672964

February 12th, 1971.

Imperial Oil Enterprises, 500 Sixth Avenue S.W., Calgary, 1, Alta.

Attention: Mr. R. Somerville

Dear Rick:

Confirming our telephone conversation of February 11th, 1971, and in response to your requests during your visit to our office on February 5th, 1971, please note the following observations concerning the Bethlehem (Maggie) - Cache Creek area, British Columbia.

Inpariel ail

- 1. Information Studied
 - (a) Claim map submitted by you see copy attached.
 - (b) Aeromagnetic map Cache Creek Map 5219G Lockwood Survey Corporation for Dept. of Energy Mines and Resources, Ottawa -1968.
 - (c) Memoir 262 Map #1010A Ashcroft McTaggart & Duffell.
 - (d) Brochures submitted by Geo-X Surveys Ltd., Vancouver, B.C.
 - (e) Informal and semi-confidential information given to Dr. W.R. Bacon by Dept. of Mines staff, Victoria, B.C., on February 8th, 1971.

2. Geology

The area in which the Maggie deposit occurs is the type locality for the Cache Creek series. The Cache Creek rocks occur in a northerly trending belt 45 miles long that extends from near Spences Bridge in the south to Clinton in the north. It is occupied by the Thompson River and a principal tributary, the Bonaparte River.

In itself, the Cache Creek formation, which is part volcanic and part sedimentary, holds out little promise for the discovery of base metal deposits (other than mercury) but developments at the Maggie indicate that small stocks of granitic porphyry, containing copper mineralization, have escaped attention heretofore. There is another stock at Red Hill towards the south end of the belt. It, too, has some associated copper mineralization. It is quite possible that other small stocks, perhaps obscured by overburden, may occur in the Cache Creek belt. These would be prime targets for exploration.

It would appear that Bethlehem have acquired claim groups other than the Maggie on the basis of available aeromagnetic data, although this is difficult to confirm.

3. Favourable Claim Groups (in order of importance)

With the information presently available, we would suggest that your initial attention be directed towards the following claim groups shown on your map:

 (a) <u>Rolling Hills</u> - immediately east of Maggie (Bethlehem) claim group - No. 4 on your map.

We have been advised that Rolling Hills completed 2162 feet of diamond drilling, 1531 feet of rotary drilling and 800 feet of percussion drilling at a cost of \$60,000. They encountered considerable pyrite with minor amounts of copper and molybdenum in the relatively few holes drilled.

The principal merit of the Rolling Hills ground is that part of it is underlain by the same quartz-plagioclase porphyry stock that contains the Maggie mineralization. It is our understanding that Rolling Hills is approachable as far as a deal is concerned.

(b) <u>Mo and Ma Groups</u> - adjoining the Maggie group to the south and southwest - No. 3 on your map.

These claims lie along the favourable structural trend and are in close proximity to magnetic highs.

(c) <u>R.W. Shaw Holdings</u> (part) adjoins the Bethlehem ground on the south side of Indian Reserve No. 2 - approximately 3 miles northwest of Cache Creek - No. 2 on your map.

A small magnetic high appears to occur near the southeast corner of the Indian Reserve.

- (d) <u>Fuzzy</u> south of Maggie group about 4 miles northwest of Cache Creek - No. 30 on your map.
- (e) Madrona adjoins Bethlehem to the north.

A magnetic high appears to occur on this claim group.

(f) (<u>Scurry Rainbow</u> - No. 6 on your map) (<u>Canada West Pet</u> - No. 17 on your map) (<u>Two areas marked 39 and 40</u> by us - south of Bethlehem)

These three areas seem desirable - are they available?

(g) <u>Maru</u> - adjoins Bethlehem to the northwest and Madrona to the east - No. 10 on your map

Magnetic highs and magnetic lows appear to occur on and to the east of this group.

CONCLUSION

7. 8

We would like to emphasize that the geological situation in the Maggie-Bonaparte area is by no means clearly understood at present. On the other hand, it would be impossible to overlook the importance of finding intrusive granite within the Cache Creek belt.

We of course are not aware of the presence of any other stocks in the belt other than those at Red Hill and the one on the Maggie property.

The aeromagnetic data is undoubtedly useful. In our opinion, however, several other approaches to exploration supplementing the aeromagnetics could also be successful.

We would be glad to go into this matter more thoroughly at your convenience. We appreciate your contacting our firm and trust that we can be of further service to you.

Yours very truly,

BACON & CROWHURST LTD.

J.J. Crowhurst, P.Eng.

JJC/ic Encl.