

Energy, Mines and Resources Canada

Earth Sciences

Énergie, Mines et Ressources Canada

Sciences de la Terre

804013

Geological Survey of Canada 601 Booth Street Ottawa, Ontario K1A 0E8 Commission géologique du Canada 601, rue Booth Ottawa (Ontario) K1A 0E8

Your life Votre référence

Our file Notre rélérence

Mr. F. Hewitt Northair Mines Ltd. 1450-625 Howe St. Vancouver, B.C. V6C 2T6

Dear Fred:

April 7, 1986

It was good to see you at the recent PDA meeting in Toronto.

During our discussions and my examination of your core display I realized that your company is very active in the Smithers-Sulphurets region of B.C.

There is a possibility that I might initiate a three week lithogeochemical research program in the area as part of my field activities. From the point of view of precious metal exploration very few systematic controlled regional and/or local studies of this type have been done in areas of widespread pyritic alteration in the Canadian Cordillera. The desire is to come up with groups of elements or their ratios which may center on auriferous zones within the system. This is particularly important with the "no-see-um" and/or structurally complex and controlled mineralization. Whole rock analysis have been in vogue, however, its success has perhaps been exaggerated. Although systematic whole rock analysis would be part of this study, trace element determinations, at state of the art detection limits, will be the major focus. After the orientation program it is hoped that useful pathfinder elemnts and their method of determination can be suggested for use by the mining community. The use of trace elements in pyrites to define haloes is also as aspect of research which may be applicable in your area.

I attach a copy of a memo from R.V. Kirkham to our director. Rod has had a history of interest in the area and I am fortunate to be able to lean on his experience. At this stage these are just project proposals. Co-operation with BCMEMP Resouces and the exploration companies working in the area will be more formalized in the future if and when the project goes ahead. It is for this reason that I would welcome your and your colleagues' comments on the present proposals. Your suggestions would be invaluable in the design and approach of the studies. With the proper liason between all parties concerned the potential of the area may be further advanced and better understood.

I also enclose two copies of the recent gold paper that we discussed.

Yours sincerely,

5. B. Ballantyr

S.B. Ballantyne

cc: R.V. Kirkham