

KERR ADDISON MINES LIMITED


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To P. M. Kavanagh From W. M. Sirola
Subject Flat Head River Deposits -
(Akimina Mineral Holdings) 82-G Date January 13, 1969.

Herewith a brief compilation of what we have been able to learn about this area.

There does not seem to be any great flurry over these deposits but we should learn as much as we can, just in case.


W. M. Sirola.

WMS/lk
Encl. - JCL report

TO: W. M. Sirola
FROM: J. C. Lund

FLATHEAD REGION OF SOUTHEASTERN B.C.

On a report that a sedimentary type copper deposit had been found in the Flathead area of B.C., I have put together below what information I was able to find including what you had heard from the Chamber of Mines.

LOCATION:

The Flathead region lies adjacent to the B.C. - Alberta border between lat. $114^{\circ}00'$ and $114^{\circ}45'$ and extends north from the 49th parallel to $49^{\circ}30'$. It lies south and east of Fernie, B.C.

MINERALIZATION:

Reported to consist of 3 beds 6 feet thick within the Precambrian -Grinnell formation with copper values of 2% - 15% Cu. (Woodside, Chamber of Mines). Kennco has done some silting over a 20 square mile area 10 miles north of the U.S. border and staked 43 claims on a sedimentary type deposit near the Flathead River off the main Grinnell formation. Mineralization consists of bornite and chalcocite in sandstones. (B.C.M. of Mines Lode Metals 1967)

GEOLOGY:

Taken from Memoir 336 on the Flathead Map Area, B. C. and Alberta. R.A. Price 1965.

The Grinnell formation is in the lower part of the Precambrian Purcell series. It is comprised of red argillites, white, green, and red quartzites, and red siltstones. Individual beds range from 1-foot^{1/2} over 80 feet in thickness - total thickness of the Grinnell averages 350 feet. It thickens to 760 feet in the Beaver Mines map area to the east and to 1000 feet in the Waterton Lakes map area of Alberta, to the southeast. The Quartzites are lenticular in shape that "...do not appear to be laterally persistent". The Grinnell formation is sharply defined by its red colour between the green beds of the Appekunny formation below and the brown beds of the Siyeh formation above.

The Purcell rocks which include the Grinnell formation are folded into a broad northwestern trending syncline with fold axis nearly coincident with B.C. - Alberta border.

Cretaceous rocks are thrust onto the Purcell forming the eastern boundary of the reported favourable rocks and tertiary rocks are down-faulted to the west forming the western boundary. Dips of the beds are not indicated in the area of greatest interest, however from dips of beds to the north they may be expected to range from 15° to 40°.

There is no copper mineralization mentioned in the G.S.C. report and information received via Chamber of Mines did not give

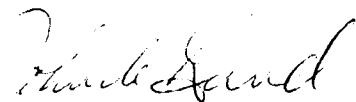
the spacial relation between the 3 mineralized bands, attitudes of the beds, or extent of the known mineralization.

CLAIMS HELD:

Akimina Mines holds approximately 2000 claims straddling the B.C. - Alberta border covering the favourable Grinnell formation. Kennco holds 43 claims near the Flathead River west of the Akimina holdings.

CONCLUSIONS:

Almost all the favourable Grinnell formation is held by Akimina Mines and any interest taken in the area would necessarily be to acquire a portion of their ground for exploration. Information as to nature and extent of mineralization should be obtained from the Akimina people for evaluation, particularly such information as to which units in the Grinnell the mineralization occurs, the spacial relation between the mineralized bands, known extent of mineralization, and attitudes of beds.



(signed)

John C. Lund.