

HECATE GOLD VISIT - 19 December 1977

On December 19th Jim Hutter, myself and Jim MacLeod flew via Northcoast Beaver from Prince Rupert (Seal Cove) south (70 miles) to Banks Island. Flying time was approximately one hour. The lake normally used was frozen so we landed on the Saltchuck (~~Indian Bay~~ <sup>Survey Bay</sup>). We walked for 30 minutes to the camp. We met Jim McDougal (Falconbridge) and he toured me around underground.

The host rock is a granodiorite to granite - foliated in many places. Small quartz ( $\pm$  py) veins exhibit wall bleaching (sericite?), especially within the first 100 feet from portal. Quartz veins are present in shear zones which forms the control for ore. Gouge is common in the larger zones (i.e. 76").  
(30.5 metres)  
(>15cm)

Sulphides in order of abundance include pyrite, arsenopyrite, chalcopyrite, sphalerite and galena. The gold is apparently present in the pyrite and arsenopyrite. For the most part the sulphides are coarse grained. In places, sulphides are distinctly banded.

Gangue is simply quartz and minor calcite. Chlorite gouge also exists.

Where granodiorite and limestone (banded-marble) are in contact, a distinct red-brown garnet-diopside skarn zone exists. Some spectacular garnet specimens have been collected.

Sulphide mineralization cuts the banding in the marble at 90°.

The attitude of the main shear (vein) structure is approximately 090°/85°N. Several auxiliary quartz shear veins have similar attitudes with shallower dips (eg. 60°N).

Outside the main camp, the limestone unit dips in the opposite direction to the shear zone.

At the time of our visit, 6 men were working on the surface and 6 men underground.

The decline is at approximately 15%.

The "road" is very poor and very muddy. It was easier walking along the diesel pipeline.

The ore is apparently contained in a number of shoots and the hope is that they open downwards.

The age of the intrusive is not known.