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REPORT ON
BAL GROUP OF CLAIMS

OMINICA MINING DIVISION
FOR
TCHENTLO LAKE MINES LTD.

by
A.J. Sinclair, P.Eng.

July 15, 1969.

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FIGURE 1: BAL GROUP

REPORT ON BAL GROUP OF CLAIMS

1.

FOR

TCHENTLO LAKE MINES LTD.

SUMMARY AND CONCLUSIONS:

1. Bal group of claims is owned by Mr. B. O'Dell, Mr. Wm. Rigler and Mr. A. Bressete of Prince George. Known showings are confined to 13 small pits located on Bal 1 to Bal 4 inclusive.
2. Showings are in well-jointed dioritic rocks of the Hogen batholith on the north shore of Tchentlo Lake, Omineca Mining Division, B.C.
3. Three joint sets nearly at right angles, are mineralized mainly with pyrite, and somewhat erratically with molybdenite and chalcopyrite.
4. Scattered outcrops of weathered, mineralized diorite are enclosed in a triangular-shaped area of at least 600,000 square feet. The property therefore, has potential for large tonnage with relatively low grade.
5. Further exploration work should consist of a detailed examination of the entire claims group, involving line cutting, soil sampling, geological mapping, an I.P. survey and trenching. (Stage 1).
6. Detailed examination of the known mineralized area required grid drilling on 300-foot centres, each hole to a depth of about 300 feet. A total of 3,900 feet of BX drilling is recommended. (Stage 2).
7. Total estimated expenditure for the foregoing program is 386,250.00. This total does not include normal overhead operating costs of the company.

INTRODUCTION:

The Bal Group, owned by Mr. B. O'Dell, Mr. A. Bressete and Mr. Wm. Rigler of Prince George, B.C., consists of 16 claims (Bal 1-16 inclusive) of which Bal 1 to Bal 4 inclusive (containing all the known showings) were examined by the writer. Purpose of the writer's visit was to examine mineral showings, evaluate their economic potential, and, if warranted, outline an exploration program.

Bal Group is in the central Interior of British Columbia in the Omineca Mining Division, on the north shore of Tchentlo Lake about 60 miles northwest of Fort St. James (figure 1). The showings are about 1000 to 1500 feet north of the lake on a gently sloping, hummocky surface from 100 to 200 feet above lake level. Tchentlo lake surface is about 2600 feet a.m.s.l. The claims are in part on an old burn with much deadfall and low bush cover.

Present access is via float plane or helicopter from Fort St. James, or Smithers. A helicopter pad exists in the immediate vicinity of the showings. A possible water route is via Chuchi and Tchentlo lakes.

There has been no formally recorded exploration work done on the Bal showings to the writer's knowledge. A total of about 40 soil samples were taken by a representative of a major mining company and Wm. Rigler during the fall of 1968. These were analyzed for copper and several were found to have values above 100 ppm.

In general, however, the values were quite low, (i.e. 20 to 50 ppm). The area was mapped on a regional scale by Armstrong (1949) but is shown as drift-covered on published geological maps (G.S.C. Maps 907A and 971A). N.B.C. Syndicate recently staked the Hi Group of claims adjoining Bal group to the south and west. Showings visited by the writer, however, are covered entirely by Bal 1 to Bal 4 inclusive.

The writer visited the property initially with Mr. Wm. "igler on June 10, 1969. A total of about 13 small pits are present, all of which were examined by the writer. A second visit was made on July 5, 1969.

GEOLOGY:

Bal Group of claims is underlain by dioritic rocks of the Hogem batholith, presumably of Upper Jurassic or Lower Cretaceous age (Armstrong, 1949). The rock is medium-grained, contains abundant hornblende and recognizable K-feldspar, and may correspond to Armstrong's marginal phase, syenodiorite. Showings are at the south end of the batholith.

The diorite is well-jointed, with at least 3 prominent sets at all localities examined. Orientations of the 3 sets, however, do not necessarily correspond at any two nearby localities. Two sets are generally steeply dipping with the third being relatively flat. Each set is fairly close to being at right angles to the other two. All three joint sets are mineralized, principally with

pyrite and, to a lesser degree and erratically, with molybdenite and/or chalcopyrite. Joint fillings range in thickness from a thin smear to about one-quarter inch. Smoky quartz is commonly present in thicker veinlets.

The rock is extensively weathered along joint surfaces with abundant limonite and, locally, a yellow stain that probably is ferrimolybdate. No secondary copper minerals were seen despite the presence of chalcopyrite.

The general nature of host rocks and sulphides appears similar at all pits examined by the writer although molybdenite is most abundant at the southwesterly pits near the claim post common to Bal 1 to Bal 4 claims inclusive, and in the pits centred about 800 feet northeast of this same claim post. In a few places well-jointed, mineralized dioritic rock is exposed between pits as small knolls.

Several grab samples were taken from pits that had been cleaned to expose relatively fresh rock. Of these, three were chosen by the writer as being visually representative of the 3 areas in which pits are concentrated and were submitted to Coast Eldridge Professional Services, Vancouver to be assayed for Mo, Cu, Au and Ag. Brief descriptions of these three samples are given in the appendix.

CONCLUSIONS AND RECOMMENDATIONS:

A triangular area of more than 600,000 square feet contains scattered outcrops of mineralized hornblende diorite, equivalent to about 50,000 tons per vertical foot. Furthermore, limits to the extent of the mineralized zone are not known. The potential, therefore, is for a large tonnage, low grade deposit. The property is worthy of detailed exploration and the following recommendations are offered.

1. A grid should be cut over the property to provide a base for further work to be outlined below. Two base lines probably will be required, with cross lines at intervals of 400 feet. A total of about 30 miles of line will be required.
2. Soil sampling at intervals of 400 feet on the above grid, with samples to be assayed for Cu, Mo, Pb, Zn and Ag. This will mean about 400 soil samples are required to cover the proposed grid.
3. Detailed geological mapping of the entire claims group.
4. An I.P. survey should be done to extend known mineralized area and to test areas of interest indicated by the soil geochemical survey. About 10 miles of I.P. work are estimated as necessary.
5. Grid drilling of the known mineralized area should be done with holes collared at intervals of 300 feet. Thirteen holes should be drilled to a depth of about 300 feet using BX core. Core should be split and assayed in sections of 10 feet.

The foregoing program should be conducted in two stages as follows:

Stage 1:

To include line cutting, geological mapping, soil sampling, and I.P. survey and surface trenching and assaying at a total estimated cost of about \$35,150.00. (See following section on estimated expenditures).

Stage 2:

Detailed grid drilling of the known mineralized area with exploratory drilling of other areas of interest that might be delineated by work done in stage 1 above. Total estimated cost of this phase of work is \$ 51,100.00. (See following section on estimated expenditures).

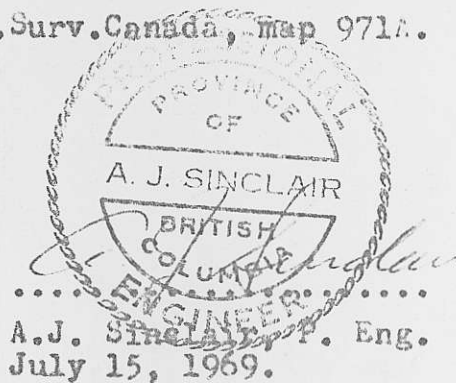
Stage 2 should be carried out only if warranted, as determined by evaluating results of work done in Stage 1.

ESTIMATED EXPENDITURES:

1.	1 Geologist - mapping and supervision 3 months at \$1000.00 per month	\$ 3,000.00
	1 Geologist's assistant ; 3 months at \$500.00 per month	1,500.00
2.	4 men - line cutting, soil sampling, trenching 3 months at \$700.00 each per month	8,400.00
3.	Camp equipment for 6-man camp	2,000.00
4.	Transportation of supplies and equipment to property	2,000.00
5.	Food expenses, 6 men, 3 months at \$5.00 per man day	2,700.00
6.	Analysis of Soil samples 400 samples at \$10.00 each	4,000.00
7.	I.P. Survey - 10 miles at \$600.00 per mile	6,000.00
8.	Grid drilling - 3900 feet of BX core at approx. \$10.00 per foot	39,000.00
9.	Assaying drill core 390 samples at \$10.00 per sample	3,900.00
10.	Consulting services - estimated	2,500.00
11.	Contingencies - 15% of above	11,250.00
	TOTAL ESTIMATED EXPENDITURES	<u>\$ 86,250.00</u>

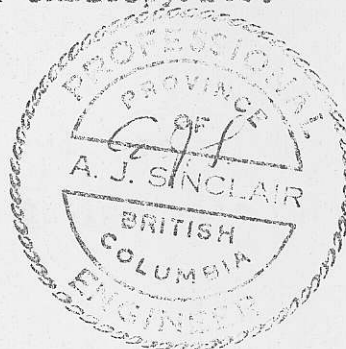
REFERENCES:

1. Armstrong, J.E., 1949. Fort St. James map-area, Cassiar and Coast districts, B.C., Geol. Surv. Canada, Memoir 252.
2. Manson River Sheet 93-N, National Topographic System.
3. Sinclair, A.J., 1969. Preliminary report on Bal group of claims; private report for Agilis Exploration Services Ltd., Vancouver.
4. Smithers-Fort St. James, B.C. Geol. Surv. Canada, map 971A.



APPENDIX: Description of grab samples to be assayed for Cu, Mo, Au and Ag by Coast Eldridge Professional Services, Vancouver.

- DX-1: From pit about 800 feet north of DX-5 (described below). Consists of fresh, coarse-grained diorite, extensively mineralized with pyrite, containing moderately abundant molybdenite here and there and rare visible chalcopyrite.
- DX-2: From large pit near claims post common to Bal 1 to Bal 4 inclusive. Consists of three relatively fresh specimens of coarse-grained hornblende diorite containing abundant pyrite along joints, with small amounts of visible molybdenite in some joints. No chalcopyrite was seen in the specimen.
- DX-5: From pit about 700 feet east of claim post common to Bal 1 to Bal 4 inclusive. Consists of 2 large (fist-size) specimens of fresh, coarse-grained, hornblende diorite, extensively mineralized, with pyrite and very minor amounts of visible molybdenite and chalcopyrite.



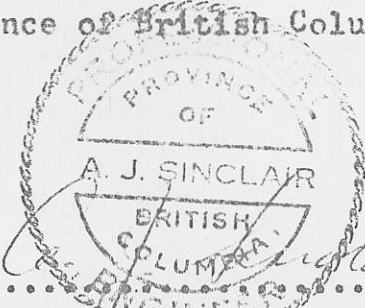
CERTIFICATE

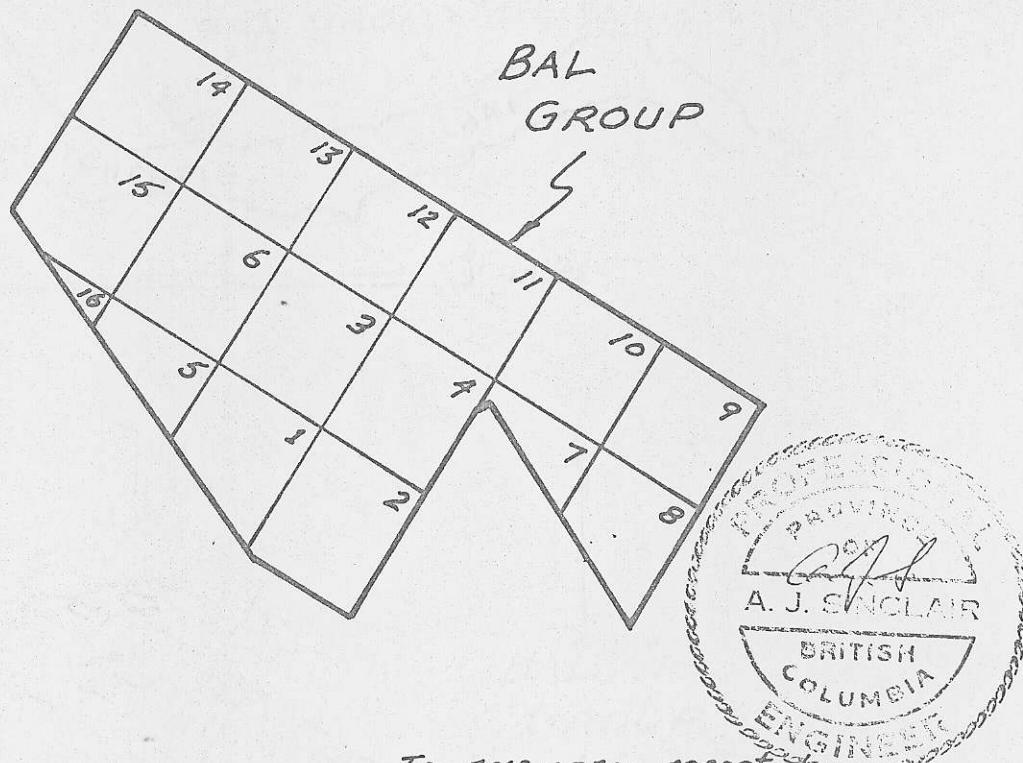
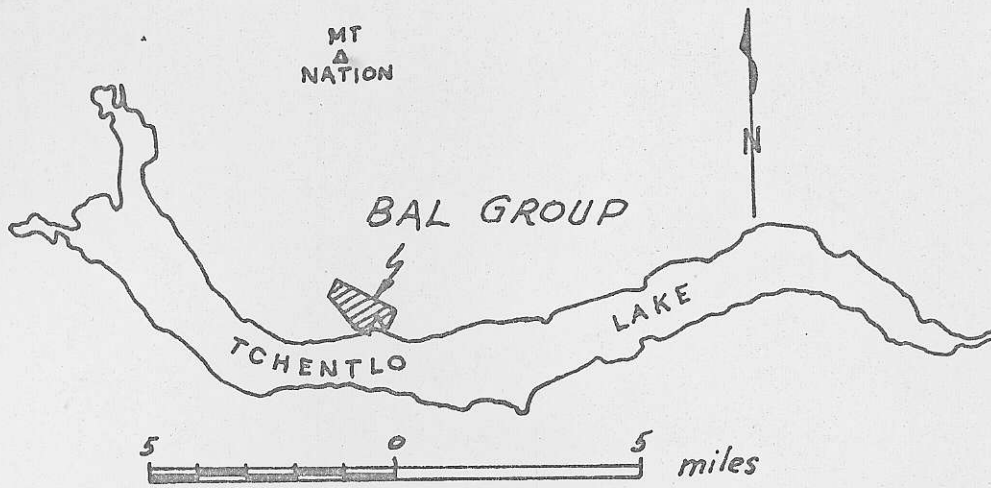
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I, Alastair J. Sinclair, of the city of Vancouver,
province of British Columbia, hereby certify:

1. That I am a Geological Engineer residing at
5869 Dunbar St., Vancouver 13, British Columbia.
2. That I obtained a B.A.Sc. degree in Applied
Geology from the University of Toronto in 1957,
an M.A.Sc. degree in Geological Engineering
from the University of Toronto in 1958, and a
Ph.D. in Geology from the University of British
Columbia in 1964.
3. That I am a registered Professional Engineer in
the Province of Ontario in the Mining Division,
and in the Province of British Columbia in the
Geology Division.
4. That I have practised my profession for twelve years.
5. That I have no interest directly or indirectly,
nor do I expect to have any direct or indirect
interest in the properties or securities of Tebentlo
Lake Mines Ltd.
6. That the accompanying report is based upon my
studies of the area and two visits to the property
on June 10 and July 5, 1969.

Dated at Vancouver in the Province of British Columbia
this 15th day of July, 1969.


A. J. SINCLAIR
BRITISH
COLUMBIA
.....
A.J. Sinclair, P. Eng.



To accompany report by
 A. J. Sinclair, P. Eng.
 July 15, 1969

FIGURE 1: BAL GROUP