

(200)

WR:

no. 80-20

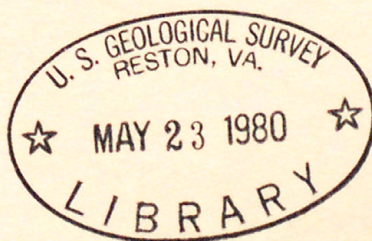
C. I. sent on

X

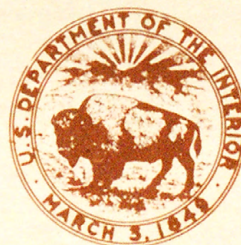
# BIBLIOGRAPHY OF GEOLOGY AND HYDROLOGY, SOUTHWESTERN NEW MEXICO

U.S. GEOLOGICAL SURVEY

WATER RESOURCES INVESTIGATIONS 80-20



✓ am  
✓ tw anal  
alc° 6/5/80





<b>BIBLIOGRAPHIC DATA SHEET</b>		1. Report No.	2.	3. Recipient's Accession No.
4. Title and Subtitle Bibliography of geology and hydrology, southwestern New Mexico			5. Report Date January 1980	
7. Author(s) Ann Finley Wright			8. Performing Organization Rept. No. USGS/WRI-80-20	
9. Performing Organization Name and Address U.S. Geological Survey Water Resources Division P.O. Box 26659 Albuquerque, New Mexico 87125			10. Project/Task/Work Unit No.	
12. Sponsoring Organization Name and Address U.S. Geological Survey Water Resources Division P.O. Box 26659 Albuquerque, New Mexico 87125			11. Contract/Grant No.	
15. Supplementary Notes			13. Type of Report & Period Covered Final	
16. Abstracts  The southwestern part of New Mexico is recognized as a source of abundant and varied natural resources. This bibliography of over 2,700 references concerned with geology, hydrology, chemistry, and geography has been compiled to assist physical science researchers in their study and development of this region.			14.	
17. Key Words and Document Analysis. 17a. Descriptors New Mexico-Southwestern, Natural Resources-Water Resources-New Mexico, Geology-Southwestern New Mexico, Hydrology-Southwestern New Mexico, Hydrogeology-Southwestern New Mexico, Water Resources-Southwestern New Mexico.				
17b. Identifiers/Open-Ended Terms New Mexico-Southwestern-Geology, New Mexico-Southwestern-Hydrology, Mesilla Valley-New Mexico, Jornada del Muerto-New Mexico, White Sands-New Mexico, Mescalero Apache Indian Reservation, Gila Wilderness-New Mexico, Tularosa Basin-New Mexico, New Mexico-South Central-Geology, New Mexico-South Central-Hydrology, New Mexico-South Central-Water Resources, New Mexico-South Central-Natural Resources, New Mexico-Southwestern-Natural Resources, Mining-Southwestern New Mexico, Volcanism-Southwestern New Mexico, Geothermal Resources-Southwestern New Mexico.				
17c. COSATI Field/Group				
18. Availability Statement  No restriction on distribution			19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 256
			20. Security Class (This Page) UNCLASSIFIED	22. Price



# ***BIBLIOGRAPHY OF GEOLOGY AND HYDROLOGY, SOUTHWESTERN NEW MEXICO***

BY ANN FINLEY WRIGHT

---

***U.S. GEOLOGICAL SURVEY***

***WATER RESOURCES INVESTIGATIONS 80-20***



JANUARY 1980



UNITED STATES DEPARTMENT OF THE INTERIOR

Cecil D. Andrus, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

---

For additional information write to: U.S. Geological Survey  
P.O. Box 26659  
Albuquerque, New Mexico 87125



## Contents

	Page
Abstract -----	1
Introduction -----	1
Method of compilation -----	3
Acknowledgments -----	3
References -----	4

## Illustrations

Figure 1.--Map of the study area -----	2
--	---



Blank page



# Bibliography of geology and hydrology,

southwestern New Mexico

by Ann Finley Wright

## Abstract

The southwestern part of New Mexico is recognized as a source of abundant and varied natural resources. This bibliography of over 2,700 references concerned with geology, hydrology, chemistry, and geography has been compiled to assist physical science researchers in their study and development of this region.

## Introduction

The southwestern part of New Mexico borders the State of Arizona to the west and the Republic of Mexico to the south. This study includes Catron, Dona Ana, Grant, Hidalgo, Lincoln, Luna, Otero, Sierra, and Socorro Counties (fig. 1). The region is an important source of natural resources, including water and mineral resources, wilderness areas, and geothermal potentials.

Because of the continuing interest in this region, a comprehensive listing of citations has been compiled. The bibliography contains over 2,700 references in geology, hydrology, chemistry, and geography, and will help avoid repetitious literature searches by those researching the area.

The citations are dated from 19th-century historical documents through December 1978 and are in English language only. The references are basically in the physical sciences with some representative historical, biological, and archaeological material included as background. The arrangement is by author or corporate author.

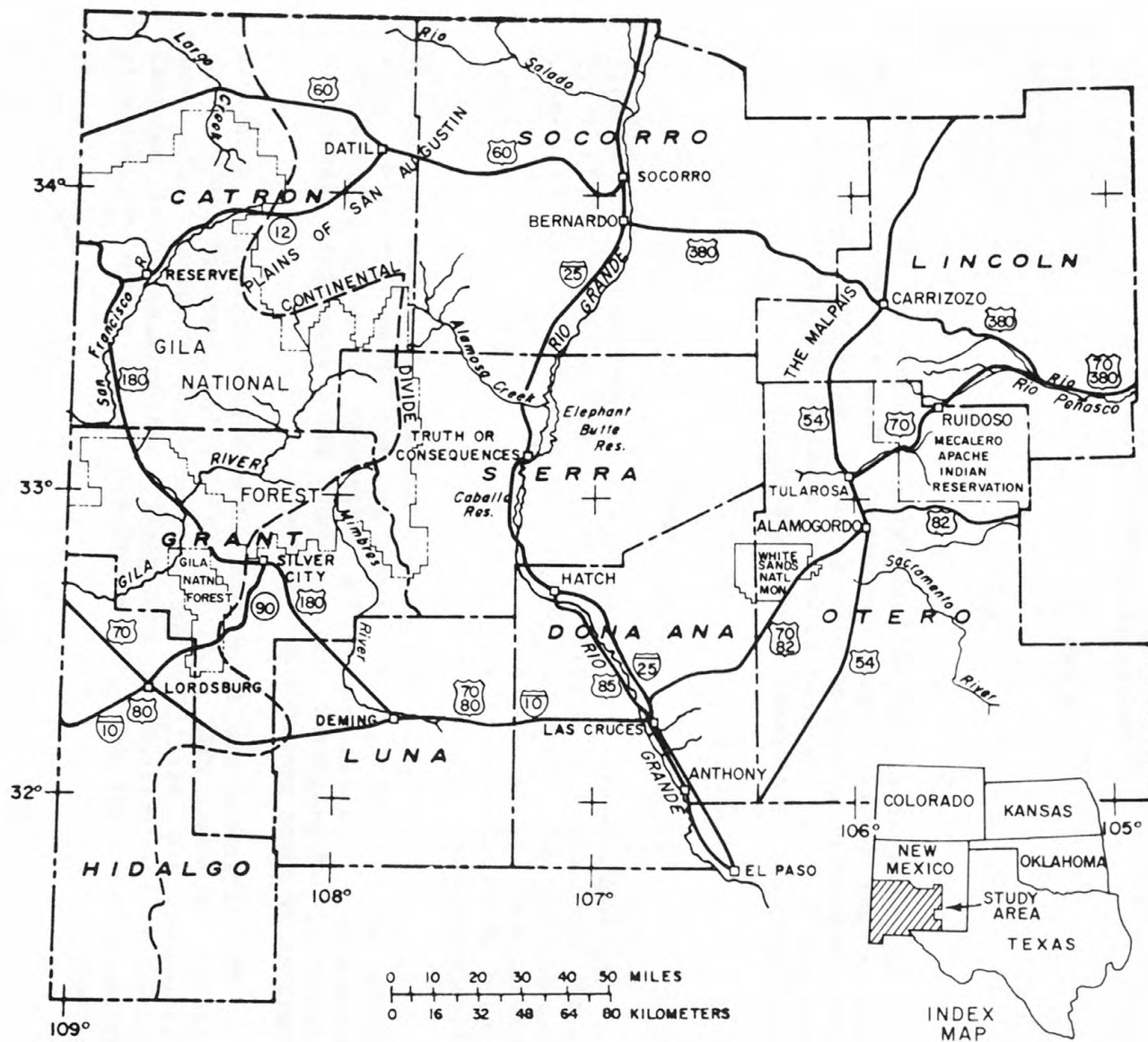


Figure 1.-- Study area



## Method of Compilation

The bibliographic citations were accumulated through manual searching with the help of the U.S. Geological Survey Libraries in Reston, Va., and Denver, Colo.; New Mexico State Library, Santa Fe; New Mexico State University Library and New Mexico Water Resources Research Institute, Las Cruces; New Mexico State Engineer Office, Santa Fe; and University of New Mexico, Albuquerque. Each reference was verified as to existence and availability.

## Acknowledgments

Thanks are expressed to the following for their help in clarifying and confirming the materials presented here: University of New Mexico, Geology Department faculty and staff; New Mexico State University Library reference staff; and New Mexico Bureau of Mines and Mineral Resources, Technical Editor and staff.

## References

- Adams, F. C., 1924, An investigation of zonal arrangements of mineral deposits in New Mexico: University of Minnesota, Minneapolis, unpublished M.S. thesis.
- Agey, W. W., Batty, J. V., Knutson, E. G., and Hanson, G. M., 1959, Operations of manganese-ore-purchasing depots at Deming, New Mexico and Wenden, Arizona: U.S. Bureau of Mines Report of Investigations RI 5462, 18 p., 2 figs.
- Agey, W. W., and Edlund, V. E., 1962, Flotation and sintering studies on manganese ores stockpiled at Deming, New Mexico and Wenden, Arizona: U.S. Bureau of Mines Report of Investigations RI 6103, 13 p.
- Agogino, G. A., and Hibben, F. C., 1958, Central New Mexico Paleo-Indian cultures: American Antiquity, v. 23, no. 4, p. 422-425.
- Ahmad, U. M. U., 1972, Recovery of manganese and by-products from manganese ores from Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 91 p., 6 figs.
- Akin, P. D., 1942, Report on testing of water-supply wells for Deming Airfield, Deming, New Mexico, in 14th and 15th biennial reports, 1938-1942: New Mexico State Engineer, p. 381-417.
- Albright, J. L., Alcorn, Rex, and Cave, H. S., 1955, Oil and gas possibilities of the basins of the Sierra County region, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 124-135.
- Albritton, C. C., and Nelson, V. E., 1943, Lead, zinc, and copper deposits of the Organ district, New Mexico: U.S. Geological Survey Open-File Report, 39 p.
- Aldrich, M. J., Jr., 1972a, Igneous tectonics of a forcible intrusion; Hanover-Fierro pluton, Grant County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 5, p. 362.
- 1972b, Structural development of the Hanover-Fierro pluton, southwestern New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 5, p. 362.
- 1972c, Tracing a subsurface structure by joint analysis: Santa Rita-Hanover axis, southwestern New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 106 p.



References - Continued

- Aldrich, M. J., Jr., 1974a, Santa Rita-Hanover axis, New Mexico; Laramide structure with a late Tertiary basin and range trend [abs.]: Geological Society of America, Abstracts with Programs, v. 6, no. 5, p. 421.
- 1974b, Structural development of the Hanover-Fierro pluton, southwestern New Mexico: Geological Society of America Bulletin, v. 85, no. 6, p. 963-968.
- 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: New Mexico Geological Society Special Publication 5, p. 79-81.
- Aldridge, B. N., 1970, Floods of November 1965 to January 1966 in the Gila River Basin, Arizona and New Mexico, and adjacent basins in Arizona, in Floods of 1965 in the United States: U.S. Geological Survey Water-Supply Paper 1850-C, 176 p.
- Alewine, J. W., 1966, Investigation of the sources of quartz grains of the Bliss Formation (Cambro-Ordovician), Silver City area, New Mexico: University of Houston, Texas, unpublished M.S. thesis, 149 p., 22 figs.
- Alfredo, Don, 1951, Apache tears and other mineral oddities from the Mogollon Mountains, New Mexico: Rocks and Minerals, v. 26, no. 3-4, p. 138-143.
- 1952, Beginner's luck (smithsonite, Organ mining district): Rocks and Minerals, v. 27, p. 468-471.
- Allen, C. A., 1911, Vanadium deposits in the Caballo Mountains, New Mexico: Mining Science Press, v. 103, p. 376-378.
- Allen, E. I., 1955, El Paso and Albuquerque now are linked by this new 248-mile products line: Oil and Gas Journal, v. 54, no. 11, p. 123, 2 figs.
- Allen, J. E., 1951, The Carrizozo malpais, in Guidebook of the Carrizozo-Capitan-Chupadera Mesa region, Lincoln and Socorro County, New Mexico: Roswell Geological Society, 5th Field Conference, p. 9-11.
- 1952a, The Carrizozo malpais [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1319.
- 1952b, A Mexican trip in your own backyard (Carrizozo lava flow): New Mexico Mineral, v. 14, no. 10, p. 26-29.

## References - Continued

- Allen, J. E., 1959, The Carrizozo malpais, in Guidebook for joint conference in the Sacramento Mountains of Otero County, New Mexico: Roswell Geological Society, p. 292-294.
- Allen, J. E., and Jones, S. M., 1952, Geology of Capitan quadrangle, New Mexico [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1319-1320.
- Allen, J. E., Jones, S. M., and others, 1951, Preliminary geologic map of the Capitan quadrangle, Lincoln County, New Mexico, in Guidebook of the Capitan-Carrizozo-Chupadera Mesa region, Lincoln and Socorro Counties, New Mexico: Roswell Geological Society, 5th Field Conference, map.
- Allen, J. E., and Kottlowski, F. E., 1967, Roswell-Capitan-Ruidoso-Bottomless Lakes State Park, second edition: New Mexico Bureau of Mines and Mineral Resources Scenic Trips to the Geologic Past 3, 50 p.
- Allen, V. T., 1952, Rhodonite at Vanadium, New Mexico [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1377.
- Allen, V. T., and Fahey, J. J., 1953, Rhodonite, johannsenite, and ferroan johannsenite at Vanadium, New Mexico: American Mineralogist, v. 38, no. 11-12, p. 883-890, 3 figs.
- 1954, Rhodonite, johannsenite, and ferroan johannsenite at Vanadium, New Mexico [abs.]: American Geological Institute, Geological Abstracts, v. 2, no. 3, p. 5.
- 1957a, Some pyroxenes associated with pyrometasomatic zinc deposits in Mexico and New Mexico: Geological Society of America Bulletin, v. 68, no. 7, p. 881-896, 2 figs.
- 1957b, Some pyroxenes associated with pyrometasomatic zinc deposits in Mexico and New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 5, no. 3, p. 51.
- Allmendinger, R. J., 1971, Preliminary evaluation of the role of the hydrologic cycle in the development of the white sands, White Sands National Monument, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 3, no. 3, p. 231-232.
- 1972, Hydrologic control over the origin of gypsum at Lake Lucero, White Sands National Monument, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 82 p., 37 figs.



## References - Continued

- Allmendinger, R. J., 1974a, Source of ore-forming fluids at the Hansonburg mining district, central New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 6, no. 7, p. 633.
- 1974b, Source of ore-forming fluids at the Hansonburg mining district, central New Mexico [abs.]: Economic Geology, v. 69, no. 7, p. 1176.
- Allmendinger, R. J., and Titus, F. B., Jr., 1973, Regional hydrology and evaporative discharge as a present-day source of gypsum at White Sands National Monument, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-55, 53 p., 15 figs.
- Alminas, H. V., Watts, K. C., Griffitts, W. R., Siems, D. L., Kraxberger, V. E., and Curry, K. J., 1975a, Map showing anomalous distribution of lead, tin, and bismuth in stream-sediment concentrates from the Sierra Cuchillo-Animas uplifts and adjacent areas, southwestern New Mexico: U.S. Geological Survey Miscellaneous Investigations Series I-881, 2 sheets.
- 1975b, Map showing anomalous distribution of molybdenum, copper, and zinc in stream-sediment concentrates from the Sierra Cuchillo-Animas uplifts and adjacent areas, southwestern New Mexico: U.S. Geological Survey Miscellaneous Investigations Series I-882, 2 sheets.
- 1975c, Map showing anomalous distribution of tungsten, fluorite, and silver in stream-sediment concentrates from the Sierra Cuchillo-Animas uplifts and adjacent areas, southwestern New Mexico: U.S. Geological Survey Miscellaneous Investigations Series I-880, 2 sheets.
- Alminas, H. V., Watts, K. C., and Siems, D. L., 1972a, Maps showing fluorite distribution in the Winston and Chise quadrangles and in the west part of the Priest Tank quadrangle, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-402, 3 sheets.
- 1972b, Maps showing lead distribution in the Winston and Chise quadrangles and in the west part of the Priest Tank quadrangle, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-398, 3 sheets.
- 1972c, Maps showing molybdenum distribution in the Winston and Chise quadrangles and in the west part of the Priest Tank quadrangle, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-399, 3 sheets.

## References - Continued

- Alminas, H. V., Watts, K. C., and Siems, D. L., 1972d, Maps showing silver and gold distribution in the Winston and Chise quadrangles and in the west part of the Priest Tank quadrangle, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-400, 3 sheets.
- 1972e, Maps showing tungsten distribution in the Winston and Chise quadrangles and in the west part of the Priest Tank quadrangle, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-401, 3 sheets.
- 1973a, Maps showing barium distribution in the Winston and Chise quadrangles and in the west part of the Priest Tank quadrangle, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-496, 3 sheets.
- 1973b, Maps showing beryllium distribution in the Winston and Chise quadrangles and in the west part of the Priest Tank quadrangle, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-498, 3 sheets.
- 1973c, Maps showing tin distribution in the Winston and Chise quadrangles and in the west part of the Priest Tank quadrangle, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-499, 3 sheets.
- 1973d, Maps showing zinc and antimony distribution in the Winston and Chise quadrangles and in the west part of the Priest Tank quadrangle, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-500, 3 sheets.
- Alminas, H. V., Watts, K. C., Siems, D. F., and Kraxberger, V. E., 1978, 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. Geological Survey Miscellaneous Field Studies Map MF-900-D.
- Alper, A. M., 1957a, Geology of the Walnut Wells quadrangle: Columbia University, New York, unpublished Ph. D. dissertation.
- 1957b, Geology of Walnut Wells quadrangle, Hidalgo County, New Mexico [abs.]: Geological Society of America Bulletin, v. 68, no. 12, pt. 2, p. 1694.
- Alper, A. M., and Poldervaart, Arie, 1957a, Zircons from the Animas stock and associated rocks, New Mexico: Economic Geology, v. 52, no. 8, p. 952-971.

References - Continued

- Alper, A. M., and Poldervaart, Arie, 1957b, Zircons from the Animas stock and associated rocks, New Mexico [abs.]: American Geophysical Union Transactions, v. 38, no. 3, p. 385.
- 1957c, Zircons from the Animas stock and associated rocks, New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 5, no. 4, p. 24.
- Amsbury, D. L., 1969a, Geological comparison of spacecraft and aircraft photographs of the Potrillo Mountains, New Mexico and Franklin Mountains, Texas [abs.]: Petroleum Abstracts, v. 10, no. 48, p. 3322.
- 1969b, Geological comparison of spacecraft and aircraft photographs of the Potrillo Mountains, New Mexico and Franklin Mountains, Texas, in 6th International Willow Run Laboratory remote sensing of environment symposium: University of Michigan, Ann Arbor, Willow Run Laboratories Proceedings, v. 1, p. 493-515.
- Andersen, Carl, 1895, The Cooney mining district, Socorro County (now Catron County), New Mexico: Engineering Mining Journal, v. 59, p. 343-344.
- 1897, The mineral belt of the Mogollon Range, New Mexico: Engineering Mining Journal, v. 64, p. 276-278.
- Anderson, C. A., 1966, Areal geology of the southwest, in Geology of the porphyry copper deposits of southwestern North America: Tucson, University of Arizona Press, p. 3-16, 7 figs.
- 1968, Arizona and adjacent New Mexico, in Ore deposits of the United States, 1933-1967: American Institute of Mining, Metallurgical, and Petroleum Engineers (Graton-Sales Volume), v. 2, p. 1163-1190.
- 1969, Arizona and adjacent New Mexico [abs.]: Abstracts of North American Geology, p. 653.
- Anderson, E. C., 1951a, New Mexico metal and mining districts, production and trends: New Mexico Miner and Prospector, v. 13, no. 6, p. 10.
- 1951b, New Mexico metal and mining districts, production and trends: New Mexico Miner and Prospector, v. 13, no. 7, p. 10, 16.
- 1951c, New Mexico metal and mining districts, production and trends: New Mexico Miner and Prospector, v. 13, no. 8, p. 8, 12.



## References - Continued

- Anderson, E. E., 1955, Mineral deposits and mines in south-central New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 121-122.
- 1957, The metal resources of New Mexico and their economic features through 1954: New Mexico Bureau of Mines and Mineral Resources Bulletin 39, 183 p.
- Anderson, J. U., Bailey, O. F., and Rai, Dhanpat, 1975, Effects of parent material on genesis of borolls and baralfs in south-central New Mexico mountains: Soil Science Society of America Proceedings, v. 39, no. 5, p. 901-904, 1 fig.
- Anderson, J. U., and Maker, H. J., 1974, Suitability of New Mexico lands for irrigation: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 276, 12 figs.
- Anderson, J. U., Silberman, D., and Rai, Dhanpat, 1975, Humus accumulation in a forested haploboroll in south-central New Mexico: Soil Science Society of America Proceedings, v. 39, no. 5, p. 905-908, 2 figs.
- Anderson, J. Y., 1901a, The Black Mountain mining district, in Mineral resources of New Mexico: International Industrial Record, El Paso, Texas, v. 3, no. 25, p. 41.
- 1901b, Organ Mountain mining district, in Mineral resources of New Mexico: International Industrial Record, El Paso, Texas, v. 3, no. 25, p. 39-40.
- Anderson, R. C., 1953, A gravity survey of the Rio Grande Valley, near Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 32 p., 10 figs.
- 1954, A gravity survey of the Rio Grande trough near Socorro, New Mexico: American Geophysical Union Transactions, v. 36, no. 1, p. 144-148, 3 figs.
- 1955, A gravity survey of the Rio Grande trough near Socorro, New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 3, no. 1, p. 69.
- Anonymous, 1891, Turquoise in southwestern New Mexico: Engineering Mining Journal, v. 51, p. 719.
- 1908, Burro Mountain turquoise: South-Western Mines, v. 1, no. 1, p. 1-2.

## References - Continued

- Anonymous, 1910a, The mines of Kelly, New Mexico: South-Western Mines, v. 2, no. 5, p. 3-4.
- 1910b, Steeple Rock mining district, Grant County, New Mexico: South-Western Mines, v. 2, no. 5, p. 3-4.
- 1925, The Torpedo copper mine, New Mexico: Engineering Mining Journal, v. 119, p. 246.
- 1943, Banner Mining Company, New Mexico: Mining World, v. 5, no. 8, p. 5-9.
- 1950, Southwestern New Mexico fluorspar mines give promise of big industry: New Mexico Miner and Prospector, v. 11, no. 4, p. 10.
- 1952a, Development of perlite at Socorro: New Mexico Miner, v. 14, no. 3, p. 4-5.
- 1952b, Flexibility in zinc milling (Peru Mining Company, Deming mill): Mining World, v. 14, no. 10, p. 57-60.
- 1952c, Operation--metal mining and milling (Bayard mine): New Mexico Miner, v. 14, no. 5, p. 6-7, 21-22.
- 1952d, Peru expands to reduce costs (Pewabic mine): Mining World, v. 14, no. 9, p. 28-31.
- 1952e, White Sands National Monument: Sun Trails, v. 5, no. 10, p. 6-9.
- 1955a, Kennecott's Chino mines (Santa Rita): Sun Trails, v. 8, no. 4, p. 6-11.
- 1955b, Silver City: Pipeliner, v. 18, no. 1, p. 11-15.
- 1955c, The smelter produces copper (Hurley): Kennecott Chinorama, v. 1, no. 3, 6 p.
- 1955d, They move mountains (haulage at Santa Rita mine): Kennecott Chinorama, v. 1, no. 8.
- 1958a, Kennecott's Chino Mines Division uses industrial engineering: Mining World, v. 20, no. 3, p. 50-53.
- 1958b, Why Chino Division (Santa Rita mine) treats mine roads (with roadbinder): Mining World, v. 20, no. 9, p. 38-41.

References - Continued

- Anonymous 1959a, The geology of the Santa Rita mine: Kennecott Chinorama, p. 10, January.
- 1959b, Uranium deposits in the Datil Mountains-Bear Mountains region, New Mexico, in Guidebook to west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 134-143.
- 1962, Santa Rita; new projects and equipment improve open pit mining operations: Mining World, v. 24, no. 12, p. 28-29.
- 1963a, The Abo Formation in the area around Socorro, New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 98-99.
- 1963b, Baca Formation in the area around Socorro, New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 100-101.
- 1963c, Oil and gas in Socorro County, New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 217-219.
- 1963d, This is Lordsburg: Albuquerque, Manly W. Lutz Publications, v. 1, no. 1, 20 p.
- 1970, Ground water in southwestern New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 155-156.
- Aoki, K.I., and Kudo, A. M., 1976, Major-element variations of late Cenozoic basalts of New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 82-88.
- Apell, G. A., Hazen, S. W., and Howe, E. G., 1947, Lake Valley manganese deposits, Sierra County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4099, 9 p., 31 figs.
- Arendt, W. W., 1971, The geology of La Joyita Hills, Socorro County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 75 p.
- Armstrong, A. K., 1958, The Mississippian of west-central New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 5, 49 p.
- 1959a, Mississippian strata on the east side of the Datil Plateau, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 52-56.

References - Continued

- Armstrong, A. K., 1959b, Mississippian system of west-central and southern New Mexico [abs.], in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 158.
- 1962a, Coral zones of the Mississippian Escabrosa Limestone of southeastern Arizona and southwestern New Mexico [abs.], in Abstracts for 1961: Geological Society of America Special Paper 68, p. 3-4.
- 1962b, Stratigraphy and paleontology of the Mississippian System in southwestern New Mexico and adjacent southeastern Arizona: New Mexico Bureau of Mines and Mineral Resources Memoir 8, 99 p.
- 1963a, Biostratigraphy and paleontology of the Mississippian System, west-central New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 112-122.
- 1963b, Stratigraphy and paleontology of the Mississippian System in southwestern New Mexico and adjacent southeastern Arizona [abs.]: American Geological Institute, Geoscience Abstracts, v. 5, no. 5-1627, p. 20.
- 1965, The stratigraphy and facies of the Mississippian strata of southwestern New Mexico, in Guidebook of southwestern New Mexico: New Mexico Geological Society, 16th Field Conference, p. 132-140.
- 1970, Mississippian stratigraphy and geology of the northwestern part of the Klondike Hills, southwestern New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 59-63.
- Armstrong, A. K., and Mamet, B. L., 1978, The Mississippian System of southwestern New Mexico and southeastern New Mexico, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 183-192.
- Armstrong, A. K., and Silberman, M. L., 1974, Geologic map of the central Peloncillo Mountains, Hidalgo County, New Mexico: U.S. Geological Survey Open-File Map 74-11.
- Armstrong, A. K., Silberman, M. L., Todd, V. R., Hoggatt, W. C., and Carten, R. B., 1978, Geology of central Peloncillo Mountains, Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 158, 19 p., 4 figs.



References - Continued

- Arnold, E. C., compiler, 1977, New Mexico's energy resources '76--annual report of Office of the State Geologist: New Mexico Bureau of Mines and Mineral Resources Circular 148, 27 p.
- 1978, New Mexico's energy resources '77: New Mexico Bureau of Mines and Mineral Resources Circular 167, 47 p.
- Arnold, E. C., Foster, R. W., Hill, J. M., Kottlowski, F. E., Page, G. B., Reiter, M. A., and Stone, W. J., 1976, New Mexico's energy resources '75: New Mexico Bureau of Mines and Mineral Resources Bulletin 107, 40 p.
- Arnold, R. I., 1974, Fluorspar deposits of the Little Whitewater Canyon, Hot Gulch, and Goddard Canyon area, Catron County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 377.
- Ash, S. R., 1959, The Indians of west-central New Mexico, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 154-156.
- 1962, The conodonts--a neglected stratigraphic tool in New Mexico [abs.], in Guidebook of the Mogollon Rim region, east-central Arizona: New Mexico Geological Society, 13th Field Conference, p. 173.
- Ash, S. R., and Davis, L. V., eds., 1964, Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, 189 p.
- Ash, S. R., and Read, C. B., 1976, North American species Tempskya and their stratigraphic significance, with a section on stratigraphy and age of the Tempskya-bearing rocks of southern Hidalgo County, New Mexico by R. A. Zeller, Jr.: U.S. Geological Survey Professional Paper 874, 42 p.
- Asquith, G. B., 1972a, Petrogenesis of Tertiary camptonites and associated diorites, Sacramento Mountains, Otero County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 7, p. 437-438.
- 1972b, Triclinic adularia from cavities in camptonite sills, Sacramento Mountains, Otero County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 4, p. 273.

## References - Continued

- Asquith, G. B., 1973a, Flow differentiation in Tertiary lamprophyres (camptonites), Sacramento Mountains, Otero County, New Mexico: *Journal of Geology*, v. 81, no. 5, p. 643-647, 3 figs.
- 1973b, High-viscosity "conglomerate" channel deposits in Tertiary lamprophyre sill, Sacramento Mountains, New Mexico: *Geology*, v. 1, no. 4, p. 149-151, 4 figs.
- 1973c, High-viscosity "conglomerate" channel deposits in Tertiary lamprophyre sill, Sacramento Mountains, New Mexico [abs.]: *Geological Society of America, Abstracts with Programs*, v. 5, no. 6, p. 537.
- 1974, Petrography and petrogenesis of Tertiary camptonites and diorites, Sacramento Mountains, New Mexico: *New Mexico Bureau of Mines and Mineral Resources Circular 141*, 6 p.
- 1975, Late magmatic adularia from cavities in camptonite sills--Sacramento Mountains, Otero County, New Mexico: *Texas Journal of Science*, v. 26, no. 3-4, p. 331-338, 3 figs.
- Austin, C. F., 1960, Some scheelite occurrences in the Magdalena mining district of New Mexico: *New Mexico Bureau of Mines and Mineral Resources Circular 55*, 17 p.
- Axelrod, D. I., 1975, Tertiary floras from the Rio Grande Rift, in *Guidebook of the Las Cruces country*: *New Mexico Geological Society*, 26th Field Conference, p. 85-88.
- Babcock, J. S., 1953, The Hanover mine--mining operations: *Mining Engineer*, v. 5, no. 12, p. 1229-1230, 4 figs.
- Bachman, G. O., 1954, Reconnaissance map of an area southeast of Sierra Blanca in Lincoln, Otero, and Chaves Counties, New Mexico, in *Guidebook of southeastern New Mexico*: *New Mexico Geological Society*, 5th Field Conference, p. 94B.
- 1960, Southwestern edge of late Paleozoic landmass in New Mexico, in *Geological Survey research 1960--short papers in the geological sciences*: *U.S. Geological Survey Professional Paper 400-B*, p. B239-B241, 2 figs.
- 1964, Southwestern edge of late Paleozoic landmass in New Mexico, in *Guidebook of the Ruidoso country*: *New Mexico Geological Society*, 15th Field Conference, p. 70-72.

References - Continued

- Bachman, G. O., 1965a, Geologic map of the Capitol Peak NW quadrangle, Socorro County, New Mexico: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-441.
- 1965b, Mineral industry in New Mexico, in Mineral and water resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 87, p. 13-17, 2 figs.
- 1968, Geology of the Mockingbird Gap quadrangle, Lincoln and Socorro Counties, New Mexico, in Shorter contributions to general geology, 1967: U.S. Geological Survey Professional Paper 594-J, 43 p.
- 1969, Geology of Mockingbird Gap quadrangle, Lincoln and Socorro Counties, New Mexico [abs.]: Abstracts of North American Geology, May, p. 655.
- Bachman, G. O., and Harbour, R. L., 1970, Geologic map of the northern part of the San Andres Mountains, central New Mexico: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-600.
- Bachman, G. O., and Hayes, P. T., 1958a, Stratigraphy of upper Pennsylvanian and lower Permian rocks in the Sand Canyon area, Otero County, New Mexico: Geological Society of America Bulletin, v. 69, no. 6, p. 689-700.
- 1958b, Stratigraphy of upper Pennsylvanian and lower Permian rocks in the Sand Canyon area, Otero County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 6, no. 3, p. 77.
- 1959, Resume of upper Pennsylvanian and lower Permian stratigraphic relations in the Sand Canyon area, Otero County, New Mexico, in Guidebook for joint field conference in the Sacramento Mountains of Otero County, New Mexico: Roswell Geological Society, 1959 Field Conference, p. 209-219, 4 figs.
- Bachman, G. O., and Mehnert, H. H., 1978, New K-Ar dates and the late Pliocene to Holocene geomorphic history of the central Rio Grande region, New Mexico: Geological Society of America Bulletin, v. 89, no. 2, p. 283-292.
- Bachman, G. O., and Myers, D. A., 1963, Geology of the Bear Peak NE quadrangle, Dona Ana County, New Mexico: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-374.

## References - Continued

- Bachman, G. O., and Myers, D. A., 1969, Geology of the Bear Park area, Dona Ana County, New Mexico, in Contributions to general geology, 1968: U.S. Geological Survey Bulletin 1271-C, 46 p.
- 1975, The Lead Camp Limestone and its correlatives in south-central New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 105-108.
- Bachman, G. O., and Stotelmeyer, R. B., 1967a, Summary report and mineral appraisal of the geology and mineral resources of the Bosque del Apache National Wildlife Refuge, Socorro County, New Mexico, in Studies related to wilderness--wildlife refuges, 1967: U.S. Geological Survey Bulletin 1260-B, 9 p.
- 1967b, Summary report on the geology and mineral resources of the Salt Creek area, Bitter Lake National Wildlife Refuge, Chaves County, New Mexico, in Studies related to wilderness--wildlife refuges, 1967: U.S. Geological Survey Bulletin 1260-A, 10 p.
- Backer, H. A., 1974, Geology of the Gila fluorspar district (Brock Canyon volcanic complex), Grant County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 377.
- Bacon, L. O., and Joesting, H. R., 1945, Magnetic and resistivity surveys in the Copper Flat area, Central mining district, New Mexico: U.S. Bureau of Mines Division of Geophysical Exploration Report, 11 p.
- Baer, C. D., 1963, Operational improvements at Chino: Mining Congress Journal, v. 49, no. 3, p. 28-31.
- Bagg, R. M., 1904a, Earthquakes in Socorro, New Mexico: American Geologist, v. 34, p. 102-104.
- 1904b, Secondary enrichment in the Santa Rita district: Engineering Mining Journal, v. 77, p. 153-154.
- Bahlburg, William, and Silver, B. A., 1976, Depositional environments of Tamaroa sequence (upper Devonian and Mississippian), Pedregosa Basin, southeastern Arizona, southwestern New Mexico, northeastern Sonora, and northwestern Chihuahua [abs.]: American Association of Petroleum Geologists Bulletin, v. 60, no. 4, p. 646-647.



## References - Continued

- Bailey, O. F., 1967, Water availability and grass root distribution in selected soils: New Mexico State University, Las Cruces, unpublished M.S. thesis, 67 p.
- Baldwin, P. M., 1938, A short history of the Mesilla Valley: New Mexico Historical Review, v. 13, no. 3, p. 314-324.
- Balk, Robert, 1962, Geologic map of Tres Hermanas Mountains, Luna County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-16.
- Ballance, W. C., 1962, Ground-water levels in New Mexico, 1961: New Mexico State Engineer Basic-Data Report, 130 p., 20 figs.
- 1963, Ground-water levels in New Mexico, 1962: New Mexico State Engineer Basic-Data Report, 126 p., 20 figs.
- 1965, Ground-water levels in New Mexico, and water levels in artesian wells in the Roswell area for a period of record, 1963: New Mexico State Engineer Basic-Data Report, 143 p., 27 figs.
- 1976, Ground-water resources of the Holloman Air Force Base well field area, 1967; with a section on geophysical exploration by Robert Mattick: U.S. Geological Survey Open-File Report 76-807, 128 p., 10 figs.
- Ballance, W. C., and Basler, J. A., 1966, Runoff from a paved small watershed at White Sands Missile Range, New Mexico [abs.], in Geological Survey research 1965: U.S. Geological Survey Professional Paper 525-A, p. 36.
- 1969, Runoff from a paved small watershed at White Sands Missile Range, New Mexico: Environmental Science and Technology, February 1969, p. 110.
- Ballance, W. C., and others, 1962, Ground-water levels in New Mexico, 1960: New Mexico State Engineer Technical Report 27, 215 p., 33 figs.
- Ballmann, D. L., 1959, The geology of the Knight Range, Grant County, New Mexico: University of Illinois, Champaign, unpublished Ph. D. dissertation, 57 p.
- 1960a, Geology of the Knight Peak area, Grant County, Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 70, 39 p.

References - Continued

- Ballmann, D. L., 1960b, Geology of the Knight Peak area, Grant County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 2, no. 7, p. 4.
- Ballmer, G. J., 1932, Native tellurium from northwest of Silver City, New Mexico: American Mineralogist, v. 17, no. 10, p. 491-492.
- 1949a, Drilling and blasting twelve-inch blastholes at Chino, New Mexico: Mining Engineer, v. 1, no. 5, p. 24.
- 1949b, Geology of the Santa Rita area, New Mexico, in Guidebook: West Texas Geological Society, 3rd Field Conference, p. 26-27.
- 1950, Drilling and blasting twelve-inch blastholes at Chino, New Mexico: Mining Congress Journal, v. 36, no. 1, p. 20-23.
- 1953, Geology of the Santa Rita area, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 130-131.
- Ballmer, G. J., and Jarris, K. V. N., 1955, Factors in selection of drill hole size at Chino (Santa Rita, New Mexico): Mining Congress Journal, v. 41, no. 11, p. 74-76, 105, 4 figs.
- Baltosser, W. W., Hernon, R. M., and Jones, W. R., 1965, Road log from Mimbres Valley to Silver City, in Guidebook to southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 62-66.
- Barker, F. C., 1898, Irrigation in Mesilla Valley, New Mexico: U.S. Geological Survey Water-Supply Paper 10, 51 p.
- Barnes, H. L., 1957, Trace-element distribution in shales near the Hanover, New Mexico, mining area [abs.]: Geological Society of America Bulletin, v. 68, no. 12, pt. 2, p. 1699.
- 1958, The source of base metal deposits: Columbia University, New York, unpublished Ph. D. dissertation, 93 p.
- 1959, The effect of metamorphism on metal distribution near base metal deposits (including Hanover, New Mexico): Economic Geology, v. 54, no. 5, p. 919-943, 11 figs.
- Barnett, R. L., 1973, The contact aureole at Copper Flat, Grant County, New Mexico: University of Western Ontario, London, Ontario, Canada, unpublished M.S. thesis.

## References - Continued

- Basham, W. L., 1951, Structure and metamorphism of the pre-Cambrian rocks of the South Manzano Mountains, New Mexico: Northwestern University, Evanston, Illinois, unpublished M.S. thesis, 124 p.
- Basler, J. A., 1967, Rehabilitation of wells 13, 15, 16, and 17, Headquarters area, White Sands Missile Range: U.S. Geological Survey Open-File Report, 86 p., 9 figs.
- 1971, Annual water-resources review, White Sands Missile Range, 1970--a basic-data report: U.S. Geological Survey Open-File Report, 33 p., 8 figs.
- Basler, J. A., and Alary, L. J., 1968, Quality of the shallow ground water in the Rincon-Mesilla Valleys, New Mexico and Texas: U.S. Geological Survey Open-File Report, 30 p., 5 figs.
- Bassett, W. A., 1977, Mineralogical and geological investigation of the Terry uranium prospect near Monticello, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-19, 15 p., 3 figs.
- Bates, R. L., 1955, Drainage developments, southern Sacramento Mountains, New Mexico [abs.]: Geological Society of America Bulletin, v. 66, no. 12, pt. 2, p. 1529.
- Bates, R. L., Wilpolt, R. H., MacAlpin, A. J., and Vorbe, Georges, 1947, Geology of the Gran Quivira quadrangle, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 26, 52 p.
- Bath, G. D., 1976, Interpretation of magnetic surveys in intermontane valleys of Nevada and southern New Mexico: U.S. Geological Survey Open-File Report 76-440, 37 p., 16 figs.
- 1977, Aeromagnetic maps with geologic interpretations of the Tularosa Valley, New Mexico--south-central: U.S. Geological Survey Open-File Report 77-258, 16 p., 9 figs.
- Beane, R. E., 1974a, Barite-fluorite-galena deposits in south-central New Mexico; a product of shallow intrusions, ground water, and epicontinental sediments [abs.]: Geological Society of America, Abstracts with Programs, v. 6, no. 7, p. 646-647.
- 1974b, Barite-fluorite-galena deposits in south-central New Mexico; a product of shallow intrusions, ground water, and epicontinental sediments [abs.]: Economic Geology, v. 69, no. 7, p. 1176.

## References - Continued

- Beane R. E., and Allmendinger, R. J., 1974, Shallow intrusives, groundwater, and ore deposits [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 383.
- Beane, R. E., Bloom, M. S., and Jaramillo, L. E., 1974, Skarn and disseminated mineralization in the Jarilla Mountains, Otero County [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 383.
- Beane, R. E., Jaramillo, L. E., and Bloom, M. S., 1975, Geology and base metal mineralization of the southern Jarilla Mountains, Otero County, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 151-156.
- Beane, R. E., and Titus, F. B., Jr., 1973, Thermal control of magnetite deposition in central New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 7, p. 543-544.
- Beane, R. E., Titus, F. B., Jr., and Billings, G. K., 1973, Thermal control of magnetite deposition in central New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 6, p. 463-464.
- Beaver, D. W., 1970a, Factors in designing a well field to supply water to a possible saline water conversion plant in the Alamogordo, New Mexico area, in Potentials for desalting in the Tularosa Basin, New Mexico, a case study: U.S. Office of Saline Water Research and Development Progress Report 776, p. 48-68.
- 1970b, Water-table drawdown at desalting site number two, in Potentials for desalting in the Tularosa Basin, New Mexico, a case study: U.S. Office of Saline Water Research and Development Progress Report 776, p. 69-73.
- Beck, C. W., and Givens, D. B., 1951, New basic copper phosphate mineral from Santa Rita, New Mexico [abs.]: Geological Society of America Bulletin, v. 62, no. 12, pt. 2, p. 1442.
- 1952, New basic copper phosphate mineral from Santa Rita, New Mexico [abs.]: American Mineralogist, v. 37, no. 3-4, p. 292.



References - Continued

- Beck, C. W., and Givens, D. B., 1953a, Chinoite, a new mineral (Santa Rita, New Mexico): *American Mineralogist*, v. 38, no. 3-4, p. 191-196, 3 figs.
- 1953b, New basic copper phosphate mineral from Santa Rita, New Mexico [abs.]: *American Geological Institute, Geologic Abstracts*, v. 1, no. 1-2, p. 8.
- Beck, C. W., and Maxwell, C. H., 1952, Pleonaste from the Caballo Mountains, New Mexico [abs.]: *Geological Society of America Bulletin*, v. 63, no. 12, pt. 2, p. 1234.
- 1953, Pleonaste from the Caballo Mountains, New Mexico [abs.]: *American Mineralogist*, v. 38, no. 3-4, p. 329-330.
- Becker, C. M., 1914, Historical and geological survey of the Florida Mountains: *Mining Science Press*, v. 70, August, p. 35-36.
- Bedichek, R., 1910, Two typical pumping plants in the Mimbres Valley, in 2nd biennial report, 1910: *New Mexico Territorial Engineer*, p. 27-30.
- Beers, C. A., Budding, A. J., and Codie, K. C., 1974, Precambrian rocks of the Los Pinos Mountains, central New Mexico; Part I, sedimentation, magmatism and orogeny [abs.]: *Geological Society of America, Abstracts with Programs*, v. 6, no. 5, p. 425.
- Belcher, R. C., 1975a, The geomorphic evolution of the Rio Grande: Baylor University, Waco, Texas, unpublished M.S. thesis, 210 p.
- 1975b, The geomorphic evolution of the Rio Grande: Baylor University, Waco, Tex., *Geologic Studies Bulletin* 29, 64 p., 69 figs.
- Belknap, William, Jr., 1957, New Mexico's great White Sands: *National Geographic Magazine*, v. 92, no. 1, p. 113-138.
- Bell, K. G., 1953, Geophysical prospecting services and research on methods--gamma-ray logging (Tyrone and Blackhawk districts, New Mexico), in Search for and geology of radioactive deposits, semiannual progress report, December 1, 1952 to May 31, 1953: U.S. Geological Survey Trace Element Investigation Report TEI-330, p. 299.
- Belt, C. B., Jr., 1955, A petrographic and alternation study of the Hanover-Fierro intrusive, New Mexico: Columbia University, New York, unpublished M.A. thesis, 58 p., 8 figs.

## References - Continued

- Belt, C. B., Jr., 1959, Intrusion and ore deposition in three New Mexico mining districts: Columbia University, New York, unpublished Ph. D. dissertation, 160 p.
- 1960, Intrusion and ore deposition in New Mexico: *Economic Geology*, v. 55, no. 6, p. 1244-1271, 16 figs.
- Benjovsky, T. D., 1946, The New Mexico Ricolite Company Telegraph mining district, Grant County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-14, 14 p., 3 figs.
- 1947, Contributions of New Mexico's mineral industry to World War II: New Mexico Bureau of Mines and Mineral Resources Bulletin 27, 76 p.
- Benne, R. E., 1975a, The stratigraphy of the lower Gobbler Formation, Sacramento Mountains, New Mexico: University of Oklahoma, Tulsa, unpublished M.S. thesis, 141 p., 4 figs.
- 1975b, The stratigraphy of the lower Gobbler Formation, Sacramento Mountains, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-64, 141 p., 4 figs.
- Bergeron, T. J., 1957, Stratigraphy of the Beeman Formation in Dry Canyon, Alamogordo, New Mexico: University of Wisconsin, Madison, unpublished M.S. thesis.
- Bhappu, R. B., and Fuerstenau, M. C., 1964, Recovery of valuable minerals from pegmatitic ores: New Mexico Bureau of Mines and Mineral Resources Circular 70, 29 p.
- Bhappu, R. B., Reynolds, D. H., and Stahmann, W. S., 1963, Studies on hydrochlorite leaching of molybdenite: New Mexico Bureau of Mines and Mineral Resources Circular 66, 22 p.
- Bieberman, R. A., compiler, 1957a, Petroleum exploration map of Catron County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Exploration Map 20, periodically revised.
- 1957b, Petroleum exploration map of Dona Ana County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Exploration Map 17, periodically revised.

## References - Continued

- Bieberman, R. A., compiler, 1957d, Petroleum exploration map of Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Exploration Map 23, periodically revised.
- 1957e, Petroleum exploration map of Luna County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Exploration Map 22, periodically revised.
- 1957f, Petroleum exploration map of Otero County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Exploration Map 24, periodically revised.
- 1957g, Petroleum exploration map of Sierra County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Exploration Map 21, periodically revised.
- Bieberman, R. A., and Clarish, M., compilers, 1951, Supplement no. I to New Mexico Bureau of Mines Circular 22: New Mexico Bureau of Mines and Mineral Resources Circular 22, 8 p.
- Bieberman, R. A., and Crespín, F. B., compilers, 1953, Supplement no. II to New Mexico Bureau of Mines Circular 22: New Mexico Bureau of Mines and Mineral Resources Circular 22, 15 p.
- 1954, Supplement no. III to New Mexico Bureau of Mines Circular 22: New Mexico Bureau of Mines and Mineral Resources Circular 22, 12 p.
- 1955, Index of samples of oil and gas well tests in library at Socorro, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 30, 24 p. [revised].
- Bieberman, R. A., and Diddle, B., compilers, 1959, Index to samples from oil and gas well tests in library at Socorro, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 22, 44 p.
- Bieberman, R. A., and Kottlowski, F. E., 1963, Field trip 6, Ojo de la Parida area, Yeso type locality, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 69-73.
- Bieberman, R. A., and Weber, R. H., 1969, New Mexico energy resources, revised 1974: New Mexico Bureau of Mines and Mineral Resources Resource Map RM-2.

## References - Continued

- Bieberman, R. A., Weber, R. H., Summers, W. K., Shomaker, J. W., and Kottowski, F. E., 1975, Energy reserves and resources in New Mexico, in Annual report July 1, 1973 to June 30, 1974: New Mexico Bureau of Mines and Mineral Resources, p. 22-26.
- Bieberman, R. A., and Whitmore, S., 1966, Index to samples from oil and gas well tests in library at Socorro, New Mexico, July 1, 1961 to July 1, 1966: New Mexico Bureau of Mines and Mineral Resources Circular 88, 11 p.
- Biggerstaff, B. P., 1974, Geology and ore deposits of the Steeple Rock-Twin Peaks area, Grant County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 382.
- Bikerman, Michael, 1972, New K-Ar ages on volcanic rocks from Catron and Grant Counties, New Mexico: Isochron/West, no. 3, p. 9-12.
- 1973, Cenozoic K-Ar dates on volcanic rocks from southwestern New Mexico [abs.]: American Geophysical Union (EOS) Transactions, v. 54, no. 4, p. 496.
- Bingaman, A. K., 1970, New Mexico's effort at rational taxation of hard-minerals extraction: Natural Resources Journal, v. 10, no. 3, p. 415-441.
- Bishop, P. H., 1972, Geohydrology of the Magdalena area, Socorro County, New Mexico: New Mexico State Engineer Open-File Report, 22 p.
- Bjorklund, L. J., 1957, Reconnaissance of ground-water conditions in the Crow Flats area, Otero County, New Mexico: New Mexico State Engineer Technical Report 8, 26 p.
- Black, B. A., 1964, Geology of the northern and eastern portions of the Ladron Mountains, Socorro County, New Mexico [abs.], in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 185-186.
- 1965, The geology of the northern and eastern parts of the Ladron Mountains, Socorro County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 117 p.
- 1973, Geology of the northern and eastern parts of the Otero platform, Otero and Chaves Counties, New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 158 p.



## References - Continued

- Black, B. A., 1974, Geology of the northern and eastern parts of Otero Platform, Otero and Chaves Counties, New Mexico [abs.]: Dissertation Abstracts International, v. 35, no. 3, p. 1292B-1293B.
- 1975, Geology and oil and gas potential of the northeast Otero Platform area, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 323-334, 3 figs.
- Black, R. F., and Powell, W. C., 1928, Preliminary report on the underground water in Socorro and Torrance Counties, in 8th biennial report: New Mexico State Engineer, p. 109-126.
- Blackwelder, Elio, 1929, Wind abrasion in the arid southwest [abs.]: Geological Society of America Bulletin, v. 40, no. 1, p. 164.
- Blagbrough, J. W., and Farkas, S. E., 1969a, Rock glaciers in the San Mateo Mountains, south-central New Mexico [abs.]: Abstracts of North American Geology, May, p. 659.
- 1969b, Rock glaciers in the San Mateo Mountains, south-central New Mexico: American Journal of Science, v. 266, no. 9, p. 812-823.
- Blake, W. P., 1894a, Alunogen and bauxite of New Mexico with notes on the geology of the upper Gila region [abs.]: American Geologist, v. 14, p. 196.
- 1894b, The zinc ore deposits of southwestern New Mexico [abs.]: Engineering Mining Journal, v. 57, p. 532.
- 1895a, Alunogen and bauxite of New Mexico with notes on the geology of the upper Gila region: American Institute of Mining and Engineers Transactions, v. 24, p. 571-573.
- 1895b, The zinc ore deposits of southwestern New Mexico: American Institute of Mining Engineers Transactions, v. 24, p. 187-195.
- Blakestad, R. B., Jr., 1974, Geology of the Kelly mining district, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-43, map.
- 1977, Geology of the Kelly mining district, Socorro County, New Mexico: University of Colorado, Boulder, unpublished M.S. thesis, 162 p., 17 figs.

## References - Continued

- Blaney, H. F., and Criddle, W. D., 1962, Determining consumptive use and irrigation water requirements: U.S. Department of Agriculture, Agricultural Research Service Technical Bulletin 1275, 59 p.
- Blaney, H. F., and Hanson, E. G., 1965, Consumptive use and water requirements in New Mexico: New Mexico State Engineer Technical Report 32, 82 p., 6 figs.
- Blankenship, J. C., Jr., 1972, Stratigraphy and petrology of the El Paso Formation (lower Ordovician) in the Silver City range, New Mexico: University of Texas, Houston, unpublished M.S. thesis.
- Blenkinsop, J., and Slawson, W. F., 1967, Geophysical evidence of the Zuni lineament: Earth and Planetary Science Letters, v. 3, no. 1, p. 75-80.
- 1968, Geophysical evidence of the Zuni lineament [abs.]: Abstracts of North American Geology, June, p. 777.
- Bliss, J. H., 1968, Water quality changes in Elephant Butte reservoir: American Society of Civil Engineers Proceedings, Irrigation and Drainage Division Journal, Paper 3637, v. 89, no. IR 3, p. 53-76, 3 figs.
- Blodgett, D. D., and Titus, F. B., 1973, Hydrogeology of the San Augustin Plains, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-51, 54 p., 10 figs.
- Blood, C. C., 1916, Pinos Altos district, Grant County, New Mexico: Mining World, v. 45, p. 659-660.
- Bloodgood, D. W., 1930, The ground water of the middle Rio Grande Valley and its relation to drainage: New Mexico State University, Las Cruces, Agricultural Experiment Station Bulletin 184, 60 p.
- Bloom, M. S., 1975, Mineral paragenesis and contact metamorphism in the Jarilla Mountains, Orogrande, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis.
- Bodine, M. W., Jr., 1953, Geology of the Capitan coal fields, Lincoln County, New Mexico: Columbia University, New York, unpublished M.S. thesis, 32 p., 4 figs.

## References - Continued

- Bodine, M. W., Jr., 1956, Geology of Capitan coal field, Lincoln County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 35, 27 p.
- Bogart, L. E., 1953, The Hueco (Gym) limestone, Luna County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 91 p.
- Bogert, J. R., 1962, Chino's "Program for Progress" means improved mill-smelter facilities: Mining World, v. 24, no. 9, p. 22-25.
- Bond, Josiah, 1906, Estimate of production [Organ Mountains mining district]: Mining World, March 17, 1906.
- Bonnichsen, Bill, 1962, General aspects of the Precambrian rocks of the Lemitar Mountains, Socorro County, New Mexico [abs.], in Guidebook of the Mogollon Rim region, east-central Arizona: New Mexico Geological Society, 13th Field Conference, p. 174.
- Borland, J. P., 1970, A proposed streamflow data program for New Mexico: U.S. Geological Survey Open-File Report, 71 p.
- Bornhorst, T. J., 1976, Volcanic geology of the Crosby Mountains and vicinity, Catron County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 113 p.
- Bornhorst, T. J., and Elston, W. E., 1978, Supplemental log no. 8; Reserve to Magdalena via Horse Springs and Datil, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 99-106.
- Borton, R. L., 1961, Geology and water resources of the Alamosa-Cuchillo Negro-Palomas Rivers area, Sierra and Socorro Counties, New Mexico: New Mexico State Engineer Open-File Report, 24 p.
- 1967, Geology and ground-water conditions adjacent to the San Francisco River near Pleasanton, Catron County, New Mexico: New Mexico State Engineer Open-File Report, 8 p.
- 1975, Configuration of the water table in the Nutt-Hockett area of Dona Ana, Luna, and Sierra Counties, New Mexico, 1974: New Mexico State Engineer Open-File Map, 1 sheet.

## References - Continued

- Borton, R. L., and Sorensen, E. F., 1967, Southwestern closed basins--settlement, development, and water use, in Water resources of New Mexico: New Mexico State Planning Office, Santa Fe, p. 265-276.
- Botbol, J. M., 1968a, Characteristic analysis of base metal mining districts in the continental United States [abs.]: Dissertation Abstracts International, section B., v. 39, no. 4, p. 1401.
- 1968b, Characteristic analysis of base metal mining districts in the continental United States: University of Utah, Salt Lake City, unpublished Ph. D. dissertation, 270 p.
- Botkin, C. W., 1933, White Sands National Monument [abs.]: Pan-American Geologist, v. 60, no. 4, p. 304-305.
- Bowers, W. E., 1960, Geology of the east Potrillo Hills, Dona Ana County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 67 p.
- Bowsher, A., L., 1948, Mississippian bioherms in the northern part of the Sacramento Mountains, New Mexico: The Compass, v. 25, p. 21-29.
- Boyd, D. W., 1958, Permian sedimentary facies, central Guadalupe Mountains, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 49, 100 p.
- Boyd, F. S., Jr., 1955, Some recent discoveries of uranium in Sierra County, New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 123.
- Boyd, F. S., Jr., and Wolfe, H. D., 1953, Recent investigations of radioactive occurrences in Sierra, Dona Ana, and Hidalgo Counties, New Mexico, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 141-142.
- Bradbury, J. P., 1966, Pleistocene-recent geologic history of Zuni Salt Lake, New Mexico [abs.]: in Guidebook of the Taos-Raton-Spanish Peaks country: New Mexico Geological Society, 17th Field Conference, p. 119.
- 1967, Origin, paleolimnology, and limnology of Zuni Salt Lake maar, west-central New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 247 p., 22 figs.



## References - Continued

- Bradbury, J. P., 1968a, Origin, paleolimnology, and limnology of Zuni Salt Lake maar, west-central New Mexico [abs.]: Dissertation Abstracts International, section B., v. 28, no. 9, p. 3748-3749.
- 1968b, Origin, paleolimnology, and limnology of Zuni Salt Lake maar, west-central New Mexico [abs.]: Abstracts of North American Geology, November, p. 1610.
- 1971, Limnology of Zuni Salt Lake, New Mexico: Geological Society of America Bulletin, v. 82, no. 2, p. 379-398, 12 figs.
- Brady, F. W., 1905, The White Sands of New Mexico: Mines and Minerals, v. 25, p. 529-530.
- Brandvold, L. A., 1974, Atomic absorption methods for analysis of some elements in ores and concentrates: New Mexico Bureau of Mines and Mineral Resources Circular 142, 22 p.
- 1978, Mercury in New Mexico surface waters: New Mexico Bureau of Mines and Mineral Resources Circular 162, 16 p., 3 figs.
- Brandvold, D. K., Brierley, J. A., and Popp, C. J., 1973, Chemical and biological character of Rio Grande water in the Bosque del Apache Wildlife Refuge: New Mexico Water Resources Research Institute Report 030, 50 p.
- Brattstrom, B. H., 1964, Amphibians and reptiles from cave deposits in south-central New Mexico: Southern California Academy of Science Bulletin, v. 63, pt. 2, p. 93-103.
- 1965, Amphibians and reptiles from cave deposits in south-central New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 7, no. 7-4321, p. 37.
- Brenner-Tourtelot, E. F., and Machette, M. N., 1979, The mineralogy and geochemistry of lithium in the Popotosa Formation, Socorro County, New Mexico: U.S. Geological Survey Open-File Report 79-839, 27 p., 5 figs.
- Brinsmade, R. B., 1906a, Kelly, New Mexico; a zinc camp: Mines and Minerals, v. 27, p. 49-53.
- 1906b, Zinc mining in New Mexico: Engineering Mining Journal, v. 81, p. 845-846.
- 1908a, Development of San Pedro Mountains, New Mexico: Mining World, v. 28, p. 1021-1024.

## References - Continued

- Brinsmade, R. B., 1908b, Mining and milling near Silver City, New Mexico: Mining World, v. 29, p. 947-950.
- Bromfield, C. S., and Wrucke, C. T., 1961, Reconnaissance geologic map of the Cedar Mountains, Grant and Luna Counties, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-159.
- Brookins, D. G., 1974a, Preliminary radiometric age determinations from the Florida Mountains, New Mexico, in Guidebook to the geology of the Florida Mountains: El Paso Geological Society, 8th Field Conference, p. 47-56.
- 1974b, Preliminary Rb-Sr study of igneous rocks of the Florida Mountains, New Mexico [abs.]: American Geophysical Union (EOS) Transactions, v. 55, no. 4, p. 470-471.
- 1974c, Radiometric age determinations from the Florida Mountains, New Mexico: Geology, v. 2, no. 11, p. 555-557, 2 figs.
- 1978, Radiogenic heat contribution to heat flow from potassium, uranium, thorium in the Precambrian silicic rocks of the Florida Mountains and Zuni Mountains, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-98, 14 p.
- Brookins, D. G., and Corbitt, L. L., 1974, Preliminary Rb-Sr study of igneous rocks of the Florida Mountains, New Mexico [abs.]: American Geophysical Union (EOS) Transactions, v. 55, no. 4, p. 470-471.
- Brookins, D. G., and Rautman, C. E., 1978, Uranium and thorium abundances, whole-rock chemistry and trace-element chemistry, Zuni Mountains, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-99, 47 p.
- Brookins, D. G., Rautman, C. E., and Corbitt, L. L., 1978, Uranium and thorium abundances and whole-rock chemistry of the Florida Mountains, New Mexico; preliminary study: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-101, 23 p.
- Brough, P. V., 1948, Concentrating lead-zinc ore at the Bayard mill: Mining and Metallurgy, v. 29, no. 502, p. 562-566.
- Brown, C. T., 1901a, Black Range and Apache mining district, in Mineral resources of New Mexico: International Industrial Record, El Paso, Texas, v. 3, no. 25, p. 41-42.

References - Continued

- Brown, C. T., 1901b, The Chloride mining district, in Mineral resources of New Mexico: International Industrial Record, El Paso, Texas, v. 3, no. 25, p. 42.
- 1901c, The Magdalena district, in Mineral resources of New Mexico: International Industrial Record, El Paso, Texas, v. 3, no. 25, p. 48-49.
- Brown, D. M., 1972a, Geology of the southern Bear Mountains, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 110 p., 18 figs.
- 1972b, Geology of the southern Bear Mountains, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-42, 110 p., 18 figs.
- Brown, L. F., 1977, A gravity survey of central Dona Ana County, New Mexico: New Mexico State University, Las Cruces, unpublished M.S. thesis, 56 p.
- Bruning, J. E., 1973a, Origin of Popotosa Formation, north-central Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished Ph. D. dissertation, 132 p., 29 figs.
- 1973b, Origin of Popotosa Formation, north-central Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-38, 132 p., 29 figs.
- Bruning, J. E., and Chapin, C. E., 1974, The Popotosa Formation—a Miocene record of basin and range deformation, Socorro County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 6, no. 5, p. 430.
- Bryan, Kirk, 1926, Ground-water reconnaissance in Socorro County, New Mexico, in 7th biennial report, 1924-26: New Mexico State Engineer, p. 81-87.
- 1927, Pedestal rocks formed by differential erosion and channel erosion of the Rio Salado, Socorro County, New Mexico, in Contributions to the geography of the United States, 1926: U.S. Geological Survey Bulletin 790-A, p. 1-19.
- 1932a, Pediments developed in basins with through drainage as illustrated by the Socorro area, New Mexico [abs.]: Geological Society of America Bulletin, v. 43, no. 1, p. 128-129.

## References - Continued

- Bryan, Kirk, 1932b, Pediments developed in basins with through drainage as illustrated by the Socorro area, New Mexico [abs.]: Pan-American Geologist, v. 57, no. 1, p. 60.
- 1938, Geology and ground-water conditions of the Rio Grande depression in Colorado and New Mexico, in U.S. National Resources Committee, Regional planning, Part VI--the Rio Grande Joint Investigation in the upper Rio Grande Basin in Colorado, New Mexico, and Texas, 1936-37: U.S. Government Printing Office, v. 1, pt. 2, p. 197-225.
- Buchanan, D. E., 1957, Reconnaissance soil investigation of the Hachita and Playas Valleys, New Mexico: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 12, 14 p.
- Budding, A. J., 1963a, Field trip 7, Carthage area, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 74-77.
- 1963b, Field trip 8, Sais quartzite quarry, and Montosa thrust fault, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 78.
- 1963c, Origin and age of superficial structures, Jicarilla Mountains, central New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 5, no. 5-3375, p. 20-21.
- 1963d, Origin and age of superficial structures, Jicarilla Mountains, central New Mexico [abs.], in Abstracts for 1962: Geological Society of America Special Paper 73, p. 78-79.
- 1963e, Origin and age of superficial structures, Jicarilla Mountains, central New Mexico: Geological Society of America Bulletin, v. 74, no. 2, p. 203-208.
- 1964a, Geologic outline of the Jicarilla Mountains, Lincoln County, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 82-86.
- 1964b, Road log from Carrizozo to White Oaks, Ancho, and Gallinas, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 42-46.



## References - Continued

- Budding, A. J., and Broadhead, R. F., 1977, Collection of geological reports on the DCM no. 1 Forest Federal well, Hidalgo County, New Mexico, Part A--petrographic description of thin sections of drill cuttings from KCM no. 1 Forest Federal well: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-75, 90 p.
- Budding, A. J., and Condie, K. C., 1975, Precambrian rocks of the Sierra Oscura and northern San Andres Mountains, south-central New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 89-94.
- Budding, A. J., and Gross, G. W., 1963, Field trip 10, Water Canyon and South Baldy Peak, Magdalena Mountains, Socorro County, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 80-85, 3 figs.
- Budding, A. J., and Hartman, D. J., 1963, Precambrian geology of the Sais quartzite quarry, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 204-208.
- Budding, A. J., Sanford, A. R., and Topozada, T. R., 1971, Seismicity and tectonics of the Rio Grande Rift zone in central New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 3, no. 7, p. 515-516.
- Budding, A. J., and Topozada, T. R., 1970, Late Cenozoic faulting in the Rio Grande Rift valley near Socorro, New Mexico [abs.], in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 161.
- Buddington, A. F., 1959, Granite emplacement with special reference to North America (Hanover and Organ Mountains stocks): Geological Society of America Bulletin, v. 70, no. 6, p. 671-747.
- Buffington, L. C., and Herbel, C. H., 1965, Vegetation changes on a semi-arid desert grassland range: Ecological Monographs, v. 34, p. 139-164.
- Burke, W. H., Kenny, G. S., Otto, J. B., and Walker, R. D., 1963, Potassium-argon dates, Socorro and Sierra Counties, New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 224.

References - Continued

- Burleson, W. E., and Biggs, Paul, 1965, New Mexico, in Minerals yearbook 1964, v. III, area reports; domestic: U.S. Bureau of Mines, p. 683-712, 2 figs.
- Burleson, W. E., and Henkes, W. C., 1967, New Mexico, in Minerals yearbook 1965, v. III, area reports; domestic: U.S. Bureau of Mines, p. 551-577, 2 figs.
- Burridge, Gaston, 1954, Mogollon, the ghost-almost: Sun Trails, v. 7, no. 2, p. 26-27.
- Burt, D. M., 1968, Control of oxygen fugacity during ore deposition in some pyrometasomatic zinc deposits (New Mexico) [abs.]: Economic Geology, v. 63, no. 6, p. 702.
- Burton, R. C., 1964a, Conodonts from the southern Sacramento Mountains, Otero County, New Mexico [abs.], in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 186.
- 1964b, A preliminary range chart of Lake Valley Formation (Osage) conodonts in the southern Sacramento Mountains, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 73-75.
- 1965a, Conodonts of the Mississippian system in the Sacramento Mountains, New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation 215 p.
- 1965b, Conodonts of the Mississippian system in the Sacramento Mountains, New Mexico [abs.]: Dissertation Abstracts International, v. 26, no. 10, p. 5974.
- Busch, F. E., 1966, Ground-water levels in New Mexico, 1964: New Mexico State Engineer Basic-Data Report, 130 p., 27 figs.
- 1969, Annual water resources review, White Sands Missile Range, 1968-a basic-data report: U.S. Geological Survey Open-File Report, 29 p., 6 figs.
- 1970, Annual water-resources review, White Sands Missile Range, 1969-a basic-data report: U.S. Geological Survey Open-File Report, 41 p., 9 figs.
- Busch, F. E., and Hudson, J. D., 1967, Ground-water levels in New Mexico, 1965, and changes in water levels, 1961-1965: New Mexico State Engineer Technical Report 34, 124 p., 44 figs.

References - Continued

- Busch, F. E., and Hudson, J. D., 1968, Ground-water levels in New Mexico, 1966: New Mexico State Engineer Basic-Data Report, 71 p., 29 figs.
- 1969, Ground-water levels in New Mexico, 1967: New Mexico State Engineer Basic-Data Report, 74 p., 30 figs.
- 1970, Ground-water levels in New Mexico, 1968: New Mexico State Engineer Basic-Data Report, 77 p., 31 figs.
- Bush, F. V., 1914, Phelps Dodge in the Burro Mountains, New Mexico: Engineering Mining Journal, v. 98, p. 375-377.
- 1915a, Burro Mountains porphyry copper developments: Mining Science Press, v. 110, p. 222-224.
- 1915b, Mining in the Pinos Altos district of New Mexico: Mining World, v. 42, p. 165-168.
- 1915c, The Mogollon mining district of New Mexico: Mining World, v. 42, p. 327-728.
- 1915d, The Steeple Rock mining district, New Mexico: Mining World, v. 42, p. 845-846.
- Bushman, F. X., 1955, Ground-water data for Dwyer quadrangle, Grant and Luna Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 37, 20 p.
- 1963, Ground water in the Socorro Valley, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 155-159.
- Bushman, F. X., and Valentine, C. P., 1954, Water well records and well water quality in southwestern San Agustin Plains, Catron County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 26, 21 p.
- Bushnell, H. P., 1953, Geology of the McRae Canyon area, Sierra County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 106 p.
- 1955a, Mesozoic stratigraphy of south-central New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 81-87.
- 1955b, Stratigraphy of the McRae Formation, Sierra County, New Mexico: Compass, v. 33, no. 1, p. 9-17, 2 figs.

## References - Continued

- Bushnell, H. P., Kelley, V. C., Silver, Caswell, and Thompson, Sam, III, 1955, Road log third day; northern part of the Caballo Mountains, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 47-54, 4 figs.
- Butler, P., Jr., 1964, Magnetite from intrusives and associated contact deposits, Lincoln County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 63 p.
- Caballo Soil and Water Conservation District and Elephant Butte Irrigation District, 1965, Work plan for watershed protection and flood prevention, Crow and Broad Canyons and Placitas Arroyo watershed, Dona Ana and Sierra Counties, New Mexico: U.S. Department of Agriculture, Soil Conservation Service and U.S. Department of State, International Boundary and Water Commission, Publication M-4504-2, 39 p.
- Cady, F. H., 1938, Thermal metamorphism of sedimentary rocks of Hanover, New Mexico: Northwestern University, Evanston, Illinois, unpublished M.S. thesis.
- Caldwell, A. B., 1969, Phelps Dodge's new Tyrone Cu complex: Mining Engineering, v. 21, no. 12, p. 29-36.
- Callahan, C. J., 1973, Aden basalt volcanic depressions, Dona Ana County, New Mexico: University of Texas at El Paso, unpublished M.S. thesis, 82 p.
- Callaghan, Eugene, 1953a, Basin and range structure in southwestern New Mexico, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 116-117.
- 1953b, Volcanic rocks of southwestern New Mexico, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 143-144.
- 1958, Basin and range structure in southwestern New Mexico, in Guidebook of the Hatchet Mountains and the Cooks Range-Florida Mountains areas, Grant, Hidalgo, and Luna Counties, southwestern New Mexico: Roswell Geological Society, 11th Field Conference, p. 53-54.
- Callender, J. F., Wilt, J. C., and Clemons, R. E., eds., 1978, Guidebook to land of Cochise, southeastern Arizona: New Mexico Geological Society, 29th Field Conference, 372 p.

References - Continued

- Calvin, Ross, 1949, Tularosa Basin is a museum; geology of the Tularosa Basin: New Mexico Magazine, v. 27, no. 3, p. 11, 39-43.
- Campbell, C. J., 1961, Comparison of eighteen phreatophyte communities on the Rio Grande in New Mexico: New Mexico State University, Las Cruces, unpublished M.S. thesis, 58 p.
- Campbell, C. J., and Dick-Peddie, W. A., 1964, Comparison of phreatophyte communities on the Rio Grande in New Mexico: Ecology, v. 3, p. 492-502.
- Campbell, J. A., 1968, Structural geology of part of the Rio Puerco fault belt, west-central New Mexico [abs.], in Abstracts for 1967: Geological Society of America Special Paper 115, p. 410-411.
- Campbell, J. L., 1910, The water supply of the El Paso and Southwestern Railway from Carrizozo to Santa Rosa, New Mexico: American Society of Civil Engineers Transactions, v. 70, p. 164-189.
- Campbell, J. M., and Ellis, F. H., 1952, Cochise manifestations in the middle Rio Grande Valley: American Antiquity, v. 17, no. 3, p. 211-221.
- Campbell, M. R., 1907, Coal in the vicinity of Fort Stanton Reservation, Lincoln County, New Mexico, in Contributions to economic geology, 1906, Part 2: U.S. Geological Survey Bulletin 316, p. 431-434.
- Campbell, R. S., 1929, Vegetative succession in the Prosopis dunes of southern New Mexico: Ecology, v. 10, p. 392-398.
- Cappa, J. A., 1975a, The depositional environment, paleocurrents, provenance, and dispersal patterns of the Abo Formation in part of the Cerros de Amado region, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 154 p., 28 figs.
- 1975b, Paleocurrents and provenance of the Abo Formation in central New Mexico [abs.]: American Association of Petroleum Geologists Bulletin, v. 59, no. 5, p. 906.
- Caravella, F. J., 1976a, A study of Poisson's ratio in the upper crust of the Socorro, New Mexico area: New Mexico Institute of Mining and Technology, Socorro, Geoscience Department, Open-File Report 11, 80 p.



## References - Continued

- Caravella, F. J., 1976b, A study of Poisson's ratio in the upper crust of the Socorro, New Mexico area: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 80 p.
- Cargo, D. N., 1959, Mineral deposits of the Granite Gap area, Hidalgo County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 70 p.
- Carpenter, D. W., 1958, Hydrothermal alteration at Santa Rita, New Mexico: Pennsylvania State University, State College, unpublished M.S. thesis.
- Carson, W. P., 1970a, Computerized lineament tectonics and porphyry copper deposits in S.E. Arizona and S.W. New Mexico: Stanford University, Palo Alto, California, unpublished Ph. D. dissertation, 310 p.
- 1970b, Computerized lineament tectonics and porphyry copper deposits in S.E. Arizona and S.W. New Mexico [abs.]: Dissertation Abstracts International, v. 31, no. 4, p. 2060B.
- Carten, R. B., Silberman, M. L., and Armstrong, A. K., 1974, Geology, trace-metal anomalies and base-metal mineralization in the central Peloncillo Mountains, Hidalgo County, New Mexico [abs.], in Symposium on base metal and fluorspar districts of New Mexico: New Mexico Bureau of Mines and Mineral Resources, p. 7.
- Carten, R. B., Silberman, M. L., Armstrong, A. K., and Elston, W. E., 1974, Geology, trace-metal anomalies, and base-metal mineralization in the central Peloncillo Mountains, Hidalgo County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 378.
- Carter, J. L., 1965a, The origin of olivine bombs and related inclusions in basalts: Rice University, Waco, Texas, unpublished Ph. D. dissertation, 264 p.
- 1965b, The origin of olivine bombs and related inclusions in basalts [abs.]: Dissertation Abstracts International, v. 26, no. 5, p. 2685-2686.
- 1966a, Comparison of olivines from Potrillo, New Mexico, Williams, Arizona and Lanzarote, Canary Islands, in Annual report for 1966: Southwest Center for Advanced Studies, Geoscience Division, p. 11-13.

References - Continued

- Carter, J. L., 1966b, The origin of olivine bombs and related inclusions in basalts [abs.]: Houston Geological Society Bulletin, v. 8, no. 5, p. 15.
- 1970, Mineralogy and chemistry of the earth's upper mantle based on the partial fusion-partial crystallization model: Geological Society of America Bulletin, v. 81, no. 7, p. 2021-2034, 6 figs.
- Carter, J. L., and Adams, J. A. S., 1965, A geochemical investigation of ultrabasic and basic inclusions in the Kilbourne Hole, New Mexico, basalt [abs.]: American Geophysical Union Transactions, v. 46, no. 1, p. 186-187.
- Carter, R. H., Jr., 1953, A historical study of floods prior to 1892 in the Rio Grande watershed, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis.
- Case, E. C., 1916, Further evidence bearing on the age of the red beds in the Rio Grande Valley, New Mexico: Science, new series, v. 44, p. 708-709.
- Case, J. E., 1965, The U.S. Geological Survey's gravity program in Arizona, Colorado, New Mexico, and Utah: American Geophysical Union Transactions, v. 46, no. 1, p. 227-231, 1 fig.
- Castetter, E. F., 1956, Vegetation of New Mexico: New Mexico Quarterly, p. 256-288.
- Cave, H. S., 1963, The Capitan Basin, Lincoln County, New Mexico: Pecos Valley Artesian Conservancy District Open-File Report, 11 p.
- Cazin, F. M. F., 1877, The copper and ore deposits of New Mexico: Engineering Mining Journal, v. 23, p. 299.
- 1880, New Mexico vs. Lake Superior as a copper producer: Engineering Mining Journal, v. 30, p. 87-88, 108.
- 1881, New Mexico vs. Lake Superior as a copper producer: Engineering Mining Journal, v. 31, p. 300.
- Cernock, P. J., 1976, Hydrocarbon source-rock evaluation study, Humble Oil and Refining Company no. 1 state BA well, Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-96, 4 p., (text), 2 figs.

## References - Continued

- Cernock, P. J., 1977, Hydrocarbon source-rock evaluation study, Humble Oil and Refining Company no. 1 state BA well, Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-97, 10 p., (text), 3 figs.
- Chamberlin, R. M., 1974a, Geology of the Council Rock district, Socorro County: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 134 p., 19 figs.
- 1974b, Geology of the Council Rock district, Socorro County: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-40, 134 p., 19 figs.
- Chang, C. W., and Dregne, H. E., 1955, Reclamation of salt- and sodium-affected soils in the Mesilla Valley: New Mexico State University, Las Cruces, Agricultural Experiment Station Bulletin 401, 26 p.
- Chapin, C. E., 1971a, Asymmetry of the Rio Grande Rift; Tectonic implications [abs.]: Geological Society of America, Abstracts with Programs, v. 3, p. 765-767.
- 1971b, K-Ar age of the La Jara Peak andesite and its possible significance to mineral exploration in the Magdalena mining district, New Mexico: Isochron/West, no. 2, p. 43-44.
- 1971c, The Rio Grande Rift, pt. 1, modifications and additions, in Guidebook to the San Luis Basin, Colorado: New Mexico Geological Society, 22nd Field Conference, p. 191-201.
- 1974a, Composite stratigraphic column, Magdalena area: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-46, 1 sheet.
- 1974b, Generalized map showing structure and stocks in Magdalena area: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-47, map.
- Chapin, C. E., Blakestad, R. B., Jr., Brown, D. M., Chamberlin, R. M., Krewedl, D. A., and Simon, D. B., 1974, Composite map of Magdalena-Tres Montosas area (preliminary): New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-45, scale 1:24,000.

References - Continued

- Chapin, C. E., Blakestad, R. B., Bruning, J. E., Brown, D. M., Chamberlin, R. M., Krewedl, D. A., Siemers, W. T., Simon, D. B., and Wilkinson, W. W., 1974, Exploration framework of the Magdalena area, Socorro County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 380-381.
- Chapin, C. E., Blakestad, R. B., Jr., and Loring, A. K., 1974, New Mexico in the tectono-magmatic framework [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 380-381.
- Chapin, C. E., Blakestad, R. B., and Siemers, W. T., 1975, Geology of the Magdalena area, in Guidebook to field trips to central New Mexico, part 2: American Association of Petroleum Geologists and Society of Economic Paleontologists and Mineralogists, Rocky Mountain Sections, 1975 Field Conference, p. 43-49, 2 figs.
- Chapin, C. E., Chamberlin, R. M., Osburn, G. R., Sanford, A. R., and White, D. W., 1978a, Exploration framework of the Socorro geothermal area, New Mexico, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 115-129.
- 1978b, Exploration framework of the Socorro geothermal area, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-88, 68 p., 3 figs.
- 1978c, Geological and geophysical maps of the Socorro geothermal area, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, in pocket.
- Chapin, C. E., and Elston, W. E., eds., 1978, Field guide to selected cauldrons and mining districts of the Datil-Mogollon volcanic field of New Mexico: New Mexico Geological Society Special Publication 7, 149 p.
- Chapin, C. E., Jahns, R. H., Chamberlin, R. M., and Osburn, G. R., 1978, Road log first day; Socorro to Truth or Consequences via Magdalena and Winston, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 1-31.
- Chapin, C. E., and Seager, W. R., 1975, Evolution of the Rio Grande Rift in the Socorro and Las Cruces areas, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 297-322.

## References - Continued

- Chapin, C. E., Siemers, W. T., and Osburn, G. R., 1975, Summary of radiometric ages of New Mexico rocks: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-60, continuous revision.
- Chavez, E. A., 1968-1977, Chloride content of water in selected wells finished in the San Andres Formation, 1967-1977: New Mexico State Engineer Open-File Maps, 14 sheets.
- Cheetham, A. H., 1950, Preliminary survey of some New Mexico bryozoa: New Mexico Institute of Mining and Technology, Socorro, unpublished B.S. thesis, 107 p.
- Chisholm, E. J., 1950, Sedimentary petrology of San Andres Formation of central New Mexico: Texas Technical University, Lubbock, unpublished M.S. thesis, 25 p.
- Chisolm, F. F., 1889, Notes on some unusual occurrences of galena crystals (Sierra County, New Mexico): Colorado Science Society Proceedings, v. 3, p. 36-37.
- Christiansen, P. W., 1963, A brief history of Socorro County, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 234-239.
- 1964, The myth of Robledo: El Palacio, v. 71, no. 3, p. 30-34.
- 1965, New Mexico's southwest, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 230-233.
- 1973, The quest for water in New Mexico: New Mexico Water Resources Research Institute Report 029, 65 p.
- 1974, The story of mining in New Mexico: New Mexico Bureau of Mines and Mineral Resources Scenic Trips to the Geologic Past 12, 112 p.
- 1975, Dona Ana County, New Mexico; historical themes, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 71-74.
- Clabaugh, S. E., 1941, Geology of the northwestern portion of the Cornudas Mountains, New Mexico: University of Texas, Austin, unpublished M.S. thesis, 68 p.



## References - Continued

- Clark, Ellis, Jr., 1895, The silver mines of Lake Valley, New Mexico: American Institute of Mining Engineers Transactions, v. 34, p. 138-167.
- Clark, I. G., 1968, Administration of water resources in New Mexico: New Mexico Water Resources Research Institute Report 3, 32 p.
- 1976, The Elephant Butte controversy; a chapter in the emergence of Federal Water Law: Journal of American History, v. 61, no. 4, p. 1006-1033.
- Clark, J. D., and Priest, K. F., 1932, Public water supplies of New Mexico: University of New Mexico, Albuquerque, Chemical Series Bulletin, v. 2, no. 1, 40 p., 7 figs.
- Clark, J. D., and Mann, E. H., 1938, A study of the occurrence of fluorine in the drinking water of New Mexico: University of New Mexico, Albuquerque, Chemical Series Bulletin, v. 2, no. 5, 23 p.
- Clark, J. W., 1972, Salinity problems in the Rio Grande Basin, in Proceedings of the National Conference on Managing Irrigated Agriculture to Improve Water Quality: New Mexico Water Resources Research Institute, Las Cruces, p. 55-66.
- Clark, K. F., 1961, Hypogene zoning in the Lordsburg mining district, Hidalgo County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 136 p.
- 1964, Hypogene zoning in the Lordsburg mining district, Hidalgo County, New Mexico [abs.], in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 186-187.
- 1970, Zoning, paragenesis, and temperatures of formation in the Lordsburg district, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 107-114.
- Clark, N. J., and Summers, W. K., 1971, Records of wells and springs in the Socorro and Magdalena areas, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 115, 51 p.
- Clark, R. D., 1969, Industrial developments for southeastern New Mexico, a case study: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis.

References - Continued

- Clark, Tracy, 1959, Geology of the Sacramento Mountains, in Guidebook to the Sacramento Mountains of Otero County, New Mexico: Roswell Geological Society, Field Conference, p. 220-222.
- Clebsch, Alfred, Jr., 1960, Availability of ground water at Gran Quivira National Monument, Socorro County, New Mexico: U.S. Geological Survey Open-File Report, 38 p., 3 figs.
- Clemons, R. E., 1975, Petrology of the Bell Top Formation, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 123-130.
- 1976a, Geologic map of east half Corralitos Ranch quadrangle, Dona Ana County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-36, 2 sheets.
- 1976b, Sierra de las Uvas ash-flow field, south-central New Mexico, in Tectonics and mineral resources of southwestern North America: New Mexico Geological Society Special Publication 6, p. 115-121.
- 1977, Geology of west half Corralitos Ranch quadrangle, New Mexico: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-44, two sheets.
- 1978, Geologic cross section of the Good Sight-Cedar Hills depression, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, [in pocket].
- Clemons, R. E., 1979, Geology of Good Sight Mountains, Luna County, New Mexico Bureau of Mines and Mineral Resources Circular 169 [in press].
- Clemons, R. E., Hawley, J. W., Hoffer, J. M., and Seager, W. R., 1975, Road log second day--Las Cruces to the Sierra de las Uvas and Aden volcanic area and return, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 17-34.
- Clemons, R. E., and Seager, W. R., 1973a, Cenozoic geology of the Goodsight-Cedar Hills volcanic-tectonic depression, in Guidebook to geology of southcentral Dona Ana County, New Mexico: El Paso Geological Society, 7th Field Conference, p. 50-55.
- 1973b, Geology of Souse Springs quadrangle, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 100, 31 p.

## References - Continued

- Clemons, R. E., and Seager, W. R., 1978, Supplemental log no. 1; Central to Las Cruces via Deming, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 65-72.
- Clifford, J. O., 1911, Vanadium in New Mexico; Caballos Mountains deposits: Mining World, v. 35, p. 857-858.
- 1912, Interesting review of Chino's mines and methods: Mines and Methods, v. 3, p. 47-52.
- Clisby, K. H., and Sears, P. B., 1956, San Augustin Plains--Pleistocene climatic changes: Science, v. 124, no. 3221, p. 537-539.
- Condie, K. C., 1976, Geologic map of Precambrian rocks of Ladron Mountains, Socorro County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-38.
- Condie, K. C., Beers, C. A., and Budding, A. J., 1974, Precambrian rocks of the Los Pinos Mountains, central New Mexico; Part II, origin of granitic and volcanic rocks [abs.]: Geological Society of America, Abstracts with Programs, v. 6, no. 5, p. 436.
- Condie, K. C., and Budding, A. J., 1979, Geology and geochemistry of Precambrian rocks, central and south-central New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 35 [in press].
- Coney, P. J., 1976, Structure, volcanic stratigraphy, and gravity across the Mogollon Plateau, New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 29-41.
- Coney, P. J., and Elston, W. E., 1978a, Supplemental log no. 6; Alternate stop on Whitewater Mesa, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 89.
- 1978b, Supplemental log no. 7; Mogollon to Horse Springs via the Bursum Road, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 90-99.
- Conover, C. S., 1952a, Effect of development of ground water west of Red Mountain, New Mexico: U.S. Geological Survey Open-File Report, 53 p., 11 figs.

## References - Continued

- Conover, C. S., 1952b, Effect of development of ground water west of Red Mountain, Luna County, New Mexico, in 18th, 19th, and 20th biennial reports, 1946-1952: New Mexico State Engineer, p. 11-12.
- 1954, Ground-water conditions in the Rincon and Mesilla Valleys and adjacent areas in New Mexico: U.S. Geological Survey Water-Supply Paper 1230, 200 p. [1955].
- Conover, C. S., and Akin, P. D., 1942, Progressive report on the ground-water supply of the Mimbres Valley, New Mexico, in 14th and 15th biennial reports, 1938-1942: New Mexico State Engineer, p. 237-282, 12 figs.
- Conover, C. S., Herrick, E. H., Wood, J. W., and Weir, J. E., Jr., 1955, The occurrence of ground water in south-central New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 108-120.
- Cooley, B. B., Jr., 1958, Oil exploration in the area of the Franklin and Hueco Mountains, in Guidebook to the Franklin and Hueco Mountains: West Texas Geological Society, 1958 Field Conference, p. 70-72, 1 fig.
- Cooley, K. R., 1966, Rainfall and runoff relationships along the central highlands of Arizona and western New Mexico: University of Arizona, Tucson, unpublished M.S. thesis, 52 p., 7 figs.
- Cooley, M. E., 1959, Triassic stratigraphy in the state line region of west-central New Mexico and east-central Arizona, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 66-73.
- 1968, Some notes on the late Cenozoic drainage patterns in southeastern Arizona and southwestern New Mexico, in Guidebook to southern Arizona III: Arizona Geological Society, 1968 Field Conference, p. 75-78.
- Cooley, M. E., and Davidson, E. S., 1963, The Mogollon Highlands--their influence on Mesozoic and Cenozoic erosion and sedimentation: Arizona Geological Society Digest, v. 6, p. 7-35, 11 figs.
- Cooper, J. B., 1958, Ground-water conditions in the vicinity of Carrizozo, Lincoln County, New Mexico: U.S. Geological Survey Open-File Report, 45 p., 2 figs.

References - Continued

- Cooper, J. B., 1964, Water supplies near Carrizozo, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 159-160.
- 1965, Ground-water resources of the northern Tularosa Basin near Carrizozo, Lincoln County, New Mexico: U.S. Geological Survey Hydrologic Investigations Atlas HA-193.
- 1967, Western closed basins--geography, geology, and water use, in Water resources of New Mexico: New Mexico State Planning Office, Santa Fe, p. 170-182.
- 1969, Ground-water exploration in the Bosque del Apache Grant, Socorro County, New Mexico: U.S. Geological Survey Open-File Report, 79 p., 12 figs.
- 1970, Summary records of supply wells in the Post Headquarters area, White Sands Missile Range, New Mexico: U.S. Geological Survey Open-File Report, 202 p., 87 figs.
- 1973, Summary records of test and supply wells in range areas, White Sands Missile Range, New Mexico: U.S. Geological Survey Open-File Report, 132 p., 40 figs.
- Cooper, J. B., and Doty, G. C., 1966, Test wells east of the Rio Grande Bosque del Apache Grant, Socorro County, New Mexico: U.S. Geological Survey Open-File Report, 26 p., 5 figs.
- Cope, E. D., 1881, Geology of the Lake Valley mining district: American Naturalist, v. 15, p. 831-832.
- 1882a, Geological age of the Lake Valley mines of New Mexico: Engineering Mining Journal, v. 34, p. 214.
- 1882b, Invertebrate fossils from the Lake Valley district, New Mexico: American Naturalist, v. 16, p. 158-159.
- 1884, The Loup Forks beds on the Gila River: American Naturalist, v. 18, p. 58-59.
- Coppedge, R. O., and Gray, J. R., 1968, Recreational use and value of water at Elephant Butte and Navajo Reservoirs: New Mexico State University, Las Cruces, Agricultural Experiment Station Bulletin 535, 24 p.



## References - Continued

- Corbitt, L. L., 1971, Structure and stratigraphy of the Florida Mountains, Luna County, New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 115 p.
- 1974a, Geology of the Florida Mountains, Luna County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 382.
- ed., 1974b, Geology of the Florida Mountains, in Guidebook to the geology of the Florida Mountains, Luna County, New Mexico: El Paso Geological Society, 8th Field Conference, 56 p.
- 1974c, Structure and stratigraphy of the Florida Mountains, in Guidebook to the geology of the Florida Mountains, Luna County, New Mexico: El Paso Geological Society, 8th Field Conference, p. 16-29.
- Corbitt, L. L., and Nials, F. L., 1975, Tectonic significance of the Pony Hills, Luna County, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 293-296.
- Corbitt, L. L., Nials, F. L., and Varnell, R. J., 1977, Structure of Brockman Hills, southwestern New Mexico: American Association of Petroleum Geologists Bulletin, v. 61, no. 4, p. 601-615, 9 figs.
- Corbitt, L. L., and Woodward, L. A., 1970, Thrust faults of the Florida Mountains, New Mexico and their regional Tectonic significance, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 69-74.
- Cordell, L. E., 1975, Combined geophysical studies at Kilbourne Hole maar, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 269-272.
- Cosgrove, C. B., 1947, Caves of the upper Gila and Hueco areas in New Mexico and Texas: Harvard University, Cambridge, Mass., Peabody Museum Papers, v. 24, no. 2.
- Cox, E. R., and Reeder, H. O., 1962a, Ground-water conditions in the Rio Grande Valley between Truth or Consequences and Las Palomas, Sierra County, New Mexico: New Mexico State Engineer Technical Report 25, 47 p.

References - Continued

- Cox, E. R., and Reeder, H. O., 1962b, Ground-water conditions in the Rio Grande Valley between Truth or Consequences and Las Palomas, Sierra County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4-4448, p. 42-43.
- Craddock, J. C., 1960, The origin of the Lincoln fold system, southeastern New Mexico, in 21st geological congress: International Geological Congress, Copenhagen, Denmark, pt. 18, p. 34-44.
- 1964, The Lincoln fold system, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 122-133.
- Crawford, W. P., 1937, Tellurium minerals of New Mexico: American Mineralogist, v. 22, no. 10, p. 1065-1069, 1 fig.
- Creasey, S. C., 1959, Some phase relations in the hydrothermally altered rocks of the porphyry copper deposits (Santa Rita mine): Economic Geology, v. 54, no. 3, p. 351-373.
- Creasey, S. C., and Granger, A. E., 1953, Geologic map of the Lake Valley manganese district, Sierra County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-9.
- Creel, B. J., 1971, An economic classification of the irrigated cropland in the lower Rio Grande Basin: New Mexico State University, Las Cruces, unpublished M.S. thesis, 137 p.
- Cross, T. A., 1970, The Mississippian Lake Valley Formation of the Sacramento Mountains, New Mexico; an environmental interpretation: University of Michigan, Ann Arbor, unpublished M.S. thesis, 107 p.
- Crutcher, T. D., 1958, Nomenclature of Cretaceous rocks, St. Johns vicinity, Apache County, Arizona, and Catron County, New Mexico: University of Texas, Austin, unpublished M.A. thesis, 98 p.
- Cruz, R. R., 1973a, Annual water-resources review, White Sands Missile Range, 1971 basic-data report: U.S. Geological Survey Open-File Report, 35 p., 8 figs.
- 1973b, Annual water-resources review, White Sands Missile Range, 1972 basic-data report: U.S. Geological Survey Open-File Report, 35 p., 8 figs.

## References - Continued

- Cruz, R. R., 1974, Annual water-resources review, White Sands Missile Range, 1973 basic-data report: U.S. Geological Survey Open-File Report, 36 p., 9 figs.
- 1975, Annual water-resources review, White Sands Missile Range, 1974 basic-data report: U.S. Geological Survey Open-File Report, 38 p., 9 figs.
- 1976, Annual water-resources review, White Sands Missile Range, 1975 basic-data report: U.S. Geological Survey Open-File Report, 39 p., 9 figs.
- 1977, Annual water-resources review, White Sands Missile Range, 1976 basic-data report: U.S. Geological Survey Open-File Report 77-330, 35 p., 7 figs.
- 1978, Annual water-resources review, White Sands Missile Range, New Mexico, 1977 basic-data report: U.S. Geological Survey Open-File Report 78-553, 42 p., 13 figs.
- Cserna, Eugene, 1955, Preliminary geologic map of the Fra Cristobal Range: New Mexico Bureau of Mines and Mineral Resources File Map.
- 1956, Structural geology and stratigraphy of the Fra Cristobal quadrangle, Sierra County, New Mexico: Columbia University, New York, unpublished Ph. D. dissertation, 106 p.
- 1960, Pennsylvanian rocks in the Fra Cristobal quadrangle, Sierra County, New Mexico, in Guidebook to the northern Franklin Mountains and southern San Andres Mountains, with emphasis on Pennsylvanian stratigraphy: Roswell Geological Society, Field Conference, p. 135-148.
- Culbertson, J. K., and Dawdy, D. R., 1964, A study of fluvial characteristics and hydraulic variables, middle Rio Grande, New Mexico, in Studies of flow in alluvial channels: U.S. Geological Survey Water-Supply Paper 1498-F, 74 p.
- Culbertson, J. K., and Scott, C. H., 1970, Sandbar development and movement in an alluvial channel, Rio Grande near Bernardo, New Mexico, in Geological Survey research 1970: U.S. Geological Survey Professional Paper 700-B, p. 237-241, 5 figs.
- Culbertson, J. K., Scott, C. H., and Bennett, J. P., 1971, Summary of alluvial-channel data from Rio Grande conveyance channel, New Mexico, 1965-1969: U.S. Geological Survey Open-File Report, 168 p., 22 figs.

## References - Continued

- Culbertson, J. K., Scott, C. H., and Bennett, J. P., 1972, Summary of alluvial-channel data from Rio Grande conveyance channel, New Mexico 1965-69, in Sediment transport in alluvial channels: U.S. Geological Survey Professional Paper 562-J, 49 p.
- Cummings, David, 1968, Geologic map of the Zuni Salt Lake volcanic crater, Catron County, New Mexico: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-544.
- Cunningham, J. E., 1966, A Cretaceous vertebrate from the Big Burro Mountains, Grant County, New Mexico [abs.], in Guidebook of the Taos-Raton-Spanish Peaks country: New Mexico Geological Society, 17th Field Conference, p. 119.
- 1974, Geologic map of Silver City quadrangle, Grant County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-30.
- Cys, J. M., and Mazzullo, S. J., 1977, Biohermal submarine cements, Laborcita Formation (Permian), northern Sacramento Mountains, New Mexico, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 43-56.
- Dabney, T. E., 1946a, Kelly--and our Lady of Magdalena, part I--the face on the mountain: New Mexico Magazine, v. 24, no. 11, p. 31-32.
- 1946b, Kelly--and our Lady of Magdalena, part II--millions in mineral wealth: New Mexico Magazine, v. 24, no. 12, p. 31-32.
- 1947a, Kelly--and our Lady of Magdalena, part III--boom times: New Mexico Magazine, v. 25, no. 1, p. 31-32.
- 1947b, Kelly--and our Lady of Magdalena, part IV: New Mexico Magazine, v. 25, no. 2, p. 31-32, 43.
- Dale, V. B., and McKinney, W. A., 1959, Tungsten deposits of New Mexico: U.S. Bureau of Mines Report of Investigations RI 5517, 72 p.
- Damon, P. E., 1965, Correlation and chronology of ore deposits and volcanic rocks: University of Arizona, Tucson, Geochronology Laboratory Geochemical Section, Annual Progress Report C00-689-50, 60 p.

## References - Continued

- Damon, P. E., 1967, Correlation and chronology of ore deposits and volcanic rocks: U.S. Atomic Energy Commission Annual Progress Report C00-689-76, 260 p.
- 1968, Correlation and chronology of ore deposits and volcanic rocks: U.S. Atomic Energy Commission Annual Progress Report C00-689-100, 240 p.
- 1970a, Correlation and chronology of ore deposits and volcanic rocks: U.S. Atomic Energy Commission Annual Progress Report C00-689-130, 177 p.
- 1970b, The relationship between late Cenozoic volcanism and tectonism and orogenic-epeirogenic periodicity, in Correlation and chronology of ore deposits and volcanic rocks: U.S. Atomic Energy Commission Annual Progress Report C00-689-130, p. AIII-1-AIII-27, 10 figs.
- Damon, P. E., and Bikerman, Michael, 1964, Potassium-argon dating of post-Laramide plutonic and volcanic rocks within the Basin and Range Province of southeastern Arizona and adjacent areas: Arizona Geological Society Digest, v. 7, p. 63-78, 3 figs.
- Damon, P. E., and others, 1969a, Volcanic geology, southwestern New Mexico and southeastern Arizona, field trip 1, in Guidebook to southern Arizona: Arizona Geological Society, 3rd Field Conference, p. 243-314.
- 1969b, Volcanic geology, southwestern New Mexico and southeastern Arizona, field trip 1 [abs.]: Abstracts of North American Geology, January, p. 28.
- Dane, C. H., and Bachman, G. O., 1961, Preliminary geologic map of the southwestern part of New Mexico: U.S. Geological Survey Miscellaneous Geologic Investigations map I-344.
- 1965, Geologic map of New Mexico: U.S. Geological Survey map, 2 sheets.
- Dane, C. H., Wanek, A. A., and Reeside, J. B., Jr., 1957, Reinterpretation of section of Cretaceous rocks in Alamosa Creek Valley area, Catron and Socorro Counties, New Mexico: American Association of Petroleum Geologists Bulletin, v. 41, no. 2, p. 181-196.



References - Continued

- Dansereau, D. A., and Wynn, J. C., 1978, Principal facts for gravity stations in the Hillsboro and San Lorenzo quadrangles, Grant and Sierra Counties, New Mexico: U.S. Geological Survey Open-File Report 78-541, 10 p., 1 fig.
- Danson, E. B., 1957, An archeological survey of west-central New Mexico and east-central Arizona: Harvard University, Cambridge, Massachusetts, Peabody Museum Papers, v. 24, no. 2.
- Darden, Frank, and Cook, R. J., 1962, Successful pilot predicts bright future for Loco Hills water flood, New Mexico: Journal of Petroleum Technology, v. 14, no. 11, p. 1223-1227.
- Darton, N. H., 1903, The Zuni salt lake [abs.]: Science, new series, v. 21, p. 219.
- 1905a, Zuni salt deposits, New Mexico, in Contributions to economic geology, 1904: U.S. Geological Survey Bulletin 260-N, p. 565-566.
- 1905b, The Zuni salt lake: Journal of Geology, v. 13, p. 185-193.
- 1905c, The Zuni salt lake: Scientific American Supplement 59, p. 24-26.
- 1906, The Zuni salt lake: Geological Society of America Bulletin, v. 16, p. 564.
- 1911, Geology of part of Luna County, New Mexico [abs.]: Geological Society of America Bulletin, v. 22, p. 718-719.
- 1914, A peculiar fault in southwestern New Mexico: Washington Academy of Science Journal, v. 4, p. 288-289.
- 1915, Underground water of Luna County, New Mexico, in Contributions to the hydrology of the United States, 1914: U.S. Geological Survey Water-Supply Paper 345-C, p. 25-40.
- 1916a, Geology and underground water of Luna County, New Mexico: U.S. Geological Survey Bulletin 618, 188 p.
- 1916b, Geology and underground water of Luna County, New Mexico [abs.]: Washington Academy of Science Journal, v. 6, p. 449-450.
- 1916c, Sedimentary succession in southern New Mexico [abs.]: Geological Society of America Bulletin, v. 27, p. 86.

References - Continued

- Darton, N. H., 1916d, Water resources--underground water, in Description of the Silver City quadrangle, New Mexico: U.S. Geological Survey Atlas Folio 199, p. 19.
- 1917a, A comparison of Paleozoic sections in southern New Mexico [abs.]: Washington Academy of Science Journal, v. 7, p. 564.
- 1917b, A comparison of Paleozoic sections in southern New Mexico, in Shorter contributions to general geology: U.S. Geological Survey Professional Paper 108-C, p. 31-55.
- 1917c, Description of the Deming quadrangle: U.S. Geological Survey Atlas Folio 207, 15 p.
- 1917d, Lower Paleozoic rocks of the southern New Mexico region [abs.]: Geological Society of America Bulletin, v. 28, p. 172.
- 1920, New Mexico gypsum, in Gypsum deposits of the United States: U.S. Geological Survey Bulletin 697, p. 161-186, 28 figs.
- 1922, Geologic structure of parts of New Mexico, in Contributions to economic geology, 1921; Part II: U.S. Geological Survey Bulletin 726-E, p. 173-275, 33 figs.
- 1925a, Structural features of New Mexico and Arizona [abs.]: Geological Society of America Bulletin, v. 36, no. 1, p. 163.
- 1925b, Structural features of New Mexico and Arizona [abs.]: Pan-American Geologist, v. 43, no. 2, p. 156.
- 1926, The Permian of Arizona and New Mexico: American Association of Petroleum Geologists Bulletin, v. 10, no. 9, p. 819-852, 10 figs.
- 1928a, "Red beds" and associated formations in New Mexico; with an outline of the geology of the state: U.S. Geological Survey Bulletin 794, 356 p., 173 figs.
- 1928b, Geologic map of New Mexico: U.S. Geological Survey, scale 1:500,000.
- 1928c, Tectonics of Arizona and New Mexico [abs.]: Geological Society of America Bulletin, v. 39, no. 1, p. 182.
- 1928d, Tectonics of Arizona and New Mexico [abs.]: Pan-American Geologist, v. 49, no. 2, p. 141.

References - Continued

- Darton, N. H., 1933, Zuni salt lake [abs.]: Washington Academy of Science Journal, v. 23, no. 10, p. 485-486.
- 1938, Tectonics of the southwest [abs.]: Oil and Gas Journal, v. 36, no. 44, p. 46-47.
- Darton, N. H., and Burchard, E. F., 1911, Fluorspar near Deming, New Mexico, in Contributions to economic geology, 1910, Part 1: U.S. Geological Survey Bulletin 470-K, p. 533-545.
- Darton, N. H., and Reeside, J. B., Jr., 1926a, Guadalupe group: Geological Society of America Bulletin, v. 37, no. 3, p. 413-428, 4 figs.
- 1926b, Guadalupe group [abs.]: Pan-American Geologist, v. 45, no. 2, p. 159.
- Davie, William, Jr., and Spiegel, Z. E., 1967, Geology and water resources of Las Animas Creek and vicinity, Sierra County, New Mexico: New Mexico State Engineer Hydrographic Survey Report, 44 p.
- Davies, D. W., 1974, The relation between waterfowl and nitrogen species in the water of the Bosque del Apache: New Mexico Institute of Mining and Technology, Socorro, unpublished M. S. thesis, 51 p.
- Davis, L. V., and Busch, F. E., 1968, Summary of hydrologic investigations by the U.S. Geological Survey at White Sands Missile Range, New Mexico: U.S. Geological Survey Open-File Report, 149 p., 25 figs.
- Davis, M. E., 1965, Development of water in the El Paso district, Texas, 1960-63: Texas Water Commission Bulletin 6514, 34 p.
- 1967, Memorandum on availability of water having less than 2,500 parts per million dissolved solids in alluvium of the Rio Grande near El Paso, Texas: U.S. Geological Survey Open-File Report, 7 p., 2 figs.
- Davis, M. E., and Leggat, E. R., 1962, Reconnaissance investigation of the ground-water resources of the upper Rio Grande Basin, Texas: U.S. Geological Survey Open-File Report, 145 p.
- 1965, Reconnaissance investigation of the ground-water resources of the upper Rio Grande Basin, Texas: Texas Water Commission Bulletin 6502, pages vary.

References - Continued

- Davis, M. E., and Leggat, E. R., 1967, Preliminary results of the investigations of the saline-water resources in the Hueco Bolson near El Paso, Texas: U.S. Geological Survey Open-File Report, 27 p., 4 figs.
- Deal, E. G., 1973a, Geology of the northern part of the San Mateo Mountains, Socorro County, New Mexico; a study of a rhyolite ash-flow tuff cauldron and the role of laminar flow in ash-flow tuffs: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 136 p.
- 1973b, Primary laminar flow structures in the rhyolite ash-flow tuff of A. L. Peak, San Mateo Mountains, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 6, p. 475.
- 1974a, Development of the Mt. Withington cauldron, San Mateo Mountains, Socorro County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 6, no. 3, p. 162.
- 1974b, Geology of the northern part of the San Mateo Mountains, Socorro County, New Mexico; a study of a rhyolite ash-flow tuff cauldron and the role of laminar flow in ash-flow tuffs [abs.]: Dissertation Abstracts International, v. 35, no. 3, p. 1294B-1295B.
- Deal, E. G., and Elston, W. E., 1978, Relationship of geothermal systems of Lightning Dock KGRA, Hidalgo County, New Mexico to mid-Cenozoic volcanism and late Cenozoic Basin and Range faulting [abs.]: Geological Society of America, 74th Annual Meeting, Cordilleran Section, Abstracts with Programs, p. 102.
- Deal, E. G., Elston, W. E., Erb, E. E., Peterson, S. L., Reiter, D. E., Damon, P. E., and Shafiqullah, M., 1978, Cenozoic volcanic geology of the Basin and Range Province in Hidalgo County, southwestern New Mexico, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 219-229.
- Deal, E. G., and Rhodes, R. C., 1976, Volcano-tectonic structures in the San Mateo Mountains, Socorro County, New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 51-56.
- Dean, K. C., Iverson, H. G., and McAllister, J. A., 1948, Concentration of Lake Valley mines, oxide manganese ore from Deming, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4186, 8 p.

## References - Continued

- Debrine, B. E., Spiegel, Z. E., and Williams, Dennis, 1963a, Cenozoic sedimentary rocks in Socorro Valley, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, p. 22-23.
- 1963b, Cenozoic sedimentary rocks in Socorro Valley, New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 123-131.
- Decker, E. R., 1969, Heat flow in Colorado and New Mexico: Journal of Geophysical Research, v. 74, no. 2, p. 550-559.
- 1972a, Heat flow and basement radioactivity in Colorado, New Mexico and Texas [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 6, p. 373-374.
- 1972b, Heat flow and radioactivity in Colorado, New Mexico, Texas, Utah, and Wyoming [abs.]: American Geophysical Union (EOS) Transactions, v. 53, no. 4, p. 516.
- Decker, E. R., Cook, F. A., Ramberg, I. B., and Smithson, S. B., 1975, Significance of geothermal and gravity studies in the Las Cruces area, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 251-260.
- Decker, E. R., and Smithson, S. B., 1975, Heat flow and gravity interpretation across the Rio Grande Rift in southern New Mexico and west Texas: Journal of Geophysical Research, v. 80, no. 17, p. 2542-2552, 5 figs.
- Decker, J. P., 1960, A brief summary of the influence of phreatophytes on water yield in arid environments, in Symposium on water yield in relation to environment in the southwestern United States: Southwestern and Rocky Mountain Division, American Association for the Advancement of Science and Sul Ross State College, Alpine, Texas, p. 64-69.
- De Hon, R. A., 1965a, The Aden Crater lava cone: Compass, v. 43, p. 34-40.
- 1965b, Maare of La Mesa, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 204-209.
- 1965c, Maare of the Potrillo area of southern New Mexico [abs.], in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 238.



References - Continued

- De Hon, R. A., 1966, A maar origin for Hunt's Hole, Dona Ana County, New Mexico: Texas Technical University, Lubbock, unpublished M.S. thesis, 70 p., 24 figs.
- De Hon, R. A., and Reeves, C. C., Jr., 1966, A maar origin for Hunt's Hole, Dona Ana County, New Mexico: Texas Journal of Science, v. 18, p. 196-316, 13 figs.
- Deju, R. A., and Bhappu, R. B., 1965, Surface properties of silicate minerals: New Mexico Bureau of Mines and Mineral Resources Circular 82, 6 p.
- 1966, A chemical interpretation of surface phenomena in silicate minerals: New Mexico Bureau of Mines and Mineral Resources Circular 89, 13 p.
- 1967, A correlation between surface phenomena and flotation in silicates: New Mexico Bureau of Mines and Mineral Resources Circular 90, 22 p.
- 1968, A mathematical and experimental model of the electrical properties of silicate minerals: New Mexico Bureau of Mines and Mineral Resources Circular 97, 7 p.
- Delgado, D. J., 1975, Syntectonic limestone conglomerate lithofacies, Laborcita and Abo Formations (Wolfcampian), north central Sacramento Mountains, New Mexico: University of Wisconsin, Madison, unpublished M.S. thesis, 181 p.
- 1977, Conglomeratic lithofacies of the Laborcita and Abo Formations (Wolfcampian), north central Sacramento Mountains, New Mexico, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 102-108.
- Delgado, D. J., and Pray, L. C., 1977, Stop "C-3" the Laborcita Formation, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 173-183.
- Denison, R. E., 1970, Basement rock framework of parts of Texas, southern New Mexico, and northern Mexico, in The geologic framework of the Chihuahua tectonic belt: West Texas Geological Society and University of Texas, Austin, Symposium in honor of R. K. DeFord, Midland, Texas, p. 4-6.

## References - Continued

- Denny, C. S., 1938, The Cenozoic geology of the San Acacia area, Socorro County, New Mexico: Harvard University, Cambridge, Massachusetts, unpublished Ph. D. dissertation.
- 1940, Tertiary geology of the San Acacia area, New Mexico: *Journal of Geology*, v. 48, no. 1, p. 73-106.
- 1941, Quaternary geology of the San Acacia area, New Mexico: *Journal of Geology*, v. 49, no. 3, p. 225-260.
- DeSimpson, R., 1976, Systematic paleontology and paleoenvironmental analysis of the Hueco Formation, Robledo and Dona Ana Mountains, Dona Ana County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-66, 256 p., 5 figs.
- DeVaney, F. D., Fine, M. M., and Shelton, S. M., 1942, Manganese investigations--metallurgical division 6, ore-dressing studies of manganese ores, concentration of manganese ores from the Little Florida Mountains, Luna County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3620, 9 p.
- Dick-Peddie, W. A., 1965, Changing vegetation patterns in southern New Mexico, *in* Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 234-235.
- 1975, Vegetation of southern New Mexico, *in* Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 81-84.
- Dickson, J. R., Esparza, L. E., and Armstrong, D. G., 1973, Evolution of arkosic sediments in a Pleistocene-Holocene arid-semiarid climate and fault-block mountain tectonic setting, central New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 6, p. 476-477.
- Dinsmore, C. A., 1908, The new gold camp of Sylvanite, New Mexico: *Mining World*, v. 29, p. 670-671.
- 1910, The Chino copper property, New Mexico: *Mining World*, v. 33, p. 457-459.
- Dinwiddie, G. A., 1967, Rio Grande Basin--geography, geology, and hydrology, *in* Water resources of New Mexico--occurrence, development, and use: New Mexico State Planning Office, Santa Fe, p. 127-142.

References - Continued

- Dinwiddie, G. A., 1968, Rio Grande Basin--geography, geology, and hydrology [abs.]: Abstracts of North American Geology, July, p. 964.
- Dinwiddie, G. A., Mourant, W. A., and Basler, J. A., 1966, Municipal water supplies and uses, southwestern New Mexico: New Mexico State Engineer Technical Report 29-D, 98 p., 18 figs.
- 1967, Municipal water supplies and uses, southwestern New Mexico [abs.]: Abstracts of North American Geology, May, p. 592.
- Ditmer, R. J., 1951, Vegetation of the southwest--past and present: Texas Journal of Science, v. 3, p. 350-355.
- Dixon, G. H., Baltz, E. H., Stipp, T. F., and Bieberman, R. A., 1954, Records of wells drilled for oil and gas in New Mexico: U.S. Geological Survey Circular 333, 79 p.
- Dobson, D. D., Dodson, C. H., Steele, J. G., and others, 1947, Physical land conditions in the Rio Grande watershed of southern New Mexico: U.S. Department of Agriculture, Soil Conservation Service, Physical Land Survey Report 42.
- Donegan, Ben, Donegan, Bob, and Kottlowski, F. E., 1965, Road log from Nutt to Hillsboro, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 27-30.
- Doraibabu, Peethambaram, 1971a, Trace base metals-petrography-rock alteration of the productive Tres Hermanas stock, Luna County, New Mexico [abs.]: Dissertation Abstracts International, v. 32, no. 12, p. 7112-B.
- 1971b, Trace base metals-petrography-rock alteration of the productive Tres Hermanas stock, Luna County, New Mexico: University of Missouri, Rolla, unpublished Ph. D. dissertation, 143 p.
- Doraibabu, Peethambaram, and Proctor, P. D., 1972, Zinc-lead-copper trace contents in Tres Hermanas stock, Luna County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Progress Report 4, 9 p., 5 figs.
- 1973, Trace base metals, petrography, and alteration Tres Hermanas stock, Luna County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 132, 29 p., 25 figs.

## References - Continued

- Dorroh, J. H., 1946a, Certain hydrologic and climatic characteristics of the southwest: University of New Mexico, Albuquerque, Publications in Engineering 1, 64 p.
- 1946b, Certain hydrologic and climatic characteristics of the southwest: U.S. Soil Conservation Service, Region 6, Bulletin 98, Engineering Series 9, 22 p.
- Doty, G. C., 1960, Reconnaissance of ground water in Playas Valley, Hidalgo County, New Mexico: New Mexico State Engineer Technical Report 15, 40 p., 9 figs.
- 1963, Water-supply development at the National Aeronautics and Space Agency--Apollo Propulsion System Development facility, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 40 p., 5 figs.
- 1965, Ground-water supply for the Apollo site, Dona Ana County, New Mexico [abs.], in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 239.
- 1966a, Rehabilitation of Murray well, White Sands Missile Range, New Mexico: U.S. Geological Survey Open-File Report, 11 p.
- 1966b, Test wells drilled at Mockingbird Gap, Socorro County, New Mexico, June to October 1965: U.S. Geological Survey Open-File Report, 10 p., 6 figs.
- 1967a, Southwestern closed basins--geography, geology, and hydrology, in Water resources of New Mexico--occurrence, development, and use: New Mexico State Planning Office, p. 250-264.
- 1967b, Supply well for Dona Ana Range Camp, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 23 p., 6 figs.
- 1968a, Phase I test wells, White Sands Missile Range, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 37 p., 12 figs.
- 1968b, Southwestern closed basins--geography, geology, and hydrology [abs.]: Abstracts of North American Geology, July, p. 965.

## References - Continued

- Doty, G. C., 1968c, Summary of production wells drilled for MAR site water supply, White Sands Missile Range, New Mexico: U.S. Geological Survey Open-File Report, 19 p., 6 figs.
- 1968d, Summary of test wells drilled for MAR site water supply, White Sands Missile Range, New Mexico: U.S. Geological Survey Open-File Report, 20 p., 5 figs.
- 1968e, Summary of wells drilled by White Sands Missile Range from June 1962 to January 1965: U.S. Geological Survey Open-File Report, 52 p., 13 figs.
- 1968f, Test wells in the Post area, White Sands Missile Range, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 50 p., 16 figs.
- 1969a, Availability of ground water near Arena, Luna County, New Mexico: U.S. Geological Survey Open-File Report, 20 p., 2 figs.
- 1969b, Test wells SMR-4 and SMR-5, White Sands Missile Range, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 26 p., 5 figs.
- Doty, G. C., and Cooper, J. B., 1970, Stratigraphic test well T-14, Post area, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 33 p., 3 figs.
- Doyle, J. C., 1951, Geology of the northern Caballo Mountains, Sierra County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 51 p., 3 figs.
- Dregne, H. E., 1969a, Irrigation water quality and the leaching requirement: New Mexico State University, Las Cruces, Agricultural Experiment Station Bulletin 542, 17 p.
- 1969b, Prediction of crop yields from quantity and salinity of irrigation water: New Mexico State University, Las Cruces, Agricultural Experiment Station Bulletin 543, 16 p.
- Dregne, H. E., and Maker, H. J., 1954, Irrigation well waters of New Mexico--chemical characteristics, quality, and use: New Mexico State University, Las Cruces, Agricultural Experiment Station Bulletin 386, 28 p.



## References - Continued

- Drewes, Harald, and Thorman, C. H., 1978, Major geologic structures between Lordsburg, New Mexico and Douglas and Tucson, Arizona, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 291-295.
- Dunham, K. C., 1935, The geology of the Organ Mountains with an account of Dona Ana County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 11, 272 p.
- 1936, Xenoliths in the Organ batholith, New Mexico: with a morphological description of diopside crystals by M. A. Peacock: American Mineralogist, v. 21, no. 5, p. 312-320, 4 figs.
- Dunn, D. A., 1959, Resume of oil and gas exploration of the Sacramento Mountains area, in Guidebook of the Sacramento Mountains of Otero County, New Mexico: Roswell Geological Society, 1959 Field Conference, p. 251-254, 1 fig.
- Dunn, P. G., 1975, Geology of the Copper Flat stockwork breccia, Hillsboro, New Mexico [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 337.
- Duriez, L. H., and Neuman, J. V., Jr., 1948, Geology and mining practice at the Bayard, New Mexico property: Mining and Metallurgy, v. 29, no. 502, p. 559-561.
- Duschatko, R. W., and Poldervaart, Arie, 1954, Spilitic intrusion near Ladron Peak, Socorro County, New Mexico [abs.]: American Geophysical Union Transactions, v. 35, no. 2, p. 378.
- 1955a, Spilitic intrusion near Ladron Peak, Socorro County, New Mexico: Geological Society of America Bulletin, v. 66, no. 9, p. 1097-1108, 5 figs.
- 1955b, Spilitic intrusion near Ladron Peak, Socorro County, New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 3, no. 4, p. 15.
- Dutton, C. E., 1965, The volcanoes and lava fields of New Mexico: abstract with discussion by J. W. Powell: Philosophical Society of Washington, D. C., Bulletin 7, p. 76-79.
- Eames, A. J., 1930, Report on ground-sloth coprolite from Dona Ana County, New Mexico: American Journal of Science, 5th series, v. 20, p. 353-356.

References - Continued

- Earth Environmental Consultants, Inc., 1976, Hydrogeology of Lamay Ranch Estates, Lincoln County, New Mexico: Albuquerque, consulting report, 19 p.
- Eaton, G. P., 1966, Geophysical investigation of a basin-fill aquifer in southeastern Arizona [abs.], in Abstracts for 1965: Geological Society of America Special Paper 87, p. 49.
- 1970, Preliminary aeromagnetic map of the Morenci-Monticello area, southeastern Arizona and southwestern New Mexico: U.S. Geological Survey Open-File Map.
- Eaton, G. P., Peterson, D. L., and Webring, Michael, 1977, Bouguer gravity map of the Mogollon-Santa Rita-Tyrone region, southwestern New Mexico: U.S. Geological Survey Open-File Map 77-650.
- Eckel, E. B., 1939, Abutment problems at Zuni Dam, New Mexico: Civil Engineering, v. 9, no. 8, p. 490-492, 4 figs.
- 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: Consulting report to U.S. Bureau of Land Management, p. 50-84, 99-117.
- Edwards, G. H., 1960, Geology of the central Little Burro Mountains, Grant County, New Mexico: University of Kansas, Lawrence, unpublished M.A. thesis.
- Edwards, W. F., 1904, Some notes on vanadium: Colorado Science Society Proceedings, v. 7, p. 297-312.
- Eimon, P. I., 1975, Future silver reserves [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 338.
- Elliott, E. W., 1957, Salt cedar control and channelization in the San Marcial area of the middle Rio Grande in New Mexico, in Problems of the upper Rio Grande; an arid zone river: U.S. Commission for Arid Resource Improvement and Development Publication 1, p. 31-36.
- Ellis, M. M., 1940, Water conditions affecting aquatic life in Elephant Butte Reservoir: Bureau of Fisheries Bulletin XLIX, no. 34, p. 257-304.

References - Continued

- Ellis, R. D., 1971, Geology and ore deposits of the Winkler anticline, Hidalgo County, New Mexico: University of Texas, Austin, unpublished M.S. thesis.
- Elston, W. E., 1953, Cenozoic history of the Sherman quadrangle, Grant, Luna, and Sierra Counties, New Mexico: Columbia University, New York, unpublished M.A. thesis.
- 1955a, Volcanic succession and possible mineralization in the Dwyer quadrangle, southwestern New Mexico [abs.]: Economic Geology, v. 50, no. 7, p. 773.
- 1955b, Volcanic succession and possible mineralization in the Dwyer quadrangle, southwestern New Mexico [abs.]: Geological Society of America Bulletin, v. 66, no. 12, pt. 2, p. 1553.
- 1956, Reconnaissance geology of the Virden quadrangle, Grant and Hidalgo Counties, New Mexico [abs.]: Geological Society of America Bulletin, v. 67, no. 12, p. 1691-1692.
- 1957, Geology and mineral resources of Dwyer quadrangle, Grant Luna, and Sierra Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 38, 86 p.
- 1958a, Burro uplift, northeastern limit of sedimentary basin of southwestern New Mexico and southeastern Arizona: American Association of Petroleum Geologists Bulletin, v. 42, no. 10, p. 2513-2517, 1 fig.
- 1958b, Geology and mineral resources of Dwyer quadrangle, Grant, Luna, and Sierra Counties, New Mexico: Columbia University, New York, unpublished Ph. D. dissertation.
- 1958c, Geology and mineral resources of Dwyer quadrangle, Grant, Luna, and Sierra Counties, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 6, no. 2, p. 141-142.
- 1958d, Some aspects of volcanism and mineralization in southwestern New Mexico, in Guidebook of the Hatchet Mountains and Cooks Range-Florida Mountains areas, Grant, Hidalgo, and Luna Counties, southwestern New Mexico: Roswell Geological Society, 11th Field Conference, p. 57-59.
- 1959, Some features of pyrometasomatic ore deposits in the Peloncillo Mountains, Hidalgo County, New Mexico [abs.], in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 159-160.

## References - Continued

- Elston, W. E., 1960, Geologic map of Virden quadrangle, Grant and Hidalgo Counties: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-15.
- 1961a, Field terms for glassy rocks;...dike rocks; classification of pyroclastic rocks;...common igneous rocks; relative proportions of glass shards; crystal fragments, and rock fragments in tuff, in Petroleum exploration handbook: New York, McGraw-Hill Book Company, Appendix A, p. 7, 10-13.
- 1961b, Reconnaissance geologic map of Virden thirty-minute quadrangle [abs.]: American Geological Institute, Geoscience Abstracts, v. 3, no. 3-734, p. 6-7.
- 1961c, Upper Cretaceous volcanism and mineralization in Steeple Rock mining district, Grant County, New Mexico [abs.], in Guidebook of the Albuquerque country: New Mexico Geological Society, 12th Field Conference, p. 193.
- 1962, Magmatic framework in the post-paleozoic development of southwestern New Mexico [abs.], in Guidebook of the Mogollon Rim region, east-central Arizona: New Mexico Geological Society, 13th Field Conference, p. 173.
- 1963, Geology and mineral resources of Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report, 781 p.
- 1964, Orogenesis and periods of mineralization in ten selected mining districts, southwestern New Mexico [abs.], in Abstracts for 1963: Geological Society of America Special Paper 76, p. 272.
- 1965a, Mining districts of Hidalgo County, New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 210-214.
- 1965b, The Mogollon Plateau volcanic province; possible connection with ring-dike complexes and lunar craters [abs.], in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 239.
- 1965c, Rhyolite ash-flow plateaus, ring-dike complexes, calderas, lopoliths, and moon craters, in Geological problems in lunar research: New York Academy of Science Annals, v. 123, article 2, p. 817-842.

References - Continued

- Elston, W. E., 1965d, Volcanic rocks of the Mimbres and upper Gila drainages, New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 167-174.
- 1966, Ring-dike complexes--possible analogs of lunar craters [abs.]: American Geophysical Union Transactions, v. 47, no. 1, p. 148.
- 1968, Terminology and distribution of ash flows of the Mogollon-Silver City-Lordsburg region, New Mexico, in Guidebook to southern Arizona III: Arizona Geological Society, 1968 Field Conference, p. 231-240.
- 1969, Terminology and distribution of ash flows of the Mogollon-Silver City-Lordsburg region, New Mexico [abs.]: Abstracts of North American Geology, January, p. 35.
- 1970a, Structural control of the pre-20 million year volcanic centers; clue to early evolution of Rio Grande trough [abs.], in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 157-158.
- 1970b, Volcano-Tectonic control of ore deposits, southwestern New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 147-154.
- 1972, Mid-Tertiary volcanism and tectonism in Basin and Range province, New Mexico; test for plate-tectonic models [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 7, p. 499.
- 1973, Regional geology of the Mogollon-Datil volcanic province, New Mexico, as a guide to mineralization [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 6, p. 478-479.
- 1974, Some guides to mineralization in Hidalgo County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 378.



References - Continued

- Elston, W. E., 1976a, Glossary of stratigraphic terms of the Mogollon-Datil volcanic province, New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 131-144.
- 1976b, 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: New Mexico Geological Society Special Publication 5, p. 93-102.
- 1978a, Supplemental log no. 5; Little Dry Creek Canyon, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 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 of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 107-113.
- Elston, W. E., Bikerman, Michael, and Damon, P. E., 1968, Significance of new K-Ar dates from southwestern New Mexico, in Correlation and chronology of ore deposits and volcanic rocks: U.S. Atomic Energy Commission Annual Progress Report C00-689-100, p. AIV1-AIV20, 4 figs.
- Elston, W. E., and Coney, P. J., 1968, Mogollon-Datil volcanic province, southwestern New Mexico [abs.], in Abstracts for 1967: Geological Society of America Special Paper 115, p. 417-418.
- Elston, W. E., Coney, P. J., and Rhodes, R. C., 1968, A progress report on the Mogollon Plateau volcanic province, southwestern New Mexico, in Cenozoic volcanism in the southern Rocky Mountains: Colorado School of Mines, Golden, Quarterly, v. 63, no. 3, p. 261-287.
- 1970, Progress report on the Mogollon Plateau volcanic province, southwestern New Mexico No. 2, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 75-86.
- Elston, W. E., and Damon, P. E., 1970, Significance of four new K-Ar dates from the Mogollon Plateau volcanic province, southwestern New Mexico, in Correlation and chronology of ore deposits and volcanic rocks: U.S. Atomic Energy Commission Annual Progress Report C00-689-130, p. AV11-AV19, 2 figs.

References - Continued

- Elston, W. E., Damon, P. E., Coney, P. J., Rhodes, R. C., Smith, E. I., and Bikerman, Michael, 1973, Tertiary volcanic rocks, Mogollon-Datil province, New Mexico and surrounding region; K-Ar dates, patterns of eruption and periods of mineralization: Geological Society of America Bulletin, v. 84, no. 7, p. 2259-2273, 5 figs.
- Elston, W. E., Erb, E. E., and Deal, E. G., 1979, Tertiary geology of Hidalgo County, New Mexico: New Mexico Geology, v. 1, no. 1, 3-6, 5 figs.
- Elston, W. E., Lambert, P. W., and Smith, E. I., 1969a, Striated cones--wind abrasion features, not shatter cones, in Shock metamorphism of natural materials: Baltimore, Md., Mono Book Corporation, p. 287-290.
- 1969b, Striated cones--wind abrasion features, not shatter cones [abs.]: Abstracts of North American Geology, October, p. 1519.
- Elston, W. E., and Netelbeek, T. A., 1965, Road log from Mimbres Valley to Silver City, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 36-43.
- Elston, W. E., and Northrop, S. A., eds., 1976, Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, 151 p.
- Elston, W. E., and Rhodes, R. C., 1969a, A progress report on the Mogollon Plateau volcanic province, southwestern New Mexico, in Cenozoic volcanism in the southern Rocky Mountains: Colorado School of Mines, Golden, Quarterly, v. 63, no. 3, p. 261-287, 6 figs.
- 1969b, A progress report on the Mogollon Plateau volcanic province, southwestern New Mexico [abs.]: Abstracts of North American Geology, April, p. 538.
- Elston, W. E., Rhodes, R. C., Coney, P. J., and Deal, E. G., 1976, 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: New Mexico Geological Society Special Publication 5, p. 3-28.

References - Continued

- Elston, W. E., Rhodes, R. C., and Erb, E. E., 1975, Control of mineralization by mid-Tertiary volcanic centers, southwestern New Mexico [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 338-339.
- 1976, Control of mineralization by mid-Tertiary volcanic centers, southwestern New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 125-130.
- Elston, W. E., Seager, W. R., and Clemons, R. E., 1975, Emory Cauldron, Black Range, New Mexico; source of the Kneeling Nun tuff, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 283-292.
- Elston, W. E., and Smith, E. I., 1970, Determination of flow direction of rhyolitic ash-flow tuffs from fluidal textures: Geological Society of America Bulletin, v. 81, no. 11, p. 3393-3406, 13 figs.
- Elston, W. E., Smith, E. I., and Rhodes, R. C., 1972, Mid-Tertiary Mogollon-Datil volcanic province, southwestern New Mexico; part 2, Petrology and petrogenesis [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 3, p. 155.
- Elston, W. E., and Snider, H. I., 1964, Differentiation and alkali metasomatism in dike swarm complex and related igneous rocks near Capitan, Lincoln County, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 140-147, 4 figs.
- Elston, W. E., Weber, R. H., and Trauger, F. D., 1965, Road log from Silver City to Junction of New Mexico highways 61 and 90, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 45-62.
- Emmens, N. W., 1906, The Jones iron fields of Socorro County, New Mexico: Mines Magazine, v. 13, p. 109-115.
- Endlich, F. M., 1883, The mining regions of southern New Mexico: American Naturalist, v. 17, p. 149-157.
- Entwistle, L. P., 1944, Manganiferous iron-ore deposits near Silver City, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 19, 70 p., 11 figs.

## References - Continued

- Entwistle, L. P., 1975, Geology and mineralization at the Ground Hog mine, New Mexico [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 339.
- Epis, R. C., 1956, Geology of the Pedregosa Mountains, Cochise County, Arizona: University of California, Berkeley, unpublished Ph. D. dissertation, 181 p.
- Erb, E. E., 1978, Evolution of mid-Tertiary ash-flow tuff cauldrons in the Animas, southern Peloncillo, and Guadalupe Mountains, Hidalgo County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 10, no. 1, p. 104-105.
- Ericksen, G. E., and Wedlow, Helmuth, Jr., 1976, Tertiary extrusive sheets and related intrusions in the Black Range, New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 63-67.
- Ericksen, G. E., Wedlow, Helmuth, Jr., Eaton, G. P., and Leland, G. R., 1970, Mineral resources of the Black Range Primitive area, Grant, Sierra, and Catron Counties, New Mexico, in Studies related to wilderness-primitive areas: U.S. Geological Survey Bulletin 1319-E, 162 p.
- Ethington, R. L., 1965a, Late Devonian and early Mississippian conodonts from Arizona and New Mexico: Journal of Paleontology, v. 39, no. 4, p. 566-589.
- 1965b, Late Devonian and early Mississippian conodonts from Arizona and New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 7, no. 7-5647, p. 39-40.
- Evans, A. M., 1949, Investigation of manganese deposits, Little Florida Mountains mining district, Luna County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4536, 11 p., 11 figs.
- Evans, G. C., 1963a, Geology and sedimentation along the lower Rio Salado in New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 99 p.
- 1963b, Geology and sedimentation along the lower Rio Salado in New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 209-216.

## References - Continued

- Eveleth, R. W., 1979a, New methods of working an old mine--case history of the Eberle Group, Mogollon, New Mexico: New Mexico Geology, v. 1, no. 1, p. 7-11, 7 figs.
- 1979b, The 1872 Mining Law; is it really obsolete?, in Annual report July 1, 1977, to June 30, 1978: New Mexico Bureau of Mines and Mineral Resources, p. 23-29.
- Everett, F. D., 1964, Reconnaissance of tellurium resources in Arizona, Colorado, New Mexico, and Utah, including selected data from other western states and Mexico: U.S. Bureau of Mines Report of Investigations RI 6350, 38 p., 4 figs.
- Fagadau, S. P., 1954, Geology of the Rio Grande depression in New Mexico [abs.]: American Association of Petroleum Geologists Bulletin, v. 38, no. 5, p. 944-945.
- Fahnestock, R. K., and Maddock, Thomas, Jr., 1963, Bed forms and flow phenomena in the Rio Grande; preliminary report [abs.]: Geological Society of America, Abstracts with Programs, p. 24-25.
- 1964a, Preliminary report on bed forms and flow phenomena in the Rio Grande near El Paso, Texas, in Geological Survey research 1964: U.S. Geological Survey Professional Paper 501-B, p. 140-142, 4 figs.
- 1964b, Preliminary report on bed forms and flow phenomena in the Rio Grande near El Paso, Texas [abs.], in Abstracts for 1964: Geological Society of America Special Paper 76, p. 272-273.
- Fairbanks, H. W., 1903a, The physiography of southern Arizona and New Mexico [abs.]: Journal of Geology, v. 11, p. 97-99.
- 1903b, The physiography of southern Arizona and New Mexico [abs.]: Engineering Mining Journal, v. 75, p. 154.
- Farkas, S. E., 1969a, Geology of the southern San Mateo mountains, Socorro and Sierra Counties, New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 137 p.
- 1969b, Geology of the southern San Mateo Mountains, Socorro and Sierra Counties, New Mexico [abs.]: Dissertation Abstracts International, section B., v. 30, no. 1, p. 255B-256B.
- Farnham, L. L., 1961, Manganese deposits of New Mexico: U.S. Bureau of Mines Information Circular IC 8030, 176 p., 27 figs.



## References - Continued

- Fay, R. O., 1962, New Mississippian blastoids from the Lake Valley Formation (Nunn Member), Lake Valley, New Mexico: Oklahoma Geology Notes, v. 22, no. 6, p. 189-195.
- 1963, New Mississippian blastoids from the Lake Valley Formation (Nunn Member), Lake Valley, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 5, no. 5-422, p. 14.
- Federal Power Commission, Bureau of Power, 1965, Upper Rio Grande River Basin, Colorado-New Mexico; planning status report, water resource appraisals for hydroelectric licensing: 13 p.
- Felmlee, J. K., and Cadigan, R. A., 1978, Radium and uranium data for mineral springs in eight western states: U.S. Geological Survey Open-File Report 78-561, 48 p., 21 figs.
- Ferguson, H. G., 1921a, The Mogollon district, New Mexico, in Contributions to economic geology, 1920, Part 1: U.S. Geological Survey Bulletin 715-L, p. 171-204, 2 figs.
- 1921b, The Mogollon district, New Mexico [abs.]: Washington Academy of Science Journal, v. 11, no. 15, p. 375-376.
- 1927, Geology and ore deposits of the Mogollon mining district, New Mexico: U.S. Geological Survey Bulletin 787, 100 p.
- Fiedler, A. G., 1927, Report on reconnaissance of the ground-water area of the Mimbres Valley, Luna County, New Mexico, in 8th biennial report, 1926-28: New Mexico State Engineer, p. 159-171.
- File, L. A., 1964, Listing of county mining records: New Mexico Bureau of Mines and Mineral Resources Circular 74, 50 p.
- 1965, Directory of mines of New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 77, 188 p.
- File, L. A., and Northrop, S. A., 1966, County, township, and range locations of New Mexico's mining districts: New Mexico Bureau of Mines and Mineral Resources Circular 84, 66 p.
- 1967, County, township, and range locations of New Mexico's mining districts [abs.]: Abstracts of North American Geology, July, p. 883.

## References - Continued

- Findley, J. S., 1965, Shrews from Hermit Cave, Guadalupe Mountains, New Mexico: *Journal of Mammalogy*, v. 46, p. 206-210, 9 figs.
- Fine, M. M., and Kennedy, J. S., 1948, Investigation of ore-dressing methods for barite ores from New Mexico, Missouri, and Arkansas: U.S. Bureau of Mines Report of Investigations RI 4280, 31 p.
- Finlay, J. R., 1922, Report of appraisal of mining properties of New Mexico: New Mexico State Tax Commission, Santa Fe, 154 p.
- Finnell, T. L., 1976a, Geologic map of the Reading Mountain quadrangle, Grant County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-800.
- 1976b, Geologic map of the Twin Sisters quadrangle, Grant County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-779.
- Flock, L. R., 1934, Records of silt carried by the Rio Grande and its accumulation in Elephant Butte Reservoir: *American Geophysical Union Transactions*, 15th Annual Meeting, pt. 2, p. 468-473.
- Fischer, Heinz, 1968, "The White Sand," die Gipswüste in New Mexico [abs.]: *Abstracts of North American Geology*, March, p. 337.
- Fischer, J. 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 Institute of Mining and Technology, Socorro, Geoscience Department, Open-File Report 14, 65 p.
- Fischer, R. P., 1937a, Sedimentary deposits of copper, vanadium-uranium, and silver in southwestern United States: *Economic Geology*, v. 32, no. 6, p. 906-951, 17 figs.
- 1937b, Sedimentary deposits of copper, vanadium-uranium, and silver in southwestern United States [abs.]: *Economic Geology*, v. 32, no. 2, p. 197-198.
- 1938, Sedimentary deposits of copper, vanadium-uranium, and silver in southwestern United States discussion by F. R. Koeberlin: *Economic Geology*, v. 33, no. 4, p. 458-461.
- Fischer, R. P., and Stewart, J. H., 1960, Distribution and lithologic characteristics of sandstone beds that contain deposits of copper, vanadium, and uranium, in Geological Survey research, 1960--short papers in the geological sciences: U.S. Geological Survey Professional Paper 400-B, p. 42-44.

References - Continued

- Fischer, W. A., and Hackman, F. J., 1964, Geologic map and sections of the Torrance Station 4 NE quadrangle, Lincoln County, New Mexico: U.S. Geological Survey Miscellaneous Geologic Investigations map I-400.
- Fishback, Martin, 1910, The Black Range mining district, New Mexico: Engineering Mining Journal, v. 89, p. 911-912.
- Fisher, R. V., and Waters, A. C., 1970, Base surge bed forms in maar volcanoes: American Journal of Science, v. 268, no. 2, p. 157-180.
- Fitzsimmons, J. P., 1955a, Geomorphology of south-central New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 105-107.
- 1955b, Historical conspectus of south-central New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 55-60.
- 1955c, Introduction to guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 11-12.
- 1955d, Some notes on the natural history of south-central New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 175-176.
- 1959, Structure and geomorphology of west-central New Mexico, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 112-116.
- 1965, A glance at the birds of southwestern New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 236-237.
- Fitzsimmons, J. P., and Lochman-Balk, Christina, eds., 1965, Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, 244 p.
- Flege, R. F., Jr., 1956, Geology of the Lordsburg quadrangle, Hidalgo County, New Mexico: University of Washington, Seattle, unpublished Ph. D. dissertation.
- 1959a, Geology of Lordsburg quadrangle, Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 62, 36 p.

References - Continued

- Flege, R. F., Jr., 1959b, Geology of the Lordsburg quadrangle, Hidalgo County [abs.]: American Geological Institute, Geoscience Abstracts, v. 1, no. 8, p. 4.
- Fleischhauer, H. L., Jr., 1976, Stratigraphy and sedimentology of lacustrine shoreline features in the lower Animas Valley, Hidalgo County, New Mexico [abs.]: Arizona Academy of Science Journal, v. 11, p. 94.
- 1977a, Soil-age relationships of alluvial and lacustrine deposits, lower Animas Valley, southwest New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 9, no. 1, p. 18-19.
- 1977b, Quaternary geology of Lake Animas, Hidalgo County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 149 p.
- 1978, Summary of the late Quaternary geology of Lake Animas, Hidalgo County, New Mexico, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 283-284.
- Fletcher, H. C., and Elmendorf, H. B., 1955, Phreatophytes--a serious problem in the west, in Yearbook of agriculture: U.S. Department of Agriculture, p. 423-429.
- Fletcher, H. C., and Rich, R. L., 1955, Classifying southwestern watersheds on the basis of water yields: Journal of Forestry, v. 53, p. 196-202.
- Flower, R. H., 1953a, Age of Bliss sandstone, New Mexico: American Association of Petroleum Geologists Bulletin, v. 37, no. 8, p. 2054-2055.
- 1953b, Franklin Mountains section, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 15-17.
- 1953c, Paleozoic sedimentary rocks of southwestern New Mexico, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 106-112.
- 1953d, Road log Franklin Mountains and vicinity, October 15, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 11-14.

References - Continued

- Flower, R. H., 1955, Pre-Pennsylvanian stratigraphy of southern New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 65-70.
- 1957, Pre-Onate deformation in southern New Mexico [abs.]: Geological Society of America Bulletin, v. 68, no. 12, pt. 2, p. 1726-1727.
- 1958, Cambrian-Mississippian beds of southern New Mexico, in Guidebook of the Hatchet Mountains and the Cooks Range-Florida Mountains areas, Grant, Hidalgo, and Luna Counties, southwestern New Mexico: Roswell Geological Society, 11th Field Conference, p. 61-78.
- 1959, Cambrian-Devonian beds of southern New Mexico, in Guidebook for joint field conference in the Sacramento Mountains of Otero County, New Mexico: Roswell Geological Society, 1959 Field Conference, p. 154-171, 2 figs.
- 1965, Early Paleozoic of New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 112-131.
- 1968, Part I--some El Paso guide fossils; Part II--fossils from the Smith Basin Limestone of the Fort Ann region; Part III--fossils from the Fort Ann Formation; Part IV--merostomes from the Cassinian portion of the El Paso group: New Mexico Bureau of Mines and Mineral Resources Memoir 22, 63 p.
- Flower, R. H., Kelley, V. C., Silver, Caswell, Kottlowski, F. E., Kuellmer, F. J., and Jones, W. R., 1953, Road log El Paso to Las Cruces, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 18-28.
- Flower, R. H., Zeller, R. A., Callaghan, Eugene, and Kottlowski, F. E., 1953, Road log Silver City to Dos Cabezas, October 18, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 83-105.
- Fodor, R. V., 1971a, Chemistry, mineralogy, and petrology of the mafic and intermediate lavas of the Black Range, New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 158 p. [1972].
- 1971b, Fe content in pyroxenes from a calcalkalic volcanic suite, New Mexico, U. S. A.: Earth and Planetary Science Letters, v. 11, no. 5, p. 385-390.



References - Continued

- Fodor, R. V., 1972a, Chemistry, mineralogy, and petrology of the mafic and intermediate lavas of the Black Range, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 6, p. 376-377.
- 1972b, Chemistry, mineralogy, and petrology of the mafic and intermediate lavas of the Black Range, New Mexico [abs.]: Dissertation Abstracts International, v. 32, no. 11, p. 6473B.
- 1975, Petrology of basalt and andesite of the Black Range, New Mexico: Geological Society of America Bulletin, v. 86, no. 3, p. 295-304, 7 figs.
- 1976, Volcanic geology of the northern Black Range, New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 68-70.
- Foley, E. J., 1964, The Lincoln folds, Lincoln, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 134-139.
- Follansbee, Robert, and Dean, H. J., 1915, Water resources of the Rio Grande Basin, 1888-1913: U.S. Geological Survey Water-Supply Paper 358, 725 p.
- Folster, H. G., Wilson, D. B., Kramer, G., Hanson, S., Boyle, W., and Bennett, C., 1978, Water treatment for small public supplies: New Mexico Water Resources Research Institute Report 095, 55 p., 20 figs.
- Ford, W. E., 1909, Calamine crystals from the Organ Mountains, Dona Ana County, New Mexico: American Journal of Science, 4th series, v. 3, p. 65-66.
- Foreman, Fred, 1956, San Augustin Plains--the sediments: Science, v. 124, no. 3221, p. 537-539.
- Foreman, Fred, Clisby, K. H., and Sears, P. B., 1959, Plio-Pleistocene sediments and climates of the San Augustin Plains, New Mexico, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 117-120.
- 1960, Plio-Pleistocene sediments and climates of the San Augustin Plains, New Mexico [abs.]: American Geological Society, Geoscience Abstracts, v. 2, no. 5, p. 16-17.

References - Continued

- Forrester, J. D., 1972a, Skarn formation and sulfide mineralization at the Continental mine, Fierro, New Mexico: Cornell University, Ithaca, New York, unpublished Ph. D. dissertation.
- 1972b, Skarn formation and sulfide mineralization at the Continental mine, Fierro, New Mexico [abs.]: Dissertation Abstracts International, v. 33, no. 3, p. 1157B.
- Foster, R. W., compiler, 1956, Petroleum exploration map of Lincoln County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Exploration Map 13, periodically revised.
- 1959, Precambrian rocks of the Sacramento Mountains and vicinity, in Guidebook for joint field conference in the Sacramento Mountains of Otero County, New Mexico: Permian Basin Section, Society of Economic Paleontologists and Mineralogists and Roswell Geological Society, p. 137-153.
- 1964, Stratigraphy and petroleum possibilities of Catron County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 85, 55 p.
- 1971, Southern Zuni Mountains, Zuni-Cibola Trail, third edition: New Mexico Bureau of Mines and Mineral Resources Scenic Trips to the Geologic Past 4, 75 p.
- 1978, Oil and gas evaluation of the White Sands Missile Range and Fort Bliss Military Reservation, south-central New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-92, 82 p., 22 figs.
- Foster, R. W., Evans, G. C., and Luce, P. B., 1963, Supplementary road log, southern Ladron Mountains Magdalena to Interstate 25, via Snake Ranch Flats, Rio Salado, and southern Ladron Mountains, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 88-95, 6 figs.
- Foster, R. W., and Kottowski, F. E., 1963, Field trip 2, Joyita Hills, in Guidebook of the Socorro region: New Mexico Geological Society, 14th Field Conference, p. 42-52, 9 figs.
- Foster, R. W., and Luce, P. B., 1963a, Road log A, Socorro northward to Valencia County line via Interstate 25, U.S. 85, and U.S. 60, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 6-12, 4 figs.

References - Continued

- Foster, R. W., and Luce, P. B., 1963b, Road log B, junction Interstate 25 to Torrance County line via U.S. 60, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 13-19, 4 figs.
- 1963c, Road log D, Socorro to Sierra County line, via U.S. 85, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 26-30.
- 1963d, Road log E, San Antonio, New Mexico (at junction U.S. 380 and U.S. 85) to Lincoln County line via U.S. 380, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 31-37, 2 figs.
- Foster, R. W., Ostrander, R. E., Willard, M. E., Weber, R. H., and Kottowski, F. E., 1959, Road log third day; Gallup to Socorro via Zuni Pueblo, Fence Lake, Salt Lake, and Quemado, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 37-50.
- Fowler, C. H., 1930, Mining and mineral laws of New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 6, 86 p.
- Fowler, C. H., and Talmage, S. B., 1941, Mining, oil, and mineral laws of New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 16, 251 p.
- Fox, W. J., 1975, The Broad Canyon Dam, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 181-182.
- Freeman, C. E., Jr., 1968, A pollen study of some post-Wisconsin alluvial deposits in Dona Ana County, New Mexico: New Mexico State University, Las Cruces, unpublished Ph. D. dissertation, 55 p., 9 figs.
- 1969, A pollen study of some post-Wisconsin alluvial deposits in Dona Ana County, southern New Mexico [abs.]: Dissertation Abstracts International, Section B, v. 29, no. 10, p. 3635B-3636B.
- 1972, Pollen study of some Holocene alluvial deposits in Dona Ana County, southern New Mexico: Texas Journal of Science, v. 24, no. 2, p. 203-220.

## References - Continued

- Fries, Carl, Jr., 1940a, Tin deposits of the Black Range, Catron and Sierra Counties, New Mexico--a preliminary report, in Strategic minerals investigations: U.S. Geological Survey Bulletin 922-M, p. 355-370.
- 1940b, Tin deposits of the Black Range, Catron and Sierra Counties, New Mexico [abs.]: American Geophysical Union Transactions, 21st Annual Meeting, pt. 1, p. 362.
- Fries, Carl, Jr., and Butler, A. P., Jr., 1943, Geologic map of the Black Range tin district, New Mexico: U.S. Geological Survey Open-File Map.
- Fries, Carl, Jr., Schaller, W. T., and Glass, J. J., 1942, Bixbyite and pseudobrookite from the tin-bearing rhyolite of the Black Range, New Mexico: American Mineralogist, v. 27, no. 4, p. 305-322, 2 figs.
- Frische, R. H., 1956, A field study of the ground-water conditions in the Alamogordo area by the induced-polarization method: New Mexico Institute of Mining and Technology, Socorro, 7 p.
- Frost, S. J., 1979, Coal industry of New Mexico in 1978, in Annual report July 1, 1977, to June 30, 1978: New Mexico Bureau of Mines and Mineral Resources, p. 30-33.
- Fry, E. D., 1910, The Lordsburg mining district, New Mexico: Engineering Mining Journal, v. 90, p. 820.
- Fuehring, H. D., 1975, Utilization of water in a semi-arid region: New Mexico Water Resources Research Institute Report 059, 35 p.
- Funderburg, D. E., and Roybal, F. E., 1977, Sediment trap efficiency of Tortugas Arroyo near Las Cruces, New Mexico, water years 1963-1974: U.S. Geological Survey Open-File Report 77-586, 56 p., 28 figs.
- Furlow, J. W., 1965a, Geology of the San Mateo Peak area, Socorro County, New Mexico [abs.], in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 240.
- 1965b, Geology of the San Mateo Peak area, Socorro County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 83 p.

## References - Continued

- Furman, H. van F., 1885, Notes on two ore deposits of southwestern New Mexico: New Mexico Institute of Mining and Technology, Socorro, Quarterly, v. 6, p. 138-142.
- Gabin, V. L., and Lesperance, L. E., 1977, New Mexico climatological data; precipitation, temperature, evaporation, and wind, monthly annual means 1850-1975: W. K. Summers and Associates, Socorro, New Mexico, 436 p.
- Gadway, K. L., 1959, Cretaceous sediments of the North Plains and adjacent area, McKinley, Valencia, and Catron Counties, New Mexico, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 81-84.
- Galloway, S. E., and Nelson, D. W., 1977, 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, Section 1, T. 16 S., R. 12 E., N.M.P.M. and in part in Lot 12, 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 Report, 11 p.
- Garcia, J. D., 1973, A study of mercurials in the Elephant Butte Reservoir ecosystem: New Mexico State University, Las Cruces, unpublished Ph. D. dissertation, 128 p.
- Garcia, R. A., 1970, Geology and petrography of andesite intrusions in and near El Paso: University of Texas at El Paso, unpublished M.S. thesis.
- Gardner, E. D., and Johnson, J. F., 1932, Shaft-sinking practices and costs [New Mexico]: U.S. Bureau of Mines Bulletin 357, 104 p., 49 figs.
- Gardner, J. H., 1910, The Carthage coal field, New Mexico, in Coal fields in Colorado and New Mexico: U.S. Geological Survey Bulletin 381-C, p. 452-460.
- Gardner, J. L., 1951, Vegetation of the creosotebush area of the Rio Grande Valley in New Mexico: Ecology Monographs, v. 21, p. 379-403.
- Garrity, T. A., Jr., and Nitzschke, E. T., Jr., 1968, Water law atlas: New Mexico Bureau of Mines and Mineral Resources Circular 95, 46 p.



References - Continued

- Garza, Sergio, and McLean, J. S., 1977, Fresh-water resources in the southeastern part of the Tularosa Basin: New Mexico State Engineer Technical Report 40, 67 p., 22 figs.
- Gaylord, M. D., 1901a, The Bonito district, in Mineral resources of New Mexico: International Industrial Record, El Paso, Texas, v. 3, no. 25, p. 38.
- 1901b, Nogal mining district, in Mineral resources of New Mexico: International Industrial Record, El Paso, Texas, v. 3, no. 25, p. 35-37.
- Gebhard, David, 1957, Pictographs in the Sierra Blanca Mountains: El Palacio, v. 64, p. 215-222.
- Geddes, R. W., 1963a, Geology of Little San Pasqual Mountain, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 197-203.
- 1963b, Structural geology of Little San Pasqual Mountain and the adjacent Rio Grande trough: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 64 p.
- Gehrig, J. L., 1958, Middle Pennsylvanian brachiopods from the Mud Springs Mountains and Derry Hills, New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 3, 37 p.
- 1959, Middle Pennsylvanian brachiopods from the Mud Springs Mountains and Derry Hills, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 1, no. 1, p. 18.
- Gelhar, L. W., 1974, Stochastic analysis of phreatic aquifers: Water Resources Research, v. 10, no. 3, p. 539-545.
- Genth, F. A., and Rath, G. V., 1885, On the vanadates and iodyrite, from Lake Valley, Sierra County, New Mexico: American Philosophical Society Proceedings, v. 22, p. 363-375.
- Gentile, A. L., 1975a, Some features of rhyolite petrogenesis: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 55 p.
- 1957b, Volcanic rocks of Nogal Canyon, Socorro County, New Mexico [abs.], in Guidebook to southwestern San Juan Mountains: New Mexico Geological Society, 8th Field Conference, p. 256.

## References - Continued

- Gifford, A. W., 1901, The Shakespeare district, in Mineral resources of New Mexico: International Industrial Record, El Paso, Texas, v. 3, no. 25, p. 47-48.
- Gile, L. H., 1961, A classification of Ca horizons in the soils of a desert region, Dona Ana County, New Mexico: Soil Science Society of America Proceedings, v. 25, no. 1, p. 52-61.
- 1962, A classification of Ca horizons in the soils of a desert region, Dona Ana County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4-1060, p. 57.
- 1967a, Cambic and certain non-cambic horizons in desert soils of southern New Mexico: Soil Science Society of America Proceedings, v. 30, no. 6, p. 773-781, 9 figs.
- 1967b, Cambic and certain non-cambic horizons in desert soils of southern New Mexico [abs.]: Abstracts of North American Geology, August, p. 1046-1047.
- 1967c, Coppice dunes and the Rotura soil: Soil Science Society of America Proceedings, v. 30, no. 5, p. 657-660, 4 figs.
- 1967d, Coppice dunes and the Rotura soil [abs.]: Abstracts of North American Geology, August, p. 1046.
- 1967e, A simplified method for preparation of soil thin sections: Soil Science Society of America Proceedings, v. 31, no. 4, p. 570-572.
- 1967f, Soils of an ancient basin floor near Las Cruces, New Mexico: Soil Science: v. 103, p. 265-276, 5 figs.
- 1968, A simplified method for preparation of soil thin sections [abs.]: Abstracts of North American Geology, January, p. 41.
- 1970, Soils of the Rio Grande Valley border in southern New Mexico: Soil Science Society of America Proceedings, v. 34, no. 3, p. 465-472, 4 figs.
- 1975a, Causes of soil boundaries in an arid region; I. Age and parent materials: Soil Science Society of America Proceedings, v. 39, no. 2, p. 316-323.
- 1975b, Causes of soil boundaries in an arid region; II. Dissection, moisture, and faunal activity: Soil Science Society of America Proceedings, v. 39, no. 2, p. 324-330.

## References - Continued

- Gile, L. H., 1975c, Holocene soils and soil-geomorphic relations in an arid region of southern New Mexico: *Quaternary Research*, v. 5, p. 321-360.
- Gile, L. H., and Grossman, R. B., 1968, Morphology of the argillic horizon in desert soils of southern New Mexico: *Soil Science*, v. 106, no. 1, p. 6-15, 7 figs.
- 1969, Morphology of the argillic horizon in desert soils of southern New Mexico [abs.]: *Abstracts of North American Geology*, April, p. 548.
- Gile, L. H., Grossman, R. B., and Hawley, J. W., 1969, Effects of landscape dissection on soils near University Park, New Mexico: *Soil Science*, v. 108, no. 4, p. 273-282, 5 figs.
- 1970, Effects of landscape dissection on soils near University Park, New Mexico [abs.]: *Abstracts of North American Geology*, August, p. 1219.
- Gile, L. H., and Hawley, J. W., 1966, Periodic sedimentation and soil formation on an alluvial-fan piedmont in southern New Mexico: *Soil Science Society of America Proceedings*, v. 30, no. 2, p. 261-268, 7 figs.
- 1967, Periodic sedimentation and soil formation on an alluvial-fan piedmont in southern New Mexico [abs.]: *Abstracts of North American Geology*, January, p. 37.
- 1968, Age and comparative development of desert soils at the Gardner Spring radio-carbon site, New Mexico: *Soil Science Society of America Proceedings*, v. 32, no. 5, p. 709-719, 6 figs.
- 1969, Age and comparative development of desert soils at the Gardner Spring radio-carbon site, New Mexico [abs.]: *Abstracts of North American Geology*, April, p. 547.
- 1972, The prediction of soil occurrence in certain desert regions of the southwestern United States: *Soil Science Society of America Proceedings*, v. 36, no. 1, p. 115-124.

References - Continued

- Gile, L. H., Hawley, J. W., and Grossman, R. B., eds., 1970a, Guidebook to distribution and genesis of soils and geomorphic surfaces in a desert region of southern New Mexico: Soil Science Society of America and New Mexico State University, Las Cruces, Agronomy Department, Soil-geomorphology Field Conference, 264 p., 29 figs.
- 1970b, The identification, occurrence, and genesis of soils in an arid region of southern New Mexico: U.S. Department of Agriculture, Soil Conservation Service, Soil Survey Investigations Training Bulletin, 177 p.
- Gile, L. H., Peterson, F. F., and Grossman, R. B., 1965, The K-horizon; a master soil horizon of carbonate accumulation: Soil Science, v. 99, no. 1, p. 74-82.
- 1966a, Morphological and genetic sequences of carbonate accumulations in desert soils: Soil Science, v. 101, no. 5, p. 347-360, 7 figs.
- 1966b, Morphological and genetic sequences of carbonate accumulations in desert soils [abs.]: Abstracts of North American Geology, November, p. 1179.
- Giles, D. L., 1965, Some aspects of the Kneeling Nun rhyolite tuff, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 164-166.
- 1967, A petrochemical study of compositionally zoned ash-flow tuffs: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 176 p.
- 1968a, Ash-flow tuffs of the Cobre Mountains, in Guidebook to southern Arizona III: Arizona Geological Society, 1968 Field Conference, p. 289-291.
- 1968b, A petrochemical study of compositionally zoned ash-flow tuffs [abs.]: Dissertation Abstracts International, section B., v. 28, no. 9, p. 3750B-3751B.
- Giles, D. L., and Cruft, E. F., 1968, Major and minor-element variations in zoned ash flows and their biotites [abs.], in Abstracts for 1967: Geological Society of America Special Paper 101, p. 78.

References - Continued

- Giles, D. L., and Thompson, T. B., 1972, Petrology and mineralization of a molybdenum-bearing alkalic stock, Sierra Blanca, New Mexico: Geological Society of America Bulletin, v. 83, no. 7, p. 2129-2148, 12 figs.
- Gilkey, A. K., 1953, Fracture pattern of the Zuni Uplift, New Mexico: U.S. Atomic Energy Commission Report RME-3050, 34 p.
- Gilkey, M. M., and Stotelmeyer, R. B., 1965, Water requirements and uses in New Mexico mineral industries: U.S. Bureau of Mines Information Circular IC 8276, 113 p., 59 figs.
- Gillerman, E. G., 1952a, Fluorspar deposits of Burro Mountains and vicinity, Grant County, New Mexico, in Contributions to general geology, 1951: U.S. Geological Survey Bulletin 973-F, p. 261-289.
- 1952b, Uranium deposits in the Blackhawk district, Grant County, New Mexico [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1254.
- 1952c, Uranium deposits in the Blackhawk district, Grant County, New Mexico [abs.]: Economic Geology, v. 47, no. 7, p. 770.
- 1952d, Uranium deposits of the White Signal district, New Mexico [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1329.
- 1953a, Fluorite deposits of the Burro Mountains and vicinity, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 137-138.
- 1953b, Search for and geology of uranium in sandstone-type deposits--White Signal-Blackhawk districts, New Mexico, in Search for and geology of radioactive deposits, semiannual progress report, December 1, 1952 to May 31, 1953: U.S. Geological Survey Trace Element Investigation Report TEI-330, p. 111-113, 1 fig.
- 1953c, Uranium deposits in the Blackhawk district, Grant County, New Mexico [abs.]: American Mineralogist, v. 38, no. 3-4, p. 340.
- 1953d, The White Signal uranium deposits, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 133-137.



References - Continued

- Gillerman, E. G., 1957, Geology of the central Peloncillo Mountains, Hidalgo County, New Mexico, and Cochise County, Arizona: University of Texas, Austin, unpublished Ph. D. dissertation.
- 1958a, Geology of the central Peloncillo Mountains, Hidalgo County, New Mexico, and Cochise County, Arizona: New Mexico Bureau of Mines and Mineral Resources Bulletin 57, 152 p.
- 1958b, Geology of the central Peloncillo Mountains, Hidalgo County, New Mexico, and Cochise County, Arizona [abs.]: American Geological Institute, Geologic Abstracts, v. 6, no. 4, p. 136-137.
- 1964, Mineral deposits of western Grant County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 83, 213 p.
- 1967, Structural framework and character of mineralization, Burro Mountains, New Mexico: Economic Geology, v. 62, no. 3, p. 370-375, 1 fig.
- 1968a, Structural framework and character of mineralization, Burro Mountains, New Mexico [abs.]: Abstracts of North American Geology, January, p. 41.
- 1968b, Uranium mineralization in the Burro Mountains, New Mexico: Economic Geology, v. 63, no. 3, p. 239-246.
- 1968c, Uranium mineralization in the Burro Mountains, New Mexico [abs.]: Abstracts of North American Geology, November, p. 1635.
- 1970, Mineral deposits and structural pattern of the Big Burro Mountains, New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 115-122.
- Gillerman, E. G., and Whitebread, D. H., 1956, Uranium-bearing nickel-cobalt native silver deposits, Blackhawk district, Grant County, New Mexico, in Contributions to the geology of uranium: U.S. Geological Survey Bulletin 1009-K, p. 283-313.
- Gillerman, E. G., Whitebread, D. H., Swinney, M. C., and Crowley, R., 1953, Generalized geologic map of a portion of the White Signal district, Grant County, New Mexico, in Guidebook of southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 135.

References - Continued

- Givens, D. B., 1951, A new basic copper phosphate mineral [chinoite] from Santa Rita, New Mexico: University of New Mexico, Albuquerque, unpublished M. S. thesis, 12 p.
- 1957, Geology of Dog Springs quadrangle, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 58, 40 p.
- 1958a, Geologic map of Datil quadrangle, Catron and Socorro Counties: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-5.
- 1958b, Geology of Dog Springs quadrangle, New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 6, no. 2, p. 149.
- Glass, J. J., 1943, Helvite, a product of magmatic emanations at Iron Mountain, Sierra and Socorro Counties, New Mexico: American Geophysical Union Transactions, 24th Annual Meeting, pt. 1, p. 252-256, 6 figs.
- Glass, J. J., Jahns, R. H., and Stevens, R. E., 1944, Helvite and danalite from New Mexico and the helvite group: American Mineralogist, v. 29, no. 5-6, p. 163-191, 5 figs.
- Glover, T. J., 1975a, Fluorspar and metallic mineral deposits along the west side of the Organ Mountains, Dona Ana County, New Mexico [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 339.
- 1975b, Geology and ore deposits of the northwestern Organ Mountains, Dona Ana County, New Mexico: University of Texas at El Paso, unpublished M.S. thesis, 93 p., 12 figs.
- 1975c, Geology and ore deposits of the northwestern Organ Mountains, Dona Ana County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-63, 93 p., 12 figs.
- 1975d, Geology of the central Organ Mountains, Dona Ana county, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 157-162.
- Goddard, E. N., 1966, Geologic map and sections of the Zuni Mountains fluorspar district, Valencia County, New Mexico: U.S. Geological Survey Miscellaneous Geological Investigations Map I-454.

References - Continued

- Goldman, M. I., 1921, Abstract of D. E. Winchester's Geology of Alamosa Creek Valley, Socorro County, New Mexico, with special reference to the occurrence of oil and gas: Washington Academy of Science Journal, v. 11, no. 11, p. 260.
- Gonzales, D. D., Scott, C. H., and Culbertson, J. K., 1969, Stage-discharge characteristics of a weir in a sand-channel stream, in Studies of flow in alluvial channels: U.S. Geological Survey Water-Supply Paper 1898-A, 29 p., 17 figs.
- Goodier, B. D., 1929, Haulage system of the Clan and Seven Sisters mine in Grant County, New Mexico: Colorado School of Mines Magazine, Golden, p. 23-26.
- Goodrich, W. H., 1952a, Waste dump leaching at the Chino Mines division, Kennecott Copper Corporation, Santa Rita, New Mexico: Mines Magazine, v. 42, no. 3, p. 65-67.
- 1952b, Waste dump leaching at the Chino Mines division, Kennecott Copper Corporation, Santa Rita, New Mexico: New Mexico Miner, v. 14, no. 3, p. 7, 29-31.
- Gordon, C.H., 1907a, Mississippian (lower Carboniferous) Formations in the Rio Grande Valley, New Mexico: American Journal of Science, 4th series, v. 24, p. 58-64.
- 1907b, New Mexico geology: Science, new series, v. 25, p. 109.
- 1907c, Notes on the Pennsylvanian Formations in the Rio Grande Valley, New Mexico: Journal of Geology, v. 15, p. 805-816.
- 1907d, Some features of the geology of Magdalena and Black Range region [abs.]: Science, new series, v. 25, p. 824-825.
- Gordon, C. H., and Graton, L. C., 1906a, Lower Paleozoic Formations in New Mexico: American Journal of Science, 4th series, no. 21, p. 390-395.
- 1906b, Lower Paleozoic Formations in New Mexico: Science, new series, v. 23, p. 590-591.
- Gott, G. B., and Erickson, R. L., 1952, Reconnaissance of uranium and copper deposits in parts of New Mexico, Colorado, Utah, Idaho, and Wyoming: U.S. Geological Survey Circular 219, 16 p., 1 fig.
- Graf, D. L., 1949, Trace-element studies, Santa Rita, New Mexico: Columbia University, New York, unpublished Ph. D. dissertation.

References - Continued

- Graf, D. L., and Kerr, P. F., 1950, Trace-element studies, Santa Rita, New Mexico: Geological Society of America Bulletin, v. 61, no. 10, p. 1023-1052.
- Grainger, J. R., 1974, Geology of the White Oaks mining district, Lincoln County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 69 p.
- Granger, H. C., and Bauer, H. L., Jr., 1951a, Results of diamond drilling, Merry Widow claim, White Signal, Grant County, New Mexico: U.S. Geological Survey Trace Element Memorandum TEM-146A, 11 p., 2 figs.
- 1952b, Uranium occurrences on the Merry Widow claim, White Signal district, Grant County, New Mexico: U.S. Geological Survey Circular 189, 16 p.
- Grantham, R. M., and Soule, J. H., 1947, Jones iron deposit, Socorro County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4010, 4 p., 4 figs.
- Greenback, J., 1937, A chemical and biological study of the water at Elephant Butte Reservoir as related to fish culture: University of New Mexico, Albuquerque, unpublished M.S. thesis, 103 p.
- Greene, D. K., and Halpenny, L. C., 1976, Basic-data report--Quintana Minerals Corporation Copper Flat project, production wells, Hillsboro (Sierra County), New Mexico: Water Development Corporation, Tucson, Arizona, consulting report to Quintana Minerals Corporation, 67 p.
- Greenwood, Eugene, 1970, Oil and gas possibilities in the Pedregosa Basin, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 105-106.
- Greenwood, Eugene, Kottlowski, F. E., and Armstrong, A. K., 1970, Upper Paleozoic and Cretaceous stratigraphy of the Hidalgo County area, New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 33-43.
- Greenwood, Eugene, Kottlowski, F. E., and Thompson, Sam, III, 1977, Petroleum potential and stratigraphy of Pedregosa Basin; comparison with Permian and Orogrande Basins: American Association of Petroleum Geologists Bulletin, v. 61, no. 9, p. 1448-1469.

## References - Continued

- Greenwood, Robert, 1963, Intrusion of mobilized tuff, Catron County, New Mexico: Geological Society of America Bulletin, v. 74, no. 12, p. 1505, 3 figs.
- Griffitts, W. R., 1959, Non-pegmatitic deposits of beryllium in the United States [abs.]: Mining Engineer, v. 11, no. 12, p. 1227.
- 1965, Beryllium, in Mineral and water resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 87, p. 196-200, 1 fig.
- Griffitts, W. R., and Alminas, H. V., 1968, Geochemical evidence for possible concealed mineral deposits near the Monticello Box, northern Sierra Cuchillo, Socorro County, New Mexico: U.S. Geological Survey Circular 600, 13 p.
- 1969, Geochemical evidence for possible concealed mineral deposits near the Monticello Box, northern Sierra Cuchillo, Socorro County, New Mexico [abs.]: Abstracts of North American Geology, May, p. 699.
- Griffitts, W. R., Alminas, H. V., and Mosier, E. L., 1971, Pb, Sn, La, Ag, Be, Zn, Sb, Mo, and Au distribution in the Vicks Peak, Steel Hill, and Black Hill quadrangles, New Mexico: U.S. Geological Survey Open-File Report.
- 1972a, Lanthanum and silver distribution in the Monticello and Sierra Fijardo 7 1/2' quadrangles, Socorro and Sierra Counties, New Mexico: U.S. Geological Survey Open-File Map.
- 1972b, Molybdenum distribution in the Monticello and Sierra Fijardo 7 1/2' quadrangles, Socorro and Sierra Counties, New Mexico: U.S. Geological Survey Open-File Map.
- 1972c, Niobium and gold distribution in the Monticello and Sierra Fijardo 7 1/2' quadrangles, Socorro and Sierra Counties, New Mexico: U.S. Geological Survey Open-File Map.
- 1972d, Strontium distribution in the Monticello and Sierra Fijardo 7 1/2' quadrangles, Socorro and Sierra Counties, New Mexico: U.S. Geological Survey Open-File Map.
- 1972e, Tin distribution in the Monticello and Sierra Fijardo 7 1/2' quadrangles, Socorro and Sierra Counties, New Mexico: U.S. Geological Survey Open-file Map.



References - Continued

- Griffitts, W. R., Alminas, H. V., and Mosier, E. L., 1972f, Zinc and antimony distribution in the Monticello and Sierra Fijardo 7 1/2' quadrangles, Socorro and Sierra Counties, New Mexico: U.S. Geological Survey Open-File Map.
- Griffitts, W. R., Larrabee, D. M., and Norton, J. J., 1962, Beryllium in the United States, exclusive of Alaska and Hawaii: U.S. Geological Survey Mineral Investigation Resources Map MR-35, 3 p.
- Griffitts, W. R., and Oda, Uteana, 1960, Geochemical prospecting for beryllium (Iron Mountain district, New Mexico), in Geological Survey research 1960—short papers in the geological sciences: U.S. Geological Survey Professional Paper 400-B, p. 90-92, 1 fig.
- Griggs, R. L., and Wagner, H. C., 1966, Geology and ore deposits of the Steeple Rock mining district, Grant County, New Mexico, in Contributions to economic geology, 1965: U.S. Geological Survey Bulletin 1222-E, 29 p., [1967].
- 1967, Geology and ore deposits of the Steeple Rock mining district, Grant County, New Mexico [abs.]: Abstracts of North American Geology, July, p. 890-891.
- Griswold, G. B., 1959, Mineral deposits of Lincoln County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 67, 117 p.
- 1961, Mineral deposits of Luna County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 72, 157 p.
- 1963a, Field trip 4, Nogal Peak mining district southeastward from Socorro, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 60-66.
- 1963b, How to measure rock pressures; new tools and proved techniques aid mine design: New Mexico Bureau of Mines and Mineral Resources Circular 69, 7 p.
- 1963c, Index map of the principal mining districts of Socorro County, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 97.
- 1964a, Mineral resources of Lincoln County, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 148-151.

## References - Continued

- Griswold, G. B., 1964b, Road log from Nogal to Nogal Peak and Bonito Lake, modified by Carl Ulvog and Sam Thompson, III, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 54-56.
- 1974, Mineral deposits, Florida Mountains, in Guidebook to the geology of the Florida Mountains, Luna County, New Mexico: El Paso Geological Society, 8th Field Conference, p. 30-35.
- Griswold, G. B., and Missaghi, F. L., 1964, Geology and geochemical survey of a molybdenum deposit near Nogal Peak, Lincoln County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 67, 24 p.
- Gross, G. W., Hoy, R. N., and Duffy, C. J., 1976, Application of environmental tritium in the measurement of recharge and aquifer parameters in a semi-arid limestone terrain: New Mexico Water Resources Research Institute Report 080, 212 p.
- Guck, D.G., 1952, The mysterious malpais (lava flow near Carrizozo): New Mexico Magazine, v. 30, no. 7, p. 24-25, 44-45.
- Guilbert, J. M., and Lowell, J. D., 1968a, Lateral and vertical alteration mineralization zoning in porphyry copper deposits [abs.]: Mining Engineer, v. 20, no. 12, p. 67.
- 1968b, Potassic alteration in porphyry copper deposits [abs.]: Economic Geology, v. 63, no. 6, p. 703.
- Guilbert, J. M., and Sumner, J. S., 1968, Distribution of porphyry copper deposits in the light of recent tectonic advances, in Guidebook to southern Arizona III: Arizona Geological Society, 1968 Field Conference, p. 97-112.
- Gunaji, N. N., 1961, Ground-water conditions in Elephant Butte irrigation district: New Mexico State University, Las Cruces, Engineering Experiment Station, 43 p.
- Haddon, R. W., 1906, Zinc mining in New Mexico, Magdalena Range: Engineering Mining Journal, v. 81, p. 845-846.
- Haederle, W. F., 1966, Structure and metamorphism in the southern Sierra Ladrones, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 58 p., 24 figs.

## References - Continued

- Hagerman, Charles de B., 1973, Availability of water for Bosworth tracts, New Mexico project numbers F-021-1 (9) and F-021-1 (13), Otero County, New Mexico: Consulting Professionals, Santa Fe, report to New Mexico Highway Department, 7 p.
- Haines, R. A., 1968, The geology of the White Oaks-Patos Mountain area, Lincoln County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 63 p.
- Hale, W. E., Reiland, L. J., and Beverage, J. P., 1965, Characteristics of the water supply in New Mexico: New Mexico State Engineer Technical Report 31, 131 p., 27 figs.
- Hall, F. R., 1963, Springs in the vicinity of Socorro, New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 160-179.
- 1964, Chemistry of water of a section of the eastern flank of the Sacramento Mountains, Lincoln and Otero Counties, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 161-170.
- Hall, F. R., and Bushman, F. X., 1963, Field trip 3, Hydrology of the Socorro area, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 53-60.
- Hall, F. R., and Moench, A. F., 1972, Application of the convolution equation to stream-aquifer relationships: Water Resources Research, v. 8, no. 2, p. 487-493.
- Hallinger, D. E., 1964, Caves of the Fort Stanton area, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 181-184.
- Halpenny, L. C., Babcock, J. A., and Greene, D. K., 1972, Basic data report, ASARCO La Mesa test production water well: Tucson, Arizona, Water Development Corporation, Open-File Report, 40 p.
- Hambleton, A. W., 1959, Interpretation of the paleoenvironment of several Missourian carbonate sections in Socorro County, New Mexico by carbonate fabrics: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis.
- 1962, Carbonate-rock fabrics of three Missourian stratigraphic sections in Socorro County, New Mexico: Journal of Sedimentary Petrology, v. 32, no. 3, p. 579-601.

References - Continued

- Hambleton, A. W., 1963, Carbonate-rock fabrics of three Missourian stratigraphic sections in Socorro County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 5, no. 5-2651, p. 55.
- Hansen, G. H., 1931, The Cretaceous geology of south-central New Mexico, in Summaries of doctoral theses, 1925-28: George Washington University, Washington, D.C., Bulletin, p. 81-87.
- 1946a, Arroyo problem [abs.]: Geological Society of America Bulletin, v. 57, no. 12, pt. 2, p. 1199.
- 1946b, Sedimentation in the middle Rio Grande Valley, New Mexico [abs.]: Geological Society of America Bulletin, v. 57, no. 2 p. 1200.
- 1948, Sedimentation in the middle Rio Grande Valley, New Mexico: Geological Society of America Bulletin, v. 59, no. 12, pt. 1, p. 1191-1215.
- Hanson, M. L., 1968, Irrigation needs in New Mexico for the next hundred years, in 13th annual New Mexico water conference proceedings: New Mexico State University, Las Cruces, p. 137-153.
- 1969, The future of subsurface irrigation--method of saving water, in 14th annual New Mexico water conference proceedings: New Mexico State University, Las Cruces, p. 86-99.
- Happ, S. C., 1944, Significance of texture and density of alluvial deposits in the middle Rio Grande Valley: Journal of Sedimentary Petrology, v. 14, no. 1, p. 3-19.
- Harbour, R. L., 1970a, The Hondo Sandstone member of the San Andres Limestone of south-central New Mexico, in Geological Survey research 1970: U.S. Geological Survey Professional Paper 700-C, p. 175-182, 3 figs.
- 1970b, The Hondo sandstone member of the San Andres Limestone of south-central New Mexico [abs.]: Petroleum Abstracts, v. 10, no. 43, p. 2929.
- 1972, Geology of the northern Franklin Mountains, Texas and New Mexico: U.S. Geological Survey Bulletin 1298, 129 p.

References - Continued

- Hardie, C. H., 1958a, The geology of a part of the Hueco Mountains, Otero County, New Mexico: University of Illinois, Champaign, unpublished M.S. thesis, 46 p.
- 1958b, The Pennsylvanian rocks of the northern Hueco Mountains, in Guidebook to the Franklin and Hueco Mountains: West Texas Geological Society, 1958 Field Conference, p. 43-45.
- Hardwick, W. R., 1958, Open-pit mining methods and practices at the Chino Mines Division, Kennecott Copper Corporation, Grant County, New Mexico: U.S. Bureau of Mines Information Circular IC 7837, 64 p., 47 figs.
- Harlan, H. M., II, 1971, Geology and ground magnetic survey of a portion of the Lampbright West area, Grant County, New Mexico: University of Arizona, Tucson, unpublished M.S. thesis.
- Harley, G. T., 1934, The geology and ore deposits of Sierra County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 10, 22 p.
- 1935, Geology and ore deposits of Sierra County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 220 p.
- Harms, J. C., and Fahnestock, R. K., 1965, Stratification, bed forms, and flow phenomena (with an example from the Rio Grande), in Primary sedimentary structures and their hydrodynamic interpretation: Society of Economic Paleontologists and Mineralogists Special Publication 12, p. 84-112.
- Harper, Clyde, 1952, Million dollar "sleeping beauty" (Tyrone): New Mexico Magazine, v. 30, no. 3, p. 20-21, 36.
- Harrer, C. M., and Kelly, F. J., 1963, Reconnaissance of iron resources in New Mexico: U.S. Bureau of Mines Information Circular IC 8190, 112 p., 25 figs.
- Harrington, E. R., 1940a, Desert ice box [ice cave southwest of Grants]: New Mexico Magazine, v. 18, no. 7, p. 14-15, 45.
- 1940b, Valley of the sands [Tularosa Valley]: New Mexico Magazine, v. 18, no. 2, p. 9-11.
- 1943a, Copper goes to war [Grant County mines]: New Mexico Magazine, v. 21, no. 3, p. 10-11, 31-33.



## References - Continued

- Harrington, E. R., 1943b, Here's your tin, in Catron and Sierra Counties: New Mexico Magazine, v. 21, no. 4, p. 7-9.
- 1944, The Gadsden corner (southwestern New Mexico): New Mexico Magazine, v. 22, no. 4, p. 9-11, 31.
- 1948, The revival of Magdalena: Mining Journal, v. 29, no. 16, p. 3-4.
- 1949, New Mexico's big pit (Chino mines, Santa Rita, New Mexico): New Mexico Professional Engineer, v. 1, no. 5, p. 9 and 19.
- 1951, Mining revivals at Magdalena: New Mexico Professional Engineer and Contractor, v. 3, no. 2, p. 4-5, 2 figs.
- Harris, A. H., 1956, A distribution check-list of New Mexican mammals: University of New Mexico, Albuquerque, unpublished M.S. thesis, 463 p.
- Harris, D. D., and Richardson, E. V., 1964, Stream gaging control structure for the Rio Grande conveyance channel near Bernardo, New Mexico, in River hydraulics: U.S. Geological Survey Water-Supply Paper 1369-E, p. 123-154.
- Harris, D. P., 1966a, Factor analysis, a tool for quantitative studies in mineral exploration, in International symposium on computers and operations research: Pennsylvania State University, Mineral Industries Experiment Station, 6th Annual Meeting, Special Publication 2-65, v. 2, p. 1-37.
- 1966b, A probability model of mineral wealth: Society of Mining Engineers Transactions, v. 235, no. 2, p. 199-216.
- Harris, R. L., Jr., 1971, Penecontemporaneous gravity-controlled folds, Holman Hill, New Mexico: The Mountain Geologist, v. 8, no. 4, p. 205-208.
- Hassan, A. A. A., 1963, The distribution of exchangeable cations in some soils in the vicinity of Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished Ph. D. dissertation, 116 p.

References - Continued

- Hassemer, Jerry, 1963, Fort Stanton Cave—past and present: National Speleological Society News, v. 21, no. 2, p. 12-13.
- Hatfield, G. D., 1956, Underground-water use and problems in Luna County, in 1st annual New Mexico water conference proceedings: New Mexico State University, Las Cruces, p. 27-29.
- Hatheway, A. W., 1971a, Collapse features of the Jornada lava field [abs.]: Geological Society of America, Abstracts with Programs, v. 3, no. 2, p. 133.
- 1971b, Lava tubes and collapse depressions: University of Arizona, Tucson, unpublished Ph. D. dissertation, 567 p.
- 1971c, Lava tubes and collapse depressions [abs.]: Dissertation Abstracts International, v. 32, no. 4, p. 2234B.
- Havenor, K. C., 1964, Oil and gas tests in Lincoln County, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 155-158.
- Havens, J. S., and Haynes, G. L., Jr., 1963, Geology and hydrology of damsites in the Cienegita Unit, Mescalero Apache Indian Reservation, Otero County, New Mexico: U.S. Geological Survey Administrative Report, 23 p., 8 figs.
- Hawley, J. W., 1965, Geomorphic surfaces along the Rio Grande Valley from El Paso, Texas to Caballo Reservoir, New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 188-198.
- 1967, K-Ar ages of late Cenozoic basalts in Dona Ana County, New Mexico [abs.], in Guidebook of the Defiance-Zuni-Mt. Taylor region: New Mexico Geological Society, 18th Field Conference, p. 226.
- ed., 1970a, Guidebook to Cenozoic stratigraphy of the Rio Grande Valley area, Dona Ana County, New Mexico: El Paso Geological Society, 4th Field Conference, 49 p., 7 figs.
- 1970b, Mid-to-late Quaternary erosion-sedimentation patterns as a factor in soil formation in southern New Mexico [abs.]: American Society of Agronomy, Agronomy Abstracts, p. 145.
- 1972, Geologic-geomorphic mapping to serve soil resource development, in 27th annual meeting: Soil Conservation Society of America Proceedings, p. 24-30.

## References - Continued

- Hawley, J. W., 1975a, Caliche and its impact on human activity in arid and semiarid regions [abs.]: Geological Society of America, Abstracts with Programs, v. 7, no. 7, p. 1104.
- 1975b, The desert soil-geomorphology project, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 183-186.
- 1975c, Quaternary history of Dona Ana County region, south-central New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 139-150.
- 1975d, Road log third day, exit C (south)--Upham interchange to Anthony, New Mexico-Texas via Interstates 25 south and 10 east, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 61-64.
- compiler, 1978, Guidebook to the Rio Grande Rift in New Mexico and Colorado: New Mexico Bureau of Mines and Mineral Resources Circular 163, 241 p., 156 figs.
- Hawley, J. W., and Clemons, R. E., 1975, Road log third day, exit D (east)--Mesilla Valley to Tularosa Basin via U.S. 70 east, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 65-70.
- Hawley, J. W., and Gile, L. H., eds., 1966, Guidebook to landscape evolution and soil genesis in the Rio Grande region, southern New Mexico: Friends of the Pleistocene, Rocky Mountain Section, 11th Field Conference, 74 p., 9 figs.
- Hawley, J. W., Gile, L. H., and Grossman, R. B., 1969, Caliche development related to the geomorphic evolution of the Rio Grande Valley [abs.], in Abstracts for 1968: Geological Society of America Special Paper 121, p. 130.
- Hawley, J. W., and King, W. E., 1975, Road log third day, exit A (north)--Rincon area to Derry Hills via Interstate 25 north, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 54-55.
- Hawley, J. W., and Kottlowski, F. E., 1965a, Exit road log from Blue Mountain to Lordsburg, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 84-86.

## References - Continued

- Hawley, J. W., and Kottowski, F. E., 1965b, Road log from Las Cruces to Nutt, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 15-27.
- 1965c, Road log from Lordsburg to San Simon Valley, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 76-81.
- 1969, Quaternary geology of the south-central New Mexico border region, in Border stratigraphy symposium: New Mexico Bureau of Mines and Mineral Resources Circular 104, p. 89-115.
- Hawley, J. W., Kottowski, F. E., Seager, W. R., Strain, W. S., and LeMone, D. V., 1969, The Santa Fe Group in the south-central New Mexico border region, in Border stratigraphy symposium: New Mexico Bureau of Mines and Mineral Resources Circular 104, p. 52-76, 5 figs.
- Hawley, J. W., and Seager, W. R., 1970, Late Cenozoic stratigraphy of the Dona Ana County area, New Mexico [abs.], in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 162.
- Hawley, J. W., Seager, W. R., and Clemons, R. E., 1975, Road log third day--Las Cruces to north Mesilla Valley, Cedar Hills, San Diego Mountain, and Rincon area, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 35-53.
- Hawley, J. W., Seager, W. R., and Corbitt, L. L., 1975, Road log third day, exit B (west)--Hatch and Deming via New Mexico 26, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 56-60.
- Hayes, C. W., 1907, The Gila River alum deposits, New Mexico, in Contributions to economic geology, 1906, Part 1: U.S. Geological Survey Bulletin 315-E, p. 215-223.
- Hayes, P. T., 1964, Geology of the Guadalupe Mountains, New Mexico: U.S. Geological Survey Professional Paper 446, 69 p.
- 1970, Cretaceous paleogeography of southeastern Arizona and adjacent areas, in Mesozoic stratigraphy in southeastern Arizona: U.S. Geological Survey Professional Paper 658-B, 42 p.
- 1972, Stratigraphic nomenclature of Cambrian and lower Ordovician rocks of easternmost southern Arizona and adjacent westernmost New Mexico, in Contributions to stratigraphy: U.S. Geological Survey Bulletin 1372-B, 21 p.

References - Continued

- Hayes, P. T., 1975, Selected stratigraphic sections of Cambrian and Ordovician rocks in Arizona, New Mexico, and western Texas: U.S. Geological Survey Open-File Report 75-178, 51 p., 1 fig.
- 1978, Cambrian and Ordovician rocks of southeastern Arizona and southwestern New Mexico, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 165-173.
- Hayes, P. T., and Cone, G. C., 1975, Cambrian and Ordovician rocks of southern Arizona and New Mexico and westernmost Texas: U.S. Geological Survey Professional Paper 873, 98 p.
- Haynes, G. L., Jr., 1964, Effect of seiches and setup on the elevation of Elephant Butte Reservoir, New Mexico, in Geological Survey research 1964: U.S. Geological Survey Professional Paper 501-B, p. 158-162, 7 figs.
- Headley, H. K., 1968, Stratigraphy and structure of the northwestern Guadalupe Mountains, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 65 p., [1969].
- Healey, D. L., Wahl, R. R., and Currey, F. E., 1978, Gravity survey of the Tularosa Valley and adjacent areas, New Mexico: U.S. Geological Survey Open-File Report 78-309, 21 p., 1 fig.
- Hedlund, D. C., 1974, Age and structural setting of base-metal mineralization in the Hillsboro-San Lorenzo area, southwestern New Mexico [abs.], in Guidebook of Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 378-379.
- 1975a, Geologic map of the Hillsboro quadrangle, Sierra and Grant Counties, New Mexico: U.S. Geological Survey Open-File Map 75-108.
- 1975b, Geologic map of the San Lorenzo quadrangle, Grant and Sierra Counties, New Mexico: U.S. Geological Survey Open-File Map 75-109.
- 1978a, Geologic map of the C Bar Ranch quadrangle, Grant County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-1039.
- 1978b, Geologic map of the Gold Hill quadrangle, Hidalgo and Grant Counties, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-1035.



References - Continued

- Hedlund, D. C., 1978c, Geologic map of the Hurley East quadrangle, Grant County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-1036.
- 1978d, Geologic map of the Ninetysix Ranch quadrangle, Grant County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-1034.
- 1978e, Geologic map of the Soldiers Farewell Hill quadrangle, Grant County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-1033.
- 1978f, Geologic map of the Werney Hill quadrangle, Grant County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-1038.
- Heidrick, T. L., 1975, Laramide ensialic intra-arc tectonism and porphyry copper deposits, American southwest [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 340.
- Heindl, L. A., 1954, Cenozoic alluvial deposits in the upper Gila River drainage basin, Arizona and New Mexico [abs.]: Geological Society of America Bulletin, v. 65, no. 12, pt. 2, p. 1262.
- 1958, Cenozoic alluvial deposits of the upper Gila River area in New Mexico and Arizona: University of Arizona, Tucson, unpublished Ph. D. dissertation, 249 p.
- 1965, Groundwater in the southwest--a perspective, in Ecology of groundwater in the southwestern United States, a symposium 1961: American Association for the Advancement of Science: Arizona State University, Tempe, Bureau Publication, p. 4-26, 3 figs.
- Hem, J. D., 1948, Quality of water in the Rio Grande and Pecos River Basins, New Mexico, 1942-1945, in 16th and 17th biennial report, 1942-1946: New Mexico State Engineer, p. 171-193, 7 figs.
- Hendrickson, G. E., 1949a, Ground-water availability at Camp Site of Guadalupe Bombing Range, Otero County, New Mexico: U.S. Geological Survey Open-File Report, 2 p., 2 maps.
- 1949b, Ground-water resources of the Carrizozo area, New Mexico: U.S. Geological Survey Open-File Report, 14 p.

## References - Continued

- Hendrickson, G. E., 1949c, Ground-water resources of the Carrizozo area, Lincoln County, New Mexico, in 18th, 19th, and 20th biennial reports, 1946-1952: New Mexico State Engineer, p. 9-10.
- Henrich, Carl, 1887, The San Pedro copper mine in New Mexico: Engineering Mining Journal, v. 43, p. 183.
- 1889, The Slayback lode [Catron County, Mogollon Range, New Mexico], a peculiar kind of fissure vein: Engineering Mining Journal, v. 48, p. 27.
- Herber, L. J., 1962, Precambrian geology of La Joyita Hills, Socorro County, New Mexico [abs.], in Guidebook of the Mogollon Rim region, east-central Arizona: New Mexico Geological Society, 13th Field Conference, p. 174.
- 1963a, Precambrian rocks of La Joyita Hills, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 180-184.
- 1963b, Structural petrology and economic features of the Precambrian rocks of La Joyita Hills: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 36 p.
- Hernandez, J. W., 1976, Rio Grande water quality base line study 1974-75 for the Rio Grande canals and associated drains from San Marcial, New Mexico to Fort Quitman, Texas: New Mexico Water Resources Research Institute Report 064, pages vary.
- Hernon, R. M., 1949, Geology and ore deposits, Silver City region, New Mexico, in Guidebook: West Texas Geological Society, 3rd Field Conference, p. 4-6.
- 1953, Summary of smaller mining districts in the Silver City region, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 138-141.
- Hernon, R. M., and Jones, W. R., 1968, Ore deposits of the Central mining district, Grant County, New Mexico, in Ore deposits of the United States: American Institute of Mining, Metallurgical and Petroleum Engineers, v. 2, p. 1211-1237.
- 1969, Ore deposits of the Central mining district, Grant County, New Mexico [abs.]: Abstracts of North American Geology, May, p. 708.

## References - Continued

- Hernon, R. M., Jones, W. R., and Moore, S. L., 1953, Some geological features of the Santa Rita quadrangle, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 117-130.
- 1964, Geology of the Santa Rita quadrangle, New Mexico: U.S. Geological Survey Geologic Quadrangle Map GQ-306.
- 1965a, Geologic map of the Santa Rita quadrangle, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, in pocket.
- 1965b, Some geological features of the Santa Rita quadrangle, New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 175-183.
- Herrick, C. L., 1896, The so-called Socorro tripoli: American Geologist, v. 18, p. 135-140.
- 1897, The geology of a typical mining camp in New Mexico (Kelly, Magdalena district): American Geologist, v. 19, p. 256-262.
- 1898, The occurrence of copper and lead in the San Andreas and Caballo Mountains, New Mexico: American Geologist, v. 22, p. 285-291.
- 1899, The occurrence of copper and lead in the San Andreas and Caballo Mountains, New Mexico: University of New Mexico, Albuquerque, Bulletin 1, p. 285-291.
- 1900a, The geology of the White Sands of New Mexico: Journal of Geology, v. 8, p. 112-128.
- 1900b, Report of a geological reconnaissance in western Socorro and Valencia Counties, New Mexico: American Geologist, v. 25, no. 6, p. 331-346.
- 1904a, The Coal Measure forest near Socorro, New Mexico: Journal of geology, v. 12, p. 237-251.
- 1904b, Laws of formation of New Mexico mountain ranges: American Geologist, v. 33, p. 301-312.

References - Continued

- Herrick, E. H., 1955a, Rehabilitation of wells in the Headquarters area, White Sands Proving Grounds, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 26 p., 7 figs.
- 1955b, Summary of availability of ground water in the Headquarters area, White Sands Proving Grounds, New Mexico: U.S. Geological Survey Open-File Report, 16 p., 3 figs.
- 1957a, Investigation of ground-water resources and development of wells at White Sands Proving Grounds, New Mexico: U.S. Geological Survey Open-File Report, 14 p., 8 figs.
- 1957b, Memorandum on a reconnaissance of ground-water conditions southeast of Valmont, Otero County, New Mexico: U.S. Geological Survey Open-File Report, 4 p.
- 1960a, Conservation of floodwater at White Sands Missile Range, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 15 p., 1 map.
- 1960b, Ground-water resources of the Headquarters (cantonment) area, White Sands Proving Grounds, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 203 p.
- 1961, Geologic map of White Sands Missile Range headquarters area, Dona Ana County, New Mexico, showing location of wells, contours on the water table, and location of proposed dams, reservoirs and recharge-discharge wells: U.S. Geological Survey Hydrologic Investigations Atlas HA-42.
- Herrick, E. H., and Davis, L. V., 1965, Availability of ground water in Tularosa Basin and adjoining areas, New Mexico and Texas: U.S. Geological Survey Hydrologic Investigations Atlas HA-191, 5 p.
- Hess, F. L., 1913, Vanadium in the Sierra de los Caballos, New Mexico, in Contributions to economic geology, 1911: U.S. Geological Survey Bulletin 530-C, p. 142-156.
- Hewett, D. F., and Radtke, A. S., 1967, Silver-bearing black calcite in western mining districts: Economic Geology, v. 62, no. 1, p. 1-21.
- Hewitt, C. H., 1958, Precambrian geology of the northern Big Burro Mountains and Redrock area, Grant County, New Mexico [abs.]: Geological Society of America Bulletin, v. 69, no. 12, pt. 2, p. 1730.

References - Continued

- Hewitt, C. H., 1959a, Geology and mineral deposits of the northern Big Burro Mountains-Redrock area, Grant County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 60, 151 p.
- 1959b, Geology and mineral deposits of the northern Big Burro Mountains-Redrock area, Grant County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 1, no. 7, p. 2.
- Hewlett, C. G., 1959, Optical properties of potassic feldspar (Fort Bayard area): Geological Society of America Bulletin, v. 70, no. 5, p. 511-538.
- Heyl, A. V., Bozion, C. N., and Maxwell, C. H., 1975, Silver resources of New Mexico [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 340.
- Hill, J. D., 1924, The mining districts of southwest New Mexico: University of Colorado, Boulder, unpublished M.A. thesis, 134 p.
- Hill, John D., 1956, Paleozoic stratigraphy of the Mud Springs Mountains, Sierra County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 72 p.
- Hill, R. S., 1946, Exploration of Grey Eagle, Grandview, and Royal John claims, Grant and Sierra Counties, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3904, 31 p., 7 figs.
- Hillard, P. D., 1967, General geology and beryllium mineralization near Apache Warm Springs, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis.
- 1969, Geology and beryllium mineralization near Apache Warm Springs, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 103, 16 p.
- Hills, R. C., 1895, Twin crystals of selenite (from near Fort Stanton): Colorado Science Society Proceedings, v. 4, p. 32.
- Hiss, W. L., and Shomaker, J. W., compilers, 1973, Energy crisis symposium, Albuquerque, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 140, 107 p.



References - Continued

- Hodges, Fred, 1931, Milling methods at the Hurley Plant of the Nevada Consolidated Copper Company, Hurley, New Mexico: U.S. Bureau of Mines Information Circular IC 6394, 16 p., 8 figs.
- Hoffer, J. M., 1969a, The San Miguel lava flow, Dona Ana County, New Mexico: Geological Society of America Bulletin, v. 80, no. 7, p. 1409-1414.
- 1969b, Volcanic history of the Black Mountain-Santo Tomas basalts, Potrillo volcanics, Dona Ana County, New Mexico, in Guidebook of the border region: New Mexico Geological Society, 20th Field Conference, p. 108-115.
- 1970, Petrology and mineralogy of the Campus andesite pluton, El Paso, Texas: Geological Society of American Bulletin, v. 81, no. 7, p. 2129-2136, 3 figs.
- 1971a, Herradura; a new lava flow feature: Geological Society of America Bulletin, v. 82, no. 10, p. 2949-2953, 6 figs.
- 1971b, Mineralogy and petrology of the Santo Tomas-Black Mountain basalt field, Potrillo volcanics, south-central New Mexico: Geological Society of America Bulletin, v. 82, no. 3, p. 603-612, 5 figs.
- ed., 1973a, Guidebook to the geology of south-central Dona Ana County, New Mexico: El Paso Geological Society, 7th Field Conference, 67 p.
- 1973b, Quaternary basalts of the West Potrillo Mountains, south-central New Mexico, in Guidebook to the geology of south-central Dona Ana County, New Mexico: El Paso Geological Society, 7th Field Conference, p. 26-32.
- 1973c, Summary of the Cenozoic geology of southern Dona Ana County, New Mexico, in Guidebook to the geology of south-central Dona Ana County, New Mexico: El Paso Geological Society, 7th Field Conference, p. 12-15.
- 1975a, The Aden-Afton basalt, Potrillo volcanics, south-central New Mexico: Texas Journal of Science, v. 26, no. 3-4, p. 379-390, 2 figs.
- 1975b, Basalt volcanism in the southern Rio Grande trench [abs.], in Exploration from the mountains to the basin: El Paso Geological Society, p. 101-113.

## References - Continued

- Hoffer, J. M., 1975c, A note on the volcanic features of the Aden Crater area, south-central New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 131-134.
- 1976a, Geology of Potrillo basalt field, south-central New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 149, 30 p.
- 1976b, The Potrillo basalt field, south-central New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 89-92.
- Hoffer, J. M., and Hoffer, R. L., 1973, Composition and structural state of feldspar inclusions from alkali olivine basalt, Potrillo basalt, southern New Mexico: Geological Society of America Bulletin, v. 84, no. 6, p. 2139-2142, 4 figs.
- Hoffman, J. P., 1975, The seismic history of the Rio Grande Rift: Earthquake Information Bulletin, v. 7, no. 3, p. 8-13, 4 figs.
- Hoffman, J. P., and Harding, S. T., 1977, Strong ground motion in the Tularosa Basin, New Mexico: U.S. Geological Survey Open-File Report 77-143, 46 p., 21 figs.
- Hoggart, W. C., Silberman, M. L., and Todd, V. R., 1977, K-Ar ages of intrusive rocks of the central Peloncillo Mountains, Hidalgo County, New Mexico: Isochron/West, no. 19, p. 3-6.
- Holmes, Charles, and Weber, R. H., 1951, Preliminary report, geology and ground-water resources near Carrizozo, New Mexico: New Mexico Institute of Mining and Technology, Research and Development Division Report GI-1, 9 p.
- Holmes, C. R., 1963, Tritium studies, Socorro Spring, in Guidebook to the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 152-154.
- Holser, W. T., 1953, Beryllium minerals in the Victorio Mountains, Luna County, New Mexico: American Mineralogist, v. 38, no. 7-8, p. 599-611, 2 figs.
- Homme, F. C., 1958, Contact metamorphism in the Tres Hermanas Mountains, Luna County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 88 p.

References - Continued

- Homme, F. C., and Rosenzweig, Abraham, 1958, Spurrite and monticellite skarns in the Tres Hermanas Mountains, Luna County, New Mexico [abs.]: Geological Society of America Bulletin, v. 69, no. 12, pt. 2, p. 1586.
- 1970, Contact metamorphism in the Tres Hermanas Mountains, Luna County, New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 141-146.
- Hood, J. W., 1956a, Availability of ground water in the vicinity of Cloudcroft, Otero County, New Mexico: U.S. Geological Survey Open-File Report, 35 p., 2 figs.
- 1956b, Ground water in the vicinity of McGregor Range camp site, Otero County, New Mexico: U.S. Geological Survey Open-File Report, 76 p., 2 figs.
- 1956c, Summary of results of ground-water investigation in the vicinity of Boles Well Field, Otero County, New Mexico: U.S. Geological Survey Open-File Report, 17 p., 3 figs.
- 1959, Ground water in the Tularosa Basin, New Mexico, in Guidebook to the Sacramento Mountains of Otero County, New Mexico: Roswell Geological Society, 1959 Joint Field Conference, p. 236-250, 1 fig.
- 1960a, Availability of ground water in the vicinity of Cloudcroft, Otero County, New Mexico: U.S. Geological Survey Open-File Report, 27 p., 2 figs.
- 1960b, Memorandum on the cleaning of three test holes in the Headquarters area, White Sands Missile Range, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report, 13 p.
- 1968, Ground-water investigations at White Sands Missile Range, New Mexico, July 1960-June 1962: U.S. Geological Survey Open-File Report, 157 p.
- Hood, J. W., and Herrick, E. H., 1965, Water resources of the Three Rivers area, Otero and Lincoln Counties, New Mexico: U.S. Geological Survey Hydrologic Investigations Atlas HA-192.
- Hoover, D. B., and Tippens, C. L., 1975, A reconnaissance audio-magnetotelluric survey at Kilbourne Hole, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 277-278.

References - Continued

- Hoover, H. A., 1953a, Bonanza days (Mogollon mining district):  
New Mexico Magazine, v. 31, no. 2, p. 20, 48-50.
- 1953b, Short rations days (Mogollon mining district):  
New Mexico Magazine, v. 31, no. 1, p. 19, 42-44.
- Horgan, Paul, 1954, Great river, the Rio Grande in North American history: New York, Holt, Rinehart and Winston, 2 v., 1020 p.
- Horst, W. E., and Bhappu, R. B., 1969, Evaluation of ground mica products from New Mexico pegmatites: New Mexico Bureau of Mines and Mineral Resources Circular 105, 27 p.
- Horton, J. S., 1953, The Hanover mine--geology: Mining Engineer, v. 5, no. 12, p. 1228-1229.
- Horton, J.S., 1959, The problem of phreatophytes, in Symposium of Hannoversch-Munden--water and woodlands: International Association of Scientific Hydrologists Publication 48, p. 76-83.
- Horton, J. S., Robinson, T. W., and McDonald, H. R., 1964, Guide for surveying phreatophyte vegetation: U.S. Department of Agriculture, Forest Service, Agriculture Handbook 266, 37 p., 14 figs.
- Hosea, R. G., 1928, Irrigation in the Rio Grande Valley--1928: New Mexico State Engineer, 90 p.
- Houghton, F. E., 1972, Climatic guide: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 230, 20 p.
- Howard, E. V., 1963, A socioeconomic study of copper leaching at Santa Rita: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis.
- Howell, Joseph, Jr., 1941, Pinyon and juniper woodlands of the southwest: Journal of Forestry, v. 39, p. 542-545.
- Huber, J. R., 1961, Sedimentary petrogenesis of the Yeso-Glorieta-San Andres transition, Joyita Hills, Socorro County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 86 p.
- Hudson, J. D., 1971, Ground-water levels in New Mexico, 1969: New Mexico State Engineer Basic-Data Report, 74 p., 31 figs.

References - Continued

- Hudson, J. D., 1974, Ground-water levels in New Mexico, 1971: New Mexico State Engineer Basic-Data Report, 73 p., 31 figs.
- 1975a, Ground-water levels in New Mexico, 1972: New Mexico State Engineer Basic-Data Report, 72 p., 32 figs.
- 1975b, Ground-water levels in New Mexico, 1973: New Mexico State Engineer Basic-Data Report, 99 p., 32 figs.
- 1976a, Ground-water levels in New Mexico, 1974: New Mexico State Engineer Basic-Data Report, 112 p., 34 figs.
- 1976b, Ground-water levels in New Mexico, 1975: New Mexico State Engineer Basic-Data Report, 128 p., 33 figs.
- Hudson, J. D., and Borton, R. L., 1974, Ground-water levels in New Mexico, 1970, and changes in water levels, 1966-1970; with a section on irrigated cropland acreage in New Mexico, 1970, by E. F. Sorenson: New Mexico State Engineer Technical Report 39, 123 p., 53 figs.
- Hunt, C. B., 1975, Why all the fuss about environment?, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 187-194.
- 1978, Surface deposits of southwest New Mexico: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-42.
- Hunt, W. F., and Faust, G. T., 1937, Pencatite from the Organ Mountains, New Mexico: American Mineralogist, v. 22, no. 12, pt. 1, p. 1151-1160, 5 figs.
- Hunter, P. L., 1960, New safety program at Chino steps up production, lowers costs: Mining Engineer, v. 12, no. 6, p. 568-569, 577.
- Huntingdon, M. G., 1947, Atwood copper group, Lordsburg district, Hidalgo County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4029, 9 p.
- Huntington, E. H., and Navarre, R. J., 1957, Basic survey of the Rio Grande River below Caballo Dam to the New Mexico-Texas line, in Fisheries investigations of District No. 3: New Mexico Department of Game and Fish, Santa Fe, Job Completion Report, Federal Aid Project F-11-R-2, p. 21-35.
- Hurt, W. R., and McKnight, D., 1949, Archeology of the San Augustin Plains, a preliminary report: American Antiquity, v. 14, no. 3, p. 172-194.



References - Continued

- Huskinson, Ed, Jr., 1972, Fluorspar deposits in the Cross Mountain area, Chise, New Mexico [abs.]: New Mexico Academy of Science Bulletin, v. 13, no. 2, p. 35.
- Hutchins, W. A., 1955, New Mexico law of water rights: New Mexico State Engineer Technical Report 4, 61 p.
- Huttl, J. B., 1943, A major zinc producing district now in the making in southwest New Mexico: Engineering Mining Journal, v. 144, no. 8, p. 78-79.
- Huzarski, J. R., 1971, Petrology and structure of eastern Monte Largo Hills, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 45 p.
- International Boundary and Water Commission, 1956-1978: Flow of the Rio Grande and related data, from Elephant Butte Dam, New Mexico to the Gulf of Mexico: Annual Report, pages vary.
- Iovenitti, J., 1977a, A reconnaissance study of jasperoid in the Kelly Limestone, Kelly mining district, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 222 p., 85 figs.
- 1977b, A reconnaissance study of jasperoid in the Kelly Limestone, Kelly mining district, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-85, 222 p., 85 figs.
- Irby, F. E., 1956, Development of pump irrigation and underground water laws in New Mexico: New Mexico State Engineer Open-File Report, 17 p.
- 1957, The ground-water situation in the Rio Grande underground water basin, New Mexico: New Mexico State Engineer Open-File Report, 11 p.
- Jackson, C. F., 1936, Stoping methods and costs [New Mexico]: U.S. Bureau of Mines Bulletin 390, 296 p., 78 figs.
- Jackson, C. F., and Knaebel, J. B., 1932, Sampling and estimation of ore deposits [New Mexico]: U.S. Bureau of Mines Bulletin 356, 155 p., 35 figs.
- Jackson, D. B., 1976, Schlumberger soundings in the Las Cruces, New Mexico area: U.S. Geological Survey Open-File Report 76-231, 170 p., 1 fig.

References - Continued

- Jackson, D. B., and Bisdorf, R. J., 1975, Direct-current soundings on the La Mesa surface near Kilbourne and Hunt's Holes, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 272-276.
- Jackson, W. S., 1963, Resource requirements, costs, and returns on cotton farms in the Pecos Valley of New Mexico: New Mexico State University, Las Cruces, unpublished M.S. thesis, 199 p.
- Jacobs, D. C., and Parry, W. T., 1974a, Geochemistry of biotite from the Santa Rita stock and its associated potassic and phyllic alteration zones, Central mining district, Grant County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 6, no. 7, p. 809.
- 1974b, Geochemistry of biotite from the Santa Rita stock and its associated potassic and phyllic alteration zones, Central mining district, Grant County, New Mexico [abs.]: Economic Geology, v. 69, no. 7, p. 1181.
- 1975, Geochemistry of biotite and muscovite as a clue to the development of the phyllic-potassic transition zone of alteration (the "ore shell"); the Chino porphyry copper deposit--a possible example [abs.]: Geological Society of America, Abstracts with Programs, v. 7, no. 7, p. 1131.
- Jacobs, J. H., and Fuller, H. C., 1946, Pilot-plant production of electrolytic manganese from manganese ores from metals reserve stockpiles at Deming, New Mexico, Cushman, Arkansas, and Phillipsburg, Montana: U.S. Bureau of Mines Bulletin 381, 204 p., 59 figs.
- Jacobs, R. C., 1956, Geology of the central front of the Fra Cristobal Mountains, Sierra County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 47 p.
- Jacobson, R. H., 1971, A computer model study of unsaturated flow in a leach dump, Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished Ph. D. dissertation, 72 p., 13 figs.
- Jahns, R. H., 1942, Geology of the Sierra Cuchillo, New Mexico [abs.]: Geological Society of America Bulletin, v. 53, no. 12, pt. 2, p. 1804.
- 1943a, The pyrometasomatic deposits at Iron Mountain, New Mexico, and their bearing on exploration for beryllium ores [abs.]: Economic Geology, v. 38, no. 1, p. 82-83.

References - Continued

- Jahns, R. H., 1943b, Tactite rocks of the Iron Mountain district, Sierra and Socorro Counties, New Mexico: California Institute of Technology, Pasadena, unpublished Ph. D. dissertation.
- 1944a, Beryllium and tungsten deposits of the Iron Mountain district, Sierra and Socorro Counties, New Mexico, in Strategic mineral investigations: U.S. Geological Survey Bulletin 945-C, p. 45-79, 2 figs.
- 1944b, "Ribbon rock," an unusual beryllium-bearing tactite (at Iron Mountain, New Mexico): Economic Geology, v. 39, no. 3, p. 173-205, 8 figs.
- 1948, Masses of pegmatite quartz (New Mexico-Arizona) [abs.]: Geological Society of America Bulletin, v. 59, no. 12, pt. 2, p. 1374.
- 1955a, Geology of the Sierra Cuchillo, New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 158-174.
- 1955b, Possibilities for discovery of additional lead-silver ore in the Palomas Camp area of the Palomas (Hermosa) mining district, Sierra County, New Mexico--a preliminary statement: New Mexico Bureau of Mines and Mineral Resources Circular 33, 14 p.
- 1955c, Road log second day; Sierra Cuchillo and neighboring areas (Truth or Consequences to Iron Mountain, via Winston), in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 25-46, 15 figs.
- 1957, The Pelican area, Palomas (Hermosa) district, Sierra County, New Mexico (preliminary map issue): New Mexico Bureau of Mines and Mineral Resources Bulletin 55, 6 p.
- 1958, The Pelican area, Palomas (Hermosa) district, Sierra County, New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 6, no. 2, p. 148-149.
- 1974, Ore deposits of the Palomas (Hermosa) district, Sierra County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 381.

## References - Continued

- Jahns, R. H., Kottowski, F. E., and Kuellmer, F. J., 1955, Volcanic rocks of south-central New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 92-95.
- Jahns, R. H., McMillan, D. K., O'Brient, J. D., and Fisher, D. L., 1978, Geologic section in the Sierra Cuchillo and flanking areas, Sierra and Socorro Counties, New Mexico, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 131-138.
- Jaksha, L. H., Locke, Jerry, Thompson, J. B., and Garcia, Alvin, 1977, Albuquerque Basin seismic network: U.S. Geological Survey Open-File Report 77-865, 25 p., 9 figs.
- James, Henry, 1955, The ghost of White Oaks: Sun Trails, v. 8, no. 5, p. 8-12.
- James, H. L., 1971, Southwestern New Mexico, Lordsburg, Silver City, Deming, and Las Cruces: New Mexico Bureau of Mines and Mineral Resources Scenic Trips to the Geologic Past 10, 80 p.
- James, H. L., and McCall, W. B., 1965, Exit road log from Lordsburg to Las Cruces, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 86-92.
- Jaramillo, C. L. E., 1973, Alteration and mineralization in the Jarilla Mountains, Otero County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis.
- Jaworski, M. J., 1973, Copper mineralization of the upper Moya Sandstone, Chupadero mines area, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 102 p., 25 figs.
- Jensen, M. L., 1959, Sulfur isotopes and hydrothermal mineral deposits (Santa Rita mine): Economic Geology, v. 54, no. 3, p. 374-394.
- Jerome, S. E., Campbell, D. D., Wright, J. S., and Vitz, H. F., 1965, Geology and ore deposits of the Sacramento (High Rolls) mining district, Otero County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 86, 30 p.

References - Continued

- Jester, D. B., 1971, Effects of commercial fishing, species introductions, and drawdown in Elephant Butte Lake, New Mexico, in Reservoir fisheries and limnology, ed. by G. E. Hall: American Fisheries Society Special Publication 8, p. 265-285.
- Jewett, J. J., 1905, Notes on the topography and geology of New Mexico: Kansas Academy of Science Transactions, v. 19, p. 141-149.
- Jicha, H. L., Jr., 1952a, Geology and mineral deposits of the Lake Valley quadrangle, Sierra, Grant, and Luna Counties, New Mexico: Columbia University, New York, unpublished Ph. D. dissertation, 132 p., 3 figs.
- 1952b, Gypsum--occurrence, properties, utilization: New Mexico Miner, v. 14, no. 8, p. 12-13, 21-22, 29.
- 1953, Paragenesis of the ores of the Palomas (Hermosa) district, southwestern New Mexico [abs.]: Geological Society of America Bulletin, v. 64, no. 12, pt. 2, p. 1442.
- 1954a, Correlation of basalt flows in central New Mexico by fusion technique [abs.]: Geological Society of America Bulletin, v. 65, no. 12, pt. 2, p. 1271.
- 1954b, Geology and mineral deposits of Lake Valley quadrangle, Grant, Luna, and Sierra Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 37, 93 p.
- 1954c, Geology and mineral deposits of Lake Valley quadrangle, Grant, Luna, and Sierra Counties, New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 2, no. 4, p. 73-74.
- 1954d, Paragenesis of the ores of the Palomas (Hermosa) district, southwestern New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 27, 19 p.
- 1954e, Paragenesis of the ores of the Palomas (Hermosa) district, southwestern New Mexico: Economic Geology, v. 49, no. 7, p. 759-778, 11 figs.
- 1955a, Correlation of basalt flows in central New Mexico by fusion technique [abs.]: American Mineralogist, v. 40, no. 3-4, p. 323-324.
- 1955b, Paragenesis of the ores of the Palomas (Hermosa) district, southwestern New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 3, no. 1, p. 19.



## References - Continued

- Jicha, H. L., Jr., 1956, Manganese deposits of the Luis Lopez district, Socorro County, New Mexico, in Symposium on deposits of manganese: International Geologic Congress, 20th Meeting, v. 3, p. 231-253.
- 1957, Hydrothermal zoning of lead in the manganese ores of the Luiz Lopez district, Socorro County, New Mexico [abs.]: Geological Society of America Bulletin, v. 68, no. 12, pt. 2, p. 1753.
- 1958a, Geology and mineral resources of Mesa del Oro quadrangle, Socorro and Valencia Counties, New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 6, no. 4, p. 135-136.
- 1958b, Geology and mineral resources of Mesa del Oro quadrangle, Socorro and Valencia Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 56, 67 p.
- 1959, The White Sands--a short review, in Guidebook to the Sacramento Mountains of Otero County, New Mexico: Roswell Geological Society, 1959 Joint Field Conference, p. 285-291, 4 figs.
- Jicha, H. L., Jr., and Elston, W. E., 1952, Tertiary volcanics and associated rocks of the Lake Valley and Sherman quadrangles, Sierra, Grant, and Luna Counties, New Mexico [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1333.
- Jiracek, G. R., Smith, Christian, Ander, M. E., Holcombe, H. T., Gerety, M. T., and Swanberg, C. A., 1977, Geophysical studies at the Lightning Dock KGRA, Hidalgo County, New Mexico [abs.]: Geothermal Research Council Transactions, v. 1, p. 157-158.
- Joesting, H. R., Bacon, L. O., and Getz, J. H., 1948, Geophysical investigation of manganiferous iron deposits, Boston Hill, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4175, 12 p., 14 figs.
- Johnson, Dean, 1953, A magnetometric survey of the Iron Horse magnetite deposit, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis.
- Johnson, D. W., 1902a, Notes on the geology of the saline basins of central New Mexico [abs.]: New York Academy of Science Annals, v. 14, p. 161-162.

References - Continued

- Johnson, D. W., 1902b, Notes on the geology of the saline basins of central New Mexico: Science, new series, v. 15, p. 106-107.
- Johnson, G. V., Kidd, D. E., and Garcia, J. D., 1974, Analysis of nutrient supplies for algae in Elephant Butte Reservoir: New Mexico Water Resources Research Institute Report 037, 73 p.
- Johnson, J. T., 1955, A northern extension of the Magdalena mining district, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 46 p., 4 figs.
- Johnson, P. H., and Bhappu, R. B., 1969, Chemical mining--a study of leaching agents: New Mexico Bureau of Mines and Mineral Resources Circular 99, 10 p.
- Johnson, W. M., 1907, The Kelly mine, New Mexico, and treatment of its ores: Mining World, v. 27, p. 267-269.
- Johnston, W. D., Jr., 1928, Fluorspar in New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 4, 127 p.
- Jones, B. R., 1959, A sedimentary study of dune sands, Lamb and Bailey Counties, Texas and White Sands National Monument, New Mexico: Texas Technical University, Lubbock, unpublished M.S. thesis.
- Jones, F. A., 1907, The Lordsburg mining region, New Mexico: Engineering Mining Journal, v. 84, p. 444-445.
- 1909a, General geology of New Mexico: South-Western Mines, v. 1, no. 6, p. 1-2.
- 1909b, The Lordsburg mining region, New Mexico: South-Western Mines, v. 1, no. 7, p. 1-4.
- 1915, The mineral resources of New Mexico (mineral resources survey): New Mexico Bureau of Mines and Mineral Resources Bulletin 1, 77 p.
- Jones, S. M., 1951, Regional tectonics of the Lincoln-White Oaks-Chupadera Mesa area, in Guidebook of the Capitan-Carrizozo-Chupadera Mesa region, Lincoln and Socorro Counties, New Mexico: Roswell Geological Society, 5th Field Conference, p. 11.

References - Continued

- Jones, S. M., 1952, Post-Laramide structural and volcanic trends in New Mexico [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1333.
- Jones, S. M., and Bacheller, W. D., 1953, Measured sections near Dos Cabezas, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 149.
- Jones, W. R., 1956, The central mining district, Grant County, New Mexico: U.S. Geological Survey Open-File Map.
- 1963, Preliminary geologic map of the Ft. Bayard quadrangle, Grant County, New Mexico: U.S. Geological Survey Open-File Map.
- Jones, W. R., Case, J. E., and Pratt, W. P., 1964, Aeromagnetic and geologic map of part of the Silver City mining region, Grant County, New Mexico: U.S. Geological Survey Geophysical Investigations Map GP-424.
- Jones, W. R., Gillerman, Elliot, Schmitt, H., Hardie, B., and Moore, S. L., 1953, Road log Santa Rita and White Signal districts, October 17, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 64-82.
- Jones, W. R., and Hernon, R. M., 1973, Ore deposits and rock alteration of the Santa Rita quadrangle, Grant County, New Mexico: U.S. Department of Commerce, National Technical Information Service PB 2-14371, 102 p.
- Jones, W. R., Hernon, R. M., and Moore, S. L., 1967, General geology of Santa Rita quadrangle, Grant County, New Mexico: U.S. Geological Survey Professional Paper 555, 144 p.
- Jones, W. R., Moore, S. L., Brew, D. A., and Koch, G. S., Jr., 1963, Preliminary geologic map of Fort Bayard quadrangle, Grant County, New Mexico: U.S. Geological Survey Open-File Map.
- Jones, W. R., Moore, S. L., and Pratt, W. P., 1970, Geologic map of the Fort Bayard quadrangle, Grant County, New Mexico: U.S. Geological Survey Geologic Quadrangle Map GQ-865.
- Jordan, C. F., Jr., 1971, Lower Permian stratigraphy of southern New Mexico and west Texas: Rice University, Houston, Texas, unpublished Ph. D. dissertation, 136 p.
- 1975, Lower Permian (Wolfcampian) sedimentation in the Orogrande Basin, New Mexico in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 109-118.

References - Continued

- Just, Evan, 1934, Recency of great lava flow of Carrizozo,  
New Mexico: Pan-American Geologist, v. 62, no. 2, p. 97-102.
- Kadhi, Abdullah, 1970, Structure of the Tom Mays Park area, Franklin  
Mountains: University of Texas at El Paso, unpublished M.S.  
thesis, 75 p.
- Kalish, Philip, 1953, Geology of the Water Canyon area, Magdalena  
Mountains, Socorro County, New Mexico: New Mexico Institute of  
Mining and Technology, Socorro, unpublished M.S. thesis, 48 p.,  
4 figs.
- Keith, S. B., and Wilt, J. C., 1978, Supplemental road log no. 3;  
Tucson to Lordsburg via Interstate 10, in Guidebook to the land  
of Cochise: New Mexico Geological Society, 29th Field  
Conference, p. 112-124.
- Keith, S. B., Wilt, J. C., Lynch, Daniel, Deal, E. G., Clemons,  
R. E., and Forrester, J. D., 1978, Road logs first day; Lordsburg  
to Douglas via Granite Gap and San Bernardino Valley with an  
extension to the southern end of the Mule Mountains, in Guidebook  
to the land of Cochise: New Mexico Geological Society,  
29th Field Conference, p. 1-30.
- Kelley, V. C., 1947, Geologic and topographic map, eastern Gallinas  
Mountains, Lincoln County, New Mexico, with text on the geology  
and fluorspar and iron deposits: U.S. Geological Survey Mineral  
Investigations (Strategic) Map 3-211.
- 1950, Geology and economics of New Mexico iron-ore deposits:  
University of New Mexico, Albuquerque, Publications in Geology 2,  
246 p.
- 1951, Oolitic iron deposits of New Mexico: American  
Association of Petroleum Geologists Bulletin, v. 35, no. 10,  
p. 2199-2228.
- 1955, Regional tectonics of south-central New Mexico, in  
Guidebook of south-central New Mexico: New Mexico Geological  
Society, 6th Field Conference, p. 96-104.
- 1968a, Geology of the alkaline Precambrian rocks at Pajarito  
Mountain, Otero County, New Mexico: Geological Society of  
America Bulletin, v. 79, no. 11, p. 1565-1572, 2 figs.
- 1968b, Precambrian rocks at Pajarito Mountain, Otero County,  
New Mexico [abs.], in Abstracts for 1967: Geological Society of  
America Special Paper 115, p. 428.

## References - Continued

- Kelley, V. C., 1969, Geology of the alkaline Precambrian rocks at Pajarito Mountain, Otero County, New Mexico [abs.]: Abstracts of North American Geology, March, p. 388.
- 1970, Highlights of the Rio Grande depression [abs.], in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 157.
- Kelley, V. C., and Bogart, L. E., 1952, Gym Limestone, New Mexico: American Association of Petroleum Geologists Bulletin, v. 36, no. 8, p. 1644-1648.
- Kelley, V. C., and Branson, O. T., 1946, Shallow, high-temperature pegmatites, Grant County, New Mexico [abs.]: Geological Society of America, v. 57, no. 12, pt. 2, p. 1255.
- 1947, Shallow, high-temperature pegmatites, Grant County, New Mexico: Economic Geology, v. 42, no. 8, p. 699-712, 5 figs.
- Kelley, V. C., and McCleary, J. T., 1960, Laramide orogeny in south-central New Mexico: American Association of Petroleum Geologists Bulletin, v. 44, no. 8, p. 1419-1420, 1 fig.
- Kelley, V. C., and Silver, Caswell, 1952, Geology of the Caballo Mountains, New Mexico: University of New Mexico, Albuquerque, Publications in Geology 4, 286 p.
- Kelley, V. C., and Thompson, T. B., 1964, Tectonics and general geology of the Ruidoso-Carrizozo region, central New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 110-121.
- compilers, 1964, Tectonic map of the Ruidoso-Carrizozo region, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, in pocket.
- Kelly, T. E., 1972, Water sources for nesting habitat of Mexican Duck and Double-crested Cormorant, Elephant Butte Marsh, Sierra County, New Mexico: U.S. Geological Survey Open-File Report, 29 p., 4 figs.
- 1973, Summary of ground-water data at Post Headquarters; and adjacent areas, White Sands Missile Range: U.S. Geological Survey Open-File Report, 66 p., 33 figs.



References - Continued

- Kelly, T. E., 1974, Reconnaissance investigation of ground water in the Rio Grande drainage basin--with special emphasis on saline ground-water resources: U.S. Geological Survey Hydrologic Investigations Atlas HA-510, 5 sheets.
- 1975, The Lost Padre Mine and the Organ mining district, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 163-166.
- Kelly, T. E., and Hearne, G. A., 1976, The effects of ground-water development on the water supply in the Post Headquarters area, White Sands Missile Range: U.S. Geological Survey Open-File Report 76-277, 97 p., 18 figs.
- Kennedy, R. A., 1955, Report on ground water in an area north of Noria (Dona Ana County), New Mexico: El Paso, Texas, consulting report, 12 p.
- Kerr, P. F., Kulp, J. L., Patterson, C. M., and Wright, R. J., 1947, Hydrothermal alteration at Santa Rita, New Mexico [abs.]: Geological Society of America Bulletin, v. 58, no. 12, pt. 2, p. 1200.
- 1950, Hydrothermal alteration at Santa Rita, New Mexico: Geological Society of America Bulletin, v. 61, no. 4, p. 275-347.
- Keyes, C. R., 1903a, Ephemeral lakes in arid regions: American Journal of Science, 4th series, v. 16, p. 377-378.
- 1903b, Geological structure of New Mexico bolson plains: American Journal of Science, 4th series, v. 15, p. 207-210.
- 1903c, Geology of the Apache Canyon placers (south-central New Mexico): Engineering Mining Journal, v. 76, p. 966-967.
- 1903d, A remarkable silver pipe (central New Mexico): Engineering Mining Journal, v. 76, p. 805.
- 1904a, Bolson plains and the conditions of their existence: American Geologist, v. 34, p. 160-164.
- 1904b, Notes on block mountains in New Mexico: American Geologist, v. 33, p. 19-23.
- 1904c, Unconformity of the Cretaceous on older rocks in central New Mexico: American Journal of Science, 4th series, v. 18, p. 360-362.

References - Continued

- Keyes, C. R., 1905a, Geological structure of the Jornada del Muerto and adjoining bolson plains (New Mexico): Iowa Academy of Science Proceedings, v. 12, p. 167-169.
- 1905b, Geology and underground water conditions of the Jornada del Muerto, New Mexico: U.S. Geological Survey Water-Supply Paper 123, 42 p.
- 1905c, Northward extension of the Lake Valley limestone (New Mexico): Iowa Academy of Science Proceedings, v. 12, p. 169-171.
- 1905d, Ore deposits of the Sierra de los Caballos (south central New Mexico): Engineering Mining Journal, v. 80, p. 149-151.
- 1905e, Zinc carbonate ores of the Magdalena Mountains (New Mexico): Mines Magazine, v. 12, p. 109-114.
- 1906, Physiography of New Mexico: Journal of Geography, v. 5, p. 251-256.
- 1907a, Aggraded terraces of the Rio Grande: American Journal of Science, 4th series, v. 24, p. 467-472.
- 1907b, Volcanic craters in the southwest: Geological Society of America Bulletin, v. 17, p. 721-723.
- 1908, Genesis of the Lake Valley, New Mexico, silver deposits: American Institute of Mining Engineers Bulletin, v. 19, p. 1-31.
- 1909, Genesis of the Lake Valley, New Mexico, silver deposits: American Institute of Mining Engineers Transactions, v. 39, p. 139-169.
- 1911a, The laccolith in ore deposition: Mining Science Press, v. 103, p. 382.
- 1911b, Origin of certain bonanza silver ores of the arid region: American Institute of Mining Engineers Bulletin, v. 55, p. 541-558.
- 1912a, Deflative scheme of the geographic cycle in an arid climate: Geological Society of America Bulletin, v. 23, p. 537-562.
- 1912b, Origin of certain bonanza silver ores of the arid region: American Institute of Mining Engineers Transactions, v. 42, p. 500-517.

References - Continued

- Keyes, C. R., 1914, Erosive potential of desert waters [abs.]: Geological Society of America Bulletin, v. 25, p. 88.
- 1918, Geologic structure of Sierra del Oro in New Mexico: Engineering Mining Journal, v. 106, p. 494-495.
- 1920, Geological setting of New Mexico: Journal of Geology, v. 28, no. 3, p. 233-254, 6 figs.
- 1921, Interglacial volcanic ash [abs.]: Science, new series, v. 54, p. 308.
- 1922a, Climatic influences in vadose ore deposition: Pan-American Geologist, v. 37, no. 4, p. 275-287.
- 1922b, Discovery of Paleozoic formations in New Mexico; faulting of Bonneville Lake deltas: Pan-American Geologist, v. 38, no. 2, p. 141-145.
- 1922c, New Mexican laccolithic structures: Pan-American Geologist, v. 37, no. 2, p. 109-120, 5 figs.
- 1922d, Superior Paleozoics of Rio Grande: Pan-American Geologist, v. 38, no. 2, p. 154-160.
- 1923, Cosmical derivation of metals; midget coal field of America (O'Mara district, New Mexico); localization of ore values in gouge materials; Tres Amigos gold veins of Arizona: Pan-American Geologist, v. 39, no. 2, p. 152-154, 154-156, 156-159, 159-160, 2 figs.
- 1925, Gashed veins on the Queen of Sheba (Arizona); and vanadinite deposits of the Elephant Butte (New Mexico): Pan-American Geologist, v. 44, no. 1, p. 60-62, 67-68.
- Keyes, W. S., 1968, Well logging in ground-water hydrology: Ground Water, v. 6, no. 1, p. 10-18, 8 figs.
- Kidd, D. E., and Johnson, G. V., 1971, An investigation of primary productivity using the  $^{14}\text{C}$  method and an analysis of nutrients in Elephant Butte Reservoir: University of New Mexico, Albuquerque, completion report Project No. A-021-NMEX-3109-32, 106 p.
- Kidd, D. E., Johnson, G. V., and Garcia, J. D., 1974, An analysis of mercurials in the Elephant Butte ecosystem: New Mexico Water Resources Research Institute Report 035, 126 p.

## References - Continued

- Kidder, S. J., 1924a, Mining methods in Mogollon district, New Mexico: American Institute of Mining and Metallurgical Engineers Transactions, preprint 1314, 21 p., 8 figs.
- 1924b, Mining methods in Mogollon district, New Mexico [abs.]: Mining and Metallurgy, v. 5, no. 207, p. 142-143.
- Kilps, J. R., 1956, Actinocrinitidae of the Mississippian Lake Valley Formation, New Mexico: University of Wisconsin, Madison, unpublished M.S. thesis.
- King, W. E., 1973a, Fusulinids Millerella and Eostaffella from the Pennsylvanian of New Mexico and Texas: New Mexico Bureau of Mines and Mineral Resources Memoir 26, 34 p.
- 1973b, Hydrogeology of La Mesa, Dona Ana County, New Mexico, in Guidebook to the geology of south-central Dona Ana County, New Mexico: El Paso Geological Society, 7th Field Conference, p. 56-67.
- King, W. E., and Hawley, J. W., 1975, Geology and ground-water resources of the Las Cruces area, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 195-204.
- King, W. E., Hawley, J. W., Taylor, A. M., and Wilson, R. P., 1969, Hydrogeology of the Rio Grande Valley and adjacent intermontane areas of southern New Mexico: New Mexico Water Resources Research Institute Report 6, 141 p.
- 1971, Geology and ground-water resources of central and western Dona Ana County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 1, 64 p.
- Kinney, E. E., Baltosser, W. W., Murphy, R. E., Greenlee, D. W., and Tovar, Jorge, 1970, Road log second day--Deming to Hachita, Playas Valley, Big Hatchet Mountains area, and Winkler anticline (Animas Mountains), in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 17-22.
- Kintzinger, P. R., 1956, Geothermal survey of hot ground water near Lordsburg, New Mexico: Science, v. 124, no. 3223, p. 629-630.
- Kister, L. R., 1973, Quality of ground water in the lower Colorado River region, Arizona, Nevada, New Mexico, and Utah: U.S. Geological Survey Hydrologic Atlas HA-478, 2 sheets.

References - Continued

- Kleinhampl, F. J., 1953, The Tyrone district [abs.], in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 131-133.
- Knapp, Vernon, 1933, The structural relations of the Capitan and eastern border of the Sierra Blanca Mountain groups in Lincoln County, New Mexico: University of Colorado, Boulder, unpublished M.S. thesis.
- Kniffin, L. M., 1930, Mining and engineering methods and costs of the Hanover Bessemer Iron and Copper Company, Fierro, New Mexico: U.S. Bureau of Mines Information Circular IC 6361, 20 p., 14 figs.
- Knopf, Adolph, 1933, Pyrometasomatic deposits, in Ore deposits of the western states: American Institute of Mining and Metallurgical Engineers (Lindgren Volume), p. 537 and 557.
- 1942, Ore deposition in the pyrometasomatic deposits, in W. H. Newhouse, ed., Ore deposits as related to structural features: New Jersey, Princeton University Press, p. 63-72, 10 figs.
- Knowles, D. B., 1956, Ground-water resources of the Hueco bolson north-east of El Paso, Texas: Texas Board of Water Engineers Bulletin 5615, 263 p.
- Knowles, D. B., and Kennedy, R. A., 1959, Ground-water resources of the Hueco Bolson, northeast of El Paso, Texas: U.S. Geological Survey Water-Supply Paper 1426, 186 p.
- Knowlton, C. S., ed., 1968, International water law along the Mexican-American border: Committee on Desert and Arid Zones Research, Southwestern and Rocky Mountain Division, American Association for the Advancement of Science and University of Texas at El Paso, 44th Annual Meeting: 64 p.
- Knox, M. S., 1947, A study of radioactivity with respect to alteration and ore location at Santa Rita, New Mexico and Gilman, Colorado: Columbia University, New York, unpublished M.A. thesis.
- Kolessar, Joseph, 1970, Geology and copper deposits of the Tyrone district, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 127-132.



## References - Continued

- Koopman, F. C., Trauger, F. D., and Basler, J. A., 1968, Water resources appraisal of the Silver City area, New Mexico: U.S. Geological Survey Open-File Report, 105 p., 12 figs.
- 1969, Water resources appraisal of the Silver City area, New Mexico: New Mexico State Engineer Technical Report 36, 50 p., 11 figs.
- 1970, Water resources appraisal of the Silver City area, New Mexico [abs.]: Abstracts of North American Geology, April, p. 554-555.
- Kopicki, R. J., 1962, Geology and ore deposits of the northern part of the Hansonburg District, Bingham, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis.
- Koschmann, A. H., 1933, Volcanic history of the Magdalena district [abs.]: American Geophysical Union Transactions 14th Annual Meeting, p. 250.
- 1935, Minor copper-producing districts of New Mexico, in Copper resources of the world: Washington, D. C., 16th International Geological Congress, p. 343.
- Koschmann, A. H., and Loughlin, G. F., 1933, Dissected pediments in the Magdalena district, New Mexico [abs.]: Geological Society of America Bulletin, v. 44, no. 1, p. 91-92.
- Koster, W. J., 1957, Guide to the fishes of New Mexico: Albuquerque, University of New Mexico Press, 113 p.
- Kottlowski, F. E., 1953a, Geology and ore deposits of a part of the Hansonburg mining district, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 23, 11 p.
- 1953b, Introduction to guidebook of southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 8-10.
- 1953c, Tertiary-Quaternary sediments of the Rio Grande Valley in southern New Mexico, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 144-148.
- 1955a, Cenozoic sedimentary rocks in south-central New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 88-91.

## References - Continued

- Kottlowski, F. E., 1955b, Geology of San Andres Mountains, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 136-145.
- 1957, High-purity dolomite deposits of south-central New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 47, 43 p.
- 1958a, Geologic history of the Rio Grande near El Paso, in Guidebook to Franklin and Hueco Mountains, Texas: West Texas Geological Society, 1958 Field Conference, p. 46-54.
- 1958b, Lake Otero--second phase in formation of New Mexico's gypsum dunes [abs.]: Geological Society of America Bulletin, v. 69, no. 12, p. 1733-1734.
- 1958c, Pennsylvanian and Permian rocks near the late Paleozoic Florida Islands, in Guidebook to the Hatchet Mountains and the Cooks Range-Florida Mountains area: Roswell Geological Society, 1958 Field Conference, p. 79-87.
- 1958d, Road log, Alamogordo to Deming, New Mexico along U.S. Route 70, in Guidebook of the Hatchet Mountains and Cooks Range-Florida Mountains areas: Roswell Geological Society, 11th Field Conference, p. 99-116.
- 1959a, Pennsylvanian rocks on the northeast edge of the Datil Plateau, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 57-62.
- 1959b, Real wildcat country, Pennsylvanian of southwest New Mexico: Oil and Gas Journal, v. 57, no. 16, p. 148-151.
- 1959c, Sedimentary rocks of the San Andres Mountains, in Guidebook to the Sacramento Mountains of Otero County, New Mexico: Roswell Geological Society, 1959 Joint Field Conference, p. 259-277, 3 figs.
- 1960, Summary of Pennsylvanian sections in southwestern New Mexico and southeastern Arizona: New Mexico Bureau of Mines and Mineral Resources Bulletin 66, 187 p.
- 1961, Geologic map of Las Cruces quadrangle, Dona Ana County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-14.

References - Continued

- Kottlowski, F. E., 1963a, Paleozoic and Mesozoic strata of southwestern and south-central New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 79, 100 p.
- 1963b, Pennsylvanian rocks of Socorro County, New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 102-111.
- 1963c, Supplementary road log, Cerros de Amado red bed copper deposits, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 86-87.
- 1964a, Sedimentary basins of central and southwestern New Mexico [abs.]: American Association of Petroleum Geologists Bulletin, v. 48, no. 11, p. 1879.
- 1964b, Sedimentary framework of the pre-Cenozoic rocks in southwestern New Mexico [abs.], in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 187.
- 1965a, Facets of the Late Paleozoic strata in southwestern New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 141-147.
- 1965b, The rock sequence and geologic structure near Las Cruces, New Mexico [abs.], in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 241.
- 1968a, Late Paleozoic in El Paso border region [abs.], in Guidebook of the general geology of the Franklin Mountains, El Paso County, Texas: El Paso Geological Society and Society of Economic Paleontologists and Mineralogists, Permian Basin Section, Joint Field Conference, p. 27.
- 1968b, Late Paleozoic sediments derived from Pedernal uplift [abs.]: American Association of Petroleum Geologists Bulletin, v. 52, no. 3, p. 537.
- 1968c, Late Paleozoic sediments derived from Pedernal uplift [abs.]: Abstracts of North American Geology, October, p. 1491.
- 1968d, San Andres Limestone west of the Sacramentos, in The San Andres Limestone, a reservoir for oil and water in New Mexico: New Mexico Geological Society, Special Publication 3, p. 5-11, 6 figs.

References - Continued

- Kottlowski, F. E., 1968e, Sedimentational influence of Pedernal uplift [abs.]: American Association of Petroleum Geologists Bulletin, v. 52, no. 1, p. 197.
- 1969, San Andres Limestone west of the Sacramentos [abs.], in Guidebook of the San Juan-San Miguel-La Plata region: New Mexico Geological Society, 19th Field Conference, p. 206-207.
- 1970, Paleozoic geologic history of southwest New Mexico and northwest Chihuahua, in The geologic framework of the Chihuahua tectonic belt: West Texas Geological Society and University of Texas, Austin, symposium in honor of R. K. DeFord, Midland, Texas, p. 16-18.
- 1971, Petroleum potential of southwest New Mexico and south Arizona in Future petroleum provinces of the United States--their geology and potential: American Association of Petroleum Geologists Memoir 15, p. 431-448, 10 figs.
- 1973, Pre-Pliocene rocks in La Mesa region, southern Dona Ana County, New Mexico, in Guidebook to the geology of southcentral Dona Ana County, New Mexico: El Paso Geological Society, 7th Field Conference, p. 37-45.
- 1975a, Mississippian strata of the San Andres Mountains, in Guidebook to Mississippian shelf-edge and basin facies carbonates, Sacramento Mountains and southern New Mexico region: Dallas Geological Society, 1975 Field Conference, p. 119-123, 1 fig.
- 1975b, Stratigraphy of the San Andres Mountains in south-central New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 95-104.
- Kottlowski, F. E., and Bushnell, H. P., 1956, Late Cretaceous and early Tertiary outcrops of the Jornada del Muerto, New Mexico [abs.]: Geological Society of America Bulletin, v. 67, no. 12, pt. 2, p. 1798.
- Kottlowski, F. E., Flower, R. H., Thompson, M. L., and Foster, R. W., 1956, Stratigraphic studies of the San Andres Mountains, New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 1, 132 p.

References - Continued

- Kottlowski, F. E., and Foster, R. W., 1959, Buried pre-Cenozoic rocks of the Datil-Mogollon Plateau in New Mexico [abs.]: Geological Society of America Bulletin, v. 70, no. 12, pt. 2, p. 1728.
- 1960, Ancient shore-line sedimentary rocks of Permian age, northern Pedernal Hills, New Mexico [abs.]: Geological Society of America Bulletin, v. 71, no. 12, pt. 2, p. 1908-1909.
- 1962, Pre-Tertiary strata of Tres Hermanas Mountains, Luna County, New Mexico: American Association of Petroleum Geologists Bulletin, v. 46, no. 11, p. 2090-2098.
- compilers and eds., 1969, Exploration for mineral resources: New Mexico Bureau of Mines and Mineral Resources Circular 101, 126 p.
- Kottlowski, F. E., Foster, R. W., and Sandeen, W. M., 1955, Road log first day; Rhodes Canyon area, San Andres Mountains, in Guidebook to south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 15-23, 6 figs.
- Kottlowski, F. E., Foster, R. W., and Wengerd, S. A., 1969, Key oil tests and stratigraphic sections in southwest New Mexico, in Guidebook of the border region: New Mexico Geological Society, 20th Field Conference, p. 186-196.
- Kottlowski, F. E., and Hawley, J. W., 1975, Road log first day; Las Cruces to southern San Andres Mountains and return, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 1-16.
- Kottlowski, F. E., and Herber, L. J., 1963, Palm Park high-calcium limestone, Apache Valley, Sierra County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, p. 31-32.
- 1964, Palm Park high-calcium limestone, Apache Valley, Sierra County, New Mexico [abs.], in Abstracts for 1963: Geological Society of America Special Paper 76, p. 279-280.
- Kottlowski, F. E., Kuellmer, F. J., and Jones, W. R., 1953, Road log Las Cruces to Silver City, October 16, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 29-63.
- Kottlowski, F. E., and LeMone, D. V., eds., 1969, Border stratigraphy symposium: New Mexico Bureau of Mines and Mineral Resources Circular 104, 123 p.



## References - Continued

- Kottlowski, F. E., LeMone, D. V., and Foster, R. W., 1973, Remnant mountains in early Ordovician seas of the El Paso region, Texas and New Mexico: *Geology*, v. 1, no. 3, p. 137-140, 6 figs.
- Kottlowski, F. E., and Pray, L. C., 1967, Silurian outcrops of south-central and southwestern New Mexico: *Tulsa Geological Society Digest*, v. 35, p. 209-230, 6 figs.
- 1968, Silurian-outcrops of south-central and southwestern New Mexico [abs.]: *Abstracts of North American Geology*, November, p. 1656.
- Kottlowski, F. E., and Stewart, W. J., 1970, Part I--Wolfcampian Joyita uplift in central New Mexico; Part II--Fusulinids of the Joyita Hills, Socorro County, central New Mexico: *New Mexico Bureau of Mines and Mineral Resources Memoir 23*, 82 p.
- Kramer, Callahan and Associates, 1973, Draft environmental assessment of proposed sewage treatment plant modification at Las Cruces, New Mexico: *Albuquerque*, 68 p.
- Kramer, W. V., 1970, *Geology of the Bishop Cap Hills, Dona Ana County, New Mexico*: University of Texas at El Paso, unpublished M.S. thesis, 77 p., 6 figs.
- Krauskopf, K. B., 1956, Uraniferous magnetite-hematite deposit at the Prince mine, New Mexico (discussion of paper by G. W. Walker and F. W. Osterwald): *Economic Geology*, v. 51, no. 7, p. 725-726.
- Krewedl, D. A., 1974a, *Geology of the central Magdalena Mountains, Socorro County, New Mexico*: University of Arizona, Tucson, unpublished Ph. D. dissertation, 139 p., 27 figs.
- 1974b, *Geology of the central Magdalena Mountains, Socorro County, New Mexico* [abs.]: *Dissertation Abstracts International*, v. 35, no. 4, p. 1740B-1741B.
- 1974c, *Geology of the central Magdalena Mountains, Socorro County, New Mexico*: *New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-44*, 139 p., 27 figs.
- Krimsky, G. A., 1969, Flow direction of volcanic rocks in the northern part of the Mogollon-Datil province, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 41 p. [1970].

References - Continued

- Krohn, D. H., 1972, Gravity survey of the Mogollon Plateau volcanic province, southwestern New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 32 p. [1973].
- 1976, Gravity survey of the Mogollon Plateau volcanic province, southwestern New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 113-116.
- Kuellmer, F. J., 1952, Endomorphic effects of xenoliths in volcanic glass (New Mexico) [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1337.
- 1954, Geologic section of the Black Range at Kingston, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 33, 100 p.
- 1955, Geology of a disseminated copper deposit near Hillsboro, Sierra County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 34, 46 p.
- compiler, 1956a, Geologic map of Hillsboro Peak quadrangle, Grant, Sierra, and Luna Counties: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-1.
- 1956b, Geology of the southern Black Range area, Grant, Luna, and Sierra Counties, New Mexico [abs.]: Geological Society of America Bulletin, v. 67, no. 12, pt. 2, p. 1798.
- 1957, Composition of alkali feldspars in some igneous rocks [abs.]: Geological Society of America Bulletin, v. 68, no. 12, pt. 2, p. 1758.
- 1958a, Alkali feldspars in a Tertiary porphyry near Hillsboro, New Mexico: Journal of Geology, v. 66, no. 2, p. 151, 162.
- 1958b, Alkali feldspars in a Tertiary porphyry near Hillsboro, New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 6, no. 2, p. 86.
- 1959a, Geologic map of Hillsboro Peak thirty-minute quadrangle [abs.]: American Geological Institute, Geoscience Abstracts, v. 1, no. 1, p. 3.
- 1959b, Significance of alkali feldspar variation in Tertiary porphyries [abs.], in Guidebook to west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 157.

## References - Continued

- Kuellmer, F. J., ed., 1963, Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, 240 p.
- Kuellmer, F. J., and Kottlowski, F. E., 1965, Road log from Hillsboro to Mimbres Valley, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 31-35.
- Lackey, J. W., 1959, The natural resources industries of New Mexico, in New Mexico and its natural resources 1900-2000: University of New Mexico, Albuquerque, Division of Research, Department of Government, p. 29-32.
- Lamarre, A. L., 1974, Fluorite in jasperoid of the Salado Mountains; significance to metallogeny of the western United States: University of Western Ontario, London, Ontario, Canada, unpublished M.S. thesis, 134 p., 17 figs.
- 1975, A model for subduction origin and distribution of fluorite deposits in the western United States, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 169-170.
- Lamarre, A. L., Perry, A. J., and Jonson, D. C., 1974, The Salado fluorspar deposit, Sierra County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 379.
- Lambert, R. S., 1973, Geology of the country east of the Santa Rita mining district, Grant County, New Mexico--the San Lorenzo area: University of New Mexico, Albuquerque, unpublished M.S. thesis, 81 p.
- Landon, R. E., 1929, Metamorphism and ore deposition in the Santa Rita-Hanover-Fierro area, New Mexico: University of Chicago, Illinois, unpublished Ph. D. dissertation.
- 1931, Metamorphism and ore deposition in the Santa Rita-Hanover-Fierro area, New Mexico, a study of igneous metamorphism, in Abstracts of theses: University of Chicago, Illinois, science series, v. 7, p. 229-234.
- Lansford, R. R., Ben-David, Shaul, and Gebhard, T. G., Jr., 1975, A socio-economic evaluation of alternative water policies on the Rio Grande in New Mexico: University of New Mexico, Albuquerque, School of Law, Natural Resources Journal, v. 15, no. 2, p. 307-325.

References - Continued

- Lansford, R. R., Ben-David, Shaul, Gebhard, T. G., Jr., Brutsaert, W. F., and Creel, B. J., 1973a, An analytical interdisciplinary evaluation of the utilization of the water resources of the Rio Grande in New Mexico: New Mexico Water Resources Research Institute Report 020, 152 p.
- 1973b, An analytical interdisciplinary evaluation of the utilization of the water resources of the Rio Grande in New Mexico; middle Rio Grande region: New Mexico Water Resources Research Institute Report 022, 99 p.
- 1973c, An analytical interdisciplinary evaluation of the utilization of the water resources of the Rio Grande in New Mexico; Socorro region: New Mexico Water Resources Research Institute Report 023, 95 p.
- 1974, An analytical interdisciplinary evaluation of the utilization of the water resources of the Rio Grande in New Mexico; lower Rio Grande region: New Mexico Water Resources Research Institute Report 024, 109 p.
- Lansford, R. R., Sorensen, E. F., Creel, B. J., Wile, W. W., and Stacks, H. M., 1978, Sources of irrigation water and irrigated and dry cropland acreages in New Mexico, by county, 1972-1977: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 377, 39 p.
- Lansford, R. R., and others, 1975, Irrigated cropland acreage and source of water used for irrigation in New Mexico, by county: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 305, 39 p.
- 1976a, The economic feasibility of nuclear desalinization of groundwater in New Mexico: American Agricultural Economics Association, Contributing Papers, 8 p.
- 1976b, Irrigated cropland acreage and source of water used for irrigation in New Mexico, by county: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 324, 39 p.
- 1976c, A preliminary economic feasibility study for the establishment of an energy-water complex in the Tularosa Basin: New Mexico Water Resources Research Institute Report 068, 231 p.

Reference - Continued

- Lansford, R. R., and others, 1976d, A preliminary economic feasibility study for the establishment of an energy-water complex in the Tularosa Basin--executive summary: New Mexico Water Resources Research Institute Report 067, 10 p.
- Larsh, P. A., 1911a, Caballo Mountain vanadium mines, New Mexico: Engineering Mining Journal, v. 92, p. 118.
- 1911b, Vanadium in old silver mines of New Mexico: Engineering Mining Journal, v. 91, p. 1249.
- 1913, Lucky Bill lead-vanadium mine, Grant County, New Mexico: Engineering Mining Journal, v. 96, p. 1103-1105.
- Lasky, S. G., 1928, Transverse faults at Kennecott and their relation to the main fault systems: American Institute of Mining and Metallurgical Engineers Technical Publication 152, 17 p.
- 1930a, A colloidal origin of some of the Kennecott ore minerals: Economic Geology, v. 25, no. 7, p. 737-757, 7 figs.
- 1930b, Geology and ore deposits of the Ground Hog mine, Central district, Grant County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 2, 14 p.
- 1932, The ore deposits of Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 8, 139 p.
- 1934, Ferric-ferrous ratio in contact-metamorphic deposits: Economic Geology, v. 29, no. 2, p. 203-206, 1 fig.
- 1935a, Distribution of silver in base-metal ores (with discussion), in Mining geology: American Institute of Mining and Metallurgical Engineers Transactions, v. 115, p. 69-80, 1 fig.
- 1935b, Igneous assimilation and associated contact metamorphism in the Virginia mining district, New Mexico: American Mineralogist, v. 20, no. 8, p. 552-561.
- 1935c, The Lordsburg district, New Mexico, in Copper resources of the World: International Geological Congress, Washington, D. C., 16th Annual Meeting, v. 1, p. 337-341.
- 1936a, Geology and ore deposits of the Bayard area, Central mining district, New Mexico: U.S. Geological Survey Bulletin 870, 144 p.



## References - Continued

- Lasky, S. G., 1936b, Hydrothermal leaching in the Virginia mining district, New Mexico: *Economic Geology*, v. 31, no. 2, p. 156-169, 7 figs.
- 1937, Outlook for further ore discoveries in the Little Hatched Mountains, New Mexico [abs.]: *Economic Geology*, v. 32, no. 8, p. 1073.
- 1938a, Geology and ore deposits of the Lordsburg mining district, Hidalgo County, New Mexico: U.S. Geological Survey Bulletin 885, 62 p, 9 figs.
- 1938b, Newly discovered section of Trinity age in southwestern New Mexico: *American Association of Petroleum Geologists Bulletin*, v. 22, no. 5, p. 524-540, 4 figs.
- 1938c, Newly discovered section of Trinity age in southwestern New Mexico [abs.]: *Oil and Gas Journal*, v. 36, no. 44, p. 68, 71.
- 1938d, Outlook for further ore discoveries in the Little Hatched Mountains, New Mexico: *Economic Geology*, v. 33, no. 4, p. 365-389, 8 figs.
- 1940a, Manganese deposits in the Little Florida Mountains, Luna County, New Mexico--a preliminary report, in *Strategic minerals investigations, 1940*: U.S. Geological Survey Bulletin 922-C, p. 55-73.
- 1940b, Outlook for further ore discoveries in the Little Hatched Mountains, New Mexico: *New Mexico Bureau of Mines and Mineral Resources Circular* 7, 31 p.
- 1947, Geology and ore deposits of the Little Hatched Mountains, Hidalgo and Grant Counties, New Mexico: U.S. Geological Survey Professional Paper 208, 101 p.
- Lasky, S. G., and Hoaglund, A. D., 1950, Central mining district, New Mexico, in K. C. Dunham, ed., *Symposium on lead and zinc for 1948: 18th International Geologic Congress, Great Britain*, pt. 7, p. 97-110.
- Lasky, S. G., and Wootton, T. P., 1933, The metal resources of New Mexico and their economic features: *New Mexico Bureau of Mines and Mineral Resources Bulletin* 7, 178 p.

References - Continued

- Laudon, L. R., and Bowsher, A. L., 1939, Stratigraphy of the Lake Valley Formation of New Mexico [abs.]: Geological Society of America Bulletin, v. 50, no. 12, pt. 2, p. 1965.
- 1941a, Mississippian Formations of the Sacramento Mountains, New Mexico: American Association of Petroleum Geologists Bulletin, v. 25, no. 12, p. 2107-2160.
- 1941b, Mississippian Formations of the Sacramento Mountains, New Mexico [abs.]: American Association of Petroleum Geologists Bulletin, v. 25, no. 5, p. 935.
- 1941c, Mississippian Formations of Sacramento Mountains, New Mexico [abs.]: Tulsa Geological Society Digest, v. 9, p. 73-75.
- 1945, Mississippian Formations of southwestern New Mexico [abs.]: Geological Society of America Bulletin, v. 56, no. 12, pt. 2, p. 1175.
- 1949, Mississippian Formations of southwestern New Mexico: Geological Society of America Bulletin, v. 60, no. 1, p. 1-37.
- Laughlin, A. W., Brookins, D. G., Kudo, A. M., and Causey, J. D., 1971, Chemical and strontium isotopic investigations of ultramafic inclusions and basalt, Bandera Crater, New Mexico: Geochimica et Cosmochimica Acta, v. 35, no. 1, p. 107-113, 2 figs.
- Lavery, N. G., and Trauger, F. D., 1977, Addendum to geohydrology of the upper Pipe Line Draw area, Grant County, New Mexico: Exxon Corporation report, 13 p.
- Leatherbee, Brigham, 1910, Sierra County, New Mexico, vanadium deposits: Mining World, v. 33, p. 799.
- 1911, Vanadium in New Mexico: Mining Magazine, v. 5, p. 282.
- Lee, W. T., 1906, The Engle coal field, New Mexico, in Coal, lignite, and peat--Survey work on coal during 1905: U.S. Geological Survey Bulletin 285-F, p. 240.
- 1907a, Afton craters of southern New Mexico: Geological Society of America Bulletin, v. 18, p. 211-220.
- 1907b, Water resources of the Rio Grande Valley in New Mexico and their development: U.S. Geological Survey Water-Supply Paper 188, 59 p.

References - Continued

- Leesch, S. H., 1910, Orogrande, New Mexico (mining district): South-Western Mines, v. 2, no. 4, p. 3-4.
- Leggat, E. R., and Davis, M. E., 1966, Analog study of the Hueco Bolson near El Paso, Texas: Texas Water Development Board Report 28, 26 p., 13 figs.
- Leggat, E. R., Lowry, M. E., and Hood, J. W., 1962, Ground-water resources of the lower Mesilla Valley, Texas and New Mexico: Texas Board of Water Engineers Bulletin 6203, 191 p.
- 1963, Ground-water resources of the lower Mesilla Valley, Texas and New Mexico, in Contributions to the hydrology of the United States, 1962: U.S. Geological Survey Water-Supply Paper 1669-AA, 49 p. [1964].
- 1965, Groundwater resources of the lower Mesilla Valley, Texas and New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 7, no. 7-977, p. 71.
- Lehmer, D. J., 1948, The Jornada Branch of the Mogollon: University of Arizona, Tucson, Bulletin, v. 19, no. 2.
- Leighly, J. B., 1936, Meandering arroyos of the dry Southwest: Geographical Review, v. 26, no. 2, p. 270-282, 7 figs.
- Lemke, P. A., 1957, Experience with cyclones at Chino: Mining Congress Journal, v. 43, no. 9, p. 42-45.
- LeMone, D. V., 1957, The Santa Fe Formation near Socorro, New Mexico [abs.], in Guidebook of southwestern San Juan Mountains, Colorado: New Mexico Geological Society, 8th Field Conference, p. 253.
- 1959, The Devonian stratigraphy of Cochise, Pima, Santa Cruz Counties, Arizona and Hidalgo County, New Mexico: University of Arizona, Tucson, unpublished M.S. thesis, 108 p.
- 1974, The lower Ordovician Florida Mountains Formation stratotype, Luna County, New Mexico, in Guidebook to the geology of the Florida Mountains, Luna County, New Mexico: El Paso Geological Society, 8th Field Conference, p. 36-46.
- LeMone, D. V., and Johnson, R. R., 1969, Neogene flora from the Rincon Hills, Dona Ana County, New Mexico, in Border stratigraphy symposium: New Mexico Bureau of Mines and Mineral Resources Circular 104, p. 77-88, 1 fig.

References - Continued

- LeMone, D. V., and Johnson, R. R., 1971, The Pleistocene flora from the Rincon Hills, Dona Ana County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 3, no. 3, p. 240.
- LeMone, D. V., King, W. E., and Cunningham, J. E., 1971a, The Pennsylvanian system at Silver City, Grant County, New Mexico [abs.], in Guidebook to the San Luis Basin: New Mexico Geological Society, 22nd Field Conference, p. 323.
- 1971b, Pennsylvanian system at Silver City, Grant County, New Mexico [abs.], in Symposium on the Pennsylvanian of New Mexico: New Mexico Geological Society and Roswell Geological Society Joint Conference Program, p. 6.
- 1974, Pennsylvanian system of Chloride Flat, Grant County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 131, 18 p.
- LeMone, D. V., Klement, K. W., and King, W. E., 1967, Permian (Wolfcamp) phylloid algal mounds in the southern Robledo Mountains, Dona Ana County, New Mexico [abs.]: New Mexico Academy of Science Bulletin, v. 8, no. 2, p. 24-25.
- 1969, The phylloid algal mounds of the upper member, Hueco Limestone, southern Robledo Mountains, Dona Ana County, New Mexico [abs.]: Texas Journal of Science, v. 20, p. 289-290.
- 1971, Abo-Hueco facies of the upper Wolfcamp Hueco Formation of the southeastern Robledo Mountains, Dona Ana County, New Mexico, in Guidebook to the Robledo Mountains, New Mexico, and Franklin Mountains, Texas: Society of Economic Paleontologists and Mineralogists, Permian Basin Section, 1971 Field Conference, p. 137-174.
- LeMone, D. V., Simpson, R. D., and Klement, K. W., 1975a, Paleoecology of transition beds of Abo and upper members of Hueco Formation (lower Permian), southern New Mexico [abs.]: American Association of Petroleum Geologists Bulletin, v. 59, no. 5, p. 914-915.
- 1975b, Wolfcampian upper Hueco Formation of the Robledo Mountains, Dona Ana County, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 119-122.

References - Continued

- Leopold, L. B., 1956, Data and understanding arroyos in New Mexico, in The future of arid lands: American Association for the Advancement of Science Publication 43, p. 114-120.
- 1962, Water and the arid zone of the United States, in Problems of the arid zone--proceedings of the Paris Symposium: United Nations Education, Scientific, and Cultural Organization, Arid Zone Research, v. 18, p. 395-399.
- Leopold, L. B., Emmett, W. W., and Myrick, R. M., 1966a, Channel and hillslope processes in a semiarid area, New Mexico, in Erosion and sedimentation in a semihumid environment: U.S. Geological Survey Professional Paper 352-G, p. 193-253, 37 figs.
- 1966b, Channel and hillslope processes in a semiarid area, New Mexico [abs.]: Abstracts of North American Geology, December, p. 1327.
- Leroy, P. G., 1951, Geology of the southern margin of the Santa Rita copper pit: Columbia University, New York City, unpublished M.A. thesis.
- 1953, Correlation of copper mineralization in the Santa Rita porphyry copper deposit: Columbia University, New York City, unpublished Ph. D. dissertation, 74 p., 31 figs.
- 1954a, Correlation of copper mineralization with hydrothermal alteration in the Santa Rita porphyry copper deposit, New Mexico: Geological Society of America Bulletin, v. 65, no. 8, p. 739-768, 16 figs.
- 1954b, Correlation of copper mineralization with hydrothermal alteration in the Santa Rita porphyry copper deposit, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 2, no. 3, p. 69.
- Lewchalermvong, Chettavat, 1973, Investigation and evaluation of the Royal Flush and Mex-Tex mines, and adjacent area, Hansonburg mining district, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 102 p., 12 figs.
- Lewis, D. W., 1961, The paragenesis of glauconite in the Bliss Formation, Silver City, New Mexico: University of Houston, Texas, unpublished M.S. thesis.



References - Continued

- Lewis, D. W., 1962a, Glauconite in the Cambrian-Ordovician Bliss Formation near Silver City, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 59, 30 p.
- 1962b, Glauconite in the Cambrian-Ordovician Bliss Formation near Silver City, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4-3323, p. 37.
- Lifshitz-Roffman, Haia, 1971, Natural and experimental weathering of basalts: New Mexico Institute of Mining and Technology, Socorro, unpublished Ph. D. dissertation, 123 p.
- Lindberg, J. D., and Smith, M. S., 1973, Reflectance spectra of gypsum sand from the White Sands National Monument and basalt from a nearby lava flow: American Mineralogist, v. 58, no. 11-12, p. 1062-1064.
- Lindgren, Waldemar, 1909, The Tres Hermanas mining district, New Mexico, in Contributions to economic geology, 1908, Part 1: U.S. Geological Survey Bulletin 380-C, p. 123-128.
- 1910, The hot springs of Ojo Caliente and their deposits: Economic Geology, v. 5, no. 1, p. 227-27.
- Lindgren, Waldemar, Graton, L. C., and Gordon, C. H., 1910, The ore deposits of New Mexico: U.S. Geological Survey Professional Paper 68, 361 p.
- Link, V. G., Neher, R. E., Derr, P. H., and Anderson, J. U., 1971, Soil associations and land classification for irrigation, Dona Ana County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 183, 41 p., 5 figs.
- Link, V. G., Turner, M. T., Gallman, W. B., and Anderson, J. U., 1971, Soil associations and land classification for irrigation, Lincoln County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 212, 49 p., 2 figs.
- Lins, T. W., 1975, Geometry of Sierrita fault and its bearing on tectonic development of the Rio Grande Rift, New Mexico; comment and reply: Geology, v. 3, no. 7, p. 357, 1 fig.
- Little, E. L., Jr., 1950, Southwestern trees--a guide to the native species of New Mexico and Arizona: U.S. Department of Agriculture Handbook 9, 109 p.

References - Continued

- Lochman-Balk, Christina, 1958, The Capitol Dome section, Florida Mountains, in Guidebook of the Hatchet Mountains and the Cooks Range-Florida Mountains areas: Roswell Geological Society, 11th Field Conference, p. 47-52.
- 1959, List of stratigraphic names used in northwest and central New Mexico, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 100-111.
- 1964, Lexicon of stratigraphic names used in Lincoln County, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 57-61.
- 1965, Lexicon of stratigraphic names used in southwestern New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 93-111.
- 1974, The Capital Dome section, Florida Mountains, in Guidebook to the geology of the Florida Mountains, Luna County, New Mexico: El Paso Geological Society, 8th Field Conference, p. 7-15.
- Loel, Wayne, 1941, Use of aerial photographs in geologic mapping (with illustrations of Silver City and Shiprock areas, New Mexico): American Institute of Mining and Metallurgical Engineers Transactions, v. 144, p. 356-409, 11 figs.
- Loeltz, O. J., Morgan, A. M., Murray, C. R., and Theis, C. V., 1942, Four ground-water studies near Lordsburg, New Mexico, in 16th and 17th biennial report, 1942-1946: New Mexico State Engineer, p. 261-291, 12 figs.
- Loeltz, O. J., and Murray, C. R., 1962, Report on testing of water-supply well for Lordsburg Airfield, New Mexico, 1942, in 16th and 17th biennial report, 1942-46: New Mexico State Engineer, p. 279-288.
- Lohr, E. P., 1959, El Morro--New Mexico's historic headland, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 149-153.
- Lokke, D. H., 1964, Lower Cretaceous Orbitolina from east Portillo Mountains, Dona Ana County, New Mexico: American Association of Petroleum Geologists Bulletin, v. 48, no. 2, p. 231-233, 1 fig.
- Loliet, A. J., 1954, Report of water supply for the Lincoln Compressor Station, Lincoln County, New Mexico: El Paso Natural Gas Company, 13 p.

References - Continued

- Long, Austin, 1966a, Late Pleistocene and recent chronologies of playa lakes in Arizona and New Mexico: University of Arizona, Tucson, unpublished Ph. D. dissertation, 161 p.
- 1966b, Late Pleistocene and recent chronologies of playa lakes in Arizona and New Mexico [abs.]: Dissertation Abstracts International, section B., v. 27, no. 4, p. 1189B-1190B.
- Longwell, C. R., 1954, Review of the "Geology of the Caballo Mountains"; by Vincent C. Kelley and Caswell Silver: American Journal of Science, v. 252, no. 1, p. 63.
- Look, A. D., and Anderson, L. G., 1957, Use of prestressed, precast shaft supports, Banner Mine, Lordsburg, New Mexico: U.S. Bureau of Mines Information Circular IC 7775, 15 p., 14 figs.
- Look, A. D., and Van Fleet, L. A., 1952, Two-way radio communication at Santa Rita open pit, Kennecott Copper Corporation, Santa Rita, New Mexico: U.S. Bureau of Mines Information Circular IC 7626, 8 p., 7 figs.
- Lopez, D. A., 1975, Geology of the Datil area, Catron County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 72 p.
- Loughlin, G. F., and Koschmann, A. H., 1942, Geology and ore deposits of the Magdalena mining district, New Mexico: U.S. Geological Survey Professional Paper 200, 168 p., [1943].
- Lovejoy, E. M. P., 1976, Geology of Cerro del Cristo Rey uplift, Chihuahua and New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 31, 84 p.
- Lovering, T. G., 1952, Geology of the western portion of the Santa Rita quadrangle, Grant County, New Mexico: U.S. Geological Survey Open-File Report, 44 p. [On file at New Mexico Bureau of Mines and Mineral Resources, Socorro].
- 1953, The geology of a western portion of the Santa Rita quadrangle, Grant County, New Mexico: University of Arizona, Tucson, unpublished M.S. thesis.
- Lowe, C. H., 1955, The eastern limit of the Sonoran Desert in the United States, with additions to the known herpetofauna of New Mexico: Ecology, v. 36, p. 343-345.

- Lucia, F. J., 1970, Lower Paleozoic history of the western Diablo Platform of west Texas and south central New Mexico, in The geologic framework of the Chihuahua tectonic belt: West Texas Geological Society and University of Texas, Austin, Symposium in honor of R. K. DeFord, Midland, Texas, p. 20-22.
- 1974, Oxide minerals in miarolitic rhyolite, Black Range, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 6, no. 5, p. 455.
- Lufkin, J. L., 1972a, Tin mineralization within rhyolite flow-domes (Tertiary), Black Range, New Mexico: Stanford University, Palo Alto, California, unpublished Ph. D. dissertation, 148 p., 48 figs.
- 1972b, Tin mineralization within rhyolite flow-domes (Tertiary), Black Range, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 7, p. 581.
- 1972c, Tin mineralization within rhyolite flow-domes, Black Range, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-57, 148 p., 48 figs.
- 1973, Tin mineralization within rhyolite flow-domes (Tertiary), Black Range, New Mexico [abs.]: Dissertation Abstracts International, v. 33, no. 8, p. 3717B.
- Lull, R. S., 1929a, A remarkable ground sloth (Nothrotherium shastense, from Aden, Dona Ana County): Yale University, New Haven, Connecticut, Peabody Museum Memoirs, v. 3, pt. 2, 21 p., 5 figs.
- 1929b, A remarkable ground sloth (Nothrotherium shastense, from Aden, Dona Ana County) [abs.]: Geological Society of America Bulletin, v. 40, no. 1, p. 246-247.
- 1929c, A remarkable ground sloth (Nothrotherium shastense, from Aden, Dona Ana County) [abs.]: Pan-American Geologist, v. 51, no. 3, p. 238.
- 1930, The ground sloth, Nothrotherium: American Journal of Science, 5th series, v. 20, p. 344-352, 6 figs.
- Luning, R. H., 1974, Fissure veins of the Bonney and Eighty-five mines, Lordsburg mining district, Hidalgo County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 383.

References - Continued

- Lusk, Don, 1938, Bonanzas (mining in southwestern New Mexico):  
New Mexico Magazine, v. 16, no. 6, p. 19-21, 44-45.
- 1952, Copper bonanza (Santa Rita): New Mexico Magazine, v. 30,  
no. 4, p. 17-19, 50-51.
- Lustig, L. K., 1967, Inventory of research on geomorphology and  
surface hydrology of desert environments: Tucson, Arizona Office  
of Arid Lands Research, 189 p.
- 1968, Appraisal of research on geomorphology and surface  
hydrology of desert environments, in Deserts of the world:  
Tucson, University of Arizona Press, p. 95-286.
- Luther, L. A., 1946, Chino copper: Compressed Air Magazine, v. 51,  
no. 11, p. 286-291.
- Lyford, F. P., 1970a, Test wells T-15, T-16, T-17, T-18, and RC-3,  
White Sands Missile Range, Dona Ana and Sierra Counties,  
New Mexico: U.S. Geological Survey Open-File Report, 46 p.,  
14 figs.
- 1970b, Water-supply well SRC-2, Stallion Range Center, White  
Sands Missile Range, Socorro County, New Mexico: U.S. Geological  
Survey Open-File Report, 26 p., 8 figs.
- 1972, Possible effects of peat excavation on manmade structures  
near Mescalero, Otero County, New Mexico: U.S. Geological Survey  
Open-File Report, 24 p., 6 figs.
- Lynn, G. C., 1975, Stratigraphic correlation of the El Paso and  
Montana Groups in the Victorio Mountains, the Snake Hills, and  
the Big Florida Mountains in southwestern New Mexico: University  
of Arizona, Tucson, unpublished M.S. thesis, 115 p., 25 figs.
- McAnulty, W. N., 1972a, Fluorspar in silicified rocks in New Mexico:  
New Mexico Bureau of Mines and Mineral Resources Progress  
Report 7, 3 p.
- 1972b, Winkler anticline fluorspar, Hidalgo County, New Mexico:  
New Mexico Bureau of Mines and Mineral Resources Progress Report  
E-3, 7 p.
- 1974, Fluorspar in New Mexico [abs.], in Guidebook to Ghost  
Ranch (central-northern New Mexico): New Mexico Geological  
Society, 25th Field Conference, p. 382.



References - Continued

- McAnulty, W. N., 1975, Fluorspar deposits and the Rio Grande Rift system, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 167-168.
- 1978, Fluorspar in New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 34, 61 p.
- McCaslin, J. C., 1965, There just hasn't been enough drilling in Catron County [New Mexico]: Oil and Gas Journal, v. 63, no. 13, p. 225.
- McCleary, J. T., 1960, Geology of the northern part of the Fra Cristobal Range, Sierra and Socorro Counties, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 59 p.
- McClure, T. M., 1934, Hidalgo County investigation, in 11th biennial report, 1932-34: New Mexico State Engineer, p. 167-183.
- 1938, Hidalgo County investigation, in 12th and 13th biennial report, 1934-38: New Mexico State Engineer, p. 272.
- MacDonald, Bernard, 1909, Discussion of paper by C. R. Keyes, Genesis of the Lake Valley, New Mexico, silver deposits: American Institute of Mining Engineers Bulletin, v. 26, p. 211-216.
- McDonald, D. F., and Enzian, Charles, 1916, Prospecting and mining of copper ore at Santa Rita, New Mexico: U.S. Bureau of Mines Bulletin 107, 122 p., 20 figs.
- McDougall, D. J., 1968a, A "lattice-defect--free energy" approach to replacement processes in ore deposition: Economic Geology, v. 63, no. 6, p. 671-681.
- 1968b, Natural thermoluminescence of igneous rocks and associated ore deposits, in Thermoluminescence of geological materials--NATO advanced research institute, Spoleto, Italy: New York, Academic Press, 1966 Proceedings, Chapter 10, p. 527-544.
- ed., 1968c, Thermoluminescence of geological material--NATO advanced research institute, Spoleto, Italy, 1966 Proceedings: New York, Academic Press, 678 p.
- McFarland, Elizabeth, 1955, Modern man meets ancient Mogollones: Sun Trails, v. 8, no. 4, p. 2-5.

References - Continued

- M'Gonigle, J. W., 1960, A magnetic survey in the Rio Grande depression: University of New Mexico, Albuquerque, unpublished M.S. thesis, 56 p.
- McGuinness, C. L., 1936, The minerals of New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 346 p.
- McKee, E. D., 1951, Sedimentary basins of Arizona and adjoining areas: Geological Society of America Bulletin, v. 62, no. 5, p. 481-506.
- 1966a, Arizona and western New Mexico, in Paleotectonic investigations of the Permian System in the United States: U.S. Geological Survey Professional Paper 515-J, p. 199-223, 13 figs.
- 1966b, Structures of dunes at White Sands National Monument, New Mexico (and a comparison with structures of dunes from other selected areas): Sedimentology, v. 7, no. 1, Special Issue, 136 p.
- 1966c, Structures of dunes at White Sands National Monument, New Mexico (and a comparison with structures of dunes from other selected areas) [abs.]: Petroleum Abstracts, v. 6, no. 49, p. 2891.
- 1967, Structures of dunes at White Sands National Monument, New Mexico (and a comparison with structures of dunes from other selected areas) [abs.]: Abstracts of North American Geology, April, p. 491.
- McKee, E. D., and Douglass, J. R., 1971, Growth and movement of dunes at White Sands National Monument, New Mexico, in Geological Survey research 1971: U.S. Geological Survey Professional Paper 750-D, p. 108-114, 3 figs.
- McKee, E. D., and Moiola, R. J., 1975, Geometry and growth of the White Sands dune field, New Mexico: Journal of Research, v. 3, no. 1, p. 59-66, 9 figs.
- McKinstry, Hugh, 1959, Mineral assemblages in sulfide ores--the system Cu-Fe-S-O (Hanover-Fierro district): Economic Geology, v. 54, no. 6, p. 975-1001.
- McLean, J. S., 1970a, Objectives of a current study of saline ground water in the Tularosa Basin, New Mexico, in Water there is no substitute: New Mexico Water Conference, 15th Annual Meeting Proceedings, p. 95-100, 3 figs.

References - Continued

- McLean, J. S., 1970b, Saline ground-water resources of the Tularosa Basin, New Mexico: U.S. Office of Saline Water Research and Development Progress Report 561, 128 p.
- 1975, Saline ground water in the Tularosa Basin, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 237-238.
- 1977, Hydrologic maps and data in the Mimbres Basin, New Mexico: U.S. Geological Survey Open-File Report 77-314, 531 p., 8 figs.
- McNaughton, D. D., 1957, Recent developments in rock drilling at Chino mines: Mining Engineer, v. 9, no. 5, p. 542-543.
- Mach, Darrell, 1978, An assessment of New Mexico water resources, in Proceedings of the 23rd annual New Mexico Water Conference: New Mexico Water Resources Research Institute Report 101, p. 4-14.
- Machette, M. N., 1976, Logs of drill holes, San Acacia 7 1/2' quadrangle, Socorro County, New Mexico: U.S. Geological Survey Open-File Report 76-688, 20 p., 1 fig.
- 1977, Geologic map of San Acacia 7 1/2 minute quadrangle, Socorro County, New Mexico: U.S. Geological Survey Geologic Quadrangle Map GQ-1415.
- compiler, 1978, Preliminary geologic map of the Socorro 1 1/4 by 2 1/4 quadrangle, central New Mexico: U.S. Geological Survey Open-File Map 78-607, 1 sheet.
- Mains, J. F., 1901, The White Oaks country, in Mineral resources of New Mexico: International Industrial Record, El Paso, Texas, v. 3, no. 25, p. 30-34.
- Maise, C. R., 1955a, Geology of Bear Creek Canyon, Arizona and New Mexico: University of Utah, Salt Lake City, unpublished M.S. thesis, 75 p., 8 figs.
- 1955b, Geology of Bear Creek Canyon, Arizona and New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-17, 75 p., 8 figs.
- Maker, H. J., Anderson, J. U., and Neher, R. E., 1971, Soil associations and land classification for irrigation, Grant County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 200, 43 p., 6 figs.

References - Continued

- Maker, H. J., Bailey, O. F., and Anderson, J. U., 1970, Soil associations and land classification for irrigation, Luna County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 176, 31 p., 3 figs.
- Maker, H. J., Cox, D. N., and Anderson, J. U., 1970, Soil associations and land classification for irrigation, Hidalgo County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 177, 29 p., 3 figs.
- Maker, H. J., Derr, P. S., and Anderson, J. U., 1972, Soil associations and land classification for irrigation, Otero County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 238, 63 p., 14 figs.
- Maker, H. J., Downs, J. M., and Anderson, J. U., 1972a, Soil associations and land classification for irrigation, Sierra County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 233, 2 figs.
- 1972b, Soil associations and land classification for irrigation, Socorro County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 234, 11 figs.
- Maker, H. J., Neher, R. E., and Anderson, J. U., 1972, Soil associations and land classification for irrigation, Catron County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 229, 9 figs.
- Maker, H. J., Neher, R. E., Derr, P. H., and Anderson, J. U., 1971, Soil associations and land classification for irrigation, Dona Ana County: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 183, 41 p.
- Malde, H. E., 1964, Environment and man in arid America: Science, v. 145, no. 3628, p. 123-129.
- Maldonado, Florian, 1974, Geology of the northern part of the Sierra Cuchillo, Socorro and Sierra Counties, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 59 p.
- Mallon, K. M., 1966a, Precambrian geology of the northern part of the Los Pinos Mountains, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 88 p., 28 figs.

References - Continued

- Mallon, K. M., 1966b, Precambrian geology of the northern part of the Los Pinos Mountains, New Mexico [abs.], in Guidebook of the Taos-Raton-Spanish Peaks country: New Mexico Geological Society, 17th Field Conference, p. 121.
- Mallory, W. W., ed., 1972, Geologic atlas of the Rocky Mountain region: Denver, Colorado, Rocky Mountain Association of Geologists and A. F. Hirschfeld Press, 331 p., 278 figs.
- Mardirosian, C. A., 1964, Geochemical exploration of Crow mine area, Lincoln County, New Mexico: University of Utah, Salt Lake City, unpublished M.S. thesis, 84 p., 15 figs.
- Mariner, R. H., Presser, T. S., and Evans, W. C., 1977, Chemical, isotopic, and gas combinations of selected thermal springs in Arizona, New Mexico, and Utah: U.S. Geological Survey Open-File Report 77-654, 56 p.
- Marr, R. J., 1956, Geology of Lynch Ranches, Catron and Valencia Counties, New Mexico: University of Texas, Austin, unpublished M.A. thesis.
- Martin, A. J., 1951, State reviews--gold, silver, copper, lead, and zinc in New Mexico (1949), in Minerals Yearbook: U.S. Bureau of Mines, p. 1540-1553, 2 figs.
- 1952, Metal mining in New Mexico (1951), in Mining Yearbook: Colorado Mining Association, p. 74.
- 1953a, Metal mining in New Mexico (1952), in Mining Yearbook: Colorado Mining Association, p. 40-41.
- 1953b, State reviews--gold, silver, copper, lead, and zinc in New Mexico (1950), in Minerals Yearbook: U.S. Bureau of Mines, p. 1555-1567, 2 figs.
- 1954a, Gold, silver, copper, lead, and zinc production in New Mexico in 1953, in Mining Yearbook: Colorado Mining Association, p. 78.
- 1954b, State reviews--gold, silver, copper, lead, and zinc in New Mexico (1951), in Minerals Yearbook: U.S. Bureau of Mines, p. 1561-1574, 2 figs.
- 1955, The mineral industry of New Mexico, in Minerals Yearbook: U.S. Bureau of Mines, 25 p., 5 figs. [preprint]



## References - Continued

- Martin, P. S., 1963, The last 10,000 years--a fossil pollen record of the American southwest: Tucson, University of Arizona Press, 87 p., 37 figs.
- Martin, P. S., and Mehringer, P. J., Jr., 1965a, Pleistocene pollen analysis and biogeography of the southwest, in The Quaternary of the United States: New Jersey, Princeton University Press, p. 433-451.
- 1965b, Pleistocene pollen analysis and biogeography of the southwest [abs.]: American Geological Institute, Geoscience Abstracts, v. 7, no. 7-6264, p. 32-33.
- Martin, P. S., Sabels, B. E., and Shutler, Dick, Jr., 1961, Rampart Cave coprolite and ecology of the Shasta ground sloth: American Journal of Science, v. 259, no. 2, p. 102-127, 8 figs.
- Martin, W. C., 1964, Some aspects of the natural history of the Capitan and Jicarilla Mountains, and Sierra Blanca region of New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 171-176.
- Marvin, R. F., Naeser, C. W., and Mehnert, H. H., 1978, Tabulation of radiometric ages--including unpublished K-Ar and fission-track ages--for rocks in southeastern Arizona and southwestern New Mexico, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 243-252.
- Mason, J. T., 1976, The geology of the Caballo Peak quadrangle, Sierra County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 131 p.
- Mathewson, D. E., and Meyers, G. F., 1955, Reconnaissance of Zuni Pueblo lands: Holly Uranium Corporation Report, 10 p.
- Mattox, R. B., ed., 1970, Saline water: Rocky Mountain Division, American Association for the Advancement of Science, Committee on Desert and Arid Zone Research Contribution 13, 105 p.
- Maxwell, C. H., 1952, Pleonaste crystals from an olivine basalt, Caballo Mountains, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 43 p.
- compiler, 1978, Map showing appraisal of mineral resources potential of RARE II proposed roadless areas in national forests, New Mexico (exclusive of coal, oil, gas, and construction materials): U.S. Geological Survey Open-File Report 78-859, map.

## References - Continued

- Maxwell, C. H., and Heyl, A. V., 1975, Mineralization and structure of mineral deposits in the Hermosa, Chloride, and Phillipsburg areas, New Mexico [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 341-342.
- 1976, Preliminary geologic map of the Winston quadrangle, Sierra County, New Mexico: U.S. Geological Survey Open-File Map 76-858.
- Maxwell, C. H., and Nonini, L. G., 1977, Status of mineral resource information for the Zuni Indian Reservation, New Mexico: U.S. Bureau of Indian Affairs Administrative Report BIA-37, 43 p., 11 figs.
- May, A. J., 1950, Sinking Star shaft at Vanadium, New Mexico: Mining Engineer, v. 187, no. 1, p. 81-85.
- Mayo, E. B., 1958, Lineament tectonics and some ore districts of the southwest: Mining Engineer, v. 10, no. 11, p. 1169-1175.
- 1959, Reply to discussion of "Lineament tectonics and some ore districts of the southwest" by D. L. Evans: Mining Engineer, v. 11, no. 6, p. 612.
- Mead, P. L., 1953, Seeds of slaughter (Santa Rita): Sun Trails, v. 6, no. 7, p. 18-20.
- Meeks, T. O., 1949, The occurrence of ground water in the Alamogordo-Tularosa area: U.S. Department of Agriculture, Soil Conservation Service Regional Bulletin 111, Geologic Series 2, 42 p.
- Meeves, H. C., 1966, Nonpegmatitic beryllium occurrences in Arizona, Colorado, New Mexico, Utah, and four adjacent states: U.S. Bureau of Mines Report of Investigations RI 6828, 68 p., 25 figs.
- Meeves, H. C., Harrer, C. M., Salsbury, M. H., Konselman, A. S., and Shannon, S. S., Jr., 1966, Reconnaissance of beryllium-bearing pegmatite deposits in six western states; Arizona, Colorado, New Mexico, South Dakota, Utah, and Wyoming: U.S. Bureau of Mines Information Circular IC 8298, 34 p., 3 figs.
- Meinzer, O. E., and Hare, R. F., 1915, Geology and water resources of Tularosa Basin, New Mexico: U.S. Geological Survey Water-Supply Paper 343, 317 p.

References - Continued

- Meinzer, O. E., and Hare, R. F., 1916, Geology and water resources of the Tularosa Basin, New Mexico [abs.]: Washington Academy of Science Journal, v. 6, p. 452-453.
- Melvin, J. W., 1963, Cretaceous stratigraphy in the Jornada del Muerto region, including the geology of the Mescal Creek area, Sierra County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 121 p.
- Metcalf, A. L., 1967, Late Quaternary mollusks of the Rio Grande Valley, Caballo Dam, New Mexico to El Paso, Texas: University of Texas at El Paso, Science Series I and Texas Western Press, 62 p., 3 figs.
- 1969, Quaternary surfaces, sediments, and mollusks; southern Mesilla Valley, New Mexico and Texas, in Guidebook of the border region: New Mexico Geological Society, 20th Field Conference, p. 158-164.
- Metzger, O. H., 1938, Gold mining in New Mexico: U.S. Bureau of Mines Information Circular 6987, 71 p., 11 figs.
- Meyer, W. R., 1976, Digital model for simulated effects of ground-water pumping in the Hueco Bolson, El Paso area, Texas, New Mexico, and Mexico: U.S. Geological Survey Water-Resources Investigations 75-58, National Technical Information Service PB-253-015/AS, 106 p.
- Meyer, W. R., and Gordon, J. D., 1972, Development of ground water in the El Paso district, Texas, 1963-70: Texas Water Development Board Report 153, 51 p.
- Meyers, W. J., 1973a, Chertification and carbonate cementation in the Mississippian Lake Valley Formation, Sacramento Mountains, New Mexico: Rice University, Houston, Texas, unpublished Ph. D. dissertation, 353 p.
- 1973b, Carbonate cement stratigraphy of the Lake Valley Formation (Mississippian), Sacramento Mountains, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 7, p. 738-739.
- 1974a, Carbonate cement stratigraphy of the Lake Valley Formation (Mississippian), Sacramento Mountains, New Mexico: Journal of Sedimentary Petrology, v. 44, no. 3, p. 837-861, 19 figs.

## References - Continued

- Meyers, W. J., 1974b, Chertification and carbonate cementation in the Mississippian Lake Valley Formation, Sacramento Mountains [abs.]: Dissertation Abstracts International, v. 35, no. 4, p. 1742B.
- 1974c, Chertification and carbonate cementation in the Mississippian Lake Valley Formation, Sacramento Mountains, New Mexico [abs.]: American Association of Petroleum Geologists and Society of Economic Paleontologists and Mineralogists, Annual Meeting Abstracts, v. 1, p. 63-64.
- 1975, Stratigraphy and diagenesis of the Lake Valley Formation, Sacramento Mountains, New Mexico, in Guidebook to Mississippian shelf-edge and basin facies carbonates, Sacramento Mountains and southern New Mexico region: Dallas Geological Society, 1975 Field Conference, p. 45-65, 12 figs.
- Meyers, W. J., and James, A. T., 1978, Stable isotopes and cherts and carbonate cements in the Lake Valley Formation (Mississippian), Sacramento Mountains, New Mexico: Sedimentology, v. 25, p. 105-124.
- Meyers, W. J., Pray, L. C., and Yurewicz, D. A., 1975, Trail guide to the Mississippian Formations of Dog and Deadman Canyons, in Guidebook to Mississippian shelf-edge and basin facies carbonates, Sacramento Mountains and southern New Mexico region: Dallas Geological Society, 1975 Field Conference, p. 21-44, 8 figs.
- Miers, B. T., and Oey, H. S., 1975, An evaluation of the hydrometeorological ground truth facility at White Sands Missile Range, New Mexico: U.S. Army Electronics Commission Technical Report 5557, 28 p.
- Miesch, A. T., 1954, Geology of the Socorro manganese area, Socorro County, New Mexico: University of Indiana, Bloomington, unpublished A.M. thesis.
- 1956, Geology of the Luis Lopez manganese district, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 38, 29 p.
- Miller, J. P., 1958, High mountain streams; effects of geology on channel characteristics and bed material: New Mexico Bureau of Mines and Mineral Resources Memoir 4, 53 p.

References - Continued

- Miller, S. A., 1881, Subcarboniferous fossils from the Lake Valley district of New Mexico, with description of new species: Cincinnati Society of Natural History, Ohio, Journal, v. 4, p. 306-315.
- Millican, R. S., 1971, The geology and petrology of the Mt. Riley-Cox pluton (post-Cretaceous, probably Tertiary, Dona Ana County, New Mexico): University of Texas at El Paso, unpublished M.S. thesis.
- Milner, Sam, 1974, Sedimentology of a sandstone-carbonate transition, lower San Andres Formation (middle Permian), Lincoln County, New Mexico: University of Wisconsin, Madison, unpublished M.S. thesis, 156 p., 31 figs.
- 1975, Sedimentology of a sandstone-carbonate transition, lower San Andres Formation (middle Permian), Lincoln County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-59, 156 p., 31 figs.
- 1976, Carbonate petrology and syndeositional facies of the lower San Andres Formation (middle Permian), Lincoln County, New Mexico: Journal of Sedimentary Petrology, v. 46, p. 463-482.
- Minton, E. G., Jr., 1961, Report of ground-water investigation, upper Animas Creek-Ladder Ranch, Sierra County, New Mexico: Consulting report to Ladder Ranch, 35 p.
- 1975, Hydrologic study and report, in Water quality plan and water supply plan, Tierra del Sol, Alamogordo, New Mexico: Consulting report to Dan Ray Corporation, Alamogordo, 6 p.
- Missaghi, F. L., 1966, Mercury content of stream sediments--a geochemical survey of the Magdalena mining district, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 85, 26 p.
- 1967, Mercury content of stream sediments--a geochemical survey of the Magdalena mining district, New Mexico [abs.]: Abstracts of North American Geology, July, p. 924.
- Mitchell, D. W., 1966, Study of precipitation of copper on iron from acid solutions: New Mexico Bureau of Mines and Mineral Resources Circular 86, 5 p.
- Moore, G. K., and Deutsch, Morris, 1975, ERTS imagery for ground-water investigations: Ground Water, v. 13, no. 2, p. 214-226, 6 figs.



## References - Continued

- Moore, H. J., 1976, Missile impact craters (White Sands Missile Range, New Mexico) and applications to lunar research, in Contributions to astrogeology: U.S. Geological Survey Professional Paper 812-B, 47 p.
- Moore, S. L., 1970, Preliminary geologic map of the Allie Canyon quadrangle, Grant County, New Mexico: U.S. Geological Survey Open-File Map.
- Morain, S. A., Budge, T. K., and White, M. E., 1977, Vegetation and land use in New Mexico: New Mexico Bureau of Mines and Mineral Resources Resource Map RM-8.
- Morgan, A. M., 1962, Ground-water conditions near Lordsburg, New Mexico 1942, in 16th and 17th biennial reports, 1942-46: New Mexico State Engineer, p. 263-270.
- Morrison, R. B., 1965, Geologic map of the Duncan and Canador Peak quadrangles, Arizona and New Mexico: U.S. Geological Survey Miscellaneous Geologic Investigations map I-442, [1966].
- 1968, Preliminary soil classification of map of southwestern U. S. and Mexico from space photography: U.S. Geological Survey Open-File Report, 4 p.
- 1969, Photointerpretive mapping from space photographs of quaternary geomorphic features and soil associations in northern Chihuahua and adjoining New Mexico and Texas, in Guidebook of the border region: New Mexico Geological Society, 20th Field Conference, p. 116-129, 4 figs.
- Morrison, R. B., and Babcock, H. M., 1942, Records of wells and springs, well logs, water analyses and map showing locations of wells and springs, Duncan-Virden Valley, Greenlee County, Arizona: Arizona State Water Commission, 29 p.
- Mott, R. P., 1976, The relationship of microearthquake activity to structural geology for the region around Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 63 p.
- Motts, W. S., 1962, Generalized geology of the Guadalupe Mountains and vicinity, in Guidebook to Permian of the central Guadalupe Mountains: Joint Hobbs, Roswell, and West Texas Geological Societies Publication 62-48, p. 99-100, 2 figs.

## References - Continued

- Motts, W. S., 1970, Some hydrologic and geologic processes influencing playa development in the western part of the Basin and Range Province, United States, in Geology and hydrology of selected playas in western United States, Chapter 7: U.S. Air Force Cambridge Research Laboratories, Office of Aerospace Research, Final Scientific Report AFCRL-69-0214, p. 237-286, 28 figs.
- Motts, W. S., and Gaal, Robert, 1960a, Geology of Pajarito Mountain area, Otero County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 2, no. 5, p. 18.
- 1960b, Geology of Pajarito Mountain area, Otero County, New Mexico: American Association of Petroleum Geologists Bulletin, v. 44, no. 1, p. 108-111, 2 figs.
- Mourant, W. A., 1957, Reconnaissance of water resources on the upper part of Sacramento River Canyon, Otero County, New Mexico: U.S. Geological Survey Open-File Report, 25 p., 3 figs.
- 1959, Ground water in the Hondo Valley, Lincoln County, New Mexico, in Guidebook to Sacramento Mountains of Otero County, New Mexico: Society of Economic Paleontologists and Mineralogists, Permian Basin Section, and Roswell Geological Society, Joint Field Conference, p. 234-235.
- 1963, Water resources and geology of the Rio Hondo drainage basin, Chaves, Lincoln, and Otero Counties, New Mexico: New Mexico State Engineer Technical Report 28, 85 p.
- Muehlberger, W. R., and Denison, R. E., 1964, Precambrian geology of south-central New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 62-69.
- Mukhopadhyay, Bimal, Brookins, D. G., and Bolivar, S. L., 1975, Pedernal Hills as source rocks of Madera Formation (Pennsylvanian), New Mexico--Rb-Sr geochronologic evidence [abs.]: American Association of Petroleum Geologists Bulletin, v. 59, no. 5, p. 917.
- Mukhopadhyay, Bimal, and Siemers, C. T., 1975, Primary sedimentary structures of Abo Formation (Permian), near Albuquerque, New Mexico [abs.]: American Association of Petroleum Geologists Bulletin, v. 59, no. 5, p. 917.

References - Continued

- Mullen, D. H., and Storms, W. R., 1948, Copper Flat zinc deposit, Central mining district, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4228, 8 p., 5 figs.
- Murphy, E. C., 1905, Rio Grande floods, New Mexico, in Destructive floods in the United States in 1904: U.S. Geological Survey Water-Supply Paper 147, p. 143-150.
- Murphy, O., 1971, Bytownite bonanza: Lapidary Journal, v. 25, p. 170-178.
- Murphy, R. E., Corbitt, L. L., and Kinney, E. E., 1970, Road log third day--Deming to Capitol Dome and Mahoney Park in the Florida Mountains, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 23-26.
- Murray, C. R., 1941, Reconnaissance survey of well sites of U. S. Grazing Service in the Cuchillo-Winston area, Sierra County, New Mexico: U.S. Geological Survey Open-File Report, 7 p.
- 1942a, Reconnaissance survey of well sites of U.S. Grazing Service in Deming-Las Cruces area, New Mexico: U.S. Geological Survey Open-File Report, 13 p.
- 1942b, Report on drilling of Hatfield, New Mexico State Engineer Test Well, Deming, New Mexico: U.S. Geological Survey Open-File Report, 3 p.
- 1946a, Test drilling in the Miesse area east of Deming, New Mexico: U.S. Geological Survey Open-File Report, 5 p.
- 1946b, Test drilling in the Miesse area east of Deming, New Mexico, in 16th and 17th biennial report, 1942-1946: New Mexico State Engineer, p. 391-396.
- 1947a, Memorandum on the possibilities of developing ground water for the Alamogordo Army Air Base: U.S. Geological Survey Open-File Report, 4 p.
- 1947b, Memorandum on the possibility of developing a ground-water supply for the White Sands Proving Grounds, New Mexico: U.S. Geological Survey Open-File Report, 3 p.
- 1953, Preliminary report on completion of the New Mexico State Engineer Deming test well, in 14th and 15th biennial report, 1938-42: New Mexico State Engineer, p. 181-218.

## References - Continued

- Murray, C. R., 1959, Ground-water conditions in the non-thermal artesian-well basin south of Hot Springs, Sierra County, New Mexico: New Mexico State Engineer Technical Report 10, 33 p.
- 1962, Report on pumping tests conducted for U.S. Corps of Engineers on Lordsburg Army Camp well number 1 in New Mexico, 1942, in 16th and 17th biennial report, 1942-46: New Mexico State Engineer, p. 271-278.
- Murray, C. R., and Jones, R. S., 1948a, Reconnaissance study of ground water in the vicinity of Ruidoso, New Mexico: U.S. Geological Survey Open-File Report, 19 p.
- 1948b, Reconnaissance study of ground water in the vicinity of Ruidoso, Lincoln County, New Mexico, in 18th, 19th, and 20th biennial report, 1946-1952: New Mexico State Engineer, p. 11.
- Murray, C. R., and Theis, C. V., 1946, Memorandum of the safe yield of ground water in the Hot Springs ground-water district, Sierra County, New Mexico: U.S. Geological Survey Open-File Report, 17 p.
- Myers, Lee, 1968, Military establishments in south-western New Mexico; stepping stones to settlement: New Mexico Historical Review, v. 43, no. 1, p. 5-48.
- Myers, R. E., 1955, Fusulinid fauna from Rhodes Canyon, San Andres Range, Socorro County, New Mexico: University of Illinois, Champaign, unpublished M.S. thesis.
- Naething, F. S., 1921, The Black Range tin district of New Mexico: Mining Science Press, v. 122, p. 557-558, 1 fig.
- Neal, J. T., Langer, A. M., and Kerr, P. F., 1968, Giant desiccation polygons of great basin playas: Geological Society of America Bulletin, v. 79, no. 1, p. 69-90, 7 figs.
- Neal, J. T., and Motts, W. S., 1967, Recent geomorphic changes in playas of western United States: Journal of Geology, v. 75, no. 5, p. 511-525, 9 figs.
- Needham, C. E., 1932, A rare crystal habit for gypsum: Science, new series, v. 76, p. 542.
- 1935, Ventifacts from New Mexico [abs.]: Pan-American Geologist, v. 64, no. 2, p. 150-151.

References - Continued

- Needham, C. E., 1936, Vertebrate remains from Cenozoic rocks,  
New Mexico: Science, new series, v. 84, no. 2189, p. 537.
- 1937a, Some New Mexico Fusulinidae: New Mexico Bureau of Mines  
and Mineral Resources Bulletin 14, 88 p., 1 fig.
- 1937b, Ventifacts from New Mexico: Journal of Sedimentary  
Petrology, v. 7, no. 1, p. 31-33, 5 figs.
- 1938a, Correlation of the Pennsylvanian rocks of New Mexico  
[abs.]: American Association of Petroleum Geologists Bulletin,  
v. 22, no. 12, p. 1705.
- 1938b, Stratigraphy of Carthage-Tokay district, New Mexico  
[abs.]: Pan-American Geologist, v. 70, no. 1, p. 73.
- 1938c, Zeolites in New Mexico: American Mineralogist, v. 23,  
no. 4, p. 285-287.
- 1939, Structural evolution of the Rio Grande depression near  
Socorro, New Mexico [abs.]: Oil Weekly, v. 93, no. 3, p. 72.
- 1940, Correlation of Pennsylvanian rocks of New Mexico:  
American Association of Petroleum Geologists Bulletin, v. 24,  
no. 1, p. 173-179, 1 fig.
- 1941, New Mexico, mineral resources: Engineering Mining  
Journal, v. 142, no. 8, p. 141.
- Needham, C. E., and Bates, R. L., 1943, Permian type sections in  
central New Mexico: Geological Society of America Bulletin,  
v. 54, no. 11, p. 1653-1668, 2 figs.
- Needham, C. E., and Talmage, S. B., 1939, Heavy minerals in the  
White Sands of New Mexico [abs.]: Pan-American Geologist, v. 72,  
no. 1, p. 73-74.
- Neel, G. M., 1932, Las Palomas-Monticello investigation, in 10th  
biennial report: New Mexico State Engineer, p. 287-301.
- Nelson, J. W., 1914, Soil survey of the middle Rio Grande Valley  
area: U.S. Department of Agriculture, Bureau of Soils Field  
Operations for 1912, 52 p.
- Nelson, J. W., and Holmes, L. C., 1914, Soil survey of the Mesilla  
Valley, New Mexico-Texas: U.S. Department of Agriculture, Bureau  
of Soils Field Operations for 1912, 39 p.



References - Continued

- Nelson, M. A., 1974, Fluorspar deposits of the southern Caballo Mountains [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 381-382.
- Neuschel, S. K., 1952, A memorandum report on four manganese groups near Socorro, New Mexico: U.S. Geological Survey Open-File Report, 6 p., 2 figs. [On file New Mexico Bureau of Mines and Mineral Resources, Socorro].
- New Mexico Bureau of Mines and Mineral Resources, 1887, AT & SF report on Chloride, New Mexico--Apache district, Sierra County: Open-File Report OF-31, 1 p.
- 1948, Drill logs--New Jersey Zinc Corporation, Organ Mountains district: Open-File Report OF-24.
- New Mexico Economic Development Commission, 1951, Water and the economic development of New Mexico: Santa Fe, 31 p.
- New Mexico Environmental Improvement Agency, 1972, Lower Rio Grande Basin plan: Water Quality Division, Santa Fe, 70 p.
- New Mexico Geological Society, 1953, Guidebook of southwestern New Mexico: 4th Field Conference, 153 p.
- 1955a, Guidebook of south-central New Mexico: 6th Field Conference, 193 p.
- 1955b, Nomenclature chart (correlation chart), in Guidebook of south-central New Mexico: 6th Field Conference, p. 61.
- 1955c, Precambrian rocks of south-central New Mexico, in Guidebook of south-central New Mexico: 6th Field Conference, p. 62-64.
- 1955d, Stratigraphy of outcropping Permian rocks in parts of south-central New Mexico, in Guidebook of south-central New Mexico: 6th Field Conference, p. 77-80.
- 1959, Uranium in the Datil Mountains--Bear Mountains region, New Mexico, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 135-143.
- 1970, Road log first day--Deming to Tyrone, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: 21st Field Conference, p. 1-16.

References - Continued

- New Mexico Geological Society, 1975a, Apollo 6 photo of the Las Cruces country, in Guidebook of the Las Cruces country: 26th Field Conference, p. xv.
- 1975b, Index map of Dona Ana County showing field trip routes, in Guidebook of the Las Cruces country: 26th Field Conference, p. xiv.
- New Mexico State Engineer, 1930, Seepage study on Rio Grande between Elephant Butte Dam and Leasburg Dam, November 1928, in 9th biennial report, 1928-1930: p. 22-25.
- 1952a, Hydrographic surveys--Animas Valley, in 18th, 19th, and 20th biennial reports, 1946-1952: p. 27-28.
- 1952b, Hydrographic surveys--Mimbres Valley, in 18th, 19th, and 20th biennial reports, 1946-1952: p. 28-29.
- 1963, Gila River hydrographic survey report, v. 1, San Simon Creek: 102 p.
- 1964, Gila River hydrographic survey report, v. 2, Red Rock area: 145 p.
- 1965a, Gila River hydrographic survey report, v. 3, Cliff-Gila, Buckhorn-Duck Creek area: 314 p., 1 fig.
- 1965b, Gila River hydrographic survey report, v. 4, upper Gila area: 169 p., 1 fig.
- 1965c, Gila River hydrographic survey report, v. 5, Glenwood-Mule Creek area: 182 p., 1 fig.
- 1966a, Gila River hydrographic survey report, v. 6, Reserve area: 138 p., 1 fig.
- 1966b, Gila River hydrographic survey report, v. 7, Luna area: 89 p., 1 fig.
- 1966c, Gila River hydrographic survey report, v. 8, Apache Creek-Aragon area: 84 p., 1 fig.
- 1974a, Hidalgo County profile: New Mexico Interstate Stream Commission and New Mexico State Engineer, Santa Fe, 30 p., 6 figs.
- 1974b, Lincoln County profile: New Mexico Interstate Stream Commission and New Mexico State Engineer, Santa Fe, 29 p., 6 figs.

## References - Continued

- New Mexico State Engineer, 1974c, Luna County profile: New Mexico Interstate Stream Commission and New Mexico State Engineer, Santa Fe, 28 p., 6 figs.
- 1974d, Sierra County profile: New Mexico Interstate Stream Commission and New Mexico State Engineer, Santa Fe, 45 p., 6 figs.
- 1974e, Socorro County profile: New Mexico Interstate Stream Commission and New Mexico State Engineer, Santa Fe, 28 p., 6 figs.
- 1975a, Catron County profile: New Mexico Interstate Stream Commission and New Mexico State Engineer, Santa Fe, 29 p., 6 figs.
- 1975b, Dona Ana County profile: New Mexico Interstate Stream Commission and New Mexico State Engineer, Santa Fe, 33 p., 6 figs.
- 1975c, Grant County profile: New Mexico Interstate Stream Commission and New Mexico State Engineer, Santa Fe, 34 p., 6 figs.
- 1975d, Otero County profile: New Mexico Interstate Stream Commission and New Mexico State Engineer, Santa Fe, 34 p., 6 figs.
- 1977a, Water-resources data for New Mexico calendar year 1975: Surface-water records: 242 p., 2 figs.
- 1977b, Water-resources data for New Mexico calendar year 1975: Water-quality records: 345 p., 2 figs.
- 1978, Water-resources data for New Mexico calendar year 1976: Surface-water records and Water-quality records: 597 p., 5 figs.
- New Mexico State Planning Office, 1967a, FHA water and sewer area plans, Lincoln County, New Mexico: 36 p.
- 1967b, FHA water and sewer area plans, Otero County, New Mexico: 30 p.
- 1968a, FHA water and sewer area plans, Dona Ana County, New Mexico: 39 p.
- 1968b, FHA water and sewer area plans, Grant County, New Mexico: 63 p.

References - Continued

- New Mexico State Planning Office, 1968c, FHA water and sewer area plans, Sierra County, New Mexico: 58 p.
- 1969a, FHA water and sewer area plans, Hidalgo County, New Mexico: 71 p.
- 1969b, FHA water and sewer area plans, Luna County, New Mexico: 69 p.
- 1970a, FHA water and sewer area plans, Catron County, New Mexico: 81 p.
- 1970b, FHA water and sewer area plans, Socorro County, New Mexico: 82 p.
- New Mexico Water Quality Control Commission, 1967a, Water quality standards--the Gila and San Francisco Rivers in New Mexico: 64 p., 14 figs.
- 1967b, Water quality standards--the Rio Grande in New Mexico: 137 p., 1 fig.
- Nials, F. L., and Corbitt, L. L., 1974, Geology and mineral potential of the Brockman and Coyote Hills, Grant and Luna Counties, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 379.
- Nielsen, R. L., 1966, Origin of primary textural and mineralogical zoning in a copper-bearing quartz-monzonite stock, Santa Rita, New Mexico [abs.]: Economic Geology, v. 61, no. 7, p. 1295.
- 1967, Origin of primary textural and mineralogical zoning in a copper-bearing quartz-monzonite stock, Santa Rita, New Mexico [abs.]: Institute of Mining and Metallurgy Transactions, v. 76, section B, Bulletin 732, p. 227-228.
- 1968a, Hypogene texture and mineral zoning in a copper-bearing granodiorite porphyry stock, Santa Rita, New Mexico: Economic Geology, v. 63, no. 1, p. 37-50, 11 figs.
- 1968b, Origin of primary textural and mineralogical zoning in a copper-bearing quartz-monzonite stock, Santa Rita, New Mexico [abs.], in Abstracts for 1966: Geological Society of America Special Paper 101, p. 151.

References - Continued

- Nielsen, R. L., 1970, Mineralization and alteration in calcareous rocks near the Santa Rita stock, New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 133-140.
- Nininger, H. H., 1944, The Puente-Ladron, Socorro County, New Mexico, aerolite: Popular Astronomy, v. 52, no. 8, p. 407-410, 1 fig.
- 1945, The Puente-Ladron, Socorro County, New Mexico, aerolite: Society of Research on Meteorites, Los Angeles, California, Contributions for 1944, v. 3, no. 3, p. 165-167.
- 1947a, Further notes on the Puente-Ladron, New Mexico aerolite (1,068,344): Popular Astronomy, v. 55, no. 6, p. 325-326.
- 1947b, Further notes on the Puente-Ladron, New Mexico aerolite (1,068,344): Society of Research on Meteorites, Los Angeles, California, Contributions, v. 4, no. 1, p. 52-54.
- Noble, E. A., 1950, Geology of the southern Ladron Mountains, Socorro County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 81 p.
- Nogueira, A. C., 1972, Mineralogy and geochemistry of contact metasomatic iron deposits at Jones Camp, Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 101 p., 14 figs.
- Nordin, C. F., Jr., 1963, A preliminary study of sediment transport parameters, Rio Puerco near Bernardo, New Mexico, in Sediment transport in alluvial channels, 1963-1965: U.S. Geological Survey Professional Paper 462-C, 21 p.
- 1964a, Discussion of sediment investigations--middle Rio Grande: American Society of Civil Engineers Proceedings, Hydraulics Division Journal, v. 90, no. HY5, p. 273-275.
- 1964b, Study of channel erosion and sediment transport: American Society of Civil Engineers Proceedings Paper 3984, Hydraulics Division Journal, v. 90, no. HY4, p. 173-192, 14 figs.
- Nordin, C. F., Jr., and Beverage, J. P., 1963, Temporary storage of fine sediments in islands and point bars and alluvial channels of the Rio Grande, New Mexico and Texas, in Short papers in geology and hydrology: U.S. Geological Survey Professional Paper 475-D, article 150, p. 138-140, 3 figs.



References - Continued

- Nordin, C. F., Jr., and Beverage, J. P., 1965a, Sediment transport in the Rio Grande, New Mexico, in Sediment transport in alluvial channels, 1963-1965: U.S. Geological Survey Professional Paper 462-F, 35 p.
- 1965b, Sediment transport in the Rio Grande, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4552, p. 71-72.
- 1965c, Temporary storage of fine sediments in islands and point bars of alluvial channels of the Rio Grande, New Mexico and Texas [abs.]: American Geological Institute, Geoscience Abstracts, v. 7, no. 7-920, p. 57-58.
- Nordin, C. F., Jr., and Culbertson, J. K., 1961, Particle-size distribution of stream bed material in the middle Rio Grande Basin, New Mexico, in Short papers in the geologic and hydrologic sciences: U.S. Geological Survey Professional Paper 424-C, article 265, p. 323-326, 4 figs.
- 1962, Particle-size distribution of stream bed material in the middle Rio Grande Basin, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4-1490, p. 43.
- Nordin, C. F., Jr., and Curtis, W. F., 1962a, Formation and deposition of clay balls, Rio Puerco, New Mexico, in Short papers in geology, hydrology, and topography: U.S. Geological Survey Professional Paper 450-B, article 14, p. 37-40.
- 1962b, Formation and deposition of clay balls, Rio Puerco, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4-3320, p. 36.
- Nordin, C. F., Jr., and Dempster, G. R., Jr., 1963a, Vertical distribution of velocity and suspended sediment, middle Rio Grande, New Mexico, in Sediment transport in alluvial channels, 1963-1965: U.S. Geological Survey Professional Paper 462-B, 20 p.
- 1963b, Vertical distribution of velocity and suspended sediment, middle Rio Grande, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 5, no. 5-4906, p. 58.
- Northrop, S. A., 1951, Mining districts of New Mexico: New Mexico Miner and Prospector, v. 13, no. 4, p. 8-9.

References - Continued

- Northrop, S. A., 1959a, Minerals of New Mexico, revised edition: Albuquerque, University of New Mexico Press, 665 p.
- 1959b, Revised edition of "Minerals of New Mexico" [abs.], in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 157.
- 1961, Earthquakes of central New Mexico, in Guidebook of the Albuquerque country: New Mexico Geological Society, 12th Field Conference, p. 151-152.
- O'Brien, B. R., 1956, Geology of Cienega Amarilla area, Catron County, New Mexico and Apache County, Arizona: University of Texas, Austin, unpublished M.A. thesis.
- O'Donnell, J. E., Martinez, Ruben, and Williams, J., 1975, Telluric current sounding near Kilbourne and Hunt's Holes, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 279-280.
- Oetking, Philip, Feray, D. E., and Renfro, H. W., 1967, Geological highway map, southern Rocky Mountain region, Utah-Colorado-Arizona-New Mexico: American Association of Petroleum Geologists map 2.
- Oliver, J. E., and Kaufman, Sidney, 1976, Profiling the Rio Grande rift: Geotimes, v. 21, no 7, July, p. 20-23.
- Olsen, R. W., 1965, Seismic time-distance relationships from P-wave arrivals at Socorro: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 31 p., 8 figs.
- Ong, Kim, 1967, Figures and tables summarizing selected quality-of-water data in the Gila River Basin and the San Francisco River Basin in New Mexico: U.S. Geological Survey Open-File Report, 65 p.
- Oppel, T. W., 1959, The Pennsylvanian-Permian contact in lower Fresno Canyon, Sacramento Mountains, New Mexico, in Guidebook to the Sacramento Mountains: Roswell Geological Society, 1960 Field Conference, p. 186-195.
- Oppel, T. W., Otte, Carel, Jr., Pray, L. C., and Thompson, Sam, III, 1977, Road log "E" High Rolls, New Mexico through Fresno Canyon to Tularosa, New Mexico, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 201-209.

References - Continued

- Ordóñez, Georges, and Baltosser, W. W., 1954, Geologic structure around the Santa Rita, New Mexico intrusive [abs.]: *Economic Geology*, v. 49, no. 1, p. 122.
- Ordóñez, Georges, Baltosser, W. W., and Martin, Keith, 1955, Geologic structures surrounding the Santa Rita intrusive, New Mexico: *Economic Geology*, v. 50, no. 1, p. 9-21, 3 figs.
- Osburn, G. R., 1978, Geology of the eastern Magdalena Mountains, Water Canyon to Pound Ranch, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 136 p.
- O'Sullivan, R. B., 1953, Geology and mineralogy of the Fierro-Hanover district, Grant County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 76 p.
- Otte, Carel, Jr., 1954a, Late Pennsylvanian and lower Permian stratigraphy of the northernmost Sacramento Mountains, New Mexico: California Institute of Technology, Pasadena, unpublished Ph. D. dissertation, 245 p., 42 figs.
- 1954b, Wolfcampian reefs of the northern Sacramento Mountains, Otero County, New Mexico [abs.]: *Geological Society of America Bulletin*, v. 65, no. 12, pt. 2, p. 1291-1292.
- Otte, Carel, Jr., 1959, Late Pennsylvanian and early Permian stratigraphy of the northern Sacramento Mountains, Otero County, New Mexico: *New Mexico Bureau of Mines and Mineral Resources Bulletin* 50, 111 p.
- Otte, Carel, Jr., and Parks, J. M., 1963, Fabric studies of Virgil and Wolfcamp bioherms, New Mexico: *Journal of Geology*, v. 71, no. 3, p. 380-396.
- Owen, J. R., and Shown, L. M., 1973, Interpretation; Apollo 9 photography of parts of southern Arizona and southern New Mexico: U.S. Geological Survey Open-File Report, 16 p.
- 1976, Hydrology of arid and semi-arid area, in ERTS-1, a new window on our planet: U.S. Geological Survey Professional Paper 929, p. 217-219.
- Owens, G. W., 1954, An interesting quartz crystal location (Organ mining district): *Rocks and Minerals*, v. 29, no. 7-8, p. 370-371.

References - Continued

- Packard, F. A., 1955, The stratigraphy of the upper Mississippian Paradise Formation of southeastern Arizona and southwestern New Mexico: University of Wisconsin, Madison, unpublished M.S. thesis, 103 p.
- Packard, R. L., 1894, Note on a blue mineral, supposed to be ultramarine, from Silver City, New Mexico: U.S. National Museum Proceedings, v. 17, p. 19-20.
- Padovani, E. R., and Carter, J. L., 1973, Mineralogy and mineral chemistry of a suite of anhydrous, quartzo-feldspathic, garnet-bearing granulites from Kilbourne Hole maar, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 7, no. 5, p. 761-762.
- 1974, Blue sillimanite in garnet granulite xenoliths from Kilbourne Hole, New Mexico [abs.]: American Geophysical Union (EOS) Transactions, v. 55, no. 4, p. 482.
- 1975, Aluminous, iron-rich orthopyroxene and iron-rich spinel in garnet granulite xenoliths from Kilbourne Hole maar, New Mexico [abs.]: American Geophysical Union (EOS) Transactions, v. 56, no. 6, p. 465.
- Page, R. O., 1972, Geology of the Malpais maar volcano, West Potrillo Mountains, Dona Ana County, New Mexico [abs.]: New Mexico Academy of Science Bulletin, v. 13, no. 2, p. 35-36.
- 1973, Stratigraphy and structure of the Quaternary Malpais maar volcano, Dona Ana County, New Mexico: University of Texas at El Paso, unpublished M.S. thesis, 46 p.
- 1975, Malpais maar volcano, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 135-138.
- Paige, Sidney, 1909, The Hanover iron-ore deposits, New Mexico, in Contributions to economic geology, 1908, Part 1: U.S. Geological Survey Bulletin 380-E, p. 199-214.
- 1911a, Metalliferous ore deposits near the Burro Mountains, Grant County, New Mexico, in Contributions to economic geology, 1910, Part 1: U.S. Geological Survey Bulletin 470-C, p. 131-150.
- 1911b, The ore deposits near Pinos Altos, New Mexico, in Contributions to economic geology, 1910, Part 1: U.S. Geological Survey Bulletin 470-B, p. 109-125.

References - Continued

- Paige, Sidney, 1912a, The geologic and structural relations at Santa Rita (Chino), New Mexico: *Economic Geology*, v. 7, no. 6, p. 547-559, 1 fig.
- 1912b, Gravel as a resistant rock (physiographic history of a portion of the Silver City quadrangle, New Mexico): *Journal of Geology*, v. 20, p. 49-52.
- 1912c, The origin of turquoise in the Burro Mountains, New Mexico: *Economic Geology*, v. 7, no. 4, p. 383-392.
- 1916, Silver City, New Mexico: *U.S. Geological Survey Atlas Folio 199*, 19 p.
- 1922, Copper deposits of the Tyrone district, New Mexico: *U.S. Geological Survey Professional Paper 122*, 53 p.
- 1932, The region around Santa Rita and Hanover, New Mexico, in *Guidebook 14 (ore deposits of the southwest): Sixteenth International Geologic Congress*, p. 23-40.
- 1935, Santa Rita and Tyrone, New Mexico, in *Copper resources of the world: Sixteenth International Geologic Congress*, v. 1, p. 327-335.
- Park, D. E., 1971, Petrology of the Tertiary Anchor Canyon stock, Magdalena Mountains, central New Mexico: *New Mexico Institute of Mining and Technology, Socorro*, unpublished M.S. thesis, 133 p.
- Parks, J. M., 1977a, Origin of early vuggy porosity in carbonate-mudbank buildups, Pennsylvanian and Permian, Sacramento Mountains, New Mexico [abs.]: *American Association of Petroleum Geologists Bulletin*, v. 61, no. 5, p. 819-820.
- 1977b, Paleoeological evidence on the origin of the Dry Canyon Pennsylvanian bioherms, in *Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68*, p. 27-42.
- Parks, James M., Jr., 1958, Plate-shaped calcareous algae in late Paleozoic rocks of midcontinent [abs.]: *Geological Society of America Bulletin*, v. 69, no. 12, pt. 2, p. 1627.
- 1962, Reef-building biota from late Pennsylvanian reefs, Sacramento Mountains, New Mexico [abs.]: *American Association of Petroleum Geologists Bulletin*, v. 46, no. 2, p. 274.



References - Continued

- Parks, James M., Jr., 1977, Plate shaped calcereous algae in late Paleozoic rocks of midcontinent [abs.], in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 163.
- Parr, W. R., 1966, Water rights--failure to use--forfeiture: Natural Resources Journal, v. 6, no. 1, p. 127-134.
- 1967, Water law--legal impediments to transfers of water rights: Natural Resources Journal, v. 7, no. 3, p. 433-441.
- Patterson, C. M., 1947, Alteration in the Santa Rita copper deposits, Santa Rita, New Mexico: Columbia University, New York, unpublished Ph. D. dissertation.
- Patterson, C. M., and Kerr, P. F., 1947, Alteration in the Santa Rita copper deposit, Santa Rita, New Mexico: New York, Kings Crown Press, 62 p.
- Pattison, Hoyt, 1967, Water legislation, 1967, in Water quality--how does it affect you?: 12th Annual New Mexico Water Conference Proceedings, p. 113-116.
- Patton, L. T., 1951, Igneous rocks of the Capitan quadrangle, New Mexico, and vicinity: American Mineralogist, v. 36, no. 9-10, p. 713-716.
- Pearson, G. A., 1931, Forest types in the southwest determined by climate and soil: U.S. Department of Agriculture Technical Bulletin 247, 144 p.
- Pemberton, E. L., 1964, Sediment investigations--middle Rio Grande: American Society of Civil Engineers Proceedings Paper 3833, Hydraulics Division Journal, v. 90, no. HY2, p. 163-185, 11 figs.
- Penfield, S. L., 1886, Crystallized vanadinite from Arizona and New Mexico: American Journal of Science, 3rd series, v. 32, p. 441-443.
- Penn, W. Y., 1932, Upper Pennsylvanian fossils of the Sacramento Mountains, New Mexico: Stanford University, Palo Alto, California, unpublished M.A. thesis.
- Perhac, R. M., 1961, Geology and mineral deposits of the Gallinas Mountains, New Mexico: University of Michigan, Ann Arbor, unpublished Ph. D. dissertation.

References - Continued

- Perhac, R. M., 1964a, Notes on the mineral deposits of the Gallinas Mountains, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 152-154.
- 1964b, Resume of the geology of the Gallinas Mountains, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 87-91.
- 1970, Geology and mineral deposits of the Gallinas Mountains, Lincoln and Torrance Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 95, 51 p.
- Perhac, R. M., and Heinrich, E. W., 1964, Fluorite-bastnaesite deposits of the Gallinas Mountains, New Mexico and bastnaesite paragenesis: Economic Geology, v. 59, no. 2, p. 226-239.
- Perkins, A. M., 1949, South-central New Mexico's sink-holes and craters: Earth Science Digest, v. 4, no. 5, p. 3-11.
- Peters, E. D., 1882, Notes on the Oscura copper fields and other mines in New Mexico: Engineering Mining Journal, v. 34, p. 270-272.
- Peterson, D. L., and Eaton, G. P., 1970, Principal facts for gravity stations in the Gila Wilderness area, Catron and Grant Counties, New Mexico: U.S. Geological Survey Open-File Map.
- Peterson, H. V., 1962, Hydrology of small watersheds in western states, in Hydrology of the public domain: U.S. Geological Survey Water-Supply Paper 1475-I, p. 217-356, 8 figs.
- Peterson, H. V., and Branson, F. A., Effects of land treatments on erosion and vegetation on range lands in parts of Arizona and New Mexico: Journal of Range Management, v. 15, no. 4, p. 220-226.
- Peterson, S. L., 1975, Geology of the Apache no. 2 mining district, Hidalgo County, New Mexico [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 342.
- 1976, Geology of the Apache No. 2 mining district, Hidalgo County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 86 p.
- Pickard, B. O., 1912, The Oro Grande mine in Grant County, New Mexico: Mining Science Press, v. 65, p. 166-168.

References - Continued

- Pike, W. S., Jr., 1947, Intertonguing marine and nonmarine upper Cretaceous deposits of New Mexico, Arizona, and southwestern Colorado: Geological Society of America Memoir 24, 103 p., 7 figs.
- Pitts, P. D., 1949, Temperature relations at the Oswaldo mine, Santa Rita, New Mexico: University of Toronto, Ontario, Canada, unpublished M.A. thesis.
- Plouf, T. M., 1974, San Antonio barite mill flow sheet: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-35, 6 p.
- Plumley, W. L., and Graves, R. M., Jr., 1953, Virgilian reefs of the Sacramento Mountains, New Mexico: Journal of Geology, v. 61, no. 1, p. 1-16.
- Plummer, F. G., and Gowsell, M. G., 1904, Forest conditions in the Lincoln Forest Reserve, New Mexico: U.S. Geological Survey Professional Paper 33, 47 p.
- Poe, T. E., III, 1965, The intrusive sequence of igneous rocks in the Gallinas Mountains, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 28 p.
- Poole, F. G., Baars, D. L., Drewes, H., Hayes, P. T., Ketner, K. B., McKee, E. D., Teichert, C., and Williams, J. S., 1967, Devonian of the southwestern United States, in International symposium on the Devonian System: Calgary, Alberta, Canada Society of Petroleum Geologists, v. 1, p. 879-912, 10 figs.
- Porter, A. L., Jr., 1971, Saline water problems in New Mexico: New Mexico Professional Engineer, v. 23, no. 2, p. 16-20.
- Potter, F. C., 1939, Origin of the gypsum sands of New Mexico [abs.]: Geological Society of America Bulletin, v. 50, no. 12, pt. 2, p. 1928.
- Potter, L. D., 1956, Phytosociological study of San Augustin Plains, New Mexico: Ecology Monographs, v. 27, p. 113-136.
- Potter, S. C., 1971, Geology of Baca Canyon, Socorro County, New Mexico: University of Arizona, Tucson, unpublished M.S. thesis, 41 p.
- Powell, W. C., 1929, Report on an investigation of the Hot Springs artesian basin, Hot Springs, New Mexico, in 9th biennial report, 1928-30: New Mexico State Engineer, p. 121-129.

References - Continued

- Powell, W. C., and Staley, C. G., 1928, Report on the investigation of the geology and water resources of the Tularosa Basin, in 8th biennial report, 1926-28: New Mexico State Engineer, p. 193-206.
- Powers, W. E., 1933a, The extinct Lake San Augustin, New Mexico [abs.]: Geological Society of America Bulletin, v. 44, no. 1, p. 96.
- 1933b, The extinct Lake San Augustin, New Mexico: Science, new series, v. 77, p. 51-52.
- 1939, Basin and shore features of the extinct Lake San Augustin, New Mexico: Journal of Geomorphology, v. 2, no. 4, p. 345-356, 8 figs.
- 1941, Volcanic rocks of the western San Augustin plains district, New Mexico: Journal of Geology, v. 49, no. 2, p. 207-217, 5 figs.
- Pradhan, B. M., and Singh, Y. L., 1960, Geology of the area between Virden and Red Rock, Hidalgo and Grant Counties, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 75 p.
- Pratt, W. P., 1967a, Geology of the Hurley West quadrangle, Grant County, New Mexico [abs.]: Abstracts of North American Geology, November, p. 1553.
- 1967b, Geology of the Hurley West quadrangle, Grant County, New Mexico [abs.]: Petroleum Abstracts, v. 7, no. 32, p. 2127.
- 1967c, Geology of the Hurley West quadrangle, Grant County, New Mexico, in Contributions to general geology, 1966: U.S. Geological Survey Bulletin 1241-E, 91 p., 20 figs.
- 1968, Interagency report NASA-71, infrared imagery of Lordsburg-Silver City area, New Mexico: U.S. Geological Survey Open-File Report, 13 p., 5 figs.
- Pratt, W. P., and Jones, W. R., 1961a, Montoya dolomite and Fusselman dolomite in the Silver City region, New Mexico: American Association of Petroleum Geologists Bulletin, v. 45, no. 4, p. 484-500.
- 1961b, Montoya dolomite and Fusselman dolomite in the Silver City region, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 3, no. 3-2227, p. 26.

References - Continued

- Pratt, W. P., and Jones, W. R., 1961c, Trap-door intrusion of the Cameron Creek laccolith, near Silver City, New Mexico, in Short papers in the geologic and hydrologic sciences: U.S. Geological Survey Professional Paper 424-C, article 208, p. 164-167, 3 figs.
- 1962, Trap-door intrusion of the Cameron Creek laccolith, near Silver City, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4-1219, p. 11.
- 1965a, The Cameron Creek laccolith; a trap-door intrusion near Silver City, New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 158-163.
- 1965b, Road log to Cameron Creek laccolith, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 43-44.
- Pray, L. C., 1949, Pre-Abo deformation in the Sacramento Mountains, Otero County, New Mexico [abs.]: Geological Society of America Bulletin, v. 60, no. 12, p. 1914-1915.
- 1952, Stratigraphy of the escarpment of the Sacramento Mountains, Otero County, New Mexico: California Institute of Technology, Pasadena, unpublished Ph. D. dissertation.
- 1953a, Geology of the Sacramento Mountains: California Institute of Technology, Pasadena, unpublished M.S. thesis.
- 1953b, Upper Ordovician and Silurian stratigraphy of Sacramento Mountains, Otero County, New Mexico: American Association of Petroleum Geologists Bulletin, v. 37, no. 8, p. 1894-1918, 10 figs.
- 1953c, Upper Ordovician and Silurian stratigraphy of the Sacramento Mountains, Otero County, New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 1, no. 3, p. 38.
- 1954, Outline of the stratigraphy and structure of the Sacramento Mountain escarpment, in Guidebook of southeastern New Mexico: New Mexico Geological Society, 5th Field Conference, p. 92-107.
- 1958, Fenestrate bryozoan core facies, Mississippian bioherms, southwestern United States: Journal of Sedimentary Petrology, v. 28, no. 3, p. 261-273.



References - Continued

- Pray, L. C., 1959, Stratigraphy and structure of the Sacramento Mountains, in Guidebook for joint field conference in the Sacramento Mountains of Otero County, New Mexico: Permian Basin Section, Society of Economic Paleontologists and Mineralogists and Roswell Geological Society, p. 86-130.
- 1961a, Geology of the Sacramento Mountains escarpment, Otero County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 35, 144 p.
- 1961b, Geology of the Sacramento Mountains escarpment, Otero County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 3, no. 3-2507, p. 7.
- 1965, Limestone clastic dikes in Mississippian bioherms, New Mexico [abs.], in Abstracts for 1964: Geological Society of America Special Paper 82, p. 154-155.
- ed., 1975, A guidebook to Mississippian shelf-edge and basin facies carbonates, Sacramento Mountains and southern New Mexico region: Dallas Geological Society, 1975 Field Conference, 140 p.
- 1977a, Alamogordo to Alamo Canyon and the western Sacramento Mountains escarpment field guide and road log "A", in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 111-121.
- 1977b, Alamogordo to Indian Wells reentrant field guide and road log "B", in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 137-138.
- 1977c, Field guide and road log "C", in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 157-162.
- 1977d, Field guide and road log "D"--High Rolls south to Four Bits Peak, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 184-200.
- 1977e, Introduction to road logs, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 109-110.

References - Continued

- Pray, L. C., 1977f, Road log "F" West Side Road and Crest Road Loop, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 210-213.
- 1977g, Road log "G" High Rolls to Cloudcroft, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 214-216.
- 1977h, Stratigraphic and structural features of the Sacramento Mountain escarpment, New Mexico, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 73-89.
- 1977i, Supplemental field guide to southernmost Sacramento Mountains escarpment--Agua Chiquita and Nigger Ed Canyons, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 122-136.
- Pray, L. C., and Bowsher, A. L., 1952, Fusselman limestone of the Sacramento Mountains, New Mexico [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1342.
- Pray, L. C., and Graves, R. L., 1952, Desmoinesian facies of the Sacramento Mountains, New Mexico [abs.]: Geological Society of America Bulletin, v. 63, no. 12, pt. 2, p. 1342.
- 1954, Desmoinesian facies of the Sacramento Mountains, New Mexico [abs.]: Geological Society of America Bulletin, v. 65, no. 12, pt. 2, p. 1295.
- Pray, L. C., and Otte, Caryl, Jr., 1954, Correlation of the Abo Formation of south-central New Mexico [abs.]: Geological Society of America Bulletin, v. 65, no. 12, pt. 2, p. 1296.
- Pye, W. D., 1959, Silurian and Devonian systems of southeastern Arizona and southwestern New Mexico, in Guidebook to southern Arizona II: Arizona Geological Society, 2nd Field Conference, p. 25-30.
- Quaide, W. L., 1953, Geology of the central Peloncillo Mountains, Hidalgo County, New Mexico: University of California, Berkeley, unpublished M.A. thesis.

- Raisz, Erwin, 1969, Mapping landforms from space photos--the sunken craters of Potrillo, New Mexico from G4-R3-20, in Earth resource surveys from spacecraft, v. 2: National Aeronautics and Space Administration, Houston, Texas, Earth Resources Group, p. 70.
- 1970, Mapping landforms from space photos--the sunken craters of Potrillo, New Mexico from G4-R3-20 [abs.]: Abstracts of North American Geology, January, p. 85.
- Ramanantoandro, R., 1965, A magnetic survey of the southern Socorro Mountains, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 38 p., 9 figs.
- Ramberg, I. B., Cook, F. A., and Smithson, S. B., 1978, Structure of the Rio Grande Rift in southern New Mexico and west Texas based on gravity interpretation: Geological Society of America Bulletin, v. 89, no. 1, p. 107-123, 14 figs.
- Ramdohr, Paul, 1957, Discussion of uraniferous magnetite-hematite deposit at the Prince mine, Lincoln County, New Mexico (an article by G. W. Walker and F. W. Osterwald): Economic Geology, v. 52, no. 3, p. 322.
- Randall, Alan, and Dewbre, Joe, 1972, Inventory of water diversions and rate structures for cities, towns, and villages in New Mexico: New Mexico State University, Las Cruces, Agricultural Experiment Station Research Report 241, 50 p.
- Rathbun, R. E., Eaton, G. P., Gaskill, D. L., Peterson, D. L., Stotelmeyer, D. L., and Meeves, H. C., 1972, Mineral resources of the Gila primitive area and Gila Wilderness, Catron and Grant Counties, New Mexico: U.S. Geological Survey Open-File Report, 428 p.
- Rathbun, R. E., and Gaskill, D. L., 1975, Reconnaissance geologic map of the Gila Wilderness study area, southwestern New Mexico: U.S. Geological Survey Miscellaneous Field Investigations Map MF-886.
- Rathbun, R. E., Kennedy, V. C., and Culbertson, J. K., 1971, Transport and dispersion of fluorescent tracer particles for the flat-bed condition, Rio Grande conveyance channel, near Bernardo, New Mexico, in Sediment transport in alluvial channels: U.S. Geological Survey Professional Paper 562-I, 156 p.
- Rathbun, R. E., Kennedy, V. C., and Nordin, C. F., Jr., 1973, Transport and dispersion of fluorescent tracer particles for the dune-bed conditions, in Flood investigations: UNESCO, International Association of Hydrological Sciences, Asian Technical Institute, v. 2, p. 61-72.

## References - Continued

- Rathbun, R. E., and Nordin, C. F., Jr., 1971, Tracer studies of sediment transport processes: American Society of Civil Engineers, Journal of the Hydraulics Division, v. 97, no. HY 9, p. 1305-1316, 10 figs.
- Rathbun, R. E., and others, 1972, Magnetic tape containing semiquantitative spectrographic and chemical analyses of rocks and stream sediments from the Gila Wilderness, Gila primitive area, and vicinity, New Mexico: U.S. Department of Commerce, National Technical Information Service PB 2-11684, 3 p.
- Ratte, J. C., 1975a, The geologic setting and revised volcanic stratigraphy of the Mogollon district, Catron County, New Mexico [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 342-343.
- 1975b, Geologic setting and revised volcanic stratigraphy of the Mogollon mining district, Catron County, New Mexico--talk presented to Symposium on base and precious metal districts of New Mexico and Arizona; Silver City, New Mexico, May 22, 1975: U.S. Geological Survey Open-File Report 75-497, 12 p., 4 figs.
- 1977, Geologic map of the Mogollon quadrangle, Catron County, New Mexico: U.S. Geological Survey Open-File Map 77-324.
- 1978a, Supplemental log no. 3; Cliff to U.S. 180 via Rain Creek Mesa and Moon Ranch, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 83-86.
- 1978b, Supplemental log no. 4; Gila mining district, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 86-87.
- Ratte, J. C., Eaton, G. P., Gaskill, D. L., and Peterson, D. L., 1974, Targets for mineral exploration in the Mogollon region of southwestern New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 379.
- Ratte, J. C., and Finnell, T. L., 1978, Road log third day; Silver City to Reserve via Glenwood and Mogollon, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 49-64.

References - Continued

- Ratte, J. C., and Gaskill, D. L., 1973, Relative ages of the Gila Cliff Dwellings and Bursum calderas [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 6, p. 505.
- 1975, Reconnaissance geologic map of the Gila Wilderness study area, southwestern New Mexico: U.S. Geological Survey Miscellaneous Investigations Series I-886, two sheets [1976].
- Ratte, J. C., Gaskill, D. L., Eaton, G. P., Peterson, D. L., Stotelmeyer, R. B., and Meeves, H. C., 1972, Mineral resources of the Gila primitive area and Gila Wilderness, Catron and Grant Counties, New Mexico: U.S. Geological Survey Open-File Report, 428 p., 51 figs.
- Ratte, J. C., Landis, E. R., Gaskill, D. L., and Damon, P. E., 1969, Geology of the Blue Range primitive area, Arizona-New Mexico [abs.], in Abstracts for 1968: Geological Society of America Special Paper 121, p. 549.
- Ratte, J. C., Landis, E. R., Gaskill, D. L., and Raabe, R. G., 1969, Mineral resources of the Blue Range primitive area, Greenlee County, Arizona, and Catron County, New Mexico, with a section on aeromagnetic interpretations, by G. P. Easton, in Studies related to wilderness-primitive areas: U.S. Geological Survey Bulletin 1261-E, 91 p., 22 figs.
- Raup, R. B., Jr., 1952, Relationships between zinc ores and gossan at Hanover, New Mexico: University of Michigan, Ann Arbor, unpublished M.S. thesis, 34 p., 6 figs.
- Rawson, D. E., 1957a, Geology of the Tecolote Hills area, Lincoln County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 77 p.
- 1957b, Geology of the Tecolote Hills, Lincoln County, New Mexico [abs.], in Guidebook to southwestern San Juan Mountains, Colorado: New Mexico Geological Society, 8th Field Conference, p. 257.
- Raynor, T. E., 1955, Three tales from a boom camp (Organ mining district): New Mexico Magazine, v. 33, no. 11, p. 19-41.
- Read, C. B., and Wanek, A. A., 1961, Stratigraphy of outcropping Permian rocks in parts of northeastern Arizona and adjacent areas, in Shorter contributions to general geology, 1960: U.S. Geological Survey Professional Paper 374-H, 10 p.



References - Continued

- Reed, E. K., 1965, Human prehistory in southwestern New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 228-229.
- Reeder, H. O., 1957, Ground water in the Animas Valley, Hidalgo County, New Mexico: New Mexico State Engineer Technical Report 11, 101 p.
- Reeder, H. O., and others, 1959, Annual water-level measurements in observation wells, 1951-55, and atlas of maps showing changes in water levels for various periods from beginning of record through 1954, New Mexico: New Mexico State Engineer Technical Report 13, 339 p., 4 figs.
- 1960a, Changes in water levels in 1955 and annual water-level measurements in January and February 1956 in observation wells in New Mexico: New Mexico State Engineer Technical Report 16, 145 p., 31 figs.
- 1960b, Ground-water levels in New Mexico, 1956: New Mexico State Engineer Technical Report 19, 251 p., 19 figs.
- 1961, Ground-water levels in New Mexico, 1957: New Mexico State Engineer Technical Report 22, 306 p., 19 figs.
- 1962a, Ground-water levels in New Mexico, 1958: New Mexico State Engineer Technical Report 23, 288 p., 20 figs.
- 1962b, Ground-water levels in New Mexico, 1959: New Mexico State Engineer Technical Report 24, 125 p., 21 figs.
- Reeves, C. C., Jr., 1963a, Economic geology of a part of the Hillsboro, New Mexico mining district: Economic Geology, v. 58, no. 8, p. 1278-1284.
- 1963b, Geology of A. P. I. [American Petroleum Institute] Project 49 Kaolin clay reference locality, Mesa Alto, New Mexico: Economic Geology, v. 58, no. 2, p. 237-249.
- 1963c, Small mining company reopens New Mexico's Hillsboro district: Engineering Mining Journal, v. 164, no. 11, p. 92-93.
- 1965a, Pluvial Lake Palomas, northwestern Chihuahua, Mexico and Pleistocene geologic history of south-central New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 199-203.

## References - Continued

- Reeves, C. C., Jr., 1965b, Pluvial Lake Palomas, southern New Mexico and northern Chihuahua, Mexico [abs.], in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 242.
- Reeves, C. C., Jr., and De Hon, R. A., 1965a, Geology of Potrillo Maar, New Mexico and northern Chihuahua, Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 7, no. 7-3574, p. 19-20.
- 1965b, Geology of Potrillo Maar, New Mexico and northern Chihuahua, Mexico: American Journal of Science, v. 263, no. 5, p. 401-409.
- Reiche, Parry, 1938, Recent fault scarps, Organ Mountain district, New Mexico: American Journal of Science, 5th series, v. 36, no. 216, p. 440-444, 2 figs.
- 1939, The origin of the Kilbourne Hole, New Mexico [abs.]: Geological Society of America Bulletin, v. 50, no. 12, pt. 2, p. 1957.
- 1940, The origin of Kilbourne Hole, New Mexico: American Journal of Science, v. 238, no. 3, p. 212-225.
- Reid, G. D., 1902, The Burro Mountain copper district, New Mexico: Engineering Mining Journal, v. 74, p. 778-779.
- Reid, H. F., 1911, Remarkable earthquakes in central New Mexico in 1906 and 1907: Seismological Society of America Bulletin, v. 1, p. 10-16.
- Reiland, L. J., and Haynes, G. L., Jr., 1963, Flow characteristics of New Mexico streams; flow-duration, high flow, and low-flow tables for selected stations through water year 1959: New Mexico State Engineer Special Report, 342 p., 4 figs.
- Reilinger, R., and Oliver, J. E., 1976, Modern uplift associated with a proposed magma body in the vicinity of Socorro, New Mexico: Geology, v. 4, p. 573-586.
- Reinke, R. E., and Herrin, Eugene, 1977, Geophysical model studies of the Tularosa Basin, New Mexico: Southern Methodist University, Dallas, Texas, Geophysical Laboratory Report AFOSR-TR-78-0779, 173 p.

References - Continued

- Reiter, M. A., Shearer, C. R., and Edwards, C. L., 1978, Geothermal anomalies along the Rio Grande Rift in New Mexico: *Geology*, v. 6, no. 2, p. 85-88.
- Reiter, M. A., and Smith, R., 1977, Subsurface temperature data in the Socorro Peak KGRA, New Mexico: *Geothermal Energy Magazine*, v. 5, no. 10, p. 37-41.
- Rejas, Angel, 1965, Geology of the Cerros de Amado area, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 128 p., 3 figs.
- Renault, J. R., 1970, Major-element variations in the Potrillo, Carrizozo, and McCartys basalt fields, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 113, 22 p.
- Reyer, R. W., 1958, Virgil cyclotherms of the Holder Formation in Beeman and Indian Wells Canyons in the Sacramento Mountains northeast of Alamogordo, New Mexico: University of Wisconsin, Madison, unpublished M.S. thesis.
- Reynolds, C. B., and Craddock, J. C., 1959, Geology of the Jarilla Mountains, Otero County, New Mexico, in Guidebook to the Sacramento Mountains of Otero County, New Mexico: Roswell Geological Society, 1959 Joint Field Conference, p. 279-284.
- Reynolds, S. E., 1956, New Mexico water resources, in Proceedings 1st Annual New Mexico Water Conference, Las Cruces, p. 6-17, 2 figs.
- 1958, Albuquerque and the Rio Grande underground water basin: City of Albuquerque Planning Department, Albuquerque Plan, v. 3, no. 9, p. 2-5.
- 1961, An outline of the statutes governing appropriation and use of ground water in New Mexico, in Proceedings 6th Annual New Mexico Water Conference, Las Cruces, p. 79-82.
- 1966, The water situation in New Mexico: New Mexico Professional Engineer, v. 18, no. 7, p. 16.
- 1973, State Water Plan, in Proceedings 18th Annual New Mexico Water Conference: New Mexico Water Resources Research Institute Report 026, p. 10-18.
- Reynolds, S. E., Yates, J. C., and Akin, P. D., 1967, Coordinated administration of surface and ground water in New Mexico under the doctrine of prior appropriation: International Conference on Water for Peace, Washington, D. C., Paper 419, 10 p.

References - Continued

- Rhodes, R. C., 1968, Summary of the geology of the Mogollon Range, southwestern New Mexico, in Guidebook to southern Arizona III: Arizona Geological Society, 3rd Field Conference, p. 260-261.
- 1969, Summary of the geology of the Mogollon Range, southwestern New Mexico [abs.]: Abstracts of North American Geology, January, p. 92.
- 1970, Volcanic rocks associated with the western part of the Mogollon Plateau volcano-tectonic complex, southwestern New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 145 p.
- 1976a, Petrologic framework of the Mogollon Plateau volcanic ring complex, New Mexico--surface expression of a major batholith, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 103-112.
- 1976b, Volcanic geology of the Mogollon Range and adjacent areas, Catron and Grant Counties, New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 42-50.
- Rhodes, R. C., and Smith, E. I., 1972a, Distribution and directional fabric of ash-flow sheets in the northwestern Mogollon Plateau, New Mexico: Geological Society of America Bulletin, v. 83, no. 6, p. 1863-1868, 2 figs.
- 1972b, Geology and tectonic setting of the Mule Creek caldera, New Mexico, U.S.A.: Bulletin of Volcanology, v. 36, no. 2, p. 401-411, 4 figs.
- 1976, Stratigraphy and structure of the northwestern part of the Mogollon Plateau volcanic province, Catron County, New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 57-62.
- Rhodes, R. C., Smith, E. I., and Elston, W. E., 1972, The mid-Tertiary Mogollon-Datil volcanic province, southwestern New Mexico, part 1, volcanic-tectonic timing [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 3, p. 224.
- Rich, John Lyon, 1911a, Gravel as a resistant rock (near Silver City, New Mexico): Journal of Geology, v. 19, no. 6, p. 492-506.
- 1911b, Recent stream trenching in the semi-arid portion of southwestern New Mexico, a result of removal of vegetation cover: American Journal of Science, 4th series, v. 32, p. 237-245.

References - Continued

- Rich, John Lyon, 1911c, Recent stream trenching in the semi-arid portion of southwestern New Mexico, a result of removal of vegetation cover [abs.]: American Association of Geographers Annals, v. 1, p. 135.
- 1972, Recent stream trenching in the semi-arid portions of southwestern New Mexico, a result of removal of vegetation cover, in Environmental morphology and landscape conservation; v. 1, prior to 1900: Stroudsburg, Pennsylvania, Dowden, Hutchinson, and Ross, p. 263-271.
- Richard, F. W., 1930, Mining methods and costs at the Ground Hog unit, Asarco Mining Company, Vanadium, New Mexico: U.S. Bureau of Mines Information Circular IC 6377, 13 p., 6 figs.
- Richard, K. E., and Courtright, J. H., 1960, Some Cretaceous-Tertiary relationships in southeastern Arizona and New Mexico: Arizona Geological Society Digest, v. 3, p. 1-7.
- 1961, Some Cretaceous-Tertiary relationships in southeastern Arizona and New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 3, no. 3-1821, p. 17.
- Richardson, G. B., 1909, El Paso folio: U.S. Geological Survey Atlas Folio 166, 1 p.
- Richardson, G. L., 1971, Water table investigation in the Mesilla Valley: New Mexico State University, Las Cruces, unpublished M.S. thesis, 206 p.
- Richardson, G. L., and Gebhard, T. G., Jr., 1972, Preliminary ground-water model of the Mesilla Valley, in Proceedings of 17th annual New Mexico water conference: New Mexico Water Resources Research Institute Report 007, p. 44-65.
- Richardson, G. L., Gebhard, T. G., Jr., and Brutsaert, W. F., 1972, Water table investigation in the Mesilla Valley: New Mexico State University, Las Cruces, Engineering Experiment Station Technical Report 76, 206 p.
- Richardson, J. K., 1958, Kennecott Copper Corporation Chino mines: New Mexico Professional Engineer, v. 10, no. 12, p. 8-11.
- Richmond, G. M., 1964, Glacial deposits on Sierra Blanca Peak, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 79-81.



## References - Continued

- Rickard, T. A., 1923, The Chino enterprise; part III, geology of Santa Rita: Engineering Mining Journal, v. 116, p. 981-985.
- 1944, Some "lost mines" of the southwest (in Guadalupe Mountains, New Mexico): Engineering Mining Journal, v. 145, no. 10, p. 99-101.
- Ridge, J. D., 1971a, Magdalena, in Annotated bibliographies of mineral deposits in the western hemisphere: Geological Society of America Memoir 131, p. 439-442.
- 1971b, Santa Rita-Hanover, in Annotated bibliographies of mineral deposits in the western hemisphere: Geological Society of America Memoir 131, p. 445-449.
- Riese, R. W., 1969, Precambrian geology of the southern part of the Rincon Range: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 183 p., 38 figs.
- Rinehart, E. J., 1976, The use of microearthquakes to map an extensive magma body in the Socorro, New Mexico area: New Mexico Institute of Mining and Technology, Socorro, Geoscience Department Open-File Report GI-10, 60 p.
- Rinehart, G. S., and Lee, R. P., 1973, Apparent 7-day period in visibility data at White Sands Missile Range, New Mexico: Journal of Geophysical Research, v. 78, no. 12, p. 1948-1951, 2 figs.
- Rio Grande Compact Commission, 1938-1978, Report of the Rio Grande Compact Commission: Annual Report, pages vary.
- Ripley, E. P., 1946, Compilation of state tax law relating to mineral properties in New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 13, 25 p.
- 1952, Compilation of state law relating to oil, gas, and mining properties in New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 32, 79 p.
- Rixon, T. F., 1905, Forest conditions in the Gila River Forest Reserve, New Mexico: U.S. Geological Survey Professional Paper 39, 89 p.
- Robinson, T. W., 1952, Phreatophytes and their relation to water in the western United States, in Symposium on phreatophytes: American Geophysical Union Transactions, v. 33, p. 57-61.

- Rodriguez-Iturbe, Ignacio, and Nordin, C. F., Jr., 1968, Time series analyses of water and sediment discharges: International Association of Scientific Hydrologists Bulletin, v. 13, no. 2, p. 69-84.
- Roedder, Edwin, Heyl, A. V., Jr., and Creel, J. P., 1967, Environment of ore deposition at the Mex-Tex deposits, Hansonburg district, New Mexico, from studies of fluid inclusions [abs.]: Economic Geology, v. 62, no. 6, p. 874.
- 1968a, Environment of ore deposition at the Mex-Tex deposits, Hansonburg district, New Mexico, from studies of fluid inclusions: Economic Geology, v. 63, no. 4, p. 336-348, 16 figs.
- 1968b, Environment of ore deposition at the Mex-Tex deposits, Hansonburg district, New Mexico, from studies of fluid inclusions [abs.], in Abstracts for 1968: Geological Society of America Special Paper 115, p. 189.
- 1969, Environment of ore deposition at the Mex-Tex deposits, Hansonburg district, New Mexico, from studies of fluid inclusions [abs.]: Abstracts of North American Geology, March, p. 425.
- Roman, R. J., and Becker, G. W., 1971, Batch-grinding model: New Mexico Bureau of Mines and Mineral Resources Circular 117, 7 p.
- 1973, Computer program for Monte Carlo economic evaluation of a mineral deposit: New Mexico Bureau of Mines and Mineral Resources Circular 137, 23 p.
- Rose, A. W., 1958a, Significance of the iron content of sphalerite (Central mining district) [abs.]: Geological Society of America Bulletin, v. 69, no. 12, pt. 2, p. 1635.
- 1958b, Trace elements in sulfide minerals from the Central mining district, New Mexico, and the Bingham district, Utah: California Institute of Technology, Pasadena, unpublished Ph. D. dissertation, 276 p.
- 1959, Trace elements in sulfide minerals from the Central mining district, New Mexico, and the Bingham district, Utah [abs.]: Geological Society of America Bulletin, v. 70, no. 12, pt. 2, p. 1664.
- 1961, The iron content of sphalerite from the Central district, New Mexico and the Bingham district, Utah: Economic Geology, v. 56, no. 8, p. 1363-1384.

References - Continued

- Rose, A. W., 1970a, Origin of trace element distribution patterns in sulfides of the Central and Bingham districts, western U.S.A. (with German abstract): *Mineralium Deposita*, v. 5, no. 2, p. 157-163.
- 1970b, Zonal relations of wallrock alteration and sulfide distribution at porphyry copper deposits: *Economic Geology*, v. 65, no. 8, p. 920-936.
- Rose, A. W., and Baltosser, W. W., 1966, The porphyry copper deposit at Santa Rita, New Mexico, in *Geology of the porphyry copper deposits, southwestern New Mexico*: Tucson, University of Arizona Press, p. 205-220, 6 figs.
- Rosenzweig, Abraham, 1968, Zinc-copper clay-like mineral from New Mexico [abs.], in *Abstracts for 1967*: Geological Society of America Special Paper 115, p. 443-444.
- Ross, C. A., 1965, Early and middle Pennsylvanian fusulinids from southeast Arizona: *Journal of Paleontology*, v. 39, no. 2, p. 173-209.
- Ross, C. S., 1948, Optical properties of glass from Alamogordo, New Mexico: *American Mineralogist*, v. 33, no. 5-6, p. 360-362.
- Rossin, E. L., 1924, Petrography of a contact metamorphic deposit near Hanover, New Mexico: Columbia University, New York City, unpublished M.A. thesis.
- Rothrock, H. E., 1945, Preliminary report on the White Star, Oakland, and Universal fluorspar veins near Hot Springs, Sierra County, New Mexico: U.S. Geological Survey Strategic Minerals Investigations Preliminary Report 3-190, pt. 2.
- 1966, Review of the guidebook of southwestern New Mexico II, by New Mexico Geological Society: *American Association of Petroleum Geologists Bulletin*, v. 50, no. 5, p. 1076-1078.
- 1970, Fluorspar, in *Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region*: New Mexico Geological Society, 21st Field Conference, p. 123-126.
- Rothrock, H. E., Johnson, C. H., and Hahn, A. D., 1946, Fluorspar resources of New Mexico: *New Mexico Bureau of Mines and Mineral Resources Bulletin* 21, 245 p.

References - Continued

- Ruedemann, Rudolph, 1929, Coralline algae, Guadalupe Mountains: American Association of Petroleum Geologists Bulletin, v. 13, no. 8, p. 1079-1080, 1 fig.
- Ruedisili, L. C., 1968a, Stratigraphy and paleontology of the Mississippian bioherms in the northern part of the Sacramento Mountains, New Mexico: University of Wisconsin, Madison, unpublished Ph. D. dissertation, 188 p.
- 1968b, Stratigraphy and paleontology of the Mississippian bioherms in the northern part of the Sacramento Mountains, New Mexico [abs.]: Dissertation Abstracts International, section B, v. 28, no. 11, p. 4627B-4628B.
- Ruhe, R. V., 1960, Age of the Rio Grande Valley in southern New Mexico [abs.]: Geological Society of America Bulletin, v. 71, no. 12, pt. 2, p. 1962-1963.
- 1961, Landscapes and soils in the southern New Mexico desert; Organ Peak and Las Cruces quadrangles and adjacent areas, Dona Ana County, New Mexico [abs.], in Guidebook of the Albuquerque country: New Mexico Geological Society, 12th Field Conference, p. 194-195.
- 1962a, Age of the Rio Grande Valley in southern New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4-2806, p. 9.
- 1962b, Age of the Rio Grande Valley in southern New Mexico: Journal of Geology, v. 70, no. 2, p. 151-167.
- 1964, Landscape morphology and alluvial deposits in southern New Mexico: American Association of Geographers Annals, v. 54, p. 147-159, 7 figs.
- 1967, Geomorphic surfaces and surficial deposits in southern New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 18, 66 p.
- 1968, Geomorphic surfaces and surficial deposits in southern New Mexico [abs.]: Abstracts of North American Geology, July, p. 1032.
- Ruhe, R. V., Gile, L. H., Peterson, F. F., and Grossman, R. B., 1961, Guidebook to landscapes and soils of the southern New Mexico desert: U.S. Department of Agriculture, Soil Conservation Service, Desert Project Soil Survey Investigation Field Conference, 87 p., 16 figs.

References - Continued

- Russell, C. P., 1935, The white sands of Alamogordo: National Geographic Magazine, v. 68, no. 2, p. 250-264.
- Russell, P. L., 1946, Exploration of Contact manganese mine, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3969, 5 p.
- 1947a, Ellis manganese deposit, Sierra County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3997, 4 p.
- 1947b, Exploration of Fluorite Ridge fluorspar district, Luna County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3987, 7 p.
- 1947c, Gila fluorspar district, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4020, 5 p., 9 figs.
- 1947d, Manganese Products Corporation's Morgan group, Dona Ana County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4021, 4 p., 2 figs.
- 1947e, Steeple Rock zinc-lead district, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4073, 12 p., 8 figs.
- Russell, P. L., and Calhoun, W. A., 1947, Niggerhead manganese deposit, Socorro County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4084, 7 p.
- Ruthven, A. G., 1907, A collection of reptiles and amphibians from southern New Mexico and Arizona: American Museum of Natural History Bulletin, v. 23, p. 483-607.
- Ryberg, G. E., 1968, The geology of the Jicarilla Mountains, Lincoln County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 95 p.
- Sabins, F. F., 1965, Road log from San Simon Valley to Blue Mountain, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 81-84.
- Sandeen, W. M., 1953, History of petroleum exploration in southwestern New Mexico, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 112-116.



References - Continued

- Ruedemann, Rudolph, 1929, Coralline algae, Guadalupe Mountains: American Association of Petroleum Geologists Bulletin, v. 13, no. 8, p. 1079-1080, 1 fig.
- Ruedisili, L. C., 1968a, Stratigraphy and paleontology of the Mississippian bioherms in the northern part of the Sacramento Mountains, New Mexico: University of Wisconsin, Madison, unpublished Ph. D. dissertation, 188 p.
- 1968b, Stratigraphy and paleontology of the Mississippian bioherms in the northern part of the Sacramento Mountains, New Mexico [abs.]: Dissertation Abstracts International, section B, v. 28, no. 11, p. 4627B-4628B.
- Ruhe, R. V., 1960, Age of the Rio Grande Valley in southern New Mexico [abs.]: Geological Society of America Bulletin, v. 71, no. 12, pt. 2, p. 1962-1963.
- 1961, Landscapes and soils in the southern New Mexico desert; Organ Peak and Las Cruces quadrangles and adjacent areas, Dona Ana County, New Mexico [abs.], in Guidebook of the Albuquerque country: New Mexico Geological Society, 12th Field Conference, p. 194-195.
- 1962a, Age of the Rio Grande Valley in southern New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4-2806, p. 9.
- 1962b, Age of the Rio Grande Valley in southern New Mexico: Journal of Geology, v. 70, no. 2, p. 151-167.
- 1964, Landscape morphology and alluvial deposits in southern New Mexico: American Association of Geographers Annals, v. 54, p. 147-159, 7 figs.
- 1967, Geomorphic surfaces and surficial deposits in southern New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 18, 66 p.
- 1968, Geomorphic surfaces and surficial deposits in southern New Mexico [abs.]: Abstracts of North American Geology, July, p. 1032.
- Ruhe, R. V., Gile, L. H., Peterson, F. F., and Grossman, R. B., 1961, Guidebook to landscapes and soils of the southern New Mexico desert: U.S. Department of Agriculture, Soil Conservation Service, Desert Project Soil Survey Investigation Field Conference, 87 p., 16 figs.

References - Continued

- Russell, C. P., 1935, The white sands of Alamogordo: National Geographic Magazine, v. 68, no. 2, p. 250-264.
- Russell, P. L., 1946, Exploration of Contact manganese mine, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3969, 5 p.
- 1947a, Ellis manganese deposit, Sierra County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3997, 4 p.
- 1947b, Exploration of Fluorite Ridge fluorspar district, Luna County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3987, 7 p.
- 1947c, Gila fluorspar district, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4020, 5 p., 9 figs.
- 1947d, Manganese Products Corporation's Morgan group, Dona Ana County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4021, 4 p., 2 figs.
- 1947e, Steeple Rock zinc-lead district, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4073, 12 p., 8 figs.
- Russell, P. L., and Calhoun, W. A., 1947, Niggerhead manganese deposit, Socorro County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4084, 7 p.
- Ruthven, A. G., 1907, A collection of reptiles and amphibians from southern New Mexico and Arizona: American Museum of Natural History Bulletin, v. 23, p. 483-607.
- Ryberg, G. E., 1968, The geology of the Jicarilla Mountains, Lincoln County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 95 p.
- Sabins, F. F., 1965, Road log from San Simon Valley to Blue Mountain, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 81-84.
- Sandeen, W. M., 1953, History of petroleum exploration in southwestern New Mexico, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 112-116.

References - Continued

- Sanford, A. R., 1963, Seismic activity near Socorro, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 146-151.
- 1965, An instrumental study of New Mexico earthquakes: New Mexico Bureau of Mines and Mineral Resources Circular 78, 12 p.
- 1968a, Gravity survey in central Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 91, 14 p.
- 1968b, Gravity survey in central Socorro County, New Mexico [abs.]: Abstracts of North American Geology, October, p. 1524.
- 1968c, Gravity survey in central Socorro County, New Mexico [abs.]: Petroleum Abstracts, v. 8, no. 23, p. 1341.
- 1977a, Seismic investigation of a magma layer in the crust beneath the Rio Grande Rift near Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Geoscience Department Open-File Report GI-18, 21 p.
- 1977b, Temperature gradient and heat-flow measurements in the Socorro, New Mexico area, 1965-1968: New Mexico Institute of Mining and Technology, Socorro, Geoscience Department Open-File Report GI-15, 19 p.
- Sanford, A. R., Alptekin, O. S., and Rush, C. A., 1970, Seismicity of the Rio Grande Rift in New Mexico [abs.], in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 161.
- Sanford, A. R., Alptekin, O. S., and Topozada, T. R., 1973, Use of reflection phases on microearthquake seismograms to map an unusual discontinuity beneath the Rio Grande Rift: Seismological Society of America Bulletin, v. 63, no. 6, p. 2021-2034.
- Sanford, A. R., Budding, A. J., Hoffman, J. P., Alptekin, O. S., Rush, C. A., and Topozada, T. R., 1972, Seismicity of the Rio Grande Rift in New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 120, 19 p.
- Sanford, A. R., and Cash, D. J., 1969, An instrumental study of New Mexico earthquakes July 1, 1964, through December 31, 1967: New Mexico Bureau of Mines and Mineral Resources Circular 102, 7 p.

References - Continued

- Sanford, A. R., and Holmes, C. R., 1961a, Earthquake research at NMIMT, in Guidebook of the Albuquerque country: New Mexico Geological Society, 12th Field Conference, p. 153.
- 1961b, Note of the July 1960, earthquakes in central New Mexico: Seismological Society of America Bulletin, v. 51, no. 2, p. 311-314.
- 1962a, Microearthquakes near Socorro, New Mexico: Journal of Geophysical Research, v. 67, no. 11, p. 4449-4459.
- 1962b, Microearthquakes near Socorro, New Mexico [abs.]: Journal of Geophysical Research, v. 67, no. 4, p. 1656.
- 1963a, Field trip 9, N.M.I.M.T. seismograph station, Socorro Mountain, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 79.
- 1963b, Microearthquakes near Socorro, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 5, no. 5-2196, p. 47.
- Sanford, A. R., and Long, L. T., 1965, Microearthquake crustal reflections, Socorro, New Mexico: Seismological Society of America Bulletin, v. 55, no. 3, p. 579-586.
- Sanford, A. R., Mott, R. P., Jr., Shuleski, P. J., Rinehart, E. J., Caravella, F. J., Ward, R. M., and Wallace, T. C., 1977, Geophysical evidence for a magma body in the crust in the vicinity of Socorro, New Mexico: American Geophysical Union Monograph 20, p. 385-403.
- Sanford, A. R., Rinehart, E. J., Shuleski, P. J., and Johnston, J. A., 1977, Evidence from microearthquake studies for small magma bodies in the upper crust of the Rio Grande Rift near Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Geoscience Department Open-File Report GI-19.
- Sanford, A. R., Rush, Clayton, and Alptekin, O. S., 1970a, Study of a seismically active segment of the Rio Grande Rift zone [abs.]: Earthquake Notes, v. 40, no. 2, p. 21-22.
- 1970b, Study of a seismically active segment of the Rio Grande Rift zone [abs.]: Geological Society of America, Abstracts with Programs, v. 2, p. 139-140.

References - Continued

- Sanford, A. R., and Singh, Surendra, 1968a, Minimum recording times for determining short-term seismicity from microearthquake activity [abs.]: Abstracts of North American Geology, September, p. 1359.
- 1968b, Minimum recording times for determining short-term seismicity from microearthquake activity: Seismological Society of America Bulletin, v. 58, no. 2, p. 639-644, 3 figs.
- Sauer, Carl, 1930, Basin and range forms in the Chiricahua area, (Arizona and New Mexico): University of California, Berkeley, Publications in Geography, v. 3, p. 339-414, 5 figs.
- Sayre, A. N., and Livingston, P. P., 1945, Ground-water resources of the El Paso area, Texas: U.S. Geological Survey Water-Supply Paper 919, 190 p.
- Schaller, W. T., 1942, Octahedron-like crystals of calcite (Magdalena district, Socorro County, New Mexico): American Mineralogist, v. 27, no. 2, p. 141-143, 1 fig.
- Schern, Mike, 1975, Physical, environmental, and economic aspects of exploration within the Blue Range primitive area [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 343.
- Schilling, J. H., 1967, Silver City-Santa Rita-Hurley, second edition: New Mexico Bureau of Mines and Mineral Resources Scenic Trips to the Geologic Past 5, 36 p.
- Schilling, J. H., Baltosser, W. W., Griswold, G. B., Wagner, W. K., File, L. A., Kottowski, F. E., Beaumont, E. C., and Baker, D. H., Jr., 1971, Survey of surface mining in New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 114, 17 p.
- Schmidt, P. G., 1962, The geology of the Jarilla Mountains, Otero County, New Mexico: University of Minnesota, Minneapolis, unpublished M.S. thesis, 134 p.
- Schmidt, P. G., and Craddock, J. C., 1964, The geology of Jarilla Mountains, Otero County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 82, 55 p.
- Schmitt, H. A., 1932a, Application of geology to mining: Engineering and Mining Journal, v. 133, no. 10, p. 509-510, 2 figs.
- 1932b, Cartography for mining geology: Economic Geology, v. 27, no. 8, p. 716-736, 4 figs.



## References - Continued

- Schmitt, H. A., 1933a, The Central mining district, New Mexico: American Institute of Mining and Metallurgical Engineers Contribution 39, 22 p., 8 figs.
- 1933b, Summary of the geological and metallogenetic history of Arizona and New Mexico, in Ore deposits of the western states: American Institute of Mining and Metallurgical Engineers, p. 316-326, 1 fig.
- 1935, The Central mining district, New Mexico--a discussion, in Mining geology: American Institute of Mining and Metallurgical Engineers Transactions, v. 115, p. 187-208, 8 figs.
- 1936, On mapping underground geology: Engineering and Mining Journal, v. 137, no. 11, p. 551-561, 4 figs.
- 1938, The Pewabic mine, New Mexico [abs.], in Proceedings for 1937: Geological Society of America, p. 110-111.
- 1939, The Pewabic mine, New Mexico: Geological Society of America Bulletin, v. 50, no. 5, p. 777-818, 6 figs.
- 1942, Certain ore deposits in the southwest, in W. H. Newhouse, ed., Ore deposits as related to structural features: New Jersey, Princeton University Press, p. 73-79, 6 figs.
- Schmitt, H. A., Jr., 1962, Status of mining in the southwest [abs.], in Guidebook of the Mogollon Rim region, east-central Arizona: New Mexico Geological Society, 13th Field Conference, p. 175.
- 1966, The porphyry copper deposits in their regional setting, in Geology of the porphyry copper deposits: Tucson, University of Arizona Press, p. 17-33.
- Schufle, J. A., 1970, Long term movement of water and soil salinity in the weathering zone of arid zone sediments, in Saline water: Rocky Mountain Division, American Association for the Advancement of Science, Committee on Desert and Arid Zone Research Contribution 13, p. 46-56.
- Schulman, Edmund, 1956, Dendroclimatic changes in semiarid America: Tucson, University of Arizona Press, 142 p., 42 figs.
- Schumm, S. A., and Hadley, R. F., 1957a, Arroyos and the semiarid cycle of erosion: American Journal of Science, v. 255, no. 3, p. 161-174, 8 figs.

References - Continued

- Schumm, S. A., and Hadley, R. F., 1957b, Arroyos and the semiarid cycle of erosion [abs.]: American Geological Institute, Geologic Abstracts, v. 5, no. 2, p. 35.
- Schupbach, M. A., 1973a, Comparison of slope and basinal sediments of a marginal cratonic basin (Pedregosa Basin, New Mexico) and a marginal geosynclinal basin (southern border of Piemontais geosyncline, Bernina Nappe, Switzerland): Rice University, Houston, Texas, unpublished Ph. D. dissertation, 135 p., 25 figs.
- 1973b, Comparison of slope and basinal sediments of a marginal cratonic basin (Pedregosa Basin, New Mexico) and a marginal geosynclinal basin (southern border of Piemontais geosyncline, Bernina Nappe, Switzerland): New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-72, 135 p., 25 figs.
- 1973c, Comparison of slope and basinal sediments of a marginal cratonic basin and geosyncline [abs.]: American Association of Petroleum Geologists Bulletin, v. 57, no. 4, p. 804.
- Schwab, G. E., Brandvold, L. A., and Summers, W. K., 1971, Characters of discharging ground water in a recharge area, Magdalena Mountains, Socorro County, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 3, no. 3, p. 243-244.
- Schwartz, G. M., 1923, Chalersite at Fierro, New Mexico, with a note on its occurrence at Parry Sound, Ontario: Economic Geology, v. 18, no. 3, p. 270-277, 2 figs.
- 1947, Hydrothermal alteration in the "porphyry copper" deposits: Economic Geology, v. 42, no. 4, p. 319-352.
- 1948, Some aspects of ore deposits important in geophysical work, in Symposium on mining geophysics: Geophysics, v. 13, no. 4, p. 540-549.
- Schwennessen, A. T., 1918, Ground water in the Animas, Playas, Hachita, and San Luis Basins, New Mexico, with analyses of water and soil by R. F. Hare: U.S. Geological Survey Water-Supply Paper 422, 152 p.
- 1919, Ground water in the San Simon Valley, Arizona and New Mexico, with a section on agriculture by R. H. Forbes, in Contributions to the hydrology of the United States, 1917: U.S. Geological Survey Water-Supply Paper 425-A, p. 1-35.
- Scofield, C. S., 1938, Quality of water of the Rio Grande Basin above Fort Quitman, Texas--analytical data: U.S. Geological Survey Water-Supply Paper 839, 296 p.

References - Continued

- Scott, A. G., 1970, Estimated mean-annual runoff at Post Headquarters area, White Sands Missile Range, New Mexico: U.S. Geological Survey Open-File Report, 13 p., 3 figs.
- 1971, Preliminary flood-frequency relations and summary of maximum discharges in New Mexico--a progress report: U.S. Geological Survey Open-File Report, 76 p., 8 figs.
- 1974, Project evaluation of investigation and analysis of floods from small drainage areas in New Mexico: U.S. Geological Survey Open-File Report 74-85, 57 p., 20 figs.
- 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. Geological Survey Open-File Report 76-86, 30 p., 5 figs.
- Scott, A. G., and Kunkler, J. L., 1976, Flood discharges of streams in New Mexico as related to channel geometry: U.S. Geological Survey Open-File Report 76-414, 29 p., 6 figs.
- Scott, D. B., 1920a, Ore deposits of the Mogollon district, with discussion by H. C. Ferguson: American Institute of Mining and Metallurgical Engineers Transactions, v. 63, p. 289-310, 5 figs.
- 1920b, Ore deposits of the Mogollon district [abs.]: Mining and Metallurgy, no. 158, section 1, p. 33, 1 fig.
- 1920c, Ore deposits of the Mogollon district: Mining and Metallurgy, section 33, 22 p., 5 figs.
- Seager, W. R., 1961, Geology of the Jarilla Mountains, Tularosa Basin, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 80 p.
- 1973, Resurgent volcano-tectonic depression of Oligocene age, south-central New Mexico: Geological Society of America Bulletin, v. 84, no. 11, p. 3611-3626, 10 figs.
- 1974, Geologic map of Bishop Cap-Organ Mountains area, Dona Ana County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-29.
- 1975a, Cenozoic tectonic evolution of the Las Cruces area, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 241-250.

References - Continued

- Seager, W. R., 1975b, Geologic map of the south half, San Diego Mountain quadrangle, Dona Ana County: New Mexico Bureau of Mines and Mineral Resources Geological Map GM-35.
- 1978a, Geologic cross sections through the Emory cauldron, Black Range, New Mexico, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, in pocket.
- 1978b, Supplemental log no. 2; Organ and Dona Ana calderas, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 73-82.
- Seager, W. R., and Brown, L. F., 1978, The Organ caldera, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 139-149.
- Seager, W. R., and Clemons, R. E., 1974a, Geologic map of the Cedar Hills-Selden Hills area, Dona Ana County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-52, map.
- 1974b, Tertiary tectonics and mineralization, Dona Ana County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 381.
- 1975, Middle to late Tertiary geology of the Cedar Hills-Selden Hills area, Dona Ana County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 133, 23 p., 14 figs.
- Seager, W. R., Clemons, R. E., and Callender, J. F., eds., 1975, Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, 376 p.
- Seager, W. R., Clemons, R. E., and Elston, W. E., 1978, Road log second day; Truth or Consequences to Silver City via Hillsboro and Tierra Blanca Canyon, in Field guide to selected cauldrons of the Datil-Mogollon volcanic field New Mexico: New Mexico Geological Society Special Publication 7, p. 33-48.
- Seager, W. R., Clemons, R. E., and Hawley, J. W., 1975, Geology of Sierra Alta quadrangle, Dona Ana County: New Mexico Bureau of Mines and Mineral Resources Bulletin 102, 56 p., 13 figs.

References - Continued

- Seager, W. R., and Hawley, J. W., 1973, Geology of Rincon quadrangle, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 101, 42 p., 7 figs.
- Seager, W. R., Hawley, J. W., and Clemons, R. E., 1971, Geology of San Diego Mountain area, Don Ana County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 97, 38 p., 3 figs.
- Seager, W. R., Kottowski, F. E., and Hawley, J. W., 1976, Geology of Dona Ana Mountains, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 147, 36 p.
- Seewald, K. O., and Sundeen, Dan, eds., 1970, The geologic framework of the Chihuahua tectonic belt: West Texas Geological Society and University of Texas, Austin, Symposium in honor of R. K. DeFord, Midland, Texas, 76 p.
- Segerstrom, Kenneth, and Antweiler, J. C., III, 1975, Placer-gold deposits of the Las Animas district, Sierra County, New Mexico: U.S. Geological Survey Open-File Report 75-206, 39 p., 1 fig.
- Segerstrom, Kenneth, and Ryberg, G. E., 1974, Geology and placer-gold deposits of the Jicarilla Mountains, Lincoln County, New Mexico: U.S. Geological Survey Bulletin 1308, 25 p.
- Segerstrom, Kenneth, Stotelmeyer, R. B., and Williams, F. E., 1975, Mineral resources of the White Mountains Wilderness and adjacent areas, Lincoln County, New Mexico with a section on aeromagnetic interpretation by L. E. Cordell: U.S. Geological Survey Open-File Report 75-385, 245 p., 19 figs.
- Shantz, Robert, 1977, Mineral processing in New Mexico, in Annual report July 1, 1976 to June 30, 1977: New Mexico Bureau of Mines and Mineral Resources, p. 76-79.
- 1978, Washability tests and heat-content predictions for New Mexico coals: New Mexico Bureau of Mines and Mineral Resources Progress Report PR-10, 16 p.
- Sharp, R. R., Jr., Morris, W. A., and Aamodt, P. L., 1978, 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): U.S. Department of Energy Open-File Report GJBX-69.
- Shawe, D. R., 1966, Arizona-New Mexico and Nevada-Utah beryllium belts, in Geological Survey research 1966: U.S. Geological Survey Professional Paper 550-C, p. 206-213, 3 figs.



## References - Continued

- Shawe, D. R., and Bernold, Stanley, 1966, Beryllium content of volcanic rocks, in Contributions to geochemistry, 1964-1968: U.S. Geological Survey Bulletin 1214-C, 11 p.
- 1967, Arizona-New Mexico and Nevada-Utah beryllium belts [abs.]: Abstracts of North American Geology, January, p. 91.
- Shearer, C. R., Reiter, M. A., and Edwards, C. L., 1975, Terrestrial heat-flow studies in eastern Arizona and western New Mexico [abs.]: American Association of Petroleum Geologists, v. 59, no. 5, p. 923.
- Sheffer, H. W., 1963, An investigation of some germanium occurrences in southwestern New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 68 p.
- Sheppard, S. M. F., Nielsen, R. L., and Taylor, H. P., Jr., 1967a, Hydrogen and oxygen isotope variations in minerals from porphyry copper deposits [abs.]: Economic Geology, v. 62, no. 6, p. 875.
- 1967b, Hydrogen and oxygen isotope variations in minerals from porphyry copper deposits [abs.], in Abstracts for 1966: Geological Society of America Special Paper 115, p. 203.
- 1969, Oxygen and hydrogen isotope ratios of clay minerals from porphyry copper deposits: Economic Geology, v. 64, no. 7, p. 755-777, 9 figs.
- Sheridan, M. J., 1947a, Lincoln County iron deposits, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3988, 19 p., 24 figs.
- 1947b, United States Fluorspar Company property, Sierra County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4017, 15 p., 10 figs.
- Shilling, R. W., 1964, Conversion from rail to truck haulage at the Chino pit: Mining Congress Journal, v. 50, no. 4, p. 29-32, 43.
- Shoemaker, E. M., 1957, Primary structures of maar rims and their bearing on the origin of Kilbourne Hole and Zuni Salt Lake, New Mexico [abs.]: Geological Society of America Bulletin, v. 68, no. 12, p. 1864.
- Short, M. N., and Henderson, E. P., 1926, Tetradymite from Hachita, New Mexico: American Mineralogist, v. 11, no. 11, p. 316-317.

- Shuleski, P. J., 1976a, Seismic fault motion and SV screening by shallow magma bodies in the vicinity of Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Geoscience Department Open-File Report 8, 94 p.
- 1976b, Seismic fault motion and SV waves screening by shallow magma bodies in the vicinity of Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 94 p.
- Shuleski, P. J., Caravella, F. J., Rinehart, E. J., Sanford, A. R., Wallace, T. C., and Ward, R. M., 1977, Seismic studies of shallow magma bodies beneath the Rio Grande Rift in the vicinity of Socorro, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Geoscience Department Open-File Report GI-13, 8 p.
- Sidwell, Raymond, and Warn, G. F., 1951, Pennsylvanian sedimentation in northeastern Socorro County, New Mexico: *Journal of Sedimentary Petrology*, v. 21, no. 1, p. 3-11, 1 fig.
- Siemers, W. T., 1973, Stratigraphy and petrology of Mississippian, Pennsylvanian, and Permian rocks in the Magdalena area, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 133 p., 28 figs.
- 1974, Stratigraphy and petrology of Mississippian, Pennsylvanian, and Permian rocks in the Magdalena area, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-54, 133 p., 28 figs.
- 1975, Stratigraphy of Magdalena Group at type locality in the Magdalena Mountains, west central New Mexico [abs.]: *American Association of Petroleum Geologists Bulletin*, v. 59, no. 5, p. 923.
- 1976, Revision of upper Paleozoic stratigraphy in the Magdalena area, New Mexico [abs.]: *Geological Society of America, Abstracts with Programs*, v. 8, no. 5, p. 629-630.
- 1978, Stratigraphy and petrology of the Pennsylvanian system of the Socorro region, west-central New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished Ph. D. dissertation.
- Siemers, W. T., and Austin, G. S., 1979, Industrial rocks and minerals of New Mexico, in Annual report July 1, 1977, to June 30, 1978: New Mexico Bureau of Mines and Mineral Resources, p. 43-60.

## References - Continued

- Silberman, M. L., Carten, R. B., and Armstrong, A. K., 1974, Geologic and geochemical maps showing distribution and abundance of Cu, Pb, Zn, Ag, Bi, Mo, W, and Ag, central Peloncillo Mountains, Hidalgo County, New Mexico: U.S. Geological Survey Open-File Report 74-112, 5 p.
- Silliman, Benjamin, Jr., 1882a, Geological age of the Lake Valley mines of New Mexico: Engineering Mining Journal, v. 34, p. 214.
- 1882b, The mineral regions of southern New Mexico [abs.]: Engineering Mining Journal, v. 34, p. 199-200, 212-213.
- 1882c, The mineral regions of southern New Mexico: American Institute of Mining Engineers Transactions, v. 10, p. 424-444.
- Silver, B. A., and Wermiel, D. E., 1976, Diagenetic history of Mississippian carbonate rocks, Pedregosa Basin, southeastern Arizona, southwestern New Mexico, northeastern Sonora, and northwestern Chihuahua [abs.]: American Association of Petroleum Geologists Bulletin, v. 60, no. 4, p. 723.
- Silver, Caswell, 1948, Jurassic overlap in western New Mexico: American Association of Petroleum Geologists Bulletin, v. 32, no. 1, p. 68-81, 4 figs.
- 1955, Geology of the Caballo Mountains, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 146-154.
- Silverman, A. N., 1975, Geochemical and biochemical studies in the Hansonburg mining district, New Mexico: University of Missouri, Rolla, unpublished M.S. thesis, 70 p., 22 figs.
- Simon, D. B., 1973a, Geology of the Silver Hill area, Socorro County: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 101 p., 18 figs.
- 1973b, Geology of the Silver Hill area, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-41, 101 p., 18 figs.
- Simons, E. L., and Alexander, N. L., 1964, Age of the Shasta ground sloth from Aden Crater, New Mexico: American Antiquity, v. 29, no. 3, p. 390-391.

References - Continued

- Simpson, J. W., and Strangway, P. W., 1970, Stratigraphy in volcanic rocks of the Mogollon Plateau by K-Ar dating and paleomagnetism [abs.]: American Geophysical Union (EOS) Transactions, v. 51, no. 4, p. 271.
- Singh, Surendra, 1970, Statistical analysis of microearthquakes of the Socorro region, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished Ph. D. dissertation, 156 p., 30 figs.
- Skinner, J. W., and Wilde, G. L., 1965a, Lower Permian (Wolfcampian) fusulinids from the Big Hatchet Mountains, southwestern New Mexico: Cushman Foundation, Ithaca, N.Y., Foraminiferal Research Contributions, v. 16, pt. 3, no. 301, p. 95-104.
- 1965b, Lower Permian (Wolfcampian) fusulinids from the Big Hatchet Mountains, southwestern New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 7, no. 7-5641, p. 39.
- Slichter, C. S., 1905, Observations on the ground waters of the Rio Grande Valley: U.S. Geological Survey Water-Supply Paper 141, 83 p.
- Slingerland, Carl, 1970, New Mexico state water plan, in Water--there is no substitute: 15th Annual New Mexico Water Conference Proceedings, Las Cruces, p. 101-103.
- Sloan, C. E., and Garber, M. S., 1971, Ground-water hydrology of the Mescalero Apache Indian Reservation, south-central New Mexico: U.S. Geological Survey Hydrologic Investigations Atlas HA-349.
- Smith, Christian, 1977, On the electrical evaluation of three southern New Mexico geothermal areas: University of New Mexico, Albuquerque, unpublished M.S. thesis, 113 p.
- 1978, Geophysics, geology, and geothermal leasing status of the Lightning Dock KGRA, Animas Valley, New Mexico, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 343-348.
- Smith, C. H., 1946, Further remarks on the Puente-Ladron, New Mexico, aerolite: Popular Astronomy, v. 54, no. 4, p. 193-195.
- 1947, Further remarks on the Puente-Ladron, New Mexico, aerolite: Society of Research on Meteorites, Los Angeles, California, Contributions for 1946, v. 3, no. 5, p. 253-254.

## References - Continued

- Smith, Cloyd H., 1968, Flow resistance in plane-bed alluvial channels: Colorado State University, Fort Collins, unpublished M.S. thesis, 70 p., 18 figs.
- Smith, C. T., 1959, Jurassic rocks of the Zuni Mountains, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 74-80.
- 1963a, Field trip 5, Socorro Peak and Socorro Mountains, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 66-68.
- 1963b, Preliminary notes on the geology of part of the Socorro Mountains, Socorro County, New Mexico, in Guidebook to the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 185-196.
- 1964a, Geologic map of the Little Black Peak quadrangle, Socorro and Lincoln Counties, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, in pocket.
- 1964b, Geology of the Little Black Peak quadrangle, Socorro and Lincoln Counties, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 92-99.
- 1964c, Reconnaissance geology of the Little Black Peak quadrangle, Lincoln and Socorro Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 75, 8 p.
- Smith, C. T., and Budding, A. J., 1959, Geologic map of Little Black Peak quadrangle, east half, Lincoln and Socorro Counties: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-11.
- Smith, E. I., 1967, Criteria for the determination of flow direction in volcanic rocks: University of New Mexico, Albuquerque, unpublished M.S. thesis, 117 p.
- 1970, A comparison of selected lunar and terrestrial volcanic domes: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 334 p.
- 1971, A comparison of selected lunar and terrestrial volcanic domes [abs.]: Dissertation Abstracts International, v. 31, no. 11, p. 6698B-6699B.



## References - Continued

- Smith, E. I., 1972, Volcanic geology of the mid-Miocene John Kerr Peak dome complex, southwestern New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 6, p. 411-412.
- 1976, Structure and petrology of the John Kerr Peak dome complex, southwestern New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 71-78.
- Smith, E. I., Aldrich, M. J., Jr., Deal, E. G., and Rhodes, R. C., 1976, Fission-track ages of Tertiary volcanic and plutonic rocks, Mogollon Plateau, southwestern New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 117-118.
- Smith, E. I., and Elston, W. E., 1968, Determination of flow direction of rhyolitic ash-flow tuffs and andesitic lavas from fluidal textures [abs.], in Abstracts for 1967: Geological Society of America Special Paper 115, p. 207.
- Smith, E. I., and Rhodes, R. C., 1971, The Mule Creek caldera, a recently discovered felsic volcanic center in southwestern New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 3, no. 2, p. 196.
- 1972, Flow direction determination of lava flows: Geological Society of America Bulletin, v. 83, no. 6, p. 1869-1874, 4 figs.
- 1974, Squirrel Springs volcano-tectonic depression; a buried cauldron in southwestern New Mexico: Geological Society of America Bulletin, v. 85, no. 12, p. 1865-1868, 4 figs.
- Smith, H. L., 1956, Cretaceous stratigraphy of Carrizo drainage basin, Apache County, Arizona, and Catron and Valencia Counties, New Mexico: University of Texas, Austin, unpublished M.A. thesis.
- Smith, T. E., 1951a, A prospector in the Magdalenas: New Mexico Magazine, v. 29, no. 5, p. 16-17, 41-45.
- 1951b, A prospector in the Magdalenas: New Mexico Magazine, v. 29, no. 6, p. 16-17, 37, 39-40.
- 1951c, A prospector in the Magdalenas: New Mexico Magazine, v. 29, no. 7, p. 27, 49, 51.

References - Continued

- Smith, T. E., 1951d, A prospector in the Magdalenas: New Mexico Magazine, v. 29, no. 10, p. 27, 45, 47, 49.
- 1951e, A prospector in the Magdalenas: New Mexico Magazine, v. 29, no. 11, p. 23, 43, 45-47.
- 1951f, A study in geology--a short geologic history of the Magdalena Mountains: New Mexico Miner and Prospector, v. 13, no. 3, p. 14-15.
- 1951g, A study in geology--a short geologic history of the Magdalena Mountains: New Mexico Miner and Prospector, v. 13, no. 4, p. 14.
- 1951h, A study in geology--a short geologic history of the Magdalena Mountains: New Mexico Miner and Prospector, v. 13, no. 5, p. 14-15.
- Smithson, S. B., and Decker, E. R., 1972, Heat flow and gravity studies across the Rio Grande Rift in southern New Mexico and western Texas [abs.]: American Geophysical Union (EOS) Transactions, v. 53, no. 4, p. 516.
- Smythe, D. D., 1921a, A contact-metamorphic iron-ore deposit near Fairview, New Mexico: Economic Geology, v. 16, p. 410-418.
- 1921b, The iron ore deposits of Iron Mountain, Socorro County, New Mexico: Cornell University, Ithaca, N.Y., unpublished M.S. thesis.
- Snell, C. C., 1953, The Hanover mine--milling and service: Mining Engineer, v. 5, no. 12, p. 1230-1232, 1 fig.
- Snow, C. H., 1891, Turquoise in southwestern New Mexico: American Journal of Science, 3rd series, v. 41, p. 511-512.
- 1893, Copper crystallization at the Copper Glance and Potosi mines, Grant County, New Mexico: American Institute of Mining Engineers Transactions, v. 21, p. 308-313.
- Snyder, D. O., 1970, Fossil evidence of Eocene age of Baca Formation, New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 65-67.
- 1971, Stratigraphic analysis of the Baca Formation, west-central New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 160 p., [1972].

References - Continued

- Snyder, D. O., 1972, Stratigraphic analysis of the Baca Formation, west-central New Mexico [abs.]: Dissertation Abstracts International, v. 32, no. 11, p. 6479B.
- Somers, R. E., 1915a, Geology of the Burro Mountains copper district, New Mexico: Cornell University, Ithaca, N.Y., unpublished Ph. D. dissertation.
- 1915b, Geology of the Burro Mountains copper district, New Mexico (with discussion): American Institute of Mining Engineers Bulletin, v. 101, p. 957, 996.
- 1916, Geology of the Burro Mountains copper district, New Mexico (with discussion): American Institute of Mining Engineers Transactions, v. 52, p. 604-644.
- Sorensen, E. 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 Technical Report 41, 34 p., 4 figs.
- Sorensen, E. F., and Borton, R. L., 1967a, Central closed basins--settlement, development, and water use, in Water resources of New Mexico--occurrence, development, and use: New Mexico State Planning Office, p. 198-210.
- 1967b, Western closed basins--settlement, development, and water use, in Water resources of New Mexico--occurrence, development, and use: New Mexico State Planning Office, p. 179-182.
- Sorensen, E. F., and Linford, Dee, 1967, Rio Grande Basin--settlement development, and water use, in Water resources of New Mexico: New Mexico State Planning Office, p. 143-168.
- Sorensen, E. F., Stotelmeyer, R. B., and Baker, D. H., Jr., 1973, Mineral resources and water requirements for New Mexico minerals industries: New Mexico Bureau of Mines and Mineral Resources Circular 138, 26 p., 1 fig.
- Sorenson, J. B., and Greenfield, R. L., 1977, "New Mexican Nationalism" and the evolution of energy policy in New Mexico: University of New Mexico, Albuquerque, Law School, Natural Resources Journal, v. 17, no. 2, p. 283-300.
- Sota Vargas, M. F., 1963, Study of the effects on dissolved content of ground water due to phreatophytes: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 72 p.

- Soule, J. H., 1946a, Exploration of Gallinas fluorspar deposits, Lincoln County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3854, 25 p.
- 1946b, Exploration of the White Eagle fluorspar mine, Cooks Peak mining district, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3903, 5 p.
- 1947a, Capitan iron deposits, Lincoln County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4022, 8 p.
- 1947b, Peerless lead-zinc mine, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4044, 8 p.
- 1948a, Silver Spot manganese-iron-zinc deposits, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4217, 5 p.
- 1948b, West Pinos Altos zinc-lead deposits, Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4237, 8 p.
- 1949, Investigation of Capitan iron deposits, Lincoln County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4514, 5 p.
- 1950, Investigation of the Royal John lead-zinc deposits Grant County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4748, 8 p.
- 1951, Investigation of the Torpedo copper deposit, Organ mining district, Dona Ana County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4791, 10 p.
- 1952, Diamond drilling at Torpedo copper mine, Organ mining district, Dona Ana County, New Mexico: U.S. Bureau of Mines Report of Investigations 4860, 21 p., 4 figs.
- 1956, Reconnaissance of the "red bed" copper deposits in southeastern Colorado and New Mexico: U.S. Bureau of Mines Information Circular 7740, 74 p.
- Soule, J. M., 1971, Structural geology of the northern Animas Mountains, Hidalgo County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 47 p. [1972].
- 1972, Structural geology of northern part of Animas Mountains, Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 125, 15 p.

References - Continued

- Spector, I. H., and Brown, D. F., 1951, Simple field tests for beryl (test no. 1): Precambrian Journal, Winnipeg, Manitoba, Canada, v. 24, no. 5, p. 13 and 15.
- 1952, Simple field tests for beryl: New Mexico Miner, v. 14, no. 5, p. 5 and 30.
- Spencer, A. C., and Paige, Sidney, 1935, Geology of the Santa Rita mining area, New Mexico: U.S. Geological Survey Bulletin 859, 78 p.
- Spiegel, Z. E., 1955, Geology and ground-water resources of northeastern Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Ground-Water Report 4, 99 p.
- 1956a, Progress report on the hydrology of the Lewis Flats-Eastern Extension area, Luna County, New Mexico: New Mexico State Engineer Open-File Report, 31 p.
- 1956b, Relation of ground water to stream flow in New Mexico in late Cenozoic time [abs.]: Geological Society of America Bulletin, v. 67, no. 12, pt. 2, p. 1801-1802.
- 1957, Full development of water resources in New Mexico and Arizona [abs.]: American Geophysical Union Transactions, v. 38, no. 3, p. 419-420.
- 1958a, Preliminary proposal for coordinated development of surface and ground water in the Tularosa area, Otero County, New Mexico: New Mexico State Engineer Open-File Report, 4 p.
- 1958b, Report of investigation of the geology and hydrology of T. 27 S., R. 8 W., Luna County, New Mexico: New Mexico State Engineer Open-File Report, 5 p.
- 1970, Cenozoic geology of the Rio Grande depression in northwestern Sierra County, New Mexico [abs.], in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 161-162.
- Spillsbury, E. G., 1909, Revival of mining in the Mogollons, New Mexico: South-Western Mines, v. 1, no. 11, p. 1-2.
- Spradlin, E. J., 1975, Geologic map and sections of the Joyita Hills area, Socorro County, New Mexico (with emphasis on Tertiary volcanic rocks): U.S. Geological Survey Open-File Map 75-139.



References - Continued

- Spradlin, E. J., 1976, Stratigraphy of Tertiary volcanic rocks, Joyita Hills area, Socorro County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 73 p.
- Staatz, M. H., Adams, J. W., and Conklin, N. M., 1965, Thorium-bearing microcline-rich rocks in the southern Caballo Mountains, Sierra County, New Mexico, in Geological Survey Research 1965: U.S. Geological Survey Professional Paper 525-D, p. 48-51, 2 figs.
- Staatz, M. H., and Norton, J. J., 1942, The pre-Cambrian geology of the Los Pinos Range, New Mexico: Northwestern University, Evanston, Illinois, unpublished M.S. thesis, 150 p.
- Stacy, A. L., 1968, Geology of the area around the Langmuir Laboratory, Magdalena Mountains, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 69 p., 2 figs.
- Stainbrook, M. A., 1935, A Devonian fauna from the Sacramento Mountains near Alamogordo, New Mexico: *Journal of Paleontology*, v. 9, no. 8, p. 709-714.
- 1947, Brachiopoda of the Percha shale of New Mexico and Arizona: *Journal of Paleontology*, v. 21, no. 4, p. 297-328.
- 1948, Age and correlation of the Devonian Sly Gap beds near Alamogordo, New Mexico: *American Journal of Science*, v. 246, no. 12, p. 765-790.
- Stark, J. T., and Dapples, E. C., 1941, Structure of the Los Pinos Mountains, New Mexico [abs.]: *Geological Society of America Bulletin*, v. 52, no. 12, pt. 2, p. 1936.
- 1946, Geology of the Los Pinos Mountains, New Mexico: *Geological Society of America Bulletin*, v. 57, no. 12, pt. 1, p. 1121-1172, 1 fig.
- Stark, J. T., Norton, J. J., and Staatz, M. H., 1943, Bedding-slip movement in fault blocks southwest of the Los Pinos Mountains, New Mexico: *Journal of Geology*, v. 51, no. 1, p. 48-55, 5 figs.
- Statz, B. A., 1908, Magdalena mining district: *South-Western Mines*, v. 1, no. 2, p. 1, 3.
- 1909a, Notes on the gold ores of the San Pedro Mountain district, New Mexico: *South-Western Mines*, v. 1, no. 4, p. 1, 6.

References - Continued

- Statz, B. A., 1909b, The Rosedale district, New Mexico: South-Western Mines, v. 1, no. 10, p. 2.
- 1912, Geology of the Magdalena district, New Mexico: Mining Science, v. 66, p. 406-407.
- Stauber, I. J., 1910, Burro Mountain mining district (Grant County): Mines and Minerals, v. 30, p. 380-382.
- Stearns, C. E., 1956, San Augustin Plains--the geologic setting: Science, v. 124, no. 3221, p. 537-539.
- 1959, Plio-Pleistocene sediments and climates of the San Augustine Plains, New Mexico--a discussion, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 120.
- 1962, Geology of the north half of the Pelona quadrangle, Catron County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 78, 46 p.
- Steele, Hugh, 1957, Underground mining-the trends in 1956-Arizona and New Mexico: Mining Engineer, v. 9, no. 2, p. 177-178.
- Steiner, M. B., 1967, Fusulinidae of the Laborcita Formation, Sacramento Mountains, New Mexico: Southern Methodist University, Dallas, Texas, unpublished M.S. thesis, 74 p., 2 figs.
- Steiner, M. B., and Williams, T. E., 1968a, Fusulinidae of the Laborcita Formation (lower Permian), Sacramento Mountains, New Mexico: Journal of Paleontology, v. 42, no. 1, p. 51-60.
- 1968b, Fusulinidae of the Laborcita Formation, (lower Permian), Sacramento Mountains, New Mexico [abs.]: Petroleum Abstracts, v. 8, no. 8, p. 378.
- 1969, Fusulinidae of the Laborcita Formation, (lower Permian), Sacramento Mountains, New Mexico [abs.]: Abstracts of North American Geology, August, p. 1212.
- Stevenson, F. V., 1941, The Devonian Sly Gap Formation of New Mexico [abs.]: Oil and Gas Journal, v. 39, no. 47, p. 65.
- 1943a, Onondagan equivalent in New Mexico: American Association of Petroleum Geologists Bulletin, v. 27, no. 2, p. 222-223.
- 1943b, Review of Pennsylvanian system in New Mexico by M. L. Thompson: Journal of Geology, v. 51, no. 3, p. 214.

References - Continued

- Stevenson, F. V., 1944, Devonian of New Mexico [abs.]: Dallas Digest, Program of 29th Annual Meeting, American Association of Petroleum Geologists, v. 94-95.
- 1945, Devonian of New Mexico: Journal of Geology, v. 53, no. 4, p. 217-245, 16 figs.
- Stevenson, R. G., Jr., 1950, A study of the La Lande, New Mexico, Yonozu, Japan, and Glorieta Mountain, New Mexico, meteorites: University of New Mexico, Albuquerque, unpublished M.S. thesis, 45 p.
- Stewart, W. J., 1966, New species of the fusulinid genus Thompsonella and a proposed change in wall terminology: Journal of Paleontology, v. 40, no. 2, p. 354-358.
- 1970, Fusulinids of the Joyita Hills, Socorro County, central New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 23, part II, p. 33-82, 1 fig.
- Stinnett, J. W., Jr., 1976, A strontium isotopic and geochemical study of volcanic rocks from the Datil-Mogollon field, southwestern New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 8.
- Stock, Chester, 1930, Quaternary antelope remains from a second cave deposit in the Organ Mountains, New Mexico: Los Angeles, California Museum Publication 2, 18 p., 3 figs.
- Stockton, C. W., 1975, Long-term stream flow records reconstructed from tree rings: University of Arizona, Tucson, Tree Ring Research Paper 5, 111 p.
- Stone, G. H., 1901, Note on the extinct glaciers of Arizona and New Mexico: Science, v. 14, p. 798.
- Stone, W. J., 1973, The hydrometeorological ground truth facility at White Sands Missile Range, New Mexico: U.S. Army Electronics Commission Technical Report 5513, 34 p.
- Stone, W. J., and Brown, D. R., 1975, Rainfall-runoff relationships for a small semiarid watershed, western flank San Andres Mountains, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 205-212.
- Stone, W. J., and Mizell, N. H., 1977, Geothermal resources of New Mexico--a survey of work to date: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-73, 117 p., 17 figs.

References - Continued

- Storms, W. R., 1947a, Iron Mountain beryllium deposits, Sierra and Socorro Counties, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4024, 13 p., 12 figs.
- 1947b, Iron Mountain tungsten deposits, Sierra County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4035, 5 p., 7 figs.
- 1949a, Mining methods and costs at the Atlas No. 2 zinc-lead mine, west Pinos Altos mining district, Grant County, New Mexico: U.S. Bureau of Mines Information Circular IC 7524, 11 p., 7 figs.
- 1949b, Mining methods and costs at the Atwood copper mine, Lordsburg mining district, Hidalgo County, New Mexico: U.S. Bureau of Mines Information Circular IC 7502, 11 p., 5 figs.
- Storms, W. R., and Faust, J. W., 1949, Mining methods and costs at the Kearney zinc-lead mine, Central mining district, Grant County, New Mexico: U.S. Bureau of Mines Information Circular IC 7507, 11 p., 9 figs.
- Stow, J. M., 1962, Quality of ground-water--changes and problems, in Ground water: New Mexico 6th Annual Water Conference Proceedings, Las Cruces, p. 56-69.
- Strain, W. S., 1965, Early Pleistocene history of southern part of Mesilla Bolson [abs.], in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 243.
- 1968a, Cenozoic rocks in the Mesilla and Hueco Bolsons, in Delaware Basin exploration: West Texas Geological Society Publication 68-55, p. 83-84.
- 1968b, Late Cenozoic strata of the El Paso area [abs.], in Guidebook of the general geology of the Franklin Mountains, El Paso County, Texas: El Paso Geological Society and Society of Economic Paleontologists and Mineralogists, Permian Basin Section, Joint Field Conference, p. 28.
- 1969a, Late Cenozoic strata of the El Paso area, in Border stratigraphy symposium: New Mexico Bureau of Mines and Mineral Resources Circular 104, p. 122-123.
- 1969b, Pleistocene history of the Rio Grande near El Paso, Texas, [abs.], in Abstracts for 1968: Geological Society of America Special Paper 121, p. 413.

References - Continued

- Strain, W. S., 1973, Pleistocene sedimentary rocks in the Mesilla Bolson, in Guidebook to the geology of southcentral Dona Ana County, New Mexico: El Paso Geological Society, 7th Field Conference, p. 33-35.
- Strangway, D. W., Simpson, J., and York, D., 1976, Paleomagnetic studies of volcanic rocks from the Mogollon Plateau area of Arizona and New Mexico, in Cenozoic volcanism in southwestern New Mexico: New Mexico Geological Society Special Publication 5, p. 119-124.
- Strock, L. W., 1941, A new helvite locality, a possible beryllium deposit (New Mexico): Economic Geology, v. 36, no. 7, p. 748-751.
- 1944, Ores for the future and use of the spectrograph in seeking them (exemplified by beryllium discovery at Iron Mountain, New Mexico) [abs.]: Geological Society of America Bulletin, v. 55, no. 12, p. 1483.
- Strongin, Oscar, 1953, Reconnaissance of the geology and ore deposits of the Apache Hills and Sierra Rica, New Mexico: Columbia University, New York, unpublished M.A. thesis, 38 p., 3 figs.
- 1957, Geology and ore deposits of Apache Hills and northern Sierra Rica, Hidalgo County, New Mexico: Columbia University, New York, unpublished Ph. D. dissertation, 221 p.
- 1958, Geology and ore deposits of Apache Hills and northern Sierra Rica, Hidalgo County, New Mexico [abs.]: Dissertation Abstracts International, v. 19, no. 2, p. 301.
- Stubbs, M. F., and Weber, R. H., 1954, Raw materials for chemical industry in New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 25, 7 p. [reprint].
- Stucky, H. R., 1971, Economy aspects of desalting application-Tularosa Basin, New Mexico: Water Resources Bulletin, v. 7, no. 5, p. 913-919, 2 figs.
- Stucky, H. R., Arwine, W. C., O'Meara, J. W., Strobel, J. J., and Sachs, M. S., 1971, Potentials for desalting in the Tularosa Basin, New Mexico--a case study: U.S. Office of Saline Water Research and Development Progress Report 776, 83 p., 9 figs.
- Stucky, H. R., Lansford, R. R., and Creel, B. J., 1971, Citizens' Conferences on Water--1971: a consideration of the pressing water problems of New Mexico--with citizens' recommendations: Water Resources Research Institute Report 11, 126 p., 32 figs.



- Sturgul, J. R., and Irwin, T. D., 1970, Earthquake history of Arizona and New Mexico, 1850-1966 [abs.]: Arizona Academy of Science Journal Proceedings Supplement, v. 6, p. 67.
- 1971, Earthquake history of Arizona and New Mexico, 1850-1956: Arizona Geological Society Digest, v. 9, p. 1-37.
- Summers, W. K., 1965a, Chemical characteristics of New Mexico's thermal waters--a critique: New Mexico Bureau of Mines and Mineral Resources Circular 83, 27 p., 9 figs.
- 1965b, A preliminary report on New Mexico's geothermal energy resources: New Mexico Bureau of Mines and Mineral Resources Circular 80, 41 p., 1 fig.
- 1966a, The hydrological significance of the Animas Valley hot spot, Hidalgo County, New Mexico [abs.]: New Mexico Academy of Science Bulletin, v. 8, no. 1, p. 24.
- 1966b, The sodium-ion concentration in New Mexico's thermal water [abs.]: New Mexico Academy of Science Bulletin, v. 7, no. 1, p. 27.
- 1967a, A comparison of long-term and short-term pumping tests (Animas Valley, Hidalgo County): Ground Water, v. 5, no. 3, p. 33-34.
- 1967b, A comparison of long-term and short-term pumping tests (Animas Valley, Hidalgo County) [abs.]: Petroleum Abstracts, v. 7, no. 34, p. 2300.
- 1968, Geothermics--New Mexico's untapped resources: New Mexico Bureau of Mines and Mineral Resources Circular 98, 9 p.
- 1969a, Geological survey of thermal ground waters in New Mexico [abs.]: Geological Society of America, Abstracts with Programs, pt. 5, p. 79.
- 1969b, Geological survey of thermal ground waters in New Mexico [abs.]: Petroleum Abstracts, v. 9, no. 18, p. 1167.
- 1969c, The hydrologic significance of the Animas Valley hot spot, Hidalgo County, New Mexico [abs.], in Abstracts for 1968: Geological Society of America Special Paper 121, p. 567.
- 1970, The role of the hydrological cycle in the formation of the White Sands of the Tularosa Basin, New Mexico: New Mexico Water Resources Research Institute, Technical Completion Report, Project B-013, 8 p.

## References - Continued

- Summers, W. K., compiler, 1972, Geothermal resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources Resource Map RM-1.
- 1975, New Mexico thermal waters, in Proceedings 20th annual New Mexico water conference: Water Resources Research Institute Report 053, p. 92-113.
- 1976, Catalog of thermal waters in New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 4, 80 p.
- Summers, W. K., and Brandvold, L. A., 1967, Physical and chemical variations in the discharge of a flowing well: Ground Water, v. 5, no. 1, p. 9-10, 1 fig.
- Summers, W. K., and Schwab, G. E., 1970, A survey of saline ground waters as a mineral resource, in Saline water: American Association for the Advancement of Science Committee on Desert and Arid Zones Research, Southwestern and Rocky Mountain Divisions, Contribution 13, p. 31-45.
- Summers, W. K., Schwab, G. E., and Brandvold, L. A., 1972, Ground-water characteristics in a recharge area Magdalena Mountains, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 124, 18 p.
- Sun, M.-S., 1957, Minerals of the Hansonburg mining district, Socorro County, New Mexico: Rocks and Minerals, v. 32, no. 11-12, p. 563-564.
- 1962, Tridymite (low form) in some opal of New Mexico [abs.], in Guidebook of the Mogollon Rim region, east-central Arizona: New Mexico Geological Society, 13th Field Conference, p. 174-175.
- 1963, Chrysocolla of New Mexico and adjacent areas [abs.], in Abstracts for 1962: Geological Society of America Special Paper 73, p. 68-69.
- Sun, M.-S., and Weber, R. H., 1957, Santafeite, a new hydrated vanadate from New Mexico [abs.]: Geological Society of America Bulletin, v. 68, no. 12, pt. 2, p. 1802.
- 1958a, Santafeite, a new hydrated vanadate from New Mexico: American Mineralogist, v. 43, no. 7-8, p. 677-687, 2 figs.
- 1958b, Santafeite, a new hydrated vanadate from New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 6, no. 3, p. 15.

References - Continued

- Sur, F. J., 1946, Exploration of Bishop Cap fluorspar project, Dona Ana County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 3946, 7 p., 6 figs.
- 1947, Huckleberry spar mine, Catron County, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4053, 11 p., 5 figs.
- Swanberg, C. A., 1975a, Application of chemical geothermometers to thermal waters of southwest New Mexico and west Texas [abs.]: American Association of Petroleum Geologists Bulletin, v. 59, no. 5, p. 924.
- 1975b, Detection of geothermal components in groundwaters of Dona Ana County, southern Rio Grande Rift, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 175-180.
- 1975c, Geochemical studies of two geothermal areas in New Mexico [abs.]: American Geophysical Union (EOS) Transactions, v. 56, no. 12, p. 1073.
- 1978, Chemistry, origin, and potential of geothermal resources in southwestern New Mexico and southeastern Arizona, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 349-352.
- Sykes, R. E., 1954, Seismic survey for determining geological control of ground water of northwestern Jornada del Muerto, T. 4 S., R. 3 E., Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 19 p., 7 figs.
- Tabet, D. E., 1979, Geology of northern Jornada del Muerto coal field, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 168 [in press].
- Tabet, D. E., and Frost, S. J., 1978, Coal fields and mines of New Mexico: New Mexico Bureau of Mines and Mineral Resources Resource Map 10.
- Tabet, D. E., Inglis, M. H., Morain, S. A., Love, L. L., and Feldman, S. C., 1976, Analysis of LANDSAT-B imagery as a tool for evaluating, developing, and managing the natural resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources and NASA Earth Resources Survey Program, 111 p.

References - Continued

- Tabet, D. E., Kottowski, F. E., Inglis, M. H., Love, L. L., and Morain, S. A., 1975, Earth resources evaluation for New Mexico by LANDSAT-2: New Mexico Bureau of Mines and Mineral Resources and NASA Earth Resources Survey Program, 6 p.
- Taft, H. H., 1936, Magnesite in Dona Ana County, New Mexico: Engineering Mining Journal, v. 137, no. 3, p. 137, 1 fig.
- Talmage, S. B., 1932a, Origin of the gypsum sands of Tularosa Valley [abs.]: Geological Society of America Bulletin, v. 43, no. 1, p. 185-186.
- 1932b, Origin of the gypsum sands of Tularosa Valley [abs.]: Pan-American Geologist, v. 57, no. 3, p. 233-234.
- 1933, Source and growth of the white sands of New Mexico [abs.]: Pan-American Geologist, v. 60, no. 4, p. 304.
- 1934, Scarps in Tularosa Valley, New Mexico: Science, new series, v. 79, no. 1043, p. 181-183.
- 1935, Folding of Chupadera beds near Lincoln, New Mexico [abs.]: Pan-American Geologist, v. 64, no. 2, p. 153-154.
- Talmage, S. B., and Wootton, T. P., 1937, The non-metallic mineral resources of New Mexico and their economic features (exclusive of fuels): New Mexico Bureau of Mines and Mineral Resources Bulletin 12, 159 p.
- Tanner, H. A., 1925, Preliminary report on water resources in Silver City, New Mexico: U.S. Geological Survey Open-File Report, 40 p.
- Taylor, A. M., 1967, Geohydrology investigations in the Mesilla Valley, New Mexico: New Mexico State University, Las Cruces, unpublished M.S. thesis, 130 p., 5 figs.
- Texas Water Rights Commission, 1970a, Water resources of the upper Rio Grande Basin: Austin and University of Texas at El Paso, 286 p.
- 1970b, Water resources of the upper Rio Grande Basin appendix: Austin and University of Texas at El Paso, 286 p.
- Theis, C. V., 1938, Progress report on the ground-water supply of the Mimbres Valley, New Mexico, in 12th and 13th biennial report, 1934-38: New Mexico State Engineer, p. 135-153.
- 1939, Progress report on the ground-water supply of the Mimbres Valley, New Mexico: New Mexico State Engineer Bulletin 3, 19 p.

References - Continued

- Theis, C. V., 1942a, Ground-water supplies in the vicinity of Fort Bayard, New Mexico: U.S. Geological Survey Open-File Report, 6 p.
- 1942b, Ground-water supplies near Las Cruces, New Mexico: U.S. Geological Survey Open-File Report, 5 p.
- 1942c, Memorandum no. 2 on ground-water supplies in the vicinity of Fort Bayard, New Mexico: U.S. Geological Survey Open-File Report, 5 p.
- 1946, Ground-water conditions near Lordsburg, New Mexico, 1942, in 16th and 17th biennial report, 1942-46: New Mexico State Engineer, p. 289-291.
- Theis, C. V., Taylor, G. C., Jr., and Murray, C. R., 1941, Thermal waters of the Hot Springs artesian basin, Sierra County, New Mexico, in 14th and 15th biennial report, 1938-42: New Mexico State Engineer, p. 419-492.
- Thomas, C. M., 1964, Origin of pisolites in Guadalupe Mountains, southern New Mexico and west Texas: Texas Technical University, Lubbock, unpublished M.S. thesis, 116 p., 61 figs.
- 1965, Origin of pisolites [abs.]: American Association of Petroleum Geologists Bulletin, v. 49, no. 4, p. 360.
- Thomas, H. E., 1963a, General summary of effects of the drought in the southwest, in Drought in the southwest, 1942-1956: U.S. Geological Survey Professional Paper 372-H, 22 p.
- 1963b, The meteorological phenomenon of drought in the southwest, in Drought in the southwest, 1942-1956: U.S. Geological Survey Professional Paper 372-A, 43 p.
- Thomas, H. E., and others, 1963, Effects of drought in the Rio Grande Basin, in Drought in the southwest, 1942-1956: U.S. Geological Survey Professional Paper 372-D, 59 p.
- Thompson, A. J., 1969, Plan for aiding exploration and development of New Mexico's mineral resources, in Exploration for mineral resources: New Mexico State Bureau of Mines and Mineral Resources Circular 101, p. 112-113.
- Thompson, M. L., 1942, Pennsylvanian system in New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 17, 92 p.



References - Continued

- Thompson, M. L., and Kottowski, F. E., 1955, Pennsylvanian and lower Marine Permian stratigraphy of south-central New Mexico, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 71-76.
- Thompson, Sam, III, 1955a, Geology of the Fra Cristobal Range, in Guidebook of south-central New Mexico: New Mexico Geological Society, 6th Field Conference, p. 155-157.
- 1955b, Geology of the southern part of the Fra Cristobal Range, Sierra County, New Mexico: University of New Mexico, Albuquerque, unpublished M.S. thesis, 75 p.
- 1961, Geology of the southern part of the Fra Cristobal Range, Sierra County, New Mexico [abs.], in Guidebook of the Albuquerque country: New Mexico Geological Society, 12th Field Conference, p. 199.
- Thompson, Sam, III, and Bieberman, R. A., 1975, Oil and gas exploration wells in Dona Ana County, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 171-174.
- Thompson, Sam, III, Behnken, F. H., Budding, A. J., Broadhead, R. F., Cernock, P. J., Bayliss, G. S., Ewing, R. C., Elston, W. E., and Erb, E. E., 1977, Geology, petroleum source rocks, and thermal metamorphism in KCM No. 1 Forest Federal well, Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 152, 62 p.
- Thompson, Sam, III, Tovar R., J. C., and Conley, J. N., 1978, Oil and gas exploration wells in the Pedregosa Basin, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 331-342.
- Thompson, T. B., 1964, A stratigraphic section of the Sierra Blanca volcanics in the Nogal Peak area, Lincoln County, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 76-78.
- 1966a, Geology of the Sierra Blanca, Lincoln and Otero Counties, New Mexico: University of New Mexico, Albuquerque, unpublished Ph. D. dissertation, 146 p., 28 figs.
- 1966b, Geology of the Sierra Blanca, Lincoln and Otero Counties, New Mexico [abs.]: Dissertation Abstracts International, section B, v. 27, no. 6, p. 1994-B.

## References - Continued

- Thompson, T. B., 1966c, Geology of the Sierra Blanca, Lincoln and Otero Counties, New Mexico [abs.]: Petroleum Abstracts, v. 7, no. 15, p. 968.
- 1968, Hydrothermal alteration and mineralization of the Rialto stock, Lincoln County, New Mexico: Economic Geology, v. 63, p. 943-949, 8 figs.
- 1972, Sierra Blanca igneous complex, New Mexico: Geological Society of America Bulletin, v. 83, no. 8, p. 2341-2356, 7 figs.
- 1973a, Mineral deposits of Nogal and Bonito mining districts, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 123, 30 p.
- 1973b, Sierra Blanca igneous complex, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 6, p. 520.
- 1974, Geology and mineral deposits--Sierra Blanca igneous complex [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 379-380.
- Thorman, C. H., 1977, Geologic map of parts of the Coyote Peak and Brockman quadrangles, Hidalgo and Grant Counties, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-924.
- Thorman, C. H., and Drewes, Harald, 1978a, Cretaceous-early Tertiary history of the northern Pyramid Mountains, southwestern New Mexico, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 215-218.
- 1978b, Geologic map of the Gary and Lordsburg quadrangles, Hidalgo County, New Mexico: U.S. Geological Survey Miscellaneous Investigations Map, [in press].
- Thorne, H. A., 1930, Mining practice at the Chino mines, Nevada Consolidated Copper Company, Santa Rita, New Mexico, in Mining and engineering methods and costs of the Hanover Bessemer Iron and Copper Company, Fierro, New Mexico: U.S. Bureau of Mines Information Circular IC 6361, p. 2-5.
- 1931, Mining practice at the Chino mines, Nevada Consolidated Copper Company, Santa Rita, New Mexico: U.S. Bureau of Mines Information Circular IC 6412, 28 p., 14 figs.

References - Continued

- Thornthwaite, C. W., 1948, An approach toward a rational classification of climate: Geological Review, v. 38, no. 1, p. 55-94.
- Tight, W. G., 1905, Bolson plains of the southwest: American Geologist, v. 36, p. 271-284.
- Titley, S. R., 1958, Silication as an ore control, Linchburg mine, Socorro County, New Mexico: University of Arizona, Tucson, unpublished Ph. D. dissertation, 153 p.
- 1959, Geological summary of the Magdalena mining district, Socorro County, New Mexico, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 144-148.
- 1961a, Genesis and control of the Linchburg orebody, Socorro County, New Mexico: Economic Geology, v. 56, no. 4, p. 695-722.
- 1961b, Genesis and control of the Linchburg orebody, Socorro County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 3, no. 3866, p. 56.
- Titus, F. B., Jr., 1960, Summary of test drilling, Gran Quivira National Monument, Socorro County, New Mexico: U.S. Geological Survey Open-File Report, 12 p.
- 1967, Central closed basins--geography, geology, and hydrology, in Water resources of New Mexico: New Mexico State Planning Office, Santa Fe, p. 97-111.
- Todd, V. R., Silberman, M. L., and Armstrong, A. K., 1975, Geochemistry petrology, and K-Ar ages of igneous rocks in the central Peloncillo Mountains, Hidalgo County, New Mexico [abs.], in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 343-344.
- Tonking, W. H., 1953, Geology of the Puertecito quadrangle, Socorro County, New Mexico: Princeton University, New Jersey, unpublished Ph. D. dissertation.
- 1957, Geology of Puertecito quadrangle, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 41, 67 p.
- Toomey, D. F., and Wilson, J. L., 1977, Stop "C-1" Yucca Mound, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 167-168.

References - Continued

- Toomey, D. F., Wilson, J. L., and Rezak, Richard, 1977, Growth history of a late Pennsylvanian phylloid algal organic buildup, northern Sacramento Mountains, New Mexico, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 8-26.
- Toppozada, T. M. R., 1974, Seismic investigation of crustal structure and upper mantle velocity in the state of New Mexico and vicinity: New Mexico Institute of Mining and Technology, Socorro, unpublished Ph. D. dissertation, 152 p., 37 figs.
- Toppozada, T. M. R., and Sanford, A. R., 1972, Instrumental study of New Mexico earthquakes, January 1968 through June 1971: New Mexico Bureau of Mines and Mineral Resources Circular 126, 6 p.
- 1973, Crustal structure in central New Mexico [abs.]: American Geophysical Union (EOS) Transactions, v. 54, no. 11, p. 1141.
- Tovote, W. L., 1919, The copper industry of the southwest: Mines Magazine, v. 20, no. 5, p. 267-275, 339-350, 6 figs.
- Towle, J. N., and Fitterman, D. V., 1975, Geomagnetic variations at Kilbourne Hole, New Mexico, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 281-282.
- Trauger, F. D., 1960, Availability of ground water at proposed well sites in Gila National Forest, Sierra and Catron Counties, New Mexico: New Mexico State Engineer Technical Report 18, 20 p., 2 figs.
- 1961, Availability of ground water at proposed well sites in Gila National Forest, Sierra and Catron Counties, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 3, no. 3-2757, p. 60.
- 1963, Geology and availability of ground water in the vicinity of Gila Cliff Dwellings National Monument, Catron County, New Mexico: U.S. Geological Survey Open-File Report, 24 p., 7 figs.
- 1964, Ground water in relation to the economy and geology of Grant County, New Mexico [abs.], in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 188-189.

References - Continued

- Trauger, F. D., 1965, Geologic structure pattern of Grant County, New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 184-187.
- 1972, Water resources and general geology of Grant County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 2, 211 p., 50 figs.
- Trauger, F. D., and Doty, G. C., 1965, Ground water--its occurrence and relation to the economy and geology of southwestern New Mexico, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 215-227, 2 figs.
- Trauger, F. D., and Herrick, E. H., 1959, Ground water in the central Hachita Valley, northeast of the Big Hatchet Mountains, Hidalgo County, New Mexico: U.S. Geological Survey Open-File Report, 33 p., 3 figs.
- 1962a, Ground water in central Hachita Valley northeast of the Big Hatchet Mountains, Hidalgo County, New Mexico: New Mexico State Engineer Technical Report 26, 21 p., 2 figs.
- 1962b, Ground water in central Hachita Valley northeast of the Big Hatchet Mountains, Hidalgo County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4446, p. 42.
- Trauger, F. D., and Lavery, N. G., 1976, Geohydrology of the upper Pipe Line Draw area, Grant County, New Mexico: Exxon Corporation report, 48 p.
- Trauger, F. D., and Netelbeek, T. A., 1965, Road log from Silver City to Lordsburg, in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 67-76.
- Trauger, F. D., and Stoneman, D. L., 1975, Geohydrology of the Santa Teresa area, Dona Ana County, New Mexico: Earth Environmental Consultants, Albuquerque, report to C. L. Crowder Investment Company, 44 p.
- Trumbo, T. M., 1950, The little bonanza (Organ Mountains): New Mexico Magazine, v. 28, no. 4, p. 11, 40-41.
- Tuan, Y. F., 1962a, Structure, climate, and basin land forms in Arizona and New Mexico: Association of American Geographers Annals, v. 52, no. 1, p. 51-68.



## References - Continued

- Tuan, Y. F., 1962b, Structure, climate, and basin land forms in Arizona and New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 4-3495, p. 10.
- 1966, New Mexican gullies--a critical review and some recent observations: Association of American Geographers Annals, v. 56, p. 573-597, 14 figs.
- 1967, New Mexican gullies--a critical review and some recent observations [abs.]: Abstracts of North American Geology, May, p. 659.
- Turner, H. W., 1903, The copper deposits of the Sierra Oscura, New Mexico: American Institute of Mining Engineers Transactions, v. 33, p. 677-681.
- 1916, Copper in the red beds of New Mexico: Economic Geology, v. 11, p. 594-597.
- Turner, S. F., 1960, Ground-water resources of the valley southeast of Lordsburg, Hidalgo County, New Mexico: Turner and Associates, Phoenix, consulting report, 18 p.
- Turner, S. F., and Halpenny, L. C., 1941, Ground-water investigation in the upper Gila River Valley, New Mexico and Arizona; scope of investigations and methods used: American Geophysical Union Transactions, 22 Annual Meeting, pt. 3, p. 738-744, 4 figs.
- Turner, S. F., Halpenny, L. C., McDonald, H. R., and Bratton, D. H., 1941, Ground-water levels and pumpage in Arizona in 1939-1940: Arizona State Water Commissioner, Tucson, 85 p.
- Turner, S. F., and Manera, P. A., 1965, Geology and hydrology of the Lordsburg Mesa drainage area, Hidalgo County, New Mexico: Turner and Associates and E. R. Geophysical Company, Phoenix, consulting report, 17 p.
- Turner, S. F., and others, 1941a, Water resource of Safford and Duncan-Virden Valleys, Arizona and New Mexico: U.S. Geological Survey Open-File Report, 2 p.
- 1941b, Water resources of Safford and Duncan-Virden Valleys, Arizona and New Mexico, with analyses by J. D. Hem: Arizona State Water Commissioner, Tucson, 58 p. (15 figs. bound separately).

References - Continued

- Turney, W. F., and Associates, 1965, Proposed investigational program for limited development of the water resources in the Tularosa Basin, New Mexico for Albuquerque District, Corps of Engineers: Albuquerque, New Mexico, 47 p.
- Ulvog, Carl, and Thompson, Sam, III, 1964a, Road log from Capitan to the Capitan iron deposits, with a note by V. C. Kelley, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 31-33.
- 1964b, Road log from Capitan to Carrizozo, with a note by W. E. Elston, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 39-41.
- 1964c, Road log from Capitan to Ruidoso, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 33-35.
- 1964d, Road log from Carrizozo to Malpais, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 22.
- 1964e, Road log from Carrizozo to Ruidoso, with notes and photographs by W. A. Maurant, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 23-25.
- 1964f, Road log from Hondo to Capitan, with a note by E. J. Foley, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 29-31.
- 1964g, Road log from Ruidoso to Capitan, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 37-38.
- 1964h, Road log from Ruidoso to Hondo, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 27-28.
- 1964i, Road log from Ruidoso to Tularosa with notes by G. O. Bachman and Carel Otte, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 14-19.
- 1964j, Road log from Tularosa to Carrizozo, with notes by T. B. Thompson, R. H. Weber, and W. A. Maurant, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 19-21.

## References - Continued

- Ulvog, Carl, and Thompson, Sam, III, 1964k, Supplemental road logs--Gallinas to Gallinas Peak; Gallinas to Carrizozo; Roswell to Hondo; Hondo to Ruidoso; Ruidoso to Pajarito Mountain, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 47-54.
- Ulvog, Carl, Thompson, Sam, III, and Thompson, T. B., 1964, Road log from Ruidoso to Sierra Blanca ski resort headquarters with a note by V. C. Kelley, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 11-14.
- Umbach, P. H., 1948, Developments (oil and gas) in Arizona, western New Mexico, and northern New Mexico in 1947: American Association of Petroleum Geologists Bulletin, v. 32, no. 6, p. 984-987.
- 1949, Developments in Arizona, western New Mexico, and northern New Mexico in 1948: American Association of Petroleum Geologists Bulletin, v. 33, no. 6, p. 931-934, 1 fig.
- 1950, Developments in Arizona, western New Mexico, and northern New Mexico in 1949: American Association of Petroleum Geologists Bulletin, v. 34, no. 6, p. 1144-1149.
- Umpleby, J. B., 1917, Manganiferous iron deposits at Silver City, New Mexico: Engineering Mining Journal, v. 104, p. 931.
- U.S. Air Force Weapons Laboratory, 1973, MX program geology/land availability, a review of available geologic, hydrologic, and seismic studies in the Tularosa Basin, New Mexico: Albuquerque, Kirtland Air Force Base, Facility Survival Branch, Civil Engineering Research Division, 27 p.
- U.S. Army, Corps of Engineers, 1967, Water resources development in New Mexico: U.S. Army, Corps of Engineers, Southwest Division, Dallas, Texas, 29 p.
- 1969, Water resources development by the U.S. Army, Corps of Engineers in New Mexico: 30 p.
- 1972, Report on review survey for flood control and allied purposes, Rio Grande and tributaries Rio Puerco and Rio Salado, New Mexico: U.S. Army, Corps of Engineers, Albuquerque District, Report 89: 62 p.
- 1978, Flood plain information; Mimbres River and Florida Gap Draw, Deming, Luna County, New Mexico: Albuquerque District, 20 p., 3 figs.

References - Continued

- U.S. Bureau of Land Management, 1978a, Final environmental impact statement, the proposed Rio Puerco livestock grazing management program: U.S. Department of the Interior, Bureau of Land Management.
- 1978b, Water resources management program for New Mexico and Oklahoma: New Mexico State Office, Santa Fe, pages vary.
- U.S. Bureau of Mines, 1942a, Beryllium deposits of Iron Mountain, Sierra and Socorro Counties, New Mexico: War Minerals Report 11, 8 p., 1 fig.
- 1942b, Spar (fluorspar) mine, Catron County, New Mexico: War Minerals Report 24, 7 p.
- 1942c, United States fluorspar mine, Sierra County, New Mexico: War Minerals Report 21, 4 p.
- 1979, Mineral production in New Mexico, in Annual report July 1, 1977, to June 30, 1978: New Mexico Bureau of Mines and Mineral Resources, p. 61.
- U.S. Bureau of Reclamation, 1914, Map of Mesilla Valley showing various known channels; Rio Grande project, New Mexico-Texas: U.S. Department of the Interior, map.
- 1930, Report on upper Gila River investigations, 1929-1930, in 11th biennial report, 1932-1934: New Mexico State Engineer, p. 183-239.
- 1967, Summary report, Rio Grande, aggradation or degradation, 1936-1962, middle Rio Grande project: U.S. Bureau of Reclamation, Hydrology Division, Albuquerque, New Mexico, 28 p.
- 1972, Unpublished water records for Elephant Butte Reservoir, New Mexico for the years 1917 to date: pages vary.
- 1973a, Evapotranspirometer studies of saltcedar near Bernardo, New Mexico: Albuquerque Development Office, 31 p., 11 figs.
- 1973b, Progress report phreatophyte investigations Bernardo evapotranspirometers, Volume II: Albuquerque Development Office, 50 p., 4 figs.
- 1974, Upper Gila River project, Arizona and New Mexico, concluding report: 79 p.

## References - Continued

- U.S. Bureau of Reclamation, 1976, New Mexico water resources assessment for planning purposes: U.S. Bureau of Reclamation, New Mexico Interstate Stream Commission and New Mexico State Engineer, 218 p., 31 figs, boxed map folio.
- 1977, Final environmental impact statement, operation and maintenance program for the Rio Grande--Velarde to Caballo Dam, Rio Grande and the middle Rio Grande projects: U.S. Department of the Interior, Bureau of Reclamation, 2 vols.
- U.S. Department of Agriculture, 1965-1978, the small watershed program in New Mexico: U.S. Department of Agriculture, Soil Conservation Division, annual report.
- U.S. Department of Commerce, 1974, Federal and state Indian reservations and Indian trust areas: 604 p.
- U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Data Service, 1917-1977, Climatological data; annual summaries, New Mexico: annual reports.
- U.S. Department of Commerce, Weather Bureau, 1955, Climatic summary of the United States; supplement for 1931 through 1952, New Mexico, in Climatography of the United States: No. 11-25, 96 p.
- 1956, Substation history, New Mexico; a summary of information available on substation locations, elevations, exposures, instrumentations, records and observers from date station established through year 1955: U.S. Government Printing Office, 112 p.
- 1965, Decennial census of United States climate: Climatic summary of the United States, no. 86-25, 98 p.
- U.S. Department of Housing and Urban Development, Federal Insurance Administration, 1978a, Flood hazard boundary map, Dona Ana County, New Mexico: 42 pages.
- 1978b, Flood hazard boundary map, Lincoln County, New Mexico: 46 p.
- 1978c, Flood hazard boundary map, Luna County, New Mexico: 34 p.
- 1978d, Flood hazard boundary map, Otero County, New Mexico: 68 p.



References - Continued

- U.S. Department of Housing and Urban Development, 1978e, Flood hazard boundary map, Sierra County, New Mexico: 46 p.
- 1978f, Flood insurance study, city of Lordsburg, New Mexico, Hidalgo County: 13 p.
- U.S. Environmental Protection Agency, 1973, Water quality criteria, 1972, a report of the Committee on Water Quality Criteria: Report EPA-R3-73-033, 594 p.
- U.S. Geological Survey, 1970, Aeromagnetic map of the Morenci-Monticello area, southeastern Arizona and southwestern New Mexico: U.S. Geological Survey Open-File Map, 4 sheets.
- 1971, Map showing the general depth to ground water in New Mexico: Open-File Map.
- 1972a, Aeromagnetic map of the Morenci-Monticello area, southeastern Arizona and southwestern New Mexico: Geophysical Investigations Map GP-838.
- 1972b, Map showing estimated thickness of aquifers that contain brine in New Mexico: Open-File Map.
- 1972c, Map showing estimated thickness of aquifers that contain fresh ground water in New Mexico: Open-File Map.
- 1972d, Map showing estimated thickness of aquifers that contain moderately saline ground water in New Mexico: Open-File Map.
- 1972e, Map showing estimated thickness of aquifers that contain slightly saline ground water in New Mexico: Open-File Map.
- 1972f, Map showing estimated thickness of aquifers that contain very saline ground water in New Mexico: Open-File Map.
- 1972g, Map showing observed changes of ground-water level and hydrographs of selected wells in New Mexico: Open-File Map.
- 1972h, Map showing the estimated potential yield of water wells in New Mexico: Open-File Map.
- 1974, Aeromagnetic map of the Jicarilla-White Oaks area, Lincoln County, New Mexico: U.S. Geological Survey Open-File Map 74-104.
- 1976a, Aeromagnetic map of Carson and vicinity, New Mexico: U.S. Geological Survey Open-File Map 76-686.

References - Continued

- U.S. Geological Survey, 1976b, Hydrologic unit map--1974 state of New Mexico: U.S. Geological Survey and U.S. Water Resources Council, 1 sheet.
- 1976c, Residual magnetic intensity map of central New Mexico: U.S. Geological Survey Open-File Map 76-805.
- 1976d, Water resources data for New Mexico, 1975: Water-Data Report NM-75-1, 603 p., 5 figs.
- 1977a, A proposal for studies of the water resources of the Mescalero Apache Indian Reservation, Otero County, New Mexico: U.S. Geological Survey Open-File Report 77-758, 20 p., 4 figs.
- 1977b, Techniques and data requirements for estimating the water availability on the Mescalero Apache Indian Reservation, Otero County, New Mexico: U.S. Geological Survey Open-File Report 77-757, 37 p., 2 figs.
- 1977c, Water resources data for New Mexico, 1976: Water Data Report NM-76-1, 655 p., 6 figs.
- 1978, Water resources data for New Mexico, 1977: Water Data Report NM-77-1, 626 p., 6 figs.
- compiler, 1965, Mineral and water resources of New Mexico (report of U.S. Senate): New Mexico Bureau of Mines and Mineral Resources Bulletin 87, 437 p., 89 figs.
- 1961-1974, Water resources data for New Mexico--Part 1, Surface water records: Annual Report.
- 1965-1974, Water resources data for New Mexico--Part 2, Water quality records: Annual Report.
- U.S. National Park Service, 1954, White Sands National Monument, New Mexico: 6 p.
- U.S. Public Health Service, 1962a, Drinking water standards: Federal Register, March 6, 1962, p. 2152-2155.
- 1962b, Public Health Service drinking water standards--1962: U.S. Department of Health, Education and Welfare, Public Health Service Publication 956, revised, 61 p., 1 fig.
- U.S. Soil Conservation Service, 1970, New Mexico soil and water conservation needs inventory: U.S. Department of Agriculture, Soil Conservation Service and New Mexico Conservation Needs Committee, 289 p.

## References - Continued

- U.S. Soil Conservation Service, 1972, Land treatment systems and erosion reduction on the Rio Puerco--Rio Salado watershed in New Mexico: U.S. Department of Agriculture, Soil Conservation Service, Albuquerque, New Mexico, report.
- 1963-1977, The small watershed program in New Mexico: U.S. Department of Agriculture, Soil Conservation Service, Annual Report.
- U.S. Weather Bureau, Climatological data, annual summary of Arizona, New Mexico, and Utah: U.S. Department of Commerce, Annual Report.
- Updegraff, C. D., and Gelhar, L. W., 1977, Parameter estimation for a lumped-parameter ground-water model of the Mesilla Valley, New Mexico: New Mexico Water Resources Research Institute Report 097, 69 p., 16 figs.
- Van Couvering, Martin, 1958, Review of the guidebook of the Hatchet Mountains and the Cooks Range-Florida Mountains areas, Grant, Hidalgo, and Luna Counties, southwestern New Mexico (by Roswell Geological Society): American Association of Petroleum Geologists Bulletin, v. 42, no. 10, p. 2527-2530.
- 1960, Review of the guidebook of west-central New Mexico (by New Mexico Geological Society): American Association of Petroleum Geologists Bulletin, v. 44, no. 5, p. 644-646.
- Van de Water, J. C., and others, 1958, Annual review--mining--southwestern operations: Mining Engineer, v. 10, no. 2, p. 189-195.
- Van der Spuy, P. M., 1970, Geologic and geochemical investigations of geophysical anomalies, Sierra Rica, Hidalgo County, New Mexico: Colorado School of Mines, Golden, unpublished M.S. thesis, 156 p., 32 figs.
- 1975, Geologic and geochemical investigations of geophysical anomalies, Sierra Rica, Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-62, 156 p., 32 figs.
- Van Hylckama, T. E. A., 1963, Growth, development and water use by saltcedar (Tamarix pentandra) under different conditions of weather and access to water, in General Assembly of Berkeley, committee for evaporation: International Association of Scientific Hydrology Publication 62, p. 75-86, 3 figs.

References - Continued

- Van Hylckama, T. E. A., 1969, Photosynthesis and water use by saltcedar: International Association of Scientific Hydrologists Bulletin, v. 14, no. 1, p. 71-83, 7 figs.
- Van Sant, J. F., 1958, Pennsylvanian fusulinids from Whiskey Canyon, Sierra County, New Mexico: University of Kansas, Lawrence, unpublished M.S. thesis, 152 p.
- Van Wagoner, J. C., 1977a, Carbonate and siliciclastic facies of the Gobbler Formation, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 57-70.
- 1977b, Guide locality B-1--west end of Horse Ridge, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 139-156.
- 1977c, Lower and middle Pennsylvanian rocks of the northern Sacramento Mountains; a study of contemporaneous carbonate and siliciclastic deposition in an active tectonic setting: Rice University, Houston, Texas, unpublished Ph. D. dissertation, 179 p.
- Vandeneuvel, R. C., 1966, The occurrence of sepiolite and attapulgite in the calcareous zone of a soil near Las Cruces, New Mexico, in Clays and clay minerals: New York, Pergamon Press, p. 195-208.
- Vanoni, V. A., Benedict, P. C., and Bondurant, D. C., 1971a, Sediment transportation mechanics; hydraulic relations for alluvial streams: American Society of Civil Engineers, Journal of the Hydraulics Division, v. 97, no. HY1, p. 101-141, 12 figs.
- 1971b, Sediment transport mechanics; fundamentals of sediment transport: American Society of Civil Engineers, Journal of the Hydraulics Division, v. 97, no. HY12, p. 1979-2022, 23 figs.
- Vaughn, P. P., 1969, Early Permian vertebrates from southern New Mexico and their paleozoogeographic significance: Los Angeles County Museum Contributions to Science 166, 22 p.
- Venetis, C., 1969, A study on the recession of unconfined aquifers: International Association of Scientific Hydrologists Bulletin, v. 14, no. 4, p. 119-125.

References - Continued

- Venetis, C., 1971, Estimating infiltration and/or the parameters of unconfined aquifers from ground water level observations: Journal of Hydrology, v. 12, no. 2, p. 161-169, 2 figs.
- Verity, V. H., and Young, R. J., 1973, Laws and regulations governing mineral rights in New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 104, 70 p.
- Vernon, J. J., 1904, Irrigation investigations at New Mexico Experiment Station, Mesilla Park, New Mexico: U.S. Department of Agriculture Experiment Station Bulletin 158, p. 303-317.
- Volin, M. E., Russell, P. L., Price, F. L. C., and Mullen, D. H., 1947, Catron and Sierra Counties tin deposits, New Mexico: U.S. Bureau of Mines Report of Investigations RI 4068, 60 p., 25 figs.
- Wade, W. R., 1907, Burro Mountain copper district: Engineering Mining Journal, v. 84, p. 355-356.
- 1913, Minerals of the Tres Hermanas district: Engineering Mining Journal, v. 96, p. 589-590.
- 1914a, Apache mining district, New Mexico: Engineering Mining Journal, v. 97, p. 597-598.
- 1914b, Mining district of Pinos Altos, New Mexico: Mining Science Press, v. 109, p. 402-403.
- Wahler, W. A., and Associates, 1974, Evaluation of mill tailings disposal practices and potential dam stability problems in southwestern United States, Kennecott Copper Corporation, Chino leaching dump, Santa Rita, New Mexico, v. 4: U.S. Bureau of Mines Open-File Report 50 (4)-75, 111 p., 24 figs. and U.S. Department of Commerce, National Technical Information Service PB 243 077/AS.
- Waite, L. A., 1973, Flood of September 3, 1972, in Hillsboro, New Mexico: U.S. Geological Survey Open-File Report, 18 p., 2 figs.
- Waldron, J. F., 1956, Reconnaissance geology and ground-water study of a part of Socorro County, New Mexico: Stanford University, Palo Alto, California, unpublished Ph. D. dissertation, 255 p. [1957].
- Walker, C. S., Jr., 1931, Confederate government in Dona Ana County: New Mexico Historical Review, v. 6, no. 3, p. 253-302.



- Walker, G. W., and Osterwald, F. W., 1956a, Uraniferous magnetite-hematite deposit at the Prince mine, Lincoln County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 4, no. 2, p. 13.
- 1956b, Uraniferous magnetite-hematite deposit at the Prince mine, Lincoln County, New Mexico: Economic Geology, v. 51, no. 3, p. 213-222.
- Wallace, C. M., 1969, Water out of the desert: University of Texas at El Paso, Southwestern Studies Monograph 22, v. 6, no. 2, 48 p.
- Waller, E., and Moses, A. J., 1892, A probable new nickel arsenide (from Grant County, New Mexico): New Mexico Institute of Mining and Technology, Socorro, Quarterly, v. 14, p. 49-51.
- Walter, R. J., Jr., 1940, The construction of Caballo Dam, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished professional engineer thesis.
- Walters, M. A., 1972, Geological and geochemical evidence for a possible concealed mineral deposit near the Old Hadley mining district, Luna County, New Mexico: Stanford University, Palo Alto, California, unpublished M.S. thesis.
- Wamsley, W. H., 1965, The open pit mining industry today: Mining Congress Journal, v. 51, no. 2, p. 36-39, 41.
- Wargo, J. G., 1958, Structure and volcanic stratigraphy in the Schoolhouse Mountain area, Grant County, New Mexico [abs.]: Geological Society of America Bulletin, v. 69, no. 12, pt. 2, p. 1748.
- 1959a, Geology of the Schoolhouse Mountain quadrangle, Grant County, New Mexico: University of Arizona, Tucson, unpublished Ph. D. dissertation, 187 p.
- 1959b, Sequence of volcanic rocks in southwestern New Mexico [abs.]: Geological Society of America Bulletin, v. 70, no. 12, pt. 2, p. 1754.
- 1959c, Volcanic stratigraphy of southwestern New Mexico and southeastern Arizona [abs.], in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 158.
- 1960a, Magnetic susceptibility and fusion data for some volcanic rocks from southwestern New Mexico: Geological Society of America Bulletin, v. 71, no. 1, p. 87-92, 4 figs.

## References - Continued

- Wargo, J. G., 1960b, Magnetic susceptibility and fusion data for some volcanic rocks from southwestern New Mexico [abs.]: American Geological Institute, Geologic Abstracts, v. 2, no. 3, p. 35.
- Warnock, B. H., and Gardner, J. L., eds., 1960, Symposium on water yield in relation to environment in the southwestern United States: Southwestern and Rocky Mountain Division, American Association for the Advancement of Science and Sul Ross State College, Alpine, Texas, 74 p.
- Watts, K. C., and Alminas, H. V., 1974, Geochemical reconnaissance, Cuchillo-Animas uplifts and adjacent areas, Sierra and Socorro Counties, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 382.
- Watts, K. C., Hassemer, J. R., Siems, D. F., and Nishi, J. M., 1978, 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. Geological Survey Open-File Report 78-801, 247 p.
- Way, S. C., 1971, The study of ground-water movement with the use of computer model at the Socorro Grant, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M. S. thesis.
- Weatherby, W. J., 1901, The Mogollon Range; a description of the region near Cooney, New Mexico: Mines and Minerals, v. 22, p. 97-101.
- Weber, R. H., 1955, Processing perlite--the technologic problems: New Mexico Bureau of Mines and Mineral Resources Circular 32, 3 p.
- 1957, Geology and petrography of the Stendel perlite deposit, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 44, 24 p.
- 1963a, Cenozoic volcanic rocks of Socorro County, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 132-143.
- 1963b, Geologic features of the Socorro perlite deposit, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 144-145.

## References - Continued

- Weber, R. H., 1963c, Human prehistory of Socorro County, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 225-233.
- 1964a, Geology of the Carrizozo quadrangle, New Mexico, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 100-109.
- 1964b, Petroglyphs of the Sierra Blanca, in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 177-180.
- 1971, K-Ar ages of Tertiary igneous rocks in central and western New Mexico: Isochron/West, v. 1, no. 1, p. 33-45.
- 1973, Geology of Mockingbird Gap site in central New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 7, p. 857-858.
- Weber, R. H., and Bassett, W. A., 1963, K-Ar ages of Tertiary volcanic and intrusive rocks in Socorro, Catron, and Grant Counties, New Mexico, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 220-223.
- Weber, R. H., and Kottowski, F. E., 1959, Gypsum resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 68, 68 p., 5 figs.
- Weber, R. H., and Willard, M. E., 1959a, Geologic map of Mogollon quadrangle, Catron and Grant Counties: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-10.
- 1959b, Geologic map of Reserve quadrangle, Catron County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-12.
- 1963a, Field trip 1, western Bear Mountains northwestward from Socorro via U.S. 60 and N.M. 52, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 38-41.
- 1963b, Road log C, Socorro westward to Catron County line via U.S. 60, in Guidebook of the Socorro region, New Mexico: New Mexico Geological Society, 14th Field Conference, p. 20-25.
- Webster, C. L., 1896, Notes on the geology of southwestern New Mexico: American Geologist, v. 18, p. 56-57.

References - Continued

- Wedekind, F. E., 1962, Geochemical survey of tungsten along the Young America fault, Magdalena mining district, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis.
- Wegemann, C. H., 1914, Geology and coal resources of the Sierra Blanca coal field, Lincoln and Otero Counties, New Mexico, in Contributions to economic geology, 1912, Part 2: U.S. Geological Survey Bulletin 541, p. 419-452.
- Weir, J. E., Jr., 1964, Geology and availability of ground water in the northern part of the White Sands Missile Range and vicinity, New Mexico: U.S. Geological Survey Open-File Report, 130 p., 14 figs.
- 1965, Geology and availability of ground water in the northern part of the White Sands Missile Range and vicinity, New Mexico: U.S. Geological Survey Water-Supply Paper 1801, 78 p., 11 figs.
- 1966, Geology and availability of ground water in the northern part of the White Sands Missile Range and vicinity, New Mexico [abs.]: Abstracts of North American Geology, May, p. 534.
- Weir, J. E., Jr., and Baltz, E. H., eds., 1959a, Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, 162 p.
- 1959b, Foreword to guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 11.
- Wells, E. H., 1918, Manganese in New Mexico (mineral resources survey): New Mexico Bureau of Mines and Mineral Resources Bulletin 2, 85 p.
- 1919, Oil and gas possibilities of the Puertecito district, Socorro and Valencia Counties, New Mexico (mineral resources survey): New Mexico Bureau of Mines and Mineral Resources Bulletin 3, 47 p.
- 1930, An outline of the mineral resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 1, 15 p.
- Wells, E. H., and Meinzer, O. E., 1926, A report on present and possible sources of water supply for Silver City, New Mexico: U.S. Geological Survey Open-File Report, 66 p.

## References - Continued

- Wells, E. H., Meinzer, O. E., and Tanner, H. A., 1926, A report on present and possible sources of water supply: Report to mayor of Silver City, New Mexico, 68 p.
- Wells, E. H., and Wootton, T. B., 1932a, Gold mining and gold deposits in New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 5, revised edition, 1940, 24 p.
- 1932b, Gold mining and gold deposits of New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 5, 26 p. [reprint 1970].
- Wells, J. L., 1909, Mines of the Lordsburg district, New Mexico: Engineering Mining Journal, v. 87, p. 890.
- Welsh, N. J., 1914, The Organ Mountain district: Engineering Mining Journal, v. 98, p. 331-334.
- Wengerd, S. A., 1959, Regional geology as related to petroleum potential of the Lucero region, west-central New Mexico, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 121-134.
- 1962a, Regional structural-stratigraphic cross section, east-central Arizona to west-central New Mexico, in Guidebook to the Mogollon Rim region, east-central Arizona: New Mexico Geological Society, 13th Field Conference, p. 58.
- 1962b, Wildcat oil prospects in southwest New Mexico: World Oil, v. 155, no. 2, p. 51-58.
- 1963a, Exploration outlook for 1963, southwestern New Mexico: World Oil, v. 156, no. 3, p. 112.
- 1963b, Regional structural-stratigraphic cross section, east-central Arizona to west-central New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 5, no. 5-4670, p. 13.
- 1969, Geologic history and the exploration for oil in the border region, in Guidebook of the border region: New Mexico Geological Society, 20th Field Conference, p. 197-204.
- 1970, Petroleum prospects in southwesternmost New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 91-104.



References - Continued

- Werts, L. L., 1969, Mineral exploration in New Mexico, in Exploration for mineral resources: New Mexico Bureau of Mines and Mineral Resources Circular 101, p. 7-24.
- West, S. W., 1963, Water levels, New Mexico, January to April 1963: Ground Water, v. 1, no. 3, p. 26.
- West, S. W., and Baldwin, H. L., 1965, Water supply of El Morro National Monument: U.S. Geological Survey Water-Supply Paper 1766, 32 p.
- West, S. W., and Broadhurst, W. L., 1973, The role of ground water in resource planning in the Rio Grande region: U.S. Geological Survey Open-File Report, 131 p., 20 figs.
- 1975, Summary appraisals of the Nation's ground-water resources--Rio Grande region: U.S. Geological Survey Professional Paper 813-D, 39 p., 21 figs.
- West, S. W., and others, 1965, Water resources, in Mineral and water resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 87, p. 387-437, 20 figs.
- West Texas Geological Society, 1977, Guidebook to geology of the Sacramento Mountains, Otero County, New Mexico: 1977 Field Conference, Publication 1977-68, 230 p.
- West Texas Geological Society and Southwestern New Mexico Section, American Institute of Mining and Metallurgical Engineers, 1949, Guidebook to geology and ore deposits of Silver City region, New Mexico: 3rd Field Conference, 45 p.
- White, C. S., 1976, Factors influencing natural water quality and changes resulting from land-use practices: Water, Air, and Soil Pollution Journal, v. 6, no. 1, p. 53-69.
- White, D. E., and Williams, D. L., eds., 1975, Assessment of geothermal resources of the United States--1975: U.S. Geological Survey Circular 726, 155 p.
- White, N. D., and Smith, C. R., 1965a, Basic hydrologic data for San Simon Basin, Cochise and Graham Counties, Arizona, and Hidalgo County, New Mexico [abs.]: American Geological Institute, Geoscience Abstracts, v. 7, no. 7-5914, p. 81.
- 1965b, Basic hydrologic data for San Simon Basin, Cochise and Graham Counties, Arizona and Hidalgo County, New Mexico: Arizona State Land Department Water-Resources Report 21, 42 p., 4 figs.

References - Continued

- White, W. N., 1931a, Preliminary report on the ground-water supply of Mimbres Valley, New Mexico, in Contributions to the hydrology of the United States, 1930: U.S. Geological Survey Water-Supply Paper 637-B, p. 69-90.
- 1931b, Preliminary report on the ground-water supply of Mimbres Valley, New Mexico, in 9th biennial report, 1928-30: New Mexico State Engineer, p. 131-152.
- 1932, Progress report on the ground-water supply of the Mimbres Valley, New Mexico, in 10th biennial report, 1930-32: New Mexico State Engineer, p. 183-228.
- 1934, Progress report on the ground-water supply of the Mimbres Valley, New Mexico, in 11th biennial report, 1932-34: New Mexico State Engineer, p. 109-125.
- White, W. N., and Guyton, W. F., 1951, Ground water in the Mimbres Valley, New Mexico with special reference to the available water supply in the Miesse district, east of the Florida Mountains: White and Guyton, Austin, Texas, 33 p.
- White Sands Missile Range Support Command, 1965, Master plan for development of water resources, White Sands Missile Range, New Mexico: U.S. Air Force, White Sands Missile Range Planning Office, 146 p.
- Whitford, W. G., and Becker, H., 1971, Comparative ecology of montane and desert repositos (cattle watering-impoundments) in southern New Mexico: New Mexico Water Resources Research Institute, Technical Completion Report, Project A-019, 83 p.
- Wiard, L. A., 1962, Floods in New Mexico, magnitude and frequency: U.S. Geological Survey Circular 464, 13 p.
- Wierenga, P. J., and Patterson, T. C., 1972, Irrigation return flow studies in the Mesilla Valley, in Proceedings: National Conference on Managing Irrigated Agriculture to Improve Water Quality, p. 173-180.
- Wiggins, Walt, 1951, Camera touring New Mexico--White Oaks: New Mexico Magazine, v. 29, no. 1, p. 18-21.
- Wilbanks, J. R., 1965, A description of an inexpensive method to separate zircon and interpretation of zircon data from the Copper Flat intrusive, Hillsboro, New Mexico [abs.], in Guidebook of southwestern New Mexico II: New Mexico Geological Society, 16th Field Conference, p. 244.

References - Continued

- Wilbanks, J. R., 1966, Zircons from the Copper Flat intrusion, Hillsboro, New Mexico: Texas Technical University, Lubbock, unpublished M.S. thesis, 41 p., 2 figs.
- 1968, Zircons from Copper Flat intrusion, Hillsboro, New Mexico [abs.], in Abstracts for 1966: Geological Society of America Special Paper 101, p. 427.
- Wilcox, L. V., 1955, Classification and use of irrigation waters: U.S. Department of Agriculture Circular 969, 19 p., 4 figs.
- Wilcox, R. E., 1965a, Volcanic-ash chronology, in The Quaternary of the United States: Princeton University Press, New Jersey, p. 807-816.
- 1965b, Volcanic-ash chronology [abs.]: American Geological Institute, Geoscience Abstracts, v. 7, no. 7-6290, p. 41.
- Wilkins, D. W., 1970, A laboratory method for predicting effluent concentrations using soil profile models: New Mexico State University, Las Cruces, unpublished M.S. thesis, 78 p.
- Wilkinson, W. W., 1976a, Geology of the Tres Montosas-Cat Mountain area, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 158 p., 26 figs.
- 1976b, Geology of the Tres Montosas-Cat Mountain area, Socorro County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-File Report OF-39, 158 p., 26 figs.
- Willard, M. E., 1957a, Geologic map of Luera Spring quadrangle, Catron and Socorro Counties: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-2.
- 1957b, Geologic map of Pinonville quadrangle, Catron County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-3.
- 1959, Tertiary stratigraphy of northern Catron County, New Mexico, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 92-99.
- 1971, K-Ar ages of the volcanic rocks in the Luis Lopez manganese district, Socorro County, New Mexico: Isochron/West, no. 2, p. 47-48.

## References - Continued

- Willard, M. E., and Jahns, R. H., 1974, Gold and tungsten mineralization in the White Oaks district, Lincoln County, New Mexico [abs.], in Guidebook to Ghost Ranch (central-northern New Mexico): New Mexico Geological Society, 25th Field Conference, p. 384.
- Willard, M. E., Schilling, J. H., Weber, R. H., Foster, R. W., Ostrander, R. E., Kottowski, F. E., and Smith, James, 1959, Road log first day; Socorro to Grants via Magdalena, Kelly, Rio Salado, Red Lake, and Acoma, in Guidebook of west-central New Mexico: New Mexico Geological Society, 10th Field Conference, p. 13-24.
- Willard, M. E., and Stearns, C. E., 1971, Geologic map of Pelona quadrangle, Catron County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-23.
- Willard, M. E., and Weber, R. H., 1958, Geologic map of Canon Largo quadrangle, Catron County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-6.
- Willard, M. E., Weber, R. H., and Kuellmer, F. J., 1961, Geologic map of Alum Mountain quadrangle, Catron and Grant Counties: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-13.
- Williams, F. E., 1965, Fluorspar deposits in New Mexico: U.S. Bureau of Mines Open-File Report 11-65. [available for inspection NMBM, Socorro, New Mexico].
- 1966, Fluorspar deposits of New Mexico: U.S. Bureau of Mines Information Circular IC 8307, 143 p., 46 figs.
- 1967, Fluorspar deposits of New Mexico [abs.]: Abstracts of North American Geology, May, p. 667.
- Williams, F. E., Fillo, P. V., and Bloom, P. A., 1964, Barite deposits of New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 76, 46 p.
- Williams, S. A., 1978, Mineralization at Granite Gap, Hidalgo County, New Mexico, in Guidebook to the land of Cochise: New Mexico Geological Society, 29th Field Conference, p. 329-330.
- Williams, T. E., 1965, Permian Fusulinidae of the Hueco Mountains, Otero County, New Mexico [abs.], in Abstracts for 1964: Geological Society of America Special Paper 82, p. 225-226.

References - Continued

- Williams, T. E., and Steiner, M. B., 1966, Permian Fusulinidae of the Sacramento Mountains, New Mexico [abs.]: Texas Journal of Science, v. 18, p. 102.
- Wilmeth, H. A., 1958, Estimating data for open-pit haulage trucks (Santa Rita mine): Mining Engineer, v. 10, no. 5, p. 577-580.
- Wilpolt, R. H., 1942, The Paleozoic stratigraphy of Los Pinos Range, New Mexico: Northwestern University, Evanston, Illinois, unpublished M.S. thesis.
- Wilpolt, R. H., MacAlpin, A. J., Bates, R. L., and Vorbe, Georges, 1946, Geologic map and stratigraphic sections of Paleozoic rocks of Joyita Hills, Los Pinos Mountains, and northern Chupadera Mesa, Valencia, Torrance, and Socorro Counties, New Mexico: U.S. Geological Survey Oil and Gas Investigations Map OM-61.
- Wilpolt, R. H., and Wanek, A. A., 1951, Geology of the region from Socorro and San Antonio east of Chupadera Mesa, Socorro County, New Mexico: U.S. Geological Survey Oil and Gas Investigations Map OM-121.
- Wilson, C. A., White, R. R., Roybal, R. G., and Gonzales, J. L., 1978, Drilling, construction, and testing of water-supply wells 21 and 22, White Sands Missile Range, Dona Ana County, New Mexico: U.S. Geological Survey Open-File Report 78-172, 34 p., 14 figs.
- Wilson, E. D., Moore, R. T., and Cooper, J. R., 1969, Geologic map of Arizona: Arizona Bureau of Mines and U.S. Geological Survey, map.
- Wilson, J. L., 1967, Cyclic and reciprocal sedimentation in Virgilian strata of southern New Mexico: Geological Society of America Bulletin, v. 78, no. 7, p. 805-818, 4 figs.
- 1968, Cyclic and reciprocal sedimentation in Virgilian strata of southern New Mexico [abs.]: Abstracts of North American Geology, January, p. 114.
- 1969a, Cycles of late Pennsylvanian beds of the Sacramento Mountains, Otero County, New Mexico, in Cyclic sedimentation in the Permian Basin, a symposium: West Texas Geological Society Publication 69-56, p. 100-114.
- 1969b, Cyclic and reciprocal sedimentation in Virgilian strata of southern New Mexico, in Cyclic sedimentation in the Permian Basin, a symposium: West Texas Geological Society Publication 69-56, p. 82-99, 4 figs.



## References - Continued

- Wilson, J. L., 1969c, Influence of local structures on sedimentary cycles of late Pennsylvanian beds of the Sacramento Mountains, Otero County, New Mexico, in Cyclic sedimentation in the Permian Basin, a symposium: West Texas Geological Society Publication 69-56, p. 100-113, 9 figs.
- 1969d, Influence of local structures on sedimentary cycles of late Pennsylvanian beds of the Sacramento Mountains, Otero County, New Mexico [abs.]: Petroleum Abstracts, v. 9, no. 21, p. 1360.
- 1969e, Regional studies of Pennsylvanian and Wolfcampian carbonate microfacies in southwestern U.S.A., and Chihuahua, Mexico [abs.], in Abstracts for 1968: Geological Society of America Special Paper 121, p. 321-322.
- 1970, Upper Paleozoic history of the western Diablo Platform, west Texas and south-central New Mexico, in Symposium on the geologic framework of the Chihuahua tectonic belt: West Texas Geological Society and University of Texas, Austin, p. 57-64.
- 1972, Influence of local structure in sedimentary cycles of Beeman and Holder Formations, Sacramento Mountains, Otero County, New Mexico, in Cyclic sedimentation in the Permian Basin, second edition: West Texas Geological Society, p. 41-54.
- 1975a, Carbonate facies in geologic history: New York, Springer-Verlag, Inc., 471 p.
- 1975b, Regional Mississippian facies and thickness in southern New Mexico and Chihuahua, in Guidebook to Mississippian shelf-edge and basin facies carbonates, Sacramento Mountains and southern New Mexico region: Dallas Geological Society, 1975 Field Conference, p. 125-128, 3 figs.
- 1977a, Regional distribution of phylloid algal mounds in late Pennsylvanian and Wolfcampian strata of southern New Mexico, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 1-7.
- 1977b, Stop "C-2" Virgilian cyclic strata, Holder Formation, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 169-172.

References - Continued

- Wilson, R. P., and White, N. D., 1976, Maps showing ground-water conditions in the San Simon area, Cochise and Graham Counties, Arizona, and in Hidalgo County, New Mexico, 1975: U.S. Geological Survey Water-Resources Investigations 76-89, 2 sheets.
- Winchell, N. H., 1874, Report on the copper and silver district of southwestern New Mexico, in Report on mines and mining west of the Rocky Mountains: Washington, D.C., p. 335-343.
- Winchester, D. E., 1921a, Geology of Alamosa Creek Valley, Socorro County, New Mexico, with special reference to the occurrence of oil and gas, in Contributions to economic geology, 1921, Part 2: U.S. Geological Survey Bulletin 716-A, p. 1-15.
- 1921b, Geology of Alamosa Creek Valley, Socorro County, New Mexico with special reference to the occurrence of oil and gas [abs.]: Washington Academy of Science Journal, v. 11, no. 11, p. 260.
- Winchester, P. D., 1972, Caliche-like limestones in the lower Permian Laborcita Formation, Sacramento Mountains, New Mexico [abs.]: Geological Society of America, Abstracts with Programs, v. 4, no. 7, p. 707-708.
- Winkler, H. A., 1951a, Preliminary report of some geophysical ground-water exploration at Lake Valley, Sierra County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Research and Development Division Report GI-4, 4 p., 1 fig.
- 1951b, Preliminary report of some geophysical ground-water exploration in Sierra County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Research and Development Division Report GI-3, 6 p., 3 figs.
- 1952a, A comparison between seismic and resistivity depth profiles between Willow and Hughes Hills near Carrizozo, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Research and Development Division Report GI-2, 3 p., 1 fig.
- 1952b, Geophysical exploration for shallow ground water near Pinon, Otero County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Research and Development Division Report GI-20, 4 p., 4 figs.
- 1952c, Preliminary report, Ruidoso geophysical ground-water survey: New Mexico Institute of Mining and Technology, Socorro, Research and Development Division Report GI-8, 15 p., 4 figs.

References - Continued

- Winkler, H. A., 1952d, A seismic and electrical resistivity reconnaissance of Hatchet Gap, Hidalgo County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Research and Development Division Report GI-12, 5 p., 2 figs.
- 1953a, Ground-water survey at Silver City, New Mexico: New Mexico Institute of Mining and Technology, Socorro, 18 p.
- 1953b, Resistivity reconnaissance for ground water in the Tularosa Basin, Otero County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, Research and Development Division Report GI-16, 9 p., 3 figs.
- Winston, M. R., and Larson, M. E., 1975, Geology and ore deposits of the Silver Monument area, Sierra County, New Mexico [abs.], in Guidebook to Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 344.
- Wolle, M. S., 1957, Pinos Altos--New Mexico gold camp: Mining World, v. 19, no. 13, p. 56-57.
- Wollman, Nathaniel, 1962, The value of water in alternative uses, with special application to water use in the San Juan and Rio Grande Basins of New Mexico: Albuquerque, University of New Mexico Press, 426 p.
- Wollum, A. G., II, 1973, Characterization of the forest floor in stands along a moisture gradient in southern New Mexico: Soil Science Society of America Proceedings, v. 37, no. 4, p. 637-640.
- Woods, Clee, 1955, Salt harvest (Catron County): New Mexico Magazine, v. 33, no. 10, p. 29, 52.
- Woodson, R. C., and Martin, J. T., 1965, The Rio Grande comprehensive plan in New Mexico and its effects on the river regime through the middle valley, in Proceedings of the Federal Interagency Sedimentation Conference, 1963: U.S. Department of Agriculture Miscellaneous Publication 970, p. 357-365, 6 figs.
- Woodward, L. A., 1969, Metamorphic and igneous rocks of Pedernal Hills area, Torrance County, New Mexico [abs.], in Abstracts for 1968: Geological Society of America Special Paper 12, p. 579-580.
- ed., 1970a, Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, 162 p.

References - Continued

- Woodward, L. A., 1970b, Introduction, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. x.
- 1970c, Precambrian rocks of southwestern New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 27-32.
- Woodward, L. A., Callender, J. F., Gries, J., Seager, W. R., Chapin, C. E., Zilinski, R. E., and Shaffer, W. L., compilers, 1975, Tectonic map of the Rio Grande region, Colorado-New Mexico border to Presidio, Texas, in Guidebook of the Las Cruces country: New Mexico Geological Society, 26th Field Conference, p. 239.
- Woodward, T. M., 1973, Geology of the Lemitar Mountains, Socorro County, New Mexico: New Mexico Institute of Mining and Technology, Socorro, unpublished M.S. thesis, 73 p.
- Woodyard, K. E., 1956, Clays of St. John's vicinity, Arizona and New Mexico: University of Texas, Austin, unpublished M.A. thesis.
- Wooton, E. O., and Standley, P. C., 1915, Flora of New Mexico: U.S. National Herbarium Contributions, v. 19, 794 p.
- Wooton, Paul, 1917, Manganiferous iron deposits at Silver City, New Mexico: Engineering Mining Journal, v. 104, p. 931.
- Wray, J. L., 1977, Origin of some Pennsylvanian algal bioherms in southwestern United States [abs.], in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 164-165.
- Wright, A. F., 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. Geological Survey Bulletin 1458, 31 p., 2 figs.
- Wright, H. E., Jr., 1943, The Tertiary and Quaternary geology of the lower Rio Puerco area, New Mexico: Harvard University, Cambridge Massachusetts, unpublished Ph. D. dissertation.
- 1945, Tertiary and Quaternary geology of the lower Rio Puerco area, New Mexico [abs.]: Geological Society of America Bulletin, v. 56, no. 12, pt. 2, p. 1213.

References - Continued

- Wright, H. E., Jr., 1946, Tertiary and Quaternary geology of the lower Rio Puerco area, New Mexico: Geological Society of America Bulletin, v. 57, no. 5, p. 383-456.
- 1947, Tertiary and Quaternary geology of the lower Rio Puerco area, New Mexico [summary], in Summary of Ph. D. Dissertations, 1943-1945: Harvard University, Cambridge, Massachusetts, p. 200-203.
- Wright, I. L., 1915, The Pinos Alto district, New Mexico: Engineering Mining Journal, v. 99, p. 133-135.
- 1930, Milling methods and costs at the Black Hawk concentrator, Hanover, New Mexico: U.S. Bureau of Mines Information Circular IC 6359, 15 p., 3 figs.
- Wright, J. R., 1975, Water quality and solid waste problems in rural New Mexico and some solutions in water pollution control in low density areas: Proceedings, Rural Environmental Engineering Conference, ed. by W. J. Jewell, and R. Swan, New England University Press, Hanover, New Hampshire, p. 217-225.
- Wright, J. W., 1909, The Black Range mining district, New Mexico: Mining World, v. 31, p. 979-981.
- Wright, R. J., 1947, Dike and sill alteration, Santa Rita, New Mexico: Columbia University, New York, unpublished Ph. D. dissertation.
- Wright, R. J., and Kerr, P. F., 1947, Dike and sill alteration, Santa Rita, New Mexico: New York, Kings Crown Press, 46 p.
- Wright, W. S., 1943, Records of Black Hawk operations at Mogollon: American Institute of Mining Engineering and Mining Technology Publication 1564, v. 7, no. 2.
- Wrucke, C. T., and Bromfield, C. S., 1961, Reconnaissance geologic map of part of the southern Peloncillo Mountains, Hidalgo County, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-160.
- Wuester, Herman, 1931, The minerals of Silver City, New Mexico, district: Rocks and Minerals, v. 7, no. 4, p. 121-125.
- Wynn, J. C., 1978, Parallel-surface-continued aeromagnetic map of the San Lorenzo and Hillsboro quadrangles, Grant and Sierra Counties, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-900-L.



References - Continued

- Wynn, J. C., and Dansereau, D. A., 1978, Complete Bouguer gravity map of the San Lorenzo and Hillsboro quadrangles, Grant and Sierra counties, New Mexico: U.S. Geological Survey Miscellaneous Field Studies Map MF-900-M.
- Yates, J. C., 1948, Animas underground water basin hydrographic survey, Hidalgo County, New Mexico: New Mexico State Engineer Open-File Report, 179 p.
- 1962, Changes in quantity of ground water, in 6th annual New Mexico water conference: New Mexico State University, Las Cruces, p. 23-30.
- Yeates, W. S., 1889, Pseudomorphs of native copper after azurite, from Grant County, New Mexico: American Journal of Science, 3rd series, v. 38, p. 405-407.
- Yeo, H. W., 1930, Hidalgo County investigation, in 9th biennial report, 1928-30: New Mexico State Engineer, p. 99-100.
- Yoder, N. B., 1968, Microfacies analysis of a biogenetic bank, Lake Valley Formation (Osagian), Sacramento Mountains New Mexico: Texas Technical University, Lubbock, unpublished M.S. thesis, 96 p., 24 figs.
- York, J. C., and Dick-Peddie, W. A., 1969, Vegetation changes in southern New Mexico during the past hundred years, in Arid lands in perspective: Tucson, University of Arizona Press, p. 155-166.
- Yost, C. B., 1953, Electrical resistivity reconnaissance of ground-water conditions east of Deming, New Mexico: U.S. Geological Survey Open-File Report, 21 p.
- Young, E. J., and Lovering, T. G., 1964, Productive and barren jasperoids at Lake Valley, Sierra County, New Mexico [abs.], in Abstracts for 1963: Geological Society of America Special Paper 76, p. 182.
- 1966, Jasperoids of the Lake Valley mining district, New Mexico, in Contributions to economic geology, 1965: U.S. Geological Survey Bulletin 1222-D, 27 p., 6 figs.
- 1967, Jasperoids of the Lake Valley mining district, New Mexico [abs.]: Abstracts of North American Geology, May, p. 669.
- Young, E. J., and Powers, H. A., 1960, Chevkinite in volcanic ash: American Mineralogist, v. 45, no. 7-8, p. 875-881.

References - Continued

- Young, E. J., and Powers, H. A., 1961, Chevkinite in volcanic ash [abs.]: American Geological Institute, Geoscience Abstracts, v. 3, no. 3-574, p. 34.
- Youtz, R. B., 1931, Mining methods at the Eighty-Five mine, Calumet and Arizona Mining Company, Valedon, New Mexico: U.S. Bureau of Mines Information Circular IC 6413, 26 p., 18 figs.
- Yurewicz, D. A., 1973, Genesis of the Rancheria and Las Cruces (?) Formations (Mississippian) of New Mexico and west Texas: University of Wisconsin, Madison, unpublished M.S. thesis, 249 p.
- 1975, Basin margin sedimentation, Rancheria Formation, Sacramento Mountains, New Mexico, in Guidebook to Mississippian shelf-edge and basin facies carbonates, Sacramento Mountains and southern New Mexico region: Dallas Geological Society, 1975 Field Conference, p. 67-86.
- 1977, The Rancheria Formation; Mississippian intracratonic basinal limestones, in Guidebook to the geology of the Sacramento Mountains, Otero County, New Mexico: West Texas Geological Society, 1977 Field Conference, Publication 1977-68, p. 71-72.
- Zalinski, E. R., 1907, Turquoise in the Burro Mountains, New Mexico: Economic Geology, v. 2, p. 464-492.
- 1908, Turquoise mining, Burro Mountains, New Mexico: Engineering Mining Journal, v. 86, p. 843-846.
- Zeitner, J. C., 1971, Minerals from New Mexico's mines: Earth Science, v. 24, no. 6, p. 286-289, 4 figs.
- Zeller, R. A., Jr., 1953, Lower Cretaceous stratigraphy of southwestern New Mexico, in Guidebook to southwestern New Mexico: New Mexico Geological Society, 4th Field Conference, p. 142-143.
- 1958a, Geologic map of Dog Mountains quadrangle, Hidalgo County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-8.
- 1958b, Geologic map of Playas quadrangle, Hidalgo and Grant Counties: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-7.
- 1958c, The geology of the Big Hatchet Peak quadrangle, Hidalgo County, New Mexico: University of California, Los Angeles, unpublished Ph. D. dissertation, 260 p.

References - Continued

- Zeller, R. A., Jr., 1962, Geologic map of southern Animas Mountains, Hidalgo County: New Mexico Bureau of Mines and Mineral Resources Geologic Map GM-17.
- 1964, Geologic controls of silver-lead-zinc replacements in Eureka mining district, southwestern New Mexico [abs.], in Guidebook of the Ruidoso country: New Mexico Geological Society, 15th Field Conference, p. 189.
- 1965, Stratigraphy of the Big Hatchet Mountains area, New Mexico: New Mexico Bureau of Mines and Mineral Resources Memoir 16, 128 p.
- 1969, Rocky Mountain ("Laramide") orogeny in southwestern New Mexico [abs.], in Abstracts for 1968: Geological Society of America Special Paper 121, p. 583.
- 1970a, Geology of the Little Hatchet Mountains, Hidalgo and Grant Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 96, 23 p.
- 1970b, Petroleum geology of southwestern New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 87-90.
- 1970c, Stratigraphy of the Big Hatchet Mountains area, New Mexico, in Guidebook of the Tyrone-Big Hatchet Mountains-Florida Mountains region: New Mexico Geological Society, 21st Field Conference, p. 45-57.
- 1975, Structural geology of Big Hatchet Peak quadrangle, Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Circular 146, 23 p.
- Zeller, R. A., Jr., and Alper, A. M., 1965, Geology of the Walnut Wells quadrangle, Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 84, 105 p.
- Zilinski, R. E., and others, 1976, Heat flow and thermal waters of the Rio Grande Rift: New Mexico Bureau of Mines and Mineral Resources Open-File Map.
- Zillmer, R. O., 1973, A feasibility and market study of Zuni Salt Lake, Catron County, New Mexico: U.S. Bureau of Indian Affairs, Albuquerque Area Office Report, 11 p.

## References - Concluded

- Zink, L. B., 1973, Population projections for the New Mexico state water plan, in Proceedings 18th annual New Mexico water conference: Water Resources Research Institute Report 026, p. 19-29.
- Zohdy, A. A. R., 1966, Geo-electrical exploration for ground water in the southwestern United States [abs.]: Geophysics, v. 31, p. 1216.
- Zohdy, A. A. R., Bisdorf, R. J., and Gates, J. S., 1976, Schlumberger soundings in the lower Mesilla Valley of the Rio Grande, Texas and New Mexico: U.S. Geological Survey Open-File Report 76-324, 77 p., 72 figs.
- Zohdy, A. A. R., Jackson, D. B., Mattick, R. E., and Peterson, A., 1969, Geophysical survey for ground water at White Sands Missile Range, New Mexico: U.S. Geological Survey Open-File Report, 31 p.
- Zohdy, A. A. R., Jackson, D. B., Mattick, R. E., and Peterson, D. L., 1963, Resistivity, seismic refraction, and gravity investigations for ground water near White Sands, New Mexico [abs.]: Geophysics, v. 33, p. 1057.

Rank, J. B., 1975, Population dynamics for the New Mexico state  
water plan. In Proceedings 1975 National New Mexico water  
conference, Santa Fe, New Mexico, 1975, 1-10.

Rank, J. B., 1976, Land-use critical evaluation for regional water  
in the southwestern United States. In Proceedings, 1976  
National New Mexico water conference, Santa Fe, New Mexico,  
1-10.

Rank, J. B., Biebert, R. J., and Baker, J. J., 1976, Soil  
conditions in the lower Rio Grande Valley of the Rio Grande  
basin, New Mexico. In Proceedings, 1976 National New Mexico  
water conference, Santa Fe, New Mexico, 1-10.

Rank, J. B., Jackson, R. J., and Baker, J. J., 1976, Soil  
conditions in the lower Rio Grande Valley of the Rio Grande  
basin, New Mexico. In Proceedings, 1976 National New Mexico  
water conference, Santa Fe, New Mexico, 1-10.

Rank, J. B., Jackson, R. J., and Baker, J. J., 1976, Soil  
conditions in the lower Rio Grande Valley of the Rio Grande  
basin, New Mexico. In Proceedings, 1976 National New Mexico  
water conference, Santa Fe, New Mexico, 1-10.

Rank, J. B., Jackson, R. J., and Baker, J. J., 1976, Soil  
conditions in the lower Rio Grande Valley of the Rio Grande  
basin, New Mexico. In Proceedings, 1976 National New Mexico  
water conference, Santa Fe, New Mexico, 1-10.

Rank, J. B., Jackson, R. J., and Baker, J. J., 1976, Soil  
conditions in the lower Rio Grande Valley of the Rio Grande  
basin, New Mexico. In Proceedings, 1976 National New Mexico  
water conference, Santa Fe, New Mexico, 1-10.

Rank, J. B., Jackson, R. J., and Baker, J. J., 1976, Soil  
conditions in the lower Rio Grande Valley of the Rio Grande  
basin, New Mexico. In Proceedings, 1976 National New Mexico  
water conference, Santa Fe, New Mexico, 1-10.

Rank, J. B., Jackson, R. J., and Baker, J. J., 1976, Soil  
conditions in the lower Rio Grande Valley of the Rio Grande  
basin, New Mexico. In Proceedings, 1976 National New Mexico  
water conference, Santa Fe, New Mexico, 1-10.

Rank, J. B., Jackson, R. J., and Baker, J. J., 1976, Soil  
conditions in the lower Rio Grande Valley of the Rio Grande  
basin, New Mexico. In Proceedings, 1976 National New Mexico  
water conference, Santa Fe, New Mexico, 1-10.







USGS LIBRARY - RESTON



3 1818 00100886 9