

# HILL, STARCK & ASSOCIATES

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## NOTES ON MAGNETOMETER SURVEYS

### PRIDE OF EMORY

Showed definite anomaly of about 1900 gamma with a peak near the N.E. edge of the ore exposure.

An anomaly of about equal intensity and smaller area showed up 100' N.E.. Sample from an old cut about which the anomaly was centered gave very low results.

### BRUNSWICK 5

No indication of an anomaly was noted in a series of readings at 25' intervals down the road from station 731 to 729.

### BRUNSWICK 2

An anomaly of about 500 gamma was noted in about the position of the supposed B.C. Nickel anomaly. The maximum intensity recorded was 55081 gammas as compared to 56310 gammas on the Pride of Emory. A check reading taken about 25 ft. N.W. of the Brunswick No. 1 surface raise gave 55200 gammas suggesting that lower intensities could be expected over the Brunswick ore bodies.

Yours truly,

Hill, Starck & Associates Ltd.

R.P. Mason

February 12, 1954

Mr. P. Malozemoff  
Newmont Exploration Limited  
1301, 14 Wall Street  
New York 5, New York

Dear Mr. Malozemoff:

I have read with interest Brant's report of the geophysical lab studies on core specimens from Western Nickel surface drill holes S1 to S6.

It is apparent that in the rock types found at Western Nickel:

1. A geophysical anomaly might be indicated by areas of ultrabasic rock with a disseminated sulfide content as low as 0.2%?
2. The high normal pulse response of the schist accounts for several of the anomalies. ✓

On the basis of the above, one might reasonably arrive at a partial explanation of the various anomalies shown on the Pulse Plan Map and Map Og-1.

#### Anomaly A

Presence of the Brunswick orebodies and other areas of submarginal disseminated sulfides.

#### Anomaly B

This anomaly is over a body of schist in part, so at best may be viewed with suspicion.

#### Anomaly C

At least one body of submarginal sulfides underlies this anomaly (at least 1200-1400 feet from the portal of the 5550 Tunnel), and the 1000' orebody lies within the projected dip of the surface expression of the anomaly.

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Anomaly D

This anomaly overlies a body of pyroxenite, which at the elevation of the 2600 Tunnel contains in general 0.1% finely disseminated sulfides. Drill holes revealed a few short sections of sulfido concentrations.

Anomaly E

Probably wholly attributable to the elongate peridotite zone containing 0.7% disseminated sulfides near the portal of the 2600 Tunnel.

Anomalies in the SE Corner of the Property

The surface holes drilled in the high pulse zones in the SE corner of the property show the presence of either schist with a high normal, or pyroxenite with 1% - 2% disseminated sulfides. Two of the holes contain both schist and mineralized pyroxenite.

Conclusions

1. It would appear that the pulsing method is of very limited value at Western Nickel for the following reasons:

(i) The 2600 Tunnel shows that large areas of ultrabasic rock types contain 0.5% - 2.0% finely disseminated sulfides. While any part of bodies of rock of this type might contain an orebody, it would seem that pulsing would be of little value in the actual ore delineation, as the entire area would be indicated as anomalous.

(ii) The ultrabasic rocks are known to contain pendants and remnant bands of schist. As over 95% of the surface area is drift covered, it is difficult to say just how many of the anomalous areas found are actually due to the presence of schist.

2. Any future use of pulsing at Western Nickel should be restricted to following and delimiting known ore bodies that are located in a background of rocks whose normal response has been determined.

Sincerely yours,

R.F.S.

R. F. Sheldon

RFS/jr

c.c.

Dr. A. A. Brent

Mr. J. Drybrough

Mr. R. Murphy

Mr. N. A. Pike