

CIRCULAR 119

# BIBLIOGRAPHY OF GEOPHYSICS FOR NEW MEXICO THROUGH 1970

1971

NEW MEXICO STATE BUREAU OF MINES AND MINERAL RESOURCES

New Mexico State Bureau of Mines and Mineral Resources

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Circular 119

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BIBLIOGRAPHY OF GEOPHYSICS FOR NEW MEXICO THROUGH 1970

by D. J. Cash

Socorro

1971

New Mexico State Bureau of Mines and Mineral Resources  
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## PREFACE

This report is organized into four sections: (1) the Bibliography consisting of 108 citations, (2) a Subject Index, (3) an Author Index, and (4) a Map Index. Each entry in the Bibliography is assigned a reference number. Citations follow common format, except that each source begins on a new line following the title. For publications in periodicals, the name of the periodical, volume number, and the first page number of the article are given. When pages are not numbered consecutively throughout an entire volume, the issue number is included in parentheses immediately following the volume number.

In the subject and author indexes, headings are followed by the reference numbers used in the Bibliography. The Map Index consists of six maps of New Mexico, one for each type of geophysical exploration: electrical, gravity, magnetic, radioactivity, seismic, and thermal. The location and coverage of the surveys are delineated by dots, lines, or enclosed areas depending on the extent and configuration of each survey. Numbers enclosed in hexagons denote surveys covering a broad area.

The Publications listed range widely in importance and detail. For example, some investigations were carried out over small areas in great detail, while others were reconnaissance of a large area, or were summaries and/or extrapolations of earlier work. Also, some publications, especially those in major journals, contained only minor data on New Mexico.

An attempt was made to include all publications concerning geophysical studies in the state of New Mexico through 1970. Recent literature, not receiving wide attention, or omitted from *Geophysical Abstracts*, could have been missed.

One significant source could not be included, namely, the confidential files of private industry. Petroleum and mining industry officials having geophysical data which can be released, are encouraged to make it available to the Bureau for future revisions of this bibliography.

This study was made possible through a graduate assistantship authorized by Mr. Don H. Baker, Jr., Director of the State Bureau of Mines and Mineral Resources located in Socorro. Valuable advice was provided by Mr. Baker, Dr. Allan R. Sanford and Dr. Frank E. Kottowski. The facilities of the Computer Center at New Mexico Institute of Mining and Technology were used in compiling this report.

Portland, Oregon  
August 1971

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# SUBJECT INDEX

## AEROMAGNETIC EXPLORATION

1 7 8 3 2 3 9 4 1 4 2  
4 3 4 4 4 5 4 6 4 7 5 1 5 5  
8 7 8 8 9 1 1 7 3 2 0 7

## AERORADIOACTIVITY EXPLORATION

3 2 6 5 1 1 2 1 1 3 1 5 7

## AFTERSHOCK

1 0 2 1 4 5 1 8 3

## ALAMOGORDO

0 6

## ALBUQUERQUE

1 6 5 7 5 8 7 8 8 1 2 2 1 2 7  
1 2 8 1 7 0

## ATTENUATION

9 2 6 9 2 1 0 9 1 3 9 1 7 5

## BLACK RANGE

5 5

## BLOOMFIELD

1 9 2

## BLUE RANGE

5 1

## CARLSBAD

2 2 2 7 4 0 1 1 2 1 1 3 1 5 6

## CARRIZO

7 6 1 8 9 1 9 9

## CATRON COUNTY

5 1 5 5

## COLFAX COUNTY

6

## CRUSTAL STRUCTURE

7 8 1 4 1 7 1 8 3 3 6 2  
7 1 8 1 8 3 8 4 8 7 8 8 1 1 1 1 1 9  
1 2 2 1 2 4 1 2 5 1 2 6 1 2 7 1 2 8 1 3 1  
1 3 4 1 4 2 1 4 3 1 4 9 1 5 3 1 5 5 1 5 8  
1 5 9 1 6 0 1 6 5 1 8 4 2 0 2

## DE BACA COUNTY

## DEFORMATION

7 7 9 6

## DELAWARE BASIN

7 8 1 6 7 1 6 8

## DULCE

1 3 3 1 8 3

## EARTHQUAKE

1 1 1 4 1 6 1 7 1 8 2 9 3 0  
5 4 5 6 6 7 6 8 1 0 2 1 2 0 1 2 1  
1 2 2 1 3 3 1 3 4 1 3 5 1 3 7 1 4 1 1 4 2  
1 4 5 1 4 6 1 4 7 1 4 8 1 4 9 1 5 0 1 5 4  
1 6 4 1 8 3 2 0 4

## EDDY COUNTY

4 0

## ELECTRICAL EXPLORATION

1 0 1 9 2 0 3 6 5 3 6 0 7 6  
8 0 8 2 8 6 1 5 1 1 5 6 1 6 0 1 6 1  
1 7 4 1 7 7 1 8 7 1 8 8 1 8 9 1 9 0 1 9 1  
1 9 2 1 9 3 1 9 4 1 9 5 1 9 8 1 9 9 2 0 0

## EPICENTER

2 9 5 4 1 2 1 1 3 7 1 4 2 1 4 5 1 4 7  
1 4 8 1 4 9 1 8 3

## ESTANCI A VALLEY

1 3 1

## EXPLOSION, CONVENTIONAL

1 6 2 2 2 7 7 1 9 3 1 2 4 1 2 5  
1 6 6 1 6 7 1 7 6

## EXPLOSION, NUCLEAR

1 5 2 4 2 5 2 6 2 9 3 0 4 8 6 6 6 9  
7 1 7 7 9 6 1 0 5 1 0 6 1 1 5 1 1 9  
1 2 4 1 2 5 1 2 6 1 3 3 1 3 9 1 5 5  
1 5 8 1 7 1 1 7 5 1 8 0 1 8 2 1 8 4  
1 8 5

## FOCUS

1 4 1 1 4 8 1 4 9 1 8 3

## FOUR CORNERS

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9 6

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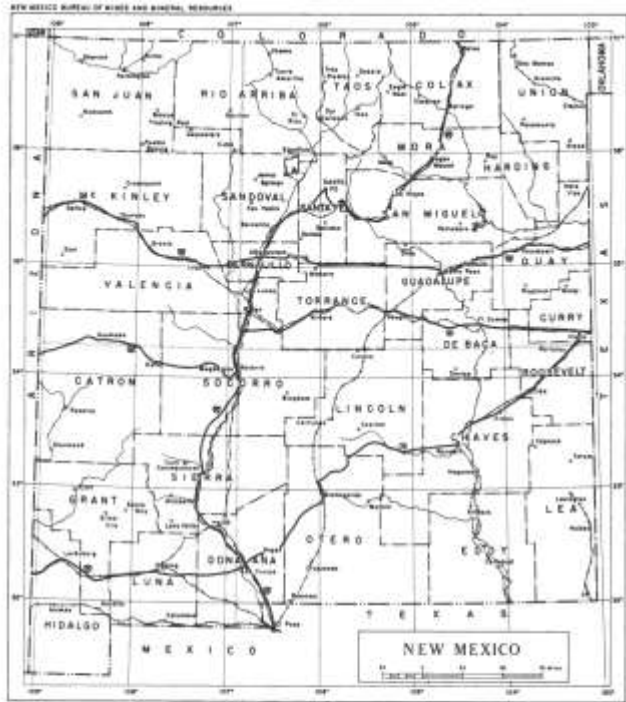


FIGURE 1--MAP OF NEW MEXICO

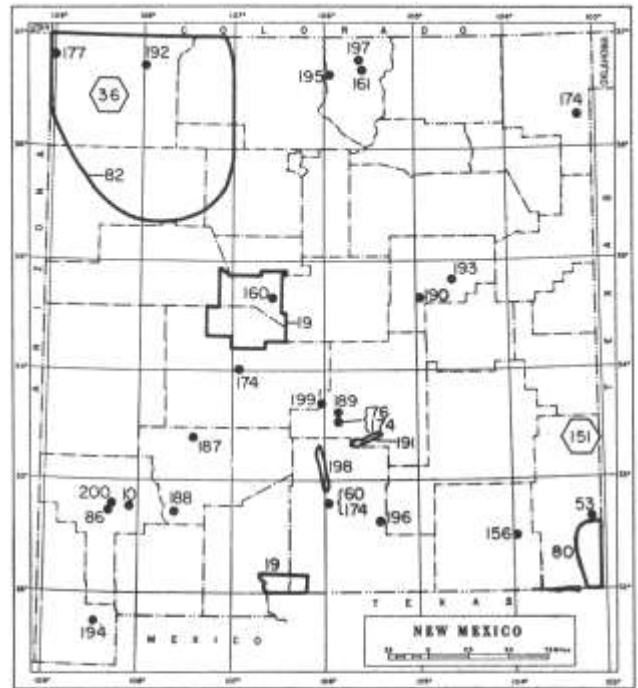


FIGURE 2--INDEX OF ELECTRICAL INVESTIGATIONS

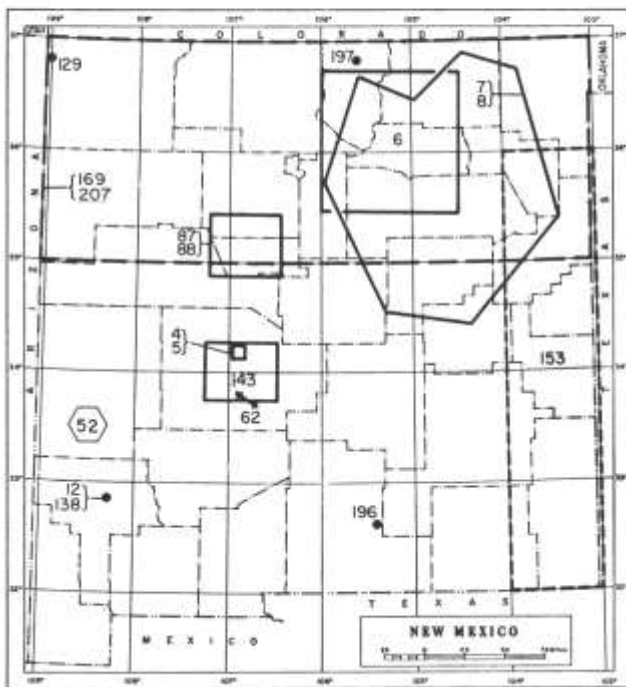


FIGURE 3--INDEX OF GRAVITY INVESTIGATIONS



FIGURE 4--INDEX OF MAGNETIC INVESTIGATIONS

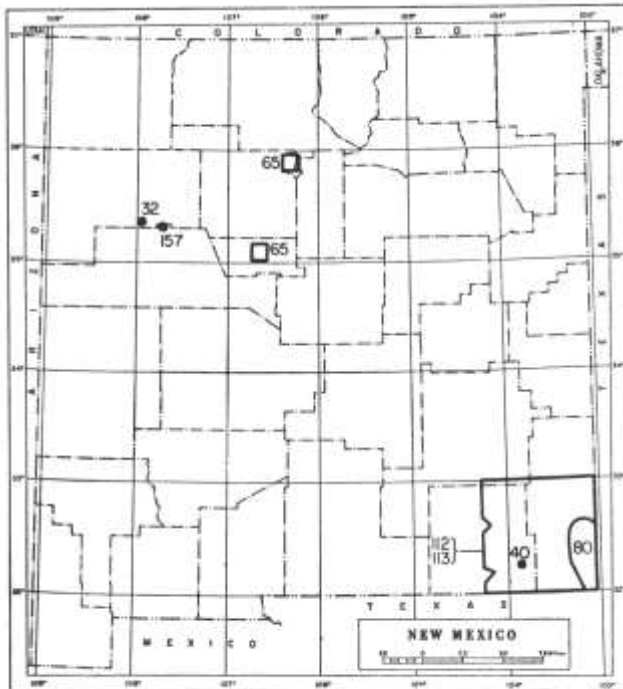


FIGURE 5--INDEX OF RADIOACTIVITY INVESTIGATIONS



FIGURE 6--INDEX OF SEISMIC INVESTIGATIONS

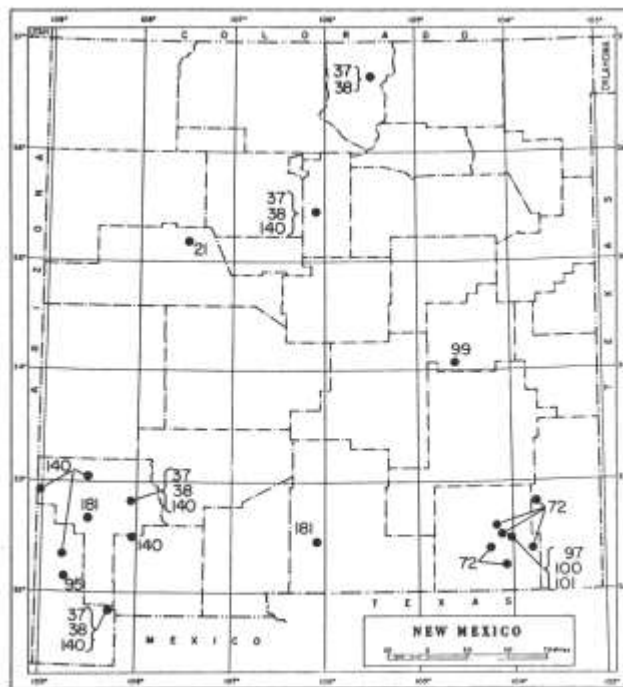


FIGURE 7--INDEX OF THERMAL INVESTIGATIONS

NOTE—Numbers refer to citations listed in the Bibliography, pages 1-17.



