

DY GROUP

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GRAVITY INTERPRETATION

105-K-346

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Yukon Territory

GRAVITY INTERPRETATION

for

ANVIL MINING CORP

by

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Field work was completed on these claims by Overland Exploration Services, Ltd., in September, 1968. Approximately 1330 stations were surveyed and metered on a line spacing of 800' and station spacing of 100. Overland prepared profiles and elevation and Bouguer maps of the field data at a scale of 200' = 1". These are included in this report. Bouguer values were computed with an elevation correction factor of .060 - corresponding to surface densities of 2.7.

Regionals were drawn through the profiles and tied, and a map of profile residual values was made. The residual map is included in this report.

#### ELEVATION MAP

Elevation varies from 4442' a.s.l. in the northwestern corner of the area to a low of 2623' a.s.l. in the southeastern corner. The elevation correction factor of .060 used in this area appears to have yielded adequate Bouguer values over the bulk of the area.

#### BOUGUER MAP

Lowest Bouguer values are in the northwestern corner of the area. In the northwestern portion these values increase with decreasing elevation, suggesting that surface rocks in this area are less dense than the 2.7 assumed for the area as a whole. Elsewhere in the

Dy area surface densities are a normal 2.7. Various local nosings are suggestive of small residual anomalies and fault contact. These are discussed more fully under the section on the Residual Map. The north end of line 104 + 00 E is anomalously low in Bouguer value. This low is interpreted as a non-structural feature, and it is probably due to a meter malfunction.

### RESIDUAL MAP

Regional gravity lines were run on the profiles and tied by synthetic profiles plotted parallel to the base line at 20 + 00N, 0 + 00 and 20 + 00S. Significant divergences from regional were plotted as residuals, but very small divergences were averaged into regional. The resulting residual map, therefore, is at "0" value over the bulk of its area. Protuberances above the regional "surface" are plotted on the accompanying residual map as local closures. The residual map itself may be looked at as a contour map of a table top with a few piles of salt scattered about it.

Some very abrupt changes in the regional have been interpreted as fault contacts. These form three prominent lineations - two in the southwest part of the area, where an en echelon arrangement is apparent, and in the east-central part.

None of the local residual closures is exceptionally strong in amplitude. It appears that the structural "grain" of the area is sub parallel to the line orientation, and it is probable that no residual apices were crossed by gravity lines, however. Because of this, causative mass depth computations are not meaningful.

A detailed comparative rating of the potential of various positives is not practicable. However, the more significant ones are as follows:

Station 20 + 00S, line 8E  
" 5 + 00N, " 112E  
" 14 + 00N, " 120E  
" 14 + 00S, " 80E

None of the above would appear to be caused by really large tonnage masses. The latter three are probably quite narrow (near vertical veins?) and may be quite close to the surface. The first-mentioned is greater in areal extent.

#### RECOMMENDATIONS

1. Consider drilling a 150' diamond drill hole at 20 + 00S on line 8E.
2. Consider surface trenching at 5 + 00N on line 112E.

3. To further examine the extremely steep gradient on the south ends of lines 8E through 48E, run one gravity line as a 4000' south extension of line 16E.

Respectfully submitted,



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