Reading File

680038

MEMORANDUM TO:

Rob Fredericks/Paul Dircksen

xc: Vancouver

FROM:

Leigh Freeman

SUBJECT:

OK Syndicate Eholt Ground Magnetic Survey

DATE:

June 1, 1992

I have processed magnetic data acquire by Rob Fredricks between March 17 and 27. Results were contoured at a scale of 1:5,000 and briefly compared to a preliminary outcrop geology map.

This memorandum presents the data on a floppy disk, a contour map of total field magnetic strength, selected profiles, and a cross-section through the Craigmont orebody showing a comparison of Eholt and Craigmont magnetic profiles. A more detailed interpretation will follow.

Discussion:

- * Slightly more than 4,000 readings were collected in 9 field days. Data was corrected for dijournal changes using a base station. Geometrics 856 magnetometers were used.
- * Data was collected at 10 meter intervals along lines 40 to 80 meters apart. North/south lines were run the first 7 days. East/west lines were run the last two days after a strong north-south striking anomaly was encountered.
- Latites outcrop on the eastern portion of the survey area. Meta volcanics with local skarn rocks comprise the western portion. Outcrop is generally sparse. The magnetic response over the latite is typically 57,000 to 57,500 gammas. Over the metavolcanics it is 56,500 to 57,000 gammas. Patches of skarns in the metavolcanics coincide with amorphous shaped magnetic highs of several hundred to a thousand gammas.
- A spectacular dipole magnetic anomaly of 5,000 to 7,000 gammas was discovered at approximately 11,100 east and 9,750 north. It strikes north south and has a very shallow east dip. It lies in an area without mapped outcrop. Latite is mapped to the east and metavolcanic to the west. The anomaly strike length is 400 meters. This anomaly is of the same order of magnitude as the Craigmont discovery mag anomaly. It could be explained with a 50 to 100 foot thickness of 5 to 10% magnetite buried 50 to 100 feet.
- * Craigmont is cited as an example because of its familiarity to Placer (and Orvana). The geologic setting is very different. However, the economic value of the Craigmont magnetite-copper skarn and the complexity of the geology (as represented by the varying amounts of magnetite, hematite and copper) serves as a reminder of the importance of a thorough evaluation. We should not rely to heavily on a magnetic survey to find all the ore. It should be used judiciously. Some of the lesser magnetic anomalies may prove to be more important.

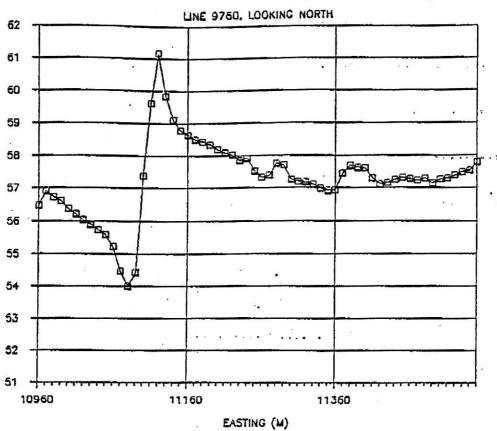
Conclusions:

- A very large magnetic anomaly has been discovered. It may represent a large skarn orebody along the contact between latites and metavolcanics. A quantitative interpretation of the anomaly is underway and will be presented shortly.
- * Additional magnetic anomalies are mapped within the study area. Their shapes are more ambiguous. They will be systematically evaluated in the field utilizing geology, geochemistry and geophysics.
- We have validated ground magnetic as a useful exploration method in this district. The magnetic survey grid should be expanded to cover the balance of the property position.
- * Geology, geochemistry and geophysics should be compiled at similar scales and compared. Potential targets should be examined in the field as soon as possible. A detailed interpretation of all available data should then be made.

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EHOLT GROUND MAGNETIC SURVEY



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