WHSE

GRAVITY SURVEY

of the

BLUE CLAIMS (30 to 64 inclusive) GROUP

and the

COLT CLAIMS (1 to 14 inclusive) GROUP
YUKON TERRITORY

Map Sheet 105K - 12
Latitude 62°37' N and Longitude 133°35' W

for

CANADIAN RESERVE OIL LIMITED

by

OVERLAND EXPLORATION SERVICES (1969) LTD.

This Report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of
$24,050

D B Craig
Resident Geologist or
Resident Mining Engineer

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

Commissioner of Yukon Territory

Job No. 72-182
June 25th to July 12th, 1972

W.G. Crook

INTRODUCTION

In June and July 1972 Overland Exploration Services (1969) Limited conducted a gravity survey on the Blue Claim Group, claims 30 to 64 inclusive, and the Colt Claim Group, claims 1 to 14 inclusive. These claims are located on Map Sheet 105K-12, eight miles northwest of Anvil Lake, centered on Latitude 62°37' N and Longitude 133° 45' W. The work was conducted from a camp located northeast of the claims. All materials and men were flown in by helicopter. A helicopter was also used to transport the men to their daily work sites while the job was in progress.

Claim Grant Numbers are:

BLUE	30 Y 61598	48 Y 66006
	31 Y 61599	49 Y 64000
	32 Y 61600	50 Y 66007
	33 Y 61601	51 Y 66008
	34 Y 61602	52 Y 66009
	35 Y 61603	53 Y 66010
	36 Y 61604	54 Y 66011
	37 Y 61605	55 Y 66012
	38 Y 61606	56 Y 63996
	39 Y 61607	57 Y 66014
	40 Y 61608	58 Y 66013
	41 Y 61609	59 Y 66015
	42 Y 63995	60 Y 66016
	43 Y 63997	61 Y 66017
	44 Y 66003	62 Y 66001
	45 Y 63998	63 Y 66005
	46 Y 63999	64 Y 66002
	47 Y 66004	

COLT	1 Y 63928	8 Y 63934
	2 Y 63929	9 Y 63936
	3 Y 63930	10 Y 63937
	4 Y 63931	11 Y 63938
	5 Y 63932	12 Y 63939
	6 Y 63935	13 Y 63940
	7 Y 63933	14 Y 63941

The Blue Claims 30 to 64 and the Colt Claims are located in two adjacent groups of the claims. The Blue Claims lie immediately to the west of the Colt Claims and are connected by common east-west survey lines. North-south base lines were surveyed and from them an east-west grid of lines spaced 750 feet apart was laid out. Along the grid and base lines gravity points were located and read at a 200 foot spacing interval. In all, 37 miles were cut, surveyed and metered. All hand-cut lines were wide enough to permit a line of sight for topographic survey.

PERSONNEL on the ANVIL PROJECT

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TECHNICAL DATA

Bouguer Free-Air Correction	- 0.06
Latitude Correction	- 4911.15 feet/milligal
Density	- 2.65
Diurnal Drift	- taken from base plots
Terrain Corrections	- taken where necessary
Meter Numbers	- Worden No. 806 LaCoste & Romberg No.'s 181 & 225
Meter Constants	- No. 806 - 0.20961 181 - 1.05556 225 - 1.06040
Base Value	- Arbitrary value of 500 milligals

0.06 for a surface density of 2.65 has been used in this interpretation.

SURVEY AND FIELD PROCEDURE

The horizontal and vertical survey was conducted with a T1 - A theodolite. Stations were located and elevated along each of the grid lines. The elevation was then closed across the extremities of the grid lines, all of the closures thus formed were under 2.5 feet. A field plot of the actual elevation closures has been included in this report. The gravity readings were taken with a Worden Master and LaCoste & Romberg meter and stations were metered on a two and one-half hour run from base to base interval. The base station plots were used for graphing the diurnal gravity drift which in turn was applied to all station readings. Each gravity station run had several repeat stations from the preceding runs in order to prove the repeatability of the gravity meter. The repeats were all within a 0.00 to 0.08 milligal range. All gravity readings were corrected for diurnal drift, Bouguer Free-Air Correction, latitude correction and terrain correction. A density factor of 0.06 for a surface density of 2.65 has been used in this interpretation.

INTERPRETATION

Included with this report are the following maps:

- Elevation Map
- Bouguer Gravity Map
- Residual Gravity Map
- Bouguer Profiles showing regional gradient and residual features

The interpretation of this report is mainly based on the Bouguer Profiles of the surveyed area. It is the profiles which have been examined for anomalous trends and it is from the profile gradient that model studies have been conducted of signifigant gradient changes. Any gradient changes emanating from within the upper 1,500 feet of the geological section are deemed to be "residual" and are shown as being positive or negative on the Residual Map.

The features which are being sought are gravity positives which can be identified with a source contrast of 1.00 specific gravity. This is the average minimum contrast that we can expect to find between the altered sedimentary host rock and the massive sulphide bodies.

Complicating the search are two events that will nearly satisfy the above perameters for density contrast. One is a cone or ridge of dense native rock surrounded by several hundred feet of surface till. The second is a mass of altered quartzite or skarn that can be very dense (up to 3.5) and if adjacent to a phyllite with a density of 2.65 will appear as a positive gravity anomaly which is similar to the anomaly produced by massive sulphide bodies.

In most cases only drilling will verify the cause of the anomaly.

The following is a discussion of the maps presented.

BOUGUER GRAVITY MAP

The Bouguer Map of the Blue Claims and Colt Claims Groups displays an even mass distribution in the east central portion of the work. From this evenly distributed area the gravity dips to the southeast and rises steeply to the northwest. The rise to the northwest is 8.0 milligals and probably can be attributed to a fault, the location of which is shown on the Bouguer Map.

We feel that the apparent dip in gravity to the east and southeast is probably coincident with the proximity of granite with the surface. Generally, the granite associated with the Anvil Batholith is less dense than the altered sediments and the granite outcrops show as gravity lows.

Superimposed on the above described regional mass distribution are a number of gravity highs and lows. Some of the local features can be readily seen on the Bouguer Map while others are masked by deeper influences and the changing gradient. It is these features that we are interested in for locating the possible mineralized zones, and it is the Residual Map that must be turned to to separate them from the regional background.

RESIDUAL GRAVITY MAP

The Residual Gravity Map shows the difference (in gravity) between the observed gravity and the regional gravity gradient. The regional gravity gradient on the Blue Claims 30 to 64 and the Colt Claims Group has been constructed from a profile analysis of the surveyed gravity lines and is designed to attempt to eliminate the deep-seated gravity features which complicate the identification of the shallow-sourced gravity features. By using this method, the deep-seated gravity events are filtered out or suppressed to a point where the remaining or residual gravity is (mostly) emanating from a predetermined maximum depth. In the case of the Blue and Colt Claims Group areas this investigation depth is 1,500 feet or less below surface.

The Blue and Colt Claims Group show three major trends of residual anomalies. These anomalous trends strike north-northeast - south southwest and are labelled east to west K, J and H. The K and J trends fall on the Blue Claim block 30 to 64 while the H trend is located on the Colt Claim block.

The most important feature is probably the K anomalies. Here we have three pod shaped features diminishing in magnitude toward the south. The northernmost positive reaches

a residual magnitude of 2.40 milligals. Models of the northern two positives show them to have a burial depth of 600 feet and an excess mass of 48,000,000 tons for the most northernly feature and 40,000,000 tons for the second feature.

The J anomalies are a series of low magnitude highs that appear to flank a fault zone. The fault lies to the west of the gravity positives that form the J feature. We feel that despite the fact that the gravity highs are low magnitude they should be investigated with I.P. to see if there is evidence of mineralization along the fault zone.

The H anomalies are two positives of 1.50 milligals that have large areal extent. The northern feature centered on claim #4 is 900 feet deep while the south high is considerably shallower at 400 feet below surface.

CONCLUSIONS

The anomalies discussed in this report are some of the most signifigant features we have seen to date on the Yukon Project. We feel that the northern K anomaly should be drilled as well as the southern H anomaly. I.P. work carried out along the fault zone should also prove to be worthwhile and it is strongly recommended.

Respectfully submitted by:

OVERLAND EXPLORATION SERVICES (1969) LTD.

W.T. Salt

THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF ALBERTA
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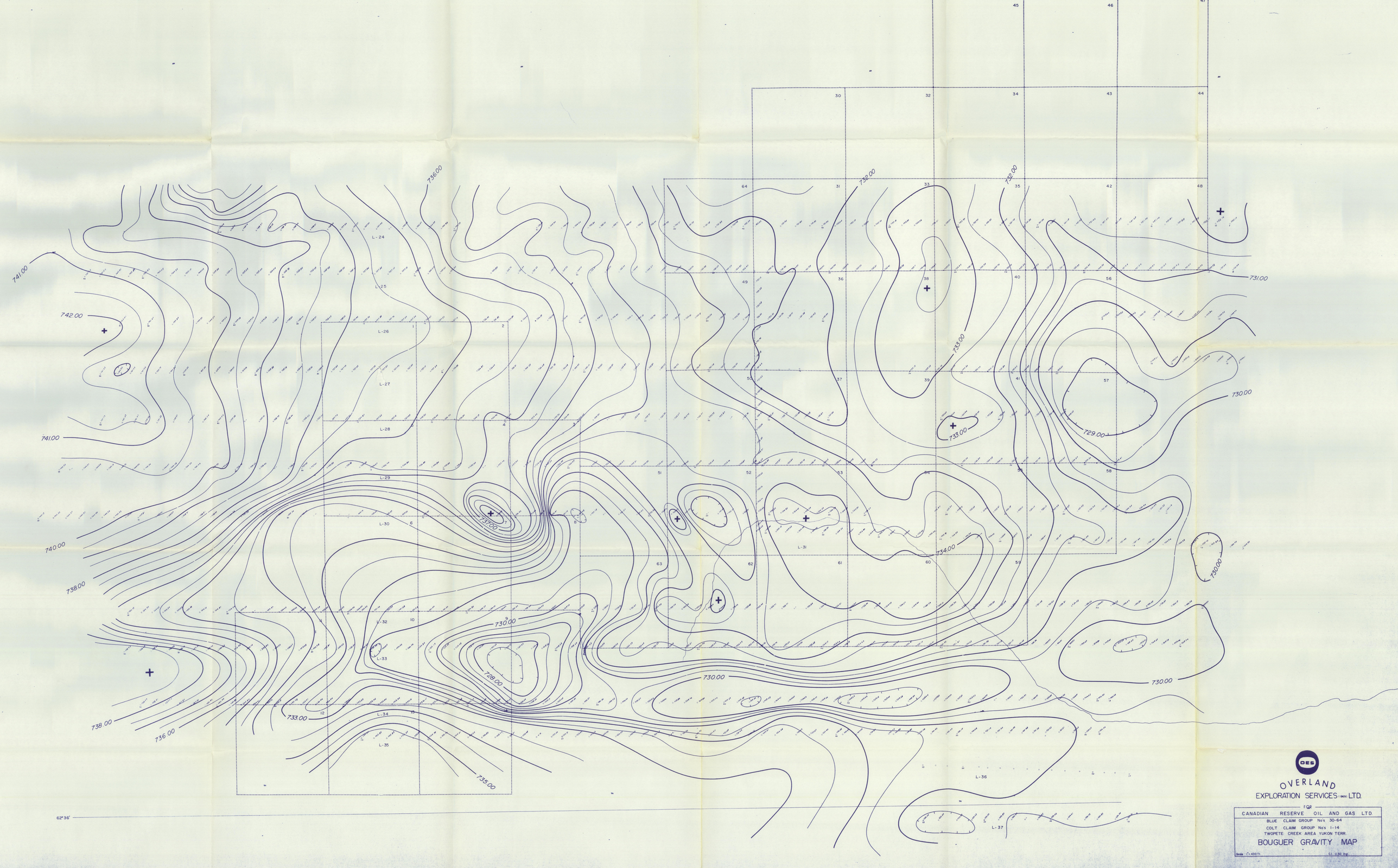
/pbe



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EXPLORATION SERVICES (1965) LTD.

FOR

CANADIAN RESERVE OIL AND GAS LTD.

BLUE CLAIM GROUP No's 30-64
COLT CLAIM GROUP No's 1-14
TWOPETE CREEK AREA YUKON TERR.

BOUGUER GRAVITY MAP

Scale 1"= 400 ft. C.I. 0.50 mgl.

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BLUE CLAIM GROUP No's 30-64

COLT CLAIM GROUP No's 1-14

TWOPETE CREEK AREA YUKON TERR.

RESIDUAL GRAVITY MAP

Scale 1"=400 ft

C.I. 0.20 mgl.