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SEA NORTH GROUP

Yukon Territory

ANVIL MINING CORP

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GRAVITY INTERPRETATION

for

ANVIL MINING CORP

by

Robert B. Galeski, P. Geoph.

November, 1967

Field work was completed on these claims by United Geophysical Company of America in October, 1967. Approximately 315 stations were surveyed and metered on a line spacing of 800' and station spacing of 200'. 45 stations were surveyed and metered at a spacing of 100' on three short lines. 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 .061 - corresponding to surface densities of 2.6.

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 3684' a.s.l. in the north central part of the area to a low of 3000' a.s.l. at the north shore of Swim Lake. The elevation correction factor of .061 adequately corrects for the elevation changes within the area, and the Bouguer values computed are adequate.

BOUGUER MAP

The Bouguer map was prepared by United and shipped directly to Anvil. A prominent Bouguer positive trend extends from 8 south on line 32E northeasterly to 10 north on line 64E. Regional gradient (see profiles) is southward toward Swim Lake, over the westerly portion of the area. This gradient is probably the result of mass deficiency because of deep water in Swim Lake and the presence of light oozes on its bottom.

To the east, the Finger Lake area does not appear to be particularly mass deficient - indicating that it must be very shallow. In fact, the easternmost line in the area (150E) exhibits a rather strong northward Bouguer gradient away from Finger Lake, suggesting that a heavy mass may exist off the south end of this line.

RESIDUALS

The Bouguer positive trend, mentioned above, results in the two residual anomalies labelled "A" and "B".

"A" has about 0.7 mgal relief. Assuming the density contrast of 0.9 which has been used for computations elsewhere in this area, the causative heavy mass works out to about 5 million tons in size with a depth to top of 240'.

"B" is probably associated with "A", but the two causative masses are not continuous, as indicated by a local residual low at 50E to 52E. Computed depth to top of the "B" causative mass is 600', the greater depth here being due in part to higher surface elevations. "B" is rather poorly defined because of the wide station and line spacing in this part of the area.

A positive "C", is indicated at the south end of line 150E because of the relatively steep northward gradient here. Apex and causative mass parameters are unknown.

RECOMMENDATIONS

1. Test the "A" anomaly at 5 south on line 40E with a hole programmed to a maximum depth of about 400'.
2. If 1, above, is successful, drill another hole at 8 south on 48E before proceeding to the drilling of the remainder of the anomaly.
3. If 1, above, indicates mineralization, drill the "B" anomaly, but choose the drilling location after running a gravity line from 4 north on line 48E to 4 north on 56E to 7 north on 64E. Use 100' station spacing.

4. Run a detailed gravity programme in the vicinity of the south end of line 150E to outline the "C" anomaly. This should be completed during the winter (preferably the latter part), since a portion of this programme should be done on the ice of Finger Lake.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "R. B. Galeski".

R. B. GALESKI CONSULTING

RBG:gp

November, 1967