PREPARED IN COOPERATION WITH
INDIANA DEPARTMENT OF CONSERVATION, DIVISION OF GEOLOGY

EXPLANATION

Magnetic contours with flight-line intersections; contours dashed where data incomplete

Magnetic contour enclosing area of lower magnetic intensity

× Measured maximum or minimum intensity within closed high or closed low

Index map of Indiana showing Gibson County

This aeromagnetic map is one of a series of county maps based on a state-wide aeromagnetic survey of Indiana which was carried out during the periods September to November 1947 and September to November 1948 by the U. S. Geological Survey in cooperation with the Division of Geology of the Indiana Department of Conservation.

The survey was made to obtain information on the configuration of the crystalline basement rocks, on variations in their composition, and on their relation to structures in the overlying sedimentary rocks. The extensive area covered by the survey will also permit a study of the magnetic expressions of large scale features, such as the regional tilt of the surfaces of the basement rocks. It is expected that this information will aid in the search for geologic structures favorable to the accumulation of petroleum.

The measurements were made by a continuously recording AN/ASQ-3A airborne magnetometer installed in a Beechcraft AT-11 airplane. North-south traverse lines were flown approximately 1,000 feet above the ground at one-mile intervals. Aerial photographs were used for pilot guidance, and the flight path of the aircraft was recorded by a gyrostabilized continuous strip camera. The distance from plane to ground was measured with a continuously recording radio altimeter. A gyro-stabilized vertical sight was used to increase positional accuracy.

Base from Indiana State Highway Map, corrected to January 1, 1937

TOTAL INTENSITY AEROMAGNETIC MAP OF GIBSON COUNTY, INDIANA

RELATIVE TO ARBITRARY DATUM

1 2 0 1 2 3 4 MILES

Contour interval 10 gammas

Flown 1000 feet above surface

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.

Aeromagnetic survey 1948 by
J. R. Henderson and J. L. Meuschke
Compilation directed by J. R. Henderson

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