84#492 (4) # 12410

## PROSPECTING

ASSESSMENT REPORT

on the

BEAR PROPERTY

New Westminster Mining Division - British Columbia

Lat. 121<sup>o</sup> 15' W. Long. 49<sup>o</sup> 11' N.

N.T.S. 92H/3 €

for

SUECON DEVELOPMENT CORPORATION

GEOLOGICAL BRANCH ASSESSMENT REPORT

12,410

Donald G. Allen, P. Eng. (B. C.)

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### SUMMARY

Suecon Development Corporation holds four claims,
BEAR 1 to 4 (two-post claims), 26 kilometres southeast of
Hope, B. C. The property lies in the Cascade Mountains at
the headwaters of Sumallo River and is accessible via the
Hope-Princeton Highway and logging roads. Widespread
zinc-lead±copper±silver±gold mineralization occurs in float
in the claim area.

The BEAR property is underlain by greenstone and chert of Hozameen Group (Late Paleozoic age).

The fracture-controlled nature of mineralization on the BEAR property, proximity to a quartz diorite stock of Miocene age, and proximity to the CANAM Copper deposit, 16 kilometres to the east (18 million tons grading 0.8% Cu in a breccia pipe), indicate that the BEAR prospect may be related to a number of base metal, precious metal and porphyry copper and molybdenum deposits of Miocene age that occur throughout the Cascade Mountains of B. C. and Washington. A program of geological mapping, geochemical sampling and diamond drilling is recommended to evaluate the property.

### CONCLUSION

The occurrence of widespread mineralized float on the BEAR claims, nature of mineralization, proximity to CANAM Copper, all suggest excellent exploration potential. An exploration program is warranted to evaluate the property.

### RECOMMENDATION

A three-stage program of surface exploration and diamond drilling is recommended to evaluate the BEAR property.

Stage I will consist of geological mapping, prospecting and geochemical sampling on and around the claim block. Additional claims should be staked prior to this work. Should results of Stage I be favourable, then Stage II and III programs of preliminary and follow up drilling are recommended. Estimated costs of Stages I, II, and III are \$20,000, \$30,000, and \$43,000, respectively, for a grand total of \$93,000.

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### ESTIMATED COSTS OF RECOMMENDATIONS

Stage I Geological mapping, pro	ospecting, geochemica	1 sampling.
Salaries		
Geologist Assistant - soil sampler	1 mo. @ \$6,000 1 mo. @ \$3,000	\$ 6,000 3,000
Room and board	60 man days @ \$35	2,100
Vehicle rental and expense		2,000
Material and supplies		1,000
Geochemical analyses and ass	ay	2,000
Report, maps		2,000
		\$18,100
	Contingencies	1,900
	Total	\$20,000
	•	\$ 5,000 20,000
Engineering, supervision, as:		2,800
		\$27,500
	Contingencies	2,500
	Total	\$30,000
Stage III Follow up diamond dri	illing.	
Drill site preparation and/or	r helicopter support	\$ 5,000
Diamond drilling 300 metres	s @ \$100	30,000
Engineering, supervision, as:	says	3,500
		\$38,500
	Contingencies	4,500
	Total	\$43,000
	Grand total	\$93,000

### INTRODUCTION

SUECON DEVELOPMENT CORPORATION holds four claims,
BEAR 1 to 4, in the Hope-Princeton area of southwestern
British Columbia. The claims cover lead-zinc±copper±
silver±gold mineralization in fractured volcanic rocks of
the Late Paleozoic Hozameen Group.

This report summarizes results of a property examination carried out by the writer on July 18, 1983. Poor weather conditions coupled with difficult terrain covered with logging debris, prevented a complete evaluation of the property. However, sampling of float on logging roads in a slide area and in stream beds yielded encouraging results.

### LOCATION, ACCESS, PHYSIOGRAPHY

The BEAR property is situated 26 kilometres southeast of Hope, British Columbia (figure 1), on the west fork of the headwaters of Sumallo River. It lies in the Cascade Mountains between elevations 3,700 and 5,000 feet. Topography in the area ranges from precipitous on mountain slopes to gentle on the valley bottom. Lower valley slopes have been logged in recent years and are covered with logging debris and a young growth of hemlock, cedar and slide alder.

Access is via the Hope-Princeton Highway to Sumallo River and thence by logging roads up the Sumallo River valley (figure 2).

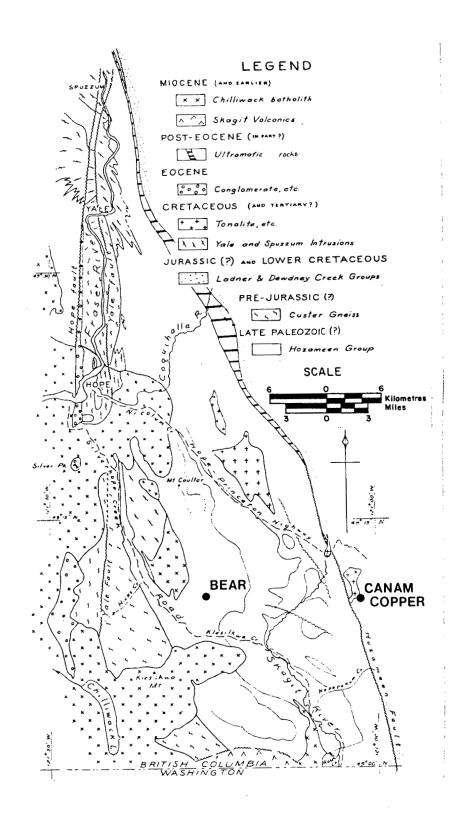


Figure 1. Location and regional geology map (geology after McTaggart and Thompson, 1967)

### CLAIMS

The Bear property comprises four two-post claims and one 16 unit modified grid claim as follows:

Claim Name	Record No.	Expiry Date
Bear 1	1257	July 13, 1984
Bear 2	1258	July 13, 1984
Bear 3	1259	July 13, 1984
Bear 4	1260	July 13, 1984
Bear II	2212	August 24, 1984

Claim boundaries of the Bear 1 to 4 as shown on Figure 3, taken from Ministry of Mines claim map 92H/3E, are not accurate. The actual positions are plotted on Figure 5.

### HISTORY

There is no record of any mineral exploration on the BEAR claims or immediate area. However, some diamond drilling is reported by T. Conway to have been carried out.

### GEOLOGY

### Regional Geology

The BEAR claims are situated in the Hope area (92H west), the geology of which has been summarized by Monger (1970). The geology of the Cascade Range immediately to the north and southeast of Hope has been described by McTaggart and Thompson (1967) as follows (see Figures 1 and 4):

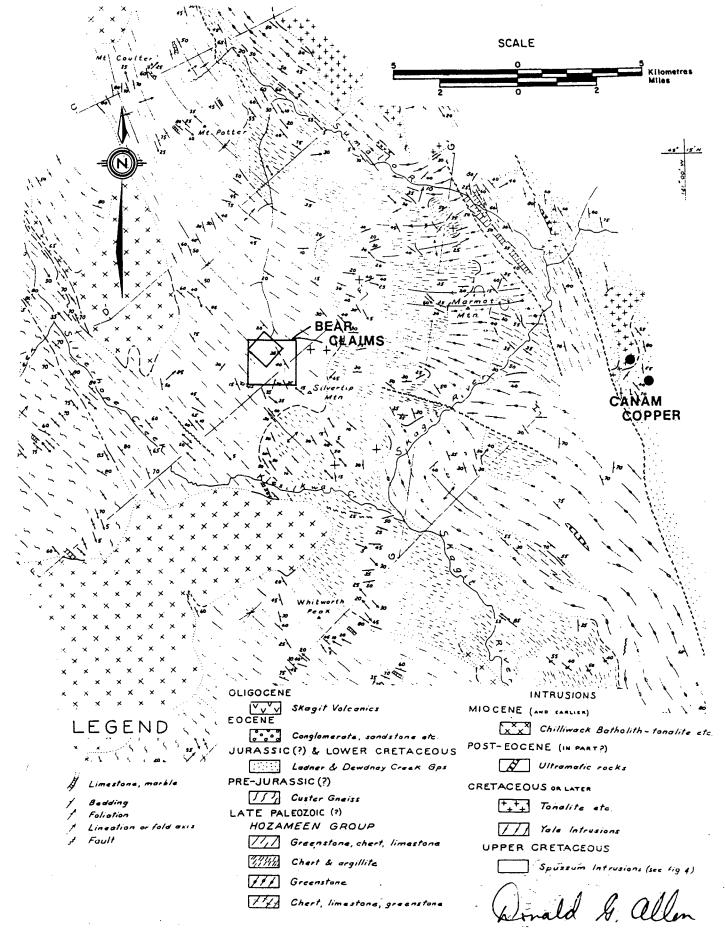
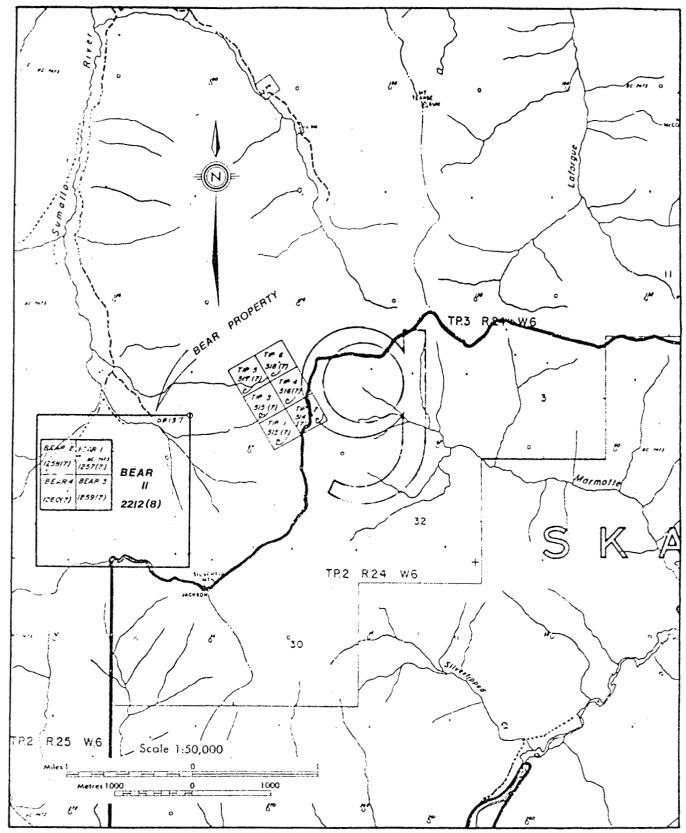


Figure 2. Geological map of area southeast of Hope (geology after McTaggart and Thompson, 1967)



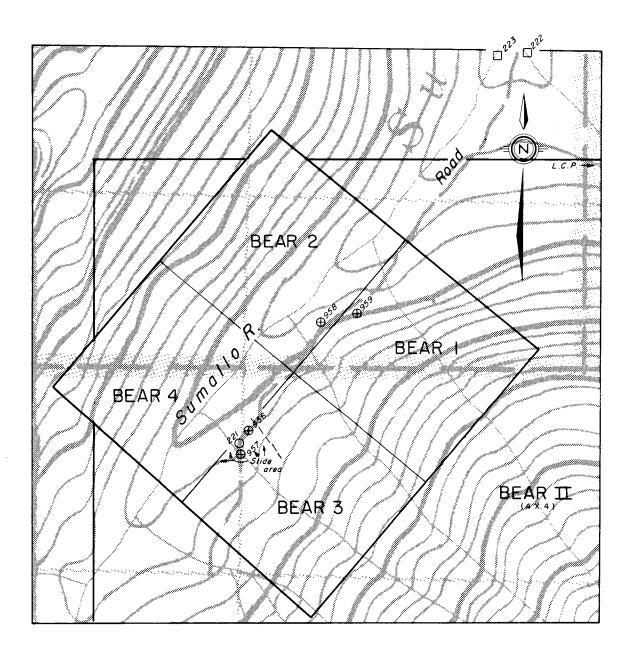
SUECON DEVELOPMENT CORPORATION

N.T.S. 92 H/3E

CLAIM MAP
BEAR CLAIMS

New Westminster Mining Division - British Columbia

exploration Ita



### LEGEND

Ф<sup>95</sup>6

Rock chip sample, sample number.

Silt sample site, sample number.

221

Soil sample site, sample number.

Claim boundary.

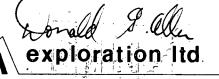
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## SUECON DEVELOPMENT CORPORATION BEAR PROPERTY

NEW WESTMINSTER MINING DIVISION - BRITISH COLUMBIA

CLAIMS & SAMPLE SITES



"The late Paleozoic (?) Hozameen Group consists of four divisions composed of various proportions of ribbon chert, basic lavas (now greenstones), limestone, and argillite, totalling at least 20,000 ft in thickness. In late Paleozoic or Triassic time, these rocks were metamorphosed to form the Custer Gneiss, a highgrade migmatitic complex of layered gneiss and schist. A second episode of highgrade regional metamorphism in Late Cretaceous time is associated with the emplacement of the Spuzzum Intrusions. followed by the Yale Intrusions (mainly foliated granodiorite), deposition of Eocene conglomerate and sandstone, and intrusion of Chilliwack batholithic rocks (mainly tonalite), which are partly of Miocene age. Several periods of deformation, some associated with the orogenies mentioned above, produced fold axes trending northwest, northeast, and northerly. The area contains three main fault zones. separates the Custer Gneiss from its overlying cover of Hozameen rocks. A second, the Hozameen fault, separates the Hozameen beds from Mesozoic formations to the east and contains the 'serpentine belt'. third, the Fraser River fault zone, is represented by the Hope and Yale faults."

Plutonism of Miocene to Oligocene age was accompanied by extensive vulcanism (Skagit formation, figure 4) and mineralization in the Cascade Range. A number of important base, precious metal, and porphyry copper and molybdenum deposits in B. C. and Washington State are associated with these young rocks including the CANAM copper and Clear Creek molybdenum deposits. The CANAM copper deposit, a breccia pipe mineralized with copper and minor amounts of gold, silver, tungsten and uranium, lies 16 kilometres to the east of the BEAR property.

### Property Geology and Mineralization

According to McTaggart and Thompson (1967), the headwaters of the Sumallo River are underlain by greenstone, chert and limestone of the Hozameen Group (figure 4). Bedding in these units strike northwesterly and dip moderately to the southwest. A quartz diorite stock of Miocene age outcrops four kilometres to the west. Rock types observed by the writer in the claim area include light green greenstone, tuff and chert. Fractured greenstone containing veinlets of pyrrhotite with or without quartz tremolite, sphalerite, and chalcopyrite (samples 955 to 959) were observed in float over a wide area. Also observed in float was a 1-2 cm wide quartz vein containing galena, sphalerite and minor amounts of chalcopyrite (sample 957, figure 5).

The fracture controlled nature of mineralization on the BEAR claims suggests a comparison with the widespread mineralized fractures and breccias on the CANAM copper property (White, 1949; Bacon, 1954; Eastwood, 1965).

Results of assay and geochemical analysis of mineralized

float are presented in part below and in Appendix I. One soil sample, S221, and two silt samples, S222 and S223, were collected from the claim area. Of note are anomalous values of silver (0.6-0.8 ppm), lead (42-66 ppm), zinc (134-1100 ppm), and copper (80-152 ppm) in all samples.

TABLE I - ROCK DESCRIPTIONS AND ANALYTICAL RESULTS

				<u>Anal</u>	yses*	
Sample No.	Description	Cu %	Zn %	Pb %	oz./ton Ag	oz./ton Au
955	Greenstone float - continuing seams of pyrrhotite, sphalerite and tremolite.	0.03	1.15			
956	Greenstone with abundant pyrrhotite	0.03	0.03			
957	Qtz. vein float with galena, sphalerite, minor chalcopyrite.	0.18	1.94	5.0	2.92	0.035
958	Greenstone - veined with pyrrhotite	0.02	0.39			
959	Greenstone contain- ing veinlets pyrr- hotite quartz, chalcopyrite and sphalerite	0.04	0.52			

<sup>\*</sup> In part, converted from geochemical values reported in ppm.

### EXPLORATION POTENTIAL

Widespread zinc-lead mineralization and anomalous geochemical results from both the east and west tributaries of Sumallo River suggest good exploration potential.

Target types are mineralized breccia pipes of the CANAM type and/or vein type base metal deposits with associated precious metals.

### REFERENCES

- Bacon, W.R. (1954). A. M. in B.C. Dept. of Mines Annual Report for 1954, pp. A152-159.
- Eastwood, G.E.P. (1965). A. M. and Invermay, in B.C. Dept. of Mines Annual Report for 1965, pp. 206-213.
- McTaggart, H.C. and Thompson, R.M. (1967). Geology of Part of The Northern Cascades in Southern British Columbia. Canadian Journal of Earth Sciences, Vo. 4, pp. 1199-1228.
- Monger, J.W.H. (1970). Hope Map Area, West Half, B.C. Geological Survey of Canada, Paper 69-47.
- White, W.H. (1949). A. M.  $\underline{\text{in}}$  B.C. Dept. of Mines Annual Report for 1949, pp. A210-213.

### CERTIFICATE

- I, Donald G. Allen, certify that:
  - 1. I am a Consulting Geological Engineer, resident at 4570 Hoskins Road, North Vancouver, British Columbia.
  - 2. I am a graduate of the University of British Columbia with degrees in Geological Engineering (B.A.Sc., 1964; M.A.Sc., 1966).
  - 3. I have been practising my profession since 1964.
  - 4. I am a member in good standing of the Association of Professional Engineers of British Columbia.
  - 5. This report is based upon a property examination carried out personally on July 18, 1983 and upon information listed under References.
  - 6. I hold no interest, nor do I expect to receive any, in the BEAR claims or in Suecon Development Corporation.
  - 7. I consent to the use of this report in a Statement of Material Facts or in a Prospectus in connection with raising of funds for the project covered by this report.

July 9, 1984 Vancouver, B.C.

Donald G. Allen, P. Eng. (B.C.)

APPENDIX I
GEOCHEMICAL RESULTS

## Kossbacher Laboratory Ltd.

**GEOCHEMICAL ANALYSTS & ASSAYERS** 

### CERTIFICATE OF ANALYSIS

BURNABY, B. C.

CANADA

TELEPHONE: 299-6910

83275-1

INVOICE NO.

3212

A & M EXPLORATION LTD.

DATE ANALYSED AUG. 3,1983

No.	NORTH VANC	pΗ	Mo	c. c.	Ha	$Z_{m}$	РЬ	PPB Bu						No
01	83-1-955			302	0.4	11,500 284 16,500 3,900 5,200	10	10						01
02	83-1-956			266	0.4	284	6	10						02
03	82-1- 957			1.840	80.0	16.500	42000	1.100						03
04	83-1-958			198	0.6	3.900	74	10						04
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# Kossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C. CANADA

TELEPHONE: 299-6910

CERTIFICATE NO.

83275-2

INVOICE NO.

3212

DATE ANALYSED AUG. 5, 1983

CERTIFICATE OF ANALYSIS A & M EXPLORATION LTD.

No	BEAR				PPB	$\mathcal{P}_{\mathcal{b}}$	22	As	Cu	Мо	ρН	NORTH VAN	No.
01					Au			1.8	ł				
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# Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE., BURNABY, B. C.

TELEPHONE: 299-6910

AREA CODE: 604

### CERTIFICATE OF ANALYSIS

A & M EXPLORATION LTD.

4570 Hoskins Rd.

North Vancouver, B.C.

CERTIFICATE NO. 83275-3

INVOICE NO. 3212

DATE RECEIVED

DATE ANALYSED July 28,1983

ATTN: Bear Claims

83-1-957 5.00 1.9	oz/T Ag 04 2.92
	·
	Carilliad by Allasback

APPENDIX II
AFFIDAVIT OF EXPENSES

### AFFIDAVIT OF EXPENSES

This will certify that geological mapping and geochemical sampling was carried out on July 18, 1983 on the BEAR 1 to 4 claims, Sumallo River area, New Westminster Mining Division, British Columbia, to the value of the following:

### Salaries

D. G. Allen and E. Ascroft		\$	700.00
Assays			83.55
Room and board			23.92
Vehicle expense and gas			56.67
Report, typing, draughting, compilation	15 hrs. @ \$15		225.00
Maps, photocopying			58.95
		\$ 1	,148.09

Donald G. Allen P. Eng., B. C.