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G E O L O G I C A L R E P O R T

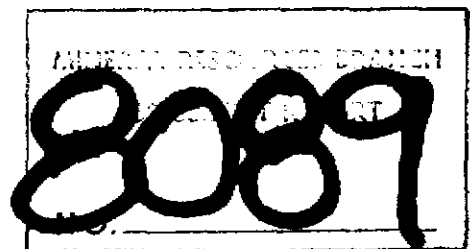
O N

THE ACE GROUP OF CLAIMS
CORNISH MOUNTAIN, WELLS, CARIBOO M.D.
N.T.S. 93 H/4E

For: Canca! Mines Ltd.

By: I. Borovic, P. Eng.
Consulting Geologist

June 6. 1980



IGNA engineering & consulting ltd.

I N V O I C E # 31

June 17, 1980

CANCAL MINES LTD.
102B-3350 Fraser St.
Vancouver, B.C.
V5V 4C1

Professional services:

Property examination (April 28&29).....	\$ 400.00
Report , 7.5 days @ \$ 200.00.....	1,500.00
Expenses(typing,copying,drafting).....	188.21
Expenses(field trip).....	220.05

TOTAL\$2,308.26

ADVANCE *500.00*

CK #1

147

BALANCE DUE ~~\$1,808.26~~ *\$2,308.26*

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Summary, Conclusions & Recommendations

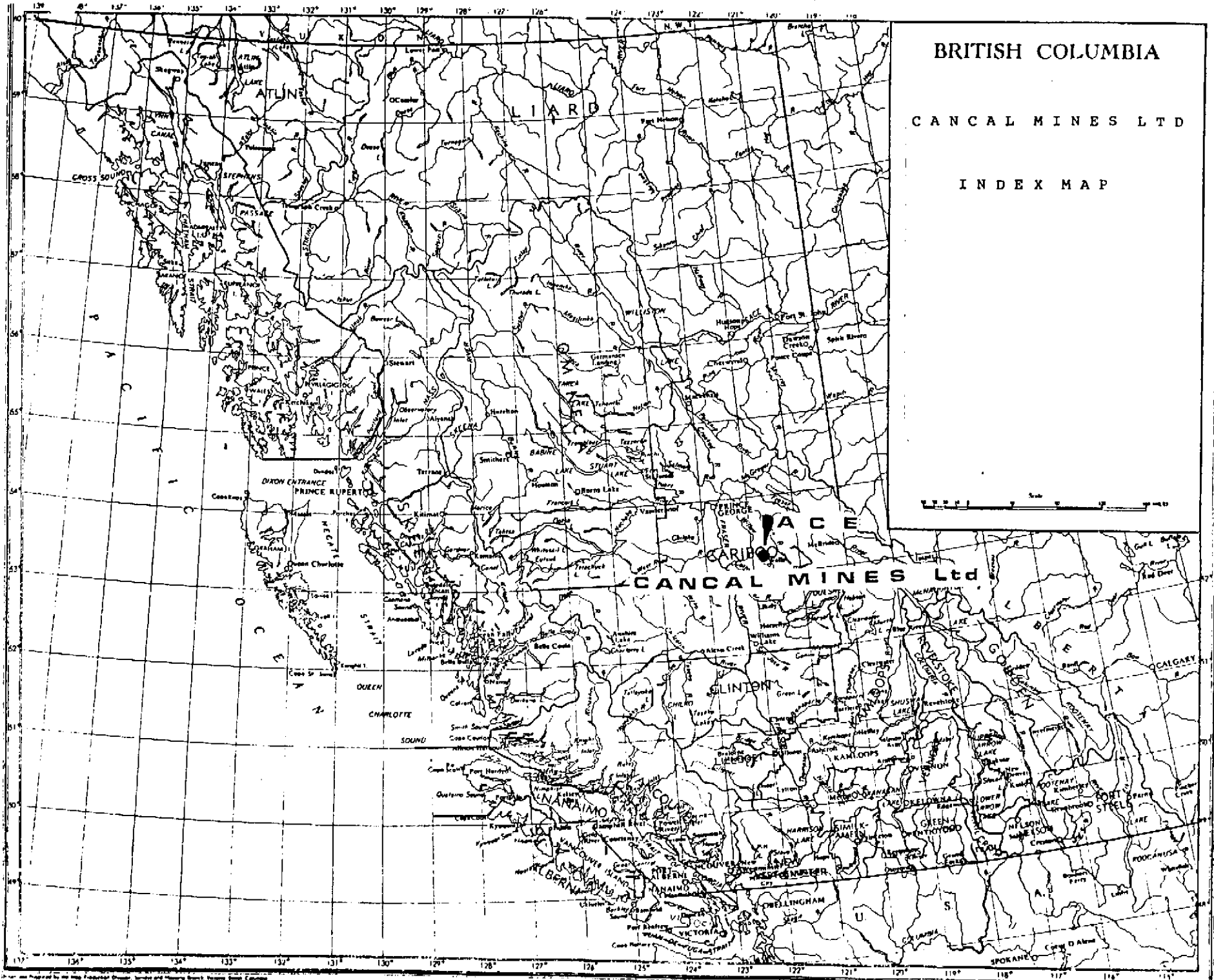
The Ace group of claims is located on southern slopes of Cornish Mountain, northeast of Mosquito Creek Gold Mine Ltd. about 1.5 km north of the town of Wells, B. C.

The property covers an area underlain by the rocks of Snowshoe formation, the uppermost formation of the Lower Cambrian Cariboo group.

The formation contains numerous limestone lenses with pyrite-gold replacement type mineralization. It is tightly folded and gold-pyrite bearing structures have been mapped by various geologists in the area of Mosquito Creek (Island Mountain). The structures continue onto the Ace property.

In view of the fact that similar or the same rock types and same structures descend onto the Ace property it is quite possible that similar types of gold-pyrite mineralization will be found in this same geological environment as shown by results of "oldtimers" underground workings which intersected gold bearing quartz veins.

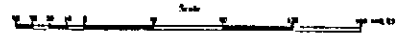
Therefore, the Canca Mines Ltd. has in its Ace property excellent mineral exploration area which, in my opinion, is well worth exploring.



BRITISH COLUMBIA

CANCAL MINES LTD

INDEX MAP



CANCAL MINES Ltd

INTRODUCTION

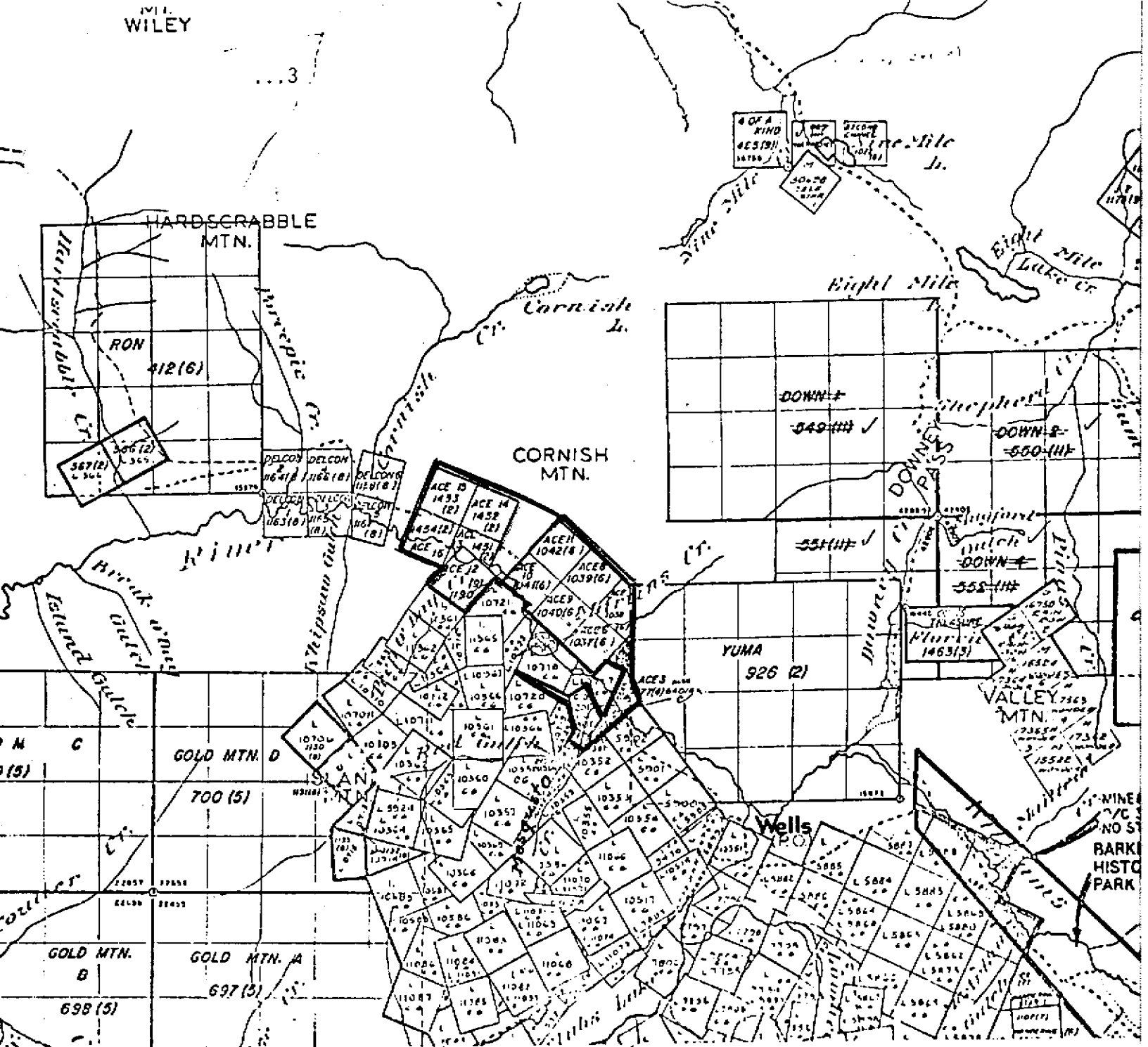
The following report has been commissioned by Mr. William Alley & CancaI Mines Ltd. of 102B - 3350 Fraser St., Vancouver, B. C. for submission to the British Columbia Securities Commission for permission to issue a prospectus in the name of CancaI Mines Ltd. The company intends to participate in the exploration of the Ace Group of claims which cover an area on the southern slopes of Cornish Mountain north of Mosquito Creek Gold Mine Ltd. near the town of Wells, B. C.

PROPERTY (See Claim Location Map)

The property consists of following mineral claims and fractions:

	<u>Rec. Date</u>	<u>Date of Expiry</u>
Wallace #1 FR M.C.....	June 23, 1970	June 23, 1980
" #4 FR.....	July 10, 1973	
Ace #3 FR M.C.....	April 6, 1976	April 6, 1981
" #5 M.C.....	June 22, 1979	June 22, 1980
" #6 M.C.....	"	"
" #7 M.C.....	"	"
" #8 M.C.....	"	"
" #9 M.C.....	"	"
" #10 M.C.....	"	"
" #11 M.C.....	"	"
" #12 M.C.....	Sept. 10, 1979	Sept. 10, 1980
" #14 M.C.....	Feb. 29, 1980	Feb. 29, 1981
" #15 M.C.....	"	"
" #16 M.C.....	"	"
" #17 M.C.....	1980	1981
" #18 M.C.....	1980	1981

The claims were located as two post claims by Mr. Wally DeLynn of Quesnell, B. C. and acquired by CancaI Mines Ltd. by "The 1980 Agreement" dated April 22, 1980. The agreement grants the company "the sole, exclusive and irrevocable option to purchase mineral claims Ace #5 - #18 and fractional M.C. Ace #3 and Wallace #1 & #4."



Canca Mines Ltd.

Ace Group

Claim Location Map

1:50 000

93 H/4E

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LOCATION 53°8' & 123°35' (Location map 1:50,000)

The property is located on Cornish Mountain 1 km northwest of the town of Wells, B. C.

ACCESS

Access to the property is provided by a good logging and mine road originating in the town of Wells, passing along Willow River and crossing Martin Creek to the west. An old tote road turns toward the north from the mine road on the east side of the Creek and leads up Martin Creek about halfway to the top of Cornish Mountain.

FACILITIES, SERVICES AND RESOURCES

The town of Wells has adequate accommodations for the exploration personnel and some services like gasoline supplies and mechanical repairs are available. There is a school and health care facility. Commercial machinery and engineering supplies and services are available at the town of Quesnel 80 km to the west on a Cariboo Highway.

WATER

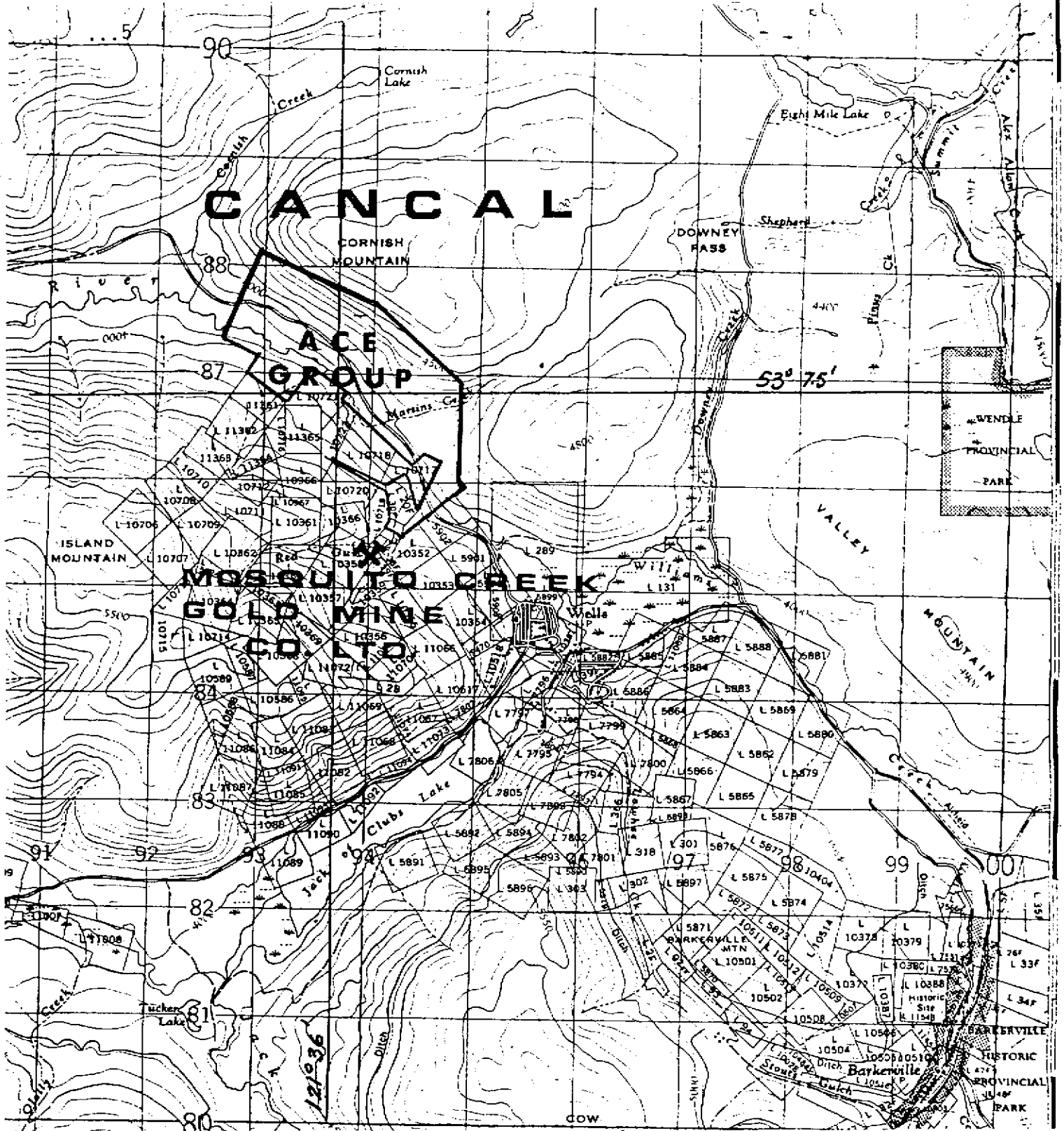
Water for drilling is available from Martin Creek but adequate supplies for drilling on the higher elevations will have to be pumped up from the Creek.

HISTORY OF EXPLORATION

(Area of the Ace Group of claims known as Cariboo Coronado)
(Minister of Mines Report 1935/36)

"In 1934 the Cariboo Coronado Mining Syndicate (today's part of Ace Group) carried on surface and underground exploration on its holdings northeast of Willow River, opposite Island Mountain.

The country rock consists of limestone and schist of Barkerville formation and of argillite and quartz-sericite schist of the overlying



Cancal Mines Ltd.

Ace Group

Location Map

1:50 000

N.T.S. 94 H/4E

Pleasant Valley formation.

An adit was driven north 13° west for 1,150 feet (Aug. 1934) into the mountain southeast of Martin Creek to cut veins exposed on the surface 500-800 feet higher. The objectives were not reached but the adit cut several quartz veins a few inches to two feet wide and several bands of calcareous argillite and of green schist partly replaced by pyrite.

Another adit was driven north 14° west for 385 feet into the mountain northwest of Martin Creek. This adit cut several narrow quartz gashes and stringers of irregular shape. Some of the quartz is well mineralized with pyrite. A band of replacement ore 2 inches wide cut by the adit assayed \$6 a ton in gold. Open cuts and a shaft on the mountain top expose several quartz veins a few inches to 8 feet wide mineralized with galena and pyrite. The veins strike north 30° east to northeast. Picked samples have assayed more than half an ounce of gold a ton. The veins are mostly in argillaceous and sericitic schists, but one is in a body of undefined shape of quartz porphyry."

CARIBOO CORONADA A. Sutherland Brown (1957)

"The property consisted of a group of recorded claims on the south side of Mount Cornish and was developed by two adits in 1933-1934, but the claims have since lapsed and the company, "Cariboo Coronada Gold Mines Limited" is without equity.

The main adit is one-half mile north of Wells at the base of Mount Cornish. It is now caved at the portal. The adit is reported to have been driven north 13° west for more than 1,300 feet but did not reach its objective, which was the downward projection of a group of veins on Mount Cornish 700 feet in elevation above the portal.

The veins on the surface are northerly to transverse in strike, and one is reported to be 8 feet wide.

The rocks on the property are very poorly exposed phyllite, meta-siltstone, limestone, and some quartzite of the Snowshoe formation. The adit is near the axis of the Snowshoe synclorium."

Since early 1930 there has not been much exploration work recorded in the area of the Ace Group.

GEOLOGY

Cariboo Group A. Sutherland Brown (1957)

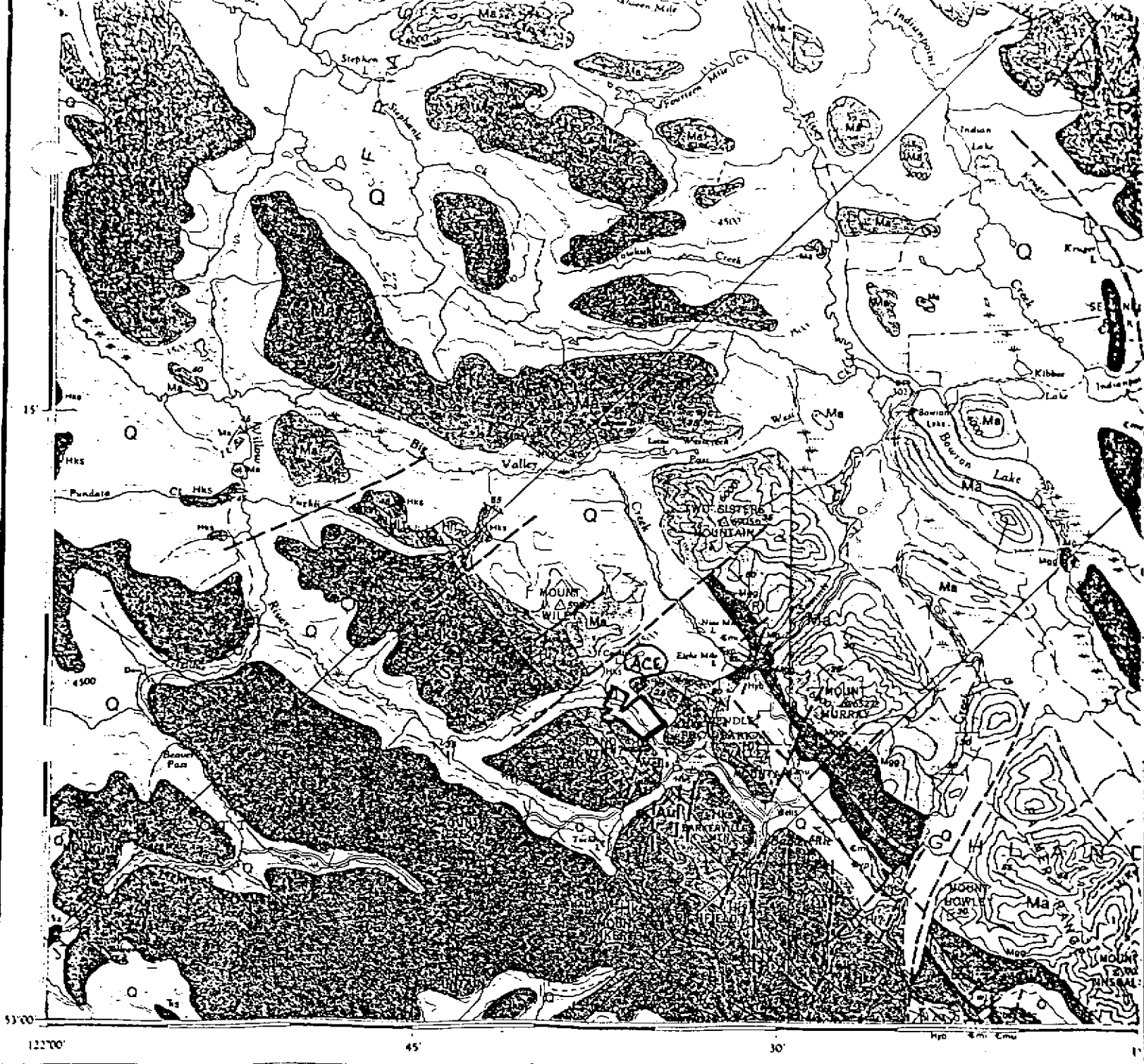
The rocks of the Cariboo group underlie the area of the Ace group of claims.

The Cariboo group is composed predominantly of clastic rocks with lesser amounts of carbonate rocks. The rocks were subject to low-grade regional metamorphism and intense deformation. Metamorphism has developed large porphyroblasts out of muscovite and chlorite but amounts of biotite and chloritoid produced are small. Deformation has developed important secondary foliation on almost all clastic and some carbonate rocks. There is also noticeable development of "dimensional" orientation of mica, quartz, feldspar and carbonate minerals. The most deformed rocks show a "flaser" structure. Economically important is a local hydrothermal alteration superimposed on the products of regional metamorphism. The hydrothermal products are bleached, silicified, chloritized, and ankeritized rocks.

Cariboo group is less than 4000 feet thick in the Wells area. It consists of five recognizable formations. (see Table of Formation) The age of the Cariboo group is Early Cambrian and younger and was determined on the basis of Archaeocyathid and Trilobite faunas found

Table II.—Table of Formations

Era	Period or Epoch	Unit and Thickness (Feet)	Lithology	
Cenozoic.	Pleistocene and Recent.		Glacial till; glacio-fluvial sand, gravel, silt; alluvium.	
	Unconformable contact.			
	Tertiary(?).		Partly cemented limonitic river-bed gravels.	
Unconformable contact.				
Upper Palæozoic.	Carboniferous(?) and (?) later.	Mount Murray intrusions.	Diabase and other basic sills and dykes; lamprophyre dykes.	
	Intrusive contact.			
	Carboniferous.	Slide Mountain group.	Antler formation 3,000+.	Brown, grey, white, or green chert; grey argillite; basic volcanic flow and pyroclastic rocks.
			Conformable contact.	
			Guyet formation 1,125-1,500.	Grey to brown conglomerate; grey greywacke to slate; basic volcanic flow and pyroclastic rocks; light grey to white, cherty crinoidal limestone.
Unconformable contact.				
Lower Palæozoic.		Proserpine dykes.	Brown weathering acidic dykes.	
	Intrusive contact.			
	Lower Cambrian and later.	Cariboo group.	Sn:whoe formation 1,000+.	Grey to brown, micaceous quartzite; brown, grey, or green phyllite, metasiltstone; black to white limestone, granule conglomerate.
			Conformable or slightly unconformable contact.	
			Midas formation 1,000+.	Black to dark grey, quartzose phyllite, and metasiltstone; black to grey limestone.
			Conformable contact.	
			Yanks Peak quartzite 0-200.	Grey to white, massive medium-grained quartzite.
			Conformable with Yanks Peak or Midas formation.	
			Yankee Belle formation 300-500.	Brown phyllite, metasiltstone, fine-grained quartzite.
	Conformable contact.			
		Cunningham limestone 2,000+.	Thinly bedded to massive, grey finely crystalline limestone, buff coarsely crystalline ferroan dolomite; minor limy phyllite.	
Conformable contact.				
Proterozoic.	Late Proterozoic.	Kaza group 6,000+.	Green schist, schistose greywacke, micaceous quartzite.	



Geology by R.B. Campbell, 1966, 1967 and by E.W. Mountjoy, 1967

PROTEROZOIC

- Hc** CUNNINGHAM FORMATION: limestone, dolostone, shale, phyllite

- Hi** ISAAC FORMATION: phyllite, argillite, schist and shale, minor siltstone, feldspathic sandstone and conglomerate, limestone

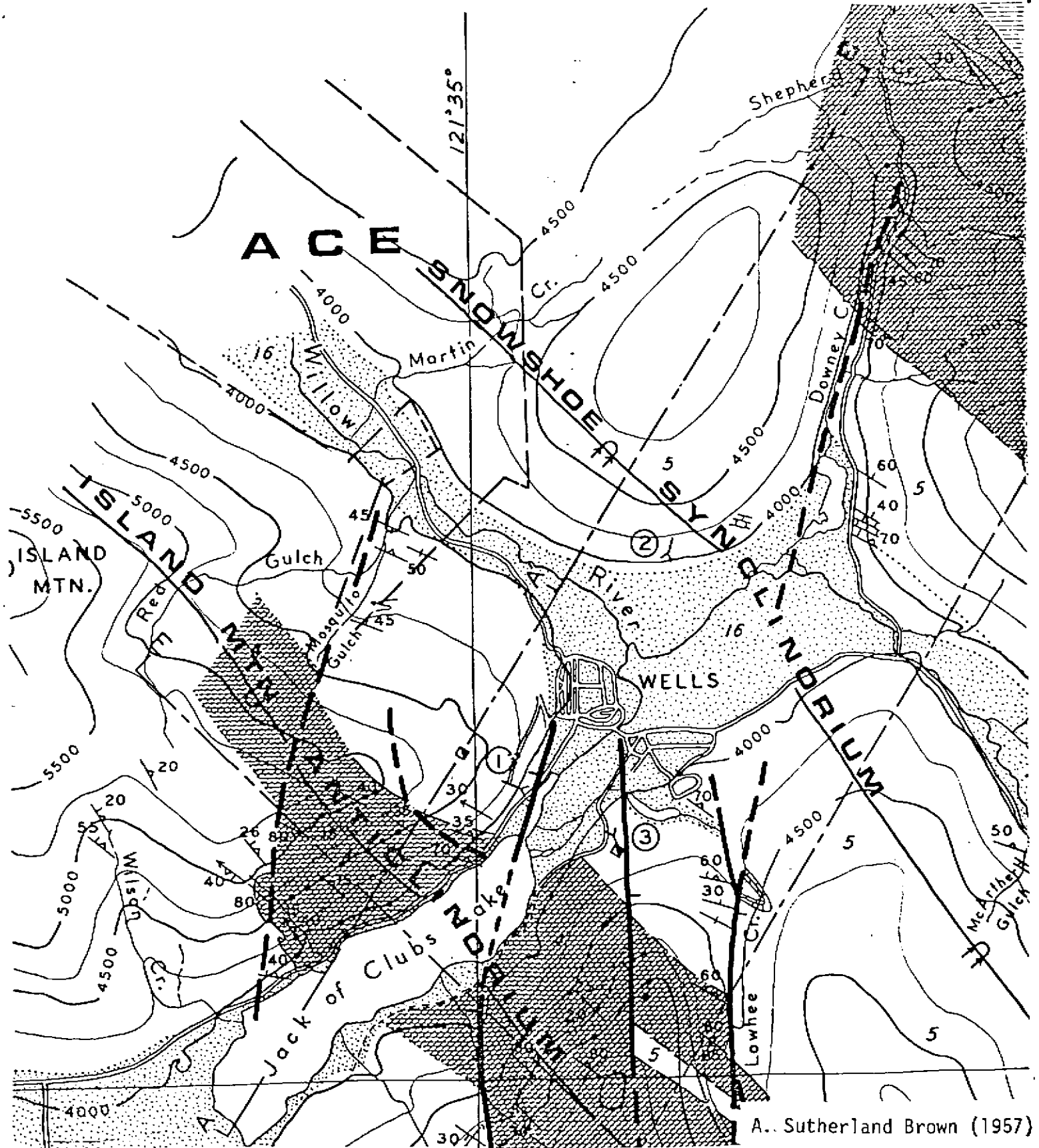
- Hk** / **Hks** KAZA GROUP (Hk) AND SNOWSHOE FORMATION (Hks)
 Hk, feldspathic sandstone and granule conglomerate, locally micaceous and schistose; argillite, phyllite and schist, minor conglomerate, limestone, and marble. Hks; Snowshoe Formation interpreted as part of Kaza Group

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Ace Group

Regional Geological Map
Scale 1:250 000

Cariboo M.D. B. C.
93 H/4E

- Geological contact (defined, approximate or assumed, covered)
- Bedding (horizontal, inclined, vertical, overturned)
- Foliation, cleavage and schistosity (inclined, vertical)
- Fault (defined, approximate or assumed)
- Fault (defined, approximate or assumed) dot on downthrown side
- Thrust or reverse fault (defined, approximate or assumed)
- Teeth in direction of dip



A. Sutherland Brown (1957)

CARIBOO GROUP (1-5)
 5 SNOWSHOE FORMATION: grey to brown micaceous quartzite, phyllitic siltstone, phyllite, fine conglomerate; grey to white limestone -

MIDAS FORMATION: black quartzose phyllite, slate, argillite, grey limestone

- Geological boundary (defined, approximate, assumed)
- Bedding (horizontal, inclined, vertical)
- Structure (horizontal, vertical)
- Plunge
- Bedding, structure, and slope combined
- Drainage (plunge, assumed)
- Fault (defined, approximate, assumed)
- Fault (defined, approximate, and no doubt from side)
- Architectural (assumed, marked)
- Special use (assumed, marked)
- Other (arrow)
- East
- North

Canal Mines Ltd.
Ace Group

Regional Geological Map
Scale 1" = 1/2 Mile

Cariboo M.D. B. C.
Q3 H/4F

in thick limestones of Cunningham Limestone formation which is the basal formation of the Cariboo group.

Snowshoe Formation

The Snowshoe Formation underlies the Ace Claim area. It is the youngest formation of the Cariboo group.

The exposures are scarce in lower areas of the Cornish Mountain but the higher elevations, creeks and gulleys are places with a number of exposures of the Snowshoe rocks.

The formation is composed of clastic rocks and limestones. The clastic rocks are poorly sorted, schistose lenticular greywackes. The limestones are thin, lenticular and impure.

STRUCTURE

The rocks of Cariboo group are intensely deformed. They have been "compressed into northwesterly trending complex folds which are overturned toward the southwest" (A. Sutherland Brown (1957) in the Wells area.

"A regional secondary foliation is developed parallel to the axial planes of folds, striking northwest and dipping to the northeast." Fold axes plunge to the northwest at gentle angles.

A number of prominent faults cut through the Cariboo group striking northward and dipping steeply to the east.

The major structure in the Ace group is the Snowshoe synclinorium.

The Synclinorium, comprised of the rocks of the Snowshoe Formation is compressed into many smaller scale very complex folds. (See Section A - B through Island and Cornish Mountains)

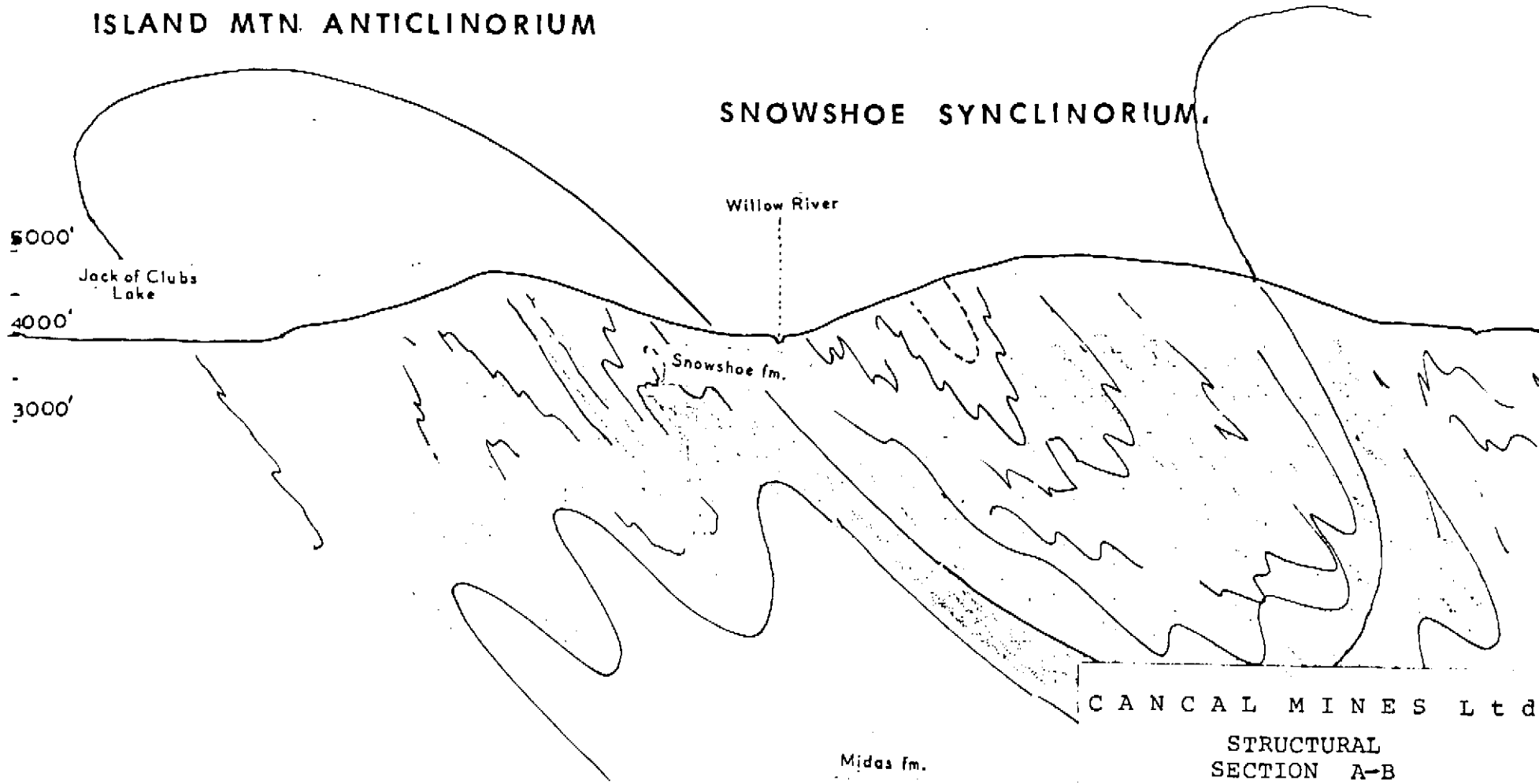
The section A - B shows Island Mtn. anticlinorium descending into Snowshoe synclinorium. Thus allowing for the same geological

A

B

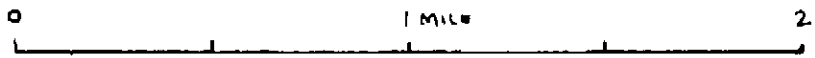
ISLAND MTN. ANTICLINORIUM

SNOWSHOE SYNCLINORIUM



CANICAL MINES Ltd

STRUCTURAL
SECTION A-B



after A.Sutherland Brown 1957

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conditions which produced replacement pyrite-gold mineralization in the Island Mountain, Cariboo Gold Quartz and Mosquito Creek Gold Mines.

All secondary folds plunge to the northwest from 7 to 10 degrees but sometimes locally as great as 25 degrees.

The northerly striking normal faults are considered to be the cause of fold plunges.

Fold structures are asymmetrical and complex and are not easy to map without adding a great deal of interpretation. There are three major developments in structural interpretation starting with Hanson (1935), Benedict (1945) and A. Sutherland Brown (1957).

A. Sutherland Brown's interpretation is one showing a very complex Island Mountain anticlinorium descending to the Snowshoe synclinorium.

Mineralization

In the area of the Island Mountain, Mosquito Creek Gold Mine, gold mineralization occurs associated with medium to coarse grained pyrite, both in quartz veins and as replacement limestone lenses. The quartz veins are gash veins found mainly in the Rainbow member while replacement limestone lenses are found in softer calcareous Baker rocks.

The gold-bearing quartz veins fill fractures, many of which belong to the regionally developed joint system. These fractures cut across all the folds in the Cariboo series and represent part of the gold bearing rocks in the Martin Creek area.

The association of high gold values with pyrite is shown in areas adjacent to the Ace claims but there is no direct relation between the amount of gold content and the amount of pyrite. Experience in

Mosquito Creek and old Cariboo Gold Quartz and Island Mountain Mines shows that high gold values are associated with fine-grained rather than coarse-grained pyrite.

The pyrite-gold bearing limestone lenses plunge to the northwest paralleling the plunge of the main structures.

Mineralization is of the selective replacement type. (G. H. Klein (1980)

PROPERTY EXAMINATION

Property examination took place on April 28 and 29. The author was accompanied by Mr. Wally DeLynn, the original owner of Ace Claims.

STAKING

The #1 and #2 post for Ace #5 and # 6 follows approximate direction to the north and passes over a survey pin L 10717.

Staking line of Ace #7 strikes in the northwesterly direction from #2 post of Ace #5 and #6 and crossed the Martin Creek about 100 m to the west.

GEOLOGY

Due to snow conditions only portions of Martin Creek and southern slopes of Cornish Mountain were traversed.

There are a number of old glory holes along the creek and some evidence of early days placer mining.

Rocks found in a float on the slopes range from limestones to schistose greywackes similar to clastic rocks and limestones of the Snowshoe formation showing that underlying rocks are part of the larger structure which continues from Mosquito Creek (Island Mountain) as mapped by A. Sutherland Brown (1957) & Campbell (1973) et al (see Geological Maps 1:250,000 and 1" = ½ mile)

EXPLORATION REQUIREMENTS AND COST ESTIMATES

In order to explore the property and bring it to the next evaluation stage, the following work is required:

- Phase I
1. Establishing an exploration grid
 2. Geological
 - a) Topographic map 1:5000 (airphoto base)
 - b) Geological detail mapping on the airphoto based topographic-map scale 1:5000
 3. Geochemical soil survey.

- Phase II
4. Geophysical EM survey
 5. Trenching the areas with shallow overburden to complement and help with geological mapping
 6. Restoration, if possible, of existing underground and surface working

Cost Estimates

<u>Phase I</u>	1. Line cutting	\$ 10,000
	2a. Topographic map 1:5000	3,000
	2b. Geological mapping	5,000
	3. Geochemical Soil Survey	10,000
	Assaying	5,000
	4. EM survey	<u>15,000</u>
		\$ 48,000
<u>Phase II</u>	5. Trenching	25,000
	6. Restoration of underground workings	<u>25,000</u>
		\$ 50,000

Phase I - \$48,000

Phase II - \$50,000

Total Estimated budget \$98,000

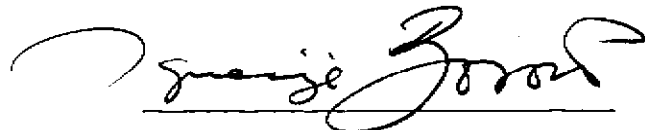
C E R T I F I C A T E

I, Ignacije Borovic, of the city of Vancouver, B. C. do hereby certify that:

1. I am a member of the Association of Professional Engineers in the province of British Columbia.
2. I am employed by Igna Engineering and Consulting Ltd. with office at 4258 W. 10th Avenue, Vancouver, B. C.
3. I am graduate of the University of Zagreb and I have practiced continuously as a geologist and graduate geological engineer since 1962.
4. I do not have any direct or indirect interest in the properties or securities of Cancal Mines Ltd. nor do I expect to receive any.
5. This report is based on a research and study of available data, personal examination of Ace Property and personal knowledge of the Mosquito Creek Gold Mine and Wells area.
6. Permission is granted to Cancal Mines Ltd. to use this report to satisfy requirements of Stock Exchanges and/or Securities Commissions and for the purpose of a financial prospectus.

Vancouver, B. C.

June, 1980



I. Borovic, P. Eng.

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