

Bulletin 109



**New Mexico Bureau of Mines & Mineral Resources**

A DIVISION OF  
NEW MEXICO INSTITUTE OF MINING & TECHNOLOGY

# Bibliography of New Mexico geology and mineral technology 1976-1980

by Dana M. Adkins-Heljeson and Candace L. Holts

SOCORRO 1984

## NEW MEXICO INSTITUTE OF MINING &amp; TECHNOLOGY

Laurence H. Lattman, *President*

## NEW MEXICO BUREAU OF MINES &amp; MINERAL RESOURCES

Frank E. Kottowski, *Director*  
George S. Austin, *Deputy Director*

## BOARD OF REGENTS

Ex Officio

Toney Anaya, *Governor of New Mexico*Leonard DeLayo, *Superintendent of Public Instruction*

Appointed

Judy Floyd, *President, 1977–1987, Las Cruces*William G. Abbott, *Secretary-Treasurer, 1961–1985, Hobbs*Donald W. Morris, *1983–1989, Los Alamos*Robert Lee Sanchez, *1983–1989, Albuquerque*Steve Torres, *1967–1985, Socorro*

## BUREAU STAFF

Full Time

ORIN J. ANDERSON, *Geologist*  
RUBEN ARCHULETA, *Technician I*  
BRIAN W. ARKELL, *Coal Geologist*  
AL BACA, *Crafts Technician*  
JAMES M. BARKER, *Industrial Minerals Geologist*  
ROBERT A. BIBERMAN, *Senior Petrol. Geologist*  
STEVE BLODGETT, *Associate Editor*  
NANCY A. BLOUNT, *Coal Lab Technician*  
LYNN A. BRANDVOLD, *Senior Chemist*  
JAMES C. BRANNAN, *Drafter*  
RON BROADHEAD, *Petroleum Geologist*  
BRENDA R. BROADWELL, *Assoc. Lab Geoscientist*  
FRANK CAMPBELL, *Coal Geologist*  
RICHARD CHAMBERLIN, *Economic Geologist*  
CHARLES E. CHAPIN, *Senior Geologist*  
JEANETTE CHAVEZ, *Admin. Secretary I*  
RICHARD R. CHAVEZ, *Assistant Head, Petroleum*  
RUBEN A. CRESPIN, *Laboratory Technician II*  
LOIS M. DEVLIN, *Director, Bus./Pub. Office*  
NANETTE DYNAN, *Staff Secretary*

ROBERT W. EVELETH, *Mining Engineer*  
K. BABETTE FARIS, *X-ray Lab Manager*  
ROUSSEAU H. FLOWER, *St. Emeritus Paleontologist*  
MICHAEL J. HARRIS, *Metallurgist*  
ZANA HARVEY, *Clerk-Typist*  
JOHN W. HAWLEY, *Senior Env. Geologist*  
CAROL A. HIELLMING, *Editorial Secretary*  
GARY D. JOHNPEER, *Engineering Secretary*  
ANNABELLE LOPEZ, *Staff Secretary*  
DAVID W. LOVE, *Environmental Geologist*  
JANE A. CALVERT LOVE, *Assistant Editor*  
WESS MAULDIN, *Driller*  
VIRGINIA McLEMORE, *Geologist*  
LYNNE McNEIL, *Staff Secretary*  
NORMA J. MEEKS, *Department Secretary*  
DAVID MENZIE, *Manager, Inf. Cir.*  
TERESA A. MUELLER, *Sci. Illustrator I*  
DIANE MURRAY, *Geologist*  
ROBERT M. NORTH, *Mineralogist*  
KEITH O'BRIEN, *Hydrologist*

GLENN R. OSBURN, *Economic Geologist*  
JOANNE CIMA OSBURN, *Coal Geologist*  
KATHRYN E. PARKER, *Drafter*  
BARBARA R. POPP, *Biotechnologist*  
MARSHALL A. REITER, *Senior Geophysicist*  
JACQUES R. RENAULT, *Senior Geologist*  
JAMES M. ROBERTSON, *Mining Geologist*  
GRETCHEN H. ROYBAL, *Coal Geologist*  
DEBORAH A. SHAW, *Assistant Editor*  
WILLIAM J. STONE, *Hydrogeologist*  
SAMUEL THOMPSON III, *Senior Petrol. Geologist*  
JUDY M. VAIZA, *Executive Secretary*  
MANUEL J. VASQUES, *Mechanic*  
ROBERT H. WEBER, *Senior Geologist*  
LINDA L. WELLS-McCOWAN, *Drafter*  
DONALD WOLBERG, *Vertebrate Paleontologist*  
MICHAEL W. WOOLDRIDGE, *Chief Sci. Illustrator*  
LISA ZANGARA, *Receptionist*  
JIRI ZIDEK, *Chief Editor-Geologist*

## Research Associates

CHRISTINA L. BALK, *NMT*  
RUSSELL E. CLEMONS, *NMSU*  
WILLIAM A. COBBAN, *USGS*  
AUREAL T. CROSS, *Mich. St. Univ.*  
JOHN E. CUNNINGHAM, *WNMU*  
WOLFGANG ELSTON, *UNM*  
MARIAN GALUSHA, *Amer. Mus. Nat. Hist.*  
JEFFREY A. GRAMBLING, *UNM*  
JOSEPH HARTMAN, *Univ. Minn.*

ALONZO D. JACKA, *Texas Tech. Univ.*  
DAVID B. JOHNSON, *NMT*  
WILLIAM E. KING, *NMSU*  
EDWIN R. LANDIS, *USGS*  
DAVID V. LEMONE, *UTEP*  
A. BYRON LEONARD, *Kansas Univ.*  
JOHN R. MACMILLAN, *NMT*  
HOWARD B. NICKELSON, *USGS*

LYOYD C. PRAY, *Univ. Wisc.*  
ALLAN R. SANFORD, *NMT*  
JOHN H. SCHILLING, *Nev. Bur. Mines & Geology*  
WILLIAM R. SEAGER, *NMSU*  
JAMES E. SORAF, *SUNY Binghamton*  
RICHARD H. TEDFORD, *Amer. Mus. Nat. Hist.*  
JORGE C. TOVAR R., *Petroleos Mexicanos*  
LEE A. WOODWARD, *UNM*

## Graduate Students

MARGARET BARROLL  
JAMES T. BOYLE  
LEE BROUILLARD  
STEVEN M. CATHER  
GERRY W. CLARKSON

TED EGGLESTON  
CHARLES FERGUSON  
GRANT GOODYEAR  
ADRIAN HUNT  
LAURA KEDZIE

RICHARD P. LOZINSKY  
JEFFREY MINER  
STEWART SMITH  
STEPHEN TURNBULL

Plus about 50 undergraduate assistants



## Preface

Bulletin 109, the *Bibliography of New Mexico geology and mineral technology 1976-1980*, contains over 2,900 references and cross references in the geoscience field. This book is the latest in a series of bibliographies previously issued as Bulletins 43, 52, 74, 90, 99, 106, and 108.

Both published and unpublished materials are cited. Most items are available either in libraries or from the issuing organizations. Citations referring to areas outside New Mexico are included if the cited work is directly applicable to New Mexico geoscience (for example, the Trans-Pecos region of west Texas). Highly generalized or nontechnical articles are not included. Several pre-1976 articles are included because they were inadvertently omitted from earlier bibliographies.

As is always the case, we would like to encourage the reader to bring any omissions to our attention for the next bibliography.

The bibliography comprises the following three sections:

*Publications and abbreviations list*—Many of the publications listed in this section may be found in the Speare Memorial Library at the New Mexico Institute of Mining and Technology in Socorro. Other publications can be located at the libraries of the University of New Mexico (Albuquerque), New Mexico State University (Las Cruces), and Los Alamos Scientific Laboratory (Los Alamos).

*Citation section*—Each citation is listed alphabetically by senior author. All publications and papers by a given author are listed chronologically. If an author published more than one paper in a single year, each paper is identified by a letter following the year. Coauthors are arranged alphabetically under the senior author.

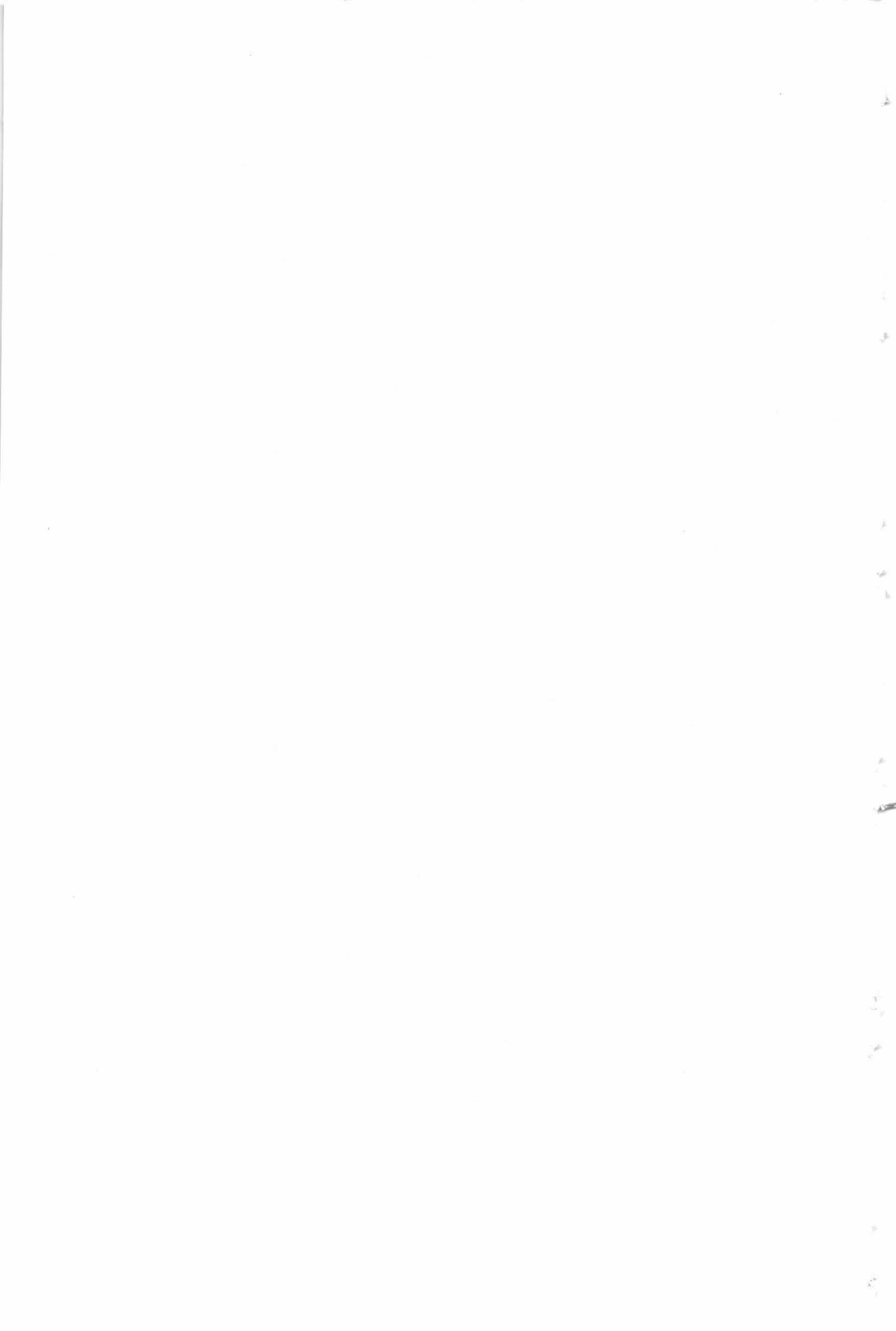
*Index*—Most citations are listed in the index under at least two headings: geographic location and subject matter. Many of the citations have been indexed under three or more headings and subheadings.

ACKNOWLEDGMENTS—We thank the following previous bibliographers at the New Mexico Bureau of Mines and Mineral Resources for their contributions: John R. Wright, Rosemary Walsh, and Colleen Bryant. We also thank these employees of the New Mexico Bureau of Mines: Jane A. Calvert, Assistant Editor; Kathy Eden, Editorial Technician; and Cindy Moore, student proofreader.

*Dana M. Adkins-Heljeson*  
Bibliographer  
New Mexico Bureau of Mines and  
Mineral Resources

Socorro, New Mexico, and  
Menlo Park, California  
December 1981

*Candace L. Holts*  
Science Editor  
Addison-Wesley Publishing Co.



# Publications and abbreviations

- Air Force Weapons Lab., Kirtland Air Force Base: Air Force Weapons Laboratory, Kirtland Air Force Base. Albuquerque, New Mexico
- Am. Assoc. Petroleum Geologists, Bull.; Studies in Geology: American Association of Petroleum Geologists, Bulletin; Studies in Geology. Tulsa, Oklahoma
- Am. City and County: American City and County
- Am. Geophys. Union, Geophys. Mon.; (EOS), Trans.: American Geophysical Union, Geophysical Monograph; (EOS), Transactions. Washington, D.C.
- Am. Inst. Mining and Engineering: American Institute of Mining and Engineering
- Am. Inst. Mining, Metall., and Petroleum Engineers, Soc. Petroleum Engineers: American Institute of Mining, Metallurgical, and Petroleum Engineers, Society of Petroleum Engineers. New York, New York
- Am. Jour. Sci.: American Journal of Science, Yale University. New Haven, Connecticut
- Am. Mineralogist: American Mineralogist, Journal of the Mineralogical Society of America. Washington, D.C.
- Am. Museum Natural History; Am. Museum Novitates: American Museum of Natural History; American Museum Novitates. New York, New York
- Am. Quaternary Assoc., Abs., Bienn. Mtg.: American Quaternary Association, Abstracts, Biennial Meeting
- Am. Soc. Civil Engineers, Jour., Geotech. Eng. Div.: American Society of Civil Engineers, Journal, Geotechnical Engineering Division. New York, New York
- Am. Soc. Photogrammetry, Proc.: American Society of Photogrammetry, Proceedings. Falls Church, Virginia
- Am. Water Works Assoc., Jour.: American Water Works Association, Journal. Denver, Colorado
- Arizona Acad. Sci., Jour.: Arizona Academy of Science, Journal, Arizona State University. Tempe, Arizona
- Arizona Geol. Soc., Digest: Arizona Geological Society, Digest. Tucson, Arizona
- Arizona-Nevada Acad. Sci., Jour.: Arizona-Nevada Academy of Science, Journal
- Assoc. Eng. Geologists, Bull.: Association of Engineering Geologists, Bulletin. Dallas, Texas
- Baylor Geol. Studies, Bull.: Baylor Geological Studies, Bulletin, Baylor University. Waco, Texas
- Brigham Young Univ., Geology Studies: Brigham Young University, Geology Studies. Provo, Utah
- Univ. California, Lawrence Berkeley Lab., Energy and Environ. Div., Rept.; Rept.: University of California, Lawrence Berkeley Laboratory, Energy and Environment Division, Report; Report. Berkeley, California.
- Canadian Soc. Petroleum Geologists, Mem.: Canadian Society of Petroleum Geologists, Memoir. Calgary, Alberta, Canada
- Carnegie Inst. Washington, Yearbook: Carnegie Institute of Washington, Yearbook. Washington, D.C.
- Carnegie Museum, Annals: Pittsburgh, Pennsylvania
- Carnegie Museum Natural History, Bull.: Carnegie Museum of Natural History, Bulletin
- Centre Recherches Pau, Bull.: Bulletin des Centres de Recherches Exploration-Production Elf-Aquitaine. Pau, France
- Chem. Geology: Chemical Geology, Elsevier Scientific Publishing Company. Amsterdam, The Netherlands
- Chemosphere: Pergamon Press. Oxford, United Kingdom
- Coal Age: McGraw-Hill Company. New York, New York
- Coal Mining and Processing: Maclean Hunter Publishing Corporation. Chicago, Illinois
- Colorado Geol. Survey, Resource Ser.: Colorado Geological Survey, Resource Series. Denver, Colorado
- Colorado Mining Assoc., Mining Yearbook: Colorado Mining Association, Mining Yearbook. Denver, Colorado
- Colorado School Mines, Quart.; Studies in Colorado Field Geology: Colorado School of Mines, Quarterly; Studies in Colorado Field Geology. Golden, Colorado
- Colorado-Wyoming Acad. Sci., Jour.: Colorado-Wyoming Academy of Science, Journal, Colorado State University. Fort Collins, Colorado
- Compass: The Compass of Sigma Gamma Epsilon, School of Geology and Geophysics, University of Oklahoma. Norman, Oklahoma
- Condor: Journal of the Cooper Ornithological Society, Allen Press, Incorporated. Lawrence, Kansas
- Contr. Mineralogy and Petrology: Contributions in Mineralogy and Petrology, Springer-Verlag. New York, New York
- Dissert. Abs. Internat.: Dissertation Abstracts International, University Microfilms. Ann Arbor, Michigan
- Drill Bit: Hart Publications. Denver, Colorado
- Earth and Planet. Sci. Letters: Earth and Planetary Science Letters, Elsevier Scientific Publishing Company. Amsterdam, The Netherlands

Earthquake Notes: Eastern Section, Seismological Society of America  
 Earth-Science Reviews: Elsevier Scientific Publishing Company. Amsterdam, The Netherlands  
 Earth Surface Processes  
 Econ. Geology: Economic Geology and the Bulletin of the Society of Economic Geologists. New Haven, Connecticut  
 Electric Power Research Inst., Rept.: Electric Power Research Institute, Report. Palo Alto, California  
 Electron Microscopy Soc. America, Proc.: Electron Microscopy Society of America, Proceedings  
 El Paso Geol. Soc.: El Paso Geological Society, University of Texas (El Paso). El Paso, Texas  
 Energy: Pergamon Press. Oxford, United Kingdom  
 Energy Research and Develop. Adm., Rept.: Energy Research and Development Administration, Report (U.S. Department of Energy)  
 Eng. and Mining Jour.: Engineering and Mining Journal, McGraw-Hill Publishing Company. New York, New York  
 Eng. Geologist: The Engineering Geologist, Engineering Division, Geological Society of America. Boulder, Colorado  
 Environ. Sci. and Tech.: Environmental Science and Technology, American Chemical Society. Washington, D.C.  
 Fed. Inter-Agency Sediment. Conf., Proc.: Federal Interagency Sedimentation Conference, Proceedings  
 Fieldiana Geology: Field Museum of Natural History. Chicago, Illinois  
 Folia Primatologica: International Journal of Primatologica, S. Karger. Basel, Switzerland  
 Fort Burgwin Research Cent., Pub.: Fort Burgwin Research Center, Publication, Museum of New Mexico. Santa Fe, New Mexico  
 Four Corners Geol. Soc.: Four Corners Geological Society. Durango, Colorado  
 Geochem. Soc. Japan, Geochem. Jour.: Geochemical Society of Japan, Geochemical Journal. Tokyo, Japan  
 Geochim. et Cosmochim. Acta: Geochimica et Cosmochimica Acta, Journal of the Geochemical Society and the Meteoritical Society, Pergamon Press. Oxford, United Kingdom  
 Geol. Assoc. Canada, Spec. Rept.: Geological Association of Canada, Special Report, University of Toronto. Toronto, Ontario, Canada  
 Geol. Soc. America, Abs. with Programs; Bull.; Mem.: Geological Society of America, Abstracts with Programs; Bulletin; Memoir. Boulder, Colorado  
 Geology: Geological Society of America. Boulder, Colorado  
 Geophys. Research Letters: Geophysical Research Letters, American Geophysical Union. Washington, D.C.  
 Geophysics: Society of Exploration Geophysicists. Tulsa, Oklahoma  
 Geothermal Energy Mag.: Geothermal Energy Magazine  
 Geothermal Resources Coun., Ann. Mtg., Proc.; Trans.: Geothermal Resources Council, Annual Meeting, Proceedings; Transactions. Davis, California  
 Geothermics: International Journal of Geothermal Research. Pisa, Italy; Pergamon Press. Oxford, United Kingdom  
 Geotimes: American Geological Institute. Washington, D.C.  
 Ground Water: Journal of Ground Water Technology, Division of the National Water Well Association. Worthington, Ohio  
 Gulf Coast Assoc. Geol. Soc., Trans.: Gulf Coast Associated Geological Societies, Transactions, University of Texas (Austin). Austin, Texas  
 Health Physics: Official Journal of the Health Physics Society, Pergamon Press. Oxford, United Kingdom  
 Herpetologica: Herpetologists League, Brigham Young University. Provo, Utah  
 Internat. Assoc. Genesis Ore Deposits, Program and Abs.: International Association on Genesis of Ore Deposits, Program and Abstracts. Gainesville, Florida  
 Internat. Atomic Energy Agency, Proc. Ser.: International Atomic Energy Agency, Proceedings Series. Vienna, Austria  
 Internat. Boundary and Water Comm., U.S. and Mexico, Water Bull.: International Boundary and Water Commission, U.S. and Mexico, Water Bulletin  
 Internat. Congr. Carboniferous Stratigraphy and Geology, Abs.: International Congress on Carboniferous Stratigraphy and Geology, Abstracts  
 Internat. Geochem. Explor. Symp., Proc.: International Geochemical Exploration Symposium, Proceedings  
 Internat. Geol. Congr., Abs.: International Geological Congress, Abstracts. Paris, France  
 Internat. Jour. Rock Mechanics and Mining Sci., Geomechanics Abs.: International Journal of Rock Mechanics and Mining Science and Geomechanics Abstracts, Pergamon Press. Oxford, United Kingdom  
 Internat. Soc. Geothermal Engineering and the Geothermal Jour.: International Society on Geothermal Engineering and the Geothermal Journal

- Internat. Symp. Remote Sensing Environ., Proc.: International Symposium on Remote Sensing of the Environment, Proceedings, Environmental Institute of Michigan. Ann Arbor, Michigan
- Interstate Oil Compact Comm., Comm. Bull.: Interstate Oil Compact Commission, Committee Bulletin. Oklahoma City, Oklahoma
- Irrig. Age: Irrigation Age
- Isochron/West: Nevada Bureau of Mines and Geology and New Mexico Bureau of Mines and Mineral Resources. Socorro, New Mexico
- Jour. Arizona History: Journal of Arizona History
- Jour. Environ. Quality: Journal of Environmental Quality, American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America. Madison, Wisconsin
- Jour. Geochem. Exploration: Journal of Geochemical Exploration, Elsevier Scientific Publishing Company. Amsterdam, The Netherlands
- Jour. Geology: Journal of Geology, University of Chicago Press. Chicago, Illinois
- Jour. Geophys. Research: Journal of Geophysical Research, American Geophysical Union. Washington, D.C.
- Jour. Hydrology: Journal of Hydrology, Elsevier Scientific Publishing Company. Amsterdam, The Netherlands
- Jour. Mammalogy: Journal of Mammalogy, American Society of Mammalogists. Lawrence, Kansas
- Jour. Paleontology: Journal of Paleontology, Society of Economic Paleontologists and Mineralogists and The Paleontological Society. Tulsa, Oklahoma
- Jour. Petroleum Tech.: Journal of Petroleum Technology, Society of Petroleum Engineers. Dallas, Texas
- Jour. Sed. Petrology: Journal of Sedimentary Petrology, Society of Economic Paleontologists and Mineralogists. Tulsa, Oklahoma
- Jour. Soil and Water Conservation: Journal of Soil and Water Conservation, Soil Conservation Society of America. Ankeny, Iowa
- Jour. Volcanology and Geothermal Research: Journal of Volcanology and Geothermal Research, Elsevier Scientific Publishing Company. Amsterdam, The Netherlands
- Kansas Water Resource Research Inst., Contrib.: Kansas Water Resource Research Institute, Contributions. Topeka, Kansas
- Lab. Global Tectonics and Metallogeny, Bull.: American University, Laboratory of Global Tectonics and Metallogeny, Bulletin. Washington, D.C.
- Lethaia: An international journal of paleontology and stratigraphy, Universitetsforlaget. Oslo, Norway
- Los Alamos Natl. Lab.: Los Alamos National Laboratory (post 1980). Los Alamos, New Mexico
- Los Alamos Sci. Lab., Inf. Rept.; Prog. Rept.; Rept.: Los Alamos Scientific Laboratory, Informal Report; Progress Report; Report (pre 1980). Los Alamos, New Mexico
- Los Angeles County Museum Natural History, Contrib. in Science: Los Angeles County Museum of Natural History, Contributions in Science. Los Angeles, California
- Lunar and Planet. Inst.: Lunar and Planetary Institute. Houston, Texas
- Univ. Michigan, Mus. Paleontology, Contrib.: University of Michigan, Museum of Paleontology, Contributions. Ann Arbor, Michigan
- Mineral. Mag.: Mineralogical Magazine, Mineralogical Society of Great Britain. London, United Kingdom
- Mineral. Record: Mineralogical Record. Tucson, Arizona
- Mining Congr. Jour.: Mining Congress Journal, American Mining Congress. Washington, D.C.
- Mining Engineering: American Institute of Mining, Metallurgical, and Petroleum Engineers. New York, New York
- Mtn. Geologist: Mountain Geologist, Rocky Mountain Association of Geologists. Denver, Colorado
- Natl. Acad. Sci.: National Academy of Sciences. Washington, D.C.
- Natl. Aeronautics and Space Admin.: National Aeronautics and Space Administration
- Natl. Geog. Soc., Research Rept.: National Geographic Society, Research Report. Washington, D.C.
- Natl. Sci. Foundation, Geothermal Energy Prog.: National Science Foundation, Geothermal Energy Program
- Natl. Speleological Soc., Bull.: National Speleological Society, Bulletin. Huntsville, Alabama
- Natl. Tech. Inf. Serv., Rept.; Water-resources Data Rept.: National Technical Information Service, Report; Water-resources Data Report, U.S. Department of Commerce. Springfield, Virginia
- NATO Advanced Study Inst. Ser., Mathematical and Physical Sci.: North Atlantic Treaty Organization Advanced Study Institute Series, Mathematical and Physical Sciences
- Natural Resources Jour.: Natural Resources Journal, University of New Mexico, School of Law. Albuquerque, New Mexico
- Nature: Macmillan (Journals) Limited. London, United Kingdom
- Nautilus: The Nautilus, American Malacological Union. Havertown, Pennsylvania
- Neues Jahrb. Geologie u. Paläontologie Monatsh: Neues Jahrbuch für Geologie und Paläontologie Monatshefte, E. Schweizerbart'sche Verlagsbuchhandlung. Stuttgart, Federal Republic of Germany

- Neues Jahrb. Mineralogie Monatsch.: Neues Jahrbuch für Mineralogie Monatshefte, E. Schweizerbart'sche Verlagsbuchhandlung. Stuttgart, Federal Republic of Germany
- Nevada Bureau Mines, Rept.: Nevada Bureau of Mines, Report. Reno, Nevada
- Univ. New Mexico, New Mexico Minerals Symp.: University of New Mexico, New Mexico Minerals Symposium. Albuquerque, New Mexico
- New Mexico Acad. Sci., Bull.: New Mexico Academy of Science, Bulletin (see New Mexico Journal of Science)
- New Mexico Bureau Mines Mineral Resources, Ann. Rept.; Bull.; Circ.; Geol. Map; Hydro. Sheet; Hydro. Rept.; Mem.; Open-file Rept.; Prog. Rept.; Resource Map; Scenic Trip: New Mexico Bureau of Mines and Mineral Resources, Annual Report; Bulletin; Circular; Geologic Map; Hydrogeologic Sheet; Hydrologic Report; Memoir; Open-file Report; Progress Report; Resource Map; Scenic Trip to the Geologic Past. Socorro, New Mexico
- New Mexico Energy and Minerals Dept., Bureau Mine Inspection: New Mexico Energy and Minerals Department, Bureau of Mine Inspection. Albuquerque, New Mexico
- New Mexico Energy Inst., Rept.: New Mexico Energy Institute, Report, New Mexico State University. Las Cruces, New Mexico
- New Mexico Geol. Soc., Guidebook; Spec. Rept.: New Mexico Geological Society, Guidebook; Special Report. Socorro, New Mexico
- New Mexico Geology: New Mexico Bureau of Mines and Mineral Resources. Socorro, New Mexico
- New Mexico Inst. Mining and Tech., Geophysics Open-file Rept.: New Mexico Institute of Mining and Technology, Geophysics Open-file Report. Socorro, New Mexico
- New Mexico Jour. Sci.: New Mexico Journal of Science, New Mexico Academy of Science, New Mexico Highlands University. Las Vegas, New Mexico
- New Mexico Legislative Energy Comm.: New Mexico Legislative Energy Committee. Santa Fe, New Mexico
- New Mexico Natural Resources Dept., Soil and Water Conserv. Div.: New Mexico Natural Resources Department, Soil and Water Conservation Division. Santa Fe, New Mexico
- New Mexico State Engineer, Basic-data Rept.; Map; Open-file Rept.; Spec. Rept.; Tech. Rept.: New Mexico State Engineer, Basic-data Report; Map; Open-file Report; Special Report; Technical Report. Santa Fe, New Mexico
- New Mexico State Highway Dept.: New Mexico State Highway Department. Santa Fe, New Mexico
- New Mexico State Univ., Agric. Exp. Station, Bull.; Research Rept.; Water Resources Research Institute, Rept.: New Mexico State University, Agricultural Experiment Station, Bulletin; Research Report; Water Resources Research Institute, Report. Las Cruces, New Mexico
- New Mexico Water Quality Control Comm.: New Mexico Water Quality Control Commission
- Oil and Gas Compact Bull.: Oil and Gas Compact Bulletin, Interstate Oil Compact Commission. Oklahoma City, Oklahoma
- Oil and Gas Jour.: Oil and Gas Journal, Penn Well Publishing Company. Tulsa, Oklahoma
- Oklahoma Geol. Survey, Circ.: Oklahoma Geological Survey, Circular. Norman, Oklahoma
- Oklahoma State Univ., Agric. Exp. Station, Resource Rept.: Oklahoma State University, Agricultural Experiment Station, Resource Report. Stillwater, Oklahoma
- Pacific Coast Paleogeog. Symp.: Pacific Coast Paleogeography Symposium, Society of Economic Paleontologists and Mineralogists, Pacific Section. Los Angeles, California
- Palaeontological Assoc., Spec. Paper Palaeontology: Palaeontological Association, Special Paper in Palaeontology. London, United Kingdom
- Paleobiology
- Petroleum Today: American Petroleum Institute. New York, New York
- Pollution Abs.: Pollution Abstracts, Cambridge Scientific Abstracts. Washington, D.C.
- Precambrian Research: Elsevier Scientific Publishing Company. Amsterdam, The Netherlands
- Priroda: Akademiya Nauk S.S.S.R. Moscow, U.S.S.R.
- Psyche: Cambridge Entomological Club. Cambridge, Massachusetts
- Pure and Applied Geophysics: Birkhäuser Verlag. Basel, Switzerland
- Quaternary Research: Academic Press. New York, New York
- Reclamation Rev.: Reclamation Review
- Rocky Mtn. Assoc. Geologists, Guidebook; Spec. Pub.: Rocky Mountain Association of Geologists, Guidebook; Special Publication. Denver, Colorado
- Roswell Geol. Soc.: Roswell Geological Society. Roswell, New Mexico
- Royal Astron. Soc., Geophys. Jour.: Royal Astronomical Society, Geophysical Journal. London, United Kingdom
- Sandia Natl. Lab.: Sandia National Laboratories (post 1980). Albuquerque, New Mexico
- Sandia Lab., Open-file Rept.; Rept.: Sandia Laboratories, Open-file Report; Report (pre 1980). Albuquerque, New Mexico
- Science: Journal of the American Association for the Advancement of Science. Washington, D.C.
- Sedimenta: Comparative Sedimentology Laboratory, Rosenstiel School of Marine and Atmospheric Science, University of Miami. Miami, Florida

- Sedimentology: Journal of the International Association of Sedimentologists, Blackwell Scientific Publications. Oxford, United Kingdom
- Seismol. Soc. America, Bull.: Seismological Society of America, Bulletin. Berkeley, California
- Sel. Water Resources Abs.: Selected Water Resources Abstracts, U.S. Department of the Interior. Washington, D.C.
- Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Guidebook; Reprint Ser.; Spec. Rept.: Society of Economic Paleontologists and Mineralogists, Permian Basin Section, Guidebook; Reprint Series; Special Report. Midland, Texas, and Tulsa, Oklahoma
- Soc. Exploration Geophys., Ann. Mtg.: Society of Exploration Geophysicists, Annual Meeting. Tulsa, Oklahoma
- Soc. Petroleum Engineers, Ann. Fall Tech. Conf.; Jour.: Society of Petroleum Engineers, Annual Fall Technical Conference; Journal. Dallas, Texas
- Soil Sci. Soc. America, Jour.: Soil Science Society of America, Journal. Madison, Wisconsin
- Southwestern Naturalist: Southwestern Association of Naturalists. Lubbock, Texas
- Southwest Resource and Inf. Center: Southwest Resource and Information Center
- Tectonophysics: Elsevier Scientific Publishing Company. Amsterdam, The Netherlands
- Univ. Texas (Austin), Bureau Econ. Geology, Geologic Atlas Texas; Guidebook: University of Texas (Austin), Bureau of Economic Geology, Geologic Atlas of Texas; Guidebook. Austin, Texas
- Texas Jour. Sci.: The Texas Journal of Science, Texas Academy of Science, Texas Tech University Press. Lubbock, Texas
- Texas Speleological Soc.: Texas Speleological Society
- Tulane Univ., Studies in Geol. and Paleontology: Tulane University, Studies in Geology and Paleontology. New Orleans, Louisiana
- Union Carbide Corp., Office Waste Isolation, Rept.: Union Carbide Corporation, Office of Waste Isolation, Report
- U.S. Bureau Indian Affairs, Rept.: U.S. Bureau of Indian Affairs, Report. Washington, D.C.
- U.S. Bureau Land Management, Rept.: U.S. Bureau of Land Management, Report. Washington, D.C.
- U.S. Bureau Mines, Minerals Yearbook; Rept. Inv.; State Mineral Profile: U.S. Bureau of Mines, Minerals Yearbook; Report of Investigation; State Mineral Profile. Washington, D.C.
- U.S. Bureau Reclamation: U.S. Bureau of Reclamation. Washington, D.C.
- U.S. Dept. Agriculture, Soil Conserv. Serv., Ann. Rept.: U.S. Department of Agriculture, Soil Conservation Service, Annual Report. Washington, D.C.
- U.S. Dept. Energy, Rept.: U.S. Department of Energy, Report. Washington, D.C.
- U.S. Dept. Interior, Rept.: U.S. Department of the Interior, Report. Washington, D.C.
- U.S. Dept. Transportation, Federal Highway Admin., Rept.: U.S. Department of Transportation, Federal Highway Administration, Report. Washington, D.C.
- U.S. Energy Research and Develop. Admin., Rept.: U.S. Energy Research and Development Administration, Report (*see* U.S. Department of Energy)
- U.S. Environ. Protection Agency: U.S. Environmental Protection Agency. Washington, D.C.
- U.S. Geol. Survey, Ann. Water-data Rept.; Bull.; Circ.; Geol. Quad. Map; Hydrol. Inv. Atlas; Jour. Research; Land Use and Land Cover Map; Misc. Field Studies Map; Misc. Inv. Ser., Map; Oil and Gas Inv. Chart; Open-file Rept.; Prof. Paper; Water-resources Inv.; Water-supply Paper: U.S. Geological Survey, Annual Water-data Report; Bulletin; Circular; Geologic Quadrangle Map; Hydrologic Investigation Atlas; Journal of Research; Land Use and Land Cover Map; Miscellaneous Field Studies Map; Miscellaneous Investigation Series, Map; Oil and Gas Investigation Chart; Open-file Report; Professional Paper; Water-resources Investigation; Water-supply Paper. Reston, Virginia
- U.S. Govt. Printing Office, Rept.: U.S. Government Printing Office, Report. Washington, D.C.
- U.S. Natl. Park Serv., Trans. Proc. Ser.: U.S. National Park Service, Transactions and Proceedings Series. Washington, D.C.
- Utah Geol.: Utah Geology, Utah Geological and Mineral Survey. Salt Lake City, Utah
- Water, Air, and Soil Pollution: D. Reidel Publishing Company. Dordrecht, The Netherlands
- Water Resources Research: American Geophysical Union. Washington, D.C.
- Western Oil Reporter: Hart Publications. Denver, Colorado
- West Texas Geol. Soc., Guidebook Pub.; Newsletter: West Texas Geological Society, Guidebook Publication; Newsletter. Midland, Texas
- West Virginia Geol. and Econ. Survey, Circ.: West Virginia Geological and Economic Survey, Circular. Morgantown, West Virginia
- World Oil: Gulf Publishing Company. Houston, Texas
- Univ. Wyoming, Contrib. to Geol.: University of Wyoming, Contributions to Geology. Laramie, Wyoming



# Bibliography

## Aamodt, R. Lee

1976 Hydraulic fracturing in and communication between two adjacent wellbores (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 349

1977 Hydraulic fracture experiments in GT-1 and GT-2: Los Alamos Sci. Lab., Rept. 6712, 19 p.

1978 (Aki, K., Albright, J. N., and others) Fracture and borehole mapping technique development: Los Alamos Sci. Lab., Rept. 7109, p. 82-141

1978 (Blatz, L. A., Brown, D. W., and others) Field studies of reservoir properties: Los Alamos Sci. Lab., Rept. 7109, p. 165-192

1978 (Brown, D. W., Fisher, H. N., and others) Reservoir performance modeling: Los Alamos Sci. Lab., Rept. 7109, p. 195-221

1979 (Bunker, M. E., Waterbury, G. R., and others) Hydrogeochemical and stream sediment reconnaissance of the National Uranium Resource Evaluation Program—October 1978–March 1979, primarily for the Rocky Mountain States of New Mexico, Colorado, Wyoming, and Montana and the State of Alaska: Los Alamos Sci. Lab., Rept. LA-7721-PR, 15 p.

1977 (Hansel, J. M., Minor, M. M., and Beckman, R. J.) Hydrogeochemical and stream sediment reconnaissance of the National Uranium Resource Evaluation Program—October–December 1976: Los Alamos Sci. Lab., Rept. LA-6708-PR, 27 p., 3 tables, 11 figs.; *Natl. Tech. Inf. Serv.*, Rept. GJBX-20-77, 27 p.; *Sel. Water Resources Abs.*, 1979, v. 12, no. 12, p. 32

1979 (Waterbury, G. R., Bunker, M. E., and others) Hydrogeochemical and stream sediment reconnaissance of the National Uranium Resource Evaluation Program—April–September 1978, primarily for the Rocky Mountain States of New Mexico, Colorado, Wyoming, and Montana and the State of Alaska: Los Alamos Sci. Lab., Rept. LA-7720-PR, 20 p.; *Natl. Tech. Inf. Serv.*, Rept. GJBX-109-79, 20 p.

see Aki and others, 1977; Murphy, H. D., and others, 1978; and Sharp and others, 1978

## Abbot, Joseph

see Keizer and others, 1979

## Abbott, M. M.

1979 A basic evaluation of the uranium potential of the Morrison Formation of northwestern Cimarron County, Oklahoma, and adjoining areas of New Mexico and Colorado: M.S. thesis, Oklahoma State Univ., 92 p.

## Abel, J. F., Jr.

1979 (Dowis, J. E., and Richards, D. P.) Concrete shaft lining design: 20th Symp. on Rock Mech., *Proc.*, p. 627-640

see Gentry and Abel, 1978

## Abernathy, George H.

see Lansford, Chaturvedi, and others, 1980

## Adam, D. P.

1980 (and Mehringer, P. J.) Scanning electron micrographs of modern chrysoomonad cysts from Castor Pond, Jemez Mountains, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-1231, 18 p.

## Adams, Roy D.

1978 Effects of localized tectonic activity on regional sedimentation in the Pennsylvanian Madera Formation and the Permian Abo Formation, north-central New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 10, no. 5, p. 209

1980 Late Paleozoic tectonic and sedimentologic history of the Peñasco uplift, north-central New Mexico: M.S. thesis, Rice Univ., 79 p.

## Adams, S. S.

1977 Interpretation of postdepositional processes related to formation and destruction of uranium deposits in sandstones (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 5, p. 759

1978 (Curtis, H. S., Hafen, P. L., and Salek-Nejad, H.) Interpretation of postdepositional processes related to the formation and destruction of the Jackpile-Paguate uranium deposit, northwest New Mexico: *Econ. Geology*, v. 73, p. 1635-1654

## Adams, W. Howard

see Purtymun and Adams, 1980; Purtymun, Adams, and others, 1977; and Purtymun, Stoker, and others, 1978

## Affholter, Kathleen

1979 Petrogenesis of orbicular rock, Tijeras Canyon, Sandia Mountains, New Mexico: M.S. thesis, Univ. New Mexico, 124 p.

## Affolter, Ronald H.

see Schneider, Hildenbrand, and Affolter, 1979

## Agenbrood, Larry D.

1978 Mammuthus in the Clovis horizon of North America (abs.): *Am. Quaternary Assoc., Abs.*, 5th Bienn. Mtg., p. 108-110

## Aguilar, P. C.

1976 (Cheeseman, R. J., and Sandell, E. T., Jr.) Preliminary map showing distribution of potash resources, Carlsbad mining district, Eddy and Lea Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-554, scale 1:62,500

## Agurkis, Edward N.

1977 Depositional history of the Piankasha sequence (Upper Devonian), southern Arizona and southwestern New Mexico: M.S. thesis, Arizona State Univ., 179 p.

## Ahlen, Jack

1977a Corral Canyon field, Eddy County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 86-87, 1 table, 1 fig.

1977b Garrett west Devonian field, Lea County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 96-97, 1 table, 1 fig.

1977c Quail Queen field, Lea County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 156-157, 1 table, 1 fig.

1977d Triple X Delaware field, Lea County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 202-203, 1 table, 1 fig.

1977 (and Havenor, K. C.) Buffalo Valley Penn



- field, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 62-63, 1 table, 1 fig.
- Ahmad, S. N.**  
 1980 (and Rose, A. W.) Fluid inclusions in porphyry and skarn ore at Santa Rita, New Mexico: *Econ. Geology*, v. 75, no. 2, p. 229-250
- Ahr, Wayne M.**  
*see* Berg and Ahr, 1978
- Aiken, Carlos L. V.**  
 1977 Definition of the Rio Grande rift in northern New Mexico by residual Bouguer gravity anomaly analysis (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 1  
 1978 A residual Bouguer gravity anomaly map of southwestern United States and northern Mexico with emphasis on the Rio Grande rift, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 102-104  
 1977 (Laughlin, A. W., and West, F. G.) Residual Bouguer gravity anomaly map of northern New Mexico: Los Alamos Sci. Lab., Rept. LA-6737  
 1978 (Laughlin, A. W., and West, F. G.) Residual Bouguer gravity anomaly map of New Mexico: Los Alamos Sci. Lab., UC-11 LA-7466-MAP, scale 1:500,000  
 1978 (and others) A multistage gravity study for geothermal resources in the southwestern U.S. (abs.): *Soc. Exploration Geophys.*, 48th ann. mtg., p. 110  
*see* Western and Aiken, 1977
- Akers, Jay P.**  
*see* Cooley and others, 1978
- Aki, Keiiti**  
 1980 Seismic model of a hydro-fractured earth with special reference to the HDR geothermal energy source (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 61, no. 46, p. 1051  
 1977 (Aamodt, R. L., Albright, J. N., Potter, R. M., and Fehler, M.) Seismic methods for defining fractures of a hot dry rock geothermal system (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 58, no. 12, p. 1187  
*see* Aamodt, Aki, and others, 1978
- Akright, Robert L.**  
 1979 Geology and mineralogy of the Cerrillos copper deposit, Santa Fe County, New Mexico: *New Mexico Geol. Soc., Guidebook 30th field conf.*, Santa Fe, p. 257-260, 6 figs.
- Albright, James N.**  
 1976 Preliminary seismic mapping of the main fracture in GT-2 (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 349  
 1979 The acoustic response of the Fenton Hill reservoir (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 60, no. 7, p. 94  
 1978 (Douglas, D. D., Elsberry, K., and others) Environmental studies: Los Alamos Sci. Lab., Rept. 7109, p. 249-267  
*see* Aamodt, Aki, and others, 1978; Aki and others, 1977; Pearson and others, 1980; and Tester and Albright, 1979
- Alcorn, John S.**  
 1977 Bagley (Pennsylvanian) north field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 52-53, 1 table, 1 fig.  
 1977 Bagley (Wolfcamp) north field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 54, 1 table
- Aldon, Earl F.**  
 1976 Soil ripping for runoff and erosion control: *Fed. Inter-Agency Sediment. Conf., Proc.*, no. 3, p. 2.24-2.29  
 1978a Endomycorrhizae enhance shrub growth and survival on mine spoils, *in* The reclamation of disturbed arid lands, R. A. Wright, editor: Univ. New Mexico Press, chap. 9, p. 174-179, 2 tables  
 1978b Reclamation of coal mined land in the Southwest: *Jour. Soil and Water Conservation*, v. 33, no. 2, p. 75-79; *Sel. Water Resources Abs.*, v. 11, no. 18, p. 27  
 1977 (and Garcia, G.) Seventeen-year sediment production from a semiarid watershed in the Southwest (abs.): *Sel. Water Resources Abs.*, v. 10, no. 3, p. 30
- Aldrich, Merrit J., Jr.**  
 1976 Geology and flow directions of volcanic rocks of the North Star Mesa quadrangle, Grant County, New Mexico, *in* Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: *New Mexico Geol. Soc., Spec. Pub. 5*, p. 79-81, 1 fig.  
 1978 Subsurface extensions of the Santa Rita-Hanover axis—a major early Tertiary structure, *New Mexico: Geology*, v. 6, no. 6, p. 373-376, 5 figs.  
*see* Smith, E. I., and others, 1976
- Aldridge, B. N.**  
*see* Roeske and others, 1978
- Alexander, E. C., Jr.**  
*see* Saito, Basu, and others, 1977; and Saito, Menzies, and others, 1978
- Alexander, Richard R.**  
 1980 External growth-lamellar patterns in brachiopods from the Madera Formation (Pennsylvanian) of New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 12, no. 6, p. 265
- Allan, James W.**  
 1978 (and Swan, M. M.) Phanerozoic reactivation of Precambrian structure—a significant control on the emplacement of Laramide-age magmas and their related porphyry copper systems in the southwestern United States (abs.): *Internat. Assoc. Genesis Ore Deposits, 5th Symp., Program and Abs.*, p. 37
- Allen, Philip G.**  
 1979 Geology of the west flank of the Magdalena Mountains south of the Kelly mining district, Socorro County, New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 119*, 161 p., 1 table, 23 figs., 1 pl.
- Allen, Russell W.**  
*see* Coury and others, 1978; and Dolton, Coury, and others, 1980
- Allmendinger, R. W.**  
*see* Brown, L. D., Allmendinger, and others, 1980
- Alminas, Henry V.**  
 1978 (and Watts, K. C.) Interpretive geochemical

- map of the Hillsboro and San Lorenzo quadrangles, exclusive of the Black Range Primitive Area, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-G, scale 1:48,000
- 1978a** (Watts, K. C., Siems, D. F., and Kraxberger, V. E.) Map showing anomalous silver distribution in stream sediment concentrates, Hillsboro and San Lorenzo quadrangles, exclusive of the Black Range Primitive Area, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-C, scale 1:48,000
- 1978b** (Watts, K. C., Siems, D. F., and Kraxberger, V. E.) Map showing anomalous copper distribution in stream sediment concentrates, Hillsboro and San Lorenzo quadrangles, exclusive of the Black Range Primitive Area, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-D, scale 1:48,000
- 1978c** (Watts, K. C., Siems, D. F., and Kraxberger, V. E.) Map showing anomalous molybdenum distribution in stream sediment concentrates, Hillsboro and San Lorenzo quadrangles, exclusive of the Black Range Primitive Area, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-E, scale 1:48,000
- 1978d** (Watts, K. C., Siems, D. F., and Kraxberger, V. E.) Map showing anomalous zinc distribution in stream sediment concentrates, Hillsboro and San Lorenzo quadrangles, exclusive of the Black Range Primitive Area, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-F, scale 1:48,000  
see Watts and Alminas, 1979; Watts, Alminas, and Kraxberger, 1978; and Watts, Alminas, Nishi, and Crim, 1978a-c
- Alvarez, Luis J.**  
see Pedersen, Alvarez, and Hermance, 1979
- Alvarez, Walter**  
**1979** (and Vann, D. W.) Comment on "Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico": *Geology*, v. 7, no. 2, p. 66-67, 2 figs.
- American City and County**  
**1977** Albuquerque closes water-wastewater cycle: *Am. City and County*, v. 92, no. 7, p. 60; *Pollution Abs.*, v. 9, no. 1, p. 35
- American Geophysical Union**  
**1977a** Hot dry rock—widespread but invisible: *Am. Geophys. Union (EOS)*, Trans., v. 58, no. 5, p. 299-302, 1 fig.  
**1977b** Coal gasification plans: *Am. Geophys. Union (EOS)*, Trans., v. 58, no. 11, p. 1029, 1 fig.
- Amesbury, Janet E.**  
see Weimer and others, 1979
- Amuedo, C. L.**  
**1977** (and Bryson, R. S.) Trinidad-Raton Basins—a model coal resource evaluation program, in *Geology of Rocky Mountain coal—proceedings of the 1976 symposium*, D. K. Murray, editor: Colorado Geol. Survey, Resource Series 1, p. 45-60
- Ander, Mark E.**  
**1980** Geophysical study of the crust and upper mantle beneath the central Rio Grande rift and adjacent Great Plains and Colorado Plateau: Ph.D. thesis, Univ. New Mexico
- 1980** (Goss, Ron, Strangway, D. W., Hillebrand, Cary, Laughlin, A. W., and Hudson, Cassandra) Magnetotelluric/audiomagnetotelluric study of the Zuni hot dry rock prospect, New Mexico: *Geothermal Resources Coun., Trans.*, v. 4, Sept., p. 5-8, 4 figs.
- 1979** (Heinken, G., Eichelberger, J., and Huestis, Stephen) Geologic and geophysical investigation of the Chimney Hill gravity high, New Mexico (abs.): *Am. Geophys. Union (EOS)*, Trans., v. 60, no. 18, p. 396
- 1978** (and Huestis, Stephen) Gravity indications of a shallow mafic intrusion beneath the Lucero uplift, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 9-10, 1 fig.
- 1980** (Laughlin, A. W., Furgerson, Robert, Foster, John, and Strangway, D. W.) Magnetotelluric study of the Zuni hot dry rock prospect and Jemez lineament (abs.): *Am. Geophys. Union (EOS)*, Trans., v. 61, no. 17, p. 365  
see Jiracek, Ander, and Holcombe, 1979; Jiracek, Ander, and Reddy, 1978; Jiracek, Smith, and others, 1977; and Smith, C. S., and others, 1977
- Anderholm, Scott K.**  
**1979** Hydrogeology and water resources of the Cuba quadrangle, Sandoval and Rio Arriba Counties, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech.  
see Stone, W. J., Brod, and Anderholm, 1978
- Anderson, C. A.**  
see Bridwell and Anderson, 1980
- Anderson, J. R.**  
**1976** (Hardy, E. E., Roach, J. T., and Witmer, R. E.) A land use and land classification system for use with remote sensor data: U.S. Geol. Survey, Prof. Paper 964, 28 p.
- Anderson, John B.**  
see Kurtz and Anderson, 1980
- Anderson, John G.**  
**1978** On the attenuation of modified Mercalli intensity with distance in the United States: *Seismol. Soc. America, Bull.*, v. 68, no. 4, p. 1147-1179, 4 tables, 6 figs.
- Anderson, Orin J.**  
**1978a** Coal, in *New Mexico's energy resources '77*, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 167, p. 28-33, 4 tables, 2 figs.  
**1978b** Uranium, in *New Mexico's energy resources '77*, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 167, p. 34-41, 7 tables, 2 figs.  
**1977** (Hatton, K. S., and Kottowski, F. E.) Coal, in *New Mexico's energy resources '76*, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 148, p. 17-21, 3 tables, 1 fig.  
**1977** (Page, G. B., and Arnold, E. C.) Uranium, in *New Mexico's energy resources '76*, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 148, p. 22-25, 8 tables, 2 figs.  
see Arnold and Anderson, 1978
- Anderson, Rod**  
**1977a** Carlsbad field, Eddy County, New Mexico, in *The oil and gas fields of southeastern New Mexico*,

1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 21–28, 6 figs.

**1977b** Winchester (Morrow) field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 218–219, 1 table, 1 fig.

**1977c** Winchester (Wolfcamp) field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 220, 1 table

**Anderson, Roger Y.**

**1977** Short term sedimentation response in lakes in western United States as measured by automated sampling (abs.): Sel. Water Resources Abs., v. 10, no. 20, p. 16

**1978** (Kietzke, K. K., and Rhodes, D. J.) Development of dissolution breccias, northern Delaware Basin, New Mexico and Texas, *in* Geology and mineral deposits of Ochoano rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 46–52, 7 figs.

**1979** (and Kirkland, D. W.) Dissolution of salt in the Delaware Basin by means of brine density flow (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 379

**1980** (and Kirkland, D. W.) Dissolution of salt deposits by brine density flow: Geology, v. 8, no. 2, p. 66–69

**1978** (and Powers, D. W.) Salt anticlines in Castile-Salado evaporite sequence, northern Delaware Basin, New Mexico, *in* Geology and mineral deposits of Ochoano rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 78–83, 6 figs.

*see* Dean and Anderson, 1978a,b

**Aoki, Ken-Ichiro**

**1976** (and Kudo, A. M.) Major-element variations of late Cenozoic basalts of New Mexico, *in* Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 82–88, 6 tables, 3 figs.

**Apt, K. E.**

**1976** (and Lee, V. J.) Chemical quality of surface and ground waters, *in* Environmental surveillance at Los Alamos during 1975: Los Alamos Sci. Lab., Inf. Rept. LA-6321-MS, p. 24–27

**Arculus, R. J.**

*see* Wilshire and others, 1977

**Armstrong, Augustus K.**

**1979** North-central New Mexico, an alternate interpretation of the Mississippian, *in* Paleotectonic investigations of the Mississippian System in the United States—pt. 1, introduction and regional analyses of the Mississippian System, L. C. Craig and C. W. Connor, compilers: U.S. Geol. Survey, Prof. Paper 1010-K, p. 188–197, 1 table, 5 figs.

**1980** (Kottlowski, F. E.; Stewart, W. J.; Mamet, B. L.; Baltz, E. H., Jr.; Siemers, W. T.; and Thompson, Sam, III) The Mississippian and Pennsylvanian (Carboniferous) Systems in the United States—New Mexico: U.S. Geol. Survey, Prof. Paper 1110-W, p. W1–W27, 1 table, 9 figs.

**1977a** (and Mamet, B. L.) Biostratigraphy and paleogeography of the Mississippian Leadville Lime-

stone in the San Juan Mountains, southwestern Colorado (and adjacent areas): U.S. Geol. Survey, Prof. Paper 85, 25 p., 3 pls.

**1977b** (and Mamet, B. L.) Biostratigraphy and paleogeography of the Mississippian System in northern New Mexico and adjacent San Juan Mountains of southwestern Colorado: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 111–127, 8 figs., 2 pls.

**1978a** (and Mamet, B. L.) The Bugle and Witch members of the Keating Formation, Escabrosa Group, and the Mississippian nomenclature in the Big Hatchet Mountains, Hidalgo County, New Mexico: U.S. Geol. Survey, Bull. 1457-A, p. A90–A94, 2 figs.

**1978b** (and Mamet, B. L.) The Mississippian System of southwestern New Mexico and southeastern Arizona: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 183–192, 9 figs.

**1979a** (and Mamet, B. L.) Carboniferous (Mississippian) microfacies and stratigraphy, New Mexico and adjacent southeastern Arizona (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 5–6; Am. Assoc. Petroleum Geologists, Bull., v. 62, p. 879

**1979b** (and Mamet, B. L.) The Mississippian System of north-central New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 201–210, 4 figs.

**1979** (Mamet, B. L., and Burton, R. C.) The Mississippian-Pennsylvanian boundary in the Pedregosa Basin in southeastern Arizona and southwestern New Mexico (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 6

**1980** (Mamet, B. L., and Repetski, J. E.) The Mississippian System of New Mexico and southern Arizona (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 671; *also in* Paleozoic paleogeography of the west-central United States, T. D. Fouch, editor, Soc. Econ. Paleontologists and Mineralogists, Rocky Mtn. Sec., p. 82–89

**1978** (Silberman, M. L., Todd, V. R., Hoggatt, W. C., and Carten, R. B.) Geology of central Peloncillo Mountains, Hidalgo County, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 158, 18 p., 2 tables, 4 figs., 1 map  
*see* Robertson, J. M., Budding, and others, 1979

**Armstrong, Dale G.**

*see* Loring and Armstrong, 1980

**Armstrong, Richard L.**

*see* Graustein and Armstrong, 1978

**Armstrong-Ziegler, Judy Gail**

**1978** An aniliid snake and associated vertebrates from the Campanian of New Mexico: Jour. Paleontology, v. 52, no. 2, p. 480–483, 2 tables, 1 fig.

**1980** Amphibia and Reptilia from the Campanian of New Mexico: Fieldiana Geology (new series), no. 4, p. 1–39

**Army Engineer District**

**1977a** Flood plain information—San Juan River and tributaries, Farmington, New Mexico (abs.): Sel. Water Resources Abs., v. 10, no. 7, p. 26

**1977b** Flood plain information—Albuquerque arroyos, part V, Albuquerque, New Mexico (abs.): Sel. Water Resources Abs., v. 10, no. 18, p. 21

**1977c** Special flood hazard information—Alameda

and Las Cruces arroyos, Las Cruces, New Mexico (abs.): Sel. Water Resources Abs., v. 10, no. 23, p. 44

**1977d** Flood plain information—Rio San Jose, pueblo of Acoma, New Mexico (abs.): Sel. Water Resources Abs., v. 10, no. 19, p. 26-27

**1977e** Flood plain information—Rio San Jose, pueblo of Laguna, New Mexico (abs.): Sel. Water Resources Abs., v. 10, no. 24, p. 46-47

**1977f** Flood plain information—Pojoaque River and tributaries, Santa Fe County, New Mexico: Army Eng. Dist., Albuquerque, rept. for Santa Fe County, 32 p., 7 tables, 1 fig., 50 pls.; Sel. Water Resources Abs., 1979, v. 12, no. 23, p. 3

**1978** Flood plain information—Mimbres River and Florida Gap Draw, Deming, Luna County, New Mexico: Army Eng. Dist., Albuquerque, rept. for Luna County Commissioners' Board, 25 p., 5 tables, 3 figs., 22 pls.; Sel. Water Resources Abs., 1979, v. 12, no. 23, p. 3

#### **Arnold, Emery C.**

**1977** (compiler) New Mexico's energy resources '76—annual report of Office of the State Geologist: New Mexico Bureau Mines Mineral Resources, Circ. 148, 27 p., 22 tables, 8 figs.

**1978** (compiler) New Mexico's energy resources '77—Office of the State Geologist: New Mexico Bureau Mines Mineral Resources, Circ. 167, 47 p., 29 tables, 17 figs.

**1978** (and Anderson, O. J.) Energy in New Mexico and adjacent states, in New Mexico's energy resources '77, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 167, p. 7-9, 2 tables.

**1978** (Foster, R. W., Hill, J. M., Kottowski, F. E., Page, G. B., Reiter, M. A., and Stone, W. J.) New Mexico's energy resources '75: New Mexico Bureau Mines Mineral Resources, Bull. 107, 40 p., 9 tables, 18 figs.

**1980a** (and Hill, J. M., compilers) New Mexico's energy resources '79—annual report of Bureau of Geology in the Mining and Minerals Division of New Mexico Energy and Minerals Department: New Mexico Bureau Mines Mineral Resources, Circ. 172, 55 p., 45 tables, 14 figs.

**1980b** (and Hill, J. M.) New Mexico's role, in New Mexico's energy resources '79, E. C. Arnold and J. M. Hill, compilers: New Mexico Bureau Mines Mineral Resources, Circ. 172, p. 7-8, 2 tables

**1980** (Hill, J. M., and Donaldson, D. A.) Oil and gas, in New Mexico's energy resources '79, E. C. Arnold and J. M. Hill, compilers: New Mexico Bureau Mines Mineral Resources, Circ. 172, p. 9-27, 17 tables, 7 figs.

**1977** (Hill, J. M., Donaldson, D. A., and Foster, R. W.) Oil and gas, in New Mexico's energy resources '76, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 148, p. 7-16, 11 tables, 5 figs.

**1978** (Hill, J. M., Donaldson, D. A., Martinez, L. B., Foster, R. W., and Gutjahr, A. L.) Oil and gas, in New Mexico's energy resources '77, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 167, p. 9-27, 15 tables, 13 figs.

see Anderson, O. J., Page, and Arnold, 1977

#### **Arth, J. G.**

see Barker, F., Arth, and others, 1976

#### **Ash, Sidney R.**

**1976** Preliminary report on the floral zones in the Upper Triassic Chinle Formation, southwestern United States (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 562-563

**1978a** (editor) Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico: Brigham Young Univ., Geology Studies, v. 25, pt. 2, 95 p., 57 figs., 23 tables

**1978b** Stratigraphy of the Ciniza Lake beds and related strata, in Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico, S. R. Ash, editor: Brigham Young Univ., Geology Studies, v. 25, pt. 2, p. 1-14, 1 table, 17 figs.

**1978c** Summary of the fossils in the Ciniza Lake beds, in Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico, S. R. Ash, editor: Brigham Young Univ., Geology Studies, v. 25, pt. 2, p. 21-22

**1978d** Plant megafossils, in Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico, S. R. Ash, editor: Brigham Young Univ., Geology Studies, v. 25, pt. 2, p. 23-43, 19 figs.

**1978e** Fish scales, in Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico, S. R. Ash, editor: Brigham Young Univ., Geology Studies, v. 25, pt. 2, p. 67-68, 1 fig.

**1978f** Coprolites, in Geology, paleontology and paleoecology of a Late Triassic lake, western New Mexico, S. R. Ash, editor: Brigham Young Univ., Geology Studies, v. 25, pt. 2, p. 69-73, 3 figs.

**1978** (Dean, W. E., Stone, J. F., Tasch, Paul, Weber, D. J., and Lawler, G. C.) Paleocology of Lake Ciniza, in Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico, S. R. Ash, editor: Brigham Young Univ., Geology Studies, v. 25, pt. 2, p. 89-95, 3 tables

**1976** (and Read, C. B.) North American species of *Tempskya* and their stratigraphic significance: U.S. Geol. Survey, Prof. Paper 874, 42 p., 13 pls.

**1976** (and Tidwell, W. D.) Upper Cretaceous and Paleocene floras of the Raton Basin, Colorado and New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 197-203, 4 figs.

see Tidwell and Ash, 1980

#### **Asquith, George B.**

**1976** (and Gilbert, J. L.) Proximal and distal braided alluvial facies in the lower braided interval of the Dakota Sandstone, northeastern New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 153-155, 4 figs.

**1976** (Gilbert, J. L., and Smith, R. C.) Fortran IV program for the analysis of sedimentary structures from stratigraphic sections (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 563

see Gage and Asquith, 1977; and Gilbert and Asquith, 1976

#### **Assereto, Riccardo**

see Folk and Assereto, 1976

#### **Atkinson, Paul G.**

**1980** Geothermal reservoir (initial state) Baca Location no. 1—New Mexico, Redondo Creek field: Geo-

- thermal Resources Coun., Trans., v. 4, Sept., p. 435-438, 3 tables, 1 fig.
- Atkinson, William W., Jr.**  
 1976 Zoning and paragenesis of ores in the San Pedro Mountains, Santa Fe County, New Mexico, in *Tectonics and mineral resources of North America*, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 187-191, 9 figs.; Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 563-564
- Attansi, E. D.**  
 1979 (Garland, T. M., Wood, J. H., and others) Economics and resource appraisal—the case of the Permian Basin, in *Hydrocarbon economics and evaluation*, a symposium: Am. Inst. Mining, Metall., Petroleum Engineers, Soc. Petroleum Engineers, p. 227-234
- Attebery, R. Tucker**  
 1978 Lindrieth Gallup-Dakota, west (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 381-384, 4 figs.
- Aubele, Jayne C.**  
 1976 Montoso maar—a detailed view of internal structure and stratigraphy, central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 564
- 1978a Geology of Cerros del Rio volcanic field, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 198-201, 1 table, 2 figs.
- 1978b Geology of the Cerros del Rio volcanic field, Santa Fe, Sandoval, and Los Alamos Counties, New Mexico: M.S. thesis, Univ. New Mexico, 136 p.
- 1979 The Cerros del Rio volcanic field: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 243-252, 1 table, 10 figs.
- 1976 (Crumpler, L. S., Loeber, K. N., and Kudo, A. M.) Maare and tuff rings in New Mexico, in *Tectonics and mineral resources of southwestern North America*, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 109-114, 13 figs.
- Austin, George S.**  
 1976 Potash in New Mexico: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1975-76, p. 23-29, 5 figs.
- 1978 (compiler) Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas: New Mexico Bureau Mines Mineral Resources, Circ. 159, 88 p., 16 tables, 73 figs.
- 1980 Potash in New Mexico: New Mexico Geology, v. 2, no. 1, p. 7-9, 5 figs.
- 1976 (and Leininger, R. K.) The effect of heat-treating sedimented mixed-layer illite-smectite as related to quantitative clay mineral determinations: *Jour. Sed. Petrology*, v. 46, p. 206-215
- 1976 (and Weber, R. H.) Perlite operations in New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 564-565
- 1976 (and Whyte, M. R.) Potash deposits of southeastern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 565
- see Foster, R. W., Austin, and others, 1977; Siemers, W. T., and Austin, 1971a,b; Siemers, W. T., Austin, and Kottowski, 1980; and Siemers, W. T., Hawley, and others, 1978
- Austin, Lynn A.**  
 1977 (Capener, W. N., Catlet, L. B., and others) Socio-economic impacts of coal mining on communities in northwestern New Mexico: New Mexico State Univ., Agric. Exp. Station, Bull. 652, 118 p., 84 tables, 2 figs., 1 appendix
- Austin, S. Ralph**  
 1979 Dissolution and authigenesis in host sandstones, *abs. in Grants uranium region*, a symposium: Am. Assoc. Petroleum Geologists, Program, p. 8; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 686
- 1980 Dissolution and authigenesis of feldspars, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 107-115, 18 figs.
- Axelrod, Daniel I.**  
 1976 (and Bailey, H. P.) Tertiary vegetation, climate, and altitude of the Rio Grande depression, New Mexico—Colorado: *Paleobiology*, v. 2, no. 3, p. 235-254, 4 tables, 8 figs.
- Baars, Donald L.**  
 1979a Developments in Four Corners-intermountain area in 1978: Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 8, p. 1206-1209, 2 tables, 1 fig.
- 1979b (editor) Permianland: Four Corners Geol. Soc., Guidebook 9th field conf., 186 p.
- 1979c The Permian System, in *Permianland*, D. L. Baars, editor: Four Corners Geol. Soc., Guidebook, 9th field conf., p. 1-6
- 1979d The Colorado Plateau aulacogen—key to continental-scale basement rifting: 2nd Internat. Conf. on New Basement Tectonics, Proc., p. 157-163
- 1980 Developments in Four Corners-intermountain area in 1979: Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 9, p. 1340-1344, 2 tables, 1 fig.
- 1977 (and Stevenson, G. M.) Permian rocks of the San Juan Basin: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 133-138, 4 figs.
- 1979 (and Stevenson, G. M.) Permian rocks of the San Juan Basin, in *Permianland*, D. L. Baars, editor: Four Corners Geol. Soc., Guidebook 9th field conf., p. 59-63
- see Stevenson and Baars, 1977
- Babcock, G.**  
 1978 Pump Mesa Fruitland (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 472-473, 2 figs.
- Babcock, Jack A.**  
 1977 Calcareous algae, organic boundstones, and the genesis of the upper Capitan Limestone (Permian, Guadalupian), Guadalupe Mountains, west Texas and New Mexico: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 1, p. 3-44
- 1979 Calcareous algae and algal problematica of the Capitan reef (Permian), Guadalupe Mountains,



- west Texas and New Mexico, *in* Symposium international sul les algues fossils: Centre Recherches Pau, Bull., v. 3, no. 2, p. 419-428
- 1977a** (Pray, L. C., and Yurewicz, D. A.) Locality guide, stop I, upper Capitan-massive, mouth of Walnut Canyon: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G17-G39
- 1977b** (Pray, L. C., and Yurewicz, D. A.) Locality guide, stop III, mouth of Slaughter Canyon, north-east side, upper Capitan foreslope: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G51-G55
- 1978** (and Yurewicz, D. A.) Syndepositional submarine cementation of Capitan Limestone (Permian), Guadalupe Mountains, west Texas and New Mexico—nature and origin of cements (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 573
- Babcock, Laurel C.**  
**1977** Life in the Delaware Basin—the paleoecology of the Lamar Limestone: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 1, p. 357-389  
*see* Ormiston and Babcock, 1979
- Babcock, R. E.**  
**1978** (Carruthers, G., Dantin, E. J., Edmison, M. T., and Powers, W. L.) Analysis of priority water resources problems for the southern plains region (abs.): Sel. Water Resources Abs., v. 11, no. 14, p. 84-85
- Babcock, R. S.**  
**1979** Evolution of middle Proterozoic magmatic rocks in the southwestern United States (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 3, p. 67
- Baca, Phillip**  
*see* Schufle, Baca, and others, 1976
- Bache, Thomas C.**  
**1978** (Rodi, W. L., and Harkrider, D. G.) Crustal structures inferred from Rayleigh-wave signatures of NTS explosions: Seismol. Soc. America, Bull., v. 68, no. 5, p. 1399-1413, 9 figs.
- Bachhuber, Frederick W.**  
**1976** (and McClellan, W. A.) Occurrence and significance of foraminifera in a pluvial sequence (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 565-566  
**1977** (and McClellan, W. A.) Paleocology of marine foraminifera in the pluvial Estancia Valley, central New Mexico: Quaternary Research, v. 7, no. 2, p. 254-267
- Bachman, George O.**  
**1976a** Cretaceous rocks in the area of Madrid coal field, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 154, p. 41-43, 2 figs.  
**1976b** Geologic map of the Madrid quadrangle, Santa Fe and Sandoval Counties, New Mexico: U.S. Geol. Survey, Geol. Quad. Map 1268, scale 1:62,500  
**1976c** Cenozoic deposits of southeastern New Mexico and an outline of the history of evaporite dissolution: U.S. Geol. Survey, Jour. Research, v. 4, no. 2, p. 135-149, 2 tables, 8 figs.; Sel. Water Resources Abs., v. 9, no. 18, p. 15  
**1980** Regional geology and Cenozoic history of Pecos region, southeastern New Mexico: U.S. Geol. Survey, Open-file Rept. 80-1099, 120 p.  
**1979a** (and Izett, G. A.) Dissolution history, southeastern New Mexico (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 70  
**1979b** (and Izett, G. A.) Dissolution history of evaporite beds defined (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 267  
**1978** (and Mehnert, H. H.) New K-Ar dates and the late Pliocene to Holocene geomorphic history of the central Rio Grande region, New Mexico: Geol. Soc. America, Bull., v. 89, no. 2, p. 283-292, 1 table, 4 figs.  
*see* Hawley, Bachman, and Manley, 1976; Hayes and Bachman, 1979; Machette and Bachman, 1978; and Mapel and others, 1979
- Baghdad, Flih**  
**1976** Stratigraphy of preliminary microfacies study of the Osage (Mississippian) bioherms of the Lake Valley Formation, Bishop Cap Hills, Doña Ana County, New Mexico, *in* Stratigraphy and structure of the Franklin Mountains: El Paso Geol. Soc., p. 35-44, 7 figs.
- Bahlburg, William C.**  
**1977** Depositional environments of the Tamaroa sequence (Mississippian) of southeastern Arizona, southwestern New Mexico, and northern Mexico: M.S. thesis, Arizona State Univ., 214 p.  
**1976** (and Silver, B. A.) Depositional environments of Tamaroa sequence (Upper Devonian and Mississippian), Pedregosa Basin, southeastern Arizona, southwestern New Mexico, northeastern Sonora, and northwestern Chihuahua (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 60, p. 646-647
- Bailey, Harry P.**  
*see* Axelrod and Bailey, 1976
- Bailey, O. F.**  
*see* Neher and Bailey, 1976
- Bailey, Roy A.**  
**1976** On the mechanisms of postsubsidence central doming and volcanism in resurgent cauldrons (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 567  
**1978** (and Smith, R. L.) Volcanic geology of the Jemez Mountains, New Mexico, *in* Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 184-196, 17 figs.  
*see* Smith, R. L., and others, 1978
- Baird, Charles W.**  
**1979** (and Martin, K. W.) Saint Anthony mine, *abs.* *in* Grants uranium region, a symposium: Am. Assoc. Petroleum Geologists, Program, p. 8  
**1980** (Martin, K. W., and Lowery, R. M.) Comparison of braided-stream depositional environment and uranium deposits at Saint Anthony underground mine, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 292-298, 4 figs.
- Baker, L. E.**  
*see* Newsom and others, 1978
- Balagna, J. P.**  
**1978** (Beddoe, T. A., Binder, I., Gancarz, A. J., Vidale, R. J., and Williams, R. A.) Analysis of hot

dry rock and circulating water (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 12, p. 1225

**1977** (West, F. G., Pettitt, R. A., Laughlin, A. W., and Charles, R. W.) Status of the Los Alamos experiment to extract geothermal energy from dry hot rock (abs.): *Geology*, v. 5, no. 4, p. 237-240

see Brookins, Della Valle, and Balagna, 1979; Charles, West, and others, 1977; Helmick and others, 1976; Laughlin, West, and others, 1977; and Potter, J. M., and others, 1976

**Balazs, E. I.**

see Reilinger, Oliver, Brown, and others, 1979

**Balch, W. J.**

**1978** (and Clark, J. W.) Pueblo water rights on the upper Rio Grande: New Mexico State Univ., Water Resources Research Inst., Rept. 098, 86 p., 4 tables, 3 figs.; *Natl. Tech. Inf. Serv.*, Rept. PB-291 392, 86 p.; *Sel Water Resources Abs.*, 1979, v. 12, no. 6, p. 78

**Baldrige, W. Scott**

**1976** Petrology of an ultramafic xenolith/xenocryst suite from the northern Rio Grande rift, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 567-568

**1977** Petrology of Plio-Pleistocene basaltic rocks from the central Rio Grande rift (New Mexico, U.S.A.) and their relation to rift structure, in *Petrology and geochemistry of continental rifts*, E. R. Neumann and I. B. Ramberg, editors: NATO Advanced Study Inst. Ser., Ser. C., *Mathematical and Physical Sci.*, v. 36, p. 71-78

**1978** Petrology and petrogenesis of basaltic lavas of the central Rio Grande rift, *abs. in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs.*, Rept. LA-7487-C, p. 16-17

**1979a** Petrology and petrogenesis of Plio-Pleistocene basaltic rocks from the central Rio Grande rift, New Mexico, and their relation to rift structure, in *Rio Grande rift—tectonics and magmatism*, R. E. Riecker, editor: *Am. Geophys. Union*, p. 323-353, 4 tables, 14 figs.

**1979b** Petrology and petrogenesis of basaltic rocks and their inclusions—studies from the Rio Grande rift, the Roman comagmatic province, and Oceanus Procellarum: Ph.D. thesis, California Inst. Tech., 336 p.

**1979c** Mafic and ultramafic inclusion suites from the Rio Grande rift (New Mexico) and their bearing on the composition and thermal state of the lithosphere: *Jour. Volcanology and Geothermal Research*, v. 6, no. 3-4, p. 319-351; *abs. in International symposium on the Rio Grande rift, Los Alamos Sci. Lab.*, 1978, Program and Abs., Rept. LA-7487-C, p. 15-16

**1979d** Lineament tectonics and the role of pre-existing structure on the Rio Grande rift (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 60, no. 46, p. 954

**1980** (Damon, P. E., Shafiqullah, M., and Bridwell, R. J.) Evolution of the central Rio Grande rift, New Mexico—new potassium-argon ages: *Earth and Planet. Sci. Letters*, v. 51, no. 2, p. 309-321, 2 tables, 3 figs.

**1980** (Perry, F. V., and Gladney, E. S.) Petrology of the Cat Hills and Lucero volcanic fields of central New Mexico (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 61, no. 46, p. 1141

see Bridwell and Baldrige, 1976

**Balestri, R. J.**

**1979** (Torres, B. W., Pahwa, S. B., and others) Preliminary safety assessment of the WIPP facility, in *Scientific basis for nuclear waste management*, G. J. McCarthy, editor: New York, Plenum Press, v. 1, p. 513-520

**Ballance, Wilber C.**

**1976** Ground water resources of the Holloman Air Force Base well field area, 1967, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-807, 128 p., 7 tables, 10 figs., 5 pls.

**Baltz, Elmer H.**

**1978** Résumé of Rio Grande depression in north-central New Mexico, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 210-228, 8 figs.

**1979** Tectonics of southern Rocky Mountains, New Mexico, 134 years of study (abs.): *New Mexico Geology*, v. 1, no. 4, p. 61

**1980a** (and O'Neill, J. M.) Preliminary geologic map of the Mora River area, Sangre de Cristo Mountains, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-374, scale 1:24,000

**1980b** (and O'Neill, J. M.) Preliminary geologic map of the Sapello River area, Sangre de Cristo Mountains, Mora and San Miguel Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-398, 22 p., scale 1:24,000

see Armstrong, A. K., Kottowski, and others, 1980

**Banaszynski, D. K.**

**1979** (DeCicco, D. A., and Patterson, E. D.) Leasable mineral and waterpower land classification map of the Tularosa quadrangle, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-733, scale 1:250,000

**Banks, H. O.**

**1980** Six-state High Plains-Ogallala aquifer area regional study, in *Western water resources symposium proceedings: Boulder, Colorado, Westview Press*, p. 44-66

**Barker, Colin**

**1976** Gas content of quartz from the GT-2 geothermal test hole, Fenton Hill, New Mexico (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 353

**Barker, Daniel S.**

**1977** Northern Trans-Pecos magmatic province—introduction and comparison with the Kenya rift: *Geol. Soc. America, Bull.*, v. 88, no. 10, p. 1421-1427, 5 tables, 9 figs.

**1979a** Cenozoic magmatism in the Trans-Pecos province—relation to the Rio Grande rift, in *Rio Grande rift—tectonics and magmatism*, R. E. Riecker, editor: *Am. Geophys. Union*, p. 382-392, 7 figs.; *abs. in International symposium on the Rio Grande rift, Los Alamos Sci. Lab.*, 1978, Program and Abs., Rept. LA-7487-C, p. 18-19

**1979b** Magmatic evolution in the Trans-Pecos province, in *Cenozoic geology of Trans-Pecos volcanic field of Texas*, A. W. Walton, editor: Univ. Texas (Austin), Bureau Econ. Geology, Guidebook 19, p. 4-9

**1977** (and Hodges, F. N.) Mineralogy of intrusions in the Diablo Plateau, northern Trans-Pecos mag-

- matic province, Texas and New Mexico: *Geol. Soc. America, Bull.*, v. 88, no. 10, p. 1428-1436, 5 tables, 7 figs.
- 1977 (Long, L. E., Hoops, G. K., and Hodges, F. N.) Petrology and Rb-Sr isotope geochemistry of intrusions in the Diablo Plateau, northern Trans-Pecos magmatic province, Texas and New Mexico: *Geol. Soc. America, Bull.*, v. 88, no. 10, p. 1437-1446, 5 tables, 9 figs.
- Barker, Fred**
- 1976 (Arth, J. G., Peterman, Z. E., and Friedman, Irving) The 1.7- to 1.8-b.y.-old trondhjemites of southwestern Colorado and northern New Mexico—geochemistry and depths of genesis: *Geol. Soc. America, Bull.*, v. 87, no. 2, p. 189-198, 9 figs.
- 1976 (Friedman, Irving, Hunter, D. R., and Gleason, J. D.) Oxygen isotopes of some trondhjemites, siliceous gneisses, and associated mafic rocks: *Precambrian Research*, v. 3, no. 6, p. 547-557, 1 table, 1 fig.
- Barnard, Ralston W.**  
see Bivens and others, 1979
- Barnes, John J.**  
see Roberts and others, 1976
- Barnett, J. H.**  
see Newsom and others, 1978
- Barone, William E.**  
see Jacka, Barone, and others, 1980
- Barr, G. E.**
- 1980 (and Gonzalez, D. D.) Current status of the hydrogeology for the WIPP: Univ. California, Lawrence Berkeley Lab., Rept. 11204, p. 89-94
- 1979 (Lambert, S. J., and Carter, J. A.) Uranium isotope disequilibrium in groundwaters of southeastern New Mexico and implications regarding age-dating of waters: *Internat. Atomic Energy Agency, Proc. Ser. STI/PUB/493*, p. 645-660
- Barreto, Armando**
- 1978 Aspects of petroleum evaluation from geophysical log in Paduca Delaware field, Lea County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech.
- Barrett, Michael E.**
- 1979 (and Kirschner, C. E.) Depositional systems in the Rinconada formation (Precambrian), Taos County, New Mexico: *New Mexico Geol. Soc., Guidebook 30th field conf.*, Santa Fe, p. 121-126, 6 figs.
- Barrie, Ferdinand J.**
- 1976a Gravimetric survey of south-central New Mexico-west Texas: M.S. thesis, Univ. Texas (El Paso)
- 1976b A Bouguer gravity anomaly map of the Franklin Mountains, New Mexico and Texas, in *Stratigraphy and structure of the Franklin Mountains: El Paso Geol. Soc.*, p. 161-163
- Barrows, L. J.**
- 1980 Geophysical studies of evaporites in the northern Delaware Basin (abs.): *Am. Assoc. Petroleum Geologists, Southwest Sec., Ann. Mtg., Program*, p. 16
- Barton, Larry**  
see Gosz and others, 1978
- Basu, Ashish R.**
- 1978 Trace elements and Sr-isotopes in some mantle-derived hydrous minerals and their significance: *Geochim. et Cosmochim. Acta*, v. 42, no. 6A, p. 659-668, 1 table, 3 figs.  
see Saito, Basu, and others, 1977
- Bateman, Jennifer**  
see Reid, Bateman, and others, 1977
- Bath, Gordon D.**
- 1976 Interpretation of magnetic surveys in intermontane valleys of Nevada and southern New Mexico: U.S. Geol. Survey, Open-file Rept. 76-440, 37 p., 2 tables, 16 figs.
- 1977 Aeromagnetic maps with geologic interpretations for the Tularosa Valley, south-central New Mexico: U.S. Geol. Survey, Open-file Rept. 77-258, 16 p., 9 figs., 12 sheets, scales 1:62,500 and 1:400,000
- 1977 (Healey, D. L., and Karably, L. S.) Combined analysis of gravity and magnetic anomalies at Tularosa Valley, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 3-4
- Bawiec, W. J.**  
see Drew and others, 1979a,b
- Bayliss, Geoffrey S.**  
see Cernock and Bayliss, 1977
- Beach, Laura J.**
- 1978 (and Jentgen, R. W.) Coal test drilling for the San Juan mine extension, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-960, 87 p., 4 tables, 1 fig.
- 1978 (and Thomas, D. M., Jr.) Chacon Dakota (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 263-265, 5 figs.
- Beane, Richard E.**
- 1980 The evolutionary nature of alteration mineralization, and fluid characteristics in intrusion-related porphyry copper deposits of the southwestern United States (abs.): *Geol. Soc. America, Abs. with Programs*, v. 12, no. 7, p. 384
- 1980 (and others) Temporal variations in fluid characteristics from some porphyry copper deposits of southern Arizona and New Mexico, U.S.A.: *26th Internat. Geol. Congr., Abs.*, v. 3, p. 904  
see Reynolds, T. J., and Beane, 1979
- Beard, H. R.**
- 1980 (Salisbury, H. B., and Shirts, M. B.) Absorption of radium and thorium from New Mexico uranium mill tailing solutions: U.S. Bureau Mines, Rept. Inv. 8463, 14 p.
- Beatty, William B.**  
see Dolphin and others, 1978
- Beaumont, Edward C.**
- 1979 Geology of the Cerrillos coal field, Santa Fe County, New Mexico: *New Mexico Geol. Soc., Guidebook 30th field conf.*, Santa Fe, p. 269-274, 3 figs.
- 1977 (and Shomaker, J. W.) Geometry of coal beds in San Juan Basin, New Mexico: *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 5, p. 765
- 1976 (Shomaker, J. W., and Stone, W. J., compilers) *Guidebook to coal geology of northwest New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 154*, 58 p., 2 tables, 49 figs.  
see Kottowski, Beaumont, and Shomaker, 1976, 1977; and Speer and others, 1977
- Beck, R. G.**
- 1980 (Cherrywell, C. H., Earnest, D. F., and Feirn,



- W. C.) Jackpile-Paguete deposit—a review, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 269–275, 2 tables, 9 figs.
- Beck, Ray H.**  
1977 Atoka Morrow west (gas) field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 44–45, 1 table, 1 fig.
- Becker, R. W.**  
1977a Cabin Lake Morrow field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 68–69, 1 table, 1 fig.  
1977b Cabin Lake Strawn field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 70, 1 table  
1977c Vacuum Morrow field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 210–211, 1 table, 1 fig.
- Beckhart, R.**  
*see* Schufle, Mega, and Beckhart, 1979
- Beckman, R. J.**  
*see* Aamodt, Hansel, and others, 1977
- Beddoe, T. A.**  
*see* Balagna, Beddoe, and others, 1978
- Beers, Charles A.**  
1976 Geology of the Precambrian rocks of the southern Los Pinos Mountains, Socorro County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech.
- Behnken, Fred H.**  
1977 Conodont determinations, *in* Geology, petroleum source rocks, and thermal metamorphism in KCM No. 1 Forest Federal well, Hidalgo County, New Mexico, S. Thompson, III, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 152, p. 25–28, 1 table, 1 fig.
- Bejnar, Craig R.**  
1976 (and Lessard, R. H.) Paleocurrents and depositional environments of the Dakota group, San Miguel and Mora Counties, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 157–163, 1 table, 1 fig.
- Bejnar, Katharine C.**  
*see* Bejnar, W., and Bejnar, 1979
- Bejnar, Waldemere**  
1979 (and Bejnar, K. C.) Structural geology related to the Montezuma Hot Springs, Montezuma, New Mexico: New Mexico Geology, v. 1, no. 2, p. 21–24, 1 table, 4 figs.  
*see* Lessard and Bejnar, 1976
- Belcher, Robert C.**  
1977 (and Galloway, W. E.) Evidence for Early Tertiary Rio Grande drainage (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 5
- Belkin, H. E.**  
*see* Roedder and Belkin, 1979
- Bendix Field Engineering Corporation**  
1980a Survey of lands held for uranium exploration, development, and production in fourteen western states in the six-month period ending June 30, 1979: U.S. Dept. Energy, Rept. GJBX–6–80, 20 p.  
1980b Survey of lands held for uranium exploration, development, and production in fourteen western states in the six-month period ending Dec. 31, 1979: U.S. Dept. Energy, Rept. GJBX–82–80, 20 p.
- Benninger, L. K.**  
*see* Nozaki, DeMaster, Benninger, and others, 1977
- Berg, Robert R.**  
1978 Comparison of turbidite sandstone reservoirs—Canyon Group of Val Verde Basin, Wilcox Group of south Texas, and Bell Canyon Formation of Delaware Basin (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 495–496  
1979a Oil and gas in delta-margin facies of Dakota Sandstone, Lone Pine field, New Mexico: Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 6, p. 886–904, 2 tables, 12 figs.  
1979b Reservoir sandstone of the Delaware Mountain Group, southeast New Mexico, *in* Guadalupian Delaware Mountain Group of west Texas and southeast New Mexico, N. M. Sullivan, editor: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., p. 75–95  
1978 (and Ahr, W. M.) Turbidite origin for anhydrite dolomite in Bell Canyon Formation, Delaware Basin, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 496
- Bergquist, Lyle E.**  
*see* Devoto, Mead, Bergquist, and Martin, 1977; and Devoto, Mead, Martin, and Bergquist, 1980
- Berkeley, John L.**  
1979 (and Callender, J. F.) Precambrian metamorphism in the Placitas–Juan Tabo area, northwestern Sandia Mountains, New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 181–188, 1 table, 5 figs.  
1976 (Callender, J. F., and Keil, Klaus) Placitas–Juan Tabo contact metamorphic aureole—evidence for progressive dynamothermal evolution through time (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 776
- Berman, David S.**  
1976 Occurrence of *Gnathorhiza* (Osteichthyes: Dipnoi) in aestivation burrows in the Lower Permian of New Mexico with description of a new species: Jour. Paleontology, v. 50, no. 6, p. 1034–1039, 4 figs.  
1977 A new species of *Dimetrodon* (Reptilia, Pelycosauria) from a non-delta facies in the Lower Permian of north-central New Mexico: Jour. Paleontology, v. 51, no. 1, p. 108–115  
1979 *Gnathorhiza bothrotreta* (Osteichthyes: Dipnoi) from the Lower Permian Abo Formation of New Mexico: Carnegie Museum, Annals, v. 48, p. 211–230, 7 figs.  
1980 (and Reisz, R. R.) New species of *Trimerorhachis* (Amphibia, Temnospondyli) from the Lower Permian Abo Formation of New Mexico, with discussion of Permian faunal distributions in that state: Carnegie Museum, Annals, v. 49, no. 24, p. 455–485
- Berman, Robert G.**  
1976 (and Reid, J. B., Jr.) The deep-seated evolution of highly undersaturated basaltic magmas—evidence from kaersutite-gabbro inclusions, west Pottillo Mts., New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 54, no. 4, p. 354–355

**Berry, Robert Chapman**

1976 Mid-Tertiary volcanic history and petrology of the White Mountain volcanic province, southeastern Arizona (western New Mexico): Ph.D. thesis, Princeton Univ., 385 p.

**Bersch, Michael**

1977 Development of the Riley maar crater, south-central Doña Ana County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 6

**Best, James R.**

1973 Stratigraphy, sedimentology, and uranium geology of the Francis Mesa area, McKinley County, New Mexico: M.S. thesis, Colorado School Mines

**Betancourt, Julio L.**

1980 (and Van Devender, T. R.) Late Quaternary vegetational history of Chaco Canyon, New Mexico: Am. Quaternary Assoc., Prog. and Abs., 6th ann. mtg., p. 23-24

**Bettis, Patricia K.**

1977 Petrography and geochemistry of some hydrogrossular garnets from Orogrande, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 7

**Bickford, David A.**

1980 Economic geology in the Jones Camp iron deposit, Socorro County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 226 p.

**Bickham, R. E.**

see Sanyal and others, 1979

**Bieberman, Robert A.**

1976 Oil and gas, in Legislative energy report, taxes and revenues: New Mexico Legislative Energy Comm., v. 2, pt. II, p. 41-83

1979 Ft. Selden and Leasburg—New Mexico State Park series: New Mexico Geology, v. 1, no. 3, p. 41-42, 2 figs.

**Bierei, Gregg R.**

1977 The environment and coal development in the San Juan Basin, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 77-82, 8 figs.

**Bikerman, Michael**

1976 Initial Sr<sup>87</sup>/Sr<sup>86</sup> ratios and K-Ar dates of some volcanic rocks from Catron County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 569

**Bikun, James V.**

1980 (Christiansen, E. H., Sheridan, M. F., and Burt, D. M.) Characteristics associated with mineralization in topaz rhyolites (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 387

see Burt, Bikun, and Christiansen, 1980; and Christiansen, E. H., and others, 1980

**Binder, I.**

see Balagna, Beddoe, and others, 1978

**Birch, Francis S.**

1980 Gravity study of the Albuquerque Basin, Rio Grande rift, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 267

**Bircher, John E.**

1978a Four Corners Paradox (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 300-303, 4 figs.

1978b Gallegos Fruitland, south (gas), in Oil and

gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 314-316, 4 figs.

1978c Hoshpah Upper Sand (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 344-346, 4 figs.

**Bird, P.**

1979 Continental delamination and the Colorado Plateau: Jour. Geophys. Research, v. 84, no. B13, p. 7561-7571

**Bisdorf, Robert J.**

see Zohdy and others, 1976

**Bivens, Hugh M.**

1980 (Jensen, D. H., Barnard, R. W., and Stephenson, W. A.) Direct measurement of uranium by prompt-fission neutron method of pulsed-neutron borehole logging, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 390-395, 10 figs.; abs. in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 8; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 686

**Bivins, R. L.**

see Tester, Morris, and others, 1979

**Black and Veatch, Consulting Engineers**

1976 Report on the digital modeling of the Buckman well field [Santa Fe County]: Black and Veatch, consult. rept. to Public Serv. Co. New Mexico, 20 p.

**Black, Bruce A.**

1976a Tectonic and structural implications of the geology of the northern and eastern parts of the Otero platform, Otero and Chaves Counties, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 569-570

1976b Tectonics of the northern and eastern parts of the Otero platform, Otero and Chaves Counties, New Mexico, in Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 39-45, 4 figs.

1978a Blackeye Dakota (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 216-217, 1 fig.

1978b Blackeye Mesaverde (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 218-219, 1 fig.

1978c Chaco Wash Mesaverde (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 260-262, 1 fig.

1978d Red Mountain Mesaverde (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 474-476, 4 figs.

1978e Seven Lakes Menefee (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 486-487, 3 figs.

1979a Oil and gas potential of Santa Fe embayment, Santa Fe County, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 5, p. 822

- 1979b** Supplemental road log no. 1, Diamond Tail fault area: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 42-43
- 1979c** Structure and stratigraphy of the Hagan embayment—a new look: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 101-105, 3 figs.
- 1979d** Oil and gas exploration in the Santa Fe-Galisteo-Hagan area of New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 275-279, 1 table, 4 figs.  
see Fassett, Black, and others, 1977; Fassett, Jentgen, and others, 1977; Fassett, Molenaar, and others, 1977; and Woodward, Ingersoll, Fitch, and others, 1979
- Black, Ken D.**
- 1977a** Geology and uranium mineralization of the Cone Peak rhyolite, Lincoln County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 6, p. 709
- 1977b** Petrology, alteration, and mineralization of two Tertiary intrusives, Sierra Blanca igneous complex, New Mexico: M.S. thesis, Colorado State Univ.
- Blagbrough, John W.**
- 1976** Rock glaciers in the Capitan Mountains, south-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 570-571
- Blair, Jess**
- 1976** Santa Rosa aquifer holds no promise for irrigators: Irrig. Age, July-August, p. 38
- Blakestad, Robert B., Jr.**
- 1977** Geology of the Kelly mining district, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 43, 139 p., 17 figs., 2 sheets; M.S. thesis, Univ. Colorado, 1978  
see Siemers, W. T., and Blakestad, 1976
- Blakey, Ronald C.**
- 1978** Pennsylvanian and Lower Permian paleogeography and paleotectonics of the southern Colorado Plateau (abs.): Geol. Soc. America, Abs., v. 20, no. 3, p. 96
- 1979** Lower Permian stratigraphy of the southern Colorado Plateau, *in* Permianland, D. L. Baars, editor: Four Corners Geol. Soc., Guidebook 9th field conf., p. 115-129
- 1980** Pennsylvanian and Early Permian paleogeography, southern Colorado Plateau and vicinity (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 677
- Blanchard, Douglas P.**  
see David, W. P., and others, 1980; Phelps, Blanchard, and others, 1979; and Phelps, Blanchard, and Stormer, 1980
- Blankenship, Joe T.**
- 1977** East Morton Wolfcamp field, Lea County, New Mexico, *in* Oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 140-141, 1 table, 1 fig.
- Blatz, L. A.**  
see Aamodt, Blatz, and others, 1978; and Holley and others, 1978
- Boden, David R.**
- 1980** Cooling unit stratigraphy and petrography of the Tshirez Member of the Banelier Tuff, southeastern Jemez Mountains, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 268
- Bodenlos, A. J.**
- 1978** Solution features in Delaware Basin evaporites, *abs. in* Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 87
- Bodine, Marc W., Jr.**
- 1978** Clay-mineral assemblages from drill core of Ochoan evaporites, Eddy County, New Mexico, *in* Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 21-31, 4 tables, 7 figs.
- 1979** (and Laskin, J. P.) Aluminum-deficient silicate residues from polyhalite beds in the Salado Formation, Carlsbad potash district, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 390
- Bodvarsson, G. S.**
- 1980** (and others) Preliminary studies of the reservoir capacity and longevity of the Baca geothermal field, New Mexico: Univ. California, Lawrence Berkeley Lab., Energy and Environ. Div., Rept. 10686, p. 98-103
- Boerngen, Josephine G.**  
see Hinkley and others, 1980a,b
- Bohor, Bruce F.**
- 1977** Tonsteins as correlation tools and environmental indicators of Rocky Mountain coals (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 6, p. 710-711
- 1976** (and Pillmore, C. L.) Tonstein occurrences in the Raton coal field, Colfax County, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 177-183, 13 figs.
- Bolivar, Stephen L.**
- 1978** Uranium hydrogeochemical and stream sediment reconnaissance of the Aztec NTMS quadrangle, New Mexico: U.S. Dept. Energy, Rept. GJBX-129-78, 75 p.
- 1980** (and others) Uranium hydrogeochemical and stream sediment reconnaissance data release for the Santa Fe NTMS quadrangle, New Mexico, including concentrations of forty-two additional elements: Los Alamos Sci. Lab., Rept. 8014, 135 p.; U.S. Dept. Energy, Rept. GJBX-197-80  
see Maassen, Bolivar, and others, 1979
- Bolton, William R.**
- 1976** Precambrian geochronology of the Sevillita metarhyolite and the Los Pinos, Sepultura, and Priest plutons of the southern Sandia uplift, central New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 57 p.  
see Brookins, Bolton, and Condie, 1980
- Book, Gerald W.**
- 1977** Eagle Creek field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 92-93, 1 table, 1 fig.
- Booth, Franklin O., III**
- 1976** Geology of the Galisteo Creek area, Lamy to Cañoncito, Santa Fe County, New Mexico: M.S. thesis, Colorado School Mines

- 1977 Geologic map of the Galisteo Creek area, Lamy to Cañoncito, Santa Fe County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-823, scale 1:12,000
- Bornhorst, Theodore J.**  
 1976 Volcanic geology of the Crosby Mountains and vicinity, Catron County, New Mexico: M.S. thesis, Univ. New Mexico, 113 p.  
 1980 Major- and trace-element geochemistry and mineralogy of Eocene to Quaternary volcanic rocks of the Mogollon-Datil volcanic field, southwestern New Mexico: Ph.D. thesis, Univ. New Mexico, 1108 p.  
 1978 (and Elston, W. E.) Reserve to Magdalena via Horse Springs and Datil, in Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 99-106, 6 figs.  
 1980 (Elston, W. E., and Della Valle, R. S.) Distribution of uranium in mid-Tertiary volcanic rocks, Mogollon-Datil volcanic field, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Southwest Sec., Ann. Mtg., Program, p. 17  
*see* Elston and Bornhorst, 1978, 1979; *and* Lopez and Bornhorst, 1979
- Borton, Robert L.**  
 1976 Papers and publications pertaining to ground water in New Mexico published or released to the open-file in 1974, with additions from 1948-73, in Ground water levels in New Mexico: New Mexico State Engineer, basic data rept., p. 107-112  
 1978 Bibliography of ground-water studies in New Mexico, 1873-1977: New Mexico State Engineer, spec. pub., 121 p.  
 1979a Enigmatic quartzite piles of La Tierra-Las Dos subdivisions area, Santa Fe County, New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 289-291, 2 tables, 4 figs.  
 1979b Bibliography of studies dealing with ground water in Santa Fe County, 1886-1979: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 307-309  
 1980 Bibliography of ground-water studies in New Mexico, 1848-1979: New Mexico State Engineer, spec. pub., 46 p.  
 1976 (and Jones, D. M.) A bibliography of papers and publications pertaining to ground water in New Mexico published or released to the open-file in 1975, with additions from 1886-1974, in Ground water levels in New Mexico, 1975: New Mexico State Engineer, basic data rept., p. 105-128  
 1978 (and Jones, D. M.) A bibliography of papers and publications pertaining to ground water in New Mexico published or released to the open file in 1976, with additions from 1873-1975: New Mexico State Engineer, basic data rept., p. 139-184
- Bowman, K. C.**  
 1978a Los Pinos Fruitland, north (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 390-392, 4 figs.  
 1978b Los Pinos Fruitland, south (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc. p. 393-394, 4 figs.
- Bowring, Samuel A.**  
 1980 The geology of the west-central Magdalena Mountains, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 120, 135 p., 1 table, 14 figs., 2 sheets, scale 1:25,000; M.S. thesis, New Mexico Inst. Mining and Tech.
- Boyd, J. S.**  
 1976 Report of ground-water supply investigation, Cebolleta Grant, Seboyeta, New Mexico: consult. rept. to Board Trustees, Cebolleta Grant, 12 p.
- Brackbill, R. M.**  
 1964 (and Gaines, J. C.) El Capitan source water system: Jour. Petroleum Tech., v. 16, no. 12, p. 1351-1356, 1 table, 2 figs.
- Bracken, R. E.**  
*see* Cape and others, 1980
- Brackenridge, G. Robert**  
 1976 Flow indices—a means to quantitatively compare seasonal mean flows in ungauged intermittent streams (abs.): Geol. Soc. America, Abs. with Prog., v. 8, no. 5, p. 571-572
- Bradley, Reta**  
*see* Stout and Bradley, 1980
- Brady, B. T.**  
 1977 (and Rice, R. S.) Helium determinations as an exploration technique in the Ambrosia Lake uranium district, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-669, 8 p., 1 fig.
- Braile, L. W.**  
*see* Keller, G. R., and Braile, 1979; *and* Keller, G. R., Braile, and Schlue, 1979
- Brandvold, Donald K.**  
*see* Brandvold, L. A., and others, 1980
- Brandvold, Lynn A.**  
 1977 Mercury in New Mexico surface waters: New Mexico Bureau Mines Mineral Resources, Circ. 162, 16 p., 1 table, 2 figs., color sheet in pocket, scale 1:1,000,000  
 1980 (Brandvold, D. K., and Popp, C. J.) Effects of uranium mining and milling on surface water in New Mexico (abs.): Energy and the Environment, 7th Natl. Conf.  
*see* Dauchy and Brandvold, 1976
- Brannen, Joseph P.**  
 1979 WIPP safety assessment: Geological Disposal Nuclear Waste, no. 19, p. 81-85, 3 tables
- Brautigam, Gerald L.**  
 1979 Faulting in the Silver City Range, Grant County, New Mexico: M.S. thesis, Univ. Houston  
 1980 (and Norman, C. E.) Faulting in the Silver City range, Grant County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 268
- Brenner, M. G.**  
 1979 Sedimentary features in base surge tuffs, Kilbourne Hole, Potrillo Mountains, Doña Ana County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 6, p. 267  
*see* Stuart and Brenner, 1979
- Brenner, R. L.**  
*see* Wright, R. P., and others, 1977
- Brenner-Tourtelot, Elizabeth F.**  
 1979 (and Machette, M. N.) The mineralogy and

- geochemistry of lithium in the Popotosa Formation, Socorro County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-839, 27 p., 5 figs.
- Brewer, J.**  
*see* Brown, L. D., Brewer, and others, 1978; Schilt and others, 1978
- Brewer, L. W.**  
 1974 Environmental monitoring report for Sandia Laboratories for 1973 (abs.): Sel. Water Resources Abs., v. 7, no. 23, p. 55
- Brezina, James L.**  
 1977a Cerca Upper Pennsylvanian field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 80-81, 1 table, 1 fig.  
 1977b Cerca Lower Wolfcamp field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 82, 1 table  
*see* Cys, Brezina, and Greenwood, 1977; *and* Cys, Greenwood, and Brezina, 1976
- Bridwell, R. Joe**  
 1976 Lithospheric thinning and the late Cenozoic thermal and tectonic regime of the northern Rio Grande rift: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 283-292, 1 table, 6 figs.  
 1977 Mechanisms of rifting, heat flow, and mantle convection (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 8  
 1978 Physical behavior of upper mantle beneath northern Rio Grande rift, *in* Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 228-230, 2 figs.  
 1980 (and Anderson, C. A.) Thermomechanical models of the Rio Grande rift, *in* Mechanisms of continental drift and plate tectonics, P. A. Davies, editor: London, Academic Press, p. 41-59  
 1976 (and Baldrige, W. S.) Thermal models from regional heat flow in the northern Rio Grande rift (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 572  
*see* Baldrige, Damon, and others, 1980; Olsen, K. H., Cash, and Bridwell, 1976; *and* Pearson and others, 1980
- Brierley, Corale L.**  
 1977 Biogenic extraction of uranium from ores of the Grants region, *in* Proceedings of the international symposium on metallurgical applications of bacterial leaching and related microbiological phenomena, L. E. Murr, A. E. Torma, and J. H. Brierley, editors: New York, Academic Press, p. 345-363  
 1979 Microbiology and mining—practices and problems: New Mexico Geology, v. 1, no. 3, p. 33-36, 40, 1 fig.
- Brimhall, Ron M.**  
 1978 Reserves of heavy oil from the Santa Rosa Sandstone: Interstate Oil Compact Comm., Comm. Bull., v. 20, no. 2, p. 54-60
- Bristol, A.**  
*see* Miyamoto and others, 1977
- Broadhead, Ronald F.**  
*see* Budding and Broadhead, 1977a-c
- Brocher, Thomas M.**  
 1978 Analysis of a magma body reflection of Abo Pass, New Mexico, COCORP data (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 4, p. 390  
 1979a Geometry and physical properties of a magma body in the Rio Grande rift from COCORP data (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 396  
 1979b Shallow velocity structure near Socorro, New Mexico, using COCORP seismic reflection data: Stanford Univ. Pub., Geological Sciences, v. 17, p. 26-30  
 1980 Reflectivity analysis of multichannel seismic reflection data with applications to COCORP Rio Grande rift survey: Ph.D. thesis, Princeton Univ., 176 p.  
*see* Jurdy and Brocher, 1980
- Brod, Robert C.**  
 1979 Hydrogeology and water resources of the Ambrosia Lake-San Mateo area, McKinley and Valencia Counties, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech.  
*see* Stone, W. J., Brod, and Anderholm, 1978
- Brookins, Douglas G.**  
 1976a The Grants mineral belt, New Mexico—comments on the coffinite-uraninite relationship, probable clay mineral reactions, and pyrite formations, *in* Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 158-166, 2 tables, 5 figs.  
 1976b Uranium deposits of the Grants, New Mexico, mineral belt, pt. 1: U.S. Energy Research and Develop. Adm., Rept. GJO-1636-1, 120 p.  
 1976c Position of uraninite and/or coffinite accumulations to the hematite-pyrite interface in sandstone-type deposits: Econ. Geology, v. 71, no. 5, p. 944-948  
 1977a Upper Cretaceous black sand deposits of the San Juan Basin, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, Supplement, p. 31-33, 1 table, 1 fig.  
 1977b A comparison of Rb-Sr systematics for granites from coastal Maine and from central New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 58, no. 6, p. 531  
 1977c Uranium deposits of the Grants mineral belt—geochemical constraints on origin, *in* Exploration frontiers of the central and southern Rockies, K. H. Veal, editor: Rocky Mtn. Assoc. Geologists, Guidebook 1977 field conf., p. 337-352, 7 figs.  
 1977d Geochemical genesis of uranium in the southern San Juan Basin: U.S. Dept. Energy, Rept. GJO-BFEC-78, p. 10-28; *abs. in* 1977 NURE uranium geology symposium, U.S. Dept. Energy, Rept. GJBX-12-78, 1978, p. 67  
 1978a Radiogenic heat contribution to heat flow from potassium, uranium, and thorium in the Precambrian silicic rocks of the Florida Mountains and the Zuni Mountains, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 98, 14 p., 2 tables  
 1978b Uranium deposits and spent fuel rods (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 372



**1978c** Radiogenic heat contribution to heat flow from K, U, Th, in the Precambrian silicic rocks of the Zuni Mountains, New Mexico (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 12, p. 1211

**1978d** Geochemical study of the uranium deposits of the southern San Juan Basin, New Mexico: U.S. Dept. Energy, Rept. GJBX-12-78, p. 67-86

**1979a** Mechanisms for uranium deposition in Grants mineral belt, *abs. in* Grants uranium region, a symposium: *Am. Assoc. Petroleum Geologists, Program*, p. 8-9; *Am. Assoc. Petroleum Geologists*, v. 63, no. 4, p. 686-687

**1979b** Periods of mineralization in Grants mineral belt, New Mexico, *abs. in* Grants uranium region, a symposium: *Am. Assoc. Petroleum Geologists, Program*, p. 9; *Am. Assoc. Petroleum Geologists*, v. 63, no. 4, p. 687

**1979c** Uranium deposits of the Grants, New Mexico, mineral belt, pt. II: U.S. Dept. Energy and Bendix Field Eng., Rept. GJBX-141-79, 411 p.

**1979d** Uranium minerals and the mineralogy of the Grants mineral belt (abs.): *Univ. New Mexico, New Mexico Minerals Symp.*, p. 7

**1979e** Study of drill core from the east Chaco Canyon area, San Juan Basin—pt. 1, geochemical studies: U.S. Dept. Energy, Rept. GJBX-215-80, 119 p.

**1980a** Geochronologic evidence for Paleozoic plutonic activity in Florida Mountains, New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 64, no. 5, p. 681-682

**1980b** K-Ar age of lamprophyre dike from the Kerr-McGee potash mine, southeastern New Mexico: *Isochron/West*, no. 29, p. 27

**1980c** Polyhalite K-Ar radiometric ages from southeastern New Mexico: *Isochron/West*, no. 29, p. 29-30

**1980d** Geochronologic studies in the Grants mineral belt, *in* *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: *New Mexico Bureau Mines Mineral Resources, Mem.* 38, p. 52-58, 4 tables, 3 figs.

**1980e** Geochemical and clay mineralogical studies, Grants mineral belt, *abs. in* *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: *New Mexico Bureau Mines Mineral Resources, Mem.* 38, p. 396

**1980f** Primary uranophane from the Grants mineral belt, New Mexico (abs.): *Arizona-Nevada Acad. Sci., Jour.*, v. 15, p. 43

**1980g** Paleozoic plutonism from southern New Mexico—evidence from the Florida Mountains: *Geophys. Research Letters*, v. 7, no. 10, p. 741-744

**1980** (Bolton, W. R., and Condie, K. C.) Rb-Sr isochron ages of four Precambrian igneous rock units from south-central New Mexico: *Isochron/West*, no. 29, p. 31-37, 4 tables, 4 figs.

**1979** (Chakoumakos, B. C., Cook, C. W., Ewing, R. C., Landis, G. P., and Register, M. E.) The Harding pegmatite—summary of recent research: *New Mexico Geol. Soc., Guidebook 30th field conf.*, Santa Fe, p. 127-133, 1 table, 6 figs.

**1977** (Crumpler, L. S., and Elston, W. E.) Sr-isotope initial ratios from the Mount Taylor volcanic field, New Mexico: *Isochron/West*, no. 20, p. 18

**1977** (and Della Valle, R. S.) Uranium abundance in some Precambrian and Phanerozoic rocks from New Mexico, *in* *Exploration frontiers of the central and southern Rockies*, H. K. Veal, editor: *Rocky Mtn. Assoc. Geol., Guidebook 1977 field conf.*, p. 353-362, 3 tables, 1 fig.

**1979** (and Della Valle, R. S.) Less common trace elements in sandstone-type uranium deposits—theory and application (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 5, p. 823-824

**1979** (Della Valle, R. S., and Balagna, J. P.) Trace element exploration geochemistry of uranium occurrences in the San Juan Basin, southwestern United States (abs.): *Geol. Soc. America, Abs. with Programs*, v. 11, no. 7, p. 394

**1977** (Della Valle, R. S., and Lee, M. J.) Rubidium-strontium geochronologic investigation of the Zuni Mountains, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 9

**1978a** (Della Valle, R. S., and Lee, M. J.) Rb-Sr geochronologic investigation of Precambrian silicic rocks from the Zuni Mountains, New Mexico: *Mtn. Geologist*, v. 15, no. 2, p. 67-71, 1 table, 3 figs.

**1978b** (Della Valle, R. S., and Lee, M. J.) Rare earth element study of whole rocks and clay minerals from the southern San Juan Basin, New Mexico (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 4, p. 388

**1980** (Della Valle, R. S., and Register, J. K.) Rb-Sr dating of diagenesis-epigenesis in Mesozoic rocks, San Juan Basin, New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 64, no. 5, p. 681

**1977** (Eppler, Dean, and Elston, W. E.) Sr isotope initial ratios from the San Antonio Mountain area, New Mexico: *Isochron/West*, no. 20, p. 17

**1977** (Forbes, R. B., Turner, D. L., and others) Rb-Sr, K-Ar, and fission-track geochronologic studies of samples from LASL drillholes GT-1, GT-2, and EE-1: *Los Alamos Sci. Lab., Rept.* 6829, 27 p.

**1980** (Kasten, J. A., and Kudo, A. M.) Sr-isotope study of andesites from the southern Albuquerque Basin, New Mexico: *Isochron/West*, no. 27, p. 27, 1 table

**1976a** (and Laughlin, A. W.) Rubidium-strontium geochronologic study of GT-1 and GT-2 whole rocks (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 352

**1976b** (and Laughlin, A. W.) High 87/86 strontium ratios in deep-seated fracture-filling calcite from GT-2 (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 352

**1976c** (and Laughlin, A. W.) Isotopic evidence for local derivation of strontium in deep-seated, fracture-filling calcite from granitic rocks, in drill hole GT-2, Los Alamos Scientific Laboratory dry hot rock program, New Mexico: *Jour. Volcanology and Geothermal Research*, v. 1, no. 2, p. 193-196, 2 tables

**1977** (Lee, M. J., and Riese, W. C.) Trace elements as possible prospecting tools for uranium in the southern San Juan Basin: *New Mexico Geol. Soc., Guidebook 28th field conf.*, San Juan Basin III, p. 263-269, 3 tables, 5 figs.

**1977** (Lee, M. J., and Shafiqullah, M.) K-Ar ages for clay-size and silt-size fractions of uranium ore

from the Grants mineral belt, New Mexico: *Isochron/West*, no. 18, p. 17-19

**1977** (and Olsen, C. E.) Results of pilot studies of Project NURE from New Mexico—Estancia Basin and area northeast of Grants mineral belt (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 5, p. 772

**1978** (and Rautman, C. A.) Uranium and thorium abundances, whole-rock chemistry and trace-element chemistry, Zuni Mountains, New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept.* 99, 47 p., 3 tables, 26 figs., appendix; *New Mexico Energy Inst.*, Rept. 77-1104B, 46 p.

**1978** (Rautman, C. A., and Corbitt, L. L.) Uranium and thorium abundances and whole-rock chemistry of the Florida Mountains, New Mexico, preliminary study: *New Mexico Bureau Mines Mineral Resources, Open-file Rept.* 101, 23 p., 2 tables, 7 figs.

**1980** (Register, J. K., and Krueger, H. W.) Potassium-argon dating of polyhalite in southeastern New Mexico: *Geochim. et Cosmochim. Acta*, v. 44, no. 5, p. 635-637, 2 tables

**1978** (Register, J. K., Register, M. E., and Lambert, S. J.) Rb-Sr systematics and related studies of the Salado and Castile Formations, southeastern New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 10, no. 7, p. 372

**1977** (Riese, W. C., and Lee, M. J.) Rare earth and other trace elements as prospecting guides in Grants mineral belt, New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 8, p. 1373

**1980** (Warren, R. G., and Kudo, A. M.) Sr-isotope initial ratios from the Engle Basin volcanics, south-central New Mexico: *Isochron/West*, no. 27, p. 17

**1980** (and Zimmerman, C. J.) Sr-isotope initial ratios from the Taos volcanic field, northern New Mexico: *Isochron/West*, no. 27, p. 31

see Callender, Robertson, and Brookins, 1976; Condie and Brookins, 1980; Della Valle and Brookins, 1979, 1980a,b; Enz and others, 1979; Helmick and others, 1976; Hicks, R. T., and others, 1979, 1980; Laughlin, Brookins, and Damon, 1976; Laughlin and others, 1979; Lee, M. J., and Brookins, 1978, 1980; Lee, M. J., Brookins, and Shafiqullah, 1977; Mukhopadhyay and Brookins, 1976a,b; Place and others, 1979, 1980; Register, J. K., and Brookins, 1980; Register, M. E., and Brookins, 1978, 1979; Register, M. E., Brookins, and Della Valle, 1978; Riese, W. C., and Brookins, 1976, 1977, 1978, 1979, 1980; Riese, W. C., Brookins, and Della Valle, 1978, 1979, 1980; Riese, W. C., Brookins, and Lee, 1978, 1979; Riese, W. C., Lee, and Brookins, 1977; and Robertson, J. M., Callender, and Brookins, 1976

#### **Brooks, B. J.**

**1978** (and Clark, W. R.) Wagon Mound Dakota-Morrison (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 553-555, 3 figs.

#### **Brooks, Robert**

**1978** Uranium resources in American west—world-wide implications (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 62, no. 7, p. 1210

#### **Broomfield, Robin E.**

**1977** Structural geology and igneous petrology of

the Cañones area, Rio Arriba County, New Mexico: M.S. thesis, Univ. New Mexico, 75 p.

#### **Broughton, Paul L.**

see Kendall and Broughton, 1977

#### **Brown, Charles F.**

**1978a** Aztec Pictured Cliffs (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 192-194, 4 figs.

**1978b** Ballard Pictured Cliffs (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 195-197, 4 figs.

**1978c** Blanco Pictured Cliffs (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 225-227, 4 figs.

**1978d** Blanco Pictured Cliffs, east (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 228-229, 3 figs.

**1978e** Blanco Pictured Cliffs, south (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 230-232, 4 figs.

**1978f** Choza Mesa Pictured Cliffs (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 266-267, 3 figs.

**1978g** Fulcher-Kutz Pictured Cliffs (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 307-309, 4 figs.

**1978h** Kutz Pictured Cliffs, west (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 366-368, 4 figs.

**1978i** Tapacito Pictured Cliffs (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 516-518, 4 figs.

#### **Brown, Daniel R.**

**1976** Hydrogeology and water resources of the Aztec quadrangle (San Juan County): M.S. thesis, *New Mexico Inst. Mining and Tech.*, 175 p.

**1979** (and Stone, W. J.) Hydrogeology of Aztec quadrangle, San Juan County, New Mexico: *New Mexico Bureau Mines Mineral Resources, Hydro. Sheet 1*, 5 tables, 12 figs., scale 1:62,500

#### **Brown, Donald W.**

**1976** Recent advances in the deep drilling of hot crystalline rocks (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 349

see Aamodt, Blatz, and others, 1978; Aamodt, Brown, and others, 1978; and Murphy, H. D., and others, 1978

#### **Brown, G. E.**

see Keefer and Brown, 1978

#### **Brown, Harold H.**

**1978a** Beautiful Mountain Mississippian (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 207-208, 4 figs.

**1978b** Buena Suerte Pennsylvanian (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and

others, editors: Four Corners Geol. Soc., p. 254-255, 2 figs.

**1978c** Nageezi Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 427-428, 3 figs.

**1978d** Otero Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 444-446, 3 figs.

**Brown, Larry D.**

**1980** (Allmendinger, R. W., Kaufman, S., Oliver, J. E., Chapin, C. E., and Sanford, A. R.) Magma bodies, transverse faulting, and deep crustal structure from COCORP surveys across a Cenozoic cauldron in central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 393

**1978** (Brewer, J., and others) COCORP deep seismic reflection studies of continental lithosphere—regional variations in intrabasement structure (abs.): Soc. Exploration Geophys., 48th Ann. Mtg., p. 87-88

**1980** (Chapin, C. E., Sanford, A. R., Kaufman, S., and Oliver, J. E.) Deep structure of the Rio Grande rift from seismic reflection profiling: Jour. Geophys. Research, v. 85, no. B9, p. 4773-4800

**1979** (Kaufman, S., Long, G. H., and others) Evidence of structural complexity of the lower crust and upper mantle from seismic reflection profiling (abs.): Tectonophysics, v. 56, no. 1-2, p. 127

**1977** (Kaufman, S., and Oliver, J. E.) Deep structure of the Rio Grande rift from seismic reflection profiling (abs.): Am. Geophys. Union (EOS), Trans., v. 58, no. 6, p. 534-535

**1979** (Krumhansl, P. A., Chapin, C. E., Sanford, A. R., Cook, F. A., Kaufman, S., Oliver, J. E., and Schilt, F. S.) COCORP seismic reflection studies of the Rio Grande rift, *in* Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 169-184, 7 figs.

**1978** (Krumhansl, P. A., Cook, F. A., and Kaufman, S.) Seismic reflection character of the Socorro magma body (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 4, p. 390

**1978** (Krumhansl, P. A., Cook, F. A., Kaufman, S., Oliver, J. E., Schilt, F. S., Chapin, C. E., and Sanford, A. R.) COCORP seismic reflection studies of the Rio Grande rift, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 20

**1980** (Miesen, D. L., Reilinger, R. E., and Jurkowski, G. A.) Geodetic leveling and crustal movement in the U.S.—pt. 1, topography and vertical motion (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 32, p. 574

**1978** (Reilinger, R. E., and Hagstrum, J. R.) Contemporary uplift of the Diablo Plateau, west Texas, from leveling measurements: Jour. Geophys. Research, v. 83, no. B11, p. 5465-5471, 6 figs.

*see* Chapin, Sanford, and Brown, 1980; Long, G. H., and others, 1977; Reilinger, Brown, and Jurkowski, 1980; Reilinger, Brown, and others, 1978, 1979; Reilinger, Brown, and Powers, 1980; Reilinger, Oliver, Brown, and others, 1979; *and* Schilt and others, 1978

**Brown, Lionel F.**

**1977** A gravity survey of central Doña Ana County,

New Mexico: M.S. thesis, New Mexico State Univ., 56 p.

*see* Daggett and Brown, 1977; *and* Seager and Brown, 1978

**Brown, M. C.**

**1979** (Duffield, R. B., and Siciliano, C. L. B., compilers) Hot dry rock geothermal energy development program, annual report, fiscal year 1978: Los Alamos Sci. Lab., Rept. LA-7807-HDR, 129 p.

**Brown, Richmond F.**

**1976** (Signor, D. C., and Wood, W. W.) Artificial ground-water recharge as a water-management technique on the southern High Plains of Texas and New Mexico: U.S. Geol. Survey, Open-file Rept. 76-730, 109 p., 1 table, 30 figs.

**Brown, S. G.**

**1976** Preliminary maps showing ground-water resources in the lower Colorado River region, Arizona, Nevada, New Mexico, and Utah: U.S. Geol. Survey, Hydrol. Inv. Atlas 542, scale 1:1,000,000

**Broxton, D. E.**

**1978** Uranium hydrogeochemical and stream sediment reconnaissance of the Tularosa NTMS quadrangle, New Mexico: U.S. Dept. Energy, Rept. GJBX-104-78, 81 p., 6 tables, 2 figs., 4 pls.

*see* Morgan, T. L., and Broxton, 1978

**Bryant, Alan C.**

**1978a** Ojo Encino Entrada (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 435-436, 3 figs.

**1978b** Papers Wash Entrada (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 451-452, 3 figs.

**1978c** Snake Eyes Entrada (oil); Snake Eyes Dakota (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 500-502, 2 figs.

**1980** Entrada oil fields of southern San Juan Basin, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 682

**Bryson, R. S.**

*see* Amuedo and Bryson, 1977

**Bubb, J. N.**

**1978** (and Hatlelid, W. G.) Seismic stratigraphy and global changes of sea level—pt. 10, seismic recognition of carbonate buildups: Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 5, p. 772-791, 1 table, 17 figs.

**Buchanan, Bruce A.**

*see* Robbie and Buchanan, 1978

**Buchanan, C.**

**1976** Precambrian structural-metamorphic history, Rociada, New Mexico: B.S. paper, Univ. Texas (Dallas)

**Buchanan, W. A.**

*see* Neher and Buchanan, 1980

**Buchholz, J. R.**

*see* Purtymun, Buchholz, and Hakonson, 1977

**Buckner, Duane H.**

**1976** Variations in natural-gas composition in Blanco field, San Juan Basin, related to source-rock type, thermal maturity, and migration (abs.): Am. Assoc.



- Petroleum Geologists, Bull., v. 60, no. 8, p. 1392-1393
- Buddecke, Donald B.**  
 1977 Costs of uranium mining in New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 77, 9 p.
- Budding, Antonius J.**  
 1978 Subsurface geology of the Pajarito Plateau—interpretation of gravity data, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 196-198, 4 figs.  
 1979 Supplemental road log no. 2, Glorieta to Las Vegas: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 44-48, 7 figs.  
 1980 Geology and oil characteristics of tar sand near Santa Rosa, New Mexico: New Mexico Geology, v. 2, no. 1, p. 4-5, 3 figs.  
 1977a (and Broadhead, R. F.) Igneous and metamorphic petrology, in Geology, petroleum source rocks, and thermal metamorphism in KCM No. 1 Forest Federal well, Hidalgo County, New Mexico, S. Thompson, III, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 152, p. 29-35, 5 tables, 4 figs.  
 1977b (and Broadhead, R. F.) Petrographic descriptions of thin sections of drill cuttings from KCM No. 1 Forest Federal well, Hidalgo County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 75, 93 p., 52 photos  
 1977c (and Broadhead, R. F.) Tertiary plutonic rocks and associated contact metamorphism in the KCM No. 1 Forest Federal well, Hidalgo County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 9-10  
 1979 (and Cepeda, J. C.) Tectonics and metamorphism of the El Oro gneiss dome near Mora, north-central New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 159-164, 1 table, 3 figs.  
 1979 (and Purtymun, W. D.) Seismicity of the Los Alamos area based on geologic data: Los Alamos Sci. Lab., Rept. LA-6278-MS, 7 p.  
 1979 (Robertson, J. M.; Manley, Kim; Hawley, J. W.; Casey, J. M.; Cordell, Lindrith; and Muehlberger, W. R.) First day, road log from Santa Fe to Ranchos de Taos via Pojoaque, Nambé, Cundiyo, Truchas, and Peñasco; with an extension to Rio Grande Gorge, Embudo, and Española: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 1-14, 15 figs.  
 see Condie and Budding, 1979; and Robertson, J. M., Budding, and others, 1979
- Budding, Karin E.**  
 see Rogers, M. A., Christie, and Budding, 1980
- Buder, M. K.**  
 1978 Coming—in-situ gasification: Coal Mining and Processing, v. 15, no. 5, p. 54-59, 3 tables, 3 figs., 2 maps
- Budge, Thomas K.**  
 see Morain and others, 1977
- Bulloch, H. Edward, Jr.**  
 1980 (and Neher, R. E.) Soil survey of Doña Ana County area, New Mexico: U.S. Dept. Agriculture, Soil Conserv. Serv., 177 p., 2 maps
- Bunderson, Eileen**  
 see Tidwell, Bunderson, and Parker, 1980
- Bunker, M. E.**  
 see Aamodt, Bunker, and others, 1979; Aamodt, Waterbury, and others, 1979; Morris, Bunker, and others, 1979; Morris, Bunker, and Steinhaus, 1979; and Weaver and others, 1978
- Burchfiel, B. C.**  
 1978 Geologic history of the central western United States (abs.): Internat. Assoc. Genesis Ore Deposits, 5th Symp., Program and Abs., p. 63
- Burke, Kevin**  
 1978 Continental rifts, abs. in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 21-22  
 see McGetchin, Burke, and others, 1979
- Burkham, D. E.**  
 1976 Hydraulic effects of changes in bottom-land vegetation on three major floods, Gila River, in southeastern Arizona: U.S. Geol. Survey, Prof. Paper 665-J, p. 1-14
- Burnside, S. S.**  
 1976 (and Wenrich-Verbeek, K. J.) Chemical analysis and statistical data for water samples collected in Colorado, New Mexico, and Arizona as part of a study of surface-water and stream-sediment sampling techniques used in uranium exploration: U.S. Geol. Survey, Open-file Rept. 76-851, 314 p.
- Burroughs, Richard L.**  
 1976 (and McFadden, D. H.) Some hydrogeologic problems in the San Luis Basin, Colorado-New Mexico: Colorado School Mines, Studies in Colorado Field Geology, no. 8, p. 544-549, 1 fig.  
 see Hawley, Burroughs, and others, 1978
- Burruss, R. C.**  
 1979 (and Hollister, L. S.) Evidence from fluid inclusions for a paleogeothermal gradient at the geothermal test well sites, Los Alamos, New Mexico: Jour. Volcanology and Geothermal Research, v. 5, no. 1-2, p. 163-177
- Burt, Donald M.**  
 1978a Skarns in the United States—a survey of recent research (abs.): Internat. Assoc. Genesis Ore Deposits, 5th Symp., Program and Abs., p. 64  
 1978b Economic mineral associations of skarn ilvaite (abs.): Internat. Assoc. Genesis Ore Deposits, 5th Symp., Program and Abs., p. 65  
 1980 (Bikun, J. V., and Christiansen, E. H.) Distribution and petrogenesis of topaz rhyolites, western U.S.A. (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7 p. 396  
 1980 (and Sheridan, M. F.) A model for the formation of uranium/lithophile element deposits in fluorine-enriched volcanic rocks (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 18  
 see Bikun and others, 1980; Christiansen, E. H., and others, 1980; and Sheridan and Burt, 1979
- Burton, Barry W.**  
 see Rogers, M. A., and Burton, 1980
- Burton, J. C.**  
 1979 (and Jackson, D. H.) Contact metamorphism by convective heat transfer at Wind Mountain, New Mexico: Neues Jahrb. Mineralogie Monatsh., no. 9, p. 408-420

**Burton, Robert C.**

1977 Conodonts from reef banks of Mississippian age in the Sacramento Mountains, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 5, p. 580

see Armstrong, A. K., Mamet, and Burton, 1979

**Busby, Mark W.**

1979a Surface water environment in the area of the San Juan Basin regional uranium study, New Mexico, Arizona, Utah, and Colorado: U.S. Geol. Survey, Open-file Rept. 79-1499, 64 p. [1980]

1979b Water use in the area of the San Juan Basin regional uranium study, New Mexico, Arizona, Utah, and Colorado: U.S. Geol. Survey, Open-file Rept. 79-1500, 21 p. [1980]

**Buscemi, P. A.**

1978 (and Puffer, J. H.) Chemico-trophic attributes of detrital aggregates in a New Mexico alkaline reservoir (abs.): *Sel. Water Resources Abs.*, v. 11, no. 11, p. 57-58

**Butler, Charles**

1977 History of the Tierra Amarilla Grant: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 91-92, 1 fig.

**Butler, James H.**

1977 (editor) Geology of the Sacramento Mountains, Otero County, New Mexico: *West Texas Geol. Soc., Guidebook*, Pub. 1977-68, 230 p.

**Butler, Robert F.**

1976 (Lindsay, E. H., Jacobs, L. L., and Johnson, N. M.) Preliminary report on magnetic stratigraphy of Cretaceous-Paleocene continental deposits in the San Juan Basin, New Mexico (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 238

1977 (Lindsay, E. H., Jacobs, L. L., and Johnson, N. M.) Magnetostratigraphy of the Cretaceous-Tertiary boundary in the San Juan Basin, New Mexico: *Nature*, v. 267, no. 5609, p. 318-327, 6 figs.

1979 (Lindsay, E. H., and Johnson, N. M.) Magnetic polarity stratigraphy of latest Cretaceous to middle Paleocene terrestrial deposits, San Juan Basin, New Mexico (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 60, no. 18, p. 237

1978 (and Taylor, L. H.) A middle Paleocene paleomagnetic pole from the Nacimiento Formation, San Juan Basin, New Mexico: *Geology*, v. 6, no. 8, p. 495-498, 2 tables, 4 figs.

see Lindsay, Butler, and Johnson, 1979; Lindsay, Butler, Johnson, and Jacobs, 1979; Lindsay, Jacobs, and Butler, 1978; and Taylor, L. H., and Butler, 1980

**Byers, V. P.**

1979 Geologic map and sections of the Crystal quadrangle, San Juan and McKinley Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-599, scale 1:24,000

1980 Geologic map and sections of the Sonsela Butte 4 SE quadrangle, Apache County, Arizona, and San Juan and McKinley Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-788, scale 1:24,000

**Byrd, T. M.**

1978 (and Kunath, C. E.) Sand Cave, in *The caves of McKittrick Hill, Eddy County, New Mexico—history and results of field work, 1965-1976*, C. E. Kunath, editor: *Texas Speleological Soc.*, p. 49-52

**Cadigan, Robert A.**

see Felmlee and Cadigan, 1978

**Calhoun, T. E.**

see Hodson and others, 1980; and Nyhan, Hacker, and others, 1978

**Callender, Jonathan F.**

1976 (Robertson, J. M., and Brookins, D. G.) Summary of Precambrian geology and geochronology of northeastern New Mexico: *New Mexico Geol. Soc., Guidebook 27th field conf.*, Vermejo Park, p. 129-135, 1 table, 1 fig.

1978 (Wilt, J. C., and Clemons, R. E., editors) Land of Cochise, southeastern Arizona: *New Mexico Geol. Soc., Guidebook 29th field conf.*, southeastern Arizona, 372 p., 32 tables, 271 figs.

1976 (Woodward, L. A., and Kelley, V. C.) Structural framework of the Rio Grande rift, New Mexico and Colorado (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 573

1976 (and Zilinski, R. E., Jr.) Kinematics of Tertiary and Quaternary deformation along the eastern edge of the Lucero uplift, central New Mexico, in *Tectonics and mineral resources of southwestern North America*, L. A. Woodward and S. A. Northrop, editors: *New Mexico Geol. Soc., Spec. Pub.* 6, p. 53-61, 1 table, 11 figs.

see Berkeley and Callender, 1979; Berkeley, Callender, and Keil, 1976; Gorham, F. D., and others, 1977, 1979; Kelley, V. C., Woodward, and others, 1976; Robertson, J. M., Callender, and Brookins, 1976; Woodward and Callender, 1977a,b; and Woodward, Callender, and others, 1978

**Calzia, J. P.**

1978 (and Hiss, W. L.) Igneous rocks in northern Delaware Basin, New Mexico and Texas, in *Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas*, G. S. Austin, compiler: *New Mexico Bureau Mines Mineral Resources, Circ.* 159, p. 39-45, 4 tables, 3 figs.

**Campbell, Charles V.**

1976 Reservoir geometry of a fluvial sheet sandstone: *Am. Assoc. Petroleum Geologists, Bull.*, v. 60, no. 7, p. 1009-1020, 7 figs.

1979 Model for beach shoreline in Gallup Sandstone (Upper Cretaceous) of northwestern New Mexico: *New Mexico Bureau Mines Mineral Resources, Circ.* 164, 32 p., 1 table, 32 figs., 2 appendices

**Campbell, Frank**

see Frost and others, 1980

**Campbell, Jock A.**

1976 (and Steele, B. A.) Uranium potential of Permian rocks in the southwestern United States: U.S. Geol. Survey, Open-file Rept. 76-529, 26 p., 10 tables, 4 figs.

see Slack and Campbell, 1976

**Campbell, John P.**

1978 Eagle Mesa Entrada (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 285-286, 2 figs.

**Cannon, Helen L.**

1979 (and Swanson, V. E.) Contributions of major and minor elements to soils and vegetation by the coal-fired Four Corners Power Plant, San Juan County, New Mexico: U.S. Geol. Survey, Prof. Paper 1129-B, p. B1-B13, 5 tables, 7 figs.

**Cannon, Robert P.**

1977 Petrology and geochemistry of the Palisades sill, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 81, 90 p., 4 tables, 31 figs., 3 appendices

1977 (and Ragland, P. C.) Petrology and geochemistry of the Palisades sill, northern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 6, p. 713-714

**Cape, Cheryl D.**

1980 (McGeary, S., Bracken, R. E., Gagnon, L. D., and Thompson, G. A.) Cenozoic normal faulting and the shallow structure of the Rio Grande rift near Socorro, New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 46, p. 1039

**Capener, W. M.**

see Austin, L. A., and others, 1977

**Caravella, Frank J.**

1976 A study of Poisson's ratio in the upper crust of the Socorro, New Mexico, area: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 11, 83 p.

1977 (and Sanford, A. R.) An analysis of earthquakes north of the Los Medanos site on July 26, 1972, and November 28, 1974: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 12a, 19 p.

see Sanford, Mott, and others, 1977; and Shuleski and others, 1977

**Carelton, A. T.**

1977 Vada Pennsylvanian field, Lea and Roosevelt Counties, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 212-213, 1 table, 1 fig.

**Carey, J. B.**

1979 (and Keetch, C. W.) Helicopter mapping of soils in San Juan County, New Mexico: Jour. Soil and Water Conservation, v. 34, no. 2, p. 99-102

**Carlson, Kurt H.**

see Miller, B. M., and others, 1978

**Carlson, R. W.**

see Jagoutz and others, 1980

**Carruthers, Garrey**

see Babcock, R. E., and others, 1978

**Carten, Richard B.**

see Armstrong, A. K., Silberman, and others, 1978

**Carter, J. A.**

see Barr and others, 1979

**Carter, James L.**

see Padovani and Carter, 1976, 1977, 1978a, b

**Carwile, C.**

see Maurer and others, 1978

**Case, Walter S., Jr.**

1978 Leach/crystallization—process for potash production, in Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 69-70

**Casella, V. R.**

see Styron and others, 1979

**Casey, J. Michael**

1979a Basin evolution of late Paleozoic Taos trough, northern New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 5, p. 824

1979b Pennsylvanian clastic depositional environments of the western margin of the Taos trough, northern New Mexico (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 31; New Mexico Geology, v. 1, no. 4, p. 60-61

1980a Paleogeographic evolution of late Paleozoic Taos trough, northern New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 687-688

1980b Depositional systems and basin evolution of the late Paleozoic Taos trough, northern New Mexico: Ph.D. thesis, Univ. Texas (Austin), 253 p.; Dissert. Abs. Internat., v. 41, no. 4, p. 1280-B; also in Paleozoic paleogeography of the west-central United States, T. D. Fouch, editor, Soc. Econ. Paleontologists and Mineralogists, Rocky Mtn. Sec., p. 181-196

1979 (and Scott, A. J.) Pennsylvanian coarse-grained fan deltas associated with the Uncompahgre uplift, Talpa, New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 211-218, 8 figs.

1980 (and Scott, A. J.) Spectrum of deltaic systems in Pennsylvanian tectonically active cratonic basin, north-central New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 688

see Budding, Robertson, and others, 1979; McBryde and Casey, 1979; and Scott, A. J., and Casey, 1979

**Cash, Daniel J.**

see Olsen, K. H., Cash, and Bridwell, 1976; and Olsen, K. H., Keller, Stewart, and others, 1977

**Cather, Steven M.**

1980 Petrology, diagenesis, and genetic stratigraphy of the Eocene Baca Formation, Alamo Navajo Reservation and vicinity, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 125, 263 p., 7 tables, 75 figs., 1 map, 2 appendices; M.S. thesis, Univ. Texas (Austin)

1980 (and Johnson, B. D.) Genetic stratigraphy and provenance of Baca Formation of New Mexico and Eagar Formation and Mogollon Rim gravels of Arizona (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 688-689; New Mexico Geology, v. 2, no. 4, p. 63

**Catlet, L. B.**

see Austin, L. A., and others, 1977

**Cavaroc, Victor V., Jr.**

1980 (and Flores, R. M.) Variations in Cretaceous coal-bearing strata, Gallup coal field, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 689

**Cave, S. P.**

see Sutherland and Cave, 1980

**Cebull, S. E.**

see Shurbet and Cebull, 1978

**Cepeda, Joseph C.**

see Budding and Cepeda, 1979

**Cernock, Paul J.**

1976 Hydrocarbon source-rock evaluation study, KCM No. 1 Cochise State A well, Hidalgo County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 96, 22 p., 5 tables, 2 figs., 1 appendix

1977a Hydrocarbon source-rock evaluation study,

Humble Oil and Refining Co. No. 1 State BA well, Hidalgo County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 97, 46 p., 8 tables, 3 figs., 1 appendix; supplement text, 3 tables

**1977b** Organic geochemical analysis of drill cuttings from the KCM No. 1 Forest Federal well, Hidalgo County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 10-11

**1977c** Hydrocarbon source-rock evaluation study, organic geochemical analyses of dry-well cuttings, EXXON Corp. Prisor Unit Fed. No. 1 well, Sierra County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 127, 27 p., 7 tables, 4 figs. 1 appendix

**1977** (and Bayliss, G. S.) Organic geochemical analyses, in Geology, petroleum source rocks, and thermal metamorphism in KCM No. 1 Forest Federal well, Hidalgo County, New Mexico, S. Thompson, III, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 152, p. 37-47, 5 tables, 3 figs.

#### **Chafetz, Henry S.**

**1976** Beartooth sandstone, an Upper Cretaceous deltaic deposit, Silver City range, southwestern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 574

see Kocurek and Chafetz, 1977

#### **Chaiffetz, M. S.**

**1977** Source rock and palynostratigraphic potential for the Paleozoic sediments of west Texas-southern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 11

**1979** Palynological age and paleoecology of Baca Formation, northwestern Socorro County, central-western New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 6, p. 268-269

**1979** (Kocurek, G., and Cornell, W. C.) First report of Chitinozoa from the Upper Devonian Percha Shale, SW New Mexico (abs.): Palynology, v. 3, p. 280-281

#### **Chakoumakos, Bryan C.**

**1978a** Replacement features in the Harding pegmatite, Taos County, New Mexico (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 22

**1978b** The Harding pegmatite mine: Univ. New Mexico, Dept. Geology, 10 p., 4 figs.

see Brookins, Chakoumakos, and others, 1979

#### **Chamberlin, Richard M.**

**1976** Rotated early-rift faults and fault blocks, Lemitar Mountains, Socorro County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 807

**1978** Structural development of the Lemitar Mountains, an intrarift tilted fault-block uplift, central New Mexico, abs. in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 22-24, 1 fig.

**1980** Cenozoic stratigraphy and structure of the Socorro Peak volcanic center, central New Mexico—v. 1, stratigraphy; v. 2, structure: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 118, 532 p., 8 tables, 41 figs., 3 maps, 3 appendices

see Chapin, Chamberlin, and Hawley, 1978; Chapin, Chamberlin, Osburn, and others, 1978; Chapin, Jahns, and others, 1978; Chapin, Sanford, and others, 1979; Hawley, Chapin, Chamberlin, and

others, 1978; and Hawley, Lovejoy, and others, 1978  
**Chambers-Campbell-Isaacson-Chaplin, Inc.**

**1976** Environmental impact assessment report for proposed West Mesa airport at Albuquerque, New Mexico: consult. rept. to Middle Rio Grande Council Govts., 15 figs.

#### **Chapin, Charles E.**

**1976** Evolution of the Rio Grande rift (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 808-809

**1978a** Evolution of the Rio Grande rift—comparisons between segments and the role of transverse structures, abs. in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Programs and Abs., Rept. LA-7487-C, p. 24-27

**1978b** Mountains and basins west of I-25, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 92-93, 1 fig.

**1978c** Overview of Cenozoic features, San Marcial Basin, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 96-97, 2 figs.

**1979a** Evolution of the Rio Grande rift—a summary, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 1-5, 1 fig.

**1979b** Basement lineaments in the southern Rocky Mountains—Rio Grande rift volcanic province and their influence on intraplate volcanism (abs.): Hawaii Symp. on Intraplate Volcanism and Submarine Volcanism, Program with Abs., p. 8

**1978** (Chamberlin, R. M., and Hawley, J. W.) Socorro to Rio Salado, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 121-137, 11 figs.

**1978a** (Chamberlin, R. M., Osburn, G. R., Sanford, A. R., and White, D. W.) Exploration framework of the Socorro geothermal area, New Mexico, in Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 114-129, 1 table, 3 figs.; New Mexico Bureau Mines Mineral Resources, Open-file Rept. 88, 70 p., 1 table, 3 figs., 5 appendices

**1978b** (Chamberlin, R. M., Osburn, G. R., Sanford, A. R., and White, D. W.) Geological and geophysical maps of the Socorro geothermal area, in Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, 1 sheet with 3 maps at scale 1:62,500 and 1 map at scale 1:250,000

**1976** (and Deal, E. G.) The A-L Peak tuff, New Mexico—a composite ash-flow sheet (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 575

**1978** (and Elston, W. E., editors) Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico: New Mexico Geol. Soc., Spec. Pub. 7, 149 p.

**1978** (Jahns, R. H., Chamberlin, R. M., and Osburn, G. R.) First day, road log from Socorro to

- Truth or Consequences via Magdalena and Winston, *in* Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 1-31, 14 figs.
- 1979** (Osburn, G. R., Hook, S. C., Massingill, G. L., and Frost, S. J.) Coal, uranium, oil, and gas potential of the Riley-Puertecito area, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 103, 38 p., 12 tables, 4 figs., 4 sheets
- 1980** (Sanford, A. R., and Brown, L. D.) Past and present magmatic and hydrothermal systems at Socorro, New Mexico (abs.): *Am. Geophys. Union (EOS)*, Trans., v. 61, no. 46, p. 1150
- 1979** (Sanford, A. R., White, D. W., Chamberlin, R. M., and Osburn, G. R.) Geological investigation of the Socorro geothermal area: New Mexico Energy Inst., Rept. NMEI-26, 70 p.
- see* Brown, L. D., Allmendinger, and others, 1980; Brown, L. D., Chapin, and others, 1980; Brown, L. D., Krumhansl, Chapin, and others, 1979; Brown, L. D., Krumhansl, Cook, Kaufman, and others, 1978; Hawley, Chapin, Chamberlin, and others, 1978; Hawley, Chapin, and Osburn, 1978; Hawley, Lovejoy, and others, 1978; Lindley and others, 1980; Oliver, J. E., Sanford, and others, 1976; Olsen, K. H., and Chapin, 1978; *and* Woodward, Callender, and others, 1978
- Chapman, Wood, and Griswold, Inc.**
- 1979** [revision] Geology of Grants uranium region: New Mexico Bureau Mines Mineral Resources, Geol. Map 31, 3 sheets, scale 1:125,000, 1st edition pub. 1977
- Chappelle, Ray L.**
- see* Constant and Chappelle, 1978
- Charles, R. W.**
- 1978** Experimental alteration of a granodiorite in a circulation system: *Natl. Tech. Inf. Serv., Rept. LA-UR-78-926*, 5 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 2, p. 31
- 1976** (and Herrick, C. C.) Attempts to correlate experimental observations with computer modeling for the prediction of mass transport in some feldspar systems (abs.): *Am. Geophys. Union (EOS)*, Trans., v. 57, no. 4, p. 353
- 1977** (West, F. G., Pettitt, R. A., Laughlin, A. W., and Balagna, J. P.) Status of the Los Alamos experiment to extract geothermal energy from dry hot rock (abs.): *Geology*, v. 5, no. 4, p. 237-290
- see* Balagna, West, and others, 1977; Laughlin, West, and others, 1977; *and* Potter, J. M., and others, 1976
- Chaturvedi, Lokesh N.**
- 1980a** Geothermal hydrology, *in* State-coupled low temperature geothermal resource assessment program, fiscal year 1979, final technical report, L. Icerman, A. Starkey, and N. Trentman, editors: *Natl. Tech. Inf. Serv., Rept. DOE/ID/01717-1*, p. 8.1-8.22, 1 table
- 1980b** Analysis of geological and geophysical logs of two geothermal exploration wells drilled on NMSU land, Las Cruces, New Mexico, *in* State-coupled low temperature geothermal resource assessment program, fiscal year 1979, final technical report, L. Icerman, A. Starkey, and N. Trentman, editors: *Natl. Tech. Inf. Serv., Rept. DOE/ID/01717-1*, p. 10.1-10.24
- 1980c** New Mexico State University geothermal production well, *in* State-coupled low temperature geothermal resource assessment program, fiscal year 1979, final technical report, L. Icerman, A. Starkey, and N. Trentman, editors: *Natl. Tech. Inf. Serv., Rept. DOE/ID/01717-1*, p. 11.1-11.40
- 1980d** Estimation of geothermal potential from geothermal aquifer characteristics and groundwater temperature changes with time (abs.): 26th Internat. Geol. Congr., Abs., v. 3, p. 1096
- 1980** (and Lory, J. K.) A preliminary evaluation of geothermal potential of San Juan Basin, New Mexico, using bottom hole temperatures from oil and gas wells: Geothermal Resources Coun., Trans., v. 4, Sept., p. 21-24, 4 figs.
- 1979** (and Ramos-Arras, M.) Geothermal hydrology and hydrogeology of Animas Basin and KGRA, southwestern New Mexico (abs.): *Geol. Soc. America*, Abs. with Programs, v. 11, no. 7, p. 400-401
- see* Gunaji, Thode, and others, 1978; *and* Lansford, Chaturvedi, and others, 1980
- Chavez, E. A.**
- 1976-77** Chloride content of water in selected wells finished in the San Andres Formation 1975-77; New Mexico State Engineer, open-file maps, 5 sheets
- Cheseman, Raymond J.**
- 1978** Geology and oil/potash resources of Delaware Basin, Eddy and Lea Counties, New Mexico, *in* Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 7-14, 2 tables, 7 figs.
- see* Aguilar, Cheseman, and Sandell, 1976; *and* John, C. P., and others, 1978
- Chemical Projects, Ltd.**
- 1978** Supplemental report, helium survey in sec. 13, T. 14 N., R. 10 W., McKinley County, New Mexico, *in* The potential of helium as a guide to uranium ore: Electric Power Research Inst., Rept. EPRI-EA-813, 25 p.
- Chenot, G. R.**
- 1977a** Peterson (Associated gas) field, Roosevelt County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 150-151, 1 table, 1 fig.
- 1977b** Shugart Delaware field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 182-183, 1 table, 1 fig.
- Chenoweth, William L.**
- 1976** Uranium resources of New Mexico, *in* Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: *New Mexico Geol. Soc., Spec. Pub. 6*, p. 138-143, 2 tables, 2 figs.
- 1977** Uranium in the San Juan Basin—an overview: *New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III*, p. 257-262, 2 tables, 4 figs.
- 1979** Uranium in the Santa Fe area, New Mexico: *New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe*, p. 261-264, 2 figs.



- 1980** (and Holen, H. K.) Exploration in Grants uranium region since 1963, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 17-21, 2 tables, 3 figs.; *abs. in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 9; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 687  
*see* Fassett, Molenaar, and others, 1977
- Cherrywell, C. H.**  
*see* Beck, R. G., and others, 1980
- Chery, D. L., Jr.**  
**1976** (and Kagan, R. S.) An overview of the precipitation processing system at the Southwest Watershed Research Center (abs.): Sel. Water Resources Abs., v. 9, no. 24, p. 95
- Chessman, Mary**  
*see* Reiter, Simmons, and others, 1976
- Christensen, David K.**  
*see* LaPoint and Christensen, 1977
- Christiansen, Eric H.**  
**1980** (Bikun, J. V., and Burt, D. M.) Petrology and geochemistry of topaz rhyolites, western United States, *in* Uranium mineralization in fluorine-enriched volcanic rocks, D. M. Burt and others: U.S. Dept. Energy, Rept. GJBX-225-80, p. 37-122  
*see* Bikun and others, 1980; *and* Burt, Bikun, and Christiansen, 1980
- Christiansen, Paige W.**  
*see* Clemons, Christiansen, and James, 1980
- Christie, Virginia L.**  
*see* Rogers, M. A., Christie, and Budding, 1980
- Cima, JoAnne**  
**1978** Physical properties of selected scoria cones in New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 89 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 2, p. 31  
*see also* Osburn, JoAnne Cima
- Clark, David L.**  
**1979** Conodonts and the Pennsylvanian-Permian boundary in the United States (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 246-247
- Clark, Dean S.**  
**1980** Uranium ore rolls in Westwater Canyon Sandstone, San Juan Basin, New Mexico, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 195-201, 4 figs.
- Clark, G. R., II**  
**1978** Byssate scallops in a Late Pennsylvanian lagoon (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 380  
**1979** Raindrop impressions as low-velocity impact structures (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 402
- Clark, J. W.**  
*see* Balch and Clark, 1978
- Clark, W. R.**  
*see* Brooks and Clark, 1978
- Clayton, R. N.**  
*see* Sridhar and others, 1978
- Clement, R. W.**  
**1978** Temperature in streams of New Mexico for the period October 1964 to September 1969: Natl. Tech. Inf. Serv., Rept. PB-299-360, 35 p.; U.S. Geol. Survey, Water-resources Inv. 78-140, 35 p.
- Clemons, Russell E.**  
**1976a** Sierra de las Uvas ash-flow field, south-central New Mexico, *in* Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 115-121, 4 figs.  
**1976b** Origin of the Bell Top Formation ash-flow tuffs, south-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 577  
**1976c** Geology of east half Corralitos Ranch quadrangle, New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 36, 2 sheets, scale 1:24,000  
**1977** Geology of west half Corralitos Ranch quadrangle, New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 44, 2 sheets, scale 1:24,000  
**1978** Geologic cross section of the Good Sight-Cedar Hills depression, *in* Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, sheet in pocket  
**1979** Geology of Good Sight Mountains and Uvas Valley, southwest New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 169, 31 p., 1 table, 23 figs., 2 appendices, 2 sheets in pocket  
**1980** (Christiansen, P. W., and James, H. L.) Southwestern New Mexico: New Mexico Bureau Mines Mineral Resources, Scenic Trip 10, revised, 119 p.  
**1978** (and Seager, W. R.) Road log from junction of N.M. Highway 90 and U.S. Highway 180, Central to Las Cruces via Deming, *in* Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 65-72, 6 figs.  
*see* Callender, Wilt, and Clemons, 1978; Keith, Wilt, and others, 1978; *and* Seager, Clemons, and Elston, 1978
- Clevenger, Tom S.**  
*see* Lansford, Chaturvedi, and others, 1980
- Coal Age**  
**1976** Region IV mining methods: Coal Age, v. 81, no. 10, p. 134-141, 5 figs.  
**1978a** Gasification plant ok without impact statement upheld: Coal Age, v. 83, no. 4, p. 149  
**1978b** New Mexico venture: Coal Age, v. 83, no. 6, p. 49  
**1978c** Four Corners utilities file suit to stop Navajo pollution tax: Coal Age, v. 83, no. 6, p. 33  
**1979a** Scientists say solar gasification tests successful: Coal Age, v. 84, no. 8, p. 32  
**1979b** Navajos say lease sets new standard: Coal Age, v. 84, no. 9, p. 43
- Cobban, William A.**  
**1976** Ammonite record from the Pierre Shale of northeastern New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 165-169, 2 figs.  
**1977a** Fossil mollusks of the Dakota Sandstone

- and intertongued Mancos Shale of west-central New Mexico: *New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III*, p. 213-220, 5 figs.
- 1977b** Characteristic marine molluscan fossils from the Dakota Sandstone and intertongued Mancos Shale, west-central New Mexico: *U.S. Geol. Survey, Prof. Paper 1009*, 74 p., 21 pls., 4 tables, 7 figs.
- 1979** (and Hook, S. C.) *Collignoniceris woollgari woollgari* (Mantell) ammonite fauna from Upper Cretaceous of Western Interior, United States: *New Mexico Bureau Mines Mineral Resources, Mem. 37*, 51 p., 12 pls., 12 figs.
- 1980** (and Hook, S. C.) The Upper Cretaceous (Turonian) ammonite family *Coilopoceratidae* Hyatt in the Western Interior of the United States: *U.S. Geol. Survey, Prof. Paper 1192*, 28 p., 21 pls.
- see Hook and Cobban, 1977, 1979, 1980a,b; Hook, Cobban, and Landis, 1980; and Kennedy, W. J., and Cobban, 1976
- Cole, James C.**  
see Marvin and Cole, 1978
- Coleman, Robert B.**  
**1978** Today's uranium milling costs: *Mining Engineering*, v. 30, no. 10, p. 1427-1432, 6 tables, 11 figs.
- Colligan, Myles A.**  
**1977** Baum Upper Penn field, Lea County, New Mexico, in *The oil and gas fields of southeastern New Mexico*, 1977 supplement, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 58-59, 1 table, 1 fig.
- Collins, Carl O.**  
**1978** Bisti Carson Unit Gallup (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 209-212, 5 figs.
- Colpitts, Robert M., Jr.**  
see Smith, C. T., and Colpitts, 1980
- Colton, R. B.**  
**1976** Map showing landslide deposits and late Tertiary and Quaternary faulting in the Ft. Garland-San Luis area, Colorado-New Mexico: *U.S. Geol. Survey, Open-file Rept. 76-185*, scale 1:250,000
- 1979** Geologic hazards in the Rocky Mountain region (abs.): *Geol. Soc. America, Abs. with Programs*, v. 11, no. 6, p. 268-269
- Colvocoresses, A. P.**  
**1979** Stereocombination of Landsat and aeromagnetic data, Claunch, New Mexico: *U.S. Geol. Survey, Open-file Rept. 79-1527*, 3 p.
- Combs, Jim**  
see Johnson, D. M., and Combs, 1976; and Quillin and Combs, 1976
- Comeau, S. P.**  
see Silver, R. M., and Comeau, 1979
- Condie, Kent C.**  
**1976** Precambrian rocks of Ladron Mountains, Socorro County, New Mexico: *New Mexico Bureau Mines Mineral Resources, Geol. Map 38*, scale 1:24,000
- 1978** Geochemistry of Proterozoic granitic plutons from New Mexico, U.S.A.: *Chem. Geology*, v. 21, no. 1/2, p. 131-149, 2 tables, 8 figs.
- 1979** Precambrian rocks of the Taos Range and vicinity, northern New Mexico: *New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe*, p. 107-111, 1 table, 1 fig.
- 1980a** Proterozoic tectonic setting in New Mexico: *New Mexico Geology*, v. 2, no. 2, p. 27-29, 2 figs.
- 1980b** The Tijeras greenstone—evidence for depleted upper mantle beneath New Mexico during the Proterozoic: *Jour. Geology*, v. 88, no. 5, p. 603-609
- 1980** (and Brookins, D. G.) Composition and heat generation of the Precambrian crust in New Mexico: *Geochem. Soc. Japan, Geochem. Jour.*, v. 14, no. 2, p. 95-99
- 1979** (and Budding, A. J.) Geology and geochemistry of Precambrian rocks, central and south-central New Mexico: *New Mexico Bureau Mines Mineral Resources, Mem. 35*, 58 p., 13 tables, 50 figs., 3 sheets in pocket, 1 microfiche
- see Brookins, Bolton, and Condie, 1980; and Robertson, J. M., Condie, and Mathewson, 1978
- Coney, Peter J.**  
**1976a** Structure, volcanic stratigraphy, and gravity across the Mogollon Plateau, New Mexico, in *Cenozoic volcanism in southwestern New Mexico*, W. E. Elston and S. A. Northrop, editors: *New Mexico Geol. Soc., Spec. Pub. 5*, p. 29-41
- 1976b** Plate tectonics and the Laramide orogeny, in *Tectonics and mineral resources of southwestern North America*, L. A. Woodward and S. A. Northrop, editors: *New Mexico Geol. Soc., Spec. Pub. 6*, p. 5-10, 2 figs.
- 1978a** (and Elston, W. E.) Alternate stop on White-water Mesa, in *Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field*, New Mexico, C. E. Chapin and W. E. Elston, editors: *New Mexico Geol. Soc., Spec. Pub. 7*, p. 89
- 1978b** (and Elston, W. E.) Mogollon to Horse Springs via the Bursum Road (NM-78 and Forest Road 28), in *Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field*, New Mexico, C. E. Chapin and W. E. Elston, editors: *New Mexico Geol. Soc., Spec. Pub. 7*, p. 90-99, 3 figs.
- see Elston, Rhodes, Coney, and Deal, 1976; and Kluth and Coney, 1980
- Conine, W. D.**  
**1980** Uranium solution mining—comparison of New Mexico with south Texas, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: *New Mexico Bureau Mines Mineral Resources, Mem. 38*, p. 340-343, 2 tables, 9 figs.
- Conkin, Barbara M.**  
see Conkin, J. E., and Conkin, 1979
- Conkin, James E.**  
**1979** (and Conkin, B. M.) Agglutinate foraminifera from the Lower Mississippian (Kinderhookian) Caballero Formation of New Mexico (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, *Abs.*, p. 31
- Conley, J. N.**  
see Thompson, S., Tovar R., and Conley, 1978, 1980
- Conlon, Michael F.**  
**1978a** Kutz Fruitland, west (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 361-362, 4 figs.
- 1978b** Piñon Fruitland, north (gas), in *Oil and gas*

- fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 458-459, 4 figs.
- Connolly, J. R.**  
see Lisenbee and others, 1979
- Connor, Carol Waite**  
see Craig, L. C., and Connor, 1979
- Conroy, G. C.**  
see Wood, C. B., and others, 1979
- Constant, Frank L.**  
1978 (and Chappelle, R. L.) Developments in west Texas and eastern New Mexico in 1977: Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 8, p. 1364-1371, 5 tables, 3 figs.
- Consulting Professionals, Inc.**  
1977 Hydrologic report, La Tierra subdivision, phase 3, Santa Fe County, New Mexico: consult. rept. to Robert Weil, 13 p.
- Contessa, Joseph V.**  
1975 The comparative influence of plant moisture stress and grazing on erosion in two small waterways in New Mexico: Ph.D. thesis, Univ. Southern Illinois (Carbondale), 161 p.; Dissert. Abs. Internat., 1976, v. 36, no. 12, pt. 1, p. 6037-B
- Conyers, William P.**  
1978 Gavilan Pictured Cliffs (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 320-322, 4 figs.
- Cook, Clarence W.**  
1979 Fluid inclusions and petrogenesis of the Harding pegmatite, Taos County, New Mexico: M.S. thesis, Univ. New Mexico, 143 p.  
see Brookins, Chakoumakos, and others, 1979
- Cook, F.**  
1979 Evaluation of the environmental effects of western surface coal mining, v. 1: Natl. Tech. Inf. Serv., Rept. EPA-600/7-79-110, 137 p.
- Cook, Frederick A.**  
1978 (Decker, E. R., and Smithson, S. B.) Preliminary transient heat-flow model of the Rio Grande rift in southern New Mexico: Earth and Planet. Sci. Letters, v. 40, no. 3, p. 316-326, 5 figs.  
1979 (McCullar, D. B., Decker, E. R., and Smithson, S. B.) Crustal structure and evolution of the southern Rio Grande rift, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 195-208, 1 table, 8 figs., abs. in International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 27-28  
see Brown, L. D., Krumhansl, Chapin, and others, 1979; Brown, L. D., Krumhansl, Cook, and Kaufman, 1978; Brown, L. D., Krumhansl, Cook, Kaufman, and others, 1978; Ramberg and others, 1978; and Schilt and others, 1978
- Cookro, Theresa M.**  
1978 Petrology of the Precambrian granitic rocks from the Ladron Mountains, Socorro County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech.
- Cooley, Maurice E.**  
1979a Effects of uranium development on erosion and associated sedimentation in southern San Juan Basin, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1496, 25 p. [1980]  
1979b Depths of channels in the area of the San Juan Basin regional uranium study, New Mexico, Colorado, Arizona, and Utah: U.S. Geol. Survey, Open-file Rept. 79-1526, 68 p., 26 sheets, scale 1:250,000 [1980]  
1978 (Harshbarger, J. W., Akers, J. P., Hardt, W. F., and Hicks, O. N.) Regional hydrogeology of the Navajo and Hopi Indian Reservations, Arizona, New Mexico, and Utah: U.S. Geol. Survey, Prof. Paper 521-A, p. A1-A61, 12 maps  
see Roeske and others, 1978
- Coonce, C. A., and Associates**  
1977a Santa Fe Downs property, water-availability study for Cipriano Martinez, surveyor, Santa Fe, New Mexico: Coonce and Assoc., consult. rept. to Cipriano Martinez, 8 p.  
1977b Capling subdivision, preliminary water-availability study for Cipriano Martinez, Santa Fe, New Mexico: Coonce and Assoc., consult. rept. to Cipriano Martinez, 9 p.  
1977c Villa subdivision, preliminary water-availability study for Cipriano Martinez, Santa Fe, New Mexico: Coonce and Assoc., consult. rept. to Cipriano Martinez, 9 p.
- Cooper, E. N.**  
1978 (Lyon, D. K., and others) Water-resources research in the Lower Colorado River basin—1977-1978: U.S. Bureau Reclamation, 90 p.
- Coppa, L. V.**  
see Weisner and others, 1980
- Corbitt, LeRoy L.**  
1977 (Nials, F. L., and Varnell, R. J.) Structure of Brockman Hills, southwestern New Mexico: Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 4, p. 601-607, 4 figs.  
1978 (Nials, F. L., and Varnell, R. J.) Laramide thrust faulting, Klondike Hills, southwestern New Mexico: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 297-300, 4 figs., 2 sheets  
see Brookins, Rautman, and Corbitt, 1978; and Varnell and others, 1976
- Cordell, Linda S.**  
1976 The Folsom site in retrospect: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 83-86
- Cordell, Lindrieth**  
1976a Aeromagnetic and gravity studies of the Rio Grande graben in New Mexico between Belen and Pilar, in Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 62-70, 10 figs.; Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 580  
1976b Aeromagnetic map of the Wheeler-Latir-Costilla section of the Sangre de Cristo Mountains in New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 281-282, 1 fig.  
1976c Review of geophysical studies in the Rio Grande rift (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 580-581  
1976d Preliminary complete Bouguer anomaly gravity map of the Taos Basin section of Rio Grande



- graben, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-358, scale 1:250,000
- 1978a** Complete Bouguer anomaly gravity map of the Taos Basin section of the Rio Grande rift, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-317, scale 1:250,000
- 1978b** Regional geophysical setting of the Rio Grande rift: Geol. Soc. America, Bull., v. 89, no. 7, p. 1073-1090, 15 figs.
- 1978c** Gravity profile along Tramway Road, *in* Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 156-158, 2 figs.
- 1978d** Overview of geophysical studies in the Rio Grande rift, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 28-29
- 1979a** Gravimetric expression of graben faulting in Santa Fe country and the Española Basin, New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 59-64, 6 figs.
- 1979b** Aeromagnetic interpretation, *in* Mineral resources of the White Mountain Wilderness and adjacent areas, Lincoln County, New Mexico: U.S. Geol. Survey, Bull. 1453, p. 15-17
- 1979c** Sedimentary facies and gravity anomaly across master faults of the Rio Grande rift in New Mexico: Geology, v. 7, no. 4, p. 201-205
- 1979d** Rio Grande rift, New Mexico (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 78
- 1978** (and Detmering-Beal, Chrys) Principal facts for detailed gravity profile near Albuquerque, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-818, 5 p.
- 1978** (Keller, G. R., and Hildenbrand, T. G.) Complete Bouguer gravity anomaly map of the Rio Grande rift: U.S. Geol. Survey, Open-file Rept. 78-958, scale 1:1,000,000  
*see* Budding, Robertson, and others, 1979
- Corken, R. James**  
**1979** Stratigraphic analysis of the Morrison Formation in the Shiprock-Beautiful Mountain area, northern New Mexico: M.S. thesis, Northern Arizona Univ.  
*see* Huffman, Kirk, and Corken, 1979, 1980
- Cornell, William C.**  
**1980** (and Simpson, R. D.) Leonardian radiolarians from the Delaware Basin (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 21  
*see* Chaifetz and others, 1977; and Nodeland and Cornell, 1976
- Correa, B. P.**  
**1980** Fluorine and lithophile element mineralization in the Black Range and Sierra Cuchillo, New Mexico, *in* Uranium mineralization in fluorine-enriched volcanic rocks, D. M. Burt and others: U.S. Dept. Energy, Rept. GJBX-225-80
- Cortner, J. C.**  
*see* Kauffman and others, 1980
- Costin, L. S.**  
**1980** (and Wawersik, W. R.) Creep healing of fractures in salt (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 17, p. 361
- Cotter, Donald J.**  
*see* Lansford, Chaturvedi, and others, 1980
- Coury, Anny B.**  
**1978** (Varnes, K. L., and Allen, R. W.) Geologic appraisal of undiscovered oil and gas resources in Permian rocks of Permian Basin, west Texas and southeastern New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 507  
*see* Dolton, Coury, and others, 1980; and Dolton, Frezon, and Coury, 1979
- Covert, L. L.**  
*see* Keller, G. R., and Covert, 1977
- Cowart, J. B.**  
*see* Osmond and Cowart, 1980
- Craig, James I.**  
**1977** The mineral industry of New Mexico: U.S. Bureau Mines, Minerals Yearbook, 23 p., 19 tables, 1 fig.
- Craig, Lawrence C.**  
**1979** (and Connor, C. W., compilers) Paleotectonic investigations of the Mississippian System in the United States—pt. I, introduction and regional analyses of the Mississippian System; pt. II, interpretive summary and special features of the Mississippian System; pt. III, 15 pls.: U.S. Geol. Survey, Prof. Paper 1010, 559 p.
- 1979** (and Varnes, K. L.) History of the Mississippian System—an interpretive summary, *in* Paleotectonic investigations of the Mississippian System in the United States—pt. 2, interpretive summary and special features of the Mississippian System, L. C. Craig and C. W. Connor, compilers: U.S. Geol. Survey, Prof. Paper 1010-R, p. 371-406, 4 figs.
- Craig, Steven D.**  
**1980** Hydrogeology and water resources of the Chico Arroyo/Torreon Wash area, Sandoval and McKinley Counties, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 272 p.
- Cramer, Scott**  
**1977** Lazy "J" (Pennsylvanian) field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 130-131, 1 table, 1 fig.
- Crawford, George A.**  
**1979** Sedimentology of Goat Seep Dolomite (Guadalupean, Permian), Guadalupe Mountains, west Texas and New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 3, p. 437
- Creel, Bobby J.**  
*see* Lansford, Chaturvedi, and others, 1980
- Cremer, G. M.**  
**1980** (Duffield, R. B., Smith, M. C., and Wilson, M. G.) Hot dry rock geothermal energy development program annual report, fiscal year 1979: Los Alamos Sci. Lab., Rept. LA-8280-HDR, 248 p.
- Cress, R. H.**  
**1977** Indian Draw Delaware field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 124-125, 1 table, 1 fig.
- Crewdson, R. A.**  
*see* Keller, G. V., Grose, and Crewdson, 1978
- Crim, W. C.**  
*see* Watts, Alminas, Nishi, and Crim, 1978a-c

**Crocket, J. H.**

see Helsen and others, 1978

**Cromwell, D. W.**

1979 Indian Draw Delaware field—a model for deeper Delaware sand exploration, *in* Guadalupian Delaware Mountain Group of west Texas and south-east New Mexico, N. M. Sullivan, editor: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., p. 142–152

**Cross, C.**

see Wilshire and others, 1977

**Crossey, Laura J.**

1979 Intraflow chemical variations in Servilleta basalts—Taos Plateau, New Mexico: M.S. thesis, Washington Univ. (St. Louis, Missouri)

**Crough, S. Thomas**

1980 (Morgan, W. J., and Hargraves, R. B.) Kimberlites—their relationship to mantle hotspots: *Earth and Planet. Sci. Letters*, v. 50, no. 1, p. 260–274, 3 tables, 6 figs.

**Crowe, B. M.**

1978 (Eddy, A. C., Eichelberger, J., and others) Hot dry rock resource assessment and site selection: Los Alamos Sci. Lab., Rept. 7109, p. 13–41

**Crowley, Charles J.**

1977 Developments in Four Corners-intermountain area in 1976: *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 8, p. 1204–1207, 2 tables, 1 fig.

1978 Developments in Four Corners-intermountain area in 1977: *Am. Assoc. Petroleum Geologists, Bull.*, v. 62, no. 8, p. 1360–1363, 2 tables, 1 fig.

**Crowley, Dennis**

1977 West Knowles Drinkard field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 126–127, 1 table, 1 fig.

**Crowley, J. A.**

see McElhinny and others, 1980

**Crumpler, L. S.**

1976 Alkalic basalt-trachyte suite, Mount Taylor volcanic field, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 581

1977 Alkali basalt-trachyte suite and volcanism, northern part of the Mount Taylor volcanic field, New Mexico: M.S. thesis, Univ. New Mexico, 131 p.

1978 Mount Taylor composite volcano, New Mexico—geology of the north and west flanks: *Geol. Soc. America, Abs. with Programs*, v. 10, no. 3, p. 101

1980 An alkali-basalt through trachyte suite, Mesa Chivato, Mount Taylor volcanic field, New Mexico: *Geol. Soc. America, Bull.*, v. 91, no. 5, pt. I, p. 253–255, pt. II, p. 1293–1331

see Aubele and others, 1976; and Brookins, Crumpler, and Elston, 1977

**Cruz, R. R.**

1976 Annual water-resources review, White Sands Missile Range, 1975—a basic-data report (abs.): *Sel. Water Resources Abs.*, v. 9, no. 15, p. 29

1977 Annual water-resources review, White Sands Missile Range, 1976—a basic-data report: U.S. Geol. Survey, Open-file Rept. 77-330, 27 p., 4 tables, 7 figs.

1978 Annual water-resources review, White Sands Missile Range, New Mexico, 1977—a hydrologic-data

report: U.S. Geol. Survey, Open-file Rept. 78-553, 42 p., 5 tables, 13 figs.

1979 Annual water-resources review, White Sands Missile Range, New Mexico, 1978: U.S. Geol. Survey, Open-file Rept. 79-985, 33 p., 5 tables, 10 figs.

1980 Annual water-resources review, White Sands Missile Range, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-753, 28 p.

**Cull, C.**

see O'Connor and Cull, 1977

**Cummings, R. G.**

1979 (and others) Economic factors relevant for electric power produced from hot dry rock geothermal resources—a case study for the Fenton Hill, New Mexico area: *Natl. Tech. Inf. Serv., Rept. DOE/ET/27017-T1*, 45 p.

see Tester, Morris, and others, 1979

**Cunningham, C. P.**

1978 Hydrocarbon source-rock evaluation study, Sunray Mid-Continent oil company Federal M No. 1 well, Sierra County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 157, 44 p., 7 tables, 4 figs.

**Cunningham, John E.**

1979 Revision of Tertiary volcanics in Geologic Map 30: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 104, scale 1:48,000

**Cunningham, M. P.**

1977 Geothermometry of spinel lherzolites, Kilbourne Hole, New Mexico: B.S. paper, Univ. Western Ontario

**Cunningham, S. Blaine**

see Jenkins, J. T., and Cunningham, 1979, 1980

**Currey, F. E.**

see Healey and others, 1978

**Curtis, D. M.**

1978 (compiler) Depositional environments and paleoecology—environmental models in ancient sediments: *Soc. Econ. Paleontologists and Mineralogists, Reprint Ser. 6*, 239 p.

**Curtis, H. S.**

see Adams, S. S., and others, 1978

**Curtis, N. L.**

see Patterson, E. D., Curtis, and DeCicco, 1978

**Curtis, N. M., Jr.**

1976 Erosion and sediment yield in New Mexico: *Fed. Inter-Agency Sediment. Conf., Proc.*, no. 3, p. 1.81–1.90

**Cushman, R. L.**

1976 (and Purtymun, W. D.) Evaluation of yield and water-level relations (abs.): *Sel. Water Resources Abs.*, v. 9, no. 10, p. 30

**Cwik, M. J.**

see Reynolds, J. F., and others, 1978

**Cys, John M.**

1977a Lower and middle Paleozoic stratigraphy of the Tatum Basin, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 1–17, 1 table, 12 figs.

1977b South Prairie Devonian field, Roosevelt County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 154–155, 1 table, 1 fig.

- 1977c** East Shoe Bar Devonian, Lea County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: Roswell Geol. Soc., p. 176-177, 1 table, 1 fig.
- 1977** (Brezina, J. L., and Greenwood, E.) Capitan "reef"—evolution of a concept (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, p. 294
- 1976** (Greenwood, E., and Brezina, J. L.) Capitan "reef"—evolution of concept (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 60, no. 4, p. 661-662
- 1977** (and Mazzullo, S. J.) Biohermal submarine cements, Laborcita Formation (Permian), northern Sacramento Mountains, New Mexico, in *Geology of the Sacramento Mountains, Otero County, New Mexico*, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 43-55, 22 figs.
- 1977** (and others) Capitan reef—evolution of a concept: *Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec.*, Pub. 77-16, Guidebook 1977 field conf., v. 1, p. 201-321  
see Mazzullo and Cys, 1977, 1978a,b, 1979a,b; and Toomey and Cys, 1977a,b, 1979
- Daggett, Paul H.**
- 1977** (and Brown, L. F.) Gravity investigation in central Doña Ana County, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 14-15
- Dames and Moore**
- 1979a** Coal resource occurrence and coal development potential maps of the Lybrook NW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0107, 25 p., 11 sheets, scale 1:24,000 [1982]
- 1979b** Coal resource occurrence and coal development potential maps of the Lybrook quadrangle, Sandoval, Rio Arriba, and San Juan Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0108, 24 p., 11 sheets, scale 1:24,000 [1981]
- 1979c** Coal resource occurrence and coal development potential maps of the Counselor quadrangle, Sandoval and Rio Arriba Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0109, 16 p., 6 sheets, scale 1:24,000 [1981]
- 1979d** Coal resource occurrence and coal development potential maps of the Fire Rock Well quadrangle, San Juan, McKinley, and Sandoval Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0110, 31 p., 18 sheets, scale 1:24,000 [1982]
- 1979e** Coal resource occurrence and coal development potential maps of the Lybrook SE quadrangle, Sandoval, McKinley, and San Juan Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0111, 27 p., 15 sheets, scale 1:24,000 [1982]
- 1979f** Coal resource occurrence and coal development potential maps of the Mule Dam quadrangle, Sandoval County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0112, 26 p., 14 sheets, scale 1:24,000 [1982]
- 1979g** Coal resource occurrence and coal development potential maps of the Pueblo Pintado quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0113, 25 p., 12 sheets, scale 1:24,000 [1982]
- 1979h** Coal resource occurrence and coal development potential maps of the Pueblo Alto Trading Post quadrangle, McKinley and Sandoval Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0114, 31 p., 17 sheets, scale 1:24,000 [1982]
- 1979i** Coal resource occurrence and coal development potential maps of the Star Lake quadrangle, McKinley and Sandoval Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0115, 31 p., 17 sheets, scale 1:24,000 [1982]
- 1979j** Coal resource occurrence and coal development potential maps of the Huerfano Trading Post SW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0152, 25 p., 13 sheets, scale 1:24,000 [1981]
- 1979k** Coal resource occurrence and coal development potential maps of the Blanco Trading Post quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0153, 23 p., 9 sheets, scale 1:24,000 [1981]
- 1979l** Coal resource occurrence and coal development potential maps of the Pueblo Bonito NW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0154, 31 p., 19 sheets, scale 1:24,000 [1982]
- 1979m** Coal resource occurrence and coal development potential maps of the Kimbeto quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0155, 25 p., 11 sheets, scale 1:24,000 [1982]
- 1979n** Coal resource occurrence and coal development potential maps of the Pueblo Bonito quadrangle, San Juan and McKinley Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0156, 19 p., 3 sheets, scale 1:24,000 [1981]
- 1979o** Coal resource occurrence and coal development potential maps of the Sargent Ranch quadrangle, San Juan and McKinley Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0157, 23 p., 9 sheets, scale 1:24,000 [1981]
- 1979p** Coal resource occurrence and coal development potential maps of the Deer Mesa quadrangle, Sandoval County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0158, 26 p., 11 sheets, scale 1:24,000 [1981]
- 1979q** Coal resource occurrence and coal development potential maps of the Taylor Ranch quadrangle, Sandoval County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0159, 13 p., 3 sheets, scale 1:24,000 [1981]
- 1979r** Coal resource occurrence and coal development potential maps of the Arroyo Chijuillita quadrangle, Sandoval County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0160, 14 p., 3 sheets, scale 1:24,000 [1981]
- 1979s** Coal resource occurrence and coal development potential maps of the Ojo Encino Mesa quadrangle, McKinley and Sandoval Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0161, 30 p., 12 sheets, scale 1:24,000 [1982]
- 1979t** Coal resource occurrence and coal development potential maps of the Bisti Trading Post quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0601, 27 p., 12 sheets, scale 1:24,000 [1982]
- 1979u** Coal resource occurrence and coal development potential maps of the Alamo Mesa West quad-

range, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0602, 34 p., 20 sheets, scale 1:24,000 [1981]

**1979v** Coal resource occurrence and coal development potential maps of the Alamo Mesa East quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0603, 28 p., 16 sheets, scale 1:24,000 [1982]

**1979w** Coal resource occurrence and coal development potential maps of the Pillar 3 NE quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0604, 24 p., 8 sheets, scale 1:24,000 [1982]

**1979x** Coal resource occurrence and coal development potential maps of the Tanner Lake quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0605, 35 p., 25 sheets, scale 1:24,000 [1982]

**1979y** Coal resource occurrence and coal development potential maps of the Pretty Rock quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0606, 31 p., 23 sheets, scale 1:24,000 [1982]

**1979z** Coal resource occurrence and coal development potential maps of the Llaves SW quadrangle, Rio Arriba County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0608, 19 p., 12 sheets, scale 1:24,000 [1981]

**1979aa** Coal resource occurrence and coal development potential maps of the Regina quadrangle, Rio Arriba and Sandoval Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0609, 10 p., 2 sheets, scale 1:24,000 [1981]

**1979bb** Coal resource occurrence and coal development potential maps of the Gallegos Trading Post quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0610, 24 p., 13 sheets, scale 1:24,000 [1981]

**1979cc** Coal resource occurrence and coal development potential maps of the Bloomfield SW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0611, 21 p., 16 sheets, scale 1:24,000 [1981]

**1979dd** Coal resource occurrence and coal development potential maps of the Huerfano Trading Post NW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0612, 27 p., 16 sheets, scale 1:24,000 [1981]

**1979ee** Coal resource occurrence and coal development potential maps of the Bloomfield SE quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0613, 21 p., 17 sheets, scale 1:24,000 [1981]

**1979ff** Coal resource occurrence and coal development potential maps of the Gould Pass SW quadrangle, San Juan and Rio Arriba Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0614, 21 p., 17 sheets, scale 1:24,000 [1981]

**1979gg** Coal resource occurrence and coal development potential maps of the Gould Pass SE quadrangle, Rio Arriba and San Juan Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0615, 19 p., 13 sheets, scale 1:24,000 [1981]

**1979hh** Coal resource occurrence and coal development potential maps of the Santos Peak quadrangle,

Rio Arriba County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0616, 20 p., 16 sheets, scale 1:24,000 [1981]

**1979ii** Coal resource occurrence and coal development potential maps of the Huerfano Trading Post quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0617, 18 p., 13 sheets, scale 1:24,000 [1981]

**1979jj** Coal resource occurrence and coal development potential maps of the Nageezi NW quadrangle, San Juan and Rio Arriba Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0618, 21 p., 21 sheets, scale 1:24,000 [1981]

**1979kk** Coal resource occurrence and coal development potential maps of the SW quarter of the Nageezi 15-minute quadrangle, San Juan and Rio Arriba Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0621, 18 p., 9 sheets, scale 1:24,000 [1981]

**1979ll** Coal resource occurrence and coal development potential maps of the Tafoya Canyon quadrangle, Rio Arriba County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0622, 14 p., 7 sheets, scale 1:24,000 [1981]

**1979mm** Coal resource occurrence and coal development potential maps of the Waterflow quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0793, 30 p., 21 sheets, scale 1:24,000 [1982]

**1979nn** Coal resource occurrence and coal development potential maps of the Fruitland quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0794, 20 p., 7 sheets, scale 1:24,000 [1982]

**1979oo** Coal resource occurrence and coal development potential maps of the Kirtland quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0795, 25 p., 17 sheets, scale 1:24,000 [1982]

**1979pp** Coal resource occurrence and coal development potential maps of the Farmington South quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0796, 22 p., 13 sheets, scale 1:24,000 [1981]

**1979qq** Coal resource occurrence and coal development potential maps of the Horn Canyon quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0797, 18 p., 12 sheets, scale 1:24,000 [1981]

**1979rr** Coal resource occurrence and coal development potential maps of the Bloomfield NW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0798, 21 p., 17 sheets, scale 1:24,000 [1981]

**1979ss** Coal resource occurrence and coal development potential maps of the Bloomfield NE quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0799, 23 p., 21 sheets, scale 1:24,000 [1981]

**1979tt** Coal resource occurrence and coal development potential maps of the Gould Pass NW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0800, 24 p., 28 sheets, scale 1:24,000 [1981]

**1979uu** Coal resource occurrence and coal development potential maps of the NE quarter of the Gould

Pass 15-minute quadrangle, Rio Arriba and San Juan Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0801, 20 p., 16 sheets, scale 1:24,000 [1981]

**1979vv** Coal resource occurrence and coal development potential maps of the Kirtland SE quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0802, 23 p., 8 sheets, scale 1:24,000 [1981]

**1979ww** Coal resource occurrence and coal development potential maps of the Hugh Lake quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0803, 23 p., 14 sheets, scale 1:24,000 [1981]

**1979xx** Coal resource occurrence and coal development potential maps of the Pillar quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0804, 30 p., 29 sheets, scale 1:24,000 [1981]

**1979yy** Coal resource occurrence and coal development potential maps of the Moncisco Wash quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0805, 28 p., 28 sheets, scale 1:24,000 [1981]

**1979zz** Coal resource occurrence and coal development potential maps of the Carson Trading Post quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0806, 28 p., 17 sheets, scale 1:24,000 [1981]

**1979aaa** Coal resource occurrence and coal development potential maps of the Johnson Trading Post quadrangle, Sandoval County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0808, 21 p., 6 sheets, scale 1:24,000 [1982]

**1979bbb** Coal resource occurrence and coal development potential maps of the Mesa Portales quadrangle, Sandoval County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-0809, 21 p., 6 sheets, scale 1:24,000 [1982]

**1979ccc** Coal resource occurrence and coal development potential maps of the La Plata quadrangle, San Juan County, New Mexico, and La Plata County, Colorado: U.S. Geol. Survey, Open-file Rept. 79-1110, 30 p., 17 sheets, scale 1:24,000 [1982]

**1979ddd** Coal resource occurrence and coal development potential maps of the Adobe Downs Ranch quadrangle, San Juan County, New Mexico, and La Plata County, Colorado: U.S. Geol. Survey, Open-file Rept. 79-1111, 23 p., 24 sheets, scale 1:24,000 [1982]

**1979eee** Coal resource occurrence and coal development potential maps of the Aztec NW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1112, 21 p., 20 sheets, scale 1:24,000 [1981]

**1979fff** Coal resource occurrence and coal development potential maps of the Aztec NE quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1113, 19 p., 11 sheets, scale 1:24,000 [1981]

**1979ggg** Coal resource occurrence and coal development potential maps of the Youngs Lake quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1114, 25 p., 13 sheets, scale 1:24,000 [1981]

**1979hhh** Coal resource occurrence and coal devel-

opment potential maps of the Farmington North quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1115, 19 p., 12 sheets, scale 1:24,000 [1981]

**1979iii** Coal resource occurrence and coal development potential maps of the Flora Vista quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1116, 18 p., 9 sheets, scale 1:24,000 [1981]

**1979jjj** Coal resource occurrence and coal development potential maps of the Aztec SW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1117, 23 p., 20 sheets, scale 1:24,000 [1981]

**1979kkk** Coal resource occurrence and coal development potential maps of the Aztec SE quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1118, 23 p., 27 sheets, scale 1:24,000 [1981]

**1979lll** Coal resource occurrence and coal development potential maps of the Navajo Dam SW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1119, 24 p., 28 sheets, scale 1:24,000 [1981]

**1979mmm** Coal resource occurrence and coal development potential maps of the Pine River quadrangle, Rio Arriba and San Juan Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1120, 25 p., 31 sheets, scale 1:24,000 [1982]

**1979nnn** Coal resource occurrence and coal development potential maps of the Nageezi SE quadrangle, Rio Arriba and San Juan Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1121, 18 p., 12 sheets, scale 1:24,000 [1981]

#### **Damon, Paul E.**

**1976** Mid-Tertiary ash flows of the southern Basin and Range province—time, space, chemistry, and genesis (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 581-582

see Baldridge, Damon, and others, 1980; Deal, Elston, and others, 1978; Kudo and others, 1977; Laughlin, Brookins, and Damon, 1976; and Laughlin, Brookins, Damon, and Shafiqullah, 1979

#### **Danilchik, W.**

see Freeman and Danilchik, 1979; and Roehler and Danilchik, 1980

#### **Dansereau, Danny A.**

**1978** (and Wynn, J. C.) Principal facts for gravity stations in the Hillsboro and San Lorenzo quadrangles, Grant and Sierra Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-541, 10 p., 1 fig.

see Wynn and Dansereau, 1978, 1979

#### **Dantin, E. J.**

see Babcock, R. E., and others, 1978

#### **Darden, Jack M.**

**1977** Bar-U field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 56-57, 1 table, 1 fig.

#### **Dauchy, J.**

**1976** (and Brandvold, L. A.) A selected trace metal profile of the Rio Grande in New Mexico (abs.): 2nd Pacific Conf. on Chemistry and Spectroscopy, Abs., p. 17



**David, Edward K.**

1977a, Haystack Cisco (gas) field, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 112-113, 1 table, 1 fig.

1977b Haystack Siluro-Devonian field, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 114-115, 1 table, 1 fig.

1977c Springs Upper Penn gas field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 188-189, 1 table, 1 fig.

1977a (and others) Fowler Upper Yeso Pool, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 94-95, 1 table, 1 fig.

1977b (and others) Goodwin Abo field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 104-105, 1 table, 1 fig.

1977c (and others) Goodwin Drinkard field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 106-107, 1 table, 1 fig.

*see* Kinchloe and David, 1977

**David, W. Phelps**

1980 (Blanchard, D. P., and Stormer, J. C., Jr.) Apatite and hornblende REE distribution coefficients in a mafic dacite and implications for the role of apatite fractionation in the genesis of siliceous rocks (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 498

**Davis, Beth Ogden**

*see* Finch and others, 1976

**Davis, Donald G.**

1979 Geology and speleogenesis of Ogle Cave—discussion: Natl. Speleological Soc., Bull., v. 41, no. 1, p. 21-22

1980 Cave development in the Guadalupe Mountains—a critical review of recent hypotheses: Natl. Speleological Soc., Bull., v. 42, no. 3, p. 42-48

**Davis, G. H.**

1978 Monocline fold pattern of the Colorado Plateau: Geol. Soc. America, Mem. 151, p. 215-233

**Davis, G. L.**

1978 (and Grew, E. S.) Age of zircon from a crustal xenolith, Kilbourne Hole, New Mexico: Carnegie Inst. Washington, Yearbook 77, p. 897-898

**Davis, Harold**

1978 New ways sought to move longwalls: Coal Age, v. 83, no. 7, p. 162-168, 14 figs.

**Davis, Thomas L.**

1979 (and Stoughton, Dean) Interpretation of seismic reflection data from the northern San Luis Valley, south-central Colorado, *in* Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 186-194, 8 figs.

**Day, J. C.**

1978 International aquifer management—the

Hueco Bolson on the Rio Grande river: Natural Resources Jour., v. 18, no. 1, p. 163-180

**Deal, Edmond G.**

1978 Geology of San Mateo Mountains, *in* Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 97-98

1978 (Elston, W. E., Erb, E. E., Peterson, S. L., Reiter, D. E., Damon, P. E., and Shafiqullah, M.) Cenozoic volcanic geology of the Basin and Range province in Hidalgo County, southwestern New Mexico: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 219-229, 1 table, 5 figs.

1976 (and Rhodes, R. C.) Volcano-tectonic structures in the San Mateo Mountains, Socorro County, New Mexico, *in* Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 51-56, 2 tables, 5 figs.

*see* Chapin and Deal, 1976; Elston, Erb, and Deal, 1979; Elston, Rhodes, Coney, and Deal, 1976; Keith, Wilt, and others, 1978; and Smith, E. I., and others, 1976

**Dean, Walter E.**

1978 Mineralogy and geochemistry of the Ciniza Lake beds and related strata, *in* Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico: Brigham Young Univ., Geology Studies, p. 15-19, 4 tables, 2 figs.

1980 Salinity cycles in the Permian Castile Formation, Delaware Basin, Texas and New Mexico: West Texas Geol. Soc., Newsletter, v. 20, no. 5

1978a (and Anderson, R. Y.) Salinity cycles—evidence for subaqueous deposition of Castile Formation and lower part of Salado Formation, Delaware Basin, Texas and New Mexico, *in* Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 15-20, 6 figs.

1978b (and Anderson, R. Y.) Continuous subaqueous deposition of the Castile and lower Salado Formations, Delaware Basin, Texas and New Mexico (abs.): 10th Internat. Congr. on Sedimentology, v. 1, p. 157

*see* Ash, Dean, and others, 1978

**DeCicco, D. A.**

1979a (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Saint Johns quadrangle, Arizona and New Mexico: U.S. Geol. Survey, Open-file Rept. 79-731, scale 1:250,000

1979b (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Roswell quadrangle, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-734, scale 1:250,000

1979c (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Carlsbad quadrangle, New Mexico and Texas: U.S. Geol. Survey, Open-file Rept. 79-735, scale 1:250,000

1979d (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Hobbs quadrangle, New Mexico and Texas: U.S.

- Geol. Survey, Open-file Rept. 79-736, scale 1:250,000
- 1980a** (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Brownfield quadrangle, Texas, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-103, scale 1:250,000
- 1980b** (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Santa Fe quadrangle, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-104, scale 1:250,000
- 1980c** (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Clovis quadrangle, New Mexico, Texas: U.S. Geol. Survey, Open-file Rept. 80-255, scale 1:250,000
- 1980d** (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the El Paso quadrangle, Texas, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-256, scale 1:250,000
- 1980e** (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Las Cruces quadrangle, New Mexico, Texas: U.S. Geol. Survey, Open-file Rept. 80-257, scale 1:250,000
- 1980f** (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Douglas quadrangle, Arizona, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-493, scale 1:250,000
- 1980g** (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Fort Sumner quadrangle, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-494, scale 1:250,000
- 1980h** (and Patterson, E. D., compilers) Leasable mineral and waterpower land classification map of the Tucumcari quadrangle, New Mexico, Texas: U.S. Geol. Survey, Open-file Rept. 80-495, scale 1:250,000
- 1978a** (Patterson, E. D., and Lutz, G. A., compilers) Leasable mineral and waterpower land classification map of the Albuquerque quadrangle, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-475, scale 1:250,000
- 1978b** (Patterson, E. D., and Lutz, G. A., compilers) Leasable mineral and waterpower land classification map of the Aztec quadrangle, New Mexico, Colorado: U.S. Geol. Survey, Open-file Rept. 78-476, scale 1:250,000
- 1978c** (Patterson, E. D., and Lutz, G. A., compilers) Leasable mineral and waterpower land classification map of the Shiprock quadrangle, New Mexico, Arizona, Colorado, and Utah: U.S. Geol. Survey, Open-file Rept. 78-478, scale 1:250,000
- 1978d** (Patterson, E. D., and Lutz, G. A., compilers) Leasable mineral and waterpower land classification map of the Raton quadrangle, New Mexico, Colorado: U.S. Geol. Survey, Open-file Rept. 78-698, scale 1:250,000
- 1979** (Patterson, E. D., and Lutz, G. A., compilers) Leasable mineral and waterpower land classification map of the Socorro quadrangle, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-732, scale 1:250,000
- 1980** (Patterson, E. D., and Lutz, G. A., compilers) Leasable mineral and waterpower land classification map of the Silver City quadrangle, New Mexico, Arizona: U.S. Geol. Survey, Open-file Rept. 80-492, scale 1:250,000
- 1980** (Patterson, E. D., and Robinson, K. M., compilers) Leasable mineral and waterpower land classification map of the Dalhart quadrangle, Texas, New Mexico, Oklahoma, Colorado, Kansas: U.S. Geol. Survey, Open-file Rept. 80-496, scale 1:250,000
- 1980** (Patterson, E. D., and Yamamoto, G. S., compilers) Leasable mineral and waterpower land classification map of the Clifton quadrangle, Arizona, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-254, scale 1:250,000
- see Banaszynski and others, 1979; and Patterson, E. D., Curtis, and DeCicco, 1978
- Decker, Edward R.**
- 1977** (and Smithson, S. B.) Review of the significance of geothermal and gravity studies in the southern Rio Grande rift (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 15
- see Cook, Decker, and Smithson, 1978; and Cook, McCullar, and others, 1979
- Decker, R. S.**
- see McDaniel and Decker, 1979
- Dein, W. K.**
- see White, R. R., and Dein, 1980
- De Keyser, Thomas L.**
- 1979** The Early Mississippian of the Sacramento Mountains, New Mexico—an ecofacies model for carbonate shelf margin deposition: Ph.D. thesis, Oregon State Univ., 323 p.; *Dissert. Abs. Internat.*, v. 39, no. 7, p. 4234-B
- see Lane and De Keyser, 1979
- Delaney, Paul T.**
- 1980** Magma flow, heat transport and brecciation of host rocks during dike emplacement near Shiprock, New Mexico: Ph.D. thesis, Stanford Univ., 262 p.; *Dissert. Abs. Internat.*, v. 41, no. 5, p. 1685-B-1686-B
- 1978** (and Pollard, D. D.) Basaltic subvolcanic conduits near Shiprock, New Mexico—magma flow, heat transport, and brecciation of host rocks (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 12, p. 1212
- see Pollard and Delaney, 1976, 1978
- Delgado, David J.**
- 1977a** Conglomeratic lithofacies of the Laborcita and Abo Formations (Wolfcampian), north-central Sacramento Mountains—sedimentology and tectonic importance, in *Geology of the Sacramento Mountains, Otero County, New Mexico*, J. H. Butler, editor: *West Texas Geol. Soc., Guidebook*, Pub. 1977-68, p. 90-101, 2 tables, 3 figs.
- 1977b** Paleocaliche textures from Wolfcampian strata of the Sacramento Mountains, New Mexico, in *Geology of the Sacramento Mountains, Otero County, New Mexico*, J. H. Butler, editor: *West Texas Geol. Soc., Guidebook*, Pub. 1977-68, p. 102-108, 8 figs.
- 1977** (and Pray, L. C.) Stop C-3, the Laborcita Formation, in *Geology of the Sacramento Mountains, Otero County, New Mexico*, J. H. Butler, editor: *West Texas Geol. Soc., Guidebook*, Pub. 1977-68, p. 173-174, 2 figs.
- Della Valle, Richard S.**
- 1980a** (and Brookins, D. G.) Geochemical studies



- of Grants mineral belt, *abs. in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 399; Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 9; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 687
- 1980b** (and Brookins, D. G.) Rare earth element, thorium and uranium trends in Jurassic and Cretaceous rocks, northwestern New Mexico—implications for uranium ore genesis in the Grants mineral belt (*abs.*): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 411  
*see* Bornhorst, Elston, and Della Valle, 1980; Brookins and Della Valle, 1977, 1979; Brookins, Della Valle, and Balagna, 1979; Brookins, Della Valle, and Lee, 1977, 1978a,b; Brookins, Della Valle, and Register, 1980; Hicks, R. T., and others, 1979, 1980; Place and others, 1979, 1980; Register, M. E., Brookins, and Della Valle, 1978; *and* Riese, Brookins, and Della Valle, 1978, 1979, 1980
- Dellechaie, F.**  
**1973** Chemical and petrographic variations in the Cerro Colorado and Paxton Springs basalt flows, Valencia County, New Mexico: M.S. thesis, Kent State Univ.  
**1977** A geological and hydro-geochemical study of the Animas geothermal area, Hidalgo County, New Mexico: Geothermal Resources Coun., Ann. Mtg. Trans., p. 73-75
- DeMark, R. S.**  
**1980** The Red Cloud mines, Gallinas Mountains, New Mexico: Mineral. Record, v. 11, no. 2, p. 69-72
- DeMaster, D. J.**  
*see* Nozaki, DeMaster, Benninger, and others, 1977; *and* Nozaki, DeMaster, Lewis, and Turekian, 1978
- Denison, Rodger, E.**  
**1980** Pre-Bliss rocks in the Van Horn region, Trans-Pecos Texas: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, p. 155-158, 2 figs.
- Dennis, Bert R.**  
**1978** (and Horton, E. H.) Hot dry rock, an alternative geothermal energy resource—a challenge for instrumentation: Natl. Tech. Inf. Serv., Rept. LA-UR-78-707, 14 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 1, p. 16  
**1978** (Miles, D. J., Pettitt, R. A., and others) Drilling and fracturing [hot dry rock]: Los Alamos Sci. Lab., Rept. 7109, p. 67-78  
**1978** (and Murphy, H. D.) Borehole temperature survey analysis, hot dry rock geothermal reservoir: Natl. Tech. Inf. Serv., Rept. LA-UR-78-905, 5 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 2, p. 31
- Dennis, John G.**  
**1978** (and Häll, Rolf) Jura-type folds—a centrifuge experiment: Tectonophysics, v. 45, no. 2/3, p. T15-T25, 7 figs.
- Denton, E. H.**  
*see* Reimer and others, 1979
- Depetro, Lynne M.**  
*see* Owen, Walters, Depetro, and Turmelle, 1978
- De Simpson, Ronald**  
**1976** Systematic paleontology and paleoenvironmental analysis of the Hueco Formation, Robledo and Doña Ana Mountains, Doña Ana County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 66, 267 p., 6 pls., 1 table, 5 figs., 2 appendices; M.S. thesis, Univ. Texas
- Des Marais, David J.**  
**1980** (Mitchell, J. M., Meinschein, W. G., and Hayes, J. M.) The carbon isotope biogeochemistry of the individual hydrocarbons in bat guano and the ecology of the insectivorous bats in the region of Carlsbad, New Mexico: Geochim. et Cosmochim. Acta, v. 44, no. 12, p. 2075-2086
- Detmering-Beal, Chrys**  
*see* Cordell and Detmering-Beal, 1978
- Devine, Paul E.**  
**1980** Depositional patterns in the Point Lookout Sandstone, northeast San Juan Basin, New Mexico: M.S. thesis, Univ. Texas (Austin)
- DeVoto, Richard H.**  
**1979** (and Mead, R. H.) Use of helium in uranium exploration, Grants district, New Mexico, *abs. in* Grants uranium region, a symposium: Am. Assoc. Petroleum Geologists, Program, p. 10  
**1977** (Mead, R. H., Bergquist, L. E., and Martin, J. P.) Helium detection in uranium exploration (*abs.*): Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 8, p. 1376  
**1980** (Mead, R. H., Martin, J. P., and Bergquist, L. E.) Use of helium in uranium exploration, Grants district, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 368-379, 12 figs.
- Dewey, J. D.**  
**1979** (Roybal, F. E., and Funderburg, D. E.) Hydrologic data on channel adjustments, 1970 to 1975, on the Rio Grande downstream from Cochiti Dam, New Mexico, before and after closure: Natl. Tech. Inf. Serv., Rept. PB-301 134, 540 p.; U.S. Geol. Survey, Water-resources Inv. 79-70, 540 p.
- Dewey, James W.**  
*see* Herrmann, Dewey, and Park, 1980
- Dhingra, K. C.**  
*see* Hsu and others, 1978
- Dickerson, Patricia W.**  
**1980** (and Hoffer, J. M., editors) Trans-Pecos region, southeastern New Mexico and west Texas: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, 314 p.
- Dickey, D. D.**  
*see* Wright, J. C., and Dickey, 1979a,b; *and* Wright, J. C., Dickey, and Freeman, 1979
- Dickinson, William R.**  
**1979** (and Sucezek, C. A.) Plate tectonics and sandstone compositions: Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 12, p. 2164-2182, 1 table, 7 figs.  
*see* Snyder, W. S., and others, 1976
- Diemer, R. A.**  
**1980** (Gibson, W. R., and Miller, H. A., Jr.) Developments in west Texas and eastern New Mexico in 1979: Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 9, p. 1369-1376, 4 tables, 5 figs.
- Dimitrijevič, I. J.**  
**1976** (G'Schwind, J. J., and Treiber, J. A.) Gravi-

- metric parameters ( $\zeta$ ,  $\xi$ ,  $\eta$ ) for the Redondo Peak region of New Mexico, as calculated from terrain corrected gravity anomalies (abs.): *Am. Geophys. Union (EOS)*, *Trans.*, v. 57, no. 4, p. 234
- DiPippo, R.**  
1978 Geothermal power plants of the United States—a technical survey of existing and planned installations: *Natl. Tech. Inf. Serv., Rept. COO-4051-20*, 129 p.
- Djeddi, Rabah**  
1979 An integrated geophysical and geological study of the deep structure and tectonics of the Permian Basin of west Texas and southeastern New Mexico: M.S. thesis, Univ. Texas (El Paso)  
*see* Keller, G. R., Hills, and Djeddi, 1980a, b
- Dobson, Steven W.**  
*see* Marvin and Dobson, 1979
- Dobyns, H. F.**  
1978 Who killed the Gila?: *Jour. Arizona History*, v. 19, no. 1, p. 17-30; *Sel. Water Resources Abs.*, v. 11, no. 18, p. 49
- Dodge, William S.**  
1979 Flow direction studies of mid-Tertiary volcanic rocks, southwest New Mexico, and early Paleozoic rocks of the Carolina slate belt, North Carolina: M.S. thesis, North Carolina State Univ.
- Dodson, J. G.**  
*see* Sibbitt and others, 1978, 1979
- Doe, B. R.**  
1979 The application of lead isotopes to mineral prospect evaluation of Cretaceous-Tertiary magmatothermal ore deposits in the western United States: *Internat. Geochem. Explor. Symp., Proc.*, no. 7, p. 227-232
- Dollase, W. A.**  
1978 (and Thomas, W. M.) The crystal chemistry of silica-rich, alkali-deficient nepheline: *Contr. Mineralogy and Petrology*, v. 66, no. 3, p. 311-318, 3 tables, 1 fig.
- Dolphin, Lambert T.**  
1978 (Beatty, W. B., and Tanzi, J. D.) Radar probing of Victorio Peak, New Mexico: *Geophysics*, v. 43, no. 7, p. 1441-1448, 1 table, 6 figs.
- Dolton, Gordon L.**  
1980 (Coury, A. B., Frezon, S. E., Robinson, K. M., Varnes, K. L., Wunder, J. M., and Allen, R. W.) Estimates of undiscovered oil and gas, Permian Basin of west Texas and southeast New Mexico: *U.S. Geol. Survey, Open-file Rept. 79-838*, 118 p.  
1979 (Frezon, S. E., and Coury, A. B.) Oil and gas resources of Permian Basin, west Texas and southeastern New Mexico (abs.): *U.S. Geol. Survey, Prof. Paper 1150*, p. 29-30  
1978 (and Wunder, J. M.) Geologic appraisal of undiscovered oil and gas resources in pre-Mississippian rocks of Permian Basin, west Texas and southeastern New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 62, no. 3, p. 509-510
- Donaldson, David A.**  
*see* Arnold, Hill, and Donaldson, 1980; Arnold, Hill, Donaldson, and Foster, 1977; and Arnold, Hill, Donaldson, and others, 1978
- Dondanville, Richard F.**  
1979 Geologic characteristics of Valles caldera geothermal system in New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 5, p. 825-826
- Donze, Martin A.**  
1980 Geology of the Squaw Peak area, Magdalena Mountains, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 123, 131 p., 21 figs., 2 sheets, 3 appendices; M.S. thesis, New Mexico Inst. Mining and Tech.
- Dosch, R. G.**  
1979 Radionuclide migration studies associated with the WIPP site in southern New Mexico, *in* Scientific basis for nuclear waste management—v. 1, G. J. McCarthy, editor: New York, Plenum Press, p. 395-398
- Douglas, A.**  
*see* Thomas, J. H., and others, 1978
- Douglas, D. D.**  
*see* Albright and others, 1978
- Dowis, J. E.**  
*see* Abel and others, 1979
- Dragon, J. C.**  
*see* Saito, Basu, and others, 1977
- Drake, J.**  
1979 Gravity values in the Rocky Mountain Front Range, northern New Mexico and southern Colorado (abs.): *Colorado-Wyoming Acad. Sci., Jour.*, v. 11, no. 1, p. 56
- Dreesen, D. R.**  
1978 (Wangen, L. E., Gladney, E. S., and others) Solubility of trace elements in coal fly ash: *Natl. Tech. Inf. Serv., Rept. CONF-760429*, p. 240-250  
*see* Purtymun, Dreesen, and Weinke, 1977
- Dreicer, Mona**  
*see* Hakonson, White, and others, 1980
- Drew, L. J.**  
1979a (Root, D. H., and Bawiec, W. J.) Estimating future rates of petroleum discoveries in the Permian Basin: *Am. Inst. Mining, Metall., Petroleum Engineers, Soc. Petroleum Engineers, Symp. on Hydrocarbon Econ. and Eval.*, p. 101-106  
1979b (Root, D. H., and Bawiec, W. J.) Forecasting rates of petroleum discovery in the Permian Basin, *abs. in* Computer methods for petroleum geologists: *West Virginia Geol. and Econ. Survey, Circ. 15*, p. 9
- Drew, Roy H.**  
*see* Robinson, K., and others, 1978
- Drewes, Harald**  
1978 Tectonic setting of the porphyry copper deposits of southeastern Arizona and some adjacent areas (abs.): *Arizona Geol. Soc., Digest*, v. 11, p. 91-92  
1978 (and Thorman, C. H.) Major geologic structures between Lordsburg, New Mexico, and Tucson, Arizona: *New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona*, p. 291-295, 1 fig.  
1980a (and Thorman, C. H.) Geologic map of the Cotton City quadrangle and the adjacent part of the Vanar quadrangle, Hidalgo County, New Mexico: *U.S. Geol. Survey, Misc. Inv. Ser., Map I-1221*, scale 1:24,000  
1980b (and Thorman, C. H.) Geologic map of the Steins quadrangle, and the adjacent part of the Vanar quadrangle, Hidalgo County, New Mexico: *U.S. Geol. Survey, Misc. Inv. Ser., Map I-1220*, scale 1:24,000

- see Repetski and Drewes, 1979; and Thorman and Drewes, 1978a,b, 1979a,b, 1980
- Drill Bit**  
1978 Delaware northwest trend theory proves true: Drill Bit, v. 26, no. 7, p. 34
- Dubois, Dean**  
see Reid, Bateman, and others, 1977
- DuChene, Harvey R.**  
1977 (Kues, B. S., and Woodward, L. A.) Osha Canyon Formation (Pennsylvanian), new Morrowan unit in north-central New Mexico: Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 9, p. 1513-1522, 1 table, 6 figs.  
see Woodward, DuChene, and Martinez, 1977
- Duffield, R. B.**  
1978 (and Tester, J. W.) Reservoir engineering [hot dry rock]: Los Alamos Sci. Lab., Rept. 7109, p. 79-82  
see Brown, M. C., and others, 1979; and Cremer and others, 1980
- Duffy, Christopher J.**  
1977 Investigation of recharge and groundwater conditions in the western region of the Roswell Basin: M.S. thesis, New Mexico Inst. Mining and Tech.  
1978 Permiability, porosity, and pore compressibility of Fenton Hill granodiorite (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 12, p. 1202  
1978 (Gelhar, L. W., and Gross, G. W.) Recharge and ground-water conditions in the western region of the Roswell Basin: New Mexico State Univ., Water Resources Research Inst., Rept. 100, 111 p., 21 tables, 18 figs., 2 appendices; Natl. Tech. Inf. Serv., Rept. PB-290 577, 111 p.; Sel. Water Resources Abs., 1979, v. 12, no. 8, p. 6  
see Gross, G. W., Duffy, and Hoy, 1976; and Gross, G. W., Hoy, and others, 1980
- Dugan, Thomas A.**  
1977 The San Juan Basin—episodes and aspirations: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 83-89, 1 table, 6 figs.  
1978a (and Fagrelus, Kurt) Amarillo Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 179-180, 3 figs.  
1978b (and Fagrelus, Kurt) Cuervo Mesaverde (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 274-275, 2 figs.  
1978c (and Fagrelus, Kurt) Gallegos Farmington, south (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 310-311, 2 figs.  
1978d (and Fagrelus, Kurt) Harper Hill Fruitland and Pictured Cliffs (gas), in Oil and gas fields of Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 327-328, 3 figs.  
1978e (and Fagrelus, Kurt) Ojo Gallup (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 439-440, 3 figs.  
1978f (and Fagrelus, Kurt) Shiprock Dakota, north (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 488-489, 3 figs.  
1978g (and Fagrelus, Kurt) Shiprock Gallup, north (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 490-491, 3 figs.  
see Kendrick and Dugan, 1978
- Dungan, Michael A.**  
1978 (Lipman, P. W., and Pronold, T. G.) A geochemical reconnaissance of the Taos Plateau volcanic field, abs. in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 30-31
- Dunn, Steven S.**  
1978a Devils Fork Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 276-278, 4 figs.  
1978b Devils Fork Mesaverde (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 279-281, 4 figs.  
1978c Duffers Point Gallup-Dakota (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 282-284, 3 figs.  
1978d Gallegos Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 317-319, 4 figs.  
1978e Pajarito Pennsylvanian (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 449-450, 3 figs.
- Dunning, P. Charles**  
1978 Provenance and paleotectonic setting of Virgilian channel deposits, Holder Formation, Sacramento Mountains, Alamogordo, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 5, p. 215
- Durden, Christopher J.**  
1979 Carboniferous and Permian entomology of western North America (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 57
- Dutro, J. T., Jr.**  
1979 (Gordon, Mackenzie, Jr., and Huddle, J. W.) Paleontological zonation of the Mississippian System, in Paleotectonic investigations of the Mississippian System in the United States—pt. 2, interpretive summary and special features of the Mississippian System, L. C. Craig and C. W. Connor, compilers: U.S. Geol. Survey, Prof. Paper 1010-S, p. 407-429, 6 figs.
- Dutton, Shirley P.**  
see Handford and others, 1980
- Eadie, Gregory G.**  
1977 (and Kaufman, R. F.) Radiological evaluation of the effects of uranium mining and milling operations on selected ground water supplies in the Grants mineral belt, New Mexico: Health Physics, v. 32, no. 4, p. 231-241; Pollution Abs., v. 8, no. 6, p. 904  
see Kaufman, R. F., and others, 1976, 1977
- Earnest, D. F.**  
see Beck, R. G., and others, 1980
- Earth Environmental Consultants, Inc.**  
1976a Geohydrologic conditions in the area of Bachelor Draw Subdivision and Lynch Place Subdivision (Santa Fe County): Earth Environ. Consult., Inc., consult. rept. to Fred C. Hill, Edgewood, 13 p.  
1976b Hydrogeology of Lamay Ranch Estates, Lin-

coln County, New Mexico: Earth Environ. Consult., Inc., consult. rept., 19 p.

**1976c** Preliminary study of geohydrologic conditions and dewatering requirements at proposed uranium mine near Crownpoint, New Mexico: Earth Environ. Consult., Inc., consult. rept. to Tennessee Valley Authority, 63 p.

**1977a** Baseline resource studies in a selected area of southeastern Sandoval County, New Mexico—geohydrological conditions: Earth Environ. Consult., Inc., consult. rept. to Union Carbide Corp., 17 p.

**1977b** Aquifer testing and subsequent dewatering recommendations (southeast Sandoval County): Earth Environ. Consult., Inc., consult. rept. to Union Carbide Corp., 26 p.

#### **Earth Satellite Corporation**

**1979** Geometric pattern recognition techniques applied to Landsat digital data for uranium exploration: U.S. Dept. Energy, Rept. GJBX-26-80

#### **Eaton, Gordon P.**

**1979a** A plate-tectonic model for late Cenozoic crustal spreading in the western United States, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 7-32, 1 table, 7 figs.; *abs.* in International symposium on the Rio Grande rift, Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 31-32

**1979b** Regional geophysics, Cenozoic tectonics, and geologic resources of the Basin and Range province and adjoining regions, in Basin and Range symposium and Great Basin field conference, G. W. Newman and H. J. Goode, editors: Rocky Mtn. Assoc. Geologists, Guidebook 1979 conf., p. 11-39, 15 figs.

**1977** (Peterson, D. L., and Webring, M. W.) Bouguer gravity map of the Mogollon-Santa Rita-Tyrone region, southwestern New Mexico: U.S. Geol. Survey, Open-file Rept. 77-650

**1976** (Peterson, D. L., Webring, M. W., and Ratte, J. C.) Gravity mapping as an aid to reconnaissance exploration for mineral and geothermal energy resources in the Mogollon-Santa Rita-Tyrone region, southwestern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 584

*see* Ratte, Gaskill, and others, 1979

#### **Ebert, James I.**

**1979** (and Gutierrez, A. A.) Remote sensing of geomorphological factors affecting the visibility of archaeological materials: 47th ann. mtg., Am. Soc. Photogrammetry, proc., p. 226-236

*see* Lyons and others, 1976

#### **Ecology Consultants, Inc.**

**1977** Ground-water resources and ground water quality, in Final report on climatological and hydrological conditions in east side Socorro study area: Ecology Consult., Inc., consult. rept. to U.S. Bureau Land Management, p. 50-84, 99-117

#### **Eddy, A. C.**

*see* Crowe and others, 1978; Laughlin and Eddy, 1976; Laughlin, West, and others, 1977; and Simons and Eddy, 1976

#### **Edmison, M. T.**

*see* Babcock, R. E., and others, 1978

#### **Edwards, C. L.**

**1978** (Reiter, M. A., Shearer, C., and Young, W.)

Terrestrial heat flow and crustal radioactivity in northeastern New Mexico and southern Colorado: Geol. Soc. America, Bull., v. 89, no. 9, p. 1341-1350, 2 tables, 5 figs.

*see* Reiter, Edwards, Mansure, and Shearer, 1978; Reiter, Edwards, Shearer, Fisher, and others, 1976; Reiter, Edwards, Shearer, McGrath, and Mansure, 1976; Reiter, Shearer, and Edwards, 1978; and Reiter, Weidman, and others, 1976

#### **Edwards, Duncan L.**

**1978** Petrology and structure of Precambrian rocks in the Bosque Peak quadrangle, north Manzano Mountains, central New Mexico: M.S. thesis, Univ. New Mexico, 105 p.

*see* Woodward, Parchman, and others, 1979

#### **Ehni, W. J.**

*see* Smith, J. L., and others, 1980

#### **Ehrenberg, Stephen N.**

**1977** The Washington Pass volcanic center, Chuska Mountains, New Mexico: Geol. Soc. America, Abs., v. 9, no. 7, p. 964-965

**1978** Petrology of potassic volcanic rocks and ultramafic xenoliths from the Navajo volcanic field, New Mexico and Arizona: Ph.D. thesis, Univ. California (Los Angeles), 276 p.; Dissert. Abs. Internat., 1979, v. 39, no. 7, p. 3199-B-3200-B

**1979** Garnetiferous ultramafic inclusions in minette from the Navajo volcanic field, in The mantle sample—inclusions in kimberlites and other volcanics, F. R. Boyd, editor: Am. Geophys. Union, 2nd Internat. Kimberlite Conf., Proc., v. 2, p. 330-344

**1979** (and Griffin, W. L.) Garnet granulite and associated xenoliths in minette and serpentinite diatremes of the Colorado Plateau: Geology, v. 7, no. 10, p. 483-487, 2 tables, 4 figs.

**1977** (and Perkins, P. C.) Electron microprobe analyses of minerals in Precambrian rocks at the Los Alamos Scientific Laboratory geothermal test site, Jemez Mountains, New Mexico: Los Alamos Sci. Lab., Rept. LA-6695-MS, 15 p.

#### **Eichelberger, J. C.**

**1979** (and Koch, F. G.) Lithic fragments in the Bandelier Tuff, Jemez Mountains, New Mexico: Jour. Volcanology and Geothermal Research, v. 5, no. 1-2, p. 115-134

*see* Ander, Heiken, and others, 1979; and Crowe and others, 1978

#### **Eicher, Don L.**

*see* Pillmore and Eicher, 1976

#### **Eister, Margaret F.**

*see* McIntosh and Eister, 1979

#### **Elam, Jack G.**

**1980** Plate tectonics of the Permian Basin (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program., p. 26

#### **El-Ashry, M. T.**

**1980** Ground-water salinity problems related to irrigation in the Colorado River basin: Ground Water, v. 18, no. 1, p. 37-45

#### **El-Hindi, M. A.**

**1977** Geology and mineralization of the southern part of Pinos Altos area, Fort Bayard quadrangle,

#### **Elias, J. Morrow**

**1977** Exploration review—1976: Mining Congr. Jour., v. 63, no. 2, p. 87-89

- Grant County, New Mexico: M.S. thesis, Colorado School Mines
- Ellet, W. N.**  
**1978** Underground ore-haulage methods in New Mexico potash milling (abs.), *in* Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 87
- Elliot, C. L.**  
**1976** A preliminary geophysical study of a trachyte dike in close proximity to the proposed Los Medanos nuclear waste disposal site, Eddy and Lea Counties, New Mexico: Sandia Lab., open-file rept., 19 p.  
*see* Hern and Elliot, 1978
- Elsberry, K.**  
*see* Albricht and others, 1978
- Elston, Wolfgang E.**  
**1976a** Mid-Tertiary volcanism and plutonism, southwestern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 585  
**1976b** Glossary of stratigraphic terms of the Mogollon-Datil volcanic province, New Mexico, *in* Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 131-144  
**1976c** Tectonic significance of mid-Tertiary volcanism in the Basin and Range province—a critical review with special reference to New Mexico, *in* Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 93-102, 7 figs.  
**1977** Rifting and volcanism in the New Mexico segment of the Basin and Range province, southwestern U.S.A., *in* Petrology and geochemistry of continental rifts, E. R. Neumann and I. B. Ramberg, editors: NATO Advanced Study Inst. Ser., Ser. C, Mathematical and Physical Sci., v. 36, p. 79-86  
**1978a** Triple road junction on Sacaton Mesa to margin of Bursum cauldron in Little Dry Creek Canyon and return to U.S. 180, *in* Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 87-88  
**1978b** Mid-Tertiary cauldrons and their relationship to mineral resources southwestern New Mexico—a brief review, *in* Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 107-113, 1 table, 5 figs.  
**1978c** Economic significance of Oligocene-Miocene ignimbrite cauldrons of southwestern New Mexico and adjacent regions of Mexico (abs.): Simp. Geol. Potencial Minero Estado Sonora, Resúmenes, no. 1, p. 57-58  
**1978** (and Bornhorst, T. J.) The Rio Grande rift in context with post-40 m.y. volcanic and tectonic events of southwestern North America, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 35-36  
**1979** (and Bornhorst, T. J.) The Rio Grande rift in context of regional post-40 m.y. volcanic and tectonic events, *in* Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 416-438, 11 figs.  
**1977** (and Erb, E. E.) Cenozoic volcano-tectonic setting, *in* Geology, petroleum source rocks, and thermal metamorphism in KCM No. 1 Forest Federal well, Hidalgo County, New Mexico, S. Thompson, III, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 152, p. 53-62, 1 table, 5 figs.  
**1980** (and Erb, E. E.) Tertiary volcanic centers as constraints on oil and gas potential of the Basin and Range province—the New Mexico segment of the Pedregosa Basin (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 38  
**1979** (Erb, E. E., and Deal, E. G.) Tertiary geology of Hidalgo County, New Mexico: New Mexico Geology, v. 1, no. 1, p. 1, 3-6, 5 figs.  
**1976** (and Northrop, S. A., editors) Cenozoic volcanism in southwestern New Mexico: New Mexico Geol. Soc., Spec. Pub. 5, 151 p.  
**1976** (Rhodes, R. C., Coney, P. J., and Deal, E. G.) Progress report on the Mogollon Plateau volcanic field, southwestern New Mexico, no. 3—surface expression of a pluton, *in* Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 3-28, 2 tables, 18 figs.  
**1976** (Rhodes, R. C., and Erb, E. E.) Control of mineralization by mid-Tertiary volcanic centers, southwestern New Mexico, *in* Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 125-130, 5 figs.  
*see* Bornhorst and Elston, 1978; Bornhorst, Elston, and Della Valle, 1980; Brookins, Crumpler, and Elston, 1977; Brookins, Eppler, and Elston, 1977; Chapin and Elston, 1978; Coney and Elston, 1978a,b; Deal, Elston, and others, 1978; Erb and Elston, 1977; and Seager, Clemons, and Elston, 1978
- Engineering and Mining Journal**  
**1976** New Mexico's uranium industry threatened by proposed major increases in taxation: Eng. and Mining Jour., v. 178, no. 1, p. 27, 31
- England, Tony**  
*see* Reiter, Simmons, and others, 1976
- Engwall, Carl**  
**1977a** Spencer field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 186-187, 1 table, 1 fig.  
**1977b** Washington Ranch Morrow (gas) field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 214-215, 1 table, 1 fig.
- Environmental Protection Agency**  
**1977** Water quality impacts of uranium mining and milling activities in the Grants mineral belt, New Mexico (abs.): Sel. Water Resources Abs., v. 10, no. 5, p. 76
- Environmental Science and Technology**  
**1977** Cleanup of Morgan Lake in the Four Corners, New Mexico, area is under way: Environ. Sci. and Tech., v. 11, no. 9, p. 844
- Enz, Robert D.**  
**1979** (Kudo, A. M., and Brookins, D. G.) Igneous



- origin of the obicular rocks of the Sandia Mountains, New Mexico: *Geol. Soc. America, Bull.*, v. 90, pt. I, p. 138-140, 1 fig., v. 90, pt. II, p. 349-380
- Eppler, Dean B.**  
**1976** The geology of the San Antonio Mountain area, Tres Piedras, Taos and Rio Arriba Counties, New Mexico: M.S. thesis, Univ. New Mexico, 77 p.  
*see* Brookins, Eppler, and Elston, 1977
- Epstein, Samuel**  
*see* Lambert, S. J., and Epstein, 1980
- Erb, Edward E.**  
**1978** Evolution of mid-Tertiary ash-flow tuff cauldrons in the Animas, southern Peloncillo, and Guadalupe Mountains, Hidalgo County, New Mexico (abs.): *Geol. Soc. America, Bull.*, v. 90, no. 2, pt. I, p. 138-140  
**1979** Petrologic and structural evolution of ash-flow tuff cauldrons and noncauldron-related volcanic rocks in the Animas and southern Peloncillo Mountains, Hidalgo County, New Mexico: Ph.D. thesis, Univ. New Mexico, 286 p.  
**1977** (and Elston, W. E.) Volcano-tectonic setting of the KCM No. 1 Forest Federal well, Winkler anticline, Hidalgo County, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 17  
*see* Deal, Elston, and others, 1978; Elston and Erb, 1977, 1980; Elston, Erb, and Deal, 1979; and Elston Rhodes, and Erb, 1976
- Erickson, George E.**  
**1976** (and Wedow, H., Jr.) Tertiary extrusive sheets and related intrusions in the Black Range, New Mexico, in *Cenozoic volcanism in southwestern New Mexico*, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 63-67, 1 table, 4 figs.
- Erickson, M. S.**  
*see* Moench and Erickson, 1980
- Erpenbeck, M. F.**  
**1979** (and Flores, R. M.) Stratigraphy and depositional environments of the Upper Cretaceous Pictured Cliffs Sandstone and Fruitland Formation in the southwestern San Juan Basin, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 11, no. 6, p. 271
- Esteban, Mateo**  
**1977** Vadose pisolite and caliche: *Am. Assoc. Petroleum Geologists, Bull.*, v. 60, no. 11-1, p. 2048-2057, 1 table, 4 figs.  
**1976** (and Pray, L. C.) Nonvadose origin of pisolite facies, Capitan reef complex (Permian), Guadalupe Mountains, New Mexico and west Texas (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 60, no. 4, p. 670  
**1977a** (and Pray, L. C.) Locality guide, stop I, introduction to strata of the shelf crest, inner Walnut Canyon and Carlsbad Caverns area, upper Yates and lower Tansill Formations: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G87-G90  
**1977b** (and Pray, L. C.) Locality guide, stop II, Hairpin curve, Hairpin dolomite, upper Yates Formation: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G91-G118  
**1977c** (and Pray, L. C.) Locality guide, stop III, Caverns highway road cuts, upper Yates and basal Tansill Formations: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G119-G124  
**1977d** (and Pray, L. C.) Locality guide, stop IV, lower Tansill Formation, Caverns highway roadcuts: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G125-G131  
**1977e** (and Pray, L. C.) Locality guide, stop V, west parking lot, Caverns visitor center, shelf crest, upper Tansill Formation: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G132-G142  
*see* Pray and Esteban, 1977
- Ethridge, Frank G.**  
**1980** (Ortiz, N. V., Granger, H. C., Ferentchak, J. A., and Sunada, D. K.) Effects of ground-water flow on the origin of Colorado Plateau-type uranium deposits, in *Geology and mineral technology of the Grants uranium region, 1979*, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 98-106, 2 tables, 18 figs.  
**1980** (Ortiz, N. V., Sunada, D. K., and Tyler, Noel) Laboratory, field, and computer flow study of the origin of Colorado Plateau-type uranium deposits: U.S. Geol. Survey, Open-file Rept. 80-805, 90 p.  
*see* Ortiz, Ethridge, and Sunada, 1980
- Evans, Robert**  
*see* Kirkland and Evans, 1980
- Evans, W. C.**  
*see* Mariner and others, 1977
- Eveleth, Robert W.**  
**1979a** New methods of working an old mine—case history of the Eberle Group, Mogollon, NM: *New Mexico Geology*, v. 1, no. 1, p. 7-11, 2 tables, 7 figs.  
**1979b** The 1872 mining law—is it really obsolete?: *New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1977-78*, p. 23-29  
**1980** (and Kottowski, F. E.) Mineral production activities in New Mexico during 1978: *New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1978-79*, p. 50-54, 1 table, 1 fig.  
**1980** (and North, R. M.) Reconnaissance report, Brush Heap mine, Kingston mining district, Sierra County, New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 165*, 24 p., 2 tables, 3 figs., 1 appendix  
**1978** (and Sheffer, H. W.) Minerals in the economy of New Mexico: U.S. Bureau Mines, State Mineral Profile 5, 18 p.  
**1980** (and Siemers, W. T.) Preliminary report on the Little Granite mine, Black Range mining district, Sierra County, New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 116*, 13 p.  
*see* Sheffer and Eveleth, 1979
- Eveletti, Robert W.**  
*see* Sheffer and Eveletti, 1978; *see also* Eveleth, Robert W.
- Everett, John R.**  
**1978** (Reid, W. M., and Porter, J. R.) Successful application of Landsat data to geologic exploration (abs.): *Geol. Soc. America, Abs. with Programs*, v. 10, no. 7, p. 398



**Everitt, B. L.**

see Van Devender and Everitt, 1977

**Everson, Joel E.**

**1978** (and Silver, L. T.) Lead systematics of late Cenozoic basalts from the Rio Grande rift, *abs.* in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 36-37

**Ewing, Rodney C.**

**1979** The Harding pegmatite—summary of recent research (abs.): Univ. New Mexico, New Mexico Minerals Symp., p. 2

**1976** (and Kues, B. S., editors) Guidebook of Vermejo Park, northeastern New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, 303 p.

**1977** (and Thompson, Sam, III) Thermal metamorphism of organic matter, in *Geology, petroleum source rocks, and thermal metamorphism in KCM No. 1 Forest Federal well, Hidalgo County, New Mexico*, S. Thompson, III, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 152, p. 49-51  
see Brookins, Chakoumakos, and others, 1979; and Jahns and Ewing, 1976, 1977

**Ewing, Thomas E.**

**1979** Lead isotope data from mineral deposits of southern New Mexico—a reinterpretation: *Econ. Geology*, v. 74, no. 3, p. 678-684, 2 tables, 3 figs.

**Eyde, Ted H.**

**1977** Annual review of mining and engineering, New Mexico—1976: *Mining Engineering*, v. 29, no. 2, p. 51-53

**Fagrelus, Kurt**

**1978a** Cone Paradox (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 268-269, 3 figs.

**1978b** Meadows Gallup (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 408-409, 3 figs.

**1978c** WAW Fruitland-Pictured Cliffs (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 558-560, 5 figs.

**1978** (and Jacobs, J. L.) Ojo Fruitland-Pictured Cliffs (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 437-438, 3 figs.

see Dugan and Fagrelus, 1978a-g; Jacobs, J. L., and Fagrelus, 1978a-b

**Fahnestock, R. K.**

see Harms and Fahnestock, 1977

**Faith Enterprises, Inc.**

**1977** Description of field investigations and hydrology of the Mora River valley near Shoemaker, New Mexico: Faith Enterprises, Inc., consult. rept. to Ted True Ranch, Inc., 19 p.

**Falkowski, Stephen K.**

**1980a** Geology and ore deposits of Johnny M mine, Ambrosia Lake district, in *Geology and mineral technology of Grants uranium region 1979*, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 230-239, 5 figs.; *abs.* in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 10; Am.

Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 687-688

**1980b** The geology and ore deposits of the Johnny M mine, Ambrosia Lake district, Grants, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 154 p.

**Faris, Kathleen Babette**

**1980** A geochemical model for the magmatic history of the Carrizozo basalt field, south-central New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 168 p.

**1980** (and Renault, J. R.) A geochemical model for the magmatic history of the Carrizozo basalt field, south-central New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 12, no. 6, p. 273

**Farmer, B. M.**

see Styron and others, 1979

**Fassett, James E.**

**1976** What happened during Late Cretaceous time in the Raton and San Juan Basins—with some thoughts about the area in between: *New Mexico Geol. Soc., Guidebook 27th field conf.*, Vermejo Park, p. 185-190, 3 figs.

**1977a** (editor) Guidebook of San Juan Basin III, northwestern New Mexico: *New Mexico Geol. Soc., Guidebook 28th field conf.*, San Juan Basin III, 307 p.

**1977b** Geology of the Point Lookout, Cliff House and Pictured Cliffs Sandstones of the San Juan Basin, New Mexico and Colorado: *New Mexico Geol. Soc., Guidebook 28th field conf.*, San Juan Basin III, p. 193-197, 1 table, 1 fig.

**1977c** Stratigraphy of the coals of the San Juan Basin, in *Geology of Rocky Mountain coal*, proceedings, D. K. Murray, editor: *Colorado Geol. Survey, Resource Ser. 1*, p. 61-71

**1979** Comment on "Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico": *Geology*, v. 7, p. 69-70

**1977** (Black, B. A., Jentgen, R. W., and Osterhoudt, W. J.) Third day—road log from El Vado Lake to Farmington via Dulce, Lumberton and Chromo, Ignacio, Colorado, Navajo Dam and Aztec: *New Mexico Geol. Soc., Guidebook 28th field conf.*, San Juan Basin III, p. 39-55

**1977** (and Hinds, J. S.) Geology and fuel resources of the Fruitland Formation and Kirtland Shale of the San Juan Basin, New Mexico and Colorado: *New Mexico Geol. Soc., Guidebook 28th field conf.*, San Juan Basin III, p. 207; *U.S. Geol. Survey, Prof. Paper 676*, 76 p.

**1978a** (and Jentgen, R. W.) Blanco Tocito, south (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 233-240, 1 table, 4 figs.

**1978b** (and Jentgen, R. W.) Largo Gallup (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 376-380, 6 figs.

**1978c** (and Jentgen, R. W.) Tapacito Gallup (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 510-515, 5 figs.

**1977** (Jentgen, R. W., Black, B. A., Molenaar, C. M., and Woodward, L. A.) Second day—road log

- from Red Mountain oil field to El Vado Lake via Pueblo Pintado, Star Lake, Torreon, Cuba and Llaves: *New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III*, p. 19-38
- 1977** (Molenaar, C. M., Black, B. A., Jentgen, R. W., and Chenoweth, W. L.) First day—road log from Farmington to Red Mountain oil field via Bisti, Crownpoint, Thoreau, Baca, and Hospah: *New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III*, p. 1-18
- 1978** (and others) Stratigraphy and oil and gas production of northwest New Mexico, *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 46-61, 5 tables, 4 figs.
- 1978** (Thomaidis, N. D., and Matheny, M. L., editors) Oil and gas fields of the Four Corners area: *Four Corners Geol. Soc.*, 2 v., 725 p.  
*see* Jentgen and Fassett, 1977
- Fehler, Michael**  
**1979** Temperature dependence of in-situ P wave velocity in a hot dry rock geothermal reservoir (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 60, no. 46, p. 946  
*see* Aki and others, 1977
- Feirn, W. C.**  
*see* Beck, R. G., and others, 1980
- Feis, P. Geoffrey**  
**1978** Magmatic sources of copper in porphyry copper deposits: *Econ. Geology*, v. 73, no. 3, p. 397-404
- Feldman, S.**  
**1974** (Inglis, M., Vonder Linden, K., and others) Geologic analysis of ERTS-1 imagery for the State of New Mexico: *Natl. Aeronautics and Space Admin.*, 82 p.
- Fellows, M. L.**  
*see* McKnight and Fellows, 1978
- Felmlee, J. K.**  
**1978** (and Cadigan, R. A.) Radium and uranium data for mineral springs in eight western states: *U.S. Geol. Survey, Open-file Rept.* 78-561, 48 p., 21 figs.
- Fender, John J.**  
**1978** A study of Poisson's ratio in the upper crust in the Socorro, New Mexico, area: *New Mexico Inst. Mining and Tech., Geophysics Open-file Rept.* 25, 78 p.
- Fenn, Philip**  
**1979** (and Jahns, R. H.) Experimental crystallization of Harding, New Mexico, pegmatite: *Geol. Soc. America, Abs. with Program*, v. 11, no. 3, p. 77-78
- Ferek, R. J.**  
*see* Winchester, J. W., and Ferek, 1979
- Ferenbaugh, R. W.**  
*see* Purtymun, Ferenbaugh, and others, 1980
- Ferentchak, James A.**  
*see* Ethridge, Ortiz, Granger, and others, 1980
- Fieseler, R. G.**  
**1978a** (and Kunath, C. E.) McKittrick Cave, *in* The caves of McKittrick Hill, Eddy County, New Mexico—history and results of field work, 1965-1976, C. E. Kunath, editor: *Texas Speleological Soc.*, p. 32-35
- 1978b** (and Kunath, C. E.) Little Sand Cave, *in* The caves of McKittrick Hill, Eddy County, New Mexico—history and results of field work, 1965-1976, C. E. Kunath, editor: *Texas Speleological Soc.*, p. 54-55
- Finch, Warren I.**  
**1976** (Wright, J. C., and Davis, B. O.) Unevaluated preliminary geologic cross section of uranium-bearing Upper Triassic rocks extending from Ute Reservoir, New Mexico, to Palo Duro Canyon, Texas: *U.S. Geol. Survey, Open-file Rept.* 76-205  
*see* Ridgley and others, 1978
- Finn, Dennis D.**  
*see* Mutschler and others, 1978
- Finnell, T. L.**  
**1976a** Geologic map of the Twin Sisters quadrangle, Grant County, New Mexico: *U.S. Geol. Survey, Misc. Field Studies Map MF-779*, scale 1:24,000
- 1976b** Geologic map of the Reading Mountain quadrangle, Grant County, New Mexico: *U.S. Geol. Survey, Misc. Field Studies Map MF-800*, scale 1:24,000  
*see* Ratte and Finnell, 1978
- Fischer, W. A.**  
**1978** (Orr, D. G., and Greenlee, D. D.) An example of the merging of Landsat, topographic, and aeromagnetic data in a geologic and hydrologic study of a karst region, Claunch, New Mexico: *Internat. Symp. Remote Sensing Environ., Proc.*, no. 12, v. 2, p. 805-823
- 1979** (Orr, D. G., and Greenlee, D. D.) Mineral exploration at Claunch, New Mexico (abs.): *U.S. Geol. Survey, Prof. Paper* 1150, p. 285
- Fisher, Dorothy L.**  
*see* Jahns, McMillan, and others, 1978
- Fisher, H. N.**  
*see* Aamodt, Brown, and others, 1978
- Fisher, Jeffrey A.**  
**1977** The use of relative travel time residuals of P phases from teleseismic events to study the crust in the Socorro, New Mexico, area: *New Mexico Inst. Mining and Tech., Geophysics Open-file Rept.* 14, 71 p.  
*see* Reiter, Edwards, Shearer, Fisher, and others, 1976
- Fisher, R. V.**  
**1979** Models for pyroclastic surges and pyroclastic flows: *Jour. Volcanology and Geothermal Research*, v. 6, no. 3-4, p. 305-318
- Fisher, Russell A.**  
**1979** A biogeochemical study of the Recent calcite deposits along the Lucero uplift, Valencia County, New Mexico: *M.S. thesis*, New Mexico Inst. Mining and Tech., 152 p.
- Fisher, W. L.**  
*see* Parker, J. M., and others, 1977
- Fitch, David C.**  
**1977** Case history of discovery of new uranium deposit, Ambrosia Lake district, New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 5, p. 784
- 1980** Exploration for uranium deposits, Grants mineral belt, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: *New Mexico Bureau Mines Mineral Resources, Mem.* 38, p. 40-51, 1 table, 20 figs.; *abs. in* Grants uranium region, a symposium, *Am. Assoc. Petroleum Geologists, 1979, Program*, p. 11; *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 4, p. 688

- see Woodward, Ingersoll, Fitch, and Hutchinson, 1979a,b; and Woodward, Ingersoll, Fitch, and others, 1979
- Fitzsimmons, J. Paul**  
 1980 (and Kelley, V. C.) Red Rock talc deposit, Sierra County, New Mexico: *New Mexico Geology*, v. 2, no. 3, p. 36-38
- Fleischer, Robert L.**  
 1980 Radon flux from the Earth—methods of measurement by the nuclear track technique: *Jour. Geophys. Research*, v. 85-C, no. 12, p. 7553-7556
- 1980 (Hart, H. R., Jr., and Mogro-Campero, Antonio) Radon emanation over an orebody—search for long-distance transport of radon, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: *New Mexico Bureau Mines Mineral Resources, Mem. 38*, p. 380-389, 2 tables, 14 figs.
- 1979a (and Mogro-Campero, Antonio) Radon emanation over orebody—has long-distance transport of radon been discovered?, *abs. in Grants uranium region, a symposium: Am. Assoc. Petroleum Geologists, Program*, p. 11; *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 4, p. 688
- 1979b (and Mogro-Campero, Antonio) Integrated radon mapping in the earth—assessment of the  $^{220}\text{Rn}$  signal and its exclusion: *Geophysics*, v. 44, no. 9, p. 1541-1548
- Fleischhauer, Henry L., Jr.**  
 1977a Soil-age relationships of alluvial and lacustrine deposits, lower Animas Valley, southwest New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 18-19
- 1977b Quaternary geology of Lake Animas, Hidalgo County, New Mexico: M.S. thesis, *New Mexico Inst. Mining and Tech.*, 149 p., 5 tables, 31 figs., 4 appendices
- 1978 Summary of the late Quaternary geology of Lake Animas, Hidalgo County, New Mexico: *New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona*, p. 283-284, 1 fig.
- Flores, Romeo M.**  
 1979 Pictured Cliffs Sandstone—Upper Cretaceous distributary-channel, delta-front, and beach-bar deposits, southwestern San Juan Basin, New Mexico (abs.): *New Mexico Geology*, v. 1, no. 4, p. 60
- 1980 Comparison of depositional models of Tertiary and Upper Cretaceous coal-bearing rocks in some Western Interior basins of the United States: *Colorado Geol. Surv., Resource Ser.*, no. 10, p. 17-20
- 1979 (and Mytton, J. W.) San Juan Basin, New Mexico (abs.): *U.S. Geol. Survey, Prof. Paper 1150*, p. 20
- see Cavaroc and Flores, 1980; and Erpenbeck and Flores, 1979
- Flower, Rousseau H.**  
 1977 Ordovician cephalopods and correlations (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 19
- see Hook and Flower, 1976, 1977
- Fodor, Ronald V.**  
 1976 Volcanic geology of the northern Black Range, New Mexico, in *Cenozoic volcanism in southwestern New Mexico*, W. E. Elston and S. A. Northrop, editors: *New Mexico Geol. Soc., Spec. Pub. 5*, p. 68-70, 1 table, 1 fig.
- 1978 Ultramafic and mafic inclusions and megacrysts in Pliocene basalt, Black Range, New Mexico: *Geol. Soc. America, Bull.*, v. 89, no. 3, p. 451-459, 6 tables, 4 figs.
- Foley, Donald C.**  
 see Jacka, Barone, and others, 1980
- Folk, James K.**  
 1978 Ojito Dakota (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 431-432, 3 figs.
- see Matheny, M. L., and Folk, 1978
- Folk, Robert L.**  
 1977 Reply—calcite and aragonite fabrics, Carlsbad Caverns: *Jour. Sed. Petrology*, v. 47, no. 3, p. 1400-1401, 1 fig.
- 1976 (and Assereto, Riccardo) Comparative fabrics of length-slow and length-fast calcite and calcitized aragonite in a Holocene speleothem, Carlsbad Caverns, New Mexico: *Jour. Sed. Petrology*, v. 46, no. 3, p. 486-496, 11 figs.
- see Loucks, R. G., and Folk, 1976
- Foltz, G. A.**  
 1977 (and Siruta, W. A.) Hobbs Blinebry field, Lea County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 118-119, 1 table, 1 fig.
- see Siruta and Foltz, 1977
- Foord, G.**  
 see Taggart and Foord, 1979
- Foppe, T.**  
 see Thompson, R. S., and others, 1980
- Forbes, R. B.**  
 see Brookins, Forbes, and others, 1977; Naeser and Forbes, 1976; and Turner, D. L., and Forbes, 1976
- Forn, C. L.**  
 see Watts, Hassemer, Forn, and Siems, 1979
- Forrester, John D.**  
 see Kith, Wilt, and others, 1978
- Foster, H. P., Jr.**  
 see Killough and Foster, 1978
- Foster, John F.**  
 1980 (and Quintanar, R. J.) An anomalous orebody within the Ambrosia Lake trend at Sandstone mine, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: *New Mexico Bureau Mines Mineral Resources, Mem. 38*, p. 240-243, 5 tables, 4 figs.; *abs. in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, Program*, p. 11-12; *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 4, p. 688
- see Ander, Laughlin, and others, 1980
- Foster, Mat**  
 see Taylor, R. G., and others, 1978
- Foster, Roy W.**  
 1976 Geology of Loco Hills sand, Loco Hills field, Eddy County, New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 67*, 177 p., 12 tables, 34 figs.
- 1978a Selected data for deep drill holes along Rio Grande rift in New Mexico, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W.

- Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 236-237
- 1978b** Oil and gas evaluation of the White Sands Missile Range and Fort Bliss Military Reservation, south-central New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 92, 130 p., 10 tables, 22 figs., 2 appendices
- 1977** (Austin, G. S., Hawley, J. W., and Stone, W. J.) Preliminary selection of sites geologically suitable for the disposal of hazardous wastes in New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 83, 64 p., 29 figs.
- 1978** (Gutjahr, A. L., and Warner, G. H.) Estimates of New Mexico's future oil production including reserves of the 50 largest pools: New Mexico Bureau Mines Mineral Resources, Circ. 166, 56 p., 8 tables, 58 figs.
- see Arnold, Foster, and others, 1976; Arnold, Hill, Donaldson, and Foster, 1977; Arnold, Hill, Donaldson, and others, 1978; and Stone, W. J., and Foster, 1977
- Fracasso, Michael A.**
- 1980** Age of the Permo-Carboniferous Cutler Formation vertebrate fauna from El Cobre Canyon, New Mexico: Jour. Paleontology, v. 54, no. 6, p. 1237-1244
- Frasier, C. W.**
- see North, R. G., and Frasier, 1977
- Freeman, V. L.**
- 1979** (and Danilchik, W.) Rank and methane content of western coals (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 20
- see Wright, J. C., Dickey, and Freeman, 1979
- Frenzel, Peter F.**
- see Lyford and Frenzel, 1979; and Lyford, Frenzel, and Stone, 1979, 1980
- Frey, Fred A.**
- see Reid and Frey, 1978
- Frezon, Sherwood E.**
- see Dolton, Coury, and others, 1980; Dolton, Frezon, and Coury, 1979; and Robinson, K., and others, 1978
- Frick, U.**
- see Phinney and others, 1978
- Fried, Sherman**
- 1978** (Hines, J. J., and Friedman, A. M.) The migration of uranium wastes from a geologic repository (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 404
- Friedman, Arnold M.**
- see Fried and others, 1978
- Friedman, Irving**
- see Barker, F., Arth, and others, 1976; Barker, F., Friedman, and others, 1976; and Reimer and others, 1979
- Frishman, Mark S.**
- 1979** Use of linear inverse techniques to study Poisson's ratios in the upper crust in the Socorro, New Mexico, area: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 27, 134 p.
- Fritschen, L. J.**
- see Gay and Fritschen, 1979
- Friz, T. O.**
- see Imhoff and others, 1976
- Frizzell, Thomas P.**
- 1977** Teague Blinebry field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 192-193, 1 table, 1 fig.
- Froehlich, J. W.**
- see Kues, B. S., Froehlich, and others, 1977
- Frost, Stephen J.**
- 1979** Coal industry of New Mexico in 1978: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1977-78, p. 30-33, 2 figs.
- 1980** Geographic names: New Mexico Geology, v. 2, no. 4, p. 58, regular column describing official geographic names for New Mexico, starting with this issue
- 1980** (Tabet, D. E., and Campbell, F. W.) Exploratory drilling in the Datil Mountains coal field: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 111, 53 p., 1 table, 7 figs., 4 appendices
- see Chapin, Osburn, and others, 1979; Kottlowski, Tabet, and Frost, 1980; Tabet and Frost, 1978, 1979 a, b; and Tabet, Frost, and Kottlowski, 1977, 1979
- Frye, John C.**
- 1978** (Leonard, A. B., and Glass, H. D.) Late Cenozoic sediments, molluscan faunas, and clay minerals in northeastern New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 160, 32 p., 5 tables, 18 figs.
- see Leonard and Frye, 1978
- Fuchs-Parker, John William**
- 1977** Alibi for a Mesaverde misfit—the La Ventana formation Cretaceous delta, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 199-206, 13 figs.
- Fuller, G. E.**
- see Hayslip, Fuller, and others, 1979, 1980
- Funderburg, D. E.**
- 1977** Trap-efficiency investigation, Bernalillo Floodwater Retarding Reservoir No. 1 (Piedra Lisa Arroyo) near Bernalillo, New Mexico, water years 1956-1974: U.S. Geol. Survey, Open-file Rept. 77-261, 52 p., 4 tables, 23 figs.
- 1977** (and Roybal, F. E.) Sediment trap efficiency of Tortugas Arroyo near Las Cruces, New Mexico, water years 1963-1964: U.S. Geol. Survey, Open-file Rept. 77-586, 63 p., 4 tables, 28 figs.
- see Dewey and others, 1979
- Furgerson, Robert**
- see Ander, Laughlin, and others, 1980
- Gableman, John W.**
- 1977** Migration of uranium and thorium—exploration significance: Am. Assoc. Petroleum Geologists, Studies in Geology no. 3, 168 p.
- 1978** Test use of ERTS/LANDSAT imagery in uranium exploration (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 515
- Gaeddert, Daniel H.**
- see Schery and others, 1980
- Gage, J. E.**
- 1977a** (and Asquith, G. B.) Sedimentology of Mesa Rica Sandstone in Tucumcari Basin, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 157, 14 p., 4 tables, 21 figs.
- 1977b** (and Asquith, G. B.) Sedimentology of Cretaceous Mesa Rica Sandstone, Tucumcari Basin,

- New Mexico (abs.): Am. Assoc. Petroleum Geologists, v. 7, no. 6, p. 758
- Gagnon, L. D.**  
see Cape and others, 1980
- Gallagher, G. L.**  
1973 The petrography of ultramafic inclusions from Bandera Crater, New Mexico: M.S. thesis, Kent State Univ.
- Galloway, Sherman E.**  
1977 (and Nelson, D. W.) Memorandum report on investigation of extent and status of rights to use of water originating at group of springs located in part in Lot 16 in Section 1, T. 16 S., R. 12 E., N.M.P.M. and in part in Lot 12 in Section 6, T. 16 S., R. 13 E., N.M.P.M., near Cloudcroft, in north-central Otero County, New Mexico: New Mexico State Engineer, open-file rept., 11 p.
- Galloway, William E.**  
1978 Morrison Formation, Colorado Plateau, in Depositional and ground-water flow systems in the exploration for uranium—a research colloquium: Univ. Texas (Austin), Bureau Econ. Geology, p. X1–X6  
1979 Morrison Formation of the Colorado Plateau, in Depositional and ground-water flow systems in the exploration for uranium, W. E. Galloway, editor: Univ. Texas (Austin), Bureau Econ. Geology, p. 214–228  
1980 Deposition and early hydrologic evolution of Westwater Canyon wet alluvial-fan system, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 59–69, 1 table, 11 figs.; *abs.* in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 12; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 683  
see Belcher and Galloway, 1977
- City of Gallup**  
1977 Research study on use of uranium mine water as a municipal supply for the City of Gallup, New Mexico: City of Gallup, rept., 100 p.
- Gallus, J. P.**  
see Messer and others, 1978
- Galusha, Ted**  
see Hawley and Galusha, 1978
- Gambill, David T.**  
1980 Tertiary alkalic intrusions of east-central Lucero uplift, central New Mexico: M.S. thesis, Stanford Univ.  
see Levitte and Gambill, 1980
- Gancarz, A. J.**  
1978  $^{87}\text{Sr}/^{86}\text{Sr}$  in water from the Los Alamos hot dry rock geothermal system (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 12, p. 1225  
see Balagna, Beddoe, and others, 1978
- Garcia, Alvin**  
see Jaksha, Locke, and others, 1977, 1978
- Garcia, G.**  
see Aldon and Garcia, 1977
- Garland, T. M.**  
see Attansi and others, 1979
- Garrand, Leonard**  
1978 Potash: Mining Engineering, v. 30, no. 5, p. 538
- Garvin, R. F.**  
1978 Slick Rock Dakota (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 497–499, 4 figs.
- Garza, Sergio**  
see McLean and Garza, 1977
- Gaskill, David L.**  
see Ratte and Gaskill, 1975; and Ratte, Gaskill, and others, 1979
- Gates, Joseph S.**  
see Zohdy and others, 1976
- Gatewood, Lloyd E.**  
1978 Stratigraphic trap possibilities in Arbuckle Group (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 516
- Gawne, Constance E.**  
1976 Lagomorphs from the Zia Sand Miocene of New Mexico: Am. Museum Novitates 2608, 15 p.
- Gay, L. W.**  
1979 ET measurements on the Pecos River floodplain (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 46, p. 828  
1979 (and Fritschen, L. J.) An energy budget analysis of water use by saltcedar: Water Resources Research, v. 15, no. 6, p. 1589–1592
- Gebula, G. T.**  
see Izett and others, 1978
- Geeslin, Jill H.**  
1980 Petrography of the Aleman Formation, Upper Ordovician, Silver City Range, southwestern New Mexico: M.S. thesis, Univ. Houston
- Gelhar, Lynn W.**  
see Duffy and others, 1978; and MacMillan and others, 1976
- Gentry, D. W.**  
1978 (and Abel, J. F., Jr.) Surface response to longwall coal mining in mountainous terrain: Assoc. Eng. Geologists, Bull., v. 15, no. 2, p. 191–220
- Geodata International**  
1976a Aerial radiometric and magnetic survey of the Tucumcari national topographic map, NI 13-3, Texas and New Mexico: U.S. Dept. Energy, Rept. GJBX-33-76  
1976b Aerial radiometric and magnetic survey of the Clovis national topographic map, NI 13-6, Texas and New Mexico: U.S. Dept. Energy, Rept. GJBX-33-76  
1976c Aerial radiometric and magnetic survey of the Brownfield national topographic map, NI 13-9, Texas and New Mexico: U.S. Dept. Energy, Rept. GJBX-33-76  
1978 Aerial radiometric and magnetic survey—Tularosa national topographic map, New Mexico: U.S. Dept. Energy, Rept. GJBX-67-79, 56 p.  
1980a Aerial radiometric and magnetic survey, Aztec national topographic map, New Mexico, Rocky Mountains, 1979: U.S. Dept. Energy, Rept. GJBX-65-80, 2 sheets, scale 1:500,000  
1980b Aerial radiometric and magnetic survey, Hobbs national topographic map, Texas, New Mexico—final report: U.S. Dept. Energy, Rept. GJBX-228-80, 2 sheets, scale 1:500,000  
see High Life Helicopters and Geodata International, 1979

**Geohydrology Associates, Inc.**

1978 Collection of hydrologic data Eastside Roswell Range EIS area, New Mexico: Geohydrology Assoc., Inc., rept. to Bureau Land Management; New Mexico Bureau Mines Mineral Resources, Open-file Rept. 95, 223 p., 6 tables, 24 figs., appendix

**Geometrics**

1979a Aerial gamma ray and magnetic survey Raton Basin project, Shiprock and Gallup quadrangles, Arizona/New Mexico, and Albuquerque quadrangle, New Mexico—final report: U.S. Dept. Energy, Rept. GJBX-116-79, 59 p.

1979b Aerial gamma ray and magnetic survey Raton Basin project, Raton and Santa Fe quadrangles, New Mexico—final report: U.S. Dept. Energy, Rept. GJBX-9-80

**Geonomics**

1978a Geothermal environmental impact assessment—baseline data for four geothermal areas in the United States: Natl. Tech. Inf. Serv., Rept. EPA-600/7-78-188, 339 p.

1978b Geothermal environmental impact assessment, subsurface environmental assessment for four geothermal systems: Natl. Tech. Inf. Serv., Rept. EPA-600/7-78-207, 240 p.

**Geotimes**

1980 Stress releases radon: *Geotimes*, v. 25, no. 3, p. 25-26

**Gerety, Michael T.**

1980 Bipole-dipole electrical technique applied to geothermal exploration in New Mexico: M.S. thesis, Univ. New Mexico

see Jiracek, Smith, and Gerety, 1976

**Gertsch, W. D.**

1977 (Sathaye, J., Ritschard, R., and others) Water requirements for future energy development in the West—state perspectives: Los Alamos Sci. Lab., Rept. 6688, 51 p.

**Gibson, Gail G.**

1975 Phanerozoic geology of the Gallina quadrangle, Rio Arriba County, north-central New Mexico: Ph.D. thesis, Univ. New Mexico, 226 p.; Dissert. Abs. Internat., 1976, v. 37, no. 4, p. 1593-B-1594-B  
see Woodward, Gibson, and McLelland, 1976

**Gibson, Wayne R.**

1979 (and Stichtenoth, C. W.) Developments in west Texas and eastern New Mexico in 1978: Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 8, p. 1236-1243, 4 tables, 5 figs.

see Diemer and others, 1980

**Gilbert, J. L.**

1976 (and Asquith, G. B.) Sedimentology of braided alluvial interval of Dakota Sandstone, north-eastern New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 150, 16 p., 4 tables, 20 figs.

see Asquith and Gilbert, 1976; and Asquith, Gilbert, and Smith, 1976

**Gile, Leland H.**

1977 Holocene soils and soil-geomorphic relations in a semi-arid region of southern New Mexico: Quaternary Research, v. 7, no. 1, p. 112-132, 5 tables, 13 figs.

**Giles, David L.**

1976 Precambrian mineralization in the southern Rocky Mountain region, in *Tectonics and mineral re-*

sources of North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 127-131, 2 figs.

see Thompson, T. B., and others, 1980

**Gill, Douglas**

1976 New Mexico legislature might restrict infill drilling on certain acreage: *Western Oil Reporter*, October, p. 27

**Gillette, D. A.**

see Sridhar and others, 1978

**Gingerich, P. D.**

1979 (and Gunnell, G. F.) Systematics and evolution of the genus *Esthonyx* (Mammalia, Tillodontia) in the early Eocene of North America: *Univ. Michigan, Mus. Paleontology, Contrib.*, v. 25, no. 7, p. 125-153

**Gish, Dan M.**

see Keller, G. R., Sinno, and others, 1979

**Gladney, Ernest S.**

see Baldrige, Perry, and Gladney, 1980; Dresen and others, 1978; and Hakonson, White, and others, 1980

**Glanzman, V. M.**

1980 Bibliography of reports by U.S. Geological Survey personnel pertaining to underground nuclear testing and radioactive waste disposal at the Nevada Test Site, and radioactive waste disposal at the WIPP site, New Mexico, January 1, 1979, to December 31, 1979: U.S. Geol. Survey, Open-file Rept. 80-817, 23 p.

**Glass, H. D.**

see Frye and others, 1978

**Gleason, J. D.**

see Barker, F., Friedman, and others, 1976

**Glikson, A. Y.**

1979 Early Precambrian tonalite-trondhjemite sialic nuclei: *Earth Science Reviews*, v. 15, no. 1, p. 1-73, 8 tables, 25 figs.

**Gloss, Steven P.**

1978 (Mayer, Lawrence, and Kidd, D. E.) Effects of suspended sediment in regulating nutrient delivery to southwestern reservoirs (abs.): *New Mexico Acad. Sci., Bull.*, v. 18, no. 1, p. 17

**Goff, Fraser E.**

1980 The Valles caldera geothermal system, New Mexico, U.S.A. (abs.): 26th Internat. Geol. Congr., Abs., v. 3, p. 1113

1980 (and Kron, A.) In-progress geologic map of Cañon de San Diego, Jemez Springs, New Mexico, and lithologic log of Jemez Springs geothermal well: U.S. Govt. Printing Office, scale 1:12,000

1980 (and Sayer, S.) A geothermal investigation of spring and well waters of the Los Alamos region, New Mexico: Los Alamos Natl. Lab., Rept. 8326-MS, 21 p.

**Golder Associates**

1980 Report to the United States Department of the Interior, Geological Survey, on recommendations for abandonment of the Wills-Weaver mine and mine shafts, Carlsbad, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-214, 446 p.

**Goldhaber, Martin B.**

see Reynolds, R. L., and Goldhaber, 1978a, b

**Gollehon, Noel R.**

see Lansford, Chaturvedi, and others, 1980



**Golombek, Matthew P.**

1980 Geometry and rate of extension across the Pajarito fault zone, Española Basin, Rio Grande rift, northern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 434

**Gonzales, J. L.**

1979a (and Jones, C. L.) Geologic data for borehole WIPP 13, in Basic data report for drillhole WIPP 13: Sandia Lab., Rept. SAND79-0273, p. 4-15, 3 tables, 2 figs.

1979b (and Jones, C. L.) Geological data, in Basic data report for drillhole WIPP 25: Sandia Lab., Rept. SAND79-0279, p. 4-25, 3 tables, 2 figs.

see Wilson, C. A., White, and others, 1978

**Gonzales, Serge**

1980 (and Johnson, K. S.) The regional potential of argillaceous strata in the United States for radioactive-waste disposal (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 434

see Johnson, K. S., and others, 1978

**Gonzalez, Don D.**

see Barr and Gonzalez, 1980

**Goode, Harry D.**

see Newman and Goode, 1979

**Goodknight, Craig S.**

1976 Cenozoic structural geology of the central Cimarron Range, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 137-140, 2 figs.

**Gordon, Mackenzie, Jr.**

see Dutro and others, 1979

**Gorham, Frank D., Jr.**

1977 (Woodward, L. A., Callender, J. F., and Greer, A. R.) Fracture permeability in Cretaceous rocks of the San Juan Basin: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 235-241, 4 figs.

1979 (Woodward, L. A., Callender, J. F., and Greer, A. R.) Fractures in Cretaceous rocks from selected areas of San Juan Basin, New Mexico—exploration implications: Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 598-607, 5 figs.

**Gorham, Timothy W.**

1979 Geology of the Galisteo Formation, Hagan Basin, New Mexico: M.S. thesis, Univ. New Mexico, 136 p.

1979 (and Ingersoll, R. V.) Evolution of the Eocene Galisteo Basin, north-central New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 219-224, 7 figs.

**Gorshkov, S. P.**

see Kondrat'yeva and Gorshkov, 1979

**Goss, Ron**

see Ander, Goss, and others, 1980

**Gosz, James R.**

1978 (Barton, Larry, and Potter, L. D.) An evaluation of New Mexico humate deposits for restoration of mine spoils, in The reclamation of disturbed arid lands, R. A. Wright, editor: Univ. New Mexico Press, chap. 10, p. 180-188, 2 tables

see Moore, D. I., and others, 1978; and White, C. S., and others, 1978

**Gottschal, W. C.**

see Szabo and Gottschal, 1980

**Gould, Walter L.**

1978 Approach to reclamation of surface mined land in the Fruitland Formation in New Mexico, in Ecology and coal resource development—based on the international congress for energy and the ecosystem, M. K. Wali, editor: New York, Pergamon Press, p. 850-858

1977 (Miyamoto, S., and Rai, Dhanpat) Reclamation potential of overburden materials in the Fruitland Formation in the San Juan Basin: New Mexico State Univ., Agric. Exp. Station, Bull. 657, 39 p., 14 tables, 9 figs., 1 appendix

see Miyamoto and others, 1977

**Graham, R. G.**

see Keller, G. R., Graham, and Roy, 1978

**Grambling, Jeffrey A.**

1978 Aluminum silicate phase relations in the Truchas Peak region, northern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 411

1979a Precambrian geology of the Truchas Peaks region, north-central New Mexico, and some regional implications: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 135-143, 9 figs.

1979b Geology of Precambrian metamorphic rocks of the Truchas Peaks area, north-central New Mexico: Ph.D. thesis, Princeton Univ., 269 p.; Dissert. Abs. Internat., 1980, v. 40, no. 7, p. 3057-B

1979c Isothermal prograde metamorphism and fluid diffusion, Truchas Peaks region, northern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 435

**Grant, Philip R., Jr.**

1978 Geothermal energy resources of northwest New Mexico, in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 9-16, 2 figs.

**Granata, G. E.**

see McGowan and others, 1977

**Granger, Harry C.**

1980 (and others) Genetic-geologic model for tabular humate uranium deposits, Grants mineral belt, San Juan Basin, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-2018, 53 p.

see Ethridge, Ortiz, Granger, and others, 1980; and Ludwig and others, 1977

**Grant, Keith**

see Owen, Walters, Kostura, and Grant, 1976

**Graustein, William C.**

1976 Organic complexes and the mobility of iron and aluminum in soil profiles (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 891

1978 (and Armstrong, R. L.) Measurement of dust input to a forested watershed using  $^{87}\text{Sr}/^{86}\text{Sr}$  ratios (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 411

see Nozaki, DeMaster, Benninger, and others, 1977

**Gray, Gordon H.**

1978 Parlay Mesaverde (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 453-455, 2 figs.

**Green, Morris W.**

1976 Geologic map of the Continental Divide quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Geol. Quad. Map GQ-1338, scale 1:24,000

- 1979** Disconformities in the Grants, New Mexico, mineral belt and their relationship to uranium occurrence (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 40-41
- 1980** Disconformities in Grants mineral belt and their relationship to uranium deposits, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 70-74, 17 figs.; *abs. in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 12; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 689
- 1976** (and Jackson, T. J.) Geologic and structure contour maps of the Gallup East quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Openfile Rept. 76-453, 18 p., 2 sheets, scale 1:24,000
- 1977** (and Pierson, C. T.) A summary of the stratigraphy and depositional environments of Jurassic and related rocks in the San Juan Basin, Arizona, Colorado, and New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 147-152, 1 table, 1 fig.  
*see* Pierson and Green, 1977, 1980; *and* Ridgley and others, 1978
- Greene, D. K.**  
**1976** (and Halpenny, L. C.) Basic-data report—Quintana Minerals Corporation Copper Flat Project, production wells, Hillsboro (Sierra County), New Mexico: Water Develop. Corp., consult. rept. to Quintana Minerals Corp., 67 p.
- Greenlee, D. D.**  
*see* Fischer and others, 1978, 1979
- Greenwood, Eugene**  
**1979** Pennsylvanian production in southwestern U.S.A. (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 77
- 1977** (Kottlowski, F. E., and Thompson, Sam, III) Petroleum potential and stratigraphy of Pedregosa Basin—comparison with Permian and Orogande Basins: Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 9, p. 1448-1469, 13 figs.  
*see* Cys, Brezina, and Greenwood, 1977; *and* Cys, Greenwood, and Brezina, 1976
- Greer, Albert R.**  
**1978a** La Plata Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 371-373, 3 figs.
- 1978b** Puerto Chiquito Mancos, east (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 464-467, 3 figs.
- 1978c** Puerto Chiquito Mancos, west (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 468-471, 3 figs.  
*see* Gorham, F. D., and others, 1977, 1979
- Gresens, Randall L.**  
**1976** Geologic, geochemical, and geochronologic investigation of Precambrian metamorphic rocks of Las Tablas-La Madera quadrangles and the Picuris Range, northern New Mexico—a summary, *in* Tectonics and mineral resources of North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 132-137, 1 fig.
- 1977** (and Stensrud, H. L.) More data on red muscovite: Am. Mineralogist, v. 62, no. 11 and 12, p. 1245-1251, 1 table, 2 figs., 1 appendix
- Grew, Edward S.**  
**1979** Al-Si disorder of K-feldspar in crustal xenoliths at Kilbourne Hole, New Mexico: Am. Mineralogist, v. 64, no. 7-8, p. 912-916, 2 tables  
*see* Davis, G. L., and Grew, 1978
- Gries, John C.**  
**1977** Possible extension of the Rio Grande rift south into Chihuahua, Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 23
- 1979** Problems of delineation of the Rio Grande rift into the Chihuahua tectonic belt of northern Mexico, *in* Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 107-113, 5 figs.; *abs. in* International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 40-41  
*see* Reynolds, D. M., and Gries, 1980; *and* Woodward, Callender, and others, 1978
- Griffin, W. L.**  
*see* Ehrenberg and Griffin, 1979
- Grigsby, Charles O.**  
*see* Holley and others, 1978; Keizer and others, 1979; *and* Taggart and Grigsby, 1976
- Grogger, P. K.**  
*see* Larkin and others, 1980
- Grose, L. T.**  
*see* Keller, G. V., Grose, and Crewdson, 1978; *and* Keller, G. V., Grose, and Pickett, 1978
- Gross, Gerardo W.**  
**1976** (Duffy, C. J., and Hoy, R. N.) Application of environmental tritium in the measurement of recharge and aquifer parameters in a semi-arid limestone terrain: New Mexico State Univ., Water Resources Research Inst., Rept. 080, 211 p.
- 1980** (Hoy, R. N., Duffy, C. J., and Rehfeldt, K. R.) Isotope studies of recharge in the Roswell Basin (NM) (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 48, p. 1191  
*see* Duffy and others, 1978; *and* Rabinowitz and others, 1977a-c
- Gross, Marvin C.**  
**1977a** High Plains Penn field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 116-117, 1 table, 1 fig.
- 1977b** West Ranger Lake Devonian field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 160-161, 1 fig.
- Gross, Richard S.**  
*see* Spence, W., Gross, and Jaksha, 1979
- Grotho, Terry**  
*see* Ratte and Grotho, 1979
- Grutt, Eugene, W., Jr.**  
**1977** Uranium exploration methods development: Mining Congr. Jour., v. 63, no. 4, p. 60-67
- G'Schwind, J. J.**  
*see* Dimitrijevič and others, 1976
- Guarnera, B. J.**  
**1978** Uranium exploration activities in the U.S.:

- Mining Engineering, v. 30, no. 10, p. 1414-1416, 2 tables, 2 figs.
- Guertin, Kateri**  
 1979 Methodes geostatistiques d'estimation des reserves de gisements d'uranium de type trend de la region de Grants, Nouveau Mexique, et applications (Geostatistical methods applied to estimation of ore reserves from uranium trend deposits, Grants, New Mexico): M.S. thesis, Ecole Polytechnique, Univ. Montreal
- Gunaji, Narendra N.**  
 1978 (and others) A geothermal field near New Mexico State University and its potential as campus energy supplier, in Geothermal energy—a novelty becomes resource: Geothermal Resource Council, Trans., v. 2, p. 241-244  
 1978 (Thode, E. F., Chaturvedi, L. N., Walvekar, Arun, and LaFrance, Leo) Geothermal application feasibility study for the New Mexico State University campus: New Mexico Energy Inst., Rept. 13, 127 p.; Natl. Tech. Inf. Serv., Rept. PB-295 846/OWE, 127 p.; *abs. in* New Mexico Geology, 1980, v. 2, no. 1, p. 13
- Gundersen, L. C.**  
 see Turner-Petersen and Gundersen, 1980
- Gunnell, G. F.**  
 see Gingerich and Gunnell, 1979
- Gunter, C. Phillip**  
 1975 A lithofacies study of Desmoinesian rocks in east-central Eddy and west-central Lea Counties, New Mexico: M.S. thesis, Mississippi State Univ., 59 p.  
 1977 Golden Lane Strawn field, Eddy County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 102-103, 1 table, 1 fig.
- Gutentag, E. D.**  
 1980 (and Weeks, J. B.) Water table in the High Plains aquifer in 1978 in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geol. Survey, Hydrol. Inv. Atlas HA-642, scale 1:2,500,000
- Gutierrez, Alberto A.**  
 1980a Channel and hillslope geomorphology of badlands in the San Juan Basin, northwestern New Mexico: M.S. thesis, Univ. New Mexico, 158 p.  
 1980b Sediment transport in badlands watersheds (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 440  
 see Ebert and Gutierrez, 1979
- Gutjahr, Allan L.**  
 see Arnold, Hill, Donaldson, and others, 1978; and Foster, R. W., Gutjahr, and Warner, 1978
- Gutschick, V.**  
 1978 (and Rea, K.) Environmental assessment of dissolved gases in LASL's hot dry rock geothermal source demonstration project: Natl. Tech. Inf. Serv., Rept. LA-UR-78-919, 5 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 3, p. 47
- Guyton, W. F., and Associates**  
 1978 Production of water from Westwater Canyon aquifer near Crownpoint, New Mexico, by Phillips Uranium Corporation for uranium mining: W. F. Guyton and Assoc., consult. rept. to Phillips Uranium Corp.
- Guyon, Peter C.**  
 1978 Spectral analysis of P-phases from mining explosions recorded in the Socorro, New Mexico, area: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 22, 88 p.
- Hacker, Leroy W.**  
 1977 Soil survey of Bernalillo County and parts of Sandoval and Valencia Counties, New Mexico: U.S. Dept. Agriculture, Soil Conserv. Serv., 101 p., 10 figs.  
 see Nyhan, Hacker, and others, 1978
- Hackman, R. J.**  
 1977 (and Olson, A. B.) Geology, structure, and uranium deposits of the Gallup 1° by 2° quadrangle, New Mexico and Arizona: U.S. Geol. Survey, Misc. Geol. Inv. Map I-981, scale 1:250,000
- Hafen, P. L.**  
 see Adams, S. S., and others, 1978
- Hageman, Ronda K.**  
 1978 The exploitation of hot dry rock geothermal resources—an application of the pure theory of exhaustion (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 28
- Hagerman, Charles de B.**  
 1976a General geology, water resources and ground-water conditions of the Arroyo de Yrisarri area, Bernalillo and Torrance Counties, New Mexico: consult. rept. to Manzano Springs residents, 10 p.  
 1976b General geology and ground-water conditions, Carson area, Taos County: consult. rept., 7 p.
- Hagstrum, J. R.**  
 see Brown, L. D., Reilinger, and Hagstrum, 1978
- Hair, Gregory L.**  
 1976 The Upper Pennsylvanian Panther Seep Formation (Virgilian) of the Franklin Mountains, Doña Ana County, New Mexico, and El Paso County, Texas, in Stratigraphy and structure of the Franklin Mountains: El Paso Geol. Soc., p. 61-66, 1 fig.  
 1977 Stratigraphy and microfacies analysis of Panther Seep Formation (Virgilian), Franklin Mountains, Texas, New Mexico: M.S. thesis, Univ. Texas (El Paso)
- Hakonson, T. E.**  
 1976 (Nyhan, J. W., and Purtymun, W. D.) Accumulation and transport of soil plutonium in liquid waste discharge areas at Los Alamos, in Transuranium nuclides in the environment: Internat. Atomic Energy Agency, p. 175-189  
 1980 (White, G. C., Gladney, E. S., and Dreicer, Mona) The distribution of mercury, cesium-137, and plutonium in an intermittent stream at Los Alamos: Jour. Environ. Quality, v. 9, no. 2, p. 289-292  
 see Purtymun, Buchholz, and Hakonson, 1977
- Hall, Robert B.**  
 1978 World nonbauxite aluminum resources—alunite: U.S. Geol. Survey, Prof. Paper 1076-A, 35 p., 4 tables, 1 fig.
- Häll, Rolf**  
 see Dennis, J. G., and Häll, 1978
- Hall, Stephen A.**  
 1977 Late Quaternary sedimentation and paleoecologic history of Chaco Canyon, New Mexico: Geol. Soc. America, Bull., v. 88, no. 11, p. 1593-1618, 3 tables, 13 figs.  
 1980 Snails from Quaternary valley fill at Chaco

- Canyon, New Mexico: *Nautilus*, v. 94, no. 2, p. 60-63
- Halleck, P. M.**  
see Heiken and others, 1976
- Halley, R. B.**  
see Scholle and Halley, 1980
- Halpenny, Leonard C.**  
see Greene and Halpenny, 1976
- Hamilton, David P.**  
1978a Jasis Canyon Fruitland (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 353-354, 2 figs.  
1978b Twin Mounds Mesaverde (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 538-539, 3 figs.  
1978c Twin Mounds Pictured Cliffs (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 540-542, 4 figs.
- Hamilton, W.**  
1978 Mesozoic tectonics of the western United States, *in* Mesozoic paleogeography of the western United States, D. G. Howell, editor: 2nd Pacific Coast Paleogeog. Symp., p. 33-70
- Handford, C. Robertson**  
1980 Pennsylvanian-Early Permian depositional systems and shelf-margin evolution, Palo Duro Basin, Texas: Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 1, p. 88-106, 1 table, 19 figs.  
1980 (Presley, M. W., and Dutton, S. P.) Depositional and tectonic evolution of a basement-bounded, intracratonic basin, Palo Duro Basin, Texas (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 717
- Hannum, D. W.**  
see Wawersik and Hannum, 1980
- Hansel, J. M.**  
see Aamodt, Hansel, and others, 1977; and Weaver and others, 1978
- Hanson, S. D.**  
1977 Catclaw Draw Morrow gas field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 74-75, 1 table, 2 figs.
- Hardee, H. C.**  
1980 (and Luth, W. C.) Continental scientific drilling—comparative assessment of five potential sites for hydrothermal-magma systems (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 46, p. 1148-1149
- Harden, S. N.**  
see Keller, G. R., Sinno, and others, 1979
- Harder, Vicki**  
1980 (Morgan, Paul, and Swanberg, C. A.) Geothermal resources in the Rio Grande rift—origins and potential: Geothermal Resources Coun., Trans., v. 4, Sept., p. 61-64, 4 figs.
- Harding, S. T.**  
see Hoffman and Harding, 1977
- Hardt, W. F.**  
see Cooley and others, 1978
- Hardy, E. E.**  
see Anderson, J. R., and others, 1976
- Hare, P. E.**  
see Miller, G. H., and Hare, 1980
- Hargraves, Robert B.**  
see Crough and others, 1980
- Harkrider, David G.**  
see Bache and others, 1978
- Harms, J. C.**  
1977 (and Fahnestock, R. K.) Stratification, bed forms, and flow phenomena (with an example from the Rio Grande), *in* Sedimentary processes—hydraulic interpretation of primary sedimentary structures: Soc. Econ. Paleontologists and Mineralogists, Reprint Ser. 3, p. 95-127
- Harrington, Gerald E.**  
1977 Querecho Plains (Queen) field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 158-159, 1 table, 1 fig.
- Harris, Arthur H.**  
1977 Wisconsin age environments in the northern Chihuahuan Desert—evidence from the higher vertebrates, *in* Transactions of the symposium on the biological resources of the Chihuahuan Desert region, United States and Mexico: U.S. Natl. Park Serv., Trans. Proc. Ser., no. 3, p. 23-52  
1978 Paleontology, *in* The caves of McKittrick Hill, Eddy County, New Mexico—history and results of field work, 1965-1976, C. E. Kunath, editor: Texas Speleological Soc., p. 69-73  
1980 The paleoecology of Dry Cave, New Mexico: Natl. Geog. Soc., Research Rept. 12, p. 331-338  
1980 (and Porter, L. S. W.) Late Pleistocene horses of Dry Cave, Eddy County, New Mexico: Jour. Mammalogy, v. 61, no. 1, p. 46-65  
see Magish and Harris, 1976
- Harris, Jay J.**  
1978 Otero Pictured Cliffs (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 195-196
- Harrison, Richard W.**  
1980 Geology of the northeastern Datil Mountains, Socorro and Catron Counties, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 136, 146 p., 3 tables, 36 figs., 2 sheets, scale 1:24,000; M.S. thesis, New Mexico Inst. Mining and Tech.
- Harshbarger, John W., and Associates**  
1976 Water requirements and aquifer analysis for in-situ leaching pilot test, Cerrillos, New Mexico: consult. rept. to Occidental Minerals Corp.  
see Cooley and others, 1978
- Hart, D. L., Jr.**  
1979a (and Smith, C. S.) Ground water in the vicinity of Capulin, New Mexico: Natl. Tech. Inf. Serv., Rept. PB-300 827, 64 p.; U.S. Geol. Survey, Water-resources Inv. 79-79, 64 p.  
1979b (and Smith, C.) Aquifer near Capulin (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 124-125
- Hart, Howard R., Jr.**  
see Fleischer, Hart, and Mogro-Campero, 1980
- Hart, S. R.**  
1980 (Padovani, E. R., and Richardson, S. H.) Geochemistry of lower crustal granulite xenoliths, Kilbourne Hole, New Mexico (abs.): 26th Internat. Geol. Congr., Abs., v. 2, p. 775

- 1979** (Padovani, E. R., and Roden, M. K.) Sr-isotopic relationships in lower crustal nodules from Kilbourne Hole, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 11, no. 7, p. 439  
see James and others, 1980a,b; and Richardson, S. H., and others, 1980
- Hartman, Harold**  
see Reiter, Simmons, and others, 1976; and Reiter, Weidman, and others, 1976
- Harvie, C. E.**  
**1980** (Weare, J. H., and others) Evaporation of seawater—calculated mineral sequences: *Science*, v. 208, no. 4443, p. 498–500
- Harwood, R. J.**  
see Ross, L. M., and Harwood, 1979
- Hassemer, J. R.**  
see Watts and Hassemer, 1980; Watts, Hassemer, Forn, and Siems, 1979; Watts, Hassemer, Nishi, and Siems, 1978; and Watts, Hassemer, Siems, and Nishi, 1978
- Hatch, J. R.**  
see Pillmore and Hatch, 1976
- Hatlelid, W. G.**  
see Bubb and Hatlelid, 1978
- Hattin, D. E.**  
**1979** Regional stratigraphy of limestone marker beds in Bridge Creek Member, Greenhorn Limestone (Upper Cretaceous), Western Interior, United States (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 3, p. 464
- Hatton, Kay S.**  
**1977** Geothermal, in *New Mexico's energy resources '76*, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 148, p. 26–27  
**1978** Geothermal energy, in *New Mexico's energy resources '77*, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 167, p. 42–46  
**1980a** Geothermal energy, in *New Mexico's energy resources '79*, E. C. Arnold and J. M. Hill, compilers: New Mexico Bureau Mines Mineral Resources, Circ. 172, p. 49–53  
**1980b** Geothermal research and exploration in New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program*, p. 33  
see Anderson, O. J., Hatton, and Kottlowski, 1977
- Haug, B. N.**  
**1978** Biodynamic and phyletic paradigms for sensory organs in camerate crinoids: *Lethaia*, v. 11, p. 145–173
- Havenor, Kay C.**  
**1977** (editor) The oil and gas fields of southeastern New Mexico, 1977 supplement: *Roswell Geol. Soc.*, 220 p.  
see Ahlen and Havenor, 1977
- Havens, J. S.**  
**1979** (and Wilkins, D. W.) Experimental salinity alleviation at Malaga Bend of the Pecos River, Eddy County, New Mexico: *Natl. Tech. Inf. Serv., Rept. PB-80 177 900*, 71 p. [1980]; *U.S. Geol. Survey, Water-resources Inv.* 80-4, 71 p. [1980]
- Hawley, John W.**  
**1978a** (compiler) Guidebook to Rio Grande rift in New Mexico and Colorado: New Mexico Bureau Mines Mineral Resources, Circ. 163, 241 p., 4 tables, 157 figs., 2 color sheets  
**1978b** Rio Embudo to Santa Fe, New Mexico, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 46–49, 4 figs.  
**1978c** Rio Salado rest area to Rio Grande bridge (I-25), in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 137–144, 5 figs.  
**1978d** Correlation chart 1—major Quaternary stratigraphic and geomorphic units in Rio Grande rift region, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 238–241  
**1978e** Correlation chart 2—middle to upper Cenozoic stratigraphic units in selected areas of the Rio Grande rift in New Mexico, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 239–241  
**1980** Approaches to environmental geology in New Mexico: *The Eng. Geologist*, v. 15, no. 3, p. 14  
**1976** (Bachman, G. O., and Manley, Kim) Quaternary stratigraphy in the Basin and Range and Great Plains provinces, New Mexico, and western Texas, in *Quaternary stratigraphy of North America*, W. C. Mahaney, editor: Stroudsburg, Pennsylvania, Dowden, Hutchinson and Ross, Inc., p. 235–274  
**1978** (Burroughs, R. L., Lipman, P. W., and Muehlberger, W. R.) Santa Fe to Alamosa, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 49–55  
**1978** (Chapin, C. E., Chamberlin, R. M., Lambert, P. W., and Kottlowski, F. E.) Santa Fe to Socorro, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 169–177  
**1978** (Chapin, C. E., and Osburn, G. R.) Elephant Butte Reservoir to Socorro, in *Guidebook to the Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 91–92, 96, 98–101, 5 figs.  
**1978** (and Galusha, Ted) Bernalillo to south of San Ysidro, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 177–182, 1 fig.  
**1978** (and Kottlowski, F. E.) Bernalillo to Santa Fe, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 158–169, 7 figs.  
**1978** (Lovejoy, E. M. P., Seager, W. R., Chapin, C. E., Chamberlin, R. M., and Osburn, G. R.) Socorro to El Paso, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 101–111  
**1978** (and Seager, W. R.) New Mexico-Texas state line to Elephant Butte Reservoir, in *Guidebook to Rio*



- Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 71-91, 20 figs.  
*see* Budding, Robertson, and others, 1979; Chapin, Chamberlin, and Hawley, 1978; Foster, R. W., Austin, and others, 1977; Muehlberger and Hawley, 1978; Seager, Kottowski, and Hawley, 1976; Seager, Morgan, and Hawley, 1978; Siemers, W. T., Hawley, and others, 1978; Sridhar and others, 1978; *and* Stone, W. J., Mizell, and Hawley, 1979
- Hayes, J. M.**  
*see* Des Marais and others, 1980
- Hayes, Philip T.**  
 1978 Cambrian and Ordovician rocks of southeastern Arizona and southwestern New Mexico: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 165-173, 6 figs.  
 1979 (and Bachman, G. O.) Examination and reevaluation of evidence for the Barrera fault, Guadalupe Mountains, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1520, 11 p.  
*see* Strobell and others, 1980
- Haynes, P.**  
*see* Kimbler and Haynes, 1979
- Hays, Walter W.**  
*see* King, K. W., and Hayes, 1977
- Hayslip, David L.**  
 1980 (Fuller, G. E., Levy, P. W., and Renault, J. R.) Thermoluminescence of uranium host rocks in Ambrosia Lake area, *abs. in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 398; *abs. in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 12-13; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 689  
 1976 (and Renault, J. R.) Potential of quartz thermoluminescence in uranium exploration (*abs.*): Geol. Soc. America, *Abs. with Programs*, v. 8, no. 5, p. 590  
*see* Renault and Hayslip, 1976, 1977
- Hazen Research, Inc.**  
 1979 Consulting service at Mining and Milling Corporation of America, core-drilling program on the Winkler anticline, Hachita, Hidalgo County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 108, 32 p., 2 figs., appendix
- Healey, Don L.**  
 1976 Interpretation of gravity surveys in intermontane basins of Nevada and New Mexico, *in* Site investigation methodology for multiple air point missile systems: Air Force Weapons Lab, Kirtland Air Force Base, AFWL-TR-76-145, p. 107-127  
 1978 (Wahl, R. R., and Currey, F. E.) Gravity survey of the Tularosa Valley and adjacent areas, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-309, 21 p., 1 fig., 4 pls.; *abs. in* New Mexico Geology, 1979, v. 1, no. 1, p. 15  
*see* Bath and others, 1977
- Hearne, G. A.**  
 1977 Evaluation of a potential well field near Church Rock as a water supply for Gallup, New Mexico: Natl. Tech. Inf. Serv., Rept. PB-274 713, 26 p. [1978]; U.S. Geol. Survey, Water-resources Inv. 77-98, 26 p. [1978]  
 1980a Simulation of an aquifer test on the Tesuque Pueblo Grant, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-1022, 47 p. [1981]  
 1980b Mathematical model of the Tesuque aquifer system underlying Pojoaque River basin and vicinity, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-1023, 195 p. [1981]  
*see* Kelly and Hearne, 1976
- Heatwole, C. G.**  
*see* Keller, L. F., and others, 1977
- Hedge, C. E.**  
*see* Wobus and Hedge, 1980
- Hedlund, David C.**  
 1976 Age of Rubio Peak Formation, Black Range, New Mexico, *in* Geological Survey research: U.S. Geol. Survey, Prof. Paper 1000, p. 77  
 1977a Geologic map of the Hillsboro and San Lorenzo quadrangles, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-A, 2 sheets, scale 1:48,000 [1978]  
 1977b Mineral resources of the Hillsboro and San Lorenzo quadrangles, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-B, scale 1:48,000  
 1978a Geologic map of the Wind Mountain quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1031, scale 1:24,000 [1979]  
 1978b Geologic map of the Soldiers Farewell Hill quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1033, scale 1:24,000  
 1978c Geologic map of the Ninety-six Ranch quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1034, scale 1:24,000  
 1978d Geologic map of the Gold Hill quadrangle, Hidalgo and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1035, scale 1:24,000  
 1978e Geologic map of the Hurley East quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1036, scale 1:24,000  
 1978f Geologic map of the Tyrone quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1037, scale 1:24,000 [1979]  
 1978g Geologic map of the Werney Hill quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1038, scale 1:24,000  
 1978h Geologic map of the C Bar Ranch quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1039, scale 1:24,000  
 1978i Geologic map of the Burro Creek quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1040, scale 1:24,000 [1979]  
 1978j Geologic map of the White Signal quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1041, scale 1:24,000 [1979]  
 1979 Background information to accompany folio of geologic, mineral resource, geochemical, aeromag-



- netic, and gravity maps of the Hillsboro and San Lorenzo quadrangles, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Circ. 808, 26 p.
- 1980a** Geologic map of the Redrock SE quadrangle, Grant and Hidalgo Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1265, scale 1:24,000
- 1980b** Geologic map of the Redrock NW quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1263, scale 1:24,000 [1981]
- 1980c** Geologic map of the Redrock NE quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1264, scale 1:24,000 [1981]  
see Wynn and Hedlund, 1979
- Heiken, Grant**
- 1976** (Halleck, P. M., and McGetchin, T. R.) Tephra formation in ash flow eruptions (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 912  
see Ander, Heiken, and others, 1979
- Heimlich, R. A.**
- 1976** Morphology of zircons from Precambrian rocks penetrated by geothermal test hole GT-2: Los Alamos Sci. Lab., Rept. LA-6433-MS, 10 p.
- Heinrich, E. William**
- 1980** Variation in distribution patterns of Precambrian  $Al_2SiO_5$  minerals in the Rocky Mountains (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 445
- Hejl, H. R.**
- 1979** Hydrology of coal areas in northwestern New Mexico (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 125
- Heller, J. S.**  
see O'Sullivan, Scott, and Heller, 1979a-d; Scott, G. R., O'Sullivan, and Heller, 1979a-c; and Weide, O'Sullivan, and Heller, 1979
- Helmick S. B.**
- 1976** (Brookins, D. G., Balagna, J. P., and Husler, J.) Trace element analyses of granitic cores from LASL dry hot rock experiment (abs.): Am. Geophys. Union (EOS), Trans., v. 57, no. 4, p. 350
- Helsen, J. N.**
- 1978** (Shaw, D. M., and Crocket, J. H.) Tungsten abundances in some volcanic rocks: Geochim. et Cosmochim. Acta, v. 42, no. 7, p. 1067-1070, 5 tables, 3 figs.
- Helsley, C. E.**
- 1977** Time of origin of the magnetization of red sediments—field evidence (abs.): Am. Geophys. Union (EOS), Trans., v. 58, no. 8, p. 729
- Hendron, R. H.**
- 1978** Hot dry rock energy project, in Geothermal energy and hydropower, T. N. Veziroglu, editor: Washington, Hemisphere Pub. Corp., v. 6, p. 2655-2687
- Henkes, W. C.**
- 1976** (Irwin, J. H., and Pratt, W. P.) Status of mineral resources information for the Ute Mountain Indian Reservation, Colorado, and New Mexico: U.S. Bureau Indian Affairs, Rept. BIA-17, p. 45-46
- Henry, W. J.**
- 1977a** Paduca Devonian field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 144-145, 1 table, 1 fig.
- 1977b** Paduca Morrow field, Eddy County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 146-147, 1 table, 1 fig.
- 1977c** Paduca Wolfcamp field, Eddy County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 148, 1 table
- 1977d** Red Hills Penn field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 162-163, 1 table, 1 fig.
- 1977e** Red Hills Wolfcamp field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 164-165, 1 table, 1 fig.
- Herkenhoff, Gordon, and Associates**
- 1976** Water availability, in sketch plan submitted data for Cerros Cantando, Santa Fe County, New Mexico: Herkenhoff and Assoc., consult. rept., 28 p.
- 1977** Program of study, Ogallala aquifer, Lea County, New Mexico: Herkenhoff and Assoc., consult. rept. to City of Hobbs, 9 p.
- 1977** (and Summers, W. K., and Associates) Geology and hydrology of a site proposed for burial of low-level solid radioactive waste, western Colfax County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 79, 3 v.; v. 1—226 p. (text); v. 2 and 3—appendices; 985 p., 24 tables, 40 figs., 6 appendices
- Hernance, John F.**
- 1979** Toward assessing the geothermal potential of the Jemez Mountains volcanic complex—a telluric-magnetotelluric survey: Natl. Tech. Inf. Serv., Rept. LA-7656-MS, 89 p.; abs. in New Mexico Geology, 1980, v. 2, no. 1, p. 12
- 1978** (and Pedersen, J.) Evidence for molten material at shallow to intermediate crustal levels beneath the Rio Grande rift at Santa Fe (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 4, p. 390
- 1980** (and Pedersen, J.) Deep structure of the Rio Grande rift—a magnetotelluric interpretation: Jour. Geophys. Research, v. 85-B, no. 7, p. 3899-3912; abs. in International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 41-42  
see Pedersen, Alvarez, and Hernance, 1979; and Pedersen and Hernance, 1979
- Hern, J. L.**
- 1979** Geophysical investigations for pilot plant for nuclear-waste isolation in southeastern New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 3, p. 465-466
- 1978** (and Elliot, C. L.) Geophysical investigations for a nuclear waste isolation pilot plant in southeastern New Mexico (abs.): Soc. Explor. Geophys., 48th internat. mtg., Abs., p. 72-73
- Hernandez, John W.**
- 1978** Interrelationship of ground and surface water quality in the El Paso-Juarez and Mesilla Valleys: Natural Resources Jour., v. 18, no. 1, p. 1-9
- Herrick, C. C.**  
see Charles and Herrick, 1976

- Herrin, Eugene**  
see Reinke and Herrin, 1979
- Herring, James R.**  
see Hinkley and others, 1980a,b
- Herrman, Robert B.**  
1980 (Dewey, J. W., and Park, Sam-Kuen) The Dulce, New Mexico, earthquake of 23 January 1966: *Seismol. Soc. America, Bull.*, v. 70, no. 6, p. 2171-2183  
1979 (and Park, Sam-Kuen) The Dulce, New Mexico, earthquake of January 23, 1966, in *Earthquake hazard studies in southeast Missouri*, W. S. Stauder, editor: U.S. Geol. Survey, rept., p. 80-97
- Hewett, Nancy S.**  
1977 The prehistory of the San Juan Basin: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 65-75, 1 table, 1 fig.
- Heyl, A. V.**  
1976 Preliminary geologic map of the Winston quadrangle, Sierra County, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-858, scale 1:24,000  
see Maxwell, C. H., and Heyl, 1976, 1980
- Hicks, Charles W.**  
1977 North Morton Permo-Penn, Lea County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: Roswell Geol. Soc., p. 138-139, 1 table, 1 fig.
- Hicks, O. N.**  
see Cooley and others, 1978
- Hicks, Randall T.**  
1980 (Lowy, R. M. [Lowry, in book], Della Valle, R. S., and Brookins, D. G.) Petrology of Westwater Canyon Member, Morrison Formation, East Chaco Canyon drilling project, New Mexico—comparison with Grants mineral belt, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: New Mexico Bureau Mineral Resources, Mem. 38, p. 208-214, 1 table, 8 figs.; *abs. in Grants uranium region, a symposium*, Am. Assoc. Petroleum Geologists, 1979, Program, p. 13
- High Life Helicopters**  
1979 (and Geodata International) Aerial radiometric and magnetic survey—Socorro national topographic map, New Mexico: U.S. Dept. Energy, Rept. GJBX-163-79, scale 1:500,000
- Hildenbrand, Rick T.**  
see Schneider, Hildenbrand, and Affolter, 1979
- Hildenbrand, T. G.**  
see Cordell, Keller, and Hildenbrand, 1978
- Hildreth, Wes**  
see Shaw, H. R., and others, 1976
- Hileman, M. E.**  
see Wright, R. P., and others, 1977
- Hill, Carol A.**  
1978 Geology and mineralogy of cave nitrates: M.S. thesis, Univ. New Mexico, 125 p.
- Hill, E. Bruce**  
1978 Regional compaction gradients in Mississippian age limestones (abs.): *Geol. Soc. America, Abs. with Programs*, v. 10, no. 7, p. 421
- Hill, J. Gilmore**  
1976 (editor) Geology of the Cordilleran hingeline: Rocky Mtn. Assoc. Geol., Guidebook 1976 symp., 432 p.
- Hill, James M.**  
1978 (compiler) Contour map showing estimated ultimate recovery for wells in the Blanco Mesaverde gas pool in northwest New Mexico, in *New Mexico's energy resources '77*, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 167, 1 sheet in pocket  
see Arnold, Foster, and others, 1976; Arnold and Hill, 1980a,b; Arnold, Hill, and Donaldson, 1980; Arnold, Hill, Donaldson, and Foster, 1977; and Arnold, Hill, Donaldson, and others, 1978
- Hill, Leslie R.**  
1979 Site evaluation for the Waste Isolation Pilot Plant (WIPP): *Geological Disposal Nuclear Waste, 19th ann. symp.*, p. 71-73
- Hill, Steve R.**  
1980 Geology of the Mining Mountain area, Cuba, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 116 p., 5 figs., 3 pls., 5 appendices, 1 sheet
- Hillebrand, Cary**  
see Ander, Goss, and others, 1980
- Hills, John M.**  
1979 Delaware Basin sedimentation, tectonism, and hydrocarbon generation, in *Guadalupian Delaware Mountain Group of west Texas and southeast New Mexico*, N.M. Sullivan, editor: *Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec.*, p. 1  
1980 Tectonics of the western Permian Basin (abs.): *Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program*, p. 34  
1979 (and Hoening, M. A.) Proposed type sections of Upper Silurian and Lower Devonian subsurface units in Permian Basin, west Texas: *Am. Assoc. Petroleum Geologists*, v. 63, no. 9, p. 1510-1521, 6 figs., 1 appendix  
see Keller, G. R., Hills, and Djeddi, 1980a,b
- Hinds, Jim S.**  
see Fassett and Hinds, 1977
- Hines, John J.**  
see Fried and others, 1978
- Hines, Steven A.**  
1976 Origins of ore-controlling folds in the Todilto Limestone, Grants mining district, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 141 p., 48 figs., 6 pls., 3 appendices
- Hinkebein, T. E.**  
1979 (and Hlava, P. F.) Interactions of simulated waste radionuclides and rocks, in *Scientific basis for nuclear waste management*, v. 1, G. J. McCarthy, editor: New York, Plenum Press, p. 419-422
- Hinkley, Todd K.**  
1980a (Herring, J. R., Smith, K. S., and Boerngen, J. G.) Overburden geochemistry of the U.S. Bureau of Land Management experimental coal mining reclamation site at Ojo Encino, northeast McKinley County, San Juan Basin, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-1226, 21 p.  
1980b (Herring, J. R., Smith, K. S., and Boerngen, J. G.) Overburden geochemistry of U.S. Bureau of Land Management experimental coal mining reclamation site at Kimbeto, southeastern San Juan County, San Juan Basin, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-1254, 26 p.

**Hiss, William L.**

**1975** Stratigraphy and ground-water hydrology of the Capitan aquifer, southeastern New Mexico and western Texas: Ph.D. thesis, Univ. Colorado (Boulder), 501 p.; Dissert. Abs. Internat., 1976, v. 37, no. 2, p. 670-B

**1976a** Evaluation and proposed study of potential ground-water supplies, Gallup area, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-522, 153 p., 2 tables, 4 figs.

**1976b** Map showing thickness of the Permian (Guadalupean) Capitan aquifer, southeast New Mexico and west Texas: U.S. Geol. Survey, open-file map

**1976c** Structure of the Permian (Guadalupean) Capitan aquifer, southeast New Mexico and west Texas: New Mexico Bureau Mines Mineral Resources, Resource Map 6, scale 1 inch = ~ 8 mi; U.S. Geol. Survey, Open-file Rept. 76-53, 2 sheets

**1976d** Structure of the Permian Ochoan Rustler Formation, southeast New Mexico and west Texas: New Mexico Bureau Mines Mineral Resources, Resource Map 7, scale 1 inch = ~ 8 mi; U.S. Geol. Survey, Open-file Rept. 76-54

**1977** Uranium mine waste water—a potential source of ground water in northwestern New Mexico: U.S. Geol. Survey, Open-file Rept. 77-625, 10 p., 1 table, 25 figs.

**1980** Movement of ground water in Permian Guadalupean aquifer systems, southeastern New Mexico and western Texas: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, p. 289-294, 4 figs.

**1976** (and Marshall, J. G.) Interpretation of geologic and hydrologic data from the Ray-1 well, City of Gallup, McKinley County, New Mexico (abs.): Sel. Water Resources Abs., v. 9, no. 9, p. 21

see Calzia and Hiss, 1978; and Mercer and Hiss, 1978

**Hitchcock, Robert K.**

see Lyons and others, 1976

**Hlava, P. F.**

**1979** Microprobe analyses of columbites and tantalites from the Globe and Harding mines (abs.): Univ. New Mexico, New Mexico Minerals Symp., p. 6

see Hinkebein and Hlava, 1979

**Hodges, Floyd N.**

see Barker, D. S., and Hodges, 1977; and Barker, D. S., Long, and others, 1977

**Hodgson, Helen E.**

**1978** (editor) Proceedings of the second symposium on the geology of Rocky Mountain coal—1977: Colorado Geol. Survey, Resource Ser. 4, 219 p.

**Hodson, M. V.**

**1980** (Calhoun, J. E., and others) Soil survey of Chaves County, New Mexico, southern part: U.S. Dept. Agriculture, Soil Conserv. Serv., 143 p.

**Hoenig, Margaret Allen**

see Hills and Hoenig, 1979

**Hoffer, Jerry M.**

**1976a** Geology of Potrillo Basalt field, south-central New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 149, 30 p., 11 tables, 12 figs., 1 sheet

**1976b** The Potrillo Basalt field, south-central New

Mexico, in Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 89-92, 6 figs.

see Dickerson and Hoffer, 1980; and Taylor, B., and others, 1980

**Hoffman, John P.**

**1977** (and Harding, S. T.) Strong ground motion in the Tularosa Basin, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-143, 46 p., 18 figs.

**1977** (and Northrop, S. A.) The Dulce, New Mexico, earthquake, January 23, 1966: Earthquake Notes, v. 48, no. 4, p. 3-20, 1 table, 6 figs.; *errata in* Earthquake Notes, v. 49, no. 2, p. 32

**Hoggatt, W. C.**

**1977** (Silberman, M. L., and Todd, V. R.) K-Ar ages of intrusive rocks of the central Peloncillo Mountains, Hidalgo County, New Mexico: Isochron/West, no. 19, p. 3-6, 1 table, 1 fig.

see Armstrong, A. K., Silberman, and others, 1978

**Hohmann, Gerald W.**

**1979** (and Jiracek, G. R.) Bipole-dipole interpretation with three-dimensional models (including a field study of Las Alturas, New Mexico): U.S. Dept. Energy, Rept. DOE/ET/28392-29

**Holcombe, H. Truman**

see Jiracek, Ander, and Holcombe, 1979

**Holdaway, M. J.**

**1978** Significance of chloritoid-bearing and staurolite-bearing rocks in the Picuris Range, New Mexico: Geol. Soc. America, Bull., v. 89, no. 9, p. 1404-1414, 12 tables, 5 figs.

**Holen, Harlen K.**

see Chenoweth and Holen, 1980

**Holley, C. E., Jr.**

**1978** (Blatz, L. A., Tester, J. W., and Grigsby, C. O.) A small geothermal test loop (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 19

**Hollister, L. S.**

see Burruss and Hollister, 1979

**Holloway, J. R.**

see Wilshire and others, 1977

**Holmes, Charles R.**

see Rabinowitz and others, 1977a-c

**Holts, Candace L.**

**1979a** Fayette A. Jones, mining engineer—a profile in diversity: New Mexico Geology, v. 1, no. 4, p. 53-54, 63, 1 fig.

**1979b** History of New Mexico Bureau of Mines and Mineral Resources as recorded in legislation, annual reports, and notes 1927-1977: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 100, 215 p.  
see also Merillat, Candace Holts

**Homuth, E. F.**

see Olsen, K. H., Keller, Stewart, and others, 1977; and Pearson and others, 1980

**Honea, Joseph**

**1978** Some edaphic characteristics of a mesquite (*Prosopis juliflora*) infested rangeland in southern New Mexico (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 5

**Hook, Stephen C.**

**1977** (and Cobban, W. A.) *Pycnodonte newberryi* (Stanton)—common guide fossil in Upper Cretaceous of New Mexico: New Mexico Bureau Mines Mineral

- Resources, Ann. Rept. 1976-77, p. 48-54, 5 figs.
- 1979** (and Cobban, W. A.) *Prionocyclus novimexicanus* (Marcou)—common Upper Cretaceous guide fossil in New Mexico: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1977-78, p. 34-42, 1 pl., 4 figs.
- 1980a** (and Cobban, W. A.) Reinterpretation of type section of Juana Lopez Member of Mancos Shale: New Mexico Geology, v. 2, no. 2, p. 17-22, 1 table, 6 figs.
- 1980b** (and Cobban, W. A.) Some guide fossils in Upper Cretaceous Juana Lopez Member of Mancos and Carlile Shales, New Mexico: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1978-79, p. 38-49, 7 figs.
- 1980** (Cobban, W. A., and Landis, E. R.) Extension of the intertongued Dakota Sandstone-Mancos Shale terminology into the southern Zuni Basin: New Mexico Geology, v. 2, no. 3, p. 42-44, 46
- 1976** (and Flower, R. H.) *Tajaroceeras* and the origin of the Troedssonellidae: Jour. Paleontology, v. 50, no. 2, p. 293-300, 2 pls., 1 fig.
- 1977** (and Flower, R. H.) Late Canadian (Zones J, K) cephalopod faunas from southwestern United States: New Mexico Bureau Mines Mineral Resources, Mem. 32, 102 p., 21 pl., 1 table, 13 figs.
- see Chapin, Osburn, and others, 1979; and Cobban and Hook, 1979, 1980
- Hoops, G. Karl**  
see Barker, D. S., Long, and others, 1977
- Hoover, D. B.**  
**1978** (Long, C. L., and Senterfit, R. M.) Some results from audiomagnetotelluric investigations in geothermal areas: Geophysics, v. 43, no. 7, p. 1501-1514, 1 table, 11 figs.
- Hopkins, L. C.**  
see Styron and others, 1979
- Hoppe, W. F.**  
**1978a** Alamo Farmington (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 177-178, 3 figs.
- 1978b** Animas Chacra (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 184-185, 1 fig.
- 1978c** Basin Dakota (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 204-206, 4 figs.
- 1978d** Bloomfield Chacra (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 241-242, 3 figs.
- 1978e** Harris Mesa Chacra (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 329-330, 3 figs.
- 1978f** Largo Chacra (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 374-375, 3 figs.
- 1978g** Otero Chacra (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 442-443, 3 figs.
- Hopson, P. S.**  
**1978** Gallegos Fruitland (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 312-313, 3 figs.
- Hornbeck, James M.**  
**1978** Flora Vista Gallup (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 294-297, 4 figs.
- Horton, E. H.**  
see Dennis, B. R., and Horton, 1978; and Lawton and Horton, 1979
- Hosseini, Masood S.**  
**1980** Bioherms of the Laborcita Formation, northern Sacramento Mountains, New Mexico: M.S. thesis, Univ. Southwestern Louisiana, 71 p.
- Houghton, A. V.**  
see Kauffman and others, 1980
- Howe, H. J.**  
**1979** Carbonate rocks of Montoya Group (Middle and Upper Ordovician) of Trans-Pecos Texas (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 3, p. 469
- Hoy, Roberta N.**  
see Gross, G. W., Duffy, and Hoy, 1976; and Gross, G. W., Hoy, and others, 1980
- Hsu, Y. C.**  
**1979** Enhanced heat extraction from hot-dry-rock geothermal reservoirs due to interacting secondary thermal cracks: New Mexico Energy Inst., Rept. NMEI-27, 31 p.
- 1978** (Lu, Y.-M., Ju, F. D., and Dhingra, K. C.) Engineering methods for predicting productivity and longevity of hot-dry-rock geothermal reservoir in the presence of thermal cracks: New Mexico Energy Inst., Rept. NMEI-15, 111 p.
- Huang, Wen H.**  
**1979** Comparison of uranium deposits of Grants mineral belt and Texas Gulf Coast Plain, abs. in Grants uranium region, a symposium: Am. Assoc. Petroleum Geologists, Program, p. 23
- Huddle, J. W.**  
see Dutro and others, 1979
- Hudson, Cassandra**  
see Ander, Goss, and others, 1980
- Hudson, Hugh H.**  
**1978** Availability and quality of water related to energy in western United States (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 7, p. 1222
- Hudson, J. D.**  
**1976a** Ground-water levels in New Mexico for calendar year 1974: New Mexico State Engineer, basic-data rept., 112 p.
- 1976b** Ground-water levels in New Mexico for calendar year 1975: New Mexico State Engineer, basic-data rept., 128 p.
- 1976-77a** Ground-water depletion, in feet, allowed in the northern and central parts of Lea County, New Mexico, by U.S. Internal Revenue Service for calendar years 1975-76: New Mexico State Engineer, Maps LC-18-19 and LN-18-19, 4 sheets
- 1976-77b** Ground-water depletion, in feet, allowed in a part of Curry County, New Mexico, by U.S. Internal Revenue Service for calendar years 1975-76: New Mexico State Engineer, Maps CU-16-17, 2 sheets
- 1976-77c** Ground-water depletion, in feet, allowed in Portales Valley, Roosevelt County, New Mexico, by U.S. Internal Revenue Service for calendar years

- 1975-76: New Mexico State Engineer, Maps RO-19-20, 2 sheets
- 1978a** A compilation of hydrologic data before and during highway construction in parts of Tijeras Canyon, New Mexico, 1972-77: U.S. Geol. Survey, Open-file Rept. 78-238, 82 p., 8 tables, 5 figs.
- 1978b** Ground-water levels in New Mexico, 1976: New Mexico State Engineer, basic-data rept., 184 p., 56 tables, 35 figs.; Sel. Water Resources Abs., v. 12, no. 14, p. 8
- 1979a** Ground-water depletion, in feet, allowed in northern Lea County, New Mexico, by U.S. Internal Revenue Service for calendar year 1978: New Mexico State Engineer, Map LN-21, scale 1:125,000; Sel. Water Resources Abs., v. 12, no. 15, p. 66
- 1979b** Ground-water depletion, in feet, allowed in central Lea County, New Mexico, by U.S. Internal Revenue Service for calendar year 1978: New Mexico State Engineer, Map LC-21, scale 1:125,000; Sel. Water Resources Abs., v. 12, no. 15, p. 66
- 1979c** Ground-water depletion, in feet, allowed in a part of Curry County, New Mexico, by U.S. Internal Revenue Service for calendar year 1978: New Mexico State Engineer, Map CU-19, scale 1:125,000; Sel. Water Resources Abs., v. 12, no. 15, p. 66
- 1979d** Ground-water depletion, in feet, allowed in Portales Valley, Roosevelt County, New Mexico, by U.S. Internal Revenue Service for calendar year 1978: New Mexico State Engineer, Map RO-22, scale 1:125,000; Sel. Water Resources Abs., v. 12, no. 15, p. 66
- 1980** A compilation of hydrologic data before and during highway construction in parts of Tijeras Canyon, New Mexico, 1972-78: U.S. Geol. Survey, Open-file Rept. 80-332, 79 p.
- Huestis, Stephen P.**
- 1979** Constraints on the thermal structure of the Rio Grande rift (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 46, p. 953  
see Ander, Heiken, and others, 1979; and Ander and Huestis, 1978
- Huffman, A. Curtis, Jr.**
- 1976** Preliminary geologic map of the Sand Spring quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-408, scale 1:24,000
- 1977** Preliminary geologic map of the Redrock Valley NE quadrangle, Apache County, Arizona, and San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-227, scale 1:24,000
- 1979** Preliminary geologic map of the Mitten Rock quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-723, scale 1:24,000
- 1978** (and Jones, T. W.) Preliminary geologic map of the Redrock Valley SE quadrangle, Apache County, Arizona, and San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-404, scale 1:24,000
- 1980** (Kirk, A. R., and Corken, R. J.) Depositional environments as ore controls in Salt Wash Member, Morrison Formation (Upper Jurassic), Carrizo Mountains area, Arizona and New Mexico, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 122-130, 1 table, 11 figs.; *abs. in Grants uranium region, a* symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 13; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 689-690
- 1977** (and Lupe, R. D.) Influences of structure on Jurassic depositional patterns and uranium occurrences, northwestern New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 277-283, 1 table, 5 figs.  
see Kirk, Huffman, and others, 1978
- Hung, C. C.**
- 1978** Conodonts from the Devonian System in the Sacramento Mountains, Otero County, New Mexico: M.S. thesis, West Texas State Univ.
- Hunt, Charles B.**
- 1977a** Surficial geology of northeast New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 40, scale 1:500,000
- 1977b** Surficial geology of southeast New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 41, scale 1:500,000
- 1978a** Surficial geology of southwest New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 42, scale 1:500,000
- 1978b** Surficial geology of northwest New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 43, scale 1:500,000
- Hunter, Bruce E.**
- 1979** Regional analysis of the Point Lookout Sandstone, Upper Cretaceous, San Juan Basin, New Mexico-COLORADO: Ph.D. thesis, Texas Tech. Univ.; Dissert. Abs. Internat., 1980, v. 40, no. 9, p. 4170-B-4171-B
- Hunter, D. R.**  
see Barker, F., Friedman, and others, 1976
- Hunter, Thomas O.**
- 1979** Technical issues for WIPP: Geological Disposal Nuclear Waste, 19th ann. symp., p. 75-80  
see Krieg and Hunter, 1980
- Hurley, Neil F.**
- 1978** Facies mosaic of the lower Seven Rivers Formation (Permian), North McKittrick Canyon, Guadalupe Mountains, New Mexico: M.S. thesis, Univ. Wisconsin (Madison), 198 p., 4 tables, 45 figs., 15 pls.
- 1979** Seaward primary dip of fall-in beds, lower Seven Rivers Formation (Permian), Guadalupe Mountains (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 3, p. 471
- Hurley, Timothy J.**
- 1980** Depositional environments of Morrowan sandstones, Carlsbad field, Eddy County, New Mexico: M.S. thesis, Texas Tech. Univ.
- Husler, John W.**  
see Helmick and others, 1976; Woodward, McLelland, and Husler, 1977; Woodward, Parchman, and others, 1979; and Woodward, Snyder, and Husler, 1978
- Hutchinson, Peter**  
see Woodward, Ingersoll, Fitch, and Hutchinson, 1979a,b
- Hydrotechnics**
- 1976** Pump test of Sierra Vista-South Estates well 1 (10.5.2.141), Bernalillo County, New Mexico: Albuquerque, Hydrotechnics, consult. rept. to Sierra Vista Estates, 13 p.



**Imhoff, E. A.**

1976 (Friz, T. O., and LaFevers, J. R.) A guide to state programs for the reclamation of surface mined areas, New Mexico: U.S. Geol. Survey, Circ. 731, 33 p.

**Ingersoll, Raymond V.**

1979a Schematic stratigraphic nomenclature chart for Santa Fe country: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. x

1979b Stratigraphy and paleoenvironments of the Hagan Basin, north-central New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 197-200, 1 fig.

1979c (editor) Archaeology and history of Santa Fe country: New Mexico Geol. Soc., Spec. Pub. 8, 18 p., 1 table, 7 figs.

1979 (and Woodward, L. A., editors) Guidebook of Santa Fe country: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, 310 p.

see Gorham, T. W., and Ingersoll, 1979; Vazzana and Ingersoll, 1980; Woodward and Ingersoll, 1979; Woodward, Ingersoll, Fitch, and Hutchinson, 1979a, b; and Woodward, Ingersoll, Fitch, and others, 1979

**Inglis, Michael H.**

1978 (Sheffer, H. W., Lyon, R. J. P., and Prelat, Alfredo) Coal surface mine reclamation monitoring by satellite (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 427

see Sheffer, Inglis, and others, 1978

**Ingram, Tom L.**

1977a Bluit San Andres Associated field, Roosevelt County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 60-61, 1 table, 1 fig.

1977b Southwest Gladiola Devonian field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 100, 1 table

1977c Southwest Gladiola Pennsylvanian field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 101, 1 table

**Interagency Oil and Gas Supply Project**

1980 Future supply of oil and gas from the Permian Basin of west Texas and southeastern New Mexico: U.S. Geol. Survey, Circ. 828, 57 p.

**International Boundary and Water Commission**

1976 Flow of the Rio Grande and related data, from Elephant Butte Dam, New Mexico, to the Gulf of Mexico—1976: Internat. Boundary and Water Comm., U.S. and Mexico, Water Bull. 46, 158 p.

**Iovenitti, Joe**

1977 A reconnaissance study of jasperoid in the Kelly Limestone, Kelly mining district, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 85, 224 p., 2 tables, 86 figs., 1 sheet, 1 appendix; M.S. thesis, New Mexico Inst. Mining and Tech., 224 p.

1977 (and Renault, J. R.) Crystallite size variation in cherts and jasperoids from the Magdalena mining district, Socorro County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 6, p. 735 see Renault and Iovenitti, 1978

**Irving, Anthony J.**

1979 Kilbourne Hole spinel lherzolites—samples of multiply depleted, enriched and deformed mantle (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 418

see Minear and Irving, 1979; and Schwartz and Irving, 1978

**Irwin, James H.**

see Henkes and others, 1976

**Isaacson, Peter E.**

1977 (and Perry, D. G.) Biogeography and morphological conservation of *Tropidoleptus* (Brachiopoda, Orthida) during the Devonian: Jour. Paleontology, v. 51, no. 6, p. 1108-1122, 4 pls., 4 figs.

**Izett, G. A.**

1978 (Obradovich, J. D., Naeser, C. W., and Gebula, G. T.) K-Ar and fission-track zircon ages of Cerro Toledo Rhyolite tephra units in the Jemez Mountains, north-central New Mexico: U.S. Geol. Survey, Open-file Rept. 78-931, 13 p., 3 figs.; abs. in New Mexico Geology, v. 1, no. 1, p. 15

see Bachman and Izett, 1979a, b

**Jacka, Alonzo D.**

1979 Deposition and entrapment of hydrocarbons in Bell Canyon and Cherry Canyon deep-sea fans of the Delaware Basin, in Guadalupian Delaware Mountain Group of west Texas and southeast New Mexico, N. M. Sullivan, editor: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., p. 104-120

1980 (Barone, W. E., Muir, N. J., Foley, D. C., Tully, Tony, and Worthen, J. A.) Cyclic hydrologic and diagenetic events in the San Andres Formation—geologic implications (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 37

1980 (and Thompson, Sam, III) Deposition and diagenesis of Horquilla carbonates, Big Hatchet Peak section, Pedregosa Basin (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 36-37

**Jackson, D. H.**

see Burton and Jackson, 1979

**Jackson, Dalles B.**

1976 Schlumberger soundings in the Las Cruces, New Mexico, area: U.S. Geol. Survey, Open-file Rept. 76-231, 170 p., 1 fig.

**Jackson, Daniel**

1976 York Canyon researches in depth for optimums in mining, preparations: Coal Age, v. 81, no. 5, p. 104-109, 10 figs.

1978 McKinley nears 5-million tpy goal: Coal Age, v. 83, no. 4, p. 106-110, 7 figs.

**Jackson, M. L.**

see Sridhar and others, 1978

**Jackson, Randall E.**

see Stone, W. J., and Jackson, 1980

**Jackson, Timothy J.**

see Green and Jackson, 1976; and Kirk, Huffman, and others, 1978

**Jacobs, David C.**

1976 Geochemistry of biotite in the Santa Rita and Hanover-Fierro stocks, Central mining district, Grant County, New Mexico: Ph.D. thesis, Univ. Utah, 230 p.; Dissert. Abs. Internat., 1977, v. 37, no. 10, p. 4935-B-4936-B



- 1979 (and Parry, W. T.) Geochemistry of biotite in the Santa Rita porphyry copper deposit, New Mexico: *Econ. Geology*, v. 74, no. 4, p. 860-887, 9 tables, 14 figs.
- Jacobs, Jim L.**  
1977 Some recent shallow Pictured Cliffs gas discoveries: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 247-249  
1978 Nipp Pictured Cliffs (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 429-430, 3 figs.  
1978a (and Fagrelus, Kurt) Potwin Pictured Cliffs (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 462-463, 3 figs.  
1978b (and Fagrelus, Kurt) Salt Creek Dakota (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 480-481, 3 figs.  
*see* Fagrelus and Jacobs, 1978
- Jacobs, Louis L.**  
*see* Butler, R. F., Lindsay, and others, 1976, 1977; Lindsay, Butler, Johnson, and Jacobs, 1979; and Lindsay, Jacobs, and Butler, 1978
- Jacobsen, Lynn C.**  
1980 Sedimentary controls on uranium ore at L-Bar deposits, Laguna district, New Mexico, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 284-291, 9 figs.
- Jagnow, David H.**  
1977 Geologic factors influencing speleogenesis in the Capitan reef complex, New Mexico and Texas: M.S. thesis, Univ. New Mexico, 201 p.
- Jagoutz, E.**  
1980 (Carlson, R. W., and Lugmair, G. W.) Equilibrated Nd-unequilibrated Sr isotopes in mantle xenoliths: *Nature*, v. 286, no. 5774, p. 708-710
- Jahns, Richard H.**  
1976 (and Ewing, R. C.) The Harding mine, Taos County, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 263-276, 5 tables, 8 figs.; *Mineral. Record*, 1977, v. 8, no. 2, p. 115-126, 11 figs.  
1978 (McMillan, D. K., O'Brien, J. D., and Fisher, D. L.) Geologic section in the Sierra Cuchillo and flanking areas, Sierra and Socorro Counties, New Mexico, in *Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field*, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 130-138, 3 tables, 3 figs.  
*see* Chapin, Jahns, and others, 1978; Fenn and Jahns, 1979; Long and Jahns, 1976; and McMillan and Jahns, 1979
- Jaksha, Lawrence H.**  
1976 Reconnaissance seismology in the Albuquerque Basin (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 12, p. 958  
1978 (and Locke, Jerry) Seismicity near Albuquerque, New Mexico, 1976-1977: U.S. Geol. Survey, Open-file Rept. 78-1054, 22 p., 7 figs.  
1977 (Locke, Jerry, Thompson, J. B., and Garcia, Alvin) Albuquerque Basin seismic network: U.S. Geol. Survey, Open-file Rept. 77-865, 25 p., 9 figs., 9 photographs  
1978 (Locke, Jerry, Thompson, J. B., and Garcia, Alvin) Reconnaissance seismology near Albuquerque, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-339, 28 p., 5 figs.  
*see* Murdock and Jaksha, 1978, 1980; Sanford, Olsen, and Jaksha, 1979, 1980; Spence, W., Gross, and Jaksha, 1979; and Spence, W., and Jaksha, 1978
- Jambon, Albert**  
1980 (and Shelby, J. E.) Helium diffusion and solubility in obsidians and basaltic glass in the range 200-300°C: *Earth and Planet. Sci. Letters*, v. 51, no. 1, p. 206-214, 2 tables, 3 figs.
- James, David E.**  
1980a (Padovani, E. R., and Hart, S. R.) Preliminary results on the oxygen isotopic composition of the lower crust, Kilbourne Hole maar, New Mexico: *Geophys. Research Letters*, v. 7, no. 5, p. 321-324  
1980b (Padovani, E. R., and Hart, S. R.) Oxygen isotopic composition of lower crustal xenoliths, Kilbourne Hole, New Mexico: *Carnegie Inst. Washington, Year Book*, no. 79, p. 455-458; *abs. in Am. Geophys. Union (EOS), Trans.*, v. 61, no. 17, p. 388
- James, H. L.**  
*see* Robertson, J. M., Budding, and others, 1979; and Clemons, Christiansen, and James, 1980
- Jenkins, David A.**  
1977 Geologic evaluation of the EPM mining claims, East Potrillo Mountains, Doña Ana County, N.M.: M.S. thesis, New Mexico Inst. Mining and Tech., 109 p.
- Jenkins, David N.**  
1977 Geohydrologic investigation of the Turquoise Trail subdivision area, Santa Fe County, New Mexico: *Geohydrolog. Assoc., Inc., consult. rept. to Lee Wilson and Assoc.*, 24 p.  
*see* Wilson, Lee, and Jenkins, 1979
- Jenkins, John T., Jr.**  
1979 (and Cunningham, S. B.) Depositional environment of Poison Canyon sandstone in Gulf Mariano Lake mine, *abs. in Grants uranium region*, a symposium: *Am. Assoc. Petroleum Geologists, Program*, p. 14; *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 4, p. 690  
1980 (and Cunningham, S. B.) Depositional environment of Brushy Basin Member, Morrison Formation, in Gulf Mariano Lake mine, McKinley County, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 153-161, 1 table, 9 figs.
- Jenkins, P. H.**  
*see* Styron and others, 1979
- Jensen, Dal H.**  
*see* Bivens and others, 1979
- Jensen, H. N.**  
*see* Wentworth and others, 1979, 1980
- Jensen, L.**  
*see* Schilt and others, 1978
- Jentgen, Russell W.**  
1977 Pennsylvanian rocks in the San Juan Basin, New Mexico and Colorado: *New Mexico Geol. Soc.*,

Guidebook 28th field conf., San Juan Basin III, p. 129-132, 2 figs.

**1977** (and Fassett, J. E.) Sundance-Bisti-Star Lake 1976 drilling, McKinley and San Juan Counties, northwestern New Mexico: U.S. Geol. Survey, Open-file Rept. 77-369, 80 p., 1 table, 25 figs.

see Beach and Jentgen, 1978; Fassett, Black, and others, 1977; Fassett and Jentgen, 1978a-c; Fassett, Jentgen, and others, 1977; Fassett, Molenaar, and others, 1977; and Wilson, R. W., and Jentgen, 1980

#### **Jiracek, George R.**

**1979a** (Ander, M. E., and Holcombe, H. T.) Magnetotelluric soundings of crustal conductive zones in major continental rifts, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 209-222, 5 figs.

**1979b** (Ander, M. E., and Holcombe, H. T.) Geoelectric soundings into the upper mantle of major continental rift zones (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 242

**1978** (Ander, M. E., and Reddy, I. K.) Magnetotelluric profiling across the Rio Grande rift COCORP study area in New Mexico, *abs.* in International symposium on the Rio Grande rift: Los Alamos Sci. Lab, Program and Abs., Rept. LA-7487-C, p. 46-47

**1976** (and Smith, C. S.) Deep resistivity investigations at two known geothermal resource areas (KGRAs) in New Mexico—Radium Springs and Lightning Dock, in Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 71-76, 8 figs.

**1977** (Smith, C. S., Ander, M. E., and others) Geophysical studies at Lightning Dock KGRA, Hidalgo County, New Mexico: Geothermal Resources Coun., Ann. Mtg., Trans., p. 157-158

**1976** (Smith, C. S., and Gerety, M. T.) Deep electrical resistivity soundings in the Rio Grande rift (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 940-941

see Hohmann and Jiracek, 1979; Parker, M. C., and Jiracek, 1980; and Smith, C. S., and others, 1977

#### **John, Chacko J.**

see Kraft and John, 1979

#### **John, Charles P.**

**1978** (Cheeseman, R. J., Lorenz, J. C., and Millgate, M. L.) Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico: U.S. Geol. Survey, Open-file Rept. 78-828, 48 p., 4 tables, 3 figs., 5 pls.

#### **Johnson, Bruce D.**

**1978** Genetic stratigraphy and provenance of the Baca Formation, New Mexico, and the Eagar Formation, Arizona: M.A. thesis, Univ. Texas (Austin); *abs.* in Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 526

see Cather and Johnson, 1980

#### **Johnson, Douglas M.**

**1976** (and Combs, Jim) Microearthquake survey of the Kilbourne Hole KGRA, south-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 942

#### **Johnson, Kenneth S.**

**1980** Dissolution of salt in the Permian Basin of the

southwestern United States (abs.): 26th Internat. Geol. Congr., Abs., v. 3, p. 1121

**1978** (Gonzales, Serge, and Lomenick, T. F.) Regional geologic characteristics important for storage of radioactive waste in salt deposits of United States (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 429

see Gonzales, S., and Johnson, 1980

#### **Johnson, Noye M.**

see Butler, R. F., Lindsay, and Johnson, 1979; Butler, R. F., Lindsay, and others, 1976, 1977; Lindsay, Butler, and Johnson, 1979; and Lindsay, Butler, Johnson, and Jacobs, 1979

#### **Johnson, Ross B.**

**1975** Geologic map of the Rainsville quadrangle, Mora County, New Mexico: U.S. Geol. Survey, Geol. Quad. Map GQ-1276, scale 1:24,000 [1976]

see Mapel and others, 1979

#### **Johnson, W. J.**

see Schubert and others, 1980

#### **Johnston, James A.**

**1978** Microearthquake frequency attenuation of S phases in the Rio Grande rift near Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 24, 85 p.

see Sanford, Rinehart, and others, 1977

#### **Johnston, Robert R.**

**1977** North American drilling activity in 1976: Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 8, p. 1121-1156, 21 tables, 10 figs., 8 appendices

**1979** North American drilling activity in 1978: Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 8, p. 1168-1203, 21 tables, 9 figs.

**1980** North American drilling activity in 1979: Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 9, p. 1295-1330, 21 tables, 9 figs.

#### **Johnstone, Paul S.**

**1977** South Corbin Morrow field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 84-85, 1 table, 1 fig.

#### **Jones, Bob**

**1977** (and McMillan, Colin) The seismograph as an exploration tool in southeastern New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 19-20

#### **Jones, C. L.**

**1978** Test drilling for potash resources—Waste Isolation Pilot Plant site, Eddy County, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-592, 441 p., 1 fig., 42 sheets; *abs.* in New Mexico Geology, v. 1, no. 1, p. 15

**1979** (McIntyre, A. F.) Geologic data for borehole WIPP 27, in Basic data report for drillhole WIPP 27: Sandia Lab., Rept. SAND 79-0281, p. 4-18, 3 tables, 2 figs.

see Gonzales, J. L., and Jones, 1979a,b

#### **Jones, D. M.**

see Borton and Jones, 1976, 1978

#### **Jones, David A.**

**1980** (and Kelsey, J. H.) Application of basin analysis to exploration strategy determination (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 27

- Jones, David P.**  
1980 Volcanic geology of the Alegros Mountain area, Catron County, New Mexico: M.S. thesis, Univ. New Mexico, 83 p.
- Jones, Richard E.**  
1976 Taxonomic treatment of dinoflagellates and acritarchs from the Mancos Shale (Upper Cretaceous) of the southwestern United States: Ph.D. thesis, Univ. Arizona, 225 p.
- Jones, Ronald L.**  
*see* Smith, D. L., and Jones, 1978a,b
- Jones, T. W.**  
*see* Huffman and Jones, 1978
- Jons, Richard D.**  
1976 (and Stanley, J. R.) Rock Tank (Morrow sandstone) field, Eddy County, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 60, no. 2, p. 326
- Jordan, J. B.**  
1977a La Rica Morrow field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 128-129, 1 table, 1 fig.  
1977b Lea Bone Springfield, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 132-133, 1 table, 1 fig.
- Ju, F. D.**  
*see* Hsu and others, 1978
- Jurdy, Donna M.**  
1978 Seismic imaging of the Precambrian basement using Abo Pass, New Mexico (COCORP) data (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 4, p. 390  
1979 Shallow structure of the Rio Grande rift, New Mexico, from COCORP data (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 314  
1980 (and Brocher, T. M.) Shallow velocity model of the Rio Grande rift near Socorro, New Mexico: Geology, v. 8, no. 4, p. 185-189
- Jurich, David**  
1980 Raton Mesa coal region report—a study of Upper Cretaceous and early Tertiary geology, coal, and the potential coalbed methane resources of the Raton Basin in Colorado and New Mexico: McLean, Virginia, TRW, Inc., Energy Systems Plan. Div., 150 p., 10 tables, 58 figs., 3 appendices
- Jurkowski, G. A.**  
*see* Brown, L. D., Miesen, and others, 1980; *and* Reilinger, Brown, and Jurkowski, 1980
- Kaehler, C. A.**  
*see* Wilkins and others, 1980
- Kagan, R. S.**  
*see* Chery and Kagan, 1976
- Kaiser Steel Corporation**  
1976 Underground and surface operations at the York Canyon mine: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 253-255, 8 figs.  
1980 Underground and surface operations at the York Canyon mine, *in* Proceedings of the fourth symposium on the geology of Rocky Mountain coal, L. M. Carter, editor: Colorado Geol. Survey, Resource Ser. 10, p. 129-131
- Karably, Louis S.**  
*see* Bath and others, 1977
- Karna, W. W.**  
1977 Utah International's Navajo mine: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 251-252, 2 tables, 1 fig.  
1979 Multiple seam operations at the Navajo mine, New Mexico, *in* Stability in coal mining, C. O. Brawner, editor: San Francisco, Miller Freeman Pub., p. 454-458
- Kasten, James A.**  
1977 Petrology and geochemistry of calc-alkaline andesites within the Albuquerque Basin, Valencia County, New Mexico: M.S. thesis, Univ. New Mexico, 79 p.  
*see* Brookins, Kasten, and Kudo, 1980
- Kasten, Terri A.**  
1980 Geology and metamorphism of Precambrian rocks in the Placitas area, northern Sandia Mountains, Sandoval County, New Mexico: M.S. thesis, Univ. New Mexico, 111 p.
- Kauffman, David**  
1980 (Houghton, A. V., Cortner, J. C., Lee, M. C., Moyers, C. F., Ungan, Aydin, and Vogel, J. E.) Feasibility of a retrofit geothermal heating system for the University of New Mexico campus: Geothermal Resources Council, Trans., v. 4, September, p. 577-579
- Kauffman, Erle G.**  
1977 Illustrated guide to biostratigraphically important Cretaceous macrofossils, Western Interior basin, U.S.A.: Mtn. Geologist, v. 14, p. 225-274
- Kaufman, E. L.**  
1979 (compiler, and Siciliano, C. L. B., editor) Environmental analysis of the Fenton Hill hot dry rock geothermal test site: Los Alamos Sci. Lab., Rept. 7830, 57 p.  
1980 (compiler, and Siciliano, C. L. B., editor) Petro-thermal energy versus the environment in New Mexico: Internat. Soc. Geotherm. Engineering and the Geotherm. Jour., v. 5, no. 2, p. 47-52
- Kaufman, Sidney**  
1977 (and Oliver, J. E.) Deep crustal seismic profiling in Hardeman County, Texas, and the Rio Grande rift area of New Mexico (abs.): Geophysics, v. 42, no. 1, p. 159  
*see* Brown, L. D., Allmendinger, and others, 1980; Brown, L. D., Chapin, and others, 1980; Brown, L. D., Kaufman, and Oliver, 1977; Brown, L. D., Krumhansl, Chapin, and others, 1979; Brown, L. D., Krumhansl, Cook, and Kaufman, 1978; Brown, L. D., Krumhansl, Cook, Kaufman, and others, 1978; Long, G. H., and others, 1977; Oliver, J. R., and Kaufman, 1976; Oliver, J. E., Sanford, and others, 1976; *and* Schilt and others, 1978
- Kaufmann, Robert F.**  
1976 (Eadie, G. G., and Russell, C. R.) Effects of uranium mining and milling on ground water in the Grants mineral belt, New Mexico: Ground Water, v. 14, no. 5, p. 296-308, 9 figs., 3 tables  
1977 (Eadie, G. G., and Russell, C. R.) Summary of ground-water quality impacts of uranium mining and milling in the Grants mineral belt, New Mexico (abs.): Sel. Water Resources Abs., v. 10, no. 6, p. 41  
*see* Eadie and Kaufmann, 1977

**Keefer, Keith D.**

1976 The atomic arrangements of low sanidine and high albite in a cryptoperthitic intergrowth (abs.): *Geol. Soc. America*, v. 8, no. 6, p. 948-949

1978 (and Brown, G. E.) Crystal structures and compositions and sanidine and high albite in cryptoperthitic intergrowth: *Am. Mineralogist*, v. 63, no. 11-12, p. 1264-1273

**Keetch, C. Wesley**

1980 Soil survey of San Juan County, New Mexico—eastern part: U.S. Dept. Agriculture, Soil Conserv. Serv., 173 p.

see Carey and Keetch, 1979

**Keil, Klaus**

see Berkeley, Callender, and Keil, 1976; Fodor and others, 1976; Lange and Keil, 1976; and Warren, R. G., and others, 1978

**Keith, Stanley B.**

1978 Paleosubduction geometries inferred from Cretaceous and Tertiary magmatic patterns in southwestern North America: *Geology*, v. 6, no. 9, p. 516-521, 4 table, maps

1978 (and Wilt, J. C.) Supplemental road log no. 3, Tucson to Lordsburg via Interstate 10: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 112-124, 12 figs.

1978 (Wilt, J. C., Lunch, Daniel, Deal, E. G., Clemons, R. E., and Forrester, J. D.) First day road log from Lordsburg to Douglas via Granite Gap and San Bernadino Valley with an extension to the southern end of the Mule Mountains: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 1-30, 33 figs.

**Keizer, Clifford R.**

1979 (Grigsby, C. O., and Abbot, Joseph) Water-hot dry rock interactions (abs.): *New Mexico Jour. Sci.*, v. 19, no. 2, p. 54

**Keller, G. Randy**

1979 Aeromagnetic map of Tortugas Mountains, Doña Ana County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 110, 2 sheets

1979 (and Braile, L. W.) Regional crustal structure of a portion of the western United States—an update (abs.): *Am. Geophys. Union (EOS)*, Trans., v. 60, no. 18, p. 397

1979 (Braile, L. W., and Schlue, J. W.) Regional crustal structure of the Rio Grande rift from surface wave dispersion measurements, in *Rio Grande rift—tectonics and magmatism*, R. E. Riecker, editor: *Am. Geophys. Union*, p. 115-126, 7 figs.; *abs. in International symposium on the Rio Grande rift, Los Alamos Sci. Lab.*, 1978, Program and Abs., Rept. LA-7487-C, p. 47-48

1977 (and Covert, L. L.) Tectonic implications of gravity and magnetic studies in west Texas (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 29-30

1978 (Graham, R. G., and Roy, R. F.) Regional geophysics of the southern Rio Grande rift, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 69-70, 1 fig.

1980a (Hills, J. M., and Djeddi, Rabah) An inte-

grated geophysical and geological study of the deep structure and tectonics of the Permian Basin (abs.): *Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program*, p. 38

1980b (Hills, J. M., and Djeddi, Rabah) A regional geological and geophysical study of the Delaware Basin, New Mexico and west Texas: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, p. 105-111, 1 table, 7 figs.

1976 (and Lowrey, W. S.) Regional crustal structure of the Rio Grande rift and adjacent areas (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 6, p. 951

1979 (Sinno, Y. A., Gish, D. M., and Harden, S. N.) Seismic refraction studies of the southern margins of the Colorado Plateau (abs.): *Earthquake Notes*, v. 50, no. 4, p. 9-10

see Cordell, Keller, and Hildenbrand, 1978; Olsen, K. H., Keller, and Stewart, 1979; Olsen, K. H., Keller, Stewart, and others, 1977; Orr, C. D., and others, 1979; and Veldhuluis and Keller, 1980

**Keller, G. V.**

1978 (Grose, L. T., and Crewdson, R. A.) Speculations on nature of geothermal energy in Basin and Range province of western United States: *Colorado School Mines, Quart.*, v. 73, no. 4, p. 71, 5 figs.

1978 (Grose, L. T., and Pickett, G. R.) Research on the physical properties of geothermal reservoir rock—quarterly report, March 1978: *Natl. Tech. Inf. Serv., Rept. COO-2908-3*, 21 p.

**Keller, L. F.**

1977 (Heatwole, C. G., and Weber, J.) Preliminary assessment of policy and management options for ground water mining in the Great Plains: *Kansas Water Resource Research Inst., Contrib.* 204, 169 p.

**Kelley, N. Ed**

see Marple and others, 1978; and Reynolds, J. F., and others, 1978

**Kelley, Richard E.**

see King, W. E., and Kelley, 1980

**Kelley, Vincent C.**

1976 Structure of the Albuquerque Basin, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 594-595

1977 Geology of Albuquerque Basin, New Mexico: New Mexico Bureau Mines Mineral Resources, Mem. 33, 60 p., 9 tables, 24 figs., 2 sheets (geol. map, scale 1:190,000; tectonic map, scale 1:280,000)

1978a Geology of Española Basin, New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 48, scale 1:125,000

1978b Western rift border and the Albuquerque Basin from the Ceja del Rio Puerco crest on I-40, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 150-151, 4 figs.

1978c East rift border and the Albuquerque Basin from I-40 to Albuquerque rest area, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 153, 2 figs.

1978d Features of the rift margin north of the Sandia uplift, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New

- Mexico Bureau Mines Mineral Resources, Circ. 163, p. 159-162, 3 figs.
- 1979a** Tectonics, middle Rio Grande rift, New Mexico, *in* Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 57-70, 4 figs.
- 1979b** Geomorphology of Española Basin: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 281-288, 4 figs.
- 1980** Gatuna Formation (late Cenozoic), Pecos Valley, New Mexico, and Trans-Pecos Texas: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, p. 213-217, 1 fig.
- 1978** (and Kudo, A. M.) Volcanoes and related basalts of Albuquerque Basin, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 156, 30 p., 16 tables, 32 figs., 2 sheets in pocket
- 1976** (Woodward, L. A., Kudo, A. M., and Callender, J. F.) Guidebook to Albuquerque Basin of the Rio Grande rift, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 153, 32 p., 32 figs.  
*see* Callender, Woodward, and Kelley, 1976; Fitzsimmons and Kelley, 1980; *and* Kudo and others, 1977
- Kelly, John M.**  
**1977** Round Tank (Queen) field, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 168, 1 table
- Kelly, Thomas E.**  
**1977** Geohydrology of the Westwater Canyon Member, Morrison Formation, of the southern San Juan Basin, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 285-290, 3 figs.
- 1976** (and Hearne, G. A.) The effects of groundwater development on the water supply in the Post Headquarters area, White Sands Missile Range, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-277, 93 p., 6 tables, 18 figs.
- 1980** (Link, R. L., and Schipper, M. R.) Effects of uranium mining on ground water in Ambrosia Lake area, New Mexico, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 313-319, 2 tables, 9 figs.; *abs. in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 14; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 690
- Kelly, W.**  
**1979** Evaluation of the environmental effects of western surface coal mining—v. II, mine inventory: Natl. Tech Inf. Serv., Rept. EPA-600/7-79-034, 197 p.
- Kelsey, Jack H.**  
*see* Jones, D. A., and Kelsey, 1980
- Kendall, Alan C.**  
**1977** (and Broughton, P. L.) Discussion—calcite and aragonite fabrics, Carlsbad Caverns: Jour. Sed. Petrology, v. 47, no. 3, p. 1397-1400, 2 figs.
- Kendorski, Francis S.**  
**1978** The cavability of ore deposits: Mining Engineering, v. 30, no. 6, p. 628-631, 3 figs.
- Kendrick, Al**  
**1978** (and Dugan, T. A.) Aztec Farmington (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 186-187, 1 fig.
- Kennedy, Claude C.**  
**1978a** Franciscan Lake Mesaverde (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 304-306, 3 figs.
- 1978b** Rusty Chacra (gas); Rusty Gallup (gas); Rusty Menefee (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 477-479, 2 figs.
- 1978c** Walker Dome Mancos (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 556-557, 3 figs.
- Kennedy, V. C.**  
*see* Rathbun and Kennedy, 1978
- Kennedy, W. J.**  
**1976** (and Cobban, W. A.) Aspects of ammonite biology, biogeography, and biostratigraphy: Paleontological Assoc., Spec. Paper Paleontology, no. 17, 94 p., 11 pls., 5 tables, 24 figs.
- Kent, D. V.**  
**1977** An estimate of the duration of the faunal change at the Cretaceous-Tertiary boundary: Geology, v. 5, p. 767-771
- Kent, Susan C.**  
**1980** Precambrian geology of the Tusas Mountain area, Rio Arriba County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 151 p., 7 tables, 18 figs., 1 sheet, scale 1:12,000
- Kerrick, Derrill M.**  
*see* Solomon and Kerrick, 1976
- Keys, Reginald C.**  
**1977** West Sawyer San Andres field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 174-175, 1 table, 1 fig.
- Kidd, D. E.**  
*see* Gloss and others, 1978
- Kietzke, Kenneth K.**  
**1979** (and Kues, B. S.) A large assemblage of the eurypterid *Adelophthalmus* from the Madera Formation (Virgilian) of central New Mexico (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 105-106  
*see* Anderson, R. Y., Kietzke, and Rhodes, 1978; *and* Kues and Kietzke, 1976
- Killough, J. E.**  
**1979** (and Foster, H. P., Jr.) Reservoir simulation of the Empire Abo field—the use of pseudos in a multilayered system: Soc. Petroleum Engineers, Jour., v. 19, no. 5, p. 279-288, 2 figs., 1 appendix
- Kimble, Frank S.**  
**1979** (and Haynes, P.) An occurrence of red beryls in the Black Range, New Mexico (abs.): Univ. New Mexico, New Mexico Minerals Symp., p. 10
- Kimbro, C. H.**  
**1977a** Sand Dune (Atoka) field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 170-171, 1 table, 1 fig.



- 1977b** Sand Dune (Cherry Canyon) field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 172-173, 1 table, 1 fig.
- Kinchloe, Dalton**
- 1977** Antelope Ridge field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 38-39, 1 table, 1 fig.
- 1977** (and David, E. K.) Oil Center Blinbry field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 142-143, 1 table, 1 fig.
- King, Kenneth W.**
- 1977** (and Hays, W. W.) Comparison of seismic attenuation in northern Utah with attenuation in four other regions of the western United States: Seismol. Soc. America, Bull., v. 67, no. 3, p. 781-792, 7 tables, 4 figs.
- King, Robert E.**
- 1977** Onshore successes dominate U.S. exploratory efforts: World Oil, v. 184, no. 7, p. 41-45, 3 figs.
- King, William E.**
- 1980** (and Kelley, R. E.) Geology and paleontology of Tortugas Mountain, Doña Ana County, New Mexico: New Mexico Geology, v. 2, no. 3, p. 33-35
- Kintzinger, P. R.**
- 1976** Geophysical measurements of Fenton Hill (abs.): Am. Geophys. Union (EOS), Trans., v. 57, no. 4, p. 349
- 1978** (and others) Mise-a-la-masse detection and modeling of hydraulic fractures at LASL geothermal site (abs.): Soc. Explor. Geophys., 48th Internat. Mtg., Abs., p. 107
- 1978** (Reynolds, C. B., West, F. G., and Suhr, G.) Seismic reflection surveys near LASL geothermal site: Natl. Tech. Inf. Serv., Rept. LA-7228-MS, 18 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 3, p. 47
- 1976** (and West, F. G.) Seismic reconnaissance of the Los Alamos Scientific Laboratory's hot dry rock geothermal project area: Los Alamos Sci. Lab., Rept. LA-6435-MS, 19 p.
- Kirk, Allan R.**
- 1979** Cretaceous stratigraphic studies (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 41
- 1978** (Huffman, A. C., Jr.; Zech, R. S.; Robertson, J. F.; and Jackson, T. J.) Review of the history of usage of the Gallup Sandstone and related units, southern and western San Juan Basin, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-1055, 56 p., 25 figs.
- 1976** (and Sullivan, M. W.) Preliminary geologic map of the Dalton Pass quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-184, scale 1:24,000
- 1976a** (and Zech, R. S.) Preliminary structure contour map of the Dalton Pass quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-348, scale 1:24,000
- 1976b** (and Zech, R. S.) Preliminary geologic map and structure contour maps of the Oak Spring quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-347, 2 sheets, scale 1:24,000
- 1976c** (and Zech, R. S.) Preliminary geologic and structure contour maps of the Hard Ground Flats quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-859, 2 sheets, scale 1:24,000
- 1977** (and Zech, R. S.) The transgressive and regressive relationships between the Upper Cretaceous Mulatto Tongue of the Mancos Shale and the Dalton Sandstone Member of the Crevasse Canyon Formation, Gallup-Pinedale area, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 185-192, 5 figs.
- 1978** (and Zech, R. S.) Preliminary geologic and structure contour maps of the Big Rock Hill quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-115, 2 sheets, scale 1:24,000  
*see* Huffman, Kirk, and Corken, 1979, 1980; *and* Peterson, F., and Kirk, 1977
- Kirkland, Douglas W.**
- 1980** (and Evans, Robert) Origin of castiles on the Gypsum Plain of Texas and New Mexico: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, p. 173-178, 4 figs.  
*see* Anderson, R. Y., and Kirkland, 1979, 1980
- Kirschner, Carolyn E.**
- 1979** Structural evolution of a Precambrian tidal flat, Taos County, New Mexico: M.S. thesis, Univ. Texas (Austin)  
*see* Barrett and Kirschner, 1979
- Klameth, L. C.**  
*see* Nelson, R. E., and others, 1978
- Kleeman, W. T.**
- 1977** (and Savage, V. H.) Geothermal resources as an alternative for an area with an energy problem—the Rio Grande region: Geothermal Resources Coun., Ann. Mtg., Proc., p. 169-171
- Kluth, Charles F.**
- 1980** (and Coney, P. J.) Plate tectonics of the ancestral Rocky Mountains (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 277
- Knauf, James A.**
- 1977** Power Grayburg field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 152-153, 1 table, 1 fig.
- Knepper, Daniel H., Jr.**
- 1978** Analysis of linear features, Rio Grande rift zone, central New Mexico, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 48-49  
*see* Zech and Knepper, 1979
- Koch, F. G.**  
*see* Eichelberger and Koch, 1979
- Kocurek, Gary**
- 1977** Petrology and environments of deposition of the Percha Formation, Upper Devonian, southwestern New Mexico: M.S. thesis, Univ. Houston
- 1977** (and Chafetz, H. S.) Environment of deposition of the Percha Shale, southwestern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 30-31



see Chaiffetz and others, 1977

**Kolstad, C. D.**

1978 (and McGetchin, T. R.) Thermal evolution models for the Valles caldera with reference to a hot-dry-rock geothermal experiment: *Jour. Volcanology and Geothermal Research*, v. 3, no. 1/2, p. 197-218, 3 tables, 12 figs.

1976 (McGetchin, T. R., and Laughlin, A. W.) Pluton thermal evolution modeling and observations in GT-2 (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 350

**Kondrat'yeva, T. I.**

1979 (and Gorshkov, S. P.) Basseyn Kolorado stanovitsya oblast'yu vnutrennego stoka (The Colorado basin becoming a region of interior drainage): *Priroda*, no. 10, p. 76-81

**Kosocki, Bruce A.**

1978 (Robbins, S. L., and Schmoker, J. W.) Principal facts for borehole gravity stations in stratigraphic test well ERDA no. 9, Eddy County, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-696, 13 p., 3 figs.

**Kostura, John R.**

see Owen, Walters, Kostura, and Grant, 1976

**Kottlowski, Frank E.**

1976 Sedimentary fill of the Rio Grande structural depression in New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 596

1977 New Mexico geology and petroleum potential: Interstate Oil Compact Comm., Comm. Bull., v. 19, no. 2, p. 26-30, 2 figs.

1979a Geologic New Mexico: *New Mexico Geology*, v. 1, no. 1, p. 2

1979b Bottomless Lakes—New Mexico State Park series: *New Mexico Geology*, v. 1, no. 4, p. 57-58, 1 fig.

1980 Pancho Villa—New Mexico State Park series: *New Mexico Geology*, v. 2, no. 3, p. 45-46, 4 figs.

1976 (Beaumont, E. C., and Shomaker, J. W.) New Mexico coal seams, in 1976 Keystone coal industry manual: New York, McGraw-Hill, Inc., p. 602-610

1977 (Beaumont, E. C., and Shomaker, J. W.) Coal seams in New Mexico, in 1977 Keystone coal industry manual: New York, McGraw-Hill, Inc., p. 633-641

1977 (Seager, W. R., LeMone, D. V., and Simpson, R. D.) Abo-Huaco lithostratigraphic relationships of south-central New Mexico and far west Texas (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 32, 57

1976 (and staff) Annual report for the fiscal year July 1, 1975 to June 30, 1976: *New Mexico Bureau Mines Mineral Resources*, 47 p., 5 tables, 10 figs.

1977 (and staff) Annual report for the fiscal year July 1, 1976 to June 30, 1977: *New Mexico Bureau Mines Mineral Resources*, 87 p., 8 tables, 20 figs., 2 pls.

1979 (and staff) Annual report for the fiscal year July 1, 1977 to June 30, 1978: *New Mexico Bureau Mines Mineral Resources*, 61 p., 3 tables, 9 figs., 1 pl.

1980 (and staff) Annual report for the fiscal year July 1, 1978 to June 30, 1979: *New Mexico Bureau Mines Mineral Resources*, 80 p., 5 tables, 16 figs., 2 pls.

1979 (and Steensma, R. S.) Barite-fluorite-lead

mines of Hansonburg mining district in central New Mexico: *New Mexico Geology*, v. 1, no. 2, p. 17-20, 32, 1 table, 2 figs.

1980 (Tabet, D. E., and Frost, S. J.) New Mexico coal seams, in 1979 Keystone coal industry manual: New York, McGraw-Hill, Inc., p. 524-533

1979 (and Thompson, Sam, III) Energy resources of New Mexico (abs.): *New Mexico Geology*, v. 1, no. 2, p. 32

1980 (and Thompson, Sam, III) Estimate of energy resources of New Mexico 1979: *New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1978-79*, p. 58-67, 2 tables, 2 figs.

see Anderson, O. J., Hatton, and Kottlowski, 1977; Armstrong, A. K., Kottlowski, and others, 1980; Arnold, Foster, and others, 1976; Eveleth and Kottlowski, 1980; Greenwood and others, 1977; Hawley, Chapin, Chamberlin, and others, 1978; Hawley and Kottlowski, 1978; Rautman and Kottlowski, 1977; Robertson, J. M., Budding, and others, 1979; Seager, Kottlowski, and Hawley, 1976; Siemers, W. T., Austin, and Kottlowski, 1980; and Tabet, Frost, and Kottlowski, 1977, 1979

**Kozusko, R. G.**

1980 (and Saucier, A. E.) The Bernabe Montañó uranium deposit, Sandoval County, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: *New Mexico Bureau Mines Mineral Resources, Mem. 38*, p. 262-268, 8 figs.; *abs. in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program*, p. 14

**Kraft, John C.**

1979 (and John, C. J.) Lateral and vertical facies relations of transgressive barrier: *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 12, p. 2145-2163, 1 table, 12 figs.

**Kraxberger, V. E.**

see Alminas, Watts, and others, 1978a-d; and Watts, Alminas, and Kraxberger, 1978

**Krieg, R. D.**

1980 (and Hunter, T. O.) Geomechanics activities conducted at Sandia National Laboratories in support of the Waste Isolation Pilot Plant: *Univ. California, Lawrence Berkeley Lab., Energy and Environ. Div., Rept. 11204*, p. 81-88

**Krier, Jonathon D.**

1980 Geology of the southern part of the Gila Primitive Area, Grant County, New Mexico: M.S. thesis, *Univ. New Mexico*, 112 p.

**Krishtalka, L.**

1976a Early Tertiary Adapisoricidae and Erinaceidae (Mammalia, Insectivora) of North America: *Carnegie Museum Natural History, Bull.*, v. 1, p. 1-40

1976b North American Nyctitheriidae (Mammalia, Insectivora): *Carnegie Museum, Annals*, v. 46, art. 2, p. 7-28

**Krohn, Douglas H.**

1976 Gravity survey of the Mogollon Plateau volcanic province, southwestern New Mexico, in *Cenozoic volcanism in southwestern New Mexico*, W. E. Elston and S. A. Northrop, editors: *New Mexico Geol. Soc., Spec. Pub. 5*, p. 113-116, 2 figs.

- Kron, A.**  
see Goff and Kron, 1980
- Krueger, Harold W.**  
see Brookins, Register, and Krueger, 1980
- Krumhansl, Peter A.**  
see Brown, L. D., Krumhansl, Chapin, and others, 1979; Brown, L. D., Krumhansl, Cook, and Kaufman, 1978; Brown, L. D., Krumhansl, Cook, Kaufman, and others, 1978; and Schilt and others, 1978
- Kudo, Albert M.**  
**1976a** A review of the volcanic history and stratigraphy of northeastern New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 109-110  
**1976b** Volcanism within the Rio Grande rift (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 597  
**1977** (Kelley, V. C., Damon, P. E., and Shafiqullah, M.) K-Ar ages of basalt flows at Canjilon Hill, Isleta volcano, and the Cat Hills volcanic field, Albuquerque-Belen Basin, central New Mexico: *Ischron/West*, no. 18, p. 15-16  
see Aoki and Kudo, 1976; Aubele and others, 1976; Brookins, Kasten, and Kudo, 1980; Brookins, Warren, and Kudo, 1980; Enz and others, 1979; Kelley, V. C., and Kudo, 1978; Kelley, V. C., Woodward, and others, 1976; Warren, R. G., and others, 1978; and Zimmerman and Kudo, 1978, 1979a, b
- Kues, Barry S.**  
**1980** A fossil crab from the Mancos Shale (Upper Cretaceous) of New Mexico: *Jour. Paleontology*, v. 54, no. 4, p. 862-864  
**1977** (Froehlich, J. W., Schiebout, J. A., and Lucas, S. G.) Paleontological survey, resources assessment, and mitigation plan for the Bisti-Star Lake area, northwestern New Mexico: Albuquerque, U.S. Bureau Land Management, rept., 399 p.  
**1976** (and Kietzke, K. K.) Paleontology and stratigraphy of the Red Tanks Member, Madera Formation (Pennsylvanian) near Lucero Mesa, New Mexico, in *Tectonics and mineral resources of southwestern North America*, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 102-108, 3 figs.  
**1980** (Lehman, T., and Rigby, J. K., Jr.) The teeth of *Alamosaurus sanjuanensis*, a Late Cretaceous sauropod: *Jour. Paleontology*, v. 54, no. 4, p. 864-869  
**1979** (and Lucas, S. G.) Summary of the paleontology of the Santa Fe Group (Mio-Pliocene), north-central New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 237-241, 1 table, 1 fig.  
see DuChene and others, 1977; Ewing and Kues, 1976; Kietzke and Kues, 1979; and Lucas and Kues, 1979
- Kues, Georgiana**  
see Turner, W. M., and Kues, 1978
- Kukalova-Peck, Jarmila**  
**1976** (and Peck, S. B.) Adult and immature Calvertiellidae (Insecta: Palaeodictyoptera) from the upper Paleozoic of New Mexico and Czechoslovakia: *Psyche*, v. 83, no. 1, p. 79-93, 8 figs.
- Kunath, C. E.**  
**1978a** (editor) The caves of McKittrick Hill, Eddy County, New Mexico—history and results of field work, 1965-1976: Texas Speleological Soc., 83 p.  
**1978b** Endless Cave, in *The caves of McKittrick Hill, Eddy County, New Mexico—history and results of field work, 1965-1976*: Texas Speleological Soc., p. 21-30  
see Byrd and Kunath, 1978; and Fieseler and Kunath, 1978a, b
- Kunkler, J. L.**  
**1980** Evaluation of the Malaga Bend salinity alleviation project, Eddy County, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-1111, 37 p. [1981]  
**1977** (and Scott, A. G.) Plan for a study of part of the Jicarilla Apache Indian Reservation: U.S. Geol. Survey, Open-file Rept. 77-756, 37 p., 2 figs.  
see Scott, A. G., and Kunkler, 1976
- Kurtz, Dennis D.**  
**1978a** Sedimentology and stratigraphy of the Triassic Chinle Formation, eastern San Juan Basin, New Mexico: M.S. thesis, Rice Univ., 177 p.  
**1978b** Upper Triassic Chinle Formation—north-central New Mexico—effects of waning influence of the southern ancestral Rocky Mountains on sedimentation (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 5, p. 219  
**1980** (and Anderson, J. B.) Depositional environments and paleocurrents of Chinle Formation (Triassic), eastern San Juan Basin, New Mexico: *New Mexico Geology*, v. 2, no. 2, p. 22-27, 1 table, 6 figs.
- LaDelfe, Carol M.**  
see Maassen, LaDelfe, and others, 1980
- LaFevers, J. R.**  
see Imhoff and others, 1976
- LaFon, Neal**  
**1980** Sedimentology and depositional environments of the Semilla Sandstone Member (Mancos Shale, Upper Cretaceous), eastern side of the San Juan Basin, New Mexico: M.S. thesis, Univ. Kansas  
see Ratkevich and LaFon, 1978
- LaFrance, Leo**  
see Gunaji, Thode, and others, 1978
- Lamb, N. Raymond**  
**1977** Grama Ridge Morrow field, Lea County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: Roswell Geol. Soc., p. 108-109, 1 table, 1 fig.
- Lambert, P. Wayne**  
**1976** Road log describing the Quaternary geology of the Albuquerque area, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-95, 20 p., 1 fig.  
**1978a** Rio Grande bridge (I-25) to Bernalillo, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 144-158, 8 figs.  
**1978b** Upper Santa Fe stratigraphy and geomorphic features of the Llano de Albuquerque, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 151  
see Hawley, Chapin, Chamberlin, and others, 1978; and Wilcox and others, 1980
- Lambert, Steven J.**  
**1976** Stable isotope studies of some active hydrothermal systems: Ph.D. thesis, California Inst. Tech.,

- 387 p.: *Dissert. Abs. Internat.*, v. 36, no. 9, p. 4351-B-4352-B
- 1978** Geochemistry of Delaware Basin ground waters, *in* Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 32-38, 5 tables
- 1979a** Justification, *in* Basic data report for drill-hole WIPP 25: Sandia Lab., Rept. SAND79-0279, appendix A, p. A1-A13, 1 fig.
- 1979b** Justification, *in* Basic data report for drill-hole WIPP 27: Sandia Lab., Rept. SAND79-0281, appendix A, p. A1-A13
- 1979c** Justification, *in* Basic data report for drill-hole WIPP 29: Sandia Lab., Rept. SAND79-0283, appendix A, p. A1-A13, 1 fig.
- 1980** Shallow-seated dissolution of bedded evaporites in the northern Delaware Basin (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 40
- 1980** (and Epstein, Samuel) Stable isotope investigations of an active geothermal system in Valles caldera, Jemez Mountains, New Mexico: *Jour. Volcan. and Geotherm. Research*, v. 8, no. 1, p. 111-129
- 1977** (and Mercer, J. W.) Hydrologic investigations of the Los Medaños area, southeastern New Mexico: Sandia Lab., Pub. SAND77-1401, 56 p.  
*see* Barr and others, 1979; *and* Brookins, Register, and others, 1978
- Lampert, Leon M.**
- 1977a** Queen sand in the Double L and Sulimar fields, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 29-37, 1 table, 7 figs.
- 1977b** Double L-Queen Associated field, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 91, 1 table
- 1977c** Sulimar Queen field, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: *Roswell Geol. Soc.*, p. 191, 1 table
- Landa, Edward**
- 1980** Isolation of uranium mill tailings and their component radionuclides from the biosphere—some earth science perspectives: *U.S. Geol. Survey, Circ.* 814, 32 p., 2 tables, 2 figs.
- Landis, Edwin R.**  
*see* Hook, Cobban, and Landis, 1980
- Landis, Gary P.**  
*see* Brookins, Chakoumakos, and others, 1979
- Landwehr, J. Maclunas**
- 1978** (Matalas, N. C., and Wallis, J. R.) Some comparisons of flood statistics in real and log space: *Water Resources Research*, v. 14, no. 5, p. 902-920, 29 tables, 8 figs.
- Lane, H. Richard**
- 1979** (and De Keyser, T. L.) Mississippian carbonate shelf along the eastern flank of the Transcontinental Arch, Illinois to New Mexico (abs.): 9th Internat. Cong. Carboniferous Stratigraphy and Geology, Abs., p. 114
- Lange, David E.**
- 1980** Stratigraphic implications of uranium deposits, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 36-39, 5 figs.; *abs. in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 14-15; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 690-691
- 1976** (and Keil, Klaus) Meteorites of northeastern New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 293-299, 2 tables, 7 figs.
- Langhorst, G. J.**
- 1980** Preliminary study of the potential environmental concerns associated with surface waters and geothermal development of the Valles caldera: Los Alamos Natl. Lab., Rept. 8398-MS, 13 p.
- Lansford, Robert R.**
- 1980** (Chaturvedi, L. N.; Abernathy, G. H.; Creel, B. J.; Nelson, D. C.; Cotter, D. J.; Gollehon, N. R.; Clevenger, T. S.; and Patterson, R. C.) Utilization of geothermal energy for agribusiness development in southwestern New Mexico: Geothermal Resources Coun., Trans., v. 4, September, p. 581-584, 1 table, 1 fig.
- 1976a** (and others) Irrigated cropland acreage and source of water used for irrigation in New Mexico by county: New Mexico State Univ., Agric. Exp. Station, Research Rept. 324, 39 p.
- 1976b** (and others) A preliminary economic study for the establishment of an energy-water complex in the Tularosa Basin—executive summary: New Mexico State Univ., Water Resources Research Inst., Rept. 067, 10 p.
- 1976c** (and others) A preliminary economic feasibility study for the establishment of an energy-water complex in the Tularosa Basin: New Mexico State Univ., Water Resources Research Inst., Rept. 068, 231 p.
- LaPoint, Dennis J.**
- 1976** A comparison of selected sandstone copper deposits in New Mexico: *Oklahoma Geol. Survey, Circ.* 77, p. 80-96
- 1977** The migration and precipitation of metals in waters associated with sandstone copper deposits (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 6, p. 742
- 1979** Geology, geochemistry, and petrology of sandstone copper deposits in New Mexico: Ph.D. thesis, Univ. Colorado (Boulder), 353 p.; *Dissert. Abs. Internat.*, 1980, v. 40, no. 8, p. 3629-B
- 1977** (and Christensen, D. K.) Evidence for source areas and depositional environments of Santa Rosa Sandstone (late Triassic) of east-central New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 8, p. 1382
- Laquer, F.**  
*see* Popp and Laquer, 1980
- Larkin, Robert P.**
- 1980** (Grogger, P. K., and Peters, G. L.) The southern Rocky Mountains: Kendall/Hunt Publ. Co., geol. field guide, 166 p.
- Laroche, T. Matthew**
- 1980** Geology of the Gallinas Peak area, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 128, 154 p., 1

- table, 17 figs., appendix, 2 sheets, scale 1:24,000; M.S. thesis, New Mexico Inst. Mining and Tech.
- Laskin, J. P.**  
see Bodine and Laskin, 1979
- Laughlin, A. William**  
1976 (Brookins, D. G., and Damon, P. E.) Late-Cenozoic basaltic volcanism along the Jemez zone of New Mexico and Arizona (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 598  
1979 (Brookins, D. G., Damon, P. E., and Shafiqullah, M.) Late-Cenozoic volcanism of the central Jemez zone, Arizona-New Mexico: *Isochron/West*, no. 25, p. 5-8, 1 table  
1976 (and Eddy, A. C.) Petrography and geochemistry of Precambrian core samples from GT-2 and EE-1 (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 350  
1976 (and West, F. G.) The Zuni Mountains, New Mexico, as a potential dry hot rock geothermal energy site: *Los Alamos Sci. Lab., Rept. 6197*, 13 p.  
1977 (and West, F. G.) Hot, dry rock (HDR) geothermal energy—exploitation and exploration (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 5, p. 807-808  
1977 (West, F. G., Pettitt, R. A., Eddy, A. C., Balagna, J. P., and Charles, R. W.) Status of the Los Alamos experiment to extract geothermal energy from dry hot rock (abs.): *Geology*, v. 5, no. 4, p. 237-240  
see Aiken, Laughlin, and West, 1977, 1978; Ander, Goss, and others, 1980; Ander, Laughlin, and others, 1980; Balagna, West, and others, 1977; Brookins and Laughlin, 1976a, b, 1977; Charles, West, and others, 1977; Kolstad, McGechen, and Laughlin, 1976; and West and Laughlin, 1976
- Laurie, Karen P.**  
1976 History of Vermejo Park: *New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park*, p. 87-92, 7 figs.  
1980 History of Vermejo Park, in *Proceedings of the fourth symposium on the geology of Rocky Mountain coal*, L. M. Carter, editor: *Colorado Geol. Survey, Resource Ser. 10*, p. 123-128
- Lauth, Robert E.**  
1978a Stoney Butte Dakota (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 503-504, 3 figs.  
1978b Stoney Butte Mesaverde (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 505-506, 3 figs.  
1978c Table Mesa Dakota (oil), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 507-509, 4 figs.
- Lavery, N. G.**  
1977 (and Trauger, F. D.) Addendum to geohydrology of the upper Pipeline Draw area, Grant County, New Mexico: *Exxon Corp.*, rept., 13 p.  
see Moore, S. C., and Lavery, 1980
- Lawler, George C.**  
see Ash, Dean, and others, 1978; and Weber, D. J., and Lawler, 1978
- Lawrence, John R.**  
1979 Geology of the Cerro del Grant area, Rio Arriba County, north-central New Mexico: M.S. thesis, Univ. New Mexico, 131 p.
- Lawton, R. G.**  
1979 (and Horton, E. H.) Data acquisition for the hot dry rock geothermal energy project: *Natl. Tech. Inf. Serv., Rept. LA-UR-79-812*, 7 p.; *abs. in New Mexico Geology*, 1980, v. 2, no. 1, p. 13  
see Murphy, H. D., and others, 1978
- Leach, David L.**  
1976 (and Puchlik, K. P.) Geochemical reconnaissance for uranium in arid regions of the western United States (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 599-600
- Lease, L. W.**  
1979 Geologic report on East Chaco Canyon drilling project, McKinley and San Juan Counties: *U.S. Dept. Energy, Rept. GJBX-98-80*, 62 p.
- Lee, M. C.**  
see Kauffman and others, 1980
- Lee, Moon J.**  
1976a Geochemistry of the sedimentary uranium deposits of the Grants mineral belt, southern San Juan Basin, New Mexico: Ph.D. thesis, Univ. New Mexico, 241 p., 22 tables, 32 figs.  
1976b Scanning electron microscopic study of the authigenic and detrital minerals of the uranium deposits of the Morrison Formation, Grants mineral belt, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 600  
1978 (and Brookins, D. G.) Rubidium-strontium minimum ages of sedimentation, uranium mineralization, and provenance, Morrison Formation (Upper Jurassic), Grants mineral belt, New Mexico: *Am. Assoc. Petroleum Geologists, Bull.*, v. 62, no. 9, p. 1673-1683, 3 tables, 12 figs.  
1980 (and Brookins, D. G.) Reply to discussion of "Rubidium-strontium minimum ages of sedimentation, uranium mineralization, and provenance, Morrison Formation (Upper Jurassic), Grants mineral belt, New Mexico": *Am. Assoc. Petroleum Geologists, Bull.*, v. 64, no. 10, p. 1719  
1977 (Brookins, D. G., and Shafiqullah, M.) K-Ar ages for clay-size and silt-size fractions of uranium ore from the Grants mineral belt, New Mexico: *Isochron/West*, no. 18, p. 17-19  
see Brookins, Della Valle, and Lee, 1977, 1978a, b; Brookins, Lee, and Riese, 1977; Brookins, Lee, and Shafiqullah, 1977; Brookins, Riese, and Lee, 1977; Riese, W. C., Brookins, and Lee, 1978, 1979; Riese, W. C., Lee, and Brookins, 1977; and Riese, W. C., Lee, and others, 1979
- Lee, Myung W.**  
see Ryder and others, 1980
- Lee, V. J.**  
see Apt and Lee, 1976
- Leeman, W. P.**  
1979 A tectonic interpretation of strontium isotopic variations in late Cenozoic lavas—western U.S. (abs.): *Geol. Soc. America, Abs. with Programs*, v. 11, no. 7, p. 464
- LeFebvre, Vernon G.**  
1976 Oxygen consumption in a confined limestone aquifer (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 249  
1977 Chemical dynamics of a confined limestone

- aquifer (Roswell Basin): New Mexico State Univ., Water Resources Research Inst., Rept. 084, 253 p.
- Lehman, T.**  
see Kues, Lehman, and Rigby, 1980
- Leininger, R. K.**  
see Austin, G. S., and Leininger, 1976
- LeMay, William J.**  
**1977a** Cemetery Morrow gas field, Eddy County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: Roswell Geol. Soc., p. 78-79, 1 table, 1 fig.  
**1977b** Siete San Andres field, Chaves County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: Roswell Geol. Soc., p. 184-185, 1 table, 1 fig.
- LeMone, David V.**  
**1977** Stratigraphic relationships of the Ordovician sediments in the El Paso border region (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 57-58  
**1976** (and Lovejoy, E. M. P.) Symposium on the stratigraphy and structure of the Franklin Mountains: El Paso Geol. Soc., 250 p.  
**1977** (and others) Applicant's paleontological assessment and continuing studies for the proposed Star Lake coal mine: Chaco Energy Co., rept., 152 p.  
**1979** (and others) Paleontological clearance assessment and evaluation report, state lands, Bisti Project: Western Coal Co., rept., 69 p.  
**1977** (and Simpson, R. D.) Paleocological interpretations of Wolfcamp fossil communities in south-central New Mexico and far west Texas (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 58  
**1978** (Simpson, R. D., and Thompson, Sam, III) Correlation of the Concha Limestone (Leonardian) in Hidalgo County, New Mexico (abs.): New Mexico Jour. Sci., v. 18, no. 2, p. 34-35  
see Kottlowski, Seager, and others, 1977; Nye and LeMone, 1978; Simpson, R. D., and LeMone, 1980; Simpson, R. D., LeMone, and Thompson, 1978a,b; Thompson, S., LeMone, and Simpson, 1977; Weise and LeMone, 1980; and Wolberg and LeMone, 1980
- Lemons, J. F.**  
see Weisner and others, 1980
- Lent, Judy**  
**1980a** San Juan Basin report—a study of Upper Cretaceous geology, coal, and coalbed methane resources of the San Juan Basin, in Colorado and New Mexico: Denver, TRW Energy Systems Group, 115 p., 12 tables, 40 figs., 4 appendices  
**1980b** San Juan Basin report—Early Tertiary geology, coal, and the potential for methane recovery from coal beds in Colorado and New Mexico: U.S. Dept. Energy, Rept. DE-AC21-78M, 131 p., 12 tables, 40 figs., 4 appendices, 12 sheets in pockets
- Leonard, A. Byron**  
**1977** Three new pulmonate gastropods from the Tertiary of New Mexico: *Nautilus*, v. 91, no. 4, p. 143-145  
**1978** (and Frye, J. C.) Paleontology of Ogallala Formation, northeastern New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 161, 21 p., 2 pls., 3 figs.  
see Frye and others, 1978
- Leonard, R. C.**  
**1977a** Avalon Penn (Cisco-Canyon) field, Eddy County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: Roswell Geol. Soc., p. 46, 1 table  
**1977b** Avalon Penn (Morrow) field, Eddy County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: Roswell Geol. Soc., p. 47-48, 1 table, 1 fig.  
**1977c** Avalon Penn (Strawn) field, Eddy County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: Roswell Geol. Soc., p. 49-50, 1 table, 1 fig.
- Leopold, Luna B.**  
**1976** Reversal of erosion cycle and climatic change: Quaternary Research, v. 6, no. 4, p. 557-562  
**1978** El Asunto del Arroyo, in *Geomorphology—present problems and future prospects*, C. Embleton, editor: London, Oxford Univ. Press, p. 25-39
- Lessard, Robert H.**  
**1976** First day road log from Las Vegas to Raton via Montezuma, Sapello, La Cueva (and vicinity), Ocate, Wagon Mound, and Springer: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 1-23, 24 figs.  
**1976** (and Bejnar, Waldemere) Geology of the Las Vegas area: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 103-108  
see Bejnar, C. R., and Lessard, 1976
- Lettemmaier, D. P.**  
see Moss and others, 1978
- Leventhal, Joel S.**  
**1979** Carbon-13/carbon-12 isotope fractionation of organic matter associated with uranium ores induced by alpha irradiation (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 47-48  
**1980** Organic geochemistry and uranium in Grants mineral belt, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 75-85, 4 tables, 10 figs.; abs. in *Grants uranium region, a symposium*, Am. Assoc. Petroleum Geologists, 1979, Program, p. 15; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 691  
**1978** (and Threlkeld, C. N.) Carbon-13/carbon-12 isotope fractionation of organic matter associated with uranium ores induced by alpha irradiation: *Science*, v. 202, no. 27, p. 430-431, 1 table, 2 figs.
- Levinson, A. R.**  
**1979** Depositional environments of the shales and coals of the Dakota Sandstone and adjacent units of the San Juan Basin, Colorado and New Mexico: M.S. thesis, Bowling Green State Univ., 125 p.
- Levitte, D.**  
**1980** (and Gambill, D. T.) Geothermal potential of west-central New Mexico from geochemical and thermal gradient data: Los Alamos Natl. Lab., Rept. 8608-MS, 102 p.
- Levy, P. W.**  
see Hayslip, Fuller, and others, 1979, 1980
- Levy, Susan**  
see Smith, D. L., and Levy, 1976
- Lewis, D. M.**  
see Nozaki, DeMaster, Benninger, and others,



- 1977; and Nozaki, DeMaster, Lewis, and Turekian, 1978
- Li, Ta M.**  
 1978 (and Wiebmer, J. D.) Uranium mining in the U.S.—producers rush to meet energy needs: Mining Engineering, v. 30, no. 10, p. 1405-1413, 10 tables, 6 figs.
- Liebes, E.**  
 see Shive and others, 1979
- Lindley, Julia I.**  
 1979 Chemical changes associated with the propylitic alteration of two ash-flow tuffs, Datil-Mogollon volcanic field, New Mexico: M.S. thesis, Univ. North Carolina  
 1980 (Ragland, P. C., and Chapin, C. E.) Chemical changes associated with the propylitic alteration of two ash-flow tuffs, Datil-Mogollon volcanic field, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Southwest Sec., Ann. Mtg., Program, p. 42-43
- Lindquist, W. F.**  
 1980 The exploration of the Ortiz gold deposit, New Mexico—geology and mineralization: Colorado Mining Assoc., mining yearbook, p. 106-112
- Lindsay, Everett H.**  
 1979 (Butler, R. F., and Johnson, N. M.) Reply on "Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico": Geology, v. 7, no. 7, p. 326-327  
 1979 (Butler, R. F., Johnson, N. M., and Jacobs, L. L.) Reply on "Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico": Geology, v. 7, p. 68-69  
 1978 (Jacobs, L. L., and Butler, R. F.) Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico: Geology, v. 6, no. 7, p. 425-429, 3 figs.  
 see Butler, R. F., Lindsay, and Johnson, 1979; and Butler, R. F., Lindsay, and others, 1976, 1977
- Lindsley, K.**  
 see Lindsley, P., and Lindsley, 1978
- Lindsley, P.**  
 1978 (and Lindsley, K.) Dry Cave, in The caves of McKittrick Hill, Eddy County, New Mexico—history and results of field work, 1965-1976, C. E. Kunath, editor: Texas Speleological Soc., p. 36-46
- Link, Regina L.**  
 see Kelley, Link, and Schipper, 1979, 1980
- Lipman, Peter W.**  
 1978 Antonito, Colorado, to Rio Grande Gorge, New Mexico, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 36-41, 7 figs.  
 1979 Structurally complex roots of a caldera near Questa, New Mexico (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 72  
 1979 (and Mehnert, H. H.) The Taos Plateau volcanic field, northern Rio Grande rift, New Mexico, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 289-311, 4 tables, 4 figs.; abs. in International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 53-54  
 1980 (and Mehnert, H. H.) Potassium-argon ages from the Mount Taylor volcanic field, New Mexico: U.S. Geol. Survey, Prof. Paper 1124-B, p. B1-B8  
 1979 (Pallister, J. S., and Sargent, K. A.) Geologic map of the Mount Taylor quadrangle, Valencia County, New Mexico: U.S. Geol. Survey, Geol. Quad. Map GQ-1523, scale 1:24,000  
 see Dungan and others, 1978; and Hawley, Burroughs, and others, 1978
- Lisenbee, Alvis L.**  
 1976a Shale diapirism and the structural development of the Galisteo syncline, Santa Fe County, New Mexico, in Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 88-94, 1 table, 8 figs.  
 1976b Shale diapirism in Galisteo syncline, Santa Fe County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 601  
 1979 (Woodward, L. A., and Connolly, J. R.) Tijeras-Cañoncito fault system—a major zone of recurrent movement in north-central New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 89-99, 9 figs.  
 see Woodward, Ingersoll, Fitch, and others, 1979
- Lisowski, M.**  
 see Savage, J. C., Lisowski, and Prescott, 1979; and Savage, J. C., Lisowski, and others, 1980
- Little, Curtis J.**  
 see Matheny, M. L., and Little, 1978a-c
- Livaccari, Richard F.**  
 1979 Late Cenozoic tectonic evolution of the western United States: Geology, v. 7, no. 2, p. 72-75, 6 figs.
- Livingston, Bowman A.**  
 1980 Geology and development of Marquez, New Mexico, uranium deposit, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 252-261, 3 tables, 8 figs.; abs. in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 15; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 691
- Locke, Jerry**  
 see Jaksha and Locke, 1978; and Jaksha, Locke, and others, 1977, 1978
- Lockwood, D. L.**  
 1978 A supply-demand forecast through the year 2000: Coal Mining and Processing, v. 15, no. 8, p. 55-58, 86, 5 tables, 6 figs.
- Loeber, Kenneth N.**  
 1976 Cenozoic volcanic geology of the Truth or Consequences-Engle area, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 601-602  
 see Aubele and others, 1976; and Sanguinetti and Loeber, 1976
- Loehr, Cynthia**  
 1979 Mineralogical and geochemical effects of basaltic dike intrusion into evaporite sequences near Carlsbad, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 69 p., 11 tables, 23 figs., 57 appendices
- Lofgren, Gary E.**  
 1979 Anatomy of an intersertal texture (abs.): Am.



- Geophys. Union (EOS), Trans., v. 60, no. 18, p. 420
- Lohmann, Kyger C.**  
 1978 Closed system diagenesis of high magnesium calcite and aragonite cement (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 446
- 1976 (and Meyers, W. J.) Microdolomite inclusions in cloudy prismatic calcites—a proposed criterion for former high magnesium calcites (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 983-984
- 1977 (and Meyers, W. J.) Microdolomite inclusions in cloudy prismatic calcites—a proposed criterion for former high-magnesium calcites: Jour. Sed. Petrology, v. 47, no. 3, p. 1078-1088, 1 table, 6 figs.  
 see Meyers, W. J., and Lohmann, 1978, 1980; and Oglesby and others, 1979
- Lohse, Richard L.**  
 1980 Geothermal assessment of Doña Ana County, New Mexico: Geothermal Resources Coun., Trans., v. 4, September, p. 217-220, 5 figs.
- 1980a (Morgan, Paul, and Swanberg, C. A.) A heat flow study of Doña Ana County, southern Rio Grande rift, New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 17, p. 363-364
- 1980b (Morgan, Paul, and Swanberg, C. A.) Heat flow maps of New Mexico—pt. 2, preliminary heat flow study and geothermal assessment of Doña Ana County, New Mexico: Natl. Tech. Inf. Serv., Rept. DOE/ID/01717-1, p. 5.1-5.36  
 see Morgan, P., Swanberg, and Lohse, 1980
- Lokke, Donald H.**  
 see Tyrrell and others, 1978
- Lomenick, Thomas F.**  
 see Johnson, K. S., and others, 1978
- Long, Carl L.**  
 see Hoover and others, 1978
- Long, G. H.**  
 1977 (Brown, L. D., Kaufman, Sidney, Oliver, J. E., and Schilt, F. S.) Structure of the deep crust by seismic reflection profiling—the COCORP project (abs.): Am. Geophys. Union (EOS), Trans., v. 58, no. 6, p. 497  
 see Brown, L. D., Kaufman, Long, and others, 1979; and Schilt and others, 1978
- Long, Leon E.**  
 see Barker, D. S., Long, and others, 1977
- Long, Philip E.**  
 1976 Precambrian granitic rocks of the Dixon-Peñasco area, northern New Mexico—a study of contrasts: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 71, 556 p., 7 tables, 152 figs., 4 pls., 6 appendices; Ph.D. thesis, Stanford Univ., 1977, 586 p.; Dissert. Abs. Internat., 1977, v. 37, no. 12, pt. 1, p. 6023-B
- 1976 (and Jahns, R. H.) Petrochemistry of Precambrian aplites and host granites of the Dixon-Peñasco area, northern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 984-985
- 1979 (and Luth, W. C.) Petrogenesis of microcline megacrysts from Precambrian granitic rocks of the Dixon-Peñasco area, northern New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 145-153, 2 tables, 12 figs.
- Lopez, David A.**  
 1979 (and Bornhorst, T. J.) Geologic map of the Datil area, Catron County, New Mexico: U.S. Geol. Survey, Misc. Inv. Ser. I-1098, scale 1:50,000
- Lopez, L. M.**  
 1978 Geomagnetic variation study in Hidalgo and Grant Counties, southwestern New Mexico: M.S. thesis, Univ. Texas (Dallas)
- Lorenz, J. C.**  
 see John, C. P., and others, 1978
- Loring, Anne Kramer**  
 1980 (and Armstrong, D. G.) Cambrian-Ordovician syenites of New Mexico, part of a regional alkaline intrusive episode: Geology, v. 8, no. 7, p. 344-348, 2 tables, 4 figs.
- 1980a (and Loring, R. B.) Age of thrust faulting, Little Hatcher Mountains, southwestern New Mexico: Isochron/West, no. 27, p. 29-30, 1 fig.
- 1980b (and Loring, R. B.) K/Ar ages of middle Tertiary igneous rocks from southern New Mexico: Isochron/West, no. 28, p. 17-19, 1 fig.
- Loring, Richard B.**  
 see Loring and Loring, 1980a, b
- Lory, Jeffrey K.**  
 see Chaturvedi and Lory, 1980
- Loucks, Robert G.**  
 1976 (and Folk, R. L.) Fanlike rays of former aragonite in Permian Capitan reef pisolite: Jour. Sed. Petrology, v. 46, no. 3, p. 483-485, 5 figs.
- Loucks, T. A.**  
 1978 (and Newell, R. A.) Geology and alteration of the Chino north pit, Santa Rita, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 3, p. 114
- Louderbough, Ellen**  
 1978 (and Potter, L. D.) Chemical-physical characteristics of Mancos Shale related to plant growth (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 4
- Love, David W.**  
 1976 The environmental and archaeological pertinence of a dynamic depositional model for the geomorphic system of Chaco Canyon, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 602-603
- 1977 Dynamics of sedimentation and geomorphic history of Chaco Canyon National Monument, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 291-300, 14 figs.
- 1979 Quaternary fluvial geomorphic adjustments in Chaco Canyon, New Mexico, in Adjustments of the fluvial system, D. D. Rhodes, editor: 10th Ann. Geomorphology Symp., p. 277-308
- 1980 Quaternary geology of Chaco Canyon, northwestern New Mexico: Ph.D. thesis, Univ. New Mexico
- 1980 (and Schultz, J.) Surficial geology and geomorphology related to mitigation of archaeological sites of the UII lease, in Human adaptations in a marginal environment, J. L. Moore and J. C. Winter, editors: Albuquerque, Office of Contact Archaeology, UII Mitigation Proj., p. 29-38, 535-539
- Lovejoy, Earl M. P.**  
 1976a A little problem concerning Fort Hancock-Camp Rice "mixed rounded gravels"; correlation in the El Paso-Las Cruces region, as viewed by a skeptic, in Stratigraphy and structure of the Franklin Mountains: El Paso Geol. Soc., p. 99-103

- 1976b** Geology of Cerro del Cristo Rey uplift, Chihuahua and New Mexico: New Mexico Bureau Mines Mineral Resources, Mem. 31, 84 p., 12 tables, 26 figs., 29 photos, 2 appendices, 6 sheets in pocket
- 1976c** Pre-Pliocene river system development, Colorado Plateau and southern Rocky Mountains—a theory (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 603
- 1976d** Neotectonics of the southeast end of the Rio Grande rift along the Mesilla Valley fault zone, and the course of the Rio Grande, El Paso, Texas, in Stratigraphy and structure of the Franklin Mountains: El Paso Geol. Soc., p. 123-138, 2 tables, 4 figs.
- 1977** Basin and range tectogenesis—a first-order hypothesis (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 60
- 1980** The Eocene erosional “surface” and its relationship to onset of basin-range faulting (abs.): Am. Assoc. Petroleum Geologists, Southwest Sec., Ann. Mtg., Program, p. 44
- 1978** (and Seager, W. R.) Discussion of structural geology of Franklin Mountains, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 68-69  
see Hawley, Lovejoy, and others, 1978; and LeMone and Lovejoy, 1976
- Lovelace, Arlon D.**  
**1976** Stabilization of a reactivated landslide near Wagon Mound on Interstate 25: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 277-279, 4 figs.
- Lowrey, W. S.**  
see Keller, G. R., and Lowrey, 1976
- Lowry, Robert M.**  
see Hicks, R. T., and others, 1980; and Lowy, Robert M. [correct spelling]
- Lowy, Robert M.**  
see Baird, Martin, and Lowy, 1980; and Hicks, R. T., and others, 1979
- Lu, Y.-M.**  
see Hsu and others, 1978
- Lucas, Spencer G.**  
**1977** Vertebrate paleontology of the San Jose Formation, east-central San Juan Basin, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 221-225, 1 table, 6 figs.  
**1980** Stratigraphy and age of the Galisteo Formation and the structural history of the Rio Puerco fault zone, north-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 279  
**1979** (and Kues, B. S.) Vertebrate biostratigraphy of the Eocene Galisteo Formation, north-central New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 225-229, 6 figs.  
**1979** (and Raza, S. M.) Comment on “Geologic implications of the relationship between mammalian faunal similarity and geographic distance”: Geology, v. 7, no. 7, p. 327-328  
**1979** (and Rigby, J. K., Jr.) Comment on “Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico”: Geology, v. 7, no. 7, p. 323-325, 1 fig.  
see Kues, B. S., Froehlich, and others, 1977; Kues, B. S., and Lucas, 1979; Rigby and Lucas, 1977; Tsen-
- tas and Lucas, 1980; and Wood, C. B., and others, 1979
- Luce, Richard M.**  
**1978a** Hospah Dakota (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 338-340, 3 figs.  
**1978b** Hospah Lower Sand, south (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 341-343, 3 figs.  
**1978c** Hospah Upper Sand, south (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 347-349, 3 figs.
- Ludington, Steve D.**  
see Mutschler and others, 1978
- Ludwig, Kenneth R.**  
**1980** Discussion of “Rubidium-strontium minimum ages of sedimentation, uranium mineralization, and provenance, Morrison Formation (Upper Jurassic), Grants mineral belt, New Mexico”: Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 10, p. 1718  
**1977** (Szabo, B. J., and Granger, H. C.) Pleistocene apparent ages by U-Pb isotope and U-series methods for uranium ore in Dakota Sandstone near Gallup, New Mexico: U.S. Geol. Survey, Jour. Research, v. 5, p. 669-672
- Luedke, R. G.**  
**1979** (and Smith, R. L.) Map showing distribution, composition, and age of late Cenozoic volcanic centers in Arizona and New Mexico: U.S. Geol. Survey, Misc. Inv. Ser. 1-1091-A, 2 sheets, scale 1:1,000,000
- Luetkehans, Gerald R.**  
**1976** Gas in tight sands, in Natural gas from unconventional geologic sources: Energy Research and Develop. Adm., Rept. FE-2271-1, p. 167-179, 1 table, 3 figs.
- Lufkin, John L.**  
**1976** Oxide minerals in microlitic rhyolite, Black Range, New Mexico: Am. Mineralogist, v. 61, no. 5-6, p. 425-430, 6 figs.  
**1977** Chemistry and mineralogy of wood-tin, Black Range, New Mexico: Am. Mineralogist, v. 62, no. 1-2, p. 100-106, 2 tables, 2 figs.; Geol. Soc. America, Abs. with Programs, 1976, v. 8, no. 5, p. 603-604
- Lugmair, G. W.**  
see Jagoutz and others, 1980
- Lunn, R. J.**  
see Orr, C. D., and others, 1979
- Lupe, Robert D.**  
**1977** Depositional history of the Triassic Santa Rosa Sandstone, Santa Rosa, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 61  
see Huffman and Lupe, 1977; and Ridgley and others, 1978
- Luth, William C.**  
**1979** Melting and crystallization relations of the Harding pegmatite, New Mexico, pegmatite bulk composition (abs.): Univ. New Mexico, New Mexico Minerals Symp., p. 3-4  
see Hardee and Luth, 1980; and Long and Luth, 1979

**Lutz, Gale A.**

see DeCicco, Patterson, and Lutz, 1978a-d, 1979, 1980

**Lyford, Forest P.**

1979 Ground water in the San Juan Basin, New Mexico and Colorado: Natl. Tech. Inf. Serv., Rept. PB-80 108 020, 27 p.; U.S. Geol. Survey, Water-resources Inv. 79-73, 27 p.

1979 (and Frenzel, P. F.) Projected ground-water pumpage from uranium mines in northwestern New Mexico (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 125

1979 (Frenzel, P. F., and Stone, W. J.) Modeled effects of projected ground-water pumping on ground-water and surface-water resources in northwestern New Mexico, *abs. in* Grants uranium region, a symposium: Am. Assoc. Petroleum Geologists, Program, p. 15-16

1980 (Frenzel, P. F., and Stone, W. J.) Preliminary estimates of effects of uranium-mine dewatering on water levels, San Juan Basin, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 320-333, 2 tables, 10 figs.

1978 (and Stone, W. J.) Ground-water resources of northwestern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 5, p. 220

see Stone, W. J., and Lyford, 1978; and Trainer and Lyford, 1979

**Lynch, A. W.**

1979 Migration of cesium in dolomite from the Rustler Formation in the Los Medanos area in southeastern New Mexico, *in* Scientific basis for nuclear waste management, v. 1, G. J. McCarthy, editor: New York, Plenum Press, p. 399-402

**Lynch, Daniel**

see Keith, Wilt, and others, 1978

**Lyon, D. K.**

see Cooper and others, 1978

**Lyon, R. J. P.**

see Inglis and others, 1978

**Lyon, Thomas R.**

1976 (Ebert, J. I., and Hitchcock, R. K.) Archaeological analysis of imagery of Chaco Canyon region, New Mexico, *in* ERTS-1—a new window on our planet, R. S. Williams, Jr., and W. D. Carter, editors: U.S. Geol. Survey, Prof. Paper 929, p. 304-306, 2 figs.

**Maassen, Larry W.**

1979 (Bolívar, S. L., and others) Uranium hydrogeochemical and stream sediment reconnaissance of the Albuquerque NTMS quadrangle, New Mexico, including concentrations of forty-three additional elements: Los Alamos Sci. Lab., Rept. 7508, 193 p., scale 1:250,000; U.S. Dept. Energy, Rept. GJBX-145-79, 193 p.

1980 (LaDelfe, C. M., and others) Uranium hydrogeochemical and stream sediment reconnaissance of the Gallup NTMS quadrangle, New Mexico/Arizona, including concentrations of forty-two additional elements: Los Alamos Sci. Lab., Rept. LA-8002-MS, 164 p., 5 tables, 6 figs., 3 appendices, 5 sheets in pocket; U.S. Dept. Energy, Rept. GJBX-186-80

1980 (and others) Uranium hydrogeochemical and

stream sediment reconnaissance data release for Saint Johns NTMS quadrangle, Arizona/New Mexico, including concentrations of forty-two additional elements: Los Alamos Sci. Lab., Rept. LA-8015-MS, 158 p., 4 figs., 2 appendices, 6 sheets in pocket; U.S. Dept. Energy, Rept. GJBX-191-80

**Maberry, John O.**

see Pillmore and Maberry, 1976

**Macer, R. J.**

1978 Fluid inclusion studies of fluorite around the Organ cauldron, Doña Ana County, New Mexico: M.S. thesis, Univ. Texas (El Paso)

**MacFadden, Bruce J.**

1976 Magnetic polarity, stratigraphy, and mammalian biochronology of the Chamita Formation stratotype (Mio-Pliocene) of north-central New Mexico: Ph.D. thesis, Columbia Univ., 116 p.; Dissert. Abs. Internat., v. 37, no. 10, p. 4942-B-4943-B

1977 Magnetic polarity stratigraphy of the Chamita Formation stratotype (Mio-Pliocene) of north-central New Mexico: Am. Jour. Sci., v. 277, p. 769-800

1976 (and Manley, Kim) Magnetic stratigraphy, tephrochronology, and mammalian biostratigraphy of the type Chamita Formation, north-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 605

**Machette, Michael N.**

1976a Logs of drill holes, San Acacia 7½-minute quadrangle, Socorro County, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-688, 20 p., 1 fig.

1976b Timing and amounts of recurrent fault displacements near Albuquerque, New Mexico—an example of applied quantitative pedology and Quaternary stratigraphy (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 605-606

1978a Geologic map of the San Acacia quadrangle, Socorro County, New Mexico: U.S. Geol. Survey, Geol. Quad. Map GQ-1415, scale 1:24,000

1978b Preliminary geologic map of the Socorro 1° x 2° quadrangle, central New Mexico: U.S. Geol. Survey, Open-file Rept. 78-607, scale 1:250,000

1978c Late Cenozoic geology of the San Acacia-Bernardo area, *in* Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 135-137, 1 table, 2 figs.

1978d Bernalillo County Dump fault, *in* Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 153-156, 4 figs.

1978e Dating Quaternary faults in the southwestern United States by using buried calcic paleosols: U.S. Geol. Survey, Jour. Research, v. 6, no. 3, p. 369-381; *abs. in* New Mexico Geology, 1979, v. 1, no. 1, p. 15-16

1978 (and Bachman, G. O.) The age, morphology, and rate of accumulation of some pedogenic calcretes in New Mexico, U.S.A. (abs.): 10th Internat. Congr. on Sedimentology, v. 2, p. 404-405

see Brenner-Tourtelot and Machette, 1979

**Macke, D. L.**

see Shepherd and Macke, 1978

**MacLachlan, Marjorie E.**

1976 Lexicon of rock-stratigraphic units in Union, Colfax, Mora, and eastern Taos Counties, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 205-215

**MacMillan, John R.**

1976 (Naff, R. L., and Gelhar, L. W.) Prediction and numerical simulation of subsidence associated with proposed ground-water withdrawal in the Tularosa Basin, New Mexico: 2nd Internat. Symp. on Land Subsidence, Proc.

**Magish, Deborah P.**

1976 (and Harris, A. H.) Fossil ravens from the Pleistocene of Dry Cave, Eddy County, New Mexico: *Condor*, v. 78, no. 3, p. 399-404

**Maki-Lopez, M. L.**

1978 Geomagnetic variations study in Hidalgo and Grant Counties, southwestern New Mexico, U.S.A., *abs.* in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 104-105

**Malde, H. E.**

1977 (and Scott, A. G.) Observations of contemporary arroyo cutting near Santa Fe, New Mexico, U.S.A.: *Earth Surface Processes*, v. 2, no. 1, p. 39-54

**Maldonado, Florian**

1974 Geology of the northern part of the Sierra Cuchillo, Socorro and Sierra Counties, New Mexico: M.S. thesis, Univ. New Mexico, 59 p.

1980 Geologic map of the northern part of Sierra Cuchillo, Socorro and Sierra Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-230, scale 1:24,000

**Malkiel, A.**

*see* Rogers, A. M., and Malkiel, 1979

**Mallory, William W.**

1977a Oil and gas from fractured shale reservoirs in Colorado and northwest New Mexico: Rocky Mtn. Assoc. Geologists, Spec. Pub. 1, 38 p., scale 1:500,000

1977b Fractured shale hydrocarbon reservoirs in southern Rocky Mountain basins, in *Exploration frontiers of the central and southern Rockies*, H. K. Veal, editor: Rocky Mtn. Assoc. Geol., Guidebook 1977 field conf., p. 89-94

**Malone, T. Lynn**

1978a Aztec Fruitland (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 188-189, 3 figs.

1978b Aztec Fruitland, north (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 190-191, 3 figs.

1978c Blanco Fruitland (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 222-224, 3 figs.

1978d Conner Fruitland (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 270-271, 2 figs.

1978e Flora Vista Fruitland (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 292-293, 3 figs.

1978f Kutz Farmington (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others,

editors: Four Corners Geol. Soc., p. 357-358, 3 figs.

1978g Kutz Fruitland (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 359-360, 3 figs.

1978h La Jara Fruitland (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 369-370, 1 fig.

**Mamet, Bernard L.**

*see* Armstrong, A. K., Kottowski, and others, 1980; Armstrong, A. K., and Mamet, 1977a,b, 1978a,b, 1979a,b; Armstrong, A. K., Mamet, and Burton, 1979; and Armstrong, A. K., Mamet, and Repetski, 1980

**Manley, Kim**

1976a K-Ar age determinations on Pliocene basalts from the Española Basin, New Mexico: *Isochron/West*, no. 16, p. 29-30

1976b Tephrochronology of the Tesuque, Ancha, and Puye Formations of the Santa Fe Group, Española Basin, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 606-607

1976c The late Cenozoic history of the Española Basin, New Mexico: Ph.D. thesis, Univ. Colorado, 193 p.; *Dissert. Abs. Internat.*, v. 37, no. 8, p. 3827-B-3828-B

1977 Geologic map of the northeastern part of the Española Basin, New Mexico, showing the Cejita Member (new name) of the Tesuque Formation: U.S. Geol. Survey, Misc. Field Studies Map MF-877, scale 1:24,000

1978a Structure and stratigraphy of the Española Basin, Rio Grande rift, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-667, 25 p., 4 figs.

1978b Pliocene deformation along the Rio Grande rift in the Española Basin, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 10, no. 5, p. 233

1978c Cenozoic structure and stratigraphy of the Española Basin, Rio Grande rift, New Mexico, *abs.* in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 55-56

1978d Geologic map of Bernalillo NW quadrangle, Sandoval County, New Mexico: U.S. Geol. Survey, Geol. Quad. Map GQ-1446, scale 1:24,000

1978e Cenozoic geology of Española Basin, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 201-210, 5 figs.

1979a Stratigraphy and structure of the Española Basin, Rio Grande rift, New Mexico, in *Rio Grande rift—tectonics and magmatism*, R. E. Riecker, editor: *Am. Geophys. Union*, p. 71-86, 4 figs.; U.S. Geol. Survey, 1978, Open-file Rept. 78-667, 25 p., 4 figs.

1979b Tertiary and Quaternary stratigraphy of the northeast plateau, Española Basin, New Mexico: *New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe*, p. 231-236, 6 figs.

1977 (and Naeser, C. W.) Fission-crack ages for tephra layers in upper Cenozoic rocks, Española Basin, New Mexico: *Isochron/West*, no. 18, p. 13-14

1978 (and Scott, G. R.) Preliminary geologic map of the Aztec 1° by 2° quadrangle, northwestern New

- Mexico and southern Colorado: U.S. Geol. Survey, Open-file Rept. 78-466, 8 p.  
 see Budding, Robertson, and others, 1979; Hawley, Bachman, and Manley, 1976; and MacFadden and Manley, 1976
- Mannhard, Gregory W.**  
 1976 Stratigraphy, sedimentology, and paleoenvironments of the La Ventana Tongue (Cliff House Sandstone) and adjacent formations of the Mesa Verde Group (Upper Cretaceous), southeastern San Juan Basin, New Mexico: Ph.D. thesis, Univ. New Mexico, 232 p.; Dissert. Abs. Internat., 1977, v. 38, no. 2, p. 558-B
- Mansure, Arthur J.**  
 1977 (and Reiter, M.A.) An accurate equilibrium temperature log in AEC #8, a drill test in the vicinity of the proposed Carlsbad disposal site: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 80, 7 p., 1 fig.  
 1979 (and Reiter, M. A.) A vertical ground-water movement correction for heat flow: Jour. Geophys. Research, v. 84, no. B7, p. 3490-3492  
 see Reiter, Edwards, Mansure, and Shearer, 1978; Reiter, Edwards, Shearer, Fisher, and others, 1976; Reiter, Edwards, Shearer, McGrath, and Mansure, 1976; and Reiter, Mansure, and Shearer, 1979a, b
- Mapel, William J.**  
 1979 (Johnson, R. B., Bachman, G. O., and Varnes, K. L.) Southern midcontinent and southern Rocky Mountains region, in Paleotectonic investigations of the Mississippian System in the United States—pt. 1, introduction and regional analyses of the Mississippian System, L. C. Craig and C. W. Connor, compilers: U.S. Geol. Survey, Prof. Paper 1010-J, p. 160-187, 7 figs.
- Mardirosian, Charles A.**  
 1979 Principal mining districts of New Mexico: New Mexico Geology, v. 1, no. 3, p. 37-38, 48, 1 fig.
- Mariner, R. H.**  
 1977 (Presser, T. S., and Evans, W. C.) Chemical, isotopic, and gas combinations of selected thermal springs in Arizona, New Mexico, and Utah: U.S. Geol. Survey, Open-file Rept. 77-654, 56 p., 8 tables, 4 figs.
- Markewich, William**  
 see Miller, B. M., and others, 1978
- Marple, Lynn M.**  
 1979 Radium-226 in vegetation and substrates at inactive uranium mill sites: Ph.D. thesis, Univ. New Mexico, 74 p.  
 1978 (Kelley, N. E., and Potter, L. D.) Uptake of trace elements by vegetation at inactive uranium mill sites (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 3-4
- Marquis, M. A.**  
 see Sherwood and Marquis, 1980
- Marshall, J. G.**  
 see Hiss and Marshall, 1976
- Marshall, P. D.**  
 see Thomas, J. H., and others, 1978
- Marston, Donald D.**  
 1976 Application of bucket wheel excavators to thick western coal seams: Mining Congr. Jour., v. 62, no. 6, p. 22-28, 6 figs.
- Martin, Joseph P.**  
 see DeVoto, Mead, Bergquist, and Martin, 1977; and DeVoto, Mead, Martin, and Bergquist, 1980
- Martin, Kalvin W.**  
 see Baird and Martin, 1979; and Baird, Martin, and Lowy, 1980
- Martin, Paul S.**  
 see Thompson, R. S., and others, 1980
- Martin, William C.**  
 1976 Some aspects of the natural history of Colfax and eastern Taos Counties, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 97-102, 2 figs.
- Martinez, Louis B.**  
 1978 (compiler) Contour map showing average daily production per well for 1976 in the Blanco Mesaverde Gas Pool in northwest New Mexico, in New Mexico's energy resources '77, E. C. Arnold, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 167, 1 sheet in pocket  
 1980 Coal, in New Mexico's energy resources '79, E. C. Arnold and J. M. Hill, compilers: New Mexico Bureau Mines Mineral Resources, Circ. 172, p. 28-38, 7 tables, 7 figs.  
 see Arnold, Hill, Donaldson, and others, 1978
- Martinez, Ruben**  
 1979 Provenance study of the Westwater Canyon and Brushy Basin Members of the Morrison Formation between Gallup and Laguna, New Mexico: Ph.D. thesis, Univ. New Mexico, 79 p.  
 see Woodward, DuChene, and Martinez, 1977
- Marvin, Richard F.**  
 1978 (and Cole, J. C.) Radiometric ages—compilation A, U.S. Geological Survey: Isochron/West, no. 22, p. 3-14, 1 fig.  
 1979 (and Dobson, S. W.) Radiometric ages—compilation B, U.S. Geological Survey: Isochron/West, no. 26, p. 3-32, 1 fig.  
 1978 (Naeser, C. W., and Mehnert, H. H.) Tabulation of radiometric ages—including unpublished K-Ar and fission-track ages—for rocks in southeastern Arizona and southwestern New Mexico: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 243-252, 3 tables, 1 fig.
- Mason, James T.**  
 1976 The geology of the Caballo Peak quadrangle, Sierra County, New Mexico: M.S. thesis, Univ. New Mexico, 131 p.
- Massingill, Gary L.**  
 1977 Baca Formation: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 94, 17 p., 7 figs.  
 1978 Geology of the southeastern edge of the Colorado Plateau, Riley area, Socorro County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 5, p. 233  
 1979a Geology of Riley-Puertecito area, southeastern margin of Colorado Plateau, Socorro County, New Mexico: D.G.S thesis, Univ. Texas (El Paso), 336 p.; Dissert. Abs. Internat., v. 40, no. 4, p. 1593-B-1594-B; New Mexico Bureau Mines Mineral Resources, Open-file Rept. 107, 1977, 301 p.  
 1979b Uranium indicator plants of the Colorado Plateau: New Mexico Geology, v. 1, no. 4, p. 49-52, 1 table, 7 figs.  
 see Chapin, Osburn, and others, 1979



**Masters, John A.**

1979 Deep basin gas trap, western Canada: Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 2, p. 152-181, 3 tables, 21 figs.

**Matalas, N.C.**

see Landwehr and others, 1978

**Matheny, J. Paul**

1978 Wildhorse Dakota (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 561-563

see Matheny, M. L., and Matheny, 1978a-g

**Matheny, Marvin L.**

1978a A history of the petroleum industry in the Four Corners area, in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 17-24

1978b Barker Creek Dakota (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 198-200, 3 figs.

1978c Barker Creek Paradox (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 201-203, 3 figs.

1978d Gobernador Pictured Cliffs (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 323-324, 3 figs.

1978e Huerfano Pictured Cliffs (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 350-352, 3 figs.

1978f Sleeper Pictured Cliffs (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 495-496, 3 figs.

1978 (and Folk, J. K.) Ojito Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 433-434, 3 figs.

1978a (and Little, C. J.) Many Rocks Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 398-402, 7 figs.

1978b (and Little, C. J.) Many Rocks Gallup, north (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 403-405, 4 figs.

1978c (and Little, C. J.) Mesa Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 418-420, 4 figs.

1978a (and Matheny, J. P.) Angel's Peak Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 181-183, 4 figs.

1978b (and Matheny, J. P.) BS Mesa Gallup (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 251-253, 4 figs.

1978c (and Matheny, J. P.) Cha Cha Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 256-259, 4 figs.

1978d (and Matheny, J. P.) Piñon Gallup (oil), in

Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 460-461, 3 figs.

1978e (and Matheny, J. P.) Simpson Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 492-494, 4 figs.

1978f (and Matheny, J. P.) Totah Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 535-537, 4 figs.

1978g (and Matheny, J. P.) Wildhorse Gallup (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 564-567, 5 figs.

1978 (and Talley, D. A.) Oil and gas field discovery lists and index maps, in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 25-29, 5 figs.

see Fassett, Thomaidis, and Matheny, 1978; and Stevenson and Matheny, 1978

**Mathewson, David C.**

see Robertson, J. M., Condie, and Mathewson, 1978

**Matlick, J. S.**

see Smith, J. L., and others, 1980

**Matsubaya, O.**

see Sakai and others, 1976

**Maulsby, Joe**

1980 Geology of the Rancho de Lopez area east of Socorro, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 85 p., 34 figs., 5 pls., 4 appendices, 1 sheet, scale 1:12,000

**Maurer, W. C.**

1978 (Rowlery, J. C., and Carwile, C.) Advanced turbodrills for geothermal wells: Natl. Tech. Inf. Serv., Rept. LA-UR-78-1239, 4 p.; *abs.* in New Mexico Geology, 1979, v. 1, no. 2, p. 31

**Maxon, J. Rolfe**

1976 Age and implications of the Tres Piedras Granite, north-central New Mexico (*abs.*): Geol. Soc. America, *Abs. with Programs*, v. 8, no. 5, p. 608

**Maxwell, Charles H.**

1976a Geologic map of the Acoma Pueblo quadrangle, Valencia [Cibola] County, New Mexico: U.S. Geol. Survey, Geol. Quad. Map GQ-1298, scale 1:24,000

1976b Stratigraphy and structure of the Acoma region, New Mexico, in *Tectonics and mineral resources of southwestern North America*, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., *Spec. Pub.* 6, p. 95-101, 3 figs.

1977a Preliminary geologic map of the Los Pilares quadrangle, Valencia [Cibola] County, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-240, scale 1:24,000

1977b Preliminary map of the Cubero quadrangle, Valencia [Cibola] County, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-241, scale 1:24,000

1977c Preliminary geologic map of the Crow Point quadrangle, Valencia [Cibola] County, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-323, scale 1:24,000

1977d Preliminary geologic map of the McCarty's quadrangle, Valencia [Cibola] County, New Mexico:



- U.S. Geol. Survey, Open-file Rept. 77-380, scale 1:24,000
- 1978** Map showing appraisal of mineral resource potential of RARE II proposed roadless areas in national forests, New Mexico (exclusive of coal, oil, gas, and construction materials): U.S. Geol. Survey, Open-file Rept. 78-859, scale 1:500,000
- 1979** Geologic map of the East Mesa quadrangle, Valencia County, New Mexico: U.S. Geol. Survey, Geol. Quad. Map OGQ-1522, scale 1:24,000
- 1976** (and Heyl, A. V.) Preliminary geologic map of the Winston quadrangle, Sierra County, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-858, scale 1:24,000
- 1980** (and Heyl, A. V.) Mineralization and structure of mineral deposits in the Hermosa, Chloride, and Phillipsburg areas, New Mexico: Lab. Global Tectonics and Metallogeny, Bull., v. 1, no. 2, p. 129-133, 5 figs.
- Maxwell, J. C.**  
see Schubert and others, 1980; and Goff and others, 1978
- Maxwell, Norman E.**  
**1976** Northwest New Mexico output off despite more wells: Western Oil Reporter, April, p. 36-37
- May, S. Judson**  
**1977** Ojo Caliente tuff ring, Rio Arriba County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 6, p. 748
- 1979** Neogene stratigraphy and structure of the Ojo Caliente-Rio Chama area, Española Basin, New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 83-88, 4 figs.
- 1980** Neogene geology of the Ojo Caliente-Rio Chama area, Española Basin, New Mexico: Ph.D. thesis, Univ. New Mexico, 204 p.
- Mayer, Lawrence**  
see Gloss and others, 1978
- Mayerson, David L.**  
**1979** Geology of the Corkscrew Canyon-Abbe Spring area, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 112, 133 p., 2 tables, 18 figs., 1 sheet, 2 appendices; M.S. thesis, New Mexico Inst. Mining and Tech., 125 p.
- Mayhew, M. A.**  
**1979** Regional crustal magnetization variation in the western United States (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 7, p. 94
- Maynard, Jim**  
**1978a** Hogback Dakota (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 331-332, 3 figs.
- 1978b** Hogback Mississippian (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 333, 1 fig.
- 1978c** Hogback Pennsylvanian (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 334, 1 fig.
- 1978d** Mt. Nebo Fruitland (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 425-426, 4 figs.
- 1978e** Piñon Fruitland (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 456-457, 3 figs.
- Mazzullo, S. J.**  
**1980** Calcite pseudospars replacive of marine acicular aragonite, and implications for aragonite cement diagenesis: Jour. Sed. Petrology, v. 50, no. 2, p. 409-422
- 1977** (and Cys, J. M.) Submarine currents in Permian boundstones and reef-associated rocks, Guadalupe Mountains, west Texas and southeastern New Mexico: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 1, p. 151-200
- 1978a** (and Cys, J. M.) Submarine cements and fabric-retentive diagenesis, Capitan reef (Permian), Guadalupe Mountains, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 541
- 1978b** (and Cys, J. M.) Archaeolithoporella-boundstones and marine aragonite cements, Permian Capitan reef, New Mexico and Texas, U.S.A.: Neues Jahrb. Geologie u. Paläontologie Monatsh., no. 10, p. 600-611
- 1979a** (and Cys, J. M.) Marine aragonite sea-floor growths and cements in Permian phylloid algal mounds, Sacramento Mountains, New Mexico: Jour. Sed. Petrology, v. 49, no. 3, p. 917-936
- 1979b** (and Cys, J. M.) In-situ formation of botryoidal aragonite on Permian seafloor (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 3, p. 493
- see Cys and Mazzullo, 1977
- McAnulty, William N.**  
**1978** Fluorspar in New Mexico: New Mexico Bureau Mines Mineral Resources, Mem. 34, 64 p., 6 tables, 31 figs., 11 pls., 14 sheets in pocket
- 1980** (compiler) Generalized geology and structure of Trans-Pecos Texas and adjacent Republic of Mexico: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, sheet in pocket, scale 1" = 5 mi
- McBryde, John C.**  
**1979** Pennsylvanian (middle Desmoinesian) coarse-grained fluvial and fluvial-deltaic deposits, Taos trough, north-central New Mexico: M.S. thesis, Univ. Texas (Austin)
- 1979** (and Casey, J. M.) Pennsylvanian coarse-grained meandering fluvial deposits, Taos trough, north-central New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 5, p. 834-835
- McCaslin, B. D.**  
**1977** (and Titman, P. S.) Fertilizer value of undigested and digested thermoradiation treated sewage sludges on calcareous soil (abs.): Pollution Abs., v. 8, no. 4, p. 690
- McClellan, William A.**  
see Bachhuber and McClellan, 1976, 1977
- McCormick, Tamsin C.**  
**1980** Exsolution in alkali feldspars and implications for the cooling history of the Battleship Rock tuff, northern New Mexico: M.S. thesis, Univ. New Mexico, 99 p.
- 1980** (and Smyth, J. R.) Exsolution in alkali feldspars reflects post-depositional cooling in the Battleship Rock tuff, Jemez Mountains, New Mexico

- (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 46, p. 1147
- McCullar, Dan B.**  
1977 Seismic refraction analysis of the crust and upper mantle beneath the Rio Grande rift in southern New Mexico: M.S. thesis, Univ. Wyoming  
*see* Cook, McCullar, and others, 1979; *and* Smithsonian and McCullar, 1977
- McDaniel, T. N.**  
1979 (and Decker, R. S.) Dispersive soil problem at Los Esteros Dam: Am. Soc. Civil Engineers, Jour. Geotech. Eng. Div., v. 105, no. GT9, p. 1017-1030, 3 tables, 5 figs., 1 appendix; Sel. Water Resources Abs., 1980, v. 13, no. 3, p. 64
- McDonald, Robert E.**  
1976 Tertiary tectonics and sedimentary rocks along the transition—Basin and Range province to plateau and thrust belt province, Utah, *in* Geology of the Cordilleran hingeline, J. G. Hill, editor: Rocky Mtn. Assoc. Geol., Guidebook 1976 symp., p. 281-317, 15 figs.
- McDowell, Fred W.**  
*see* Roden and others, 1979
- McEachin, W. D.**  
1978 (and Royce, R. M.) Horseshoe Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fasset and others, editors: Four Corners Geol. Soc., p. 335-337, 3 figs.
- McElhinny, M. W.**  
1980 (and Crowley, J. A.) Paleomagnetic direction and pole positions—XVI, pole numbers 16/1 to 16/26: Royal Astron. Soc., Geophys. Jour., v. 61, no. 3, p. 549-571
- McFadden, D. H.**  
*see* Burroughs and McFadden, 1976
- McGeary, Susan**  
*see* Cape and others, 1980
- McGetchin, Thomas R.**  
1979 (Burke, K., Thompson, G., and Young, R.) Plateau uplifts—mode and mechanism: Am. Geophys. Union (EOS), Trans., v. 60, no. 6, p. 64-67, 3 tables, 3 figs.  
1977 (Smith, D., and others) Navajo kimberlites and minetts guide: 2nd Internat. Kimberlite Conf., field guide, 39 p.  
*see* Heiken and others, 1976; Kolstad and McGetchin, 1978; Kolstad, McGetchin, and Laughlin, 1976; *and* Silver, L. T., and McGetchin, 1978
- McGowen, J. H.**  
1979 Depositional facies and uranium occurrence, Triassic (Dockum Group), Texas panhandle (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 5, p. 835  
1977 (Granata, G. E., and Seni, S. J.) Depositional systems, uranium occurrence and postulated groundwater history of the Triassic Dockum Group, Texas panhandle, eastern New Mexico: Univ. Texas (Austin), Bureau Econ. Geology, 104 p.
- McGrath, E. E.**  
*see* Reiter, Edwards, Shearer, Fisher, and others, 1976; *and* Reiter, Edwards, Shearer, McGrath, and Mansure, 1976
- McIntosh, Willard L.**  
1979 (and Eister, M. F.) Geologic map index of New Mexico: U.S. Geol. Survey, 32 p., 6 figs.
- McIntyre, A. F.**  
*see* Jones, C. L., and McIntyre, 1979; *and* Snyder, R. P., and McIntyre, 1979
- McKay, E. J.**  
*see* Myers and McKay, 1976
- McKinney, C. R.**  
*see* Rosholt and McKinney, 1980
- McKnight, J. F.**  
1978 (and Fellows, M. L.) Silicate mineral assemblages and their relationship to sulfide mineralization, Pinos Altos mineral deposit, New Mexico: Arizona Geol. Soc., Digest, v. 11, p. 1-8
- McLafferty, Susan W.**  
1979 Depositional environments in the transition from Mancos Shale to Mesa Verde Group near Carthage, Socorro County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 125 p., 8 tables, 31 figs., 1 pl.
- McLean, John S.**  
1976 Factors altering the microclimate in Carlsbad Caverns, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-171, 59 p., 3 tables, 31 figs.  
1977 Hydrologic maps and data in the Mimbres Basin, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-314, 531 p., 6 tables, 2 figs., 6 sheets, scale 1:48,000  
1980 Aquifer tests in the Gallup Sandstone near Yah-Ta-Hey, New Mexico: Natl. Tech. Inf. Serv., Rept. PB-81 103 590, 31 p.; U.S. Geol. Survey, Water-resources Inv. 80-25, 31 p.  
1977 (and Garza, Sergio) Fresh-water resources in the southeastern part of the Tularosa Basin, New Mexico: New Mexico State Engineer, Tech. Rept. 40, 67 p.
- McLelland, Douglas**  
*see* Woodward, Gibson, and McLelland, 1976; *and* Woodward, McLelland, and Husler, 1977
- McLemore, Virginia T.**  
1980a Geology of the Precambrian rocks of the Lemitar Mountains, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 122, 207 p., 19 tables, 15 figs., 3 maps; M.S. thesis, New Mexico Inst. Mining and Tech., 169 p.  
1980b Proterozoic sedimentation and tectonic evolution of the Corkscrew Canyon sequence in the Lemitar Mountains, Socorro, New Mexico (abs.): New Mexico Geology, v. 2, no. 3, p. 48  
1980c Carbonatites in the Lemitar Mountains, Socorro County, New Mexico: New Mexico Geology, v. 2, no. 4, p. 49-52, 3 tables, 1 fig.
- McMillan, Colin**  
*see* Jones, B., and McMillan, 1977
- McMillan, David Kent**  
1979 Crystallization and metasomatism of the Cuchillo Mountain laccolith, Sierra County, New Mexico: Ph.D. thesis, Stanford Univ., 298 p.; Desert. Abs. Internat., 1980, v. 40, no. 9, p. 4167-B  
1979 (and Jahns, R. H.) Metasomatism in the Cuchillo Mountain laccolith, Sierra County, New Mexico: *abs. in* New Mexico Geology, v. 1, no. 4, p. 61  
*see* Jahns, McMillan, and others, 1978
- McNaughton, Clark H.**  
1978 Conventional potash mining, *in* Geology and

- mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 63-64, 7 figs.
- Mead, Richard H.**  
see DeVoto and Mead, 1979; DeVoto, Mead, Bergquist, and Martin, 1977; and DeVoto, Mead, Martin, and Bergquist, 1980
- Meeves, Henry C.**  
see Ratte, Gaskill, and others, 1979
- Mega, J.**  
see Schuffle, Mega, and Beckhart, 1979
- Mehnert, Harald H.**  
see Bachman and Mehnert, 1978; Lipman and Mehnert, 1979, 1980; Marvin, Naeser, and Mehnert, 1978; and O'Neill, J. M., and Mehnert, 1980a, b
- Mehring, P. J.**  
see Adam and Mehring, 1980
- Meinschein, W. G.**  
see Des Marais and others, 1980
- Meissner, Fred F.**  
1977 Coal as a major source of dry natural gas, with examples from two Rocky Mountain basins—San Juan and Raton, *abs. in* Geology of Rocky Mountain coal—proceedings of the 1976 symposium, D. K. Murray, editor: Colo. Geol. Survey, Resource Ser. 1, p. 174-175
- Melancon, S. M.**  
1979 (Michaud, T. S., and Thomas, R. W.) Assessment of energy resource development impact on water quality—the San Juan River basin: Natl. Tech. Inf. Serv., Rept. EPA-600/7-79-235, 152 p.
- Melvin, James W.**  
1976 Systematic distribution of large uranium deposits in the Grants uranium region, *in* Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 144-150, 5 figs.; Geol. Soc. America, Abs. with Programs, v. 5, no. 5, p. 611-612
- Mendes, R. V.**  
1979 (and Van Trump, G., Jr.) Geochemical data for New Mexico: Natl. Tech. Inf. Serv., Rept. PB-300-543, magnetic tape
- Menzies, Martin**  
1980 (and Murthy, V. R.) Nd- and Sr-isotope geochemistry of hydrous mantle nodules and their host alkali basalts—implications for local heterogeneities in metasomatically veined mantle: Earth and Planet. Sci. Letters, v. 46, no. 3, p. 323-334, 3 tables, 4 figs.  
see Saito, Menzies, and others, 1978
- Mercado, Abraham**  
1977 The kinetics of mineral dissolution in carbonate aquifers as a tool for hydrological investigations—pt. II, hydrogeochemical models: Jour. Hydrology, v. 35, no. 3-4, p. 365-384, 10 figs.
- Mercer, Jerry W.**  
1979 Hydrologic testing of strata associated with Permian bedded salt (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 267  
1978 (and Hiss, W. L.) Solution of Permian Ochoan evaporites, northern Delaware Basin, New Mexico, *abs. in* Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 86
- 1977 (and Orr, B. R.) Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-123, 59 p., 1 table, 7 figs.
- 1979 (and Orr, B. R.) Interim data report on the geohydrology of the proposed Waste Isolation Pilot Plant site, southeast New Mexico: Natl. Tech. Inf. Serv., Rept. PB-80 128 762, 188 p.; U.S. Geol. Survey, Water-resources Inv. 79-98, 188 p.  
see Lambert, S. J., and Mercer, 1977
- Merillat, Candace Holts**  
1977a Sketch of the first fifty years of the New Mexico Bureau of Mines and Mineral Resources: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1976-77, p. 29-33, 1 table  
1977b Acts of the New Mexico Legislature 1927-77 relating to New Mexico Bureau of Mines and Mineral Resources: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1976-77, p. 34-47  
see also Holts, Candace L.
- Merrick, Margaret A.**  
1980 Geology of the eastern part of the Regina quadrangle, Sandoval and Rio Arriba Counties, New Mexico: M.S. thesis, Univ. New Mexico
- Messer, P. H.**  
1978 (Pye, D. S., and Gallus, J. P.) Injectivity restoration of a hot-brine geothermal injection well: Jour. Petroleum Tech., v. 30, September, p. 1225-1230, 1 table, 4 figs.
- Metcalf, A. L.**  
1977 Some Quaternary molluscan faunas from the northern Chihuahuan Desert and their paleoecological implications, *in* Transactions of the symposium on the biological resources of the Chihuahuan Desert region, United States and Mexico: U.S. Natl. Park Serv., Trans. Proc. Ser., no. 3, p. 53-66  
1980 Fossil *Rangia cuneata* (mactridae) in Eddy County, New Mexico: Nautilus, v. 94, no. 1, p. 2-3
- Metts, David A.**  
1977a Tres Papalotes field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 198-199, 1 table, 1 fig.  
1977b Tres Papalotes west field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 200, 1 table
- Meyer, Henry O.**  
1976 Kimberlites of the continental United States—a review: Jour. Geology, v. 84, no. 4, p. 377-403, 2 tables, 13 figs.
- Meyer, W. R.**  
1976 Digital model for simulated effects of groundwater pumping in the Hueco Bolson, El Paso area, Texas, New Mexico, and Mexico: Natl. Tech. Inf. Serv. PB-253 015/AS, 106 p.; U.S. Geol. Survey, Water-resources Inv. 75-58, 106 p.
- Meyers, William J.**  
1977a Chertification in the Mississippian Lake Valley Formation, Sacramento Mountains, New Mexico: Sedimentology, v. 24, no. 1, p. 75-105  
1977b Regional cementation patterns in Mississip-

- pian limestones of southern New Mexico and Arizona (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 5, p. 813
- 1978** Carbonate cements—their regional distribution and interpretation in Mississippian limestones of southwestern New Mexico: *Sedimentology*, v. 25, no. 3, p. 371–397
- 1980** Compaction in Mississippian skeletal limestones, southwestern New Mexico: *Jour. Sed. Petrology*, v. 50, no. 2, p. 457–474, 6 figs.
- 1978** (and Lohmann, K. C.) Microdolomite-rich syntaxial cements—proposed meteoric-marine mixing zone phreatic cements from Mississippian limestones, New Mexico: *Jour. Sed. Petrology*, v. 48, no. 2, p. 475–488
- 1980** (and Lohmann, K. C.) Geochemistry of regionally extensive calcite cement zones in Mississippian skeletal limestones, New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 64, no. 5, p. 750, 1 fig.
- see Lohmann and Meyers, 1976, 1977; Oglesby and others, 1979; and Vaughan and Meyers, 1976
- Michaud, T. S.**  
see Melancon and others, 1979
- Miera, F. R.**  
see Nyhan and others, 1976
- Miesen, D. L.**  
see Brown, L. D., Miesen, and others, 1980
- Milanese, Robert S.**  
**1978** Perlite: *Mining Engineering*, v. 30, no. 5, p. 535
- Miles, Dan J.**  
see Dennis, B. R., Miles, and others, 1978
- Milios, P.**  
**1976** Water and energy required to operate coal gasification facilities and waste water treatment requirements (abs.): *Sel. Water Resources Abs.*, v. 9, no. 3, p. 75
- Miller, Betty M.**  
**1978** (Carlson, K. H., and Markewich, William) New developments in methods of resource estimation, Gulf of Mexico and Permian Basin, west Texas and southeastern New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 62, no. 3, p. 544
- Miller, Forest**  
**1980** The Washington Ranch Morrow field—a case history in frontier exploration (abs.): *Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program*, p. 46
- Miller, Gifford H.**  
**1980** (and Hare, P. E.) Amino acid geochronology—integrity of the carbonate matrix and potential of molluscan fossils, in *Biogeochemistry of amino acids*, P. E. Hare, editor: New York, John Wiley and Sons, p. 415–443
- 1979** (Nelson, A. R., and others) Amino acid geochronology utilizing terrestrial gastropods from western U.S. (abs.): *Geol. Soc. America, Abs. with Programs*, v. 11, no. 6, p. 280
- Miller, Harry A., Jr.**  
see Diemer and others, 1980
- Miller, Stan**  
**1976** A Southwest power plant saga: *Environ. Sci. and Tech.*, v. 10, no. 6, p. 532–537, 5 figs.
- Millgate, M. L.**  
see John, C. P., and others, 1978
- Minler, Sam**  
**1976** Carbonate petrology and syndepositional facies of the lower San Andres Formation (middle Permian), Lincoln County, New Mexico: *Jour. Sed. Petrology*, v. 46, no. 3, p. 463–482, 13 figs.
- 1978** Genesis, provenance, and petrography of the Glorieta Sandstone of eastern New Mexico: *New Mexico Bureau Mines Mineral Resources, Circ.* 165, 25 p., 3 tables, 23 figs.
- Minear, J. W.**  
**1979** (and Irving, A. J.) Composite mantle xenoliths and melt movement (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 60, no. 18, p. 419
- Minor, M. M.**  
see Aamodt, Hansel, and others, 1977
- Mishler, Robert**  
see Schufle, Baca, and others, 1976
- Mitcham, T. W.**  
**1978** Structural reconnaissance of the southwest porphyry copper province: *Arizona Geol. Soc., Digest*, v. 11, p. 93–98
- Mitchell, J. M.**  
see Des Marais and others, 1980
- Miyamoto, S.**  
**1977** (Bristol, A., and Gould, W. L.) Wettability of coal-mine spoils in northwestern New Mexico: *Soil Sci.*, v. 123, no. 4, p. 258–263, 5 tables, 1 fig.; *Sel. Water Resources Abs.*, v. 10, no. 18, p. 72  
see Gould and others, 1977
- Mizell, Nancy H.**  
**1980a** Inventory of geothermal leasing and drilling activity in New Mexico: *New Mexico Geology*, v. 2, no. 4, p. 53–54, 3 tables, 3 figs.
- 1980b** Documentation for computerization of geothermal activity in New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept.* 121, 27 p.
- 1979** (and Stone, W. J.) Maps showing the regional extent of sandstone bodies within the Gallup Sandstone (compiled for the San Juan Basin hydrogeologic study): *New Mexico Bureau Mines Mineral Resources, Open-file Rept.* 105, 2 p., 2 tables, 1 fig., 5 sheets  
see Stone, W. J., and Mizell, 1977, 1978; and Stone, W. J., Mizell, and Hawley, 1979
- Modreski, Peter J.**  
**1979** Rare earth elements in agardite and in other minerals from the Red Cloud district, New Mexico (abs.): *Univ. New Mexico, New Mexico Minerals Symp.*, p. 9
- Moench, Robert H.**  
**1980** (and Erickson, M. S.) Occurrence of tungsten in the Sangre de Cristo Range near Santa Fe, New Mexico—possible stratabound scheelite peripheral to favorable settings for volcanogenic massive-sulfide deposits: *U.S. Geol. Survey, Open-file Rept.* 80-1162, 23 p.  
see Robertson, J. M., and Moench, 1979
- Mogro-Campero, Antonio**  
see Fleischer, Hart, and Mogro-Campero, 1980; and Fleischer and Mogro-Campero, 1979a,b
- Molenaar, Cornelius M.**  
**1977a** The Pinedale oil seep—an exhumed stratigraphic trap in the southwestern San Juan Basin: *New*

- Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 243-246, 5 figs.
- 1977b** Stratigraphy and depositional history of Upper Cretaceous rocks of the San Juan Basin area, New Mexico and Colorado, with a note on economic resources: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 159-166, 1 fig.
- 1977c** San Juan Basin time-stratigraphic nomenclature chart: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. xii, 1 fig.
- 1978** Time-stratigraphic nomenclature chart (San Juan Basin), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 25-29, 5 figs.
- see Fassett, Jentgen, and others, 1977; and Fassett, Molenaar, and others, 1977
- Moodie, Kevin B.**
- 1979** (and Van Devender, T. R.) Extinction and extirpation in the herpetofauna of the southern High Plains with emphasis on *Geochelone wilsoni* (Testudinidae): Herpetologica, v. 35, no. 3, p. 198-206
- Moore, D. I.**
- 1978** (Gosz, J. R., and White, C. S.) Impact of a ski basin on a mountain watershed—pt. II, heavy metals: Water, Air and Soil Pollution, v. 10, no. 1, p. 81-93, 7 tables; Sel. Water Resources Abs., 1979, v. 12, no. 13, p. 35
- see White, C. S., and others, 1978
- Moore, H. J.**
- 1976** Missile impact craters (White Sands Missile Range, New Mexico) and applications to lunar research: U.S. Geol. Survey, Prof. Paper 812-B, p. B1-B47
- Moore, Jack C.**
- 1979** Uranium deposits in the Galisteo Formation of the Hagan Basin, Sandoval County, New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 265-267, 2 figs.
- Moore, M. J.**
- see Wilcox and others, 1980
- Moore, R. B.**
- 1978** Cenozoic igneous rocks of the Colorado Plateau, in Plateau uplift—mode and mechanism: Lunar and Planet. Sci. Inst., p. 28-30
- Moore, Stephen C.**
- 1980** (and Lavery, N. G.) Magnitude and variability of disequilibrium in San Antonio Valley uranium deposit, Valencia County, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 276-283, 2 tables, 12 figs.; *abs.* in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 16; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 691-692
- Morain, Stanley A.**
- 1977** (Budge, T. K., and White, M. E.) Vegetation and land use in New Mexico: New Mexico Bureau Mines Mineral Resources, Resource Map 8, scale 1:1,000,000
- Morgan, Paul**
- 1980** (Swanberg, C. A., and Lohse, R. L.) Borehole temperature studies of the Las Alturas geothermal anomaly, New Mexico: Natl. Tech. Inf. Serv., Rept. DOE/ID/01717-1, p. 9.1-9.14
- 1979** (Swanberg, C. A., and others) Geophysical evaluation of the Las Alturas Estates, New Mexico geothermal prospect (*abs.*): Soc. Exploration Geophys., Ann. Mtg., p. 102
- see Harder and others, 1980; Lohse and others, 1980a,b; Seager and Morgan, 1978a,b, 1979; Seager, Morgan, and Hawley, 1978; and Swanberg and others, 1977
- Morgan, R. D.**
- see DeCicco, Patterson, and Morgan, 1980
- Morgan, Terrance L.**
- 1978** (and Broxton, D. E.) Uranium hydrogeochemical and stream sediment reconnaissance of the Raton NTMS quadrangle, New Mexico: Los Alamos Sci. Lab., Rept. LA-7344-MS, 84 p., scale 1:250,000; Natl. Tech. Inf. Serv., Rept. GJBX-138-78, 84 p.; U.S. Energy Research Develop. Adm., Rept. GJBX-138-78
- 1980a** (and others) Uranium hydrogeochemical and stream sediment reconnaissance of the Dalhart NTMS quadrangle, New Mexico/Texas/Oklahoma, including concentrations of forty-two additional elements: Los Alamos Sci. Lab., Inf. Rept. LA-8008-MS, 108 p., 3 tables, 5 figs., 3 appendices, 6 sheets in pocket; U.S. Dept. Energy, Rept. GJBX-207-80
- 1980b** (and others) Uranium hydrogeochemical and stream sediment reconnaissance of the Shiprock NTMS quadrangle, New Mexico/Arizona, including concentrations of forty-two additional elements: Los Alamos Natl. Lab., Rept. 7513, 194 p.; U.S. Dept. Energy, Rept. GJBX-143-80
- 1980c** (and others) Uranium hydrogeochemical survey of well waters from an area around Pie Town, Catron County, west-central New Mexico, including concentrations of twenty-three additional elements: Los Alamos Natl. Lab., Rept. 8017, 43 p.; U.S. Dept. Energy, Rept. GJBX-23-81
- Morgan, W. Jason**
- see Crough and others, 1980
- Morris, G. E.**
- see Tester, Morris, and others, 1979
- Morris, W. A.**
- 1979** (Bunker, M. E., and others) Hydrogeochemical and stream sediment reconnaissance of the National Uranium Resource Evaluation Program—semi-annual progress report April-September 1979—primarily for the Rocky Mountain States of New Mexico, Colorado, Wyoming, and Montana and the State of Alaska: Natl. Tech. Inf. Serv., Rept. GJBX-5-80, 11 p.
- 1979** (Bunker, M. E., and Steinhaus, D. W.) Hydrogeochemical and stream sediment reconnaissance of the National Uranium Resource Evaluation Program—October-December 1977—the Rocky Mountain States of New Mexico, Colorado, Wyoming, and Montana and the State of Alaska: Los Alamos Sci. Lab., Rept. 7175, 10 p.; Natl. Tech. Inf. Serv., Rept. GJBX-77-78, 10 p.
- see Sharp and others, 1978
- Mortensen, J. J.**
- 1978** Hot dry rock—a new geothermal energy source: Energy, v. 3, no. 5, p. 639-644
- Moss, M. E.**
- 1978** (Lettemmaier, D. P., and Wood, E. F.) On the design of hydrologic data networks: Am. Geo-



- phys. Union (EOS), Trans., v. 59, no. 8, p. 772-775
- Mott, R. P., Jr.**  
 1976 The relationship of microearthquake activity to structural geology for the region around Socorro, New Mexico: New Mexico Inst. Mining and Technology, Geophysics Open-file Rept. 7a, 67 p.  
 see Sanford, Mott, and others, 1977
- Moyers, C. F.**  
 see Kauffman and others, 1980
- Muehlberger, William R.**  
 1978 Frontal fault zone of northern Picuris Range, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 44-45, 1 fig.  
 1979a The Embudo fault between Pilar and Arroyo Hondo, New Mexico—an active intracontinental transform fault: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 77-82, 5 figs.  
 1979b The areal extent of Cenozoic faulting in Trans-Pecos, Texas, in Cenozoic geology of the Trans-Pecos volcanic field of Texas, A. W. Walton, editor: Univ. Texas (Austin), Bureau Econ. Geology, Guidebook 19, p. 19-21  
 1978 (and Hawley, J. W.) Rio Grande Gorge to Rio Embudo, New Mexico, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 42-44, 45-56, 7 figs.  
 see Budding, Robertson, and others, 1979; and Hawley, Burroughs, and others, 1978
- Mueller, Jerry**  
 1978 Elephant Butte Dam and Reservoir, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 90-91, 1 fig.
- Muir, Nancy J.**  
 see Jacka, Barone, and others, 1980
- Mukhopadhyay, Bimal**  
 1976a (and Brookins, D. G.) Rb-Sr whole-rock geochronology and clay mineralogy of the Madera Formation near Albuquerque, New Mexico: Jour. Sed. Petrology, v. 46, no. 3, p. 680-688, 6 figs.  
 1976b (and Brookins, D. G.) Strontium isotopic composition of the Madera Formation (Pennsylvanian) near Albuquerque, New Mexico: Geochim. et Cosmochim. Acta, v. 40, no. 6, p. 611-616, 2 tables, 3 figs.
- Munson, B. E.**  
 see Toy and Munson, 1979
- Murdock, James N.**  
 1978 (and Jaksha, L. H.) Estimates of relative time terms and of the Pn velocity in central New Mexico, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 63  
 1980 (and Jaksha, L. H.) Time-term solutions and corresponding data for the crustal structure of north-central New Mexico: U.S. Geol. Survey, Open-file Rept. 80-2014, 40 p.
- Murphy, Hugh D.**  
 1976 Extracting energy from hydraulically fractured geothermal reservoirs (*abs.*): Am. Geophys. Union (EOS), Trans., v. 57, no. 4, p. 349  
 1978a Thermal stress cracking and enhancement of heat extraction from fractured geothermal reservoirs: Natl. Tech. Inf. Serv., Rept. LA-UR-78-917, 4 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 2, p. 31 [not identical to 1978b]  
 1978b Thermal stress cracking and the enhancement of heat extraction from fractured geothermal reservoirs: Natl. Tech. Inf. Serv., Rept. LA-7235-MS, 19 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 3, p. 46 [not identical to 1978a]  
 1978 (Lawton, R. G., Tester, J. W., Potter, R. M., Brown, D. W., and Aamodt, R. L.) Preliminary assessment of a geothermal energy reservoir formed by hydraulic fracturing: Soc. Petroleum Engineers, Jour., v. 17, no. 4, p. 317-326, 11 figs.  
 1980 (and others) Preliminary evaluation of the second hot dry rock geothermal energy reservoir—results of Phase 1, Run Segment 4: Los Alamos Natl. Lab., Rept. 8354-MS, 88 p.  
 1979 (and Tester, J. W.) Heat production from geothermal reservoir formed by hydraulic fracturing—comparison of field and theoretical results: Soc. Petroleum Engineers, 54th Ann. Fall Conf., p. 1-10  
 see Dennis, B. R., and Murphy, 1978
- Murphy, John R.**  
 1977 Seismic source functions and magnitude determination for underground nuclear detonations: Seismol. Soc. America, Bull., v. 67, no. 1, p. 135-158, 18 figs., 1 appendix
- Murphy, Robert E.**  
 1977a North Dagger Draw field, Eddy County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 88-89, 1 table, 1 fig.  
 1977b South Dagger Draw field, Eddy County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 90, 1 table
- Murr, L. E.**  
 1976 (and Wongwiwat, K.) Scanning electron microscope study of the effect of structure on the liquefaction of New Mexico coals: Electron Microscopy Soc. America, 34th Ann. Mtg., Proc., p. 622-623, 1 fig.  
 see Oliver, T., and Murr, 1977
- Murthy, V. Rama**  
 see Menzies and Murthy, 1980; and Williams, Susan, and Murthy, 1978, 1979
- Mutschler, Felix E.**  
 1978 (Finn, D. D., and Ludington, S.) Magmatism and related ore deposits of extensile continental environments—computer exercises in petrochemical pattern recognition and prediction, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 64-65
- Myers, Donald A.**  
 1977 Geologic map of the Scholle quadrangle, Socorro, Valencia, and Torrance Counties, New Mexico: U.S. Geol. Survey, Geol. Quad. Map GQ-1412, scale 1:24,000  
 1976 (and McKay, E. J.) Geologic map of the north end of the Manzano Mountains, Tijeras and Sedillo quadrangles, Bernalillo County, New Mexico: U.S. Geol. Survey, Misc. Inv. Ser. I-968, scale 1:24,000



**Mytton, James W.**

1979 Preliminary geologic map of Chaco Canyon 1° by ½° quadrangle showing coal zones of Fruitland Formation, San Juan, Rio Arriba, and Sandoval Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1104, scale 1:100,000 [1980]

see Flores and Mytton, 1979; Schneider, Weide, and others, 1979; Scott, G. R., Mytton, and Schneider, 1980; Scott, G. R., O'Sullivan, and Mytton, 1980; Weide, Mytton, and Scott, 1979, 1980; Weide, Schneider, and others, 1979a,b; and Weide, Scott, and Mytton, 1980

**Naert, K. A.**

1980 (Wright, L. A., and Thornton, C. P.) Geology of the perlite deposits of the No Agua Peaks, Taos County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 162, 88 p., 2 tables, 33 figs.

**Naeser, C. W.**

1976 (and Forbes, R. B.) Variation of fission track ages with depth in two deep drill holes (abs.): Am. Geophys. Union (EOS), Trans., v. 57, no. 4, p. 353

see Izett and others, 1978; Manley and Naeser, 1977; and Marvin, Naeser, and Mehnert, 1978

**Naff, R. L.**

see MacMillan and others, 1976

**Narsavage, R. J., Jr.**

1979 Vanadinite and related lead-zinc minerals, north Magdalena district, Socorro County: Univ. New Mexico, New Mexico Minerals Symp., p. 11-14

**Nash, John T.**

1976 Fluid-inclusion petrology—data from porphyry copper deposits and applications to exploration: U.S. Geol. Survey, Prof. Paper 907-D, 16 p.

**Nash, W. P.**

see Trevena and Nash, 1978a,b

**Nation, J. B.**

see Ward, R. W., and Nation, 1979

**Neal, James T.**

1976 Pleistocene Lake Trinity, a sulfate basin in the northern Jornada del Muerto, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1026

1978 Satellite sensing of pluvial lake basins (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 462

**Needham, C. N.**

1978a Boulder Mancos (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 248-250, 4 figs.

1978b Schmitz Torreon-Puerco (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 482-485, 5 figs.

**Neese, D. G.**

1979a Carbonate facies variation on Guadalupian shelf crest (upper Yates and lower Tansill Formations), Guadalupe Mountains, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 3, p. 501-502

1979b Facies mosaic of the upper Yates and lower Tansill Formations (Upper Permian), Walnut Canyon, Guadalupe Mountains, New Mexico: M.S. thesis, Univ. Wisconsin

1977 (and Schwartz, A. H.) Facies mosaic of the

upper Yates and lower Tansill Formations, Walnut and Rattlesnake Canyons, Guadalupe Mountains, New Mexico: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 1, p. 437-450

**Neher, R. E.**

1976 Soil survey of Mescalero-Apache area, New Mexico, northeastern Otero County: U.S. Dept. Agriculture, Soil Conserv. Serv., 79 p.

1976 (and Bailey, O. F.) Soil survey of White Sands Missile Range, New Mexico; parts of Otero, Lincoln, Doña Ana, Sierra, and Socorro Counties: U.S. Dept. Agriculture, Soil Conserv. Serv., 64 p.

1980 (and Buchanan, W. A.) Soil survey of Luna County, New Mexico: U.S. Dept. Agriculture, Soil Conserv. Serv., 80 p.

see Bulloch and Neher, 1980

**Nelson, A. R.**

see Miller, G. H., and Nelson, 1979

**Nelson, D. W.**

see Galloway, S. E., and Nelson, 1977

**Nelson, Dale C.**

see Lansford, Chaturvedi, and others, 1980

**Nelson, R. E.**

1978 (Klameth, L. C., and Nettleton, W. D.) Determining soil gypsum content and expressing properties of gypsiferous soils: Soil Sci. Soc. America, Jour., v. 42, no. 4, p. 659-661, 1 fig.

**Nettleton, W. D.**

see Nelson, R. E., and others, 1978

**Newell, R. A.**

see Loucks, T. A., and Newell, 1978

**Newman, Gary W.**

1979 (and Goode, H. D., editors) Basin and Range symposium and Great Basin field conference: Rocky Mtn. Assoc. Geol., Guidebook 1979 conf., 662 p.

**New Mexico Bureau of Mines and Mineral Resources**

see U.S. Geological Survey and others, 1980

**New Mexico Energy and Minerals Department**

1979 Sixty-sixth annual report by the Energy and Minerals Department, Bureau of Mine Inspection, for the year ending December 31, 1978: New Mexico Energy and Minerals Dept., Bureau Mine Inspection, 65 p., 23 figs.

**New Mexico Oil and Gas Conservation Commission**

1977 Northwest New Mexico gas production increases: Western Oil Reporter, April, p. 65-66

**New Mexico State Highway Department**

1978 Geology and aggregate resources of New Mexico: New Mexico State Highway Dept. and U.S. Dept. Transportation, Federal Highway Admin., Rept. 7a, 282 p., 8 maps, 2 appendices

**New Mexico Water Quality Control Commission**

1976 Middle Rio Grande basin plan: New Mexico Water Quality Control Comm., 10 figs.

**Newsom, M. M.**

1978 (Barnett, J. H., Baker, L. E., Varnado, S. G., and Polito, J.) Geothermal well technology—drilling and completions program plan: Natl. Tech. Inf. Serv., Rept. SAND-77-1630; abs. in New Mexico Geology, 1979, v. 1, no. 3, p. 46-47

**Newton, Carl A.**

see Olsen, K. H., Keller, Stewart, and others, 1977

**Nials, Fred L.**

see Corbitt and others, 1977, 1978; and Varnell and others, 1976

**Nichols, C. E.**

1976 (and others) Northwest Texas pilot geochemical survey, National Uranium Resource Evaluation Program (NURE): U.S. Energy Research Develop. Adm., Rept. GJBX-60-76, 58 p.

**Nichols, J.**

1980 A simple thermodynamic model for estimating the solubility of H<sub>2</sub>O in magmas: *Contr. Mineralogy and Petrology*, v. 74, no. 2, p. 211-220, 3 tables, 3 figs., 1 appendix

**Nichols, Susan L.**

1978 Age dates from other publications—list 2: *Isochron/West*, no. 21, p. 22-35  
see Weimer and others, 1979

**Nielsen, D. R.**

see Van de Pol and others, 1977

**Nielsen, Kent C.**

1979 (Scott, T. E., Jr.) Precambrian deformational history of the Picuris Mountains, New Mexico: *New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe*, p. 113-120, 1 table, 15 figs.

1980 (and Scott, T. E., Jr.) Polyphase folding and superimposed strain events, a model for basement fabrics near the Jemez lineament, north-central New Mexico (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 61, no. 46, p. 1120

**Nielson, Richard L.**

1978 Regional structure control for emplacement of Laramide porphyry copper systems, Arizona-New Mexico: *Nevada Bureau Mines, Rept. 33*, p. 49-55; *Internat. Assoc. Genesis Ore Deposits, 5th symp., Program and Abs.*, p. 134

**Nielson, T. W.**

1978 Stratigraphy and microfacies analysis of the Colina Limestone (Lower Permian), Hidalgo County, New Mexico: M.S. thesis, Univ. Texas (El Paso)

**Nishi, J. M.**

see Watts, Alminas, Nishi, and Crim, 1978a-c; Watts, Hassemmer, Nishi, and Siems, 1978; and Watts, Hassemmer, Siems, and Nishi, 1978

**Nodeland, Steve**

1976 (and Cornell, W. C.) Microfossils of the Smel-terturon formation stratotype (Cretaceous, Albian), Mount Cristo Rey, New Mexico, in *Stratigraphy and structure of the Franklin Mountains: El Paso Geol. Soc.*, p. 87-89, 1 fig.

**Noon, Patrick L.**

1980 Surface to subsurface stratigraphy of the Dakota Sandstone (Cretaceous) and adjacent units along the eastern flank of the San Juan Basin, New Mexico and Colorado: M.S. thesis, Bowling Green State Univ., 133 p.

**Norman, Carl E.**

see Brautigam and Norman, 1980; and Peterson, H. W., and Norman, 1980

**North, R. G.**

1977 (and Frasier, C. W.) Analysis of seismic research observatory (SRO) data (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 58, no. 6, p. 442-443

**North, Robert M.**

1979 Pegmatite mineralogy of the Petaca mining

district, New Mexico (abs.): *Univ. New Mexico, New Mexico Minerals Symp.*, p. 5

see Eveleth and North, 1980

**Northrop, Stuart A.**

1976 New Mexico's earthquake history, 1849-1975, in *Tectonics and mineral resources of southwestern North America*, L. A. Woodward and S. A. Northrop, editors: *New Mexico Geol. Soc., Spec. Pub. 6*, p. 77-87, 5 tables, 9 figs.

1977 History of New Mexico Geological Society, 1947-1976: *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 11, pt. 1, p. 2012-2016, 2 tables, 2 figs.

1979 Some highlights in the history of New Mexico minerals: *Univ. New Mexico, New Mexico Minerals Symp.*, 4 p.

see Elston and Northrop, 1976; Hoffman and Northrop, 1977; and Woodward and Northrop, 1976

**Nowak, E. J.**

1978 The migration of Eu through geologic media (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 12, p. 1224

**Nozaki, Y.**

1977 (DeMaster, D. J., Benninger, L. K., Lewis, D. M., Graustein, W. C., and Turekian, K. K.) Atmospheric Pb-210 fluxes determined from soil profiles (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 58, no. 6, p. 396

1978 (DeMaster, D. J., Lewis, D. M., and Turekian, K. K.) Atmospheric Pb-210 fluxes determined from soil profiles (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 6, p. 563

**Nuhfer, Edward B.**

1979 Temporal and lateral variations in the geochemistry, mineralogy, and microscopy of seston collected in automated samplers from selected lakes in Ohio, Pennsylvania, and New Mexico: Ph.D. thesis, Univ. New Mexico, 390 p.

**Nunes, H. P.**

1978 (and Weaver, T. A.) Hydrogeochemical and stream sediment reconnaissance of the National Uranium Resource Evaluation Program—July-September 1977—the Rocky Mountain States of New Mexico, Colorado, Wyoming, and Montana and the State of Alaska: *Los Alamos Sci. Lab., Rept. 6993*, 14 p.; *Natl. Tech. Inf. Serv., Rept. GJBX-27-78*, 14 p.

**Nye, Osborne B., Jr.**

1978 (and LeMone, D. V.) Multilaminar growth in *Reptomulticava texana*, a new species of cyclostome bryozoa: *Jour. Paleontology*, v. 52, no. 4, p. 830-845, 3 pls., 2 tables, 5 figs.

**Nyhan, J. W.**

1978 (Hacker, L. W., Calhoun, T. E., and others) Soil survey of Los Alamos County, New Mexico: *Los Alamos Sci. Lab., Rept. LA-6779-MS*, 102 p.

1976 (Miera, F. R., and Peters, R. J.) Distribution of plutonium in soil particle size fractions of liquid effluent-receiving areas at Los Alamos: *Jour. Environ. Quality*, v. 5, no. 1, p. 50-56; *Sel. Water Resources Abs.*, v. 9, no. 16, p. 52

see Hakonson, Nyhan, and Purtymun, 1976

**Obradovich, John D.**

see Izett and others, 1978

**O'Brient, James D.**

1980 Hypabyssal crystallization and emplacement of the rhyolitic Rabb Park complex, Grant County,

- New Mexico: Ph.D. thesis, Stanford Univ., 250 p.  
see Jahns, McMillan, and others, 1978
- O'Connor, G. A.**  
1977 (and Cull, C.) Minimizing the salt burden of Pecos River irrigation drainage water (abs.): Sel. Water Resources Abs., v. 10, no. 24, p. 110-111
- Oglesby, T. W.**  
1979 (Meyers, W. J., and Lohmann, K. C.) Microdolomite-rich syntaxial cements—proposed meteoric-marine mixing zone phreatic cements from Mississippian limestones, New Mexico: Jour. Sed. Petrology, v. 49, no. 2, p. 670-676
- Olander, Paul A., Jr.**  
1979 Authigenic mineral reactions in tuffaceous sedimentary rocks, Buckhorn, New Mexico: M.S. thesis, Univ. Wyoming
- Olhoef, G. R.**  
1978 Electrical properties of salt cored from Carlsbad, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-463, 5 p., 1 fig.
- Oliver, Jack E.**  
1978 Exploration of the continental basement by seismic reflection profiling: Nature, v. 275, no. 5680, p. 485-488  
1976 (and Kaufman, Sidney) Profiling the Rio Grande rift: Geotimes, v. 21, no. 7, p. 20-22, 4 figs.  
1976 (Sanford, A. R., Chapin, C. E., and Kaufman, Sidney) Seismic reflection profiling of the deep basement—the Rio Grande rift (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1035  
see Brown, L. D., Allmendinger, and others, 1980; Brown, L. D., Chapin, and others, 1980; Brown, L. D., Kaufman, and Oliver, 1977; Brown, L. D., Krumhansl, Chapin, and others, 1979; Brown, L. D., Krumhansl, Cook, Kaufman, and others, 1978; Kaufman, S., and Oliver, 1977; Long, G. H., and others, 1977; Reilinger, Brown, and others, 1978, 1979; Reilinger and Oliver, 1976; Reilinger, Oliver, Brown, and others, 1979; Reilinger, Oliver, and others, 1980; Sanford and Oliver, 1977; and Schilt and others, 1978
- Oliver, T.**  
1977 (and Murr, L. E.) An electron microscope study of asbestiform fiber concentrations in Rio Grande valley water supplies: Am. Water Works Assoc., Jour., v. 69, no. 8, p. 428-431; Pollution Abs., v. 9, no. 1, p. 45
- Olsen, Clayton E.**  
1977 Uranium hydrogeochemical and stream sediment pilot survey of the Estancia Valley, Bernalillo, Santa Fe, San Miguel and Torrance Counties, New Mexico: Los Alamos Sci. Lab., Rept. LA-6650-MS, 32 p., 9 pls., 4 appendices; U.S. Energy Research Develop. Adm., Rept. GJBX-21-77  
see Brookins and Olsen, 1977
- Olsen, Kenneth H.**  
1979 The seismicity of north-central New Mexico with particular reference to the Cerrillos earthquake of May 28, 1918: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 65-75, 4 tables, 4 figs.  
1976 (Cash, D. J., and Bridwell, R. J.) Seismicity of north-central New Mexico and its relationship to contemporary tectonics (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 615-616  
1978 (and Chapin, C. E.) Program and abstracts, 1978 international symposium on the Rio Grande rift, October 8-17, 1978, Santa Fe, New Mexico, U.S.A.: Los Alamos Sci. Lab., Rept. LA-7487-C, 105 p., 1 table, 4 figs.  
1979 (Keller, G. R., and Stewart, J. N.) Crustal structure along the Rio Grande rift from seismic refraction profiles, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 127-143, 1 table, 8 figs.; abs in International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 65-66  
1977 (Keller, G. R., Stewart, J. N., Homuth, E. F., Cash, D. J., and Newton, C. A.) A seismic refraction study of crustal structure in the central Rio Grande rift, New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 58, no. 12, p. 1184  
1979 (and Stewart, J. N.) A generalized crustal model of the Rio Grande rift derived from synthetic seismogram modeling of refraction profiles (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 6, p. 298  
see Sanford, Olsen, and Jaksha, 1979, 1980
- Olson, A. B.**  
see Hackman and Olson, 1977; and Wyant and Olson, 1978
- O'Neill, A. J.**  
see Vizcaino and O'Neill, 1977
- O'Neill, F. Michael**  
1980 A rare fossil skeleton of *Camelops hesternus* from the Pleistocene of New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 494
- O'Neill, J. Michael**  
1980a (and Mehnert, H. H.) Late Cenozoic physiographic evolution of the Ocate volcanic field, north-central New Mexico: U.S. Geol. Survey, Open-file Rept. 80-928, 58 p.  
1980b (and Mehnert, H. H.) Late Cenozoic volcanism, uplift, and erosion, southern Sangre de Cristo Mountains, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 300  
see Baltz and O'Neill, 1980a, b
- Oppel, T. W.**  
1977 (Otte, Carel, Jr.; Pray, L. C.; and Thompson, Sam, III) Road log "E," High Rolls, New Mexico, through Fresnal Canyon to Tularosa, New Mexico, in Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 201-202
- Ormiston, A.**  
1979 (and Babcock, L. C.) *Follicucullus*, new radiolarian genus from the Guadalupian (Permian) Lamar Limestone of the Delaware Basin: Jour. Paleontology, v. 53, p. 911-912
- Orr, B. R.**  
see Mercer and Orr, 1977, 1979
- Orr, C. D.**  
1979 (Keller, G. R., and Lunn, R. J.) A seismicity study of a Delaware Basin gas field, west Texas (abs.): Earthquake Notes, v. 50, no. 4, p. 7-8
- Orr, D. G.**  
see Fischer and others, 1978, 1979
- Ortiz, Nestor V.**  
1980 (Ethridge, F. G., and Sunada, D. K.) Computer model study of Colorado Plateau-type uranium

- deposits (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 61, no. 46, p. 961
- 1980** (and others) Ground-water flow and uranium in Colorado Plateau: *Ground Water*, v. 18, no. 6, p. 596-606  
*see* Ethridge, Ortiz, Granger, and others, 1980; *and* Ethridge, Ortiz, Sunada, and Tyler, 1980
- Osborn, H. B.**  
**1979** (Renard, K. G., and Simanton, J. R.) Dense networks to measure convective rainfall in the south-western United States: *Water Resources Research*, v. 15, no. 6, p. 1701-1711
- Osburn, Glenn R.**  
**1978** Geology of the eastern Magdalena Mountains, Water Canyon to Pound Ranch, Socorro County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Technology, 159 p.; *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 113*, 159 p., 35 figs., 3 appendices, 1 sheet; *abs. in New Mexico Geology*, 1979, v. 1, no. 3, p. 46  
*see* Chapin, Chamberlin, Osburn, and others, 1978; Chapin, Jahns, and others, 1978; Chapin, Osburn, and others, 1979; Chapin, Sanford, and others, 1979; Hawley, Chapin, and Osburn, 1978; *and* Hawley, Lovejoy, and others, 1978
- Osburn, JoAnne Cima**  
**1980** Evaluation of scoria deposits in New Mexico: *New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1978-79*, p. 75-80, 1 table, 2 figs.  
*see also* Cima, JoAnne
- Osmond, J. K.**  
**1980** (and Cowart, J. B.) Th<sup>230</sup>, U<sup>234</sup>, and U<sup>238</sup> disequilibria in secondary uranium deposits (abs.): *26th Internat. Geol. Congr. Abs.*, v. 3, p. 982
- Ossian, Clair R.**  
**1976** Redescription of *Megactenopetalus kaibabensis* David 1944 (Chondrichthyes: Petalodontidae) with comments on its geographic and stratigraphic distribution: *Jour. Paleontology*, v. 50, no. 3, p. 392-397, 1 pl., 3 figs.
- Osterhoudt, Walter J.**  
*see* Fassett, Black, and others, 1977
- O'Sullivan, Robert B.**  
**1977** Triassic rocks in the San Juan Basin of New Mexico and adjacent areas: *New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III*, p. 139-146, 3 figs.  
**1980** Measured stratigraphic sections of the upper coal-bearing part of the Cretaceous Menefee Formation in the Kin Klishin Ruins quadrangle of north-western New Mexico: *U.S. Geol. Survey, Open-file Rept. 80-184*, 34 p.  
**1979a** (Scott, G. R., and Heller, J. S.) Preliminary geologic map of the Newcomb SE quadrangle, San Juan County, New Mexico: *U.S. Geol. Survey, Misc. Field Studies Map MF-1026*, scale 1:24,000  
**1979b** (Scott, G. R., and Heller, J. S.) Preliminary geologic map of the Bisti Trading Post quadrangle, San Juan County, New Mexico: *U.S. Geol. Survey, Misc. Field Studies Map MF-1075*, scale 1:24,000  
**1979c** (Scott, G. R., and Heller, J. S.) Preliminary geologic map of the Kirtland SW quadrangle, San Juan County, New Mexico: *U.S. Geol. Survey, Misc. Field Studies Map MF-1080*, scale 1:24,000  
**1979d** (Scott, G. R., and Heller, J. S.) Preliminary geologic map of the Hogback South quadrangle, San Juan County, New Mexico: *U.S. Geol. Survey, Misc. Field Studies Map MF-1093*, scale 1:24,000  
**1979** (Scott, G. R., and Weide, D. L.) Preliminary geologic map of the Kin Klishin Ruins quadrangle, San Juan and McKinley Counties, New Mexico: *U.S. Geol. Survey, Misc. Field Studies Map MF-1094*, scale 1:24,000  
*see* Scott, G. R., O'Sullivan, and Heller, 1979a-c; Scott, G. R., O'Sullivan, and Mytton, 1979; Strobell and others, 1980; *and* Weide, O'Sullivan, and Heller, 1979
- Otte, Carel, Jr.**  
**1980** Overview of geothermal energy developments (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 64, no. 5, p. 761  
*see* Oppel and others, 1977
- Ottolini, R. O.**  
**1978** Stanford's COCORP seismic processing and migration of the Socorro lines (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 12, p. 1137
- Owen, Donald E.**  
**1980** San Juan Basin of New Mexico and Colorado, classic area of stratigraphic exploration (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 64, no. 5, p. 761-762  
**1977** (and Siemers, C. T.) Lithologic correlation of the Dakota Sandstone and adjacent units along the eastern flank of the San Juan Basin, New Mexico: *New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III*, p. 179-183, 2 figs.  
**1978** (Walters, L. J., Jr.; Depetro, L. M.; and Turmelle, J. M.) Paleocurrents of Jackpile sandstone, Burro Canyon Formation, and Dakota Sandstone of San Juan Basin region, New Mexico, Colorado, and Utah (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 62, no. 6, p. 1093  
**1976** (Walters, L. J., Jr.; Kostura, J. R.; and Grant, Keith) Paleocurrent analysis of Dakota and subjacent sandstones, San Juan Basin, New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 60, no. 8, p. 1405
- Owens, J. W.**  
*see* Purtymun, Peters, and Owens, 1980
- Packard, Frank**  
*see* Pray and Packard, 1977
- Padovani, Elaine R.**  
**1977** Granulite facies xenoliths from Kilbourne Hole maar, New Mexico, and their bearing on deep crustal evolution: Ph.D. thesis, Univ. Texas (Dallas), 172 p.; *Dissert. Abs. Internat.*, v. 38, no. 3, p. 1110-B  
**1976** (and Carter, J. L.) Labradorite anorthosite from south-central New Mexico (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 338  
**1977** (and Carter, J. L.) Aspects of the deep crustal evolution beneath south-central New Mexico, *in* The Earth's crust—its nature and physical properties, J. G. Heacock, editor: *Am. Geophys. Union, Geophys. Mon. 20*, p. 19-55  
**1978a** (and Carter, J. L.) The lower crust beneath Kilbourne Hole, New Mexico (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 4, p. 392  
**1978b** (and Carter, J. L.) Deep crustal evolution beneath south-central New Mexico—constraints on the geothermal gradient from xenolithic assemblages,

- abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 66-67  
 see Hart, S. R., Padovani, and Richardson, 1980; Hart, S. R., Padovani, and Roden, 1979; James and others, 1980a,b; Richardson, S. H., and others, 1980; Wasilewski and Padovani, 1980; and Wilshire and others, 1977
- Page, Gordon B.**  
 see Anderson, O. J., Page, and Arnold, 1977; and Arnold, Foster, and others, 1976
- Pahwa, S. B.**  
 see Balestri and others, 1979
- Pallister, J. S.**  
 see Lipman, Pallister, and Sargent, 1979
- Palmer, A. N.**  
 see Queen and others, 1979
- Palmer, M. V.**  
 see Queen and others, 1979
- Parchman, Mark A.**  
 see Woodward, Parchman, and others, 1979
- Park, Sam-Kuen**  
 see Herrmann, Dewey, and Park, 1980; and Herrmann and Park, 1979
- Parker, John M.**  
 1977 (Riggs, E. A., and Fisher, W. L.) Oil and gas potential of the San Juan Basin: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 227-234, 2 tables, 6 figs.
- Parker, Lee R.**  
 see Tidwell, Bunderson, and Parker, 1980
- Parker, Mark D.**  
 1980 (and Jiracek, G. R.) Progress toward evaluating the geothermal resource in the Albuquerque, New Mexico, area: Geothermal Resources Coun., Trans., v. 4, September, p. 229-232, 5 figs.
- Parks, James M.**  
 1976a New evidence for ecologic reef origin of Dry Canyon Late Pennsylvanian bioherms, Sacramento Mountains, south-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 617  
 1976b Summary of evidence for ecologic reef origin of Dry Canyon Late Pennsylvanian bioherms, Sacramento Mountains, south-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1042  
 1977a Origin of early vuggy porosity in carbonate-mudbank buildups, Pennsylvanian and Permian, Sacramento Mountains, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 5, p. 819-820  
 1977b Paleocological evidence on the origin of the Dry Canyon Pennsylvanian bioherms, *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 27-41, 4 pls.  
 1977c Plate-shaped calcareous algae in Late Paleozoic rocks of midcontinent, *abs. in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 163  
 1977d Evolution of the Holder Formation Dry Canyon biohermal complexes, *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 164-166, 2 figs.
- Parry, William T.**  
 see Jacobs, D. C., and Parry, 1979
- Patterson, E. D.**  
 1978 (Curtis, N. L., and DeCicco, D. A.) Leasable mineral and waterpower land classification map of the Gallup quadrangle, New Mexico, Arizona: U.S. Geol. Survey, Open-file Rept. 78-477, scale 1:250,000  
 1976 (and Renner, J. L.) Selected geothermal resources assessment data—hydrothermal connection systems in New Mexico: Natl. Tech. Inf. Serv., Rept. PB-250-377, p. 281-291  
 see Banaszynski and others, 1979; DeCicco and Patterson, 1979a-d, 1980a-h; DeCicco, Patterson, and Lutz, 1978a-d, 1979, 1980; DeCicco, Patterson, and Morgan, 1980; DeCicco, Patterson, and Robinson, 1980; and DeCicco, Patterson, and Yamamoto, 1980
- Patterson, R. C.**  
 see Lansford, Chaturvedi, and others, 1980
- Paul Weir Company**  
 1976 Mining cost estimates, typical mines (hypothetical) strip and underground, State of New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 78, 26 p., 10 tables
- Payne, Myron W.**  
 1976 Basinal sandstone facies, Delaware Basin, west Texas and southeast New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 60, no. 4, p. 517-527, 3 tables, 11 figs.  
 1979 Submarine-fan channel depositional processes in the Permian Bell Canyon Formation, west Texas and southeast New Mexico, *in* Guadalupian Delaware Mountain Group of west Texas and southeast New Mexico, N. M. Sullivan, editor: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., p. 96-103
- Pearson, Christopher F.**  
 1980 (Albright, J. N., Homuth, E. F., Bridwell, R. J., and Potter, R. M.) The relationship between high pore pressures and seismicity at the Fenton Hill, New Mexico, hot dry rock geothermal site (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 46, p. 1051-1052
- Peck, Stewart B.**  
 see Kukulova-Peck and Peck, 1976
- Pedersen, Jens**  
 1980 A magnetotelluric investigation of the deep electrical structure of the Rio Grande rift and adjacent tectonic provinces: Ph.D. thesis, Brown Univ., 325 p.  
 1979 (Alvarez, L. J., and Hermance, J. F.) 1-D, 2-D, and 3-D distortion of telluric-magnetotelluric fields in the Rio Grande rift and Colorado Plateau (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 46, p. 811  
 1979 (and Hermance, J. F.) Upper mantle structure beneath the Colorado Plateau as determined from magnetotelluric measurements (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 243  
 see Hermance and Pedersen, 1978, 1980
- Pelley, C. R.**  
 1978 Utilization characteristics of blending eastern and western coals: Mining Engineering, v. 30, no. 1, p. 64-71, 1 table, 14 figs.



**Pense, G. M.**

1977 The volcanic stratigraphy of the Banco Bonito vitrophyre—a petrochemical study of a rhyolite lava flow: M.S. thesis, Texas Christian Univ.

**Pepin, R. O.**

see Saito, Menzies, and others, 1978

**Perkins, Betty L.**

1979 An overview of the New Mexico uranium industry: New Mexico Energy and Minerals Dept., 147 p., 48 tables, 10 figs., 5 appendices

1980 Uranium, in New Mexico's energy resources '79, E. C. Arnold and J. M. Hill, compilers: New Mexico Bureau Mines Mineral Resources, Circ. 172, p. 39-48, 19 tables

**Perkins, Priscilla C.**

see Ehrenberg and Perkins, 1977

**Perry, D. G.**

see Isaacson and Perry, 1977

**Perry, Frank V.**

see Baldrige, Perry, and Gladney, 1980

**Peterman, Z. E.**

see Barker, F., Arth, and others, 1976

**Peters, G. L.**

see Larkin and others, 1980

**Peters, R. J.**

see Nyhan and others, 1976; Purtymun, Peters, and Owens, 1980; and Purtymun, Peters, and Stoker, 1980

**Peterson, Donald L.**

see Eaton, Peterson, and Webring, 1977; Eaton, Peterson, Webring, and Ratte, 1976; and Ratte Gaskill, and others, 1979

**Peterson, Donald N.**

1979 Preliminary results from a paleomagnetic investigation of Upper Permian rocks from the U.S. Southwest (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 237

**Peterson, Fred**

1977 (and Kirk, A. R.) Correlation of the Cretaceous rocks in the San Juan, Black Mesa, Kaiparowits and Henry Basins, southern Colorado Plateau: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 167-178, 4 figs., 2 appendices

**Peterson, Harry W.**

1979 Structural and petrological relationships of the Bear Mountain intrusive, Silver City Range, Grant County, New Mexico: M.S. thesis, Univ. Houston

1980 (and Norman, C. E.) Structural and petrological relationships of the Bear Mountain intrusive, Silver City Range, Grant County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 300-301

**Peterson, R. J.**

1980 Geology of pre-Dakota uranium geochemical cell, sec. 13, T. 16 N., R. 17 W., Church Rock area, McKinley County, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 131-138, 13 figs.; abs. in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 16-17  
see Smith, D. A., and Peterson, 1979, 1980

**Peterson, Stephen L.**

1977 Geology of the Apache no. 2 mining district,

Hidalgo County, New Mexico: M.S. thesis, Univ. New Mexico, 86 p.

see Deal, Elston, and others, 1978

**Pettitt, Roland A.**

1976 Water-quality monitoring—ground water, in Environmental monitoring for the hot dry rock geothermal energy development project: Los Alamos Sci. Lab., Rept. LA-6504-SR, p. 23-27

1977 Los Alamos hot dry rock geothermal energy project: Geothermal Resources Coun., Ann. Mtg., Trans., p. 241-244

1978 Testing, planning, and redrilling of geothermal test hole GT-2, phases IV and V: Los Alamos Sci. Lab., Prog. Rept. LA-7586-PR, 60 p., 4 tables, 26 figs.

1979 Completion of hot dry rock geothermal well systems: Soc. Petroleum Engineers, 54th Ann. Fall Conf., p. 1-7

1978a (and Tester, J. W.) The development of hot dry rock resources, in Geothermal environmental seminar '78, F. L. Tucker, editor: Kelseyville, California, Environ. Syst. and Serv., p. 140-147

1978b (and Tester, J. W.) Development of hot dry rock resources: Natl. Tech. Inf. Serv., Rept. LA-UR-1336, 11 p.; abs. in New Mexico Geology, 1979, v. 1, no. 2, p. 31

1978 (and West, F. G.) Environmental monitoring program for the hot dry rock geothermal project, Fenton Hill site, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 471

see Balagna, West, and others, 1977; Charles, West, and others, 1977; Dennis, B. R., Miles, and others, 1978; and Laughlin, West, and others, 1977

**Petty, David M.**

1979 Geology of the southeastern Magdalena Mountains, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 106, 174 p., 25 figs., 2 sheets; M.S. thesis, New Mexico Inst. Mining and Tech., 174 p.

**Phelps, David W.**

1979 (Blanchard, D. P., and others) Rare-earth geochemistry of the Raton-Clayton volcanic field, northeast New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 495

1980 (Blanchard, D. P., and Stormer, J. C., Jr.) Apatite and hornblende REE distribution coefficients in a mafic dacite and implications for the role of apatite fractionation in the genesis of siliceous rocks (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 498

**Phillips, C. A.**

see Styron and others, 1979

**Phinney, D.**

1978 (Tennyson, J., and Frick, U.) Xenon in CO<sub>2</sub> well gas revisited: Jour. Geophys. Research, v. 82, no. B5, p. 2313-2319

**Picard, M. Dane**

1980 Petroleum occurrences in nonmarine rocks (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 764

**Pickett, G. R.**

see Keller, G. V., Grose, and Pickett, 1978

**Pierson, Charles T.**

1977 (and Green, M. W.) Factors controlling localization of uranium deposits in the Dakota Sandstone,



- Gallup and Ambrosia Lake mining districts, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-766, 62 p., 1 fig., 1 pl., 6 photos
- 1980** (and Green, M. W.) Factors that localized uranium deposition in the Dakota Sandstone, Gallup and Ambrosia Lake mining districts, McKinley County, New Mexico: U.S. Geol. Survey, Bull. 1485, 31 p.  
see Green and Pierson, 1977; and Ridgley and others, 1978
- Pillmore, Charles L.**
- 1976a** Road log from Raton to Underwood Lakes through the Raton coal field via the York Canyon mine, Vermejo Park and Gold Creek: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 25-47
- 1976b** Road log from Raton to Adams and Bartlett Lakes, Vermejo Park, New Mexico, through Trinidad coal field and Tercio anticline, Colorado; return via Van Bremmer Canyon and Colfax, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 49-69
- 1976c** Deflation origin of Adams and Bartlett Lake basins, Vermejo Park, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 121-124, 8 figs.
- 1976d** Commercial coal beds of the Raton coal field, Colfax County, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 227-247, 11 tables, 12 figs., appendix
- 1976e** The York Canyon coal bed: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 249-251, 7 figs.
- 1980a** 1980 Romocoal field trip—generalized first day road log—from Denver south through Castle Rock, Colorado Springs, Pueblo, and Trinidad, Colorado, to Raton, New Mexico, in Proceedings of the fourth symposium on the geology of Rocky Mountain coal, L. M. Carter, editor: Colorado Geol. Survey, Resource Ser. 10, p. 111-112
- 1980b** 1980 Romocoal field trip—second day road log—from Raton to Vermejo Park through the Raton coal field via the York Canyon mine, in Proceedings of the fourth symposium on the geology of Rocky Mountain coal, L. M. Carter, editor: Colorado Geol. Survey, Resource Ser. 10, p. 113-117
- 1976** (and Eicher, D. L.) Lower part of the marine Cretaceous at Gold Creek, Vermejo Park, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 171-176, 4 figs.
- 1976** (and Hatch, J. R.) Geochemical data on selected coal beds, Raton coal field, Colfax County, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-542, 23 p., 8 tables, 1 fig.
- 1976** (and Maberry, J. O.) Depositional environments and trace fossils of the Trinidad Sandstone, southern Raton Basin, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 191-195, 9 figs.
- 1976** (and Scott, G. R.) Pediments of the Vermejo Park area, New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 111-120, 1 table, 12 figs.  
see Bohor and Pillmore, 1976
- Pinzon Lizarraga, Santiago**
- 1978** A non-linear lumped-parameter model for the Mesilla Valley, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech.
- Piper, A. M.**
- 1974** The four-township study area near Carlsbad, New Mexico—vulnerability to future subsidence: Union Carbide Corp., Office Waste Isolation, Rept. Y/OWI/SUB-3745/2, 31 p.
- Pitt, William D.**
- 1980** San Andres Formation, east-central New Mexico (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 49-50
- Pittman, E. D.**
- 1977** (and Wilson, M. D.) Authigenic clays in sandstones—recognition and influence on reservoir properties and paleoenvironmental analysis: Jour. Sed. Petrology, v. 47, no. 1, p. 3-31
- Place, Jeannie T.**
- 1980** (Della Valle, R. S., and Brookins, D. G.) Mineralogy and geochemistry of Mariano Lake uranium deposit, Smith Lake district, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 172-184, 3 tables, 26 figs.; abs. in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 16; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 692
- Planner, Harry N.**
- 1980** (and others) Uranium hydrogeochemical and stream sediment reconnaissance data release for the Socorro NTMS quadrangle, New Mexico, including concentrations of forty-two additional elements: Los Alamos Sci. Lab., Rept. 8001, 145 p.; U.S. Dept. Energy, Rept. GJBX-12-81
- Polito, J.**  
see Newsom and others, 1978
- Pollard, D. D.**
- 1976** (and Delaney, P. T.) On the form and growth of large en echelon fractures in rock (abs.): Am. Geophys. Union (EOS), Trans., v. 57, no. 12, p. 1006
- 1978** (and Delaney, P. T.) Basaltic subvolcanic conduits near Shiprock, New Mexico—dike propagation and dilation (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 12, p. 1212-1213  
see Delaney and Pollard, 1978
- Popp, Carl J.**
- 1980** (and Laquer, F.) Trace metal transport and partitioning in the suspended sediments of the Rio Grande and tributaries in central New Mexico: Chemosphere, v. 9, no. 2, p. 89-98  
see Brandvold, L. A., and others, 1980; Riese, A. C., and Popp, 1980; and Smith, R. W., and Popp, 1980
- Porter, D. A.**  
see Wentworth and others, 1979, 1980
- Porter, J. Robert**  
see Everett and others, 1978
- Porter, L. S. W.**  
see Harris and Porter, 1980
- Porter, Robert B.**
- 1977** Developments in west Texas and eastern New Mexico in 1976: Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 8, p. 1208-1215, 5 tables, 1 fig.
- Potter, Jarod M.**
- 1978** Experimental permeability studies at elevated

- temperature and pressure of granitic rocks: M.S. thesis, Univ. New Mexico, 101 p.; Natl. Tech. Inf. Serv., Rept. LA-7224T, 109 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 3, p. 46
- 1976** (Balagna, J. P., and Charles, R. W.) Permeability of a biotite monzogranite at elevated temperatures (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 353
- Potter, Loren D.**  
*see* Gosz and others, 1978, Louderbough and Potter, 1978; *and* Marple and others, 1978
- Potter, Robert M.**  
**1976** Characteristics of seismic events associated with hydraulic fracturing (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 57, no. 4, p. 349  
*see* Aki and others, 1977; Murphy, H.D., and others, 1978; *and* Pearson and others, 1980
- Powers, Dennis W.**  
**1979** Justification, *in* Basic data report for drillhole WIPP 13: Sandia Lab., Rept. SAND79-0273, appendix A, p. A1-A9  
**1980** Geologic processes in evaporites in the northern Delaware Basin (abs.): *Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program*, p. 50
- 1979a** (and Shaffer, S. E.) Introduction, *in* Basic data report for drillhole WIPP 25: Sandia Lab., Rept. SAND79-0279, p. 2-3
- 1979b** (and Shaffer, S. E.) Introduction, *in* Basic data report for drillhole WIPP 27: Sandia Lab., Rept. SAND79-0281, p. 2-3
- 1979c** (and Shaffer, S. E.) Introduction, *in* Basic data report for drillhole WIPP 29: Sandia Lab., Rept. SAND79-0283, p. 2-3
- 1979** (and Weart, W. D.) Introduction, *in* Basic data report for drillhole WIPP 13: Sandia Lab., Rept. SAND79-0273, p. 2-3  
*see* Anderson, R. Y., and Powers, 1978; Reilinger, Brown, and Powers, 1980; *and* Weart and Powers, 1980
- Powers, R. S.**  
**1976** Geology of the Summit Mountains and vicinity, Grant County, New Mexico, and Greenlee County, Arizona: M.S. thesis, Texas Tech Univ., 107 p.
- Powers, W. L.**  
*see* Babcock, R. E., and others, 1978
- Pratt, H. R.**  
**1976** (and Simonson, E. R.) Geotechnical studies of geothermal reservoirs: Natl. Tech. Inf. Serv., Rept. TID-28703, 56 p.; *abs. in* New Mexico Geology, 1980, v. 2, no. 1, p. 13
- Pratt, Walden P.**  
*see* Henkes and others, 1976
- Pray, Lloyd C.**  
**1977a** Stratigraphic and structural features of the Sacramento Mountain escarpment, New Mexico, *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 73-89, 2 figs.  
**1977b** Alamogordo to Alamo Canyon and the western Sacramento Mountains escarpment, field guide and road log "A," *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 111-121, 124-134, 11 figs.
- 1977c** Field guide and road log "A," supplemental field guide to southernmost Sacramento Mountains escarpment—Agua Chiquita and Nigger Ed Canyons, *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 122-123, 135, 1 fig.
- 1977d** Alamogordo to Indian Wells, reentrant field guide and road log "B," *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 137-138, 1 fig.
- 1977e** Field guide and road log "C"—from the Tularosa Basin up the Sacramento Mountains escarpment to High Rolls-Mountain Park via U.S. 82, *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 157-161, 168, 171-174, 178-183, 7 figs.
- 1977f** Field guide and road log "D," High Rolls south to Four Bits Peak, *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 184-200, 10 figs.
- 1977g** Road log "G," High Rolls to Cloudcroft, *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 214-216
- 1977** (and Esteban, M., editors) Upper Guadalupian facies, Permian reef complex, Guadalupe Mountains, New Mexico and west Texas: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Rept. 77-16, v. 2, 194 p.
- 1977** (and Packard, Frank) Road log "F," West Side Road and crest road loop, *in* Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 210-213
- 1977** (and Sarg, J. F.) Road log, Carlsbad to Rocky Arroyo and return: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G15-G163
- 1977** (and Schwartz, A. H.) Locality guide, stop II, mouth of Walnut Canyon, outer shelf facies, Yates and Tansill Formations: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G41-G46  
*see* Babcock, J. A., and others, 1977a,b; Delgado and Pray, 1977; Esteban and Pray, 1976, 1977a-e; *and* Oppel and others, 1977
- Prelat, Alfredo**  
*see* Inglis and others, 1978
- Prescott, W. H.**  
*see* Savage, J. C., Lisowski, and Prescott, 1979; *and* Savage, J. C., Lisowski, and others, 1980
- Preslar, Tony**  
**1976** Geophysical investigations at the Lightning Dock KGRA (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 619
- Presley, Mark W.**  
*see* Handford and others, 1980
- Presser, T. S.**  
*see* Mariner and others, 1977

**Preston, Charles D.**

**1977a** Shoobar Strawn north field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 178-179, 1 table, 1 fig.

**1977b** Shoobar Wolfcamp north field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 180-181, 1 table, 1 fig.

**Preston, R. E.**

**1979** Late Pleistocene cold-blooded vertebrate faunas from the mid-continental United States—1., Reptilia—Testudines, Crocodylia: Univ. Michigan, Mus. Paleontology, Papers on Paleontology 19, 53 p.

**Prigmore, Susan M.**

**1978** Mineralogical, petrological, and geochemical aspects of Pleistocene low temperature rhyolites of the Tewa Group, Jemez Mountains, New Mexico: Ph.D. thesis, Southern Methodist Univ., 93 p.; Desert. Abs. Internat., 1979, v. 39, no. 7, p. 3205-B

**Pritchard, Roy L.**

**1978a** Blanco Mesaverde (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 222-224, 3 figs.

**1978b** Crouch Mesa Mesaverde (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 272-273, 3 figs.

**1978c** Flora Vista Mesaverde (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 298-299, 3 figs.

**1978d** Gonzales Mesaverde (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 325-326, 3 figs.

**1978e** Knickerbocker Buttes Gallup (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 355-356, 1 fig.

**1978f** Otero Point Lookout (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 447-448, 3 figs.

**1978g** Torreon Mesaverde (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 532-533, 2 figs.

**1978h** Torreon Mesaverde (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 534, 1 fig.

**1978i** Venado Mesaverde (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 548-549, 3 figs.

**Probandt, W. T.**

**1977** Mescalero north (Cisco) field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 134-137, 1 table, 2 figs.

**Proffett, John M., Jr.**

**1978** Ore deposits of the western United States—a summary (abs.): Internat. Assoc. Genesis Ore Deposits, 5th symp., Program and Abs., p. 147

**Pronold, Thomas G.**

**1979** The one-atmosphere phase relations of three volcanic rocks from the Taos Plateau volcanic field, north-central New Mexico: M.S. thesis, Southern Methodist Univ.

*see* Dungan and others, 1978

**Puchlik, Kenneth P.**

*see* Leach and Puchlik, 1976

**Puffer, J. H.**

*see* Buscemi and Puffer, 1978

**Purtymun, William D.**

**1977a** Hydrologic characteristics of the Los Alamos well field with reference to the occurrence of arsenic in well LA-6: Los Alamos Sci. Lab., Rept. LA-7212-MS, 63 p.

**1977b** Water supply at Los Alamos during 1976: Los Alamos Sci. Lab., Rept. LA-6814-PR, 28 p.; Sel. Water Resources Abs., 1978, v. 11, no. 4, p. 25-26

**1978** Water supply at Los Alamos during 1977: Los Alamos Sci. Lab., Rept. LA-7436-MS, 38 p.

**1980** Water supply at Los Alamos during 1979: Los Alamos Natl. Lab., Rept. LA-8504-PR, 44 p.

**1980** (and Adams, W. H.) Geohydrology of Bandler Natl. Monument, New Mexico: Los Alamos Natl. Lab., Rept. LA-8461-MS, 25 p.

**1977** (Adams, W. H., Stoker, A. K., and West, F. G.) Water quality in vicinity of Fenton Hill site, 1975 (abs.): Sel. Water Resources Abs., v. 10, no. 22, p. 53

**1977** (Buchholz, J. R., and Hakonson, T. E.) Chemical quality of effluents and their influence on water quality in a shallow aquifer (abs.): Sel. Water Resources Abs., v. 10, no. 14, p. 36-37

**1977** (Dreesen, D. R., and Wienke, C. L.) Geology and hydrology in the vicinity of the inactive uranium-mill tailings pile, Ambrosia Lake, New Mexico: Los Alamos Sci. Lab., Rept. LA-6839-MS, 36 p.

**1980** (Ferenbaugh, R. W., and others) Water quality in the vicinity of Fenton Hill site, 1978: Los Alamos Sci. Lab., Rept. LA-8217-PR, 21 p.

**1976** (and others) Water quality in vicinity of Fenton Hill site, 1975: Los Alamos Sci. Lab., Rept. LA-6511-MS, 21 p.

**1980** (and others) Water quality in the vicinity of Fenton Hill, 1979: Los Alamos Natl. Lab., Rept. LA-8424-PR, 21 p.

**1980** (Peters, R. J., and Owens, J. W.) Geohydrology of White Rock Canyon of the Rio Grande from Otowi to Frijoles Canyon: Los Alamos Sci. Lab., Rept. 8635, 15 p.

**1980** (Peters, R. J., and Stoker, A. K.) Radioactivity in soils and sediments in and adjacent to the Los Alamos area, 1974-1977: Los Alamos Sci. Lab., Rept. LA-8234-MS, 17 p.

**1980** (Rogers, M. A., and Wheeler, M. L.) Sampling for migration from a solid radioactive waste disposal pit (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 32, p. 572

**1978** (Stoker, A. K., Adams, W. H., and others) Water quality in the vicinity of Fenton Hill site, 1977: Los Alamos Sci. Lab., Rept. 7408, 16 p.

*see* Budding and Purtymun, 1979; Cushman and Purtymun, 1976; Hakonson, Nyhan, and Purtymun, 1976; and West, F. G., and Purtymun, 1976

**Putnam, Bordon R., III**

1980 Fluid inclusion and microchemical analysis of the Hansonburg Mississippi Valley type ore deposits in central New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech.; *abs. in New Mexico Geology*, v. 2, no. 3, p. 48

**Pye, D. S.**

see Messer and others, 1978

**Queen, J. Michael**

1980 Evidence of a sea level low stand during the Guadalupian, Upper Permian rocks of the Guadalupe Mountains, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 12, no. 7, p. 504-505

1979 (Palmer, A. N., and Palmer, M. V.) Carbonate replacement of sulfate—new mechanism for porosity generation in carbonate rocks marginal to evaporite basins (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 3, p. 512-513

**Quillin, Robert**

1976 (and Combs, Jim) Microearthquake survey of the Radium Springs KGRA, south-central New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 6, p. 1055

**Rabinowitz, D. Dan**

1977a (Gross, G. W., and Holmes, C. R.) Environmental tritium as a hydrometeorologic tool in the Roswell Basin, New Mexico—pt. I, tritium input function and precipitation-recharge relation: *Jour. Hydrology*, v. 32, no. 1-2, p. 1-17, 4 tables, 4 figs.

1977b (Gross, G. W., and Holmes, C. R.) Environmental tritium as a hydrometeorologic tool in the Roswell Basin, New Mexico—pt. II, tritium patterns in ground water: *Jour. Hydrology*, v. 32, no. 1-2, p. 19-33, 5 figs.

1977c (Gross, G. W., and Holmes, C. R.) Environmental tritium as a hydrometeorologic tool in the Roswell Basin, New Mexico—pt. III, hydrologic parameters: *Jour. Hydrology*, v. 32, no. 1-2, p. 35-46, 1 table, 2 figs.

**Ragland, Paul C.**

see Cannon, R. P., and Ragland, 1977; and Lindley and others, 1980

**Rai, Dhanput**

see Gould and others, 1977

**Ramberg, Ivar B.**

1978 Comparison of the Oslo graben with the Rio Grande rift, *abs. in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs.*, Rept. LA-7487-C, p. 68-71, 1 fig.

1978 (Cook, F. A., and Smithson, S. B.) Structure of the Rio Grande rift in southern New Mexico and west Texas based on gravity interpretation: *Geol. Soc. America, Bull.*, v. 89, no. 1, p. 107-123, 2 tables, 14 figs.

**Ramey, Joe D.**

1977 New Mexico: Oil and Gas Compact Bull., v. 36, no. 1, p. 38

1978 New Mexico: Oil and Gas Compact Bull., v. 37, no. 1, p. 33

1979 New Mexico: Oil and Gas Compact Bull., v. 38, no. 1, p. 38

**Ramos-Arras, M.**

see Chaturvedi and Ramos-Arras, 1979

**Rathbun, Ronald E.**

1978 (and Kennedy, V. C.) Transport and disper-

sion of fluorescent tracer particles for the dune-bed condition, Atrisco Feeder Canal near Bernalillo, New Mexico: U.S. Geol. Survey, Prof. Paper 1037, 95 p., 1 pl.; *Sel. Water Resources Abs.*, v. 11, no. 22, p. 16

**Ratkevich, Ron P.**

1976 *Dinosaurs of the Southwest*: Albuquerque, Univ. New Mexico Press, 115 p.

1978 (and LaFon, N.) Field guide to New Mexico fossils: Alamogordo, Dinograph Southwest, Inc., 84 p.

**Ratte, James C.**

1977 Geologic map of the Mogollon quadrangle, Catron County, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-324, scale 1:24,000

1978a Cliff to U.S. 180 via Rain Creek Mesa and Moon Ranch on N.M. 211 and 293 and Forest Road 147, in Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: *New Mexico Geol. Soc., Spec. Pub. 7*, p. 83-86, 2 figs.

1978b Gila mining district, in Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: *New Mexico Geol. Soc., Spec. Pub. 7*, p. 86-87

1980 Geologic map of the Saliz Pass quadrangle, Catron County, New Mexico: U.S. Geol. Survey, Misc. Field Study Map MF-1203, scale 1:24,000

1978 (and Finnell, T. L.) Third day, road log from Silver City to Reserve via Glenwood and the Mogollon mining district, in Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: *New Mexico Geol. Soc., Spec. Pub. 7*, p. 49-63, 13 figs.

1975 (and Gaskill, D. L.) Reconnaissance geologic map of the Gila Wilderness study area, southwestern New Mexico: U.S. Geol. Survey, Misc. Inv. Ser., Map I-886, 2 sheets, scale 1:62,500 [1976]

1979 (Gaskill, D. L., Eaton, G. P., Peterson, D. L., Stotelmeyer, R. B., and Meeves, H. C.) Mineral resources of the Gila Primitive Area and Gila Wilderness, Catron and Grant Counties, New Mexico: U.S. Geol. Survey, Bull. 1451, 229 p., sheets in case

1979 (and Grotho, Terry) Chemical analyses and norms of 81 volcanic rocks from part of the Mogollon-Datil volcanic field, southwestern New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1435, 36 p.

see Eaton, Peterson, Webring, and Ratte, 1976

**Rautman, Christopher A.**

1976 Uranium in New Mexico, in *Legislative energy report, taxes, and revenues: New Mexico Legislative Energy Comm.*, v. 2, pt. II, p. 26-40

1977a Uranium industry of New Mexico: *New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1976-77*, p. 55-65, 4 tables, 7 figs.

1977b The uranium industry in New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 74, 24 p.*, 3 tables, 7 figs.

1980 (compiler) *Geology and mineral technology of the Grants uranium region 1979*: *New Mexico Bureau Mines Mineral Resources, Mem. 38*, 400 p., 66 tables, 483 figs.

1977 (and Kottowski, F. E.) Relation of costs and taxes for New Mexico's uranium production: *New*

- Mexico Bureau Mines Mineral Resources, Open-file Rept. 77, 12 p., 10 figs.
- see Brookins and Rautman, 1978; Brookins, Rautman, and Corbitt, 1978; Siemers, W. T., Hawley, and others, 1978; and Wright, R. P., and others, 1977
- Rawson, Richard R.**
- 1976 Sabkha environment—new frontier for uranium exploration (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 60, no. 8, p. 1406-1407
- 1980 Uranium in Todilto Limestone (Jurassic) of New Mexico—example of a sabkha-like deposit, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 304-312, 15 figs.; also *in* Uranium in sedimentary rocks—application of the facies concept to exploration, C. E. Turner-Peterson, editor, Soc. Econ. Paleontologists and Mineralogists, Rocky Mtn. Sec., p. 127-144; abs. *in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 17; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 692
- Raza, S. Mahmood**  
see Lucas and Raza, 1979
- Rea, Amadeo M.**
- 1980 Late Pleistocene and Holocene turkeys in the Southwest, *in* Papers in avian paleontology honoring Hildegard Howard, Kenneth E. Campbell, Jr., editor: Los Angeles County Museum Natural History, Contrib. in Science 330, p. 209-224
- Rea, Kenneth H.**
- 1977 Environmental investigations associated with the LASL hot dry rock geothermal energy development project: Los Alamos Natl. Lab., Rept. LA-6972, 23 p.  
see Gutschick and Rea, 1978
- Read, C. B.**  
see Ash and Read, 1976
- Reddy, George**  
see Scott, G. L., and Reddy, 1977
- Reddy, I. K.**  
see Jiracek, Ander, and Reddy, 1978
- Reed, E. L.**
- 1977 Ground-water evaluation, McKinley County, New Mexico: consult. rept. to Yah-Ta-Hey, Inc., 25 p.
- Reese, Douglas L.**
- 1976 Developments in Four Corners-intermountain area in 1975: Am. Assoc. Petroleum Geologists, Bull., v. 60, no. 8, p. 1239-1242, 2 tables, 1 fig.
- Reese, Val R.**
- 1978a Escrito Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 287-289, 4 figs.
- 1978b Five Lakes Dakota (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 290-291, 4 figs.
- 1978c Lybrook Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 395-397, 4 figs.
- 1978d Media Entrada (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 410-412, 4 figs.
- 1978e Media Entrada, southwest (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 413-415, 4 figs.
- 1978f Media Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 416-417, 4 figs.
- Reeves, Corwin C., Jr.**
- 1976 Quaternary stratigraphy and geologic history of the southern High Plains, Texas and New Mexico, *in* Quaternary stratigraphy of North America, W. C. Mahaney, editor: Stroudsburg, Pennsylvania, Dowden, Hutchinson, and Ross, Inc., p. 213-234
- 1977 Uranium potential of Ogallala Group, southern High Plains, west Texas and eastern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 68
- 1978 Uranium movement in Ogallala aquifer, west Texas and eastern New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 12, p. 1223-1224
- Register, Joseph K.**
- 1979 Rb-Sr and related studies of the Salado Formation, southeastern New Mexico: M.S. thesis, Univ. New Mexico, 119 p.
- 1980 (and Brookins, D. G.) Rb-Sr isochron age of evaporite minerals from the Salado Formation (Late Permian), southeastern New Mexico: Isochron/West, no. 29, p. 39-42, 3 tables, 1 fig.  
see Brookins, Della Valle, and Register, 1980; Brookins, Register, and Krueger, 1980; and Brookins, Register, and others, 1978
- Register, Marcia E.**
- 1979 Geochemistry and geochronology of the Harding pegmatite, Taos County, New Mexico: M.S. thesis, Univ. New Mexico, 145 p.
- 1978 (and Brookins, D. G.) Geochemical study of Harding pegmatite and related granites, Taos County, New Mexico (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 16-17
- 1979 (and Brookins, D. G.) Geochronologic and rare-earth study of the Embudo granite and related rocks: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 155-158, 2 tables, 4 figs.
- 1978 (Brookins, D. G., and Della Valle, R. S.) Geochemical study of the Harding pegmatite and related granites, Taos County, New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 12, p. 1212  
see Brookins, Chakoumakos, and others, 1979; and Brookins, Register, and others, 1978
- Rehfeldt, Kenneth R.**  
see Gross, G. W., Hoy, and others, 1980
- Reid, Bruce E.**
- 1980 (and others) Raton quadrangle, New Mexico and Colorado (NURE): Bendix Field Eng. Corp., Tech. Library, Rept.; U.S. Dept. Energy, Rept. GJQ-005-80, 83 p., 2 sheets, scale 1:500,000
- Reid, John B., Jr.**
- 1976 Upper and lower limits to the geothermal gradient beneath the southern Rio Grande rift (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 621-622
- 1978 The petrologic history of the upper mantle beneath the southern Rio Grande rift with speculation on limits to Cenozoic diapirism beneath the rift, abs. *in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 71-72



- 1977** (Bateman, Jennifer; Dubois, Dean; and Woods, G. A.) Oceanic mantle beneath the south-western U.S. (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 58, no. 6, p. 526
- 1978** (and Frey, F. A.) The nature of the upper mantle beneath the southern Rio Grande rift—new rare earth evidence (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 12, p. 1214
- 1978a** (and Woods, G. A.) A comparison of partial melting processes beneath Hawaii and the southern Rio Grande rift (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 7, p. 766-767
- 1978b** (and Woods, G. A.) Oceanic mantle beneath the southern Rio Grande rift: *Earth and Planet. Sci. Letters*, v. 41, no. 3, p. 303-316, 5 tables, 7 figs.  
*see* Berman, R. G., and Reid, 1976
- Reid, W. M.**  
*see* Everett and others, 1978
- Reilinger, Robert E.**
- 1980** (Brown, L. D., and Jurkowski, G. A.) Geotectonic leveling and crustal movement in the U.S.—pt. III, tectonic deformation (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 61, no. 17, p. 210
- 1979** (Brown, L. D., Oliver, J. E., and York, J. E.) Recent vertical crustal movements from leveling observations in the vicinity of the Rio Grande rift, *in* Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: *Am. Geophys. Union*, p. 223-236, 7 figs.; *abs. in* International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 73-74
- 1980** (Brown, L. D., and Powers, D. W.) New evidence for tectonic uplift in the Diablo Plateau region, west Texas: *Geophys. Research Letters*, v. 7, no. 3, p. 181-184
- 1976** (and Oliver, J. E.) Modern uplift associated with a proposed magma body in the vicinity of Socorro, New Mexico: *Geology*, v. 4, no. 10, p. 583-586, 5 figs.
- 1979** (Oliver, J. E., Brown, L. D., Sanford, A. R., and Balazs, E. I.) New measurements of crustal doming over the Socorro magma body (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 60, no. 46, p. 954
- 1980** (Oliver, J. E., and others) New measurements of crustal doming over the Socorro magma body, New Mexico: *Geology*, v. 8, no. 6, p. 291-295
- 1978** (and York, J. E.) Tectonic implications of two vertical crustal movement anomalies from NGS leveling data (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 59, no. 4, p. 330
- 1979** (and York, J. E.) Relative crustal subsidence from leveling data in a seismically active part of the Rio Grande rift, New Mexico: *Geology*, v. 7, no. 3, p. 139-143  
*see* Brown, L. D., Miesen, and others, 1980; *and* Brown, L. D., Reilinger, and Hagstrum, 1978
- Reimer, G. M.**
- 1979** (Denton, E. H., Friedman, I., and others) Recent developments in uranium exploration using the U.S. Geological Survey's mobile helium detector: *Jour. Geochem. Exploration*, v. 11, no. 1, p. 1-12  
*see* Rice and Reimer, 1977
- Reinke, Robert E.**
- 1978** Surface-wave propagation in the Tularosa and Jornada del Muerto Basins, south-central New Mexico: Ph.D. thesis, Southern Methodist Univ., 161 p.; *Dissert. Abs. Internat.*, 1979, v. 39, no. 10, p. 4785-B
- 1979** (and Herrin, Eugene) Geophysical model studies of the Tularosa Basin, New Mexico: *Natl. Tech. Inf. Serv.*, Rept. AD-A054 161/SWN, 173 p.; *abs. in* *New Mexico Geology*, v. 1, no. 1, p. 16  
*see* Stump and Reinke, 1980
- Reisz, Robert R.**  
*see* Berman, D. S., and Reisz, 1980
- Reiter, David E.**
- 1980** *Geology of Alamo Hueco and Dog Mountains, Hidalgo County, New Mexico*: M.S. thesis, Univ. New Mexico  
*see* Deal, Elston, and others, 1978
- Reiter, Marshall A.**
- 1976** An investigation of the thermal regime of the Rio Grande rift and neighboring geologic provinces by employing very deep heat flow measurements: *Natl. Sci. Foundation, Geothermal Energy Prog.*, NSF-RA-760090, p. 5
- 1978** (Edwards, C. L., Mansure, A. J., and Shearer, Charles) Heat-flow data and major geologic features along the Rio Grande rift in New Mexico, *in* Guidebook to the Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: *New Mexico Bureau Mines Mineral Resources, Circ. 163*, p. 234, 1 fig.
- 1976** (Edwards, C. L.; Shearer, Charles; Fisher, J.A.; Mansure, A. J.; and McGrath, E. E.) Terrestrial heat flow studies in the New Mexico and neighboring geologic areas (abs.): *Colorado School Mines and Natl. Sci. Foundation, Conf. on Exploration for the Geothermal Reservoir*, p. 1-2
- 1976** (Edwards, C. L.; Shearer, Charles; McGrath, E. E.; and Mansure, A. J.) Heat flow anomalies along the Rio Grande rift (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 6, p. 1065
- 1979a** (Mansure, A. J., and Shearer, Charles) Geothermal characteristics of the Rio Grande rift within the southern Rocky Mountain complex, *in* Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: *Am. Geophys. Union*, p. 253-267, 3 tables, 2 figs.; *abs. in* International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 75
- 1979b** (Mansure, A. J., and Shearer, Charles) Geothermal characteristics of the Colorado Plateau: *Tectonophysics*, no. 61, p. 183-195; *abs. in* *New Mexico Geology*, v. 1, no. 1, p. 16
- 1976** (and others) A preliminary economic feasibility study for the establishment of an energy-water complex in the Tularosa Basin: *New Mexico State Univ.*, Water Resources Research Inst., Rept. 068, 231 p.
- 1979** (and Shearer, Charles) Terrestrial heat flow in eastern Arizona—a first report: *Jour. Geophys. Research*, v. 84, no. B11, p. 6115-6120
- 1980** (and Shearer, Charles) Deep terrestrial heat-flow studies in southwestern United States (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 64, no. 5, p. 771-772
- 1978** (Shearer, Charles, and Edwards, C. L.) Geothermal anomalies along the Rio Grande rift in New Mexico: *Geology*, v. 6, no. 2, p. 85-88, 1 table, 2 figs.
- 1976** (Simmons, Gene; Chessman, Mary; England,



- Tony; Hartman, Harold; and Weidman, Charles) Terrestrial heat flow near Datil, New Mexico: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1975-76, p. 33-37, 2 tables, 2 figs.
- 1977** (and Smith, R.) Subsurface temperature data in the Socorro Peak KGRA, New Mexico: Geothermal Energy Mag., v. 5, no. 10, p. 37-41
- 1976** (and Stone, W. J.) Geothermal resources, in Legislative energy report, taxes and revenues: New Mexico Legislative Energy Comm., v. 2, pt. II, p. 84-95
- 1976** (Weidman, Charles, Edwards, C. L., and Hartman, Harold) Subsurface temperature data on Jemez Mountains, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 151, 16 p., 14 figs.  
see Arnold, Foster, and others, 1976; Edwards and others, 1978; Mansure and Reiter, 1977, 1979; and Shearer and Reiter, 1978
- Renard, K. G.**  
see Osborn and others, 1979
- Renault, Jacques R.**
- 1978a** Overview of Rio Grande basalts with special reference to TiO<sub>2</sub> variation, in Guidebook to the Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 230-233, 2 tables, 2 figs.
- 1978b** Petrology of the Cerro de Los Lunas, Wind Mesa, and Cat Hills volcanics, Bernalillo and Valencia Counties, New Mexico, *abs.* in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 75-77
- 1977** (and Hayslip, D. L.) Thermoluminescence of quartz in uraniumiferous sandstones—methods and initial tests: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1976-77, p. 66-75, 2 tables, 9 figs.; New Mexico Bureau Mines Mineral Resources, 1976, Open-file Rept. 68, 34 p., 3 tables, 8 figs.
- 1978** (and Iovenitti, Joe) Resolution of x-ray diffraction lines—a model of the 68-degree 2-theta quartz quintuplet: Geol. Soc. America, Abs. with Programs, v. 10, no. 5, p. 236  
see Faris and Renault, 1980; Hayslip, Fuller, and others, 1979, 1980; Hayslip and Renault, 1976; Iovenitti and Renault, 1977; and Taggart and Renault, 1977
- Renner, J. L.**
- 1976** (and others) Hydrothermal convection systems in the States of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming: Natl. Tech. Inf. Serv., Rept. PB-250-377, 352 p.  
see Patterson, E. D., and Renner, 1976
- Repetski, John E.**
- 1979** (and Drewes, H. B.) Ordovician Montoya Group extended westward in southeastern Arizona (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 83  
see Armstrong, A. K., Mamet, and Repetski, 1980
- Restrepo, J. J.**
- 1972** Geology and mineral deposits of the Rio Hondo-Red River divide, Taos County, New Mexico: M.S. thesis, Colorado School Mines
- Reynolds, C. B.**  
see Kintzinger and others, 1978
- Reynolds, Daniel M.**
- 1979** Origin and formation of clastic plugs and dikes of Union County, New Mexico: M.S. thesis, Wichita State Univ.
- 1980** (and Gries, J. C.) Origin and formation of clastic plugs of Union County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 1, p. 16
- Reynolds, J. F.**
- 1978** (Cwik, M. J., and Kelley, N. E.) Reclamation at Anaconda's open pit uranium mine, New Mexico: Reclamation Rev., v. 1, no. 1, p. 9-17
- Reynolds, Richard L.**
- 1978a** (and Goldhaber, M. B.) Recognition of oxidized sulfide minerals as an exploration guide for uranium: U.S. Geol. Survey, Jour. Research, v. 6, no. 4, p. 483-488, 4 figs.
- 1978b** (and Goldhaber, M. B.) Iron-titanium oxide minerals and associated alteration phases in some uranium-bearing sandstones: U.S. Geol. Survey, Jour. Research, v. 6, no. 6, p. 707-714, 5 figs.
- Reynolds, T. J.**
- 1979** (and Beane, R. E.) The evolution of hydrothermal fluid characteristics through time at the Santa Rita, New Mexico, porphyry copper deposit (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 502
- Rezak, Richard**  
see Toomey and others, 1977a,b
- Rhett, Douglas W.**
- 1980** Heavy-mineral criteria for subsurface uranium exploration, San Juan Basin, New Mexico, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 202-207, 4 figs.
- Rhodes, Doris J.**  
see Anderson, R. Y., Kietzke, and Rhodes, 1978
- Rhodes, Rodney C.**
- 1976a** Volcanic geology of the Mogollon range and adjacent areas, Catron and Grant Counties, New Mexico, in Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 42-50, 7 tables, 5 figs.
- 1976b** Petrologic framework of the Mogollon Plateau volcanic ring complex, New Mexico—surface expression of a major batholith, in Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 103-112, 4 tables, 10 figs.
- 1976** (and Smith, E. I.) Stratigraphy and structure of the northwestern part of the Mogollon Plateau volcanic province, Catron County, New Mexico, in Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 57-62, 2 tables, 4 figs.  
see Deal and Rhodes, 1976; Elston, Rhodes, Coney, and Deal, 1976; Elston, Rhodes, and Erb, 1976; and Smith, E. I., and others, 1976
- Ricciardi, Karen**
- 1978** A petrographic and chemical study of axinite and scapolite occurrences in the White Oaks mining district, Lincoln County, New Mexico: M.S. thesis, Univ. New Mexico, 128 p.

**Rice, R. S.**

1977 (and Reimer, G. M.) Helium analysis of subsurface waters as a uranium exploration tool: U.S. Dept. Energy, Rept. GJBX-77-77, p. 301-302  
see Brady and Rice, 1977

**Richards, D. P.**

see Abel and others, 1979

**Richardson, C. B.**

1976 Cross sections of southern Arizona and adjacent parts of California and New Mexico: Arizona Geol. Soc., Digest, v. 10, p. 1-5

**Richardson, S. H.**

1980 (Padovani, E. R., and Hart, S. R.) The gneiss syndrome—Nd- and Sr-isotopic relationships in lower crustal granulite xenoliths, Kilbourne Hole, New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 17, p. 388

see Hart, S. R., Padovani, and Richardson, 1980

**Richter, D. H.**

1978 Geologic map of the Spring Canyon quadrangle, Catron County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-966, scale 1:24,000

**Rickart, E. A.**

1977 Pleistocene lizards from Burnet and Dark Canyon Caves, Guadalupe Mountains, New Mexico: Southwestern Naturalist, v. 21, no. 4, p. 519-522

**Rickman, Douglas L.**

1977 The origin of celestite (strontium sulfate) ores in the southwestern United States and northern Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 75 p.

**Ridgley, Jennie L.**

1977 Stratigraphy and depositional environments of the Jurassic-Cretaceous sedimentary rocks in the southwest part of the Chama Basin, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 153-158, 4 figs.

1979a Roll-type uranium occurrence at Dennison-Bunn claim and possibility of uranium deposits in eastern part of San Juan Basin, New Mexico, *abs.* in Grants uranium region, a symposium: Am. Assoc. Petroleum Geologists, Program, p. 17; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 692-693

1979b Preliminary geologic map of the Arroyo del Agua quadrangle, Rio Arriba County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-657, scale 1:24,000

1979c A preliminary report on the geology of the Dennison-Bunn uranium claim, Sandoval County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1510, 44 p.

1979d Geologic map of the Arroyo del Agua quadrangle, Rio Arriba County, New Mexico (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 41-42

1980 Geology and characteristics of uranium mineralization in Morrison Formation at Dennison-Bunn claim, Sandoval County, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 299-303, 1 table, 4 figs.

1978 (Green, M. W., Pierson, C. T., Finch, W. I., and Lupe, R. D.) Summary of the geology and resources of uranium in the San Juan Basin and adjacent region, New Mexico, Arizona, Utah, and Colo-

rado: U.S. Geol. Survey, Open-file Rept. 78-964, 114 p., 1 fig., 2 pls.

**Ridley, W. Ian**

1979 Phase chemistry as an indicator of calc-alkaline petrogenesis (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 412-413

**Riecker, Robert E.**

1977 State of stress in the lithosphere: Am. Geophys. Union (EOS), Trans., v. 58, no. 7, p. 597-599, 1 map

1979 (editor) Rio Grande rift—tectonics and magmatism: Washington, D.C., Am. Geophys. Union, 438 p.

**Riese, A. C.**

1980 (and Popp, C. J.) Application of solution-mineral equilibrium chemistry to solution mining of uranium ores, in Geology and mineral technology of Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 344-354, 8 tables, 10 figs.; *abs.* in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 17; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 693

**Riese, Walter C.**

1977 Geology and geochemistry of the Mount Taylor uranium deposit, Valencia County, New Mexico: M.S. thesis, Univ. New Mexico, 119 p.

1980 The Mount Taylor uranium deposit, San Mateo, New Mexico: Ph.D. thesis, Univ. New Mexico, 643 p.; Dissert. Abs. Internat., v. 41, no. 5, p. 1689-B-1690-B

1976 (and Brookins, D. G.) Geochemistry of uranium deposits east and northeast of the San Mateo Springs Grant, McKinley and Valencia Counties, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 622

1977 (and Brookins, D. G.) Subsurface stratigraphy of the Morrison Formation in the Mount Taylor area and its relation to uranium ore genesis: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 271-275, 3 figs.

1978 (and Brookins, D. G.) A scanning electron microscopic study of the Mount Taylor uranium deposit, Valencia County, New Mexico (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 17

1979 (and Brookins, D. G.) Mount Taylor uranium deposit—description and comparison with Wyoming roll fronts (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 5, p. 839

1980 (and Brookins, D. G.) Mount Taylor uranium deposit, San Mateo, New Mexico, *abs.* in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 397; *also* in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 17-18; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 693

1978 (Brookins, D. G., and Della Valle, R. S.) The effectiveness of organic acids in providing uranium mineralization in the Grants mineral belt, New Mexico—an experimental study (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 18

1980 (Brookins, D. G., and Della Valle, R. S.) Scanning-electron-microscope investigation of para-

genesis of uranium deposits, Mount Taylor and elsewhere, Grants mineral belt, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 244-251, 33 figs.; *abs. in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 18; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 693

**1978** (Brookins, D. G., and Lee, M. J.) SEM investigation of the paragenesis of uranium deposits, Grants mineral belt, New Mexico, U.S.A. (abs.): Internat. Assoc. Genesis Ore Deposits, 5th symp., Program and Abs., p. 153; Nevada Bureau Mines, 1979, Rept. 33, p. 165-174

**1977** (Lee, M. J., and Brookins, D. G.) Scanning electron microscopy of uranium ores, Grants mineral belt, New Mexico—application to U:C:pyrite distribution (abs.): Geol. Soc. America, Abs., v. 9, no. 7, p. 1142

**1979** (Lee, M. J., and others) Application of trace element geochemistry to prospecting for sandstone-type uranium deposits: 7th Internat. Geochem. Explor. Symp., Proc., p. 47-63

*see* Brookins, Lee, and Moon, 1977; *and* Brookins, Lee, and Riese, 1977

#### **Riesmeyer, William D.**

**1978** Precambrian geology and ore deposits of the Pecos mining district, San Miguel and Santa Fe Counties, New Mexico: M.S. thesis, Univ. New Mexico, 215 p.

**1979** (and Robertson, J. M.) Precambrian geology and ore deposits of the Pecos mine, San Miguel County, New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 175-179, 1 table, 1 fig.

#### **Rigby, J. Keith, Jr.**

**1977** Southern Colorado Plateau: Kendall/Hunt Publishing Co., K/H Geology Field Guide Series, 148 p., 223 figs.

**1977** (and Lucas, S. G.) Fossil mammals from the Ojo Alamo Sandstone, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, Suppl. Articles, p. 55-56, 1 fig.

**1980** (and Wolberg, D. L.) A unique Late Cretaceous fossil assemblage from the "Fossil Forest," Fruitland Formation, San Juan Basin, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 509

*see* Kues, Lehman, and Rigby, 1980; Lucas and Rigby, 1979; *and* Wolberg and Rigby, 1980

#### **Riggs, Elliott A.**

**1978a** Bloomfield Farmington (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 243-244

**1978b** Blue Hill Paradox (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 245-247, 2 figs.

**1978c** Oswell Farmington (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 441, 1 fig.

**1978d** Tocito Dome Mississippian, north (helium), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 519-521, 3 figs.

**1978e** Verde Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 550-552, 2 figs.

*see* Parker, J. M., and others, 1977

#### **Rinehart, Eric J.**

**1976** The use of microearthquakes to map an extensive magma body in the Socorro, New Mexico, area: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 10, 60 p.

**1979a** The determination of an upper crustal model for the Rio Grande rift near Socorro, New Mexico, employing S-wave reflections produced by local microearthquakes: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 29, 138 p.

**1979b** The determination of an upper crustal model for the Rio Grande rift near Socorro, New Mexico, employing S-wave reflections produced by local microearthquakes: Ph.D. thesis, New Mexico Inst. Mining and Tech., 92 p.

**1980** (and Sanford, A. R.) An upper crustal geophysical model for the Rio Grande rift beneath Socorro, New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 5, p. 47

**1979** (Sanford, A. R., and Ward, R. M.) Geographic extent and shape of an extensive magma body at mid-crustal depths in the Rio Grande rift near Socorro, New Mexico, *in* Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 237-251, 1 table, 8 figs.; *abs. in* International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 77-78

*see* Sanford, Mott, and others, 1977; Sanford, Rinehart, and others, 1977; *and* Shuleski and others, 1977

#### **Rinehart, John S.**

**1977** Effects of earth tides on water wells (abs.): New Mexico Acad. Sci., Bull., v. 17, no. 2, p. 37

#### **Riskind, D. H.**

*see* Wauer and Riskind, 1977

#### **Ristorcelli, Steven J.**

**1980a** Geology of eastern Smith Lake ore trend, Grants mineral belt, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 145-152, 10 figs.; *abs. in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 18; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 693-694

**1980b** Geology of the eastern Smith Lake ore trend, McKinley County, New Mexico: M.S. thesis, Univ. New Mexico

#### **Ritschard, R.**

*see* Gertsch and others, 1977

#### **Roach, J. T.**

*see* Anderson, J. R., and others, 1976

#### **Robbie, Wayne A.**

**1978** (and Buchanan, B. A.) Soil erosion rates for forested and non-forested areas (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 4

#### **Robbins, Stephen L.**

*see* Kososki and others, 1978

#### **Roberts, J. Wayland**

**1976** (Barnes, J. J., and Wacker, H. J.) Subsurface

- Paleozoic stratigraphy of the northeastern New Mexico basin and arch complex: *New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park*, p. 141-152, 10 figs.
- Robertson, Jacques F.**  
**1976** Preliminary geologic map of the Casamero Lake quadrangle, McKinley County, New Mexico: *U.S. Geol. Survey, Open-file Rept. 76-681*, scale 1:24,000  
**1978** Preliminary geologic map of the Crownpoint quadrangle, McKinley County, New Mexico: *U.S. Geol. Survey, Open-file Rept. 78-713*, scale 1:24,000  
**1979** The Ruby Well no. 1 uranium mine, McKinley County, New Mexico (abs.): *U.S. Geol. Survey, Prof. Paper 1150*, p. 41  
*see Kirk, Huffman, and others, 1978*
- Robertson, James M.**  
**1976a** Annotated bibliography and mapping index of Precambrian of New Mexico: *New Mexico Bureau Mines Mineral Resources, Bull. 103*, 92 p., 2 figs., 2 maps  
**1976b** Mining districts of northeastern New Mexico: *New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park*, p. 257-262  
**1979** (Budding, A. J., Kottowski, F. E., James, H. L., and Armstrong, A. K.) Third day, road log from Lamy Junction to Cowles via Glorieta, Pecos National Monument, Pecos, Tererro, and Pecos mine: *New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe*, p. 29-41, 14 figs.  
**1976** (Callender, J. F., and Brookins, D. G.) Summary of Precambrian geology and geochronology of northeastern New Mexico: *New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park*, p. 129-135  
**1978** (Condie, K. C., and Mathewson, D. C.) The Pecos greenstone belt—a Proterozoic volcano-sedimentary sequence in the southern Sangre de Cristo Mountains, New Mexico (abs.): *Geol. Soc. America, Abs. with Program*, v. 10, no. 7, p. 479  
**1979** (and Moench, R. H.) The Pecos greenstone belt—a Proterozoic volcano-sedimentary sequence in the southern Sangre de Cristo Mountains, New Mexico: *New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe*, p. 165-173, 2 figs.  
*see Budding, Robertson, and others, 1979; Callender, Robertson, and Brookins, 1976; and Riesmeyer and Robertson, 1979*
- Robinson, B.**  
*see Styron and others, 1979*
- Robinson, Keith**  
**1978** (Frezon, S. E., and Drew, R. H.) Geologic appraisal of undiscovered oil and gas resources in Pennsylvanian and Mississippian rocks of Permian Basin, west Texas and southeastern New Mexico (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 62, no. 3, p. 558  
*see DeCicco, D. A., Patterson, and Robinson, 1980; and Dolton, Coury, and others, 1980*
- Robinson, W. P.**  
**1978** (compiler) *New Mexico uranium inventory: Southwest Resource and Inf. Cent.*, 200 p.
- Roden, M. K.**  
*see Hart, S. R., Padovani, and Roden, 1979*
- Roden, Michael F.**  
**1978** Trace element geochemistry of mafic and felsic minettes, Buell Park diatreme, Navajo volcanic field (abs.): *Geol. Soc. America, Abs. with Programs*, v. 10, no. 7, p. 480  
**1979** (Smith, D., and McDowell, F. W.) Age and extent of potassic volcanism on the Colorado Plateau: *Earth and Planet. Sci. Letters*, v. 43, no. 2, p. 279-284
- Rodi, William L.**  
*see Bache and others, 1978*
- Roedder, Edwin W.**  
**1979** (and Belkin, H. E.) Application of studies of fluid inclusions in Permian Salado Salt, New Mexico, to problems of siting the waste isolation pilot plant, *in* Scientific basis for nuclear waste management, G. J. McCarthy, editor: *New York, Plenum Press*, v. 1, p. 313-321
- Roegiers, J.-C.**  
**1976** (and Thill, R. E.) Rock characterization at a geothermal site: 17th Symp. *Rock Mechanics, Proc.*, p. 5D5.1-5D5.6
- Roehler, Henry W.**  
**1980** (and Danilchik, Walter) Relation of intraformational faults to fluvial sedimentation and coal-bed discontinuity, Raton Formation, Colorado and New Mexico, *in* Proceedings of the fourth symposium on the geology of Rocky Mountain coal, L. M. Carter, editor: *Colorado Geol. Survey, Resource Ser. 10*, p. 13
- Roeske, R. H.**  
**1978** (Cooley, M. E., and Aldridge, B. N.) Floods of September 1970 in Arizona, Utah, Colorado, and New Mexico: *U.S. Geol. Survey, Water-supply Paper W-2052*, 135 p., 1 sheet
- Rogers, A. M.**  
**1979** (and Malkiel, A.) A study of earthquakes in the Permian Basin of Texas-New Mexico: *Seismol. Soc. America, Bull.*, v. 69, no. 3, p. 843-865
- Rogers, Margaret Anne**  
**1980** (and Burton, B. W.) Trace element study of the Bandelier Tuff (Pleistocene), Pajarito Plateau, Los Alamos and Santa Fe Counties, north-central New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 12, no. 6, p. 302  
**1980** (Christie, V. L., and Budding, K. E.) Distinguishing structural joints from cooling joints in the Bandelier Tuff (Pleistocene), Pajarito Plateau, north-central New Mexico—a radioactive waste management study (abs.): *Geol. Soc. America, Abs. with Programs*, v. 12, no. 5, p. 302  
*see Purtyman, Rogers, and Wheeler, 1980*
- Rona, Peter A.**  
**1977** Plate tectonics, energy, and mineral resources—basic research leading to payoff: *Am. Geophys. Union (EOS), Trans.*, v. 58, no. 8, p. 629-639, 5 figs.
- Root, D. H.**  
*see Drew and others, 1979a,b*
- Rose, Arthur W.**  
*see Ahmad and Rose, 1980*
- Rose, Kenneth S.**  
**1978** Gelled acid coaxes oil from tight Permian carbonates: *World Oil*, v. 187, no. 5, p. 115-120, 9 figs.

**Rose, Peter R.**

1976 Mississippian carbonate shelf margins, western United States: U.S. Geol. Survey, Jour. Research, v. 4, no. 4, p. 449-466, 10 figs.

**Rosholt, J. N.**

1980 (and McKinney, C. R.) Uranium trend dating of surficial deposits and Gypsum Spring deposit near WIPP site, New Mexico, in Uranium series disequilibrium investigations related to the WIPP site, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-879, 21 p.

**Ross, Charles A.**

1978 Pennsylvanian and Early Permian depositional framework, southeastern Arizona: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 193-200, 7 figs.

**Ross, Joseph R.**

1978 A three-dimensional facies analysis of the canyon alluvial fill sequence, Chaco Canyon, New Mexico: M.S. thesis, Univ. New Mexico, 86 p.

**Ross, L. M.**

1979 (and Harwood, R. J.) Organic geochemical correlation of San Juan Basin oils and oil source sequences (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 506

**Ross, Reuben J., Jr.**

1976 Ordovician sedimentation in the western United States, in Geology of the Cordilleran hinge-line, J. G. Hill, editor: Rocky Mtn. Assoc. Geol., Guidebook 1976 symp., p. 109-133, 11 figs.

**Roswell Geological Society**

1977 Southeastern New Mexico oil and gas field production data and comprehensive symposium index (production data as of January 1, 1976), in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. x-xxx

**Roth, Susan J.**

1980 Geology of the Sawmill Canyon area of the Magdalena Mountains, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 129, 96 p., 20 figs., 2 sheets; M.S. thesis, New Mexico Inst. Mining and Tech., 88 p.

**Rowlery, J. C.**

see Maurer and others, 1978

**Roy, R. E.**

see Keller, G. R., Graham, and Roy, 1978; and Taylor, Bruce, and others, 1980

**Roybal, F. E.**

see Dewey and others, 1979; and Funderburg and Roybal, 1977

**Roybal, R. Gary**

see Wilson, C. A., White, and others, 1978; and Wilson, C. A., White, and Roybal, 1979a,b

**Royce, R. M.**

see McEachin and Royce, 1978

**Rudolph, K. W.**

1979 Diagenesis of back-reef carbonate rocks—example from Capitan complex (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 3, p. 519

**Ruetschilling, Richard L.**

see Woodward and Ruetschilling, 1976

**Runnells, Donald D.**

1977 Wastewaters in the vadose zone of arid

regions—geochemical interactions (abs.): Sel. Water Resources Abs., v. 10, no. 10, p. 13

**Russen, S. John**

1977 Logging in the San Juan Basin of northwestern New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, Suppl. Articles, p. 35-40, 5 figs.

**Russell, Charles R.**

see Kaufman, R. F., and others, 1976, 1977

**Russell, Judy A.**

1979 Refractory clay resources of the Burro Canyon (?) Formation—Dakota Sandstone, north-central New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 111 p., 7 tables, 30 figs., 2 appendices  
see Wright, J. R., and Russell, 1977

**Russell, Susan L.**

see Smith, R. L., and others, 1978

**Russell, Thomas W.**

see Taylor, R. G., and others, 1978

**Rutenbeck, Todd**

see Wachter and Rutenbeck, 1980

**Rybarczyk, Sandra M.**

see Swanberg and Rybarczyk, 1979

**Ryder, Robert T.**

1980 (Smith, G. H., and Lee, M. W.) Seismic models of 15 stratigraphically controlled oil and gas fields containing sandstone reservoirs in Rocky Mountain basins (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 778

**Sabins, Floyd F.**

1978 Bisti Lower Gallup (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 213-215, 4 figs.

**Sachdev, Suresh C.**

1978 Clay minerals as uranium tracers for roll front-type deposits (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 480

1980 Mineralogical variations across Mariano Lake roll-type uranium deposit, McKinley County, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 162-171, 17 figs.; abs. in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 19; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 694

**Saito, K.**

1977 (Basu, A. R., Alexander, E. C., Jr., and Dragon, J. C.) Rare gases in mantle derived samples (abs.): Am. Geophys. Union (EOS), Trans., v. 58, no. 12, p. 1249

1978 (Menzies, M., Alexander, E. C., Jr., and Pepin, R. O.) Rare gases in mantle xenoliths (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 12, p. 1215

**Sakai, H.**

1976 (Matsubaya, O., and Shannon, S. S.) Interpretation of the regimen of ephemeral gypsiferous lakes in the Tularosa Basin, New Mexico, using  $^{34}\text{S}$ / $^{32}\text{S}$ ,  $^{18}\text{O}/^{16}\text{O}$ , and D/H ratios (abs.): Internat. Geol. Congr., Abs., no. 25, v. 3, p. 835-836

**Salek-Nejad, H.**

see Adams, S. S., and others, 1978

**Sales, John K.**

1978 Model studies of continental rifting related to



- the Rio Grande rift, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 80-82
- Salisbury, H. B.**  
see Beard and others, 1980
- Salter, T. L.**  
see Walton and others, 1980
- Salveson, J. O.**  
1978 Future potential for development of geothermal energy in contiguous United States (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 7, p. 1210
- Sandberg, Charles A.**  
1976 Conodont biofacies of Late Devonian *Polygnathus styriacus* zone in western United States, in Symposium on conodont paleoecology, C. R. Barnes, editor: Geol. Assoc. Canada, Spec. Paper 15, p. 171-186
- Sandell, E. T., Jr.**  
see Aguilar, Cheeseman, and Sandell, 1976
- Sanderson, George A.**  
see Tyrrell and others, 1978
- Sandia Laboratories**  
1979a (and U.S. Geological Survey) Basic data report for drillhole WIPP 13: Sandia Lab., Rept. SAND79-0273, 60 p., 4 appendices  
1979b (and U.S. Geological Survey) Basic data report for drillhole WIPP 25: Sandia Lab., Rept. SAND79-0279, 80 p., 4 appendices  
1979c (and U.S. Geological Survey) Basic data report for drillhole WIPP 27: Sandia Lab., Rept. SAND79-0281, 68 p., 4 appendices  
1979d (and U.S. Geological Survey) Basic data report for drillhole WIPP 29: Sandia Lab., Rept. SAND79-0283, 66 p., 4 appendices
- Sandlin, Gary L.**  
1980 (and Schatz, F. L.) The Peterson and South Peterson multi-pay fields, Roosevelt County, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 53
- Sanford, Allan R.**  
1976 Seismicity of the Los Alamos region based on seismological data: Los Alamos Sci. Lab., Rept. LA-6416-MS, 9 p.  
1977a Temperature gradient and heat-flow measurements in the Socorro, New Mexico area, 1965-1968: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 15, 19 p.  
1977b Seismic investigation of a magma layer in the crust beneath the Rio Grande rift near Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 18, 21 p.  
1978a Characteristics of Rio Grande rift in vicinity of Socorro, New Mexico, from geophysical studies, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 116-121, 3 figs.  
1978b Earthquake activity in New Mexico (1849 through 1977): New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 26, 25 p.  
1979 Earth tilts measured in Socorro Mountain, west of Socorro, New Mexico, 1968 to 1972: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 30, 8 p.
- 1980a Earthquake activity in New Mexico from 1849 through 1961: New Mexico Geology, v. 2, no. 1, p. 6, 1 fig.  
1980b Earthquake activity in New Mexico, 1849-1977: Natl. Tech. Inf. Serv., Rept. DOE/ID/01717-1, p. 3.1-3.26  
1977 (Mott, R. P., Jr., Shuleski, P. J., Rinehart, E. J., Caravella, F. J., Ward, R. M., and Wallace, T. C.) Geophysical evidence for a magma body in the crust in the vicinity of Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 17, 18 p.; Am. Geophys. Union (EOS), Trans., v. 58, no. 7, p. 621  
1977 (and Oliver, J. E.) Comparison of microearthquake and COCORP studies of magma bodies beneath the Rio Grande rift in the vicinity of Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 16, 9 p.  
1979 (Olsen, K. H., and Jaksha, L. H.) Seismicity of the Rio Grande rift, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 145-168, 3 tables, 6 figs.; *abs. in* International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 86-88  
1980 (Olsen, K. H., and Jaksha, L. H.) Seismicity of New Mexico—1849 through 1977: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 34  
1976 (and others) Microearthquake investigations of magma bodies in the vicinity of Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 9, 7 p.; Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1085-1086  
1978 (and others) Seismic studies of the Los Medanos area in southeastern New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 20, 59 p.  
1980 (and others) Seismicity in the area of the Waste Isolation Pilot Plant (WIPP): Sandia Natl. Lab., Rept. SAND80-7096, 80 p., 7 tables, 10 figs.; New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 32, 74 p.  
1977 (Rinehart, E. J., Shuleski, P. J., and Johnston, J. A.) Evidence from microearthquake studies for small magma bodies in the upper crust of the Rio Grande rift near Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 19, 13 p.; Am. Geophys. Union (EOS), Trans., v. 58, no. 12, p. 1188  
1979 (and Schlue, J. W.) Seismic measurements of the Tertiary fill in the Rio Grande depression west of Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 31, 10 p.  
1980 (and Schlue, J. W.) Seismic exploration for shallow magma bodies in the vicinity of Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 33, 19 p.; New Mexico Energy Inst., Rept. NMEI-56, 17 p.  
1976 (Toppozada, T. R., Ward, R. M., and Wallace, T. C.) The seismicity of New Mexico, 1962 through 1972: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 7b, 16 p.; Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 625-626  
see Brown, L. D., Allmendinger, and others, 1980;



- Brown, L. D., Chapin, and others, 1980; Brown, L. D., Krumhansl, Chapin, and others, 1979; Brown, L. D., Krumhansl, Cook, Kaufman, and others, 1978; Caravella and Sanford, 1977; Chapin, Chamberlin, Osburn, and others, 1978; Chapin, Sanford, and Brown, 1980; Chapin, Sanford, and others, 1979; Oliver, J. E., Sanford, and others, 1976; Reilinger, Oliver, Brown, and others, 1979; Rinehart, E. J., and Sanford, 1980; Rinehart, E. J., Sanford, and Ward, 1979; Savage, J. C., Lisowski, and others, 1980; Shuleski and others, 1977; and Topozada and Sanford, 1976
- Sangree, J. B.**  
 1978 (and Widmier, J. M.) Seismic stratigraphy and global changes of sea level—pt. 9, seismic interpretation of clastic depositional facies: Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 5, p. 752–771, 1 table, 14 figs.  
 1979 (and Widmier, J. M.) Interpretation of depositional facies from seismic data: Geophysics, v. 44, no. 2, p. 131–160, 3 tables, 21 figs.
- Sanguinetti, Christopher C.**  
 1976 (and Loeber, K. N.) Fault tracing as indicated by gravity profiles across the Santo Domingo Basin and Hagan embayment, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 626
- Sanyal, S. K.**  
 1979 (Wells, L. E., and Bickham, R. E.) Geothermal well log interpretation—midterm report: Los Alamos Sci. Lab., Rept. 7693, 178 p.
- Sarella, Craig**  
 1977 Northeast New Mexico stratigraphic paper—Entrada equivalent: Am. Assoc. Petroleum Geologists, Amarillo, Texas, Continuing Education Short Course
- Sarg, Joseph F.**  
 1976a Sedimentology of the carbonate-evaporite facies transition of the Seven Rivers Formation (Gadalupean-Permian) in southeast New Mexico: Ph.D. thesis, Univ. Wisconsin, 341 p.; Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 1, p. 451–478; Dissert. Abs. Internat., v. 37, p. 250-B  
 1976b Subaqueous evaporite deposition, Permian shelf, Seven Rivers Formation, southeast New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 60, no. 4, p. 718–719; Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G187–G188  
 1977 Locality guides, stops VI, VII, and VIII, Rocky Arroyo: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G165–G187  
 see Pray and Sarg, 1977
- Sargent, K. A.**  
 see Lipman, Pallister, and Sargent, 1979
- Sathaye, J.**  
 see Gertsch and others, 1977
- Saucier, Alva E.**  
 1976 Tectonic influence on uranium trends in the Late Jurassic Morrison Formation, in Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 151–157, 5 figs.  
 1977 Exploration and development in Grants uranium region, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 5, p. 825  
 1979 Albuquerque to Ambrosia Lake, New Mexico, Grants uranium region guidebook: Am. Assoc. Petroleum Geologists, 29 p., 4 tables, 14 figs.  
 1980 Tertiary oxidation in Westwater Canyon Member of Morrison Formation, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 116–121, 3 figs.; abs. in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 19; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 694  
 see Kozusko and Saucier, 1979, 1980; and Woodward, Ingersoll, Fitch, Lisenbee, and others, 1979
- Saunders, Jeffrey J.**  
 1978 *Mammuthus* in the Clovis horizon of North America (abs.): Am. Quaternary Assoc., 5th Bienn. Mtg., Abs., p. 99–103
- Savage, G. J.**  
 1977a Arkansas Junction (Queen) field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 40–41, 1 table, 1 fig.  
 1977b Arkansas Junction (San Andres) field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 42–43, 1 table, 1 fig.
- Savage, J. C.**  
 1979 (Lisowski, M., and Prescott, W. H.) Geodetic measurements of strain accumulation in Alaska, Montana, Nevada, New Mexico, Utah, and Washington: Earthquake Notes, v. 50, no. 4, p. 71–72  
 1980 (Lisowski, M., Prescott, W. H., and Sanford, A. R.) Geodetic measurements of horizontal deformation across the Rio Grande rift near Socorro, New Mexico: Jour. Geophys. Research, v. 85-B, no. 12, p. 7215–7220
- Savage, V. H.**  
 see Kleeman and Savage, 1977
- Savella, C. E.**  
 1977 Textural analysis of the Exeter Sandstone, northeastern New Mexico: Compass, v. 54, no. 2, p. 29–35
- Sayer, Suzanne**  
 see Goff and Sayer, 1980
- Schaefer, P. J.**  
 1976 Microfacies analysis and cementation history of a Mississippian mud mound: M.S. thesis, State Univ. New York (Stony Brook)
- Schatz, Frank L.**  
 see Sandlin and Schatz, 1980
- Schery, Stephen D.**  
 1980 (Wilkening, M. H., and Gaeddert, D. H.) Radon transport through fractured rock—a case study (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 46, p. 1033
- Schiebout, Judith A.**  
 1978 Early Tertiary terrestrial paleogeography of North American Southwest and Gulf Coast (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 92, no. 9,

- p. 1765; Gulf Coast Assoc. Geol. Soc., Trans., v. 28, pt. 2, p. 459
- 1979** An overview of the terrestrial early Tertiary of southern North America—fossil sites and paleopedology: Tulane Univ., Studies in Geol. and Paleontology, v. 15, p. 75–94
- 1980** (and Schrodt, A. K.) Stratigraphy of the early Tertiary Baca Formation of western New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 4, p. 207  
see Kues, B. S., Froehlich, and others, 1977
- Schilt, F. S.**
- 1978** (Brewer, J.; Brown, L. D.; Cook, F. A.; Jensen, L.; Kaufman, S.; Krumhansl, P. A.; Long, G. H.; and Oliver, J. E.) The COCORP seismic reflection project—probing the continental crust (abs.): Earthquake Notes, v. 49, no. 3 p. 25  
see Brown, L. D., Krumhansl, Chapin, and others, 1979; Brown, L. D., Krumhansl, Cook, Kaufman, and others, 1978; and Long, G. H., and others, 1977
- Schipper, Mark R.**  
see Kelly, T. E., Link, and others, 1979, 1980
- Schlue, John W.**
- 1978** Report on a gravity survey of the northern Jornada del Muerto, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 21, 19 p.  
see Keller, G. R., Braile, and Schlue, 1979; and Sanford and Schlue, 1979, 1980
- Schmidt, Volkmar**
- 1977** Inorganic and organic reef growth and subsequent diagenesis in the Permian Capitan reef complex, Guadalupe Mountains, Texas, New Mexico: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 1, p. 93–131
- Schmoker, James W.**
- 1980** Effect upon borehole-gravity data of salt structures typical of the WIPP site (northern Delaware Basin), Eddy County, New Mexico: U.S. Geol. Survey, Oil and Gas Inv. Chart OC-109  
see Kososki and others, 1978
- Schnake, David W.**
- 1977** Conditions of formation of the iron-bearing skarns at Lone Mountain, Lincoln County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 88 p.
- Schneider, Douglas**
- 1980** New Mexico ground water regulation—an overview, *abs.* in National water quality management conference: U.S. Environ. Protection Agency, p. 115–116
- Schneider, Gary B.**
- 1978** Preliminary geologic map of the Kimbeto, Sargent Ranch, Pueblo Bonito, and Pueblo Bonito NW quadrangles, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 78–90, 1 sheet
- 1979** (Hildenbrand, R. T., and Affolter, R. H.) Coal resources and chemical analyses of coal from the Fruitland Formation, Kimbeto EMRIA site, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79–1090, 35 p., 6 sheets
- 1979** (Weide, D. L., Mytton, J. W., and Scott, G. R.) Geologic map of the Pueblo Bonito NW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1117, scale 1:24,000
- 1979** (Weide, D. L., and Scott, G. R.) Geologic map of the Kimbeto quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1118, scale 1:24,000  
see Scott, G. R., Mytton, and Schnieder, 1980; Scott, G. R., Schneider, and Mytton, 1980; and Weide, Schneider, and others, 1979a,b
- Scholle, Peter A.**
- 1980** (and Halley, R. B.) Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento Mountains): U.S. Geol. Survey, Open-file Rept. 80–383, 191 p., 2 sheets, scale 1:250,000
- Schram, Frederick R.**
- 1979** (and Schram, J. M.) Some shrimp of the Madera Formation (Pennsylvanian), Manzanita Mountains, New Mexico: Jour. Paleontology, v. 53, no. 1, p. 169–174, 2 pls., 2 figs.
- Schram, Joan M.**  
see Schram, F. R., and Schram, 1979
- Schrodt, Augusta Kay**
- 1980** Depositional environments, provenance, and vertebrate paleontology of the Eocene-Oligocene Baca Formation, Catron County, New Mexico: M.S. thesis, Louisiana State Univ., 174 p.  
see Schiebout and Schrodt, 1980
- Schroeder, Albert H.**
- 1979** The Cerrillos mining area, in Archaeology and history of Santa Fe country, R. V. Ingersoll, editor: New Mexico Geol. Soc., Spec. Pub. 8, p. 12–16, 1 table, 2 figs.
- Schubert, Carl E.**
- 1980** (Maxwell, J. C., and Johnson, W. J.) Eastern U.S. hot dry rock target prospect evaluation (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 2, p. 81
- Schuffe, Joseph A.**
- 1979** Is Gallinas Gorge a young formation? (abs.): New Mexico Jour. Sci., v. 19, no. 2, p. 51
- 1976** (Baca, Phillip; Mishler, Robert; and Tinsley, Mary) Ion exchange dating and cultural remains associated with a Rio Tecolote sediment in northern New Mexico: Texas Jour. Sci., v. 27, no. 3, p. 377–381, 2 figs.
- 1979** (Mega, J., and Beckhart, R.) Ion exchange dating of sediments on the Gallinas River (abs.): Colorado-Wyoming Acad. Sci., Jour., v. 11, no. 1, p. 16
- Schultz, Jerald D.**
- 1980** Geomorphology, sedimentology, and Quaternary history of the eolian deposits, west-central San Juan Basin, northwest New Mexico: M.S. thesis, Univ. New Mexico, 139 p., 10 tables, 49 figs., 4 sheets, 3 appendices  
see Love and Schultz, 1980
- Schwartz, Arthur H.**  
see Neese and Schwartz, 1977; and Pray and Schwartz, 1977
- Schwartz, Kenneth B.**
- 1978** (and Irving, A. J.) Cation valence determinations in kaersutite and biotite megacrysts from alkalic basalts—evidence for  $Ti^{3+}$  in the upper mantle (abs.): Am. Geophys. Union (EOS), Trans., v. 59, no. 12, p. 1214–1215

**Science and Engineering Resources, Inc.**

1976 Ground-water hydrology of the alluvium at United Nuclear-Homestake Partners' mill near Milan, New Mexico: Sci. and Eng. Resources, Inc., consult. rept. to United Nuclear-Homestake Partners, 179 p.

1977 Modelling, design, and specifications of the collection and injection systems, United Nuclear-Homestake Partners' mill near Milan, New Mexico: Sci. and Eng. Resources, Inc., consult. rept. to United Nuclear-Homestake Partners, 60 p.

**Scott, Alan J.**

1979 (and Casey, J. M.) Pennsylvanian fan-delta facies of the Taos trough, New Mexico (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 198

see Casey and Scott, 1979, 1980

**Scott, Arthur G.**

1976 Revised estimates of mean-annual runoff and summary of precipitation and discharge data for Post Headquarters area, White Sands Missile Range, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-86, 23 p., 4 tables, 5 figs.

1976 (and Kunkler, J. L.) Flood discharges of streams in New Mexico as related to channel geometry: U.S. Geol. Survey, Open-file Rept. 76-414, 38 p., 3 tables, 6 figs., 1 sheet

see Kunkler and Scott, 1977; and Malde and Scott, 1977

**Scott, George L.**

1977a Garrett Drinkard field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 98-99, 1 table, 1 fig.

1977b Tom-Tom field, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 196-197, 1 table, 1 fig.

1980 Tom-Tom and Tomahawk San Andres oil fields, Chaves and Roosevelt Counties, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 53

1977 (and Reddy, George) Cato field, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 76-77, 1 table, 1 fig.

**Scott, Glenn R.**

1980 (Mytton, J. W., and Schneider, G. B.) Geologic map of the Star Lake quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1248, scale 1:24,000

1979a (O'Sullivan, R. B., and Heller, J. S.) Preliminary geologic map of the Burnham Trading Post quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1076, scale 1:24,000

1979b (O'Sullivan, R. B., and Heller, J. S.) Preliminary geologic map of the Pillar NW quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1077, scale 1:24,000

1979c (O'Sullivan, R. B., and Heller, J. S.) Preliminary geologic map of the Newcomb NE quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1092, scale 1:24,000

1979 (O'Sullivan, R. B., and Mytton, J. W.) Reconnaissance geologic map of the Alamo Mesa West quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1074, scale 1:24,000

1980 (Schneider, G. B., and Mytton, J. W.) Geologic map of the Ojo Encino Mesa quadrangle, McKinley and Sandoval Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1249, scale 1:24,000

see Manley and Scott, 1978; O'Sullivan, Scott, and Heller, 1979a-d; O'Sullivan, Scott, and Weide, 1979; Pillmore and Scott, 1976; Schneider, Weide, and others, 1979; Schneider, Weide, and Scott, 1979; Weide, Mytton, and Scott, 1979, 1980; Weide, Schneider, and others, 1979a,b; and Weide, Scott, and Mytton, 1980

**Scott, Robert W.**

1977 Early Cretaceous environments and paleo-communities in the southern Western Interior—pt. 1, *in* Cretaceous facies, faunas, and paleoenvironments across the Western Interior Basin, E. G. Kauffman, editor: Mtn. Geologist, v. 14, no. 3-4, p. 155-173

1979 Depositional model of Early Cretaceous coral-algal-rudist reefs, Arizona: Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 7, p. 1108-1127, 2 tables, 13 figs.

**Scott, Thrumen E., Jr.**

see Nielsen, K. C., and Scott, 1979, 1980

**Scott, W. B.**

see Wilkins and others, 1980

**Scroggin, M. P.**

1978 Cationic flotation of sylvite, *in* Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 65-67, 3 figs.

**Scully, Leo W.**

1979 WIPP facility design: Geological Disposal Nuclear Waste, 19th ann. symp., p. 63-69

**Seager, William R.**

1977 Rio Grande rift in southern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 72

1978a Road log to Organ and Doña Ana calderas, *in* Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 73-82, 8 figs.

1978b Geologic cross sections through the Emory cauldron, Black Range, New Mexico, *in* Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, sheet in pocket

1980 Quaternary fault system in the Tularosa and Hueco Basins, southern New Mexico and west Texas: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, p. 131-135, 4 figs.

1978 (and Brown, L. F.) The Organ caldera, *in* Field guide to selected cauldrons and mining districts in the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 139-149, 1 table, 6 figs.

1978 (Clemons, R. E., and Elston, W. E.) Second

- day, road log from intersection of I-25 and NM-90 to Silver City with side trip to Tierra Blanca, in Field guide to selected cauldrons and mining districts in the Datil-Mogollon volcanic field, New Mexico, C. E. Chapin and W. E. Elston, editors: New Mexico Geol. Soc., Spec. Pub. 7, p. 33-48, 15 figs.
- 1976** (Kottlowski, F. E., and Hawley, J. W.) Geology of Doña Ana Mountains, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 147, 36 p., 2 tables, 13 figs., 3 maps, 4 appendices
- 1978a** (and Morgan, Paul) San Diego Mountain, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 82-83
- 1978b** (and Morgan, Paul) Caballo Reservoir, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 85-87
- 1979** (and Morgan, Paul) Rio Grande rift in southern New Mexico, west Texas, and northern Chihuahua, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 87-106, 8 figs.; *abs.* in International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 88-89
- 1978** (Morgan, Paul, and Hawley, J. W.) Rincon overlook, in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 79-81  
*see* Clemons and Seager, 1978; Hawley, Lovejoy, and others, 1978; Hawley and Seager, 1978; Kottlowski, Seager, and others, 1977; Lovejoy and Seager, 1978; and Woodward, Callender, and others, 1978
- Segerstrom, Kenneth**  
**1979** (Stotelmeyer, R. B., and Williams, F. E.) Mineral resources of the White Mountain Wilderness and adjacent areas, Lincoln County, New Mexico: U.S. Geol. Survey, Bull. 1453, 135 p., 3 tables, 20 figs., 2 sheets in pocket
- Sengupta, M. K.**  
**1977** (and Ward, R. W.) Three-dimensional seismic reflection survey near Socorro, New Mexico (*abs.*): Am. Geophys. Union (EOS), Trans., v. 58, no. 12, p. 1184  
*see* Ward, R. W., and Sengupta, 1977
- Senterfit, R. M.**  
*see* Hoover and others, 1978
- Seward, P. D.**  
*see* Statler, R. D., and Seward, 1979a-h
- Shaffer, Sue-Ellen**  
**1979a** Logs, in Basic data report for drillhole WIPP 13: Sandia Lab., Rept. SAND79-0273, appendix D, p. D1  
**1979b** Logs, in Basic data report for drillhole WIPP 25: Sandia Lab., Rept. SAND79-0279, appendix D, p. D1  
**1979c** Logs, in Basic data report for drillhole WIPP 27: Sandia Lab., Rept. SAND79-0281, appendix D, p. D1  
**1979d** Logs, in Basic data report for drillhole WIPP 29: Sandia Lab., Rept. SAND79-0283, appendix D, p. D1  
*see* Powers, D. W., and Shaffer, 1979a-c
- Shaffer, W. L.**  
*see* Woodward, Callender, and others, 1978
- Shafiqullah, Muhammad**  
*see* Baldrige, Damon, and others, 1980; Brookins, Lee, and Shafiqullah, 1977; Deal, Elston, and others, 1978; Kudo and others, 1977; Laughlin, Brookins, Damon, and Shafiqullah, 1979; and Lee, Brookins, and Shafiqullah, 1977
- Shankland, T. J.**  
**1978** Simultaneous consideration of electrical and elastic anomalies in rift zones, *abs.* in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 89
- Shannon, S. S.**  
*see* Sakai and others, 1976
- Shantz, Robert F.**  
**1976** Cyanide leaching of chalcocite: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 65, 213 p., 45 tables, 12 figs., 3 appendices  
**1977a** Mineral processing in New Mexico: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1976-77, p. 76-79  
**1977b** Calculating heat content from ash percentage for New Mexico coals: Coal Mining and Processing, v. 14, no. 5, p. 112-114  
**1977c** Strategy for coal-washing operations in New Mexico: New Mexico Bureau Mines Mineral Resources, Prog. Rept. 9, 7 p., 2 tables, 1 fig.  
**1978** Washability tests and heat-content predictions for New Mexico coals: New Mexico Bureau Mines Mineral Resources, Prog. Rept. 10, 16 p., 28 tables, 3 figs.  
**1979** Mining, milling, and smelting operations in southwest New Mexico: New Mexico Geology, v. 1, no. 2, p. 24-26, 2 figs.
- Sharp, R. R., Jr.**  
**1978** (Morris, W. A., and Aamodt, R. L.) Uranium hydrogeochemical and stream sediment reconnaissance data release for the New Mexico portions of the Douglas, Silver City, Clifton, and St. Johns NTMS quadrangles, New Mexico, Arizona: Los Alamos Sci. Lab., Rept. 7180, 123 p.; Natl. Tech. Inf. Serv., Rept.; U.S. Dept. Energy, Rept. GJBX-69-78, 123 p.
- Sharrock, Roy G.**  
**1978** Las Milpas gas storage unit, in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 5-8, 5 figs.
- Shaw, Alan B.**  
**1977** A review of some aspects of evaporite deposition: Mtn. Geologist, v. 14, no. 1, p. 1-16, 1 table, 7 figs.
- Shaw, D. M.**  
*see* Helsen and others, 1978
- Shaw, H. R.**  
**1976** (Smith, R. L., and Hildreth, Wes) Thermo-gravitational mechanisms for chemical variations in zoned magma chambers (*abs.*): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1102
- Shearer, Charles R.**  
**1978** (and Reiter, M. A., compilers) Basic heat-flow data in New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 93, computer printout  
*see* Edwards and others, 1978; Reiter, Edwards,

- Mansure, and Shearer, 1978; Reiter, Edwards, Shearer, Fisher, and others, 1976; Reiter, Edwards, Shearer, McGrath, and Mansure, 1976; Reiter, Mansure, and Shearer, 1979a,b; Reiter and Shearer, 1979, 1980; and Reiter, Shearer, and Edwards, 1978
- Sheffer, Herman W.**  
 1979 (and Eveleth, R. W.) Minerals in the economy of New Mexico: U.S. Bureau Mines, State Mineral Profile, 20 p., 8 tables, 4 figs., 1 sheet  
 1978 (and Eveletti, R. W.) Minerals in the economy of New Mexico: U.S. Bureau Mines, State Mineral Profile 5, 18 p., 5 tables, 2 figs.  
 1978 (Inglis, M. H., and others) Landsat monitoring of the Navajo coal surface mine: Am. Soc. Photogrammetry, Proc., p. 523-539  
*see* Eveleth and Sheffer, 1978; and Inglis and others, 1978
- Shelby, James E.**  
*see* Jambon and Shelby, 1980
- Shepherd, R. G.**  
 1976 Sedimentary processes and structures of ephemeral-stream point bars, Rio Puerco near Albuquerque, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1103  
 1978 Distinction of aggradational and degradational fluvial regimes in valley-fill alluvium, Tapia Canyon, New Mexico, *in* Fluvial sedimentology, A. D. Miall, editor: Canadian Soc. Petroleum Geologists, Mem. 5, p. 277-286  
 1978 (and Macke, D. L.) Discrimination of fluvial and eolian deposits by number-frequency analysis of sediments of sand through silt size from a point bar, Rio Puerco, New Mexico: U.S. Geol. Survey, Jour. Research, v. 6, no. 4, p. 499-504, 5 figs.
- Sheridan, Michael F.**  
 1979 (and Burt, D. M.) A model for the genesis of uranium/lithophile element deposits related to rhyolitic volcanism (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 515  
*see* Bikun and others, 1980; Burt and Sheridan, 1980; and Wohletz and Sheridan, 1976
- Sherwood, P. B.**  
 1980 (and Marquis, M. A.) The Baca data dissemination program: Geothermal Resources Coun., Trans., v. 4, September, p. 531-532
- Shetwy, Mohamed M.**  
 1978 Sedimentologic and stratigraphic analysis of the Point Lookout Sandstone, southeastern San Juan Basin, New Mexico: Ph.D. thesis, New Mexico Inst. Mining and Tech., 262 p.
- Shirts, M. B.**  
*see* Beard and others, 1980
- Shive, P. N.**  
 1979 (Liebes, E., and Steiner, M. B.) Remanence acquisition in the Moenkopi Formation of the Colorado Plateau (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 237
- Shomaker, John W.**  
 1976 (and Stone, W. J.) Availability of ground water for coal development in San Juan Basin, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 154, p. 43-48, 4 figs.  
 1977 (and Whyte, M. R.) Geological appraisal of deep coals, San Juan Basin, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 155, 39 p., 6 tables, 13 figs., 2 appendices  
*see* Beaumont and Shomaker, 1977; Beaumont and others, 1976; Kottlowski, Beaumont, and Shomaker, 1976, 1977; Speer and others, 1977; and Whyte and Shomaker, 1977a,b
- Shroba, Ralph R.**  
 1977 Soil development in Quaternary tills, rock-glacier deposits, and taluses, southern and central Rocky Mountains: Ph.D. thesis, Univ. Colorado (Boulder), 449 p.; Dissert. Abs. Internat., 1978, v. 38, no. 7, p. 3098-B
- Shuleski, Paul J.**  
 1976 Seismic fault motion and SV screening by shallow magma bodies in the vicinity of Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 8, 94 p.  
 1977 (Caravella, F. J., Rinehart, E. J., Sanford, A. R., Wallace, T. C., and Ward, R. M.) Seismic studies of shallow magma bodies beneath the Rio Grande rift in the vicinity of Socorro, New Mexico: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 13, 8 p.; Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 73  
*see* Sanford, Mott, and others, 1977; and Sanford, Rinehart, and others, 1977
- Shurbet, D. H.**  
 1978 (and Cebull, S. E.) The Delaware Basin—a late phase of an aulacogen? (abs.): New Mexico Acad. Sci., Bull., v. 18, no. 1, p. 16
- Sibbitt, Wilmer L.**  
 1976 Preliminary measurements of the thermal conductivity of rocks from LASL geothermal test holes GT-1 and GT-2: Los Alamos Sci. Lab., Rept. LA-6199-MS, 8 p.  
 1978 (Dodson, J. G., and Tester, J. W.) Thermal conductivity of rocks associated with energy extraction from hot dry rock geothermal systems: Natl. Tech. Inf. Serv., Rept. LA-UR-78-1240, 25 p.; *abs. in* New Mexico Geology, 1979, v. 1, no. 3, p. 47  
 1979 (Dodson, J. G., and Tester, J. W.) Thermal conductivity of crystalline rocks associated with energy extraction from hot dry rock geothermal systems: Jour. Geophys. Research, v. 84, no. B3, p. 1117-1124
- Siciliano, C. L. B.**  
*see* Brown, M. C., and others, 1979; and Kaufman, E. L., and Siciliano, 1979, 1980
- Siemers, Charles T.**  
 1978a Generation of a simplified working depositional model for repetitive coal-bearing sequences using field data—an example from the Upper Cretaceous Menefee Formation (Mesaverde Group), northwestern New Mexico, *in* Proceedings of the second symposium on the geology of Rocky Mountain coal—1977: Colorado Geol. Survey, Resource Ser. 4, p. 1-22, 5 tables, 19 figs.  
 1978b Core and wire-line log analysis of a coal-bearing sequence—lower part of the Upper Cretaceous Menefee Formation (Mesaverde Group) northwestern New Mexico, *in* Proceedings of the second symposium on the geology of Rocky Mountain coal—1977: Colorado Geol. Survey, Resource Ser. 4, p. 165-180, 5 figs., 10 photos



- 1979 Sedimentology and petrology of Pennsylvanian strata, central and eastern Rowe-Mora Basin, southeastern Sangre de Cristo Mountains, New Mexico (abs.): Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 201-202; New Mexico Geology, v. 1, no. 1, p. 61
- 1977 (and Wadell, J. S.) Humate deposits of the Menefee Formation (Upper Cretaceous) northwestern New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, Suppl. Articles, p. 1-21, 9 tables, 21 figs.  
see Owen and Siemers, 1977
- Siemers, W. Terry**
- 1978 Stratigraphy, petrology, and paleoenvironments of the Pennsylvanian system of the Socorro region, west-central New Mexico: Ph.D. thesis, New Mexico Inst. Mining and Tech., 259 p.
- 1979 Summary of mining and mineral-processing operations in New Mexico: New Mexico Geology, v. 1, no. 4, p. 56
- 1979a (and Austin, G. S.) Industrial rocks and minerals of New Mexico: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1977-78, p. 43-61, 2 tables, 2 figs.
- 1979b (and Austin, G. S.) Mines, processing plants, and power plants in New Mexico: New Mexico Bureau Mines Mineral Resources, Resource Map 9, 25 p. text, scale 1:1,000,000
- 1980 (Austin, G. S., and Kottlowski, F. E.) Industrial rocks and minerals of New Mexico (abs.): Am. Inst. Mining, Metallurgical, and Petroleum Engineers, Ann. Mtg., Prog., p. 67
- 1976 (and Blakestad, R. B., Jr.) Revision of upper Paleozoic stratigraphy in the Magdalena area, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 629-630
- 1978 (Hawley, J. W., Rautman, C. A., and Austin, G. S.) Evaluation of the mineral potential (excluding hydrocarbons, potash, and water) of the Waste Isolation Pilot Plant site, Eddy County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 87, 48 p., 5 tables, 2 figs., appendix  
see Armstrong, A. K., Kottlowski, and others, 1980; and Eveleth and Siemers, 1980
- Siems, D. F.**  
see Alminas, Watts, and others, 1978a-d; Watts, Hassemer, Forn, and Siems, 1979; Watts, Hassemer, Nishi, and Siems, 1978; and Watts, Hassemer, Siems, and Nishi, 1978
- Signor, Donald C.**  
see Brown, R. F., and others, 1976
- Sikri, Atam P.**  
see Weiber and Sikri, 1978
- Silberman, Miles L.**  
see Armstrong, A. K., Silberman, and others, 1978; Hoggatt and others, 1977; and Snyder, W. S., and others, 1976
- Silver, B. A.**
- 1976 (and Wermiel, D. E.) Diagenetic history of Mississippian carbonate rocks, Pedregosa Basin, southeastern Arizona, southwestern New Mexico, northeastern Sonora, and northwestern Chihuahua (abs.): Am. Assoc. Petroleum Geol., Bull., v. 60, no. 4, p. 723  
see Bahlburg and Silver, 1976
- Silver, Leon T.**
- 1978 (and McGetchin, T. R.) The nature of the basement beneath the Colorado Plateau and some implications for plateau uplifts, in Plateau uplift—mode and mechanism: Lunar and Planet. Inst., p. 45  
see Everson and Silver, 1978
- Silver, R. M.**
- 1979 (and Comeau, S. P.) Geothermal energy—problems and short comings of classification of a unique resource—a look at problems with water law, with particular emphasis on New Mexico: Natural Resources Jour., v. 19, no. 2, p. 445-459; Sel. Water Resources Abs., 1980, v. 13, no. 1, p. 56
- Simanton, J. R.**  
see Osborn and others, 1979
- Simmons, Gene**
- 1976 (and Eddy, A. C.) Microcracks in the GT-2 core (abs.): Am. Geophys. Union (EOS), Trans., v. 57, no. 4, p. 353  
see Reiter, Simmons, and others, 1976
- Simonson, E. R.**  
see Pratt and Simonson, 1976
- Simpson, D. N.**
- 1978 Entries from the surface to new mines: Mining Engineer, v. 137, no. 202, p. 601-615, 6 tables, 5 figs.
- Simpson, J.**  
see Strangway and others, 1976
- Simpson, John J.**
- 1977 Give us 300 billion barrels: Petroleum Today, v. 18, no. 2, p. 11-15
- Simpson, L. C.**
- 1978 Comments on the pelycosaur *Edaphosaurus* and the validity of the species *E. minuta* Tasch: Jour. Paleontology, v. 52, p. 211-212
- Simpson, Ronald D.**
- 1980 (and LeMone, D. V.) Brachiopod biostratigraphy of the Hueco Group (Wolfcamp), Franklin Mountains, Texas and New Mexico (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 54-55
- 1978a (LeMone, D. V., and Thompson, Sam, III) Silicified brachiopod fauna of the Permian Concha Limestone (Leonard), Big Hatchet Mountains, Hidalgo County, New Mexico (abs.): New Mexico Jour. Sci., v. 18, no. 2, p. 35
- 1978b (LeMone, D. V., and Thompson, Sam, III) Conodonts from the Concha—preliminary analysis of the limestone (Leonardian) of the Big Hatchet Mountains, Hidalgo County, New Mexico (abs.): New Mexico Jour. Sci., v. 18, no. 2, p. 35  
see Cornell and Simpson, 1980; Kottlowski, Seager, and others, 1977; LeMone and Simpson, 1977; LeMone, Simpson, and Thompson, 1978; and Thompson, S., LeMone, and Simpson, 1977
- Singh, Surendra**
- 1978 Geomagnetic activity and microearthquakes: Seismol. Soc. America, Bull., v. 68, no. 5, p. 1533-1535
- Sinno, Y. A.**  
see Keller, G. R., Sinno, and others, 1979
- Siruta, W. A.**
- 1977 (and Foltz, G. A.) Hobbs Drinkard field, Lea County, New Mexico, in The oil and gas fields of



- southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 121, 1 table  
see Foltz and Siruta, 1977
- Skeryanc, Anthony J.**  
1977 Texture, fabric, and composition of fine-grained terrigenous sediments from the Graneros Member of the Mancos Shale, San Juan Basin, New Mexico: M.S. thesis, Univ. New Mexico, 137 p.
- Slack, Paul B.**  
1976 (and Campbell, J. A.) Structural geology of the Rio Puerco fault zone and its relationship to central New Mexico tectonics, in *Tectonics and mineral resources of southwestern North America*, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 46-52, 7 figs.; Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 630-631
- Sloggett, G.**  
1977 Mining the Ogallala aquifer—state and local efforts in ground-water management: Oklahoma State Univ., Agric. Exp. Station, Resource Rept. P-761, 24 p.
- Smart, Eugene**  
1979 Observations of seismic surface-wave scattering phenomena in the western United States (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 324
- Smartt, Richard A.**  
1977 The ecology of late Pleistocene and Recent *Microtus* from south-central and southwestern New Mexico: *Southwestern Naturalist*, v. 22, no. 1, p. 1-19
- Smith, A. Richard**  
1978a Sulfur deposits in Ochoan rocks of southeast New Mexico and west Texas, in *Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas*, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 71-77, 1 table, 6 figs.  
1978b Geology, in *The caves of McKittrick Hill, Eddy County, New Mexico—history and results of field work, 1965-1976*, C. E. Kunath, editor: Texas Speleological Soc., p. 56-57  
1979 Solution scarp and related fissure system, Yeso Hills, Culberson County, Texas, and Eddy County, New Mexico (abs.): Natl. Speleological Soc., Bull., v. 41, no. 117  
1980 Sulfur deposits in Ochoan rocks of the Gypsum Plain, southeast New Mexico and west Texas: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, p. 277-283, 2 tables, 7 figs.
- Smith, Christian S.**  
1976 Deep resistivity surveys in the Rio Grande rift, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 631-632  
1977 On the electrical evaluation of three southern New Mexico geothermal areas: M.S. thesis, Univ. New Mexico, 113 p.  
1978 Geophysics, geology, and geothermal leasing status of the Lightning Dock KGRA, Animas Valley, New Mexico: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 343-348, 9 figs.  
1977 (Jiracek, G. R., and Ander, M. E.) Deep electrical investigations of geothermal prospects in the Basin and Range province of southern New Mexico (abs.): Geophysics, v. 42, no. 1, p. 183  
see Hart, D. L., Jr., and Smith, 1979a,b; Jiracek and Smith, 1976; Jiracek, Smith, and others, 1977; and Jiracek, Smith, and Gerety, 1976
- Smith, Clay T.**  
1980 (and Colpitts, R. M., Jr.) Geology of Cieneguilla Creek drainage basin in southwest Colfax County, New Mexico: New Mexico Geology, v. 2, no. 1, p. 1-3, 13-15, 1 table, 2 figs.
- Smith, D.**  
see McGetchin, Smith, and others, 1977; Roden and others, 1979; and Wilshire and others, 1977
- Smith, D. A.**  
1980 (and Peterson, R. J.), Geology and recognition of a relict uranium deposit in sec. 28, T. 14 N., R. 10 W., southwest Ambrosia Lake area, McKinley County, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 215-225, 14 figs.; abs. in *Grants uranium region, a symposium*, Am. Assoc. Petroleum Geologists, 1979, Program, p. 19-20
- Smith, Douglas L.**  
1978a (and Jones, R. L.) Thermal evidence for extension of the Rio Grande rift into northern Mexico, abs. in *International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C*, p. 90-91  
1978b (and Jones, R. L.) Thermal anomaly in northern Mexico—an extension of the Rio Grande rift?, in *Rio Grande rift—tectonics and magmatism*, R. E. Riecker, editor: Am. Geophys. Union, p. 269-278  
1976 (and Levy, Susan) Petrology of the Green Knobs diatreme and implications for the upper mantle below the Colorado Plateau: *Earth and Planet. Sci. Letters*, v. 29, no. 1, p. 107-125, 9 figs., 4 tables
- Smith, Eugene I.**  
1976 Structure and petrology of the John Kerr Peak dome complex, southwestern New Mexico, in *Cenozoic volcanism in southwestern New Mexico*, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 71-78, 3 tables, 9 figs.  
1976 (Aldrich, M. J., Jr., Deal, E. G., and Rhodes, R. C.) Fission-track ages of Tertiary volcanic and plutonic rocks, Mogollon Plateau, southwestern New Mexico, in *Cenozoic volcanism in southwestern New Mexico*, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 117-118, 1 table  
see Rhodes, R. C., and Smith, 1976
- Smith, Gerald N.**  
see Ryder and others, 1980
- Smith, Grant**  
1977 Todd San Andres (gas) field, Roosevelt County, New Mexico, in *The oil and gas fields of southeastern New Mexico, 1977 supplement*, K. C. Havenor, editor: Roswell Geol. Soc., p. 194-195, 1 table, 1 fig.
- Smith, J. L.**  
1980 (Matlick, J. S., and Ehni, W. J.) Summary of 1979 geothermal drilling, western United States: *Geothermal Energy*, v. 8, no. 7, p. 3-14

**Smith, J. W.**

1975 The Permian Basin as a radioactive waste repository: Union Carbide Corp., Office Waste Isolation, Rept. Y/OW1/SUB-4495/1

**Smith, Jeffrey A.**

1976 Developments in west Texas and eastern New Mexico in 1975: Am. Assoc. Petroleum Geologists, Bull., v. 60, no. 8, p. 1243-1250, 5 tables, 1 fig.

1977 Oil and gas exploration in the Permian Basin, in Gas fields in west Texas: West Texas Geol. Soc., v. III, p. 1-3

**Smith, Kathleen S.**

see Hinkley and others, 1980a,b

**Smith, L. T.**

1976 A regional uranium anomaly in the Precambrian basement of the Colorado Plateau (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1107-1108

**Smith, Morton C.**

1975 The Los Alamos Scientific Laboratory dry hot rock geothermal project (LASL Group Q-22): Geothermics, v. 4, no. 1-4, p. 27-39

1976 The LASL dry hot rock concept (abs.): Am. Geophys. Union (EOS), Trans., v. 57, no. 4, p. 349

1978 Heat extraction from hot, dry, crustal rock, in Geothermics and geothermal energy, L. Rybach, editor: Pure and Applied Geophysics, v. 117, no. 1-2, p. 200-296

see Cremer and others, 1980

**Smith, R.**

see Reiter and Smith, 1977

**Smith, R. C.**

see Asquith, Gilbert, and Smith, 1976

**Smith, Robert L.**

1980 The Valles caldera, Jemez Mountains, New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 46, p. 1150

1978 (Bailey, R. A., and Russell, S. L.) The volcanic evolution of the Jemez Mountains and its relationship to the Rio Grande rift, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 91-92

see Bailey, R. A., and Smith, 1978; Luedke and Smith, 1979; Shaw, H. R., and others, 1976; and Warshaw and Smith, 1980

**Smith, Robert W.**

1979 Evaluation of solution-mineral equilibria in the small scale solution mining of copper: M.S. thesis, New Mexico Inst. Mining and Tech., 77 p.

1980 (and Popp, C. L.) Factors controlling water composition of the Rio Grande, central New Mexico (abs.): New Mexico Geology, v. 2, no. 3, p. 48

**Smithson, Scott B.**

1977 (and McCullar, D. B.) Unreversed seismic crustal refraction profile across the southern Rio Grande rift (abs.): Am. Geophys. Union (EOS), Trans., v. 58, no. 12, p. 1184

see Cook, Decker, and Smithson, 1978; Cook, McCullar, and others, 1979; Decker and Smithson, 1977; and Ramberg and others, 1978

**Smyth, Joseph R.**

see McCormick and Smyth, 1980

**Snyder, Don O.**

see Woodward and Snyder, 1976a,b; and Woodward, Snyder, and Husler, 1978

**Snyder, R. P.**

1979 (and McIntyre, A. F.) Geological data, in Basic data report for drillhole WIPP 29: Sandia Lab., Rept. SAND79-0283, p. 4-18, 3 tables, 2 figs.

**Snyder, W. S.**

1976 (Dickinson, W. R., and Silberman, M. L.) Tectonic implications of space-time patterns of Cenozoic magmatism in western United States: Earth and Planet. Sci. Letters, v. 32, no. 1, p. 91-106, 7 figs.

**Solomon, George C.**

1976 (and Kerrick, D. M.) Experimental hydrothermal alteration of granitic rocks, with implications for dry, hot-rock geothermal energy (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1114

**Sommer, Michael A., II**

1977 Volatiles H<sub>2</sub>O, CO<sub>2</sub>, and CO in silicate melt inclusions from the rhyolitic Bandelier air-fall and ash-flow tuff, New Mexico: Jour. Geology, v. 85, no. 4, p. 423-432, 4 tables, 8 figs.

1978 Volatiles in silicate melt inclusions from the air-fall and ash-flow tuffs of the Bandelier Tuff, Jemez Mountains, New Mexico (abs.): Geol. Soc. America, Abs. with Program, v. 10, no. 7, p. 495

**Sondermayer, R. V.**

1976 The mineral industry of New Mexico: U.S. Bureau Mines, Mineral Yearbook, 1973, v. 2, p. 469-487

**Sorenson, Earl F.**

1977 Water use by categories in New Mexico counties and river basins, and irrigated and dry cropland acreage in 1975: New Mexico State Engineer, Tech. Rept. 41, 34 p.

**Soule, P. L.**

1979 (and Wilkins, D. W.) Water-resources investigations of the U.S. Geological Survey, New Mexico district, fiscal year 1978: U.S. Geol. Survey, Openfile Rept. 79-560, 134 p., 29 figs.; Sel. Water Resources Abs., v. 12, no. 24, p. 39

**Spaw, J. M.**

1977 Paleo-environments of Middle Pennsylvanian *Chaetetes* lithotopes, Texas and New Mexico: M.S. thesis, Rice Univ.; Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 74-75

**Speer, William R.**

1976 Oil and gas exploration in the Raton Basin: New Mexico Geol. Soc., Guidebook 27th field conf., Vermejo Park, p. 217-226, 4 figs.

1977 (Beaumont, E. C., and Shomaker, J. W.) Coal resources of the San Juan Basin, New Mexico: New Mexico Bureau Mines Mineral Resources, Openfile Rept. 84, 103 p., 4 tables, 3 figs., 7 sheets

**Spence, Barbara J.**

1980 National Coal Resources Data System in New Mexico: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1978-79, p. 34-37, 2 figs.

**Spence, William**

1979 (Gross, R. S., and Jaksha, L. H.) P-wave velocity structure beneath the central Rio Grande rift (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 46, p. 953-954

1978 (and Jaksha, L. H.) Teleseismic P-wave delays across the central Rio Grande rift, *abs. in* Inter-

- national symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 93-94
- Spencer and Hutson**  
 1977 Humble City field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 122-123, 1 table, 1 fig.
- Spencer, Charles W.**  
 1978a Tocito Dome Pennsylvanian "D" (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 522-527, 5 figs.  
 1978b Tocito Dome Pennsylvanian, north (gas), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 528-531, 4 figs.
- Spencer, Patrick K.**  
 1980 Stratigraphy, lithology, and depositional environment of the Black Prince formation, southeastern Arizona and southwestern New Mexico: M.S. thesis, Western Washington Univ.
- Spiegel, Zane E.**  
 1976 Fundamental concepts of hydrogeology applied to the Pecos Valley and related aquifer systems: New Mexico State Engineer, rept., 46 p.
- Spradlin, Ernest J.**  
 1976 Stratigraphy of Tertiary volcanic rocks, Joyita Hills area, Socorro County, New Mexico: M.S. thesis, Univ. New Mexico, 73 p.
- Springett, M. S.**  
 1980 The exploration of the Ortiz gold deposit, New Mexico—sampling and ore reserves: Colorado Mining Assoc., Mining Yearbook, p. 113-120
- Squires, Richard L.**  
 1976 Pseudoreefs in the San Andres Formation, Guadalupe Mountains, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 634-635
- Squyres, John B.**  
 1980 Origin and significance of organic matter in uranium deposits of Morrison Formation, San Juan Basin, New Mexico, *in* Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 86-97, 16 figs.; *abs. in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 20
- Sridhar, K.**  
 1978 (Jackson, M. L., Clayton, R. N., Gillette, D. A., and Hawley, J. W.) Oxygen isotopic ratios of quartz from wind-erosive soils of southwestern United States in relation to aerosol dust: Soil Sci. Soc. America, Jour., v. 42, no. 1, p. 158-162, 5 tables, 2 figs.
- Stalkup, F. I.**  
 1978 Carbon dioxide miscible flooding—past, present, and outlook for the future: Jour. Petroleum Tech., v. 30, August, p. 1102-1112, 2 tables, 9 figs.
- Stanley, Jack R.**  
 1977a (and Tipton, Steven) Burton Flat Morrow field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 66-67, 1 table, 1 fig.  
 1977b (and Tipton, Steven) Rock Tank Morrow field, Eddy County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 166-167, 1 table, 1 fig.  
*see* Jons and Stanley, 1976
- Statler, R. D.**  
 1979a (and Seward, P. D.) Drilling and testing plan, *in* Basic data report for drillhole WIPP 13: Sandia Lab., Rept. SAND79-0273, appendix B, p. B1-B21  
 1979b (and Seward, P. D.) Hole history, *in* Basic data report for drillhole WIPP 13: Sandia Lab., Rept. SAND79-0273, appendix C, p. C1-C12  
 1979c (and Seward, P. D.) Drilling and testing plan, *in* Basic data report for drillhole WIPP 25: Sandia Lab., Rept. SAND79-0279, appendix B, p. B1-B24  
 1979d (and Seward, P. D.) Hole history, *in* Basic data report for drillhole WIPP 25: Sandia Lab., Rept. SAND79-0279, appendix C, p. C1-C9  
 1979e (and Seward, P. D.) Drilling and testing plan, *in* Basic data report for drillhole WIPP 27: Sandia Lab., Rept. SAND79-0281, appendix B, p. B1-B24  
 1979f (and Seward, P. D.) Hole history, *in* Basic data report for drillhole WIPP 27: Sandia Lab., Rept. SAND79-0281, appendix C, p. C1-C10  
 1979g (and Seward, P. D.) Drilling and testing plan, *in* Basic data report for drillhole WIPP 29: Sandia Lab., Rept. SAND79-0283, appendix B, p. B1-B24, 3 figs.  
 1979h (and Seward, P. D.) Hole history, *in* Basic data report for drillhole WIPP 29: Sandia Lab., Rept. SAND79-0283, appendix C, p. C1-C9
- Stearns, Charles E.**  
 1979 New K-Ar dates and the late Pliocene to Holocene geomorphic history of the central Rio Grande region, New Mexico—discussion: Geol. Soc. America, Bull., v. 90, no. 8, pt. 1, p. 799-800
- Steele, B. A.**  
*see* Campbell, J. A., and Steele, 1976
- Steensma, Rene S.**  
 1979 Feasibility study of gravitational ore separation, Hansonburg mining district, central New Mexico: New Mexico Geology, v. 1, no. 4, p. 55, 58, 2 figs.  
*see* Kottowski and Steensma, 1979
- Steiner, Maureen B.**  
*see* Shive and others, 1979
- Steinhaus, D. W.**  
*see* Morris, Bunker, and Steinhaus, 1979
- Steinpress, Martin G.**  
 1980 Neogene stratigraphy and structure of the Dixon area, Española Basin, north-central New Mexico: M.S. thesis, Univ. New Mexico, 127 p.; Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 306
- Stensrud, Howard L.**  
*see* Gresens and Stensrud, 1977
- Stephenson, William A.**  
*see* Bivens and others, 1979
- Stevens, Donald G.**  
 1977a Twin Lakes Devonian fields, Chaves County, New Mexico, *in* The oil and gas fields of

- southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 206-207, 1 table, 1 fig.
- 1977b** Twin Lakes San Andres field, Chaves County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 208-209, 1 table, 1 fig.
- Stevenson, G. M.**
- 1978** Middle Canyon Dakota (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 421-422, 2 figs.
- 1977** (and Baars, D. L.) Pre-carboniferous paleotectonics of the San Juan Basin, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 99-110, 1 table, 8 figs.
- 1978** (and Matheny, M. L.) Kutz Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 363-365, 4 figs.
- see* Baars and Stevenson, 1977, 1979
- Stewart, B. S.**
- see* Goff and others, 1978
- Stewart, Dion C.**
- 1979** (and Windom, K. E.) The role of water in the development of a hybrid columnar-pillow structure in basalt (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 636
- Stewart, J. N.**
- see* Olsen, K. H., Keller, and Stewart, 1979; Olsen, K. H., Keller, Stewart, and others, 1977; *and* Olsen, K. H., and Stewart, 1979
- Stewart, Wendell J.**
- see* Armstrong, A. K., Kottowski, and others, 1980
- Stewart, William P.**
- 1977** Casey Strawn field, Lea County, New Mexico, *in* The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 72-73, 1 table, 1 fig.
- Stewart-Gordon, T. J.**
- 1978** New plays develop new plays in the Permian Basin: World Oil, v. 186, no. 6, p. 68-74, 3 figs.
- Stichtenoth, Craig W.**
- see* Gibson, W. R., and Stichtenoth, 1979
- Stinnett, James W., Jr.**
- 1980** A geochemical study of calc-alkaline andesites and associated volcanic rocks from the Mogollon-Datil field, southwestern New Mexico: Ph.D. thesis, Miami Univ. (Ohio), 271 p.
- 1976** (and Stueber, A. M.) A strontium isotopic and geochemical study of volcanic rocks from the Datil-Mogollon field, southwestern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 636-637
- Stoker, A. K.**
- see* Purtymun, Adams, and others, 1977; Purtymun, Peters, and Stoker, 1980; *and* Purtymun, Stoker, and others, 1978
- Stone, J. Fred**
- 1978** Pollen and spores, *in* Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico, S. R. Ash, editor: Brigham Young Univ., Geology Studies, v. 25, pt. 2, p. 45-59, 4 tables, 7 figs.
- see* Ash, Dean, and others, 1978
- Stone, William J.**
- 1976a** Index to Bureau water-resource data: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1975-76, p. 38-43, 1 table, 1 fig.
- 1976b** Hydrogeologic considerations in mining and development of energy resources, San Juan Basin, New Mexico: Am. Inst. Mining and Engineering, 105th Ann. Mtg., preprint 76-AG-74
- 1976c** Origin of a fan-edge boulder deposit, eastern Organ Mountains, Doña Ana County, New Mexico (abs.): Arizona Acad. Sci., Jour., v. 11, p. 93-94
- 1979a** Descriptions of sections measured for hydrogeologic study of the San Juan Basin, northwest New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 90, 134 p., 4 tables, 2 figs., 1 sheet, 1 appendix
- 1979b** Basic petrographic data compiled for hydrogeologic study of the San Juan Basin, northwest New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 91, 43 p., 2 tables, 6 figs., 1 appendix
- 1979c** Hydrologic constraints and impacts associated with uranium extraction, San Juan Basin, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 524
- 1978** (Brod, R. C., and Anderholm, S. K.) Descriptions of cuttings from Navajo water wells in New Mexico, 1977: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 82, 83 p., 1 table, 1 fig.
- 1977** (and Foster, R. W.) Hydrogeologic studies of the Socorro landfill site: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 86, 72 p., 5 tables, 5 figs., 2 appendices
- 1980** (and Jackson, R.) Description of cuttings from Navajo water wells in New Mexico, 1978 and 1979: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 114, 26 p., 1 table, 1 fig., 1 appendix
- 1978** (and Lyford, F. P.) Ground-water resources of northwestern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 5, p. 220
- 1977** (and Mizell, N. H.) Geothermal resources of New Mexico—a survey of work to date: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 73, 123 p., 7 tables, 17 figs., 1 sheet, appendix
- 1978** (and Mizell, N. H.) Basic subsurface data compiled for hydrogeologic study of the San Juan Basin, northwest New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 89, 44 p., 1 table, 2 figs., 28 sheets
- 1979** (Mizell, N. H., and Hawley, J. W.) Availability of geological and geophysical data for the eastern half of the U.S. Geological Survey's southwestern alluvial basins, regional aquifer study, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 109, 80 p., 14 figs., 3 appendices
- see* Arnold, Foster, and others, 1976; Beaumont and others, 1976; Brown, D. R., and Stone, 1979; Foster, R. W., Austin, and others, 1977; Lyford, Frenzel, and Stone, 1979, 1980; Lyford and Stone, 1978; Mizell and Stone, 1979; Reiter and Stone, 1976; *and* Shomaker and Stone, 1976

**Storhaug, Dennis G.**

**1978a** Lone Pine Dakota "A" (gas), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 385-386, 2 figs.

**1978b** Lone Pine Dakota "D" (oil), in Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 387-389, 3 figs.

**Stormer, John C., Jr.**

**1978** Contemporaneous calc-alkaline and basinite-nephelinite suites on the east flank of the Rio Grande depression, *abs.* in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 94-95

*see* David, W. P., and others, 1980; *and* Phelps, Blanchard, and Stormer, 1980

**Stotelmeyer, Ronald B.**

*see* Ratte, Gaskill, and others, 1979; *and* Segerstrom and others, 1979

**Stoughton, Dean**

*see* Davis, T. L., and Stoughton, 1979

**Stout, John**

**1980** (and Bradley, Reta) United States province overviews (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 789

**Stoyer, Charles H.**

*see* Swanberg and others, 1977

**Strachan, Donald G.**

**1976** Stratigraphy of the Jarilla Mountains, Otero County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 135 p.

**Strain, William S.**

**1976** New formation names in the Cretaceous at Cerro de Cristo Rey, Doña Ana County, New Mexico: New Mexico Bureau Mines Mineral Resources, Mem. 31, p. 77-82, 5 tables, 1 fig.

**Strangway, David W.**

**1976** (Simpson, J., and York, D.) Paleomagnetic studies of volcanic rocks from the Mogollon Plateau area of Arizona and New Mexico, in Cenozoic volcanism in southwestern New Mexico, W. E. Elston and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 5, p. 119-124, 1 table, 6 figs.

*see* Ander, Goss, and others, 1980; *and* Ander, Laughlin, and others, 1980

**Strauss, Alan C.**

**1977** Preliminary evaluation of the seismic research observations (abs.): Am. Geophys. Union (EOS), Trans., v. 58, no. 6, p. 442

**Strimple, Harrell L.**

**1980** Pennsylvanian crinoids from Sangre de Cristo and Sacramento Mountains of New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 178, 17 p., 2 pls., 2 tables, 1 fig.

**Strobell, John D., Jr.**

**1980** (Hayes, P. T., and O'Sullivan, R. B.) Preliminary geologic map of the Waterflow quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1253, scale 1:24,000

**Stuart, C. J.**

**1979** Hunt's Hole maar volcano, Aden-Afton basalt field, Doña Ana County, south-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 525

**1979** (and Brenner, M. G.) "Low-regime" base surge dunes—an example from Kilbourne and Hunt's Holes, south-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 7, p. 525

**Stueber, Alan M.**

*see* Stinnett and Stueber, 1976

**Stump, B. W.**

**1980** (and Reinke, R. E.) Spall-like waveforms from explosive sources in alluvium (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 46, p. 1052

**Styron, Clarence E.**

**1979** (Casella, V. R., Farmer, B. M., Hopkins, L. C., Jenkins, P. H., Phillips, C. A., and Robinson, B.) Assessment of the radiological impact of coal utilization: Natl. Tech. Inf. Serv., MLM-2514, 98 p., 29 tables, 4 figs., 6 appendices

**Suchomel, Thomas J.**

**1976** Geology and mineralogy of the Harding pegmatite, Taos County, New Mexico: M.S. thesis, Univ. Illinois, 88 p., 4 tables, 13 figs., 1 sheet

**Suczek, Christopher A.**

*see* Dickinson and Suczek, 1979

**Suhr, G.**

*see* Kintzinger and others, 1978

**Suits, Vivian J.**

*see* Wenrich-Verbeck and Suits, 1979a,b

**Sullivan, Michael W.**

*see* Kirk and Sullivan, 1976

**Sullivan, N. M.**

**1979** (editor) Guadalupian Delaware Mountain Group of west Texas and southeast New Mexico: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., 226 p.

**Sullivan, R. M.**

**1979** Revision of the Paleogene genus *Glyptosaurus*—Reptilia Anguidae: Am. Museum Natural History, Bull., v. 163, art. 1, 72 p.

**Summers, W. K., and Associates**

*see* Herkenhoff and Associates and Summers, 1977

**Summers, W. Kelly**

**1976a** Catalog of thermal waters in New Mexico: New Mexico Bureau Mines Mineral Resources, Hydrol. Rept. 4, 80 p., 29 tables, 47 figs., 1 microfiche

**1976b** Hydrologic report on the pumping test of the Barton Water-Users Association well (9 N. 6 E., 36. 411), January 17-25, 1976: Socorro, W. K. Summers and Assoc., consult. rept. to Dennis Eng. Co., 103 p.

**1976c** Ortiz mine grant (Santa Fe County), ground-water resources, phase I, well and spring inventory: Socorro, W. K. Summers and Assoc., consult. rept., 63 p.

**1977a** Water resource and development, headquarters area, Vermejo Park Ranch, Colfax County, New Mexico: Socorro, W. K. Summers and Assoc., consult. rept. to Vermejo Park Corp., 13 p., 3 appendices

**1977b** Ground-water resources, Alto Village Deer Park Woods Subdivision (Lincoln County): Socorro, W. K. Summers and Assoc., consult. rept. to Lake-side Corp., 81 p.

**1979** Hydrothermal anomalies in New Mexico: New Mexico Bureau Mines Mineral Resources, Resource Map 1 [revised], scale 1:1,000,000



**Sumner, Ward**

1980 Geology of the Water Canyon-Jordan Canyon areas, Socorro County, New Mexico: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 135, 152 p., 1 map; M.S. thesis, New Mexico Inst. Mining and Tech.

**Sunada, Daniel K.**

see Ethridge, Ortiz, Granger, and others, 1980; Ethridge, Ortiz, Sunada, and Tyler, 1980; and Ortiz, Ethridge, and Sunada, 1980

**Sutherland, H. J.**

1980 (and Cave, S. P.) Argon gas permeability of New Mexico rock salt under hydrostatic compression: *Internat. Jour. Rock Mechanics and Mining Sci., and Geomechanics Abs.*, v. 17, no. 5, p. 281-288

**Swan, Monte M.**

see Allan and Swan, 1978

**Swanberg, Chandler A.**

1976 Geothermal studies in southwest New Mexico: New Mexico Energy Inst., Rept. 3, 69 p.; Natl. Tech. Inf. Serv., Rept. PB-295 836/1WE, 69 p.; *abs. in New Mexico Geology*, 1980, v. 2, no. 1, p. 13

1978 Chemistry, origin, and potential of geothermal resources of southwestern New Mexico: *New Mexico Geol. Soc., Guidebook 29th field conf., southwestern Arizona*, p. 349-351, 1 table, 3 figs.

1979 Chemistry of thermal and nonthermal groundwaters in the Rio Grande rift and adjacent tectonic provinces, *in Rio Grande rift—tectonics and magmatism*, R. E. Riecker, editor: *Am. Geophys. Union*, p. 279-288, 5 figs.; *abs. in International symposium on the Rio Grande rift*, Los Alamos Sci. Lab., 1978, Programs and Abs., Rept. LA-7487-C, p. 95-96

1977 (Morgan, Paul, Stoyer, C. H., and Witcher, J. C.) An appraisal study of the geothermal resources of Arizona and adjacent areas in New Mexico and Utah, and their value for desalinization and other uses: *New Mexico Energy Inst.*, Rept. 6-1, 98 p.; *Natl. Tech. Inf. Serv.*, Rept. PB-295 859/3WE, 98 p.; *abs. in New Mexico Geology*, 1980, v. 2, no. 1, p. 13

1979 (and Rybarczyk, S. M.) Potential for geothermal desalination in the southwest United States: *New Mexico Jour. Sci.*, v. 19, no. 1, p. 9-14

see Harder and others, 1980; Lohse and others, 1980a,b; Morgan, P., Swanberg, and Lohse, 1980; and Morgan, P., Swanberg, and others, 1979

**Swanson, Vernon E.**

see Cannon, H. L., and Swanson, 1979

**Sweet, W. C.**

1977 Conodont biostratigraphy of the Late Ordovician Montoya Group, Texas and New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 76

1979 Late Ordovician conodonts and biostratigraphy of the western midcontinent province, *in Conodont biostratigraphy of the Great Basin and Rocky Mountains*, C. A. Sandberg, editor: *Brigham Young Univ., Geology Studies*, v. 26, pt. 3, p. 45-86

**Swenson, David R.**

1977 Stratigraphy, tetrology, and environments of deposition of the upper part of the Pennsylvanian Madera Formation near Jemez Springs, New Mexico: M.S. thesis, Univ. New Mexico, 172 p.

**Szabo, Barney J.**

1980 (and Gottschall, W. C.) A preliminary study of uranium-thorium systematics in dissolution residues at the top of evaporites of the Salado Formation—implications to process and time, *in Uranium series disequilibrium investigations related to the WIPP site*, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-879, 21 p.

see Ludwig and others, 1977

**Tabet, David E.**

1976a Geology of the Jornada del Muerto coal field, eastern Socorro County, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 638-639

1976b Coal industry in the United States and New Mexico, *in Legislative energy report, taxes and revenues: New Mexico Legislative Energy Comm.*, v. 2, pt. II, p. 1-25

1977a Reclamation of coal surface-mined lands in New Mexico: *New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1976-77*, p. 81-85, 1 table, 1 fig.

1977b The relationship between coal and petroleum in the San Juan Basin, New Mexico (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 76-77

1979a Geology of Jornada del Muerto coal field, Socorro County, New Mexico: *New Mexico Bureau Mines Mineral Resources, Circ. 168*, 19 p., 1 table, 2 figs., 1 map

1979b Summary of the geology of the Engle coal field: *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 115*, 8 p.

1978 (and Frost, S. J.) Coal fields and mines of New Mexico: *New Mexico Bureau Mines Mineral Resources, Resource Map 10*, 3 tables, 4 figs., scale 1:1,000,000

1979a (and Frost, S. J.) Coal geology of Torreon Wash area, southeast San Juan Basin, New Mexico: *New Mexico Bureau Mines Mineral Resources, Geol. Map 49*, 3 sheets, scale 1:24,000

1979b (and Frost, S. J.) Environmental characteristics of Menefee coals in the Torreon Wash area, New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 102*, 141 p., 5 tables, 19 figs., 3 appendices

1977 (Frost, S. J., and Kottlowski, F. E.) Cost to mine coal in New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 78*, 3 p.

1979 (Frost, S. J., and Kottlowski, F. E.) Depositional environments for Menefee Formation low-sulfur coals in southwest San Juan Basin of New Mexico: 9th *Internat. Congr. Carboniferous Stratigraphy and Geology, Abs.*, p. 212; *New Mexico Geology*, v. 1, no. 4, p. 61

1976 (and others) Analysis of Landsat B imagery as a tool for evaluating, developing, and managing the natural resources of New Mexico: *New Mexico Bureau Mines Mineral Resources, Open-file Rept. 76*, 111 p., 9 tables, 24 figs., 1 sheet, 5 appendices

see Frost and others, 1980; and Kottlowski, Tabet, and Frost, 1980

**Taggart, Joseph E.**

1976 Harding pegmatite—outdoor museum and historical site: *New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1975-76*, p. 44-46, 5 figs.

1979 (and Foord, G.) A review of rare mineral



- species from the Hansonburg mining district, Bingham, New Mexico (abs.): Univ. New Mexico, New Mexico Minerals Symp., p. 8
- 1976** (and Grigsby, C. O.) An occurrence of multiple Japan-law quartz twins: *Mineral. Record*, v. 7, no. 1, p. 34-35
- 1977** (and Renault, J. R.) Mineralogical analyses of cuttings from Sandia WIPP drill hole #9: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 70, 26 p.
- Talley, D. A.**  
see Matheny, M. L., and Talley, 1978
- Tang, Saihay**  
**1978** Three-dimensional crustal-velocity model, beneath the Socorro, New Mexico, area from inversion of relative travel-time residuals: *New Mexico Inst. Mining and Tech., Geophysics Open-file Rept.* 23, 40 p.
- Tanzi, John D.**  
see Dolphin and others, 1978
- Tasch, Paul**  
**1978** Clam shrimps, in *Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico*: Brigham Young Univ., *Geology Studies*, v. 25, no. 2, p. 61-65, 2 tables, 2 figs.  
see Ash, Dean, and others, 1978
- Taylor, Bruce**  
**1980** (Roy, R. F., and Hoffer, J. M.) Hueco Tanks—an initial evaluation of a potential geothermal area near El Paso, Texas: *Geothermal Resources Coun., Trans.*, v. 4, September, p. 253-256, 1 table, 3 figs.
- Taylor, D. W.**  
**1980** Late Cenozoic freshwater mollusca of New Mexico—an annotated bibliography: *New Mexico Bureau Mines Mineral Resources, Open-file Rept.* 124, 51 p.
- Taylor, Louis H.**  
**1977** Geochronology of Torrejonian sediments, Nacimiento Formation, San Juan Basin, New Mexico: M.S. thesis, Univ. Arizona, 93 p.  
**1980** (and Butler, R. F.) Magnetic-polarity stratigraphy of Torrejonian sediments, Nacimiento Formation, San Juan Basin, New Mexico: *Am. Jour. Sci.*, v. 280, no. 2, p. 97-115  
see Butler, R. F., and Taylor, 1978
- Taylor, Robert G.**  
**1978** (Russell, T. W., and Foster, Mat) Pollution studies—Ogallala aquifer (abs.): *New Mexico Jour. Sci.*, v. 18, no. 2, p. 37
- Technology Application Center, University of New Mexico**  
**1978** Soil erosion rates in New Mexico: *New Mexico Natural Resources Dept., Soil and Water Conserv. Div.*, scale 1:1,000,000
- Tennyson, J.**  
see Phinney and others, 1978
- Tessendorf, Timothy N.**  
**1980** Redistributed orebodies of Poison Canyon, sec. 18 and 19, T. 13 N., R. 9 W., McKinley County, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: *New Mexico Bureau Mines Mineral Resources, Mem.* 38, p. 226-229, 1 fig.; *abs. in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program*, p. 20; *Am. Assoc. Petroleum Geologists, Bull.*, v. 63, no. 4, p. 694-695
- Tester, Jefferson W.**  
**1979** (and Albright, J. N.) Hot dry rock energy extraction field test—75 days of operation of a prototype reservoir at Fenton Hill, segment 2 of phase I: *Los Alamos Sci. Lab.*, Rept. 7771, 104 p.  
**1979** (Morris, G. E., Cumming, R. G., and Bivins, R. L.) Electricity from hot dry rock geothermal energy—technical and economic issues: *Natl. Tech. Inf. Serv.*, Rept. LA-7603-MS, 27 p.; *abs. in New Mexico Geology, 1980*, v. 2, no. 1, p. 13  
see Duffield and Tester, 1978; Holley and others, 1978; Murphy, H. D., and others, 1978; Murphy, H. D., and Tester, 1979; Pettitt and Tester, 1978a,b; and Sibbitt and others, 1978, 1979
- Texas Bureau of Economic Geology**  
**1976** Hobbs sheet: Univ. Texas (Austin), Bureau Econ. Geology, *Geologic Atlas Texas*, 5 p., scale 1:250,000  
**1978** Clovis sheet: Univ. Texas (Austin), Bureau Econ. Geology, *Geologic Atlas Texas*, scale 1:250,000
- Texas Instruments**  
**1978** Aerial radiometric and magnetic reconnaissance survey of portions of Arizona—New Mexico—final report: U.S. Dept. Energy, Rept. GJBX-23-79  
**1979a** Aerial radiometric and magnetic reconnaissance survey of portions of Arizona, Idaho, Montana, New Mexico, South Dakota, and Washington—final report: U.S. Dept. Energy, Rept. GJBX-126-79  
**1979b** Aerial radiometric and magnetic reconnaissance survey of portions of New Mexico, Oklahoma, and Texas, Dalhart quadrangle—final report: U.S. Dept. Energy, Rept. GJBX-46-80
- Tezak, Margaret A.**  
**1978a** Ute Dome Dakota (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 543-545, 4 figs.  
**1978b** Ute Dome Paradox (gas), in *Oil and gas fields of the Four Corners area*, J. E. Fassett and others, editors: *Four Corners Geol. Soc.*, p. 546-547, 4 figs.
- Thill, R. E.**  
see Roegiers and Thill, 1976
- Thode, Edward F.**  
see Gunaji, Thode, and others, 1978
- Thomaidis, N. D.**  
see Fassett, Thomaidis, and Matheny, 1978
- Thomas, D. M., Jr.**  
see Beach and Thomas, 1978
- Thomas, J. H.**  
**1978** (Marshall, P. D., and Douglas, A.) Rayleigh-wave amplitudes from earthquakes in the range 0-150°: *Royal Astron. Soc., Geophys. Jour.*, v. 53, no. 2, p. 191-200, 2 tables, 4 figs.
- Thomas, R. W.**  
see Melancon and others, 1979
- Thomas, W. M.**  
see Dollase and Thomas, 1978
- Thompson, D. T.**  
**1980** Geophysical experiments at Mariano Lake uranium orebody, in *Geology and mineral technology of the Grants uranium region 1979*, C. A. Rautman, compiler: *New Mexico Bureau Mines Mineral Resources, Mem.* 38, p. 185-194, 15 figs.; *abs. in Grants*

- uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 20; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 695
- Thompson, G.**  
see McGetchin, Burke, and others, 1979
- Thompson, George A.**  
see Cape and others, 1980
- Thompson, John B.**  
see Jaksha, Locke, and others, 1977, 1978
- Thompson, K. F. M.**  
1980 The origin of natural gas, San Juan Basin, New Mexico (abs.): 26th Internat. Geol. Congr., Abs., v. 2, p. 798
- Thompson, Robert S.**  
1980 (Van Devender, T. R., Martin, P. S., and Foppe, T.) Shasta ground sloth (*Nothrotheriops shastense* Hoffstetter) at Shelter Cave, New Mexico—environment, diet, and extinction: Quaternary Research, v. 14, no. 3, p. 360–376
- Thompson, Sam, III**  
1976 Tectonic and igneous effects on petroleum accumulations in southwestern New Mexico, in Tectonics and mineral resources of southwestern North America, L. A. Woodward and S. A. Northrop, editors: New Mexico Geol. Soc., Spec. Pub. 6, p. 122–126, 1 fig.  
1977a Subsurface geology of the KCM No. 1 Forest Federal well, Hidalgo County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 77–78  
1977b (compiler) Geology, petroleum source rocks, and thermal metamorphism in KCM No. 1 Forest Federal well, Hidalgo County, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 152, 62 p., 13 tables, 19 figs.  
1977c Subsurface geology and the petroleum-exploration significance, in Geology, petroleum source rocks, and thermal metamorphism in KCM No. 1 Forest Federal well, Hidalgo County, New Mexico, S. Thompson, III, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 152, p. 5–23, 1 table, 6 figs.  
1978 The Fra Cristobal Range from Mitchell Point exit (Stop 58), in Guidebook to Rio Grande rift in New Mexico and Colorado, J. W. Hawley, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 163, p. 93–96, 2 figs.  
1980 Pedregosa Basin's main exploration target is Pennsylvanian dolostone: Oil and Gas Jour., v. 78, no. 42, p. 202–215  
1977 (LeMone, D. V., and Simpson, R. D.) Preliminary considerations of the Permian stratigraphic nomenclature of southwestern New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 78  
1978 (Tovar R., J. C.; and Conley, J. N.) Oil and gas exploration wells in the Pedregosa Basin: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 331–342, 4 tables, 3 figs.  
1980 (Tovar R., J. C.; and Conley, J. N.) Oil and gas exploration wells in Pedregosa Basin (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 58; Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 3, p. 450; New Mexico Geology, v. 2, no. 4, p. 63
- see Armstrong, A. K., Kottlowski, and others, 1980; Ewing, R. G., and Thompson, 1977; Greenwood and others, 1977; Jacka and Thompson, 1980; Kottlowski and Thompson, 1979, 1980; LeMone, Simpson, and Thompson, 1978; Opiel and others, 1977; and Simpson, R. D., and others, 1978a,b
- Thompson, Tommy B.**  
1980 (Giles, D. L., and others) Igneous origin of the orbicular rocks of the Sandia Mountains, New Mexico—discussion and reply: Geol. Soc. America, Bull., v. 91, no. 4, pt. 1, p. 245–247
- Thorman, Charles H.**  
1977 Geologic map of the Coyote Peak and Brockman quadrangles, Hidalgo and Grant Counties, New Mexico (abs.): U.S. Geol. Survey, Misc. Field Studies Map MF-924, scale 1:24,000 [1978]  
1978a (and Drewes, Harald) Cretaceous–early Tertiary history of the northern Pyramid Mountains, southwestern New Mexico: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 215–218, 1 fig.  
1978b (and Drewes, Harald) Geologic map of Gary and Lordsburg quadrangles, Hidalgo County, New Mexico: U.S. Geol. Survey, Misc. Inv. Ser., Map I-1151, scale 1:24,000  
1979a (and Drewes, Harald) Geologic map of parts of the Grandmother Mountain East and Grandmother Mountain West quadrangles, Luna County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1088, scale 1:24,000  
1979b (and Drewes, Harald) Geologic map of the Saltys quadrangle, Grant County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1137, scale 1:24,000  
1980 (and Drewes, Harald) Geologic map of the Victorio Mountains, Luna County, southwestern New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1175, scale 1:24,000  
see Drewes and Thorman, 1978, 1980a,b
- Thornton, C. P.**  
see Naert and others, 1980
- Thorsen, W. G.**  
1977 Wilson Deep field, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 216–217, 1 table, 1 fig.
- Threlkeld, Charles N.**  
see Leventhal and Threlkeld, 1978
- Tidwell, William D.**  
1980 (and Ash, S. R.) Preliminary report on a flora in the Red Tanks Member of the Madera Formation, central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 306  
1980 (Bunderson, Eileen, and Parker, L. R.) Petrified palm bases from the Upper Cretaceous Fruitland Formation, San Juan Basin, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 306  
see Ash and Tidwell, 1976
- Tilton, James G.**  
1976 Gas from coal deposits, in Natural gas from unconventional geologic sources: Energy Research and Develop. Adm., Rept. FE-227-1, p. 206–229, 7 tables, 9 figs.

**Timmer, Robert S.**

1976 Geology and sedimentary copper deposits in the western part of the Jarosa and Seven Springs quadrangles, Rio Arriba and Sandoval Counties, New Mexico: M.S. thesis, Univ. New Mexico, 151 p.  
see Woodward and Timmer, 1979

**Tinsley, Mary**

see Schufle, Baca, and others, 1976

**Tipton, Steven**

see Stanley and Tipton, 1977a,b

**Titman, P. S.**

see McCaslin and Titman, 1977

**Titus, Frank B.**

1980 Ground water in the Sandia and northern Manzano Mountains, New Mexico: New Mexico Bureau Mines Mineral Resources, Hydro. Rept. 5, 66 p., 3 tables, 22 figs.

**Todd, V. R.**

see Armstrong, A. K., Silberman, and others, 1978; and Hoggatt and others, 1977

**Tooker, Edwin W.**

1978 Proposed plate tectonic setting for metal provinces in the conterminous United States (abs.): Internat. Assoc. Genesis Ore Deposits, 5th symp., Program and Abs., p. 191

**Toomey, Donald F.**

1980 History of a Late Carboniferous phylloid algal bank complex in northeastern New Mexico: *Lethaia*, v. 13, no. 3, p. 249-267

1977a (and Cys, J. M.) Rock/biotic relationships of the Permian Tansill-Capitan facies exposed on the north side of the entrance to Dark Canyon, Guadalupe Mountains, southeastern New Mexico: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 1, p. 133-150

1977b (and Cys, J. M.) Spirorbid/algal stromatolites, a probable marginal marine occurrence from the lower Permian of New Mexico, U.S.A.: *Neues Jahrb. Geologie u. Paläontologie, Monatsh.*, no. 6, p. 331-342

1979 (and Cys, J. M.) Community succession in small bioherms of algae and sponges in the Lower Permian of New Mexico: *Lethaia*, v. 12, no. 1, p. 65-74

1977 (and Wilson, J. L.) Stop C-1, Yucca Mound, in *Geology of the Sacramento Mountains, Otero County, New Mexico*, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 167-168, 1 fig.

1977a (Wilson, J. L., and Rezak, Richard) Evolution of Yucca Mound Complex, Late Pennsylvanian phylloid-algal buildup, Sacramento Mountains, New Mexico: *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 12, p. 2115-2133, 15 figs.

1977b (Wilson, J. L., and Rezak, Richard) Growth history of a Late Pennsylvanian phylloid algal organic buildup, northern Sacramento Mountains, New Mexico, in *Geology of the Sacramento Mountains, Otero County, New Mexico*, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 9-26, 10 figs.

**Toppozada, Tousson R.**

1976 (and Sanford, A. R.) Crustal structure in central New Mexico interpreted from the Gasbuggy ex-

ploration: *Seismol. Soc. America, Bull.*, v. 66, no. 3, p. 877-886, 3 tables, 6 figs.

see Sanford, Toppozada, and others, 1976

**Torres, B. W.**

see Balestri and others, 1979

**Tourtlot, E. B.**

1976 (and Vine, J. D.) Copper deposits in sedimentary and volcanogenic rocks: U.S. Geol. Survey, Prof. Paper 907-C, p. C1-C34

**Tovar R., Jorge C.**

see Thompson, Sam, III, Tovar R., and Conley, 1978, 1980

**Towle, James N.**

1978 Current channeling and geomagnetic induction in the Rio Grande rift, *abs. in International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C*, p. 96

1979 Interpretation of local differences in the regional geomagnetic-variation field across the central Rio Grande rift (abs.): *Am. Geophys. Union (EOS), Trans.*, v. 60, no. 18, p. 242-243

1980a Polarization of bay-type geomagnetic disturbances in the Rio Grande rift, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-377, 69 p.

1980b New evidence for magmatic intrusion beneath the Rio Grande rift, New Mexico: *Geol. Soc. America, Bull.*, v. 91, no. 10, pt. 1, p. 626-630, 4 figs.

**Townsend, K. K.**

1979 Ground and surface water in New Mexico—are they protected against uranium mining and milling, in *U.S. energy policy—errors of the past, proposals for the future*, W. J. Mead, editor: Cambridge, Ballinger Pub. Co., p. 239-260; *Sel. Water Resources Abs.*, v. 12, no. 16, p. 72; *Natural Resources Jour.*, 1978, v. 18, no. 4, p. 941-962

**Towse, Donald F.**

1980 Evolution and stress-history of low-permeability Upper Cretaceous gas reservoirs, Rocky Mountains (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 64, no. 5, p. 794

**Toy, T. J.**

1979 (and Munson, B. E.) Climatic appraisal maps of the rehabilitation potential of strippable coal lands in the Four Corners area, Arizona, Colorado, New Mexico, and Utah: U.S. Geol. Survey, Misc. Field Studies Map MF-1098, 2 sheets, scale 1:1,000,000

**Trainer, Frank W.**

1978 Geohydrologic data from the Jemez Mountains and vicinity, north-central New Mexico: *Natl. Tech. Inf. Serv., Rept. PB-284-221*, 152 p.; U.S. Geol. Survey, Water-resources Inv. 77-131, 152 p.; *abs. in New Mexico Geology*, v. 1, no. 1, p. 16

1979 (and Lyford, F. P.) Geothermal hydrology in the Rio Grande rift, north-central New Mexico: *New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe*, p. 299-306, 3 tables, 3 figs.

**Trauger, Frederick D.**

see Lavery and Trauger, 1977

**Treiber, J. A.**

see Dimitrijevic and others, 1976

**Treimain, Allan H.**

1977 Precambrian geology of the Ojo Caliente quadrangle, Rio Arriba and Taos Counties, New Mexico: M.S. thesis, Stanford Univ., 93 p.

1978 A hypabyssal granitic intrusion of Precam-

- brian age, Ojo Caliente quadrangle, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 5, p. 240
- Trevena, Arthur S.**  
 1977 Determining fluvial channel patterns from stratification style—a Triassic example from the Colorado Plateau: Univ. Wyoming, Contrib. in Geology, v. 16, no. 1, p. 45-53
- 1978a (and Nash, W. P.) Provenance of the Chuska Sandstone—feldspar chemistry, paleocurrents, and petrography (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 3, p. 151
- 1978b (and Nash, W. P.) Provenance and correlation of some mid-Tertiary (?) eolian sandstone units, New Mexico and Arizona (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 5, p. 240
- Tschudy, Robert H.**  
 1976 Palynology of Crevasse Canyon and Meneff Formations of San Juan Basin, New Mexico: New Mexico Bureau Mines Mineral Resources, Circ. 154, p. 48-55, 5 figs.
- 1980 Normapolles pollen from *Aquilapollenites* province, western United States: New Mexico Bureau Mines Mineral Resources, Circ. 170, 14 p., 1 table, 3 figs.
- Tsentas, Costas**  
 1980 (and Lucas, S. G.) Position of the Paleocene-Eocene boundary in the south-central San Juan Basin, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 538
- Tully, Tony**  
 see Jacka, Barone, and others, 1980
- Turekian, K. K.**  
 see Nozaki, DeMaster, Benninger, and others, 1977; and Nozaki, DeMaster, Lewis, and Turekian, 1978
- Turmelle, John M.**  
 see Owen, Walters, Depetro, and Turmelle, 1978
- Turner, Dennis L.**  
 1979 Geology and economic geology of the Juniper Hills-Sycamore Creek area, Reading Mountain quadrangle, Grant County, New Mexico: M.S. thesis, Colorado School Mines
- 1976 (and Forbes, R. B.) K-Ar studies in two deep basement drill holes—a new geologic estimate of argon blocking temperature of biotite (abs.): Am. Geophys. Union (EOS), Trans., v. 57, no. 4, p. 353  
 see Brookins, Forbes, and others, 1977
- Turner, William M.**  
 1978 (and Kues, Georgiana) Hot dry rock reviewed: Geotimes, v. 23, no. 7, p. 19
- Turner-Peterson, C. E.**  
 1980 Tabular uranium ore in Poison Canyon area, Morrison Formation, San Juan Basin, and application of lacustrine-humate model (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 795
- 1980 (and Gundersen, L. C.) Sedimentology of Westwater Canyon Member, Morrison Formation, southern San Juan Basin (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 795-796
- 1980 (and others) Fluvial-lacustrine sequences in the Upper Jurassic Morrison Formation and the relationship of facies to tabular uranium ore deposits in the Poison Canyon area, Grants mineral belt, New Mexico, in Uranium in sedimentary rocks, C. E. Turner-Peterson, editor: Soc. Econ. Paleontologists and Mineralogists, Rocky Mtn. Sec., p. 177-211
- Turney, W. F., and Associates**  
 1976 Geology and hydrology, in USBR-NTUA water study, P.L. 92-199: Turney and Assoc., consult. rept. to Navajo Tribal Authority and U.S. Bureau Reclamation, pt. 10, p. 104-114
- Tweto, Ogden**  
 1979 The Rio Grande rift system in Colorado, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 33-56, 4 figs.
- Tyler, Noel**  
 see Ethridge, Ortiz, Sunada, and Tyler, 1980
- Tyrrell, Willis W., Jr.**  
 1978 (Lokke, D. H., Sanderson, G. A., and Ver-ville, G. J.) Late Guadalupian correlations, Permian reef complex, west Texas and New Mexico (abs.), in Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 84-85, 1 fig.
- U.S. Bureau of Land Management**  
 1976 State of New Mexico, nominated areas for coal leasing: U.S. Bureau Land Management, New Mexico Office, scale 1:500,000
- U.S. Bureau of Mines**  
 1976 Mineral production in New Mexico [1974 and 1975]: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1975-76, p. 47
- 1977 Mineral production in New Mexico [1975 and 1976]: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1976-77, p. 87
- 1979 Mineral production in New Mexico [1976 and 1977]: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1977-78, p. 61
- 1980 Nonfuel mineral production in New Mexico [1979]: New Mexico Geology, v. 2, no. 2, p. 32, 1 table
- U.S. Bureau of Reclamation**  
 1976a New Mexico water resources assessment for planning purposes: U.S. Bureau Reclamation, New Mexico Interstate Stream Comm., and New Mexico State Engineer, 218 p., 31 figs.
- 1976b Ground water, in Final environmental statement—Proposed Western Gasification Project and expansion of Navajo mine by Utah International Inc., San Juan County, New Mexico: U.S. Bureau Reclamation, INT FES 76-2, v. 1, p. 2.32, 2.37-2.39
- 1976c Final environmental statement—Proposed modifications to the Four Corners Power Plant and Navajo mine (San Juan County), New Mexico: U.S. Bureau Reclamation, INT FES 76-36, v. 1, p. 2.56-2.57
- 1976d Ground water, in Draft environmental statement, proposed expansion of the San Juan Power Plant, San Juan County, New Mexico: U.S. Bureau Reclamation, p. 2-53
- 1976e Resource and potential reclamation evaluation—Bisti West study site—Bisti coal field: U.S. Dept. Interior, Bureau Land Management, EMRIA Rept. 5, 108 p.
- 1977 Technical memorandum, state regional futures and problem lists (activity 2, phase II) 1975 national assessment—Rio Grande region—1975 water

assessment: U.S. Bureau Reclamation, Interior Task Force, 267 p., 9 figs.

**U.S. Congress, Senate Subcommittee on Energy Resources and Materials Production**

**1980** Coal leases on BLM lands in New Mexico: U.S. Govt. Printing Office, Rept. 96-66, 211 p.

**U.S. Department of Agriculture**

**1976** Final environments statement, geothermal leasing, Santa Fe National Forest: U.S. Dept. Agriculture, 165 p., 3 figs.

**U.S. Department of Energy**

**1979** Use of brackish ground water resources for regional energy center development, Tularosa Basin, New Mexico (abs.): New Mexico Geology, v. 1, no. 2, p. 31

**U.S. Department of the Interior**

**1977** Hydrology and water supply, *in* Resource and potential reclamation evaluation, Bisti West study site, Bisti coal field: U.S. Dept. Interior, EMRIA Rept. 5-1976, p. 69-80, appendix F, 17 p.

**U.S. Geological Survey**

**1976a** Land use and land cover and associated maps for Carlsbad, New Mexico, Texas: U.S. Geol. Survey, Open-file Rept. 76-26, 5 sheets, scale 1:250,000

**1976b** Aeromagnetic map of an area north of Abiquiu, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-503, scale 1:62,500

**1976c** Aeromagnetic map of Wheeler Peak and vicinity, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-504, scale 1:62,500

**1976d** Aeromagnetic map of Carson and vicinity, New Mexico: U.S. Geol. Survey, Open-file Rept. 76-686, scale 1:62,500

**1976e** Residual magnetic intensity map of central New Mexico: U.S. Geol. Survey, Open-file Rept. 76-806, scale 1:250,000

**1976f** Water resources data for New Mexico—pt. 1, surface water records, report year 1974: U.S. Geol. Survey, ann. water-data rept.

**1976g** Water resources data for New Mexico—pt. 2, water quality records, report year 1974: U.S. Geol. Survey, ann. water-data rept., p. 258-289

**1976h** Geologic and water-supply reports and maps, New Mexico, report year 1975: U.S. Govt. Printing Office, p. 22-29, 36-37

**1976i** Water resources data for New Mexico, water year 1975: U.S. Geol. Survey, Water-data Rept. NM-75-1, p. 530-598

**1976j** Hydrologic unit map 1974, State of New Mexico: U.S. Geol. Survey, map, scale 1:500,000

**1977a** Ground water levels in the United States—pt. 6, southwestern United States, report year 1971-74: U.S. Geol. Survey, Water-supply Paper 2162, p. 66-86

**1977b** Water resources data for New Mexico—water year 1975: Natl. Tech. Inf. Serv., Water-resources Data Rept. PB-263 548/AS, 616 p.

**1977c** Techniques and data requirements for estimating the water availability on the Mescalero Apache Indian Reservation, Otero County, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-757, 37 p., 2 sheets

**1977d** A proposal for studies of the water resources of the Mescalero Apache Indian Reservation, Otero

County, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-758, 17 p., 1 fig., 3 sheets

**1977e** Water resources data for New Mexico—water year 1976: Natl. Tech. Inf. Serv. PB-277 922, 666 p.

**1978** Progress report on Black Mesa monitoring program, 1977: U.S. Geol. Survey, Open-file Rept. 78-459, 38 p.

**1979a** Land use and land cover and associated maps for Gallup, New Mexico, Arizona, lat. 35° to 36°, long. 108° to 110°: U.S. Geol. Survey, Open-file Rept. 78-277, 5 sheets, scale 1:250,000

**1979b** Drill-hole location maps, Carlsbad mining district, Eddy and Lea Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-251, 4 sheets, scale 1:31,680

**1979c** Land use and land cover and associated maps for Shiprock, New Mexico, Arizona, Colorado, Utah, lat. 36° to 37°, long. 108° to 110°: U.S. Geol. Survey, Open-file Rept. 79-260, 5 sheets, scale 1:250,000

**1979d** Aeromagnetic map of the north and west parts of the Silver City 1° by 2° quadrangle, New Mexico and Arizona: U.S. Geol. Survey, Open-file Rept. 79-1452, 5 sheets, scale 1:62,500

**1979e** Land use and land cover and associated maps for Albuquerque, NW, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1549, 2 sheets, scale 1:100,000 [1980]

**1979f** Preliminary map showing distribution of potash resources, Carlsbad mining district, Eddy and Lea Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1579, scale 1:62,500

**1979g** Aeromagnetic map of the Malpais area, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1644, scale 1:250,000

**1979h** Water resources data for New Mexico—water year 1978: Natl. Tech. Inf. Serv., Water-resources Data Rept. PB-80 160 864, 688 p.

**1979i** Early Tertiary flora found in New Mexico: U.S. Geol. Survey, Prof. Paper 1150, p. 217

**1980a** Land use and land cover, 1974, Carlsbad, New Mexico, Texas: U.S. Geol. Survey, Land Use and Land Cover Map L-176, scale 1:250,000

**1980b** Land use and land cover, 1976, Gallup, New Mexico, Arizona: U.S. Geol. Survey, Land Use and Land Cover Map L-184, scale 1:250,000

**1980c** Land use and land cover, 1971-76, Shiprock, New Mexico, Arizona, Colorado, Utah: U.S. Geol. Survey, Land Use and Land Cover Map L-195, scale 1:250,000

**1980d** Land use and land cover and associated maps for Hobbs, Texas, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-259, 2 sheets, scale 1:250,000

**1980e** Land use and land cover and associated maps for Clovis, Texas, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-260, 2 sheets, scale 1:250,000

**1980f** Land use and land cover and associated maps for Brownfield, Texas, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-261, 2 sheets, scale 1:250,000

**1980g** Land use and land cover and associated maps for Tucumcari, New Mexico, Texas: U.S. Geol. Survey, Open-file Rept. 80-264, 2 sheets, scale 1:250,000



- 1980h** Aeromagnetic map of northeast Arizona and northwest New Mexico: U.S. Geol. Survey, Open-file Rept. 80-614, 4 sheets, scale 1:250,000
- 1980i** Aeromagnetic map of the Pecos area, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-671, 4 sheets, scale 1:62,500
- 1980j** Aeromagnetic map of the Buck Robinson Peak area, Arizona and New Mexico: U.S. Geol. Survey, Open-file Rept. 80-995, scale 1:62,500
- 1980k** Aeromagnetic map of the Little Dog-Pup Canyon area, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-997, scale 1:62,500
- 1980l** Aeromagnetic map of the southern part of the Silver City 1° by 2° quadrangle, Arizona and New Mexico: U.S. Geol. Survey, Open-file Rept. 80-1128, 4 sheets, scale 1:62,500
- 1980m** Aeromagnetic and airborne radioactivity maps and profile in New Mexico published or open-filed by the U.S. Geological Survey: New Mexico Geology, v. 2, no. 4, p. 55-58, 2 figs.
- 1980** (U.S. Bureau of Mines, and New Mexico Bureau of Mines and Mineral Resources) Mineral resources of the Pecos Wilderness and adjacent areas, Santa Fe, San Miguel, Mora, Rio Arriba, and Taos Counties: U.S. Geol. Survey, Open-file Rept. 80-382, 117 p., 6 sheets, scale 1:48,000  
see Sandia Laboratories, 1979a-d
- U.S. Soil Conservation Service**
- 1976** The small watershed program in New Mexico: U.S. Dept. Agriculture, Soil Conserv. Serv., ann. rept.
- Uphoff, Thomas L.**
- 1977** Subsurface structural correlations—Rio Grande valley, Doña Ana County, New Mexico, and El Paso County, Texas (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 79
- 1978** Subsurface stratigraphy and structure of the Mesilla and Hueco Bolsons, El Paso region, Texas and New Mexico: M.S. thesis, Univ. Texas (El Paso)
- 1979** Late Cretaceous—Paleogene tectonic activity of the El Paso region, Texas and New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 6, p. 304
- Van Alstine, Ralph E.**
- 1976** Continental rifts and lineaments associated with major fluor spar districts: Econ. Geology, v. 71, no. 6, p. 977-987, 2 figs.
- Van Cleave, P. F.**
- 1976** Radon in Carlsbad Caverns and caves of the surrounding area, in National cave management symposium: Albuquerque, Speleobooks, Proc., p. 120
- Van de Pol, R. M.**
- 1977** (Wierenga, P. J., and Nielsen, D. R.) Solute movement in a field soil: Soil Sci. Soc. America, Jour., v. 41, no. 1, p. 10-13, 5 figs.
- Van Devender, Thomas R.**
- 1977** (and Everitt, B. L.) The latest Pleistocene and Recent vegetation of the Bishop's Cap, south-central New Mexico: Southwestern Naturalist, v. 22, no. 3, p. 337-352
- 1977** (and Worthington, R. D.) The Herpetofauna of Howell's Ridge Cave and the paleoecology of the northwestern Chihuahuan Desert, in Symposium on the biological resources of the Chihuahuan Desert region, United States and Mexico: U.S. Natl. Park Serv., Trans. Proc. Ser. 3, p. 85-106  
see Betancourt and Van Devender, 1980; Moodie and Van Devender, 1979; and Thompson, R. S., and others, 1980
- Vaninetti, G. E.**
- 1979** Coal exploration concepts and practices in the western United States, in Coal exploration, G. D. Argall Jr., editor: 2nd Internat. Coal Explor. Symp., Proc., v. 2, p. 132-194
- Van Sant, Joel N.**
- 1977** New Mexico, in Mining and mineral operations in the Rocky Mountain states—a visitor guide: U.S. Govt. Printing Office, p. 58-65
- Van Trump, G., Jr.**  
see Mendes and Van Trump, 1979
- Van Wagoner, John C.**
- 1977a** Carbonate and siliciclastic facies of the Gobbler Formation, in Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 57-70, 1 table, 4 figs.
- 1977b** Guide locality B-1—west end of Horse Ridge, in Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 139-156, 7 figs.
- 1978** Pennsylvanian carbonate and siliciclastic depositional patterns and sequences across Sacramento shelf, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 569
- Varnado, S. G.**  
see Newsom and others, 1978
- Varnell, R. J.**
- 1976** Geology of the Hat Top Mountain quadrangle, Grant and Luna Counties, New Mexico: M.S. thesis, Univ. Texas (El Paso)
- 1976** (Nials, F. L., and Corbitt, L. L.) Laramide thrust faulting in the Klondike Hills, northern Cedar Mountains, Luna County, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 5, p. 642  
see Corbitt and others, 1977, 1978
- Varnes, Katherine L.**
- 1979** Index to localities and sources, in Paleotectonic investigations of the Mississippian System in the United States—pt. 2, interpretive summary and special features of the Mississippian System, L. C. Craig and C. W. Connor, compilers: U.S. Geol. Survey, Prof. Paper 1010-W, p. 461-546  
see Coury and others, 1978; Craig, L. C., and Varnes, 1979; Dolton, Coury, and others, 1980; and Mapel and others, 1979
- Vassiliou, Andreas H.**
- 1980a** The form of occurrence of uranium in deposits associated with organic matter: Econ. Geology, v. 75, no. 4, p. 609-617, 1 table, 8 figs.
- 1980b** The form of occurrence of uranium in urano-organic deposits (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 2, p. 88
- Vaughan, F. R.**
- 1978** The origin and diagenesis of the Arroyo Peñasco collapse breccia: M.S. thesis, State Univ. New York (Stony Brook)
- 1976** (and Meyers, W. J.) Diagenesis and origin of the Arroyo Peñasco collapse breccia, north-central

- New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1152-1153
- Vazzana, Michael E.**  
 1980 Stratigraphy, sedimentary petrology, and basin evolution of the Abiquiu Formation, north-central New Mexico: M.S. thesis, Univ. New Mexico, 115 p.
- 1980 (and Ingersoll, R. V.) Stratigraphy, sedimentary petrology and basin evolution of the Abiquiu Formation (Oligo-Miocene), north-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 307
- Veal, Harry K.**  
 1977 (editor) Exploration frontiers of the central and southern Rockies: Rocky Mtn. Assoc. Geol., Guidebook 1977 field conf., 498 p.
- Veldhuluis, J. H.**  
 1980 (and Keller, G. R.) A geophysical and geologic analysis of Cenozoic basins in Trans-Pecos Texas and southern New Mexico (abs.): Am Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 58
- Veneklasen, G. O.**  
 1977 Geohydrologic report, Lamphere-Rio Villa Subdivision, Agua Fria Road, Santa Fe County, New Mexico: consult. rept. to James Lamphere, 11 p.
- Verville, George J.**  
 see Tyrell and others, 1978
- Vidale, R. J.**  
 see Balagna, Beddoe, and others, 1978
- Vine, James D.**  
 1976 Breccia pipes and burial metamorphism in Permian evaporites of the Delaware Basin, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 6, p. 1154  
 see Tourtelot and Vine, 1976
- Vizcaino, H. P.**  
 1977 (and O'Neill, A. J.) Preliminary study of the uranium potential of Tertiary rocks in the central San Juan Basin, New Mexico: U.S. Energy Research and Develop. Admin., Rept. GJBX-78-77, 28 p.
- Vogel, J. E.**  
 see Kauffman and others, 1980
- Von Barga, David J.**  
 1979 The silver-antimony-mercury system and the mineralogy of the Black Hawk district, New Mexico: Ph.D. thesis, Purdue Univ., 260 p.; Dissert. Abs. Internat., 1980, v. 41, no. 1, p. 104-B
- von Seggern, David**  
 1977 Amplitude-distance relation for 20-second Rayleigh waves: Seismol. Soc. America, Bull., v. 67, no. 2, p. 405-411, 3 tables
- Wachter, Bruce G.**  
 1980 (and Ruttenbeck, Todd) Recognition and monitoring of rockfall hazards at selected National Park Service sites in Arizona, New Mexico, and Colorado (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 6, p. 307
- Wacker, Herbert J.**  
 see Roberts and others, 1976
- Wadell, James S.**  
 see Siemers, C. T., and Wadell, 1977
- Wahl, David E., Jr.**  
 1980 Mid-Tertiary volcanic geology in parts of Greenlee County, Arizona, Grant and Hidalgo Counties, New Mexico: Ph.D. thesis, Arizona State Univ., 270 p.; Dissert. Abs. Internat., v. 41, no. 4, p. 1288-B
- Wahl, R. R.**  
 see Healey and others, 1978
- Walker, J. R.**  
 1977 The geomorphic evolution of the southern High Plains: M.S. thesis, Baylor Univ.; Baylor Geol. Studies, 1978, Bull. 35, 29 p.
- Wallace, Terry C.**  
 see Sanford, Mott, and others, 1977; Sanford, Toppozada, and others, 1976; and Shuleski and others, 1977
- Wallis, J. R.**  
 see Landwehr and others, 1978
- Walsh, E. N.**  
 1979 Development of the Chacon Dakota Associated pool: Soc. Petroleum Engineers, 54th Ann. Fall Tech. Conf., p. 1-4
- Walters, Kenneth A.**  
 1979 The geology of the Baldy Mountain area, Colfax County, New Mexico: M.S. thesis, Northern Arizona Univ., 87 p.
- Walters, Lester J., Jr.**  
 see Owen, Walters, Kostura, and Grant, 1976; and Owen, Walters, Depetro, and Turmelle, 1978
- Walton, Anthony W.**  
 1980 (Salter, T. L., and Zetterlund, Dale) Uranium potential of southwestern New Mexico (southern Hidalgo County), including observations on crystallization history of lavas and ash tuffs and the release of uranium from them: U.S. Dept. Energy, Rept. GJBX-169-80, 114 p.
- Walvekar, Arun**  
 see Gunaji, Thode, and others, 1978
- Wangen, L. E.**  
 1978 (and Wienke, C. L.) A review of trace element studies related to coal combustion in the Four Corners area of New Mexico (abs.): Sel. Water Resources Abs., v. 11, no. 8, p. 28  
 see Dressen and others, 1978
- Wannamaker, Philip E.**  
 1980 The relation of regional resistivity structure in S.W. Utah to the tectonics of the Great Basin and Colorado Plateau (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 46, p. 941
- Ward, Roger M.**  
 1980 Determination of three-dimensional velocity anomalies within the upper crust in the vicinity of Socorro, New Mexico, using first P-arrival times from local earthquakes: Ph.D. thesis, New Mexico Inst. Mining and Tech., 136 p.  
 see Rinehart, E. J., Sanford, and Ward, 1979; Sanford, Mott, and others, 1977; Sanford, Toppozada, and others, 1976; and Shuleski and others, 1977
- Ward, Ronald W.**  
 1979 Seismologists seeking heat: Geotimes, v. 24, no. 8, p. 21-24  
 1979 (and Nation, J. B.) Reduction of 3-D reflection data acquired during COCORP surveys (abs.): Soc. Exploration Geophys., 49th Ann. Mtg., p. 84  
 1977 (and Sengupta, M. K.) Three-dimensional seismic reflection survey near Socorro, New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 58, no. 6, p. 436  
 see Sengupta and Ward, 1977

**Warner, Glenn H.**

see Foster, R. W., Gutjahr, and Warner, 1978

**Warren, A. Helene**

1979 (and Weber, R. H.) Indian and Spanish mining in the Galisteo and Hagan Basins, in *Archaeology and history of Santa Fe country*, R. V. Ingersoll, editor: New Mexico Geol. Soc., Spec. Pub. 8, p. 6-11, 3 figs.

**Warren, J. L.**

1980 Shallow land burial—experience and development at Los Alamos, in *Underground disposal of radioactive wastes*: Internat. Atomic Energy Agency, Proc. Ser. STI/PUB/528, p. 221-240

**Warren, Richard G.**

1978 Characterization of the lower crust-upper mantle of the Engle Basin, Rio Grande rift, from a petrochemical and field geologic study of basalts and their inclusions: M.S. thesis, Univ. New Mexico, 156 p.

1979 Geochemistry of lithic and single-crystal inclusions in basalt and a characterization of the upper mantle-lower crust in the Engle Basin, Rio Grande rift, New Mexico, in *Rio Grande rift—tectonics and magmatism*, R. E. Riecker, editor: Am. Geophys. Union, p. 393-415, 5 tables, 16 figs.

1978 (Kudo, A. M., and Keil, Klaus) Geochemistry of basalts and their inclusions and a characterization of the upper mantle-lower crust in the Engle Basin, Rio Grande rift, New Mexico, *abs. in International symposium on the Rio Grande rift*: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 99-100

1978 (and Nunes, H. P.) Uranium hydrogeochemical and stream sediment reconnaissance data release for the New Mexico portions of the Hobbs and Brownfield NTMS quadrangles, New Mexico/Texas: U.S. Dept. Energy, Rept. GJBX-103-78, 612 p., 3 figs., 6 pls.

see Brookins, Warren, and Kudo, 1980

**Warshaw, Charlotte M.**

1980 (and Smith, R. L.) Ferromagnesian silicates in the Bandelier Tuff (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 545

**Wasilewski, Peter J.**

1980 (and Padovani, E. R.) Magnetization in the lower crust (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 17, p. 222

**Waterbury, G. R.**

see Aamodt, Bunker, and others, 1979; and Aamodt, Waterbury, and others, 1979

**Water Resources Associates, Inc.**

1977a Geohydrology of the Angel Fire area, Colfax County, New Mexico: Water Resources Assoc., Inc., consult. rept. to Baca Grande Angel Fire Corp., 26 p.

1977b Hydrology Jemez Mountains, New Mexico: Water Resources Assoc., Inc., consult. rept. to Union Oil Co., 27 p., 3 appendices

**Water Resources Engineers, Inc.**

1976 Water quality analysis, upper Rio Grande (abs.): Sel. Water Resources Abs., v. 9, no. 22, p. 54

**Watts, Kenneth C.**

1979 (and Alminas, H. V.) Geochemistry, in *Background information to accompany folio of geologic, mineral resource, geochemical, aeromagnetic, and gravity maps of the Hillsboro and San Lorenzo quad-*

*rangles, Sierra and Grant Counties, New Mexico*: U.S. Geol. Survey, Circ. 808, 26 p.

1978 (Alminas, H. V., and Kraxberger, V. E.) Map showing areas of detrital fluorite and cassiterite and the localities of rock samples, Hillsboro and San Lorenzo quadrangles, exclusive of the Black Range Primitive Area, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-H, scale 1:48,000

1978a (Alminas, H. V., Nishi, J. M., and Crim, W. C.) Map showing anomalous tungsten and gold distribution in stream sediment concentrates, Hillsboro and San Lorenzo quadrangles, exclusive of the Black Range Primitive Area, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-I, scale 1:48,000

1978b (Alminas, H. V., Nishi, J. M., and Crim, W. C.) Map showing anomalous lead distribution in stream sediment concentrates, Hillsboro and San Lorenzo quadrangles, exclusive of the Black Range Primitive Area, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-J, scale 1:48,000

1978c (Alminas, H. V., Nishi, J. M., and Crim, W. C.) Map showing anomalous bismuth distribution in stream sediment concentrates, Hillsboro and San Lorenzo quadrangles, exclusive of the Black Range Primitive Area, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-K, scale 1:48,000

1980 (and Hassemer, J. R.) Distribution and abundance of fluorite in stream sediment concentrates, Silver City 1° by 2° quadrangle, Arizona and New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1183-C, scale 1:24,000

1979 (Hassemer, J. R., Forn, C. L., and Siems, D. F.) Discussion, statistical analysis, and listing of the spectrographic analyses of alluvial heavy mineral concentrates, Mogollon mining district, Catron County, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1682, 64 p.

1978 (Hassemer, J. R., Nishi, J. M., and Siems, D. F.) Anomaly patterns for selected metals in heavy mineral concentrates and oxalic acid residues, Dwyer quadrangle, Grant and Luna Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-1027, scale 1:31,680

1978 (Hassemer, J. R., Siems, D. F., and Nishi, J. M.) A statistical summary and listing of the spectrographic analyses of heavy mineral concentrates and conventional sieved stream-sediment samples, Silver City area, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-801, 247 p.

see Alminas and Watts, 1978; and Alminas, Watts, and others, 1978a-d

**Wauer, R. H.**

1977 (and Riskind, D. H., editors) Symposium on the biological resources of the Chihuahuan Desert region, United States and Mexico: U.S. Natl. Park Serv., Trans. Proc. Ser. 3, 658 p.

**Wawersik, W. R.**

1980 (and Hannum, D. W.) Mechanical behavior of New Mexico rock salt in triaxial compression up to 200 degrees C: Jour. Geophys. Research, v. 85, no. B2, p. 891-900

- see Costin and Wawersik, 1980
- Weare, J. H.**  
see Harvie and Weare, 1980
- Weart, Wendell D.**  
1980 (and Powers, D. W.) Geologic issues for the Waste Isolation Pilot Plant (WIPP) (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 546  
see Powers, D. W., and Weart, 1979
- Weaver, T. A.**  
1978 (Bunker, M. E., and Hansel, J. M.) Hydrogeochemical and stream sediment reconnaissance of the National Uranium Resource Evaluation Program—January–March 1978—the Rocky Mountain States of New Mexico, Colorado, Wyoming, and Montana, and the State of Alaska: Los Alamos Sci. Lab., Rept. 7544, 28 p.  
see Nunes and Weaver, 1978
- Weber, Darrell J.**  
1978 (and Lawler, G. C.) Lipid components of the coprolites, *in* Geology, paleontology, and paleoecology of a Late Triassic lake, western New Mexico: Brigham Young Univ., Geology Studies, p. 75–87, 9 tables, 6 figs.  
see Ash, Dean, and others, 1978
- Weber, J.**  
see Keller, L. F., and others, 1977
- Weber, Robert H.**  
1979a Valley of Fires—New Mexico State Park series: New Mexico Geology, v. 1, no. 2, p. 27–28, 1 fig.  
1979b Turquoise in New Mexico: New Mexico Geology, v. 1, no. 3, p. 39–40, 1 fig.  
1980a City of Rocks—New Mexico State Park series: New Mexico Geology, v. 2, no. 1, p. 10–11  
1980b Rock Hound—New Mexico State Park series: New Mexico Geology, v. 2, no. 4, p. 59–60, 3 figs.  
1980c Geology of the Ake Site, *in* The Ake Site—collection and excavation of LA13423, Catron County, New Mexico, P. H. Beckett, editor: New Mexico State Univ., CRMD Rept. 357, p. 221–238  
see Austin, G. S., and Weber, 1976; and Warren, A. H., and Weber, 1979
- Webring, Michael W.**  
see Eaton, Peterson, and Webring, 1977; and Eaton, Peterson, Webring, and Ratte, 1976
- Webster, G. D.**  
1978 Late Paleozoic echinoderm biostratigraphy of the southwestern United States (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 3, p. 152  
1979 Early and middle Mississippian crinoid faunas of western North America (abs.): 9th Internat. Congr. Carboniferous Stratigraphy and Geology, Abs., p. 228–229
- Wechsler, D. J.**  
1980 Hypocenter location capability of the LASL seismic array in northern New Mexico (abs.): Am. Geophys. Union (EOS), Trans., v. 61, no. 46, p. 1029
- Wedow, Helmuth, Jr.**  
see Ericksen and Wedow, 1976
- Weeks, J. B.**  
1978 Plan of study for the High Plains Regional Aquifer—System Analysis in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geol. Survey, Water-resources Inv. 78–70, 32 p.; Natl. Tech. Inf. Serv., Rept. PB–284 668, 32 p.  
see Gutentag and Weeks, 1980a, b
- Weiber, Paul R.**  
1978 (and Sikri, A. P.) The development of in-situ processes for energy and fuels from coals: Mining Engineering, v. 30, no. 5, p. 557–565, 6 tables, 10 figs.
- Weide, David L.**  
1979 (Mytton, J. W., and Scott, G. R.) Geologic map of the Fire Rock Well quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF–1124, scale 1:24,000  
1980 (Mytton, J. W., and Scott, G. R.) Geologic map of the Pueblo Alto Trading Post quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF–1200, scale 1:24,000  
1979 (O'Sullivan, R. B., and Heller, J. S.) Preliminary geologic map of the Fruitland quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF–1089, scale 1:24,000  
1979a (Schneider, G. B., Mytton, J. W., and Scott, G. R.) Geologic map of the Pueblo Bonito quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF–1119, scale 1:24,000  
1979b (Schneider, G. B., Mytton, J. W., and Scott, G. R.) Geologic map of the Sargent Ranch quadrangle, San Juan County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF–1120, scale 1:24,000  
1980 (Scott, G. R., and Mytton, J. W.) Geologic map of the Pueblo Pintado quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF–1219, scale 1:24,000  
see O'Sullivan, Scott, and Weide, 1979; Schneider, Weide, and others, 1979; and Schneider, Weide, and Scott, 1979
- Weidler, Mark E.**  
1978a Marcelina Dakota (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 406–407, 2 figs.  
1978b Miguel Creek Gallup (oil), *in* Oil and gas fields of the Four Corners area, J. E. Fassett and others, editors: Four Corners Geol. Soc., p. 423–424, 2 figs.
- Weidman, Charles**  
see Reiter, Simmons, and others, 1976; and Reiter, Weidman, and others, 1976
- Weimer, Becky S.**  
1979 (Amesbury, J. E., and Nichols, S. L.) Age determinations from other publications—list 3: Isochron/West, no. 25, p. 9–30
- Weinmeister, Marcus P.**  
1978 Origin of upper Bell Canyon reservoir sandstones (Guadalupian), El Mar and Paduca fields, southeast New Mexico and west Texas: M.S. thesis, Texas A and M Univ.
- Weise, James R.**  
1980 (and LeMone, D. V.) Carbonate stratigraphy of the U-Bar Formation (Aptian-Albian) of the southeastern Big Hatchet Mountains, Hidalgo County, New Mexico (abs.): Am. Assoc. Petroleum Geologists, Southern Sec., Ann. Mtg., Program, p. 60–61
- Weisner, R. C.**  
1980 (Lemons, J. F., and Coppa, L. V.) Valuation

- of potash occurrences within the nuclear Waste Isolation Pilot Plant site in southeastern New Mexico: U.S. Bureau Mines, Inf. Circ. 8814, 94 p.
- Welder, G. E.**  
 1977a Map showing the altitude and configuration of the water level in the shallow aquifer, January 1975, Roswell Basin, Chaves and Eddy Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-505, 2 sheets, scale 1:125,000  
 1977b Map showing the altitude and configuration of the water level in the shallow aquifer January 1964, Roswell Basin, Chaves and Eddy Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 77-506, 2 sheets, scale 1:125,000
- Wells, L. E.**  
 see Sanyal and others, 1979
- Wells, Stephen G.**  
 1978 (and White, W. D.) Forest-fire devegetation and hillslope erosion in small mountainous watersheds (abs): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 513-514  
 see White, W. D., and Wells, 1979
- Wenrich-Verbeek, Karen J.**  
 1977 The effectiveness of stream-sediment sampling along the Rio Ojo Caliente, New Mexico, *abs.* in Symposium on hydrogeochemical and stream-sediment reconnaissance for uranium in the United States: U.S. Dept. Energy, Rept. GJBX-77-77, p. 403-409  
 1978 The effectiveness of stream sediment sampling along the Rio Ojo Caliente, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-843, 9 p., 2 figs.  
 1979a Source for the anomalous uranium in surface waters of the Ojo Caliente area in New Mexico (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 49  
 1979b Relative uranium scavenging affects of organic matter, clays, and iron and manganese oxides (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 49-50  
 1979a (and Suits, V. J.) Chemical data and statistical analyses from a uranium hydrogeochemical survey of the Rio Ojo Caliente drainage basin, New Mexico—pt. 1, water: U.S. Geol. Survey, Open-file Rept. 79-996, 145 p.  
 1979b (and Suits, V. J.) Chemical data and statistical analyses from a uranium hydrogeochemical survey of the Rio Ojo Caliente drainage basin, New Mexico—pt. 2, stream sediments: U.S. Geol. Survey, Open-file Rept. 79-997, 128 p.  
 see Burnside and Wenrich-Verbeek, 1976
- Wentworth, D. W.**  
 1980 (Porter, D. A., and Jensen, H. N.) Geology of Crownpoint Sec. 29 uranium deposit, McKinley County, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 139-144, 7 figs.; *abs.* in Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, Program, p. 23
- Wermiel, Dan E.**  
 1978 Diagenetic history and dolomitization of Tamarora sequence (Mississippian) carbonates of the Pedregosa Basin, southeastern Arizona, southwestern New Mexico, and northern Sonora and Chihuahua, Mexico: M.S. thesis, Arizona State Univ., 156 p.  
 see Silver, B. A., and Wermiel, 1976
- West, Francis G.**  
 1976 (and Laughlin, A. W.) Spectral gamma logging in crystalline basement rocks: Geology, v. 4, no. 10, p. 617-618, 5 figs.  
 1976 (and Purtymun, W. D.) Geology of the LASL Fenton Hill site (abs.): Am. Geophys. Union (EOS), Trans., v. 57, no. 4, p. 349  
 see Aiken, Laughlin, and West, 1977, 1978; Balagna, West, and others, 1977; Charles, West, and others, 1977; Kintzinger and others, 1978; Kintzinger and West, 1976; Laughlin and West, 1976, 1977; Laughlin, West, and others, 1977; Pettitt and West, 1978; and Purtymun, Adams, and others, 1977
- West, Kenton L.**  
 1979 P-wave travel-time delays for teleseismic events recorded in the Socorro, New Mexico, area: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 28, 121 p.
- Western, Stephen K.**  
 1977 (and Aiken, C. L. V.) Residual Bouguer gravity anomaly analysis of Chihuahua and Trans-Pecos (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 2, p. 297
- Wheeler, M. L.**  
 see Purtymun, Rogers, and Wheeler, 1980
- White, C. S.**  
 1978 (Gosz, J. R., and Moore, D. I.) Impact of a ski basin on a mountain watershed—I, bacteriological water quality: Water, Air, and Soil Pollution, v. 10, no. 1, p. 71-79, 5 tables, 2 figs.; Sel. Water Resources Abs., 1979, v. 12, no. 13, p. 35  
 see Moore, D. I., and others, 1978
- White, D. L.**  
 1978a Rb-Sr isochron ages of some Precambrian plutons in south-central New Mexico: Isochron/West, no. 21, p. 8-14, 4 tables, 5 figs.; Ph.D. thesis, Miami (Ohio) Univ., 88 p.  
 1978b Precambrian Rb-Sr geochronology of the Ojita, Ladron, Magdalena, and Oscura plutons, south-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 3, p. 153  
 1979 Rb-Sr age and isotopic data of some Precambrian plutons in central New Mexico, U.S.A.: Mtn. Geologist, v. 16, no. 4, p. 131-137
- White, D. W.**  
 see Chapin, Chamberlin, Osburn, and others, 1978; and Chapin, Sanford, and others, 1979
- White, G. C.**  
 see Hakonson, White, and others, 1980
- White, Mike E.**  
 see Morain and others, 1977
- White, Natalie D.**  
 see Wilson, R. P., and White, 1976
- White, Robert R.**  
 1980 (and Dein, W. K.) Water-resources investigations of the U.S. Geological Survey, New Mexico district, fiscal year 1979: U.S. Geol. Survey, Open-file Rept. 80-408, 78 p.  
 see Wilson, C. A., White, and Roybal, 1979a,b; and Wilson, C. A., White, and others, 1978
- White, William D.**  
 1979 (and Wells, S. G.) Forest-fire devegetation and drainage basin adjustments in mountainous terrain, in Adjustments of the fluvial system, D. D.



- Rhodes, editor: 10th Ann. Geomorphology Symp., p. 199-223  
 see Wells and White, 1978
- Whyte, Michael R.**  
 1977a (and Shomaker, J. W.) A geological appraisal of the deep coals of the Menefee Formation of the San Juan Basin, New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, Suppl. Articles, p. 41-48, 4 tables, 5 figs.  
 1977b (and Shomaker, J. W.) A geologic appraisal of the deep coals of the San Juan Basin (abs.): Geol. Soc. America, Abs. with Programs, v. 9, no. 1, p. 80-81  
 see Austin, G. S., and Whyte, 1976; and Shomaker, J. W., and Whyte, 1977
- Widdicombe, Roberta E.**  
 1979 Quaternary surficial features in the Delaware Basin, Eddy and Lea Counties, New Mexico: M.S. thesis, Univ. New Mexico, 178 p.
- Widmier, J. M.**  
 see Sangree and Widmier, 1978, 1979
- Wiebmer, J. D.**  
 see Li and Wiebmer, 1978
- Wiedenmayer, Felix**  
 1980 The Permian reef complex of Texas and New Mexico: Sedimenta, v. 8, p. 113-121
- Wienke, C. L.**  
 see Purtymun, Dreesen, and Wienke, 1977; and Wangen and Wienke, 1978
- Wierenga, P. J.**  
 see Van de Pol and others, 1977
- Wilcox, R. W.**  
 1980 (Moore, M. J., and Lambert, P. W.) Revised coal-development potential for certain Federal coal lands in the Lee Ranch area, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-868, 4 p.
- Wilkening, Marvin H.**  
 see Schery and others, 1980
- Wilkins, D. W.**  
 1980 (Scott, W. B., and Kaehler, C. A.) Planning report for the southwest alluvial basins (east) regional aquifer-system analysis, parts of Colorado, New Mexico, and Texas: U.S. Geol. Survey, Open-file Rept. 80-564, 43 p.  
 see Havens and Wilkins, 1979; and Soule and Wilkins, 1979
- Wilkinson, William H.**  
 1976 Geology of the Tres Montosas-Cat Mountain area, Socorro County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 158 p., 8 tables, 26 figs., 3 sheets, appendix; New Mexico Bureau Mines Mineral Resources, Open-file Rept. 39, 169 p.
- Williams, Frank E.**  
 see Segerstrom and others, 1979
- Williams, L. M.**  
 1979 Gravity study of the Los Alamos area, New Mexico: Los Alamos Sci. Lab., Rept. LA-8154-MS, 18 p.
- Williams, R. A.**  
 see Balagna, Beddoe, and others, 1978
- Williams, S. A.**  
 1978 Mineralization at Granite Gap, Hidalgo County, New Mexico: New Mexico Geol. Soc., Guidebook 29th field conf., southeastern Arizona, p. 329-330, 1 fig.  
 1979 Rajite, naturally occurring cupric pyrotellurite, a new mineral: Mineralogical Mag., v. 43, no. 325, p. 91-92, 2 tables
- Williams, Susan**  
 1978 (and Murthy, V. R.) Genetic relationships of volcanic rock from the Taos Plateau, Rio Grande rift—Rb-Sr and Sm-Nd isotopic systematics, *abs. in* International symposium on the Rio Grande rift: Los Alamos Sci. Lab., Program and Abs., Rept. LA-7487-C, p. 100  
 1979 (and Murthy, V. R.) Sources and genetic relationships of volcanic rocks from the northern Rio Grande rift—Rb-Sr and Sm-Nd evidence (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 407
- Williamson, Charles R.**  
 1978 Depositional processes, diagenesis and reservoir properties of Permian deep-sea sandstones, Bell Canyon Formation, Texas-New Mexico: Ph.D. thesis, Univ. Texas (Austin), 276 p.; Dissert. Abs. Internat., 1979, v. 39, no. 7, p. 3206-B-3207-B  
 1979a Deep-sea deposition in density-stratified cratonic basin, Bell Canyon Formation (Permian), Delaware Basin, Texas-New Mexico (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 3, p. 553  
 1979b Deep-sea sedimentation and stratigraphic traps, Bell Canyon Formation (Permian), Delaware Basin, *in* Guadalupian Delaware Group of west Texas and southeast New Mexico, N. M. Sullivan, editor: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., p. 39-74  
 1980a Reservoir rock, source rock, and trapping mechanism of Permian basinal facies, Delaware Basin (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 64, no. 5, p. 803-804  
 1980b Sedimentology of Guadalupian deep-water clastic facies, Delaware Basin, New Mexico and Texas: New Mexico Geol. Soc., Guidebook 31st field conf., Trans-Pecos, p. 195-204, 11 figs.
- Williamson, Turner F.**  
 1978 Petrology of the lower Arroyo Peñasco (Mississippian), Taos County, New Mexico: M.S. thesis, Univ. Texas (Austin)
- Willingham, D. L.**  
 1979 Stratigraphy of the Pliocene-Pleistocene upper Santa Fe Group in the El Paso region, west Texas and south-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 11, no. 6, p. 305
- Williston, McNeil, and Associates, Inc.**  
 1979 Time domain survey of the Los Alamos region New Mexico: Natl. Tech. Inf. Serv., Rept. LA-7657-MS, 52 p.; *abs. in* New Mexico Geology, 1980, v. 2, no. 1, p. 13
- Wilshire, H. G.**  
 1977 (Padovani, E. R., Wohletz, K. H., Holloway, J. R., Cross, C., Smith, D., and Arculus, R. J.) Basalt nodule guide: Washington, D.C., The Geophys. Lab., Guidebook, 2nd Internat. Kimberlite Conf.
- Wilson, Clyde A.**  
 1979a (White, R. R., and Roybal, R. G.) Ground water conditions in the vicinity of Elephant Butte Irrigation District well field (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 125-126

- 1979b** (White, R. R., and Roybal, R. G.) Ground-water resources of the lower Rio Grande valley area of New Mexico (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 126
- 1978** (White, R. R., Roybal, R. G., and Gonzales, J. L.) Drilling, construction and testing of water-supply wells 21 and 22, White Sands Missile Range, Doña Ana County, New Mexico: U.S. Geol. Survey, Open-file Rept. 78-172, 52 p., 5 tables, 14 figs.
- Wilson, James L.**  
**1977a** Regional distribution of phylloid algal mounds in Late Pennsylvanian and Wolfcamp strata of southern New Mexico, in *Geology of the Sacramento Mountains, Otero County, New Mexico*, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 1-7, 3 figs.  
**1977b** Stop C-2, Virgilian cyclic strata, Holder Formation, in *Geology of the Sacramento Mountains, Otero County, New Mexico*, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 169-173, 2 figs.  
 see Toomey and Wilson, 1977; and Toomey and others, 1977a,b
- Wilson, John C.**  
**1977** The McKinley mine: New Mexico Geol. Soc., Guidebook 28th field conf., San Juan Basin III, p. 253-255, 2 figs.
- Wilson, John E.**  
**1977** Stratigraphy and structure of part of the Abiquiu embayment of the Rio Grande rift, New Mexico: M.S. thesis, Univ. New Mexico, 90 p.
- Wilson, Lee**  
**1976a** Summary of data and observations resulting from the ROMCOE ground-water level monitoring program: Lee Wilson and Assoc., rept., 8 p.  
**1976b** ROMCOE environmental study, Oxymin Cerrillos Project: Lee Wilson and Assoc., consult. rept. to Occidental Minerals Corp.  
**1979** (and Jenkins, D. N.) Ground-water resources of Santa Fe country: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 293-298, 2 tables, 1 fig.
- Wilson, M. D.**  
 see Pittman and Wilson, 1977
- Wilson, M. G.**  
 see Cremer and others, 1980
- Wilson, R. P.**  
**1976** (and White, N. D.) Maps showing ground-water conditions in the San Simon area, Cochise and Graham Counties, Arizona, and Hidalgo County, New Mexico—1975: U.S. Geol. Survey, Water-resources Inv. 76-89
- Wilson, R. W.**  
**1980** (and Jentgen, R. W.) Coal test drilling in the De-Na-Zin Bisti area, San Juan County, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-1289, 111 p.
- Wilt, Jan C.**  
 see Callender, Wilt, and Clemons, 1978; Keith and Wilt, 1978; and Keith, Wilt, and others, 1978
- Winchester, J. W.**  
**1979** (and Ferek, R. J.) Comparison of aerosol sulfur and crustal element concentrations in particle size fractions from continental U.S. locations: *Water, Air, and Soil Pollution*, v. 12, no. 4, p. 431-440
- Winchester, Paul D.**  
**1976** Carbonate diagenesis and cyclic sedimentation in the Wolfcampian Laborcita Formation of the Sacramento Mountains, New Mexico: Ph.D. thesis, Rice Univ., 176 p.; *Dissert. Abs. Internat.*, v. 37, no. 4, p. 1600-B  
**1977** Evidence for solution compaction in lime grainstones (abs.): *Am. Assoc. Petroleum Geologists, Bull.*, v. 61, no. 5, p. 841
- Windom, Kenneth E.**  
 see Stewart, D. C., and Windom, 1979
- Witcher, James C.**  
 see Swanberg and others, 1977
- Witmer, R. E.**  
 see Anderson, J. R., and others, 1976
- Wobus, R. A.**  
**1980** (and Hedge, C. E.) Rb-Sr isochron age of Precambrian plutons of the San Pedro Mountains, north-central New Mexico: *Isochron/West*, no. 27, p. 19-25, 2 tables, 4 figs.
- Wohletz, Kenneth H.**  
**1976** (and Sheridan, M. F.) A model for base-surge deposits (abs.): *Geol. Soc. America, Abs. with Programs*, v. 8, no. 5, p. 645-646  
 see Wilshire and others, 1977
- Wolberg, Donald L.**  
**1980a** Dinosaurs, turtles, badlands, and coal in northwest New Mexico: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1978-79, p. 68-74  
**1980b** *Goniopholis kirtlandicus* Wiman—forgotten crocodile from the Kirtland Formation, San Juan Basin, New Mexico: *New Mexico Geology*, v. 2, no. 3, p. 39-41  
**1980c** Data base and review of paleofaunas and floras of the Fruitland Formation (Late Cretaceous), San Juan Basin, with interpretive observations and age relationships: New Mexico Bureau Mines Mineral Resources, Open-file Rept. 117, 72 p.  
**1980** (and LeMone, D. V.) Paleontology of Fruitland Formation near Bisti, San Juan Basin, New Mexico—a progress report: New Mexico Bureau Mines Mineral Resources, Ann. Rept. 1978-79, p. 55-57  
**1980** (and Rigby, J. K., Jr.) Vertebrate paleontology of the Fruitland Formation, San Juan Basin, New Mexico—recent discoveries (abs.): *Soc. Vertebrate Paleontology*, 40th ann. mtg., Program  
 see Rigby and Wolberg, 1980
- Wolf, J. A.**  
**1979** Early Tertiary flora found in New Mexico (abs.): U.S. Geol. Survey, Prof. Paper 1150, p. 217
- Wongiwat, K.**  
 see Murr and Wongiwat, 1976
- Wood, C. B.**  
**1979** (Conroy, G. C., and Lucas, S. G.) New discoveries of fossil primates from the type Torrejonian (middle Paleocene) of New Mexico: *Folia Primatologica*, v. 32, no. 1-2, p. 1-7
- Wood, E. F.**  
 see Moss and others, 1978
- Wood, J. H.**  
 see Attansi and others, 1979
- Wood, W. W.**  
 see Brown, R. F., and others, 1976

**Woodcock, J. R.**

1979 A guide to the molybdenum resources of North America and ongoing plans for development: *Eng. and Mining Jour.*, v. 180, no. 8, p. 86-89

**Woods, Geoffrey A.**

see Reid, J. B., Bateman, and others, 1977; and Reid, J. B., and Woods, 1978a,b

**Woodward, Lee A.**

1976 Laramide deformation of the Rocky Mountain foreland—geometry and mechanics, in *Tectonics and mineral resources of southwestern North America*, L. A. Woodward and S. A. Northrop, editors: *New Mexico Geol. Soc., Spec. Pub. 6*, p. 11-17, 10 figs.

1977 Rate of crustal extension across the Rio Grande rift near Albuquerque, *New Mexico: Geology*, v. 5, no. 5, p. 269-272

1978 Nacimiento uplift of northwestern New Mexico—unique tectonic element of the Rocky Mountain foreland (abs.): *Geol. Soc. America, Abs. with Programs*, v. 10, no. 3, p. 155

1980a Structure of thrust belt in southwestern New Mexico and implications for hydrocarbon exploration (abs.): *Am. Assoc. Petroleum Geologists, Southern Sec., Ann Mtg., Program*, p. 61-62

1980b A hard look at Overthrust Belt prospects in southwest New Mexico: *Oil and Gas Jour.*, v. 78, no. 16, p. 114-116

1977a (and Callender, J. F.) Tectonic framework of the San Juan Basin: *New Mexico Geol. Soc., Guidebook 28th field conf.*, San Juan Basin III, p. 209-212, 2 figs.

1977b (and Callender, J. F.) Tectonics and development of northern part of Rio Grande rift, New Mexico and Colorado (abs.): *Geol. Soc. America, Abs. with Programs*, v. 9, no. 1, p. 81-82

1978 (Callender, J. F., Seager, W. R., Chapin, C. E., Gries, J. C., Shaffer, W. L., and Zilinski, R. E., Jr.) Tectonic map of Rio Grande rift region in New Mexico, Chihuahua, and Texas, in *Guidebook to Rio Grande rift in New Mexico and Colorado*, J. W. Hawley, compiler: *New Mexico Bureau Mines Mineral Resources, Circ. 163*, color sheet in pocket, scale 1:1,000,000

1977 (DuChene, H. R., and Martinez, R.) *Geology of Gilman quadrangle, New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 45*, scale 1:24,000

1976 (Gibson, G. G., and McLelland, Douglas) *Geology of Gallina quadrangle, New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 39*, scale 1:24,000

1979 (and Ingersoll, R. V.) Phanerozoic tectonic setting of Santa Fe country: *New Mexico Geol. Soc., Guidebook 30th field conf.*, Santa Fe, p. 51-57, 2 figs.

1979a (Ingersoll, R. V., Fitch, D. C., and Hutchinson, Peter) Second day optional road log no. 1, Cerrillos turnoff on N.M. Highway 14 to Oxymyn property in Cerrillos Hills: *New Mexico Geol. Soc., Guidebook 30th field conf.*, Santa Fe, p. 26, 2 figs.

1979b (Ingersoll, R. V., Fitch, D. C., and Hutchinson, Peter) Second day optional road log no. 2, N.M. Highway 14 to Goldfields Mining Corporation's

Ortiz mine: *New Mexico Geol. Soc., Guidebook 30th field conf.*, Santa Fe, p. 27-28, 5 figs.

1979 (Ingersoll, R. V., Fitch, D. C., Lisenbee, A. L., Black, B. A., and Saucier, A. E.) Second day, road log from Santa Fe to Galisteo, Cerrillos, Madrid, Golden, Hagan, and return to Santa Fe: *New Mexico Geol. Soc., Guidebook 30th field conf.*, Santa Fe, p. 15-25, 15 figs.

1977 (McLelland, Douglas, and Husler, J. W.) Precambrian rocks of the northern part of the Nacimien-to uplift, *New Mexico: New Mexico Geol. Soc., Guidebook 28th field conf.*, San Juan Basin III, 93-98, 3 tables, 2 figs.

1976 (and Northrop, S. A., editors) *Tectonics and mineral resources of southwestern North America: New Mexico Geol. Soc., Spec. Pub. 6*, 218 p.

1979 (Parchman, M. A., Edwards, D. L., and Husler, J. W.) Stratigraphy and mineralization of Hell Canyon greenstone belt (Precambrian), *New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf.*, Santa Fe, p. 189-195, 3 tables, 4 figs.

1976 (and Ruetschilling, R. L.) *Geology of San Ysidro quadrangle, New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 37*, scale 1:24,000

1976a (and Snyder, D. O.) Tectonic map of the southern Raton Basin, *New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf.*, Vermejo Park, sheet in pocket, scale 1:250,000

1976b (and Snyder, D. O.) Structural framework of the southern Raton Basin, *New Mexico: New Mexico Geol. Soc., Guidebook 27th field conf.*, Vermejo Park, p. 125-127, 2 figs.

1978 (Snyder, D. O., and Husler, J. W.) *Geology and mineralization at the Milagros gold deposit, central New Mexico: Mtn. Geologist*, v. 15, no. 3, p. 73-78

1979 (and Timmer, R. S.) *Geology of Jarosa quadrangle, New Mexico: New Mexico Bureau Mines Mineral Resources, Geol. Map 47*, scale 1:24,000

see Callender, Woodward, and Kelley, 1976; DuChene and others, 1977; Fassett, Jentgen, and others, 1977; Gorham, F. D., and others, 1977, 1979; Ingersoll and Woodward, 1979; and Kelley, V. C., Woodward, and others, 1976

**Woolfson, Walter**

1977 *San Juan Basin overriding royalty payment dispute "settled" by court and FPC decisions: Western Oil Reporter*, v. 34, no. 3, p. 39

**Worthen, John A.**

see Jacka, Barone, and others, 1980

**Worthington, R. D.**

see Van Devender and Worthington, 1977

**Wray, John L.**

1977 Origin of some Pennsylvanian algal bioherms in southwestern United States (abs.), in *Geology of the Sacramento Mountains, Otero County, New Mexico*, J. H. Butler, editor: *West Texas Geol. Soc., Guidebook, Pub. 1977-68*, p. 164

**Wright, Ann Finley**

1978 Bibliography of the geology and hydrology of the Albuquerque greater urban area, Bernalillo and parts of Sandoval, Santa Fe, Socorro, Torrance, and Valencia Counties, *New Mexico: U.S. Geol. Survey, Bull. 1458*, 31 p., 2 figs.

- 1979a** Bibliography of geology and hydrology, San Juan Basin, New Mexico, Colorado, Arizona, and Utah: U.S. Geol. Survey, Bull. 1481, 123 p.
- 1979b** Bibliography of geology and hydrology, eastern New Mexico: Natl. Tech. Inf. Serv., Rept. PB-300-832, 174 p.; U.S. Geol. Survey, Water-resources Inv. 79-76, 174 p.
- 1980** Bibliography of geology and hydrology, southwestern New Mexico: Natl. Tech. Inf. Serv., Rept. PB-80 199 961, 259 p.; U.S. Geol. Survey, Water-resources Inv. 80-20, 259 p.
- Wright, James C.**
- 1978** Four maps showing lithologic distributions of selected parts of the Jurassic San Rafael Group, Utah, Colorado, Arizona, and New Mexico: U.S. Geol. Survey, Open-file Rept. 78-572, 9 p., 4 figs.
- 1979a** (and Dickey, D. D.) Stratigraphic sections of Jurassic San Rafael Group and adjacent rocks in Rio Arriba and Santa Fe Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-247, 31 p., 1 fig.
- 1979b** (and Dickey, D. D.) Stratigraphic sections of Jurassic San Rafael Group and adjacent rocks in San Juan and McKinley Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-715, 31 p.
- 1979** (Dickey, D. D., and Freeman, V. L.) Stratigraphic sections of Jurassic San Rafael Group and adjacent rocks in Valencia and Sandoval Counties, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-836, 80 p.  
*see* Finch and others, 1976
- Wright, John R.**
- 1977** (and Russell, J. A.) Bibliography of New Mexico geology and mineral technology 1971-1975: New Mexico Bureau Mines Mineral Resources, Bull. 106, 137 p.
- Wright, L. A.**  
*see* Naert and others, 1980
- Wright, R. P.**
- 1977** (Brenner, R. L., Hileman, M. E., and Rautman, C. A.) Depositional models and paleobiogeography of the Jurassic in the Western Interior United States (abs.): Jour. Paleontology, v. 51, suppl. 2, pt. III, p. 32-33
- Wright, Robert J.**
- 1980** Grants and world uranium, in Geology and mineral technology of the Grants uranium region 1979, C. A. Rautman, compiler: New Mexico Bureau Mines Mineral Resources, Mem. 38, p. 22-35, 20 figs.; *abs. in* Grants uranium region, a symposium, Am. Assoc. Petroleum Geologists, 1979, Program, p. 20-21; Am. Assoc. Petroleum Geologists, Bull., v. 63, no. 4, p. 695
- Wright, W. Floyd**
- 1979** Petroleum geology of the Permian Basin: West Texas Geol. Soc., 98 p.
- Wunder, John M.**  
*see* Dolton, Coury, and others, 1980; *and* Dolton and Wunder, 1978
- Wyant, D. J.**
- 1978** (and Olson, A. B.) Preliminary geologic map of the Albuquerque 1° by 2° quadrangle, northwestern New Mexico: U.S. Geol. Survey, Open-file Rept. 78-467, 7 p., scale 1:250,000
- Wyman, William F.**
- 1980a** Proterozoic komatiites from the Sangre de Cristo Mountains, north-central New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 12, no. 7, p. 553
- 1980b** Precambrian geology of the Cow Creek ultramafic complex, San Miguel County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 125 p.; *abs. in* New Mexico Geol., v. 2, no. 3, p. 47-48
- Wynn, Jeffrey C.**
- 1978** Parallel-surface-continued aeromagnetic map of the San Lorenzo and Hillsboro quadrangles, Grant and Sierra Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-L, scale 1:48,000
- 1978** (and Dansereau, D. A.) Complete Bouguer gravity map of the San Lorenzo and Hillsboro quadrangles, Grant and Sierra Counties, New Mexico: U.S. Geol. Survey, Misc. Field Studies Map MF-900-M, scale 1:48,000
- 1979** (and Dansereau, D. A.) Preliminary complete Bouguer gravity anomaly map of the Silver City two-degree sheet, New Mexico and Arizona: U.S. Geol. Survey, Open-file Rept. 79-708, scale 1:250,000
- 1979** (and Hedlund, D. C.) Geophysics, in Background information to accompany folio of geologic, mineral resource, geochemical, aeromagnetic, and gravity maps of the Hillsboro and San Lorenzo quadrangles, Sierra and Grant Counties, New Mexico: U.S. Geol. Survey, Circ. 808, 26 p.  
*see* Dansereau and Wynn, 1978
- Wynne, C. C.**
- 1978** Continuous mining—the problem and the answer, *abs. in* Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas, G. S. Austin, compiler: New Mexico Bureau Mines Mineral Resources, Circ. 159, p. 87
- Yamamoto, G. S.**  
*see* DeCicco, Patterson, and Yamamoto, 1980c
- Yoder, H. S., Jr.**
- 1976** Generation of basaltic magma: Washington, D.C., Natl. Acad. Sci., 265 p.
- York, D.**  
*see* Strangway and others, 1976
- York, James E.**  
*see* Reilinger, Brown, and others, 1978, 1979; *and* Reilinger and York, 1978, 1979
- Young, R.**  
*see* McGetchin, Burke, and others, 1979
- Young, Robert G.**
- 1977** Sandstone depositional systems in uraniumiferous sandstones of Colorado Plateau (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 5, p. 843
- 1978** Depositional systems and dispersal patterns in uraniumiferous sandstones of the Colorado Plateau: Utah Geol., v. 5, no. 2, p. 85-102
- Young, W.**  
*see* Edwards and others, 1978
- Yousef, Ali A.**
- 1977** A study of time residuals in the Socorro area for Pn arrivals from mining explosions at Santa Rita, Tyrone, New Mexico, and Morenci, Arizona: New Mexico Inst. Mining and Tech., Geophysics Open-file Rept. 12b, 32 p.
- Yousefpour, M. V.**
- 1978** Geology and contact pyrometamorphic ore de-

- posits at the Continental mine, Fierro, New Mexico: M.S. thesis, Colorado School Mines
- Yuras, Walter**  
 1976 The origin of the Lincoln fold belt, Lincoln County, New Mexico: M.S. thesis, New Mexico Inst. Mining and Tech., 97 p.
- Yurewicz, Donald A.**  
 1976a Sedimentology, paleoecology, and diagenesis of the massive facies of the lower and middle Capitan Limestone (Permian), Guadalupe Mountains, New Mexico and west Texas: Ph.D. thesis, Univ. Wisconsin, 296 p.; Dissert. Abs. Internat., 1977, v. 38, no. 1, p. 109-B-110-B  
 1976b Genesis of the lower and middle Capitan Limestone massive (Permian), Guadalupe Mountains, New Mexico and west Texas (abs.): Geol. Soc. America, Abs. with Programs, v. 8, no. 4, p. 519  
 1977a Sedimentology of Mississippian basin-facies carbonates, New Mexico and west Texas—the Rancheria Formation, in Deep-water carbonate environments, H. E. Cook, editor: Soc. Econ. Paleontologists and Mineralogists, Spec. Pub. 25, p. 203-219  
 1977b The Rancheria Formation—Mississippian intercratonic basinal limestones, in Geology of the Sacramento Mountains, Otero County, New Mexico, J. H. Butler, editor: West Texas Geol. Soc., Guidebook, Pub. 1977-68, p. 71-72  
 1977c Evolution of Capitan massive limestone (Permian) of Guadalupe Mountains, New Mexico and west Texas (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 61, no. 5, p. 843-844  
 1977d Origin of the massive facies of the lower and middle Capitan Limestone (Permian), Guadalupe Mountains, New Mexico and west Texas: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 1, p. 45-92  
 1977e Locality guide, stop IV, lower Capitan-massive, inner Slaughter Canyon: Soc. Econ. Paleontologists and Mineralogists, Permian Basin Sec., Pub. 77-16, Guidebook 1977 field conf., v. 2, p. G57-G71  
 1978 Syndepositional submarine cementation of Capitan Limestone (Permian), Guadalupe Mountains, west Texas and New Mexico—cement evolution (abs.): Am. Assoc. Petroleum Geologists, Bull., v. 62, no. 3, p. 573  
 see Babcock, J. A., and others, 1977a,b; and Babcock, J. A., and Yurewicz, 1978
- Zantop, Half**  
 1980 Paleozoic stratiform Cu-Pb-Zn deposits in Arizona and New Mexico: Geol. Soc. America, Abs. with Programs, v. 12, no. 3, p. 161
- Zartman, Robert E.**  
 1979 Uranium, thorium, and lead concentrations and lead isotopic composition of biotite granodiorite (sample 9527-2b) from LASL drill hole GT-2: Los Alamos Sci. Lab., Rept. 7923, 18 p.
- Zech, Robert S.**  
 1980 Preliminary geologic map of the Twin Lakes quadrangle, McKinley County, New Mexico: U.S. Geol. Survey, Open-file Rept. 80-77, scale 1:24,000  
 1979 (and Knepper, D. H., Jr.) Landsat linear features data for the Gallup-Grants uranium district, New Mexico: U.S. Geol. Survey, Open-file Rept. 79-1507, 35 p.  
 see Kirk, Huffman, and others, 1978; and Kirk and Zech, 1976a-c, 1977, 1978
- Zeller, Robert A., Jr.**  
 1976 Stratigraphy and age of the *Tempyska*-bearing rocks of southern Hidalgo County, New Mexico: U.S. Geol. Survey, Prof. Paper 874, p. 16-22
- Zetterlund, Dale**  
 see Walton and others, 1980
- Zielinski, Robert A.**  
 1979 Uranium mobility during interaction of rhyolitic obsidian, perlite and felsite with alkaline carbonate solution— $T = 120^{\circ} \text{C}$ ,  $P = 210 \text{ kg/cm}^2$ : Chem. Geology, v. 27, no. 1/2, p. 47-63, 5 tables, 4 figs.
- Zilinski, Robert E., Jr.**  
 1976 Geology of the central part of the Lucero uplift, Valencia County, New Mexico: M.S. thesis, Univ. New Mexico, 69 p.  
 see Callender and Zilinski, 1976; and Woodward, Callender, and others, 1978
- Zimmerman, Charles J.**  
 1979 Geochemistry of andesites and related rocks, central-northern Rio Grande rift, New Mexico: M.S. thesis, Univ. New Mexico, 111 p.  
 1978 (and Kudo, A. M.) The role of paragenetic hornblende in andesite genesis, Rio Grande rift, New Mexico (abs.): Geol. Soc. America, Abs. with Programs, v. 10, no. 7, p. 522; abs. in International symposium on the Rio Grande rift, Los Alamos Sci. Lab., 1978, Program and Abs., Rept. LA-7487-C, p. 101-102  
 1979a (and Kudo, A. M.) Geology and petrology of Tetilla Peak, Santa Fe County, New Mexico: New Mexico Geol. Soc., Guidebook 30th field conf., Santa Fe, p. 253-256, 5 tables, 2 figs.  
 1979b (and Kudo, A. M.) Geochemistry of andesites and related rocks, Rio Grande rift, New Mexico, in Rio Grande rift—tectonics and magmatism, R. E. Riecker, editor: Am. Geophys. Union, p. 355-381, 8 tables, 11 figs.  
 see Brookins and Zimmerman, 1980
- Zimmerman, George D.**  
 1977 Tulk Penn and Wolfcamp fields, Lea County, New Mexico, in The oil and gas fields of southeastern New Mexico, 1977 supplement, K. C. Havenor, editor: Roswell Geol. Soc., p. 204-205, 1 table, 1 fig.
- Zoback, Mary Lou**  
 1975 State of stress in the southern Basin and Range province and Colorado Plateau (abs.): Am. Geophys. Union (EOS), Trans., v. 60, no. 18, p. 311
- Zobeck, Teddy M.**  
 1980 Soil moisture regimes along a vegetation transect in central New Mexico: Ph.D. thesis, New Mexico State Univ., 220 p.; Dissert. Abs. Internat., v. 41, no. 2, p. 433-B
- Zohdy, Adel A. R.**  
 1976 (Bisdorf, R. J., and Gates, J. S.) Schlumberger soundings in the lower Mesilla Valley of the Rio Grande, Texas and New Mexico: U.S. Geol. Survey, Open-file Rept. 76-324, 77 p., 72 figs.



## Index

- Abiquiu Tuff**, *see* Santa Fe Group
- Abo Formation**, Adams, R. D. (1978); Berman, D. S. (1976, 1979); Berman, D. S., and Reisz (1980); Delgado (1977a, b); Kottlowski, Seager, and others (1977); Langford (1980); LaPoint (1979)
- aggregate**, New Mexico State Highway Department (1978)
- Albuquerque Basin**, Kasten, J. A. (1977); Kaufman, S., and Oliver (1977); Kelley, V. C. (1976, 1977, 1978b, c); Kelley, V. C., and Kudo (1978); Kelley, V. C., Woodward and others (1976); Kudo and others (1977); Lambert, P. W. (1978b)
- Aleman Formation**, *see* Montoya Group
- A-L Peak tuff**, Chapin and Deal (1976)
- aluminum**, Hall, R. B. (1978); Heinrich (1980)
- Ambrosia Lake uranium district**  
Dakota Sandstone, Pierson and Green (1977, 1980) exploration, Brady and Rice (1977); Fitch (1977); Hayslip, Fuller, and others (1980); Hayslip and Renault (1976) ground water, Brod (1979); Kelley, T. E., Link, and Schippen (1980) hydrology, Purtymun, Dreesen, and Wienke (1977) Johnny M mine, Falkowski (1980a, b) Kerr-McGee mine, Simpson, D. N. (1978) La Bajada deposit, Vassiliou (1980a, b) Morrison Formation, Smith, D. A., and Peterson (1980) Sandstone mine, Foster, J. F., and Quintanar (1980)
- Anapra sandstone**, Strain (1976)
- Ancha Formation**, *see* Santa Fe Group
- Animas Mountains**, Erb (1979)
- Animas Valley**  
KGRA, Chaturvedi and Ramos-Arras (1979); Dellechiaie (1977) soils, Fleischhauer (1977a)
- aragonite**, Folk, R. L. (1977); Folk, R. L., and Assereto (1976); Mazzullo (1980); Mazzullo and Cys (1978a, b, 1979a, b)
- Arbuckle Group**, Gatewood (1978)
- Arroyo Peñasco breccia**, Vaughan (1978); Vaughan and Meyers (1976)
- Artesia Group**  
Capitan aquifer, *see* Capitan Limestone or reef complex Queen Formation, Lampert (1977) Seven Rivers Formation, Hurley, N. F. (1978, 1979); Sarg (1976a, b) Tansill Formation, Esteban and Pray (1977 a-c); Neese (1979a, b); Neese and Schwartz (1977); Pray and Schwartz (1977); Toomey and Cys (1977a); Tyrrell and others (1978) Yates Formation, Neese (1979a, b); Neese and Schwartz (1977); Peterson, D. N. (1979); Pray and Schwartz (1977)
- axinite**, Ricciardi (1978)
- Baca Formation**, Belcher and Galloway (1977); Cather (1980); Cather and Johnson (1980); Chaiffetz (1979); Johnson, B. D. (1978); Massingill (1978b); Schiebout and Schrodt (1980); Schrodt (1980)
- Banco Bonito Member**, *see* Valles Rhyolite
- Bandelier National Monument**, Purtymun and Adams (1980)
- Bandelier Tuff**, *see* Tewa Group
- Bandera Crater**, Gallagher (1973)
- barite**, Kottlowski and Steensma (1979)
- basalt**, Aoki and Kudo (1976); Baldrige (1976, 1977, 1978, 1979a-c); Berman, R. G., and Reid (1976); Crumpler (1976, 1977, 1980); Faris (1980); Faris and Renault (1980); Laughlin, Brookins, and Damon (1976); Laughlin, Brookins, Damon, and Shafiqullah (1979); Lofgren (1979); Manley (1976a); Menzies and Murthy (1980); Reid, J. B., Bateman, and others (1977); Reid, J. B., and Woods (1978b); Renault (1978a, b); Saito, Basu, and others (1977); Saito, Menzies, and others (1978); Schwartz and Irving (1978); Warren, R. G. (1978, 1979); Warren, R. G., and others (1978); Wilshire and others (1977); Yoder (1976)
- Basin and Range province**, Damon (1976); Deal, Elston, and others (1978); Eaton (1979b); Elston (1976c, 1977); Elston and Erb (1980); Hawley, Bachman, and Manley (1976); Keller, G. R., and Braile (1979); Keller, G. V., Grose, and Crewdson (1978); Livaccari (1979); Lovejoy (1977, 1980); Mutschler and others (1978); Newman and Goode (1979)
- Beartooth sandstone**, Chafetz (1976)
- Bell Canyon Formation**, *see* Delaware Mountain Group
- Bell Top Formation**, Clemons (1976b)
- Bernalillo County**  
Albuquerque, Birch (1980); Brewer (1974); Chambers-Campbell-Isaacson-Chaplin, Inc. (1976); Kaufman and others (1980); Wright, A. F. (1978) Albuquerque 2° quadrangle, DeCicco, Patterson, and Lutz (1978a); Geometrics (1979a), Maassen, Bolivar, and others (1979); Wyant and Olson (1978) Albuquerque 1/2° × 1° quadrangle, U.S. Geol. Survey (1979e) Arroyo de Yrisarri, Hagerman (1976a) Bouguer gravity studies, Cordell, L. (1978c); Cordell, L., and Detmering-Beal (1978) Cat Hills volcanic field, Baldrige, Perry, and Gladney (1980); Kudo and others (1977) crustal structures, Bache and others (1978) faults, Machette (1976b, 1978d, e) geomorphology, Lambert, P. W. (1978b) geothermal energy, Kauffman, D., and others (1980); Parker, M. D., and Jiracek (1980) hydrology, American City and County (1977); Chambers-Campbell-Isaacson-Chaplin, Inc. (1976); Hagerman (1976a); Hudson, J. D. (1978a, 1980); Hydrotechnics (1976); Summers (1976b); Wright, A. F. (1978) Isleta volcano, Kudo and others (1977) land classification map, DeCicco, Patterson, and Lutz (1978a, 1979) Madera Formation, Mukhopadhyay and Brookins (1976a, b) magnetic survey, Geometrics (1979a); High Life Helicopters and Geodata International (1979) Milagros gold deposit, Woodward, Snyder, and Husler (1978) Quaternary, Lambert, P. W. (1976) radioactive pollution, Brewer (1974) road logs, Hawley (1978c); Hawley, Chapin, Chamberlin, and others (1978); Lambert, P. W. (1976, 1978a); Saucier (1979); Woodward, Ingersoll, Fitch, and others (1979) Santa Fe Formation, Lambert, P. W. (1978b) scoria, Cima (1978) Sedillo 7 1/2' quadrangle, Myers and McKay (1976) seismology, Jaksha (1976); Jaksha and Locke (1978); Jaksha, Locke, and others (1977, 1978); North, R. G., and Frasier (1977); Strauss (1977); Stump and Reinke (1980); von Seggern (1977) Socorro 2° quadrangle, DeCicco, Patterson, and Lutz (1979); High Life Helicopters and Geodata International (1979) soil survey, Hacker (1977) Tijeras Canyon, Hudson, J. D. (1978a, 1980) Tijeras 7 1/2' quadrangle, Myers and McKay (1976)
- beryl**, Kimbler and Haynes (1979)
- bibliographies**  
Albuquerque greater urban area, Wright, A. F. (1978) Cenozoic freshwater mollusca, Taylor, D. W. (1980) eastern New Mexico, Wright, A. F. (1979b) general, Wright, J. R., and Russell (1977)

ground water, Borton (1976, 1978, 1979b, 1980); Borton and Jones (1976, 1978)

Precambrian, Robertson, J. M. (1976a)

radioactive-waste disposal, Glanzman (1980)

San Juan Basin, Wright, A. F. (1979a)

southwestern New Mexico, Wright, A. F. (1980)

**Big Hatchet Mountains**, Armstrong and Mamet (1978a); Scott, R. W. (1979); Simpson, R. D., LeMone, and Thompson (1978a, b); Weise and LeMone (1980)

**bioherms**, Hosseini (1980); Parks (1976a, b, 1977b, d); Toomey (1980); Toomey and Cys (1979); Toomey and others (1977a, b); Toomey and Wilson (1977); Wilson, J. L. (1977a); Wray (1977)

**Bisbee Group**

U-Bar Formation, Weise and LeMone (1980)

**Bisti area**, Kues, Froehlich, and others (1977); LeMone and others (1977, 1979); Rigby and Wolberg (1980); U.S. Bureau of Reclamation (1976c); U.S. Dept. Interior (1977); Wilson, R. W., and Jentgen (1980)

**bitxbyite**, Lufkin (1976)

**Black Mesa**, Peterson, F., and Kirk (1977); U.S. Geol. Survey (1978)

**Black Prince Limestone**, Spencer, P. K. (1980)

**Black Range**

beryl, Kimbler and Haynes (1979)

Emory cauldron, Seager (1978b)

oxide minerals, Lufkin (1976)

Rubio Peak Formation, Hedlund (1976)

uranium, Burt and Sheridan (1980); Correa (1980); Sheridan and Burt (1979)

volcanic geology, Erickson and Wedow (1976); Fodor (1976, 1978)

wood-tin, Lufkin (1977)

**Bliss Sandstone**, LeMone (1977)

**Bridge Creek Member**, *see* Greenhorn Limestone

**Brushy Basin Shale Member**, *see* Morrison Formation

**Brushy Mountain Formation**, *see* Delaware Mountain Group

**Burro Canyon Formation**, Owen, Walters, Depetro, and Turmelle (1978); Owen, Walters, Kosturu, and Grant (1976); Russell, J. A. (1979)

**Burro Mountains**, Langford (1980)

**Caballero Formation**, Conkin and Conkin (1979); Meyers (1978, 1980)

**Cabalito Mountains**, Loring and Armstrong (1980)

**calcite**, Folk, R. L. (1977); Folk, R. L., and Assereto (1976); Lohmann (1978); Lohmann and Meyers (1976, 1977)

**Caloso Formation**, Meyers (1978, 1980)

**Campanian**, Armstrong-Ziegler (1978)

**Camp Rice Formation**, *see* Santa Fe Group

**Capitan Limestone or reef complex**, Anderson, R. Y., and Kirkland (1979, 1980); Babcock, J. A. (1977, 1979); Babcock, J. A., and others (1977a, b); Babcock, J. A., and Yurewicz (1978); Cys, Brezina, and Greenwood (1977); Cys, Greenwood, and Brezina (1976); Cys and others (1977); Esteban (1977); Esteban and Pray (1976); Hiss (1975, 1976b, c, 1980); Jagnow (1977); Lohmann (1978); Loucks and Folk (1976); Mazzullo (1980); Mazzullo and Cys (1977, 1978a, b, 1979a, b); Pray and Esteban (1977); Queen (1980); Queen and others (1979); Rudolph (1979); Schmidt (1977); Toomey and Cys (1977a); Tyrrell and others (1978); Wiedenmayer (1980); Yurewicz (1976a, b, 1977c-e, 1978)

**Capitan Mountains**, Blagbrough (1976)

**carbonatites**, McLemore (1980c)

**Carlisle Shale**, *see* Colorado Group

**Carlsbad Caverns**, Des Marais and others (1980); Folk, R. L. (1977); Folk, R. L., and Assereto (1976); Kendall and Broughton (1977); McLean (1976); Van Cleave (1976)

**Carrizo Mountain**, Huffman, Kirk, and Corken (1980)

**cassiterite**, Lufkin (1976, 1979)

**castile Formation**, Anderson, R. Y., and Powers (1978); Brookins, Register, Register, and Lambert (1978); Dean (1980); Dean and Anderson (1978a, b); Kirkland and Evans (1980); Shaw (1977)

## Catron County

Ake Site, Weber, R. H. (1980c)

Alegros Mountain area, Jones, D. P. (1980)

Baca Formation, Schrodt (1980)

Bear Canyon, Frost (1980)

Bougour gravity anomaly, Eaton, Peterson, and Webring (1977); Eaton, Peterson, Webring, and Ratte (1976)

Chloride mining district, Maxwell, C. H., and Heyl (1980)

Clifton 2° quadrangle, DeCicco, Patterson and Yamamoto (1980); Sharp and others (1978)

Cooney mining district, Eveleth (1979a)

Datil, Lopez, D. A., and Bornhorst (1979)

Datil Mountain coal field, Frost and others (1980)

general, Bikerman (1976)

guidebook, Clemons, Christiansen, and James (1980)

land classification map, Banaszyski and others (1979); DeCicco and Patterson (1979a); DeCicco, Patterson, and Lutz (1979); DeCicco, Patterson, and Yamamoto (1980)

magnetic survey, High Life Helicopters and Geodata International (1979)

Mangas, Frost (1980)

Mogollon mining district, Watts, Hassemer, Forn, and Siems (1979)

Mogollon 7 1/2' quadrangle, Ratte (1977)

rajite, Williams, S. A. (1979)

road logs, Bornhorst and Elston (1978); Clemons, Christiansen, and James (1980); Coney and Elston (1978a, b); Ratte and Finnell (1978)

Saint Johns 2° quadrangle, DeCicco and Patterson (1979a); Maassen and others (1980); Sharp and others (1978)

Saliz Pass 7 1/2' quadrangle, Ratte (1980)

Socorro 2° quadrangle, DeCicco, Patterson, and Lutz (1979); High Life Helicopters and Geodata International (1979)

Spring Canyon 7 1/2' quadrangle, Richter (1978)

Tularosa 2° quadrangle, Banaszyski and others (1979); Geodata International (1978)

uranium, Morgan, T. L., and others (1980c)

**Cedar Hills vent zone**, Clemons (1978)

**Cejita member**, *see* Tesuque Formation

**Cenozoic**, Aoki and Kudo (1976); Bachman (1976c); Chapin (1978c); Elston and Northrup (1976); Hawley (1978e); Laughlin, Brookins, and Damon (1976); Laughlin, Brookins, Damon, and Shafiqullah (1979); May (1980); Moore, R. B. (1978); Muehlberger (1979b)

**Cerro del Cristo Rey**, Lovejoy, (1976b)

**Cerro Toledo Rhyolite**, *see* Tewa Group

**Cerro del Rio volcanic field**, Aubele (1978a, b, 1979)

**Chaco Canyon**, Betancourt and Van Devender (1980); Brookins (1979e); Ebert and Gutierrez (1979); Hall, S. A. (1977, 1980); Hicks, R. T., and others (1980); Lease (1979); Love (1976, 1977, 1979, 1980); Lyons and others (1976); Ross, J. R. (1978)

**chalcocite**, Shantz (1976)

**Chama Basin**, Ridgley (1977)

**Chama-El Rito Member**, *see* Tesuque Formation

**Chamita Formation**, *see* Santa Fe Group

**Chaves County**

Artesia Group, Lampert (1977)

Bottomless Lakes State Park, Kottowski (1979b)

Brownfield 2° quadrangle, DeCicco and Patterson (1980a); U.S. Geol. Survey (1980f)

Buffalo Valley Penn field, Ahlen and Havenor (1977)

Carlsbad 2° quadrangle, DeCicco and Patterson (1979c); U.S. Geol. Survey (1976a, 1980a)

Cato field, Scott, G. L., and Reddy (1977)

Clovis 2° quadrangle, DeCicco and Patterson (1980c); Texas Bureau of Economic Geology (1978); U.S. Geol. Survey (1980e)

Double L-Queen Associated field, Lampert (1977b)

Fort Sumner 2° quadrangle, DeCicco and Patterson (1980g)

general, Black, B. A. (1976a, b)

Haystack Cisco field, Davida, E. K. (1977a)

- Haystack Siluro-Devonian field, David, E. K. (1977b)  
 Hobbs 2° quadrangle, DeCicco and Patterson (1979d);  
 Texas Bureau of Economic Geology (1976); U.S. Geol.  
 Survey (1980d)  
 hydrology, Geohydrology Associates, Inc. (1978)  
 land classification map, DeCicco and Patterson (1979b-  
 d, 1980a, c, g); U.S. Geol. Survey (1976a, 1980a, d-  
 f)  
 petroleum and natural gas, Ahlen and Havenor (1977);  
 Havenor (1977); Lampert (1977); Roswell Geological  
 Society (1977); Scott, G. L. (1980)  
 Queen sand in Double L and Sulimar fields, Lampert  
 (1977a)  
 Roswell 2° quadrangle, DeCicco and Patterson (1979b)  
 Roswell Range, Geohydrology Associates, Inc. (1978)  
 Round Tank (Queen) field, Kelly, J. M. (1977)  
 Siete San Andres field, LeMay (1977b)  
 soil survey, Hodson and others (1980)  
 Sulimar Queen field, Lampert (1977c)  
 Tom-Tom and Tomahawk San Andres fields, Scott, G.  
 L. (1977b, 1980)  
 Twin Lakes Devonian fields, Stevens, D. G. (1977a)  
 Twin Lakes San Andres field, Stevens, D. G. (1977b)  
**Cherry Canyon Formation**, *see* Delaware Mountain Group  
**chert**, Iovenitti and Renault (1977)  
**Chihuahuan Desert**, Harris (1977); Van Devender and  
 Worthington (1977); Wauer and Riskind (1977)  
**Chinle Formation**, *see* Dockum Group  
**Chuska Mountains**, Ehrenberg (1977)  
**Chuska Sandstone**, Trevena and Nash (1978a)  
**Cibola County**  
*created out of the western half of Valencia County in 1891*  
 Acoma Pueblo 7 1/2' quadrangle, Maxwell, C. H. (1976a)  
 Acoma region, Maxwell, C. H. (1976b)  
 Albuquerque 2° quadrangle, DeCicco, Patterson, and Lutz  
 (1978a); Geometrics (1979b); Maassen, Bolivar, and  
 others (1979); Wyant and Olson (1978)  
 Crow Point 7 1/2' quadrangle, Maxwell, C. H. (1977c)  
 Cubero 7 1/2' quadrangle, Maxwell, C. H. (1977b)  
 East Mesa 7 1/2' quadrangle, Maxwell, C. H. (1979)  
 Gallup 2° quadrangle, Geometrics (1979b); Hackman and  
 Olson (1977); Maassen, LaDelfe, and others (1980);  
 Patterson, E. D., and others (1978); U.S. Geol. Survey  
 (1979a, 1980b)  
 hydrology, Brod (1979)  
 land classification map, DeCicco and Patterson (1979a)  
 DeCicco, Patterson, and Lutz (1978a, 1979); Patterson,  
 E. D., and others (1978); U.S. Geol. Survey (1979a,  
 1980b)  
 Los Pilares 7 1/2' quadrangle, Maxwell, C. H. (1977a)  
 magnetic survey, Geometrics (1979b); High Life Helic-  
 opters and Geodata International (1979); U.S. Geol.  
 Survey (1979g)  
 Malpais area, U.S. Geol. Survey (1979g)  
 McCarty's 7 1/2' quadrangle, Maxwell, C. H. (1977d)  
 Mount Taylor 7 1/2' quadrangle, Lipman, Pallister, and  
 Sargent (1979)  
 road logs, Saucier (1979)  
 Saint Johns 2° quadrangle, DeCicco and Patterson (1979a);  
 Maassen and others (1980); Sharp and others (1978)  
 Socorro 2° quadrangle, DeCicco, Patterson, and Lutz  
 (1979); High Life Helicopters and Geodata International  
 (1979)  
**Cimarron Range**, Goodknight (1976)  
**Cinza Lake**, Ash (1978a-f), Ash, Dean, and others (1978);  
 Dean (1978); Stone, J. F. (1978); Tasch (1978); Weber,  
 D. J., and Lawler (1978)  
**City of Rocks State Park**, Weber, R. H. (1980a)  
**clastic plugs**, Reynolds, D. M. (1979); Reynolds, D. M.,  
 and Gries (1980)  
**clay**, Austin, G. S., and Leninger (1976); Bohor and Pill-  
 more (1976); Brookins (1980e); Frye and others (1978);  
 Gonzales, S., and Johnson (1980); Mukhopadhyay and  
 Brookins (1976a); Russell, J. A. (1979)  
**Cliff House Sandstone**, *see* Mesaverde Group  
**Clovis Formation**, Agenbrood (1978); Saunders (1978)  
**coal**  
 ash, Dreesen and others (1978); Shantz (1977b)  
 Bisti coal field, U.S. Bureau of Reclamation (1976e)  
 Black Mesa, U.S. Geol. Survey (1978)  
 Catron County, Frost and others (1980)  
 Chaco Canyon, Mytton (1979)  
 Colfax County, Davis, H. (1978); Gentry and Abel (1978)  
 Delaware Basin, Hills (1979)  
 environmental effects, Cook, F. (1979); Kelly, W. (1979)  
 Four Corners Power Plant, Cannon, H. L., and Swanson  
 (1979); Environmental Science and Technology (1977);  
 Miller, S. (1976); U.S. Bureau of Reclamation (1976c,  
 d); Wangen and Wienke (1978)  
 Fruitland Formation, Bieri (1977); Fassett and Hinds (1977);  
 Miyamoto and others (1977); Mytton (1979); Schneider,  
 Hildenbrand and Affolter (1979)  
 gasification, American Geophysical Union (1977b); Buder  
 (1978); Lent (1980a, b); Meissner (1977); Milios (1976);  
 Stalcup (1978); Tilton (1976); Weiber and Sikri (1978)  
 general, Anderson, O. J. (1978a); Anderson, O. J., Hat-  
 ton, and Kottowski (1977); Austin, L. A., and others  
 (1977); Beaumont and others (1976); Bohor (1977);  
 Freeman and Danilchik (1979); Frost (1979); Hodgson  
 (1978); Kottowski, Beaumont, and Shomaker (1976,  
 1977); Kottowski, Tabet, and Frost (1980); Lockwood  
 (1978); Martinez, L. B. (1980); Pelley (1978); Shantz  
 (1977b, c, 1978); Tabet (1976b); Tabet and Frost (1978);  
 Tabet, Frost, and Kottowski (1977); U.S. Bureau of  
 Land Management (1976); U.S. Congress (1980); Van-  
 inetti (1979)  
 ground water, Shomaker and Stone (1976)  
 liquefaction, Murr and Wongwiwat (1976)  
 longwalls, Davis, H. (1978); Gentry and Abel (1978)  
 McKinley County, Cavarco and Flores (1980); Dames  
 and Moore (1979d, e, g-i, n, o, s); Wilcox and others  
 (1980)  
 McKinley mine, Jackson, D. (1978)  
 Menefee Formation, O'Sullivan (1980); Siemers, C. T.  
 (1978a); Whyte and Shomaker (1977a, b)  
 National Coal Resource Data System, Spence, B. J. (1980)  
 Navajo mine, Karn (1977, 1979)  
 paleontology and mitigation plans, Kues, Froehlich, and  
 others (1977); LeMone and others (1977, 1979)  
 Raton Basin, Amuedo and Bryson (1977); Bohor and  
 Pillmore (1976); Flores (1980); Jurich (1980); Meissner  
 (1977); Pillmore (1976d, e); Pillmore and Hatch (1976)  
 Raton Formation, Roehler and Danilchik (1980)  
 reclamation, Aldon (1978a, b); Gosz and others (1978);  
 Gould (1978); Gould and others (1977); Hinkley (1980);  
 Hinkley and others (1980); Imhoff and others (1976);  
 Inglis and others (1978); Miyamoto and others (1977);  
 Tabet (1977a); Toy and Munson (1979)  
 Rio Arriba County, Dames and Moore (1979b, c, z, aa,  
 ff-hh, jj-ll, uu, mmm, nnn)  
 Sandoval County, Dames and Moore (1979b-f, h, i, p-s,  
 aa, aaa, bbb)  
 San Juan Basin, Beaumont and Shomaker (1977); Bieri  
 (1977); Fassett and Hinds (1977); Flores (1980); Hinkley  
 (1980); Hinkley and others (1980); Kues, Froehlich, and  
 others (1977); Lent (1980a, b); Levinson (1979); Meis-  
 sner (1977); O'Sullivan (1980); Schneider, Hildenbrand,  
 and Affolter (1979); Shomaker and Stone (1976); Sho-  
 maker and Whyte (1977); Siemers, C. T. (1978a, b);  
 Speer and others (1977); Styron and others (1979); Tabet  
 (1977b); Tabet and Frost (1979a, b); Tabet, Frost, and  
 Kottowski (1979); U.S. Dept. Interior (1977); Whyte  
 and Shomaker (1977a, b); Wilson, R. W., and Jentgen  
 (1980)  
 San Juan County, Beach and Jentgen (1978); Dames and

- Moore (1979a, b, d, e, j-o, t-y, bb-gg, ii-kk, mm-zz, ccc-*nnn*)
- Santa Fe County, Bachman (1976a); Beaumont (1979)
- Sierra County, Tabet (1979b)
- Socorro County, Chapin, Osburn, and others (1979); Tabet (1976a, 1979a)
- stripping technology, Marston (1976)
- tonsteins, Bohor (1977); Bohor and Pillmore (1976)
- trace elements, Dreesen and others (1978); Wangen and Wienke (1978)
- uranium, Styron and others (1979)
- York Canyon mine, Davis, H. (1978); Jackson, D. (1976); Kaiser Steel Corporation (1976, 1980); Pillmore (1976e)
- Colfax County**
- see also* Raton Basin
- Adams Lake basin, Pillmore (1976c)
- Angel Fire, Water Resources Associates, Inc. (1977a)
- Baldy Mountain area, Walters, K. A. (1979)
- Bartlett Lake basin, Pillmore (1976c)
- Cieneguilla Creek basin, Smith and Colpitts (1980)
- Cretaceous, Pillmore and Eicher (1976)
- Folsom site, Cordell, L. S. (1976)
- geomorphology, Colton (1976)
- Gold Creek, Pillmore and Eicher (1976)
- ground water, Summers (1977a)
- guidebook, Ewing, R. C., and Kues (1976)
- Holocene natural history, Martin (1976)
- hydrogeology, Burroughs and McFadden (1976); Water Resources Associates, Inc. (1977a)
- land classification map, DeCicco, Patterson, and Lutz (1978d, 1980)
- magnetic survey, Geometrics (1979a)
- radioactive-waste disposal, Herkenhoff and Associates and Summers and Associates (1977)
- Raton 2° quadrangle, DeCicco, Patterson, and Lutz (1978d, 1980); Geometrics (1979a); Morgan, T. L., and Broxton (1978)
- Raton volcanic field, Phelps, Blanchard, and others (1979); Phelps, Blanchard, and Stormer (1980); Stormer (1978)
- road logs, Lessard (1976); Pillmore (1976a, b, 1980a, b)
- stratigraphy, MacLachlan (1976)
- Vermejo Park, Ewing, R. C., and Kues (1976); Laurie (1976, 1980)
- York Canyon mine, Davis, H. (1978); Jackson, D. (1976); Kaiser Steel Corporation (1976, 1980); Pillmore (1976e)
- Colina Limestone**, *see* Naco Group
- Colorado Group**
- Bridge Creek Member, Hattin (1979)
- Carlile Shale, Hook and Cobban (1980b); Pillmore and Eicher (1976)
- Graneros Shale, Pillmore and Eicher (1976)
- Greenhorn Limestone, Hattin (1979); Pillmore and Eicher (1976)
- Juana Lopez Member, Hook and Cobban (1980b)
- Niobrara Formation, Pillmore and Eicher (1976)
- Colorado Plateau**
- Cenozoic igneous, Moore, R. B. (1978)
- Chinle Formation, Young, R. G. (1977, 1978)
- Cretaceous correlation, Peterson, F., and Kirk (1977)
- crustal structure, Keller, G. R., and Braille (1979); Keller, G. R., Sinno, and others (1979); Silver, L. T., and McGetchin (1978)
- Green Knobs diatreme, Smith, D. L., and Levy (1976)
- ground water, Ortiz and others (1980)
- guidebook, Rigby (1977)
- heat flow, Reiter, M. A., Mansure, and Shearer (1979b); Reiter, M. A., and Shearer (1979, 1980)
- hydrology, Kondrat'yeva and Gorshkov (1979)
- kimberlites and hot spots, Crough and others (1980)
- magnetic variations, Mayhew (1979); Wasilewski and Padovani (1980)
- magnetotelluric survey, Pedersen and others (1979); Pedersen and Hermance (1979); Wannamaker (1980)
- mantle, Pedersen and Hermance (1979); Smith, D. L., and Levy (1976)
- Moenkopi Formation, Dickinson and Suczek (1979); Shive and others (1979)
- monocline folds, Davis, G. H. (1978)
- Morrison Formation, Dickinson and Suczek (1979); Langford (1977); Young, R. G. (1977, 1978)
- Navajo volcanic field, Ehrenberg (1978, 1979); Ehrenberg and Griffin (1979); Roden (1979)
- Pennsylvanian, Blakey (1978, 1980)
- Permian, Blakey (1978, 1979, 1980)
- potassic volcanism, Roden and others (1979)
- river system development, Lovejoy (1976c); Trevena (1977)
- tectonics, Baars (1979d); Bird (1979); Blakey (1978); Dickinson and Suczek (1979); Livaccari (1979); McGetchin, Burke, and others (1979); Silver, L. T., and McGetchin (1978); Zoback (1979)
- topaz rhyolites, Burt, Bikun, and Christiansen (1980)
- uranium, Ortiz, Ethridge, and Sunada (1980); Ortiz and others (1980); Smith, L. T. (1976)
- uranium indicator plants, Massingill (1979b)
- Colorado River basin**
- hydrology, Brown, S. G. (1976); Cooper and others (1978); El-Ashry (1980)
- columbites**, Hlava (1979)
- Concha Limestone**, *see* Naco Group
- copper**
- bacterial leaching, Brierley (1979)
- general, Tourtelot and Vine (1976)
- Grant County, Ahmad and Rose (1980); Alminas, Watts, and others (1978b); Brierley (1979); Feis (1978); Jacobs, D. C., and Parry (1979); Loucks and Newell (1978); Reynolds, T. J., and Beane (1979)
- Laramide orogeny, Allan and Swan (1978); Nielson, R. L. (1978); Zantop (1980)
- porphyry, Allan and Swan (1978); Beane (1980); Beane and others (1980); Drewes (1978); Feis (1978); Jacobs, D. C., and Parry (1979); Mitcham (1978); Nash (1976); Nielson, R. L. (1978); Reynolds, T. J., and Beane (1979)
- Rio Arriba County, Timmer (1976)
- Sandoval County, Timmer (1976)
- sandstone deposits, LaPoint (1976, 1977, 1979)
- Santa Fe County, Akright (1979); Harshbarger, J. W., and Associates (1976)
- Sierra County, Alminas, Watts, and others (1978b)
- solution mining, Smith, R. W. (1979)
- tectonic setting, Drewes (1978)
- Cretaceous**
- ammonites, Cobban and Hook (1979, 1980)
- biostratigraphy, Kauffman, E. G. (1977)
- Black Mesa Basin, Peterson, F., and Kirk (1977)
- Colorado Plateau correlation, Peterson, F., and Kirk (1977)
- Henry Basin, Peterson, F., and Kirk (1977)
- Kaiparowits Basin, Peterson, F., and Kirk (1977)
- La Ventana delta, Fuchs-Parker (1977)
- Raton Basin, Ash and Tidwell (1976); Fassett (1976)
- reptiles and amphibians, Armstrong-Ziegler (1978, 1980)
- San Juan Basin, Brookins (1977a); Butler, R. F., Lindsay, Jacobs, and Johnson (1976, 1977); Butler, R. F., Lindsay, and Johnson (1979); Fassett (1976); Molenaar (1977b); Peterson, F., and Kirk (1977)
- Santa Fe County, Bachman (1976a)
- stratigraphy, Kirk (1979)
- Cretaceous-Tertiary boundary**, Kent, D. V. (1977)
- Crevasse Canyon Formation**, *see* Mesaverde Group
- Crosby Mountains**, Bornhorst (1976)
- crust**, Ander (1980); Brown, L. D., Kaufman, and others (1979); Brown, L. D., Kaufman, and Oliver (1977); Condie and Brookins (1980); Jurdy (1979); Jurdy and Brocher (1980); Keller, G. R., and Braille (1979); Keller, G. R., Braille, and Schlue (1979); Keller, G. R., and Lowrey (1976); Long, G. H., and others (1977); McCullar (1977); Murdock and Jaksha (1980); Oliver, J. E. (1978); Oliver,

- J. E., and Kaufman (1976); Oliver, J. E., and others (1976); Olsen, K. H., Keller, and Stewart (1979); Olsen, K. H., Keller, Stewart, and others (1977); Olsen, K. H., and Stewart (1979); Padovani (1977); Padovani and Carter (1977, 1978a, b); Rinehart, E. J. (1979a, b); Rinehart, E. J., and Sanford (1980); Rinehart, E. J., and others (1979); Spence, W., Gross, and Jaksha (1979); Spence, W., and Jaksha (1978); Topozada and Sanford (1976); Ward, R. M. (1980); Warren, R. G. (1978, 1979); Warren, R. G., and others (1978); Wasilewski and Padovani (1980); Woodward (1977)
- crystallography**  
nepheline, Dallase and Thomas (1978)
- Cuba Mesa Member**, *see* San Jose Formation
- Cuchillo Mountain laccolith**, McMillan (1979); McMillan and Jahns (1979)
- Curry County**  
Blackwater Draw, Agenbroad (1978); Saunders (1978)  
Clovis 2° quadrangle, DeCicco and Patterson (1980c); Texas Bureau of Economic Geology (1978); U.S. Geol. Survey (1980e)  
ground water, Hudson, J. D. (1976–77b, 1979c)  
land classification map, DeCicco and Patterson (1980c); U.S. Geol. Survey (1980e)
- Cutler Formation**, Fracasso (1980)
- Dakota Sandstone**  
brachiopods, Hook and Cobban (1977)  
clay, Russell, J. A. (1979)  
Colfax County, Pillmore and Eicher (1976)  
general, Asquith and Gilbert (1976); Bejnar, C. R., and Lessard (1976); Gilbert and Asquith (1976); Levinson (1979)  
geochronology, Brookins, Della Valle, and Register (1980); Ludwig and others (1977)  
Grants uranium district, Della Valle and Brookins (1980b); Pierson and Green (1977, 1980)  
mollusks, Cobban (1977a, b)  
petroleum and natural gas, Berg (1979a); Dugan (1977)  
San Juan Basin, Noon (1980); Owen and Siemers (1977); Owen, Walters, Depetro, and Turmelle (1978); Owen, Walters, Kostura, and Grant (1976)  
Santa Fe County, Bachman (1976a)  
Trowells Sandstone Tongue, Hook and Cobban (1977)  
Zuni Basin, Hook, Cobban, and Landis (1980)
- Dalton Sandstone Member**, *see* Crevasse Canyon Formation
- Datil-Mogollon volcanic province**, *see* Mogollon-Datil volcanic field
- Datil Mountains**, Harrison (1980)
- D-Cross Tongue**, *see* Mancos Shale
- De Baca County**  
Clovis 2° quadrangle, DeCicco and Patterson (1980c); Texas Bureau of Economic Geology (1978); U.S. Geol. Survey (1980e)  
Fort Sumner 2° quadrangle, DeCicco and Patterson (1980g)  
land classification map, DeCicco and Patterson (1980c, g); U.S. Geol. Survey (1980e)
- Delaware Basin**  
Bell Canyon Formation, Berg (1978); Berg and Ahr (1978); Ormiston and Babcock (1979); Payne (1976, 1979); Williamson, C. R. (1978, 1979a, b, 1980a, b)  
Castile Formation, Anderson, R. Y., and Powers (1978); Dean (1980); Dean and Anderson (1978a, b)  
crustal structure, Keller, G. R., Hills, and Djeddi (1980b)  
evaporites, Anderson, R. Y., Kietzke, and Rhodes (1978); Anderson, R. Y., and Kirkland (1979, 1980); Anderson, R. Y., and Powers (1978); Barrows (1980); Bodenlos (1978); Bodine (1978); Cheeseman (1978); Lambert, S. J. (1980); Mercer (1979); Mercer and Hiss (1978); Powers, D. W. (1980); Scroggin (1978); Vine (1976)  
general, Austin, G. S. (1978); Cheeseman (1978); Hills (1979)  
geomorphology, Widdicombe (1979)  
ground water, Lambert, S. J. (1978, 1980)  
igneous, Calzia and Hiss (1978)  
Lamar Limestone, Babcock, L. C. (1977)  
petroleum and natural gas, Berg (1978); Cheeseman (1978); Hills (1979); Jacka (1979); Orr and others (1979)  
radiolarians, Cornell and Simpson (1980)  
Salado Formation, Anderson, R. Y., and Powers (1978); Dean and Anderson (1978a, b)  
sulfur, Smith, A. R. (1978a, 1980)  
tectonics, Shurbet and Cebull (1978)
- Delaware Mountain Group**  
Bell Canyon Formation, Berg (1978); Berg and Ahr (1978); Hiss (1980); Jacka (1979); Ormiston and Babcock (1979); Payne (1976, 1979); Weinmeister (1978); Williamson, C. R. (1978, 1979a, b, 1980a, b)  
Brushy Canyon Formation, Hiss (1980)  
Cherry Canyon Formation, Hiss (1980); Jacka (1979)  
general, Sullivan, N. M. (1979)  
hydrology, Anderson, R. Y., and Kirkland (1979, 1980)  
Lamar Limestone Member, Babcock, L. C. (1977); Tyrrell and others (1978)  
petroleum and natural gas, Berg (1979b); Cromwell (1979); Jacka (1979)
- Del Norte formation**, Strain (1976)
- Devonian**  
Piankasha sequence, Agurkis (1977)
- Dewey Lake Formation**, Peterson, D. N.
- Diablo Plateau**, Brown, L. D., Reilinger, and Hagstrum (1978); Reilinger, Brown, and Powers (1980)
- Dixon member**, *see* Tesuque Formation
- Dockum Group**  
Chinle Formation, Ash (1976); Helsey (1977); Kurtz (1978a, b); Kurtz and Anderson (1980); O'Sullivan (1977)  
general, McGowen (1979); McGowen and others (1977); Young, R. G. (1977, 1978)  
Santa Rosa Sandstone, Brimhall (1978); Budding (1980); LaPoint and Christiansen (1977); Lupe (1977)
- Doña Ana cauldron**, Seager (1978a)
- Doña Ana County**  
Bishop Cap hills, Baghdad (1976); Van Devender and Everitt (1977)  
Cerro de Cristo Rey, Strain (1976)  
Corralitos Ranch 15' quadrangle, Clemons (1976c, 1977)  
Doña Ana Mountains, DeSimpson (1976)  
El Paso 2° quadrangle, DeCicco and Patterson (1980d)  
Fort Selden State Monument and Leasburg State Park, Bieberman (1979)  
geothermal energy, Chaturvedi (1980a-c); Gunaji and others (1978); Gunaji, Thode, and others (1978); Lohse (1980); Lohse and others (1980a, b); Morgan, P., Swanberg, and Lohse (1980); Morgan, P., Swanberg, and others (1979)  
gravity survey, Brown, L. F. (1977); Daggett and Brown (1977)  
ground water, Hernandez (1978)  
guidebook, Clemons, Christiansen, and James (1980)  
Hueco Formation, DeSimpson (1976)  
Hunt's Hole, Stuart (1979); Stuart and Brenner (1979)  
land classification map, Banaszyski and others (1979); DeCicco and Patterson (1980d, e)  
Las Alturas anomaly, Hohmann and Jiracek (1979)  
Las Cruces, Jackson, D. B. (1976); Thomas, J. H., and others (1978)  
Las Cruces 2° quadrangle, DeCicco and Patterson (1980e)  
Mesilla Valley, Hernandez (1978); Uphoff (1978); Zohdy and others (1976)  
Mesilla Valley fault zone, Lovejoy (1976d)  
Organ Mountains, Stone, W. J. (1976c)  
Potrillo Mountains, Berman, R. G., and Reid (1976); Bersch (1977); Hoffer (1976a, b); Jenkins, D. A. (1977)  
Radium Springs KGRA, Jiracek and Smith (1976); Quillin and Combs (1976)  
Rincon, Seager, Morgan, and Hawley (1978)  
road logs, Clemons, Christiansen, and James (1980); Cle-



- mons and Seager (1978); Hawley, Lovejoy, and others (1978); Hawley and Seager (1978); Seager (1978a)
- Robledo Mountains, DeSimpson (1976)
- San Diego Mountain, Seager and Morgan (1978a)
- scoria, Cima (1978)
- seismology, Jackson, D. B. (1976); Thomas, J. H., and others (1978); Zohdy and others (1976)
- Shelter Cave, Thompson, R. S., and others (1980)
- soil survey, Bulloch and Neher (1980)
- stratigraphy, Strain (1976)
- tectonics, Uphoff (1977, 1979)
- Tortugas Arroyo, Funderburg and Roybal (1977)
- Tortugas Mountain, Keller, G. R. (1979); King, W. E., and Kelly (1980)
- Tularosa 2° quadrangle, Banaszyski and others (1979)
- Doña Ana Mountains**, DeSimpson (1976); Seager, Kottowski, and Hawley (1976)
- Edwy County**
- Atoka Morrow west field, Beck, R. H. (1977)
- Avalon Penn (Cisco-Canyon) field, Leonard, R. C. (1977a)
- Avalon Penn (Morrow) field, Leonard, R. C. (1977b)
- Avalon Penn (Strawn) field, Leonard, R. C. (1977c)
- Brownfield 2° quadrangle, DeCicco and Patterson (1980a); U. S. Geol. Survey (1980f)
- Burton Flat Morrow field, Stanley and Tipton (1977a)
- Cabin Lake Morrow and Strawn fields, Becker (1977a, b)
- Carlsbad Cavems, Esteban and Pray (1977a-e); Folk (1977); Folk and Assereto (1976); Kendall and Broughton (1977); McLean (1977); Van Cleave (1976)
- Carlsbad field, Anderson, Rod (1977a)
- Carlsbad potash district, Aguilar and others (1976); Bodine and Laskin (1979); Brookins (1980b, c); Ellet (1978); McNaughton (1978); Olhoef (1978); U.S. Geol. Survey (1979b, f); Wynne (1978)
- Carlsbad 2° quadrangle, DeCicco and Patterson (1979c); U.S. Geol. Survey (1976a, 1980a)
- Catclaw Draw Morrow field, Hanson (1977)
- Cemetery Morrow field, LeMay (1977a)
- Corral Canyon field, Ahlen (1977a)
- Dry Cave, Harris, A. H. (1980); Harris, A. H., and Porter (1980); Lindsley and Lindsley (1978); Magish and Harris (1976)
- Eagle Creek field, Book (1977)
- Empire Abo field, Killough and Foster (1979)
- evaporites, Lochr (1979)
- Globe mine, Hlava (1979)
- Golden Lane Strawn field, Gunter (1977)
- ground water, Rinehart, J. S. (1977)
- heat flow, Mansure and Reiter (1977)
- Hobbs 2° quadrangle, DeCicco and Patterson (1979d); Texas Bureau of Economic Geology (1976); U.S. Geol. Survey (1980d)
- Indian Draw Delaware field, Cress (1977)
- land classification map, DeCicco and Patterson (1979c, d); U.S. Geol. Survey (1976a, 1980a, d, f)
- Loco Hills sand, Foster, R. W. (1976)
- Los Medaños, Caravella and Sanford (1977); Elliot (1976); Lambert, S. J., and Mercer (1977); Nowak (1978); Sanford and others (1978)
- Malaga Bend salinity alleviation, Havens and Wilkins (1979); Kunkler (1980)
- McKittick Hill caves, Byrd and Kunath (1978); Fieseler and Kunath (1978a, b); Harris, A. H. (1978); Kunath (1978a, b); Lindsley and Lindsley (1978); Smith, A. R. (1978b)
- mollusks, Metcalf (1980)
- North Dagger Draw field, Murphy, R. E. (1977a)
- Paduca Morrow field, Henry (1977b)
- Paduca Wolfcamp field, Henry (1977c)
- Pennsylvanian, Gunter (1975); Hurley, T. J. (1980)
- petroleum and natural gas, Ahlen (1977a); Anderson, Rod (1977a-c); Havenor (1977); Jons and Stanley (1976); Roswell Geological Society (1977)
- potash, Aguilar and others (1976); Ellet (1978); John and others (1978); Jones, C. L. (1978); Weisner and others (1980)
- Power Grayburg field, Knauf (1977)
- road logs, Esteban and Pray (1977a-e); Pray and Sarg (1977); Sarg (1977); Yurewicz (1977e)
- Rock Tank field, Jons and Stanley (1976)
- Rock Tank Morrow field, Stanley and Tipton (1977b)
- Sand Cave, Byrd and Kunath (1978)
- Sand Dune (Atoka) field, Kimbro (1977a)
- Sand Dune (Cherry Canyon) field, Kimbro (1977b)
- seismology, Caravella and Sanford (1977); Sanford and others (1978)
- South Dagger Draw field, Murphy, R. E. (1977b)
- Springs Upper Penn field, David, E. K. (1977c)
- Sugart Delaware field, Cress (1977)
- Washington Ranch Morrow field, Engwall (1977b)
- Wills-Weaver mine, Golder Associates (1980)
- Winchester field, Anderson, Rod (1977b, c)
- Yeso Hills, Smith, A. R. (1979)
- El Paso Group**, LeMone (1977)
- Embudo Granite**, Register, M. E., and Brookins (1979)
- Emory cauldron**, Seager (1978b)
- energy resources**  
*see also* coal, geothermal energy, and petroleum and natural gas
- general, Arnold (1977, 1978); Arnold and Anderson (1978); Arnold and Hill (1980a, b); Arnold, Foster, and others (1976); Kottowski and Thompson (1979, 1980)
- tectonics, Rona (1977)
- Tularosa Basin complex, Lansford and others (1976b, c); Reiter and others (1976); U.S. Dept. Energy (1979)
- waterpower, Banaszyski and others (1979); DeCicco and Patterson (1979a-d, 1980a-h); DeCicco, Patterson, and Lutz (1978a-d, 1979, 1980); DeCicco, Patterson, and Morgan (1980); DeCicco, Patterson, and Robinson (1980); DeCicco, Patterson, and Yamamoto (1980)
- water requirements, Gertsch and others (1977); Hudson, H. H. (1978); Melancon and others (1979); Milios (1976); Silver, R. M., and Comeau (1979); Stone, W. J. (1976b)
- Engle Basin**, Brookins, Warren, and Kudo (1980); Warren, R. G. (1978, 1979); Warren, R. G., and others (1978)
- Entrada Sandstone**, *see* San Rafael Group
- environmental geology**, Hawley (1980); Kaufman, E. L., and Siciliano (1980); Langhorst (1980)
- Escabrosa Group**  
Keating Formation, Armstrong and Mamet (1978a)
- Española Basin**  
Cenozoic, Manley (1976c, 1978c, e); May (1980)  
geology, Kelley, V. C. (1978a); Manley (1977); May (1979)  
geochronology, Baldrige and others (1980); Manley (1976a, b); Manley and Naeser (1977)  
geomorphology, Kelley, V. C. (1979b)  
gravity studies, Cordell, L. (1979a)  
Pajarito fault zone, Golombek (1980)  
Rio Grande rift, Bridwell (1978); Cordell, L. (1979a); Manley (1976c, 1978a-c, 1979a); Reilinger, Brown, and others (1979); Reilinger and York (1979)  
stratigraphy, Ingersoll (1979a); Manley (1978a, c, 1979a, b); May (1979); Steinpens (1980)  
tectonics, Woodward and Ingersoll (1979)  
volcanics, Manley (1976a, b); Manley and Naeser (1977)
- Espinosa Formation**, Baldrige and others (1980)
- Estancia Valley**  
foraminifera, Bachhuber and McClellan (1976, 1977)  
uranium, Brookins and Olsen (1977); Olsen, C. E. (1977)
- evaporites**  
argon gas permeability, Sutherland and Cave (1980)  
Cenozoic, Bachman (1976c)

- Delaware Basin, Anderson, R. Y., Kietzke, and Rhodes (1978); Anderson, R. Y., and Kirkland (1979, 1980); Anderson, R. Y., and Powers (1978); Barrows (1980); Bodenlos (1978); Bodine (1978); Lambert, S. J. (1980); Mercer (1979); Mercer and Hiss (1978); Powers, D. W. (1980); Schmoker (1980); Scroggin (1978); Vine (1976) deposition, Shaw, A. B. (1977)
- dissolution history, Bachman (1976c); Bachman and Izett (1979a, b); Johnson, K. S. (1980); Lambert, S. J. (1980); Szabo and Gottschall (1980)
- electrical properties, Olhoeft (1978)
- geochronology, Brookins, Register, and Krueger (1980); Register, J. K., and Brookins (1980)
- Permian Basin, Johnson, K. S. (1980)
- Seven Rivers Formation, Sarg (1976a, b)
- volcanic intrusion, Loehr (1979)
- Exeter Sandstone**, Savelle (1977)
- feldspar**, Grew (1979)
- Florida Mountains**, Brookins (1978a, 1980a, g); Brookins, Rautman, and Corbitt (1978); Loring and Armstrong (1980)
- Florida Mountains Formation**, Hook and Flower (1976, 1977)
- fluorine**, Burt and Sheridan (1980); Correa (1980); Kottowski and Steensma (1979); McAnulty (1978); Van Alstine (1976)
- Folsom site**, Cordell, L. S. (1976)
- Fort Bliss Military Reservation**, Foster, R. W. (1978b)
- Fort Hancock Formation**, *see* Santa Fe Group
- Fort Selden State Monument**, Bieberman (1979)
- Four Corners**
- coal, Stalkup (1978)
- Morgan Lake, Environmental Science and Technology (1977)
- petroleum and natural gas, Baars (1979a, 1980); Crowley, C. J. (1977, 1978); Fassett and others (1978); Fassett, Thomaidis, and Matheny (1978); Matheny, M. L. (1978a); Matheny, M. L., and Talley (1978); Reese, D. L. (1976)
- pollution, Environmental Science and Technology (1977)
- power plant, Cannon, H. L., and Swanson (1979); Environmental Science and Technology (1977); Miller, S. (1976); U.S. Bureau Reclamation (1976c, d); Wangen and Wienke (1978)
- Franklin Mountains**, Barrie (1976b); Chaifetz (1977); Hair (1976); LeMone and Lovejoy (1976); Lovejoy (1976a); Lovejoy and Seager (1978); Nodeland and Cornell (1976); Simpson, R. D., and LeMone (1980)
- Frutland Formation**
- coal, Bierei (1977); Fassett and Hinds (1977); Flores (1980); Miyamoto and others (1977); Schneider, Hildenbrand, and Affolter (1979); Whyte and Shomaker (1977b)
- mine reclamation, Gould (1978); Gould and others (1977)
- paleontology, Rigby and Wolberg (1980); Tidwell, Bunderson, and Parker (1980); Wolberg (1980a, c); Wolberg and LeMone (1980); Wolberg and Rigby (1980)
- petrified palm bases, Tidwell, Bunderson, and Parker (1980)
- petroleum and natural gas, Fassett and Hinds (1977)
- stratigraphy, Butler, R. F., Lindsay, Jacobs, and Johnson (1976, 1977); Butler, R. F., Lindsay, and Johnson (1979); Erpenbeck and Flores (1979)
- Galisteo Basin**, Gorham, T. W., and Ingersoll (1979); Lis- enbee (1976a, b); Warren, A. H., and Weber (1979)
- Galisteo Formation**, Gorham, T. W. (1979); Gorham, T. W., and Ingersoll (1979); Lucas (1980); Lucas and Kues (1979); Moore, J. C. (1979)
- Gallinas Mountains**, DeMark (1980)
- Gallinas River**, Schufle, Baca, and others (1976); Schufle, Mega, and Beckhart (1979)
- Gallup Sandstone**, *see* Mesaverde Group
- garnet**, Bettis (1977)
- Gasbuggy project**, Luetkehans (1976); Topozada and Sanford (1976)
- Gatuna Formation**, Kelley, V. C. (1980)
- geochemistry**
- Albuquerque Basin andesites, Kasten, J. A. (1977)
- Animas Valley KGRA, Dellechiaie (1977)
- atmospheric lead, Nozaki, DeMaster, Benninger, and others (1977); Nozaki, DeMaster, Lewis, and Turekian (1978)
- Bandelier Tuff, Rogers, M. A., and Burton (1980); Sommers (1977, 1978)
- bat guano, Des Marais and others (1980)
- Battleship Rock Welded Tuff, McCormick (1980); McCormick and Smyth (1980)
- biotite, Jacobs, D. C. (1976); Jacobs and Parry (1979)
- Carrizozo basalt field, Faris (1980); Faris and Renault (1980)
- Chuska Sandstone, Trevena and Nash (1978a)
- Ciniza Lake, Dean (1978)
- Clayton volcanic field, Phelps, Blanchard, and others (1979); Phelps, Blanchard, and Stormer (1980)
- coal fly ash, Dreesen and others (1978)
- coal overburden, Hinkley (1980); Hinkley and others (1980)
- Delaware Basin, Lambert, S. J. (1978); Mercer (1979); Mercer and Hiss (1978)
- Embudo Granite, Register, M. E., and Brookins (1979)
- Engle Basin, Warren, R. G. (1978, 1979); Warren, R. G., and others (1978)
- Florida Mountains, Brookins, Rautman, and Corbitt (1978)
- Four Corners Power Plant, Wangen and Wienke (1978)
- general, Mendes and Van Trump (1979)
- Grants uranium district, Brookins (1980e); Brookins, Riese and Lee (1977); Della Valle and Brookins (1979, 1980a); Lee, M. J. (1976a, b); Leventhal (1979, 1980); Leventhal and Threlkeld (1978); Riese, W. C., Brookins, and Della Valle (1980); Riese, W. C., Brookins, and Lee (1978); Riese, W. C., Lee, and Brookins (1977)
- Harding pegmatite, Register, M. E. (1979); Register, M. E., and Brookins (1978); Register, M. E., Brookins, and Della Valle (1978)
- hot dry rock program, Charles (1978); Charles and Her- rick (1976); Laughlin and Eddy (1976)
- KCM No. 1 Forest Federal well, Cernock (1977b); Cer- nock and Bayliss (1977)
- Kilbourne Hole, Basu (1978); Hart, S. R., and others (1980); James and others (1980a, b); Richardson, S. H., and others (1980); Saito, Basu, and others (1977); Saito, Menzies, and others (1978)
- Lucero uplift, Fisher, R. A. (1979)
- Madera Formation, Mukhopadhyay and Brookins (1976b)
- magmatothermal ore deposits, Doe (1979)
- Mancos Shale, Louderbough and Potter (1978)
- Mississippian limestones, Meyers and Lohmann (1980)
- Mogollon-Datil volcanic field, Bornhorst (1980); Lindley (1979); Lindley and others (1980); Ratte and Grothro (1979); Stinnett (1980); Stinnett and Stueber (1976)
- Morrison Formation, Lee, M. J. (1976b)
- Mount Taylor volcanic field, Ridley (1979); Riese, W. C., and Brookins (1976)
- muscovite, Gresens and Stensrud (1977)
- Navajo volcanic field, Roden (1978)
- nepheline, Dollase and Thomas (1978)
- obsidians, Jambon and Shelby (1980)
- Palisades sill, Cannon, R. P. (1977); Cannon, R. P., and Ragland (1977)
- pediments, Pillmore and Scott (1976)
- petroleum and natural gas, Ross, L. M., and Harwood (1979)
- Precambrian, Condie (1978); Condie and Budding (1979); Gresens (1976); Gresens and Stensrud (1977)
- Raton coal field, Pillmore and Hatch (1976)
- Raton volcanic field, Phelps, Blanchard, and others (1979); Phelps, Blanchard, and Stormer (1980)
- Red Cloud district, Modreski (1979)
- Red Mountain Dacite, David, W. P., and others (1980)
- Riley maar, Saito, Menzies, and others (1978)

- Rio Grande rift, Menzies and Murthy (1980); Reid, J. B. (1978); Reid, J. B., Bateman, and others (1977); Reid, J. B., and Frey (1978); Reid, J. B., and Woods (1978b); Swanberg (1979); Zimmerman, C. J. (1979); Zimmerman, C. J., and Kudo (1978, 1979b)
- Roswell Underground Water Basin, LeFebvre (1976, 1977); Mercado (1977)
- sandstone copper deposits, LaPoint (1979)
- San Juan Basin, Brookins (1977d, 1978d); Ross, L. M., and Harwood (1979)
- Servilleta basalts, Crossey (1979)
- seston, Nuhfer (1979)
- Smith Lake mining district, Place and others (1980)
- Taos Plateau volcanic field, Dungan and others (1978); Pronold (1979)
- Tewa Group, Prigmore (1978)
- topaz rhyolites, Christiansen, E. H., and others (1980)
- trace elements, Bornhorst (1980); Brookins and Della Valle (1979); Brookins, Della Valle, and Balagna (1979); Brookins, Della Valle, and Lee (1978b); Brookins, Lee, and Riese (1977); Brookins and Rautman (1978); Brookins, Riese, and Lee (1977); David, W. P., and others (1980); Helmick and others (1976); Marple (1979); Marple and others (1978); Popp and Laquer (1980); Riese, W. C., Lee, and others (1979); Roden (1978); Rogers, M. A., and Burton (1980)
- trondhjemites, Barker, F., Arth, and others (1976); Barker, F., Friedman, and others (1976); Glickson (1979)
- tuffaceous sediments, Olander (1979)
- Tularosa Basin, Sakai and others (1976)
- uranium, general, Leach and Puchlik (1976); Lee, M. J. (1976a, b); Nichols, C. E., and others (1976); Osmond and Cowart (1980); Riese, W. C., Lee, and others (1979)
- Zuni Mountains, Brookins and Rautman (1978)
- geochronology**
- amino acid, Miller, G. H., and Hare (1980); Miller, G. H., and others (1979)
- fission-track dating
- hot dry rock geothermal project, Naeser and Forbes (1976)
- Mogollon Plateau, Smith, E. I., and others (1976)
- general
- Florida Mountains, Brookins (1980a)
- general, Marvin and Cole (1978); Marvin and Dobson (1979); Marvin, Naeser, and Mehnert (1978); Nichols, S. L. (1978); Weimer and others (1979)
- Grants uranium district, Brookins (1980d)
- ground water, Barr and others (1979)
- hot dry rock project, Brookins, Forbes, and others (1977)
- Kilbourne Hole, Davis, G. L., and Grew (1978)
- Nacimiento Formation, Taylor, L. H. (1977)
- Precambrian, Bolton (1976); Robertson, J. M., Calender, and Brookins (1976)
- Rubio Peak Formation, Hedlund (1976)
- Sandia Mountains, Bolton (1976)
- southwestern New Mexico, Snyder, W. S., and others (1976)
- ion exchange
- Gallinas River sediments, Schuffe, Baca, and others (1976); Schuffe, Mega, and Beckhart (1979)
- K–Ar**
- Albuquerque–Belén Basin volcanics, Kudo and others (1977)
- Bandelier Tuff, Baldrige and others (1980)
- Bernalillo County, Machette (1978e)
- Catron County, Bikerman (1976)
- Cerro Toledo Rhyolite, Izett and others (1978)
- Colorado Plateau, Roden and others (1979)
- Eddy County, Brookins (1980c)
- Embudo Granite, Register, M. E., and Brookins (1979)
- Española Basin, Baldrige and others (1980); Manley (1976a)
- Espinosa Formation, Baldrige and others (1980)
- Grants uranium district, Brookins, Lee, and Shafiqullah (1977); Lee, M. J., Brookins, and Shafiqullah (1977)
- Harding pegmatite, Register, M. E. (1979)
- hot dry rock project, Turner, D. L., and Forbes (1976)
- Jemez lineament, Laughlin, Brookins, Damon, and Shafiqullah (1979)
- Jemez Mountains, Izett and others (1978)
- Las Tablas–La Madera 7 1/2' quadrangles, Gresens (1976)
- Lea County, Brookins (1980b, c)
- Little Hatchet Mountains, Loring and Loring (1980a)
- Los Piños Formation, Baldrige and others (1980)
- Mount Taylor volcanic field, Lipman and Mehnert (1980)
- Peloncillo Mountains, Hoggatt and others (1977)
- Picuris Range, Gresens (1976)
- Pliocene basalts, Manley (1976a)
- polyhalite, Brookins, Register, and Krueger (1980)
- Precambrian, Gresens (1976)
- Rio Grande rift, Bachman and Mehnert (1978); Baldrige, Damon, and others (1980); Stearns (1979)
- southern New Mexico, Loring and Loring (1980b)
- lead systematics
- mineral deposits, Ewing, T. E. (1979)
- Rio Grande rift, Everson and Silver (1978)
- Rb–Sr**
- Castile Formation, Brookins, Register, Register, and Lambert (1978)
- Embudo Granite, Register, M. E., and Brookins (1979)
- Harding pegmatite, Register, M. E. (1979)
- hot dry rock project, Brookins and Laughlin (1976a)
- Ladron Mountains, White, D. L. (1978a, b)
- Madera Formation, Mukhopadhyay and Brookins (1976a)
- Magdalena Mountains, White, D. L. (1978a, b)
- Manzano Mountains, White, D. L. (1978a, b)
- Morrison Formation, Lee, M. J., and Brookins (1978, 1980); Ludwig (1980)
- Ojita pluton, White, D. L. (1978a, b)
- Precambrian igneous rocks, Brookins, Bolton, and Condie (1980); White, D. L. (1979)
- Rio Grande rift, Brookins (1977b); Williams, S., and Murthy (1978, 1979)
- Salado Formation, Brookins, Register, Register, and Lambert (1978); Register, J. K. (1979); Register, J. K., and Brookins (1980)
- San Juan Basin, Brookins, Della Valle, and Register (1980)
- San Pedro Mountains, Wobus and Hedge (1980)
- Sierra Oscura, White, D. L. (1978a, b)
- Taos Plateau volcanics, Williams, S., and Murthy (1978, 1979)
- Trans–Pecos magmatic province, Barker, D. S., Long, and others (1977)
- Tres Piedras Granite, Maxon (1976)
- Zuni Mountains, Brookins, Della Valle, and Lee (1977, 1978a)
- Sr**
- Bernalillo County, Brookins, Kasten, and Kudo (1980)
- Catron County, Bikerman (1976)
- Engle Basin, Brookins, Warren, and Kudo (1980)
- Embudo Granite, Register, M. E., and Brookins (1979)
- hot dry rock project, Brookins and Laughlin (1976b, 1977); Grancarz (1978)
- Kilbourne Hole, Hart, S. R., and others (1979)
- lavas, Leeman (1979)
- Mount Taylor volcanic field, Brookins, Crumpler, and Elston (1977)
- Rio Arriba County, Brookins, Eppler, and Elston (1977)
- Sangre de Cristo Mountains, Graustein and Armstrong (1978)
- Servilleta Formation, Brookins, Eppler and Elston (1977)
- Taos County, Brookins, Eppler, and Elston (1977); Brookins and Zimmerman (1980)

- tephrochronology  
 Española Basin, Manley (1976b); Manley and Naeser (1977)
- U-Pb isotopes and U series  
 Dakota Sandstone, Ludwig and others (1977)  
 Tres Piedras Granite, Maxon (1976)
- zircon fission-track  
 Jemez Mountains, Izett and others (1978)
- geologic hazards**, Colton (1979); Wachter and Rutenbeck (1980)
- geologic history**  
 Española Basin, Manley (1976c)  
 faults, Machette (1978e)  
 general, Burchfiel (1978)  
 Pecos region, Bachhuber (1980)  
 Picuris Range, Nielsen, K. C., and Scott (1979)  
 Pyramid Mountains, Thorman and Drewes (1978a)  
 river system development, Lovejoy (1976c)  
 Sangre de Cristo Mountains, O'Neill, and Mehner (1980a, b)
- geomorphology**  
*see also* soil science  
 Bernalillo County, Lambert, P. W. (1978b)  
 Chaco Canyon, Love (1976, 1977, 1979, 1980); Ross, J. R. (1978)  
 Colfax County, Pillmore (1976c)  
 Delaware Basin, Widdicombe (1979)  
 Doña Ana County, Bulloch and Neher (1980)  
 erosion, Aldon (1976); Contessa (1975); Cooley (1979a, b); Curtis, N. M., Jr. (1976); Robbie and Buchanan (1978); Wells, S. G., and White (1978); White, W. D., and Wells (1979)  
 Española Basin, Kelley, V. C. (1979b)  
 fossil preservation, Isaacson and Perry (1977)  
 Gallinas Gorge, Schufie (1979)  
 general, Gile (1977)  
 Mora County landslide, Lovelace (1976)  
 Rio Grande basin, Stearns (1979)  
 Rio Grande rift, Bachman and Mehner (1978); Hawley (1978d, e)  
 San Juan Basin, Cooley (1979a, b); Gutierrez (1980a); Hewett (1977); Schultz (1980)  
 San Juan County, Love and Schultz (1980)  
 Santa Fe County, Leopold (1976); Malde and Scott (1977)  
 southern High Plains, Walker (1977)  
 White Sands Missile Range, Moore, H. J. (1976)
- geophysics**  
 borehole gravity, Kosocki and others (1978); Schmoker (1980)  
 Bouguer gravity surveys, Aiken (1977, 1978); Aiken, Laughlin, and West (1977, 1978); Aiken and others (1978); Ander, Heinken, and others (1979); Ander and Huestis (1978); Barrie (1976a, b); Bath and others (1977); Birch (1980); Brown, L. F. (1977); Budding (1978); Chapin, Chamberlin, and others (1978b); Coney (1976a); Cordell, L. (1976a, d, 1978a, c, 1979a, b); Cordell, L., and Detmering-Beal (1978); Cordell, L., Keller, and Hildenbrand (1978); Daggett and Brown (1977); Dansereau and Wynn (1978); Decker and Smithson (1977); Dimitrijevič and others (1976); Drake (1979); Eaton, Peterson, and Webring (1978); Eaton, Peterson, Webring, and Ratte (1976); Healey (1976); Healey and others (1978); Hedlund (1979); Keller, G. R., and Covert (1977); Krohn (1976); Ramberg and others (1978); Sanguinetti and Loeber (1976); Schlue (1978); Western and Aiken (1977); Williams, L. M. (1979); Wynn and Dansereau (1978, 1979)  
 COCORP, Brocher (1978, 1979a, b, 1980); Brown, L. D., Allmendinger, and others (1980); Brown, L. D., Brewer, and others (1978); Brown, L. D., Chapin, and others (1980); Brown, L. D., Kaufman, and others (1979); Brown, L. D., Kaufman, and Oliver (1977); Brown, L. D., Krumhansl, Chapin, and others (1979); Brown, L. D., Krumhansl, Cook, and Kaufman (1978); Brown, L. D., Krumhansl, Cook, and others (1978); Cape and others (1980); Chapin, Sanford, and Brown (1980); Jiracek, Ander, and Reddy (1978); Jurdy (1978, 1979); Jurdy and Brocher (1980); Kaufman, S., and Oliver (1977); Long, G. H., and others (1977); Oliver, J. E. (1978); Oliver, J. E., and Kaufman (1976); Oliver, J. E., and others (1976); Olsen, K. H., Keller, and Stewart (1979); Olsen, K. H., Keller, Stewart, and others (1977); Olsen, K. H., and Stewart (1979); Ottolini (1978); Sanford, Mott, and others (1977); Sanford and Oliver (1977); Schilt and others (1978); Ward, R. W., and Nation (1978)  
 electromagnetic survey, Williston, McNeil, and Assoc., Inc. (1979)  
 gamma ray survey, Geometrics (1979a, b)  
 general, Ander (1980); Barrows (1980); Cordell, L. (1976c, 1978b, d, 1979); Djeddi (1979); Eaton (1979b); Elliot (1976); Hern (1979); Hern and Elliot (1978); Jiracek, Smith, and others (1977); Keller, G. R., Graham, and Roy (1978); Keller, G. R., Hills, and Djeddi (1980a, b); Kintzinger (1976); Preslar (1976); Sanford (1978a); Sanford, Mott, and others (1977); Smith, C. S. (1978); Thompson, D. T. (1980); Towle (1980b); Veldhuluis and Keller, (1980); Wynn and Hedlund (1979)  
 heat flow, Bridwell (1976, 1978); Bridwell and Baldrige (1976); Brookins (1978a); Burruss and Holister (1979); Chapin, Chamberlin, and others (1978b); Chapin, Sanford, and Brown (1980); Cook, F. A., and others (1978); Crough and others (1980); Decker and Smithson (1977); Edwards and others (1978); Huestis (1979); Lohse and others (1980); Mansure and Reiter (1977, 1979); Padovani and Carter (1978b); Reid, J. B. (1976); Reiter, M. A. (1976); Reiter, M. A., Edwards, Mansure, and Shearer (1978); Reiter, M. A., Edwards, Shearer, Fisher, and others (1976); Reiter, M. A., Edwards, Shearer, McGrath, and Mansure (1976); Reiter, M. A., Mansure, and Shearer (1979a, b); Reiter, M. A., and Shearer (1979, 1980); Reiter, M. A., Shearer, and Edwards (1978); Reiter, M. A., Simmons, and others (1976); Reiter, M. A., and Smith (1977); Reiter, M. A., Weidman, and others (1976); Sanford (1977a); Shearer and Reiter (1978); Smith, D. L., and Jones (1978a, b)  
 lunar research, Moore, H. J. (1976)  
 magnetic surveys, Ander, Goss, and others (1980); Ander, Laughlin, and others (1980); Bath (1976, 1977); Bath and others (1977); Chapin, Chamberlin, and others (1978b); Colvocoresses (1979); Cordell, L. (1976a, b, 1979c); Fischer, W. A., and Orr (1978); Geodata International (1976a-c, 1978, 1980a, b); Geometrics (1979a, b); Hedlund (1979); High Life Helicopters and Geodata International (1979); Hohmann and Jiracek (1979); Keller, G. R., and Covert (1977); Lopez, L. M. (1978); Maki-Lopez (1978); Mayhew (1979); Singh (1978); Texas Instruments (1978, 1979a, b); Towle (1978, 1979, 1980a); U.S. Geol. Survey (1976b-e, 1979d, g, 1980-h-m); Wasilewski and Padovani (1980); Wynn (1978)  
 magnetotelluric survey, Hermance (1979); Hermance and Pedersen (1980); Hoover and others (1978); Jiracek, Ander, and Holcombe (1979a, b); Jiracek, Ander, and Reddy (1978); Pedersen (1980); Pedersen and others (1979); Pedersen and Hermance (1979); Wannamaker (1980)  
 petroleum evaluation, Barreto (1978)  
 radar probing, Dolphin and others (1978)  
 resistivity, Jiracek, Ander, and Holcombe (1979b); Jiracek and others (1976); Jiracek and Smith (1976); Shankland (1978); Smith, C. S. (1976, 1977); Smith, C. S., and others (1977); Zohdy and others (1976)  
 seismology, Aki (1980); Aki and others (1977); Anderson, J. G. (1978); Bache and others (1978); Brocher (1978, 1979a, b, 1980); Budding and Purtyman (1979); Caravella (1976); Caravella and Sanford (1977); Chapin, Chamberlin, and others (1978b); Davis, T. L., and

- Stoughton (1979); Fehler (1979); Fender (1978); Fisher, J. A. (1977); Frishman (1979); Geotimes (1980); Guyn (1978); Herrman and others (1980); Herrman and Park (1979); Hoffman and Harding (1977); Jackson, D. B. (1976); Jaksha (1976); Jaksha and Locke (1978); Jaksha, Locke, and others (1977, 1978); Johnson, D. M., and Combs (1976); Johnston, J. A. (1978); Jones, B., and McMillan (1977); Jurdy (1978, 1979); Jurdy and Brocher (1980); Keller, G. R., Braile, and Schlue (1979); Keller, G. R., Sinno, and others (1979); King, K. W., and Hays (1977); Kintzinger, Reynolds, and others (1978); Kintzinger and West (1976); Long, G. H., and others (1977); McCullar (1977); Mott (1976); Murdock and Jaksha (1978, 1980); Murphy, J. R. (1977); North, R. G., and Frasier (1977); Northrop (1976); Oliver, J. E. (1978); Oliver, J. E., and Kaufman (1976); Oliver, J. E., and others (1976); Olsen, K. H., Cash, and Bridwell (1976); Orr and others (1979); Potter, R. M. (1976); Quillin and Combs (1976); Reinke (1978); Reinke and Herrin (1979); Rinehart, E. J. (1976, 1979a, b); Rinehart, E. J., and Sanford (1980); Rinehart, E. J., and others (1979); Rogers, A. M., and Malkiel (1979); Ryder and others (1980); Sanford (1976, 1977b, 1978b, 1980a, b); Sanford and Oliver (1977); Sanford, Olsen, and Jaksha (1979, 1980); Sanford and others (1976, 1978, 1980); Sanford, Rinehart, and others (1977); Sanford and Schlue (1979, 1980); Sanford, Topozada, and others (1976); Sangree and Widmire (1978, 1979); Savage, J. C., and others (1979, 1980); Sengupta and Ward (1977); Shuleski (1976); Shuleski and others (1977); Singh (1978); Smart (1979); Smithson and McCullar (1977); Spence, W., Gross, and Jaksha (1979); Spence, W., and Jaksha (1978); Strauss (1977); Stump and Reinke (1980); Tang (1978); Thomas, J. H., and others (1978); Topozada and Sanford (1976); von Seggern (1977); Ward, R. M. (1980); Ward, R. W. (1979); Ward, R. W., and Sengupta (1977); West, K. L. (1979); Yousef (1977)
- spectral gamma logging, West and Laughlin (1976)
- geothermal energy**
- Animas Basin and KGRA, Chaturvedi and Ramos-Arras (1979); Dellechaie (1977)
- Basin and Range province, Keller, G. V., Grose, and Crewdson (1978)
- Bernalillo County, Kauffman, D., and others (1980); Parker, M. D., and Jiracek (1980)
- Bouguer gravity anomaly, Aiken and others (1978); Eaton, Peterson, Webring, and Ratte (1976)
- desalinization, Swanberg and Rybarczyk (1979)
- Doña Ana County, Chaturvedi (1980a-c); Gunaji and others (1978); Gunaji, Thode, and others (1978); Lohse (1980); Lohse and others (1980a, b)
- exploration, Gerety (1980)
- general, Chaturvedi (1980d); DiPippo (1978); Geonomics (1978a, b); Lansford, Chaturvedi, and others (1980); Mizell (1980a, b); Otte (1980); Patterson, E. D., and Renner (1976); Pratt and Simonson (1976); Reiter, M. A., and Stone (1976); Renner and others (1976); Salvesson (1978); Silver, R. M., and Comeau (1979); Smith, J. L., and others (1980); Stone and Mizell (1977); Swanberg and others (1977); Ward, R. W. (1979)
- Hidalgo County, Elston, Erb, and Deal (1979)
- hot dry rock, Aamodt (1976, 1977); Aamodt, Aki, and others (1979); Aamodt, Baltz, and others (1978); Aamodt, Brown, and others (1978); Aki (1980); Aki and others (1977); Albright (1976, 1979); Albright and others (1978); American Geophysical Union (1977a); Ander, Goss, and others (1980); Atkinson, P. G. (1980); Balagna, Beddoe, and others (1978); Balagna, West, and others (1977); Barker, C. (1976); Bodvarsson and others (1980); Brookins, Forbes, and others (1977); Brookins and Laughlin (1976a, b, 1977); Brown, D. W. (1976); Brown, M. C., and others (1979); Burruss and Holister (1979); Charles, West, and others (1977); Cremer and others (1980); Crowe and others (1978); Cummings and others (1979); Dennis, B. R., and Horton (1978); Dennis, B. R., Miles, and others (1978); Dennis, B. R., and Murphy (1978); Duffield and Tester (1978); Duffy (1978); Ehrenberg and Perkins (1977); Fehler (1977); Gancarz (1978); Gutschick and Rea (1978); Hageman (1978); Hatton (1977, 1978, 1980a, b); Helmick and others (1976); Hendron (1978); Holley and others (1978); Hsu (1979); Hsu and others (1978); Kaufman, E. L., and Siciliano (1979); Keizer and others (1979); Keller, G. V., Grose, and Pickett (1978); Kintzinger (1976); Kintzinger and others (1978); Kintzinger, Reynolds, and others (1978); Kintzinger and West (1976); Kolstad and McGetchin (1978); Kolstad, McGetchin, and Laughlin (1976); Lambert, S. J. (1979a-c); Laughlin and Eddy (1976); Laughlin and West (1976, 1977); Laughlin, West, and others (1977); Lawton and Horton (1979); Maurer and others (1978); Messer and others (1978); Mortensen (1978); Murphy, H. D. (1976, 1978a, b); Murphy, H. D., and others (1978, 1980); Murphy, H. D., and Tester (1979); Naeser and Forbes (1976); Newsom and others (1978); Otte (1980); Pearson and others (1980); Pettitt (1976, 1977, 1978, 1979); Pettitt and Tester (1978a, b); Pettitt and West (1978); Potter, J. M. (1978); Potter, J. M., and others (1976); Potter, R. M. (1978); Purtymun, Adams, and others (1977); Purtymun, Ferenbaugh, and others (1980); Purtymun and others (1976, 1980); Purtymun, Stoker, and others (1978); Rea, K. H. (1977); Riecker (1977); Sanyal and others (1979); Schubert and others (1980); Sibbitt (1976); Sibbitt and others (1978, 1979); Simmons and Eddy (1976); Smith, M. C. (1975, 1976, 1978); Solomon and Kerrick (1976); Tester and Albright (1979); Tester and others (1979); Turner, D. L., and Forbes (1979); Turner, W. M., and Kues (1978); West, F. G., and Laughlin (1976); West, F. G., and Purtymun (1976); Zartman (1979)
- hot springs, Bejnar, W., and Bejnar (1979); Mariner and others (1977); Summers (1976a, 1979)
- Hueco Tanks, El Paso area, Taylor, Bruce, and others (1980)
- Jemez Mountains volcanic complex, Hermance (1979)
- Jemez Springs, Goff and Kron (1980)
- Kilbourne Hole, Hoover and others (1978)
- Las Alturas anomaly, Morgan, P., Swanberg, and Lohse (1980); Morgan, P., Swanberg, and others (1979)
- Lightning Dock KGRA, Jiracek and Smith (1976); Jiracek, Smith, and others (1977); Preslar (1976); Smith, C. S. (1978)
- Los Alamos region, Goff and Sayer (1980)
- Radium Springs KGRA, Jiracek and Smith (1976)
- Rio Grande rift, Hardee and Luth (1980); Harder and others (1980); Huestis (1979); Kleeman and Savage (1977); Rona (1977); Swanberg (1979); Trainer and Lyford (1979)
- San Juan Basin, Chaturvedi and Lory (1980); Gran (1978)
- Santa Fe National Forest, U.S. Dept. Agriculture (1976)
- Socorro County, Chapin, Chamberlin, and others (1978a, b); Chapin, Sanford, and others (1979); Reiter, M. A., and Smith (1977)
- southwestern New Mexico, Eaton, Peterson, Webring and Ratte (1976); Smith, C. S. (1977); Smith, C. S., and others (1977); Swanberg (1976, 1978)
- Valles caldera, Dondanville (1979); Goff (1980); Keller, G. V., Grose, and Crewdson (1978); Kolstad and McGetchin (1978); Lambert, S. J., and Epstein (1980); Langhorst (1980); Sherwood and Marquis (1980)
- west-central New Mexico, Levitte and Gambill (1980)
- Zuni Mountains, Laughlin and West (1976)
- Gila Cliff Dwellings**, Clemons, Christiansen, and James (1980)
- Gila River**, Burkham (1976); Dobyns (1978)
- Gila Wilderness study area**, Krier (1980); Ratte and Gaskill (1975); Ratte, Gaskill, and others (1979)



- Glorieta Sandstone**, see San Andres Formation
- Gnome project**, Smart (1979)
- Goat Seep Dolomite**, Crawford (1979)
- Goat Seep Limestone**, Hiss (1976b, c, 1980)
- Gobbler Formation**, see Magdalena Group
- gold**, Eveleth (1979a); Hazen Research, Inc. (1979); Lindquist (1980); Springett (1980); Woodward, Snyder, and Husler (1978)
- Good Sight Mountains**, Clemons (1978, 1979)
- Graneros Shale**, see Colorado Group
- Grant County**
- aluminum, Hall, R. B. (1978)
  - Beartooth sandstone, Chafetz (1976)
  - Black Hawk mining district, Von Barga (1979)
  - Brockman Hills, Corbitt and others (1977)
  - Brockman 7 1/2' quadrangle, Thorman (1977)
  - Buckhorn area tuffaceous sediments, Olander (1979)
  - Burro Peak 7 1/2' quadrangle, Hedlund (1978i)
  - C Bar Ranch 7 1/2' quadrangle, Hedlund (1978h)
  - City of Rocks State Park, Weber, R. H. (1980a)
  - Clifton 2° quadrangle, DeCicco, Patterson, and Yamamoto (1980); Sharp and others (1978)
  - Coyote Peak 7 1/2' quadrangle, Thorman (1977)
  - Douglas 2° quadrangle, DeCicco and Patterson (1980f); Sharp and others (1978)
  - Dwyer 15' quadrangle, Watts, Hassemer, Nishi, and Siems (1978)
  - Fierro, Yousefpour (1978)
  - Fort Bayard 7 1/2' quadrangle, El-Hindi (1977)
  - Gila fluorspar district, Ratte (1978b)
  - Gila Primitive Area, Krier (1980)
  - Gold Hill 7 1/2' quadrangle, Hedlund (1978d)
  - gravity, Dansereau and Wynn (1978); Eaton, Peterson, and Webring, (1977); Eaton, Peterson, Webring, and Ratte (1976); Wynn and Dansereau (1978, 1979)
  - guidebook, Clemons, Christiansen, and James (1980)
  - Hanover-Fierro, Jacobs, D. C. (1976)
  - Hat Top Mountain 7 1/2' quadrangle, Varnell (1976)
  - Hillsboro 15' quadrangle, Alminas and Watts (1978); Alminas, Watts, and others (1978a-d); Dansereau and Wynn (1978); Hedlund (1977a, b, 1979); Watts and Alminas (1979); Watts, Alminas and Kraxberger (1978); Watts, Alminas, and others (1978a-c); Wynn (1978); Wynn and Dansereau (1978); Wynn and Hedlund (1979)
  - Howell's Ridge cave, Van Devender and Worthington (1977)
  - Hurley East 7 1/2' quadrangle, Hedlund (1978e)
  - hydrogeology, Lavery and Trauger (1977)
  - Juniper Hills, Turner, D. L. (1979)
  - Klondike Hills, Corbitt and others (1978)
  - land classification map, Banaszyski and others (1979); DeCicco and Patterson (1980e, f); DeCicco, Patterson, and Morgan (1980); DeCicco, Patterson, and Yamamoto (1980)
  - Las Cruces 2° quadrangle, DeCicco and Patterson (1980e)
  - magnetic survey, Lopez, L. M. (1978); Maki-Lopez (1978); U.S. Geol. Survey (1979d, 1980l); Wynn (1978)
  - Mimbres Basin, McLean (1977)
  - Ninety-six Ranch 7 1/2' quadrangle, Hedlund (1978c)
  - North Star Mesa, Aldrich (1976)
  - Pinos Altos mining district, El-Hindi (1977); McKnight and Fellows (1978)
  - Pinos Altos Range, Brautigam and Norman (1980)
  - Pipeline Draw, Lavery and Trauger (1977)
  - Rabb Canyon pegmatite, Keefer (1976)
  - Rabb Park rhyolite complex, O'Brien (1980)
  - Reading Mountain 7 1/2' quadrangle, Finnell (1976b); Turner, D. L. (1979)
  - Redrock NE 7 1/2' quadrangle, Hedlund (1980c)
  - Redrock NW 7 1/2' quadrangle, Hedlund (1980b)
  - Redrock SE 7 1/2' quadrangle, Hedlund (1980a)
  - road logs, Clemons, Christiansen, and James (1980); Clemons and Seager (1978); Elston (1978a); Ratte (1978a); Ratte and Finnell (1978); Seager, Clemons, and Elston (1978)
  - Saltys 7 1/2' quadrangle, Thorman and Drewes (1979b)
  - San Lorenzo 15' quadrangle, Alminas and Watts (1978); Alminas, Watts, and others (1978a-d); Dansereau and Wynn (1978); Hedlund (1977a, b, 1979); Watts and Alminas (1979); Watts, Alminas, and Kraxberger (1978); Watts, Alminas, and others (1978a-c); Wynn (1978); Wynn and Dansereau (1978); Wynn and Hedlund (1979)
  - Santa Rita copper mine, Ahmad and Rose (1980); Brierley (1979); Feis (1978); Jacobs, D. C. (1976); Jacobs, D. C., and Parry (1979); Loucks and Newell (1978); Reynolds, T. J., and Beane (1979)
  - Santa Rita-Hanover axis, Aldrich (1978)
  - Silver City, Watts, Hassemer, Siems, and Nishi (1978)
  - Silver City 7 1/2' quadrangle, Cunningham, J. E. (1979)
  - Silver City 2° quadrangle, DeCicco, Patterson, and Morgan (1980); Sharp and others (1978); U.S. Geol. Survey (1979d, 1980l); Watts and Hassemer (1980); Wynn and Dansereau (1979)
  - Silver City Range, Brautigam (1979); Brautigam and Norman (1980); Chafetz (1976); Peterson, H. W. (1979); Peterson, H. W., and Norman (1980)
  - Soldiers Farewell Hill 7 1/2' quadrangle, Hedlund (1978b)
  - Summit Mountains, Powers, R. S. (1976)
  - Sycamore Creek, Turner, D. L. (1979)
  - Tertiary volcanics, Cunningham, J. E. (1979)
  - topaz rhyolites, Bikun and others (1980)
  - Tularosa 2° quadrangle, Banaszyski and others (1979); Geodata International (1978)
  - Two Sisters 7 1/2' quadrangle, Finnell (1976a)
  - Tyrone 7 1/2' quadrangle, Hedlund (1978f)
  - uranium, Sharp and others (1978)
  - volcanic geology, general, Wahl (1980)
  - Werney Hill 7 1/2' quadrangle, Hedlund (1978g)
  - White Signal 7 1/2' quadrangle, Hedlund (1978j)
  - Wind Mountain 7 1/2' quadrangle, Hedlund (1978a)
- Grants uranium district**
- Bernabe Montaña uranium deposit, Kouzso and Saucier (1980)
  - biogenic ore extraction, Brierley (1977, 1979)
  - Church Rock deposit, Peterson, R. J. (1980)
  - Crownpoint, Conine (1980)
  - Crownpoint Sec. 29 deposit, Wentworth and others (1980)
  - disconformities, Green (1979, 1980)
  - exploration, Bivins and others (1980); Brookins, Riese, and Lee (1977); Chenoweth and Holen (1980); DeVoto and Mead (1979); DeVoto, Mead, Bergquist, and Martin (1977); DeVoto, Mead, Martin, and Bergquist (1980); Fitch (1980); Reimer and others (1979); Saucier (1977)
  - general, Brookins (1976b, 1977c, 1978b, 1979a-d, 1980e); Brooks, Robert (1978); Chapman, Wood, and Griswold, Inc. (1977); Wright, R. J. (1980)
  - geochronology, Brookins (1980d, e); Brookins, Della Valle, and Register (1980); Brookins, Lee, and Shafiqullah (1977); Lee, M. J., and Brookins (1978, 1980); Lee, M. J., Brookins, and Shafiqullah (1977); Ludwig (1980); Ludwig and others (1977)
  - geophysics, Thompson, D. T. (1980)
  - ground water, Eadie and Kaufman (1977); Earth Environmental Consultants, Inc. (1976c); Environmental Protection Agency (1977); Ethridge, Ortiz, Granger, and others (1980); Guyton and Associates (1978); Kaufman, R. F., and others (1976, 1977); Landa (1980); Lyford and Frenzel (1979); Lyford, Frenzel, and Stone (1979, 1980); Science and Engineering Resources, Inc. (1976)
  - guidebook, Rautman (1980)
  - Jackpile-Paguete deposit, Adams, S. S. (1977); Adams, S. S., and others (1978); Beck, R. G., and others (1980); Brierley (1979); Reynolds, J. F., and others (1978)
  - L-Bar deposits, Jacobsen (1980)
  - Mariano Lake, Jenkins, J. T., Jr., and Cunningham (1979, 1980); Place and others (1980); Riese, A. C., and Popp

- (1980); Sachdev (1978, 1980); Thompson, D. T. (1980) Marquez deposit, Livingston (1980)
- Morrison Formation, Brookins (1976a); Della Valle and Brookins (1979, 1980a); Langford (1977); Lee, M. J. (1976a); Lee, M. J., and Brookins (1978); Peterson, R. J. (1980); Rhett (1980); Saucier (1980); Turner-Peterson and others (1980)
- Mount Taylor volcanic field, Riese, W. C. (1977, 1980); Riese, W. C., and Brookins (1976, 1977, 1978, 1979, 1980); Riese, W. C., Brookins, and Della Valle (1980) Nose Rock deposit, Rhett (1980)
- ore deposits, general, Brookins (1976c, 1977d, 1978d, 1980f); Ethridge, Ortiz, Granger, and others (1980); Ethridge, Ortiz, Sunada, and Tyler (1980); Granger and others (1980); Huang (1979); Melvin (1976); Riese, W. C., Brookins, and Della Valle (1978); Riese, W. C., Brookins, and Lee (1978); Riese, W. C., Lee, and Brookins (1977)
- organic chemistry, Leventhal (1979, 1980); Leventhal and Threlkeld (1978)
- Poison Canyon mine, Tessendorf (1980)
- pollution, Land (1980)
- radon transport, Fleischer (1980); Fleischer, Hart, and Mogro-Campero (1980); Fleischer and Mogro-Campero (1979a, b)
- reclamation, Reynolds, J. F., and others (1978)
- remote sensing, Zech and Knepper (1979)
- reserves, Guertin (1979)
- Ruby Well no. 1 mine, Robertson, J. F. (1979)
- sabkha environments, Rawson (1976, 1980)
- Saint Anthony mine, Baird and Martin (1979); Baird, Martin, and Lowry (1980)
- San Antonio Valley deposit, Moore, S. C., and Lavery (1980)
- Smith Lake ore trend, Ristorcelli (1980a, b)
- Todilto Limestone, Hines, S. A. (1976); Rawson (1976, 1980)
- United Nuclear-Homestake Partners' mill, Science and Engineering, Inc. (1976, 1977)
- Great Plains province**, Hawley, Bachman, and Manley (1976); Keller, L. F., and others (1977)
- Greenhorn Limestone**, *see* Colorado Group
- ground water**
- Ambrosia Lake uranium district, Kelly, T. E., Link, and Shipper (1979)
- Artesia Group, Hiss (1980)
- Bernalillo County, Chambers-Campbell-Isaacson-Chaplin, Inc. (1976); Hagerman (1976a); Hydrotechnics (1976); Summers (1976b)
- bibliographies, Borton (1976, 1978, 1979b, 1980); Borton and Jones (1976, 1978)
- Capitan aquifer, Hiss (1975, 1980)
- coal mining, Shomaker and Stone (1976); U.S. Bureau of Reclamation (1976b)
- Colfax County, Summers (1977a)
- Colorado River, Brown, S. G. (1976); El-Ashry (1980)
- Curry County, Hudson, J. D. (1976-77b, 1979c)
- Delaware Basin, Lambert, S. J. (1978); Mercer (1979); Mercer and Hiss (1978)
- Delaware Mountain Group, Hiss (1980)
- Dockum Group, McGowen and others (1977)
- Doña Ana County, Hernandez (1978)
- Eddy County, Rinehart, J. S. (1977)
- Gallup Sandstone, McLean (1980)
- general, Borton (1976, 1978); Borton and Jones (1976, 1978); Hudson, J. D. (1976a, b, 1978b); Stone, W. J., Mizell, and Hawley (1979); U.S. Geol. Survey (1977a); Wilkins and others (1980)
- Grants uranium district, Eadie and Kaufman (1977); Environmental Protection Agency (1977); Ethridge, Ortiz, Granger, and others (1980); Guyton, W. F., and Associates (1978); Kaufman, R. F., and others (1976, 1977); Lyford and Frenzel (1979); Lyford, Frenzel and Stone (1979, 1980); Science and Engineering Resources, Inc. (1976, 1977)
- Great Plains, Keller, L. F., and others (1977)
- Guadalupe County, Blair, J. (1976)
- heat flow, Mansure and Reiter (1979)
- Hidalgo County, Wilson, R. P., and White (1976)
- High Plains aquifer, Banks (1980); Gutentag and Weeks (1980)
- hot dry rock geothermal project, Pettitt (1976); Purtymun, Adams, and others (1977); Purtymun, Ferenbaugh, and others (1980); Purtymun and others (1976, 1980); Purtymun, Stoker, and others (1978)
- hot springs, Bejnar, W., and Bejnar (1979); Mariner and others (1977); Summers (1976a, 1979)
- Hueco Bolson, Meyer, W. R. (1976)
- Lea County, Hudson, J. D. (1976-77a, 1979a,b)
- Lincoln County, Summers, W. K. (1977b)
- Los Alamos County, Apt and Lee (1976); Cushman and Purtymun (1976); Purtymun (1977a); Purtymun, Buchholz, and Hakonson (1977)
- Manzano Mountains, Titus (1980)
- McKinley County, Boyd (1976); Guyton, W. F., and Associates (1978); Hearne (1977); Hiss (1976a); Hiss and Marshall (1976); McLean (1980); Reed (1977)
- mineral springs, Felmlee and Cadigan (1978)
- Morrison Formation, Galloway, W. E. (1978, 1979)
- Navajo Indian Reservation, Stone, W. J., Brod, and Anderholm (1978); Stone, W. J., and Jackson (1980)
- Ogallala Formation or aquifer, Banks (1980); Herkenhoff and Associates (1977); Reeves (1978); Sloggett (1977)
- Otero County, Ballance (1976); Galloway, S. E., and Nelson (1977)
- recharge, Brown, R. F., and others (1976); Gross and others (1976)
- Rio Arriba County, Hart, D. L., Jr., and Smith (1979a, b)
- Rio Grande, Day (1978)
- Rio Grande rift, Swanberg (1979)
- Rio Grande valley, Wilson, C. A., White, and Roybal (1979b)
- Roosevelt County, Hudson, J. D. (1976-77c, 1979d)
- Roswell Underground Water Basin, Duffy and others (1978); Gross, G. W., and others (1980); LeFebvre (1976, 1977); Mercado (1977); Rabinowitz and others (1977a-c); Welder (1977a, b)
- San Andres Formation, Chavez (1976-77); Hiss (1980)
- Sandia Mountains, Titus (1980)
- Sandoval County, Boyd (1976); Earth Environmental Consultants, Inc. (1977b)
- San Juan Basin, Lyford (1979); Lyford and Frenzel (1979); Lyford, Frenzel and Stone (1979, 1980); Lyford and Stone (1978); Shomaker and Stone (1976); U.S. Bureau of Reclamation (1976b); U.S. Dept. Interior (1977)
- San Miguel County, Bejnar, W., and Bejnar (1979)
- Santa Fe County, Black and Veatch (1976); Borton (1979b); Harshbarger, J. W., and Associates (1976); Summers (1976c); Wilson, L. (1976a, b); Wilson, L., and Jenkins (1979)
- Sierra County, Greene and Halpenny (1976); Wilson, C. A., White, and Roybal (1979a)
- Socorro County, Ecology Consultants, Inc. (1977)
- soil science, Van de Pol and others (1977)
- southern High Plains, Brown, R. F., and others (1976); Weeks (1978)
- Taos County, Hagerman (1976b)
- Torrance County, Hagerman (1976a)
- tritium, Gross, G. W., and others (1976); Rabinowitz and others (1977a-c)
- Tularosa Basin, MacMillian and others (1976); U.S. Dept. Energy (1979)
- uranium, Hiss (1977); Townsend (1979)
- Valencia County, Boyd (1976)
- White Sands Missile Range, Kelley, T. E., and Hearne

- (1976); Wilson, C. A., White, Roybal, and Gonzales (1978)
- Guadalupe County**  
 Fort Sumner 2° quadrangle, DeCicco and Patterson (1980g)  
 land classification map, DeCicco and Patterson (1980b, g)  
 Los Esteros Dam, McDaniel and Decker (1979)  
 magnetic survey, Geometrics (1979a)  
 Santa Fe 2° quadrangle, DeCicco and Patterson (1980b); Geometrics (1979a)  
 Santa Rosa Sandstone, Lupe (1977)  
 Santa Rosa tar sand, Budding (1980)
- Guadalupe Mountains**  
*see also* Capitan Limestone or reef complex  
 Barrera fault, Hayes and Bachman (1979)  
 biostratigraphy, Toomey and Cys (1977a)  
 Goat Seep Dolomite, Crawford (1979)  
 Guadalupian, Pray and Esteban (1977)  
 karst features, Queen (1980)  
 lizards, Rickart (1977)  
 Paleozoic facies, Scholle and Halley (1980)  
 Permian facies, Mazzullo and Cys (1977)  
 San Andres Formation, Squires (1976)  
 Seven Rivers Formation, Hurley, N. F. (1978, 1979)  
 speleology, Davis, D. G. (1980); Rickart (1977)  
 Tansill Formation, Neese (1979a, b); Neese and Schwartz (1977)  
 Yates Formation, Neese (1979a, b); Neese and Schwartz (1977)
- guidebook**  
 Basin and Range province, Newman and Goode (1979)  
 Colorado Plateau, Rigby (1977)  
 Cordillera, Hill, J. G. (1976)  
 Delaware Mountain Group, Sullivan, N. M. (1979)  
 fossils, Ratkevich and LaFon (1978)  
 Grants uranium district, Rautman (1980); Veal (1977)  
 Hidalgo County, Callender, Wilt, and Clemons (1978)  
 Rio Grande rift, Hawley (1978a); Olsen, K. H., and Chapin (1978); Riecker (1979)  
 Sacramento Mountains, Butler (1977)  
 San Juan Basin, Fassett (1977a)  
 Santa Fe country, Ingersoll (1979c); Ingersoll and Woodward (1979)  
 southeastern Arizona, Callender, Wilt, and Clemons (1978)  
 southwestern New Mexico, Clemons, Christiansen, and James (1980)  
 Trans-Pecos region, Dickerson and Hoffer (1980)  
 uranium, Veal (1977)  
 Vermejo Park, Ewing, R. C., and Kues (1976)
- Hagan Basin**, Gorham, T. W. (1979); Ingersoll (1979a, b); Moore, J. C. (1979); Sanguinetti and Loeber (1976); Warren, A. H., and Weber (1979)
- Harding County**  
 Dalhart 2° quadrangle, DeCicco, Patterson, and Robinson (1980); Morgan, T. L., and others (1980)  
 land classification map, DeCicco and Patterson (1980b, h); DeCicco, Patterson, and Robinson (1980); U.S. Geol. Survey (1980g)  
 magnetic survey, Geometrics (1979a)  
 Raton 2° quadrangle, DeCicco, Patterson, and Lutz (1978d, 1980); Geometrics (1979a); Morgan, T. L., and Broxton (1978)  
 Santa Fe 2° quadrangle, DeCicco and Patterson (1980b); Geometrics (1979a)  
 Tucumcari 2° quadrangle, DeCicco and Patterson (1980h); U.S. Geol. Survey (1980g)
- Harding pegmatite**, Brookins, Chakoumakos and others (1979); Chakoumakos (1978a, b); Cook, C. W. (1979); Ewing, R. C. (1979); Fenn and Jahns (1979); Hlava (1979); Jahns and Ewing (1976); Luth (1979); Nichols, J. (1980); Register, M. E. (1979); Register, M. E., and Brookins (1978); Register, M. E., Brookins, and Della Valle (1978); Suchomej (1976); Taggart (1976)
- helium**, Chemical Projects, Ltd. (1978); DeVoto and Mead (1979); DeVoto, Mead, Bergquist, and Martin (1977); DeVoto, Mead, Martin, and Bergquist (1977); Jambon and Shelby (1980); Reimer and others (1979); Rice and Reimer (1977)
- Hell Canyon greenstone belt**, Woodward, Parchman, and others (1979)
- hematite**, Lufkin (1976)
- Henry Basin**, Peterson, F., and Kirk (1977)
- Hidalgo County**  
 Alamo Hueco Mountains, Reiter, D. E. (1980)  
 Animas Valley, Chaturvedi and Ramos-Arras (1979); Dellechiaie (1977); Fleischhauer (1977a)  
 Apache no. 2 mining district, Peterson, S. L. (1977)  
 Brockman Hills, Corbitt and others (1977)  
 Concho Limestone, LeMone, Simpson, and Thompson (1978)  
 Cotton City 7 1/2° quadrangle, Drewes and Thorman (1980a)  
 Coyote Peak 7 1/2° quadrangle, Thorman (1977)  
 Dog Mountains, Reiter, D. E. (1980)  
 Douglas 2° quadrangle, DeCicco and Patterson (1980f); Sharp and others (1978)  
 Gary 7 1/2° quadrangle, Thorman and Drewes (1978b)  
 geothermal energy, Elston, Erb, and Deal (1979)  
 Gold Hill 7 1/2° quadrangle, Hedlund (1978d)  
 Granite Gap, Williams, S. A. (1978)  
 gravity studies, Wynn and Dansereau (1979)  
 ground water, Wilson, R. P., and White (1976)  
 guidebook, Callender, Wilt, and Clemons (1978); Clemons, Christiansen, and James (1980)  
 Humble Oil and Refining Co. No. 1 State BA well, Cernock (1977a)  
 KCM No. 1 Cochise State A well, Cernock (1976)  
 KCM No. 1 Forest Federal well, Behnken (1977); Budding and Broadhead (1977a-c); Cernock (1977b); Cernock and Bayliss (1977); Erb and Elston (1977); Ewing, R. C., and Thompson (1977); Elston and Erb (1977); Thompson, S., III (1977a-c)  
 Lake Animas, Fleischhauer (1977b, 1978)  
 land classification map, DeCicco and Patterson (1980f); DeCicco, Patterson, and Morgan (1980)  
 Lightning Dock KGRA, Jiracek and Smith (1976); Jiracek, Smith, and others (1977); Preslar (1976); Smith, C. S. (1978)  
 Lordsburg 7 1/2° quadrangle, Thorman and Drewes (1978b)  
 magnetic survey, Lopez, L. M. (1978); Maki-Lopez (1978)  
 mineral resources, Elston, Erb, and Deal (1979)  
 Ordovician, Hayes (1978)  
 petroleum and natural gas, Cernock (1976, 1977); Elston, Erb, and Deal (1979); Thompson, S., III (1977b, c)  
 Redrock SE 7 1/2° quadrangle, Hedlund (1980)  
 road logs, Clemons, Christiansen, and James (1980); Keith and Wilt (1978); Keith, Wilt, and others (1978)  
 San Simon, Wilson, R. P., and White (1976)  
 sedimentation, Ross, C. A. (1978)  
 Silver City 2° quadrangle, DeCicco, Patterson, and Morgan (1980); Sharp and others (1978); Wynn and Dansereau (1979)  
 Steins 7 1/2° quadrangle, Drewes and Thorman (1980b)  
 structural geology, Drewes and Thorman (1978)  
 Tempskya-bearing rocks, Zeller (1976)  
 Tertiary cauldrons, Erb (1978)  
 uranium, Walton and others (1980)  
 Vanar 15° quadrangle, Drewes and Thorman (1980a, b)  
 volcanic geology, Deal, Elston, and others (1978); Erb (1979); Wahl (1980)  
 Winkler anticline, Erb and Elston (1977); Hazen Research, Inc. (1979)
- Holder Formation**, Dunning (1978); Wilson, J. L. (1977b)
- Holocene**  
 Colfax County, Martin (1976)  
 Taos County, Martin (1976)
- Horquilla Limestone**, *see* Naco Group

- Hueco Bolson**, Meyer, W. R. (1976); Seager (1980); Uphoff (1978)
- Hueco Formation**, De Simpson (1976); Kottlowski, Seager, and others (1977); LeMone and Simpson (1977); Simpson, R. D., and LeMone (1980)
- humate**, Gosz and others (1978)
- Hunt's Hole**, Stuart (1979); Stuart and Brenner (1979)
- hydrogeology**
- Animas Basin and KGRA, Chaturvedi and Ramos-Arras (1979)
- Bandelier National Monument, Purtymun and Adams (1980)
- Cibola County, Brod (1979)
- Colfax County, Burroughs and McFadden (1976); Water Resources Associates, Inc. (1977a)
- Grant County, Lavery and Trauger (1977)
- Jemez Mountains, Trainer (1978)
- Lincoln County, Earth Environmental Consultants, Inc. (1976b)
- McKinley County, Brod (1979); Craigg (1980); Earth Environmental Consultants, Inc. (1976c)
- Navajo Indian Reservation, Cooley and others. (1978)
- Pecos Valley, Spiegel (1976)
- Rio Arriba County, Anderholm (1979)
- Sandoval County, Anderholm (1979); Craigg (1980); Earth Environmental Consultants, Inc. (1977a); Purtymun, Peters, and Owens (1980)
- San Juan Basin, Kelley, T. E. (1977); Stone, W. J., and Mizell (1978)
- San Juan County, Brown, D. R. (1976); Brown, D. R., and Stone (1979)
- San Luis Basin, Burroughs and McFadden (1976)
- Santa Fe County, Earth Environmental Consultants, Inc. (1976a); Jenkins (1977); Veneklasen (1977)
- Socorro County, Stone, W. J., and Foster (1977)
- Taos County, Burroughs and McFadden (1976)
- Valencia County, Brod (1979)
- Waste Isolation Pilot Plant, Barr and Gonzalez (1980); Mercer and Orr (1977, 1979)
- hydrology**
- Ambrosia Lake uranium district, Purtymun, Dreesen, and Wienke (1977)
- asbestiform fiber concentrations, Oliver, T., and Murr (1977)
- Bernalillo County, American City and County (1977); Hagerman (1976a); Hudson, J. D. (1978a, 1980); Wright, A. F. (1978)
- bibliography, Wright, A. F. (1978, 1979a, b, 1980)
- chemical analysis, Burnside and Wenrich-Verbeek (1976)
- coal gasification, Milios (1976)
- Colfax County, Geohydrology Associates, Inc. (1978)
- Colorado Plateau, Kondrat'yeva and Gorshkov (1979)
- Colorado River basin, Cooper and others (1978)
- data networks, Moss and others (1978)
- desalinization, Swanberg and others (1977); Swanberg and Rybarczyk (1979)
- Eddy County, Lambert, S. J., and Mercer (1977)
- energy development, Gertsch and others (1977); Hudson, H. H. (1978); Melancon and others (1979); Milios (1976); Silver, R. M., and Comeau (1979); Stone, W. J. (1976b); general, Soule and Wilkins (1979); Stone, W. J. (1976a); U.S. Bureau of Reclamation (1976a); U.S. Bureau of Reclamation and State of New Mexico (1976); U.S. Geol. Survey (1976f-j, 1977b, e, 1979h); White, R. R., and Dein (1980)
- irrigation, Lansford and others (1976a); O'Connor and Cull (1977)
- Jemez Mountains, Water Resources Associates, Inc. (1977b)
- Los Alamos County, Purtymun (1977a, b, 1978, 1980)
- McKinley County, City of Gallup (1977)
- Mescalero Apache Indian Reservation, U.S. Geol. Survey (1977c, d)
- Mesilla Valley, Pinzon Lizarraga (1978)
- Mimbres Basin, McLean (1977)
- Mora River valley, Faith Enterprises, Inc. (1977)
- Navajo Indian Reservation, Turney, W. F., and Associates (1976)
- precipitation, Chery and Kagan (1976)
- Rio Arriba County, Moss and others (1978)
- Rio Grande basin, U.S. Bureau of Reclamation (1977)
- San Juan Basin, Hejl (1979); Melancon and others (1979); Stone, W. J. (1976b, 1979a-c); Stone, W. J., and Lyford (1978); U.S. Dept. Interior (1977); Wright, A. F. (1978)
- San Juan County, Brown, D. R. (1976); Brown, D. R., and Stone (1979)
- Santa Fe County, Consulting Professionals, Inc. (1977); Coonce and Assoc. (1977a-c); Herkenhoff and Assoc. (1976); White, C. S. (1978)
- southern plains, Babcock, R. E., and others (1978)
- Tesque Pueblo, Balch and Clark (1978); Hearne (1980a, b)
- Torrance County, Hagerman (1976a)
- Tularosa Basin, Lansford and others (1976b, c); McLean and Garza (1977)
- uranium, City of Gallup (1977); Townsend (1979)
- water use, general, Sorenson (1977)
- White Sands Missile Range, Cruz (1976, 1977, 1978, 1979, 1980); Scott, A. G. (1976)
- iron**, Bickford (1980); Schnake (1977)
- Jackpile sandstone**, see Morrison Formation
- Jarita Basal Member**, see Los Pinos Formation
- jasperoids**, Iovenitti (1977); Iovenitti and Renault (1977)
- Jemez lineament**, Ander, Laughlin, and others (1980); Baldrige (1979b); Laughlin, Brookins, and Damon (1976); Laughlin, Brookins, Damon, and Shafiqullah (1979); Nielsen, K. C., and Scott (1980)
- Jemez Mountains**
- Bandelier Tuff, Boden (1980); Eichelberger and Koch (1979); Heiken and others (1976); Sommer (1977, 1978)
- Battleship Rock Welded Tuff, McCormick (1980); McCormick and Smyth (1980)
- Castor Pond, Adam and Mehringer (1980)
- Cerro Toledo Rhyolite, Izett and others (1978)
- geochronology, Izett and others (1978)
- geothermal energy, Hermance (1979); Solomon and Kerrick (1976)
- heat flow, Reiter, M. A., Weidman, and others (1976)
- hydrogeology, Trainer (1978)
- hydrology, Water Resources Associates, Inc. (1977b)
- Rio Grande rift, Smith, R. L., and others (1978)
- road log, Bailey and Smith (1978)
- tectonics, Woodward and Ingersoll (1979)
- Tewa Group, Prigmore (1978)
- volcanism, Bailey and Smith (1978); Smith, R. L., and others (1978)
- Jicarilla Apache Indian Reservation**, Kunkler and Scott (1977)
- John Kerr Peak dome complex**, Smith, E. I. (1976)
- Jones, Fayette A.**, Holts (1979a)
- Jornada del Muerto**
- Lake Trinity, Neal (1976)
- Juana Lopez Member**, see Carlile Shale or Mancos Shale
- Jurassic**
- general, Wright, R. P., and others (1977)
- San Juan Basin, Green and Pierson (1977)
- Kaiparowits Basin**, Peterson, F., and Kirk (1977)
- karst**, Fischer, W. A., and others (1978, 1979)
- Keating Formation**, see Escabrosa Group
- Kelley Formation**, Meyers (1978, 1980)
- Kelly Limestone**, Iovenitti (1977)
- Kilbourne Hole**, Basu (1978); Brenner (1979); Cunningham, M. P. (1977); Davis, G. L., and Grew (1978); Grew (1979); Hart, S. R., and others (1979, 1980); Hoover and others (1978); Irving (1979); James and others (1980a, b); Johnson, D. M., and Combs (1976); Minear and Irving

- (1979); Padovani (1977); Padovani and Carter (1976, 1977, 1978b) Reid, J. B., Bateman, and others (1977); Reid, J. B., and Woods (1978b); Richardson, S. H., and others (1980); Saito, Basu, and others (1977); Saito, Menzies, and others (1978); Stuart and Brenner (1979)
- kimberlites**, Crough and others (1980); McGetchin, Smith, and others (1977); Meyer, H. O. (1976)
- Kirtland Shale**, Fasset and Hinds (1977); Wolberg (1980a, b)
- Laborcita Formation**, *see* Magdalena Group
- Ladron Mountains**, Callender and Zilinski (1976); Condie (1976); Cookro (1978); White, D. L. (1978a, b)
- La Jencia Basin**, Brown, L. D., Allmendinger, and others (1980)
- Lake Valley Limestone**, Baghdad (1976); Burton, R. C. (1977); Hill, E. B. (1978); Lane and De Keyser (1979); Lohmann (1978); Lohmann and Meyers (1976, 1977); Meyers (1977a, 1978, 1980); Meyers and Lohmann (1978, 1980); Oglesby, Meyers, and Lohmann (1979)
- Lamar Limestone Member**, *see* Bell Canyon Formation
- Landsat**, *see* remote sensing
- Laramide orogeny**, Allan and Swan (1978); Coney (1976b); Corbitt and others (1978); Nielson, R. L. (1978); Varnell and others (1976); Woodward (1976); Zantop (1980)
- Las Cruces Limestone**, Lane and De Keyser (1979)
- La Ventana Tongue**, *see* Cliff House Sandstone
- Lea County**
- Antelope Ridge field, Kinchloe (1977)
- Arkansas Junction (Queen) field, Savage, G. J. (1977a)
- Arkansas Junction (San Andres) field, Savage, G. J. (1977b)
- Bagley north field, Alcorn (1977a, b)
- Bar-U field, Darden (1977)
- Baum Upper Penn field, Colligan (1977)
- Brownfield 2° quadrangle, DeCicco and Patterson (1980a); U.S. Geol. Survey (1980f)
- Carlsbad potash district, Aguilar and others (1976); Bodine and Laskin (1979); Brookins (1980b, c); Ellet (1978); McNaughton (1978); Olhoeft (1978); U.S. Geol. Survey (1979b, f)
- Casey Strawn field, Stewart, W. P. (1977)
- Cerca Lower Wolfcamp field, Brezina (1977b)
- Cerca Upper Pennsylvanian field, Brezina (1977a)
- East Morton Wolfcamp field, Blankenship (1977)
- East Shoe Bar Devonian field, Cys (1977c)
- Fowler Upper Yeso Pool, David, E. K., and others (1977a)
- Garrett Drinkard field, Scott, G. L. (1977a)
- Garrett west Devonian field, Ahlen (1977b)
- Goodwin Abo field, David, E. K., and others (1977b)
- Goodwin Drinkard field, David, E. K., and others (1977c)
- Gramma Ridge Morrow field, Lamb (1977)
- ground water, Hudson, J. D. (1976, 1977a, 1979a, b)
- High Plains Penn field, Gross, M. C. (1977a)
- Hobbs Blinebry field, Foltz and Siruta (1977)
- Hobbs Drinkard field, Siruta and Foltz (1977)
- Hobbs 2° quadrangle, DeCicco and Patterson (1979d); Texas Bureau of Economic Geology (1976); U.S. Geol. Survey (1980d)
- Humble City field, Spencer and Hutson (1977)
- land classification map, DeCicco and Patterson (1979d, 1980a); U.S. Geol. Survey (1980d, f)
- La Rica Morrow field, Jordan (1977a)
- Lazy "J" (Pennsylvanian) field, Cramer (1977)
- Lea Bone field, Jordan (1977b)
- Los Medaños, Elliot (1976)
- Mescalero north (Cisco) field, Probandt (1977)
- North Morton Permo-Penn field, Hicks, C. W. (1977)
- Oil Center Blinebry field, Kinchloe and David (1977)
- Paduca Delaware field, Barreto (1978)
- Paduca Devonian field, Henry (1977a)
- Pennsylvanian, Gunter (1975)
- petroleum and natural gas, Ahlen (1977b-d); Alcorn (1977a, b); Havenor (1977); King, R. E. (1977); Rose, K. S. (1978); Roswell Geological Society (1977)
- Quail Queen field, Ahlen (1977c)
- Querecho Plains (Queen) field, Harrington (1977)
- Red Hills Penn field, Henry (1977d)
- Red Hills Wolfcamp field, Henry (1977e)
- Shoobar Strawn north field, Preston, C. D. (1977a)
- Shoobar Wolfcamp north field, Preston, C. D. (1977b)
- South Corbin Morrow field, Johnstone (1977)
- Southwest Gladiola Devonian field, Ingram (1977b)
- Southwest Gladiola Pennsylvanian field, Ingram (1977c)
- Spencer field, Engwall (1977a)
- Teague Blinebry field, Frizzell (1977)
- Tres Papulotes field, Metts (1977a)
- Tres Papulotes west field, Metts (1977b)
- Triple "X" Delaware field, Ahlen (1977d)
- Tulk Penn and Wolfcamp fields, Zimmerman, G. D. (1977)
- Vacuum Morrow field, Becker (1977c)
- Vada Pennsylvanian field, Carelton (1977)
- West Knowles Drinkard field, Crowley, Dennis (1977)
- West Ranger Lake Devonian field, Gross, M. C. (1977b)
- West Sawyer San Andres field, Keyes (1977)
- Wilson Deep field, Thorsen (1977)
- lead**, Kottowski and Steensma (1979); Zantop (1980)
- Leadville Limestone**, Armstrong and Mamet (1977a)
- Leasburg State Park**, Bieberman (1979)
- Lemitar Mountains**, Chamberlin (1976, 1978); McLemore (1980a-c)
- limestone**
- Greenhorn Limestone, Hattin (1979)
- Kelly Limestone, Iovenitti (1977a, b)
- Mississippian, Meyers (1977b)
- Lincoln County**
- Carrizozo basalt field, Faris (1980); Faris and Renault (1980)
- Cone Peak rhyolite, Black, K. D. (1977a)
- Fort Sumner 2° quadrangle, DeCicco and Patterson (1980g)
- ground water, Summers (1977b)
- hydrogeology, Earth Environmental Consultants, Inc. (1976b)
- land classification map, Banaszyski and others (1979); DeCicco and Patterson (1979b, 1980g)
- Lincoln fold belt, Dennis, J. G., and Hall (1978); Yuras (1976)
- Lone Mountain skarns, Schnake (1977)
- Roswell 2° quadrangle, DeCicco and Patterson (1979b)
- Tularosa 2° quadrangle, Banaszyski and others (1979); Geodata International (1978)
- Valley of Fires State Park, Faris and Renault (1980); Weber, R. H. (1979a)
- White Mountain Wilderness, Segerstrom and others (1979)
- White Oaks mining district, Ricciardi (1978)
- lithium**, Brenner-Tourtelot and Machette (1979)
- Little Hatchet Mountains**, Loring and Loring (1980a)
- Llano Estacado**
- amphibian speciation, Blair, W. F. (1965)
- Los Alamos County**
- Albuquerque 2° quadrangle, DeCicco, Patterson, and Lutz (1978a); Geometrics (1979b); Maassen, Bolivar, and others (1979); Wyant and Olson (1978)
- electromagnetic survey, Williston, McNeill, and Assoc., Inc. (1979)
- geothermal energy, Goff and Sayer (1980)
- gravity survey, Williams, L. M. (1979)
- ground water, Apt and Lee (1976); Cushman and Purtymun (1976); Purtymun (1977a); Purtymun, Buchholz, and Hakonson (1977)
- hydrology, Purtymun (1977a, b, 1978, 1980)
- land classification map, DeCicco, Patterson, and Lutz (1978a)
- magnetic survey (1979b)
- radioactivity, Purtymun, Peters, and Stoker (1980)
- seismology, Budding and Purtymun (1979); Sanford (1976)
- soil survey, Nyhan, Hacker, and others (1978)
- surface water pollution, Hakonson and others (1976, 1980)



**Los Alamos Scientific Laboratory**

hot dry rock, Aamodt (1976, 1977); Aamodt, Aki, and others (1979); Aamodt, Baltz, and others (1978); Aamodt, Brown, and others (1978); Aki (1980); Aki and others (1977); Albright (1976, 1979); Albright and others (1978); American Geophysical Union (1977a); Ander, Goss, and others (1980); Atkinson, P. G. (1980); Balagna, Beddoe, and others (1978); Balagna, West, and others (1977); Barker, C. (1976); Bodvarsson and others (1980); Brookins, Forbes, and others (1977); Brookins and Laughlin (1976a, b, 1977); Brown, D. W. (1976); Brown, M. C., and others (1979); Burruss and Holister (1979); Charles (1978); Charles and Herrick (1976); Charles, West, and others (1977); Cremer and others (1980); Crowe and others (1978); Cummings and others (1979); Dennis, B. R., and Horton (1978); Dennis, B. R., Miles, and others (1978); Dennis, B. R., and Murphy (1978); Duffield and Tester (1978); Duffy (1978); Ehrenberg and Perkins (1977); Fehler (1977); Gancarz (1978); Gutschick and Rea (1978); Hageman (1978); Hutton (1977, 1978, 1980a, b); Helmick and others (1976); Hendron (1978); Holley and others (1978); Hsu (1979); Hsu and others (1978); Kaufman, E. L., and Siciliano (1979); Keller, G. V., Grose, and Pickett (1978); Kintzinger and others (1978); Kintzinger, Reynolds, and others (1978); Kintzinger and West (1976); Kolstad and McGetchin (1978); Kolstad, McGetchin, and Laughlin (1976); Lambert, S. J. (1979a-c); Laughlin and Eddy (1976); Laughlin and West (1976); Laughlin, West, and others (1977); Lawton and Horton (1979); Maurer and others (1978); Messer and others (1978); Mortensen (1978); Murphy, H. D., (1976, 1978a, b); Murphy, H. D., and others (1978, 1980); Murphy, H. D., and Tester (1979); Naeser and Forbes (1976); Newsom and others (1978); Otte (1980); Pettitt (1976, 1977, 1978, 1979); Pettitt and Tester (1978a, b); Pettitt and West (1978); Potter, J. M. (1978); Potter, R. M. (1978); Purtymun, Adams, and others (1977); Purtymun, Ferenbaugh, and others (1980); Rea, K. H. (1977); Riecker (1977); Sanyal and others (1979); Schubert and others (1980); Sibbitt (1976); Sibbitt and others (1978, 1979); Simmons and Eddy (1976); Smith, M. C. (1975, 1976, 1978); Tester and Albright (1979); Tester and others (1979); Turner, D. L., and Forbes (1976); Turner, W. M., and Kues (1978); West, F. G., and Laughlin (1976); West, F. G., and Purtymun (1976); Zartman (1979) radioactive waste disposal, Nyhan, Miera, and Peters (1976); Warren, J. L. (1980) seismic array, Wechsler (1980) uranium exploration, Grutt (1977)

**Los Pinos Formation**

Jarita Basalt Member, Baldrige and others (1980)

**Lucero uplift**, Ander and Huestis (1978); Callender and Zilinski (1976); Fisher, R. A. (1979); Gambill (1980); Zilinski (1976)

**Luna County**

aluminum, Hall, R. B. (1978)  
Cedar Mountains, Varnell and others (1976)  
Douglas 2° quadrangle, DeCicco and Patterson, (1980f); Sharp and others (1978)  
Dwyer 15' quadrangle, Watts, Hassemer, Nishi, and Siems (1978)  
El Paso 2° quadrangle, DeCicco and Patterson (1980d)  
Grandmother Mountain East 7 $\frac{1}{2}$ ' quadrangle, Thorman and Drewes (1979a)  
Grandmother Mountain West 7 $\frac{1}{2}$ ' quadrangle, Thorman and Drewes (1979a)  
gravity studies, Wynn and Dansereau (1979)  
guidebook, Clemons, Christiansen, and James (1980)  
Hat Top Mountain 7 $\frac{1}{2}$ ' quadrangle, Varnell (1976)  
Klondike Hills, Corbitt and others (1978); Varnell and others (1976)  
land classification map, DeCicco and Patterson (1980d,

f); DeCicco, Patterson, and Morgan (1980)  
Pancho Villa State Park, Kottowski (1980)  
road logs, Clemons, Christiansen, and James (1980); Clemons and Seager (1978)  
Rock Hound State Park, Weber, R. H. (1980b)  
Silver City 2° quadrangle, DeCicco, Patterson, and Morgan (1980); Sharp and others (1978); Wynn and Dansereau (1979)  
soil survey, Neher and Buchanan (1980)  
Victorio Mountains, Thorman and Drewes (1980)

**Madera Formation**, *see* Magdalena Group

**Magdalena Group**

Gobbler Formation, Van Wagoner (1977a)  
Laborcita Formation, Cys and Mazzullo (1977); Delgado (1977a, b); Delgado and Pray (1977); Hosseini (1980); Winchester, P. D. (1976, 1977)  
Madera Formation, Adams, R. D. (1978); Alexander (1980); Clark, G. R., II (1978); Kietzke and Kues (1979); Kues and Kietzke (1976); Mukhopadhyay and Brookins (1976a, b); Schram and Schram (1979); Swenson (1977); Tidwell and Ash (1980)

**Magdalena Mountains**, Allen (1979); Bowring (1980); Donze (1980); Osburn, G. R. (1978); Petty (1979); Roth (1980); Siemers, W. T., and Blakestad (1976)

**Mancos Shale**

ammonites, Cobban and Hook (1979, 1980); Hook and Cobban (1978, 1980b); Kennedy and Cobban (1976)  
brachiopods, Hook and Cobban (1977, 1980b)  
crabs, Kues (1980)  
D-Cross Tongue, Hook and Cobban (1979)  
dinoflagellates and acritarchs, Jones, R. E. (1976)  
general, McLafferty (1979)  
geochronology, Brookins, Della Valle, and Register (1980)  
Graneros Member, Skeryanc (1977)  
Grants uranium district, Della Valle and Brookins (1980b)  
Juana Lopez Member, Hook and Cobban (1980a, b)  
mollusks, Cobban (1977a, b); Hook and Cobban (1980a)  
Mulatto Tongue, Kirk and Zech (1977)  
petroleum and natural gas, Berg (1979a)  
Santa Fe County, Bachman (1976a)  
Semilla Sandstone Member, LaFon (1980)  
soil science, Louderbough and Potter (1978)  
Zuni Basin, Hook, Cobban, and Landis (1980)  
**Manzanita Mountains**, Schram and Schram (1979)  
**Manzano Mountains**, Clark, G. R., II (1978); Durden (1979); Myers and McKay (1976); Titus (1980)

**maps****aeromagnetic**

Abiquiu area, U.S. Geol. Survey (1976b)  
Aztec 2° quadrangle, Geodata International (1980a)  
Brownfield 2° quadrangle, Geodata International (1976c)  
Buck Robinson Peak area, U.S. Geol. Survey (1980j)  
Carson area, U.S. Geol. Survey (1976d)  
Clovis 2° quadrangle, Geodata International (1976b)  
general, U.S. Geol. Survey (1976e)  
Hillsboro 15' quadrangle, Wynn (1978)  
Hobbs 2° quadrangle, Geodata International (1980b)  
index, U.S. Geol. Survey (1980m)  
Little Dog-Pup Canyon area, U.S. Geol. Survey (1980k)  
Malpais area, U.S. Geol. Survey (1979g)  
northwest New Mexico, U.S. Geol. Survey (1980h)  
Pecos area, U.S. Geol. Survey (1980i)  
Raton Basin, Geometrics (1979a, b)  
Sangre de Cristo Mountains, Cordell, L. (1976b)  
San Lorenzo 15' quadrangle, Wynn (1978)  
Silver City 2° quadrangle, U.S. Geol. Survey (1979d, 1980l)  
Socorro County, Chapin, Chamberlin, and others (1978b)  
Socorro 2° quadrangle, High Life Helicopters and Geodata International (1979)  
Tortugas Mountains, Keller, G. R. (1979)  
Tucumcari 2° quadrangle, Geodata International (1976a)  
Tularosa 2° quadrangle, Geodata International (1978)

- Tularosa Valley, Bath (1977)  
 Wheeler Peak area, U.S. Geol. Survey (1976c)  
 Bouguer gravity anomaly  
 Franklin Mountains, Barrie (1976b)  
 general, Aiken, Laughlin, and West (1977, 1978)  
 Hillsboro 15' quadrangle, Wynn and Dansereau (1978)  
 Rio Grande rift, Aiken (1978); Cordell, L. (1976d, 1978a); Cordell, L., Keller, and Hildenbrand (1978)  
 San Lorenzo 15' quadrangle, Wynn and Dansereau (1978)  
 Silver City 2° quadrangle, Wynn and Dansereau (1979)  
 Socorro County, Chapin, Chamberlin, and others (1978b)  
 southwestern New Mexico, Eaton, Peterson, and Webring (1977); Eaton, Peterson, Webring, and Ratte (1976)  
 Taos Basin, Cordell, L. (1976d, 1978a)
- geochemical  
 Hillsboro 15' quadrangle, Alminas and Watts (1978)  
 San Lorenzo 15' quadrangle, Alminas and Watts (1978)
- geologic  
 Acoma Pueblo 7 1/2' quadrangle, Maxwell, C. H., (1976a)  
 Alamo Mesa West 7 1/2' quadrangle, Scott, G. R., O'Sullivan, and Mytton (1979)  
 Albuquerque Basin, Kelley, V. C. (1977)  
 Albuquerque 2° quadrangle, Wyant and Olson (1978)  
 Alegros Mountain area, Jones, D. P. (1980)  
 Arroyo de Agua 7 1/2' quadrangle, Ridgley (1979b, d)  
 Aztec 2° quadrangle, Manley and Scott (1978)  
 Baldy Mountain area, Walters, K. A. (1979)  
 Bernalillo NW 7 1/2' quadrangle, Manley (1978d)  
 Big Rock Hill 7 1/2' quadrangle, Kirk and Zech (1978)  
 Bisti Trading Post 7 1/2' quadrangle, O'Sullivan, Scott, and Heller (1979b)  
 Brockman 7 1/2' quadrangle, Thorman (1977)  
 Burnham Trading Post 7 1/2' quadrangle, Scott, G. R., O'Sullivan, and Heller (1979a)  
 Burro Peak 7 1/2' quadrangle, Hedlund (1978i)  
 Caballo Peak, Mason (1976)  
 Cañon de San Diego, Goff and Kron (1980)  
 Capitan aquifer, Hiss (1976b, c)  
 Casamero Lake 7 1/2' quadrangle, Robertson, J. F. (1976)  
 Cat Mountain area, Wilkinson (1976)  
 C Bar Ranch 7 1/2' quadrangle, Hedlund (1978h)  
 Cedar Hills vent zone, Clemons (1978)  
 Cerro del Grant area, Lawrence (1979)  
 Chaco Canyon 1° × 1/2° quadrangle, Mytton (1979)  
 Clovis 2° quadrangle, Texas Bureau of Economic Geology (1978)  
 Continental Divide 7 1/2' quadrangle, Green (1976)  
 Corkscrew Canyon-Abbe Spring area, Mayerson (1979)  
 Corralitos Ranch 15' quadrangle, Clemons (1976c 1977)  
 Cotton City 7 1/2' quadrangle, Drewes and Thorman (1980a)  
 Coyote Peak 7 1/2' quadrangle, Thorman (1977)  
 Crownpoint 7 1/2' quadrangle, Robertson, J. F. (1978)  
 Crow Point 7 1/2' quadrangle, Maxwell, C. H. (1977c)  
 Crystal 7 1/2' quadrangle, Byers (1979)  
 Cubero 7 1/2' quadrangle, Maxwell, C. H. (1977b)  
 Dalton Pass 7 1/2' quadrangle, Kirk and Sullivan (1976); Kirk and Zech (1976a)  
 Datil area, Harrison (1980); Lopez, D. A., and Bornhorst (1979)  
 East Mesa 7 1/2' quadrangle, Maxwell, C. H. (1979)  
 Española Basin, Kelley, V. C. (1978a); Manley (1977); May (1980)  
 Fire Rock Well 7 1/2' quadrangle, Weide, Mytton, and Scott (1979)  
 Fort Bayard 7 1/2' quadrangle, El-Hindi (1977)  
 Fruitland 7 1/2' quadrangle, Weide, O'Sullivan, and Heller (1979)  
 Gallina 7 1/2' quadrangle, Woodward, Gibson, and McLelland (1976)  
 Gallinas Peak area, Laroche (1980)  
 Gallup East 7 1/2' quadrangle, Green and Jackson (1976)  
 Gallup 2° quadrangle, Hackman and Olson (1977)  
 Gary 7 1/2' quadrangle, Thorman and Drewes (1978b)  
 Gila Primitive area, Krier (1980)  
 Gila Wilderness study area, Ratte and Gaskill (1975)  
 Gilman 7 1/2' quadrangle, Woodward, DuChene, and Martinez (1977)  
 Gold Hill 7 1/2' quadrangle, Hedlund (1978d)  
 Good Sight Mountains, Clemons (1978, 1979)  
 Grandmother Mountain East 7 1/2' quadrangle, Thorman and Drewes (1979a)  
 Grandmother Mountain West 7 1/2' quadrangle, Thorman and Drewes (1979a)  
 Hard Ground Flats 7 1/2' quadrangle, Kirk and Zech (1976c)  
 Hat Top Mountain 7 1/2' quadrangle, Varnell (1976)  
 Hillsboro 15' quadrangle, Hedlund (1977a)  
 Hobbs 2° quadrangle, Texas Bureau of Economic Geology (1976)  
 Hogback South 7 1/2' quadrangle, O'Sullivan, Scott, and Heller (1979d)  
 Hurley East 7 1/2' quadrangle, Hedlund (1978e)  
 index, McIntosh and Eister (1979); Robertson, J. M. (1976a); U.S. Geol. Survey (1976h)  
 Jarosa 7 1/2' quadrangle, Timmer (1976); Woodward and Timmer (1979)  
 Kimbeto 7 1/2' quadrangle, Schneider (1978); Schneider, Weide, and Scott (1979)  
 Kin Klislin Ruins 7 1/2' quadrangle, O'Sullivan, Scott and Weide (1979)  
 Kirtland SW 7 1/2' quadrangle, O'Sullivan, Scott, and Heller (1979c)  
 Lador Mountains, Condie (1976)  
 Lake Animas, Fleischhauer (1977b)  
 Lordsburg 7 1/2' quadrangle, Thorman and Drewes (1978b)  
 Los Pilares 7 1/2' quadrangle, Maxwell, C. H. (1977a)  
 Lucero uplift, Zilinski (1976)  
 Madrid 15' quadrangle, Bachman (1976b)  
 Magdalena Mountains, Osburn, G. R. (1978); Petty (1979)  
 Manzano Mountains, Myers and McKay (1976)  
 McCarty's 7 1/2' quadrangle, Maxwell, C. H. (1977d)  
 Mining Mountain area, Hill, S. R. (1980)  
 Mitten Rock 7 1/2' quadrangle, Huftman (1979)  
 Mogollon 7 1/2' quadrangle, Ratte (1977)  
 Mora River area, Baltz and O'Neill (1980a)  
 Mount Taylor 7 1/2' quadrangle, Lipman and Mehnert (1980)  
 Newcomb NE 7 1/2' quadrangle, Scott, G. R., O'Sullivan, and Heller (1979c)  
 Newcomb SE 7 1/2' quadrangle, O'Sullivan, Scott, and Heller (1979a)  
 Ninety-six Ranch 7 1/2' quadrangle, Hedlund (1978c)  
 Oak Spring 7 1/2' quadrangle, Kirk and Zech (1976b)  
 Ojo Encino Mesa 7 1/2' quadrangle, Scott, G. R., Schneider, and Mytton (1980)  
 Pillar NW 7 1/2' quadrangle, Scott, G. R., O'Sullivan, and Heller (1979b)  
 Placitas area, Kasten, T. (1980)  
 Pueblo Alto Trading Post 7 1/2' quadrangle, Weide, Mytton, and Scott (1980)  
 Pueblo Bonito 7 1/2' quadrangle, Schneider (1978); Weide, Schneider, and others (1979a)  
 Pueblo Bonito NW 7 1/2' quadrangle, Schneider (1978); Schneider, Weide, Mytton, and Scott (1979)  
 Pueblo Pintago 7 1/2' quadrangle, Weide, Scott, and Mytton (1980)  
 Rainsville 7 1/2' quadrangle, Johnson, R. B. (1975)  
 Rancho de Lopez area, Maulsby (1980)  
 Reading Mountain 7 1/2' quadrangle, Finnell (1976b); Turner, D. L. (1979)

- Redrock NE 7 $\frac{1}{2}$ ' quadrangle, Hedlund (1980c)  
 Redrock NW 7 $\frac{1}{2}$ ' quadrangle, Hedlund (1980b)  
 Redrock SE 7 $\frac{1}{2}$ ' quadrangle, Hedlund (1980a)  
 Redrock Valley NE 7 $\frac{1}{2}$ ' quadrangle, Huffman (1977)  
 Redrock Valley SE 7 $\frac{1}{2}$ ' quadrangle, Huffman and Jones (1978)  
 Regina 7 $\frac{1}{2}$ ' quadrangle, Merrick (1980)  
 Riley-Puertecito area, Massingill (1979a)  
 Rustler Formation, Hiss (1976d)  
 Saliz Pass 7 $\frac{1}{2}$ ' quadrangle, Ratte (1980)  
 Saltys 7 $\frac{1}{2}$ ' quadrangle, Thorman and Drewes (1979b)  
 San Acacia 7 $\frac{1}{2}$ ' quadrangle, Machette (1978a)  
 Sand Spring 7 $\frac{1}{2}$ ' quadrangle, Huffman (1976)  
 San Lorenzo 15' quadrangle, Hedlund (1977a)  
 San Ysidro 7 $\frac{1}{2}$ ' quadrangle, Woodward and Ruet-schilling (1976)  
 Sapello River area, Baltz and O'Neill (1980b)  
 Sargent Ranch 7 $\frac{1}{2}$ ' quadrangle, Schneider (1978); Weide, Schneider, and others (1979b)  
 Sawmill Canyon area, Roth (1980)  
 Scholle 7 $\frac{1}{2}$ ' quadrangle, Myers (1977)  
 Sedillo 7 $\frac{1}{2}$ ' quadrangle, Myers and McKay (1978)  
 Seven Springs 7 $\frac{1}{2}$ ' quadrangle, Timmer (1976)  
 Sierra Cuchillo, Maldonado (1974, 1980)  
 Sierra de las Uvas, Clemons (1978, 1979)  
 Silver City 7 $\frac{1}{2}$ ' quadrangle, Cunningham, J. E. (1979)  
 Socorro geothermal area, Chapin, Chamberlin, and others (1978b)  
 Socorro 2° quadrangle, Machette (1978b)  
 Soldiers Farewell Hill 7 $\frac{1}{2}$ ' quadrangle, Hedlund (1978b)  
 Sonsela Butte SE 7 $\frac{1}{2}$ ' quadrangle, Byers (1980)  
 Spring Canyon 7 $\frac{1}{2}$ ' quadrangle, Richter (1978)  
 Squaw Peak area, Donze (1980)  
 Star Lake 7 $\frac{1}{2}$ ' quadrangle, Scott, G. R., Mytton, and Schneider (1980)  
 Steins 7 $\frac{1}{2}$ ' quadrangle, Drewes and Thorman (1980b)  
 surficial, Hunt (1977a, b, 1978a, b)  
 Tijeras 7 $\frac{1}{2}$ ' quadrangle, Myers and McKay (1976)  
 Tres Montosas area, Wilkinson (1976)  
 Tusas Mountain area, Kent, S. C. (1980)  
 Twin Lakes 7 $\frac{1}{2}$ ' quadrangle, Zech (1980)  
 Twin Sisters 7 $\frac{1}{2}$ ' quadrangle, Finnell (1976a)  
 Tyrone 7 $\frac{1}{2}$ ' quadrangle, Hedlund (1978f)  
 Uvas Valley, Clemons (1978, 1979)  
 Vanar 15' quadrangle, Drewes and Thorman (1980a, b)  
 Victorio Mountains, Thorman and Drewes (1980)  
 Water Canyon-Jordan Canyon areas, Sumner (1980)  
 Waterflow 7 $\frac{1}{2}$ ' quadrangle, Strobell and others (1980)  
 Werney Hill 7 $\frac{1}{2}$ ' quadrangle, Hedlund (1978g)  
 White Signal 7 $\frac{1}{2}$ ' quadrangle, Hedlund (1978j)  
 Wind Mountain 7 $\frac{1}{2}$ ' quadrangle, Hedlund (1978a)  
 Winston 7 $\frac{1}{2}$ ' quadrangle, Heyl (1976); Maxwell, C. H., and Heyl (1976)
- hydrologic  
 Capitan aquifer, Hiss (1976b, c)  
 Colorado River region, Brown, S. G. (1976)  
 Hidalgo County, Wilson, R. P., and White (1976)  
 index, U.S. Geol. Survey (1976h, j)  
 Mimbres Basin, McLean (1977)  
 Rustler Formation, Hiss (1976d)
- land classification map  
 Albuquerque 2° quadrangle, DeCicco, Pattenon, and Lutz (1978a)  
 Albuquerque 1/2° by 1° quadrangle, U.S. Geol. Survey (1979e)  
 Aztec 2° quadrangle, DeCicco, Pattenon, and Lutz (1978b)  
 Brownfield 2° quadrangle, DeCicco and Pattenon (1980a); U.S. Geol. Survey (1980f)  
 Carlsbad 2° quadrangle, DeCicco and Pattenon (1979c); U.S. Geol. Survey (1976, 1980a)
- Clifton 2° quadrangle, DeCicco, Pattenon and Yamamoto (1980)  
 Clovis 2° quadrangle, DeCicco and Pattenon (1980d)  
 Dalhart 2° quadrangle, DeCicco, Pattenon, and Robinson (1980)  
 Douglas 2° quadrangle, DeCicco and Pattenon (1980g)  
 El Paso 2° quadrangle, DeCicco and Pattenon (1980e)  
 Fort Sumner 2° quadrangle, DeCicco and Pattenon (1980h)  
 Gallup 2° quadrangle, Pattenon, E. D., and others (1978); U.S. Geol. Survey (1979a, 1980b)  
 general, Morain and others (1977)  
 Hobbs 2° quadrangle, DeCicco and Pattenon (1979d); U.S. Geol. Survey (1980d)  
 Las Cruces 2° quadrangle, DeCicco and Pattenon (1980f)  
 Raton 2° quadrangle, DeCicco, Pattenon, and Lutz (1978d, 1980)  
 Roswell 2° quadrangle, DeCicco and Pattenon (1979b)  
 Saint Johns 2° quadrangle, DeCicco and Pattenon (1979a)  
 Santa Fe 2° quadrangle, DeCicco and Pattenon (1980b)  
 Shiprock 2° quadrangle, DeCicco, Pattenon, and Lutz (1978c); U.S. Geol. Survey (1979c, 1980c)  
 Silver City 2° quadrangle, DeCicco, Pattenon, and Morgan (1980)  
 Socorro 2° quadrangle, DeCicco, Pattenon, and Lutz (1979)  
 Tucumcari 2° quadrangle, DeCicco and Pattenon (1980i)  
 Tularosa 2° quadrangle, Banaszyski and others (1979)
- miscellaneous  
 Cenozoic volcanic centers, Luedke and Smith (1979)  
 heat flow, Lohse and others (1980b)  
 radioactivity, airborne, U.S. Geol. Survey (1980m)  
 San Luis Valley, Colton (1976)
- resource  
 Carlsbad potash district, U.S. Geol. Survey (1979f)  
 Chaco Canyon coal, Mytton (1979)  
 copper, Alminas, Watts, and others (1978b)  
 Dwyer 15' quadrangle, Watts, Hassemer, Nishi, and Siems (1978)  
 Hillsboro 15' quadrangle, Hedlund (1977b); Watts and Alminas (1979); Watts, Alminas, and Kraxberger (1978); Watts, Alminas, and others (1978a-c)  
 molybdenum, Alminas, Watts, and others (1978c)  
 Pecos Wilderness, U.S. Geol. Survey and others (1980)  
 potash, Aguilar and others (1976)  
 San Lorenzo 15' quadrangle, Hedlund (1976b); Watts and Alminas (1979); Watts, Alminas, and Kraxberger (1978); Watts, Alminas, and others (1978a-c)  
 silver, Alminas, Watts, and others (1978a)  
 Silver City 2° quadrangle, Watts and Hassemer (1980); Watts, Hassemer, Siems, and Nishi (1978)  
 uranium, Hackman and Olson (1977); Reid, B. E., and others (1980)  
 zinc, Alminas, Watts, and others (1978d)
- tectonic  
 Raton Basin, Woodward and Snyder (1976a)  
 Rio Grande rift, Woodward, Callender, and others (1978)
- McKinley County**  
*see also* Grants uranium district  
 Albuquerque 2° quadrangle, DeCicco, Pattenon, and Lutz (1978a); Geometrics (1979b); Maassen, Bolivar, and others (1979); Wyant and Olson (1978)  
 Big Rock Hill 7 $\frac{1}{2}$ ' quadrangle, Kirk and Zech (1978)  
 Blackeye Dakota field, Black, B. A. (1978a)  
 Casamero Lake 7 $\frac{1}{2}$ ' quadrangle, Robertson, J. F. (1976)  
 Cebolleta Grant, Boyd (1976)  
 Chaco Wash Mesaverde field, Black, B. A. (1978c)  
 Chico Arroyo, Craig (1980)  
 Church Rock, Hearne (1977)  
 coal, Cavaroc and Flores (1980); Dames and Moore (1979d,

- e, g-i, n, s); Jackson, D. (1978); Wilcox and others (1980); Wilson, J. C. (1977)
- Continental Divide 7 $\frac{1}{2}$ ' quadrangle, Green (1976)
- Crevasse Canyon Formation, Kirk and Zech (1977)
- Crownpoint, Earth Environmental Consultants, Inc. (1976c); Guyton, W. F., and Associates (1978)
- Crownpoint 7 $\frac{1}{2}$ ' quadrangle, Robertson, J. F. (1978)
- Crystal 7 $\frac{1}{2}$ ' quadrangle, Byers (1979)
- Dalton Pass 7 $\frac{1}{2}$ ' quadrangle, Kirk and Sullivan (1976); Kirk and Zech (1976a)
- East Chaco Canyon drilling project, Lease (1979)
- Fire Rock Well 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979d)
- Francis Mesa, Best (1973)
- Franciscan Lake Mesaverde field, Kennedy, C. C. (1978a)
- Gallup, City of Gallup (1977); Hiss (1976); Hiss and Marshall (1976)
- Gallup 2° quadrangle, Geometrics (1979a); Hackman and Olson (1977); Maassen, LaDelfe, and others (1980); Patterson, E. D., and others (1978); U.S. Geol. Survey (1979a, 1980b)
- Gallup East 7 $\frac{1}{2}$ ' quadrangle, Green and Jackson (1976)
- Gallup Sandstone, McLean (1980)
- ground water, Boyd (1976); Guyton, W. F., and Associates (1978); Hearne (1977); Hiss (1976a); Hiss and Marshall (1976); McLean (1980); Reed (1977)
- Hard Ground Flats 7 $\frac{1}{2}$ ' quadrangle, Kirk and Zech (1976c)
- helium, Chemical Projects Ltd. (1978)
- Hospah Dakota field, Luce (1978a)
- Hospah Lower Sand field, Luce (1978b)
- Hospah Upper Sand field, Bircher (1978c)
- Hospah Upper Sand south field, Luce (1978c)
- hydrogeology, Brod (1979); Craig (1980); Earth Environmental Consultants, Inc. (1976c)
- land classification map, DeCicco and Patterson (1979a); DeCicco, Patterson, and Lutz (1978a); Patterson, E. D., and others (1978); U.S. Geol. Survey (1979a, 1980b)
- Lee Ranch area, Wilcox and others (1980)
- Lone Pine Dakota "A" field, Storhaug (1978a)
- Lone Pine Dakota "D" field, Storhaug (1978b)
- Lybrook SE 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979e)
- magnetic survey, Geometrics (1979a)
- Mancos Shale, Kirk and Zech (1977)
- Marcelina Dakota field, Weidler (1978a)
- McKinley mine, Jackson, D. (1978); Wilson, J. C. (1977)
- Miguel Creek Gallup field, Weidler (1978b)
- Oak Spring 7 $\frac{1}{2}$ ' quadrangle, Kirk and Zech (1976b)
- Ojo Encino, Hinkley and others (1980)
- Ojo Encino Entrada field, Bryant (1978a)
- Ojo Encino Mesa 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979s); Scott, G. R., Schneider, and Mytton (1980)
- Papers Wash Entrada field, Bryant (1978b)
- petroleum and natural gas, Fassett, Thomaidis, and Matheny (1978); Matheny, M. L., and Talley (1978)
- Pueblo Alto Trading Post 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979h); Weide, Mytton, and Scott (1980)
- Pueblo Bonito 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979n)
- Pueblo Pintado 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979g); Weide, Scott, and Mytton (1980)
- Red Mountain Mesaverde field, Black, B. A. (1978d)
- road logs, Fassett, Jentgen, and others (1977); Fassett, Molenaar, and others (1977); Saucier (1979)
- Saint Johns 2° quadrangle, DeCicco and Patterson (1979a); Maassen and others (1980); Sharp and others (1978)
- Sargent Ranch 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979o)
- Seven Lakes Menefee field, Black, B. A. (1978e)
- Smith Lake mining district, Place and others (1980); Ristorelli (1980a, b)
- Sonsela Butte SE 7 $\frac{1}{2}$ ' quadrangle, Byers, (1980)
- Star Lake coal mine, LeMone and others (1977)
- Star Lake 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979i); Scott, G. R., Mytton, and Schneider (1980)
- Sundance, Jentgen and Fassett (1977)
- Torreon Wash, Craig (1980)
- Twin Lakes 7 $\frac{1}{2}$ ' quadrangle, Zech (1980)
- uranium, Chemical Projects, Ltd. (1978)
- Walker Dome Mancos field, Kennedy, C. C. (1978c)
- Ya-Ta-Hey, McLean (1980)
- Zuni hot dry rock prospect, Ander, Goss, and others (1980); Ander, Laughlin, and others (1980)
- Menefee Formation**, *see* Mesaverde Group
- mercury**, Brandvold, L. A. (1977)
- Mesa Rica Sandstone**, Gage and Asquith (1977a, b)
- Mesaverde Group**
- Cliff House Sandstone, Fassett (1977b); Fuchs-Parker (1977); Mannhard (1976)
- Crevasse Canyon Formation, Kirk and Zech (1977); Tschudy (1976)
- Dalton Sandstone Member, Kirk and Zech (1977)
- Gallup Sandstone, Berg (1979a); Campbell, C. V. (1979); Kirk, Huffman, and others (1978); McLean (1980); Mizell and Stone (1979)
- general, Bachman (1976a); McLafferty (1979)
- La Ventana Tongue, Fuchs-Parker (1977); Mannhard (1976)
- Menefee Formation, O'Sullivan (1980); Siemers, C. T. (1978a, b); Siemers, C. T., and Wadell (1977); Tabet and Frost (1979b); Tabet, Frost, and Kottowski (1979); Whyte and Shomaker (1977a, b)
- petroleum and natural gas, Berg (1979a); Towse (1980)
- Point Lookout Sandstone, Devine (1980); Fassett (1977b); Hunter, B. E. (1979); Shetiwy (1978)
- Mescalero Apache Indian Reservation**, U.S. Geol. Survey (1977c, d)
- Mesilla Valley**, Pinzon Lizarraga (1978)
- Mesilla Valley shale**, Strain (1976)
- Mesozoic**
- tectonics, Hamilton, W. (1978)
- metamorphism**
- Cuchillo Mountain laccolith, McMillan (1979); McMillan and Jahns (1979)
- Hidalgo County, Budding and Broadhead (1977c); Ewing, R. C., and Thompson (1977); Thompson, S., III (1977b)
- Picuris Range, Holdaway (1978)
- Sandia Mountains, Berkeley and Callender (1979); Berkeley, Callender, and Keil (1976); Kasten, T. (1980)
- skarns, Schnake (1977)
- Truchas Range, Grambling (1978, 1979a-c)
- Wind Mountain, Burton, J. C., and Jackson (1979)
- meteorites**, Lange and Keil (1976)
- mica**, Holdaway (1978); Jacobs, D. C. (1976); Jacobs, D. C., and Parry (1979)
- mineral exploration**
- Albuquerque 2° quadrangle, DeCicco, Patterson, and Lutz (1978a)
- Aztec 2° quadrangle, DeCicco, Patterson, and Lutz (1978b)
- Brownfield 2° quadrangle, DeCicco and Patterson (1980a)
- Carlsbad 2° quadrangle, DeCicco and Patterson (1979c)
- Catron County, Maxwell, C. H., and Heyl (1980)
- Clifton 2° quadrangle, DeCicco, Patterson, and Yamamoto (1980)
- Clovis 2° quadrangle, DeCicco and Patterson (1980d)
- coal, general, Vaninetti (1979)
- copper, Nash (1976)
- Dalhart 2° quadrangle, DeCicco, Patterson, and Robinson (1980)
- Douglas 2° quadrangle, DeCicco and Patterson (1980g)
- El Paso 2° quadrangle, DeCicco and Patterson (1980e)
- Fort Bayard 7 $\frac{1}{2}$ ' quadrangle, El-Hindi (1977)
- Fort Sumner 2° quadrangle, DeCicco and Patterson (1980h)
- general, Eyde (1977); Maxwell, C. H. (1978); Northrop (1979)
- Gila Wilderness study area, Ratte, Gaskill, and others (1979)

- Hell Canyon greenstone belt, Woodward, Parchman, and others (1979)
- Hidalgo County, Elston, Erb, and Deal (1979); Williams, S. A. (1978)
- Hobbs 2° quadrangle, DeCicco and Patterson (1979d)
- Las Cruces 2° quadrangle, DeCicco and Patterson (1980f)
- McKinley County, Jentgen and Fassett (1977)
- molybdenum, Woodcock (1979)
- Pecos Wilderness, U.S. Geol. Survey and others (1980)
- petroleum and natural gas, Jones, B., and McMillan (1977)
- Raton 2° quadrangle, DeCicco, Patterson, and Lutz (1978d, 1980)
- Roswell 2° quadrangle, DeCicco and Patterson (1979b)
- Saint Johns 2° quadrangle, DeCicco and Patterson (1979a)
- San Juan Basin, Elias (1977); Molenaar (1977b)
- San Juan County, Jentgen and Fassett (1977)
- Santa Fe 2° quadrangle, DeCicco and Patterson (1980b)
- Shiprock 2° quadrangle, DeCicco, Patterson, and Lutz (1978c)
- Sierra County, Maxwell, C. H., and Heyl (1980)
- Silver City 2° quadrangle, DeCicco, Patterson, and Morgan (1980)
- skarn, Burt (1978a, b)
- Socorro County, Fischer, W. A., and others (1979)
- Socorro 2° quadrangle, DeCicco, Patterson, and Lutz (1979)
- southwestern New Mexico, Eaton, Peterson, Webring, and Ratte (1976)
- Taos County, Restrepo (1972)
- tectonics, Mutschler and others (1978); Rona (1977); Tooker (1978); Woodward and Northrop (1976)
- Tertiary cauldrons, Elston (1978b, c); Elston, Rhodes, and Erb (1976)
- Tierra Amarilla Grant, Butler, Charles (1977)
- Tucumcari 2° quadrangle, DeCicco and Patterson (1980i)
- Tularosa 2° quadrangle, Banaszyski and others (1979)
- uranium, Bivins and others (1980); Brookins, Riese, and Lee (1977); Chenoweth and Holen (1980); DeVoto and Mead (1979); DeVoto, Mead, Bergquist, and Martin (1977); DeVoto, Mead, Martin, and Bergquist (1980); Earth Satellite Corporation (1979); Energy Research and Development Administration (1976a, b); Fitch (1980); Gableman (1977, 1978); Galloway, W. E. (1978); Leach and Puchlik (1976); Massingill (1979b); Rawson (1976, 1980); Reimer and others (1979); Reynolds, R. L., and Goldhaber (1978a, b); Rhett (1980); Rice and Reimer (1977); Riese, W. C., Lee, and others (1979); Saucier (1977)
- White Mountain Wilderness, Segerstrom and others (1979)
- WIPP site, Siemers, W. T., and others (1978)
- mineral production**
- bacterial leaching, Brierley (1977, 1979)
- fluorspar, McAnulty (1978)
- general, Eyde (1977); Craig, J. I. (1977); Eveleth and Kottlowski (1980); Eveleth and Sheffer (1978); New Mexico Energy and Minerals Department (1978); Shantz (1977a); Sheffer and Eveleth (1979); Sheffer and Eveletti (1978); Siemers, W. T. (1979); Siemers, W. T., and Austin (1979a, b); Siemers, W. T., Austin, and Kottlowski (1980); Sondermayer (1976); U.S. Bureau of Mines (1976, 1977, 1979, 1980); Van Sant (1977)
- potash, Case (1978); McNaughton (1978)
- sylvite, Scroggin (1978)
- uranium, Coleman (1978); Conine (1980); Energy Research and Development Administration (1976a, b); Engineering and Mining Journal (1976); Riese, A. C., and Popp (1980); Zielinski (1979)
- mining districts**
- Apache no. 2 district, Peterson, S. L. (1977)
- Black Hawk district, Von Bargen (1979)
- Black Range district, Eveleth and Siemers (1980)
- Carlsbad potash district, Aguilar and others (1976); McNaughton (1978); U.S. Geol. Survey (1979b, f); Wynne (1978)
- Central district, Jacobs, D. C. (1976)
- Cerrillos district, Schroeder (1979)
- Chloride district, Maxwell, C. H., and Heyl (1980)
- Cooney district, Eveleth, (1979a)
- Gallup district, Pierson and Green (1977, 1980)
- general, Mardirosian (1979); New Mexico Energy and Minerals Department (1979); Robertson, J. M. (1976b)
- Gila fluorspar district, Ratte (1978b)
- Hansonburg district, Kottlowski and Steensma (1979); Putnam (1980); Steensma (1979); Taggart and Foord (1979)
- Hermosa district, Maxwell, C. H., and Heyl (1980)
- High Rolls district, LaPoint (1979)
- Kelly district, Allen (1979); Blakestad (1977); Iovenitti (1977)
- Kingston district, Eveleth and North (1980)
- Magdalena district, Iovenitti and Renault (1977); Nar-savage (1979)
- Mogollon-Datil volcanic field, Chapin and Elston (1978)
- Mogollon district, Eveleth (1979a); Watts, Hassemer, Forn, and Siems (1979)
- Pecos district, Riesmeyer (1978)
- Petaca district, North, R. M. (1979)
- Pinos Altos district, McKnight and Fellows (1978)
- Rayo district, LaPoint (1979)
- Red Cloud district, Modreski (1979)
- Scholle district, LaPoint (1979)
- Smith Lake district, Place and others (1980); Ristorcelli (1980a, b)
- White Oaks district, Ricciardi (1978)
- mining history**
- Jones, Fayette A., Holts (1979a)
- New Mexico Bureau of Mines and Mineral Resources, Holts (1979b); Merillat (1977a, b)
- Santa Fe County, Warren and Weber (1979)
- mining law, Eveleth (1979b)**
- mining technology**
- Ambrosia Lake, Simpson, D. N. (1978)
- chalcocite, Shantz (1976)
- coal gasification, American Geophysical Union (1977b); Buder (1978); Lent (1980a, b); Meissner (1977); Milios (1976); Stalkup (1978); Tilton (1976); Weiber and Sikri (1978)
- coal stripping, Marston (1976)
- cyanide heap leaching, Eveleth (1979a)
- general, Eyde (1977); Paul Weir Company (1976)
- gravitational ore separation, Steensma (1979)
- longwalls, Davis, Harold (1978); Gentry and Abel (1978)
- molybdenum, Kendorski (1978)
- potash, Eller (1978); Wynne (1978)
- reclamation, Aldon (1978a, b); Gosz and others (1978); Gould (1978); Gould and others (1977); Hinkley (1980); Hinkley and others (1980); Imhoff and others (1976); Inglis and others (1978); Miyamoto and others (1977); Reynolds, J. F., and others (1978); Tabet (1977a); Toy and Munson (1979)
- solution mining, Smith, R. W. (1979)
- southwest New Mexico, Shantz (1979)
- uranium tailings, Beard and others (1980)
- York Canyon mine, Davis, Harold (1978); Jackson, Daniel (1978)
- Mississippian**
- Big Hatchet Mountains, Armstrong and Mamet (1978a, b)
- carbonate shelf and Transcontinental Arch, Lane and De Keyser (1979)
- entomology, Durden (1979)
- foraminifera, Conkin and Conkin (1979)
- general, Armstrong (1979); Armstrong, Kottlowski, and others (1980); Armstrong and Mamet (1977b, 1978b, 1979a, b); Armstrong, Mamet, and Repetski (1980); Craigg, L. C., and Varnes (1979)
- Lake Valley formation bioherms, Baghdad (1976)



- Lake Valley Limestone, Meyers (1977a)  
limestones, Meyers (1977b, 1978, 1980); Meyers and Lohmann (1978, 1980)  
paleontology, general, Duro and others (1979)  
paleotectonics, Craig, L. C., and Connor (1979); Mapel and others (1979); Varnes (1979)  
Pedregosa Basin, Armstrong, Mamet, and Burton (1979); Silver, B. A., and Wermiel (1976)  
Sacramento Mountains, Schaefer (1976)  
San Juan County, Rose, P. R. (1976)  
San Juan Mountains, Armstrong and Mamet (1977a, b)
- Moenkopi Formation**, Dickinson and Suczek (1979); Shive and others (1979)
- Mogollon-Datil volcanic field**, Berry (1976); Bornhorst (1980); Bornhorst, Elston, and Della Valle (1980); Chapin and Elston (1978); Dodge (1979); Elston (1976b); Krohn (1976); Lindley (1979); Lindley and others (1980); Ratte and Grothro (1979); Rhodes (1976a, b); Rhodes and Smith (1976); Stinnett (1980); Stinnett and Stueber (1976)
- Mogollon Plateau**, Coney (1976a); Elston, Rhodes, Coney, and Deal (1976); Smith, E. I., and others (1976); Strangway and others (1976)
- Mojado Formation**, Corbitt and others (1977)  
**molylbdenum**, Alminas, Watts, and others (1978c); Kendorski (1978); Woodcock (1979)
- Montoso maar**, Aubele (1976)
- Montoya Group**  
Aleman Formation, Geeslin (1980)  
conodont biostratigraphy, Sweet (1977)  
general, Howe (1979); Repetski and Drewes (1979)  
Rio Mimbres Sandstone, LeMone (1977)
- Mora County**  
El Oro gneiss dome, Budding and Cepeda (1979)  
gamma ray and magnetic survey, Geometrics (1979b)  
guidebook, Ewing, R. C., and Kues (1976)  
land classification map, DeCicco and Patterson (1980b); DeCicco, Patterson, and Lutz (1978d, 1980)  
landslide, Lovelace (1976)  
Mora River valley, Faith Enterprises, Inc. (1977)  
Rainsville 7 1/2' quadrangle, Johnson, R. B. (1975)  
Raton 2° quadrangle, DeCicco, Patterson, and Lutz (1978d, 1980); Geometrics (1979b); Morgan, T. L., and Broxton (1978)  
road log, Lessard (1976)  
Santa Fe 2° quadrangle, DeCicco and Patterson (1980b); Geometrics (1979b)  
Shoemaker, Faith Enterprises, Inc. (1977)  
stratigraphy, MacLachlan (1976)  
Wagon Mound, Lovelace (1976)  
Wagon Mound basal flow, Stewart, D. C., and Windom (1979)  
Wagon Mound Dakota-Morrison field, Brooks, B. J., and Clark (1978)
- Morenci shear zone**, Baldrige (1979)
- Morrison Formation**  
Brushy Basin Shale Member, Della Valle and Brookins (1980b); Jenkins, J. T., Jr., and Cunningham (1979, 1980); Martinez, R. (1979); Tessendorf (1980)  
Colorado Plateau, Dickinson and Suczek (1979)  
geochemistry, Lee, M. J. (1976a, b)  
geochronology, Brookins, Della Valle, and Register (1980); Lee, M. J., and Brookins (1978, 1980); Ludwig (1980)  
Jackpile sandstone, Baird and Martin (1979); Baird, Martin, and Lowry (1980); Owen, Walters, Depetro, and Turmelle (1978)  
petroleum and natural gas, Campbell, C. V. (1976)  
Recapture Shale Member, Della Valle and Brookins (1980b)  
Salt Wash Member, Austin, S. R. (1979, 1980); Huffman, Kirk, and Corken (1980)  
Shiprock-Beautiful Mountain area, Corken (1979)  
stratigraphy, Green and Pierson (1977); Riese, W. C., and Brookins (1977)  
tectonics, Saucier (1976)  
uranium, Abbot (1979); Austin, S. R. (1979, 1980); Baird and Martin (1979); Baird, Martin, and Lowry (1980); Brookins (1976a); Galloway, W. E. (1978, 1979); Hicks and others (1980); Langford (1977); Ridgley (1979a, 1980); Saucier (1976); Smith, D. A., and Peterson (1979); Squyres (1980); Turner-Peterson (1980); Turner-Peterson and others (1980); Young, R. G. (1977, 1978)  
Westwater Canyon Member, Austin, S. R. (1979, 1980); Clark, D. S. (1980); Della Valle and Brookins (1979, 1980a, b); Galloway, W. E. (1980); Guyton, W. F., and Associates (1978); Hicks, R. T., and others (1980); Kelly, T. E. (1977); Kelly, T. E., Link, and Schipper (1980); Martinez, R. (1979); Moore, S. C., and Lavery (1980); Peterson, R. J. (1980); Rhett (1980); Riese, W. C. (1977, 1980); Riese, W. C., and Brookins (1976, 1977, 1978, 1979, 1980); Saucier (1980); Turner-Peterson and Gundersen (1980); Wentworth and others (1979)
- Mount Taylor volcanic field**, Brookins, Crumpler, and Elston (1977); Crumpler (1976, 1977, 1978, 1980); Lipman and Mehnert (1980); Ridgley (1979); Riese, W. C. (1977, 1980); Riese, W. C., and Brookins (1976, 1977, 1978, 1979, 1980)
- Mount Withington cauldron**, Chapin and Deal (1976)
- Muleros Formation**, Strain (1976)
- muscovite**, Gresens and Stensrud (1977)
- Nacimiento Formation**, Butler, R. F., and Taylor (1978); McElhinny and Crowley (1980); Taylor, L. H. (1977); Taylor, L. H., and Butler (1980); Tsentas and Lucas (1980)
- Nacimiento uplift**, Woodward (1978); Woodward, McLelland, and Husler (1977)
- Naco Group**  
Colina Limestone, Nielson, T. W. (1978)  
Concha Limestone, LeMone, Simpson, and Thompson (1978); Simpson, R. D., LeMone, and Thompson (1978a, b)  
Horquilla Limestone, Jacka and Thompson (1980)
- Navajo Indian Reservation**, Cooley and others (1978); Stone, W. J., Brod, and Anderholm (1978); Stone, W. J., and Jackson (1980); Turney, W. F., and Associates (1976)
- Navajo volcanic field**, Ehrenberg (1978, 1979); Ehrenberg and Griffen (1979); Roden (1978)
- nepheline**, Dollase and Thomas (1978)
- New Mexico Bureau of Mines and Mineral Resources**, Holts (1979b); Kottowski and staff (1976, 1977, 1979, 1980); Merillat (1977a, b)
- New Mexico Geological Society**, Northrop (1977)
- Niobrara Formation**, see Colorado Group
- Ocate volcanic field**, O'Neill and Mehnert (1980a, b)
- Ochoan**  
Delaware Basin, Austin, G. S. (1978)
- Ogallala Formation or aquifer**  
general, Frye and others (1978)  
hydrology, Banks (1980); Herkenhoff and Associates (1977); Sloggett (1977)  
paleontology, Frye and others (1978); Leonard, A. B. (1977); Leonard, A. B., and Frye (1978)  
pollution, Taylor, R. G., and others (1978)  
uranium, Reeves (1977, 1978)
- Ogle Cave**, Davis, D. G. (1979)
- Ojo Alamo Sandstone**, Rigby and Lucas (1977)
- Ojo Caliente Sandstone Member**, see Tesuque Formation
- Ordovician**, Hayes (1978); LeMone (1977); Ross, R. J., Jr. (1976)
- ore deposits**  
Catron County, Maxwell, C. H., and Heyl (1980)  
celestite, Rickman (1977)  
copper, Ahmad and Rose (1980); Akright (1979); Beane (1980); Beane and others (1980); Drewes (1978); Feis (1978); LaPoint (1976, 1977, 1979); Mitcham (1978); Nielson, R. L. (1978); Reynolds, T. J., and Beane (1979); Zantop (1980)  
general, Proffett (1978)

- gold, Lindquist (1980); Springett (1980); Woodward, Snyder, and Husler (1978)
- Grant County, Fierro deposits, Yousefpour (1978)
- Jones Camp iron deposits, Bickford (1980)
- lead, Zantop (1980)
- lead isotopes, Ewing, T. E. (1979)
- magmatothermal, Doe (1979)
- Mississippi Valley type deposits, Putnam (1980)
- molybdenum, Kendorski (1978)
- Pecos mining district, Riesmeyer (1978)
- Pinos Altos mining district, McKnight and Fellows (1978)
- Precambrian, Giles (1976)
- Sangre de Cristo Range, Moench and Erickson (1980)
- San Miguel County, Riesmeyer and Robertson (1979)
- San Pedro Mountains, Atkinson, W. W., Jr. (1976)
- Sierra Blanca igneous complex, Black, K. D. (1977b)
- Sierra County, Maxwell, C. H., and Heyl (1980)
- skarn, Burt (1978a, b); Schnake (1977)
- tectonics, Mutschler and others (1978); Rona (1977); Tooker (1978)
- uranium, Adams, S. S. (1977); Adams, S. S., and others (1978); Austin, S. R. (1979, 1980); Beck, R. G., and others (1980); Brookins (1976b, c, 1977d, 1978d); Clark, D. S. (1980); Ethridge, Ortiz, Granger, and others (1980); Ethridge, Ortiz, Sunada, and Tyler (1980); Falkowski (1980a, b); Foster, J. F., and Quintanar (1980); Green (1979, 1980); Huffman, Kirk, and Corken (1980); Huffman and Lupe (1977); Jacobsen (1980); Kozusko and Saucier (1980); Livingston (1980); Melvin (1976); Place and others (1980); Rhett (1980); Ridgley (1979a, 1980); Riese, W. C. (1977, 1980) Riese, W. C., and Brookins (1976, 1978, 1979, 1980); Riese, W. C. Brookins, and Della Valle (1978, 1980); Riese, W. C., Brookins, and Lee (1978); Ristorcelli (1980a, b); Sachdev (1978, 1980); Smith, D. A., and Peterson (1980); Squyres (1980); Tessendorf (1980); Thompson, D. T. (1980); Turner-Peterson (1980); Turner-Peterson and others (1980); Vassiliou (1980a, b); Wentworth and others (1980)
- zinc, Zantop (1980)
- Organ caudron**, Macer (1978); Seager (1978a); Seager and Brown (1978)
- Organ Mountains**, Stone, W. J. (1976c)
- Orogrande Basin**, Greenwood (1979); Greenwood and others (1977)
- Ortega Quartzite**, Gresens (1976)
- Osha Canyon Formation**, DuChene and others (1977)
- Otero County**
- Carlsbad 2° quadrangle, DeCicco and Patterson (1979c); U.S. Geol. Survey (1976a, 1980a)
- Cloudercroft, Galloway, S. E., and Nelson (1977)
- garnets, Bettis (1977)
- geothermal energy, Taylor, Bruce, and others (1980)
- Holloman Air Force Base, Ballance (1976)
- Hueco Bolson, Meyer, W. R. (1976); Uphoff (1978)
- Hueco Tanks, Taylor, Bruce, and others (1980)
- hydrology, Ballance (1976); Galloway and Nelson (1977)
- Jarilla Mountains, Strachan (1976)
- land classification map, Banaszyski and others (1979); DeCicco and Patterson, (1979b, c, 1980e); U.S. Geol. Survey (1976a, 1980a)
- Las Cruces 2° quadrangle, DeCicco and Patterson (1980e)
- Little Dog-Pup Canyon area, U.S. Geol. Survey (1980k)
- magnetic survey, U.S. Geol. Survey (1980k)
- Mescalero-Apache area, Neher (1976)
- nepheline, Dollase and Thomas (1978)
- Orogrande, Bettis (1977)
- Otero Platform, Black, B. A. (1976a, b)
- road logs, Delgado and Pray (1977); Oppel and others (1977); Pray (1977b-g); Pray and Packard (1977); Toomey and Wilson (1977); Van Wagoner (1977b); Wilson, J. L. (1977b)
- Roswell 2° quadrangle, DeCicco and Patterson (1979b)
- tectonics, Uphoff (1979)
- Tularosa 2° quadrangle, Banaszyski and others (1979); Geodata International (1978)
- Tularosa Valley, Banaszyski and others (1979); Bath (1977); Bath and others (1977)
- Overthrust Belt**, Woodward (1980a, b)
- Pajarito fault zone**, Golombek (1980)
- Pajarito Plateau**, Budding (1978); Rogers, M. A., and Burton (1980); Rogers, M. A., Christie, and Budding (1980)
- Paleocene**
- primates, Wood, C. B., and others (1979)
- San Juan Basin, Alvarez and Vann (1979)
- paleoecology**
- Baca Formation, Chaietz (1979)
- Capitan Limestone or reef complex, Yurewicz (1976)
- Chaco Canyon, Hall, S. A. (1977)
- Chihuahuan Desert, Metcalf (1977); Van Devender and Worthington (1977)
- Dry Cave, Harris, A. H. (1980)
- Estancia Valley, Bachhuber and McClellan (1977)
- Hueco Group, LeMone and Simpson (1977)
- Lamar Limestone, Babcock, L. C. (1977)
- Rio Grande rift, Axelrod and Bailey (1976)
- Sacramento Mountains, De Keyser (1979)
- Triassic Ciniza Lake, Ash, Dean, and others (1978)
- paleoenvironments**
- Chaco Canyon, Betancourt and Van Devender (1980); Love (1976, 1977, 1979, 1980)
- Chama Basin, Ridgley (1977)
- Chihuahuan Desert, Harris, A. H. (1977)
- Chinle Formation, Kurtz and Anderson (1980)
- Cliff House Sandstone, Mannhard (1976)
- Dakota Sandstone, Bejnar, C. R., and Lessard (1976); Levinson (1979)
- general, Scott, R. W. (1977)
- Hueco Formation, DeSimpson (1976)
- Mancos Shale, McLafferty (1979)
- Menefee Formation, Tabet, Frost, and Kottowski (1979)
- Mesaverde Group, Mannhard (1976); McLafferty (1979)
- Pennsylvanian Chaetetes lithotypes, Spaw (1977)
- sabkha and uranium, Rawson (1976, 1980)
- San Juan Basin, Erpenbeck and Flores (1979); Levinson (1979)
- Santa Fe County, Leopold (1976)
- Santa Rosa Sandstone, LaPoint and Christiansen (1977)
- Tamaroa sequence, Bahlburg (1977); Bahlburg and Silver (1976)
- Trinidad Sandstone, Pillmore and Maberry (1976)
- paleogeography**, Blakey (1978, 1980); Casey (1980a); Schiebout (1978)
- paleomagnetism**
- Chamita Formation, MacFadden (1976); MacFadden and Manley (1976)
- Chinle Formation, Helsley (1977)
- Dewey Lake Formation, Peterson, D. N. (1979)
- Moenkopi Formation, Shive and others (1979)
- Mogollon Plateau, Strangway and others (1976)
- Nacimiento Formation, Butler, R. F., and Taylor (1978); McElhiny and Crowley (1980); Taylor, L. H., and Butler (1980)
- San Juan Basin, Butler, R. F., Lindsay, Jacobs, and Johnson (1976, 1977); Butler, R. F., Lindsay, and Johnson (1979); Butler, R. F., and Taylor (1978); Lindsay, Butler, and Johnson (1979); Lindsay, Jacobs, and Butler (1978)
- Yates Formation, Peterson, D. N. (1979)
- paleontology**
- acritarchs, Jones, R. E. (1976)
- algae, Babcock, J. A. (1979); Parks (1976c); Toomey and Cys (1979)
- ammonites, Cobban (1976); Cobban and Hook (1979, 1980); Hook and Cobban (1979, 1980b); Kennedy, W. J., and Cobban (1976)

- amphibians, Armstrong-Ziegler (1980); Berman, D. S., and Reisz (1980); Blair, W. F. (1965)
- aniliid snake, Armstrong-Ziegler (1978)
- arthropods, Kietzke and Kues (1979)
- Baca Formation, Schrodt (1980)
- Bishop Cap, Van Devender and Everitt (1977)
- Bisti Badlands, Rigby and Wolberg (1980)
- brachiopods, Alexander (1980); Hook and Cobban (1977, 1980b); Isaacson and Perry (1977); Simpson, R. D., and LeMone (1980); Simpson, R. D., LeMone, and Thompson (1978a)
- bryozoans, Nye and LeMone (1978)
- byssate scallops, Clark, G. R., II (1978)
- cephalopods, Flower (1976, 1977, 1978); Hook and Flower (1976)
- Chaco Canyon, Hall, S. A. (1977, 1980)
- Chaetetes, Spaw (1977)
- Chamita Formation mammals, McFadden and Manley (1976)
- Chihuahuan Desert, Harris, A. H. (1977)
- chryomonad cysts, Adam and Mehringer (1980)
- Ciniza Lake, Ash (1978a, c-f)
- clam shrimp, Tasch (1978)
- Clovis horizon, Agenbroad (1978)
- coal mining and mitigation plans, Kues, Froelich, and others (1977)
- conodonts, Behnken (1977); Burton, R. C. (1977); Clark, D. L. (1979); Hung (1978); Sandberg (1976); Simpson, R. D., LeMone, and Thompson (1978b); Sweet (1977, 1979)
- coprolites, Weber, D. J., and Lawler (1978)
- crabs, Kues (1980)
- Cretaceous, Kauffman, E. G. (1977)
- Cretaceous-Tertiary boundary, Kent, D. V. (1977)
- crinoids, Haugh (1978); Strimple (1980); Webster (1978, 1979)
- Cutler Formation, Fracasso (1980)
- dinoflagellates, Jones, R. E. (1976)
- dinosaurs, Ratkevich (1976); Wolberg (1980a)
- Eddy County, Harris, A. H. (1978); Harris, A. H., and Porter (1980)
- entomology, Durden (1979)
- fish, Ossian (1976)
- floral zones, Ash (1976)
- foraminifera, Bachhuber and McClellan (1976, 1977); Conkin and Conkin (1979); Toomey and Cys (1977b)
- Fruitland Formation, Rigby and Wolberg (1980); Tidwell, Bunderson, and Parker (1980); Wolberg (1980a, c); Wolberg and LeMone (1980); Wolberg and Rigby (1980)
- fusulinids, King, W. E., and Kelley (1980); Tyrrell and others (1978)
- Galisteo Formation vertebrates, Lucas and Kues (1979)
- gastropod geochronology, Miller, G. H., and others (1979)
- ground sloths, Thompson, R. S., and others (1980)
- guidebook, Ratkevich and LaFon (1978)
- horses, Harris and Porter (1980)
- Hueco Formation, DeSimpson (1976); LeMone and Simpson (1977)
- Insecta: Paleodictyoptera, Kuklova-Peck and Peck (1976)
- insectivores, Krishtalka (1976a, b)
- Jemez Mountains, Adam and Mehringer (1980)
- Jurassic, general, Wright, R. P., and others (1977)
- Kirtland Shale, Wolberg (1980a, b)
- lagomorphs, Gawne (1976)
- lizards, Rickart (1977)
- Madera Formation, Kues and Kietzke (1976); Tidwell and Ash (1980)
- mammuthus, Agenbroad (1978); Saunders (1978)
- McKinley County, LeMone and others (1977)
- mice, Smartt (1977)
- Mississippian, general, Dutro and others (1979)
- mollusca, bibliography, Taylor, D. W. (1980)
- mollusk geochronology, Miller, G. H., and Hare (1980)
- mollusks, Cobban (1977a, b); Frye and others (1978); Hook and Cobban (1980a); Metcalf (1977, 1980)
- Ogallala Formation, Leonard, A. B. (1977); Leonard, A. B., and Frye (1978)
- Ojo Alamo Sandstone mammals, Rigby and Lucas (1977)
- osteichthyes, Berman, D. S. (1976, 1979)
- ostracods, Toomey and Cys (1977b)
- Paleocene, Wood, C. B., and others (1979)
- pelycosaur, Simpson, L. C. (1978)
- radiolarians, Cornell and Simpson (1980); Ormiston and Babcock (1979)
- ravens, Magish and Harris (1976)
- reptiles, Armstrong-Ziegler (1980); Berman, D. S. (1977); Moodie and Van Devender (1979); Preston, R. E. (1979); Sullivan, R. M. (1979); Van Devender and Worthington (1977); Wolberg (1980a, b)
- Sacramento Mountains, Mazzullo and Cys (1979a); Toomey and others (1977)
- San Jose Formation vertebrates, Lucas (1977)
- San Juan Basin coal, Kues, Froelich, and others (1977); LeMone and others (1977, 1979); Wolberg (1980a)
- Santa Fe Group, Kues and Lucas (1979)
- sauropod, Kues, Lehman, and Rigby (1980)
- shrimp, Schram and Schram (1979)
- Smeltertown formation, Nodeland and Cornell (1976); Nye and LeMone (1978)
- snails, Hall, S. A. (1980)
- sponges, Toomey and Cys (1979)
- stratigraphy, Lucas and Raza (1979); Lucas and Rigby (1979)
- stromatolites, Toomey and Cys (1977b)
- Tempskyia, Ash and Read (1976); Zeller (1976)
- Tertiary, Schiebout (1979); U.S. Geol. Survey (1979); Wolf (1979)
- Tillodondia *Esthonyx*, Gingerich and Gunnell (1979)
- Trinidad Sandstone, Pillmore and Maberry (1976)
- turkeys, Rea, A. M. (1980)
- Western Interior basin, Kauffman, E. G. (1977)
- Paleozoic**
- Guadalupe Mountains, Scholle and Halley (1980)
- Raton Basin, Roberts and others (1976)
- Sacramento Mountains, Scholle and Halley (1980)
- Tatum Basin, Cys (1976)
- Palisades sill**, Cannon, R. P. (1977); Cannon, R. P., and Ragland (1977)
- Palo Duro Basin**, Handford (1980); Handford and others (1980)
- palynology**
- Aquilapollenites province, Tschudy (1980)
- Baca Formation, Chaiffetz (1979)
- Crevasse Canyon Formation, Tschudy (1976)
- Franklin Mountains, Chaiffetz (1977)
- Percha Shale, Chaiffetz and others (1979)
- Triassic Ciniza Lake, Stone, J. F. (1978)
- Pancho Villa State Park**, Kottlowski (1980)
- Panther Seep Formation**, Hair (1976, 1977)
- Pecos greenstone belt**, Robertson, J. M., Condie and Mathewson (1978); Robertson, J. M., and Moench (1979); Wyman, W. F. (1980b)
- Pecos River**
- evapotranspiration, Gay (1979)
- irrigation and salinity, O'Connor and Cull (1977)
- Malaga Bend salinity alleviation, Havens and Wilkins (1979)
- Pecos Valley**
- Gatuna Formation, Kelley, V. C. (1980)
- general, Bachman (1980)
- hydrogeology, Spiegel (1976)
- Pecos Wilderness**, U.S. Geol. Survey and others (1980)
- Pedregosa Basin**, Armstrong, Mamet, and Burton (1979); Bahlburg and Silver (1976); Elston and Erb (1980); Greenwood (1979); Greenwood and others (1977); Jacka and Thompson (1980); Ross, C. A. (1978); Silver, B. A., and

- Wermiel (1976); Thompson, S., III (1980); Thompson, S., III, Tovar R. and Conley (1978, 1980); Wermiel (1978)
- pegmatite**  
Harding pegmatite, Brookins, Chakoumakos, and others (1979); Chakoumakos (1978a, b); Ewing, R. C. (1979); Fenn and Jahns (1979); Hlava (1979); Jahns and Ewing (1976); Luth (1979); Nichols, J. (1980)  
Petaca mining district, North, R. M. (1979)
- Peloncillo Mountains**, Armstrong, Silberman, and others (1978); Erb (1979); Hoggatt and others (1977)
- Peñasco uplift**, Adams, R. D. (1980)
- Pennsylvanian**  
bioherms, Toomey (1980); Wilson, J. L. (1977a); Wray (1977)  
Colorado Plateau, Blakey (1978, 1980)  
conodonts, Clark, D. L. (1979)  
Eddy County, Gunter (1975)  
entomology, Durden (1979)  
general, Armstrong, Kottlowski, and others (1980)  
Hidalgo County, Ross, C. A. (1978)  
Lea County, Gunter (1975)  
Morrowan sandstones, Hurley, T. J. (1980)  
Osha Canyon Formation, DuChene and others (1977)  
Pedregosa Basin, Armstrong, Mamet, and Burton (1979); Ross, C. A. (1978)  
petroleum and natural gas, Greenwood and others (1977)  
Sangre de Cristo Mountains, Siemers, C. T. (1979)  
San Juan Basin, Jentgen (1977)  
Socorro County, Siemers, W. T. (1978)
- Percha Formation**, Kocurek (1977)
- Percha Shale**, Chaffetz and others (1979); Kocurek and Chafetz (1977)
- perlite**, Austin, G. S., and Weber (1976); Naert and others (1980)
- Permian**  
bioherms, Toomey and Cys (1979)  
biostratigraphy, Toomey and Cys (1977b)  
Colorado Plateau, Blakey (1978, 1979, 1980)  
conodonts, Clark, D. L. (1979)  
*Dimetrodon*, Berman, D. S. (1977)  
entomology, Durden (1979)  
general, Baars (1979c)  
*Gnathorhiza*, Berman, D. S. (1976, 1979)  
Guadalupe Mountains, Toomey and Cys (1977a)  
Hidalgo County, Ross, C. A. (1978)  
Hueco Group, LeMone and Simpson (1977)  
paleoecology, Toomey and Cys (1977b)  
Pedregosa Basin, Ross, C. A. (1978)  
San Juan Basin, Baars (1979b, c); Baars and Stevenson (1977, 1979)  
southwestern New Mexico, Thompson, S., III, LeMone, and Simpson (1977)  
*Trimerorhachis*, Berman, D. S., and Reisz (1980)  
uranium, Campbell, J. A., and Steele (1976)
- Permian Basin**  
crustal structure, Keller, G. R., Hills, and Djeddi (1980a)  
earthquakes, Rogers, A. M., and Malkiel (1979)  
evaporites, Johnson, K. S. (1980)  
petroleum and natural gas, Attansi and others (1979); Coury and others (1978); Dolton, Coury, and others (1980); Dolton, Frezon, and Coury (1979); Dolton and Wunder (1978); Drew and others (1979a, b); Greenwood (1979); Greenwood and others (1977); Interagency Oil and Gas Supply Project (1980); Miller, B. M., and others (1978); Robinson, K., and others (1978); Smith, J. A. (1977); Stewart-Gordon (1978); Wright, W. F. (1979)  
radioactive-waste disposal, Smith, J. W. (1975)  
stratigraphy, Greenwood and others (1977); Hills and Hoenig (1979)  
tectonics, Djeddi (1979); Elam (1980); Hills (1980)
- Permian reef complex**, *see* Capitan Limestone or reef complex
- petroleum and natural gas**  
Arbuckle Group, Gatewood (1978)  
Artesia Group, Lampert (1977)  
Basin and Range province, Elston and Erb (1980)  
Bell Canyon Formation, Williamson, C. R. (1978, 1979a, b, 1980a)  
Blanco Mesaverde field, Hill, J. M. (1978)  
Chaves County, Ahlen and Havenor (1977); David, E. K. (1977a, b); Havenor (1977); Kelly, J. M. (1977); Lampert, L. M. (1977a-c); LeMay (1977b); Roswell Geological Society (1977); Scott, G. L. (1977b, 1980); Scott, G. L., and Reddy (1977); Stevens (1977a, b)  
coal gasification, American Geophysical Union (1977b); Buder (1978); Lent (1980a, b); Meissner (1977)  
Delaware Basin, Berg (1978); Cheeseman (1978); Hills (1979); Jacka (1979); Orr and others (1979); Williamson (1978, 1979a, b, 1980a)  
Delaware Mountain Group, Berg (1979b); Cromwell (1979); Jacka (1979)  
Eddy County, Ahlen (1977a); Anderson, Rod (1977a-c); Beck, R. H. (1977); Becker (1977a, b); Book (1977); Chenot (1977b); Cress (1977); David, E. K. (1977c); Engwall (1977b); Foster, R. W. (1976); Gunther (1977); Hanson (1977); Havenor (1977); Henry (1977b, c); Jons and Stanley (1976); Killough and Foster (1979); Kimbro (1977a, b); Knauf (1977); LeMay (1977a); Leonard, R. C. (1977a-c); Murphy, R. E. (1977a, b); Roswell Geological Society (1977); Stanley (1977a, b)  
El Mar field, Weinmeister (1978)  
enhanced recovery, Rose, K. S. (1978); Simpson, J. J. (1977); Stalkup (1978)  
Fort Bliss Military Reservation, Foster, R. W. (1978b)  
Four Corners, Baars (1979a, 1980); Crowley, C. J. (1977, 1978); Fassett and others (1978); Fassett, Thomaidis, and Matheny (1978); Matheny, M. L. (1978a); Matheny, M. L., and Talley (1978); Maxwell, N. E. (1976); Reese, D. L. (1976)  
Franklin Mountains, Chaffetz (1977)  
general, Arnold, Hill, and Donaldson (1980); Arnold, Hill, Donaldson, and Foster (1977); Arnold, Hill, Donaldson, Martinez, and others (1978); Barreto (1978); Bieberman (1976); Constant and Chapelle (1978); Diemer and others (1980); Foster, R. W., Gutjahr, and Warner (1978); Gibson, W. R., and Stichtenoth (1979); Gill (1976); Johnston, R. R. (1977, 1979, 1980); Kottlowski (1977); Porter (1977); Ramey (1977, 1978, 1979); Roswell Geological Society (1977); Smith, J. A. (1976); Stout and Bradley (1980)  
Guadalupe County, Budding (1980)  
Guadalupe Mountains, Scholle and Halley (1980)  
Hidalgo County, Cernock (1976, 1977a, b); Cernock and Bayliss (1977); Elston, Erb, and Deal (1979); Thompson, S., III (1977b, c)  
Indian Draw Delaware field, Cromwell (1979)  
Lea County, Ahlen (1977b-d); Alcorn (1977a, b); Barreto (1978); Becker (1977c); Blankenship (1977); Brezina (1977a, b); Carelton (1977); Colligan (1977); Cramer (1977); Crowley, Dennis (1977); Cys (1977c); Darden (1977); David, E. K., and others (1977a-c); Engwall (1977a); Foltz and Siruta (1977); Gross, M. C. (1977a, b); Harrington (1977); Havenor (1977); Henry (1977a, d, e); Hicks, C. W. (1977); Ingram (1977b, c); Johnstone (1977); Jordan (1977a, b); Keyes (1977); Kinchloe (1977); Kinchloe and David (1977); King, R. E. (1977); Lamb (1977); Metts (1977a, b); Preston, C. D. (1977a, b); Probandt (1977); Rose, K. S. (1978); Roswell Geological Society (1977); Savage, G. J. (1977a, b); Scott, G. L. (1977a); Siruta and Foltz (1977); Spencer and Hutson (1977); Stewart, W. P. (1977); Thorsen (1977); Zimmerman (1977)  
McKinley County, Bircher (1978c); Black, B. A. (1978a, c-e); Bryant (1978a, b); Fassett, Thomaidis, and Math-

- eny (1978); Kennedy, C. C. (1978a, c); Luce (1978a-c); Matheny, M. L., and Talley (1978); Storhaug (1978a, b); Weidler (1978a, b)
- Mesaverde Formation, Towse (1980)
- Mora County, Brooks, B. J., and Clark (1978)
- Morrison Formation, Campbell, C. V. (1976)
- Orogrande Basin, Greenwood (1979); Greenwood and others (1977)
- Overthrust Belt, Woodward (1980a, b)
- Paduca field, Weinmeister (1978)
- Pedregosa Basin, Elston and Erb (1980); Greenwood (1979); Greenwood and others (1977); Thompson, S., III (1980); Thompson, S., III, Tovar R., and Conley (1978, 1980)
- Pennsylvanian, Greenwood (1979)
- Permian Basin, Attansi and others (1979); Coury and others (1978); Dolton, Coury, and others (1980); Dolton, Frezon, and Coury (1979); Dolton and Wunder (1978); Drew and others (1979a, b); Greenwood (1979); Greenwood and others (1977); Interagency Oil and Gas Supply Project (1980); Miller, B. M., and others (1978); Robinson, K., and others (1978); Smith, J. A. (1977); Stewart-Gordon (1978); Wright, W. F. (1979)
- Pictured Cliffs Sandstone, Jacobs, J. L. (1977)
- Point Lookout Sandstone, Hunter (1979)
- Raton Basin, Speer (1976)
- reservoir simulation, Killough and Foster (1979)
- Rio Arriba County, Attebery (1978); Beach and Thomas (1978); Brown, C. F. (1978b-f, i); Brown, H. H. (1978d); Conyers (1978); Dunn (1978a, b); Fassett and Jentgen (1978a-c); Fassett, Thomaidis, and Matheny (1978); Folk, J. K. (1978); Greer (1978b, c); Harris, J. J. (1978); Hill, J. M. (1978); Hoppe (1978c, f, g); Malone (1978h); Matheny, J. P. (1978); Matheny, M. L. (1978d); Matheny, M. L., and Folk (1978); Matheny, M. L., and Matheny (1978b, g); Matheny, M. L., and Talley (1978); Needham (1978a, b); Pritchard (1978a, d); Reese, V. R. (1978a, c)
- Roosevelt County, Carelton (1977); Chenot (1977a); Cys (1977b); Havenor (1977); Ingram (1977a); Roswell Geological Society (1977); Sandlin and Schatz (1980); Scott, G. L. (1980); Smith, G. (1977)
- Sacramento Mountains, Scholle and Halley (1980)
- Sandoval County, Beach and Thomas (1978); Black, B. A. (1979d); Brown, C. F. (1978b, e); Campbell, J. P. (1978); Fassett, Thomaidis, and Matheny (1978); Gray (1978); Harris, J. J. (1978); Hoppe (1978c); Kennedy, C. C. (1978b); Matheny, M. L., and Talley (1978); Pritchard (1978f-i); Reese, V. R. (1978b-f); Sharrock (1978)
- San Juan Basin, Berg (1979a); Bryant (1980); Buckner (1976); Dugan (1977); Fassett and Hinds (1977); Fassett and others (1978); Fassett, Thomaidis, and Matheny (1978); Gorham, F. D., Jr., and others (1977, 1979); Kraft and John (1979); Luetkehans (1976); Mallory (1977a, b); Martinez, L. B. (1978); Masters (1979); Matheny, M. L. (1978a); Matheny, M. L., and Talley (1978); Maxwell, N. E. (1976); Molenaar (1977a, b); New Mexico Oil and Gas Conservation Commission (1977); Owen (1980); Parker, J. M., and others (1977); Picard (1980); Ross, L. M., and Harwood (1979); Rusen (1977); Ryder and others (1980); Tabet (1977b); Thompson, K. F. M. (1980); Woolfson (1977)
- San Juan County, Babcock, G. (1978); Bircher (1978a, b); Black, B. A. (1978b); Bowman (1978a, b); Brown, C. F. (1978a-c, e, g, h); Brown, H. H. (1978a-c); Bryant (1978c); Collins (1978); Conlon (1978a, b); Dugan and Fagrelius (1978a-g); Dunn (1978c-e); Fagrelius (1978a-c); Fagrelius and Jacobs (1978b); Fassett, Thomaidis, and Matheny (1978); Garvin (1978); Greer (1978a); Hamilton, D. P. (1978a-c); Harris, J. J. (1978); Hoppe (1978a-f); Hopson (1978); Hornbeck (1978); Jacobs, J. L. (1978); Jacobs, J. L., and Fagrelius (1978a, b); Kendrick and Dugan (1978); Lauth (1978a-c); Malone (1978a-g); McEachin and Royce (1978); Matheny, M. L. (1978a-c, e, f); Matheny, M. L., and Little (1978a-c); Matheny, M. L., and Matheny (1978a, c-f); Matheny, M. L., and Talley (1978); Maynard (1978a-e); Pritchard (1978a-c, e); Reese, V. R. (1978a); Riggs (1978a-e); Sabins (1978); Spencer, C. W. (1978a, b); Stevenson (1978); Stevenson and Matheny (1978); Tezak (1978a, b)
- Santa Fe County, Black, B. A. (1979a, d)
- Santa Rosa Sandstone, Brimhall (1978); Budding (1980) seismology, Jones, B., and McMillan (1977)
- Sierra County, Cernock (1977c); Cunningham, C. P. (1978)
- Socorro County, Chapin, Osburn, and others (1979)
- southeastern New Mexico, Havenor (1977); Roswell Geological Society (1977)
- southwestern New Mexico, Thompson, S., III (1977a); Washington Ranch Morrow field, Miller, F. (1980)
- White Sands Missile Range, Foster, R. W. (1978b)
- petrology**
- Abiquiu Tuff, Vazzana (1980); Vazzana and Ingersoll (1980)
- Albuquerque Basin andesites, Kasten, J. A. (1977)
- Aleman Formation, Geeslin (1980)
- Animas Mountains, Erb (1979)
- Arroyo Peñasco collapse breccia, Vaughan (1978); Vaughan and Meyers (1976); Williamson, T. F. (1978)
- Baca Formation, Cather (1980)
- Bandera Crater, Gallagher (1973)
- Bear Mountain intrusive, Peterson, H. W. (1979); Peterson, H. W., and Norman (1980)
- Bosque Peak 7<sup>1/2</sup>' quadrangle, Edwards, D. L. (1978)
- Carlsbad Caverns, Kendall and Broughton (1977)
- Cat Hills volcanics, Baldrige, Perry, and Gladney (1980); Renault (1978b)
- Cerro de Los Lunas, Renault (1978b)
- Chuska Sandstone, Trevena and Nash (1978a)
- Dixon-Peñasco Precambrian, Long, P. E. (1976); Long, P. E., and Jahns (1976); Long, P. E., and Luth (1979)
- Glorieta Sandstone, Milner (1978)
- Green Knobs diatreme, Smith, D. L., and Levy (1976)
- Harding pegmatite, Cook, C. W. (1979); Nichols (1980)
- Hidalgo County, Budding and Broadhead (1977a, c)
- hot dry rock project, Laughlin and Eddy (1976)
- John Kerr Peak dome complex, Smith, E. I. (1976)
- Ladron Mountains, Cookro (1978)
- Lake Valley Limestone, Oglesby, Meyers, and Lohmann (1979)
- Lucero volcanic field, Baldrige, Perry, and Gladney (1980)
- Mogollon-Datil volcanic field, Rhodes (1976b)
- Navajo Indian Reservation, Stone, W. J., Brod, and Anderholm (1978); Stone, W. J., and Jackson (1980)
- Navajo volcanic field, Ehrenberg (1978, 1979); Ehrenberg and Griffen (1979)
- Organ cauldron, Macer (1978)
- Palisades sill, Cannon, R. P. (1977); Cannon, R. P., and Ragland (1977)
- Peloncillo Mountains, Erb (1979)
- Percha Formation, Kocurek (1977)
- porphyry copper, Nash (1976)
- Rio Arriba County, Broomfield (1977)
- Rio Grande rift, Baldrige (1976, 1977, 1978, 1979a-c); Reid, J. B. (1976)
- San Andres Formation, Milner (1976)
- Sandia Mountains, Affholder (1979); Enz and others (1979) sandstone copper deposits, LaPoint (1979)
- Sangre de Cristo Mountains, Siemers, C. T. (1979)
- San Juan Basin, Stone, W. J. (1979b)
- Sierra Blanca igneous complex, Black, K. D. (1977b)
- Socorro County, Siemers, W. T. (1978)
- Taos Plateau volcanic field olivine tholeiite, Lofgren (1979)
- Tetilla Peak, Zimmerman, C. J., and Kudo (1979a)
- Tewa Group, Prigmore (1978)

- Tijeras greenstone, Condie (1980b)  
 topaz rhyolites, Christiansen, E. H., and others (1980)  
 Trans-Pecos magnetic province, Barker, D. S., Long, and others (1977)  
 Wind Mountain volcanics, Renault (1978b)
- Pictured Cliffs Sandstone**, Erpenbeck and Flores (1979); Fassett (1977b); Flores (1979, 1980); Jacobs, J. L. (1977)
- Picuris Range**, Gresens (1976); Gresens and Stensrud (1977); Heinrich (1980); Holdaway (1978); Muehlberger (1978); Nielsen, K. C., and Scott (1979)
- Pierre Shale**, Cobban (1976)
- Pinos granite**, Brookins, Bolton, and Condie (1980)
- Pleistocene**  
 Lake Trinity, Neal (1976)  
 mice, Smartt (1977)
- Point Lookout Sandstone**, *see* Mesaverde Group
- Pojaque Basin**  
 hydrology, Balch and Clark (1978)
- pollution**  
 Ambrosia Lake uranium district, Purtymun, Dreesen, and Wienke (1977)  
 asbestiform fibers, Oliver, T., and Murr (1977)  
 coal, Cannon, H. L., and Swanson (1979); Cook, F. (1979); Kelly, W. (1979)  
 Four Corners Power Plant, Environmental Science and Technology (1977); Wangen and Wienke (1978)  
 general, Kaufman, E. L., and Siciliano (1980)  
 Grants uranium district, Brandvold, L. A., and others (1980); Environmental Protection Agency (1977); Marple (1979); Marple and others (1978); Townsend (1979)  
 hot dry rock geothermal project, Pettitt (1976); Pettitt and West (1978)  
 Los Alamos County, Hakonson and others (1976, 1980); Purtymun, Buchholz, and Hakonson (1977)  
 Ogallala aquifer, Taylor, R. G., and others (1978)  
 Santa Fe ski area, Moore, D. I., and others (1978)  
 sulfur, Winchester, J. W., and Ferek (1979)
- Popotosa Formation**, Brenner-Tourtelot and Machette (1979)
- Portales Valley**, *see* Roosevelt County
- potash**  
 Carlsbad potash district, Aguilar and others (1976); Ellet (1978); John and others (1978); U.S. Geol. Survey (1979f); Wynne (1978)  
 general, Austin, G. S. (1976, 1978); Austin, G. S., and Whyte (1976)  
 production, Case (1978); McNaughton (1978)
- Potrillo Basalt field**, Berman, R. G., and Reid (1976); Bersch (1977); Hoffer (1976a, b)
- Potrillo Mountains**, Jenkins, D. A. (1977)
- Precambrian**  
 Abo Pass, Jurdy (1978)  
 bibliography, Robertson, J. M. (1976a)  
 Bosque Peak 7 $\frac{1}{2}$ ' quadrangle, Edwards, D. L. (1978)  
 Cow Creek ultramafic complex, Wyman, W. F. (1980b)  
 crust, Condie and Brookins (1980)  
 Dixon-Peñasco area, Long, P. E. (1976); Long, P. E., and Jahns (1976); Long, P. E., and Luth (1979)  
 general, Condie and Budding (1979); Robertson, J. M., Callender, and Brookins (1976)  
 geochemistry, Laughlin and Eddy (1976)  
 geochronology, Brookins, Bolton, and Condie (1980); Brookins, Della Valle, and Lee (1978a); Robertson, J. M., Callender, and Brookins (1976); White, D. L. (1978a, b, 1979)  
 granites, Condie (1978)  
 Hell Canyon greenstone belt, Woodward, Parchman, and others (1979)  
 Jemez Mountains, Solomon and Kerrick (1976)  
 Ladron Mountains, Condie (1976); Cookro (1978); White, D. L. (1978a, b)  
 Las Tablas-La Madera 7 $\frac{1}{2}$ ' quadrangles, Gresens (1976)  
 Lemitar Mountains, McLemore (1980a-c)  
 Los Pinos Mountains, Beers (1976)  
 Magdalena Mountains, White, D. L. (1978a, b)  
 Manzano Mountains, White, D. L. (1978a, b)  
 mineralization, Giles (1976)  
 Nacimiento uplift, Woodward, McLelland, and Husler (1977)  
 northeastern New Mexico, Callender, Robertson, and Brookins (1976)  
 Ojita pluton, White, D. L. (1978a, b)  
 Pecos mining district, Riesmeyer (1978)  
 petrology, Laughlin and Eddy (1976)  
 Picuris Range, Gresens (1976); Heinrich (1980); Nielsen, K. C., and Scott (1979)  
 Rio Arriba County, Treimain (1977, 1978)  
 Sandia Mountains, Berkeley and Callender (1979); Berkeley, Callender, and Keil (1976); Bolton (1976); Kasten, T. A. (1980)  
 Sangre de Cristo Mountains, Wyman, W. F. (1980a)  
 San Miguel County, Riesmeyer and Robertson (1979)  
 Sierra Oscura, White, D. L. (1978a, b)  
 structure, Allan and Swan (1978); Jurdy (1978)  
 Taos County, Kirschner (1979); Treimain (1977, 1978)  
 Taos Range, Condie (1979)  
 tectonics, Condie (1980a)  
 Tijeras greenstone, Condie (1980b)  
 Trans-Pecos region, Denison (1980)  
 trondhjemites, Barker, F., Arth, and others (1976); Barker, F., Friedman, and others (1976); Glickson (1979)  
 Truchas Range, Grambling (1978, 1979a-c)  
 Tusas Mountain area, Kent, S. C. (1980)
- Priest quartz monzonite**, Bolton (1976); Brookins, Bolton, and Condie (1980)
- Proterozoic**  
 magmatic rocks, Babcock, R. S. (1979)
- pseudobrookite**, Lufkin (1976)
- Puye Formation**, *see* Santa Fe Group
- Pyramid Mountains**, Thorman and Drewes (1978a)
- quartz**, multiple Japan-law twins, Taggart and Grigsby (1976)
- quartzite**, Borton (1979a)
- Quaternary**  
 Basin and Range province, Hawley, Bachman, and Manley (1976)  
 Bernalillo County, Lambert, P. W. (1978a)  
 Great Plains Province, Hawley, Bachman, and Manley (1976)  
 Ladron Mountains, Callender and Zilinski (1976)  
 Lake Animas, Fleischhauer (1977b, 1978)  
 Lucero uplift, Callender and Zilinski (1976)  
 mammoth, Agenbroad (1978); Saunders (1978)  
 Rio Grande rift stratigraphy, Hawley (1978d)  
 San Juan Basin, Schultz (1980)  
 soil formation, Shroba (1977)  
 southern High Plains, Reeves (1976)
- Quay County**  
 Clovis 2' quadrangle, DeCicco and Patterson (1980c); Texas Bureau of Economic Geology (1978); U.S. Geol. Survey (1980e)  
 Fort Sumner 2' quadrangle, DeCicco and Patterson (1980g)  
 land classification map, DeCicco and Patterson (1980c, g, h); U.S. Geol. Survey (1980e, g)  
 Tucumcari 2' quadrangle, DeCicco and Patterson (1980h); U.S. Geol. Survey (1980g)  
 uranium, Finch and others (1976)
- Queen Formation**, *see* Artesia Group
- radioactive-waste disposal**, Anderson, R. Y., and Kirkland (1979, 1980); Balestri and others (1979); Barr and Gonzalez (1980); Brannen (1979); Costin and Wawersik (1980); Dosch (1979); Elliot (1976); Foster, R. W., Austin, and others (1977); Fried and others (1978); Glanzman (1980); Gonzales, J. L., and Jones (1979a, b); Gonzales, Serge, and Johnson (1980); Herkenhoff and Associates and Summers and Associates (1977); Hern (1979); Hern and Elliot (1978); Hill, L. R. (1979); Hinkebein and Hlava (1979); Hunter, T. O. (1979); John and others (1978); Johnson,



- K. S., and others (1978); Jones, C. L. (1978); Jones, C. L., and McIntyre (1979); Kosocki and others (1978); Krieg and Hunter (1980); Lynch (1979); Mansure and Reiter (1977); Mercer and Orr (1978, 1979); Nowak (1978); Nyhan, Miera, and Peters (1976); Olhoeft (1978); Piper (1974); Powers, D. W. (1979); Powers, D. W., and Shaffer (1979a-c); Powers, D. W., and Weart (1979); Purtymun, Rogers, and Wheeler (1980); Roedder and Belkin (1979); Rogers, M. A., Christie, and Budding (1980); Rosholt and McKinney (1980); Sandia Laboratories and U.S. Geol. Survey (1979a-d); Sanford and others (1978, 1980); Schmoker (1980); Scully (1979); Shaffer (1979a-d); Siemers, W. T., and others (1978); Smith, J. W. (1975); Snyder, R. P., and McIntyre (1979); Statler and Seward (1979a-h); Szabo and Gottschall (1980); Taggart and Renault (1977); Warren, J. L. (1980); Weart and Powers (1980); Weisner and others (1980)
- radionuclides**  
Waste Isolation Pilot Plant site, Dosch (1979)
- radium**  
mineral springs, Felmlee and Cadigan (1978)  
pollution and vegetation, Marple (1979); Marple and others (1978)
- radon**, Fleischer (1980); Fleischer, Hart, and Mogro-Campero (1980); Fleischer and Mogro-Campero (1979a, b); Geotimes (1980); Schery and others (1980); Van Cleave (1976)
- rajite**, Williams, S. A. (1979)
- Rancheria Formation**, Lane and DeKeyser (1979); Meyers (1978, 1980); Yurewicz (1977a, b)
- rare earths**, Brookins and Della Valle (1979); Brookins, Della Valle, and Balagna (1979); Brookins, Della Valle, and Lee (1978b); Brookins, Lee, and Riese (1977); Brookins, Riese, and Lee (1977); Della Valle and Brookins (1980b); Dreesen and others (1978); Modreski (1979); Phelps, Blanchard, and others (1979); Phelps, Blanchard, and Stormer (1980); Reid, J. B., and Frey (1978)
- RARE II areas**, Maxwell, C. H. (1978)
- Raton Basin**  
coal, Amuedo and Bryson (1977); Bohor and Pillmore (1976); Jurich (1980); Meissner (1977); Pillmore (1976d, e); Pillmore and Hatch (1976)  
Cretaceous, Ash and Tidwell (1976); Fassett (1976)  
Dakota Sandstone, Asquith and Gilbert (1976)  
gamma ray and magnetic survey, Geometrics (1979b)  
Paleocene, Ash and Tidwell (1976)  
Paleozoic, Roberts and others (1976)  
petroleum and natural gas, Speer (1976)  
road logs, Pillmore (1976a, 1980a, b)  
tectonics, Woodward and Snyder (1976a, b)  
Trinidad Sandstone, Pillmore and Maberry (1976)  
Vermejo Formation, Flores (1980)
- Raton Formation**, Roehler and Danilchik (1980)
- Recapture Shale Member**, *see* Morrison Formation
- Red Mountain Dacite**, David, W. P., and others (1980); Phelps, Blanchard, and others (1979); Phelps, Blanchard, and Stormer (1980)
- Redondo Peak**, Dimitrijevic and others (1976)
- Red Tanks Member**, *see* Madera Formation
- remote sensing**, Anderson, J. R., and others (1976); Colvocoresses (1979); Earth Satellite Corporation (1979); Ebert and Gutierrez (1979); Everett and others (1978); Feldman and others (1974); Fischer, W. A. and others (1978); Gableman (1978); Inglis and others (1978); Knepper (1978); Lyons and others (1976); Neal (1978); Sheffer and others (1978); Tabet and others (1976); Zech and Knepper (1979)
- Riley maar**, Saito, Menzies, and others (1978); Schwartz and Irving (1978)
- Rinconada formation**, Barrett and Kirschner (1979)
- Rio Arriba County**  
Abiquiu, U.S. Geol. Survey (1976b)  
Arroyo del Agua 7 $\frac{1}{2}$ ' quadrangle, Ridgley (1979b, c)  
Aztec 2° quadrangle, DeCicco, Patterson, and Lutz (1978b); Geodata International (1980); Manley and Scott (1978)  
Ballard Pictured Cliffs field, Brown, C. F. (1978b)  
Basin Dakota field, Hoppe (1978c)  
Blanco Mesaverde field, Hill, J. M. (1978); Pritchard (1978a)  
Blanco Pictured Cliffs east field, Brown, C. F. (1978d)  
Blanco Pictured Cliffs field, Brown, C. F. (1978c)  
Blanco Pictured Cliffs south field, Brown, C. F. (1978e)  
Blanco Tocito south field, Fassett and Jentgen (1978a)  
Boulder Mancos field, Needham (1978a)  
B S Mesa field, Matheny, M. L., and Matheny (1978b)  
Cañones, Broomfield (1977)  
Capulin, Hart, D. L., Jr., and Smith (1979a, b)  
Cerro del Grant area, Lawrence (1979)  
Chacon Dakota field, Beach and Thomas (1978)  
Choza Mesa Pictured Cliffs field, Brown, C. F. (1978f)  
coal, Dames and Moore (1979b, c, z, aa, ff-hh, jj-ll, uu, mmm)  
copper, Timmer (1976)  
Counselor 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979c)  
Cuba 7 $\frac{1}{2}$ ' quadrangle, Anderholm (1979)  
Devils Fork Gallup field, Dunn (1978a)  
Devils Fork Mesaverde field, Dunn (1978b)  
Dixon, Steipress (1980)  
Dixon-Peñasco Precambrian, Long, P. E. (1976); Long, P. E., and Jahns (1976); Long, P. E., and Luth (1979)  
Dulce, Herrman and others (1980); Herrman and Park (1979); Hoffman and Northrup (1977)  
Embudo, Moss and others (1978)  
Escrito Gallup field, Reese, V. R. (1978a)  
Gallina 7 $\frac{1}{2}$ ' quadrangle, Gibson, G. G. (1975); Woodward, Gibson, and McLelland (1976)  
Gavilan Pictured Cliffs field, Conyers (1978)  
Governador Pictured Cliffs field, Matheny, M. L. (1978d)  
Gonzales Mesaverde field, Pritchard (1978d)  
Gould Pass 15' quadrangle, NE corner, Dames and Moore (1979uu)  
Gould Pass SE 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979gg)  
Gould Pass SW 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979ff)  
ground water, Hart, D. L., Jr., and Smith (1979a, b)  
guidebook, Ingersoll (1979c); Ingersoll and Woodward (1979)  
hydrology, Anderholm (1979); Moss and others (1978)  
Jarosa 7 $\frac{1}{2}$ ' quadrangle, Timmer (1976); Woodward and Timmer (1979)  
La Jara Fruitland field, Malone (1978h)  
land classification map, DeCicco, Patterson, and Lutz (1978b, d, 1980)  
Largo Chacra field, Hoppe (1978f)  
Largo Gallup field, Fassett and Jentgen (1978b)  
Las Tablas-La Madera 7 $\frac{1}{2}$ ' quadrangles, Gresens (1976)  
Lindrieth Gallup-Dakota west field, Attebery (1978)  
Llaves 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979z)  
Lybrook Gallup field, Reese, V. R. (1978c)  
Lybrook 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979b)  
magnetic survey, U.S. Geol. Survey (1976b)  
Nageezi 15' quadrangle, SW corner, Dames and Moore (1979kk)  
Nageezi NW 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979jj)  
Nageezi SE 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979nnn)  
Ojito Dakota field, Folk, J. K. (1978)  
Ojito Gallup field, Matheny, M. L., and Folk (1978)  
Ojo Caliente-Río Chama Neogene, May (1979)  
Ojo Caliente 7 $\frac{1}{2}$ ' quadrangle, Treiman (1977, 1978)  
Ojo Caliente tuff ring, May (1977)  
Otero Chacra field, Hoppe (1978g)  
Otero Gallup field, Brown, H. H. (1978d)  
Otero Pictured Cliffs field, Harris, J. J. (1978)  
Petaca mining district, North, R. W. (1979)  
petroleum and natural gas, Fassett, Thomaidis, and Matheny (1978); Hill, J. M. (1978); Matheny, M. L., and Talley (1978)

- Pine River  $7\frac{1}{2}'$  quadrangle, Dames and Moore (1979mmm)  
Precambrian, Gresens (1976)  
Puerto Chiquito Mancos east field, Greer (1978b)  
Puerto Chiquito Mancos west field, Greer (1978c)  
Raton  $2^{\circ}$  quadrangle, DeCicco, Patterson, and Lutz (1978d,  
1980); Morgan, T. L., and Broxton (1978)  
Regina  $7\frac{1}{2}'$  quadrangle, Dames and Moore (1979aa);  
Merrick (1980)  
road logs, Budding, Robertson, and others (1979); Fas-  
sett, Black, and others (1977); Fassett, Jentgen, and  
others (1977); Hawley (1978b); Hawley, Burroughs, and  
others (1978); Lipman (1978); Muehlberger and Hawley  
(1978)  
San Antonio Mountain, Brookins, Eppler, and Elston  
(1977); Eppler (1976)  
Santos Peak  $7\frac{1}{2}'$  quadrangle, Dames and Moore (1979hh)  
Schmitz Torreon-Puerco field, Needham (1978b)  
Tafoya Canyon  $7\frac{1}{2}'$  quadrangle, Dames and Moore (1979ll)  
Tapacito Gallup field, Fassett and Jentgen (1978c)  
Tapacito Pictured Cliffs field, Brown, C. F. (1978i)  
Tusas Mountain area, Kent, S. C. (1980)  
Wildhorse Dakota field (oil), Matheny, J. P. (1978)  
Wildhorse Gallup field (gas), Matheny, M. L., and Math-  
eny (1978g)
- Rio Grande**  
aquifers, Day (1978)  
general, Belcher and Galloway (1977); Brackenridge  
(1976); Dewey and others (1979); International Boundary  
and Water Commission (1976); Moss and others  
(1978); New Mexico Water Quality Control Commission  
(1976); Smith, R. W., and Popp (1980); Water Re-  
sources Engineers (1976)  
salt cedar, Gay and Fritschen (1979)  
sedimentary structures, Harms and Fahnestock (1977)  
trace metals, Dauchy and Brandvold (1976); Popp and  
Laquer (1980)
- Rio Grande basin**  
geochronology, Stearns (1979)  
geomorphology, Bachman and Mehnert (1978); Stearns  
(1979)  
geothermal energy, Kleeman and Savage (1977)  
ground water, Wilson, White, and Roybal (1979b)  
Tertiary sedimentation and tectonics, McDonald (1976)
- Rio Grande rift**  
Abiquiu embayment, Wilson, J. E. (1977)  
Albuquerque, Kelley, V. C. (1978b, c); Kelley, V. C.,  
Woodward, and others (1976)  
andesites, Zimmerman, C. J. (1979); Zimmerman, C. J.,  
and Kudo (1978, 1979b)  
basalt, Baldrige (1977); Menzies and Murthy (1980);  
Renault (1978a, b)  
Bouguer gravity anomaly, Aiken (1977, 1978); Birch  
(1980); Cordell, L. (1976a, d, 1978a, c, 1979a, b);  
Cordell, L., and Detmering-Beal (1978); Cordell, L.,  
Keller, and Hildenbrand (1978); Decker and Smithson  
(1977); Ramberg and others (1978)  
Chihuahua tectonic belt, Gries (1977, 1979); Smith, D.  
L., and Jones (1978a, b)  
crustal structure, Ander (1980); Baldrige (1977); Brown,  
L. D., Brewer, and others (1978); Brown, L. D., Chapin,  
and others (1980); Brown, L. D., Kaufman, and others  
(1979); Brown, L. D., Kaufman, and Oliver (1977);  
Cape and others (1980); Jurdy (1979); Jurdy and Brocher  
(1980); Keller, G. R., and Braile (1979); Keller, G. R.,  
Braile, and Schlue (1979); Keller, G. R., and Lowrey  
(1976); Long, G. H., and others (1977); McCullar (1977);  
Murdock and Jaksha (1980); Oliver, J. E. (1978); Oliver,  
J. E., and Kaufman (1976); Oliver, J. E., and others  
(1976); Olsen, K. H., Keller, and Stewart (1979); Olsen,  
K. H., Keller, Stewart, and others (1977); Olsen, K.  
H., and Stewart (1979); Rinehart, E. J. (1979a, b);  
Rinehart, E. J., and Sanford (1980); Rinehart, E. J.,  
and others (1979); Spence, W., Gross, and Jaksha (1979);  
Spence, W., and Jaksha (1978); Topozada and Sanford  
(1976); Warren, R. G. (1978, 1979); Warren, R. G.,  
and others (1978); Woodward (1977)  
Engle Basin, Warren, R. G. (1978, 1979); Warren, R.  
G., and others (1978)  
Española Basin, Bridwell (1978); Cordell, L. (1979a);  
Manley (1976c, 1978a-c, e, 1979a); Reilinger, Brown,  
and others (1979); Reilinger and York (1979)  
fluorite, Van Alstine (1976)  
general, Axelrod and Bailey (1976); Baldrige (1976);  
Baltz (1978); Bridwell (1977); Bridwell and Anderson  
(1980); Burke (1978); Callender, Woodward, and Kelley  
(1976); Chapin (1976, 1978a, 1979a); Cordell, L. (1976c,  
1978b, d, 1979b); Elston (1977); Foster, R. W. (1978a)  
Keller, G. R., Graham, and Roy (1978); Ramberg (1978);  
Sales (1978); Seager and Morgan (1979); Tweto (1979)  
geochronology, Bachman and Mehnert (1978); Baldrige,  
Damon, and others (1980); Brookins (1977b); Everson  
and Silver (1978); Stearns (1979)  
geothermal energy, Harder and others (1980); Kleeman  
and Savage (1977); Rona (1977); Trainer and Lyford  
(1979)  
guidebook, Hawley (1978a); Olsen, K. H., and Chapin  
(1978); Riecker (1979)  
heat flow, Bridwell (1976); Bridwell and Baldrige (1976);  
Cook, F. A., and others (1978); Decker and Smithson  
(1977); Huestis (1979); Lohse and others (1980); Reid,  
J. B. (1976); Reiter, M. A. (1976); Reiter, M. A., Ed-  
wards, Mansure, and Shearer (1978); Reiter, M. A.,  
Edwards, Shearer, McGrath, and Mansure (1976); Rei-  
ter, M. A., Mansure, and Shearer (1979a); Reiter, M.  
A., and Shearer (1980); Reiter, M. A., Shearer, and  
Edwards (1978); Smith, D. L., and Jones (1978)  
Jemez Mountains, Smith, R. L., and Bailey (1978)  
La Jencia Basin, Brown, L. D., Allmendinger, and others  
(1980)  
Lemita Mountains, Chamberlin (1976, 1978)  
magma bodies, Brocher (1978, 1979a, b); Brown, L. D.,  
Krumhansl, Cook, and Kaufman (1978); Caravella (1976);  
Fender (1978); Fischer, J. A. (1977) Frishman (1979);  
Hardee and Luth (1980); Hermance and Pederson (1978);  
Reilinger and Oliver (1976); Reilinger, Oliver, Brown,  
and others (1979); Reilinger, Oliver, and others (1980);  
Reilinger and York (1979); Riecker (1979); Towle (1980b)  
magnetics, Cordell, L. (1976a); Mayhew (1979); Towle  
(1978, 1979, 1980a); Wasilewski and Padovani (1980)  
magnetotelluric survey, Hermance and Pedersen (1980);  
Jiracek, Ander, and Holcombe (1979a, b); Jiracek, An-  
der, and Reddy (1978); Pedersen (1980); Pedersen and  
others (1979)  
mantle, Ander (1980); Bridwell (1976, 1978); Brown, L.  
D., Kaufman, and others (1979); Brown, L. D., Kauf-  
man, and Oliver (1977); McCullar (1977); Oliver, J. E.  
(1978); Oliver, J. E., and Kaufman (1976); Oliver, J.  
E., and others (1976); Reid, J. B. (1976, 1978); Reid,  
J. B., Bateman, and others (1977); Reid, J. B., and  
Frey (1978); Reid, J. B., and Woods (1978a, b); Warren,  
R. G. (1978, 1979); Warren, R. G., and others (1978)  
Mesilla Valley fault zone, Lovejoy (1976d)  
ore deposit, Putnam (1980)  
Pajarito fault zone, Golombek (1980)  
remote sensing, Knepper (1978)  
resistivity, Jiracek, Ander, and Holcombe (1979b); Jira-  
cek and others (1976); Shankland (1978); Smith, C. S.  
(1976)  
Sandia uplift, Kelley, V. C. (1978d)  
sedimentation, Cordell, L. (1979b); Kottlowski (1976)  
seismology, Brocher (1978, 1979a, b, 1980); Brown, L.  
D., Brewer, and others (1977); Brown, L. D., Chapin,  
and others (1980); Brown, L. D., Kaufman, and others  
(1979); Brown, L. D., Kaufman, and Oliver (1977);  
Brown, L. D., Krumhansl, Chapin, and others (1979);  
Brown, L. D., Krumhansl, Cook, and Kaufman (1978);

- Brown, L. D., Krumhansl, Cook, and others (1978); Davis, T. L., and Stoughton (1979); Johnston, J. A. (1978); Jurdy (1979); Jurdy and Brocher (1980); Kaufman, S., and Oliver (1977); Keller, G. R., and Braile (1979); Keller, G. R., Braile, and Schlue (1979); Murodock and Jaksha (1978, 1980); Oliver, J. E. (1978); Oliver, J. E., and Kaufman (1976); Oliver, J. E., and others (1976); Olsen, K. H., Keller, and Stewart (1979); Olsen, K. H., Keller, Stewart, and others (1977); Olsen, K. H., and Stewart (1979); Ottolini (1978); Sanford and Oliver (1977); Sanford, Olsen, and Jaksha (1979); Savage, J. C., and others (1979, 1980); Schilt and others (1978); Smithson and McCullar (1977); Spence, W., Gross, and Jaksha (1979); Spence, W., and Jaksha (1978); Ward, R. W., and Nation (1979); Ward, R. W., and Sengupta (1977)
- Socorro County, Sanford (1978a); Sanford and Schlue (1979)
- southern New Mexico, Seager (1977)
- stratigraphy, Hawley (1978d, e)
- Taos Plateau volcanics, Williams, S., and Murthy (1978)
- tectonics, Baldridge (1979d); Baldridge and others (1980); Bridwell (1976); Brown, L. D., Miesen, and others (1980); Chapin (1979b); Eaton (1979a); Elston and Bornhorst (1978, 1979); Kelley, V. C. (1979a); Livaccari (1979); Lovejoy (1976d); Mutschler and others (1978); Reilinger, Brown, and Jurkowski (1980); Reilinger and York (1978); Riecker (1979); Woodward (1977); Woodward and Callender (1977b); Woodward, Callender, and others (1978); Woodward and Ingersoll (1977)
- Trans-Pecos, Keller, G. R., and Covert (1979)
- Trans-Pecos magmatic province, Barker, D. S. (1979a)
- volcanism, Kudo (1976b); Mutschler and others (1978); Stormer (1978)
- Rio Ojo Caliente**, Wenrich-Verbeek (1977, 1978, 1979a, b); Wenrich-Verbeek and Suits (1979a, b)
- Rio Puerco**, Aldon (1976); Shepherd (1976); Shepherd and Macke (1978)
- Rio Puerco fault zone**, Callender and Zilinski (1976); Lucas (1980); Slack and Campbell (1976)
- road logs**
- Bernalillo County, Hawley (1978c); Hawley, Chapin, Chamberlin, and others (1978); Lambert, P. W. (1976, 1978a); Saucier (1979); Woodward, Ingersoll, Fitch, and others (1979)
- Capitan Limestone or reef complex, Babcock, J. A., and others (1977a, b)
- Catron County, Bornhorst and Elston (1978); Clemons, Christiansen, and James (1980); Coney and Elston (1978a, b); Elston (1978a); Ratte and Finnell (1978)
- Cibola County, Saucier (1979)
- Colfax County, Lessard (1976); Pillmore (1976a, b, 1980a, b)
- Doña Ana County, Clemons, Christiansen, and James (1980); Clemons and Seager (1978); Hawley, Lovejoy, and others (1978); Hawley and Seager (1978); Seager (1978a)
- Eddy County, Esteban and Pray (1977a-e); Pray and Sarg (1977); Sarg (1977); Yurewicz (1977e)
- Grant County, Clemons, Christiansen, and James (1980); Clemons and Seager (1978); Elston (1978a); Ratte (1978a)
- Ratte and Finnell (1978); Seager, Clemons, and Elston (1978)
- Hidalgo County, Clemons, Christiansen, and James (1980); Keith and Wilt (1978); Keith, Wilt, and others (1978)
- Jemez Mountains, Bailey and Smith (1978)
- Luna County, Clemons, Christiansen, and James (1980); Clemons and Seager (1978)
- McKinley County, Fassett, Jentgen, and others (1977); Fassett, Molenaar, and others (1979); Saucier (1979)
- Mora County, Lessard (1976)
- Otero County, Delgado and Pray (1977); Opiel and others (1977); Pray (1977b-g); Pray and Packard (1977); Toomey and Wilson (1977); Van Wagoner (1977b); Wilson, J. L. (1977b)
- Rio Arriba County, Budding, Robertson, and others (1979); Fassett, Black, and others (1977); Fassett, Jentgen, and others (1977); Hawley (1978b); Hawley, Burroughs, and others (1978); Lipman (1978); Muehlberger and Hawley (1978)
- Sandoval County, Black B. A. (1979b); Fassett, Jentgen, and others (1977); Hawley, Chapin, Chamberlin, and others (1978); Hawley and Galusha (1978); Hawley and Kottlowski (1978); Lambert, P. W. (1978a); Woodward, Ingersoll, Fitch, and others (1979)
- San Juan County, Fassett, Black, and others (1977); Fassett, Molenaar, and others (1977)
- San Miguel County, Budding (1979); Lessard (1976); Robertson, J. M., Budding, and others (1979)
- Santa Fe County, Black, B. A. (1979b) Budding (1979); Budding, Robertson, and others (1979); Hawley (1978b); Hawley, Burroughs, and others (1978); Hawley, Chapin, Chamberlin, and others (1978); Hawley and Kottlowski (1978); Robertson, J. M., Budding, and others (1979); Woodward, Ingersoll, Fitch, and Hutchinson (1979a, b); Woodward, Ingersoll, Fitch, and others (1979)
- Sierra County, Chapin, Jahns, and others (1978); Hawley, Chapin, and Osburn (1978); Hawley, Lovejoy, and others (1978); Hawley and Seager (1978); Seager, Clemons, and Elston (1978); Thompson, S., III (1978)
- Socorro County, Bornhorst and Elston (1978); Chapin, Chamberlin, and Hawley (1978); Chapin, Jahns, and others (1978); Hawley (1978c); Hawley, Chapin, Chamberlin, and others (1978); Hawley, Chapin, and Osburn (1978); Hawley, Lovejoy, and others (1978)
- Taos County, Budding, Robertson, and others (1979); Hawley, Burroughs, and others (1978); Lipman (1978); Muehlberger and Hawley (1978)
- Valencia County, Hawley (1978c); Hawley, Chapin, Chamberlin, and others (1978); Saucier (1979b)
- Robledo Mountains**, DeSimpson (1976)
- Rock Hound State Park**, Weber, R. H. (1980b)
- Rocky Mountains**
- Chinle Formation, Kurtz (1978b)
- coal, Hodgson (1978)
- crustal structure, Keller, G. R., and Braile (1979)
- general, Larkin and others (1980)
- geologic hazards, Colton (1979)
- gravity, Drake (1979)
- Nacimiento uplift, Woodward (1978)
- river system development, Lovejoy (1976c)
- tectonics, Baltz (1979); Chapin (1979b); Kluth and Coney (1980); Woodward (1976)
- Roosevelt County**
- Blackwater Draw, Agenbroad (1978); Saunders (1978)
- Bluitt field, Ingram (1977a)
- Brownfield 2° quadrangle, DeCicco and Patterson (1980a); U.S. Geol. Survey (1980f)
- Clovis 2° quadrangle, DeCicco and Patterson (1980c); Texas Bureau of Economic Geology (1978); U.S. Geol. Survey (1980e)
- ground water, Hudson, J. D. (1976-77c, 1979d)
- land classification map, DeCicco and Patterson (1980a, c); U.S. Geol. Survey (1980e, f)
- Peterson (Associated gas) field, Chenot (1977a)
- petroleum and natural gas, Havenor (1977); Roswell Geological Society (1977); Sandlin and Schatz (1980); Scott, G. L. (1980)
- Portales Valley, Hudson, J. D. (1976-77c, 1979d)
- soil science, Sridhar and others (1978)
- South Prairie Devonian field, Cys (1977b)
- Todd San Andres field, Smith, G. (1977)
- Tom-Tom and Tomahawk San Andres oil fields, Scott, G. L. (1980)
- Vada Pennsylvanian field, Carelton (1977)

**Roswell Underground Water Basin**

ground water, Duffy and others (1978); Gross, G. W., and others (1980); LeFebre (1976, 1977); Mercado (1977); Rabinowitz and others (1977a); Welder (1977a, b)

**Rubio Peak Formation, Hedlund (1976)****Rustler Formation, Hiss (1976d); Lynch (1979)****Sacramento Mountain escarpment, Pray (1977a)****Sacramento Mountains**

Abo Formation, Delgado (1977a, b)

algae, Parks (1977c)

bioherms, Hosseini (1980); Parks (1976a, b, 1977b, d);

Wilson, J. L. (1977a); Wray (1977)

Caballero Formation foraminifera, Conkin and Conkin (1979)

Capitan Formation, Lohmann (1978)

carbonate-mudbank buildups, Parks (1977a)

conodonts, Burton, R. C. (1977); Hung (1978)

crinoids, Strimple (1980)

erosion, Robbie and Buchanan (1978)

Gobbler Formation, Van Wagoner (1977a)

guidebook, Butler, J. H. (1977)

Holder Formation, Dunning (1978)

Laborcita Formation, Cys and Mazzullo (1977); Delgado (1977a, b); Delgado and Pray (1977); Winchester, P. D. (1976, 1977)

Lake Valley Limestone, Burton, R. C. (1977); Lohmann (1978); Lohmann and Meyers (1977); Meyers (1977a) limestones, general, Meyers (1978, 1980)

Mississippian deposition, De Keyser (1979); Schaefer (1976)

Paleozoic facies, Scholle and Halley (1980)

phyllitic algal mounds, Mazzullo and Cys (1979a); Toomey and others (1977)

road logs, Delgado and Pray (1977); Oppel and others (1977); Pray (1977b-g); Pray and Packard (1977)

Yucca Mound Complex, Toomey and others (1977a, b); Toomey and Wilson (1977)

**Sacramento shelf, Van Wagoner (1978)****Salado Formation**

Carlsbad potash district, Bodine and Laskin (1979)

Delaware Basin, Anderson, R. Y., and Powers (1978); Dean and Anderson (1978a, b)

geochronology, Brookins, Register, Register, and Lambert (1978); Register, J. K. (1979); Register, J. K., and Brookins, (1980)

radioactive-waste disposal, Roedder and Belkin (1979); Szabo and Gottschall (1980)

Tijeras Canyon, Affholter (1979)

**Salt Wash Member, see Morrison Formation****San Andres Formation**

general, Jacka and others (1980); Milner (1976); Pitt (1980)

Glorieta Sandstone, Milner (1978); Ossian (1976)

ground water, Chavez (1976-77)

pseudoreefs, Squires (1976)

**San Andres Mountains, Meyers (1978, 1980)****Sandia Mountains**

ground water, Titus (1980)

igneous, Bolton (1976); Enz and others (1979); Thompson, T. B., and others (1980)

Placitas-Juan Tabo metamorphism, Berkeley and Callender (1979); Berkeley, Callender, and Keil (1976); Kas-ten, T. A. (1980)

**Sandoval County**

Albuquerque 2° quadrangle, DeCicco, Patterson, and Lutz (1978a); Geometrics (1979a); Maassen, Bolivar, and others (1979); Wyant and Olson (1978)

aluminum, Hall, R. B. (1978)

Arroyo Chijullita 7 1/2' quadrangle, Dames and Moore (1979f)

Aztec 2° quadrangle, DeCicco, Patterson, and Lutz (1978b); Geodata International (1980)

Ballard Pictured Cliffs field, Brown, C. F. (1978b)

Bandelier National Monument, Purtymun and Adams (1980)

Basin Dakota field, Hoppe (1978c)

Bernabe Montaña uranium deposit, Kozusko and Saucier (1980)

Bernalillo NW 7 1/2' quadrangle, Manley (1978d)

Blanco Pictured Cliffs south field, Brown, C. F. (1978e)

Bouguer gravity anomaly, Dimitrijevic and others (1976)

Canjilon Hill, Kudo and others (1977)

Cañon de San Diego, Goff and Kron (1980)

Cebolleta Grant, Boyd (1976)

Cerros del Rio, Aubele (1978, 1979)

Chacon Dakota field, Beach and Thomas (1978)

Chico Arroyo, Craig (1980)

coal, Dames and Moore (1979b-f, h, i, p-s, aa, aaa, bbb)

copper, Timmer (1976)

Counselor 7 1/2' quadrangle, Dames and Moore (1979c)

Deer Mesa 7 1/2' quadrangle, Dames and Moore (1979p)

Dennison-Bunn uranium claim, Ridgley (1979a, c, 1980)

Diamond Tail fault, Black, B. A. (1979b)

Eagle Mesa Entrada field, Campbell, J. P. (1978)

Fire Rock Well 7 1/2' quadrangle, Dames and Moore (1979d)

Five Lakes Dakota field, Reese, V. R. (1978b)

geothermal energy, Fenton Hill site, Aamodt (1976, 1977);

Aamodt, Aki, and others (1978); Aamodt, Baltz, and

others (1978); Aamodt, Brown, and others (1978); Aki

and others (1977); Albright (1976, 1979); Albright and

others (1978); American Geophysical Union (1977a);

Ander, Goss, and others (1980); Atkinson, P. G. (1980);

Balagna, Beddoe, and others (1978); Balagna, West,

and others (1977); Barker, Colin (1976); Bodvarsson

and others (1980); Brookins, Forbes, and others (1977);

Brookins and Laughlin (1976a, b, 1977); Brown, D. W.

(1976); Brown, M. C., and others (1979); Burruss and

Holister (1979); Charles (1978); Charles and Herrick

(1976); Charles, West, and others (1977); Cremer and

others (1980); Crowe and others (1978); Cummings and

others (1979); Dennis, B. R., and Horton (1978); Den-

nis, B. R., Miles, and others (1978); Dennis, B. R.,

and Murphy (1978); Duffield and Tester (1978); Duffy

(1978); Ehrenberg and Perkins (1977); Fehler (1977);

Gancarz (1978); Gutschick and Rea (1978); Hageman

(1978); Hatton (1977, 1978, 1980a, b); Helmick and

others (1976); Hendron (1978); Holley and others (1978);

Hsu (1979); Hsu and others (1978); Kaufman, E. L.,

and Siciliano (1979); Keller, G. V., Grose, and Pickett

(1978); Kintzinger (1976); Kintzinger and others (1978);

Kintzinger and West (1976); Kolstad and McGetchin

(1978); Kolstad, McGetchin, and Laughlin (1976);

Lambert, S. J. (1979a-c) Laughlin and Eddy (1976);

Laughlin and West (1976); Laughlin, West, and others

(1977); Lawton and Horton (1979); Maurer and others

(1978); Messer and others (1978); Mortensen (1978);

Murphy, H. D. (1976, 1978a, b); Murphy, H. D., and

others (1978); Murphy, H. D., and Tester (1979); Naeser

and Forbes (1976); Newsom (1978); Otte (1980); Pear-

son and others (1980); Pettitt (1976, 1977, 1978, 1979);

Pettitt and Tester (1978a, b); Pettitt and West (1978);

Potter, J. M. (1978); Potter, J. M., and others (1976);

Potter, R. M. (1976); Purtymun, Adams, and others

(1977); Purtymun, Ferenbaugh, and others (1980); Pur-

tymun and others (1976, 1980); Purtymun, Stoker, and

others (1978); Riecker (1977); Sanyal and others (1976);

Schubert and others (1980); Sibbitt and others (1978,

1979); Simmons and Eddy (1976); Smith, M. C. (1975,

1976, 1978); Tester and Albright (1979); Tester and others

(1979); Turner, D. L., and Forbes (1976); Turner, W.

M., and Kues (1978); West, F. G., and Laughlin (1976);

West, F. G., and Purtymun (1976); Zartman (1979)

Gilman 7 1/2' quadrangle, Woodward, DuChene, and Mar-

tiniez (1977)

ground water, Boyd (1976); Earth Environmental Con-

sultants, Inc. (1977b)

- Hagan embayment, Black, B. A. (1979c)  
hydrogeology, Craig (1980); Earth Environmental Consultants, Inc. (1977a); Purtymun, Peters, and Owens (1980)
- Johnson Trading Post 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979aaa)
- land classification map, DeCicco, Patterson, and Lutz (1978a, d)
- Las Milpas gas storage unit, Sharrock (1978)
- Lybrook Gallup field, Reese, V. R. (1978c)
- Lybrook 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979b)
- Lybrook SE 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979e)
- Madrid, Bachman (1976b)
- magnetic survey, Geometrics (1979b)
- Media Entrada field, Reese, V. R. (1978d)
- Media Entrada southwest field, Reese, V. R. (1978e)
- Media Gallup field, Reese, V. R. (1978f)
- Mesa Portales 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979bbb)
- Mining Mountain area, Hill, S. R. (1980)
- Mule Dam 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979f)
- Ojo Encino Mesa 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979s); Scott, G. R., Schneider, and Mytton (1980)
- Otero Pictured Cliffs field, Harris, J. J. (1978)
- Otero Point Lookout field, Pritchard (1978f)
- Pajarito Plateau, Budding (1978)
- Parlay Mesaverde field, Gray (1978)
- Peña Blanca, Frost (1980)
- petroleum and natural gas, Black, B. A. (1979d); Fassett, Thomaidis, and Matheny (1978); Matheny, M. L., and Talley (1978)
- Piedra Lisa Arroyo, Funderburg (1977)
- Pueblo Alto Trading Post 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979h)
- Regina 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979aa); Merrick (1980)
- road logs, Black, B. A. (1979b); Fassett, Jentgen, and others (1977); Hawley, Chapin, Chamberlin, and others (1978); Hawley and Galusha (1978); Hawley and Kottowski (1978); Lambert, P. W. (1978a); Woodward, Ingersoll, Fitch, and others (1979)
- Rusty Chacra field, Kennedy, C. C. (1978b)
- Sandia Mountains, Kasten, T. A. (1980)
- San Ysidro 7 $\frac{1}{2}$ ' quadrangle, Woodward and Ruetschilling (1976)
- Seven Springs 7 $\frac{1}{2}$ ' quadrangle, Timmer (1976)
- soil survey, Hacker (1977)
- Star Lake 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979i)
- surface water, Rathbun and Kennedy (1978)
- Taylor Ranch 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979q)
- Torreón Mesaverde field (gas), Pritchard (1978g)
- Torreón Mesaverde field (oil), Pritchard (1978h)
- Torreón Wash, Craig (1980)
- uranium, Moore, J. C. (1979)
- venado Mesaverde field, Pritchard (1978i)
- sandstone**
- copper, LaPoint (1976, 1977, 1979)
- uranium, Brookins and Della Valle (1979)
- Sangre de Cristo Mountains**
- aeromagnetic map, Cordell, L. (1976b); U.S. Geol. Survey (1976c)
- crinoids, Strimple (1980)
- geochronology, Graustein and Armstrong (1978)
- Mora River area, Baltz and O'Neill (1980a)
- Ocate volcanic field, O'Neill and Mehnert (1980a, b)
- Pecos greenstone belt, Robertson, J. M., Condie, and Mathewson (1978); Robertson, J. M., and Moench (1979)
- pediments, Pillmore and Scott (1976)
- Pennsylvanian strata, Siemers, C. T. (1979)
- Precambrian, Wyman, W. F. (1980a)
- Sapello River area, Baltz and O'Neill (1980b)
- soil science, Graustein (1976); Nozaki, DeMaster, Beninger, and others (1977); Nozaki, DeMaster, Lewis, and Turekian (1978)
- stratigraphy, Ingersoll (1979a)
- tungsten, Moench and Erickson (1980)
- watershed, Graustein and Armstrong (1978)
- San Jose Formation**, Lucas (1977); Tsentas and Lucas (1980)
- San Juan Basin**
- Bisti-Star Lake area, Kues, Froehlich, and others (1977); LeMone and others (1977, 1979); U.S. Bureau of Reclamation (1976e); U.S. Dept. Interior (1977); Wilson, R. W., and Jentgen (1980)
- black sand deposits, Brookins (1977a)
- Blanco field, Buckner (1976)
- Blanco Mesaverde field, Hill, J. M. (1978); Martinez, L. B. (1978)
- Burro Canyon Formation, Owen, Walters, Depetro, and Turmelle (1978); Owen, Walters, Kostura, and Grant (1976)
- Chinle Formation, O'Sullivan (1977)
- Cliff House Sandstone, Fassett (1977b); Fuchs-Parker (1977); Mannhard (1976)
- coal, Beach and Jentgen (1978); Beaumont and Shomaker (1977); Bierei (1977); Fassett (1977c); Hejl (1979); Hinkley (1980); Hinkley and others (1980); Lent (1980a, b); Marston (1976); Meissner (1977); O'Sullivan (1980); Schneider, Hildenbrand, and Affolter (1979); Shomaker and Stone (1976); Shomaker and Whyte (1977); Siemers, C. T. (1978a, b); Speer and others (1977); Tabet (1977b); Tabet and Frost (1979a, b); Tabet, Frost, and Kottowski (1979); Whyte and Shomaker (1977a, b); Wilson, R. W., and Jentgen (1980)
- Cretaceous, Fassett (1976); Molenaar (1977b); Peterson, F., and Kirk (1977)
- Dakota Sandstone, Cobban (1977a); Dugan (1977); Levinson (1979); Noon (1980); Owen and Siemers (1977)
- Owen, Walters, Depetro, and Turmelle (1978); Owen, Walters, Kostura, and Grant (1976)
- East Chaco Canyon drilling project, Hicks, R. T., and others (1980); Lease (1979)
- Entrada oil field, Bryant (1980)
- Entrada Sandstone, Picard (1980)
- erosion, Cooley (1979a, b)
- Fossil Forest, Rigby and Wolberg (1980)
- Fruitland Formation, Bierei (1977); Erpenbeck and Flores (1979); Fassett and Hinds (1977); Flores (1980); Gould (1978); Gould and others (1977); Rigby and Wolberg (1980); Schneider, Hildenbrand, and Affolter (1979); Tidwell, Bunderson, and Parker (1980); Whyte and Shomaker (1977b); Wolberg (1980a, c); Wolberg and LeMone (1980); Wolberg and Rigby (1980)
- Gallup Sandstone, Kirk, Huffman, and others (1978); Mizell and Stone (1979)
- general, Flores and Mytton (1979)
- geochronology, Brookins, Della Valle, and Register (1980); Taylor, L. H. (1977)
- geomorphology, Gutierrez (1980a); Hewett (1977); Schultz (1980)
- geothermal energy, Chaturvedi and Lory (1980); Gran (1978)
- ground water, Lyford (1979); Lyford and Frenzel (1979); Lyford, Frenzel, and Stone (1979, 1980); Lyford and Stone (1978); Shomaker and Stone (1976); U.S. Bureau of Reclamation (1976b); U.S. Dept. Interior (1977)
- guidebook, Fassett (1977a); Lent (1980a, b)
- hydrogeology, Kelly, T. E. (1977); Stone, W. J., and Mizell (1978); Wright, A. F. (1979a)
- hydrology, Hejl (1979); Melancon and others (1979); Stone, W. J. (1976b, 1979a-c); Stone, W. J., and Lyford (1978)
- Jackpile Sandstone, Owen, Walters, Depetro, and Turmelle (1978)
- Jurassic, Green and Pierson (1977)
- Kirtland Shale, Fassett and Hinds (1977); Wolberg (1980b)
- La Ventana formation, Fuchs-Parker (1977)



- Lone Pine field, Berg (1979a)  
 magnetic survey, U.S. Geol. Survey (1980h)  
 Mancos Shale, Cobban (1977a); Skeryanc (1977)  
 Menefee Formation, Siemers, C. T. (1978a, b); Siemers, C. T., and Wadell (1977); Tabet and Frost (1979b); Tabet, Frost, and Kottowski (1979); Whyte and Shomaker (1977a, b)  
 mineral exploration, Elias (1977)  
 mollusks, Cobban (1977a)  
 Morrison Formation, Corken (1979); Green and Pierson (1977); Squyres (1980); Turner-Peterson (1980)  
 Nacimiento Formation, Taylor, L. H. (1977); Taylor, L. H., and Butler (1980); Tsentas and Lucas (1980)  
 Navajo coal mine, Karma (1977, 1979); Sheffer and others (1978); U.S. Bureau of Reclamation (1976b, c)  
 Ojo Alamo Sandstone, Rigby and Lucas (1977)  
 Paleocene stratigraphy, Alvarez and Vann (1979); Lucas and Rigby (1979)  
 paleomagnetism, Butler, R. F., Lindsay, Jacobs, and Johnson (1976, 1977); Butler, R. F., Lindsay, and Johnson (1979); Butler, R. F., and Taylor (1978); Lindsay, Butler, and Johnson (1979); Lindsay, Butler, and others (1979); Lindsay, Jacobs, and Butler (1978); Lucas and Rigby (1979)  
 Pennsylvanian, Jentgen (1977)  
 Permian, Baars (1979b, c); Baars and Stevenson (1977, 1979)  
 petroleum and natural gas, Berg (1979a); Bryant (1980); Buckner (1976); Dugan (1977); Fassett and others (1978); Fassett, Thomaidis, and Matheny (1978); Gorham, F. D., Jr., and others (1977, 1979); Hill, J. M. (1978); Hunter (1979); Kraft and John (1979); Luetkehans (1976); Mallory (1977a, b); Martinez, L. B. (1978); Masters (1979); Matheny, M. L. (1978a); Matheny, M. L., and Talley (1978); Molenaar (1977a, b); New Mexico Oil and Gas Conservation Commission (1977); Owen (1980); Parker, J. M., and others (1977); Picard (1980); Ross, L. M., and Harwood (1979); Rusen (1977); Ryder and others (1980); Tabet (1977b); Thompson, K. F. M. (1980); Woolfson (1977)  
 petrology, Stone, W. J. (1979b)  
 Pictured Cliffs Sandstone, Erpenbeck and Flores (1979); Fassett (1977b); Flores (1979, 1980)  
 Pinedale oil seep, Molenaar (1977a)  
 Point Lookout Sandstone, Devine (1980); Fassett (1977b); Hunter, B. E. (1979); Shetiwy (1978)  
 San Jose Formation, Lucas (1977); Tsentas and Lucas (1980)  
 sauropod, Kues, Lehman, and Rigby (1980)  
 seismology, King, K. W., and Hays (1977); Ryder and others (1980); Sangree and Widmier (1978, 1979)  
 Semilla Sandstone Member, LaFon (1980)  
 shale, Mallory (1977)  
 stratigraphy, Butler, R. F., Lindsay, Jacobs, and Johnson (1976, 1977); Butler, R. F., Lindsay, and Johnson (1979); Fassett (1979); Huffman and Lupe (1977); Lindsay, Butler, and Johnson (1979); Lindsay, Jacobs, and Butler (1978); Lucas and Rigby (1979); Molenaar (1977b, c, 1978); O'Sullivan, R. B. (1977); Owen (1980); Owen and Siemers (1977); Sangree and Widmier (1978, 1979); Stevenson and Baars (1977); Stone, W. J. (1979a); Tsentas and Lucas (1980)  
 surface water, Busby (1979a, b); Gutierrez (1980b)  
 tectonics, Stevenson and Baars (1977); Woodward and Callender (1977a)  
 Tertiary sedimentation, McDonald (1976)  
 Torreon Wash area coal, Tabet and Frost (1979a, b)  
 Triassic, O'Sullivan (1977)  
 uranium, Brookins, Della Valle, and Balagna (1979); Brookins, Della Valle, and Lee (1978b); Brookins, Lee, and Riese (1977); Busby (1979a, b); Chenoweth (1977); Clark, D. S. (1980); Cooley (1979a, b); Huffman and Lupe (1977); Ridgley (1979a, 1980); Ridgley and others (1978); Stone, W. J. (1979c); Turner-Peterson (1980)  
 Westwater Canyon Sandstone, Clark, D. S. (1980); Kelly, T. E. (1977); Turner-Peterson and Gunderson (1980); Vizcaino and O'Neill (1977)

### San Juan County

- Alamo Farmington field, Hoppe (1978a)  
 Alamo Mesa East 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979v)  
 Alamo Mesa West 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979u); Scott, G. R., O'Sullivan, and Mytton (1979)  
 Amarillo Gallup field, Dugan and Fagrelis (1978a)  
 Angel's Peak Gallup field, Matheny, M. L., and Matheny (1978a)  
 Animas Chacra field, Hoppe (1978b)  
 Aztec Farmington field, Kendrick and Dugan (1978)  
 Aztec Fruitland field, Malone (1978a)  
 Aztec Fruitland north field, Malone (1978b)  
 Aztec Pictured Cliffs field, Brown, C. F. (1978a)  
 Aztec 2 $\frac{1}{2}$  quadrangle, Brown, D. R. (1976); Brown, D. R., and Stone (1979); DeCicco, Patterson, and Lutz (1978b); Geodata International (1980); Manley and Scott (1978)  
 Ballard Pictured Cliffs field, Brown, C. F. (1978b)  
 Barker Creek Dakota field, Matheny, M. L. (1978b)  
 Barker Creek Paradox field, Matheny, M. L. (1978c)  
 Basin Dakota field, Hoppe (1978c)  
 Beautiful Mountain Mississippian field, Brown, H. H. (1978a)  
 Bisti, Jentgen and Fassett (1977); LeMone and others (1979); Wilson, R. W., and Jentgen (1980)  
 Bisti Carson Unit Gallup field, Collins (1978)  
 Bisti Lower Gallup field, Sabins (1978)  
 Bisti Trading Post 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979t); O'Sullivan, Scott, and Heller (1979b)  
 Blackeye Mesaverde field, Black, B. A. (1978b)  
 Blanco Fruitland field, Malone (1978c)  
 Blanco Mesaverde field, Hill, J. M. (1978); Pritchard (1978a)  
 Blanco Pictured Cliffs field, Brown, C. F. (1978c)  
 Blanco Pictured Cliffs south field, Brown, C. F. (1978e)  
 Blanco Trading Post 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979k)  
 Bloomfield Chacra field, Hoppe (1978d)  
 Bloomfield Farmington field, Riggs (1978a)  
 Bloomfield SE 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979ee)  
 Bloomfield SW 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979cc)  
 Blue Hill Paradox field, Riggs (1978b)  
 Buena Suerte Pennsylvanian field, Brown, H. H. (1978b)  
 Burnham Trading Post 7 $\frac{1}{2}$ ' quadrangle, Scott, G. R., O'Sullivan, and Heller (1979a)  
 Cha Cha Gallup field, Matheny, M. L., and Matheny (1978c)  
 coal, Dames and Moore (1979a, b, d, e, j-o, t-y, bb-gg, ii-kk, mm-zz, ccc-mmm)  
 Cone Paradox field, Fagrelis (1978a)  
 Conner Fruitland field, Malone (1978d)  
 Crouch Mesa Mesaverde field, Pritchard (1978b)  
 Crystal 7 $\frac{1}{2}$ ' quadrangle, Byers (1979)  
 Cuervo Mesaverde field, Dugan and Fagrelis (1978b)  
 Duffers Point Gallup field, Dunn (1978c)  
 Escrito Gallup field, Reese, V. R. (1978a)  
 Fire Rock Well 7 $\frac{1}{2}$ ' quadrangle, Weide, Mytton, and Scott (1979)  
 Flora Vista Fruitland field, Malone (1978e)  
 Flora Vista Gallup field, Hornbeck (1978)  
 Flora Vista Mesaverde field, Pritchard (1978c)  
 Four Corners Paradox field, Bircher (1978a)  
 Fruitland 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979d); Weide, O'Sullivan, and Heller (1979)  
 Fulcher-Kutz Pictured Cliffs field, Brown, C. F. (1978g)



- Gallegos Farmington south field, Dugan and Fagrelus (1978c)  
 Gallegos Fruitland field, Hopson (1978)  
 Gallegos Fruitland south field, Bircher (1978b)  
 Gallegos Gallup field, Dunn (1978d)  
 Gallegos Trading Post 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979bb)  
 geomorphology, Love and Schultz (1980)  
 Green Knobs diatreme, Meyer, H. O. (1976)  
 Harper Hill Fruitland and Pictured Cliffs field, Dugan and Fagrelus (1978d)  
 Harris Mesa Chacra field, Hoppe (1978e)  
 Hogback Dakota field, Maynard (1978a)  
 Hogback Mississippian field, Maynard (1978b)  
 Hogback Pennsylvanian field, Maynard (1978c)  
 Hogback South 7 $\frac{1}{2}$ ' quadrangle, O'Sullivan, Scott, and Heller (1979d)  
 Horseshoe Gallup field, McEachin and Royce (1978)  
 Huerfano Pictured Cliffs field, Matheny, M. L. (1978e)  
 Huerfano Trading Post 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979j)  
 Huerfano Trading Post NW 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979dd)  
 hydrology, Brown, D. R. (1976); Brown, D. R., and Stone (1979)  
 Jasis Canyon Fruitland field, Hamilton, D. P. (1978a)  
 Kimbeto, Hinkley (1980); Schneider, Hildenbrand, and Affolter (1979)  
 Kimbeto 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979m); Schneider (1978); Schneider, Weide, and Scott (1979)  
 Kin Klishin Ruins 7 $\frac{1}{2}$ ' quadrangle, O'Sullivan (1980); O'Sullivan, Scott, and Weide (1979)  
 Kirtland SW 7 $\frac{1}{2}$ ' quadrangle, O'Sullivan, Scott, and Heller (1979c)  
 Knickerbocker Buttes Gallup field, Pritchard (1978e)  
 Kutz Farmington field, Malone (1978f)  
 Kutz Fruitland field, Malone (1978g)  
 Kutz Fruitland west field, Conlon (1978a)  
 Kutz Gallup field, Stevenson and Matheny (1978)  
 Kutz Pictured Cliffs west field, Brown, C. F. (1978h)  
 land classification map, DeCicco, Patterson, and Lutz (1978b, c); U.S. Geol. Survey (1979c, 1980c)  
 La Plata Gallup field, Greer (1978a)  
 Largo Chacra field, Hoppe (1978f)  
 Los Pinos Fruitland north and south fields, Bowman (1978a, b)  
 Lybrook 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979b)  
 Lybrook NW 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979a)  
 Lybrook SE 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979c)  
 magnetic survey, Geometrics (1979a)  
 Many Rocks Gallup field, Matheny, M. L., and Little (1978a)  
 Many Rocks Gallup north field, Matheny, M. L., and Little (1978b)  
 Meadows Gallup field, Fagrelus (1978b)  
 Menefee Formation, O'Sullivan (1980)  
 Mesa Gallup field, Matheny, M. L., and Little (1978c)  
 Middle Canyon Dakota field, Stevenson (1978)  
 Mississippian carbonates, Rose, P. R. (1976)  
 Mitten Rock 7 $\frac{1}{2}$ ' quadrangle, Huffman (1979)  
 Mt. Nebo Fruitland field, Maynard (1978d)  
 Nageezi Gallup field, Brown, H. H. (1978c)  
 Nageezi SE 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979nnn)  
 Navajo mine, Karna (1977, 1979); Sheffer (1979)  
 Newcomb NE 7 $\frac{1}{2}$ ' quadrangle, Scott, G. R., O'Sullivan, and Heller (1979c)  
 Newcomb SE 7 $\frac{1}{2}$ ' quadrangle, O'Sullivan, Scott, and Heller (1979a)  
 Nipp Pictured Cliffs field, Jacobs, J. L. (1978)  
 Ojo Fruitland-Pictured Cliffs field, Fagrelus and Jacobs (1978b)  
 Ojo Gallup field, Dugan and Fagrelus (1978e)  
 Oswell Farmington field, Riggs (1978c)  
 Otero Pictured Cliffs field, Harris, J. J. (1978)  
 Pajarito Pennsylvanian field, Dunn (1978e)  
 petroleum and natural gas, Fassett, Thomaidis, and Matheny (1978); Hill, J. M. (1978); Matheny, M. L., and Talley (1978)  
 Pillar NW 7 $\frac{1}{2}$ ' quadrangle, Scott, G. R., O'Sullivan, and Heller (1979b)  
 Pine River 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979mmm)  
 Piñon Fruitland field, Maynard (1978e)  
 Piñon Fruitland north field, Conlon (1978b)  
 Piñon Gallup field, Matheny, M. L., and Matheny (1978d)  
 Potwin Pictured Cliffs field, Jacobs, J. L., and Fagrelus (1978a)  
 Pretty Rock 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979y)  
 Pueblo Bonito 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979n); Schneider (1978); Weide, Schneider, and others (1979a)  
 Pueblo Bonito NW 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979j); Schneider (1978); Schneider, Weide, Mytton, and Scott (1979)  
 Pump Mesa Fruitland field, Babcock, G. (1978)  
 Redrock Valley NE 7 $\frac{1}{2}$ ' quadrangle, Huffman (1977)  
 Redrock Valley SE 7 $\frac{1}{2}$ ' quadrangle, Huffman and Jones (1978)  
 road logs, Fassett, Black, and others (1977); Fassett, Molenaar, and others (1977)  
 Salt Creek Dakota field, Jacobs, J. L., and Fagrelus (1978b)  
 Sand Spring 7 $\frac{1}{2}$ ' quadrangle, Huffman (1976)  
 Sargent Ranch 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979o); Schneider (1978); Weide, Schneider, and others (1979b)  
 Shiprock, Delaney (1980); Delaney and Pollard (1978); Pollard and Delaney (1978)  
 Shiprock Dakota north field, Dugan and Fagrelus (1978f)  
 Shiprock Gallup north field, Dugan and Fagrelus (1978g)  
 Shiprock 2° quadrangle, DeCicco, Patterson, and Lutz (1978c); Geometrics (1979a); U.S. Geol. Survey (1979c, 1980c)  
 Simpson Gallup field, Matheny, M. L., and Matheny (1978e)  
 Sleeper Pictured Cliffs field, Matheny, M. L. (1978f)  
 Slick Rock Dakota field, Garvin (1978)  
 Snake Eyes Dakota and Entrada fields, Bryant (1978c)  
 soil mapping, Carey and Keetch (1979); Keetch (1980)  
 Sonsela Butte SE 7 $\frac{1}{2}$ ' quadrangle, Byers (1980)  
 Star Lake, Jentgen and Fassett (1977); LeMone and others (1977)  
 Stoney Butte Dakota field, Lauth (1978a)  
 Stoney Butte Mesaverde field, Lauth (1978b)  
 Table Mesa Dakota field, Lauth (1978c)  
 Tanner Lake 7 $\frac{1}{2}$ ' quadrangle, Dames and Moore (1979x)  
 Tooto Dome Mississippian north field, Riggs (1978d)  
 Tooto Dome Pennsylvanian "D" field, Spencer, C. W. (1978a)  
 Tooto Dome Pennsylvanian north field, Spencer, C. W. (1978b)  
 Totah Gallup field, Matheny, M. L., and Matheny (1978f)  
 Twin Mounds Mesaverde field, Hamilton, D. P. (1978b)  
 Twin Mounds Pictured Cliffs field, Hamilton, D. P. (1978c)  
 Ute Dome Dakota field, Tezak (1978a)  
 Ute Dome Paradox field, Tezak (1978b)  
 Ute Mountain Indian Reservation, Henkes and others (1976)  
 Verde Gallup field, Riggs (1978e)  
 volcanism, Delaney (1980); Delaney and Pollard (1978); Pollard and Delaney (1978)  
 Waterflow 7 $\frac{1}{2}$ ' quadrangle, Stobell and others (1980)  
 WAW Fruitland-Pictured Cliffs field, Fagrelus (1978c)
- San Juan Mountains**, Armstrong and Mamet (1977a, b)  
**San Luis Basin**  
 geomorphology, Colton (1976)  
 hydrogeology, Burroughs and McFadden (1976)  
 seismology, Davis, T. L., and Stoughton (1979)  
**San Marcial Basin**, Chapin (1978c)

**San Mateo Mountains**, Chapin and Deal (1976); Deal (1978); Deal and Rhodes (1976)

**San Miguel County**  
 Cow Creek ultramafic complex, Wyman, W. F. (1980b)  
 Gallinas Gorge, Schuffe (1979)  
 guidebook, Ewing, R. C., and Kues (1976); Ingersoll (1979c); Ingersoll and Woodward (1979)  
 land classification map, DeCicco and Patterson (1980b, h); U.S. Geol. Survey (1980g)  
 Las Vegas, Lessard and Bejnar (1976)  
 magnetic survey, Geometrics (1979a); U.S. Geol. Survey (1980i)  
 Montezuma Hot Springs, Bejnar, W., and Bejnar (1979)  
 Pecos, U.S. Geol. Survey (1980i)  
 Pecos mine, Riesmeyer and Robertson (1979)  
 Rito de los Quemazones, Frost (1980)  
 road logs, Budding (1979); Lessard (1976); Robertson, J. M., Budding, and others (1979)  
 Santa Fe 2° quadrangle, DeCicco and Patterson (1980b); Geometrics (1979b)  
 Tapia Canyon, Shepherd (1978)  
 Tucumcari 2° quadrangle, DeCicco and Patterson (1980h); U.S. Geol. Survey (1980g)

**San Pedro Mountains**, Wobus and Hedge (1980)

**San Rafael Group**  
 Entrada Sandstone, Langford (1980); Picard (1980); Sarella (1977)  
 general, Wright, J. C. (1978); Wright, J. C., and Dickey (1979a, b); Wright, J. C., Dickey, and Freeman (1979)  
 Todilto Limestone, Hines, S. A. (1976); Rawson (1976, 1980)

**Santa Fe County**  
 Albuquerque 2° quadrangle, DeCicco, Patterson, and Lutz (1978a); Geometrics (1979a); Maassen, Bolivar, and others (1979); Wyant and Olson (1978)  
 Buckman, Black and Veatch (1976)  
 Carboniferous entomology, Durden (1979)  
 Cerrillos copper deposit, Akright (1979); Harshbarger, J. W. and Associates (1976)  
 Cerrillos earthquake, Olsen, K. H. (1979)  
 Cerrillos mining district, Schroeder (1979)  
 Cerros del Rio, Aubele (1978a, b, 1979)  
 Diamond Tail fault, Black, B. A. (1979b)  
 Galisteo Creek, Booth, (1976, 1977)  
 Galisteo syncline, Lisenbee (1976a, b)  
 geomorphology, Leopold (1976); Malde and Scott (1977)  
 ground water, Black and Veatch (1976); Borton (1979b); Harshbarger, J. W., and Associates (1976); Summers (1976c); Wilson, L. (1976a, b); Wilson, L., and Jenkins (1979)  
 guidebook, Ingersoll (1979c); Ingersoll and Woodward (1979)  
 hydrogeology, Earth Environmental Consultants, Inc. (1976a); Jenkins, D. N. (1977); Veneklassen (1980)  
 hydrology, Consulting Professionals, Inc. (1977); Coonce and Assoc. (1977a-c); Herkenhoff and Associates (1976)  
 kimberlite, McGetchin, Smith, and others (1977)  
 land classification map, DeCicco and Patterson (1980b); DeCicco, Patterson, and Lutz (1978a)  
 Madrid, Bachman (1976a, b)  
 magma bodies, Hermance and Pederson (1978)  
 magnetic survey, Geometrics (1979a, b); U.S. Geol. Survey (1980i)  
 Ortiz gold deposit, Lindquist (1980); Springett (1980)  
 Pajarito Plateau, Budding (1978)  
 paleoclimates, Leopold (1976)  
 petroleum and natural gas, Black, B. A. (1979a, d)  
 road logs, Black, B. A. (1979b); Budding (1979); Budding, Robertson, and others (1979); Hawley (1978b); Hawley, Burroughs, and others (1978); Hawley, Chapin, Chamberlin, and others (1978); Hawley and Kottowski (1978); Robertson, J. M., Budding, and others (1979); Woodward, Ingersoll, Fitch, and Hutchinson (1979a, b);

Woodward, Ingersoll, Fitch, and others (1979)  
 San Pedro mine, Taggart and Grigsby (1976)  
 San Pedro Mountains, Atkinson, W. W., Jr. (1976)  
 Santa Fe, Borton (1979a)  
 Santa Fe embayment, Black, B. A. (1979a)  
 Santa Fe ski basin, White, C. S., and others (1978)  
 Santa Fe 2° quadrangle, DeCicco and Patterson (1980b); Geometrics (1979b)  
 Tetilla Peak, Zimmerman, C. J., and Kudo (1979a)  
 uranium, Chenoweth (1979)

**Santa Fe Group**  
 Abiquiu Tuff, Vazzana (1980); Vazzana and Ingersoll (1980)  
 Ancha Formation, Manley (1976a, b); Manley and Naeser (1977)  
 Camp Rice Formation, Lovejoy (1976a)  
 Cejita member, Steinpress (1980)  
 Chama-El Rito Member, Steinpress (1980)  
 Chamita Formation, MacFadden (1976, 1977); MacFadden and Manley (1976); Manley and Naeser (1977)  
 Dixon member, Steinpress (1980)  
 Fort Hancock Formation, Lovejoy (1976a)  
 Llano de Albuquerque, Lambert, P. W. (1978b)  
 Ojo Caliente Sandstone Member, Steinpress (1980)  
 paleontology, Kues and Lucas (1979)  
 Puye Formation, Manley (1976a, b); Manley and Naeser (1977)  
 stratigraphy, general, Willingham (1979)  
 Tesuque Formation, Manley (1976b); Manley and Naeser (1977); Steinpress (1980)

**Santa Fe National Forest**, U.S. Dept. Agriculture (1976)

**Santa Rosa Sandstone**, see Dockum Group

**Santo Domingo Basin**, Sanguinetti and Loeber (1976)

**scapolite**, Ricciardi (1978)

**scoria**, Cima (1978); Osburn, J. C. (1980)

**sedimentation**  
 Abo Formation, Adams, R. D. (1978)  
 Baca Formation, Schrodt (1980)  
 Bell Canyon Formation, Payne, M. W. (1976, 1979); Weinmeister (1978); Williamson, C. R. (1978, 1979a, b, 1980b)  
 Black Prince Limestone, Spencer, P. K. (1980)  
 Burro Canyon Formation, Owen, Walters, Depetro, and Turmelle (1978); Owen, Walters, Kostura, and Grant (1976)  
 Capitan Limestone or reef complex, Babcock and Yurewicz (1978); Queen and others (1979); Yurewicz (1976a, b, 1977c, d, 1978)  
 Castile Formation, Shaw (1977)  
 Chaco Canyon, Hall (1977); Love (1976, 1977)  
 Chinle Formation, Kurtz (1978a, b); Kurtz and Anderson (1980); Young, R. G. (1977, 1978)  
 Chuska Sandstone, Trevena and Nash (1978a)  
 Cliff House Sandstone, Mannhard (1976)  
 Colorado Plateau, Trevena (1977)  
 copper, Alminas, Watts, and others (1978b)  
 Crevasse Canyon Formation, Kirk and Zech (1977)  
 Dakota Sandstone, Asquith and Gilbert (1976); Bejnar, C. R., and others (1976); Gilbert and Asquith (1976); Levinson (1979); Owen, Walters, Depetro, and Turmelle (1978); Owen, Walters, Kostura, and Grant (1976)  
 Delaware Basin, Hills (1979)  
 Dockum Group, McGowen (1979); McGowen and others (1977)  
 Doña Ana County, Funderburg and Roybal (1977)  
 Estancia Valley, Olsen, C. E. (1977)  
 Exeter Sandstone, Savelle (1977)  
 Galisteo Basin, Gorham, T. W., and Ingersoll (1979)  
 Gallinas River, Schuffe, Baca, and others (1976); Schuffe, Mega, and Beckhart (1979)  
 Gallup Sandstone, Campbell, C. V. (1979)  
 general, Aldon and Garcia (1977); Anderson, R. Y. (1977); Asquith, Gilbert, and Smith (1976); Bachhuber and McClellan (1976); Curtis, N. M., Jr. (1976)

- Glorieta Sandstone, Milner (1978)  
 Goat Seep Dolomite, Crawford (1979)  
 Guadalupe Mountains, Queen (1980); Scholle and Halley (1980)  
 Holder Formation, Dunning (1978)  
 Jackpile Sandstone, Owen, Walters, Depetro, and Turmelle (1978)  
 Jurassic, general, Wright, R. P., and others (1977)  
 Kilbourne Hole, Brenner (1979)  
 Laborcita Formation, Cys and Mazzullo (1977); Winchester, P. D. (1976)  
 Lake Valley Limestone, Hill, E. B. (1978); Oglesby, Meyers, and Lohmann (1979)  
 Lemitar Mountains, McLemore (1980b)  
 Madera Formation, Adams, R. D. (1978); Swenson (1977)  
 Mancos Shale, Kirk and Zech (1977); McLafferty (1979); Skeryanc (1977)  
 McKinley County, Best (1973)  
 Menefee Formation, Tabet, Frost, and Kottlowski (1979)  
 Mesaverde Group, Mannhard (1976); McLafferty (1979)  
 Mesa Rica Sandstone, Gage and Asquith (1977)  
 molybdenum, Alminas, Watts, and others (1978c)  
 Morrison Formation, Huffman, Kirk, and Corken (1980); Jenkins, J. T., Jr., and Cunningham (1979, 1980); Lee, M. J., and Brookins (1978, 1980); Ludwig (1980); Young, R. G. (1977, 1978)  
 Morrowan sandstones, Hurley, T. J. (1980)  
 Naco Group, Jacka and Thompson (1980)  
 Ordovician, Ross, R. J., Jr. (1976)  
 Palo Duro Basin, Handford (1980); Handford and others (1980)  
 Pedregosa Basin, Ross, C. A. (1978)  
 Peñasco uplift, Adams, R. D. (1980)  
 Percha Formation, Kocurek (1977)  
 Percha Shale, Kocurek and Chafetz (1977)  
 Piankasha sequence, Agurkis (1977)  
 Pictured Cliffs Sandstone, Flores (1979)  
 Point Lookout Sandstone, Devine (1980); Shetiwy (1978)  
 Precambrian, Kirschner (1979)  
 Rancheria Formation, Yurewicz (1977a, b)  
 Raton Basin, Fassett (1976)  
 Raton Formation, Roehler and Danilchik (1980)  
 Rinconada Formation, Barrett and Kirschner (1979)  
 Rio Grande, Harms and Fahnestock (1977)  
 Rio Grande rift, Cordell, L. (1979b); Kottlowski (1976); Sanford and Schlue (1979)  
 Rio Ojo Caliente, Wenrich-Verbeek (1977, 1978, 1979a); Wenrich-Verbeek and Suits (1979a, b)  
 Rio Puerco, Shepherd (1976); Shepherd and Macke (1978)  
 Sacramento Mountains, De Keyser (1979); Delgado (1977a); Scholle and Halley (1980)  
 Sacramento shelf, Van Wagoner (1978)  
 San Andres Formation, Milner (1976)  
 Sandoval County, Rathbun and Kennedy (1978)  
 Sangre de Cristo Mountains, Siemers, C. T. (1979)  
 San Juan Basin, Cooley (1979a, b); Fassett (1976); Kraft and John (1979); Molenaar (1977b); Schultz (1980)  
 San Miguel County, Shepherd (1978)  
 Santa Rosa Sandstone, LaPoint and Christiansen (1977); Lupe (1977)  
 Semilla Sandstone Member, LaFon (1980)  
 seston, Nuhfer (1979)  
 Seven Rivers Formation, Sarg (1976a, b)  
 silver, Alminas, Watts, and others (1978a)  
 surface water, Gloss and others (1978)  
 Tamaroa sequence, Bahlburg (1977); Bahlburg and Silver (1976); Wermiel (1978)  
 Taos trough, Casey (1979b, 1980b); Casey and Scott (1980); McBryde (1979); McBryde and Casey (1979); Scott, A. J., and Casey (1979)  
 Trinidad Sandstone, Pillmore and Maberry (1976)  
 Uncompahgre uplift, Casey and Scott (1979)  
 uranium, Aamodt, Bunker, and others (1979); Aamodt, Hansel, and others (1977); Aamodt, Waterbury, and others (1979); Austin, S. R. (1979, 1980); Baird and Martin (1979); Baird, Martin, and Lowry (1980); Huffman, Kirk, and Corken (1980)  
 Westwater Canyon Member, Galloway, W. E. (1980); Turner-Peterson and Gunderson (1980)  
 zinc, Alminas, Watts, and others (1978d)
- Semilla Sandstone Member**, see Mancos Shale  
**Sepultura granite**, Bolton (1976); Brookins, Bolton, and Condie (1980)  
**Servilleta Formation**, Brookins, Eppler, and Elston (1977); Crossey (1979); Manley (1976a)  
**Seven Rivers Formation**, see Artesia Group  
**Sevilleta Metarhyolite**, Bolton (1976); Brookins, Bolton, and Condie (1980)  
**Shiprock**, Pollard and Delaney (1976)  
**Sierra Blanca**, LaPoint (1979)  
**Sierra County**  
 aluminum, Hall, R. B. (1978)  
 Black Range mining district, Eveleth and Siemers (1980)  
 Brush Heap mine, Eveleth and North (1980)  
 Caballo Peak quadrangle, Mason (1976)  
 Caballo Reservoir, Seager and Morgan (1978b)  
 Chloride mining district, Maxwell, C. H., and Heyl (1980)  
 coal, Tabet (1979b)  
 Copper Flat Project, Greene and Halpenny (1976)  
 Cuchillo Mountain laccolith, McMillan (1979); McMillan and Jahns (1979)  
 Elephant Butte Dam and Reservoir, Mueller (1978)  
 Elephant Butte Irrigation District, Wilson, C. A., White, and Roybal (1979a)  
 Engle coal field, Tabet (1980)  
 EXXON Corp. Prisor Unit Fed. No. 1 well, Cernock (1977c)  
 Fra Cristobal Range, Thompson, S., III (1978)  
 gravity, Dansereau and Wynn (1978); Wynn and Dansereau (1978)  
 ground water, Greene and Halpenny (1976); Wilson, C. A., White, and Roybal (1979a)  
 Hermosa mining district, Maxwell, C. H., and Heyl (1980)  
 Hillsboro 15' quadrangle, Alminas and Watts (1978); Alminas, Watts, and others (1978a-d); Dansereau and Wynn (1978); Hedlund (1977a, b, 1979); Watts and Alminas (1979); Watts, Alminas, and Kraxberger (1978); Watts, Alminas, and others (1978a-c); Wynn (1978); Wynn and Dansereau (1978); Wynn and Hedlund (1979)  
 land classification map, Banaszyski and others (1979); DeCicco and Patterson (1980e)  
 Las Cruces 2° quadrangle, DeCicco and Patterson (1980e)  
 Little Granite mine, Eveleth and Siemers (1980)  
 magnetic survey, Wynn (1978)  
 Red Rock talc deposit, Fitzsimmons and Kelley (1980)  
 road logs, Chapin, Jahns, and others (1978); Hawley, Chapin, and Osburn (1978); Hawley, Lovejoy, and others (1978); Hawley and Seager (1978); Seager, Clemons, and Elston (1978); Thompson, S., III (1978)  
 San Lorenzo 15' quadrangle, Alminas and Watts (1978); Alminas, Watts, and others (1978a-d); Dansereau and Wynn (1978); Hedlund (1977a, b, 1979); Watts and Alminas (1979); Watts, Alminas, and Kraxberger (1978); Watts, Alminas, and others (1978a-c); Wynn (1978); Wynn and Dansereau (1978); Wynn and Hedlund (1979)  
 Sierra Cuchillo, Jahns and others (1978); Maldonado (1974, 1980)  
 Sunray Mid-Continent Federal M No. 1 well, Cunningham, C. P. (1978)  
 Tularosa 2° quadrangle, Banaszyski and others (1979); Geodata International (1978)  
 volcanic geology, Loeber (1976)  
 Winston 7 1/2' quadrangle, Heyl (1976); Maxwell, C. H., and Heyl (1976)
- Sierra Cuchillo**, Correa (1980); Jahns and others (1978)  
**Sierra de las Uvas**, Clemons (1976a, 1978, 1979)

**silver**

- Brush Heap mine, Eveleth and North (1980)  
Grant County, Alminas, Watts, and others (1978a)  
Sierra County, Alminas, Watts, and others (1978a)  
Winkler anticline, Hazen Research, Inc. (1979)

**skarn**, Burt (1978a, b)

- Smeltetown formation**, Nodeland and Cornell (1976); Nye and LeMone (1978); Strain (1976)

**Socorro County**

- Abbe Spring area, Mayerson (1979)  
A-L Peak tuff, Chapin and Deal (1976)  
Baca Formation, Cather (1980); Chaiffetz (1979)  
Bernardo, Machette (1978c)  
Cat Mountain area, Wilkinson (1976)  
Claunch, Colvocoresses (1979); Fischer, W. A., and others (1978, 1979)  
coal, Chapin, Osburn, and others (1979); Tabet (1976a, 1979a)  
Corkscrew Canyon area, Mayerson (1979); McLemore (1980b)  
Datil, Reiter, M. A., Simmons, and others (1976)  
Datil Mountains, Harrison (1980)  
Gallinas Peak area, Laroche (1980)  
geothermal studies, Chapin, Chamberlin, and others (1978a, b); Chapin, Sanford, and others (1979); Reiter, M. A., Simmons, and others (1976); Reiter, M. A., and Smith (1977); Sanford (1977a)  
gravity, Schlue (1978)  
ground water, Ecology Consultants, Inc. (1977)  
Fort Sumner 2° quadrangle, DeCicco and Patterson (1980g)  
Hansonburg mining district, Kottowski and Steensma (1979); Putnam (1980); Steensma (1979); Taggart and Foord (1979)  
hydrology, Stone, W. J., and Foster (1977)  
Jones Camp iron deposit, Bickford (1980)  
Jornada del Muerto, Reinke (1978); Schlue (1978); Tabet (1976a, 1979)  
Joyita Hills, Spradlin (1976)  
Kelly Limestone, Iovenitti (1977)  
Kelly mining district, Iovenitti (1977)  
Ladron Mountains, Callender and Zilinski (1976); Condie (1976); Cookro (1978); White, D. L. (1978a, b)  
land classification map, Banaszyski and others (1979); DeCicco and Patterson (1979b, 1980g); DeCicco, Patterson, and Lutz (1979)  
lead-zinc minerals, Narsavage (1979)  
Lemitar Mountains, Chamberlin (1976, 1978); McLemore (1980a-c)  
Los Pinos Mountains, Beers (1976)  
Magdalena mining district, Iovenitti and Renault (1977); Narsavage (1979)  
Magdalena Mountains, Allen (1979); Bowring (1980); Donze (1980); Osburn, G. R. (1978); Petty (1979); Roth (1980); Siemers, W. T., and Blakestad (1976)  
magma body, Brocher (1979a, b); Brown, L. D., Krumhansl, Cook, and Kaufman (1978); Chapin, Sanford, and Brown (1980); Fender (1978); Fisher, J. A. (1977); Reilinger, Brown, and others (1979); Reilinger and Oliver (1976); Reilinger, Oliver, Brown, and others (1979); Reilinger, Oliver, and others (1980); Rinehart, E. J. (1976, 1979a, b); Rinehart, E. J., and Sanford (1980); Rinehart, E. J., and others (1979); Sanford (1976, 1977b, 1979); Sanford, Mott, and others (1977); Sanford and Oliver (1977); Sanford and others (1976); Sanford, Rinehart, and others (1977); Sanford and Schlue (1980); Shuleski (1976); Shuleski and others (1977)  
magnetic survey, High Life Helicopters and Geodata International (1979)  
Mount Withington cauldron, Chapin and Deal (1976)  
Pennsylvanian system, Siemers, W. T. (1978)  
Popotosa Formation, Brenner-Tourtelot and Machette (1979)  
radon, Geotimes (1980); Schery and others (1980)

- Rancho de Lopez area, Maulsby (1980)  
Red Cloud mines, DeMark (1980)  
Riley-Puertecito area, Chapin, Osburn, and others (1979); Masingill (1978a, 1979a)  
road logs, Bornhorst and Elston (1978); Chapin (1978b); Chapin, Chamberlin, and Hawley (1978); Chapin, Jahns, and others (1978); Hawley (1978c) Hawley, Chapin, Chamberlin, and others (1978); Hawley, Chapin, and Osburn (1978); Hawley, Lovejoy, and others (1978)  
Roswell 2° quadrangle, DeCicco and Patterson (1979b)  
San Acacia, Machette (1978c)  
San Acacia 7 1/2' quadrangle, Machette (1976a, 1978a)  
San Marcial Basin, Chapin (1978c)  
San Mateo Mountains, Chapin and Deal (1976); Deal (1978); Deal and Rhodes (1976)  
Scholle 7 1/2' quadrangle, Myers (1977)  
seismology, Brocher (1979a, b); Caravella (1976); Fender (1978); Fisher, J. A. (1977); Frishman (1979); Geotimes (1980); Guyn (1978); Johnston, J. A. (1978); Jurdy and Brocher (1980); Mott (1976); Murdock and Jaksha (1978); Ottolini (1978); Reinke (1978); Rinehart (1976, 1979); Rinehart and Sanford (1980); Rinehart and others (1979); Sanford (1976); Sanford and Oliver (1977); Sanford and others (1976); Sanford, Rinehart, and others (1977); Sanford and Schlue (1979, 1980) Savage and others (1979); Sengupta and Ward (1977); Shuleski (1976); Shuleski and others (1977); Tang (1978); Ward, R. M. (1980); Ward, R. W., and Sengupta (1977); West, K. L. (1979); Yousef (1977)  
Sierra Cuchillo, Jahns and others (1978); Maldonado (1974, 1980)  
Socorro Peak KGRA, Reiter, M. A., and Smith (1977)  
Socorro Peak volcanic center, Chamberlin (1980)  
Socorro 2° quadrangle, DeCicco, Patterson, and Lutz (1979); High Life Helicopters and Geodata International (1979); Machette (1978b)  
Squaw Peak area, Donze (1980)  
structural geology, Mott (1976)  
Tertiary fill, Sanford and Schlue (1979)  
Tres Montosas area, Wilkinson (1976)  
Tularosa 2° quadrangle, Banaszyski and others (1979); Geodata International (1978)  
Water Canyon-Jordan Canyon areas, Sumner (1980)
- soil science**  
Animas Valley, Fleischhauer (1977a)  
Bernalillo County, Hacker (1977)  
calcretes, Machette and Bachman (1978)  
Chaves County, Hodson and others (1980)  
Doña Ana County, Bullock and Neher (1980); Van de Pol and others (1977)  
fertilizer, McCaslin and Titman (1977)  
general, Gile (1977)  
ground water, Van de Pol and others (1977)  
Los Alamos County, Nyhan, Miera, and Peters (1976)  
Los Esteros Dam, McDaniel and Decker (1979)  
Luna County, Neher and Buchanan (1980)  
moisture regimes, Zobeck (1980)  
Otero County, Neher (1976)  
Quaternary, Shroba (1977)  
rangeland, Honea (1978)  
Roosevelt County, Sridhar and others (1978)  
Sandoval County, Hacker (1977)  
Sangre de Cristo Mountains, Graustein (1976)  
San Juan County, Carey and Keetch (1979); Keetch (1980)  
Tertiary, Schiebout (1979)  
Valencia County, Hacker (1977)  
White Sands Missile Range, Neher and Bailey (1976)
- southern High Plains**, Banks (1980); Brown, R. F., and others (1976); Gutentag and Weeks (1980); Moodie and Van Devender (1979); Reeves (1976, 1977); Stormer (1978); Walker (1977); Weeks (1978)
- speleology**  
Capitan Limestone or reef complex, Jagnow (1977)

- Carlsbad Caverns, Folk, R. L. (1977); Folk, R. L., and Assereto (1976); Kendall and Broughton (1977); McLean (1976); VanCleave (1976)
- Eddy County, Byrd and Kunath (1978); Fieseler and Kunath (1978a, b); Folk, R. L. (1977); Folk, R. L., and Assereto (1976); Harris, A. H. (1978); Harris, A. H., and Porter (1980); Kunath (1978a, b); Lindsley and Lindsley (1978); Smith, A. R. (1978b)
- Guadalupe Mountains, Davis, D. G. (1980)
- nitrate, Hill, C. A. (1978)
- Ogle Cave, Davis, D. G. (1979)
- spinel lherzolites**, Cunningham, M. P. (1977)
- staurolite**, Holdaway (1978)
- stratigraphy**
- Abiquiu embayment, Wilson, J. E. (1977)
- Abiquiu Tuff, Vazzana (1980); Vazzana and Ingersoll (1980)
- Abo Formation, Kottowski, Seager, and others (1977)
- Baca Formation, Cather (1980); Cather and Johnson (1980); Johnson, B. D. (1978); Schiebout and Schrodt (1980)
- Banco Bonito vitrophyre, Pense (1977)
- Bandelier Tuff, Boden (1980)
- Basin and Range province, Hawley, Bachman, and Manley (1976)
- Bernalillo County faults, Machette (1976b)
- Black Prince Limestone, Spencer, P. K. (1980)
- Chamita Formation, MacFadden (1976, 1977); MacFadden and Manley (1976)
- Chinle Formation, Kurtz (1978a)
- Cibola County, Maxwell, C. H. (1976b)
- Cliff House Sandstone, Mannhard (1976)
- Colfax County, MacLachlan (1976); Pillmore and Eicher (1976)
- Colina Limestone, Nielson, T. W. (1978)
- Colorado Plateau, Blakey (1978, 1979); Peterson, F., and Kirk (1977)
- conodonts, Sweet (1977, 1979)
- Cretaceous, Kirk (1979)
- crinoids, Webster (1978, 1979)
- Dakota Sandstone, Asquith and Gilbert (1976); Cobban (1977a, b); Hook, Cobban, and Landis (1980); Noon (1980); Owen and Siemers (1977)
- Desmoinesian, Gunter (1975)
- Doña Ana County, Strain (1976)
- Entrada Sandstone, Sarella (1977)
- Española Basin, Ingersoll (1979a); Manley (1978a, c, 1979a, b); May (1979); Steinpress (1980)
- Franklin Mountains, Chaiffetz (1977); Hair (1976, 1977); LeMone and Lovejoy (1976)
- Fruitland Formation, Erpenbeck and Flores (1979)
- Galisteo Formation, Lucas (1980); Lucas and Kues (1979)
- Great Plains province, Hawley, Bachman, and Manley (1976)
- Greenhorn Limestone, Hattin (1979)
- Hagan Basin, Ingersoll (1979a)
- Hagan embayment, Black, B. A. (1979c)
- Hell Canyon greenstone belt, Woodward, Parchman, and others (1979)
- Hueco Bolson, Uphoff (1978)
- Hueco Formation, Kottowski, Seager, and others (1977); Simpson, R. D., and LeMone (1980)
- Jarilla Mountains, Strachan (1976)
- Lake Valley Limestone, Baghdad (1976)
- Lamar Limestone Member, Tyrrell and others (1978)
- Madera Formation, Kues and Kietzke (1976); Swenson (1977)
- mammalian correlation, Lucas and Raza (1979)
- Mancos Shale, Cobban (1977a, b); Hook and Cobban (1980a); Hook, Cobban, and Landis (1980)
- McKinley County, Best (1973)
- Menefee Formation, O'Sullivan (1980)
- Mesaverde Group, Kirk, Huffman, and others (1978); Mannhard (1976)
- Mesilla Bolson, Uphoff (1978)
- Mogollon-Datil volcanic field, Elston (1976b); Rhodes and Smith (1976)
- Montoya Group, Repetski and Drewes (1979)
- Mora County, MacLachlan (1976)
- Morrison Formation, Corken (1979); Green and Pierson (1977); Riese, W. C., and Brookins (1977)
- Nacimiento Formation, Taylor, L. H., and Butler (1980)
- northeastern New Mexico, Kudo (1976a)
- Orogrande Basin, Greenwood and others (1977)
- Panther Seep Formation, Hair (1976, 1977)
- Pedregosa Basin, Greenwood and others (1977)
- Pennsylvanian-Permian boundary, Clark, D. L. (1979)
- Permian Basin, Greenwood and others (1977); Hills and Hoenig (1979)
- Pictured Cliffs Sandstone, Erpenbeck and Flores (1979)
- Point Lookout Sandstone, Shetiwy (1978)
- Raton Basin, Fassett (1976); Roberts and others (1976)
- Rio Grande rift, Hawley (1978d, e)
- Rustler Formation, Hiss (1976d)
- Sacramento Mountain escarpment, Pray (1977a)
- Sangre de Cristo Mountains, Ingersoll (1979a)
- San Juan Basin, Alvarez and Vann (1979); Butler, R. F., Lindsay, Jacobs, and Johnson (1976, 1977); Butler, R. F., Lindsay, and Johnson (1979); Erpenbeck and Flores (1979); Fassett (1976, 1977c, 1979); Green and Pierson (1977); Kirk, Huffman, and others (1978); Lindsay, Butler, and Johnson (1979); Lindsay, Butler, and others (1979); Lindsay, Jacobs, and Butler (1978); Lucas and Rigby (1979); Molenaar (1977b, c, 1978); O'Sullivan (1977); Owen and Siemers (1977); Sangree and Widmier (1978, 1979); Stevenson and Baars (1977); Stone, W. J. (1979a); Tsentas and Lucas (1980)
- San Rafael Group, Wright, J. C. (1978); Wright, J. C., and Dickey (1979a, b); Wright, J. C., Dickey, and Freeman (1979)
- Santa Fe Group, Lambert, P. W. (1978b); Lovejoy (1976a); Willingham (1979)
- sedimentation, Asquith, Gilbert, and Smith (1976)
- Socorro County, Chamberlin (1980); Siemers, W. T. (1978); Siemers, W. T., and Blakestad (1976); Spradlin (1976)
- Socorro Peak volcanic center, Chamberlin (1980)
- southern High Plains, Reeves (1976)
- southwestern New Mexico, LeMone (1977); Richardson, C. B. (1976); Thompson, S., III, LeMone, and Simpson (1977)
- Tansill Formation, Tyrrell and others (1978)
- Taos County, MacLachlan (1976)
- Taos trough, Casey and Scott (1980); McBryde (1979); McBryde and Casey (1979); Scott, A. J., and Casey (1979)
- Tatum Basin, Cys (1977a)
- Tempskya, Ash and Read (1976); Zeller (1976)
- Triassic Ciniza Lake, Ash (1978b)
- Tucumcari Basin, Roberts and others (1976)
- U-Bar Formation, Weise and LeMone (1978)
- Union County, MacLachlan (1976)
- Zuni Basin, Hook, Cobban, and Landis (1980)
- structural geology**
- Abiquiu embayment, Wilson, J. E. (1977)
- aggregate resources, New Mexico State Highway Department (1978)
- Albuquerque Basin, Kelley, V. C. (1976)
- Bandelier Tuff, Rogers, M. A., Christie, and Budding (1980)
- Barrera fault, Hayes and Bachman (1979)
- Basin and Range province, Keller, G. R., and Braile (1979)
- Bernalillo County, Machette (1976b, 1978d)
- Brockman Hills, Corbitt and others (1977)
- Capitan aquifer, Hiss (1976b, c)
- Capitan Mountains, Blagbrough (1976)
- Cedar Mountains, Varnell and others (1976)
- Cerro del Cristo Rey uplift, Lovejoy (1976b)



- Cibola County, Maxwell, C. H. (1976b)  
 Cimarron Range, Goodknight (1976)  
 Colorado Plateau, Davis, G. H. (1978); Keller, G. R., and Braile (1979); Keller, G. R., Sinno, and others (1979); Silver, L. T., and McGetchin (1978)  
 Cordillera, Hill, J. G. (1976)  
 crustal structure, Ander (1980); Brown, L. D., Brewer, and others (1978); Brown, L. D., Chapin, and others (1980); Brown, L. D., Kaufman, and Oliver (1977); Brown, L. D., Kaufman, and others (1979); Cape and others (1980); Jurdy (1979); Jurdy and Brocher (1980); Keller, G. R., and Braile (1979) Keller, G. R., Braile, and Schlue (1979); Keller, G. R., and Lowrey (1976); Long, G. H., and others (1977); Murdock and Jaksha (1980); Topozada and Sanford (1976)  
 Doña Ana County, Uphoff (1977)  
 Embudo fault zone, Muehlberger (1979a)  
 Española Basin, Manley (1978a, c, 1979a); May (1979); Steinpress (1980)  
 Franklin Mountains, LeMone and Lovejoy (1976); Lovejoy and Seager (1978)  
 Galisteo syncline, Lisenbee (1976a, b)  
 Gallup 2° quadrangle, Hackman and Olson (1977)  
 Hagan embayment, Black, B. A. (1979c); Sanguinetti and Loeber (1976)  
 Hidalgo County, Drewes and Thorman (1978)  
 Hueco Basin, Seager (1980); Uphoff (1978)  
 Jemez lineament, Nielsen, K. C., and Scott (1980)  
 John Kerr Peak dome complex, Smith, E. I. (1976)  
 Klondike Hills, Corbitt and others (1978); Varnell and others (1976)  
 Lemitar Mountains, Chamberlin (1976, 1978)  
 Lincoln fold belt, Dennis, J. G., and Häll (1978); Yuras (1976)  
 Little Hatchet Mountains, Loring and Loring (1980a)  
 Lucero uplift, Callender and Zilinski (1976); Zilinski (1976)  
 Mesilla Basin, Uphoff (1978)  
 Mogollon Plateau, Coney (1976a); Rhodes and Smith (1976)  
 Permian Basin, Djeddi (1979)  
 Picuris Range, Muehlberger (1978)  
 Pinos Altos Range, Brautigam and Norman (1980)  
 porphyry copper, Mitcham (1978)  
 Raton Basin, Woodward and Snyder (1976b)  
 Rio Arriba County, Broomfield (1977)  
 Rio Grande rift, Brown, L. D., Brewer, and others (1978); Brown, L. D., Chapin, and others (1980); Callender, Woodward, and Kelley (1976); Cape and others (1980); Keller, G. R., and Braile (1979); Keller, G. R., Braile, and Schlue (1979); Keller, G. R., and Lowrey (1976); Oliver, J. E. (1978); Oliver, J. E., and Kaufman (1976); Oliver, J. E., and others (1976); Olsen, K. H., Keller, and Stewart (1979); Olsen, K. H., Keller, Stewart, and others (1977); Olsen, K. H., and Stewart (1979); Ramberg and others (1978)  
 Rio Puerco fault zone, Lucas (1980); Slack and Campbell (1976)  
 Rocky Mountains, Keller, G. R., and Braile (1979)  
 Rustler Formation, Hiss (1976d)  
 Sacramento Mountain escarpment, Pray (1977a)  
 San Miguel County, Bejnar, W., and Bejnar (1979)  
 Santa Rita-Hanover axis, Aldrich (1978)  
 Santo Domingo Basin, Sanguinetti and Loeber (1976)  
 Shiprock, Pollard and Delaney (1976)  
 Sierra Cuchillo, Jahns and others (1978)  
 Silver City Range, Brautigam (1979); Brautigam and Norman (1980); Peterson, H. W. (1979); Peterson, H. W., and Norman (1980)  
 Socorro County, Mott (1976)  
 Socorro Peak volcanic center, Chamberlin (1980)  
 Tijeras-Cañoncito fault zone, Lisenbee and others (1979)  
 Trans-Pecos region, McAnulty (1980); Muehlberger (1979b)  
 Tularosa Basin, Seager (1980)  
**sulfur**, Smith, A. R. (1978a, 1980)  
**Summit Mountains**, Powers, R. S. (1976)  
**surface water**  
 chemical analysis, Burnside and Wenrich-Verbeek (1976)  
 Cochiti Reservoir, Brackenridge (1976)  
 Colfax County, Pillmore (1976c)  
 Colorado Plateau, Kondrat'yeva and Gorshkov (1979); Lovejoy (1976c)  
 Doña Ana County, Funderburg and Roybal (1977); Hernandez (1978)  
 erosion, Aldon (1976); Contessa (1975); Cooley (1979a, b); Curtis, N. M., Jr. (1976); Leopold (1978); Technology Application Center (1978)  
 evapotranspiration, Gay (1979)  
 floods, Burkham (1976); Landwehr and others (1978); Roeske and others (1978); Scott, A. G., and Kunkler (1976)  
 general, U.S. Geol. Survey (1976f)  
 Gila River, Dobyns (1978)  
 mercury, Brandvold, L. A. (1977)  
 Pecos River, Gay (1979); Havens and Wilkins (1979); O'Connor and Cull (1977)  
 pollution, Brandvold, L. A., and others (1980); Hakonson and others (1980)  
 rainfall, Osborn and others (1979); Rabinowitz and others (1977a-c)  
 Rio Grande, Belcher and Galloway (1977); Brackenridge (1976); Dewey and others (1979); Gay and Fritchen (1979); International Boundary and Water Commission (1976); Moss and others (1978); New Mexico Water Quality Control Commission (1976); Popp and Laquer (1980); Smith, R. W., and Popp (1980); Water Resources Engineers (1976)  
 Rio Ojo Caliente, Wenrich-Verbeek (1977, 1978, 1979a); Wenrich-Verbeek and Suits (1979a, b)  
 Rio Puerco, Aldon (1976); Shepherd (1976); Shepherd and Macke (1978)  
 Rocky Mountains, Lovejoy (1976c)  
 salinity alleviation, Havens and Wilkins (1979); O'Connor and Cull (1977)  
 salt cedar, Gay and Fritschen (1979)  
 Sandoval County, Funderberg (1977); Rathbun and Kennedy (1978)  
 San Juan Basin, Busby (1979a, b) Gutierrez (1980b)  
 sediment, Gloss and others (1978)  
 seston, Nuhfer (1979)  
 temperature, Clement (1978)  
 trace metals, Dauchy and Brandvold (1976); Popp and Laquer (1980)  
 uranium, Brandvold, L. A., and others (1980); Townsend (1979)  
 watersheds, Graustein and Armstrong (1978); Gutierrez (1980b); Moore, D. I., and others (1978); U.S. Soil Conservation Serv. (1976); Wells, S. G., and White (1978); White, W. D., and Wells (1979)  
 White Sands Missile Range, Scott, A. G. (1976)  
**syenites**, Loring and Armstrong (1980)  
**talc**, Fitzsimmons and Kelley (1980)  
**Tamarao sequence**, Bahlburg (1977); Bahlburg and Silver (1976); Wermiel (1978)  
**Tansill Formation**, *see* Artesia Group  
**tantalites**, Hlava (1979)  
**Taos County**  
 Arroyo Peñasco breccia, Vaughan (1978); Vaughan and Meyers (1976)  
 Aztec 2° quadrangle, DeCicco, Patterson, and Lutz (1978b)  
 Carson, Hagerman (1976b); U.S. Geol. Survey (1976d)  
 geomorphology, Colton (1976)  
 ground water, Hagerman (1976b)  
 guidebook, Ingersoll (1979c); Ingersoll and Woodward (1979)  
 Harding pegmatite, Brookins, Chakoumakos and others

- (1979); Chakoumakos (1978a, b); Cook, C. W. (1979); Ewing, R. C. (1979); Fenn and Jahns (1979); Hlava (1979); Jahns and Ewing (1976); Luth (1979); Nichols, J. (1980); Register, M. E., and Brookins (1979); Register, M. E., Brookins, and Della Valle (1978); Suchomel (1976); Taggart (1976)
- Holocene natural history, Martin (1976)
- hydrogeology, Burroughs and McFadden (1976)
- land classification map, DeCicco, Patterson, and Lutz (1978b, d, 1980)
- magnetic survey, Geometrics (1979b); U.S. Geol. Survey (1976c, d)
- No Agua dome complex, Brookins, Eppler, and Elston (1977); Naert and others (1980)
- Ojo Caliente 7<sup>1/2</sup>' quadrangle, Treiman (1977, 1978)
- Peñasco-Dixon Precambrian, Long, P. E. (1976); Long, P. E., and Luth (1979)
- Precambrian, Kirschnner (1979)
- Questa caldera, Lipman (1979)
- Raton 2<sup>o</sup> quadrangle, DeCicco, Patterson, and Lutz (1978d, 1980); Geometrics (1979b); Morgan, T. L., and Broxton (1978)
- Rio Hondo-Red River divide geology, Restrepo (1972)
- road logs, Budding, Robertson, and others (1979); Hawley, Burroughs, and others (1978); Muehlberger and Hawley (1978)
- San Antonio Mountain, Brookins, Eppler, and Elston (1977); Eppler (1976)
- Servilleta basalts, Crossey (1979)
- stratigraphy, MacLachlan (1976)
- Wheeler Peak, U.S. Geol. Survey (1976c)
- Wismath crater, Brookins, Eppler, and Elston (1977)
- Taos Plateau volcanic field**, Brookins and Zimmerman (1980); Crossey (1979); Dungas and others (1978); Lipman and Mehnert (1979); Lofgren (1979); Pronold (1979); Williams, S., and Murthy (1978, 1979)
- Taos Range**, Condie (1979)
- Taos trough**, Casey (1979a, b, 1980a, b); Casey and Scott (1980); Cordell, L. (1976d, 1978a); McBryde (1979); McBryde and Casey (1979); Scott, A. J., and Casey (1979)
- Tatum Basin**, Cys (1977a)
- Taylor Creek Rhyolite**, Lufkin (1977)
- tectonics**
- Abo Formation, Adams, R. D. (1978)
- Albuquerque Basin, Kelley, V. C. (1976)
- Basin and Range province, Eaton (1979b); Elston (1976c); Livaccari (1979); Lovejoy (1977); Mutschler and others (1978)
- Cenozoic volcanism, Snyder, W. S., and others (1976)
- Colorado Plateau, Baars (1979d); Bird (1979); Blakey (1978); Dickinson and Suczek (1979); Livaccari (1979); McGetchin, Burke, and others (1979); Silver, L. T., and McGetchin (1978); Zoback (1979)
- copper, Drewes (1978)
- Delaware Basin, Hills (1979); Shurbet and Cebull (1978)
- Diablo Plateau, Brown, L. D., Reilinger, and Hagstrum (1978); Reilinger, Brown, and Powers (1980)
- El Oro gneiss dome, Budding and Cepeda (1979)
- El Paso region, Uphoff (1979)
- fluorite, Van Alstine (1976)
- Galisteo syncline, Lisenbee (1976a, b)
- general, Olsen, K. H., Cash, and Bridwell (1976); Rona (1977); Woodward and Northrop (1976)
- geochronology, Leeman (1979)
- Hidalgo County, Elston and Erb (1977); Erb and Elston (1977)
- Holder Formation, Dunning (1978)
- Laramide orogeny, Coney (1976b)
- Lemitar Mountains, McLemore (1980b)
- Lincoln fold belt, Dennis, J. G., and Häll (1978); Yuras (1976)
- Madera Formation, Adams, R. D. (1978)
- Mesozoic, Hamilton, W. (1978)
- Mississippian, Craig, L. C., and Connor (1979); Mapel and others (1979); Varnes (1979)
- Morrison Formation, Saucier (1976)
- ore deposits, Mutschler and others (1978); Rona (1977); Tooker (1978)
- Otero Platform, Black, B. A. (1976a, b)
- paleosubduction geometries, Keith (1978)
- Palo Duro Basin, Handford and others (1980)
- Peñasco uplift, Adams, R. D. (1980)
- Permian Basin, Djeddi (1978); Elam (1980); Hills (1980); Keller, G. R., Hills, and Djeddi (1980a)
- petroleum and natural gas, Thompson, S., III (1976)
- Precambrian, Condie (1980a)
- Raton Basin, Woodward and Snyder (1976a, b)
- Rio Grande rift, Baldrige (1979d); Bridwell (1976, 1977); Bridwell and Anderson (1980); Brown, L. D., Miesen, and others (1980); Burke (1978); Chapin (1976, 1978a, 1979a, b); Eaton (1979a); Elston and Bornhorst (1978, 1979); Golombeck (1980); Kelley, V. C. (1979a); Livaccari (1979); Lovejoy (1976d); Mutschler and others (1978); Reilinger, Brown, and Jurkowski (1980); Reilinger and York (1978); Riecker (1979); Sales (1978); Seager (1977); Woodward (1977); Woodward and Callender (1977b); Woodward, Callender, and others (1978)
- Rio Puerco fault zone, Slack and Campbell (1976)
- Rocky Mountains, Baltz (1979); Chapin (1979b); Kluth and Coney (1980); Woodward (1976, 1978)
- Sacramento Mountains, Delgado (1977a)
- sandstone compositions, Dickinson and Suczek (1979)
- San Juan Basin, Stevenson and Baars (1977); Woodward and Callender (1977a)
- San Mateo Mountains, Deal and Rhodes (1976)
- Santa Fe country, Woodward and Ingersoll (1979)
- Taos trough, Casey (1979a, 1980a, b); Casey and Scott (1980)
- tephrochronology**
- Española Basin, Manley (1976b)
- Tertiary**
- cauldrons and mineral resources, Elston (1978b, c); Elston, Rhodes, and Erb (1976)
- flora, U.S. Geol. Survey (1979i)
- general, Wolf (1979)
- Grant County, Cunningham, J. E. (1979)
- Ladron Mountains, Callender and Zilinski (1976)
- Lucero uplift, Callender and Zilinski (1976); Gambill (1980)
- paleontology, Schiebout (1979)
- Rio Grande rift, Axelrod and Bailey (1976)
- San Juan Basin, Butler, R. F., Lindsay, Jacobs, and Johnson (1976, 1977); Butler, R. F., Lindsay, and Johnson (1979); Vizcaino and O'Neill (1977)
- Santa Rita-Hanover axis, Aldrich (1978)
- soil science, Schiebout (1979)
- southwestern New Mexico, Elston (1976a)
- White Mountains, Berry (1976)
- Tesuque Formation**, *see* Santa Fe Group
- Tesuque Pueblo**
- hydrology, Balch and Clark (1978); Hearne (1980a, b)
- Tewa Group**
- Bandelier Tuff, Baldrige and others (1980); Boden (1980); Dondanville (1979); Eichelberger and Koch (1979); Heiken and others (1976); Rogers, M. A., and Burton (1980); Rogers, M. A., Christie, and Budding (1980); Shaw, H. R., and others (1976); Sommer (1977, 1978); Warshaw and Smith (1980); Wohletz and Sheridan (1976)
- Battleship Rock Welded Tuff, McCormick (1980); McCormick and Smyth (1980)
- Cerro Toledo Rhyolite, Izett and others (1978)
- general, Prigmore (1978)
- thorium**
- Dakota Formation, Della Valle and Brookins (1980b)
- exploration, Gableman (1977)
- Florida Mountains, Brookins, Rautman, and Corbitt (1978)

- Mancos Shale, Della Valle and Brookins (1980b)  
Morrison Formation, Della Valle and Brookins (1980b)  
Zuni Mountains, Brookins and Rautman (1978)
- Tierra Amarilla Grant**, Butler, Charles (1977)
- Tijeras-Cañoncito fault system**, Lisenbee and others (1979)
- Tijeras greenstone**, Condie (1980b)
- tin**  
Black Range, Lufkin (1977)
- Todilto Limestone**, *see* San Rafael Group
- topaz rhyolites**, Bikun and others (1980); Burt, Bikun, and Christiansen (1980); Christiansen, E. H., and others (1980)
- Torrance County**  
Abo Pass, Brocher (1978); Jurdy (1978)  
Albuquerque 2° quadrangle, DeCicco, Patterson, and Lutz (1978a); Geometrics (1979a); Maassen, Bolivar, and others (1979); Wyant and Olson (1978)  
Arroyo de Yrisarri, Hagerman (1976a)  
Bosque Peak 7 1/2' quadrangle, Edwards, D. L. (1978)  
Fort Sumner 2° quadrangle, DeCicco and Patterson (1980g)  
hydrology, Hagerman (1976a)  
land classification map, DeCicco and Patterson (1980b, g); DeCicco, Patterson, and Lutz (1978a, 1979)  
Lobo Hills, Loring and Armstrong (1980)  
magnetic survey, Geometrics (1979a, b); High Life Helicopters and Geodata International (1979)  
Pedernal Hills, Loring and Armstrong (1980)  
Red Cloud mining district, Modreski (1979)  
Santa Fe 2° quadrangle, DeCicco and Patterson (1980b); Geometrics (1979b)  
Socorro 2° quadrangle, DeCicco, Patterson, and Lutz (1979); High Life Helicopters and Geodata International (1979);
- Tortugas Mountains**, Keller, G. R. (1979); King, W. E., and Kelley (1980)
- Trans-Pecos region**  
Bouguer gravity surveys, Keller, G. R., and Covert (1977); Western and Aiken (1977)  
Castile Formation, Kirkland and Evans (1980)  
Cenozoic faulting, Muehlberger (1979b)  
Gatuna Formation, Kelley, V. C. (1980)  
general, McNulty (1978); Veldhuluis and Keller (1980)  
guidebook, Dickerson and Hoffer (1980)  
magmatic province, Barker, D. S. (1977, 1979a, b); Barker, D. S., Long, and others (1977)  
magnetic surveys, Keller, G. R., and Covert (1977)  
Montoya Group, Howe (1979)  
Precambrian, Denison (1980)
- Tres Hermanos Sandstone Member**, Cobban and Hook (1979, 1980)
- Tres Piedras Granite**, Maxon (1976)
- Triassic**  
Ciniza Lake, Ash (1978a-f); Ash, Dean, and others (1978); Dean (1978); Stone, J. F. (1978); Tasch (1978); Weber, D. J., and Lawler (1978)  
Quay County, Finch and others (1976)  
San Juan Basin, O'Sullivan (1977)
- Trinidad Sandstone**, Pillmore and Maberry (1976)
- Truchas Range**, Grambling (1978, 1979a-c)
- Tucumcari Basin**  
Mesa Rica Sandstone, Gage and Asquith (1977a, b)  
stratigraphy, Roberts and others (1976)
- Tulosa Basin**  
energy-water complex, Lansford and others (1976b, c); Reiter, M. A., and others (1976); U.S. Dept. Energy (1979)  
faulting, Seager (1980)  
geophysical model, Reinke and Herrin (1979)  
gravity survey, Healey and others (1978)  
ground water, MacMillian and others (1976); U.S. Dept. Energy (1979)  
gypsiferous playas, Sakai and others (1976)  
hydrology, McLean and Garza (1977)  
seismicity, Hoffman and Harding (1977); Reinke (1978)
- tungsten**, Moench and Erickson (1980)
- turquoise**, Weber, R. H. (1979b)
- U-Bar Formation**, *see* Bisbee Group
- Uncompahgre uplift**, Casey and Scott (1979)
- underground waste disposal**, *see* radioactive-waste disposal
- Union County**  
clastics, Reynolds, D. M. (1979); Reynolds, D. M., and Gries (1980)  
Clayton volcanic field, Phelps, Blanchard, and others (1979); Phelps, Blanchard, and Stormer (1980); Stormer (1978)  
Dalhart 2° quadrangle, DeCicco, Patterson, and Robinson (1980); Morgan, T. L., and others (1980)  
Dry Cimarron River valley, Reynolds, D. M., and Gries (1980)  
land classification map, DeCicco and Patterson (1980h); DeCicco, Patterson, and Robinson (1980); U.S. Geol. Survey (1980g)  
scoria, Cima (1978)  
stratigraphy, MacLachlan (1976)  
Tucumcari 2° quadrangle, DeCicco and Patterson (1980h); U.S. Geol. Survey (1980g)  
uranium, Abbott (1979)
- uranium**  
Abo Formation, Langford (1980)  
Albuquerque 2° quadrangle, Maassen, Bolivar, and others (1979)  
Ambrosia Lake uranium district, Brady and Rice (1977); Falkowski (1980a, b); Fitch (1977); Foster, J. F., and Quintanar (1980); Smith, D. A., and Peterson (1980); Vassiliou (1980a, b)  
Aztec 2° quadrangle, Bolivar (1978)  
Black Range, Burt and Sheridan (1980); Correa (1980); Sheridan and Burt (1979)  
Catron County, Morgan, T. L., and others (1980c)  
Chaco Canyon, Brookins (1979e); Hicks and others (1980)  
Clifton 2° quadrangle, Sharp and others (1978)  
coal, Styron and others (1979)  
Colorado Plateau, Langford (1977); Ortiz, Ethridge, and Sunada (1980); Ortiz and others (1980); Smith, L. T. (1976)  
Dakota Formation, Della Valle and Brookins (1980b); Pierson and Green (1977, 1980)  
Dalhart 2° quadrangle, Morgan, T. L., and others (1980a)  
Dockum Group, McGowen (1979); McGowen and others (1977)  
Douglas 2° quadrangle, Sharp and others (1978)  
Estancia Valley, Brookins and Olsen (1977); Olsen, C. E. (1977)  
exploration methods, Bivins and others (1980); Brady and Rice (1977); Brookins, Riese, and Lee (1977); Chenoweth and Holen (1980); DeVoto and Mead (1979); DeVoto, Mead, Bergquist, and Martin (1977); DeVoto, Mead, Martin, and Bergquist (1980); Fitch (1980); Grutt (1977); Hayslip, Fuller, and others (1980); Hayslip and Renault (1976); Leach and Puchlick (1976); Reimer and others (1979); Reynolds, R. L., and Goldhaber (1978a, b); Rhett (1980); Rice and Reimer (1977); Riese, W. C., Lee, and others (1979); Veal (1977)  
Florida Mountains, Brookins, Rautman, and Corbit (1978)  
Galisteo Formation, Moore, J. C. (1979)  
Gallup 2° quadrangle, Hackman and Olson (1977); Maassen, LaDelfe, and others (1980)  
general, Anderson, O. J. (1978b); Anderson, O. J., Page, and Arnold (1977); Barr and others (1979); Bendix Field Engineering Corp. (1980a, b); Bivens and others (1980); Brierley (1977, 1979); Brookins and Della Valle (1977); Brooks, Robert (1978); Buddecke (1977); Burnside and Wenrich-Verbeek (1976); Chenoweth (1976); Coleman (1978); Energy Research and Development Administration (1976a, b); Engineering and Mining Journal (1976); Guarnera (1978); Langford (1977); Li and Wiebmer

- (1978); Perkins (1979, 1980) Rautman (1976, 1977a, b); Rautman and Kottlowski (1977); Robinson, W. P. (1978)
- geochronology, Brookins, Lee, and Shafiqullah (1977); Lee, M. J., and Brookins (1978); Lee, M. J., Brookins, and Shafiqullah (1977)
- Grants uranium district, Brookins (1976a-c, 1977c, d, 1978b, d, 1979a-d, 1980f); Brookins, Riese, and Lee (1977); Chenoweth and Holen (1980); DeVoto and Mead (1979); DeVoto, Mead, Bergquist, and Martin (1977); DeVoto, Mead, Martin, and Bergquist (1980); Ethridge, Ortiz, Granger, and others (1980); Ethridge, Ortiz, Sunada, and others (1980); Fitch (1980); Granger and others (1980); Green (1979, 1980); Guertin (1979); Huang (1979); Lee, M. J. (1976a); Livingston (1980); Melvin (1976); Moore, S. C., and Lavery (1980); Place and others (1980); Rautman (1980); Riese, W. C., Brookins, and Della Valle (1978, 1980) Riese, W. C., Brookins, and Lee (1978); Riese, W. C., Lee, and Brookins (1977); Saucier (1977); Thompson, D. T. (1980); Wentworth and others (1980); Wright, R. J. (1980)
- ground water, Ethridge, Ortiz, Granger, and others (1980); Hiss (1977); Kaufman, R. F., and others (1976, 1977); Ortiz and others (1980); Townsend (1979)
- Hidalgo County, Walton and others (1980)
- indicator plants, Massingill (1979b)
- isotope disequilibria, Osmond and Cowart (1980)
- Jackpile-Paguete deposit, Adams, S. S., and others (1978); Beck, R. G., and others (1980)
- Laguna district, Jacobsen (1980)
- Lincoln County, Black, K. D. (1977a)
- Mancos Shale, Della Valle and Brookins (1980b)
- McKinley County, Best (1973); Chemical Projects, Ltd. (1978)
- migration, Gableman (1977)
- mineral springs, Felmlee and Cadigan (1978)
- Morrison Formation, Abbott (1979); Austin, S. R. (1979, 1980); Baird and Martin (1979); Baird, Martin, and Lowry (1980); Galloway, W. E. (1978, 1979); Della Valle and Brookins (1980b); Hicks and others (1980); Huffman, Kirk, and Corken (1980); Langford (1977); Lee, M. J. (1976a, b); Lee, M. J., and Brookins (1978); Peterson, R. J. (1980); Rhett (1980); Riese, W. C. (1977, 1980); Riese, W. C., and Brookins (1976, 1977, 1978, 1979, 1980); Saucier (1976); Tessendorf (1980); Turner-Peterson (1980); Turner-Peterson and others (1980); Wentworth and others (1980)
- Mount Taylor volcanic field, Riese, W. C. (1977, 1980); Riese, W. C., and Brookins (1976, 1977, 1978, 1979, 1980)
- NURE Program, Aamodt, Bunker, and others (1979); Aamodt, Hansel, and others (1977); Aamodt, Waterbury, and others (1979); Bendix Field Engineering Corporation (1980a, b); Bolivar (1978); Bolivar and others (1980); Brookins (1977d, 1978d, 1979c, e); Brookins and Olsen (1977); Broxton (1978); Christiansen, E. H., Bikun, and Burt (1980); Correa (1980); Earth Satellite Corporation (1979); Geodata International (1976a-c, 1978, 1980a, b); Geometrics (1979a, b); High Life Helicopters and Geodata International (1979); Lease (1979); Maassen, Bolivar, and others (1979); Maassen, LaDelfe, and others (1980); Maassen and others (1980); Morgan, T. L., and Broxton (1978); Morgan, T. L., and others (1980a-c); Morris, W. A., Bunker, and others (1979); Morris, W. A., Bunker, and Steinhaus (1979); Nichols, C. E., and others (1976); Nunes and Weaver (1978); Olsen, C. E. (1977); Planner and others (1980); Reid, B. E., and others (1980); Rice and Reimer (1977); Sharp and others (1978); Texas Instruments (1978, 1979a, b); Vizcaino and O'Neill (1977); Walton and others (1980); Warren, R. G., and Nunes (1978); Weaver and others (1978); Wenrich-Verbeek (1977)
- Ogallala Formation or aquifer, Reeves (1977, 1978)
- organic chemistry, Leventhal (1979, 1980); Leventhal and Threlkeld (1978); Squyres (1980); Vassiliou (1980a, b) Permian, Campbell, J. A., and Steele (1976)
- pitchblende, Langford (1977)
- quartz thermoluminescence, Hayslip, Fuller, and others (1980); Hayslip and Renault (1976)
- Quay County, Finch and others (1976)
- Raton 2° quadrangle, Morgan, T. L., and Broxton (1978); Reid, B. E., and others (1980)
- remote sensing, Earth Satellite Corporation (1979); Gableman (1978)
- Rio Ojo Caliente, Wenrich-Verbeek (1977, 1978, 1979a, b); Wenrich-Verbeek and Suits (1979a, b)
- Saint Johns 2° quadrangle, Maassen and others (1980); Sharp and others (1978)
- Sandoval County, Kozusko and Saucier (1980); Ridgley (1979a, c, 1980)
- sandstone, Brookins and Della Valle (1979); Renault and Hayslip (1977)
- San Juan Basin, Brookins, Della Valle, and Balagna (1979); Brookins, Della Valle, and Lee (1978b); Brookins, Lee, and Riese (1977); Chenoweth (1977); Clark, D. S. (1980); Cooley (1979a, b); Huffman and Lupe (1977); Stone, W. J. (1979c); Vizcaino and O'Neill (1977)
- San Rafael Group, Langford (1980)
- Santa Fe County, Chenoweth (1979)
- Santa Fe 2° quadrangle, Bolivar and others (1980)
- sedimentation, Aamodt, Bunker, and others (1979); Aamodt, Hansel, and others (1977); Aamodt, Waterbury, and others (1979)
- Shiprock 2° quadrangle, Morgan, T. L., and others (1980b)
- Sierra Cuchillo, Correa (1980)
- Silver City 2° quadrangle, Sharp and others (1978)
- Socorro County, Chapin, Osburn, and others (1979)
- Socorro 2° quadrangle, Planner and others (1980)
- solution mining, Conine (1980); Riese, A. C. and Popp (1980)
- stratigraphy, Langford (1980)
- surface water, Brandvold, L. A., and others (1980); Townsend (1979)
- tailings, Beard and others (1980)
- thermoluminescence, Renault and Hayslip (1977)
- Todiloto Limestone, Rawson (1976, 1980)
- Tularosa 2° quadrangle, Broxton (1978)
- Union County, Abbott (1979)
- vegetation, Marple (1979); Marple and others (1978)
- waste water, City of Gallup (1977)
- Zuni Mountains, Brookins and Rautman (1978)
- Ute Mountain Indian Reservation**, Henkes and others (1976)
- Uvas Valley**, Clemons (1978, 1979)
- Valencia County**  
see also Cibola County
- Cebolleta Grant, Boyd (1976)
- Chimney Hill, Ander, Heinken, and others (1979)
- ground water, Boyd (1976)
- hydrogeology, Brod (1979)
- land classification map, DeCicco, Patterson, and Lutz (1979)
- Los Lunas volcanics, Brookins, Kasten, and Kudo (1980)
- Lucero Mesa, Baldrige, Perry, and Gladney (1980); Kues and Kietzke (1976)
- Lucero uplift, Fisher, R. A. (1979); Gambill (1980)
- magnetic survey, High Life Helicopters and Geodata International (1979)
- road logs, Hawley, (1978c); Hawley, Chapin, Chamberlin, and others (1978); Saucier (1979b)
- soil survey, Hacker (1977)
- Socorro 2° quadrangle, DeCicco, Patterson, and Lutz (1979); High Life Helicopters and Geodata International (1979)
- Tome Hill, Brookins, Kasten, and Kudo (1980)
- Valles caldera**, Bailey (1976); Boden (1980); Dondanville (1979); Goff (1980); Jambon and Shelby (1980); Keller,

- G. V., Grose, and Crewdson (1978); Kolstad and McGetchin (1978); Lambert, S. J. (1976); Lambert, S. J., and Epstein (1980); Langhorst (1980); Shaw, H. R., and others (1976); Sherwood and Marquis (1980); Smith, R. L. (1980); Spence, W., Gross, and Jaksha (1979)
- Valles Rhyolite**  
Banco Bonito Member, Pense (1977)
- Valley of Fires State Park**, Faris and Renault (1980); Weber, R. H. (1979a)
- vanadinite**, Narsavage (1979)
- Vermejo Formation**, Flores (1980)
- Victorio Mountains**, Thorman and Drewes (1980)
- volcanics**  
Adeñ-Afton basalt field, Stuart (1979)  
Albuquerque Basin, Kelley, V. C., and Kudo (1978); Kudo and others (1977)  
Alegros Mountain area, Jones, D. P. (1980)  
A-L Peak tuff, Chapin and Deal (1976)  
Animas Mountains, Erb (1979)  
Arroyo Peñasco collapse breccia, Vaughan (1978); Vaughan and Meyers (1976)  
Bandler Tuff, Heiken and others (1976); Rogers, M. A., and Burton (1980); Rogers, M. A., Christie, and Budding (1980); Wohletz and Sheridan (1976)  
Bandera Crater, Gallagher (1973)  
Basin and Range province, Damon (1976); Elston (1976, 1977); Elston and Erb (1980); Mutschler and others (1978)  
Bear Mountain intrusive, Peterson, H. W., and Norman (1980)  
Bell Top Formation tuffs, Clemons (1976b)  
Bernalillo County, Baldrige, Perry, and Gladney (1980); Renault (1978b)  
Black Range, Burt and Sheridan (1980); Erickson and Wedow (1976); Fodor (1976, 1978); Sheridan and Burt (1979)  
Bursum cauldron, Elston (1978a)  
Carlsbad evaporites, Loehr (1979)  
Carrizozo basalt field, Faris (1980); Faris and Renault (1980)  
Catron County, Bikerman (1976)  
Cenozoic-centers map, Luedke and Smith (1979)  
Cerro del Rio, Aubele (1978a, b, 1979)  
Chuska Mountains, Ehrenberg (1977)  
Clayton volcanic field, Phelps, Blanchard, and others (1979); Phelps, Blanchard, and Stormer (1980); Stormer (1978)  
Colorado Plateau, Moore, R. B. (1978); Roden and others (1979); Smith, D. L., and Levy (1976)  
Cone Peak rhyolite, Black, K. D. (1977a)  
copper, Feis (1978)  
Cow Creek ultramafic complex, Wyman, W. F. (1980b)  
Crosby Mountains, Bornhorst (1976)  
Cuchillo Mountain laccolith, McMillan (1979); McMillan and Jahns (1979)  
Delaware Basin, Calzia and Hiss (1978)  
Doña Ana cauldron, Seager (1978a)  
El Oro gneiss dome, Budding and Cepeda (1979)  
Emory cauldron, Seager (1978b)  
Engle Basin, Brookins, Warren, and Kudo (1980)  
Española Basin, Manley (1976a, b); Manley and Naeser (1977)  
Florida Mountains, Brookins (1980a, g)  
general, Aubele and others (1976); Babcock, R. S. (1979); Barker, F., Arth, and others (1976); Barker, F., Friedman, and others (1976); Leeman (1979); Yoder (1976)  
Grant County, Aldrich, (1976); Cunningham, J. E. (1979); Wahl (1980)  
Green Knobs diatreme, Smith, D. L., and Levy (1976)  
Hidalgo County, Deal, Elston, and others (1978); Elston and Erb (1977); Erb (1978, 1979); Erb and Elston (1977); Wahl (1980)  
Hunt's Hole, Stuart (1979); Stuart and Brenner (1979)  
Jemez lineament, Laughlin, Brookins, and Damon (1976); Laughlin, Brookins, Damon, and Shafiqullah (1979)  
Jemez Mountains, Bailey and Smith (1978); Eichelberger and Koch (1979); Smith, R. L., and others (1978)  
John Kerr Peak dome complex, Smith, E. I. (1976)  
Joyita Hills, Socorro County, Spradlin (1976)  
Kilbourne Hole, Minear and Irving (1979); Padovani (1977); Padovani and Carter (1976); Saito, Basu, and others (1977); Saito, Menzies, and others (1978); Stuart and Brenner (1979)  
Ladron pluton, White, D. L. (1978a, b)  
Laramide magmas, Allan and Swan (1978)  
Los Medaños dike, Elliot (1976)  
Magdalena pluton, White, D. L. (1978a, b)  
Mogollon-Datil volcanic field, Berry (1976); Bornhorst (1980); Bornhorst, Elston, and Della Valle (1980); Chapin and Elston (1978); Dodge (1979); Elston (1976b); Krohn (1976); Lindley (1979); Lindley and others (1980); Ratte and Grothro (1979); Rhodes (1976a, b); Rhodes and Smith (1976); Stinnett (1980); Stinnett and Stueber (1976)  
Mogollon Plateau, Coney (1976a); Elston, Rhodes, Coney, and Deal (1976); Smith, E. I., and others (1976); Strangway and others (1976)  
Montoso maar, Aubele (1976)  
Mount Taylor volcanic field, Crumpler (1976, 1977, 1978, 1980); Lipman and Mehrt (1980); Ridley (1979)  
Mount Withington cauldron, Chapin and Deal (1976)  
Navajo volcanic field, Ehrenberg (1978, 1979); Ehrenberg and Griffen (1979); Roden (1978)  
northeastern New Mexico, Kudo (1976a)  
Ocate volcanic field, O'Neill and Mehrt (1980a, b)  
Ojita pluton, White, D. L. (1978a, b)  
Ojo Caliente tuff ring, May (1977)  
Organ cauldron, Macer (1978); Seager (1978a); Seager and Brown (1978)  
Oscura pluton, White, D. L. (1978a, b)  
Pecos greenstone belt, Robertson, J. M., Condie, and Mathewson (1978); Robertson, J. M., and Moench (1979)  
Peloncillo Mountains, Erb (1979)  
petroleum and natural gas, Thompson, S., III (1976)  
Potrillo Basalt field, Berman, R. G., and Reid (1976); Bersch (1977); Hoffer (1976a, b)  
Precambrian granitic plutons, Condie (1978)  
Questa caldera, Lipman (1979)  
Rabb Park rhyolite complex, O'Brien (1980)  
radioactive-waste disposal, Elliot (1976)  
Raton volcanic field, Phelps, Blanchard, and others (1979); Phelps, Blanchard, and Stormer (1980); Stormer (1978)  
Riley maar, Bersch (1977); Saito, Menzies, and others (1978); Schwartz and Irving (1978)  
Rio Grande rift, Baldrige (1976, 1977, 1978, 1979a-c); Chapin (1979b); Elston (1977); Elston and Bornhorst (1978, 1979); Kudo (1976b); Mutschler and others (1978); Reid, J. B. (1976, 1978); Reid, J. B., and Woods (1978a)  
Renault (1978a); Stormer (1978); Williams, S., and Murthy (1978, 1979); Zimmerman and Kudo (1978, 1979b)  
Sandia Mountains, Bolton (1976); Thompson, T. B., and others (1980)  
San Juan County, Delaney (1980); Delaney and Pollard (1978); Pollard and Delaney (1978)  
San Mateo Mountains, Deal and Rhodes (1976)  
San Pedro Mountains, Wobus and Hedges (1980)  
scoria, Cima (1978); Osburn, J. C. (1980)  
Servilleta basalts, Crossey (1979)  
Shiprock, Delaney (1980); Delaney and Pollard (1978); Pollard and Delaney (1978)  
Sierra Blanca igneous complex, Black, K. D. (1977b)  
Sierra County, Loeber (1976)  
Sierra de las Uvas ash-flow field, Clemons (1976a)  
Socorro Peak volcanic center, Chamberlin (1980)  
southern High Plains, Stormer (1978)

- southwestern New Mexico, Elston (1976a); Elston and Northrup (1976)
- Taos Plateau volcanic field, Brookins and Zimmerman (1980); Crosse (1979); Dungan and others (1978); Lipman and Mehnert (1979); Pronold (1979); Williams, S., and Murthy (1978, 1979)
- tectonics, Keith (1978); Snyder, W. S., and others (1976)
- Tertiary cauldrons, Elston (1978b, c); Elston, Rhodes, and Erb (1976); Erb (1978)
- Trans-Pecos magmatic province, Barker, D. S. (1977, 1979a, b); Barker, D. S., and Hodges (1977); Barker, D. S., Long, and others (1977)
- uranium, Burt and Sheridan (1980); Sheridan and Burt (1979); Walton and others (1980)
- Valencia County, Baldrige, Perry, and Gladney (1980); Brookins, Kasten, and Kudo (1980); Renault (1978b)
- Valles caldera, Bailey (1976); Jambon and Shelby (1980); Lambert, S. J. (1976); Smith, R. L. (1980)
- Valley of Fires State Park, Weber, R. H. (1979a)
- Wagon Mound basalt flow, Stewart, D. C., and Windom (1979)
- Washington Pass volcanic center, Ehrenberg (1977)
- White Mountains, Berry (1976)
- Waste Isolation Pilot Plant (WIPP)**, *see* radioactive-waste disposal
- Westwater Canyon Sandstone**, *see* Morrison Formation
- White Mountain Wilderness**, Cordell, L. (1979c)
- White Mountains volcanic province**, Berry (1976)
- White Sands Missile Range**
- ground water, Kelly, T. E., and Hearne (1976); Wilson, C. A., White, Roybal, and Gonzales (1978)
- hydrology, Cruz (1976, 1977, 1978, 1979, 1980); Scott, A. G. (1976)
- missile craters, Moore, H. J. (1976)
- petroleum and natural gas, Foster, R. W. (1978b)
- soil survey, Neher and Bailey (1976)
- Victorio Peak, Dolphin and others (1978)
- Wind Mountain**, Burton, J. C., and Jackson (1979)
- x-ray diffraction**, Renault and Iovenitti (1978)
- Yates Formation**, *see* Artesia Group
- Zia Sand**, Gawne (1976)
- zinc**, Alminas, Watts, and others (1978d); Zantop (1980)
- zircons**, Heimlich (1976)
- Zuni Basin**, Hook, Cobban, and Landis (1980)
- Zuni Mountains**, Brookins (1978a); Brookins, Della Valle, and Lee (1977, 1978a); Brookins and Rautman (1978); Langford (1980); Laughlin and West (1976)



*Editor:* Jane Calvert Love

*Type faces:* Text in 8-pt. English Times, leaded one point  
Index in 7-pt. English Times, leaded one point  
Display heads in 18-pt. English Times

*Presswork:* Miehle Single Color Offset  
Harris Single Color Offset

*Binding:* Sewn with softbound cover

*Paper:* Cover on 17 pt. Kivar  
Text on 60-lb. White Offset

*Ink:* Cover—PMS 320  
Text—Black

*Quantity:* 1000



