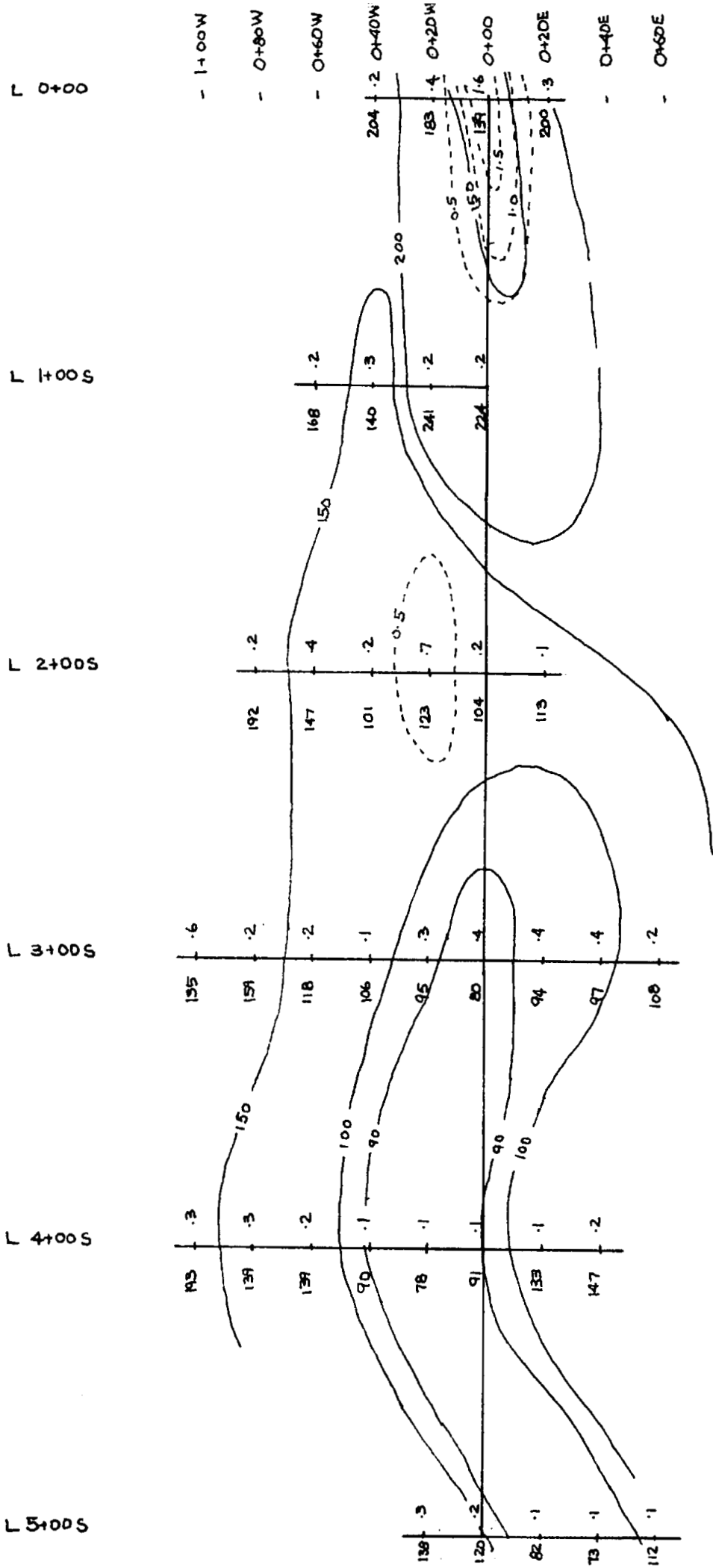
The regional area is underlain by northwest - southeast trending formations and structures. The Skagit River Valley and Snass Mtn. areas expose lithological sections of tuff, volcanic breccia, grit, argillite, and conglomerate of the Dewdney Creek Group. Just east of Snass Mtn. and in fault contact with 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).

H. RECONNAISSANCE GEOCHEM SURVEYS

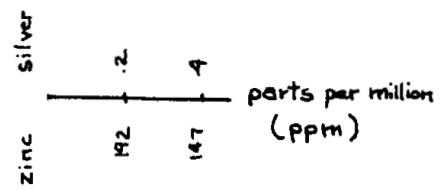
A reconnaissance gridline was established just south of Punch Bowl Lake beginning near a pass or divide (fig. 2). A baseline running south for 500m was surveyed using compass and hip chain-topoline. Crosslines were established every 100m apart with sample stations every 20m intervals along the crosslines. The baseline-0+00 is located approximately 500m southeast of the KCM legal corner post at elevation 1,753m (5750 ft.). All stations and crosslines are identified by flagging and marked accordingly (eg. KC 1+00S-0+20E).

Soils were obtained from each station stored in standard paper soil bags and numbered according to the station number. Using a maddock the soil horizon was exposed and the 'B' horizon sampled where possible. Majority of the sampled sites had relatively well developed rusty-orange B horizon just below a thin organic A horizon.

A total of 36 soils were analyzed for zinc, arsenic, silver and, gold. Utilizing the geochem analyses, zinc-silver geochem contour (fig. 3) and arsenic-gold geochem contour (fig. 4) maps were plotted. Superimposed zinc-silver contours show a coincidental Zn-Ag anomaly along the northern portion of the grid with the remaining area showing a relatively flat or low Zn-Ag response. Superimposed arsenic-gold contours also have a high response at the north end of the grid (fig. 4) with As values as high as 13,570 ppm and Au up to 25 ppb. One isolated As anomaly occurs at L 3+00S-0+40E the remaining area has a weak to low As-Au geochem response.



KAM CREED MINES LTD.
Reconnaissance
Zinc - Silver
Geochem.
KCM Claim Group



scale 1 : 2000



Fig. 3

L 0+00

- 1+00W - 0+80W - 0+60W - 3 0+40W - 45 - 44 - 43 - 42 - 41 - 40 - 39 - 38 - 37 - 36 - 35 - 34 - 33 - 32 - 31 - 30 - 29 - 28 - 27 - 26 - 25 - 24 - 23 - 22 - 21 - 20 - 19 - 18 - 17 - 16 - 15 - 14 - 13 - 12 - 11 - 10 - 0+20E - 0+00 - 0+60E

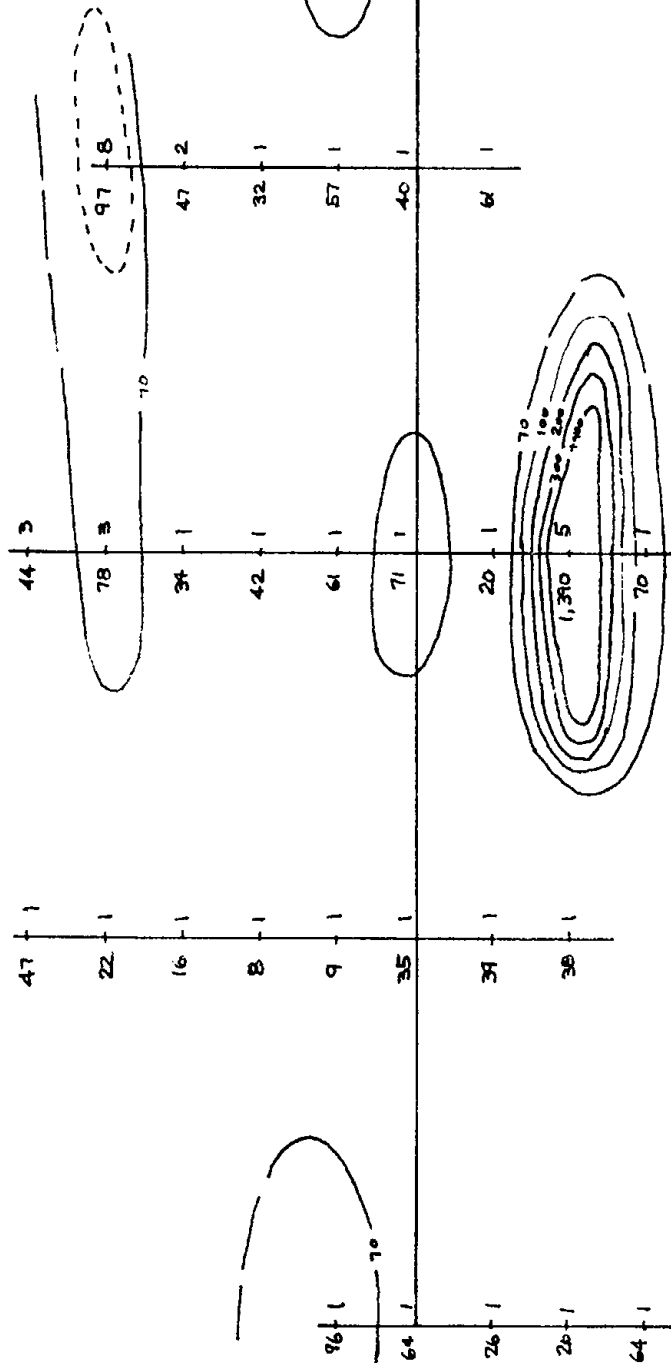
L 1+00S

L 2+00S

L 3+00S

L 4+00S

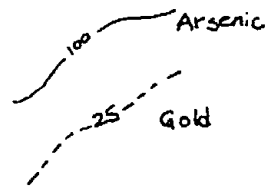
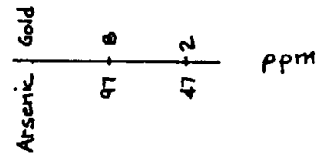
L 5+00S



KAM CREED MINES LTD.

Reconnaissance
Arsenic - Gold Geochem.

KCM Claim Group



Scale 1:2,000

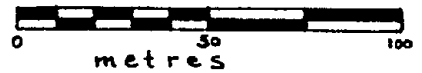
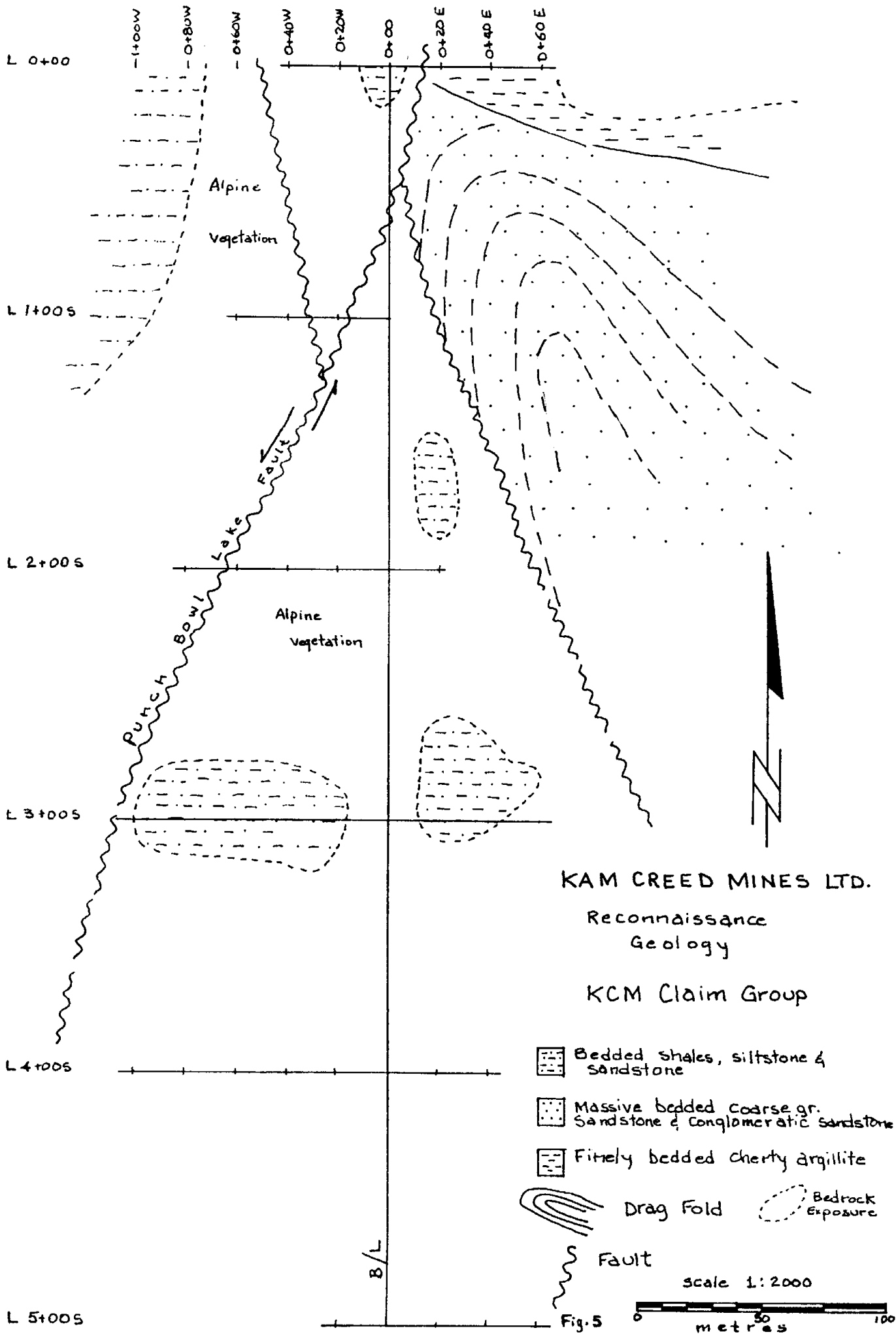


Fig. 4

I. RECONNAISSANCE GEOLOGY SURVEYS

Using the established gridlines as control, crosslines were traversed and all bedrock exposure and structures mapped (fig. 5). Much of the grid area is covered by alpine vegetation; consequently, only limited bedrock is exposed. At least 3 different types were encountered and mapped. The rocks are of sedimentary origin and consist of thinly bedded to finely laminated, grey-buff shales, siltstones, and fine sandstones which are found to occur over half of the grid area. Along the eastern edge of the grid area is a large outcrop of folded, massive-bedded, grey, coarse grain sandstone and conglomeratic sandstone. In contact and along the northeast flank of the grey sandstone is a thin bedded unit of dark grey cherty argillites and buff colored cherts.

Subsequent transcurrent faulting has occurred, offsetting the sedimentary units. At least 2 generations of fault systems were identified - an older N.W. - S.E. trending fault; and, a younger fault system striking N.E.-S.W., offsetting and displacing the older fault by about 100m. The younger fault is referred to by the writer as the Punch Bowl Lake Fault. The transcurrent movement along this fault appears to have dragged the eastern block containing the massive sandstone unit northward resulting in the formation of a drag fold structure in the sandstone (fig.5).



KAM CREED MINES LTD.
 Reconnaissance
 Geology
 KCM Claim Group

Fig. 5

J. CONCLUSION

Reconnaissance surveys consisting of geochemical soil sampling and geology were conducted on a portion of the KCM Claim Group. High arsenic and zinc anomalies, and associated anomalous silver and gold were outlined along the northern portion of a survey grid. The anomalous zones occur from about cross-line L1+00S and extend beyond L0+00.

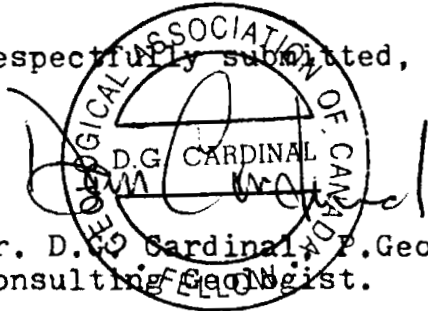
The bedrock geology underlying the anomalies is composed of faulted sandstones and shales. As a result, the geochem highs in this area appear to reflect mineralized fault zones, possibly hosting gold and silver. Follow-up surveys should be conducted to the north and tighter gridline control be established. Additional detail mapping should also be carried out.

The surveys conducted on the KCM Group were for assessment purposes in order that the property be kept in good standing, and, the work here-in outlined be submitted for assessment work credits.

K. COST BREAKDOWN

| Personnel: | Cost |
|--|-----------------|
| Consultant Geologist, 3 days @ \$350.00/day (Aug. 3-5, 1986) | \$ 1,050.00 |
| Prospector/Assistant, 3 days @ \$150.00/day (Aug. 3-5, 1986) | 450.00 |
| Camp and Materials | 630.00 |
| Mobilization Helicopter, 1 hr. @ \$450/hr. plus fuel | 450.00 |
| Geochem Analyses: 37 samples analysed for Zn, As, Ag, & Au @ \$8.25/sample | 305.25 |
| Office: Report writing, typing and drafting | <u>1,500.00</u> |
| Total | \$ 4,385.25 |

Respectfully submitted,

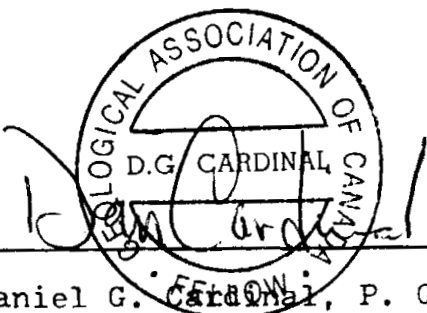

D.G. CARDINAL
Mr. D.G. Cardinal, P.Geol.
Consulting Geologist.

APPENDIX I

Certificate:

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

1. I am a professional geologist residing in Hope, B.C., mailing address; P.O. Box 594, Hope, B.C. VOX 1L0.
2. I am a graduate of the University of Alberta and a member in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).
3. Since 1970, I have been actively involved in the Canadian mining industry, both as a project manager and consulting geologist for major and junior resource companies.
4. The findings in the report are derived from data acknowledged and from personal examination of the property during August 3rd, 4th, and 5th, 1986.


Daniel G. Cardinal, P. Geol.

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

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.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOILS -BONESH AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. J. Dean* DEAN TOYE. CERTIFIED B.C. ASSAYER.

KAM CREED MINES FILE # 86-3174

| SAMPLE# | Zn PPM | Ag PPM | As PPM | Au* PPB |
|----------------|-----------|-----------|-----------|------------|
| KC 1+00S 0+40W | 140 | .3 | 16 | 1 |
| KC 1+00S 0+20W | 241 | .2 | 310 | 5 |
| KC 1+00S 0+00W | 224 | .2 | 35 | 1 |
| KC 2+00S 0+80W | 192 | .2 | 97 | 8 |
| KC 2+00S 0+60W | 147 | .4 | 47 | 2 |
| KC 2+00S 0+40W | 101 | .2 | 32 | 1 |
| KC 2+00S 0+20W | 123 | .7 | 57 | 1 |
| KC 2+00S 0+00W | 104 | .2 | 40 | 1 |
| KC 2+00S 0+20E | 113 | .1 | 61 | 1 |
| KC 3+00S 1+00W | 135 | .6 | 44 | 3 |
| KC 3+00S 0+80W | 159 | .2 | 78 | 3 |
| KC 3+00S 0+60W | 118 | .2 | 34 | 1 |
| KC 3+00S 0+40W | 106 | .1 | 42 | 1 |
| KC 3+00S 0+20W | 95 | .3 | 61 | 1 |
| KC 3+00S 0+00W | 80 | .4 | 71 | 1 |
| KC 3+00S 0+20E | 94 | .4 | 20 | 1 |
| KC 3+00S 0+40E | 97 | .4 | 1390 | 5 |
| KC 3+00S 0+60E | 108 | .2 | 70 | 1 |
| KC 4+00S 1+00W | 193 | .3 | 47 | 1 |
| KC 4+00S 0+80W | 139 | .3 | 22 | 1 |
| KC 4+00S 0+60W | 139 | .2 | 16 | 1 |
| KC 4+00S 0+40W | 90 | .1 | 8 | 1 |
| KC 4+00S 0+20W | 78 | .1 | 9 | 1 |
| KC 4+00S 0+00W | 91 | .1 | 35 | 1 |
| KC 4+00S 0+20E | 133 | .1 | 39 | 1 |
| KC 4+00S 0+40E | 147 | .2 | 38 | 1 |
| KC 5+00S 0+20W | 138 | .3 | 96 | 1 |
| KC 5+00S 0+00W | 120 | .2 | 64 | 1 |
| KC 5+00S 0+20E | 82 | .1 | 26 | 1 |
| KC 5+00S 0+40E | 73 | .1 | 26 | 1 |
| KC 5+00S 0+60E | 112 | .1 | 64 | 1 |
| KC 0+00 0+40W | 204 | .2 | 45 | 3 |
| KC 0+00 0+20W | 183 | .4 | 44 | 3 |
| KC 0+00 0+00W | 139 | 1.6 | 13570 ✓ | 25 |
| KC 0+00 0+20E | 200 | .3 | 465 | 24 |
| KC 1+00S 0+60W | 168 | .2 | 29 | 4 |
| STD C/AU-S | 133 | 7.0 | 37 | 52 |