

McARTHUR GROUP105-M-4

( M. Waldner)

INTRODUCTION

The area under consideration was the south side of the McArthur Group delineated by  $136^{\circ}00'$  and  $136^{\circ}20'$  and  $62^{\circ}57'$  and  $63^{\circ}08'$ . Work commenced in the area on July 14th, 1969. Due to difficulty in landing, a helicopter pad had to be cut out for the first camp, thereby causing the loss of one day's work. The first traverses were on July 15, 1969. Geochemical silt sampling by Teddy and Alfred Charlie was done on the drainages in proximity to the camps. Matt Waldner did regional geological mapping in the area. Work progressed until the 30th of July. Hugo Bordell and John Acklack remained in the area to do prospecting and further geochemical silt sampling.

Work in the area was hampered by poor weather and high winds. Due to the rugged terrain the wind seriously impeded helicopter support.

GENERAL GEOLOGY

The rocks in the area are quartzites and slates intruded by biotite rich, porphyritic granite and granodiorite. In many places the quartzite is highly altered to schistose and slaty rock, often high in biotite content. There is a predominance of biotite schist and some slightly graphitic to grey slate and phyllite. The metasediments have a general regional folding trending approximately southeast. The slaty cleavage trends in this general direction as well. The outcrops of metasediments near the granitic contacts are generally characterized by biotite schist. The schistosity runs parallel to the contact between the granite and the metasediments in proximity to the contact.

The granitic outcrops are characteristically a biotite granite to biotite granodiorite. The granitic rock is mostly coarse to medium grain size and porphyritic in nature. Some minor barren quartz veins and tourmaline pegmatite are present in the granite. The outcrops are generally poor due to frost heaving and most rock on the ridges and unforested slopes is felsenmeer float. No sulphide mineralization was encountered in the granitic rock.

Some very minor sulphide mineralization was encountered in a gossan between Sideslip Lake and Gray Hunter Creek. It consisted of very minor chalcopyrite and arsenopyrite in a dark grey ferruginous altered quartzite. Molybdenite was found in somewhat larger, but still minor, quantities in contacts between the quartzite and quartz veins which cut the quartzite.

Most of the mineralization was found in float in the gossan, although some of the molybdenite was discovered in place. The gossan is approximately 100 ft. from the granite contact which is northeast of the occurrence. The occurrence was of such minor importance that staking was not considered. However, a prospecting crew remained in the area to prospect for a more substantial showing.

#### CONCLUSIONS

Forthcoming conclusions will have to be made after the results of the silt sampling are known.

M. Waldner,  
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