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RECORDS 1949/90

COBAR GEOPHYSICAL SURVEY - 6TH PROGRESS REPORT

by

L.A. Richardson

COBAR GEOPHYSICAL SURVEY5TH PROGRESS REPORTREPORT NO. 1949/90GEOPHYSICAL SERIES NO. 6.PEAK AREA

Dr. Stillwell's Report on the mineragraphic examination of drill core specimens from the Peak No. 2 and the Spotted Leopard No. 1 Drill Holes has been received and copies have been forwarded to the various authorities concerned. Dr. Stillwell's investigations have shown that the body responsible for the Peak magnetic anomaly contains more pyrrhotite, chalcopyrite galena and sphalerite in the position of No. 2 drill hole than it does in the position of No. 1 drill hole. It has thus been confirmed that the total mineralisation of the anomaly body shows a tendency to increase with depth.

Peak No. 3 Drill Hole was abandoned at 1026' where a core barrel was lost. No mineralised body capable of giving rise to the measured S.P. anomaly was found. Some lightly mineralised material was intersected at 685' - 730' and this is assumed, by Zinc Corporation geologists, to be in the Blue Code shear. The hole, which was drilled from the west side, reached a point 950' vertically below the centre of the S.P. anomaly. It had been recommended that the anomaly be tested at a vertical depth of 600' and it was anticipated that drilling would be carried far enough to intersect any easterly dipping anomaly body. The topography makes it difficult to gain access to a suitable site for drilling from the east side.

It is believed therefore that the No. 3 drill hole has not given a conclusive test and it is recommended that consideration be given to the drilling of another hole to intersect the central part of the anomaly axis at a vertical depth of 350' - 400' which would probably be just below water level. The centre part may be considered to be along 1000E between Traverses 1000N and 1200N. A test of this kind should prove whether the measured S.P. anomaly is due to the spontaneous polarisation of a sulphide body or to some other phenomenon.

CORONATION AREA

The Coronation No. 1 Drill Hole has intersected the magnetic anomaly axis at a depth of about 500' and has revealed the existence of light pyrrhotite mineralisation in slate.

MOPONE AREA

A detailed magnetic survey has been completed on this area following the discovery of a magnetic anomaly there by the Airborne Magnetometer operations, conducted by the Oscar Weiss Organisation on behalf of Zinc Corporation.

The ground survey has revealed a group of anomalies occurring at intervals along a line of length about one mile. The survey results are shown on the accompanying Plan (No. 62-13). The strongest anomaly zone is centred at about 35000N/2800E and appears to be due to a somewhat irregular distribution of magnetic

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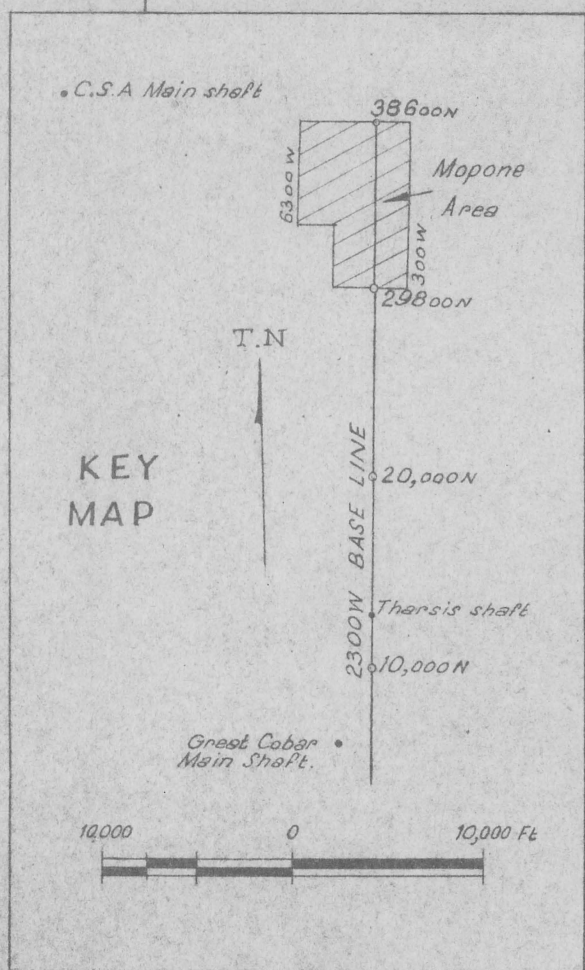
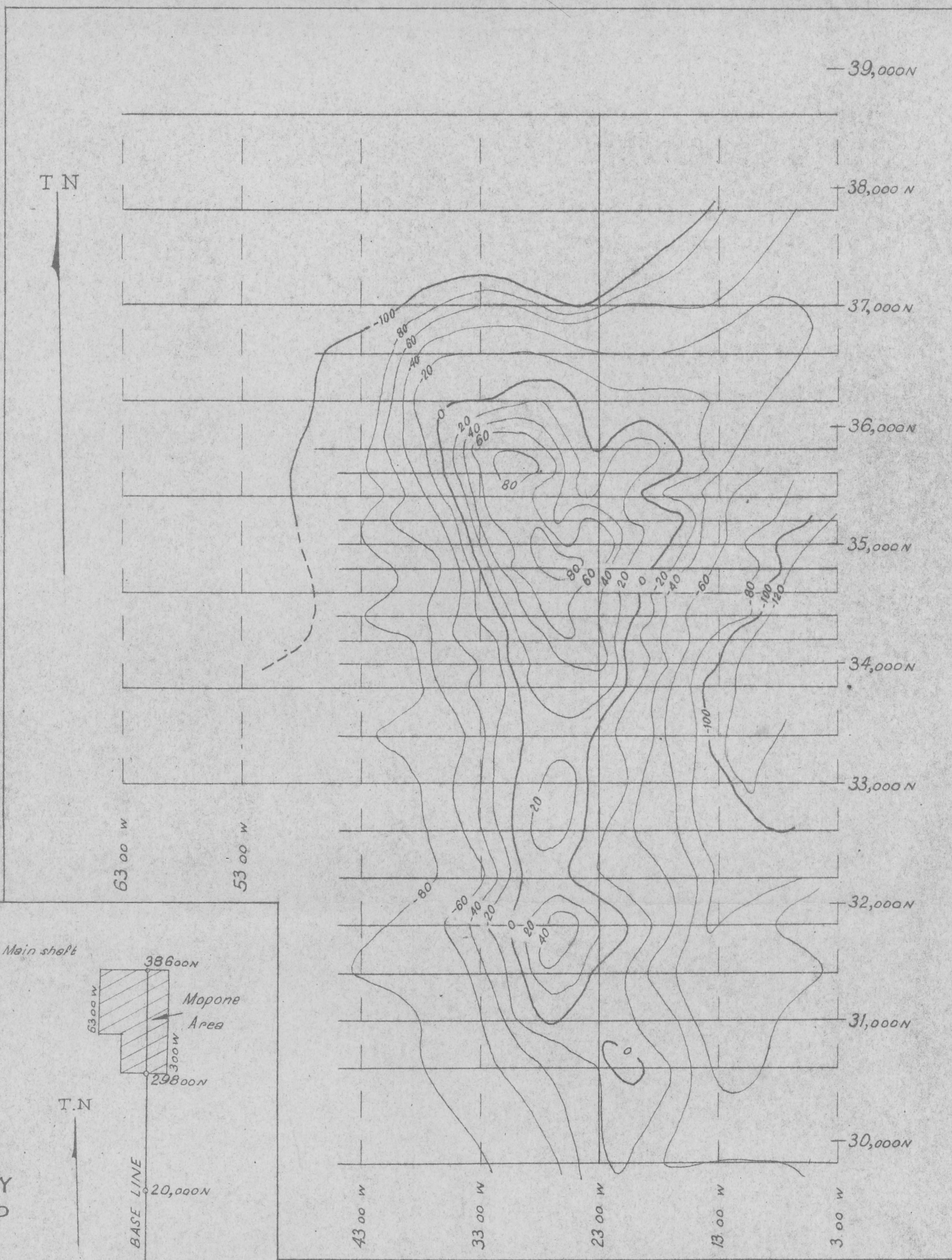
material of considerable dimensions and with possible dip to the north-east. Lesser anomaly centres occur to the south and more might be revealed if the survey is continued southerly. There is a gap 2 miles long of unsurveyed country between the Mopone block and the northerly limit of the earlier surveys along the main Gobar "line". The Mopone group of anomalies terminate abruptly at the north end but may extend north easterly beyond the area surveyed.

It has been recommended that the main anomaly be tested, by drilling from the east side, to intersect the anomaly centre at a depth of 1000 feet.

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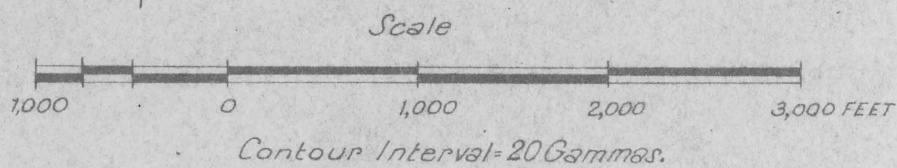
Melbourne,
7th September, 1949.



COBAR GEOPHYSICAL SURVEY

MOPONE AREA

Plan showing
Geomagnetic Vertical Force Contours



Geophysical Surveys by
N.G. Chamberlain
R. Williams (Zinc Corporation Ltd.)

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