CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the Doug K. Martin Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

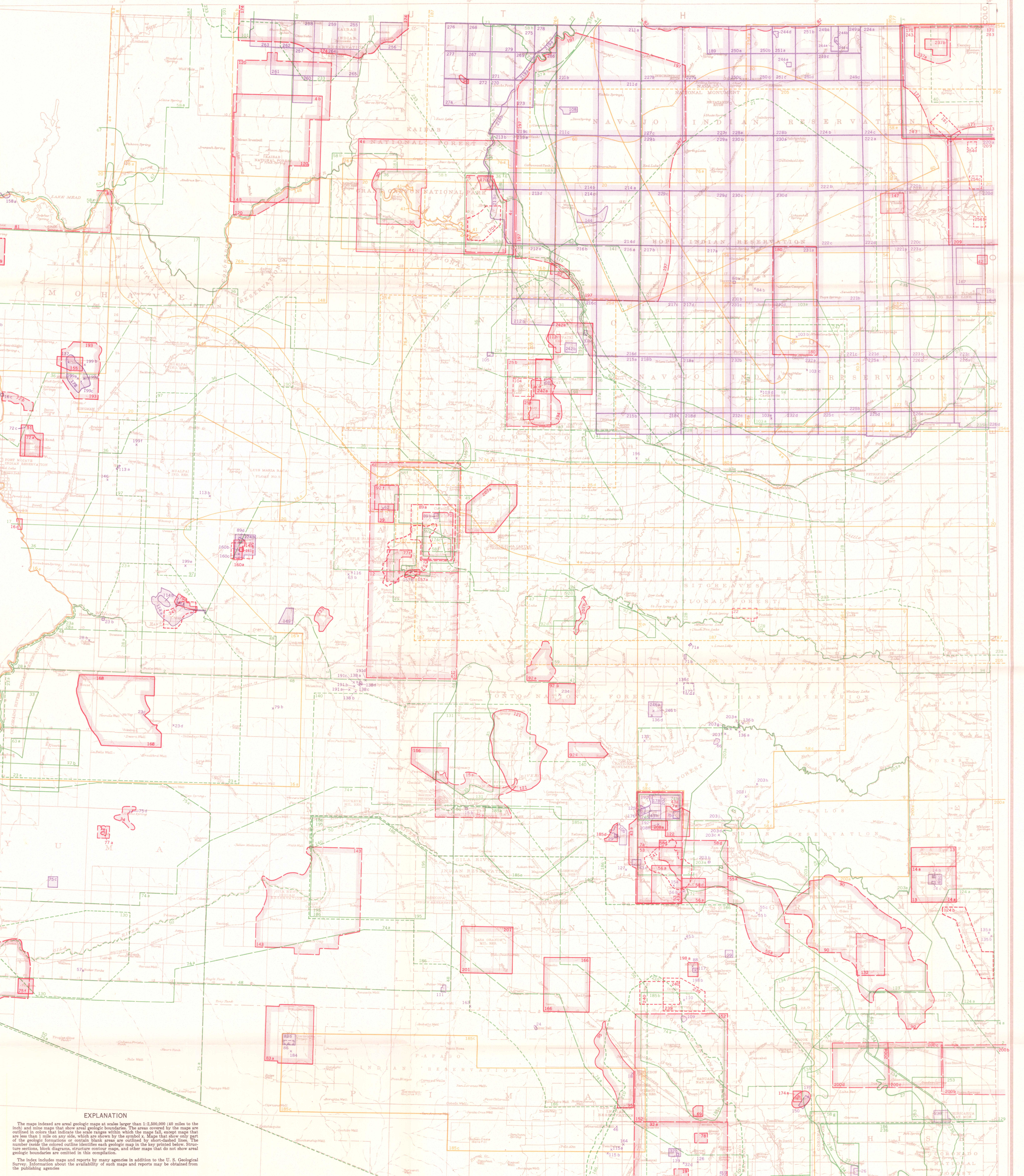
The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

INDEX TO GEOLOGIC MAPPING IN THE UNITED STATES
STATE OF ARIZONA



EXPLANATION

The maps indexed are areal geologic maps at scales larger than 1:2,500,000 (40 miles to the inch) and mine maps that show areal geologic boundaries. The areas covered by the maps are outlined in colors that indicate the scale ranges within which the maps fall, except maps that are less than 1 mile on any side, which are shown by the symbol x. Maps that show only part of the geologic formations or contain blank areas are outlined by short-dashed lines. The number *inside* the colored outline identifies each geologic map in the key printed below. Structure sections, block diagrams, structure contour maps, and other maps that do not show areal geologic boundaries are omitted in this compilation.

The index includes maps and reports by many agencies in addition to the U. S. Geological Survey. Information about the availability of such maps and reports may be obtained from the publishing agencies

SCALES INDICATED BY COLORED LINES

- Scale larger than 1:38,400, or 3,200 feet to the inch.
- Scale 1:38,400 to 1:76,800, or 3,200 to 6,400 feet to the inch.
- Scale 1:76,800 to 1:153,600, or 1.21 to 2.42 miles to the inch.
- Scale 1:153,600 to 1:307,200, or 2.42 to 4.85 miles to the inch.
- Scale 1:307,200 to 1:614,400, or 4.85 to 9.70 miles to the inch.
- Scale 1:614,400 to 1:1,228,800, or 9.70 to 19.39 miles to the inch.
- Scale smaller than 1:1,228,800, or 19.39 miles to the inch.

MAPS CONTAINING SOME BLANK AREAS

- Scale larger than 1:38,400, or 3,200 feet to the inch.
- Scale 1:38,400 to 1:153,600, or 3,200 to 12,800 feet (2.42 miles) to the inch.
- Scale 1:153,600 to 1:614,400, or 2.42 to 9.70 miles to the inch.
- Scale smaller than 1:614,400, or 9.70 miles to the inch.

STATE MAP

Geologic map of Arizona, by N. H. Darton, Carl Lausen, and E. D. Wilson, scale 1:500,000: Arizona Bureau of Mines, 1924.

GEOLOGIC MAP INDEX OF ARIZONA

Compiled by Leona Boardman
Revised by Albert N. Bove

1957

Scale 1:1,000,000

10 0 10 20 30 MILES

PRINTED 1958

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C., M R-2901

For sale by U. S. Geological Survey, price 60 cents

KEY TO INDEX MAP

The publications are listed chronologically except those containing geologic maps of the same or similar areas, which are indicated by one outline with only one key number.

1. 1861. Newberry, J. S., Geological report. *in* Rept. upon the Colorado River of the West: U. S. 36th Cong., 1st sess., Senate Ex. Doc. and House Ex. Doc. 90. Map 2, 1:760,320.
2. 1876. Wheeler, G. M., Geological atlas projected to illustrate geographical explorations and surveys west of the 100th meridian: U. S. Army, Corps of Eng. Sheets 58, 66, 67, 75, 76, and 83, 1:506,880.
3. 1877. Hayden, F. V., Geological and geographical atlas of Colorado and portions of adjacent territory: U. S. Geol. and Geog. Survey of the Territories. Sheet 15, 1:253,440.
4. 1882. Dutton, C. E., Tertiary history of the Grand Canyon dist.: U.S.G.S. Mon. 2. (a) Sheet 2, 1:1,000,000; (b) sheets 7 and 8, 1:63,360; (c) sheets 11 to 14, 1:63,360; (d) sheets 22 and 23, 1:253,440.
5. 1894. Walcott, C. D., Pre-Cambrian igneous rocks of the Unkar terrane, Grand Canyon of the Colorado: U.S.G.S. 14th Ann. Rept., pt. 2, p. 497-524. Pl. 60, 1:125,000.
6. 1895. Walcott, C. D., Algonkian rocks of the Grand Canyon of the Colorado: Jour. Geology, v. 3, p. 312-330. Pl. 6, 1:187,500.
7. 1903. Ransome, F. L., Geology of the Globe copper dist.: U.S.G.S. Prof. Paper 12. (a) Pl. 1, 1:62,500 (same area as No. 173, fig. 2); (b) pl. 15, 1:12,000. Also mine map.
   1905. Ransome, F. L., Globe quadrangle: U.S.G.S. Geol. Folio 111. (a) Map, 1:62,500; (b) map, 1:12,000.
8. 1903. Spurr, J. E., Descriptive geology of Nevada south of the 40th parallel and adjacent portions of California: U.S.G.S. Bull. 208. Pl. 1, 1:950,400.
9. 1903. Reagan, A. B., Geology of the Fort Apache region: Pan-Am. Geologist, v. 32, p. 265-308. Pl. 29, 1:750,000.
10. 1904. Ransome, F. L., Bisbee quadrangle: U.S.G.S. Geol. Folio 112. (a) Map, 1:62,500; (b) map, 1:12,000 (same area as No. 38, pls. 4, 12, and 13; No. 160, pt. 1, fig. 6; and No. 89, pl. 7).
    1904. Ransome, F. L., Geology and ore deposits of the Bisbee quadrangle: U.S.G.S. Prof. Paper 21. (a) Pl. 1, 1:62,500; (b) pl. 3, 1:12,000.
11. 1904. Campbell, M. R., Deer Creek coal field: U.S.G.S. Bull. 225, p. 240-258. Fig. 7, 1:187,500.
12. 1905. Jaggar, T. A., Jr., and Palache, Charles, Bradshaw Mountains: U.S.G.S. Geol. Folio 126. Map, 1:125,000.
13. 1905. Lindgren, Waldemar, Clifton quadrangle: U.S.G.S. Geol. Folio 129. Map, 1:62,500.
    1916. Reber, L. E., Jr., Mineralization at Clifton-Morenci: Econ. Geology, v. 11, p. 528-573. Fig. 28, 1:221,760.
14. 1905. Lindgren, Waldemar, Copper deposits of the Clifton-Morenci dist.: U.S.G.S. Prof. Paper 43. (a) Pl. 1, 1:62,500; (b) pl. 17, 1:12,000 (also mine maps); (c) pl. 19, 1:12,000.
15. 1905. Lee, W. T., Underground waters of Salt River Valley: U.S.G.S. Water-Supply Paper 136. (a) Pl. 7, 1:96,000; (b) fig. 15, 1:20,000.
16. 1908. Lee, W. T., Geologic reconnaissance of a part of western Arizona: U.S.G.S. Bull. 352. (a) Pl. 1, 1:125,000; (b) fig. 7, 1:31,680; (c) pl. 9, 1:10,000; (d) fig. 10, 1:55,440.
17. 1909. Schrader, F. C., Mineral deposits of the Cerbat Range, Black Mountains, and Grand Wash Cliffs, Mohave County: U.S.G.S. Bull. 397. Pl. 1, 1:250,000.
18. 1909. Tolman, C. F., Jr., Geology of the vicinity of Tumamoc Hills, *in* Distribution and movements of desert plants: Carnegie Inst. Washington Pub. 113. Pl. 27, 1:6,000.
19. 1910. Hill, J. M., Notes on the placer deposits of Greaterville: U.S.G.S. Bull. 430, p. 11-22. Fig. 1, 1:80,000. (Same area as No. 77, fig. 6.)
20. 1910. Darton, N. H., Reconnaissance of parts of northwestern New Mexico and northern Arizona: U.S.G.S. Bull. 435. Pl. 1, 1:1,000,000.
21. 1911. Campbell, M. R., and Gregory, H. E., Black Mesa coal field: U.S.G.S. Bull. 431, p. 229-238. Pl. 11, 1:500,000.
22. 1911. Veatch, A. C., Coal deposits near Pinedale, Navajo County: U.S.G.S. Bull. 431, p. 239-242. Pl. 12, 1:48,000.
23. 1911. Bancroft, Howland, Reconnaissance of the ore deposits in northern Yuma County: U.S.G.S. Bull. 451. (a) Pl. 1, 1:250,000; (b) fig. 5, 1:24,000; (c) fig. 14, 1:18,000; (d) fig. 16, 1:18,000.
    1946. Cummins, J. W., New Planet iron deposit, Yuma County: U. S. Bur. Mines Rept. Inv. 3982. (b) Fig. 2, 1:4,800.
24. 1912. Stewart, C. A., Geology and ore deposits of the Silverbell mining dist.: Am. Inst. Min. Eng. Bull., v. 65, p. 455-505; Trans., v. 43, p. 240-290, 1913. Fig. 1, 1:24,000.
    1951. Kerr, P. F., Alteration features at Silver Bell: Geol. Soc. America Bull., v. 62, no. 5. Pl. 1, 1:24,000.
25. 1913. Robinson, H. H., San Franciscan volcanic field: U.S.G.S. Prof. Paper 76. (a) Pl. 3, 1:500,000; (b) pl. 5, 1:96,000; (c) fig. 18, 1:50,000; (d) fig. 24, 1:750,000.
26. 1913. Ransome, F. L., Turquoise copper-mining dist.: U.S.G.S. Bull. 530-C. Fig. 17, 1:18,000.
27. 1913. Meinzer, O. E., and Kelton, F. C., Geology and water resources of Sulphur Spring Valley: U.S.G.S. Water-Supply Paper 320. Pl. 1, 1:250,000.
28. 1913. Blanchard, R. C., Geology of the western Buckskin Mountains, Yuma County: Columbia Univ. Geol. Dept. Contrib. (thesis), v. 26, p. 1-80. (a) Map 2, 1:375,000; (b) map 3, 1:120,000 (approx.).
29. 1914. Ransome, F. L., Copper deposits near Superior: U.S.G.S. Bull. 540-D. Fig. 13, 1:13,500.
30. 1914. Noble, L. F., Shinumo quadrangle, Grand Canyon dist.: U.S.G.S. Bull. 549. Pl. 1, 1:48,000.
31. 1914. Gregory, H. E., Reconnaissance of a portion of the Little Colorado Valley: Am. Jour. Sci., 4th ser., v. 38, p. 491-501. Fig. 1, 1:250,000.
32. 1915. Schrader, F. C., and Hill, J. M., Mineral deposits of the Santa Rita and Patagonia Mountains: U.S.G.S. Bull. 582. (a) Pl. 2, 1:125,000; (b) pl. 8, 1:31,680; (c) fig. 46, 1:1,200; (d) figs. 12 and 14, 1:1,800; (e) fig. 30, 1:2,160; (f) fig. 31, 1:21,600; (g) pl. 18, 1:600; (h) fig. 35, 1:1,200; (i) fig. 37, 1:780; (j) fig. 43, 1:3,300. (Pl. 13, 1:2,400, and fig. 8, 1:7,200, are parts of area of No. 139.)
33. 1915. Jones, E. L., Jr., Gold deposits near Quartzsite: U.S.G.S. Bull. 620-C. Pl. 4, 1:187,500.
34. 1915. Jones, E. L., Jr., Reconnaissance in the Kofa Mountains: U.S.G.S. Bull. 620-H. Pl. 5, 1:125,000.
35. 1915. Meinzer, O. E., and Ellis, A. J., Ground water in Paradise Valley: U.S.G.S. Water-Supply Paper 375-B. Pl. 3, 1:187,500.
36. 1915. Darton, N. H., and others, Santa Fe guidebook: U.S.G.S. Bull. 613. Sheets 16 to 21, 1:500,000.
37. 1916. Gregory, H. E., Navajo country: U.S.G.S. Water-Supply Paper 380. (a) Pl. 2, 1:500,000 (same area as No. 42, pl. 2); (b) fig. 4, 1:31,680.
38. 1916. Bonillas, Y. S., and others, Warren mining dist.: Am. Inst. Min. Eng. Bull., v. 117, p. 1397-1465; Trans., v. 55, p. 284-355. Pl. 1, 1:250,000 (pl. 4, 1:24,000, same area as No. 10-b; No. 160, pt. 1, fig. 6; and No. 89, pl. 7).
    1933. Tenney, J. B., The Bisbee mining dist., *in* Ore deposits of the Southwest: 16th Internat. Geol. Cong. Guidebook 14. Pl. 11, 1:187,500 (pl. 12, 1:16,000, same area as No. 10-b; No. 160, pt. 1, fig. 6; and No. 89, pl. 7.)
    1935. Tenney, J. B., Copper deposits of Arizona, *in* Copper resources of the world: 16th Internat. Geol. Cong. Pl. 12, 1:187,500 (pl. 13, 1:15,000, same area as No. 10-b, No. 160, pt. 1, fig. 6, and No. 89, pl. 7; pl. 14, 1:12,000, same area as No. 83b.)
39. 1916. Provot, F. A., Jerome mining dist.: Eng. and Min. Jour., v. 102, p. 1028-1031. Fig. 1, 1:62,500.
40. 1916. Emery, W. B., Igneous geology of Carrizo Mountain: Am. Jour. Sci., 4th ser., v. 42, p. 349-363. Fig. 1, 1:250,000.
41. 1917. Noble, L. F., and Hunter, J. F., Reconnaissance of the Archean complex of the Granite Gorge, Grand Canyon: U.S.G.S. Prof. Paper 98-I. Fig. 10, 1:670,000.
42. 1917. Gregory, H. E., Geology of the Navajo country: U.S.G.S. Prof. Paper 93. Fig. 2, 1:42,240 (pl. 2, 1:500,000, same area as No. 37a).
43. 1919. Ransome, F. L., Copper deposits of Ray and Miami: U.S.G.S. Prof. Paper 115. (a) Pl. 2, 1:125,000; (b) pl. 39, 1:12,000 (also mine maps); (c) pl. 45, 1:12,000 (same area as No. 53, and No. 185, fig. 30; also mine map).
    1910. Higgins, Edwin, Copper deposits of the Glove-Kelvin districts: Eng. and Min. Jour., v. 89, p. 769-772. (b) Map, p. 771, 1:31,680.
    1910. Herrick, R. L., Mining at Miami: Mines and Minerals, v. 30, p. 751-756. (b) Fig. 3, 1:60,000 (approx.).
44. 1920. Jones, E. L., Jr., and Ransome, F. L., Deposits of manganese ore in Arizona: U.S.G.S. Bull. 710-D. (a) Pl. 5, 1:48,000 (same area as No. 91, pl. 3); (b) fig. 35, 1:4,000.
45. 1921. Schwennesen, A. T., Geology and water resources of the Gila and San Carlos valleys in the San Carlos Indian Res.: U.S.G.S. Water-Supply Paper 450-A. Pl. 2, 1:250,000.
46. 1922. Ransome, F. L., Ore deposits of the Sierrita Mountains, Pima County: U.S.G.S. Bull. 725-J. Fig. 66, scale large (not indicated).
47. 1922. Wilson, E. D., Proterozoic Mazatzal quartzite of central Arizona: Pan-Am. Geologist, v. 38, no. 4. Pl. 29, 1:316,800 (pl. 30, 1:125,000, same area as No. 92f).
48. 1922. Ross, C. P., Geology of the lower Gila region: U.S.G.S. Prof. Paper 129-H. Pl. 45, 1:500,000.
    1923. Ross, C. P., Lower Gila region: U.S.G.S. Water-Supply Paper 498. Pl. 6, 1:500,000.
49. 1922. Reber, L. E., Jr., Geology and ore deposits of the Jerome dist.: Am. Inst. Min. Eng. Trans., v. 66, p. 3-40. Fig. 1, 1:375,000.
50. 1922. Bryan, Kirk, Erosion and sedimentation in the Papago country, with a sketch of the geology: U.S.G.S. Bull. 730-B. Pl. 9, 1:500,000 (same area as No. 57, pl. 9).
51. 1923. Ransome, F. L., Geology of the Oatman gold dist.: U.S.G.S. Bull. 743. Pl. 1, 1:48,000.
52. 1923. Jenkins, O. P., Verde River lake beds near Clarkdale: Am. Jour. Sci., 5th ser., v. 5, p. 65-81. Map, p. 66, 1:375,000.
53. 1923. Ransome, F. L., Ray quadrangle: U.S.G.S. Geol. Folio 217. Map, 1:62,500 (map, 1:12,000, same area as No. 43c).
54. 1924. Reagan, A. B., Stratigraphy of the Hopi Buttes volcanic field: Pan-Am. Geologist, v. 41, no. 5. Pl. 12, 1:625,000.
55. 1925. Ross, C. P., Geology and ore deposits of the Aravaipa and Stanley mining dists.: U.S.G.S. Bull. 763. (a) Pl. 1, 1:125,000; (b) fig. 7, 1:1,600; (c) fig. 8, 1:2,400.
56. 1925. Ross, C. P., Ore deposits of the Saddle Mountain and Banner mining dists.: U.S.G.S. Bull. 771. (a) Pl. 1, and pl. 17, both 1:62,500; (b) pl. 13, 1:3,600.
    1956. Peterson, N. P., and Swanson, R. W., Christmas copper mine, Gila County: U.S.G.S. Bull. 1027-H. (b) Pl. 33, 1:3,600. Also more detailed maps.
    1948. Christmas copper deposit, Gila County: U. S. Bur. Mines Rept. Inv. 4293. (b) Fig. 4, 1:6,000, after U.S.G.S. map. Also mine maps.
57. 1925. Bryan, Kirk, Papago country: U.S.G.S. Water-Supply Paper 499. Fig. 23, 1:4,800 (pl. 9, 1:500,000, same area as No. 50).
58. 1925. Darton, N. H., Resume of Arizona geology: Ariz. Bur. Mines Bull. 119. (a) Pl. 39, 1:500,000; (b) pl. 43, 1:348,000, and fig. 15, 1:312,500; (c) pl. 65, 1:1,000,000; (d) pl. 72, 1:125,000; (e) fig. 30, 1:875,000; (f) fig. 33, 1:312,500; (g) fig. 100, 1:250,000; (h) fig. 19, 1:500,000; (i) fig. 99, 1:78,125 (fig. 94, 1:50,000, same area as No. 69 and No. 74, fig. 47).
    1910. Noble, L. F., Geology of the Shinumo area: Am. Jour. Sci., 4th ser., v. 29, p. 497-528. (b) Pl. 5 (Grand Canyon and Vishnu series), 1:375,000.
    1932. Reagan, A. B., Geological notes on the Fort Apache region: Kans. Acad. Sci. Trans., v. 35, p. 260-273. (c) Map, p. 261, 1:1,500,000.
59. 1925. Lausen, Carl, and Wilson, E. D., Gold and copper deposits near Payson: Ariz. Bur. Mines Bull. 120. Pl. 1, 1:187,500.
60. 1925. Reagan, A. B., Late Cretacic formations of Black Mesa: Pan-Am. Geologist, v. 44, no. 4. Pl. 22, 1:1,000,000.
    1936. Keyes, C. R., Mesa Verde coal formation: Pan-Am. Geologist, v. 65, no. 4. Pl. 28, 1:1,000,000.
    1941. Keyes, C. R., Outlines of Arizona geology: Pan-Am. Geologist, v. 75, no. 1. Pl. 5, 1:1,000,000.
61. 1926. Lindgren, Waldemar, Ore deposits of the Jerome and Bradshaw Mountains quadrangles: U.S.G.S. Bull. 782. Pl. 1 and pl. 2, both 1:125,000.
62. 1926. Fearing, J. L., Jr., Some notes on the geology of the Jerome dist.: Econ. Geology, v. 21, no. 8. Fig. 1, 1:9,000.
63. 1927. Lausen, Carl, and Gardner, E. D., Quicksilver resources of Arizona: Ariz. Bur. Mines Bull. 122. (a) Fig. 2, 1:250,000; (b) fig. 6, 1:12,000.
64. 1927. Wilson, E. D., Geology and ore deposits of the Courtland-Gleeson region: Ariz. Bur. Mines Bull. 123. Pl. 1. 1:24,000.
65. 1928. Walker, R. T., Mineralized volcanic explosion pipes: Eng. and Min. Jour., v. 126, no. 25. Fig. 16, 1:30,000.
66. 1928. Wilson, E. D., Asbestos deposits of Arizona: Ariz. Bur. Mines Bull. 126. Fig. 4, 1:27,000. Also mine map.
67. 1928. Longwell, C. R., Geology of the Muddy Mountains, Nev., with a section through the Virgin Range to the Grand Wash Cliffs, Ariz.: U.S.G.S. Bull. 798. Pl. 1, 1:250,000.
    1921. Longwell, C. R., Geology of the Muddy Mountains, Nevada, with a section to the Grand Wash Cliffs in western Arizona: Am. Jour. Sci., 5th ser., v. 1, no. 1. Map, p. 40, 1:500,000.
68. 1929. Colton, H. S., Sunset Crater and the lava beds: Mus. Northern Ariz., Mus. Notes, v. 2, no. 4. Map, p. 3 (lava flows), 1:31,680.
    1945. Colton, H. S., Sunset Crater: Plateau, v. 18, no. 1. Fig. 2 (lava flows), 1:50,000.
69. 1930. Keyes, C. R., Colossal Cave: Pan-Am. Geologist, v. 53, no. 5. Pl. 17, 1:48,000 (same area as No. 58, fig. 94, and No. 74, fig. 47).
70. 1930. Lausen, Carl, Pre-Cambrian greenstone complex of the Jerome quadrangle: Jour. Geology, v. 38, no. 2. Fig. 1, 1:150,000.
71. 1931. Burchard, E. F., Iron ore on Canyon Creek, Fort Apache Indian Res.: U.S.G.S. Bull. 821-C. (a) Fig. 7 and (b) fig. 9, 1:31,680.
    1947. Stewart, L. A., Apache iron deposits, Navajo County: U. S. Bur. Mines Rept. Inv. 4093. (a) Fig. 6, 1:12,000; (b) fig. 8, 1:10,000.
72. 1931. Lausen, Carl, Geology and ore deposits of the Oatman and Katherine dists.: Ariz. Bur. Mines Geol. ser. 6, Bull. 131. (a) Pl. 1, 1:42,240; (b) pl. 2, 1:100,000; (c) fig. 26, 1:18,000.
73. 1931. Gregory, H. E., and Moore, R. C., Kaiparowitz region: U.S.G.S. Prof. Paper 164. Pl. 2, 1:250,000.
74. 1933. Darton, N. H., Southern Pacific guidebook: U.S.G.S. Bull. 845. (a) Sheets 20 to 26, 1:500,000; (b) fig. 54, 1:220,000 (fig. 47, 1:48,000, same area as No. 58, fig. 94, and No. 69).
75. 1933. Wilson, E. D., Geology and mineral deposits of southern Yuma County: Ariz. Bur. Mines Bull. 134. (a) Pl. 1, 1:375,000; (b) pl. 5, 1:24,000 (includes area of No. 160, pt. 2, fig. 19); (c) pl. 9, 1:14,400 (same area as No. 160, pt. 2, fig. 23); (d) pl. 16, 1:7,000; (e) fig. 2, 1:1,000; (f) fig. 7, 1:62,500.
76. 1933. Gregory, H. E., Colorado Plateau region: 16th Internat. Geol. Cong., Guidebook 18. (a) Pl. 6, 1:1,000,000, and fig. 1, 1:750,000; (b) pl. 1, 1:1,375,000.
77. 1933. Arizona gold placers and placering, 4th ed.: Ariz. Bur. Mines Bull. 135, (reprinted as Bull. 142, 1937, and Bull. 160, 1952, with revisions). (a) Fig. 3, 1:125,000; (b) fig. 4, 1:250,000; (c) fig. 5, 1:125,000 (fig. 6, 1:78,125, same area as No. 19).
78. 1934. Wilson, R. A., Thrust faulting in the Empire Mountains of southeastern Arizona: Jour. Geology, v. 42, no. 4. Fig. 3, 1:90,000.
79. 1936. Hewett, D. F., and others, Mineral resources of the region around Boulder Dam: U.S.G.S. Bull. 871. (a) Fig. 37, 1:76,000; (b) fig. 47, 1:5,400.
    1935. Moore, B. N., Some strontium deposits of southeastern California and western Arizona: Am. Inst. Min. Met. Eng. Tech. Pub. 599; Trans., v. 115, p. 356-377. (b) Fig. 3, 1:4,000.
80. 1936. Williams, Howell, Pliocene volcanoes of the Navajo-Hopi country: Geol. Soc. America Bull., v. 47, no. 1. (a) Fig. 2, 1:625,000; (b) fig. 8, 1:875,000.
81. 1936. Longwell, C. R., Geology of the Boulder Reservoir floor: Geol. Soc. America Bull., v. 47, no. 9. Pls. 2 and 3, 1:110,000.
82. 1936. Baker, A. A., Geology of the Monument Valley-Navajo Mountain region: U.S.G.S. Bull. 865. Pl. 1, 1:96,000.
83. 1937. Gilluly, James, Geology and ore deposits of the Ajo quadrangle: Ariz. Bur. Mines Bull. 141. (a) Pl. 1, 1:62,500; (b) pl. 3, 1:12,000 (same area as No. 38, pl. 14).
    1942. Gilluly, James, Mineralization of the Ajo copper dist.: Econ. Geology, v. 37, no. 4. (b) Fig. 2, 1:42,000.
    1946. Gilluly, James, Ajo mining dist.: U.S.G.S. Prof. Paper 209. (a) Pl. 3, 1:62,500; (b) pl. 20, 1:12,000.
84. 1937. Reiche, Parry, Toreva-block, a distinctive landslide type: Jour. Geology, v. 45, no. 5. (a) Fig. 3, 1:12,000; (b) fig. 6, 1:16,000.
85. 1937. Reiche, Parry, Quaternary deformation in the Cameron district of the Plateau Province: Am. Jour. Sci., 5th ser., v. 34, no. 200. Map, p. 129, 1:95,000.
86. 1937. Gilluly, James, Physiography of the Ajo region: Geol. Soc. America Bull., v. 48, no. 3. Fig. 6, 1:31,680 (alluvium).
87. 1937. Colton, H. S., Basaltic cinder cones and lava flows of the San Francisco Mountain volcanic field: Mus. Northern Ariz., Bull. 10. Figs. 14, 15, 17, 19, 20, 23, and 24, 1:125,000 to 1:150,000.
88. 1938. Peterson, N. P., Geology and ore deposits of the Mammoth mining camp area, Pinal County: Ariz. Bur. Mines Bull. 144. Pl. 1, 1:4,400 (same area as No. 160, pt. 1, fig. 19). Also mine maps.
89. 1938. Butler, B. S., and Wilson, E. D., Some Arizona ore deposits: Ariz. Bur. Mines Bull. 145. (a) Pl. 8, 1:125,000; (b) pl. 9, 1:9,600; (c) pl. 16, 1:24,000; (d) pl. 25, 1:9,600; (e) pl. 32, 1:2,400 (same as No. 160, pt. 2, fig. 9). (Pl. 7, 1:24,000, same area as No. 10b; No. 160, pt. 1, fig. 6; and No. 38, pls. 4, 12, and 13.)
    1922. Smith, H. D., and Sirdevan, W. H., Mining methods and costs at the United Verde mine: Am. Inst. Min. Met. Eng. Trans., v. 66, p. 127-180. (b) Fig. 1, 1:2,640.
90. 1938. Knechtel, M. M., Geology and ground-water resources of the valley of Gila River and San Simon Creek, Graham County: U.S.G.S. Water-Supply Paper 796-F. Pl. 46, 1:96,000.
91. 1938. Butler, B. S., Wilson, E. D., and Rasor, C. A., Geology and ore deposits of the Tombstone dist.: Ariz. Bur. Mines Bull. 143. Pl. 4, 1:6,000 (pl. 3, 1:12,000, same area as No. 44a).
92. 1939. Wilson, E. D., Pre-Cambrian Mazatzal revolution in central Arizona: Geol. Soc. America Bull., v. 50, no. 7. (a) Pl. 10, 1:80,000; (b) pl. 11, 1:62,500; (c) pl. 12, 1:125,000; (d) fig. 4, 1:174,240; (e) fig. 6, 1:187,500; (f) fig. 9, 1:125,000 (same area as No. 47, pl. 30); (g) fig. 10, 1:160,000.
93. 1939. Mackay, D. K., Geology of the Klene structure: Oil Weekly, v. 93, no. 10. Fig. 1, 1:21,120.
94. 1939. Harrell, M. A., and Eckel, E. B., Ground-water resources of the Holbrook region: U.S.G.S. Water-Supply Paper 836-B. Pl. 2, 1:500,000.
95. 1939. Brown, W. H., Tucson Mountains: Geol. Soc. America Bull., v. 50, no. 5. Pl. 1, 1:62,500.
    1920. Jenkins, O. P., and Wilson, E. D., Geological reconnaissance of the Tucson and Amole Mountains: Ariz. Univ. Bull. 106. Pl. 1, 1:160,000.
96. 1940. Strahler, A. N., Landslides of the Vermilion and Echo Cliffs: Jour. Geomorphology, v. 3, no. 4. Fig. 3, 1:62,500.
97. 1940. Morrison, R. B., Ground-water resources of the Big Sandy Valley, Mohave County: Ariz. State Water Comm. Map, 1:375,000.
98. 1941. Enlows, H. E., Structure of Little Dragoon Mountains: Pan-Am. Geologist, v. 75, no. 4. Pl. 27, 1:62,500.
99. 1941. Kuhn, T. H., Pipe deposits of the Copper Creek area: Econ. Geology, v. 36, no. 5. Fig. 2, 1:28,800 (same as No. 160, pt. 2, fig. 13).
100. 1941. Billingsley, P. R., and Locke, Augustus, Structure of ore districts in the continental framework: Am. Inst. Min. Met. Eng. Trans., v. 144, p. 9-59. Fig. 4, 1:62,500. Contains other maps adapted from pub. sources.
101. 1941. Gardner, L. S., Hurricane fault in southwestern Utah and northwestern Arizona: Am. Jour. Sci., v. 239, no. 4. Pl. 1, 1:312,500.
102. 1942. Nickell, F. A., Development and use of engineering geology: Am. Assoc. Petroleum Geologists Bull., v. 26, no. 12. Fig. 3, 1:22,000. Also more detailed map.
103. 1942. Hack, J. T., Sedimentation and volcanism in the Hopi Buttes: Geol. Soc. America Bull., v. 53, no. 2. (a) Pl. 1, 1:250,000; (b) fig. 7, 1:12,000; (c) fig. 9, 1:7,200; (d) fig. 12, 1:6,000; (e) fig. 13, 1:6,000.
104. 1942. Sharp, R. P., Multiple Pleistocene glaciation on San Francisco Mountain: Jour. Geology, v. 50, no. 5. Fig. 1, 1:80,000.
105. 1942. Mintz, Yale, Slate Mountain volcano-laccolith: Plateau, v. 14, no. 3. Map, p. 44-45, 1:24,000.
106. 1943. Short, M. N., and others, Geology and ore deposits of the Superior mining area: Ariz. Bur. Mines Bull. 151. Pl. 1, 1:12,000 (area similar to No. 160, pt. 1, fig. 24). Also mine maps.
107. 1943. Gutschick, R. C., Redwall limestone of Yavapai County: Plateau, v. 16, no. 1. Map, p. 2, 1:625,000.
108. 1943. Read, C. B., Sample, R. D., and Sullwold, H. H., Jr., Copper deposits of the White Mesa mining dist., Coconino County: U.S.G.S. Open-file rept. Pl. 1, 1:7,200. Also more detailed maps.
109. 1943. Peterson, N. P., and Creasey, S. C., Some copper deposits in the Old Hat mining dist., Pima County: U.S.G.S. Open-file rept. Fig. 3, 1:18,000. Also more detailed mine maps.
110. 1944. Bateman, P. C., and Erickson, M. P., Maudina and Morning Star tungsten mines, Pinal County: U.S.G.S. Prelim. maps. Sheet 2, 1:480.
111. 1944. Hadley, J. B., and Sullwold, H. H., Jr., Copper and zinc deposits in the Reward area, Casa Grande mining dist., Pinal County: U.S.G.S. Prelim. maps. Pl. 2, 1:6,000. Also more detailed maps.
     1946. Denton, T. C., and Haury, P. S., Exploration of the Reward (Vekol) zinc deposit, Pinal County: U. S. Bur. Mines Rept. Inv. 3975. Fig. 2, 1:7,500.
112. 1944. Strahler, A. N., Guide to the east Kaibab monocline in the Grand Canyon region: Plateau, v. 17, no. 1. Fig. 4, 1:100,000.
113. 1944. Hobbs, S. W., Tungsten deposits in the Boriana district and the Aquarius Range, Mohave County: U.S.G.S. Bull. 940-I. (a) Pl. 43, 1:9,600 (also mine map); (b) fig. 28, 1:7,200 (also mine map).
114. 1944. Lasky, S. G., and Webber, B. N., Manganese deposits in the Artillery Mountains region, Mohave County: U.S.G.S. Bull. 936-R. (a) Pl. 62, 1:31,680; (b) pl. 63, 1:9,600.
     1949. Lasky, S. G., and Webber, B. N., Manganese resources of the Artillery Mountains region: U.S.G.S. Bull. 961. (a) Pl. 1, 1:31,680; (b) pl. 2, 1:9,600.
115. 1945. Anderson, C. A., and Kupfer, D. H., Report on the properties of the Amargosa Molybdenum and Copper Corp., Pima County: U.S.G.S. Open-file rept. no. 383. (a) Pl. 2, and (b) pl. 7, 1:1,200.
116. 1945. Anderson, C. A., Loma Prieta mine, Copper Basin, Yavapai County: U.S.G.S. Open-file rept. Pl. 2, 1:2,400.
117. 1945. Hadley, J. B., and Sullwold, H. H., Jr., Geologic map of the San Manuel area, Pinal County: U.S.G.S. Prelim. Map 3-180, 1:2,400.
     1947. Steele, H. J., and Rubly, G. R., San Manuel prospect: Am. Inst. Min. Met. Eng. Tech. Pub. 2255; Trans., v. 178, p. 181-194, 1948. Fig. 1, 1:9,600.
     1950. Lovering, T. S., Huff, L. C., and Almond, Hy, Dispersion of copper from the San Manuel copper deposit, Pinal County: Econ. Geology, v. 45, no. 6. Fig. 2, 1:12,000.
118. 1945. Gilluly, James, Emplacement of the Uncle Sam porphyry, Tombstone: Am. Jour. Sci., v. 243, no. 12. Fig. 2, 1:220,000.
119. 1945. Babenroth, D. L., and Strahler, A. N., Geomorphology and structure of the East Kaibab monocline: Geol. Soc. America Bull., v. 56, no. 2. Pl. 1, 1:160,000.
120. 1945. Koons, E. D., Geology of the Uinkaret Plateau, northern Arizona: Geol. Soc. America Bull., v. 56, no. 2. Pl. 1, 1:108,612.
     1943. Koons, E. D., Uinkaret volcanic field: Plateau, v. 15, no. 4. Fig. 1, 1:500,000.
121. 1946. McDonald, H. R., and Padgett, H. D., Jr., Geology and ground-water resources of the Verde River Valley near Fort McDowell: U.S.G.S. Open-file rept. Pl. 2, 1:125,000.
122. 1946. Hazen, G. E., and Turner, S. F., Geology and ground-water resources of the Upper Pinal Creek area: U.S.G.S. Open-file rept. Pl. 1, 1:56,000.
123. 1946. Turner, S. F., and others, Ground-water resources and problems of the Safford Basin: U.S.G.S. Open-file rept. Pl. 2, 1:250,000 (same area as No. 186, pl. 5).
124. 1946. Halpenny, L. C., and others, Ground-water resources of the Duncan Basin: U.S.G.S. Open-file rept. (a) Pl. 2, 1:300,000 (same area as No. 186, pl. 2); (b) pl. 1 (alluvium), 1:95,000.
125. 1946. Peterson, N. P., Gilbert, C. M., and Quick, G. L., Hydrothermal alteration in the Castle Dome copper deposit: Econ. Geology, v. 41, no. 8. Fig. 2, 1:18,000.
     1948. Peterson, N. P., Geology of the Castle Dome copper deposit: Am. Inst. Min. Met. Eng., Tech. Pub. 2302; Trans., v. 178, p. 195-205. Fig. 1, 1:20,000.
126. 1946. Haury, P. S., Exploration of the Mohawk zinc prospect, Pima County: U. S. Bur. Mines Rept. Inv. 3958. Fig. 1, 1:5,000.
127. 1946. Phelps, H. D., Exploration of the Copper Butte mine, Mineral Creek mining dist., Pinal County: U. S. Bur. Mines Rept. Inv. 3914. Fig. 6, 1:3,000.
128. 1947. Babcock, H. M., and Snyder, C. T., Ground-water resources of the Holbrook area, Navajo County: U.S.G.S. Open-file rept. Pl. 2, 1:375,000.
129. 1947. Cushman, R. L., and Jones, R. S., Geology and ground-water resources of the San Simon Basin, Cochise and Graham Counties: U.S.G.S. Open-file rept. Pl. 1, 1:300,000 (same area as No. 186, pl. 8).
130. 1947. Babcock, H. M., and Sourdry, A. M., Geology and ground-water resources of the Wellton-Mohawk area, Yuma County: U.S.G.S. Open-file rept. Pl. 1, 1:142,560 (same area as No. 186, pl. 24).
131. 1947. McDonald, H. R., Wolcott, H. N., and Bluhm, F. I., Geology and ground-water resources of Paradise Valley, Maricopa County: U.S.G.S. Open-file rept. Pl. 1, 1:210,000.
132. 1947. Halpenny, L. C., and Cushman, R. L., Ground-water resources and problems of the Cactus Flat-Artesia area, San Simon Basin: U.S.G.S. Open-file rept. Pl. 2, 1:94,000.
133. 1947. Babcock, H. M., and Brown, S. C., Ground-water resources of Peeples Valley: U.S.G.S. Open-file rept. Pl. 1, 1:60,000.
134. 1947. Jones, R. S., and Cushman, R. L., Geology and ground-water resources of the Wilcox Basin, Cochise and Graham Counties: U.S.G.S. Open-file rept. Pl. 1, 1:250,000 (same area as No. 186, pl. 26).
135. 1947. Trace, R. D., Fourth of July and Luckie No. 1 and No. 2 fluorspar veins near Duncan, Greenlee County: U.S.G.S. Prelim. Maps 3-207. (a) Pl. 2, 1:1,200; (b) pls. 4 and 6, 1:480.
136. 1947. Stewart, L. A., and Haury, P. S., Arizona asbestos deposits, Gila County: U. S. Bur. Mines Rept. Inv. 4100. (a) Fig. 16, 1:1,800; (b) fig. 19 and (d) fig. 25, 1:2,000; (c) fig. 23, 1:4,800.
137. 1947. Haury, P. S., Examination of zinc-lead mines in the Wallapai mining dist., Mohave County: U. S. Bur. Mines Rept. Inv. 4101. Fig. 7, 1:400.
138. 1947. Bell, G. L., Tungsten deposits near Morristown, Maricopa County: U.S.G.S. Open-file rept. No. 384. (a) Fig. 6, 1:6,000; (b, c, and d) fig. 5, 3, and 4, respectively, 1:1,200.
139. 1947. Creasey, S. C., and Quick, G. L., Copper deposits of a part of the Helvetia mining dist., Pima County: U.S.G.S. Open-file maps. Pl. 1, 1:12,000. Also larger scale maps. (Includes areas in No. 32, pl. 13 and fig. 8.)
140. 1947. McDonald, H. R., Wolcott, H. N., and Hem, J. D., Geology and ground-water resources of the Salt River Valley area, Maricopa and Pinal Counties: U.S.G.S. Open-file rept. Pl. 1, 1:330,000 (same area as No. 186, pl. 18).
141. 1948. Childs, O. E., Geomorphology of the valley of the Little Colorado River: Geol. Soc. America Bull., v. 59, no. 4. Pl. 1, 1:312,500.
142. 1948. Feth, J. H., Permian stratigraphy and structure, northern Canela Hills: Am. Assoc. Petroleum Geologists Bull., v. 32, no. 1. Fig. 1, 1:36,000.
143. 1948. Babcock, H. M., and Kendall, K. K., Geology and ground-water resources of the Gila Bend Basin, Maricopa County: U.S.G.S. Open-file rept. Pl. 1, 1:148,000 (same area as No. 189, pl. 23).
144. 1948. Brown, S. C., and Halpenny, L. C., Water-supply investigations at Tuba City, Navajo Indian Res.: U.S.G.S. Prelim. rept. Pl. 1, 1:31,680.
145. 1948. Anderson, C. A., Structural control of copper mineralization, Bagdad: Am. Inst. Min. Met. Eng. Tech. Pub. 2352; Trans., v. 178, p. 170-180. Fig. 2, 1:72,000.
146. 1948. Romslo, T. M., Antler copper-zinc deposit, Mohave County: U. S. Bur. Mines Rept. Inv. 4214. Fig. 2, 1:2,400.
147. 1948. Halpenny, L. C., and Brown, S. C., Water-supply investigations at Chinle, Navajo Indian Res.: U.S.G.S. Open-file rept. Map, 1:62,500.
148. 1948. Koons, Donaldson, Geology of the eastern Hualpai Res.: Plateau, v. 20, no. 4. Fig. 1, 1:625,000. Reproduced as fig. 5, 1:675,000, in U. S. AEC, RME-2014.
149. 1948. Babcock, H. M., and Brown, S. C., Water supply of Date Creek area, Yavapai County: Arizona State Land Dept. Pl. 1, 1:31,680.
150. 1949. Romslo, T. M., Investigations of Keystone and St. George copper-zinc deposits, Cochise County: U. S. Bur. Mines Rept. Inv. 4504. Figs. 3 and 4, 1:3,000 (same area as No. 160, pt. 1, fig. 14).
     1906. Kellogg, L. O., Sketch of the geology and ore deposits of the Cochise mining dist., Cochise County: Econ. Geology, v. 1, no. 7. Fig. 48, 1:30,000 (approx.).
151. 1949. Halpenny, L. C., and Brown, S. C., Water-supply investigations of Fort Defiance area, Navajo Indian Res., Apache County: U.S.G.S. Open-file rept. Pl. 1, 1:31,680.
152. 1949. Moore, B. N., and others, Geology of the Tucson quadrangle: U.S.G.S. Open-file rept. Map, 1:125,000.
153. 1949. Stoyanow, A. A., Lower Cretaceous stratigraphy in southeastern Arizona: Geol. Soc. Am. Mem. 38. Pl. 27, 1:4,800.
154. 1949. Kiersch, G. A., Structural control and mineralization at the Seventy-Nine mine, Gila County: Econ. Geology, v. 44, no. 1. Fig. 1, 1:14,400 (same area as No. 160, pt. 2, fig. 16).
155. 1949. Thomas, B. E., Ore deposits of the Wallapai dist.: Econ. Geology, v. 44, no. 8. Fig. 2, 1:72,000.
156. 1949. Bluhm, F. I., Wolcott, H. N., and Hem, J. D., Ground-water resources of Deer Valley, Maricopa County: U.S.G.S. Open-file rept. Pl. 1, 1:84,480.
157. 1950. Creasey, S. C., Geology of the Humboldt region and the Iron King mine, Bigbug mining dist., Yavapai County: U.S.G.S. Open-file rept. (a) Pl. 1, 1:24,000; (b) pl. 2, 1:2,400 (same area as No. 160, pt. 1, fig. 35).
     1952. Creasey, S. C., Geology of the Iron King mine, Yavapai County: Econ. Geology, v. 47, no. 1. (a) Fig. 2, 1:48,000; (b) fig. 3, 1:6,400 (same area as No. 160, pt. 1, fig. 35).
158. 1950. Boulder Canyon project; Geological investigation, Final report, Pt. 3, Bull. 1: U. S. Bur. Reclamation. (a) Fig. 11, 1:10,000; (b) fig. 34, 1:14,400. Also more detailed maps.
159. 1950. Price, W. E., Jr., Cenozoic gravels on the rim of Sycamore Canyon: Geol. Soc. America Bull., v. 61, no. 5. Fig. 2, 1:187,500.
160. 1950. Arizona zinc and lead deposits, pt. 1: Ariz. Bur. Mines Geol. Ser. 18, Bull. 156. (a) Fig. 38, 1:62,500; (b) fig. 40, 1:1,200 (see No. 174); (c) fig. 43, 1:2,400 (see No. 171); (c) fig. 43, 1:2,400 (see No. 171). (Fig. 45, 1:31,680, area similar to No. 178; fig. 6, same area as No. 89, pl. 7, No. 10b, and No. 38, pls. 4, 12, and 13; fig. 14, 1:12,000, same area as No. 150; fig. 19, 1:1,200, in same area as No. 88; fig. 24, 1:6,000, area similar to No. 106; fig. 35, 1:7,200, same area as No. 157b.)
     1951. Arizona zinc and lead deposits, pt. 2: Ariz. Bur. Mines Geol. Ser. 19, Bull. 158. (Fig. 9, 1:8,000, same as No. 89e; fig. 13, 1:31,680, same as No. 99; fig. 16, 1:16,000, same area as No. 154; fig. 19, 1:42,240, is in area of No. 75b; fig. 23, 1:24,000, same area as No. 75c.)
161. 1950. Anderson, C. A., Alteration and metallization in the Bagdad porphyry copper deposit: Econ. Geology, v. 45, no. 7. Fig. 2, 1:46,875.
162. 1950. Campbell, Ian, and Schenk, E. T., Camptonite dikes near Boulder Dam: Am. Mineralogist, v. 35, no. 9-10. Fig. 1, 1:18,000. Also larger scale map. Reprinted as Calif. Inst. Contrib., Div. Geol. Sciences No. 539.
163. 1950. Romslo, T. M., Investigations of the Lake Shore copper deposits, Pinal Co.: U. S. Bur. Mines Rept. Inv. 4706. Fig. 3, 1:840.
164. 1950. Cummings, J. B., and Romslo, T. M., Investigations of Twin Buttes copper mines, Pima Co.: U. S. Bur. Mines Rept. Inv. 4732. Figs. 3a, 3b, and 3c, 1:3,600.
165. 1950. Gregory, H. E., Geology and geography of the Zion Park region, Utah and Arizona: U.S.G.S. Prof. Paper 220. Pl. 2, 1:125,000.
166. 1950. Feth, J. H., Structural reconnaissance of the Red Rock quadrangle: U.S.G.S. Open-file rept. Fig. 1, 1:62,500.
167. 1950. Whitcomb, H. A., and Halpenny, L. C., Water-supply inv. of the Buell Park-Sawmill area, Navajo Indian Res., Apache County: U.S.G.S. Open-file rept. Pl. 1, 1:31,680.
168. 1951. Metzger, D. G., Geology and ground-water resources of the northern part of the Ranegras Plain, Yuma County: U.S.G.S. Open-file rept. Pl. 1, 1:62,500 (same area as No. 186, pl. 25).
169. 1951. Longwell, C. R., Megabreccia developed downslope from large faults: Amer. Jour. Sci., v. 249, no. 5. Fig. 2, 1:125,000.
170. 1951. Van Gundy, C. E., Nankoweap group of the Grand Canyon Algonkian of Arizona: Geol. Soc. America Bull., v. 62, no. 8. (a) Pl. 1, and (b) fig. 2, 1:50,000.
171. 1951. Stokes, W. L., Carnotite deposits in the Carrizo Mountains area, Navajo Indian Res., Apache County, Arizona, and San Juan County, New Mexico: U.S.G.S. Circ. 111. Pl. 1, 1:125,000.
     1953. Masters, J. A., Geology of uranium deposits of the Lukachukai Mtns. area, northeastern Arizona: U. S. AEC, RME-27. Fig. 2, 1:68,500.
     1955. Chenoweth, W. L., Geology and uranium deposits of the northwest Carrizo area, Apache County: Guidebook, Four Corners Geol. Soc Field Conf., June 15-17. Fig. 1, 1:285,000.
172. 1951. Wright, R. J., Annie Laurie prospect, Santa Cruz County: U. S. Atomic Energy Commission RMO-677. Pl. 1, 1:2,400.
173. 1951. Kaiser, E. P., Uraniferous quartzite, Red Bluff prospect, Gila County: U.S.G.S. Circ. 137. Pl. 1, 1:2,400.
174. 1951. Anderson, C. A., Older Precambrian structure in Arizona: Geol. Soc. America Bull., v. 62, no. 11. (a) Fig. 2, 1:62,500; (b) fig. 3, 1:100,000; (c) fig. 4, 1:187,500.
     1956. Anderson, C. A., Scholz, E. A., and Strobell, J. D., Jr., Geology and ore deposits of the Bagdad area, Yavapai County: U.S.G.S. Prof. Paper 278. (b) Pl. 3, 1:20,000 (figs. 26, 1:1,200, and 30, 1:660, same as Nos. 160b and c, respectively).
175. 1951. Cooper, J. R., and Huff, L. C., Geological investigation and geochemical prospecting experiment at Johnson: Econ. Geology, v. 46, no. 7. Fig. 2, 1:7,500.
176. 1951. Peterson, N. P., Gilbert, C. M., and Quick, G. L., Geology and ore deposits of the Castle Dome area, Gila County: U.S.G.S. Bull. 971. Pl. 1, 1:6,000, area similar to no. 185, figs. 44 and 45 (fig. 2, 1:250,000, same as no. 7a). Also mine maps.
177. 1951. South and west sides of the San Juan Basin: Guidebook, N. Mex. Geol. Soc. 2d Field Conf. Map, 1:750,000.
178. 1951. Dings, M. G., Wallapai mining dist., Cerbat Mountains, Mohave County: U.S.G.S. Bull. 978-E. Pl. 18, 1:24,000 (area similar to No. 160, pt. 1, fig. 45).
179. 1951. Bejnar, Waldemere, Geology of the Ruin Basin area, Gila County: U.S.G.S. Open-file rept. Pl. 1. 1:12,000.
180. 1951. Repenning, C. A., and Halpenny, L. C., Water-supply investigations of Keams Canyon area, Hopi Indian Res., Navajo County: U.S.G.S. Open-file report. Pl. 1, 1:125,000.
181. 1951. Masters, J. A., Uranium deposits on southwest rim of Lukachukai Mountains, northeast Arizona: U. S. AEC, RMO-911. Pl. 1 (Salt Wash-Bluff contact), 1:78,125.
182. 1951. Anthony, John W., Geology of the Montosa-Cottonwood Canyon area, Santa Cruz County: Univ. of Ariz. thesis. (a) Pl. 1, 1:12,000; (b) pl. 3, 1:1,200.
183. 1952. Huddle, J. W., and Dobrovolny, Ernest: Devonian and Mississippian rocks of central Arizona: U.S.G.S. Prof. Paper 233-D. Fig. 15, 1:31,680.
184. 1952. Romslo, T. M., and Robinson, C. S., Copper Giant deposits, Pima County: U. S. Bur. Mines Rept. Inv. 4850. Fig. 2, 1:1,800.
185. 1952. Guidebook for field trip excursions in southern Arizona: Ariz. Geol. Soc. (a) Fig. 3, 1:187,500; (b) fig. 12, 1:250,000; (c) fig. 13, 1:625,000; (d) fig. 39, 1:62,500 (fig. 30, 1:15,000, area similar to No. 43c; fig. 43, 1:40,000, in area of No. 202; figs. 44 and 45, 1:24,000, areas similar to No. 176).
186. 1952. Halpenny, L. C., and others, Ground water in the Gila River basin and adjacent areas—a summary: U.S.G.S. Open-file rept. Pls. 9, 10, 11, 15, 22, and 29, 1:250,000-1:437,500 (pl. 2, 1:187,500, same area as No. 124a; pl. 5, 1:375,000, same area as No. 123; pl. 8, 1:312,500, same area as No. 129; pl. 18, 1:437,500, same area as No. 140; pl. 23, 1:250,000, same area as No. 143; pl. 24, 1:250,000, same area as No. 130; pl. 25, 1:187,500, same area as No. 168; pl. 26, 1:437,500, same area as No. 134).
187. 1952. Geological symposium of the Four Corners region: Four Corners Geol. Soc. Map inside back cover, 1:1,250,000.
188. 1952. Thune, H. W., Cedar City, Utah, to Las Vegas, Nevada: Utah Geol. Soc., Guidebook No. 7. General pl. 1, 1:500,000.
189. 1952. Fischer, W. A., and Condon, W. H., Photogeologic map of the Shanto Spring-1 quad.: U.S.G.S. TEM-499, 1:24,000.
190. 1952. Blissenbach, Erich, Geology of the Aubrey Valley, south of the Hualpai Indian Res.: Plateau, v. 24, no. 4. Fig. 1, 1:312,500.
191. 1952. Jahns, R. H., Pegmatite deposits of the White Picacho dist., Maricopa and Yavapai Counties: Ariz. Bur. Mines Bull. 162. (a, c, d) Pls. 17, 21, and 24, respectively, 1:240 (pl. 22, 1:480, within area of pl. 21); (b) pl. 20, 1:480.
192. 1953. Peterson, N. P., and others, Geologic map of a portion of the Inspiration quadrangle: U.S.G.S. Open-file map, 1:12,000.
193. 1953. Thomas, B. E., Geology of the Chloride quadrangle: Geol. Soc. America Bull., v. 64. no. 4. Pl. 1, 1:125,000.
194. 1953. Feth, J. H., A geologic and geophysical reconnaissance of the Doney Park-Black Bill Park area with reference to ground water: U.S.G.S. Circ. 233. Pl. 1, 1:93,750.
195. 1953. Wolcott, H. N., Memorandum on ground-water resources and geology of Rainbow Valley-Waterman Wash area, Maricopa County: U.S.G.S. Open-file rept. Pl. 1, 1:250,000.
196. 1953. Hager, Dorsey, Crater Mound (Meteor Crater), a geologic feature: Am. Assoc. Petroleum Geologists Bull., v. 37, no. 4. Fig. 7, 1:12,000.
197. 1953. Wanek, A. A., and Stephens, J. G., Reconnaissance geologic map of the Kaibito and Moenkopi Plateaus and parts of the Painted Desert, Coconino County: U.S.G.S. Oil and Gas Inv. Map OM 145, 1:150,000.
198. 1953. Schwartz, G. M., Geology of the San Manuel copper deposit: U.S.G.S. Prof. Paper 256. (a) Fig. 3, 1:40,000; (b) pl. 1, 1:4,800.
199. 1953. Hart, O. M., and Hetland, D. L., Preliminary report on uranium-bearing deposits in Mohave County: U. S. AEC, RME-4026. (a) Figs. 2, 3, and 4, 1:600 and 1:240; (b) fig. 5, 1:600; (c) fig. 6, 1:1,200; (d) fig. 7, 1:600; (e) fig. 8, 1:120; (f) fig. 9, 1:720.
200. 1953. Guidebook of southwestern New Mexico: N. Mex. Geol. Soc. Fourth Ann. Field Conf. (a) Map, p. 159, 1:812,500; (b, c, d) maps 3-4, 3-5, 3-6, respectively, 1:126,720.
201. 1953. Yost, Coyd B., Jr., Geophysical and geological reconnaissance to determine ground-water resources of Chiu Chuischu area, Papago Indian Res.: U.S.G.S. Open-file rept. Pl. 2, 1:62,500.
202. 1954. Peterson, N. P., Geology of the Globe quadrangle: U.S.G.S. Geol. Quad. Map GQ 41, 1:24,000 (area similar to No. 185, fig. 43).
203. 1954. Bromfield, C. S., and Shride, A. F., Mineral resources of the San Carlos Indian Res.: U.S.G.S. Bull. 1027-N. (a) Pl. 52, 1:250,000; (b) pl. 54, 1:12,000; (c-i) figs. 78-84, respectively, 1:2,400; (j) fig. 85, 1:4,800.
204. 1954. Webb, B. P., and Coryell, K. C., Preliminary regional mapping in the Ruby quad.: U. S. AEC, RME-2009. Pl. 1, reconn. geol. map, 1:43,000 (approx.).
205. 1954. Repenning, C. A., and Irwin, J. H., Bidahochi formation of Arizona and New Mexico: Am. Assoc. of Petroleum Geologists Bull., v. 38, no. 8. Fig. 1, 1:2,312,500.
206. 1954. Wright, H. E., Jr., Problem of Tohatchi formation, Chuska Mtns., Arizona—New Mexico: Am. Assoc. of Petroleum Geologists Bull., v. 38, no. 8. Fig. 1, 1:500,000.
     1956. Wright, H. E., Jr., Origin of the Chuska sandstone, Arizona—New Mexico: Geol. Soc. Amer. Bull., v. 67, no. 4. Fig. 1, 1:470,000.
207. 1954. Feth, J. H., Preliminary report of investigations of springs in the Mogollon Rim region: U.S.G.S. Open-file rept. 317. (a) Pl. 4, 1:75,000; (b) pl. 5, 1:95,000. Also large-scale maps.
208. 1954. Weathers, G., Uranium occurrence at the King No. 1 claim, Gila County: U. S. AEC, RME-2016 (Pt. 1). (a) Fig. 2, 1:62,500; (b) pl. 2, 1:2,400.
209. 1954. Harshbarger, J. W., and Repenning, C. A., Water resources of the Chuska Mtns. area, Navajo Indian Res., Arizona and New Mexico: U. S. G. S. Circ. 308. Pl. 1, 1:125,000.
210. 1954. Coates, D. R., and Halpenny, L. C., Ground-water field trip, Tucson to Nogales: U.S.G.S. Open-file rept. Pl. 1, 1:420,000.

The following are U.S.G.S. prelim. maps, in the open file (unpublished, but on file in Survey offices for public inspection), of 15' quadrangles, scale 1:31,680, in the Navajo-Hopi Indian Res. area, issued during 1950-54; the numbers are keyed to 30' quads., each of which is divided into separate 15' quads. designated by the letters, a, b, c, and d:

211. Keam District. (a-d) Keam Dist. 1-4 quads., respectively. By Irwin, J. H., and others.
212. Grand View. (a) Grand View 1, and (b) part of Grand View 4 quads., respectively. By Akers, J. P., and others.
213. Shinumo Altar. (a, d) Shinumo Altar, 1, 4, and (b, c) parts of Shinumo Altar 2, 3 quads., respectively. By Cooley, M. E., and others.
214. Tuba. (a-d) Tuba 1-4 quads., respectively. By Stevens, P. R., and others.
215. Canyon Diablo. (a) Canyon Diablo 1, and (b) Canyon Diablo 4 quads., respectively. By Jackson, R. L., and others.
216. Black Falls. (a, b, and d) Black Falls 1, 2, and 4, and (c) part of Black Falls 3 quads., respectively. By Irwin, J. H., and others.
217. Oraibi. (a-d) Oraibi 1-4 quads., respectively. By Irwin, J. H., and others.
218. Winslow. (a, b) Winslow 1, 2, and (c, d) parts of Winslow 3, 4 quads., respectively. By Jackson, R. L., and others.
219. Paria Plateau. (a-c) Paria Plateau 1, 3, and 4 quads., respectively. By Cooley, M. E., and others.
220. Sonsala Butte. (a-d) Sonsala Butte 1-4 quads., respectively. By Repenning, C. A., and others.
221. Ganado. (a-d) Ganado 1-4 quads., respectively. By Repenning, C. A., and others.
222. Chinle. (a-d) Chinle 1-4 quads., respectively. By Repenning, C. A., and others.
223. Zith-Tusayan Butte. (a-c) Zith-Tusayan Butte 2-4 quads., respectively. By Akers, J. P., and others.
224. Setsiltso Springs. (a-c) Setsiltso Springs 1, 3, and 4 quads., respectively. By Repenning, C. A., and others.
225. Pinto. (a, b) Pinto 1, 2, and (c, d) parts of Pinto 3, 4 quads., respectively. By Jackson, R. L., and others.
226. Houck. (a, b) Houck 1, 2, and (c, d) parts of Houck 3, 4 quads., respectively. By Akers, J. P., and others.
227. Shan-to Springs. (a-d) Shan-to Springs 1-4 quads., respectively. By Repenning, C. A., and others.
228. Agathla Peak. (a, b) Agathla Peak 3, 4 quads., respectively. By Irwin, J. H., and others.
229. White Cave Springs. (a-d) White Cave Springs 1-4 quads., respectively. By Irwin, J. H., and others.
230. Te-Ye-Ba-A-Kit Lake. (a-d) Te-Ye-Ba-A-Kit Lake 1-4 quads., respectively. By Akers, J. P., and others.
231. Polacca. (a-d) Polacca 1-4 quads., respectively. By Repenning, C. A., and others.
232. Mal-Pais Springs. (a, b) Mal-Pais Springs 1, 2, and (c, d) parts of Mal-Pais Springs 3, 4 quads., respectively. By Irwin, J. H., and others.

233. 1955. Finch, W. I., Preliminary geologic map showing the distribution of uranium deposits and principal ore-bearing formations of the Colorado Plateau region: U.S.G.S. Mineral Inv. Field Studies Map MF 16, 1:500,000.
234. 1955. McAllister, J. F., Geologic maps of the Ord quicksilver area: U.S.G.S. Open-file rept. 319. Map, 1:2,400. Also larger-scale mine maps.
235. 1955. Kiersch, G. A., and Keller, W. D., Bleaching clay deposits, Sanders-Defiance Plateau dist., Navajo country: Econ. Geol., v. 50, no. 5. Fig. 1, 1:260,000.
236. 1955. Coates, D. R., and Cushman, R. L., Geology and ground-water resources of the Douglas basin: U.S.G.S. Water-Supply Paper 1354. Pl. 1, 1:253,440; pls. 2, 3, and 5, same area, same scale, also shows geology.
237. 1955. Chenoweth, W. L., Geology and uranium deposits of the northwest Carrizo area, Apache County: Guidebook, Four Corners Geol. Soc. Field Conf., June 15-17. (a) Fig. 2, 1:125,000; (b) fig. 3, 1:48,000.
238. 1955. Enlows, H. E., Welded tuffs of Chiricahua National Monument: Geol. Soc. Amer. Bull., v. 66, no. 10. Pl. 1, 1:31,680.
239. 1955. Heindl, L. A., Memorandum on geology and ground-water resources in the vicinity of Oracle, Pinal County: U.S.G.S. Open-file rept. Fig. 2, 1:125,000.
240. 1955. Heindl, L. A., Ground-water conditions between Oracle and Oracle Junction, Pinal County: U.S.G.S. Open-file rept. Fig. 3, 1:125,000.
241. 1955. Coates, D. R., Memorandum on the geology and ground-water resources of Dripping Springs basin, Gila and Pinal Counties: U.S.G.S. Open-file rept. Pl. 1, 1:62,500.
242. 1955. Cosner, O. J., Ground water in the Wupatki and Sunset Crater Nat. Monuments, Coconino County: U.S.G.S. Open-file rept. (a) Pl. 1, 1:62,500 (1-2 mile strip S and W of Colo. R. not mapped); (b) inset map, 1:30,000.
243. 1956. Strobell, J. D., Jr., Geology of the Carrizo Mtns. area, in northeastern Arizona and northwestern New Mexico: U.S.G.S. Oil and Gas Inv. Map OM 160, 1:48,000 (sheet 1 of 2). Shows geology of sedimentary rocks surrounding Carrizos, but not of Carrizos themselves.
244. 1956. Witkind, I. J., Uranium deposits at base of the Shinarump conglomerate, Monument Valley, Ariz.: U.S.G.S. Bull. 1030-C. (a) Pl. 6, 1:31,680; (b) pl. 5, maps B and C, 1:12,000; (c) pl. 5, map A, 1:8,400; (d) fig. 14, 1:32,400; (e) fig. 18, 1:20,000.
245. 1956. Wolcott, H. N., Skibitzke, H. E., and Halpenny, L. C., Water resources of Bill Williams River valley near Alamo: U.S.G.S. Water-Supply Paper 1360-D. Pl. 21, 1:62,500 (recent alluvium).
246. 1956. Sharp, B. J., Preliminary report on a uranium occurrence and regional geology in the Cherry Creek area, Gila County: U. S. AEC, RME-2036 (Rev.). (a) Pl. 1, 1:24,000; (b) fig. 3, 1:250.
247. 1956. Geologic investigations of radioactive deposits, semiannual progress report, Dec. 1, 1955 to May 31, 1956: U.S.G.S. TEI-620. Fig. 10, 1:337,500 (volcanic rocks only).
248. 1956. Brown, R. H., Harshbarger, J. W., and Thomas, H. E., Analysis of basic data concerning ground water in the Yuma area: U.S.G.S. Open-file rept. Pl. 1, 1:85,000. (Gila Mtns. not mapped.)
249. 1956. Witkind, I. J., and others, Preliminary geologic maps of the Dinnehotso quad.: U.S.G.S. Mineral Inv. Field Studies Maps (4 separate maps). (a) MF 92, Dinnehotso NW; (b) MF 93, Dinnehotso NE; (c) MF 94, Dinnehotso SE; (d) MF 95, Dinnehotso SW. All 1:24,000.
     1952. Ray, R. G., Photogeologic maps of the Setsiltso Springs quad.: (a) U.S.G.S. TEM-404; (b) TEM-402; (d) TEM-439. All, 1:24,000.
250. 1957. Witkind, I. J., and others, Preliminary geologic maps of the Boot Mesa quad.: U.S.G.S. Mineral Inv. Field Studies Maps (4 separate maps). (a) MF 84, Boot Mesa NW; (b) MF 85, Boot Mesa NE; (c) MF 86, Boot Mesa SE; (d) MF 87, Boot Mesa SW. All, 1:24,000.
     1952. Hackman, R. J., (a) Photogeologic map of the Agathla Peak-4 quad. U.S.G.S. TEM-412, 1:24,000.
251. 1957. Witkind, I. J., and others, Preliminary geologic maps of the Agathla Peak quad.: U.S.G.S. Mineral Inv. Field Studies Maps (4 separate maps). (a) MF 88, Agathla Peak NW; (b) MF 89, Agathla Peak NE; (c) MF 90, Agathla Peak SE; (d) MF 91, Agathla Peak SW. All, 1:24,000.
     1952. Hackman, R. J., Ray, R. G., and Eckstein, W. H., Photogeologic maps of the Agathla Peak quad.: (a) U.S.G.S. TEM-440; (b) TEM-411; (c) TEM-468; (d) TEM-441. All, 1:24,000.
252. 1957. Metzger, D. G., Reconnaissance of the water resources of the Lonesome Valley area, Yavapai County: U.S.G.S. Open-file rept. Map, 1:62,500.
253. 1957. Sabins, Floyd F., Jr., Stratigraphic relations in Chiricahua and Dos Cabezas Mtns.: Am. Assoc. Petroleum Geologists Bull., v. 41, no. 3. Fig. 2, 1:215,000.
254. 1957. Appledorn, C. R., and Wright, H. E., Jr., Volcanic structures in the Chuska Mtns., Navajo Res., Arizona-New Mexico: Geol. Soc. America Bull., v. 68, no. 4. (a) Fig. 1, 1:1,400,000; (b and d) figs. 6 and 8, respectively, 1:47,500; (c) fig. 7, 1:60,000.

The following are photogeologic maps of 7½' quadrangles, scale 1:24,000, published by the U.S.G.S. in its Miscellaneous Geologic Investigations series, during 1956-57:

255. Fredonia NW, Mohave County, by W. R. Hemphill. I-133.
256. Shinarump NW, Coconino County, by R. H. Morris. I-139.
257. Short Creek SW, Mohave County, by C. H. Marshall. I-140.
258. Short Creek NW, Mohave County, by C. H. Marshall and C. L. Pillmore. I-141.
259. Short Creek NE, Mohave County, by C. L. Pillmore. I-142.
260. Heaton Knolls NW, Mohave County, by C. H. Marshall. I-143.
261. Lost Spring Mtn. SE, Mohave County, by C. H. Marshall. I-144.
262. Lost Spring Mtn. NE, Mohave County, by C. H. Marshall. I-145.
263. Lost Spring Mtn. NW, Mohave County, by C. H. Marshall. I-146.
264. Short Creek SE, Mohave County, by C. H. Marshall. I-153.
265. Fredonia SW, Mohave County, by C. H. Marshall. I-160.
266. Lees Ferry SE, Coconino County, by Kathleen McQueen. I-169.
267. Paria Plateau SW, Coconino County, by J. P. Minard. I-171.
268. Paria Plateau NW, Coconino County, by J. P. Minard. I-182.
269. Lees Ferry SW, Coconino County, by J. S. Detterman. I-189.
270. Emmett Wash NE, Coconino County, by J. S. Detterman. I-190.
271. Paria Plateau SE, Coconino County, by C. H. Marshall. I-191
272. Emmett Wash NW, Coconino County, by J. P. Minard. I-192.
273. Tanner Wash NW, Coconino County, by J. P. Minard. I-193.
274. Jacob Lake NE, Coconino County, by C. H. Marshall. I-194.
275. Lees Ferry NW, Coconino County, by Kathleen McQueen. I-196.
276. House Rock Spring NE, Coconino County, by J. P. Minard. I-198.
277. House Rock Spring SE, Coconino County, by Kathleen McQueen. I-199.
278. Lees Ferry NE, Coconino County, by Kathleen McQueen. I-222.
279. Paria Plateau NE, Coconino County, by Kathleen McQueen. I-228.