

SEA EAST GROUP

GRAVITY INTERPRETATION

ANVIL MINING CORP.

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Nov. 1967

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Yukon Territory

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for

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by

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November, 1967

Field work was completed on these claims by United Geophysical Company of America in October, 1967. Approximately 441 stations were surveyed and metered on a line spacing of 800' and station spacing of 200'. United prepared elevation and Bouguer maps of the field data. These are to be included in this report. Bouguer values were computed with an elevation correction factor of .060 - corresponding to surface densities of 2.7.

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

Elevations vary from a high of 3179' a.s.l. in the west central part of the area to a low of 2535' a.s.l. near the southwest corner. Except in one locality, the elevation correction factor of .060, yields adequate Bouguer values. The excepted locality is near the south ends of lines 120E, 128E and 136E, where a low ridge (100' - 150' high) coincides with a Bouguer low. The ridge is probably composed of light

debris.

BOUGUER MAP

The Bouguer map contains a number of noses and one closure (vicinity of 305 on lines 136E and 144E) of about 0.5 mgals. In addition, there is a steepening of gradient which curves from 46S on line 80 to 125E on the base line. This steep gradient may best be observed on the base line profile. It is interpreted as a fault with up to 2000' displacement. The fault may not cut the surface rocks.

RESIDUAL MAP

Positive anomalies of potential interest are lettered "A" through "E", in order of importance. They are described below.

"A" anomaly - Over 1.0 mgal relief, and outstanding in size and amplitude. Open towards the east. Computations based on a causative mass of 3.6 g/cc density indicate over 50 million tons. Shape probably lies between that of a horizontal slab and a horizontal cylinder, with depth to top of about 750' or a little less. It would appear that a causative mass lies within the 0.6 mgal contour. It is possible that this anomaly may be caused by an intrusion of basic rocks rather than an accumulation of mineralized material. Such an intrusion

might have a density of 3.0 and be larger and shallower. However, the anomaly represents a particularly attractive target.

"B" anomaly - 0.4 mgal relief. Relatively small amplitude and lack of steep gradient on the flanks make this only marginally attractive. It is probably an over-burden effect.

"C", "D", "E" anomalies - all at the edges of the area where good regional control is lacking. "D" appears to be the strongest of the three and should be investigated further.

RECOMMENDATIONS

1. Detail the "A" anomaly by:
 - (a) Running gravity lines 124E, 132E, 140E and 148E from 10S to 50S, using a 100' station interval.
 - (b) Run a gravity line from 34S on 120E to 26S on 152E, using a 100' station interval.
 - (c) Extend the gravity programme eastward, if Anvil's claims extend in that direction.
2. Test the "A" anomaly at a location selected on the basis of the additional work. Be prepared to drill to 1000' if necessary. DRILLED AS GS-S-1
957' - rock
3. Extend line 120E southward 1500' to investigate the "D" anomaly, further.



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