

## New publications

### NMBMMR

\***Bulletin 130**—Bibliography of New Mexico geology and mineral technology 1986, by J. C. Love, C. A. Hjellming, and N. H. Troxel, 1992, 92 pp. \$7.00

This volume, the eleventh in a series of bibliographic bulletins, extends comprehensive coverage of the geologic literature of New Mexico through 1986. The nearly 1,200 new references include articles published in scientific journals; reports, serials, and monographs published by federal and state agencies, professional societies, research institutions, and scientific publishers; abstracts of papers presented at professional meetings; and research papers, theses, and dissertations completed as part of MS and PhD degree requirements. Complete references are listed alphabetically by senior author; junior authors and cross references are included in the alphabetical arrangement. Each reference is indexed one or more times by subject, geographic location, age, and/or rock-stratigraphic unit.

\***Bulletin 145**—Late Mesozoic to Cenozoic cooling histories of the flanks of the northern and central Rio Grande rift, Colorado and New Mexico, by S. A. Kelley, C. E. Chapin, and J. Corrigan, 1992, 39 pp. \$6.00

Apatite fission-track (FT) data collected in the northern and central Rio Grande rift of New Mexico and Colorado indicate that rocks now exposed in the eastern and western margins of the rift cooled during uplift and erosion in a complex spatial and temporal pattern. Generally, the youngest FT ages are found in the rift flanks adjacent to large normal faults along the deep margins of the en echelon half-grabens that make up the present Rio Grande rift. Cooling rates increased from the Laramide orogenic event (1° to 4°C/Ma) to the development of the Rio Grande rift (7° to 20°C/Ma).

\***Mines, mills and quarries in New Mexico**, compiled by K. S. Hatton, J. M. Barker, R. B. Hallett, L. Hemenway, K. Campbell, and R. S. King, 1992, 67 pp., 1 sheet, scale ~1:1,250,000. \$5.25

The data on mining operations were compiled jointly by the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department and the New Mexico Bureau of Mines and Mineral Resources from registrations received by July 1, 1992. Mines and mills (in the first section of this report) and pits and quarries (in the second section) are numbered, listed alphabetically by county, and plotted on an ~1:1,250,000-scale map. Specific data listed in the report for each entry include the name of the operation, the commodity mined or milled, ownership, address, current status, and location (township and range). New to this edition are sources for state and regional maps of New Mexico, addresses of county courthouses, three indexes (commodity, mine and plant, and operator), and a three-page appendix of interesting mineral-industries facts and statistics on uses, production, employment, and revenues.

### USGS

#### PROFESSIONAL PAPER

1411-C—Geohydrology of Mesozoic rocks in the upper Colorado River basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, excluding the San Juan Basin, by G. W. Freethy and G. E. Cordy, 1991, 118 pp., 6 plates in pocket.

#### BULLETINS

1808-J,K—New interpretations of the stratigraphy and sedimentology of uppermost Jurassic to lowermost Upper Cretaceous strata in the San Juan Basin of northwestern New Mexico. X-ray diffraction studies of the <2- $\mu$ m fraction from the upper part of the Brushy Basin Member of the Upper Jurassic Morrison Formation and the Lower Cretaceous Burro Canyon Formation in the Four Corners area, Colorado, by W. M. Aubrey and G. L. Skipp, 1992, 28 pp., 2 plates in pocket. (Chapters J and K are issued as a single volume.)

1808-N—Upper Cenomanian foraminifers from the southern part of the San Juan Basin, New Mexico, by M. A. Carey, 1992, 17 pp.

#### WATER-RESOURCES INVESTIGATIONS

WRI-91-4165—Water-level changes in the High Plains aquifer; predevelopment to 1990, by J. T. Dugan and D. E. Schild, 1992, 55 pp.

#### Other publications

Belski, D. (editor), 1992, GYPKAP Report #2: Southwest Region, National Speleological Society, 56 pp., 6 map plates.

Deckert, L. B., and DeMarco, M. J., 1992, Lea County, N.M., oil presents opportunities for independents: *The American Oil & Gas Reporter*, v. 35, no. 9, pp. 89-94

Goodell, P. C., Gutierrez, C. G., and Cortes, I. R. (editors), 1992, Energy resources of the Chihuahua Desert region: Dept. of Geological Sciences (UT El Paso), El Paso Geological Society, Center for InterAmerican and Border Studies (UT El Paso), Research Consortium of the Chihuahua Desert, The Energy Institute (UT El Paso) (includes Uranium occurrences in the Chihuahua Desert area, Sierra, Grant, Hidalgo, Luna, and Doña Ana Counties, New Mexico, by V. T. McLemore, pp. 224-235).

Hoppe, K., 1992, Baby dinosaur found near ancient sea: *Science News*, v. 142, no. 20, p. 334.

Laubach, S. E., Tyler, R., Ambrose, W. A., Tremain, C. M., and Grout, M. A., 1992, Preliminary map of fracture patterns in coal in the western United States: Wyoming Geological Association, Guidebook to 43rd Field Conference, pp. 253-267.

Sanders, M. R., 1992, The San Pedro mine, Santa Fe County, New Mexico: *Rocks and Minerals*, v. 67, no. 6, pp. 390-395.

Sanford, R. F., 1992, A new model for tabular-type uranium deposits: *Economic Geology*, v. 87, no. 8, pp. 2041-2055.

Schwochow, S. D., 1992, Cumulative bibliography and index to *The Mountain Geologist*, 1975 through 1991: *The Mountain Geologist*, v. 29, no. 4, pp. 101-130.

Tyler, R., Zhou, N., McMurray, R. G., Jackson, M. L. W., and Tremain, C. M. (compilers), 1992, Selected references related to coalbed methane in the Greater Green River, Piceance, Powder River, Raton, and San Juan Basins: Colorado Geological Survey, Information Series 35, 77 pp.

Tyler, R., Ambrose, W. A., Scott, A. R., and Kaiser, W. R., 1992, Evaluation of the coalbed methane potential in the Greater Green River, Piceance, Powder River, and Raton Basins: Wyoming Geological Association, Guidebook to 43rd Field Conference, pp. 269-302.

### Open-file reports

#### NMBMMR

\*323—Hydrogeologic framework of the Mesilla Basin in New Mexico and western Texas, by J. W. Hawley and R. P. Lozinsky, 1992, 55 pp., 17 plates, 2 appendices (Appendix B supersedes NMBMMR Open-file Report 190). \$30.00

\*389—Compilation of Precambrian isotopic ages in New Mexico, by P. W. Bauer and R. T. Pollock, 1993, 130 pp. \$15.00

\*390—Geologic map of the Truth or Consequences 30 × 60-minute quadrangle (1:100,000 scale), by R. W. Harrison, R. P. Lozinsky, T. L. Eggleston, and W. C. McIntosh, 1993, 16 pp. \$4.70

#### USGS

\*90-699—U.S. Geological Survey multichannel seismic data; National Energy Research Seismic Library; NERSL CD-ROM 1, by D. R. Hutchinson, D. J. Taylor, and F. N. Zihlman, 1990, 15 pp. \$3.00 (CD-ROM available separately as OF 92-289.)

91-236—Listings of model input values for the simulation of ground-water flow in the San Andres-Glorieta aquifer in the Acoma embayment and eastern Zuni uplift, west-central New Mexico, by P. F. Frenzel, 1991, 7 pp., 2 5 1/4" DD diskettes.

91-624—Audio-magnetotelluric investigation at Bursum caldera, Mogollon mining district, west-central New Mexico; location map and data report, by R. M. Senterfit and G. A. Abrams, 1991, 29 pp., 1 sheet, scale 1:100,000.

\*92-118—Inventory of springs in the State of New Mexico, by W. E. White and G. E. Kues, 1992, 258 pp., 33 tables, 35 figs. \$51.60

\*92-289—National Energy Research Seismic Library; multichannel seismic-reflection data from the U.S. North Atlantic continental margin, Montana, and New Mexico, by D. R. Hutchinson, D. J. Taylor, and F. N. Zihlman, 1992, 1 CD-ROM.

(Data printout available at \$0.20/page.)

\*92-328-A—Digital geologic map of the Roswell Resource Area, New Mexico, by E. J. LaRock and S. L. Moore, 1992, 5 pp. \$1.00 (Map included in OF 92-261.)

\*92-328-B—Digital geologic map of the Roswell Resource Area, New Mexico, by E. J. LaRock and S. L. Moore, 1992, 1 3 1/2" HD database diskette for use with ARC/INFO. \$4.00

(Map included in OF 92-261.)

\*92-328-C—Digital geologic map of the Roswell Resource Area, New Mexico, by E. J.

LaRock and S. L. Moore, 1992, 1 3 1/2" HD command files diskette for use with ARC/INFO. \$4.00  
(Map included in OF 92-261.)

\*92-365-A—NURE data for groundwater and stream sediments, BLM Roswell Resource Management Area, east-central New Mexico, by R. R. Tidball and J. A. Erdman, 1992, 10 pp. \$2.00

\*92-365-B—NURE data for groundwater and stream sediments, BLM Roswell Resource Management Area, east-central New Mexico, by R. R. Tidball and J. A. Erdman, 1992, 1 5 1/4" HD diskette. \$4.00  
(Printout included in OF 92-261.)

\*92-465—Annual water-resources review, White Sands Missile Range, New Mexico, 1988, by R. G. Myers and S. C. Sharp, 1992, 28 pp., 8 tables, 10 figs. \$5.60

\*92-503—Gravity data at the western rim of the Bursum caldera, New Mexico, including principal facts, profiles, and gravity contour maps, by G. A. Abrams, R. M. Senterfit, and D. P. Klein, 1992, 13 pp., 1 table, 6 figs., 1 plate, 1 appendix. \$4.10

\*92-528—A geologic overview and one-day field guide of the Taos Plateau volcanic field, Taos County, New Mexico, by R. A. Thompson and Nancy J. McMillan, 1992, 24 pp., 11 figs. \$4.80

## Ground-water Conference Call for papers

Papers are requested for the October 27-29, 1993 Rocky Mountain Ground Water Conference/New Mexico Section of the American Water Resources Association Annual Conference to be held in Albuquerque, New Mexico. Papers are solicited on all aspects of subsurface water science and engineering, including but not limited to: aquifer and wellhead protection, vadose-zone flow and transport, ground-water ecology, ground-water resource management, ground-water quality and contamination, geophysical and geotechnical aspects, changing government-agency roles, interstate and international issues, and legal and policy aspects. Indicate session preference: oral, poster, or no preference. Note that all attendees, including authors and presenters, must pay the registration fee. Abstracts must be received by May 28, 1993, and should be no more than 300 words and single spaced. For additional information and specific abstract formatting, contact: Technical Chair, William J. Stone, NMED-Ground Water, P.O. Box 26110, Santa Fe, NM 87502-6110, (505/827-2434; Fax: 505/827-2965). For information on exhibits, contact: Exhibits Chair, Douglas Earp, City of Albuquerque, Environmental Health Department, P.O. Box 1293, Albuquerque, NM 87103 (505/768-2600; fax: 505/768-2617).

## Upcoming geologic meetings

Conference title	Dates	Location	Contact for more information
Tucson Gem & Mineral Society show	Feb. 11-14	Convention Center Tucson, AZ	TGMS Show Comm. Box 42543 Tucson, AZ 85733
SME annual meeting	Feb. 15-18	Reno-Sparks Convention Center	SME Meetings Dept. P.O. Box 625002 Littleton, CO 80162 (303) 973-9550
AAPG Southwest Section	Feb. 21-23	Fort Worth, TX	R. Geoff Ice Snyder Oil Corp. 777 Main St., Suite 2500 Ft. Worth, TX 76102 (817) 882-5950
Albuquerque Gem & Mineral Club Show	March 6-7	UNM Continuing Ed. Conf. Center	Albuquerque Gem & Mineral Club P.O. Box 13718 Albuquerque, NM 87192
Deming Gem & Mineral Society Rockhound Roundup	March 11-14	SWNM State Fair Grounds	Deming Gem & Mineral Society P.O. Box 1459 Deming, NM 88031
New Mexico Geological Society spring meeting	April 9	Macey Center Socorro, NM	Steven Ralser NMT, Dept. Geoscience Socorro, NM 87801 (505) 835-5878
AAPG annual meeting	April 25-28	New Orleans, LA	AAPG Convention Dept. P.O. Box 979 Tulsa, OK 74101 (918) 584-2555
Cordilleran/Rocky Mountain Sections, GSA	May 19-21	Reno, NV	R. A. Schweickert UNR, Dept. Geol. Sci. Mackay School of Mines Reno, NV 89557-0138 (702) 784-6050
Roadrunner Gem & Mineral Club, Inc. show	May 29-30	Carlsbad Civic Center Carlsbad, NM	Dort Pearson P.O. Box 1023 Carlsbad, NM 88220 (505) 885-4431

## New Mexico Geological Society 1994 Fall Field Conference Call for papers

The 1994 NMGS Fall Field Conference will tour the Mogollon Slope of west-central New Mexico from September 28 to October 1, 1994. The Mogollon Slope is generally defined by southerly dipping Tertiary volcanic and volcanoclastic strata that overlap the southern structural margin of the Colorado Plateau between Socorro, New Mexico and Springerville, Arizona. The conference will focus on the Cenozoic stratigraphic, structural, and topographic evolution of the Plateau margin. Additional topics will be recent wild-cat oil-test wells in the Mangas Mountains area, ongoing development of an open-pit coal mine near Quemado by the Salt River Project, aspects of regional hydrologic studies, and seismic reflection profiles for the San Agustin Plains region. A four-wheel-drive caravan is planned to permit access to the scenic back country north and south of U.S. 60.

Scientific papers, technical review articles, and minipapers are being solicited

for the conference guidebook. NMGS guidebooks typically cover a wide range of topics in geology, geophysics, geochemistry, economic geology, hydrology, archeology, engineering, and regional history. If you plan to submit an article or minipaper for the guidebook, please send a tentative title, estimate of manuscript length, and information concerning figures and tables to: NMGS-1994 FFC, Richard M. Chamberlin, New Mexico Bureau of Mines and Mineral Resources, Socorro, NM 87801, prior to **January 7, 1994**. Also, be sure to request "Instructions to Authors" before you start writing. All articles and road log contributions for the Mogollon Slope guidebook must be submitted by **February 15, 1994**. Managing editor for the guidebook will be Barry Kues, and technical editors will be Richard Chamberlin, Jim Barker, and Bill McIntosh. For additional information, contact Richard Chamberlin (505-835-5310/5420; fax (505-835-6333).

# New Mexico Bureau of Mines and Mineral Resources staff notes

**Don Wolberg** is on one-year sabbatical; **Lois Gollmer** resigned as Geotechnical Records Clerk to join her husband who will be attending Iowa State University; **James Robertson** left the Bureau to accept the position of Director and State Geologist of the Wisconsin Geological and Natural History Survey; **Steve Haase** joined Gram, Inc. environmental consulting firm in Albuquerque; **Theresa Lopez** was promoted to Geotechnical Records Clerk. Anniversaries of our staff with five or more years of service from December 1992 through February 1993 were: **Richard Chavez**, 36; **Lois Devlin**, 31; **Mickey Wooldridge**, 22; **Ruben Crespin**, 18; **Robert Eveleth**, 15; **Don Wolberg**, 14; **Jim Barker** and **Jiri Zidek**, 10; **Carol Hjellming**, 9; and **Chris McKee**, 6.

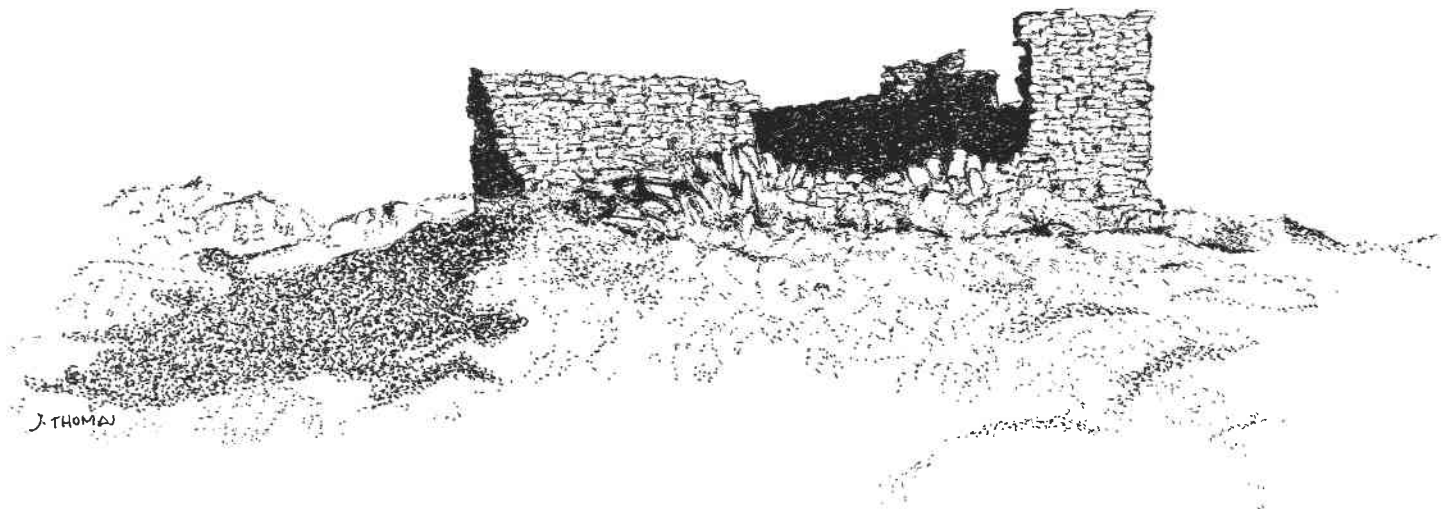
At the annual Geological Society of America meeting in Cincinnati, **Charles Chapin** presented a paper at the SEG symposium and attended the midyear AASG meeting; **Frank Kottowski** attended the GSA meeting, the AASG meeting, and at the GSA Coal Geology Division luncheon he received a Distinguished Service Award from the division; **Paul Bauer**,

**Bill Haneberg**, and **Jacques Renault** also attended GSA. **James Robertson** attended both GSA and SEG; **Don Wolberg** presented a paper at GSA.

**Frank Kottowski**, member of the NMMA Environmental Committee, attended the NMMA Board of Directors meeting in Santa Fe. **George Austin** and **Norma Meeks** attended a Science and Math Teachers Convention and manned an SME-Bureau table; George also attended the SME section meeting and section board meeting in Albuquerque. **James Barker** attended the annual SCE meeting as Industrial Minerals Division representative. **Paul Bauer** presented a talk to the Amigos Bravos in Taos, "Geology, mineral resources, and geologic hazards of the Taos region"; he and **Bill Haneberg** delivered the keynote address at the annual meeting of the Los Alamos Geological Society in Los Alamos, "Geology and geologic hazards of the Rio Grande gorge area." **Lynn Brandvold** attended meetings of New Mexico Water Quality Control Commission and the Groundwater Protection Plan Subcommittee in Santa Fe. **Ron Broadhead** was an invited participant at the

USGS meeting in Denver on estimating oil and gas resources of the Rocky Mountains; he also attended a Roswell Geological Society meeting. **Steve Cather** gave a seminar at NMSU, "Stratigraphic evolution of Santa Fe Group near Socorro." **Charles Chapin** attended a meeting of the Coal Surface Mining Commission in Santa Fe, the annual State Mine Inspector meeting in Socorro, and chaired the annual meeting of the Mine Safety Advisory Board. **Steve Haase** attended the 37th annual New Mexico water conference in Taos and presented a paper at the American Geophysical Union meeting in San Francisco. **Gretchen Hoffman** attended the AAPG-EMD Advisory Council meeting in Tulsa. **Glen Jones** attended the Geographic Information Systems Advisory Council meeting in Santa Fe. **Dave Love** attended the NM Geographic Information Council Board meeting in Albuquerque and the EPA Regional Response meeting on hazardous materials and earthquakes in Carlsbad. **Susan Welch** attended a seminar in Albuquerque on grammar usage. **Debbie Goering**, **Lynne Hemenway**, and **Judy Vaiza** attended a seminar in Albuquerque on macros, tables, and forms in WordPerfect.

Virginia McLemore's article in the proceedings volume, "Energy resources of the Chihuahu Desert region," is referenced in *Service/News*, *Other publications*.



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New Mexico  
**GEOLOGY**

• Science and Service

New Mexico Bureau of Mines & Mineral Resources, Socorro, NM 87801-4796

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