Bibliography of New Mexico Geology and Mineral Technology 1961-1965

by TERI RAY

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CAMPUS STATION SOCORRO, NEW MEXICO

# NEW MEXICO INSTITUTE OF MINING & TECHNOLOGY Stirling A. Colgate, President

# STATE BUREAU OF MINES AND MINERAL RESOURCES Alvin J. Thompson, Director

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## Foreword

The bibliography that follows may contain many items that should have been left out and may omit many items that should have been included, as well as lists many more items that are indexed differently from previous bibliographies. I humbly acknowledge all such errors and welcome corrections of same.

Mr. Alvin J. Thompson, director of the Bureau, assigned this task to me. This book would be still "in press" were it not for Dr. Frank E. Kottlowski, assistant director of the Bureau, whose constant encouragement, skillful guidance, and patience and kindness in answering innumerable questions were unwavering, and for Mrs. Helen Sickles, of the College Library staff, whose unfailing willingness, cheerfulness, and generosity in helping to locate references and then rechecking them for me will long be remembered with gratitude. Mr. W. Martin Speare and Mrs. Irma Youngblood, of the library staff, assisted handsomely in locating references and sources, and Mr. Roy W. Foster, of the Bureau staff, also displayed remarkable patience answering what to him must have been elementary questions but offering explanations in simple terms within my ken.

Mrs. Wilma Nicholson and Miss Cathy Fischer, of the Bureau Publications Office, who helped in gathering and typing some of the material and in checking it several times, proved to be invaluable aides, very much appreciated. Dr. Robert H. Weber and others, whose contributions of references, supplies, typing, and sympathy enhanced the work, speeded completion of the project.

Those familiar with previous issues of the Bureau bibliographies will notice one or two changes in format, designed in an attempt to make the book more readily usable for geologist and nongeologist alike. Most of the publications used as sources were library copies.

TERI RAY

U. I. O. G. D.

## List of Abbreviations and Sources

(Italics indicate sources.)

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abs.-abstract
Am. Antiquity-American Antiquity
Am. Assn. Adv. Sci.-American Association of Advanced Science
Am. Assoc. Petrol. Geol.—American Association of Petroleum Geologists
Am. Geol. Inst. Geosci. Abs.—American Geological Institute Geoscience Abstracts

A.I.M.E., Soc. Min. Engr. Trans., Soc. Petrol. Engr. Trans.—American Institute of Mining,

Metallurgical, and Petroleum Engineers, Society of Mining Engineering Transactions, Society
    of Petroleum Engineering Transactions
Am. Jour. Sci.-American Journal of Science
Am. Mineralogist-American Mineralogist
Am. Soc. Civil Engr.-American Society of Civil Engineers
Ann. Rpt.-Annual Report
Anon.-Anonymous
Ariz. Geol. Soc.-Arizona Geological Society
Ariz. State Land Dept.-Arizona State Land Department
Assoc. Am. Geog. Annals-Association of American Geographers Annals
Basic Data Rpt .- Basic Data Report
Bull.—Bulletin
ch.-chapter
Chicago Nat. Hist. Mus.-Chicago Natural History Museum
Circ.—Circular
Coal Inv.-Coal Investigations
col.-column
Comm. on Stratig.—Commission on Stratigraphy
Co.-Company
Comp.—Compiler
Comp. Air Mag.—Compressed Air Magazine
Conf. Geol. Problems in Lunar Res.—Conference, Geologic Problems in Lunar Research
cont.--continued
contr.-contributions
Cushman Found. Foraminiferal Res.—Cushman Foundation Foraminiferal Research
Dissert. Abs.-Dissertation Abstracts
Econ. Geol.—Economic Geology
ed(s).-editor(s) or edition(s)
E. M. Thesis-Engineer of Mines Thesis
Eng. Min. Jour .- Engineering and Mining Journal
Four Corners Geol. Soc.—Four Corners Geological Society Ft. Burgwin Res. Center—Fort Burgwin Research Center
gen. chrmn.-general chairman
Geochim. et Cosmochim. Acta-Geochimica et Cosmochimica Acta
Geol. Quad. Map-Geological Quadrangle Map
Geol. Soc. Am., Bull., Mem., Spec. Papers-Geological Society of America, Bulletin, Memoir,
    Special Papers
Geophysics
Geophys. Inv. Map-Geophysical Investigations Map
GeoTimes.
Govt. Res. Pub.-Government Research Publication
Guidebook Ser.—Guidebook Series
Hydraulics Div. Jour.—Hydraulics Division Journal
Hydrol. Inv. Atlas-Hydrology Investigations Atlas
inc.-included, inclusive, incorporated
inf .- information
Joint Field Conf.-Joint Field Conference
Jour. Geol-Journal of Geology
Jour. Geophys. Res.—Journal of Geophysical Research
Jour. Mammalogy.—Journal of Mammalogy
Jour. Metals-Journal of Metals
Jour. Paleont.-Journal of Paleontology
Jour. Petrol. Tech.-Journal of Petroleum Technology
Jour. Sed. Petrol .-- Journal of Sedimentary Petrology
Mem.--Memoir
<sup>1</sup>Metal Min. & Proc.-Metal Mining and Processing
Metallurgical Soc.-Metallurgical Society
Micropaleont.-Micropaleontology
Mineral Inv.-Mineral Investigations
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<sup>&</sup>lt;sup>1</sup> Metal Mining & Processing: until January 1964, Mining World

Mines Mag.-Mines Magazine Min. Eng.-Mining Engineering

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Min. World-Mining World
Misc. Geol. Inv. Map-Miscellaneous Geologic Investigations Map
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Moly Corp.-Molybdenum Corporation

Mtn. Geologist-Mountain Geologist Mus. N. Mex.-Museum of New Mexico

Nat.—National, Natural Natl.—National

Nat. Res. Jour .- Natural Resources Journal

Natl. Speleol. Soc., Bull., News-National Speleological Society, Bulletin, News Nature

N. Mex. Bur. Mines-New Mexico Bureau of Mines and Mineral Resources N. Mex. Business-New Mexico Business

N. Mex. Geol. Soc .- New Mexico Geological Society

N. Mex. Hist. Rev .- New Mexico Historical Review

N. Mex. Inst. Min. & Tech.-New Mexico Institute of Mining and Technology

N. Mex. Mag.-New Mexico Magazine

N. Mex. Oil Conserv. Comm.-New Mexico Oil Conservation Commission

N. Mex. Prof. Engr.-New Mexico Professional Engineer

N. Mex. State Engr.—New Mexico State Engineer New York Acad. Sci.—New York Academy of Science

N. Y. Times—New York Times Nuclear Sci. Abs.—Nuclear Science Abstracts

n.--number

ofc.-office

Ohio Jour. Sci .- Ohio Journal of Science

Oil & Gas Jour .- Oil and Gas Journal

Okla. Geol. Notes-Oklahoma Geological Notes

Open-File Rpt .-- Open-File Report

n.--nage

<sup>2</sup>Pac. States and Rocky Mt. Oil & Gas Rptr.-Pacific States and Rocky Mountain Oil and Gas Reporter

Paleont. Soc. Japan-Paleontological Society of Japan

pt(s),-part(s)

Perm. Basin Sec.-Permian Basin Section

Permian Subcomm.—Permian Subcommittee

3Petrol. Engr.-Petroleum Engineer

3Petrol, Management-Petroleum Management

Petrol. Today-Petroleum Today

Pit and Quarry

Proc.-Processing, Proceedings

Prof. Paper-Professional Paper

Prog.-Program

Pub (1) .- Publication

Radiocarbon

Reprint Ser.-Reprint Series

Res. for Industry-Research for Industry

Rock Products

Rocks and Minerals

<sup>2</sup>Rocky Mt. Oil Rptr.-Rocky Mountain Oil Reporter

Roswell Geol. Soc.-Roswell Geological Society

Sandia Corp.-Sandia Corporation

Sandia Lab.-Sandia Laboratory

Science

Seismol, Soc. Am. Bull.-Seismological Society of America Bulletin

ser.-series

Soc. Econ. Paleont. and Min.-Society of Economic Paleontologists and Mineralogists -Permian Basin Sec.-Permian Basin Section

Soil Sci. Soc. Am .- Soil Science Society of America

So. Calif. Acad. Sci. Bull.-Southern California Academy of Science Bulletin

Spec. Papers—Special Papers State Bur. Mines and Min. Res .- State Bureau of Mines and Mineral Resources

Tech. Rpt.—Technical Report T.E.I. Rpt.—Trace Elements Investigations Report

Tex. Jour. Sci.-Texas Journal of Science

Trans. and Proc.-Transactions and Proceedings United Nations Econ., Sci., and Cult. Org.-United Nations Economic, Scientific, and Cultural Organization

UNM-University of New Mexico

U.S. Atomic Energy Comm.-United States Atomic Energy Commission

U.S. Bur. Mines-United States Bureau of Mines

U.S. Geol. Surv.--United States Geological Survey

<sup>&</sup>lt;sup>2</sup> Pacific States and Rocky Mountain Oil and Gas Reporter: until December 1965, Rocky Mountain Oil Reporter

<sup>&</sup>lt;sup>3</sup> Petroleum Management: until September 1961, Petroleum Engineer

U.S. Govt. Printing Office—United States Government Printing Office
Univ. N. Mex. Contr.—University of New Mexico Contributions in Geology 1898-1964, Publ. in
geology, n. 7
unpub.—unpublished
v.—volume
Water Well Jour.—Water Well Journal
Water Res. Paper—Water Research Paper
Univ. Kan.—University of Kansas
W. Va. Acad. Sci.—West Virginia Academy of Science
World Oil

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(Dissertations are noted by "Ph.D." after the name; all other papers are masters' theses)

## NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY

Bingler, 1 Butler Evans, G. C. Geddes Grace Gray (Petrol. Engr.) Harley Hassan (Ph.D.) Herber Ibrahim Kelley, J. M. (Petrol. Engr.)

Long, L. T. McCrory Moore, D. G., 2 Poe

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#### THE UNIVERSITY OF NEW MEXICO

Ash, 2 Baltz (Ph.D.) Black Brown, B. N. Catacosinos Clark, K. F. Cordell Devers Edmonds Emerson Huber Kirkland Lambert Long, W. W.

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#### OTHER SCHOOLS

(All "University of " unless otherwise noted)

ARIZONA Entwistle Lovering CALIFORNIA CHICAGO Stevenson

Langston (Ph.D.) Quaide

COLUMBIA Graf (Ph.D.) Ishihara

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CALIFORNIA INSTITUTE OF TECHNOLOGY Jahns (Ph.D.) Shoemaker, E.

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Osage: Burton

Paleocene: Reynolds, T. E.

Paleozoic: Bachman, 1, 4; Cole; Elston, W. E., 5; Flower, 12; Hills, 2; Kelley, V. C., 8; Kottlowski, 9, 13, 24, 25; Northrop, 7; Stauffer; Vaughn, 1; Wilpolt; Wilson, J. L.

Pennsylvanian: Adams, J. E., 1; Bachman, 1; Branson; Cordell; Gardner, 1; Konishi; Kottlowski, 14, 22, 24; Lokke, 2; McCaslin, 2; Northrop, 3; Parks; Picard, 1, 2; Ross, C. A.; Sabins, 7; Stevens; Sutherland; Wengerd, 2; Werrell

Permian: Adams, J. E., 2; Baars; Cooper, J. B., 1; Dahl; Flower, 9; Gardner, 2, 4; Harrington, 1; Hills, 1; Jones, C. L.; Kerr, S. D.; Kirkland; Konishi; Kornfeld; Langston; Lucia; Mear, 2; Motts, 2; Natl. Res. Council; Read, 2; Romer; Sabins, 7; Scott, G. L.; Skinner; Sutherland; Tanner, 1; Vaughn, 2; Williams, T. E.; Winters

Pleistocene: Harris; Martin, P. S., 2; Reeves, 5, 7; Strain; Wendorf

Precambrian: Andreasen, 2; Bingler, 3, 4; Budding, 2; Cooper, B. N.; Fitzsimmons, 3; Herber, 1; Montgomery; Muchlberger, 6; Shoemaker, E.; Sutherland; Wasserburg

Quaternary: Kottlowski, 21; Richmond, G. M.; Stearns, 1; Wright, H. E.; Wright, H. E., Jr., 1

Recent: Harris; Postel; Vine, 1; Wendorf

Silurian: Wright, W. F., 7

Tertiary: Anderson, R. Y., 1; Ash, 7; Kottlowski, 6; Richard; Stearns, 1; Wargo; Weber, R. H., 4; Wright, H. E.

Triassic: Ash, 6; Baird; Cazeau; Chico, 2; Gregory, J. T.

Virgilian: Baver; Kottlowski, 24; Moore, W. L.; Otte Wolfcampian: Kottlowski, 14, 20, 22, 24; Otte; Skinner

# GEOLOGY, general

Akers; Alpha; Anderson, T. C. I.; Andreasen; Anon. Oil and Gas Jour., 2, 5, 11, 15, 16, 17; Ash, 2, 3, 7, 8; Atkinson, W. W.; Bachman; Bailey; Bakker; Baltz, 1, 2; Belt; Bingler; Black; Bohmer; Bonnichsen; Bradley; Branson; Brown, B. N.; Bryner; Budding; Burnham; Carpenter, R. H.; Cazeau; Chico; Christiansen, 1, 2; Clark, K. F.; Cole; Conley; Conover; Cooley; Cooper, B. N.; Cooper, J. B., 1; Craddock; Dane: Denny; Dow; Edmonds; Edwards; Elston, W. E., 2, 3, 5, 6, 7, 11; Emerson; Evans, G. C.; Fischer, R. P.; Fitch, 2; Fitzsimmons, 1, 2, 3, 5; Foley; Four Corners Geol. Soc.; Furlow; Gard; Geddes; Giles; Gillerman; Gordon, E. D., 2; Greenwood; Gregory, D.; Griggs; Griswold, 1, 4, 6; Gruner; Haigler; Harley; Harrington, 1, 5, 6; Hawley; Hayes; Herber, 1, 2; Hernon, 1, 2; Hibben; Hills, 1; Howard; Ishihara; Jahns; Jerome; Joesting; Johnson, D. W.; Jones, C. L.; Jones, W. R., 1; Kelley, V. C., 1, 4, 6, 8; Kinney; Kopicki; Kottlowski, 3, 4, 5, 6, 7, 8, 9, 11, 12, 15, 16, 18, 20, 21, 23; Krieger; Leve; Lovering, 1; Lucia; MacKallor, 2; McCaslin, 1; McCormick; McPeek, 1; Maddox; Megrue; Melvin, J. W.; Michael; Miesch; Miller, J. P, 2; Moench, 8; Montgomery; Morgan, A. M.; Motts, 2, 3, 4; Mourant; Muehlberger, 1, 5, 6; Natl. Res. Council; Natl. Speleol. Soc.; N. Mex. Bur. Mines; N. Mex. Geol. Nichols; Nicholson, Nicholson, J. H.; Northrop, 1; O'Sullivan; Otte; Owen; Packard; Patterson, C. M.; Payne; Penttila, 3, 4; Perhac; Perry; Peterson; Phillips, C. H.; Picard; Poe; Pratt, W. P.; Pray, 1; Pustmueller; Quaide; Ratcliff; Read, 5, 6; Reddy; Redmon; Reeves, 1, 2, 4, 7; Rich; Richard; Richmond, G. M.; Ridge; Rocky Mt. Assoc. Geol.; Ross, C. S.; Rowe, R. C.; Ruhe; Runyan; Schilling, C. F.; Schilling, J. H.; Schlee, 1, 2; Schluter;

Schmidt; Scott, G. L., 2; Seager; Shelton; Shoemaker, J.; Simpson; Sloss; Smith, C. T., 2, 3, 4; Smith, K. G.; Snyder; Spiegel, 4; Stearns; Stevenson; Strain; Tait; Tanner; Thompson, Sam; Thompson, T. B., 1; Tipton; Titley; Titus; Tonking; Trauger, 3, 5; Turner; U. S. Dept. Interior; U.S. Geol. Surv., 2; Van Couvering, 2; Vine, 2; Walter; Wanek, 2; Wargo; Wasserburg; Watson; Weber, R. H., 1, 2, 3, 6, 8; Wengerd, 1; Wilcox, J. T.; Williams, F. E.; Wilson, J. L.; Winograd; Winters; Wright, H. E.; Wright, H. E., Jr.; Wright, W. E.; Young, J. V.; Zeller, 2, 3

Geophysics: Andreasen; Ben-Menahem; Berg; Byerly; Carder, B.; Carder, D.; Coffer; Dempsey; Dickey; Franklin; Keppel; Knutson; Koopmans; MacKellor; McCrory; Pakiser; Sanford; Slawson; Smith, N. J.; Stuart; Thomas, R. P.; Weart; Werth; Westhusing

Ghost towns: File, 3; Harrington, 3; Looney; Vieth; Zimmerle

Graduate papers (see page 101)

Guidebooks: Four Corners Geol. Soc.; Natl. Speleol. Soc.; N. Mex. Bur. Mines, 2, 3; N. Mex. Geol. Soc.; Packard

Helium: Dean, J. W.; Pylant

History: Christiansen; Cooper, V., 2; Devers; File, 1; Harrington, 3, 10; Howard; Kelly; Kottlowski, 12, 18; Long, W. W.; Looney; Martin, W. C.; Northrop, 2; Reed, E. K.; Reeves, 3; Saffold; Smedley; Spence; Strong; Vieth; Weber, R. H., 5, 7, 8; Young, J. V.; Zimmerle

Hopi Indian Reservation: Cooley, 3; Davis, G. E.

Indians (see also tribal names): Christiansen; Hough, 3; Kaanta; Kelly; Reed, E. K.; Weber, R. H., 5, 7, 8; West, W.

Infrared: Erd; Fischer, W. A.; Omori

Intermountain: Keller

Jicarilla Apache Indian Reservation: Baltz, 4 Jornada del Muerto: Melvin, J. W.

Joyita uplift: Kottlowski, 20

Kansas: Tasch La Bajada: Rohl

Labor: File. 1

Laguna Indian Reservation: Griswold, 5

## LAKES

Ambrosia: Abbiss, 1; Anon. Min. World, 7; Granger; Howell; Wolff

General: Harrington, 6; Michael; Wright, H. E., Jr., 1

Maares: De Hon; Reeves, 4

Palomas: Reeves, 7, 8

Pluvial: Malde; Reeves, 6, 7, 8

Queen: Reddy Red: Akers

Law: Anon. Oil and Gas Jour., 10; Clark, R. E.; File, 1; Hays; Isbell

Limestone (under Rocks)

Lincoln folds: Craddock; Foley, 2

Llano Estacado: Reeves, 5; Wendorf

Lucero uplift: Cooper, B. N.; Joesting; Mirsky; Titus, 1

Maares (under Lakes)

Mammals (see also under Fossils):
Fitzsimmons, 4; Gregory, D.;
Sloane

MAPS (geologic unless otherwise noted)

### Bachman

2: northeastern New Mexico

3: Bear Peak NE quadrangle, Dona Ana County

5: Capitol Peak NW quadrangle, Socorro County

Balk, R.: Tres Hermanas Mountains

Bogart: photomosaic maps, Sandia, Lucero, Jemez areas

Bromfield: Cedar Mountains, Grant and Luna counties

Dane, 2: southwestern New Mexico

### Dempsey

1: aeromagnetic map, Colfax, Mora, Harding counties 2: aeromagnetic map, San Miguel, Harding counties

3: aeromagnetic map, San Miguel County

Elston, 1: Virden thirty-minute quadrangle

File, 3: Ghost town map of New Mexico

Fischer, W. A., 2: Torrance Station 4 NE quadrangle, Lincoln County

Foster, 1: . . . and relief map,
Precambrian rocks of New
Mexico

Griswold, 3: Index map, mining districts, Socorro County

Hernon, 1, 3: Santa Rita quadrangle

Jones, W. R., 2: aeromagnetic and geol. map, Silver City mining region, Grant County

Kelley, V. C.

3: Sandia Mountains and vicinity

7: tectonic map of the Ruidoso-Carrizozo region

### Kottlowski

1: Las Cruces thirty-minute quadrangle

2: highway map of New Mexico MacKallor, 1: natural gamma and aeroradioactivity of the GNOME (Carlsbad) area

# Moench

3: Seboyeta quadrangle

4: Laguna quadrangle

5: Arch Mesa quadrangle

6: Mesa Gigante quadrangle

8: Dough Mountain quadrangle9: La Gotera quadrangle, Sandoval and Valencia counties

Motts, 3: west Carlsbad quadrangle

N. Mex. Geol. Soc.: maps with guidebooks

O'Sullivan: . . . structure, and uranium deposits, Shiprock quadrangle

Read, 7: Philmont Ranch region

3: Moquino quadrangle

4: Mesita quadrangle

U. S. Geol. Surv., 1: Bandelier Natl. Monument and vicinity

Vlissides: oil and gas fields, test wells, etc., New Mexico

Wanek

1: parts of Harding, San Miguel, Mora counties

2: ... and fuel resources, Raton coal field, Colfax County

Willard, 1: Alum Mountain thirtyminute quadrangle

Wrucke: southern Peloncillo Mountains, Hidalgo county

Zeller, 1: southern Animas Mountains

Metallurgy: Bhappu; Chen; Deju; Fuerstenau; Garman; Gaudin; Mitchell; Purcell, 2; Rahmig; Roman

Meteorites: Adler; Rowe, M. W. Midcontinent area: Van Couvering, 1 Mills (under Mining)

# MINERALS

Adularia: Hewett, 2 Agricultural: Haight

Aluminum: Grace; Young, E. J., 2

Anhydrite: Kerr, S. D.

Argon: Bassett; Damon, 2; Walker, R. D.; Weber, R. H., 4 Asphaltite: Pierce, A. P.; Rohl

Attapulgite: Davies; McGhee

Barite: Hewett, 2; Kottlowski, 23; Kuellmer, 2; Perhac, 2; Williams, F. E.

Barium: Young, E. J., 2

Basalt: Carman, J. H.; Carson; Nichols; Rader; Roedder; Wilcox, J. T.

Bastnaesite: Perhac, 2, 3

Bentonite: Dahl

Beryl: Fuerstenau, 1; Staatz

Beryllium: Coats
Bismuth: Saffold

Bornite: Perhac, 2; Wargo

Calcite: Kuellmer, 2

Calcium: Gile; Kottlowski, 8, 10, 15; Lindberg; Weeks; Young, E. J., 2

Chalcocite: Perhac, 2; Wargo Chalcophanite: Hewett, 1

Chalcopyrite: Rozenweig, 4; War-

Chevkinite: Young, E. J., 1

Chlorine: Hoering Chlorite: Fournier

Chromium: Cannon; Young, E. J.,

Chrysocolla: Chen; Sun, 4, 5

Clay (under rocks) Coal (see Coal)

Coffinite: Moench, 1

Copper: Anon. Min. World, 4; Argall; Baer; Beall; Bogert; Cannon; Christiansen, 2, 3; Fischer, R. P.; Griswold, 5; Harrington, 3, 10; Huttl; Laub; Mitchell; Patterson, C. M.; Perhac; Phillips, J. S.; Read, 6; Reeves, 2, 3; Rose, A. W.; Rosenzweig, 5; Shilling; Spivey; Titley; Wargo; Zimmerle

Coprolite: Martin, P. S., 1

Coronadite: Hewett, 2

Cryptomelane: Hewett, 2; Sun, 2

Detrital: Melvin, N. W. Dickite: Weber, J. N.

Dolomite: Knutson; Kottlowski, 14, 22; Lucia; Motts, 1; Pierce, A. P.; Pratt, W. P., 1; Probst; Sabins, 2; Wright, W. F., 6; Young, E. J., 2

Epsomite: Schluter Feldspar: Kuellmer, 1 Fluorescent: Stephenson

Fluorite: Hewett; Kottlowski, 23; Kuellmer, 2; Perhac, 3

Galena: Austin, 2; Perhac, 2; Slawson

Gallium: Grace

Garnet: Moench, 2, 7

General: Andrews; Anon. Rocky
Mt. Oil Rptr., 6; Bhappu, 6;
Campbell, I.; Cooper, B. N.; Elston, W. E., 3, 4, 6, 10; File, 1;
Gilkey; Gillerman; Graf; Griswold, 1, 4; Jones, W. R., 1; Kopicki; Leavens; Melvin, N. W.;
Northrop, 5; O'Neill; Owen, 3;
Perhac, 1, 5; Smedley; Stephenson; Strong; U. S. Dept. Interior; U. S. Geol. Surv., 2;
Whiting

Germanium: Sheffer Glauconite: Lewis, D. W.

Gold: Harrington, 3, 10; Reeves, 2; Rose, A. W.; Saffold; Wargo; Woods

Goldmanite: Moench, 7 Grantsite: Weeks Guano: Gregory, D.

Gypsum: Bergstrom; Harrington, 1; Herod, 1; Kuster; McDougal

Halite: Weart

Halloysite: Weber, J. N.

Heavy: Bingler, 1, 2; Mirsky; Scott, G. L., 2

Hendersonite: Lindberg Hetaerolite: Hewett, 1 Hollandite: Hewett, 2

Industrial: Campbell, I.; O'Neill

Iron: Mitchell, D. W.; Rahmig; Rose, A. W.; Rowe, M. W., 2; Young, E. J., 2

Johannsenite: Simons, F. S.

Kaolin: Reeves, 1

Kaolinite: Reeves, 1; Weber, J. N.

Kyanite: Corey

Lead: Cannon; Griswold, 5; Harrington, 3; Krieger; Miller, D. S., 1; Pierce, A. P.; Rose, A. W.; Saffold; Slawson; Thompson, A. J., 3; Titley; Wargo; Zeller, 2

Lepidolite: Rimal Limestone (under Rocks)

Lithium: Heinrich

Magnesium: Cannon; Young, E. J., 2

Magnetite: Butler; Smith, D. K.

Manganese: Crittenden; Farnham; Fleischer; Hewett, 2; Miesch; Roman

Marcasite: Pierce, A. P.

Mercury: Anon. U.S. Bur. Mines

Molybdenite: Anon. Min. Eng., 1; Bhappu, 5; Roman

Molybdenum: Anon. Eng. Min. Jour, 4; Anon. Met. Min. & Proc., 1, 2; Anon. Min. World, 1, 3, 6; Bhappu, 7, 8; Briggs; Carman, J. B.; Griswold, 6; Ishihara; Macgregor; McInnis; Schilling, J. H.; Silman; Wamsley

Muscovite: Rimal

Niobium: Bingler, 1, 2; Moore, D. G.

Olivine: Carman, J. H.; Roedder; Smith, D. K.

Onyx: Cooper, B. N.

Opal: Sun, 3

Palygorskite: Pierce, J. W.

Potash: Anon. Min. World, 5; Chasteen, 3; Childs; Christiansen, 2; Griswold, 5; Haight; Hall, J. W.; Horne; Johnston; Lewis, R. W.; Miller, E. H.; Parker, D. F.; Sitton; Smith, J. P.; Stark; Utley, 2, 3; Warrick; White, N. C.; Wilson, T. A.; Wright, J. S.

Potassium: Bassett; Damon, 2; Moore, J. G.; Pliler; Sayegh; Smith, J. P.; Walker, R. D.; Weber, R. H., 4

Psilomelane: Hewett

Pyrite: Perhac, 2; Pierce, A. P.; Wargo

Pyrolusite: Fleischer; Hewett Quartz: Ames, 1; Fuerstenau, 2

Quartzite: Budding, 2 Radioactive: Stephenson Radium: Granger, 3

Ramsdellite: Fleischer; Hewett

Rare earths: Perhac, 2 Rhabdite: Adler Rhenium: Myers, A. T. Saline: Erd; Omori

Salt: Adams, J. E., 2; Apker;
Chasteen, 3; Dickey; Jones, C.
L.; Knutson; Renualt; Smith,
J. P.; Warrick; Werth

Schreibersite: Adler Selenite: Zeitner

Selenium: Bhappu, 3, 4; Davidson, D. F.

Shattuckite: Sun, 1

Silicate: Deju, 2 Silver: Christiansen,

Silver: Christiansen, 3; Fischer, R. P.; Harrington, 3, 10; Knoerr; Linn; Reeves, 2; Rose, A. W.; Saffold; Wargo; Zeller, 2

Sodium: Moore, J. G., 1; Renault; Smith, J. P.; Weeks

Sphalerite: Rose, A. W.

Spurrite: Rosenzweig, 2 Strontium: Cannon

Sulfate: Erd; Omori

Sulfur: Anon. Min. World, 5; Mil-

ler, D. S., 1 Syenite: Wargo Sylvite: Sun, 2

Tantalum: Moore, D. G., 2

Thallium: Crittenden Thorium: Pliler

Titanuim · Cannon

Titanuim: Cannon; Young, E. J.,

Travertine: Cooper, B. N.

Tridymite: Sun, 3
Tungsten: Wedekind
Turquoise: Wargo

Uranium: Abbiss; Anon. Min. World, 2; Arlin; Bernick; Briggs; Chico, 1, 3; Christiansen, 2; Davidson, D. F.; Devers; Fischer, R. P.; Fitch, 1; Granger; Griswold, 5; Hilpert; James; Kelley, V. C., 4; Laub; Liddell; Lynn; Megrue, 1; Miller, D. S.; Olson; O'Sullivan; Payne; Pierce, A. P.; Pliler; Rosenzweig, 1; Sherman; Soc. Econ. Geol.; Tipton; West, S. W., 2; Wolff; Young, W. E.

Vandate: Fischer, R. P.; Lindberg; Weeks

Vanadium: Chico, 1, 3; Moench, 2, 7; Young, E. J., 2

Vermiculite: Fournier

Zinc: Cannon; Griswold, 5; Harrington, 3; Kierger; Rader; Rose, A. W.; Saffold; Titley; Wargo; Zeller, 2

Zircon: Wilbanks

Mineral resources: Anon. Rocky Mt.
Oil Rptr., 6; Cooper, B. N.; Elston, W. E., 3, 4, 6, 10; Gillerman;
Griswold, 1, 4; Kopicki; Lehmann;
Melvin, N. W.; Schilling, J. H., 2;
U.S. Dept. Interior; U.S. Geol.
Surv., 2; Williams, F. E.

Mineral technology: Adler; Ames; Andrews; Arnott; Austin; Bassett; Bray, E. E.; Butler; Carman, J. H.; Crittenden; Dahl; Damon; Davidson, D. F.; Erd; Fischer, R. P.; Fischer, W. A., 1; Fleischer; Friedman; Gile; Grace; Graf; Granger, 2, 3; Holmes; Kelley, V. C., 4; Kuellmer, 1, 2; Lindberg; Moench, 1, 2, 7; Moore, D. G.; Moore, J. G.; Motts, 1, 4; Omori; Parkhill; Pierce, A. P.; Pierce, J. W.; Purcell, 1; Renault; Rimal; Roedder; Rose, A. W.; Rosenzweig, 2, 3, 4; Sabins, 2; Sayegh; Schilling, C. F.; Sheffer; Simons, F. S.; Smith, D. K.; Staatz; Sun; Walker, R. D.; Warrick; Weber, J. N.; Weber, R. H., 4; Weeks; Wilbanks; Wilcox, J. T.; Young, E. J.; Zeitner

#### MINES

Anon. Coal Age, 5; Anon. Eng. Min. Jour., 4; Anon. Min. World, 5; File, 2, 4; Griswold, 5; Rieseberg; Schilling, J. H., 2

Bullfrog: Rose, A. W.

Chino (see also Companies, Kennecott): Anon. Min. World, 4;
Baer; Bogert; Griswold, 5;
Huttl; Patterson, C. M.; Shilling; Spivey

Contact: Hewett, 1

Continental: Rose, A. W.

Diamond No. 2: Chico, 1, 3

Empire Zinc: Rose, A. W.

Groundhog: Rose, A. W. Inspiration [Ariz.]: Sun, 4

Jackpile: Anon. Min. World, 2; Griswold, 5

Kearney: Rose, A. W.

Koehler: Anon. Coal Age, 3; Dimitroff

Linchburg: Titley
Lost Cross: Woods

Navajo: Olsen; Wilson, A. M. Ora Blanchard: Smedley; Strong

Oswaldo: Pitts; Rose, A. W.

Peerless: Rose, A. W. Pewabic: Rose, A. W.

Questa: Anon. Met. Min. & Proc., 1; Anon. Min. World, 1, 3, 6; Bhappu, 7, 8; Carman, J. B.; Ishihara; Schilling, J. H., 1

Red Cloud: Perhac

Section 23: Young, W. E. Shingle Canyon: Rose, A. W.

Woodrow: Moench, 1

#### MINING

Abbiss; Andrews; Anon. Coal Age, 3, 5; Anon. Eng. Min. Jour.; Anon. Met. Min. & Proc., Anon. Min. Eng., 1, 2, 3, 5; Anon. Min. World, 1, 3, 4, 6; Anon. N. Mex. Business, 1; Anon. Pit and Quarry; Anon. Rock Products; Argall; Arlin; Averitt; Baer; Bernick; Bogert; Boyd; Briggs; Buddecke; Campbell, I.; Childs; Christiansen, 2, 3; Eng. Min. Jour.; File, 1, 2; Fitch, 1; Griswold, 2, 3, 5; Hall, J. W.; Harrington, 1, 3, 10; Hays; Hewett; Horne; Hoy; Jones, W. R., 2; Knoerr; Kuster; LaLonde; Lehmann; Lemke; Lewis, R. W.; Liddell; Linn; Long, W. W.; Looney; Lynn; Macgregor; McDougal; Mc-Innis; Mann; Meaders; Miller, E. H.; Morgan, A. D.; N. Mex. Bur. Mines, 1; Olsen; Olson; O'Neill; Parker, D. F.; Pitts; Ray; Ridge; Saffold: Schilling, J. H., Schmitt; Shilling; Silman; Smed-Spence: Spivey: Stark: Strong; Thompson, A. J., 1, 2, 4; Utley; Vieth; Wamsley; White, N. C.; Wilson, A. M.; Wilson, T. A.; Wolff; Woods; Wright, J. S.; Young, W. E.; Young, W. H.; Zimmerle

Companies (see Companies)

# Districts:

Ambrosia Lake: Abbiss, 1; Anon. Min. World, 7; Granger; Howell; Wolff

ARAVAIPA [ARIZ.]: Simons, F. S. BLUEWATER: Gordon

BINGHAM [UTAH]: Rose, A. W. CENTRAL: Jones, W. R., 1; Rose, A. W.

CERRILLOS: Wargo

CHLORIDE FLAT: Entwistle

COYOTE: Laub EUREKA: Zeller, 2

GENERAL: Elston, W. E., 6, 10; File, 4; Gillerman; Griswold, 1, 3, 4; Hill, J. D.; Northrop, 5

Hansonburg: Kopicki Hillsboro: Reeves, 2, 3 IRON MOUNTAIN: Jahns

LAKE VALLEY: Christiansen, 3; Hewett, 1

LAS ANIMAS: Reeves, 2

LORDSBURG: Clark, K. F.

Luis Lopez: Hewett, 1

MAGDALENA: Lovering, 2; Titley; Wedekind

MEERSCHAUM: Pierce, J. W.

ORGAN: Lovering, 2

PETACA: Corey
RED LAKE: Akers

SACRAMENTO (HIGH ROLLS):
Jerome

SILVER CITY: Jones, W. R., 2 STEEPLE ROCK: Elston, W. E., 4

Groups:

BIGELOW: Reeves, 2 JACKPOT: Reeves, 2 MKT: Reeves, 2

SAN ANTONIO: Reeves, 2

Methods: Andrews; Anon. Coal Age, 3; Anon. Eng. Min. Jour., 6; Anon. Min. Eng., 5; Anon Min. World, 2, 4; Argall; Arlin; Baer; Bergstrom; Bogert; Boyd; Buddecke; Cowan; Dimitroff; Griswold, 2; Harrington, 10; Horne; Howell; Huttl; James; Johnston; Liddell: Lynn; Parker, D. F.; Ray; Shilling; Silman; Spivey; Utley, 2, 3; West, S. W., 2; Wolff; Wright, J. S.; Young, W. F.

Mills: Anon. Eng. Min. Jour., 4; Anon. Min. Eng., 2; Anon. Pit and Quarry; Anon. Rock Products; Arlin; Bergstrom, 2; Bogert; Lemke; Lynn; Utley, 1; West, S. W., 2

Open-pit: Anon. Coal Age, 5; Anon. Eng. Min. Jour., 6; Anon. Min. Eng., 5; Anon. Min. World, 4; Griswold, 5; Harrington, 10; Wamsley; Wilson, A. M.

Safety: Abbiss; Anon. Min. World, 7; Buddecke; Hays

Missouri: Bowsher

Mogollon Rim [Ariz.]: Kottlowski, 7; N. Mex. Geol. Soc., 3; Weber, R. H., 1

#### MOUNTAINS

Animas: Read, 1, 3; Zeller, 1

Animas Hills: Reeves, 2

Big Hatchet: Kottlowski, 14, 22; Read, 1, 3; Skinner; Trauger,

2; Zeller, 4 Caballo: Stauffer

Capitan: Martin, W. C.

Capulin: Muchlberger, 5

Cedar: Bromfield

Cerrillos Hills: Johnson, D. W.

Chiricahua [Ariz.]: Sabins, 9

Chuska: Appledorn; Bent; Michael; Watson; Wright, H. E., Jr., 1

Creston Range: Reed, J. M. Dos Cabezas [Ariz.]: Sabins, 9

East Grants Ridge: Wilcox, J. T.

East Potrillo: De Hon, 2; Lokke, 1

Elk: Thompson, T. B., 3

Fra Cristobal: Thompson, Sam

Franklin [Tex.]: Hu

Gallinas: Moore, D. G.; Perhac, 1, 3, 4, 5; Poe

Guadalupe: Hayes

Hueco: Williams, T. E.

Jarilla: Schmidt; Seager

Jemez; Bailey; Ross, C. S., 1; Smith, R. L.

Jicarilla: Budding, 3, 4; Martin, W. C.

[La] Joyita Hills: Herber; Huber

Ladron: Black

Lemitar: Bonnichsen

Little Burro: Edwards

Little San Pasqual: Geddes Los Pinos Range: Wilpolt

Manzano: Budding, 2; Koopmans; Myers, D. A.

Monte Largo: Lambert; Moore, D. G.

Nogal Peak: Griswold, 6; Thompson, T. B., 2

North Franklin [Tex.]: Harbour

Oscura: Zimmerle

Peloncillo: Quaide; Wrucke Picuris Range: Montgomery

Potrillo: De Hon

Rocky: Averitt; Kauffman; Mc-Caslin, 3

Sacramento: Bates; Baver; Burton; Hall, F. R., 3; Packard; Parks; Pray, 1; Woods

Sandia: Catacosinos; Kelley, V. C., 3; Phillips, C. H.; Rich; Shoemaker, J.; Yale

Sangre de Cristo: Andreasen, 1; Baltz, 1; Miller, J. P.; Sutherland

San Mateo Peak: Furlow

San Pedro: Atkinson, W. W.

Sierra Blanca: Martin, W. C.; Richmond, G. M., 2; Thompson, T. B., 2; Weber, R. H., 7

Socorro: Smith, C. T., 3

South: Thompson, T. B., 1

Taos Range: Gruner

Tres Hermanas: Balk, R.; Kottlowski, 6

Tusas: Muehlberger, 1

# NATIONAL MONUMENTS

Bandelier: U.S. Geol. Surv., 1

Carlsbad Caverns: Baker; Davies; Gregory, D.; Natl. Speleol. Soc.

Gila National Forest: Trauger, 1

White Sands: Jones, B. R.; Wendorf

MISSILE RANGE: Herrick, 1

Navajo Indian Reservation: Akers; Appledorn; Cooley, 3; Davis, G. E.; Harrington, 2; Hough, 3; Kaanta; Kelly; West, W.

### NEW MEXICO

Central: Baars, 1; Bogart; Budding, 2, 3, 4; Evans, G. C.; Hibben; Kelley, V. C., 6, 7; Kottlowski, 14; Looney; Northrop, 4; Sanford, 3; Tanner, 1

East: Adams, J. E., 1, 2; Keppel; Nicholson, J. H.; Robertson; Stewart, S. W.

General: Anon. Eng. Min. Jour., 2, 3; Anon. Metal Min. & Proc., 2; Anon. Min. World, 1, 3, 6; Anon. Oil and Gas Jour., 1, 5, 10, 16, 17, 18; Anon. Rock Products; Anon. Rocky Mt. Oil Rptr., 5; Aristarain; Ash, 4, 6; Bachman, 4; Baird; Ballance;

Belt; Bhappu, 3, 4; Bowsher; Buddecke; Burford; Cannon; Christiansen; Cole; Cooley, 1, 3; Darden; Davis, G. E.; Devers; Emerson; Ethington: Farnham; File, 1, 3, 4; Finney; Flower, 9, 12; Foster, 1, 2; Fournier; Gilkey; Grozier; Harrington, 3, 6; Hays; Herod, 2; Hills, 2; Hood, 2; Hough, 2; Howard; Howe, 1; Kalb; Kerr, S. D.; Kottlowski, 2, 8, 10, 12, 16, 18, 23; Lamb; Langston; Lawrence; Leavens; Leopold; Lindberg; Linn; Long, W. W.; MacKallor; McCaslin, 1, 4; McClure; Meaders, 1, 2, 3, 4; Motter; Motts, 2; N. Mex. Bur. Mines, 1, 3; Nordin, 5; Northrop, 6, 7; Ostrom; Otte, Pollack; Pray, 2; Rahmig; Ramey; Reeder, 1, 2, 3, 4, 5; Richmond, G. M., 1; Riley; Romer; Rosenzweig, 4; Sanford, 7; Schilling, C. F.; Schilling, J. H., 2; Sitton; Smedley; Summers; Sun, 3, 5; Tait; Thomas, H. E.; Thompson, A. J.; Tuan; Turner; U.S. Dept. Interior; U.S. Geol. Surv., 2; Vlissides; Weeks; Williams, F. E.

North-Central: Anon. Min. Eng., 1, 2; Baltz, 5, 7; Beaumont; Gruner; Kottlowski, 3; Lee, W. T.; Montgomery; Redmon; Rohl; Titus, 1

Northeastern: Andreasen, 2; Anon. Rocky Mt. Oil Rptr., 6; Bachman, 2; Cazeau; Gregory, J. T.; Muehlberger, 5; N. Mex. State Engr.; Read, 7; Robinson

Northwestern: Akers; Anon. Rocky
Mt. Oil Rptr., 1; Appledorn;
Bent; Bingler, 1, 2; Cordell;
Griswold, 5; Harrington, 2, 7;
Hilpert; McCormick; McCubbin; Michael; Mirsky; O'Sullivan; Owen; Parkhill; Read, 2, 4, 5; Tipton; Watson; Wright, H. E., Jr., 1

South-Central: Bates; Brattstrom; Hawley; Herrick; Kelley, V. C., 8; Kottlowski, 13, 22; Leggat; Martin, W. C.; Muehlberger, 6; Reeves, 4, 7, 8; Schluter

Southeastern (see also Oil and Gas, fields/pools): Anon. Oil

and Gas Jour., 2, 7, 8; Baker; Cooper, J. B., 1, 2, 3; Craddock, 1; Darden; Essary; Graves; Griswold, 5; Grozier; Helmig; Holland; Horak; Jones, C. L.; Jones, C. R.; Jones, T. S.; Kelley, J. M.; Kinney; LeMay; Motts, 4, 5; Murphy; Norden; Probst; Rogers, V. W.; Roswell Geol. Soc.; Vine

Southern: De Hon, 2; Dick-Peddie; Ruhe

Southwestern: Armstrong, 1, 2, 4; Balk, C. L., 2; Christiansen, 3; Damon; Dane, 2; Elston, W. E., 5, 6; Fitzsimmons, 4, 5; Gardner, 2; Hill, J. D.; Kottlowski, 5, 13, 14, 17, 22, 25; N. Mex. Geol. Soc., 6; Reed, E. K.; Richard; Sabins, 9; Sheffer; Skinner; Trauger, 5; Walter; Wengerd, 4, 5; White, N. D.; Zeller

West: Budd: Mathews

West-Central: Armstrong, 3; Wengerd, 3

Noise: Buddecke

North America: Anon. World Oil, 3; Healy; Hills, 1; Howard; Malde; Natl. Res. Council; Patterson, J. R.; Skipp; Sloss; Wise

Nuclear studies: Anon. Min. Eng., 3; Anon. N. Mex. Prof. Engr.; Anon. Res. for Industry; Anon. Water Well Jour.; Ben-Menahem; Berg; Carder, D. S.; Carlson; Coffer; Cooper, J. B., 2; Cowan; Dickey; Doty; Finney; Gard; Hankins; Hill, G.; Hoy; Inst. Sci. Tech.; Knutson; McCrory; Norden; Romney; Rowe, M. W.; Smith, D. K.; Smith, S. W.; Stephens; Stewart, S. W.; Travis; Weart; Werth; Westhusing

Nutria monocline: Chico, 2; Edmonds

# OIL AND GAS

Adams, C. S.; Adams, E.; Anon. N. Mex. Geol., 4; Anon. Oil and Gas Jour.; Anon. Petrol. Management; Anon. Rocky Mt. Oil Rptr.; Anon. World Oil; Ballou; Beaumont; Bieberman; Birdseye; Blymn; Brinkley; Chasteen; Christiansen, 2; Coffer; Cooper, V.;

Cram; Crenshaw; Darden; Dean, J. W.; Dean, M. R.; Dietzman; Dillon; Eardley; Essary; Fitzsimmons, 1; Foster, 2, 3; Franklin; Galloway; Gardner; Gray; Griswold, 5; Harrington, 2, 7, 8; Havenor; Havens; Heinrichs; Helmig; Herbeck; Holder; Holmquest; Horn; Hough; Hutchinson; Jackson, G.; Johnson, W. B.; Jones, T. S.; Kalb; Keller; Kelley, J. M.; Kelly; Kinney; Knutson; Kornfeld; Kottlowski, 9; Lagrone; Le-May; Lyon; McCaslin; McGhee; Matthies; Mechler: McNeal; Moody; Motter; Muskat; Parker, J. L.; Penttila; Picard; Pool; Praetorius; Pratt, W. E.; Ramey; Rea; Rensch; Riley; Rogers, L. C.; Roswell Geol. Soc.; Runyan; Scott, J.; Smith, A. M.; Smith, K. G.; Snyder; Struth; Tait; Travis; Vlissides; Walker, T.; Wengerd, 4, 5; West, W.; Wright, W. F.

# Developments:

1959: Foster, 2 1960: Budd: Horak

1961: Mathews; Murphy 1962: Holland; Mathews

1963: Jones, C. R.; Mathews; Praetorius

1964: Keller; Rogers, V. W.

Fields/Pools:

Anon. Oil and Gas Jour., 6; Roswell Geol. Soc.; Runyan; Vlissides

BISTI: Anon. Rocky Mt. Oil Rptr., 1; Brinkley; McNeal, 1; Sabins, 1, 3, 4

CAPROCK QUEEN: Riley

CHA CHA: Anon. Oil and Gas Jour., 3, 4; Anon. Rocky Mt. Oil Rptr., 1

CHAVEROO: Anon. Oil and Gas Jour., 15

DEAD HORSE CREEK: Sabins, 3

EMPIRE ABO: Snyder

Horseshoe Gallup: Anon. Rocky Mt. Oil Rptr., 1; Herbeck; Penttila, 1, 2

LEA: Franklin

LISBON VALLEY: Chasteen, 3

Loco HILLS: Darden

LOVINGTON: Gray

MANY Rocks: Cooper, V., 1

RED MOUNTAIN: Birdseye

TOTAH: Anon. Oil and Gas Jour., 3, 4; Anon. Rocky Mt. Oil Rptr., 1

VERDE GALLUP: Penttila, 1, 2

Floodwater: Anon. Petrol. Management; Darden; Herbeck; Ramey; Riley

Helium: Dean, J. W.; Pylant

Hydrocarbons: Lyon, L. B.; Parkhill; Pierce, A. P.; Travis

Olefin; Parkhill

Technology: Anon. Oil and Gas Jour., 9, 11, 12; Anon. Petrol. Management; Ballou; Birdseye; Coffer; Cram; Crenshaw; Darden; Dean, M. R.; Dietzman; Essary; Gray; Heinrichs; Holder; Hutchinson; Jackson, G.; Johnson, W. B.; Jones, T. S.; Kalb; Kelley, J. M.; Lagrone; Lyon, L. B.; McGhee; Matthies; Mechler; Parkhill; Peterson, 1; Pool; Ramey; Riley; Sabins, 6; Scott, J.; Smith, A. M.; Travis; Walker, T.

Uranium well: Arlin; Lynn; West, S. W., 2

Water wells: Arlin; Lynn

Wells: Adams, C. S.; Anon. Oil and Gas Jour., 7, 9; Anon. World Oil, 1, 2; Blymn; Cram; Crenshaw; Dillon; Galloway; Gardner; Holder; Isbell; Jackson, G.; Kalb; Kornfeld; McCaslin, 2, 4, 5; Vlissides

Wildcat wells: Anon. Oil and Gas Jour., 9, 10; Gardner, 2, 3; Mc-Caslin, 3; Rensch; Wengrd, 4

Oklahoma: Motts, 2; Pollack; Tasch

Paleoecology: Armstrong, 3; Elias; Kauffman; Lamb; Martin, P. S., 1; Sabins, 1; Wendorf

Paleogeography: Tanner

Paleogeology: Cooley, 1; Dunham; Leopold; Strain

Paleontology: Ager; Armstrong, 1,
2; Ash, 1, 4, 6; Baird; Baker;
Baver; Bowsher; Brattstrom; Burton; Catacosinos; Colbert; Ething-

ton: Fay: Flower: Gregory, J. T.; Harris; Howe, 2, 3; Hu; Kauffman; Kirkland; Konishi; Lamb; Lawrence; Lokke; Martin, P. S., 1; Nations: Northrop, 3, 6, 7; Ostrom; Paape; Parks; Pradhan; Read, 1, 3; Reynolds, T. E.; Romer; Ross, C. A.; Sabins, 7, 9; Simons, E. L.; Skinner; Skipp; Stevens; Tasch; Vaughn; Wendorf

Paleotectonics: Cordell

Palynology: Anderson, R. Y., 1; Bent; Martin, P. S., 2; Schoenwetter; Wendorf; Werrell; Williams, T. E.

Petroglyphs: Weber, R. H., 7

Petrography: Crutcher: Emerson; Sabins, 1, 5, 8; Stauffer; Yale

Petrology: Adams, J. E., 1; Ash, 3; Baltz, 1, 3; Bassett; Cooley, 3; Damon; Elston, W. E., 2; Fitzsimmons, 1, 2; Giles; Grace; Hambleton; Harnett; Herber, 3; Howe, 1; Huber; Jones, C. L.; Jones, W. R., 3; Kottlowski, 3, 5, 7, 11, 12, 17, 18, 26; Lambert; McCubbin; Muchlberger, 1; Nottingham; Owen, 3; Poe; Postel; Robinson; Rocky Mt. Assoc. Geol.; Shoemaker, E.; Smith, C. T., 1

Philmont Ranch: Read, 7; Robinson

Photography: Bogart; Carder, B.; Erd; Fischer, W. A., 1; Omori; Schuster

Phreatophytes: Soto Vargas

Physical geology: Carder, B.; Carlson; Carson; Hawley; Nichols; Ruhe, 1; Schuster; Sloss; Watson; Wright, H. E., Jr., 1

Physiography: Anderson, R. Y., 2; Baltz, 6; Bates; Catacosinos; Chico, 2; Conley; Cooley, 2; Cooper, B. N.; Dunham; Eardley; Edmonds; Elston, W. E., 11; Geddes; Harrington, 6; Hawley; Healy; Hodge; Joesting; Keller; Kelley, V. C., 2, 5; Kottlowski, 7, 20; Le-May; Leve; Mirsky; Moore, W. L.; Muehlberger, 3; N. Mex. Geol. Soc., 3; Nordin, 1; Otte; Parks; Pierce, A. P.; Pratt, W. P., 2, 3; Pray; Reddy; Reeves, 4, 5, 6, 7, 8; Robinson; Rohl; Ross, C. S., 2; Ruhe, 1; Schumm; Skipp; Smith, K. G.; Titus, 1; Tuan; Vine, 2; Watson; Weber, R. H., 1; Wedekind; Wendorf; Wilcox, J. T.; Willard, 2; Wise

# PLAINS-PLATEAUS

Colorado Plateau: Baars, 2, 3; Baltz, 6; Bradley; Cooley, 2; Fischer, R. P.; Kelley, V. C., 2; Kirkland; Miller, D. S.; Myers, A. T.; Newman; Payne; Poole; Scott, G. L., 2

Copper Flat: Reeves, 2; Wilbanks High Plains: Havens; Miller, W. D.; Muehlberger, 5; Wendorf

Llano Estacado: Reeves, 5; Wendorf

Mogollon Plaeau: Elston, W. E., 11 Pajarito Plateau: Abrahams, 1 San Augustin Plains: Young, J. V.

Production, mineral (inc. oil and gas): Anon. Coal Age, 2, 4; Anon. Eng. Min. Jour., 4; Anon. Min. Eng., 2, 4; Anon. Oil and Gas Jour., 5, 7, 8; Anon. Petrol. Management: Anon. Pit and Quarry: Products: Anon. Rock Rocky Mt. Oil Rptr., 1; Anon. World Oil, 2, 3; Averitt; Birdseye; Boyd; Brinkley; Budd; Cooper, V., 1, 3; Darden; Dean, J. W.; Dean, M. R.; Gardner; Harrington, 1, 2, 7; Herod; Holmquest; Hutchinson; Kornfeld; Lemke; N. Mex. Bur. Mines, 1; Olsen; Ramey: Parkhill; Praetorius; Reeves, 3; Rensch; Scott, J.; Silman; Thompson, A. J., 1, 2, 4; Wamsley; Wengerd, 5; Wilson, A. M.; Wright, W. F., 8

# **PROJECTS**

Apollo site: Doty

Gnome (see also Nuclear studies; Seismology): Anon. Min. Eng., 3; Anon. N. Mex. Prof. Engr.; Anon. Res. for Industry; Berg; Carder, D. S.; Cooper, J. B., 2; Dickey; Gard; Hankins; Inst. Sci. Tech.; Knutson; MacKallor; Mourant, 1; Norden; Romney; Smith, D. K.; Smith, S. W.: Stephens: Stewart, S. W.; Westhusing

Logan: Carder, D. S., 2

QUADRANGLES

Alum Mountain: Willard, 1

Arch Mesa: Moench, 5 Bear Peak: Bachman, 3

Capitol Peak NW: Bachman, 5

Carlsbad: Motts, 3

Carrizozo: Weber, R. H., 6

Chama: Muehlberger, 2

Dough Mountain: Moench, 8

La Gotera: Moench, 9 Laguna: Moench, 4

La Madera: Bingler, 3, 4

Las Cruces: Kottlowski, 1; Ruhe,

Little Black Peak: Smith, C. T., 4

Mesa Gigante: Moench, 6

Mesita: Schlee, 4

Mockingbird Gap: Bachman, 1

Moquino: Schlee, 3 Nash Draw: Vine, 2 Organ Peak: Ruhe, 1 Pelona: Stearns, 2 Puertecito: Tonking

Santa Rita: Hernon; Lovering, 1

Seboyeta: Moench, 3 Shiprock: O'Sullivan Virden: Elston, W. E., 1 Walnut Wells: Zeller, 3

Radioactivity: Bassett; Damon; Horn; MacKallor; Pierce, A. P.; Rowe, M. W.; Stuiver; Walker, R. D.; Weber, R. H., 4

Reefs: Dunham; Gregory, D.; Le-May; Parks; Pierce, A. P.; Runyan; Wright, W. F., 1, 2, 6

Reports: LaLonde; McClure; Montagne; N. Mex. Bur. Mines, 1; Reynolds, S. E.; Thompson, A. J., 1, 2, 4

Reservoirs (see also Dams): Coffer; Dietzman; Gray; Hawley [Caballo]; Haynes [Elephant Butte]; Hutchinson; Kaanta [Navajo]; Schoenwetter [Navajo]

Resins: Bhappu, 2

Reviewers: Alpha; Foley, 1; Leav-

ens; Packard; Pustmueller; Sloane; Van Couvering; Wengerd, 1

RIVERS-CREEKS

Alamogordo Creek: Keppel

Cameron Creek: Pratt, W. P., 2, 3

Canadian: Gregory, J. T.; N. Mex. State Engr.; Pollack

Gila: Elston, W. E., 9

Jemez: Spiegel, 1

Little Colorado: Cooley, 1

Mescal Creek: Melvin, J. W.

Mimbres: Elston, W. E., 9

Pecos: Grozier; Thomas, H. E.

Rio Chama: N. Mex. Geol. 1; Wengerd, 1

Rio Grande (see also under Valleys): Nordin, 1, 3, 4, 5; Wollman

Rio Hondo: Mourant, 2

Rio Puerco: Nordin, 2; Wagner;

Wright, H. E.

Rio Salado: Evans, G. C.

San Juan: Harrington, 2; Wollman

ROCKS

Alluvium: Abrahams, 2; Gile; Nordin, 5; Schoenwetter; Werth

Andesite: Kottlowski, 15

Aplite: Shoemaker, J.

Basalt: Carman, J. H.; Roedder Breccia: Bryner; Perry; Wilcox,

Caliche: Aristarain

Carbonate: Four Corners Geol. Soc., 2; Hambleton; Hilpert; Howe, 1; Jones, C. L.; Motts, 2, 4; Pustmueller; Stauffer

Cenozoic: Kottlowski, 17; Weber, R. H., 2

Clay: Aristarain; Arnott; Dahl; Granger, 2; Grim; Nordin, 2; Reeves, 1; Sayegh; Swineford; Weber, J. N.

Cretaceous: Ash, 3; Baltz, 3; Crutcher; Willard, 2

Devonian: Baltz, 1

Dolomite (under Minerals)

Evaporite: Fourner; Grim; Jones, C. L.

General: Austin, 1; Elston, W. E., 2; Grace; Griswold, 2; Kottlowski, 12, 18, 26; Read, 6

Granite: Werth

Igneous: Carman, J. H.; De Hon; Elston, W. E., 2, 7; Moore, D. G.; Moore, J. G., 1; Poe; Rimal; Roedder

Jasperoid: Lovering, 2; Young, E. J., 2

Jurassic: Mirsky; Smith, C. T., 1

Kaolin: Reeves, 1

Limestone: Armstrong, 1; Cooper, B. N.; Gregory, J. T.; Hayes, P. T.; Knutson; Kottlowski, 4, 8, 10, 14, 15, 22; Lovering, 2; Motts, 1; Nations; Pray, 2; Schluter; Williams, T. E.

Malpais: Carson

Metamorphic: Fitzsimmons, 1

Mississippian: Baltz, 1

Paleozoic: Rocky Mt. Assoc. Geol.

Pegmatites: Bhappu, 6; Heinrich; Redmon; Rimal; Thompson, T. B., 3

Pennsylvanian: Adams, J. E., 1; Catacosinos; Kottlowski, 3, 5, 7, 11

Perlite: Anon. Min. Eng., 2; Anon. Pit and Quarry; Anon. Rock Products; Griswold, 5; Herod, 2; Weber, R. H., 3

Permian: Gardner, 4; Poe; Read, 4, 5

Petroglyphs: Weber, R. H., 7

Phenocrysts: Carman, J. H.; Friedman; Roedder

Porphyry: Kuellmer, 1

Precambrian: Bonnichsen; Fitzsimmons, 2, 3; Foster, 1; Harbour; Herber, 2, 3; Lambert; Muehlberger, 1; Poe; Vlissides

Pumice: Utley, 1

Pyroclastic: Elston, W. E., 2

Rhyodacite: Damon, 2

Rhyolite: Bohmer; Giles; Poe

Sandstone: Bhappu, 3, 4; Bradley; Chico, 1, 3; Davidson, D. F.; Dow; Granger, 1; Gregory, J. T.; Knutson; Loleit; McCubbin; Megrue, 2; Peterson, 1; Phillips, J. S.; Read, 6; Reynolds, J. M.; Schlee, 1, 2; Scott, G. L., 2 Sedimentary: Byerly; Chico, 2; DeBrine; Knutson; Kottlowski, 15; Newman

Shale: Chico, 1, 3; Gregory, J. T.; Kottlowski, 14, 22; Lamb

Silicate: Jones, W. R., 3

Siluro-Devonian: Wright, W. F., 7

Stone: Rowe, M. W., 1 Sulfate: Jones, C. L.

Tactite: Jahns

Tertiary: Baltz, 3; Poe; Weber, R. H., 4

Travertine: Cooper, B. N.

Triassic: Colbert; Poole; Smith, C. T., 1

Tuff: Abrahams, 1; DeBrine; Elston, W. E., 2; Giles; Greenwood; Werth

Vitreous: Elston, W. E., 2

Volcanic: Bassett; Coats; De-Brine; Elston, W. E., 2, 9; Friedman; Moore, J. G., 2; Ross, C. S., 2; Smith, R. L.; Thompson, T. B., 2; Weber, R. H., 2, 4

Safety (under Mining)

Salt (under Minerals)

Sand: Bakker; Hantush, 4, 5, 8; Jones, B. R.; Pollack; Purcell, 1; Reeves, 6

Sandstone (under Rocks)

Scenic Trips: Christiansen, 2; Muchlberger, 5; N. Mex. Bur. Mines, 2, 3

Sedimentology: Anderson, R. Y., 3;
Baltz, 5; Bent; Cooper, J. B., 1;
DeBrine; Dunham; Evans, G. C.;
Fischer, R. P.; Fournier; Graves;
Grim; Harnett; Hubert; Jones, B.
R.; Jones, C. L.; Kerr, S. D.; Knutson; Kottlowski, 14, 17, 22, 23;
Lewis, D. W.; Megrue, 2; Mirsky;
Myers, D. A.; Newman; Nordin;
Peterson, 2; Pollack; Poole; Reed,
J. M.; Reynolds, J. M.; Richmond,
G. M.; Sabins, 1, 2, 3, 4, 5, 6, 8, 9;
Schlee, 1, 2; Scott, G. L.; Schufle;
Spiegel, 1; Swineford; Ullrich;
Wagner; Wengerd, 2; Willard, 2

Seismology (see also Nuclear studies; Projects): Anon. N. Mex. Prof. Engr.; Anon. Res. for Industry; Ben-Menahem; Berg; Carder, B.; Carder, D. S.; Franklin; Hankins; Inst. Sci. Tech.; Koopmans; Long, L. T.; McCrory; Northrop, 4; Robertson; Romney; Sanford; Smith, S. W.; Stephens; Stewart, S. W.; Stuart; Theis, 1; Thomas, R. P.; Walker, T.; Weart; Werth; Westhusing

Societies: Four Corners Geol.; Natl. Speleol.; N. Mex. Geol.; Rocky Mt. Assoc. Geol.; Roswell Geol.; Soc. Econ. Geol.

Soil: Abrahams, 1; Fischer, W. A., 1; Gile; Hassan; Ruhe, 1

Southwest (under United States)

Stratigraphy: Adams, J. E., 3, 4; Anderson, R. Y.; Armstrong; Ash, 4, 7; Baars; Bachman, 1; Balk, C. L.; Baltz, 3, 7; Bowsher; Brooks; Burford; Catacosinos; Chico, 2; Conley; Cooley, 3; Cooper, B. N.; Edmonds; Foster, 3; Gile; Hambleton; Hayes, 1; Jones, T. S.; Kirkland; Kottlowski, 6, 13, 19, 25; Lamb; Lee, W. T.; Lessentine; Loleit; McCaslin; McPeek, 2; Mc-Swain; Mear, 2; Melvin, J. W.; Mirsky; Muehlberger, 2; Natl. Res. Council; Ohlen; Owen; Patterson, J. R.; Penttila; Picard, 2; Read, 1, 2, 3, 4, 5; Richard; Robertson; Ruhe, 2; Sabins; Schlee, 1, 2; Shoemaker, J.; Silver, C.; Sloss; Stevens; Sutherland; Tait; Tasch: Thompson, T. B., 2; Titley; Wasserburg; Wengerd, 3; Wilpolt; Wilson, J. L.; Winters; Wright, W. F.; Zeller, 2, 4

Structure (see also Folds/Faults; Tectonics): Adams, J. E., 1, 2; Alpha; Anderson, R. Y., 3; Andreasen, 1; Anon. N. Mex. Geol. Soc., 1, 2, 3; Appledorn; Austin, 1; Baltz, 3, 5, 6; Belt; Bingler, 1, 2, 3; Bradley; Budding, 3; Burford; Burnham; Carpenter, R. H., 1; Carson; Chico, 2, 3; Clark, K. F.; Cooper, J. B., 1, 3; Craddock; Eardley; Elston, W. E., 5, 6, 7, 8; Fischer, W. A., 1; Foley, 2; Four Corners Geol. Soc., 1; Geddes, 2; Granger, 4; Greenwood; Hayes, 1; Healy; Herber, 3; Hills; Hilpert; Jones, W. R., 1, 3; Kelley, V. C., 1, 2, 5, 6, 7, 8; Kerr, S. D.; Knutson; Kottlowski, 4, 9, 20, 24, 26; Lovering, 2; Megrue; Motts, 2, 4;

Muehlberger, 3, 4; Norden; Nottingham; Ohlen; O'Sullivan; Otte; Pakiser; Penttila, 1, 3, 4; Perry; Poe; Pratt, W. E.; Pratt, W. P.; Pray, 2; Probst; Reddy; Reeves, 4, 6, 7, 8; Robinson; Rosenzweig, 3, 5; Ross, C. S., 2; Shoemaker, J.; Silver, C.; Slawson; Smith, R. L.; Stewart, S. W.; Stuart; Sutherland; Titley; Trauger, 4; Tuan, 1; Van Couvering, 1; Vine, 1; Wagner; Walker, T.; Wengerd, 3; Wise; Wright, W. F.; Zeller, 2

Technology, general: Austin; Bray, E. E.; Damon; Hassan; Horn; Pierce, A. P.; Sabins, 6; Schuster; Stuiver

Tectonics (see also Structure): Adams, J. E., 3, 4; Baltz, 5; Cordell; Healy; Hills, 2; Kelley, V. C., 2, 5, 6, 7; Norden; Ohlen; Pakiser; Stewart, S. W.; Stuart; Wise

### TEXAS

Central: Wilson, J. L. Coke County: Mear, 2

General: Adams, J. E., 1; Howe, 1; MacKallor; McCaslin, 1; Motts, 2; Nordin, 5; Pollack; Wasserburg

Panhandle: Nicholson, J. H.

Trans-Pecos: Howe, 2, 3; Turner

West: Adams, J. E.; Cazeau; Cooper, J. B., 1; Dahl; Grozier; Harbour; Hawley; Herrick, 2; Hills, 2; Holland; Horak; Jones, C. R.; Jones, T. S.; Kerr, S. D.; Leggat; Mear, 1; Miller, W. D.; Murphy; Probst; Reeves, 6; Robertson; Rogers, V. W.; Tait; Wilson, J. L.; Wright, W. F., 1, 2

#### TOWNS—AREAS

Albuquerque: Anderson, R. Y., 2; Anon. N. Mex. Geol. Soc. 1; Bjorklund; Elston, W. E., 8; Fitzsimmons, 2; Harrington, 1; Hibben; Joesting; Kelley, V. C., 5; N. Mex. Geol. Soc., 2; Northrop, 1, 2, 3, 5; Smith, C. T., 1; Van Couvering, 2

Artesia: Gardner, 4; Motts, 4

Bernardo: Wagner

Bingham: Kopicki; Smedley; Strong

Bland: Vieth

Bluewater: Gordon, E. D. Capitan: Elston, W. E., 7

Carlsbad: Gard, 1; Griswold, 5; Johnston; MacKallor; Mourant, 1; Parker, D. F.; Pierce, A. P.; Smith, D. K.; Smith, J. P.; Sun, 2; Utley, 2, 3

Carrizozo: Cooper, J. B., 4; Kelley, V. C., 6, 7

Cerrillos: Looney; Wargo Chama: Gardner, 3

Chihuahua [Mex.]: Reeves, 4, 7, 8

Ciniza: Parkhill

Clayton: Muehlberger, 5

Clovis: Postel
Deming: Turner

El Paso [Tex.]: Hawley

El Vado: McPeek Estey City: Zimmerle

Farmington: Harrington, 2 Fort Stanton: Hallinger Galisteo: Stearns, 1

Gallup: Anon. Oil and Gas Jour., 3, 4; Anon. Rocky Mt. Oil Rptr., 1; Chico; Edmonds; Herbeck; Penttila, 1, 2; West, S. W., 1

Golden: Looney

Grants: Anon. Min. World, 2; Bassett; Bhappu, 3, 4; Byerly; Gordon, E. D.; Griswold, 5; James; Kelley, V. C., 4; Lynn; Megrue, 1; Rosenzweig, 1; Soc. Econ. Geol.; Tipton; West, S. W., 2

Hillsboro: Christiansen, 3; Reeves, 2, 3; Wilbanks

Jemez: Bogart Koehler: Dimitroff La Bajada: Rohl

Laguna: Byerly; Megrue; Moench, 2, 7; Rosenzweig, 1; Schlee, 1, 2 Lake Valley: Fay; Young, E. J., 2

La Madera: Phillips, C. H.

La Mesa: De Hon, 1

Las Cruces: Kottlowski, 26

Las Palomas: Cox Las Vegas: Whiting

Lincoln: Craddock; Foley, 2

Los Alamos: Abrahams, 2; Griggs; Theis, 2

Lucero: Bogart

Madrid: Looney Malaga: Reddy Mesa Alta: Reeves, 1

Mockingbird Gap: Moore, W. L. Navajo Reservoir district: Schoenwetter

No Agua: Anon. Pit and Quarry;

Griswold, 5

Ojo Caliente district: Shoemaker,
E.

Pecos: Krieger

Pinos Altos: Saffold

Potrillo area: De Hon, 2; Reeves,

Questa: Anon. Metal Min. & Proc.; Anon. Min. World, 1, 3, 6; Bhappu, 5, 7, 8; Carman, J. B.; Carpenter, R. H., 1; Silman; Wamsley

Raton: Muehlberger, 5; Wanek, 2

Red Bluff: Leve Red River: Ratcliff

Rosario: Bergstrom; Harrington, 1 Roswell: Fitzpatrick; Harrington, 8; Hood, 1

Ruidoso: Ash, 8; Kelley, V. C., 6, 7; N. Mex. Geol. Soc., 5

St. Johns [Ariz.]: Crutcher

San Acacia: Denny Sandia: Bogart

Sanostee: Bingler, 1, 2 San Pedro: Looney

Santa Fe: Spiegel, 4; Utley, 1

Santa Rita (see also Companies, Kennecott; Mines, Chino): Anon. Min. World, 4; Baer; Bogert; Christiansen, 2, 3; Graf; Griswold, 5; Huttl; Patterson, C. M.; Pitts; Shilling; Spivey

Silver City: Griswold, 5; Jones, W. R., 2; Lewis, D. W.; Pratt, W. P.; Saffold

Socorro: Anon. N. Mex. Geol. Soc., 2, 3, 4; Blymn; DeBrine; Foley, 1; Hall, F. R., 2; Hassan; Kuellmer, 3; Long, L. T.; Miesch; Moore, D. G.; N. Mex. Geol. Soc., 4; Sanford, 1, 2, 4, 5, 6, 8; Weber, R. H., 3

Three Rivers: Hood, 4

Todilto Park: Bingler, 1, 2; Willard, 2

Tonque: Stearns, 1

Truth or Consequences: Cox Tucumcari: Gregory, J. T. Vacuum: Kelley, J. M.

### UNITED STATES

Anon. Metal Min. & Proc., 2; Anon. Min. World, 1, 3, 6; Anon. U.S. Bur. Mines; Branson; Dietzman; Knoerr; Wright, H. E., Jr., 2

Southwest: Argall; Beall; Fischer, R. P.; Herod, 1; Hewett, 2; Kottlowski, 21, 24; Kuellmer, 1; Lokke, 2; Malde; Martin, P. S., 2; Read, 6; Schmitt, 1; Theis, 3; Wilson, A. M.

Western: Anon. Coal Age, 1; Coats; Eardley; Moore, J. G.; Pakiser; Phillips, J. S.; Read, 1,3; Roberson; Sabins, 2; Stuart

# Uranium (under Minerals)

Utah: Burford; Chasteen, 3; Cooley, 3; Davis, G. E.; Dow; Read, 2, 5; Vaughn, 2; Weeks, 2

Ute Dam: N. Mex. State Engr.

# VALLEYS

Apache: Kottlowski, 15 Hachita: Trauger, 2 Mesilla: Leggat

Monument [Utah]: Vaughn, 2

Rio Grande (inc. basin, trough):
Anon. N. Mex. Geol. Soc., 1;
Cox; Geddes, 2; Hawley; Joesting; Kelley, V. C., 5; Nordin,
1; Ruhe, 2; Titus, 1

Socorro: Bushman: DeBrine

Sunshine: Winograd Tularosa: Hood, 4 Vegetation (see Flora)

Vertebrates (under Fossils)

#### VOLCANICS

Appledorn; Bassett; Carman, J. H.; Coats; Elston, W. E., 4, 8, 9, 11; Friedman; Moore, J. G., 2; Ross, C. S., 2; Thompson, T. B., 2; Weber, R. H., 2, 4; Wilcox, J. T.; Wilcox, R. E.; Young, E. J., 1

### Calderas:

JEMEZ: Titus, 1

VALLE GRANDE: Conover; Ross, C. S., 2; Smith, R. L.

VALLE TOLEDO: Conover; Ross, C. S., 2

Maares: De Hon; Reeves, 4

WATER (see also Oil and Gas, floodwater, uranium well, water wells)

Aquifers: Hantush, 1, 2, 5; Ibrahim; Spiegel, 2, 3

# Drainage basins:

GILA: Elston, W. E., 9 MIMBRES: Elston, W. E., 9

RIO GRANDE: Nordin, 1; Wollman

RIO HONDO: Mourant, 2

Roswell: Ballance, 2; Borton; Hood, 1, 3; Maddox; Morgan, A. M.; Motts, 5; Reeder, 6

SAN JUAN: Wollman TULAROSA: Herrick, 2

Floodwater: Herrick, 1; Keppel; Thrailkill

Fresh water: Fitzpatrick; Harrington, 9

General: Anon. N. Mex. Geol. Soc., 1; Anon. Water Well Jour.; Bates; Clark, R. E.; Fitzpatrick; Friedman; Gilkey; Holmes; Isbell; Kaanta; McClure; Mourant; Reeder, 6; Reynolds, S. E.; Thomas, H. E.; U. S. Geol. Surv., 2; Wollman

Geothermal: Anon. Rocky Mt. Oil Rptr., 5; Byerly; Summers

Ground water: Abrahams; Akers; Ash, 2, 5; Ballance; Bjorklund; Bushman; Cooper, J. B., 2, 3, 4; Cox; Davis, G. E.; Doty; Gordon, E. D.; Griggs; Hall, F. R., 2; Hantush, 4, 5, 6; Herrick, 2; Hood, 1, 3; Leggat; Maddox; McClure; Motts, 5; Nicholson, A.; Nordin; Pollack; Reeder, 6; Soto Vargas; Spiegel, 2, 3, 4; Theis, 2, 3; Titus; Trauger, 1, 2, 3, 5; West, S. W., 1; Winograd

Hydrology: Abrahams, 1; Borton; Conover; Cooley, 3; Davis, G. E.; Hall, F. R., 1, 3; Hantush; Ibrahim; Keppel; Miller, J. P., 1; Nordin; Pollack; Roberson; Soto Vargas; Spiegel, 2, 3; Theis, 1; Thomas, H. E.; Thrailkill; White, N. D.

Levels: Ballance; Davis, G. E.; Reeder, 1, 2, 3, 4, 5 Phreatophytes: Soto Vargas

Resources: Anon. Water Well Jour.; Ash, 2; Baltz, 4; Bates; Bjorklund; Clark, R. E.; Cooper, J. B., 4; Davis, G. E.; Doty; Fitzpatrick; Gilkey; Gordon, E. D.; Griggs; Harrington, 4, 8, 9; Herrick, 1; Hood, 2, 4; Leggat; Morgan, A. M.; Mourant, 2; Spiegel, 4; Summers, 1; U.S. Geol. Surv., 2; Walter; Wollman

Saline water: Fitzpatrick; Harrington, 8; Hood, 1, 2, 3

Springs: Hall, F. R., 2; Holmes
Waste water (uranium): Arlin;
Lynn: West. S. W., 2

Wells: Anon. Rocky Mt. Oil Rptr., 5; Anon. Water Well Jour.; Arlin; Ballance, 2; Baltz, 4; Cooley; Hantush, 1, 3, 5, 6, 7, 8, 9; Harrington, 5; Isbell; Lynn; Miller, W. D.; Reeder, 1; Theis, 2; Trauger, 1; West, S. W., 2

Western United States (under United States)

Wyoming: Dow; Sabins, 3