TO: W.M. Sirola

FROM: J.W. Murton

SUBJECT: GOLD PROPOSAL ON QUEEN CHARLOTTE ISLANDS By - Jim Christie and Gordon Richards

DATE: February 20th, 1979.

Recent conversations with ex Quintana employees at the G.A.C. Symposium regarding their past and present exploration efforts resulted in their presenting to us their ideas for gold exploration on the Queen Charlottes. The ex Quintana personnel are: J. Christie, G. Richards, and W. Howell. These men were involved in a gold exploration program for Quintana minerals and since termination by Quintana of all Canadian exploration, these men have been continuing work on their own. They have been partially funded by Chevron in Vancouver and as a result, Chevron has optioned seven out of ten properties they have located. Two of the located properties are still available and it is on these properties, the King and the Bateau, as well as a regional program, that discussions were held.

REGIONAL WORK

Christie and Richards feel they have one season's work left to complete coverage of the Queen Charlotte Islands (Q.C.I.) from a regional point. They have completed work in all areas they feel have potential for hydrothermally developed Au. deposits (Tertiary dykes that have silicified and mineralized country rock). They have been looking at areas of Triassic Kunga limestone as well as younger sediments, in their expanding program outwards from Specogna's Au. property. As will be noted on the enclosed claim compilation map, their

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ground position encompasses a large geographic area.

Christie and Richards proposed a one to two month program of regional work to complete their coverage of geologically favourable areas. They forecast a cost of \$50,000 for the program with the following terms:

 On any property they stake, Kerr Addison would have thirty days to accept or reject. If accepted, we pay \$2,000 cash and fund further work.
Four units as a minimum would "designate the property".

2. They retain a 10% net profit interest in the property which is not for sale, but it is reduced to only 3% net profit during payback.

3. Annual cash payments of \$5,000, \$10,000, \$10,000, etc.

4. They want \$1.00 per foot for drilling on the ground staked to make up for the lower cash property payments.

During regional work as part of the \$50,000 budget, Christie and Richards will be paid \$100 per day per man. If and when property work is done by them, they will be paid \$200 per day per man. They would like to begin their regional work in April, using a Canova boat and aircraft support.

I think these are very knowledgeable and good men. We have to decide whether the geological concept warrants our approval. Apparently Chevron thinks the concept is valid. We might talk with the Chevron people to assess their feelings.

PROPERTIES

Bateau Group - Twelve units staked July 5th, 1978. This claim is located on the West Coast of the Queen Charlotte Islands at Kitgoru Inlet in

an area of Kunga limestone. The limestone has been cut by faults and intruded by a Tertiary quartz porphyry dyke swarm that is altered and silicified and has in turn, altered and silicified the limestone and calcareous argillite. The argillite and limestone are in fault contact with Karmutson volcanics to the south.

All areas staked by Christie and Richards exhibit Au, As, Hg, anomalies. In silts, Au. values range from a background of less than 5 ppb to 35 ppb, As. from 2 ppm to 440 ppm, and Hg. from 85 ppb to 1800 ppb. Quartz veinlets with arsenopyrite near the dykes have Au. up to 0.4 oz/ton and the quartz porphyry dykes contain up to 2400 ppb Au. (.07 oz/ton).

The Bateau group has had only reconnaissance work completed and requires detailed mapping and sampling. Christie and Richards proposed \$10,000 down, \$20,000 in one year, \$30,000 next year, and continuing payments of \$30,000 per annum. A 10% net profit interest with 3% during payback is proposed, with \$1.00 per foot for drilling.

The Bateau group would probably not be ready or warrant drilling in the first year.

<u>King Group</u> - The King group is located 12 km southwest of the Specogna Au. showing and is made up of 12 units. Newmont optioned the ground in 1978 and conducted geological mapping and geochemistry sampling with the work done by Christie and Richards. Newmont dropped the option at the end of 1978.

The King group covers an area of Honna conglomerates and sandstone fault bounded by grey argillite which may be part of the Triassic Kunga formation

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or may be Cretaceous Haida formation. All units are cut by numerous fine grained feldspar porphyry dykes of probable rhyolitic composition. Intense silcification and pyritization has altered a section of conglomerate and sandstone over an area 4500 ft. by 8000 ft.

Geochemically the area contains the highest Hg. and As. anomaly located on the Q.C.I. (Christie and Richards). Hg. values of > 10,000 ppb (10 ppm) are common, and As. values range to over 1000 ppm. As. values of 50 ppm would normally be of interest according to Christie and Richards. Au. is only weakly indicated geochemically and values are only 10 to 20 ppb except in arsenopyrite concentrations. The lack of Au. is undoubtedly why Newmont returned the property, but its lack is puzzling considering the highly anomalous As. and Hg.

Christie and Richards proposed a buried Au. deposit with only the roof exposed, and expressed by As. and Hg. anomalies. They proposed several DDH's to at least 500 ft. to see if zoning patterns developed at depth.

The terms for this property are similar to the terms of the Bateau group.

CONCLUSION

An assessment of the Au. potential of rocks, other than Tertiary volcanics as at Specogna's property, must be made before we can consider acceptance or rejection of this proposal. Certainly Chevron appears willing to spend significant dollars evaluating the properties that Christie and Richards have presented to them. However, even knowing the values and relative merits of the accepted properties, it is difficult to rate the two presented to us.

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They may be at the bottom of the pile as far as geochemistry and geology are concerned, but Chevron may have simply had sufficient ground on the Queen Charlotte Islands to satisfy them.

If we feel the geological concept is valid, Christie and Richards are good men with valuable experience and should be backed. We could back their reconnaissance work only, if we felt the properties are not favourable for option. However, it must be recognized that their continued reconnaissance work may well turn up similar mineralization to that of the Bateau claims as they are part of the most recent staking done by Christie and Richards.

Murton, P. Eng.