

## REPORT ON A MAGNETOMETER SURVEY ON THE ANOMALY GRID GILLIES LIMIT NORTH TOWNSHIP, ONTARIO

for Cabo Mining Enterprises Corp.

June, 2006 Seymour Sears, P.Geo



#### SUMMARY

The Anomaly Grid covers an area of Coleman Group sedimentary rocks in the north part of Gillies Limit North Township, Ontario. A magnetometer survey was completed over the 13.2 km grid in May, 2006 for the purpose of collecting data on possible exploration targets in the area. The area displays very little magnetic relief and the survey was ineffective in outlining any Cobalt Type Ag/Co mineralization or potential sulphide zones. Prospecting accompanied by soil geochemical sampling may be a more useful tool for future efforts in this area.

Respectfully submitted,

Seymour M. Sears, P.Geo.

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#### INTRODUCTION

This work report on the Anomaly Grid (Figures 1, 2), has been prepared on behalf of Cabo Mining Enterprises Corp. of Vancouver, B. C. The content of the report is based on groundwork and geophysical surveys carried out between May 5<sup>th</sup> and 9<sup>th</sup>, 2006 by Mr. A. Kon.

### **PROPERTY LOCATION AND ACCESS**

Claim # 1231084 is held under option by Cabo Mining Enterprises Corp. from Outcrop explorations Limited of North Cobalt, Ontario. It is a single claim containing 13 units (240 hectares). The claim is located on the north part of Gillies Limit North Township, and represents the parts Blocks 2 and 3. It is shown on MNDM claim index map G-3429, a portion of which is reproduced as Figure 2. It is accessible via the Houndchutes Road which departs from the Coleman Road southeast of the town of Cobalt. The grid is accessed by following Giroux Creek south of Houndchutes Road at the Southwest end of Giroux Lake.

## TOPOGRAPHY AND VEGETATION

Maximum relief on the property is approximately 50 metres. Topography is generally rolling with local steep ledges and cliffs. Local creeks drain the area first towards the southeast and into the Montreal River.

Most of the claim group is covered by extensive overburden. Vegetation consists mostly of mixed forest with extremely bad underbrush.

#### **EXPLORATION HISTORY**

Although there is abundant evidence of work to the north (numerous old pits and other workings), there has been no useable work recorded on this claim in the assessment files. The Ontario Geological Survey flew a geophysical survey that was released in 2000 (Map 82 067) that detected a conductor on the Anomaly grid.

## **REGIONAL AND PROPERTY GEOLOGY**

The area was mapped by R. Thompson in 1960-1961. The Anomaly grid is entirely underlain by Huronian Coleman Group sedimentary rocks. It is probable that these sedimentary rocks are in turn underlain by Archean volcanic rocks.

### 2004 WORK PROGRAM AND RESULTS

TABLE 1 - Work Summary

Linecutting – 13.2 km grid Ground Mag Survey - Total 13.2 km (589 readings).

The magnetometer survey was carried out between May 1<sup>st</sup>, and May 6<sup>th</sup>, 2006.

#### **MAGNETOMETER SURVEY**

The ground magnetometer survey was completed using a Geometrics G-816 Portable Proton Magnetometer. This instrument measures the total intensity of the earth's magnetic field in gammas. A Geometrics G-856A recording Base Station magnetometer was used during the survey to monitor the diurnal variations of the magnetic field. This data was then utilized for correcting the field data. The Base Station was located at 00 on the Baseline. It had a value of 58,490 gammas.

Magnetic intensities were observed at 12.5 metre intervals along 13.2 kms of crosslines on the cut grid. The diurnally corrected data was contoured using the Kriging method in Golden Software's *Surfer*, and plotted at a scale of 1:5000 (Figure 3).

The survey was designed to provide coverage over an area containing an anomaly identified on an Ontario Geological Survey airborne magnetic survey. The magnetic intensities in this area are very subdued, to the point where interpretation is of little use, though three areas may warrant additional exploration. The data was contoured at 50 nanotesla intervals in search of some weak feature. Values over the grid range from 56076 to 56996 nanoteslas, with a mean reading of 56424. Table 2 contains descriptive statistics of the field strength readings of the Anomaly grid.

Two anomalous areas of "higher" values were identified at the extremities of Line 300 West, and a region of "lower" values identified from 500 South to 675 South on Line 900 West.

## Table 2 – Descriptive Statistics for Magnetometer Total Field Strength Readings

Mean	56424.4
Median	56417
Mode	56429
Standard Deviation	75.69673
Sample Variance	5729.995
Range	920
Minimum	56076
Maximum	56996
Sum	33233970
Count	589
Largest(5)	56660
Smallest(5)	56230

#### **CONCLUSIONS AND RECOMMENDATIONS**

The ground magnetometer survey carried out over Claim # 1231084 of Cabo Mining Enterprises Corp. shows that the claim is underlain by rocks that are of similar magnetic susceptibility. The data from the survey is of little or no use in locating Cobalt Type vein hosted silver- cobalt mineralization. Prospecting and soil geochemical sampling and an electromagnetic survey are recommended on the grid.

Sudbury, Ontario June 17<sup>th</sup>, 2006 Respectfully submitted,

Seymour M. Sears, P.Geo.

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# Appendix 1

(Figure 3 – Contoured Total Field Magnetics)



Figure 1: Regional Location Map of Ontario



