136

GEOMAG GEOPHYSICAL REPORT NO. 136
of the
Bell, Bill and Keith Claims
Three miles west of Merritt, B.C.
50° North - 120° West
for 92I/2W
Merritt Copper Syndicate Rep
March 8 - March 21, 1965 Ass. 136

D. L. Hings, P. Eng.

50 120 SW

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MERRITT COPPER SYNDICATE | No. 136 | APRIL 2nd, 1965

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E. G. S.

"GEOMAG"

REPORT

April 2nd, 1965

This is a Geomag Geophysical Survey No. 136, of the Bill, Bell and Keith Claims, in Merritt, B. C. for the Merritt Copper Syndicate, March, 1965.

SURVEY STATISTICS

The type of instrumentation used on this survey was the Geomag Theodolite Magnetic Component Vectoring System.

The survey was located on the Bell, Bill and Keith group of claims. The location of this group of claims is approximately three miles west of Merritt, B. C. The Geomag Survey was conducted over 48,160' of uncorrected line, or 46,723' of line corrected for slope distances. The survey consists of thirteen east/west lines and two north/south base lines. The lines were cut and staked by Merritt Copper Syndicate personnel.

The survey commenced on March 8th, 1965 and was concluded on March 21st, 1965. There were a total of 323 setup readings made over 297 stations.

Work distribution -

4 man days travel,

4 man days field office,

10 man days surveying,

10 man days helping surveyor,

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28 Total Field Man Days.

22 man days preparation of report, interpretation and plans,

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50 TOTAL MAN DAYS

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PRESENTATION

Plan 136-1 is a Surface Plan showing surface features and reference pints surveyed by Electronic Geophysical Surveys' personnel.

The variations in the magnetic components measured by the Geomag System are presented in two forms. Plan 136-2, the first presentation, constitutes a Vector Plan indicating the direction and amplitude of the magnetic components over a local mean normal. Linear strike features are determined from the vectors as linear anomalies. The vector units indicated in the legend, approximate minutes of a degree.

The second presentation is shown on Plan 136-3, indicating resistive anomalies made up from profiles, the "anomalies" are indicated by their relative importance. The areal anomalies consist of the low resistance contours associated with mineralization, whereas the higher resistance are of less significance and are not individually identified.

The E.G.S. Surface Contour Plan 136-1 shows the surface topography of the area surveyed in twenty-five foot contour intervals. The station locations and their relative numbers, along with identification markers such as the corner pins and claim stakes are shown.

The vector plan showing the variations of the total field angle departure, are presented in the E.G.S. Drawing No. 136-2. Included in the plan are the linear anomalous strikes, L-1, L-2, L-3 and L-4. The only magnetic high of any significance is also shown on this plan.

The low resistive contour plan, No. 136-3 is made up of the low resistance anomalies A-1, A-2, A-3, A-4, A-5 and A-6; also included are the linear anomalies shown on the previous plan. The contours indicate the areas within a resistive reading of twenty, and include within their boundaries, the anomalous areas of five or less.

INTERPRETATION

The linear anomalies L-1 and L-2 form curving paths north and south and would appear to be associated structurally. The linear anomaly L-3 appears to be a shear or fault and the curvature when related to the surface plan No. 136-1, suggests a southeasterly dip. The linear anomaly L-4 coincides with a narrow low resistive anomaly and could represent a nearly vertical dyke or mineralized shear.

The A-1, A-2 and A-4 anomalies follow the L-1 anomaly on the eastern side, and A-3 on the northern end, suggests that L-1 is possibly the strike of a contact formation. The A-5 and A-6 which are closely associated with L-2, apparently representing the western side of this anomalous area extending within L-1 and L-2.

The relative locations of A-1 and A-3 suggest that L-3 is a fault zone that has offset these two anomalies. This is further confirmed by the offsetting of the anomalies A-5 and A-6.

SUMMARY

To summarize, the L-1 anomaly appears to be the eastern boundary of the anomalous area and when considered with the surface contours, the formation should be dipping to the west or southwest at a relatively flat angle. The linear anomaly L-2 would appear to be dipping in the same relation but could be above L-1.

Geophysically speaking, the stronger readings are in the center and southern section in the vicinity of the A-1 anomaly, with the structural edge being in the vicinity of stations 143, 144, and having a depth in the vicinity of two hundred feet. The A-1 formation continues to the south

into A-2 to an equally prominent anomaly, but which might be deeper than A-1. The A-3 anomaly on the north line lies nearly parallel with the grid and does not give the control for measurement that is suitable for good interpretation. The A-3 anomaly does not show the prominence of A-1 and A-2. The A-4 anomaly in the extreme south appears to have a definite northwest strike between stations 281 and 292, and is associated with L-1. It also is assumed it continues to anomaly A-1 although there is no control to confirm this. The A-5 anomaly shows a large area of low resistance, however, apart from L-3, there is little indication of structural support. The anomaly A-6 also shows an area of low resistance that has very little confirmation of supporting structure.

It would appear that the anomalies A-1 and A-2 warrant geological investigation and it is understood some work has already shown mineralization in A-3 and A-4 anomalies.

ELECTRONIC GEOPHYSICAL SURVEYS LIMITED

D. L. Hings, P. Eng.,
Geophysicist.

DLH/j

IP BELL 6&10
IP KEITH 1&2
FP BELL 6&8

IRON PIN N-E CORNER
BLOCK 1417

IP KEITH 3&4
FP BELL 3&4

IP BILL 3&4
BILL FR 1.

IP BILL 1&2
BILL 1&2

2600
2700
2800
2900
3000
3100
3200
3300
3400
3500

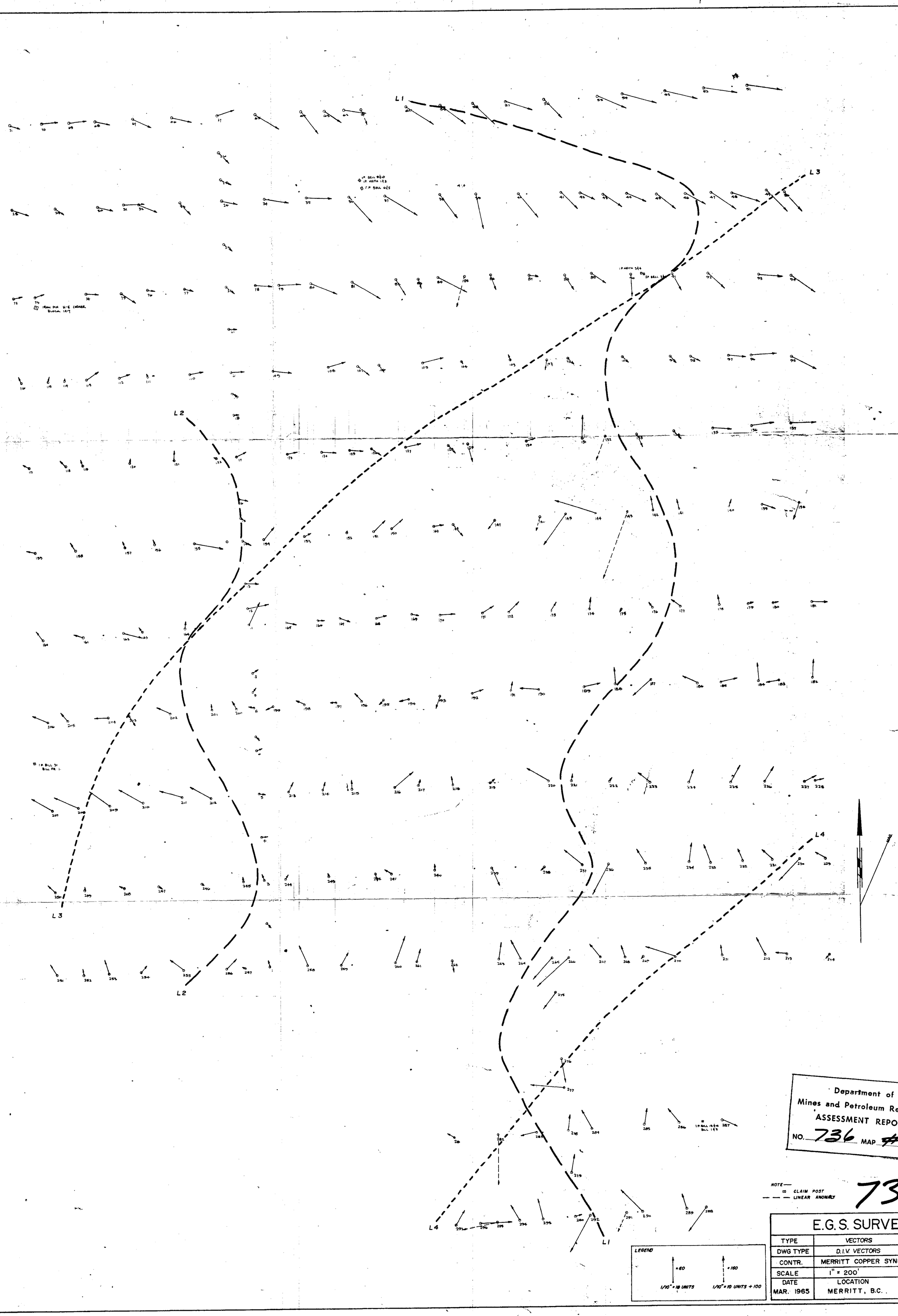
MAG.

NOTE—
⊡ CLAIM POST
CONTOUR INTERVAL 25 FEET

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 736 MAP #1

E.G.S. SURVEY		
TYPE	CONTOUR	
DWG TYPE	SURFACE CONTOURS	
CONTR.	MERRITT COPPER SYNDICATE	
SCALE	1" = 200'	APPR.
DATE MAR. 1965	LOCATION MERRITT, B.C.	DWG. NO. 136-1

736



Department of
Mines and Petroleum Resources
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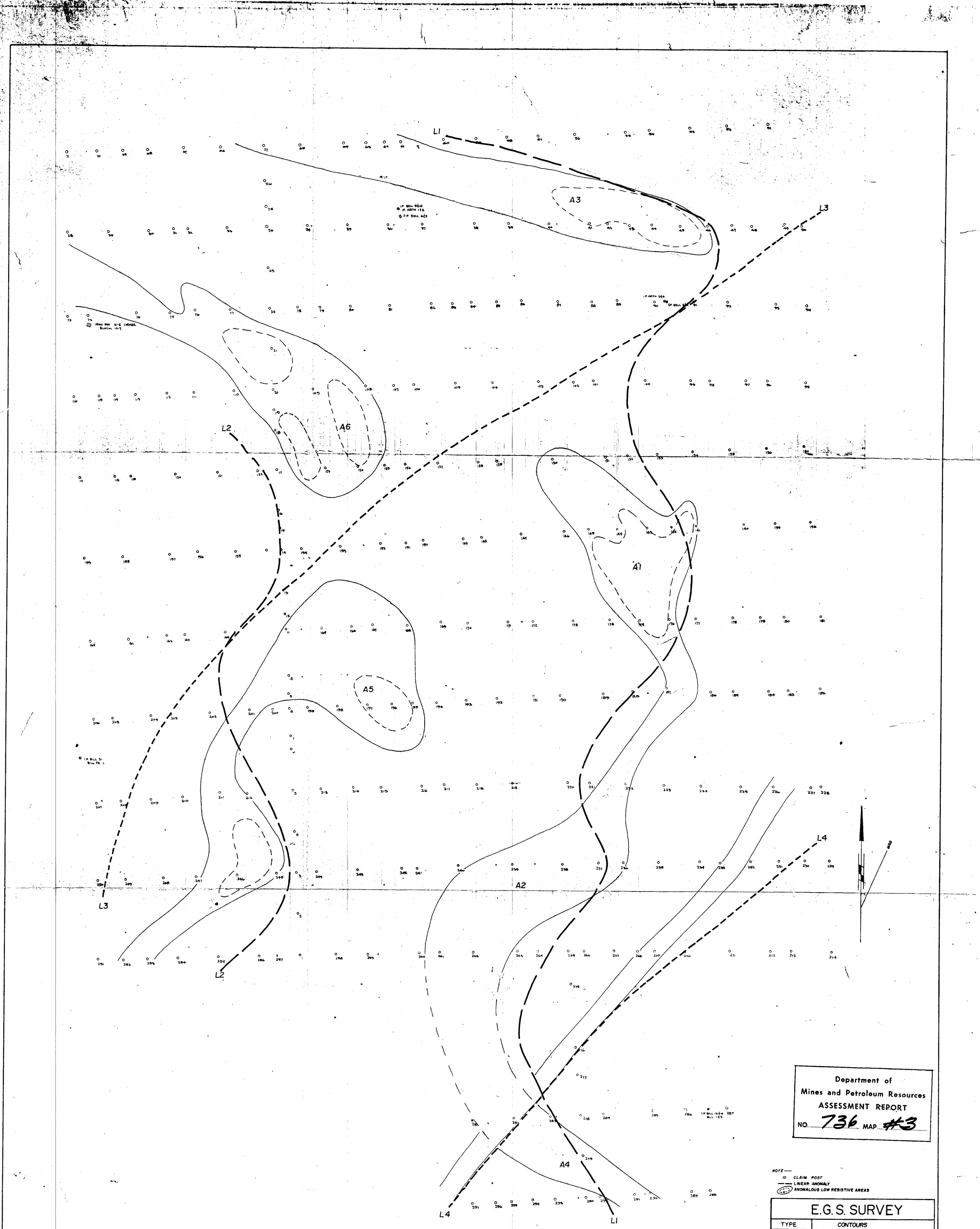
NOTE—
CLAIM POST
LINEAR ANOMALY

LEGEND
=60 1/10" = 10 UNITS
=160 1/10" = 10 UNITS + 100

E.G.S. SURVEY		
TYPE	VECTORS	
DWG TYPE	D.I.V. VECTORS	
CONTR.	MERRITT COPPER SYNDICATE	
SCALE	1" = 200'	APPR.
DATE MAR. 1965	LOCATION MERRITT, B.C.	DWG. NO. 136-2



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 736 MAP #3

NOTE—
- CLAIM POST
- LINEAR ANOMALY
- ANOMALOUS LOW RESISTIVE AREAS

E.G.S. SURVEY		
TYPE	CONTOURS	
DWG TYPE	RESISTIVE CONTOURS	
CONTR.	MERRITT COPPER SYNDICATE	
SCALE	1" = 200'	APPR.
DATE MAR. 1965	LOCATION MERRITT, B.C.	DWG. NO. 136-3

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