REPORT ON GRAVITY, MAGNETIC and VLF-EM SURVEY Claims 1140850 and 3018472 Walker Township Ontario

for

Merle Cosby, 1377753 Ontario Inc.

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by
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TORONTO CANADA

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1.1 Terms of Reference and Objectives of this Work

This work was initiated in response to a request from Merle Cosby. The requested geophysical survey was done with the objective of providing information about the geology of a property that includes gold mineralization.

The surveyed area, as seen in Figure 1, is located about 15 km north of the village of Matheson, in Walker Township and can be reached by all-weather road.

1.2 Geophysical Survey and Data Reduction

The survey conducted by this author in the period May 29-31, 2009 and was assisted by Miss Danielle Dubien. Surveying was done on 4 N-S lines (68, 70, 72 and 74)spaced at 200m interval and on 3 E-W cut lines (TL1, 2 and 3) spaced at 200m, about 4.2 km in total. Gravity, magnetic intensity and VLF-EM measurements were taken at 25 m spacing. Gravity measurements were not taken on the E-W lines.

The geophysical measurements were made using a thermostatically controlled Sodin gravimeter; 286-T which rested on a 0.7 m. high tripod, a GEOMETRICS 846 Unimag II proton magnetometer and a GEONICS EM-16 VLF receiver.

Gravimeter temperature setting was 25 degrees Celsius. It has a sensitivity of ± 0.01 milligals (mgal). The magnetometer has a sensitivity of ± 1 nT. Barometry was used to determine gravity station elevations. Gravity station elevation accuracy is about 2 feet.

No magnetic storm activity was encountered during the survey.

1.2.1 Drift and Instrument Scale Correction.

All gravity traverses commenced and ended by a reading at the survey base station. Instrument readings were converted to milligals (mgal) using the instrument constant; 0.10062 mgal/instrument division

1.2.3 Latitude Correction

The gravity data was corrected for the northerly gravity increase; 0.8055 mgal / km.

1.2.4 Elevation Correction

Gravity decreases rapidly with elevation or distance from the centre of the earth. This decrease is partly dependent on the density of the material underlying the gravity station. The elevation correction may be written as + 0.3086 -0.04186 \circ mgal/meter, where \circ is the density of the material between the gravity station and the minimum elevation of the survey. Selected density was 2.67 gm/cc.

1.2.5 Data Compilation

A principal product of this survey is a digital recording of the reduced geophysical data file Ga.dat on a 3.5" diskette. It contains 5 columns of information:

- 1 ast and north station position in meters, north of datum of 5390,000m NAD27 datum, zone 17
- 2. Bouguer gravity in milligals, arbitrary datum
- 3. relative station elevation in feet

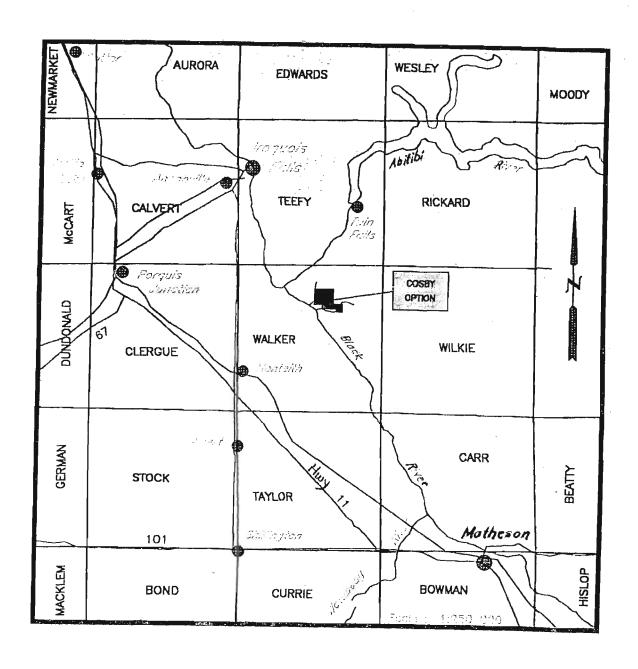


Figure 1. Location Map

4. magnetic intensity above a datum of 56,000 nT

Fraser filtered in-phase EM-16 measurements

1.2.6 Magnetic Data Analysis

Geomagnetic statistics for the area (2008) are as follows;

Intensity; 56,700 nT

Inclination; 74°

Declination; 11.5°W

2 Survey Results

The geophysical data is described in three 1:5000 scale maps;

Figure 2.1 Bouguer gravity

Figure 2.2 Magnetic intensity

Figure 2.3 Fraser Filtered In-Phase EM-16 values

Figure 3 Geophysical Anomalies

igures 4.1 to 4.7 Gravity, magnetic and VLF data profiles

2.1 Gravity Features

The gravity map shows an anomaly, E, in the south half of Line 68. A prominent 0.7 mgal anomaly is observed. It appears to extend to the southeast to Line 70. The gravity anomaly is similar in amplitude to the anomaly surveyed in 1998 to the west. Further gravity surveying between E and the 1998 anomaly is required to determine the relation between these gravity features.

A drill hole 100-80-MO located on line 70 at 5392.750N and inclined to the north appears to have

A second gravity high; D, is noticed in the north half of line 74.

We observe a major discordancy in the gravity map between lines 70 and 72. This may be due to dislocation caused by the **Black River Fault**.

2.2 Magnetic Features

Two magnetic anomalies are observed and each is associated with gravity anomalies D and E.

Each is about 200 nT in amplitude and both are indicative of north dipping magnetic bedding.

Magnetic data on TL3 further defines the extent of magnetic anomaly E.

Both anomalies are only partially defined by the current surveying.

Figure 2.1 Bouguer gravity, scale 1:5000, contour interval; 0.2 mgal

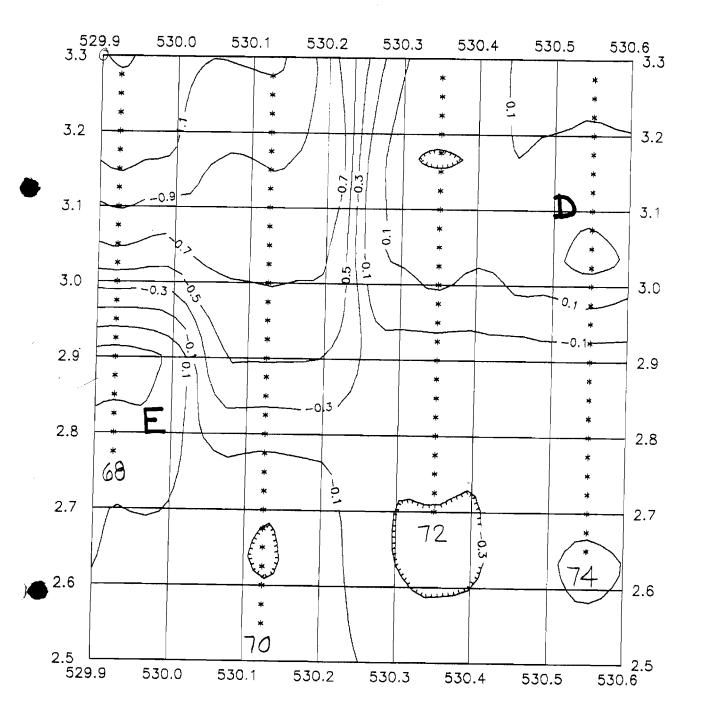


Figure 2.2 Magnetic Intensity, scale 1:5000, contour interval; 50 nT

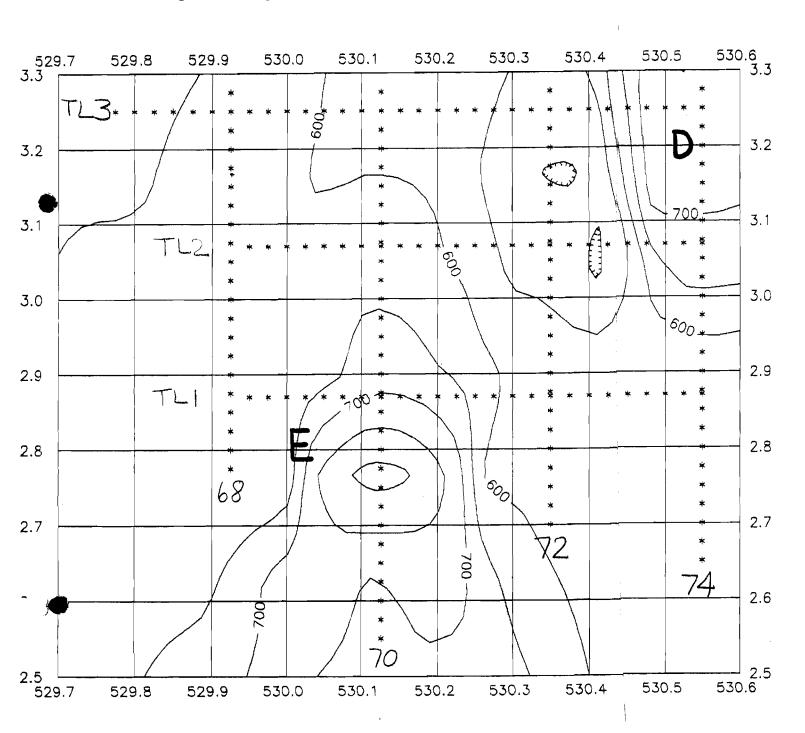


Figure 2.3 Fraser filtered VLF data, scale 1:5000, contour interval; 20 units

