
Mr. G. McIntyre,
Chief Mining Recorder
Federal Building
Whitehorse,
Yukon Territory.

Dear Mr. McIntyre:

The accompanying report "MOR Group - Gravity Interpretation" by R.B. Galecki is being submitted in support of applications for certificates of work on the MOR group of mineral claims.

These claims are situated in the Swim Lakes area, Whitehorse Mining District on claim map sheet 105K/2.

Yours truly,

M.O. Hampton, P. Eng.
Chief of Exploration
ANVIL MINING CORPORATION LIMITED

MOR/pp

Enclosure
MOR GROUP
Yukon Territory

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 473 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

Elevation varies from 3489' a.s.l. atop a hill in the eastern portion of the area to a low of 2982' a.s.l. in the northwestern corner. Another hill peaks at 3328' a.s.l. near the south end of line 140E. Lowest points on most of the north-south lines is at about 20N. Drainage of the bulk of the area is westerly along 20N. The elevation correction factor of .060 used in this area appears to have yielded adequate Bouguer values.
BOUGUER MAP

Bouguer values decrease generally from north to south, with the gradient being greatest at the eastern end of the prospect. A local steepening of gradient occurs on all lines east of 116E, in the vicinity of the base line to 1000' north of the base line. This may be indicative of a fault (south side down). Trace would extend from the intersection of the base line and 204E westerly through about 5N on 164E and 172E, to the vicinity of 5N on 124E. There is no evidence on which to carry it farther west. Displacement may be as great as 1000'. It is doubtful that this postulated fault cuts rocks at the surface.

A number of noses are evident. Those of importance yield residual anomalies which will be discussed in the next section. The attention of the reader is directed to an area of widening contours in the vicinity of 10N to 16N on lines 156E to 196E. This is the area of the "A" anomaly discussed more fully in the next section.

The highest Bouguer value is at the north end of line 188E. Gradients south and southwest of it are very steep. Because regional control is lacking here at the edge of the prospect, it is unknown, whether or not a significant residual anomaly exists. On the profiles of 180E, 188E and 196E, the regional was
arbitrarily carried close to the Bouguer values. However, the area warrants further investigation.

**RESIDUAL MAP**

In order of importance, residual anomalies have been labelled "A", "B", "C" and "D".

"A" anomaly - 0.65 mgal amplitude, depth to top of causative mass 240'\(^\dagger\). On trend with "C" and "D" it lies on the north side of a postulated fault and in close proximity to it. Shape of the anomaly probably is somewhat distorted because of the steep regional gradient in the area.

"B" anomaly - 0.61 mgal amplitude, depth to top of causative mass 460'\(^\dagger\). Probably separated from "A", "C" and "D" anomalies by a fault.

"C" and "D" anomalies - approximately 0.5 mgal amplitude. Possibly represent small accumulations at great depth.

**RECOMMENDATIONS**

1. Run gravity line (100' station interval) 9 North between 164E and 196E.

2. Extend lines 180E, 188E and 196E northward for 2000' to investigate possibility of an anomaly in this area.
3. Drill "A" anomaly at a location to be selected after the results of the 9 north line are studied.

Respectfully submitted,

R. B. Galeski

RBG: gp
STATEMENT OF COSTS

Gravity Survey of MOR Group.

(A) Linecutting - performed and submitted as representative work in 1966.

(B) Leveling - Instrument man

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<td>$180.00</td>
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<tr>
<td>33 hrs. O/T</td>
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Rodmen

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Room & Board 22 m.d. @ $6.80
$149.60 less $33.00 paid by Rodmen $106.60 $106.60

(C) Gravity Metering -

Meter operation

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<td>128 hrs.</td>
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Room & Board 8 days @ $6.80 $54.40 $1206.40

(D) Transportation, Helicopter

(September 22-27, 30, Oct. 1-9)

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Total $4079.79
AFFIDAVIT

SUPPORTING STATEMENT OF COSTS
Gravity Survey
September 22 - October 2, 1967.

I, Murray O. Hampton, Chief of Exploration for ANVIL MINING CORPORATION LIMITED, have compiled the Statement of Costs as presented in this report "Gravity Interpretation - MOR Group," DO MAKE OATH AND SAY AS Follows:

That to the best of my knowledge and belief, the Statement of Costs as presented is a true and an accurate presentation of expenditures to be applied as representation work on the MOR mineral claims.

M. O. Hampton
Murray O. Hampton, B.A.Sc., P.Eng.
Chief of Exploration for ANVIL MINING CORPORATION LIMITED

Sworn before me this DEC 18, 1967, day of ............. 1967, in the City of Whitehorse in the Yukon Territory.

A Commissioner for taking oaths and for the Territory of Yukon.