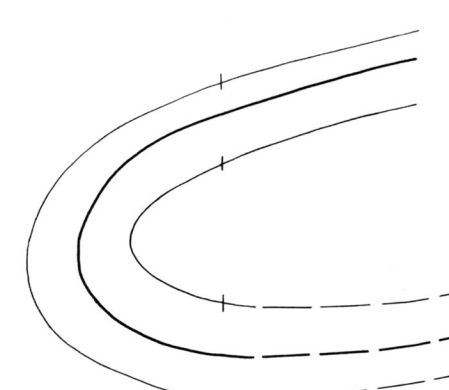
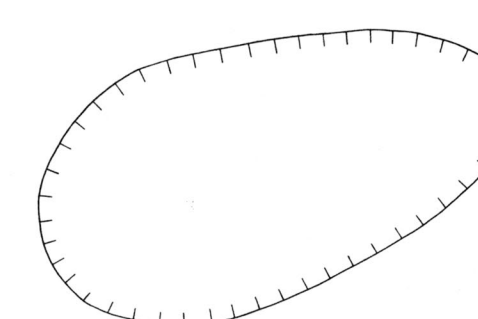


EXPLANATION



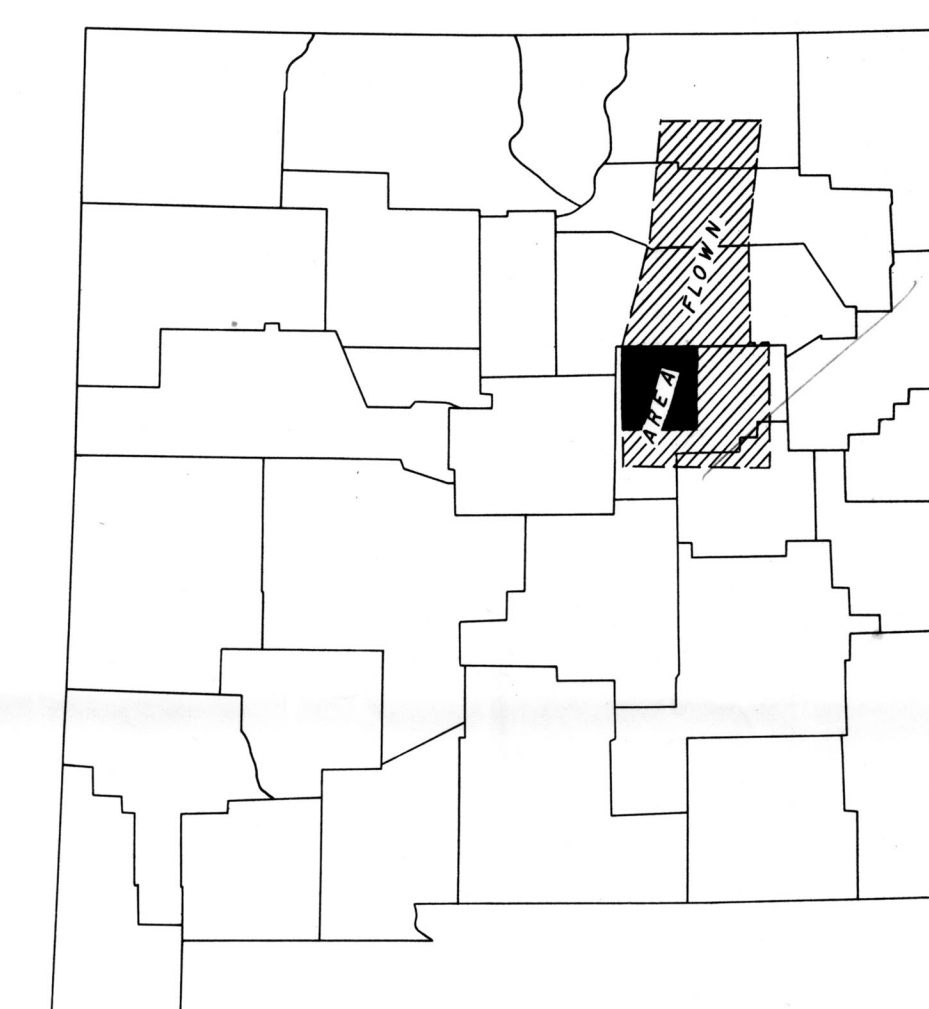
Magnetic contours with flight-line intersections; contours dashed where data incomplete



Magnetic contour enclosing area of least magnetic intensity

X

Measured maximum or minimum intensity within closed high or closed low



Index map of New Mexico

An area of 7000 square miles in northeastern New Mexico was surveyed with an airborne magnetometer by the United States Geological Survey during May and June 1946. This work was done to provide detailed magnetic maps of a large area covered with sedimentary rocks for the purpose of obtaining information on the configuration of the underlying crystalline rocks.

East-west traverse lines were flown approximately 1000 feet above the ground at 1-mile intervals. Magnetic measurements were made with an AN/ASQ-3A airborne magnetometer installed in a (Boeing) AT-11 airplane. Aerial photographs were used for pilot guidance, and the flight path of the aircraft was recorded by a gyro-stabilized continuous-strip camera. The altitude of the plane above the surface was determined by a continuous-recording radio altimeter.

Two north-south base lines flown in both directions were used to adjust the east-west traverses to a common magnetic datum. Individual maps are contoured to the same datum.

This is one of four published maps covering a total of 2500 square miles in the southern part of the area flown. Planimetric base maps are not yet available for the remainder of the area surveyed. Completion will be resumed when suitable base maps are available.

Interpretation of the aeromagnetic results and correlation with available geologic information will be attempted when magnetic maps of the whole area have been published.

TOTAL INTENSITY AEROMAGNETIC MAP OF PARTS OF SAN MIGUEL AND GUADALUPE COUNTIES, NEW MEXICO
RELATIVE TO ARBITRARY DATUM
(R16E-R22E AND T6N-T10N, AND PART OF ANTON CHICO GRANT)

1 2 0 2 MILES
Contour interval 10 gammas
Flown approximately 1000 feet above surface
1950

Base map from Soil Conservation Service planimetric quadrangles

Aeromagnetic survey 1946 by W.J. Dempsey and ME190

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