

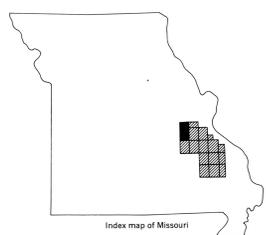
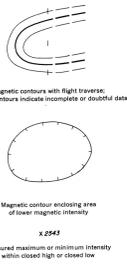
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EXPLANATION



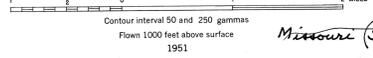
This aeromagnetic map is one of five maps showing the results of an eastward and westward extension of aeromagnetic surveys of the southeastern Missouri lead district. Two previously published maps show variations in the total magnetic field over the central part of the district. An area of approximately 2,500 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 AEROMAG 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 traverse lines 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 trees to about 200 feet. Aerial photographs were used for pilot guidance. The flight path of the aircraft was recorded by a geostabilized continuous-strip camera, and a photostabilized vertical sight was used to increase positional accuracy.

Note: This map overlaps the Richwoods and St. Clair quadrangles to assure complete magnetic coverage.

TOTAL INTENSITY AEROMAGNETIC MAP OF SULLIVAN QUADRANGLE AND PART OF UNION QUADRANGLE, MISSOURI

RELATIVE TO ARBITRARY DATUM



Missouri (Sullivan and Union quadr.) Aeromagnetic. 1:31,630. 1951.

U.S. GEOLOGICAL SURVEY, WASHINGTON, D. C.  
Aeromagnetic survey 1950 by W. J. Dempsey and J. L. Mouchka  
Compilation directed by W. J. Dempsey

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