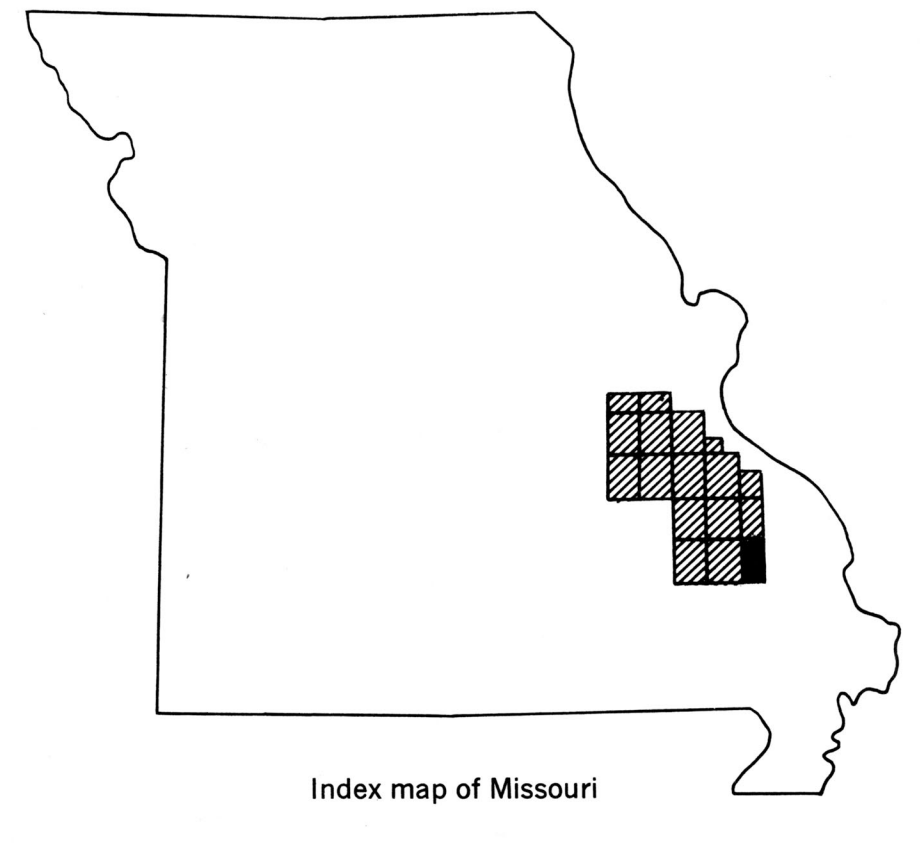


EXPLANATION

Magnetic contours with flight traverses;
dashed contours indicate incomplete or doubtful data

Magnetic contour enclosing area
of lower magnetic intensity

X 2543
Measured maximum or minimum intensity
within closed high or closed low



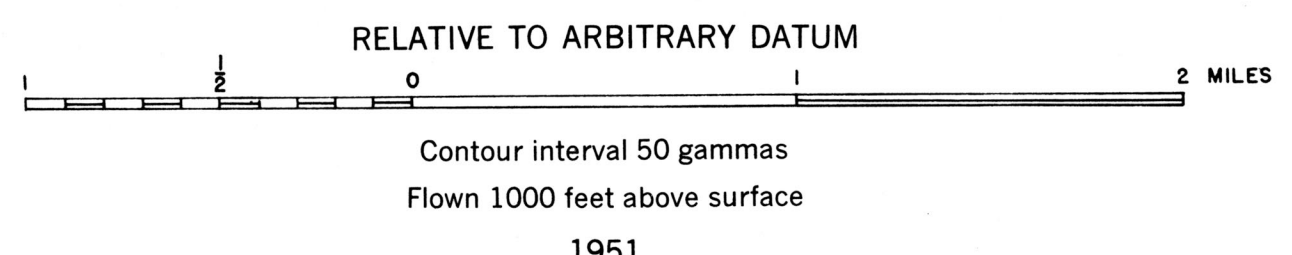
This aeromagnetic map is one of five maps showing the results of an eastward and westward extension of aeromagnetic surveys of the southeastern Missouri lead district. Ten previously published maps show variations in the total magnetic field over the central part of the district. An area of approximately 3,500 square miles in the southeastern Missouri lead district has been mapped. The survey was made to obtain information on the structure of the crystalline basement rocks, on variations in their composition, and on their relation to structures in the overlying sedimentary rocks, some of which may be favorable for the occurrence of lead deposits. The survey may also give additional information on the location of magnetic iron deposits that occur locally in parts of the area.

Magnetic measurements were made by a continuously recording ANASQ-3A airborne magnetometer installed in a DC-3 airplane. North-south traverses were flown at quarter-mile intervals over the whole area, and were tied to east-west base-line traverses to correct for instrument drift and diurnal variation. A constant barometric altitude of 1,800 feet above sea level was maintained except in areas above 1,400 feet in elevation, where the altitude was increased to clear all peaks by about 500 feet. Aerial photographs were used for pilot guidance. The flight path of the aircraft was recorded by a gyro-stabilized continuous strip camera, and a gyro-stabilized vertical sight was used to increase positional accuracy.

Note:
This map overlaps the Coldwater quadrangle to assure complete magnetic coverage.

Base from U. S. Geological Survey topographic quadrangle map

TOTAL INTENSITY AEROMAGNETIC MAP OF PART OF MARQUAND QUADRANGLE, MISSOURI



Aeromagnetic survey 1950 by W. J. Demsey and J. L. Meuschke
Completion directed by W. J. Demsey

For sale by U. S. Geological Survey PRICE 15 CENTS

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