# (Barrier Lake Area)

SUMMARY REPORT
ROYAL CANADIAN VENTURES
E.B.L. and B.B. CLAIMS
BARRIERE LAKES AREA-KAMLOOPS, B.C.

#### INTRODUCTION

The Barriere Lakes copper property comprises approximately 130 claims between North and East Barriere Lakes, some 35 miles north-east of Kamloops. The property is underlain by a sequence of mineralized metasediments and metavolcanics near the south contact of the Baldy Batholith. This contact zone is the site of at least one major find in Noranda's Harper Creek property, situated on the north side of the intrusive, where a deposit in the order 100 million tons of 0.4 to 0.5% copper is at present undergoing a feasibility study. Work to date on the R.C.V. property includes detailed geochemical and geophysical work including extensive induced polarization surveys and over 5,000 feet of drilling which has indicated potentially large tonnages of .4% copper.

The present proposal would allow Cyprus to gain 60-70% of the property for continued payments to the original owners to a total sum of \$150,000.00 and exploration expenditures of \$500,000.00 over the next four years.

#### LOCATION AND ACCESS

The property is situated about 35 miles north-east of Kamloops in south central B.C. The nearest rail-head is at Barriere some 15 miles west of the property on the Canadian National route Edmonton-Kamloops-Vancouver. Access from Barriere is by all-weather gravel road; the property being served by well maintained logging roads.

#### GEOLOGY

The property covers an area of highly deformed schists and gneisses of the Shuswap Metamorphic Complex near its contact with the Baldy Batholith. The intrusive has a pronounced mineralized aureole with classic mineral zoning indicated by deposits of copper, copper lead and zinc. and lead and zinc. The age of the Shuswap is in doubt, but it is certainly older than the Batholith which is of Jurassic/Cretaceous age. On the property a sequence of tightly folded chloritic schists, tuffs and metasediments including minor limestones, trends north-west and is cut by

porphyritic dykes and minor granitic intrusives. Mineralization is widespread, but appears to be best developed in a feldspathic chlorite schist where pyrite and chalcopyrite have been deposited along the foliation and fracture planes. It is understood that the Noranda deposit ores are of similar type.

#### WORK TO DATE

Over the last two years R.C.V. on their own account, and through joint ventures with Rayrock have carried out detailed geological mapping, soil geochemical, magnetometer, and induced polerization surveys over much of the claims area. This work revealed a number of sizeable coincident or near coincident IP/copper geochemical targets, the best of which was tested by a 5 diamond drill and 12 percussion holes, all of which intersected mineralized country rock. At least half of these holes intersected sections of ore grade or near ore grade material over mineable widths.

The offset of copper and silver geochemical highs from IP highs are generally accountable for by downslope migration.

The drilling generally confirms this, as holes in high chargeability zones but just outside the highest geochemical contours, have generally better mineralization than those showing good geochemistry alone. The elongate pattern of geochemical highs to the northwest of the main geochemical anomaly probably reflects the geology; the surface intersecting a tightly folded mineralized horizon alternating with less mineralized or barren rocks. The IP high chargeability contours extend well to the northwest of the best geochemical anomaly. It is significant that the IP is not generally coincident with high magnetometer readings, indicating that the IP values are not related to high pyrrhotite or magnetite content.

#### Diamond Drilling

Although very preliminary, the drilling to date indicates a zone 800' to 1,000' wide and some 2,000' long of potential mineralization. The simplest structural interpretation, i.e. a dipping mineralized sheet of relatively uniform thickness, would give a potential of up to 15 million tons of material grading around 0.4% in widths of 50' or over, with a stripping ratio of 2 to 1 or better. From a consideration of the diamond drill logs and the observed geology, it seems likely that the mineralization represents intersections of a strongly folded sequence, probably

with overturning to the east. If the grade and thicknesses so far intersected are generally indicative of fold limbs, then both tonnage and grade are likely to be enhanced in intersections of fold nose areas, as a result of repetition of mineralized widths, and the generally more fractured and presumably better mineralization in fold cores. The immediate area of interest is open to the northwest, the final hole in this direction providing the best intersection to date. It should be noted that none of the percussion holes in the potential ore zone exceed 250' in depth, and there is no reason why similar or better grades should not be intersected over the succeeding 500'.

#### CONCLUSIONS AND RECOMMENDATIONS

From the foregoing it would seem that a target potential in the region of 50-100 million tons of 0.4%-0.5% copper with possible credits in silver and gold exists in the primary target area, which as yet has received only preliminary drilling. Considering the structural implications, results to date must be regarded as promising. The open nature of the primary target, and the presence of other good IP/geochemical situations along the structural strike from the known mineralized zone suggests this as a high potential exploration target. It is considered that if the joint venture terms outlined in the following section can be negotiated, Cyprus is strongly recommended to participate in the venture.

#### POSSIBLE TERMS OF JOINT VENTURE

R.C.V. have so far spent or caused to be spent a total of around \$120,000.00 made up of \$35,000.00 in payments and \$85,000.00 in direct exploration expenditures.

To earn a 60% interest in the venture, R.C.V. have indicated that Cyprus will be required to:

a. take over payments to original owners as follows:

lst June, 1971 - \$10,000 lst December, 1971 - \$25,000 lst June, 1972 - \$10,000 lst December, 1972 - \$35,000 lst June, 1973 - \$10,000 lst December, 1973 - \$25,000

and \$15,000 per annum until production is reached.

b. To carry out work commitments to a total of \$500,000 as follows:

> lst June, 1971 - \$50,000 total lst December, 1971 - \$100,000 total lst December, 1972 - \$200,000 total lst December, 1973 - \$350,000 total lst December, 1974 - \$500,000 total

After which further expenditures to production would proceed on a 60/40 basis. A royalty amounting to approximately \$150,000 per annum on an assumed production of 25,000 tons per day would be payable to the original owners on a 60/40 basis.

R.C.V. may be amenable to a 70/30 split and it is suggested that this percentage is put to them as a first proposal. As a comeback, Cyprus could agree to carry some of R.C.V.'s percentage in excess of half a million dollars expenditure, with repayment from production costs.

The property access is such that Cyprus could take advantage of the first option to carry out \$50,000 worth of work (largely diamond drilling) before the 1st of June, 1971; with potential tonnage in sight a \$10,000 payment and a further work commitment of \$50,000 by 1st December would appear to be a reasonable exploration gamble.

#### PROPOSED PROGRAM

It is proposed that the preliminary \$50,000 commitment should be largely spent on a diamond drill program to fill in and extend the mineralized zone indicated by the preliminary drilling. This could be carried out from mid-March to end of April and all assays and summaries completed before mid-May, giving sufficient time to evaluate the program in respect of a further commitment. Diamond drilling costs at this location are likely to be less than \$8 per foot for the footage envisaged, and at this cost there would be little or no advantage in using percussion drilling. Considering the structural implications it is considered essential that diamond drilling data is available.

Should the first part of this program prove disappointing, the balance of the drilling could be directed to other targets on the property.

Encouragement with the early program would engender a further program of diamond drilling and associated detailed geological mapping. The overburden is sufficiently thin in some areas that caterpillar trenching to obtain surface cross sections of the geology would be beneficial. This is considered particularly important in view of the structural implications.

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## 2) Nahanni Syndicate Proposal - Vendor: C. Clyde Smith

A proposed reconnaissance syndicate in the South Nahanni River area of the Selwyn Basin (Y.T. - Yukon Border) has been offered to Cyprus for consideration. The proposal program outlines approximately 1,000 square miles in which geological mapping, prospected, rock, soil, and silt geochemical sampling is to be carried out.

The area chosen on a basis of favourable geology and major structural considerations, should be a good hunting ground for syngenetic lead - zinc deposits of the Tom, Summit Lake, Robb Lake, Pine Point types and is in fact partly coincident with the area proposed earlier by Kerr Addison for a possible joint venture with Cyprus.

The deal involves 9 shares of which one goes to the vendor with eight further units at \$20,000 each for a total budget - \$160,000. We understand that of these 4 have been taken up by Quintana (nee Charlie Ney) probably a good recommendation in itself, and one unit by Home Oil, leaving three units for possible participation.

Smith, who is fairly knowledgable in the area and has the reputation of being a good field manager, proposes to manage the project with a staff of 9 including helicopter pilot and engineer.

While there is no quarrel with the area some of Smith's reasoning or at least his order of priorities may not altogether agree with ours. A further problem lies in the fact that we have already turned down Kerr Addison on much the same area.

Considering the compilation and proposals set out by Jilson (see his March report) it may be just as well to decline the offer and if we do have any money to spare for this type of venture to go it alone, and thus not get tied down by joint venture or syndicate restrictions as to where and when we can look. It was made quite clear to Smith before he made his presentation that, as we might be considering some work in the general Selwyn Basin, we could give him no undertaking to exclude ourselves from his area of interest if we did not take a piece of his proposal.

# Barriere Lake - S. British Columbia Vendor: J. Gourley - Cu

This property was examined in some detail in 71 and at that time was controlled by Royal Canadian Ventures, but has since been returned to the original vendors. Drilling by Noranda in 71 and Craigmont in 72 has indicated some 30-40 m.s.t. of 0.35% Cu in a potential open pit situation. This latest data was examined with a view to updating our information on the property. An examination of drill sections, etc., in my opinion still leaves room for considerably expanded tonnage. The workers to date have mapped

two parallel striking bands of mineralization when in fact these in all probability represent a single folded horizon, which would be amenable to expanded open-pit tonnage. A closer pattern of drilling would be required to substantiate this, in order to test the area between the two horizons already drilled.

While this would not be unduly costly (\$60-100,000 should prove or disprove the possibility) the generally low grade of 0.35% may be difficult to improve on and 0.4% Cu would appear to be the expected maximum. Present Government policy in B.C. mitigates against holding such a property for future production, but in my opinion this could well prove to be a relatively easy one to prove as a long range reserve, if and when the political scene changes.

## 4) Nelson Property - Vendor: Bill Bottel - MoS2

You have the data on this one Paul. I would think we would be hard pressed to interest L.A. in this one, although I agree it might be worth a few quick holes on the basis of the mag linear and the mineralization already intersected.

#### GENERAL

#### Blunt Mountain

P. Bland has started his magnetometer work on the Blunt property, aimed primarily at providing assessment, but also hopefully to give additional information on the pyritized areas of interest already noted. Our magnetometer was shipped to him on 3 April. Gregg has been alerted that assessment on 14 claims needs to be filed before 26th April and Pete will contact him as soon as he finishes the field work estimated at about 11th-12th April.

#### Vehicles

Redhawk 4x4 pickup up 5th April. Insurance (full coverage \$100 deductible including collision) has been arranged by Al Prevost through Marsh & McLennan.