

105-K-12

ALTERATION ZONE G-#7

(G. Sanford)

013611

Alteration zone #7 was spotted during helicopter reconnaissance in late August, 1969. It lies at 133° 50' W and 62° 44' N, approximately 2 miles north of the Tay River and 3 miles east of Mt. Menzie, Tay River Map Sheet. This zone was examined on September 1st.

During the course of the examination, soil samples were collected and the area was prospected. Soil samples were taken at 100 ft. intervals along 1000 ft. lines running north, south, east and west. At each sample site two samples were collected, one of the B-horizon and one of the volcanic ash layer if it were present.

The surrounding area is mapped as unconsolidated glacial and alluvial deposits, but locally a stream has cut through the overburden and has exposed the underlying bed rock for one-half to three-quarters of a mile along the creek. This creek has cut a narrow canyon, about 150 to 250 ft. deep into the bedrock.

The exposed rocks are bedded black argillites, sometimes greenish weathering which have been moderately to intensely folded. The general bedding direction is northwesterly-southeasterly with moderate dips to the southwest, but folding and faulting has altered this general attitude in many places. Some of the bedding planes have rusty zones along them and there are several small, near vertical shears in the argillites. The axial planes of the few measured folds generally trend the same as the bedding, with a slight plunge to the west. Some folds are continuous across the creek indicating that the creek bed is not the site of a fault zone.

In the approximate centre of the canyon an east-west near vertical quartzose-feldspathic dyke 20 ft. wide cuts the argillites. This dyke is very fine grained at its centre and becomes aphanitic towards its margins. The rock contains much pyrite and consequently it weathers to a dull rusty colour. The fresh surface is light greenish and there are no mafic minerals.

South of the dyke, the rocks become much more sheared and broken, probably indicating much stronger folding. About one-quarter mile south of the dyke, some cherty and limy bands are found in the argillites. There are several one-half inch calcite veins in the limy rocks.

No mineralization except for pyrite in the dyke rock was seen. It appears that this alteration zone is a result of folding and faulting in the black argillites, and the gossan appearance is due to the weathering of the dyke rock.

GOSSAN #8
(G. Sanford)

Gossan #8 was observed during helicopter reconnaissance in late August 1969. It lies at 135°55'W and 62°44' N, on the northeast face of Mt. Menzie, Tay River Map Sheet. The gossan itself lies on a northward flowing creek, just below tree line. This gossan was examined on August 29th.

Soil samples were taken at 100 ft. intervals along 1000 ft. lines running north, south, east and west from the approximate centre of the gossan. The surrounding area was prospected and geologically mapped.

Mt. Menzie contains a granodiorite core which has intruded grey and black bedded cherts. Near the contact the granitic rock is more dioritic in composition and the surrounding cherts are somewhat hornfelsic for several hundred feet from the intrusion. Granitic fingers intrude the surrounding cherts and highly siliceous dacite dykes are closely associated with the granitic contacts.

In general the cherts strike northwesterly-southeasterly and dip moderately to steeply to the southwest. About 300 vertical feet above the gossan, rusted pyrite crystals up to one inch in diameter are found in the grey cherts. A limy unit about 20 ft. thick lies one hundred vertical feet above the gossan.

The gossan is caused by a dacitic to aplitic dyke which has intruded black argillites. This dyke is several hundred feet wide and contains very much pyrite as disseminations and fracture fillings. The rusting of this pyrite has formed the gossan. The intrusion of this dyke has caused some deformation in the surrounding argillites.

Pyrite was the only mineralization noted and this gossan contains nothing of economic interest.