672821 92F/6

August 14th, 1968.

Mr. Don Wilson, Richardson & Wilson Securities Ltd., 556 Howe St., Vancouver, 1, B.C.

Dear Sir:

Re: McIntyre Prospect, Porter Mountain, Alberni Mining Division

Pursuant to your request, I visited and examined the antimony showings on Porter Mountain on Tuesday, July 9th, 1968. I was accompanied by Mr. McIntyre.

Property

The property consists of twenty mineral claims, called the "H.M." claims, which are in good standing.

Record Nos.

Located by

12416	-	12425	
12199	10	12201	
12202	-	12204	
12269	-	12272	

McIntyre & H. Bowler H. Bowler & McIntyre H. Audet Harvey Bowler

These claims lie on the north side of Porter Mountain, and are due south of Beauty Island in Great Central Lake, at El. 2500' to 3000'. Map Ref. 49° 15' North and 125° 17' West.

<u>General</u>

Access to within about one mile is by means of No. 12 road of the Sproat Lake Division of MacMillan Bloedel. The area is heavily timbered and is snow-covered in winter. Overburden averages about five feet. There are several small lakes close to the showings which could supply water for diamond drilling.

Voin Structure

A quartz vein structure has been exposed in six places over a strike length of about 1200 feet, by trenching. Its general strike is N 20° W, and its dip is vertical to 80° West. This dip is consistent over the length exposed and the vein is regular.

The vein structure disappears under snow at the southeastern end, but has reportedly been traced for a further two miles to the northwest. Exploration on this extended section could more easily be carried out by approaching it from Great Central Lake.

In the trenches and places where streams have cut across the mineralized structure, the vain is consistently strong, averages three feet wide, and varies from one to four feet wide.

On either side of the quartz is a heavily weathered zone consisting of what appears to be kaolinised diorite. This weathered zone varies in width between 30 and 40 feet.

Road rock cuts situated some distance easterly expose granitic material.

Mineralization

The vein contains one, two or as many as three lenses or pods of stibuite measuring between 2 and 8 inches wide. The lengths of these pods are indeterminate, because the exposed outcrops and trenched areas are very short along the strike of the vein. Continuity of mineralization is thus open to question.

The stibuite occurs as coarse crystals; there are also traces of realgar and lesser orpiment. Minor pyrite is present, but no other important mineral was observed.

A grab sample, which is not necessarily representative of the average mineralization, assayed as follows:

Au	TTe
Ag	0.2 ozs/ton
Sb	9.93%
AB	0.02%
Hg	0.043%

Marketing

"Metals Week" of 1st July 1968, quotes antimony metal at 44¢ per 1b.

The Cominco Marketing Division at Trail (Mr. G. Siddall) says that they are not able to quote without a firm proposal, but suggest a net smalter return of 50% (i.e. about 22¢ per 1b. of antimony) with an arsenic penalty of \$1.25 per unit.

Further, they could possibly handle about one ton per day of metal content, but are not at all enthusiastic.

North American consumption of antimony is supplied approximately 60% by salvage, chiefly from storage batteries. Chinese production covers most of the balance.

In summary, the market for antimony is poor in North America, and firm contracts are seldom made. "Spot" price purchases on an occasional basis are common, and something less than the quoted price must be anticipated.

Reconceries

An approximate evaluation of the economics related to antimony production from this property would be as follows:

Ore production rate - tons/year35,00070,000Approximate grade required - feed to concentrator12% sb10% sbPounds Sb sold/ton ore 0 85% recovery204170Net smalter returns/ton ore 0 44€/lb, quoted price - say - 35€/lb, negotiated price\$36.72\$30.60Estimated operating cost/ton ore (underground mining)\$30.00\$22.00Operating profit/ton ore\$6.72\$8.60Operating profit/year\$235,000\$602,000	Ore production rate - tons/day	100	200
feed to concentrator12% Sb10% SbFounds Sb sold/ton ore @ 85% recovery204170Net smelter returns/ton ore @ 44¢/lb. quoted price - say - 35¢/lb. negotiated price\$36.72\$30.60Estimated operating cost/ton ore (underground mining)\$30.00\$22.00Operating profit/ton ore\$6.72\$8.60	Ore production rate - tons/year	35,000	70,000
Net smelter returns/ton ore © 44#/lb. quoted price - say - 35#/lb. negotiated price\$36.72\$30.60Estimated operating cost/ton ore (underground mining)\$30.00\$22.00Operating profit/ton ore\$6.72\$8.60		12% Sb	10% SD
@ 44#/lb. quoted price - say - 35#/lb. negotiated price\$36.72\$30.60Estimated operating cost/ton ore (underground mining)\$30.00\$22.00Operating profit/ton ore\$6.72\$8.60	Pounds Sb sold/ton ore 0 85% recovery	204	170
(underground mining)\$30.00\$22.00Operating profit/ton ore\$6.72\$8.60	@ 44#/1b. quoted price - say -	\$36.72	\$30.60
		\$30.00	\$22.00
Operating profit/year \$235,000 \$602,000	Operating profit/ton ore	\$6.72	\$8.60
	Operating profit/year	\$235,000	\$602,000

Estimated capital cost to place in production

\$1,000,000 \$1,500,000

210,000

210,000

Years production required to recoup capital investment, and interest thereon 6 3

Tons of ore required - ditto

Summary & Conclusions

A strong regular vein containing stibuite, averaging 3 feet wide, has been partially exposed over a strike length of at least 1200 feet. If one third of this vein is mineralized, tons per vertical foot would be 100, and total tons indicated to 400 feet in depth could be of the order of 40,000

Consideration of the general economics involved leads to the conclusion that about 400,000 tons of material containing 10% to 12% Sb, or ten times that which is now partially exposed, would be required to support an economic operation. Careful investigation of marketing possibilities must precede any large capital expenditures related to production plans.

Recommendations

If further work is considered worthwhile, it is suggested this work should be carried out as follows:

- 1. Extensions along the strike of the vein could be determined, by tractor trenching at regular intervals of 100 feet.
- Possibilities of parallel veins should be investigated by careful prospecting.
- The section of the vein now partially exposed should be cleaned off down to solid rock at regular intervals of 100 feet, and channel samples taken.

The cost of the work is estimated roughly as follows:

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Cost Estimate

10 trenches (2 weeks - Caterpillar D-4 type tractor or equivalent @ \$100 per day)	\$1,500
Gasoline rock drill - monthly rental	200
Explosives, etc.	200
Labour - 2 men - 2 weeks @ \$40 per day	1,,200
Mise. camp & transport cost	1,000
2 general helpers (2 weeks @ \$30 per day)	900
Provisions	600
Total	\$5,600

Further work would depend on results obtained. If these results were favourable, core diamond drilling to test depth extensions should follow.

Respectfully submitted,

BACON and CROWHURST

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