

## New publications

### NMBMMR

\***Bulletin 150**—Geologic activities in the 90s, edited by J. Ahlen, J. Peterson, and A. L. Bowsher, 1994, 137 pp. \$15.00

**Errata:** Bulletin 150 sells for \$15.00, not \$5.00 as listed in the May issue.

\***Bulletin 133**—Soils, geomorphology, and multiple displacements along the Organ Mountains fault in southern New Mexico, by L. H. Gile, 1994, 91 pp., 60 figs. including 11 aerial photos. \$10.00

The Organ Mountains fault occurs along the eastern side of the Organ and San Andres Mountains in Doña Ana County, New Mexico. The fault is one of the youngest in New Mexico and is of particular local interest and significance because (1) episodes of faulting are accompanied by severe earthquake activity, (2) major centers of population are nearby, and (3) the fault is very close to the headquarters of White Sands Missile Range (WSMR). This report presents a study of soils, geomorphology, and evidence of both late Holocene and pre-Holocene displacements along the fault.

\***Guide to Bureau Services & Annual Report (1991-93)**, 1994, 32 pp. FREE

This pamphlet describes the services and facilities available to the citizens of New Mexico. It also includes a staff directory; a financial statement for fiscal years 1991, 1992, and 1993; and 1992 statistics for energy and mineral production, state revenue from taxes and royalties on energy and mineral production, and direct employment by the extractive industries. A healthy mineral industry is vitally important to the economy of New Mexico and to maintenance of public education and services.

\***Open-file List 7**—Open-file reports available from the New Mexico Bureau of Mines and Mineral Resources, 1994, 30 pp. FREE

\***Isochron/West**—The Bulletin of Isotopic Geochronology, no. 61, July 1994, 48 pp.

Cooperatively published at irregular intervals by New Mexico Bureau of Mines and Mineral Resources and Nevada Bureau of Mines and Geology, *Isochron/West* is a forum for papers on isotopic age-dating (except carbon-14) of rocks and minerals from the Western Hemisphere. A subscription to six issues (nos. 61-66) can be purchased for \$12.00 by writing to *Isochron/West*, % New Mexico Bureau of Mines and Mineral Resources, Campus Station, Socorro, New Mexico 87801. Contributions (manuscripts and correspondence about editorial matters or policies) should be sent to John Schilling, 1301 Royal Drive, Reno, Nevada 89503.

## USGS

### PROFESSIONAL PAPER

**1414-B**—Regional aquifers in Kansas, Nebraska, and parts of Arkansas, Colorado, Missouri, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: geohydrologic framework, by D. G. Jorgensen, J. O. Helgesen, and J. L. Imes, 1993, 72 pp., 25 plates in pocket (Regional Aquifer-System Analysis; central Midwest).

### BULLETIN

**2073**—Shorter contributions to paleontology and stratigraphy 1993, edited by W. J. Sando, 1994. Chapter E. Cenomanian (Upper Cretaceous) nautiloids from New Mexico is by W. A. Cobban and J. W. Kennedy; chapters are issued as a single volume and are not available separately.

### CIRCULARS

**1098**—Nonfuel mineral resources in the United States-Mexico border region; a progress report on information available from the Center for Inter-American Mineral Resources Investigations (CIMRI), by G. J. Orris, N. J. Page, J. G. Staude, K. S. Bolm, M. M. Carbonaro, F. Gray, and K. R. Long, 1993, 19 pp.

**1103-A**—USGS research on mineral resources, 1994; Part A, Program and abstracts, edited by L. M. H. Carter, M. I. Toth, and W. C. Day, 1994, 119 pp. (Ninth V. E. McKelvey forum on mineral and energy resources)

**1103-B**—USGS research on mineral resources, 1994; Part B, Guidebook for field trips, edited by C. H. Thorman and D. E. Lane, 1994, 115 pp. (Ninth V. E. McKelvey forum on mineral and energy resources)

### WATER-SUPPLY PAPER

**W-2400**—National water summary 1990-91; hydrologic events and stream water quality, compiled by R. W. Paulson, E. B. Chase, J. S. Williams, and D. W. Moody, 1993, 590 pp.

### SPECIAL PRINTING

Bandelier National Monument and vicinity, New Mexico. Reprinted on waterproof and tear resistant (plastic) stock rather than paper stock, folded.

### Other publications

Eisenberg, R. A., Harris, P. M., Grant, C. W., Goggin, D. J., and Conner, F. J., 1994, Modeling reservoir heterogeneity within outer ramp carbonate facies using an outcrop analog, San Andres Formation of the Permian Basin: Association of American Petroleum Geologists, Bulletin, v. 78, no. 9, pp. 1337-1359.

Karlstrom, K. E., and Daniel, C. G., 1994, Restoration of Laramide right-lateral strike slip

in northern New Mexico by using Proterozoic piercing points: Tectonic implications from the Proterozoic to the Cenozoic—*Reply*: Geology, v. 22, no. 9, pp. 863-864.

Kues, G. E., 1992, Ground-water-quality monitoring for septic-tank-use effects, central New Mexico; in Borden, R. C., and others (eds.), Future availability of ground-water resources: American Water Resources Association, Technical Publication Series TPS, Proceedings, pp. 273-276.

Lopes, T. J., 1991, Effects of uranium mining, Puerco River, New Mexico; in Ritter, W. F., ed., Irrigation and drainage engineering: American Society of Civil Engineers, Proceedings, pp. 508-515.

Luo, M., Baker, M. R., and LeMone, D. V., 1994, Distribution and generation of the overpressure system, eastern Delaware Basin, western Texas and southern New Mexico: Association of American Petroleum Geologists, Bulletin, v. 78, no. 9, pp. 1386-1405.

Scott, A. R., Kaiser, W. R., and Ayers, W. B., Jr., 1994, Thermogenic and secondary biogenic gases, San Juan Basin, Colorado and New Mexico—implications for coalbed gas producibility: Association of American Petroleum Geologists, Bulletin, v. 78, no. 8, pp. 1186-1209.

Soreghan, G. S., 1994, Stratigraphic responses to geologic processes: Late Pennsylvanian eustasy and tectonics in the Pedregosa and Orogrande basins, Ancestral Rocky Mountains: Geological Society of America, Bulletin, v. 106, no. 9, pp. 1195-1211.

Webster, J. D., and Duffield, W. A., 1994, Extreme halogen abundances in tin-rich magma of the Taylor Creek Rhyolite, New Mexico: Economic Geology, v. 89, no. 4, pp. 840-849.

Woodward, L. A., 1994, Restoration of Laramide right-lateral strike slip in northern New Mexico by using Proterozoic piercing points: Tectonic implications from the Proterozoic to the Cenozoic—*Comment*: Geology, v. 22, no. 9, pp. 862-863.

## Open-file reports

### USGS

**93-144**—Sources of information and data pertaining to geohydrology in the vicinity of the Roswell Basin, in parts of Chaves, Eddy, De Baca, Guadalupe, Lincoln, and Otero Counties, by D. P. McAda and T. D. Morrison, 1993, 78 pp.

**93-337**—Petroleum exploration plays and resource estimates, 1989, onshore United States; Region 4, Rocky Mountains and Northern Great Plains, edited by R. B. Powers, 1993, 194 pp.

**93-522**—Petroleum exploration plays and resource estimates, 1989, onshore United States; West Texas and eastern New Mexico, edited by R. B. Powers, 1993, 84 pp.

**93-532**—Distribution of mineral deposits in the United States-Mexico border region, by Center for Inter-American Mineral Resource Investigations (CIMRI), with contributions by G. J. Orris, K. S. Bolm, M. Carbonaro, F. Gray, K. R. Long, N. J. Page, J. M. G. Staude, and T. Wells, 1993, 29 pp.

# New Mexico Bureau of Mines and Mineral Resources staff notes

The Bureau filled two temporary (3-month) positions by hiring **Jesse Dengate** as a Cartographic Aide and **David Ennis** as a Research Technician. Anniversaries of our staff with five or more years of service from June through August are: **Charles Chapin**, 24; **Albert Baca**, 22; **Barbara Popp**, 16; **Orin Anderson**, 15; **Ibrahim Gundiler**, **Lynne Hemenway**, **Dave Love**, and **Virginia McLemore**, 14; **Jane Love**, 13; **Annabelle Lopez** and **Manuel Vasquez**, 11.

Several NMBMMR staff attended the American Association of Petroleum Geologists annual meeting. **Gretchen Hoffman** received the AAPG Energy Minerals Division (EMD) Distinguished Service Award, organized short courses for the EMD, and attended the USGS Trace-element Course. **Neil Whitehead, III** presented the poster, "Fractures at the surface in the San Juan Basin, New Mexico and Colorado: implications for petroleum, ground water and engineering," that was judged to be the outstanding poster presentation of the Division of Environmental Sciences. **Steve Cather** presented a paper written with **Charles Chapin**, "Tectonic setting of the axial basins of the northern and central Rio Grande rift" and attended a field trip; **Ron Broadhead** attended the AAPG House of Delegates meeting and served as Matson Award judge; he also attended the Potential Gas Committee meeting of the Potential Gas Agency. **Frank Kottlowski** attended the Energy Minerals Division and Associate Editors meetings; he served as Chairperson of EMD's Awards Committee and also judged EMD posters.

**Norma Meeks** was in charge of publication sales for the Bureau.

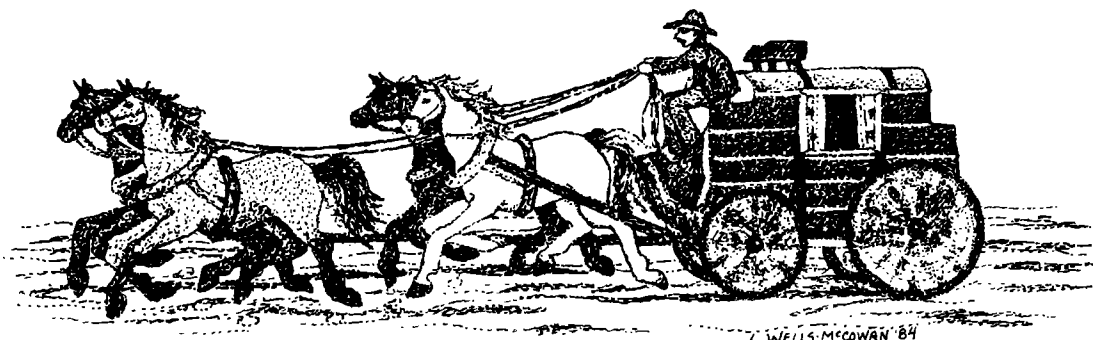
**Nelia Dunbar**, **William McIntosh**, and **Matthew Heizler** attended the 8th Annual ICOG meeting where **William McIntosh** presented a paper, "Application CO<sub>2</sub> laser heating in Ar/Ar geochronology," and **Matthew Heizler** presented a paper, "<sup>40</sup>Ar/<sup>39</sup>Ar results of incompletely degassed sanidine: age of Lathrop wells volcanism."

Other meetings attended by NMBMMR staff include: Water Quality Control Commission (**Charles Chapin**, **Lynn Brandvold**); Transboundary Resource Inventory Program (**Charles Chapin**); Coal Surface Mining Commission (**Charles Chapin**); SME Foundation Board of Trustees (**George Austin**); Clay Minerals Society Council and annual meeting (**George Austin**); GISAC (**Glen Jones**); New Mexico Mining Association Board of Directors (**Frank Kottlowski**); Mining Commission hearings on proposed hard-rock reclamation (**Frank Kottlowski** testified); National Mining and Mineral Education Conference (**Susan Welch**); Environmental Education Association of NM Forum (**Susan Welch**); Borderland Forum 95, the 31st Forum on the Geology of Industrial Minerals, preparation meeting (**George Austin**, **James Barker**, **Gretchen Hoffman**); Intra-Agency Consortium on Border Resources (**Charles Chapin**); Chaparral Rockhounds of Roswell (**Virgil Lueth**, invited talk, "Mineralogy of Groundwater"); Southwest Institute Field Seminar, "The Border region: southwestern New Mexico, southeastern Arizona, and northern Chihuahua" (**Dave Love** gave daily talks during the

seminar and gave the invited talk, "General geology of the Border region"); Four Corners Geological Society Meeting and Field Trip (**Frank Kottlowski**); Society for Environmental Geochemistry and Health (**Lynn Brandvold**, "Lead content of plants and soils from three abandoned smelter areas").

In recognition of his work as a member of the Costilla Dam Independent Review team, which led to the State's recovery of nearly \$5 million in cost overruns, **Bill Haneberg** was awarded a Certificate of Distinction from NM State Engineer Eluid Martinez. **James Barker** and **George Austin** met with BLM and IMC Fertilizer for a WIPP study session. **John Hawley** and **Dave Love** met with Forest Service, Rocky Mountain Forest and Range Experiment Station, for a middle Rio Grande ecological planning session. **Mike Whitworth** judged technical presentations for the NAMES/MIMES program. **Charles Chapin**, **Ron Broadhead**, and **Glen Jones** attended a meeting at the Earth Data Analysis Center (EDAC) to discuss possible joint projects. **Dave Love** assisted in teaching both the Seismic Sleuths Workshop for Teachers Grades 7-12 sponsored by Federal Emergency Management Agency and American Geophysical Union and also the "Train-the-Trainer" Earthquake Workshop for Teachers Grades K-6 sponsored by Federal Emergency Management Agency. **Lynn Brandvold** attended the Water Ecology Project orientation and conducted the 3-week Water Ecology Program.

Articles by **Mike Whitworth** and coauthors have been published in *Applied Geochemistry*, *Environmental Geology*, *Journal of Membrane Science*, and *Water Resources Research*; **Bill Haneberg** was coauthor of U.S. Geological Survey Bulletin 2059, Chapter C.



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