



Department of Energy, Mines and Resources  
 Ministère de l'Énergie, des Mines et des Ressources

Mines Branch  
 Direction des mines

File Number  
 No à rappeler

*R. (SM)*  
*c/c 7829*

Mineral Processing Division

40 Lydia Street,  
 Ottawa, Ontario.

July 31, 1969.

Mr. J. J. Crowhurst,  
 Bacon and Crowhurst,  
 Consulting Engineers,  
 102-1111 West Georgia Street,  
 Vancouver 5, B. C.

673174

Dear Mr. Crowhurst:

Re: Anchor Takla

The investigation of your ore sample No. 17051 to 17062 is now underway. For greater convenience, the surface samples (17051 - 17056) and the underground samples (17057 - 17062) were combined separately for the testwork.

A head sample was cut from each lot of ore and analysed with the following results:


<u>Element</u>	<u>Underground Ore</u>	<u>Surface Ore</u>
Ag (oz/ton)	18.24	62.45
Au "	0.17	0.18
Pb ( % )	2.35	10.37
Sb "	1.95	7.65
Zn "	2.37	1.76
Fe "	14.79	11.42
As "	6.37	11.20

Mineralogical studies have shown that the lead and antimony occurred mainly as jamesonite, the zinc as sphalerite, and the silver as andorite, argentiferous tetrahedrite and miargyrite. The silver minerals were largely associated with the lead-antimony sulfosalt.

The preliminary testwork was carried out on the underground sample because it was much less oxidized than the surface material. This consisted of rougher flotation at various grinds to determine the fineness necessary for an optimum recovery of the valuable constituents. It was found that grinding to 80% minus 200 mesh was sufficient to recover more than 95% of the metal values at a ratio of concentration of 2:1.

Attempts are currently made to clean these rougher concentrates in order to achieve a satisfactory grade. When further results will be obtained, a second progress report will be sent to you.

Yours truly,

  
G. I. Mathieu

GIM:hp