

Location of abandoned wells by magnetic surveys: location maps
and aeromagnetic contour maps

by

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This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.

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Introduction

In cooperation with the Environmental Protection Agency, the U.S. Geological Survey evaluated the use of geophysical methods for locating abandoned wells containing steel casings. As part of this study, aeromagnetic surveys were made over four small test areas in Oklahoma and one in Colorado. The purpose of this report is to present the flight line and contour maps which resulted from these surveys. A description of the equipment and techniques used in data acquisition and processing and an interpretation of the results are given in a companion report, 85-614A. Persons interested in the maps given here will generally be interested in the interpretation given in 85-614A. However, persons interested in the techniques used and a summary of the results may be interested in 85-614A only and will have no need for 85-614B.

Plates

Each plate or sheet consists of two parts: a map showing the locations of the flight lines and the locations of wells identified from sources other than the aeromagnetic data and a contour map of the residual total intensity magnetic data with an arbitrary datum subtracted. Features on the contour map which were considered in interpretation are numbered and the locations of wells known from interpretation of aerial photographs and other sources are indicated on the flight line maps. The plates are:

Arcadia, OK -- sheets no. 1 and no. 2
Horseshoe Lake, OK -- sheets no. 1 and no. 2
Moore, OK -- (one sheet)
Oklahoma City, OK -- sheets no. 1 and no. 2
Piney Creek, CO -- sheets no. 1 and no. 2

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