



SHARPE GEOPHYSICAL SURVEYS LIMITED

FIELD OFFICE; BATHURST, N.S. SUITE 901 - 330 BAY STREET TORONTO 1, ONTARIO

TELEPHONE; EMPIRE 6-3261

REPORT ON A MAGNETIC SURVEY ON A SECTION OF THE PROPERTY OF CONIAGAS MINES LIMITED, GILLIES LIMIT, DISTRICT OF NIPISSING, ONTARIO.

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INTRODUCTION

The following is a brief report based upon the results of a magnetometer survey, carried out by Sharpe Geophysical Surveys Limited, on a section of the property of Coniagas Mines Limited, in Gillies Limit, District of Nipissing, Ontario. The survey was carried out between February 1st, 1956 and February 7th, 1956.

Only a section of the property in the vicinity of the 'showing' was covered by this survey. For this purpose, traverse lines were cut at 200 foot intervals oriented due North astronomic. A total of approximately 3 line miles were surveyed and the base line was run 1,000 feet each way in the east-west direction from the showing. Readings were taken along the traverse lines across the strike of the showing for about 1,000 feet.

A Sharpe Magnetometer, with a scale constant of approximately 25 gamma per division was employed for the survey and the readings of vertical magnetic intensity were taken at 100 foot station intervals. Near the anomaly, however, stations were read at 50 foot intervals.

LOCATION AND ACCESSIBILITY

The property consists of a group of 44 claims located in Gillies Limit, near Temagami, District of Nipissing, Ontario. It is accessible by a road that runs very close to the east boundary of the property. Also, a railroad runs not very far from this property.

The following are the claim numbers of the section of the property covered by the magnetometer survey:

37362 37386 37363 37387 37364 37388

Total of 6 claims

DISCUSSION OF GEOPHYSICAL RESULTS AND CONCLUSIONS

The accompanying plan map, on a scale of one inch equals 200 feet, shows the distribution of vertical magnetic intensity and the contours that have been deduced therefrom.

The results of this survey have indicated the presence of a considerable amount of magnetic in-homogenities over the section of the property that lies in the immediate surrounding of the 'showing'. There seem to be two parallel zones of high magnetic intensity. The main zone extends from the 'showing' on L-O to the far west line marked L-lOW and still remains open to the west. The average magnetic relief characterizing this zone is of the order of 2,500 gammas and goes as high as 4,000 gammas in peak values over localized regions. The zone strikes at approximately N70°E.

A few hundred feet north ofthis zone and parallel to it there is another zone of high magnetic intensity that extends from the middle of I=0 and I=2W to the far west line and also remains open to the west.

It will be noticed that the main anomalous zone on L-8W exhibits a sudden change in polarity of magnetic intensity. Along this line, from 2+00N to 2+50N, i.e. within 50 feet, the magnetic intensity changes from +6,700 gammas to -4,700 gammas. This sort of variation has often been observed in the case of massive pyrrhotite zone. From the magnitude of the anomalies and the nature of their variation, it seems both of them are characteristic of massive zone of pyrrhotite. The probability that these are

being caused by magnetite does not seem to be very great. However, it will remain for an electrical method to find out whether there is any sulphide mineralization associated with these zones of high magnetic intensity. In the meantime, suggestion could be made, since it is believed that the 'showing' itself indicates the presence of pyrrhotite here, that at least the main zone be tested with one exploratory drill hole to find out the source of the anomaly. Further drilling has to be based on the information that would be available from this drill hole and from any surface investigation of electrical nature that may be carried out over this region.

Apart from the two anomalies discussed above, there seems to be present a small zone of moderate magnetic intensity. This has been located on L-8E at 3+00S. This zone has been detected on single line only and seems to lie in strike with the main zone. The source of this seems to lie similarly in pyrrhotite mineralization, but of lesser concentration over a localized region.

Respectfully submitted,
SHARPE GEOPHYSICAL SURVEYS LIMITED

A. K. Mousuf. P.D. Geophysicist.

Dated at Toronto, Ontario, October 23rd, 1956.

