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GAL GROUP

105-K-6

GRAVITY INTERPRETATION

ANVIL MINING CORP.

SEPT. 1967

CAL GROUP

Yukon Territory

GRAVITY INTERPRETATION

for

ARVIL MINING CORP.

by

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September, 1967

Field work was completed on these claims by United Geophysical Company of America during the summer of 1967. Approximately 360 stations were surveyed and metered on a line spacing of 600' and station spacing of 200'. United prepared elevation and Bouguer maps of the field data. These are included in this report. Bouguer values were computed with an elevation correction factor of .059 - corresponding to surface densities of 2.75.

The writer plotted Bouguer gravity, regional and residual profiles which are attached to this report. Regionals were drawn through the profiles and tied, and a map of profile residual values was made. Template residuals were calculated as a check against the profile residual values. The residual map is included in this report.

#### ELEVATION MAP

Elevation varies from a high of about 3340' a.s.l. in the west and south parts of the area to a low of 2975' a.s.l. in the north corner. A stream runs northeastward through the centre of the area and joins a northeasterly flowing stream near the base line. Bouguer values in the valley near the base line are low, indicating abnormally high densities in surface rocks. However, the points of highest elevation in the south have low values also. This probably indicates the presence of abnormally thick overburden here. Elsewhere in the area the elevation correction factor used appears appropriate.

### BOUGUER MAP

Bouguer map was prepared by United and shipped directly to Anvil. United has been requested to redraft the contours because of some inconsistencies in the eastern corner. There is a Bouguer high at 115 on line 32E, which possibly ties to another at 115 on line 24E. Another positive occurs in the vicinity of 305 on lines 0 and 8E. Other small noisings and flattenings occur.

### RESIDUALS

Two sizable residual positives have been labelled "A" and "B". These are discussed below.

#### "A" Anomaly:

Highest value is at 115 on line 32E. Relief: 0.65 mgal. The anomalous reversal can best be seen on the line 32E profile. The north flank is possibly distorted by the presence of the stream channel and the feature is open to the east. Therefore, depth estimates are likely to be highly inaccurate. The data at hand however, suggests that a heavy causative mass may exist at depths of 400' to 500'. The anomaly, occurring at the edge of regional control, needs confirmation by an extension of the gravity programme before it should be considered a drillable prospect.

#### "B" Anomaly:

Highest value of 0.4 mgal here, occurs at 595 on line 8E. The positive feature appears to exist as such, only because

of the presence of light materials (overburden, glacial debris) in the areas of high elevation to the west and south. It is unlikely that it is caused by a concentration of sulphides.

The Bouguer high in the vicinity of 30S on lines O and 0E appears to be a deep-seated regional effect and of no economic interest.

RECOMMENDATIONS

1. To further investigate the "A" anomaly run lines 28E, 36E and 40E from the base line to 25S.

Respectfully submitted,



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RBE:gp