

October 1st, 1970.

OWL MINERAL CLAIMSGravity SurveyPreliminary examination of survey results

There are 3 anomalous areas that warrant testing by diamond drilling:

Area A

1.17 milligal peak located over line 20W at station 5S. This is an area of prime interest over which a gravity anomaly extends over an area of 2000 by 1500 feet. Calculations made from the north sloping gradient in line 20W have been made for 2 possible causative structures:

- (a) Horizontal cylinder:
- |                 |          |
|-----------------|----------|
| Depth to centre | d = 400' |
| Radius          | r = 210' |
| Depth to top    | d = 190' |
- (b) Slab:
- |              |          |
|--------------|----------|
| Depth to top | d = 270' |
| Thickness    | t = 110' |

The shape of the overall anomaly is more characteristic of a slab. Dip would be southerly.

To the east of Area A at line 8W, there is a suspected 'elevation bust' therefore providing a lack of continuity between areas A and C.

Area B

.82 milligal peak located on line 20E at station 6N. This feature is of smaller amplitude than Area A and is not due to as large a causative mass. The main structure strikes from 4N on 12E to 6N on 20E with a 'saddle' on line 16E. This has been interpreted by Overland as a possible steep dipping bed of dense material. Depth to the top of a slab would be 145 ft.

Calculations from gradients over the 'hole' on line 4E for a horizontal cylinder with a 0.7 density contrast (country rock = 2.7) and a radius equal to  $\frac{1}{2}$  width show that an overburden filled depression is plausible here.

Area C

.77 milligal anomaly located at station 4S on line 4W with weak extensions to the southeast part lines 4E to line 12E at 14S.

This anomaly is partially coincident with a topographic swale and for this reason could be due to such a feature or a bedrock topographic characteristic.

The causative body does not appear to be a slab however, if it were, its top would be at the 200 ft. level.

General

The regional gradient determined by Overland Explorations has presented a residual that is 'conservative'. It tends to lessen the highs and show up the lows.

Further study of the regional data by consultant R. Galeski changes the direction to a drop towards the northeast of about 1 milligal. East of line 12E there is a flattening to a lower regional compared to the western lines. If this is legitimate there could be a north-south fault through line 12E.

The gravity lows may be due to faulting producing overburden filled topographic lows.

Diamond Drilling

The targets to be tested are:

1st	Line	20E	6N
2nd	Line	20W	5S
3rd	Line	4 W	4S

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