

825902

BANKS ISLAND GOLD DEPOSITS
BANKS ISLAND
NORTH COAST BRITISH COLUMBIA

February 15, 1980

SUMMARY OF DATA REVIEW

A review was made of all available information on the Banks Island gold deposits, formerly owned by Falconbridge Nickel Mines but now controlled by Hecate Gold Corp.

Three significant mineral deposits are known. All were tested by diamond drilling, and one tested by underground exploration.

These deposits are:

- 1) Discovery Zone - in a skarn contact area. Strike length approximately 200 feet, depth 300 feet and open at depth. Falconbridge estimate 70-100 tons per vertical foot grading 0.4 oz/ton Au, 1.0 oz/+ Ag, 2.5% Pb-Zn.
- 2) Bob Zone - in a strong fault zone adjacent to its intersection with limy sediments. Underground exploration exposed a zone 144 feet long, average width 5.5 feet grading 0.92 oz/ton Au. Zone narrows with depth and along strike.
- 3) Tel Zone - in a shear zone in limestone near an intrusive contact. Mineralized zone approximately 100 feet long, average width 5 feet, and at least 100 feet deep. It is open at depth. Average grade is 1.13 oz/ton Au, 1 oz/+Ag.

Numerous other areas were reviewed, some of which received considerable exploration. All are similar in that they have poorly exposed veins containing gold bearing massive sulfides. Assays from 0.1 to >1oz/Au are common. No significant "ore shoots" were located on any of these zones,

Two exploration proposals are attached to this summary. One is for "grass roots" type exploration, the second for drilling. Due to very poor outcrop exposures of the mineralized shear zones, grass-roots exploration might be very futile. Drilling on a known "ore shoot" has the opportunity of developing more "ore". Because of the known dimensions of the mineralized zones, a considerable down dip extension would be needed to add significantly to the "ore" reserves.

CONCLUSION

While numerous occurrences of gold bearing float and veins are known on Banks Island, no mineable mineralized zones are known. Small isolated pods of auriferous massive sulfides, such as those already found, might be the best that one can expect to find on Banks Island. A search for other small deposits, or hopefully a large one, would require prospecting using a diamond drill, testing all mineralized exposures and structures. The cost would be prohibitive.

RECOMMENDATION

It is recommended that no option be taken on the Banks Island property.

J. Jones
Harold M. Jones

Respectfully submitted

Harold M. Jones.

APPENDIX I

BANKS ISLAND EXPLORATION PROGRAM

PROPOSAL I

INTRODUCTION

An examination was made of maps, reports and drill logs, compiled mostly by Falconbridge Nickel Mines and to a much lesser degree by McIntyre Mines and Hecate Gold Corp., covering work completed on the Banks Island gold prospects. It was concluded from this study that, while small high grade "ore shoots" are present, none are of sufficient size to justify a mining operation. Because of the numerous occurrences of "high grade" gold-bearing float and small veins this area warrants further exploration. The following program is proposed:

1. Office research - one month (April)

At the present time, data on the Banks Island gold occurrences is scattered between several offices. All data should be accumulated in the company's office where it can be efficiently studied.

Air photos should be obtained to cover the area of interest. Using photos in conjunction with existing data, locate areas which justify more ground exploration, e.g., east-west faults intersecting limy sediments.

It would be an asset to have the company geologist visit the property early in the study period, preferably accompanied by someone familiar with the Banks Island gold occurrences. This would give the researcher a much better feel for the project.

2. Field Program - 3 months (May-July)

A minimum crew of 8 men is suggested. This would include:

Senior geologist - supervision

Junior geologist

2-prospectors - experienced

geophysical operator - using company or leased equipment - E.M., S.P., Etc.

2 student assistants

Cook.

The field program would include:

a) re-examination of known mineralized zones. This work would concentrate on detailed geological mapping, prospecting, geophysical survey, etc. along strike from the deposits.

b) examination of areas of interest resulting from the office research

c) General reconnaissance mapping and prospecting.

There are no roads on Banks Island. The camp would have to be moved several times during the program. A helicopter from either Kitamat or Prince Rupert can be used for this purpose.

3. Geophysical Surveys - by contract (August)

These would be contingent on results of the above work. May be required to better define target areas for drilling.

4. Diamond Drilling (September)

Contingent on above results. It is not recommended to drill the known mineralized zones at the present time. Their sizes appear small and any new drilling of them would not add appreciably to their tonnages.

Estimated Cost - stage 1 only

1. Office research - including Banks Island examination	\$ 5,000
2. Field program - wages, estimate \$16,800/mo, 3 mo.	50,400
- camp	7,000
- food, etc. @ \$10/man/day, 720 man days	7,200
- fuel-oil, propane	2,000
3. <u>Transportation</u>	
- mobilization, demobilization	6,000
- servicing	2,700
- helicopter-say 15 hrs.	5,250
4. Instrument rental	3,000
5. Assays	1,000
6. Data compilation, maps report, etc.	5,000
	<u>\$ 94,550</u>
Contingencies @ 15%	<u>14,182.50</u>
	<u><u>\$108,732.50</u></u>

Comments

A brief review of the Banks Island gold property was made with Jim MacDougall, Falconbridge Nickel Mines Ltd. Work by his company was mostly prospecting followed by drilling. In many cases, packsack diamond drill holes were put down to test mineralized outcrops. In some instances, where gold bearing float was located but no outcrop, they drill holes to test for a possible mineralized zone in the vicinity of the float.

Prospecting was greatly hampered by water, which fills most fault depressions in which the mineralization occurs. He is not very optimistic that further prospecting would locate other zones, unless it were a very dry summer and water levels decreased substantially.

Self potential surveys were made during only one season when the summer was dry. Other years it was too wet for this type of survey.

Interpretation of E.M. Surveys was made difficult because of an abundance of non-auriferous pyrrhotite \pm graphite in many shear zones.

It is concluded from the above discussion that general prospecting and geophysical surveys may add very little new information.

Detailed estimated cost - Proposal I

Estimates based on all Company employees.

Geologist - \$3000/mo
Jr. Geologist - 2000/mo
Geophysical Op. - 2000/mo
Prospector - 2500/mo - no interest
Field assist. - 1500/mo
Cook - 1800/mo

Fuel Oil - \$1/gal @ 360 gal/mo
Propane - \$20/100 lb tank - 7 tanks per month

Camp - @ \$1000/tent - 5 tents
- \$2000 - cookhouse

Mobilization - guesstimate, not knowing water freight rates

Servicing - small aircraft @ \$225/trip

Helicopter - @ 350/hour

Instrument rental - S.P., E.M., etc. - say \$1000/mo.

BANKS ISLAND EXPLORATION PROGRAM

PROPOSAL II

INTRODUCTION

Surface prospecting and geological mapping may add very little new information to the geology and mineral deposition on Banks Island. This is due to limited outcrop and the fact that most mineralization occurs beneath water filled fault depressions. It is therefore proposed that a diamond drill program be undertaken to drill in detail the Discovery deposit, the main purpose of which is to test for its depth potential and for a plunge direction, if any.

If the drilling did indicate a significant amount of "ore" down plunge, then other zones should be re-assessed.

The following cost estimate is for a minimum amount of drilling.

Cost Estimate

Mobilization and demobilization	\$ 8000
Drilling - 3000 feet @ \$20/ft.	60000
Camp, food, etc. @ \$30/man/day - 6 men	5400
Helicopter-drill moves, say 10 hrs @ \$350	3500
Air support - say	1500
Geologist-supervision-one month	3000
Field Assist. - core splitter, etc.	1500
Assays - say	1000
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	83900
Contingencies @ 15%	12585
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	\$ 96485
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Say - \$32.00 per foot.

If additional drilling is warranted, the costs should be estimated at \$32 per foot.