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DON GROUP

WATSON LANE BLDG., N.Y.

By

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August 25, 1966

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INTRODUCTION

Boswell River Mines Limited is in the process of negotiating the acquisition of the ten claim Ben Group, situated in the valley of Swift River, approximately 12 air miles due north of milepost 730 on the Alaska Highway, in the Watson Lake Mining Division of Yukon Territory.

The writer has been requested by Boswell River Mines Limited to evaluate these showings.

The writer has visited this occurrence in June 1962 while in the employ of Cominco Ltd., and again in July 1966 for Boswell River Mines Ltd.

PROPERTY

The property consists of the following claims:

Ben 1 - 10, Grants not yet issued at the time of writing.

These claims are located 12 miles east of the Pine Lake airstrip, on claim sheet 105-R-3, approximately 90 air miles due west of Watson Lake, at an elevation of about 4000', in the Yukon Territory; they cover pyrrhotite-zinc showings with minor copper and/or lead-silver.

The property is accessible by a jeep road north of the Swift River, which road starts at mile 722 at the Pine Lake airstrip.

This road crosses the Swift River approximately one mile east of the claims; in summer, this stream can be forded by jeep. An old bridge at this location is now in disrepair.

The climate is typical of the Yukon, with about 3' to 4' of snow in winter.

Water is abundant and there is timber with butts up to 20" on the property.

HISTORY

The showings in this area were discovered in 1946 by Hudson Bay Mining & Smelting Company prospectors.

In late fall 1950, this company ran a Holiden electromagnetic survey over the showings under unfavourable conditions of wet weather.

Some strongly conducting zones were located near the bottom of the main valley, downslope from the pyrrhotite-zinc showings.

As a result, H.B.M. & S. drilled the conducting zones and made an attempt to drill the showings from a downslope position.

The conducting zones were found to consist of graphitic schists; the holes drilled for the depth extension of the showings failed to intersect them, as they had been spotted not only in the overburden terrace-slope below the showings, but were drilled at an angle nearly parallel to the dip of the occurrence.

In 1964, W. McKinnon of Yeelin, the discoverer and owner of the showings, opened up some of the showing area by bulldozer stripping. As his attention then became engaged by a mining development venture in the Logjam Creek area, no further work was done.

The writer visited the showings on June 24, 1962 and again on July 22, 1966.

Various other groups totalling some 50 claims have recently been staked on other showings within a few miles of the Lan Group, all in the same geological setting.

GEOLOGICAL SETTING

The showings in the area consist of zinc-bearing pyrrhotite, carrying in some cases lead and silver as well.

They occur in slightly shaly schists near diorite intrusives which, in this general area, are specifically associated with most if not all mineral showings.

These diorite intrusives are in general small bodies of from 1 to a few miles diameter and they form part of a NE trending belt of granodiorite and quartz monzonites, striking away from the Cassiar batholith. Part of this stock is of Upper Cretaceous or Lower Tertiary age; the diorites and occasional ultrabasic rocks of the area are the oldest intrusives, of probable Jurassic age.

These intrusives intrude a series of Devonian-Mississippian sediments bordered on the NE side by slightly older volcanic rocks of limited extent, which in turn overlie conformably Middle Devonian dolomites.

The sediments exhibit a low grade metamorphism which has given rise to hornfelses and marbles near the intrusives. The hornfelses are mostly metamorphosed quartzites, argillites and slates with minor chert; graphitic schist also occurs.

A number of base-metal occurrences of the copper-zinc-lead type in the Yukon are associated with similar formations of the same general Devonian-Mississippian age.

Large areas of Yukon schists are thought to be of the same age, including the schists in the Vancouver Creek area.

The mineralized belt in the Swift River area also lies slightly south of a strong NE fault following the course of the Swift River and of Pan Creek; this enhances considerably its attractiveness for further work.

DESCRIPTION OF MINING

The showings were originally discovered in a small creek a few hundred feet above the floor of the main valley. A trench was driven across them, reported by Newmont Mining to expose a 16' width of .07 Cu and 4.3 Zn.

These values occur with varying amounts of pyrrhotite interbedded in a skarny silicified thin-bedded argillite, striking N45° and dipping 70° SW.

The mineralized zone is hard, and therefore difficult to sample accurately.

Bulldozer work has tended to leave the hard sections exposed and to fill the softer areas with rubble.

The most representative samples taken by the writer average as follows, when only those samples are used in each location that were taken from well-exposed material at the time of the writer's visits, leaving aside those taken from poorly exposed outcrops. (See Fig. 2)

8085	2'	6.1 Zn
8180	6'	6.1 Zn
<hr/>		
Total width	8'	6.1 Zn
8084	7'	10.0 Zn
8083	2'	6.8 Zn
<hr/>		
Average	5.7'	6.0 Zn
length well exposed	40'	
Total length of mineralized zone:	85'	

Ag, Pb and Cu are low to negligible although there is visible chalcopyrite in places.

In trench No. 4, 700' to the SE of the main showing, a number of blocks have been exposed, which do not appear to be in place; as they occur on the slope of the terrace on which the main showing is located, their source is very likely to be the buried SE extension of the main showing.

The writer's two chip samples of four large "blocks" averaged 0.75 Ag, 3.2 Zn and 0.25 Pb. Most of this material is massive pyrrhotite which should be easy to locate in place by electromagnetic methods.

ECONOMIC POTENTIAL

1. The San Group is obviously not an isolated occurrence, as half a dozen similar showings are reported within a few miles of it. They form part of a definite mineral belt, related to the diorite intrusives.

2. Grade-wise, the San Group covers zinc occurrences. However, some of the showings in the area are reported to contain good silver values and low lead values.

One of the writer's samples showed 1.5 oz/t Au for 0.5% Pb, which suggests that in the presence of significant lead, very good silver values may be found.

It is noteworthy that the silver-gold occurrences at Longjam Creek, some 20 miles to the SW, are related to similar diorite intrusives. These occurrences consist of 6" to 2.5' wide quartz veins with high silver galena, a typical assay being 1.9% Au, 30.6 Ag, 2.7 Pb, 6.5 Zn.

3. There is no apparent structural control in the showings of the San Group. If significant folding is present along the mineralized zone, it would be an excellent target for improvement in size and grade.

The presence of low grade massive pyrrhotite in blocks of over 4' diameter indicates that there may be bodies of such more significant size.

4. In summary, the economic potential of these showings cannot be evaluated without further work. Particular attention should be paid to galena-bearing zones, as these can be expected to carry high silver values.

Although visible chalcocite has been observed by the writer, all indications suggest that the area has very little potential for copper.

FURTHER WORK

This is a typical area requiring a two-pronged attack, i.e. simultaneous work to establish the size and grade of the known showings and to determine where the best chances are for an improvement in the silver-lead grade both on the San claims and in the general area.

There is sufficient exposure on the San Group to require sampling by core-hole drilling of the known showings.

Their extension should be traced by visual and electromagnetic prospecting, keeping in mind that the latter method will mainly locate the pyrrhotite as sphalerite is a poor conductor.

The area as a whole warrants such core prospecting and geological mapping of selected targets, like showings and fold-and fault structures.

Accessibility of the area is very good, but the jeep road requires some improvements. There is plentiful water for drilling.

Core-hole drilling should be done from three stations 50' apart and located 40' SW of the showings. From each set-up a -45° and a -70° hole should be drilled for about 120' across the showing area, which will provide intersections at a vertical depth of about 35' and 70'.

Provision should be made to drill three 200' core-holes at -70° about 100' SW of the showings, to intersect their downward projection at a vertical depth of some 120' to 150'.

RECOMMENDED PROGRAM

The recommended program should be conducted in a flexible manner so as to shift at all times the emphasis towards the situation with the most promise.

Costs are estimated as follows:

Core hole drilling, 1200' @ \$12.00 per foot	\$ 14,500
Prospecting	2,000
Geological mapping	2,000
Line cutting, 100' grid	1,000
Electromagnetic survey	1,500
Stripping of anomalies	2,000
Road improvement	3,000
Engineering	2,000
Contingencies, 10%	<u>1,000</u>
Total	\$ 31,000

MINERALIZATION AND INTERPRETATIONS

The Lan Group of 10 claims covers a pyrrhotite-zinc showing interbedded in hornfelsic and sherry argillites in a sequence of Devonian-Mississippian sediments invaded by small intrusives of mineralizing diorites.

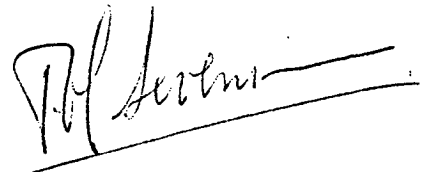
The outcrop averages 2.0% Zn over a width of 5.7' for an exposed length of 40'. The showing is open to the NS and at depth. On strike, barren and low grade pyrrhotite occur 45' and 700' to the NS, either in place or in large-size float.

Minor lead-silver mineralization is present, and in the area, any known lead occurrences carry high silver values.

It is recommended to appropriate \$1,000 to drill the showings, explore the claims and prospect in the area.

Respectfully submitted,

PETER H. SEVENEMA CONSULTANTS LTD.



P.H. Sevenema, Ph.D., P. Eng.

PHS/12

C E R T I F I C A T E

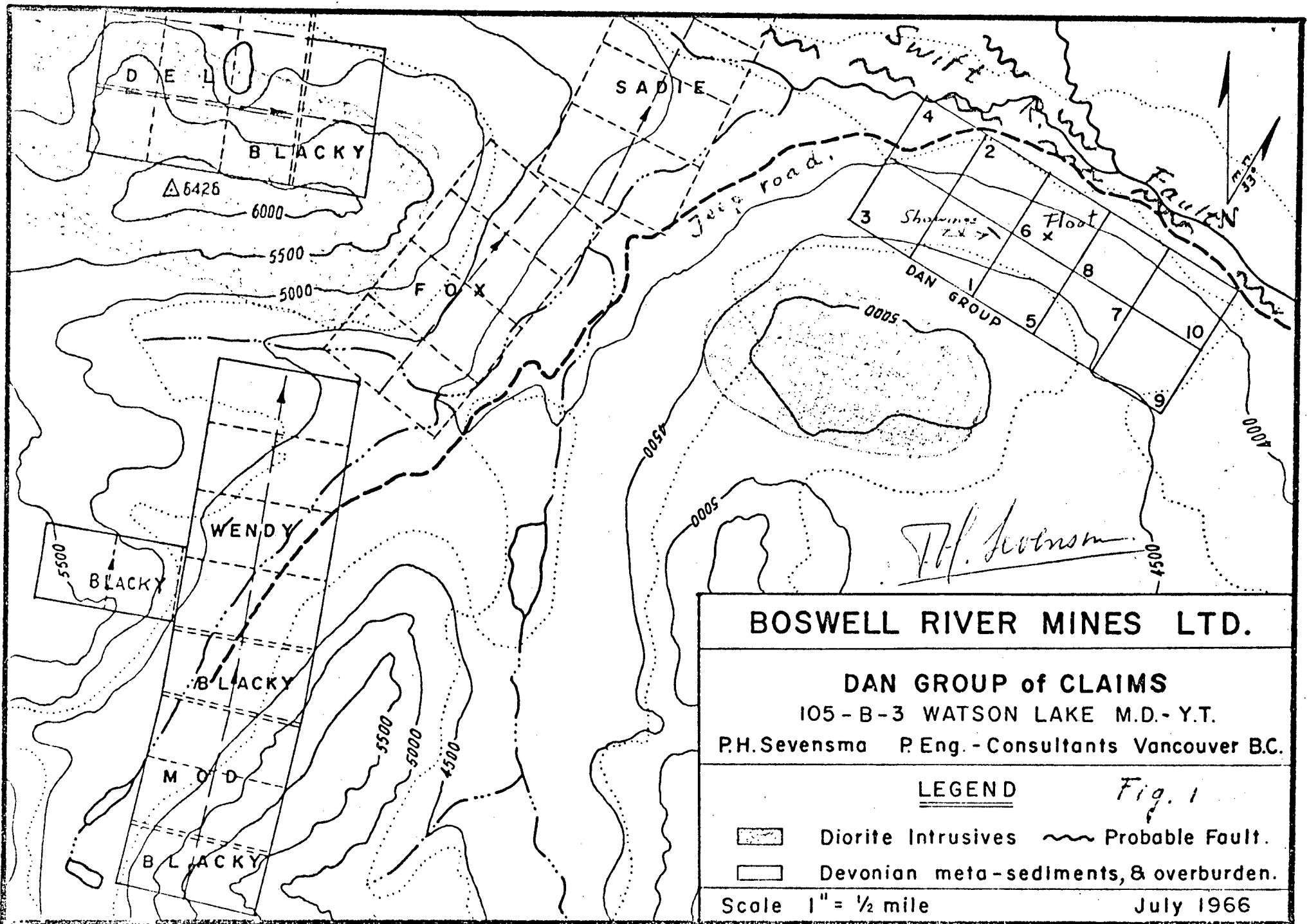
I, Peter H. Sevensma, of Vancouver, B.C. do hereby certify that:

1. I am a graduate of the University of Geneva, Switzerland (Physics and Chemistry 1937, Geology and Mineralogy 1937), where I obtained my Ph.D., in Geological and Mineralogical Sciences in 1941.
2. I am a Consulting Geological Engineer and a registered member in good standing of the Association of Professional Engineers of British Columbia and of the Association of Professional Engineers of Yukon Territory.
3. From February 1948 until December 1965 I have been engaged continuously in mining and exploration geology in the employ of the Consolidated Mining and Smelting Company of Canada Limited. As a Senior Exploration Geologist, I have worked extensively both in Eastern and Western Canada.
4. I have examined the showings described in this report on June 24th, 1962 and again on July 23rd, 1966 after additional trenching had been carried out.
5. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the claims discussed in this report or in the securities of Rossell Silver Mines Ltd.

Respectfully submitted,



P.H. Sevensma, Ph.D., P. Eng.



BOSWELL RIVER MINES LTD.

DAN GROUP of CLAIMS

105 - B - 3 WATSON LAKE M.D. - Y.T.

P.H. Sevensma P. Eng. - Consultants Vancouver B.C.

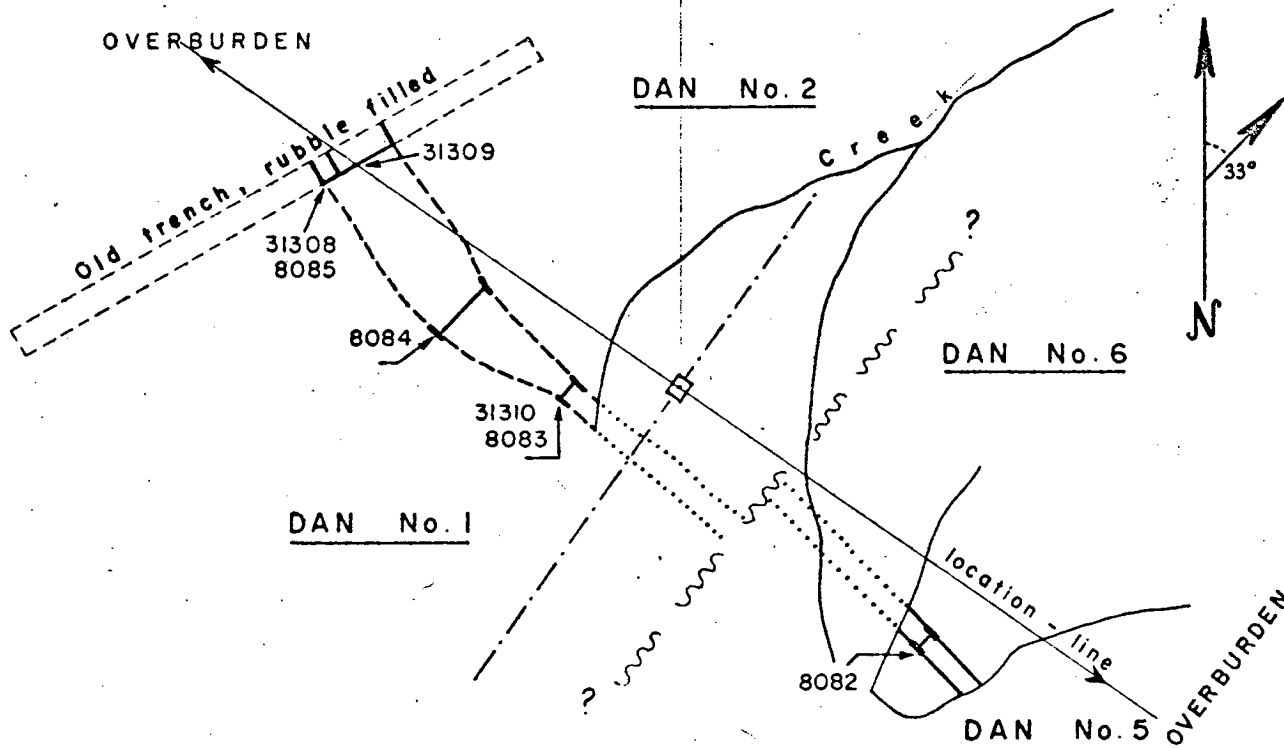
LEGEND

Fig. 1

-  Diorite Intrusives
-  Probable Fault.
-  Devonian meta-sediments, & overburden.

Scale 1" = 1/2 mile

July 1966



		Width	Ag	Pb	Zn	Cu	
8082	Main showing	2'	Tr.	Tr.	Tr.	Tr.	
8083		2'	Tr.	Tr.	8.8	Tr.	
31310		20"	.12	nil	3.0	nil	
8084		7'	.20	Tr.	10.0	Tr.	
8085		2'	Tr.	Tr.	6.1	Tr.	
31308		2'	.08	nil	1.6	nil	
31309		6'	.54	nil	6.1	nil	
8086	Trench 4	Float?	Tr.	Tr.	3.6	Tr.	
31311		Float?	1.50	0.5	2.8	nil	

* Trench 4 is about 700' due East from the Main showing.

31308 - 311 Samples taken JUNE 24, 1962
 8082-8086 " " JULY 22, 1966

Fig. 2

BOSWELL RIVER MINES LTD.

DAN GROUP of CLAIMS

105-B-3 WATSON LAKE M.D. Y.T.

LOCATION OF SAMPLES TAKEN BY P.H. SEVENSMA

JUNE 24, 1962 and JULY 22, 1966

1" = 20' JULY 1966

[Handwritten signature]

P.H. SEVENSMA — CONSULTANTS LTD. — VANCOUVER, B.C.