To Mr. Coleman

file 3/2

005834

Little Salmon
105
Bene File

MEMORANDUM RE LITTLE SALMON PROPERTY

The geological mapping of the Little Salmon Property has established the presence of a fault striking approximately southwest across the northern portion of the property. This has been the most important development and is enhanced by the magnetometer and E. M. Surveys which located anomalous conditions along this break.

The fault has been established by the following criteria. A steep sided depression which has been largely filled with talus and overburden marks out the surface expression of the fault. The area to the northwest of this lineament is underlain by limestones which dip at around 25 degrees to the NW and strike nearly parallel to the fault depression; on the southeast side the geology is more complex and the area is underlain by tuffaceous cherts with narrow bands of intercalated limestons and quartzite - this assemblage is intruded by dikes and (sills) of feldspar porphyry. Generally speaking the tuffaceous chert formation is nearly flat lying except at the eastern extremity of the property where it has been uplifted by intrusions of feldspar porphyry; here it dips approximately 30 degrees to the southeast.

The metamorphosed contact zone between the feldspar porphyry and tuffaceous chert formation is mineralized with magnetite (largely) pyrite, pyrrhotite, galena, sphalerite and some fluorite and calcite. The greater part of this metamorphosed zone is covered by talus and overburden. Examinations along this zone by trenching and drilling were, therefore, confined to a very few exposures; in addition, the ruggedness of the terrain made it impossible to put down holes at the most desirable locations because of the limiting lifting capacity of the water pump.

At the "Lake Showing" (see attached plan) four trenches were put down with considerable difficulty due to the steepness of the slope.

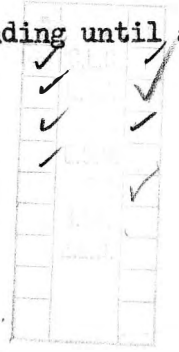
The results of the channel sampling of these trenches do not indicate any sizeable zones of economic value.

The "Cliff Showing" consists of a narrow shear zone mineralized with galena, sphalerite, chalcopyrite and pyrite and exposed along the face of a cliff in the tuffaceous-chert formation. Channel sampling here gave an average of 11% lead, 3% zinc and 7 oz. of silver across three feet over a length of approximately forty feet. (see attached plan)

In general the results of the sampling confirm surface observations namely that the occurrences are extremely narrow and intermittent high grade zones of sulphide mineralization.

The Magnetometer and E. M. Surveys have traced this mineralized condition along strike to the southwest, to a zone which is coincident with the surface expression of the fault. A shallow drill hole put down at this location through heavy talus and overburden intersected 25 feet of mineralization at the bottom of the hole. This consisted mainly of magnetite but some massive zones of pyrite and pyrrhotite are also present as well as visible amounts of galena and sphalerite. The magnetometer and E. M. Surveys have both outlined strong anomalies in this area. In lieu of these conditions which are in proximity to a fault zone, it is felt that several deeper holes are warranted.

It is, therefore, proposed that the property be held in good standing until a limiting drilling program can be completed in this area.



LJD:AW
Sept. 19/55

LOMER J. D'AIGLE

5 cc.