May 28, 1974 006038

TO: W.M. Sirola

FROM: F.Chow

SUBJECT: Report on the Hyland River Tungsten Prospect (105 H/07

The Hyland River Tungsten Property was submitted to the company by prospector-owner, Mr. Max Martin.

PROPERTY & LOCATION:

The property consists of 60 contiguous mineral claims, namely the MAX and MAR claims. It is located at Lat. 61 degrees 17'/Long. 128 degrees 40', about 9 miles N.E. of Mount Billings, and about 18 miles due west of Mile 120 on the Watson Lake - Cantung Mine road.

HISTORY:

Prospecting and exploration in the past have been for Pb, Zn, Ag, and Cu minerals. A number of mineral showings were found, mainly small occurrences of Zn-Pb-Cu & Ag mineralization in the silicated calcareous members throughout the schist-gneiss-quartzite complex of Cambrian or earlier formations. It has been reported that magnetic and electro-magnetic surveys were done plus two diamond drill holes were drilled in 1968.

Dusty Mac Mines optioned the property from Mr. M. Martin in 1972 and terminated the agreement in January, 1974. During this period, trenching, regional geological mapping, plus soil sampling were done. Detail surveys comprising of magnetic, soil sampling and mapping were carried out on selected target areas.

GEOLOGY:

The property is underlained by Cambrian age schist, quartzite, gneisses, and their thinly-bedded calcareous members. These rocks lie unconformably with Devonian and/or Mississippian age hornfels, quartzite, argillite, and limestone on the east. The sediments are enclosed within a 25-mile wide batholith of quartz monzonite and dioritic rocks of Cretaceous age. The sediments are about 5 miles wide in areal extent, their beds tilted upwards around the intrusive border. Locally the sediments generally trend northeast to easterly and dip southeasterly. A change in altitudes occur near the eastern boundary of the property, where the beds strike NE-N and dip westerly. Within this area the limestone beds and calcareous schist formation are exposed for about 1000 feet along two creeks, approximately the strike of the beds.

MINERALIZATION:

Mineralization includes sphalerite, galena, chalcopyrite, magnetite, scheelite, and silver mineral(s). These occur in varying combinations and amounts in 1 - 20 feet wide, irregular limestone lenses within the Cambrian calcareous members where skarn has developed. Miner occurrences of sphalerite, and chalcopyrite were found in (Devonian or Mississippian?) sediments on the eastern part of the property. Mr. Jim Glass of Dusty Mac Mines has said that Max Martin has prospected and lamped the eastern part of the property and that the results were discouraging.

There are about 9 Pb-Zn mineralized showings on the property. Five of these within a 7-claim area on the western half of the property were trenched. Three locations showed appreciable amounts of scheelite, assaying from 0.2 to 2.2% WO_3 over 8'-21'. Other metals range from 0.2 to 0.9% PB, 0.2 to 0.7% Zn, 0.1 to 0.2% Cu, and 1.5 to 2.9 oz. Ag per ton. The other trenches contain negligible amounts of scheelite, but moderate amounts of sulphides ranging from 2-9% Zn, 2-10% PB, 0.1 to 0.2% Cu, and 0.5 to 12 oz. Ag per ton, with widths of 2'-15'.

The mineralization found thus far appear to be relatively small occurrences erratic in shape and fairly rich in grade. The skarn zones may be continuous but cannot be traced at length due to complex structural changes by shearing and faulting.

GEOCHEMISTRY:

A regional soil geochemical survey was conducted by Dusty Mac Mines in 1972. The soils were all tested for PB and Zn content, partly for Ag and Cu. Soil samples from detail grid sampling of geochemical and magnetic anomalies were assyaed for all four metals. The soils were not tested for tungsten content.

The 100 ppm PB & 100 ppm Zn values form linear features parallel to or slightly oblique to the drainages, with occasional high assays of 300-500 ppm Pb and 300-700 ppm Zn. Copper values are low, about 1-20 ppm Cu background, with occasional values exceeding 100 ppm Cu. Silver content is fairly high in the soils, about 0.4 ppm background. Ag values greater than 1.2 ppm form anomalies up to 400'-500' wide. Three ppm Ag values form similar size anomalies as the above, notably on the eastern part of the property. Four ppm Ag values form small isolated highs with occasional assays of 6 ppm Ag. Sporadic occurrences of Pb-Zn mineralization are suspected to be the cause of the geochemical results.

CONCLUSIONS:

The property lies in a favourable geological setting with calcareous Cambrian sediments surrounded by Cretaceous intrusives of quartz monzonite and dioritic rocks. Although there are a few high grade Pb, Zn and W showings on the property, the occurrences appear to

be small, locally mineralized lenses in limestone and skarn. The chances of finding an economic deposit within thinly-bedded limestone is remote. The limestone formation which appear to be thicker on the east side of the property has been found to be less mineralized. The geochemical results and trench geology indicate sporadic Pb-Zn mineralization on most of the claims. The copper geochemical values are too low to suggest much tungsten mineralization. If the soil samples were available then it would have been worth the expense of re-assaying for W content.

RECOMMENDATION:

A study of the results of the work done to date do not provide targets to explore, therefore, I do not recommend further investigation of this property.

F. chow

FC/gm