A Geophysical Report
on
A Gravity Survey - Tie Grid
by
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A REPORT

ON

A GRAVITY SURVEY

Tie Grid, Anvil Area

Yukon Territory

FOR

CYPRUS ANVIL MINING CORPORATION

Vancouver, British Columbia

BY

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INTRODUCTION

Between June 22nd and 29th, 1975, Peter E. Walcott & Associates Limited carried out a gravity survey over the Tie grid for Cyprus Anvil Mining Corporation.

The survey was carried out over N 15° W lines which were turned off at right angles from a N 75° E baseline, and which were chained and picketed at 100 foot intervals.

Measurements of relative gravity were made every 100 feet along the picket lines using a CG-2 gravity meter. In addition elevations at each of the gravity stations were obtained using a Sokkisha TM-20C theodolite and rod.

The data was then processed and is presented in contour form on Maps W-196-1 to 3 that accompany this report.

PROPERTY, LOCATION AND ACCESS

The property, i.e. the Tie claims, is located in the Anvil area of the Yukon Territory.

The grid is situated at and around the intersection of the Anvil mine road and the north access road to Blind Creek and the Grum deposit.

Access is easily obtained by two wheel drive vehicle.

PREVIOUS WORK

Previous work on the property consisted of airborne magnetic and electromagnetic surveys, geological mapping, geochemical sampling, ground magnetic and electromagnetic surveys, and limited rotary drilling.

The results of the above are documented in reports held by Cyprus Anvil Mining Corporation.

PURPOSE

The purpose of the survey was to see if any excess mass, that could be indicative of sulphide mineralization, is associated with the electromagnetic conductor.

GEOLOGY

The reader is referred to reports held by Cyprus Anvil Mining Corporation.

SURVEY SPECIFICATIONS AND PROCEDURES

The magnetic survey was carried out using a Sharpe MF-1 fluxgate magnetometer. This instrument measures variations in the vertical component of the earth's magnetic field to an accuracy of ± 10 gammas. Corrections for diurnal variations were made by tying-in to previously established base stations at intervals not exceeding two hours.

The gravity survey was carried out using a Scintrex CG-2 gravity meter, which measures variations in the earth's gravitational field to an accuracy of ± 0.01 milligals.

Values of observed gravity were obtained every 100 feet along the picket lines. Corrections for meter drift were made by tying-in to previously established base stations at intervals not exceeding 2 to 3 hours. Drifts of over 0.10 milligals per hour were not allowable.

The elevations of the gravity stations were determined by rod and transit (Sokkisha TM-20C theodolite) using the stadia method. Errors in the tying-in of loops were kept to a minimal, and did not exceed 0.5 feet per loop.

Corrections were then applied to the observed gravity values for differences in elevation, using a density of 2.7 gm/cc, and latitude.

The final Bouguer gravity values were then plotted and contoured.

The regional gravity effects were established from profiles, plotted, contoured and smoothed.

The differences between the Bouguer gravity values and the regional effects, the residual gravity values, were then established and contoured.

DISCUSSION OF RESULTS

No significant gravity anomalies are observed on the residual map (Map No. W-196-3) calculated for a density of 2.7 gm/cc.

The regional gravity map (W-196-3) appears to reflect the surmised geological setting of the grid, i.e. greenstones and associated rocks (ρ = 2.9 - 3.0 gm/cc) south of the baseline, phyllitic rocks (ρ = 2.7 gm/cc) to the north, and granitic intrusives ($\rho < 2.7$ gm/cc) in the north eastern corner.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Between June 22nd and 29th, 1975, Peter E. Walcott & Associates Limited carried out a gravity survey over the Tie grid for Cyprus Anvil Mining Corporation.

No significant gravity anomalies were located on the grid.

As a result the writer recommends that no further work be undertaken on the area surveyed on the basis of the above results.

Respectfully submitted,

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L.40-W L.36-W L.32-W L.28-W L.24-W L.20-W L.16-W L.12-W L.8-W L.4-W L.0 L.4-E

16-N 14-N 12-N 10-N 8-N 6-N 4-N 2-N — BASE-LINE — 2-S 4-S 6-S 8-S 10-S 12-S 14-S 16-S

B.S.-2 (4109)

B.S.-1 (4201)