

## New publications

### NMBMMR

\***Resource Map 12** (black & white), revised from 1980 edition—large 26" × 29" satellite photomap of New Mexico, scale 1:1,000,000, folded \$3.00

\***Pricelist 17**—Publications available from the New Mexico Bureau of Mines and Mineral Resources, April 1983 FREE

\***Open-file List 2**—Open-file reports available from the New Mexico Bureau of Mines and Mineral Resources, March 1983 FREE

### CORRECTION TO PREVIOUS ANNOUNCEMENT:

\***Resource Map 14**—Active mines and processing plants of New Mexico, by M. J. Logsdon, 1982 (revision of RM-9). Plate A—Full-color, 8½" × 11" map (scale 1:3,500,000) of state's energy and mineral resources. Plate B—Blue-line copy on 1:1,000,000 scale is continuously updated location map of active mines and processing plants, cross referenced with eight directories of specific commodities.

Plate A—\$ .50  
Plate B—\$3.00  
Directories—\$5.80

### USGS

#### MISCELLANEOUS FIELD STUDIES MAP

**1344-B**—Geophysical surveys of the Hells Hole Further Planning Area (RARE II), Greenlee County, Arizona, and Grant County, New Mexico, by R. A. Martin, 1981, scale 1:62,500

**1344-E**—Mineral resource potential map of the Hells Hole Further Planning Area (RARE II), Greenlee County, Arizona, and Grant County, New Mexico, by James C. Ratté, Jerry R. Hassemer, and Ronny A. Martin, U.S. Geological Survey, and John P. Briggs, U.S. Bureau of Mines, 1982, 7 p. text, 1 map sheet, scale 1:62,500

#### PROFESSIONAL PAPER

**1237**—Geochemistry of some rock, mine spoils, stream sediments, soils, plants, and waters in the western energy region of the conterminous United States, by R. J. Ebens and H. T. Shacklette, 1982

#### GEOLOGIC QUADRANGLE MAP

**1556**—Geologic map of the Becker quadrangle, Valencia and Socorro Counties, New Mexico, by D. A. Myers and J. A. Sharps, 1981, scale 1:24,000

### Geological Society of America

Merging of Upper Cretaceous Point Lookout Sandstone and its Hosta Tongue, southwestern San Juan Basin, New Mexico [abs.], by V. V. Cavaroc and R. M. Flores, 1982, Geological Society of America, Abstracts with Programs, v. 14, no. 6, p. 306

Microearthquakes near the Albuquerque volcanoes, New Mexico, by L. H. Jaksha and others, 1981, Geological Society of America, Bulletin, pt. 1, v. 92, p. 31-36

Redefinition and description of the Los Pinos Formation of north-central New Mexico, by Kim Manley, 1981, Geological Society of America, Bulletin, v. 92, no. 12, p. 984-989

Tectonic setting and geology of base and precious metal deposits, southwestern Mogollon-Datil

volcanic field, New Mexico and Arizona [abs.], by J. C. Ratté and others, 1982, Geological Society of America, Abstracts with Programs, v. 14, no. 4, p. 226

Upper Jurassic ground-water flow in the Colorado Plateau—the key to formation of uranium ore deposits [abs.], by R. F. Sanford, Geological Society of America, Abstracts with Programs, v. 13, no. 7, p. 545

### U.S. Department of Energy

**PGJ-016 (80)**—Uranium resource evaluation of the Albuquerque 1° × 2° quadrangle New Mexico, by M. W. Green, 1980

**PGJ-024 (80)**—Uranium resource evaluation of the Albuquerque 1° × 2° quadrangle, New Mexico and Arizona, by M. W. Green, 1980

**TME 3148**—Basic data report, Borehole WIPP-12 deepening, Waste Isolation Pilot Plant (WIPP) project, southeastern New Mexico, by S. R. Black, 1982, D'Appolonia Consulting Engineers, Inc., 4 tables, 4 figs., 3 appendices

### U.S. Bureau of Mines

**MLA 143-82**—Mineral investigation of the Columbine-Hondo roadless area, Taos County, New Mexico, by J. P. Briggs, 1982

The microbial flocculation of phosphate and potash slimes, by C. L. Brierley and G. R. Lanza, 1982, contract no. JO199150, 131 p.

### Other miscellaneous publications

Differentiation of contemporaneous delta-front and beach-bar lithofacies of the Upper Cretaceous Pictured Cliffs Sandstone, southwest San Juan Basin, New Mexico, by R. J. Flores and M. R. Erpenbeck, 1981, The Mountain Geologist, v. 18, no. 2, p. 23-34

Origin of intraformational folds in the Jurassic Todilto Limestone, Ambrosia Lake uranium mining district, McKinley County, New Mexico [abs.], by M. W. Green, 1981, American Association of Petroleum Geologists, Bulletin, v. 65, no. 3, p. 560

Stratigraphic correlation chart for western Colorado and northwestern New Mexico, by M. E. MacLachlan, 1981, New Mexico Geological Society, Guidebook 32nd field conference, p. 75-79

Mesozoic stratigraphy of the Paradox Basin—an overview, in Geology of the Paradox Basin, by C. M. Molenaar, 1981, Rocky Mountain Association of Geologists, Guidebook, p. 119-127

The P-wave velocity of the uppermost mantle of the Rio Grande rift region of north-central New Mexico, by J. N. Murdock and L. H. Jaksha, 1981, Journal of Geophysical Research, v. 86, no. B8, p. 7,055-7,058

Evaluating chemical character of soil material for suitability in rehabilitating mined land in the San Juan Basin, New Mexico, by R. C. Severson, 1981, Soil Science Society of America, Journal, v. 45, no. 2, p. 396-404

### Journal of Sedimentary Petrology

Stromatolitic framework of carbonate mud mounds, by B. R. Pratt, 1982, v. 52, no. 4, 1 table, 19 figs., p. 1,203-1,227

Silica recrystallization in petrified wood, by C. L. Stein, 1982, v. 52, no. 4, 5 figs., p. 1,277-1,282

### New Elsevier journal

Elsevier Scientific Publishing Company of Amsterdam, The Netherlands, announces publication of a new journal *Mining Science and Technology*. The journal, which will begin publication during the second half of 1983, will be published quarterly at a subscription cost of \$86.00 per year. Covering all aspects of extraction of solid-mineral materials such as metallic and nonmetallic ores and coals and other solid sources of secondary materials, the journal will include topics such as exploration and mine economics, mine planning and design, surface and underground excavation methods and equipment, ground control, mine drainage, mine surveying, mine transport systems, ventilation, environmental control, waste disposal, mine safety, legal aspects, and future mining. Further information is available from Elsevier/North-Holland, Inc., 52 Vanderbilt Avenue, New York, NY 10017.

### Isochron/West

Isochron/West, a journal of isotopic geochronology, is published three times a year by the Nevada Bureau of Mines and Geology and the New Mexico Bureau of Mines and Mineral Resources. The bulletin covers isotopic age dating (except carbon-14) on rocks and minerals from the Western Hemisphere. Subscription rates are \$12.00 for 6 issues (two years). Back issues are available at \$2.00 per issue. Correspondence regarding subscriptions should be addressed to Isochron/West, % New Mexico Bureau of Mines and Mineral Resources, Socorro, NM 87801.

## Open-file reports

### NMBMMR

\***133**—A two-dimensional hydrologic model of the Animas Valley, Hidalgo County, New Mexico, by K. M. O'Brien and W. J. Stone, 1983, 51 p., 1 table, 16 figs. \$10.20

\***162**—Geology of the perlite deposits of the No Agua Peaks, Taos County, New Mexico, by K. A. Naert, L. A. Wright, and C. P. Thornton, 1980, 88 p., 2 tables, 33 figs. \$17.60

\***178**—Geology and coal resources of the Tejana Mesa quadrangle, Catron County, New Mexico, by G. H. Roybal, 1982, 38 p., 7 figs., 1 map, appendix \$9.10

\***179**—Preliminary evaluation of the mineral resource potential of the Sierra Ladrones Wilderness study area, Socorro County, New Mexico, by R. M. Chamberlin, M. J. Logsdon, R. W. Eveleth, R. A. Bieberman, G. H. Roybal, J. C. Osburn, R. M. North, V. T. McLemore, and R. H. Weber, 1982, 193 p., 9 tables, 8 figs., 8 maps, 3 appendices \$41.60

\***179s**—Summary version of Open-file report 179, by R. M. Chamberlin, 1982, 19 p., 1 fig., 1 map \$4.30

### USGS

\***83-2**—Geologic references index for the Navajo Indian Reservation, Arizona, New Mexico, and Utah, by J. D. Bliss, 1983, 100 p.

\***81-564**—The geothermal research program of the U.S. Geological Survey, by W. A. Duffield and Marianne Guffanti, 1981

\***82-324**—Radioactivity and geochemistry of selected mineral-spring waters in the western United States—basic data and multivariate statistical analysis, by J. K. Felmlee and R. A. Cadigan, 1982

MINING REGISTRATIONS  
(AUG. 6, 1982 THROUGH SEPT. 8, 1982)

State Mine Inspector

2340 Menaul N.E.

Albuquerque, NM 87107

- \*81-182—Element concentrations in rehabilitation species from thirteen coal strip mines in five western states and Alaska, by L. P. Gough and R. C. Severson, 1981
- \*82-207—Geology and ore deposits of the Section 23 mine, Ambrosia Lake district, New Mexico, by H. C. Granger and E. S. Santos, 1982
- \*82-69—Origin of intraformational folds in the Jurassic Todilto Limestone, Ambrosia Lake uranium mining district, McKinley and Valencia Counties, New Mexico, by M. W. Green, 1982
- \*81-763—Stratigraphic succession, isotopic ages, partial chemical analyses, and sources of certain silicic volcanic ash beds (4.0 to 0.1 m.y.) of the western United States, by G. A. Izett, 1981
- \*81-203—Lithologic descriptions of cutting samples, Mariano Lake-Lake Valley drilling project, McKinley County, New Mexico, holes 4 and 4A, by A. C. Huffman and others, 1981
- \*81-1207—Lithologic descriptions, core and cutting samples, Mariano Lake-Lake Valley drilling project, McKinley County, New Mexico, hole number 1, by A. R. Kirk and others, 1981
- \*81-1204—Lithologic descriptions, core and cutting samples, Mariano Lake-Lake Valley drilling project, McKinley County, New Mexico, hole number 6, by A. R. Kirk and others, 1981
- \*81-1205—Lithologic descriptions, core and cutting samples, Mariano Lake-Lake Valley drilling project, McKinley County, New Mexico, hole number 8, by A. R. Green and others, 1981
- \*81-1206—Lithologic descriptions, core and cutting samples, Mariano Lake-Lake Valley drilling project, McKinley County, New Mexico, hole number 7, by A. R. Kirk and others, 1981
- \*81-1038—Revised classification of terrestrial volcanoes and catalog of topographic dimensions, with new results on edifice volume, by R. J. Pike and G. D. Clow, 1981
- \*81-1154—Illustrations of plant microfossils from the Morrison Formation-II, Plant microfossils from the Westwater Canyon Member, by R. H. Tschudy and others, 1981
- \*81-1208—Lithologic descriptions of cutting samples, Mariano Lake-Lake Valley drilling project, McKinley County, New Mexico, hole number 2, by R. S. Zech and others, 1981
- \*81-1209—Lithologic descriptions, core and cutting samples, Mariano Lake-Lake Valley drilling project, McKinley County, New Mexico, hole number 5, by R. S. Zech and others, 1981
- \*81-1210—Lithologic descriptions, core and cutting samples, Mariano Lake-Lake Valley drilling project, McKinley County, New Mexico, hole number 7A, by R. S. Zech and others, 1981 □

Date and operation	Operators and owners	Location
8-6-82 metal	Operator—Ortiz, Mountain States Constructor's, Station B, Box 6098, Albuquerque, NM 87107; Gen. Mgr.: Steve Benoit, same address, phone: 345-4401; Person in charge: Gayle Hampton, Box 825, Moriarty, NM, phone 242-1064; Other official: Fidel Sanchez; Property owner—Goldfields Operating Co.	Santa Fe Co.; sec. 19, T. 17 N., R. 7, 8 E.; private land; from town of Cerrillos, turn off NM-14, drive approximately 1 mi west, turn south on improved dirt road and drive approximately 7 mi to mine site; gold-copper; surface-open pit
8-5-82 tails pond	Operator—#1 Tails Pond, West Arc Welding & Machine Works, 212 S. Bullard, Silver City, NM 88061; Gen. Mgr.: Ray F. Leon, Jr., same address, phone: 538-2671; Person in charge: Gene Gallassini, same address and phone; Gen. Supt.: Thomas D. McArthur, same address and phone; Property owner—Kennecott Minerals Company	Grant Co.; secs. 31, 6, T. 18 S., 19 S., R. 12 W.; private land; Hurley
8-26-82 silver, gold	Operator—Center shaft, Summit Minerals, Inc., Box W, Duncan, AZ 85534; Gen. Mgr.: Fred Dollarhide, same address, phone: 359-2239; Person in charge: D. E. Hanson, phone: 359-2835; Property owner—Summit Minerals, Inc.	Grant Co.; sec. 1, T. 16 S., R. 21 W.; Steeple Rock mining district; underground; private land; 12 mi north of Duncan, down Carlisle Road
8-26-82 silver, gold	Operator—Summit mine, Summit Minerals, Inc., Box W, Duncan, AZ 85534; Gen. Mgr.: Fred Dollarhide, Duncan, phone: 359-2239; Person in charge: D. E. Hanson, phone: 359-2835; Property owner—Summit Minerals, Inc.	Grant Co.; sec. 16, T. 16 S., R. 21 W.; Steeple Rock mining district; underground; private land; 13 mi north of Duncan, down Carlisle Road
8-26-82 silver, gold	Operator—East Camp, Summit Minerals, Inc., Box W, Duncan, AZ 85534; Gen. Mgr.: Fred Dollarhide, Duncan, phone: 359-2239; Person in charge: D. E. Hanson, phone: 359-2835; Property owner—Summit Minerals, Inc.	Grant Co.; sec. 8, T. 16 S., R. 21 W.; Steeple Rock mining district; underground; private land; 16 mi north of Duncan, down Carlisle Road
9-8-82 gold, silver	Operator—Woodlawn, Carl Davis, Rt. 8, Box 290, Silver City, NM 88061; Gen. Mgr.: Carl E. Davis, same address, phone: 538-2769; Other official: P. L. Hunter, Box 1162, Silver City, NM 88062; Property owner—B. H. Tiller, 11000 Dyer, El Paso, TX 79924	Grant Co.; sec. 25, T. 16 S., R. 15 W.; Juniper Hill mining district; underground; federal land; down Walnut Creek, approximately 6 mi from Little Walnut Forest Service campground

(TO BE CONTINUED NEXT ISSUE)

**Sabinoso district**

(continued from p. 38)

- Griggs, R. L., and Hendrickson, G. S., 1951, Geology and ground-water resources of San Miguel County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-water Report 2, 121 p.
- Kelley, V. C., 1972, Triassic rocks of the Santa Rosa country, in East-central New Mexico: New Mexico Geological Society, Guidebook 23rd field conference, p. 84-90
- Meek, W. B., 1953, Preliminary reconnaissance report—Unknown property in sec. 28, T. 17 N., R. 23 E.: U.S. Atomic Energy Commission, Report DEB-RR-468, 1 p.
- Perhac, R. M., 1953, Preliminary reconnaissance report—James Lujan Ranch: U.S. Atomic Energy Commission, Report DEB-RRA-736, 2 p.
- Perhac, R. M., Jedlinka, J. J., and Collins, G. E., 1953, Preliminary reconnaissance report—Garfield Lester Ranch (Anomaly No. 3): U.S. Atomic Energy Commission, Report DEB-RRA-468, 1 p.

- Reid, B. E., Griswold, G. B., Jacobsen, L. C., and Lessard, R. H., 1980, National uranium resource evaluation, Santa Fe quadrangle, New Mexico: U.S. Department of Energy, Preliminary Report PGJ-021(80), 55 p.
- U.S. Atomic Energy Commission, 1966, U.S. Atomic Energy Commission airborne radiometric reconnaissance in Arizona, California, Nevada, and New Mexico, 1953-1956: U.S. Atomic Energy Commission, Report RME-147, p. 37
- , 1970, Preliminary reconnaissance for uranium in New Mexico, 1950-1958: U.S. Atomic Energy Commission, Report RME-160 (TIDU651), 224 p.
- Wanek, A. A., 1962, Reconnaissance geologic map of parts of Harding, San Miguel, and Mora Counties, New Mexico: U.S. Geological Survey, Oil and Gas Investigations Map OM-208, scale 1:96,000
- Wolfe, H. D., and Perhac, R. M., 1953, Preliminary reconnaissance report—Charles Lujan Ranch: U.S. Atomic Energy Commission, Report DEB-RRA-735, 4 p. □

New Mexico  
GEOLOGY

• Science and Service

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

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