105-K-10

015825

MAGNETIC ANOMALY MA-#20

(M. Waldner)

Introduction

The magnetic anomaly is present at the sight of an old claim group, the TED Group staked in 1965. It appears that soil sample grid lines were run over the area of the anomaly. The anomaly is located on map sheet 105-K-10, air photo number A12371-477. One soil sample profile line was run across the magnetic anomaly. Samples were taken at 100 ft. intervals (see Alfred Charlie's traverse, Sept. 1, 1969). Base line trends $\approx 115^{o}$ for the Ted group claims.

General Geology

Most of the region of the magnetic anomaly is covered by overburden. The rocks in the area are of three general types.

There is a black argillite stained reddish orange (iron?). The rock is poorly foliated. The foliations are close together, but poorly developed, probably a poorly developed slaty cleavage. A grid sample number U4J4 was discovered on the black argillite outcrop.

Also present is a poorly bedded medium to fine grained, medium grey quartzite. The quartzite occurs generally at a higher elevation than the black argillite, but no tops determination were made so it is not known if the quartzite overlies the black argillite. There is a slight red staining present in the quartzite and some minor quartz stringers, approximately 1/8" wide. The quartz stringers are barren. North of the magnetic anomaly there is an outcrop of very fine grained, black quartzite siltstone. This rock has a slightly fetid smell when it is freshly broken.

The third general rock type is a medium grey to slightly greenish argillite. This rock is highly fractured and no foliation (bedding or slaty cleavage) attitudes were available.

Mineralogy

No sulphide mineralization was observed either in float or outcrop. The area was staked for sphalerite mainly and drilled. However, no mineralization or old drill sites were found.

Structural Geology

The black argillite outcrop south of the magnetic anomaly has a poorly developed slaty cleavage which strikes 106^{o} and dips 86^{o} NE. The medium grey-green argillite outcrop northwest of the black argillite outcrop is highly fractured and no bedding or slaty cleavage attitudes were available. The fine grained quartzite is generally well bedded and

strikes 013° and dips 60° NW. No folding was observed but folding or some type of deformation is indicated by the slaty cleavage (axial plane cleavage?) in the black argillite and by the fractured nature of the medium grey-green argillite. However, any deformation in the region is indicated as being of low intensity. It can be noted that the slaty cleavage in the black argillite trends almost at right angles to the quartzite bedding, possibly indicating a regional fold axis trending approximately 106°.

Conclusions

Since no mineralization was discovered little can be said. However, if any soil sample anomalies occur over magnetic anomaly number 20 and/or 21, it may be profitable to try and correlate the results since both anomalies are close together. Also, since magnetic anomaly number 20 is reported to overlie a zone of pyrrhotite sphalerite mineralization, there may be a continuous or discontinuous body of ore extending into magnetic anomaly number 21 which is only about 5 miles from magnetic anomaly number 20.

105-K-10

MAGNETIC ANOMALY #21

(M. Waldner)

Introduction

The magnetic anomaly is located on map sheet 105-K-10, air photo number A12371-418. Two soil sample profile lines were run across magnetic anomaly #21. The samples were taken at 100 ft. intervals. Generally the soil samples were poor due to problems of thick volcanic ash, heavy overburden and permafrost.

General Geology

The most prevalent rock type in the region skirting the magnetic anomaly is a medium grey and black argillite. These rocks are generally well bedded; the bedding thickness varies between two and six inches. In parts of the medium grey and black argillite the rock is finely laminated. Some minor, barren quartz stringers, less than 1/8" thick, cut the outcrop intermittently. In some places the argillite assumes a slightly cherty nature as indicated by a slight conchoidal fracture. No alteration product or rusty staining is prevalent in the medium grey and black argillite. In places this rock extends into the magnetic anomaly slightly, but for the most part it outcrops outside the anomaly, on the east side primarily.

West of the anomaly there is outcropping of medium grey to greenish argillite. No rusty staining was observed, or alteration products in these rocks.

The main part of the magnetic anomaly is covered by overburden and only one outcrop definitely within an anomaly was encountered. This was a small outcrop of red and green slate. Little green slate was present in the outcrop, but there was an abundance of red slate outcrop and talus. The red slate was in contact to the east with medium grey and black argillite. It should be noted that the slaty cleavage strikes 149° and dips 66° NE and the bedding of the argillite strikes 147° and dips 71° NE. Both these strikes are parallel to the trend of the magnetic anomaly boundary which cuts along or close to the red slate, medium grey and black argillite contact. The red slate is extremly fissile and thinly foliated.

Mineralogy

No sulphide mineralization was found. In fact there was no alteration products or staining to even indicate the weathering of any iron-rich minerals (i.e. rusty staining lacking).

Structural Geology

No folding or faulting was observed and all indications are that little or no deformation of the rock has taken place. The general strike of bedding and slaty cleavage foliation vary from approximately 160° in the east to 120° in the west. The dips are all to the northeast varying between sixty and eighty degrees.

It is noteworthy that the contact between the red slate, which is inside the magnetic anomaly, and the medium grey and black argillite which is outside the anomaly strikes ≈148° which is the trend other isomagnetic lines that cut along this contact between the slate and argillite.

Conclusions

No indication of economic sulphide mineralization was seen. However, the soil sample profiles may indicate the presence of sulphide and particularly sphalerite mineralization if the supposed sphalerite-pyrrhotite body below MA-#20 extends to magnetic anomaly number 21. The red slate may have some relationship to the magnetic anomaly since the slaty cleavage strikes parallel to the isomagnetic boundary lines of the magnetic anomaly (Proterozoic dome?). Also, the boundary of the magnetic anomaly appears to follow the red slate, medium grey to black argillite contact.