Dr. J.T. Fyles,

Associate Deputy Minister.

March 27th 74.

104P/3E (PF)

Re: Atan Barite

I am returning to you the reports from Tournigan Mining Explorations Ltd. together with McCammon's comments on Quin's compilation of earlier reports.

It would appear that the barite potential is extremely problematical and that no specific data regarding the zinc content is provided.

> STUART S. HOLLAND, Chief Geologist, Geological Div., Mineral Resources Branch.

SSH/jr

Encls.

Dr. Stuart S. Holland,

Chief, Geological Division,

March 27,

74

RE: Tournigan Report

I am not prepared to comment on the potential of the sulphide mineralization since I am not up on deposits of this type.

With respect to the barite possibilities I feel the same now as I did when I wrote a memo to you on the same topic on March 28, 1973. As far as I can see nothing more has been proved. There is no record of logs for the drilling by Brinex but apparently no significant barite was found. I quote my memorandum of last year:

'In brief, it seems to me that great speculations have been made on few facts.

First, with respect to the amount of barite available, there is nothing concrete to use to make any sort of valid quantity estimate. The reports and map indicate scattered small pods and lenses of barite in two areas, one 1000 feet by 500 feet, and the other 400 feet in diameter. These are 3,500 feet apart. The largest exposed mass is 25 feet cut in a trench. There has been no drilling on barite to indicate depth. Since barite is typically lensy in carbonate rocks, much more work is necessary to prove up sizeable masses here. Gravity surveys have been done and have indicated 4 anomalies which have been interpreted to represent sub-surface masses equivalent to about 10 million tons. There is nothing to show what these are due to and so far no anomaly has been properly drilled. Hembling's letter intimates it is all barite. While gravity surveys are often used to search for barite, they are not infallible, particularly if galena is associated. Mountain Minerals Company tried a gravity survey on their Brisco barite property. They got highs over barren dolomite and lows over known ore bodies.

As to quality - Hembling talks about "high quality" but provides no information. The only analyses available are 7 shown by Misty. These show barium sulphate content ranging from 1.9 to 99.67 per cent with a numerical average of 42 per cent, which could certainly not be considered high quality."

Information on file Re: Atan Property:

- 1. Assessment Report 1813
- 2. Assessment Report 4581
- In my files on barite: (a) Geophysical report on Gravity Survey
 (b) Report by D.R. Cochrane (general) (c) Comprehensive Geology
 Report by N. Misty. (d) Capital Cost Estimate of Barite Production
 by Wright Engineers.

J.W. McCammon, Geologist, Geological Division Mineral Resources Branch