

New publications

NMBMMR

***Circular 196**—Late Holocene displacement along the Organ Mountains fault in southern New Mexico, by Leland H. Gile, 1987, 42 pp. \$6.00

A comprehensive study of soils and geomorphology of an extensive fault system in southern New Mexico. Alluvial fans of several ages have been displaced by the fault system, indicating long-term faulting at different times in the same place. These episodes of climatically controlled erosion and deposition provide both discrete deposits and, where the deposits can be dated, a chronology that is independent of faulting and the sedimentation associated with it. The faulting, which was determined to be relatively recent, has particular significance because of potential effects on current urban development and storage of hazardous wastes.

***Geologic Map 55**—Geology of Pueblo Viejo Mesa quadrangle, Socorro and Cibola Counties, New Mexico, revision by J. C. Osburn, 1987, 1 sheet approximately 8" x 10 1/2", scale 1:24,000. Free

Recent work in Pueblo Viejo Mesa quadrangle has shown that the members of the Tres Hermanos Formation were mapped incorrectly in the central part of the quadrangle and that poor but mappable outcrops of the Rio Salado Tongue of the Mancos Shale are exposed in the same area. These errors were corrected during recent mapping as shown in this updated version of the area. This four-color revision is provided as a free insert with the purchase of GM-55, as well as being available to those who have purchased the map sheet since its release in 1984.

USGS

PROFESSIONAL PAPER

1300—Wilderness mineral-potential assessment of mineral-resource potential in U.S. Forest Service lands studied 1964–1984, edited by S. P. Marsh, S. J. Kropschot, and R. G. Dickinson, 1984, v. 1, 550 pp.; v. 2, 1183 pp.

WATER-RESOURCES INVESTIGATIONS

WRI-87-4015—Ground-water flow and shallow aquifer properties in the Rio Grande inner valley south of Albuquerque, Bernalillo County, New Mexico, by K. D. Peter, 1987, 29 pp.

Other publications

Dubiel, R. F., Blodgett, R. H., and Bown, T. M., 1987, Lungfish burrows in the Upper Triassic Chinle and Dolores Formations, Colorado Plateau: *Journal of Sedimentary Petrology*, v. 57, no. 3, pp. 512–521.

Harder, Vicki, 1987, Fission tracks in fluorite and apatite with geologic applications: Unpublished M.S. thesis, University of Texas (El Paso).

Johansen, S. J., 1986, Provenance of the Mesa-verde Group of west-central New Mexico: Unpublished M.S. thesis, University of Texas (Austin), 310 pp.

Kuentz, D. C., 1986, The Otowi Member of the Bandelier Tuff—a study the petrology, petrography, and geochemistry of an explosive silicic eruption, Jemez Mountains, New Mexico: Unpublished M.S. thesis, University of Texas (Arlington), 168 pp.

Lee, Y. I., and Friedman, G. M., 1987, Deep-burial dolomitization in the Ordovician Ellenburger Group carbonates, west Texas and southeastern New Mexico: *Journal of Sedimentary Petrology*, v. 57, no. 3, pp. 544–557.

Mercer J. W., 1987, Compilation of hydrologic data from drilling the Salado and Castile Formations near the Waste Isolation Pilot Plant (WIPP) site in southeastern New Mexico: Sandia Laboratories, SAND86-0954, 39 pp.

Pollastro, R. M., and Pillmore, C. L., 1987, Mineralogy and petrology of the Cretaceous-Tertiary boundary clay bed and adjacent clay-rich rocks, Raton Basin, New Mexico and Colorado: *Journal of Sedimentary Petrology*, v. 57, no. 3, pp. 456–466.

Sorauf, J. E., 1987, The rugose coral *Tabulophylum Traversensis* of the Oñate Formation (Middle Devonian) of the Mud Springs Mountains, New Mexico: *Journal of Paleontology*, v. 61, no. 1, pp. 14–20.

Stamets, R. L., 1986, Drilling mud disposal—environmental concerns and regulatory solutions: The Interstate Oil Compact Commission Committee Bulletin, v. 28, no. 1, pp. 40–41.

Walters, L. J., Jr., Owen, D. E., Henley, A. L., Winsten, M. S., and Valek, K. W., 1987, Depositional environments of the Dakota Sandstone and adjacent units in the San Juan Basin utilizing discriminant analysis of trace elements in shales: *Journal of Sedimentary Petrology*, v. 57, no. 2, pp. 265–277.

Williams, F. L., and Smith D. M., Diffusion of gases in New Mexico coals, 1987: New Mexico Research and Development Institute, final technical report 2-74-4122, 98 pp.

Open-file reports

NMBMMR

***259**—Organic geochemical analyses of the Keradamex No. SM32-1 uranium test (Cibola County), Continental Oil Co. No. 1 L-Bar well (Sandoval County), and Richfield Oil Co. No. 1 Drought Booth well (McKinley County), New Mexico, by S. R. Jacobson, J. D. Saxton, K. M. Tully, and J. R. Allen, 1985, 31 pp. \$6.20

***260**—Organic geochemical analyses of Superior Oil Co. No. 1-14 San Mateo well, McKinley County, New Mexico, by S. R. Jacobson, J. D. Saxton, K. M. Tully, and J. R. Allen, 1985, 16 pp. \$3.20

***261**—Geochemical evaluation of the Cities Service No. 1 Ridley A well, Roosevelt County, New Mexico, by J. E. Keal, Jr., 1983, 24 pp. \$4.80

***262**—Organic geochemical analyses of the Santa Fe Energy Operating Partners No. 1 Rohmer well, Eddy County, New Mexico, by G. S. Bayliss, 1987, 57 pp. \$11.40

***272**—Hydrocarbon source-rock analyses, True Oil Company No. 21 Medina well, Colfax County, New Mexico, by Core Laboratories, Inc., and Chevron U.S.A., Inc., 1987, 8 pp. \$1.60

***273**—Hydrocarbon source-rock analyses, Amoco Production Company No. 1 Baker well, Quay

County, New Mexico, by Geochem Laboratories, Inc., and Chevron U.S.A., Inc., 1987, 18 pp. \$3.60

***274**—Organic geochemical analyses, Baker and Taylor No. 1-10 State well, Quay County, New Mexico, by Chevron U.S.A., Inc., 1987, 2 pp. \$0.40

***275**—Organic geochemical analyses, Sunray Midcontinent Oil Company No. 1 Briscoe well, Quay County, New Mexico, by Geochem Laboratories, Inc., and Core Laboratories, Inc., 1987, 15 pp. \$3.00

***276**—Organic geochemical analyses, Superior Oil Company No. 1 Blackwell well, Torrance County, New Mexico, by Geochem Laboratories, Inc., 1987, 3 pp. \$0.60

***277**—Organic geochemical analyses, Olsen No. 1 Means well, Torrance County, New Mexico, by Geochem Laboratories, Inc., 1987, 4 pp. \$0.80

***278**—Organic geochemical analyses, Gardner No. 1 Kidwell well, Torrance County, New Mexico, by Geochem Laboratories, Inc., 1987, 4 pp. \$0.80

***279**—Organic geochemical analyses, Lea No. 1 Milburn well, Torrance County, New Mexico, by Geochem Laboratories, Inc., 1987, 3 pp. \$0.60

***280**—Hydrocarbon source-rock analyses, Houston Oil and Minerals No. 14-28 Federal well, Torrance County, New Mexico, by Geochem Laboratories, Inc., 1987, 7 pp. \$1.40

USGS

***78-466**—Preliminary geologic map of the Aztec 1° x 2° quadrangle, northwestern New Mexico and southern Colorado, by Kim Manley and G. R. Scott, 1978, 8 pp., 1 pl. (not reproducible). \$1.60

***83-743**—Maps showing natural aggregates of the conterminous United States, by W. H. Langer and D. L. Belval, 1983, 19 pp., 2 pls. (not reproducible). \$3.80

***84-608**—Availability of hydrologic data in San Juan County, New Mexico, by R. L. Klausung and G. E. Welder, 1984, 142 pp., 1 pl. (not reproducible). \$28.40

***87-37**—Preliminary hydrologic data for wells tested in Nash Draw, near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico, by S. F. Richey, 1987, 136 pp. \$27.20

***87-70**—Deep-seated landslide deposits map showing landslide deposits in northwestern New Mexico, by F. Guzzetti and E. E. Brabb, 1987, 2 pls (not reproducible).

***87-184**—Thermal conductivity of samples from borehole VC-1, Valles caldera, New Mexico, by R. J. Munroe and J. H. Sass, 1987, 16 pp. \$3.20

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***MLA-6-87**—Mineral resources of the Organ Mountains Wilderness study area (NM-030-074), Doña Ana County, New Mexico, by R. E. Jeske, 1987, 87 pp., 1 pl. (not reproducible) \$17.40

***MLA-43-87**—Mineral investigation of a part of the Brokeoff Mountains (NM-030-112) Wilderness study area, Otero County, New Mexico, and the Lonesome Ridge (NM-060-801) and a part of the Devil's Den (NM-060-145) Wilderness study area, Eddy County, New Mexico, by P. A. Corbetta, 1987, 22 pp. \$4.40

New Mexico Bureau of Mines and Mineral Resources staff notes

Staff stable; more than 110 people applied for the field geologist opening. Anniversaries of staff who have had five or more years of service from June through August 1987 were: Robert Bieberman, 37; Frank Kottlow-ski, 36; Chuck Chapin, 17; Orin Anderson, 8; Dave Love, Lynne McNeil, and Virginia McLemore, 7; Jane Love, 6; Albert Baca and Deborah Shaw, 5.

Dave Love's talk at the New Mexico Geographic Information Council meeting was "Progress report on New Mexico Bureau of Mines and Mineral Resources digitizing activities"; the meeting was also attended by Mike Goba and Darrell Daude. Bob North's talk at the mineral symposium in Las Vegas was "History and geology of the San Pedro gold mine." Bob Eveleth talked to the Los Alamos Gem and Mineral Club on "Too good to be true—a synopsis of New Mexico mining scams." Lynn Brandvold was our representative at the Water Quality Control Commission meetings, and she attended the Society of Applied Spectroscopy meeting. Don Wolberg represented us at the Environmental Round Table. Ron Broadhead attended the Roswell Geological Society meeting. George Austin attended the Hazardous Waste Management Society meetings. Mike Goba's talk at the NMBMMR-Geoscience seminar was on the functions of the Bureau information center. Don Wolberg was nominated for Secretary of The Paleontological Society. New Mexico Tech's Sigma Xi chapter elected Ron Broadhead Treasurer; Marshall Reiter joins Dave Love on the Tech Nominating Committee.

Phase III of NMBMMR's Superconducting Super Collider work was funded for \$167,227, of which \$96,700 is for outside contracts; this involves salary-supported staff, Gary Johnpeer, Danny Bobrow, Sylveen Robinson-Cook, Joe Kelliher, and Don Barrie, with input from John Hawley, Ron Broadhead, Bill Stone, Dave Love, Jim Barker, Virginia

McLemore, Bob North, and George Austin. The statewide Petroleum Source-Rock Geochemical Data Base project, which is sponsored by NMBMMR and the Oil Conservation Division, with Roy Johnson as the lead petroleum geologist and involving Sam Thompson, Ron Broadhead, Robert Bieberman, and Frank Kottlowski, has received contributions of \$51,816 from 20 petroleum companies, which will be matched 1:2 by the New Mexico Research and Development Institute (NMR&DI); to date, geochemical analyses of five wells have been obtained. The report for the Coal Quality of Strippable Coals in New Mexico project, covering the second year of coal core drilling and analyses, is available from NMR&DI. The report was funded by NMR&DI and five coal companies.

George Austin attended the Industrial Minerals Forum in Illinois. Jacques Renault's poster at the Geological Society of America Cordilleran Section meeting was entitled "Possible orbital forcing of Miocene alluvial sedimentation." At the AAPG meeting in Los Angeles Ron Broadhead and Bill King's poster session was on "Petroleum geology of Pennsylvanian and Lower Permian strata in the Tucumcari Basin"; Sam Thompson, Chuck Chapin, and Frank Kottlowski were on the Publications Committee; Sam and Chuck attended workshops and field trips; Frank attended the AAPG Advisory Council and Energy and Minerals Division Executive Board meeting, the latter as the incoming (EMD) President. George Austin and Frank Kottlowski attended the annual meeting of the Association of American State Geologists.

Yates Brothers donated their sample library consisting of 3,800 boxes of cuttings; this was ramrodded by Art Bowsher and Ray Beck of Yates Brothers and handled by Robert Bieberman and Richard Chavez. Bill Stone attended the flood hazard meeting for the state and the Albuquerque Water Quality

Steering Committee. Frank Kottlowski attended the New Mexico Mining Association Board of Directors meeting, chaired the Coal Surface Mining Commission hearing in Santa Fe, and gave a talk on "Mineral Resources of the San Juan Basin" (with input from many staff members) to the New Mexico State Transportation Authority in Farmington. John Hawley, Dave Love, Richard Chamberlin, and Larry Smith attended sessions with the Bureau of Indian Affairs and Soil Conservation Service on the Jicarilla Apache Reservation to review relationships between geology and soil.

Orin Anderson and Sam Thompson attended the Southwest section meeting of AAPG. Virginia McLemore attended the radon meeting at USGS headquarters. Bill Stone participated in the National Water Well Association short course in Denver. Mike Goba obtained mining records from the Montana School of Mines and Technology in Butte while on vacation. Dave Love participated in Southwest Institute's field trip to the Canyon Country of the Colorado Plateau where he gave lectures on geology ranging from the Four Corners area to Grand Canyon and Brice Canyon.

An article in the *Journal of Paleontology* by D. M. Rohr and A. W. Potter is entitled "*Rousseauspira*: a new gastropod operculum from the Ordovician of Alaska and California," named in honor of Rousseau Flower. Gary Johnpeer attended field sessions on landslides in the Pecos area with other state agencies and gave a talk to the Civil Emergency Preparedness Division on earthquake hazards in New Mexico. Jamie Robertson participated in the economic geology field trip to Iberia. Chuck Chapin, Jim Barker, and Mark Bowie attended the symposium on the Sevilleta National Wildlife Refuge. Frank Kottlowski attended the Northwest Quadrant economic review by the New Mexico Mining Association in Farmington. Bill Stone attended the 75th anniversary celebration of the Jornada Experimental Range and presented a poster on "Rainfall—runoff relationships on mountain slopes." He also field checked waste-disposal sites near La Union, Kirtland EPNG plant, and El Cerro Mission.

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• Science and Service

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