

GEOLOGICAL SURVEY CIRCULAR 401



REPORTS AND MAPS OF THE  
GEOLOGICAL SURVEY RELEASED  
ONLY IN THE OPEN FILES, 1956

UNITED STATES DEPARTMENT OF THE INTERIOR  
Fred A. Seaton, *Secretary*

GEOLOGICAL SURVEY  
Thomas B. Nolan, *Director*

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By Betsy A. Weld, William S. Eisenlohr, Jr., and Arthur Johnson

Washington, D. C., 1957

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Free on application to the Geological Survey, Washington 25, D. C.



# REPORTS AND MAPS OF THE GEOLOGICAL SURVEY

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### INTRODUCTION

This circular contains a list of the maps and reports released by the Geological Survey in 1956 that are available in open files. They may be consulted in the Geological Survey Library, in Washington, D. C., and at various field offices, the addresses of which are given immediately after the date of the report. They may also be read at the offices of various cooperating agencies, as indicated.

The following circulars list open-file reports and maps released during the years indicated: 56 (1946-47), 64 (1948), 149 (1949-50), 227 (1951), 263 (1952), 337 (1953), 364 (1954), and 379 (1955).

Most of the maps were duplicated by rapid and inexpensive processes, such as photostat, vandyke, or ozalid, but some were printed by photolithography. Most of the texts for the reports are typed copies (ribbon or carbon copy), but some have been mimeographed.

The reports of the Conservation Division concern the potential waterpower of Cascade Creek, Scenery

Creek, Delta Creek, and Bradley Lake, Alaska, and the geology and waterpower possibilities of Crater Lake, Long Lake, and Speel River, Alaska.

The reports and maps of the Geologic Division contain results of work accomplished by Survey geologists in 16 states, Alaska, Brazil, Iran, and Puerto Rico. These maps and reports are released in preliminary form in order to make information immediately available to persons concerned with exploration for and production of minerals, fuels, and construction materials.

The reports of the Water Resources Division contain information on streamflow, ground water, quality of water, and related geology and hydrology in the United States, Alaska, Hawaii, Puerto Rico and Peru.

A general index follows, in which the reader is referred to a report by its serial number as listed in the following list of reports, which are arranged alphabetically by names of authors.

### MAPS AND REPORTS

1. Ames, F. C., Sediment data for streams in northwestern California: 5 p. Aug. 31, 1956. P. O. Box 239, University Station, Albuquerque, N. Mex.; 1242-E General Services Bldg., Washington, D. C.
2. Archbold, N. L., Relationships of calcium carbonate to lithology and vanadium-uranium deposits in Salt Wash sandstone of southwestern Colo.: 27 p., 15 illus., 7 tables. Oct. 23, 1956. Grand Junction, Colo.
3. Audsley, G. L., Reconnaissance of ground-water development in the Fort Stockton area, Pecos County, Tex.: 105 p., 1 pl., 4 figs. Sept. 21, 1956. 302 West 15th St., Austin, Tex.; 1242-G General Services Bldg., Washington, D. C.
4. Barnes, D. F., Report on seismic survey at Ordnance Test Station, Maynard, Mass.: 8 p., 1 map, 14 traveltime curves and profiles. July 20, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; Room 1, 270 Dartmouth St., Boston, Mass.; 230 Old Country Road, Mineola, L. I., N. Y.
5. Bayley, R. W., Preliminary report on the geology of Lake Mary quadrangle, Iron County, Mich.: 133 p., 7 pls., 37 figs., 4 tables. Mar. 8, 1956. First National Bank Bldg., Iron Mountain, Mich.
6. Beamer, N. H., Salinity investigations in the Delaware River estuary: 4 p., 1 fig. Apr. 10, 1956. 1302 Custom House, 2nd and Chestnut Sts., Philadelphia, Pa.; 1242-E General Services Bldg., Washington, D. C.

7. Berkstresser, C. F., Reconnaissance of ground-water conditions in vicinity of Philmont Boy Scout Ranch, Colfax County, N. Mex.: 14 p. Oct. 16, 1956. 279 Geology Bldg., University of New Mexico, Albuquerque, N. Mex.; 1242-G General Services Bldg., Washington, D. C.
8. Bickel, R. S., and Patton, W. W., Jr., Preliminary geologic map of the Nulato and Kateel Rivers area, Alaska; 1 map and explanation. Oct. 1, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; Brooks Memorial Mines Bldg., College, Alaska; 117 Federal Bldg., Juneau, Alaska; 210 Glover Bldg., Anchorage, Alaska; 468 New Customhouse, Denver, Colo.; 1031 Bartlett Bldg., Los Angeles, Calif.; 724 Appraisers Bldg., San Francisco, Calif.; 504 Federal Bldg., Salt Lake City, Utah; S. 157 Howard St., Spokane, Wash.; Territorial Dept. of Mines, Territorial Bldg., Juneau, Alaska.
9. Bodhaine, G. L., Correlative discharge estimates for Columbia River at Rocky Reach dam site near Entiat, Wash., for water years 1928-53: 2 p. Aug. 15, 1956. 207 Federal Bldg., Tacoma, Wash.; 2236 General Services Bldg., Washington, D. C.
10. Bodhaine, G. L., Correlative discharge estimates for Columbia River at Wells dam site near Pateros, Wash., for water years 1928-53: 2 p. Aug. 15, 1956. 207 Federal Bldg., Tacoma, Wash.; 2236 General Services Bldg., Washington, D. C.
11. Bradley, Edward, and Cushman, R. V., Memorandum report on geologic and ground-water conditions in the Hubbard Brook watershed, New Hampshire: 15 p., 1 pl., 1 fig. July 31, 1956. 230 Old Country Road, Mineola, L. I., N. Y.; Geological Survey, Durham, N. H.; 1242-G General Services Bldg., Washington, D. C.
12. Breeding, S. D., and Holland, P. H., Delivery of water, Whitney Reservoir to Richmond, Tex., via Brazos River channel, 1954: 4 p., 4 charts. Nov. 9, 1956. 302 West 15th St., Austin, Tex.; 300 West Vickery St., Fort Worth, Tex.; 1013 Federal Bldg., Houston, Tex.; 1602 West Beauregard St., San Angelo, Tex.; 318-19 Federal Bldg., Wichita Falls, Tex.; 2236 General Services Bldg., Washington, D. C.
13. Brennan, Robert, Chemical quality of the water of the coastal basins of northern California: 48 p., 12 figs., 11 tables. Aug. 31, 1956. 2520 Marconi Ave., Sacramento, Calif.; 1242-E General Services Bldg., Washington, D. C.
14. Brennan, Robert, Preliminary chemical quality study in the Manhattan Beach area, Calif.: 33 p., 7 figs., 5 tables. June 26, 1956. 2520 Marconi Ave., Sacramento, Calif.; 1242-E General Services Bldg., Washington, D. C.
15. Brown, C. E., and Whitlow, J. W., Records of drill holes from drilling in Dubuque County, Iowa, by the Geological Survey, 1955: 31 p., 2 illus. June 25, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; Office of the State Geologist, Geology Annex, Iowa Geological Survey, Iowa City, Iowa.
16. Brown, R. H., Harshbarger, J. W., and Thomas, H. E., Analysis of basic data concerning ground water in the Yuma area, Arizona: 117 p., 2 pls., 43 figs. Apr. 20, 1956. 136 N. Park Ave., Tucson, Ariz.; 133 West Monroe St., Phoenix, Ariz.; 200-1 Post Office Bldg., Yuma, Ariz.; 1031 Bartlett Bldg., 215 West 7th St., Los Angeles, Calif.; 468 New Custom House, Denver, Colo.; 504 Federal Bldg., Salt Lake City, Utah; 1242-G General Services Bldg., Washington, D. C.
17. Brown, S. G., and Newcomb, R. C., The ground-water resources of Cow Valley near Ironside, Malheur County, Oreg.: 46 p., 9 pls. Apr. 1956. 1001 NE. Lloyd Blvd., Portland, Oreg.; 1242-G General Services Bldg., Washington, D. C.; Office of the Oregon State Engineer, Salem, Oreg.
18. Brown, S. G., and Newcomb, R. C., Ground-water resources of the sand-dune area north of Coos Bay, Oreg.: 37 p., 23 pls. Dec. 1956. 1001 NE. Lloyd Blvd., Portland, Oreg.; 1242-G General Services Bldg., Washington, D. C.
19. Burnham, W. L., and Dutcher, L. C., Map of Redlands-Beaumont area, California, showing well locations and water-level contours for March 1955: 1 map. May 9, 1956. 221 Redondo Ave., Long Beach, Calif.; 2929 Fulton Ave., Sacramento, Calif.; 1242-G General Services Bldg., Washington, D. C.
20. Byers, F. M., Jr., Geologic map of the Alvord Mountain quadrangle, Calif.: 1 map, 2 geologic structure sections. Nov. 15, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; 116 North Alexander St., Claremont, Calif.; 215 West 7th St., Los Angeles, Calif.; California Division of Mines, Ferry Bldg., San Francisco, Calif.
21. Campbell, A. B., Reconnaissance geologic map of the St. Regis-Superior area, Mineral County, Mont.: 1 map. May 18, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; S. 157 Howard St., Spokane, Wash.; Office of the Director, Montana Bureau of Mines and Geology, Butte, Mont.
22. Canney, F. C., Geochemical study of soil contamination in the Coeur d'Alene district, Shoshone County, Idaho. 2 illus. July 20, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; S. 157 Howard St., Spokane, Wash.

23. Carlson, J. E., Drilling data in the Montfort, Rewey, Mifflin, Belmont, and Calamine quadrangles, Wis.: 70 p., 6 illus. Apr. 22, 1956. Office of the State Geologist, Science Hall, Univ. of Wisconsin, Madison, Wis.
24. Cater, F. W., Jr., and Crowder, D. F., Geologic map of the Holden quadrangle, Washington: 1 map. Aug. 30, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; S. 157 Howard St., Spokane, Wash.; Office of the State Geologist, Dept. of Conservation and Development, 335 General Administration Bldg., Olympia, Wash.
25. Chase, G. H., Five preliminary maps of Kit Carson County, Colo., showing the depth to the water table in the principal aquifer, altitude of the water table, saturated thickness of the principal aquifer, altitude of the surface of the Pierre shale, and depth to the Pierre shale: 5 maps. Nov. 27, 1956. Denver Federal Center, Bldg. 25, Denver, Colo.; 1242-G General Services Bldg., Washington, D. C.
26. Colbert, J. L., Waterpower resources of Cascade Creek, Scenery Creek, and Delta Creek near Petersburg, Alaska: 58 p., 1 pl., 12 figs., 9 tables. Feb. 1, 1956. 4 Homewood Pl., Menlo Park, Calif.; 724 Appraisers Bldg., San Francisco, Calif.; 529 Post Office and Court House, Los Angeles, Calif.; 244 Federal Bldg., Tacoma, Wash.; 117 Federal Bldg., Juneau, Alaska; 210 Glover Bldg., Anchorage, Alaska; Wright Bldg., Palmer, Alaska; Mines Bldg., College, Alaska; 1033 General Services Bldg., Washington, D. C.
27. Colby, B. R., Relationship of sediment discharge to streamflow: 170 p., 7 pls., 40 figs., 9 tables. Apr. 5, 1956. P. O. Box 293, University Station, Albuquerque, N. Mex.; 1242-E General Services Bldg., Washington, D. C.
28. Colby, B. R., Relationship of unmeasured sediment discharge (difference between total and measured sediment discharge) to mean velocity: 17 p., 8 figs. Oct. 16, 1956. P. O. Box 293, University Station, Albuquerque, N. Mex.; 1242-E General Services Bldg., Washington, D. C.
29. Conover, C. S., The ground-water situation in Albuquerque: 6 p. Oct. 1956. 279 Geology Bldg., University of New Mexico, Albuquerque, N. Mex.; 1242-G General Services Bldg., Washington, D. C.
30. Conover, C. S., and others, Results of spot-discharge measurements and chemical analyses of water along the Pecos River, tributaries, and diversions between Acme and Artesia, N. Mex., January and February 1956: 8 p., 3 figs. May 1956. 279 Geology Bldg., University of New Mexico, Albuquerque, N. Mex.; 1242-G General Services Bldg., Washington, D. C.; Office of the State Engineer, Santa Fe, N. Mex.
31. Crosthwaite, E. G., Ground-water use in Idaho: 7 p. Apr. 30, 1956. 914 Jefferson St., Boise, Idaho; 1242-G General Services Bldg., Washington, D. C.
32. Crosthwaite, E. G., Well records and ground-water levels in western Jerome County, Idaho: 151 p., 1 pl., 2 figs. Apr. 1956. 914 Jefferson St., Boise, Idaho; 429 Federal Bldg., Boise, Idaho; 2128 South 38th St., Tacoma, Wash.; 1001 NE, Lloyd Blvd., Portland, Oreg.; 504 Federal Bldg., Salt Lake City, Utah; 1242-G General Services Bldg., Washington, D. C.; Idaho State Reclamation Engineer, State House, Boise, Idaho.
33. Cushing, E. M., The water situation in Tennessee: 6 p. June 21, 1956. 823 Edney Bldg., Chattanooga, Tenn.; Memphis General Depot, U. S. Army, Memphis, Tenn.; 2238 General Services Bldg., Washington, D. C.
34. Daniels, W. S., and Hale, M. D., Floods of October 1954 in the Chicago area, Illinois and Indiana: 58 p., 14 graphs, 2 maps. Feb. 1, 1956. 605 South Neil St., Champaign, Ill.; 611 North Park Ave., Room 407, Indianapolis, Ind.; 2236 General Services Bldg., Washington, D. C.
35. Davis, G. H., Geologic and drainage features of lands involved in action to quiet title to properties in Kings Canyon National Park, U. S. vs. Blanchard, et al.: 13 p., 2 pls. Sept. 10, 1956. 2929 Fulton Ave., Sacramento, Calif.; 1242-G General Services Bldg., Washington, D. C.
36. Davis, G. H., Green, J. H., Olmstead, F. H., and Brown, D. W., Plates 2, 3, 4, 5, 6, 7, 8, 15, 30, 31, and 37 from report, "Ground-water conditions and storage capacity in the San Joaquin Valley, Calif.": 11 pls. May 16, 1956. 2929 Fulton Ave., Sacramento, Calif.; 1242-G General Services Bldg., Washington, D. C.
37. Dings, M. G., Structure contour map of the Pend Oreille and Grandview mines area, Metaline mining district, Pend Oreille County, Wash.: 1 map and sheet of sections. Oct. 29, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; Office of the State Geologist, Dept. of Conservation and Development, 335 General Administration Bldg., Olympia, Wash.
38. Dings, M. G., Whitebread, D. H., and Yates, R. G., Geologic map and sections of the Metaline mining district, Pend Oreille County, Wash.: 1 map, 4 sections, 1 topographic map, 1 explanation sheet. Dec. 10, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; S. 157 Howard St., Spokane, Wash.; Office of the State Geologist, Dept. of Conservation and Development, 335 General Administration Bldg., Olympia, Wash.

39. Dobrovolsky, Ernest, and Gard, L. M., Jr., Report on the geology of the relocation alignment between Marshall, Colo., and the Rocky Flats Atomic Energy Commission plant, State Highway No. 93: 30 p., 1 map, 54 pl., 6 tables. Dec. 18, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; Library, Colo. Dept. of Highways, 4201 E. Arkansas Ave., Denver, Colo.
40. Durfor, C. N., Investigation of water-quality hydrology in the Ft. Belvoir, Va. area, 1954-1955. A summary report: 115 p., 33 figs., 7 tables. May 7, 1956. 1302 Custom House, 2nd and Chestnut Sts., Philadelphia, Pa.; 1242-E General Services Bldg., Washington, D. C.
41. Dutcher, L. C., Memorandum summarizing preliminary estimates of ground-water outflow from Bunker Hill Basin at Colton Narrows, San Bernardino County, Calif.: 14 p., 2 pls. June 26, 1956. 221 Redondo Ave., Long Beach, Calif.; 2929 Fulton Ave., Sacramento, Calif.; 1242-G General Services Bldg., Washington, D. C.
42. Eaton, W. R., Estimated use of water in Tennessee, 1949 (breakdown of data pertaining to Tennessee published in Circular 115): 6 p. text and tables. Feb. 1, 1956. 823 Edney Bldg., Chattanooga, Tenn.; 2236 General Services Bldg., Washington, D. C.
43. Eaton, W. R., Location of gaging stations in Tennessee district, Surface Water Branch, and delineation of areas of certain 3-day minimum discharges occurring once in 2 years and once in 10 years, on the average: 2 maps. Feb. 1, 1956. 823 Edney Bldg., Chattanooga, Tenn.; 2236 General Services Bldg., Washington, D. C.
44. Erskine, H. M., Losses due to ice storage in Heart River between Heart Butte Dam and Mandan, N. Dak.: 20 p., 11 figs., 1 map. Sept. 26, 1956. Room 7, 202½ Third St., Bismarck, N. Dak.; 2236 General Services Bldg., Washington, D. C.
45. Eschman, D. F., and Hartshorn, J. H., Geologic map of proposed relocation of Route 2 between Ward Hill Road, Phillipston, and the Templeton town line, Mass.: 3 p., 1 map. May 18, 1956. Commonwealth of Mass., Dept. of Public Works, Boston, Mass.; Room 1, 270 Dartmouth St., Boston, Mass.
46. Foxworthy, B. L., and Washburn, R. L., Reconnaissance investigation of ground water in the Wellpint area, Stevens County, Wash.: 14 p., 3 pls., 1 fig. Dec. 27, 1956. 2128 South 38th St., Tacoma, Wash.; 1242-G General Services Bldg., Washington, D. C.
47. Gibson, Russell, Memorandum reports on the geologic spot examinations of mines and prospects in Iran, Feb. 1954, through June, 1955: 65 p., 25 figs. Nov. 15, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; Director of Mining, Ministry of Industry and Mining, Govt. of Iran, Tehran, Iran.
48. Hackman, R. J., The multi-slope model: a constructed stereoscopic model showing angles of slope from 2 to 90 degrees at different locations and sloping in different directions in the model: 2 figs., 1 table. Aug. 30, 1956. Room 3638, Interior Bldg., Washington, D. C.
49. Harris, A. H., and Jibson, W. N., Bear River hydrometric data, tri-State investigations, 1954: 89 p. text and tables, 8 graphs. June 21, 1956. 170 North Main St., Logan, Utah; 2236 General Services Bldg., Washington, D. C.
50. Harris, A. H., and Jibson, W. N., Bear River hydrometric data, tri-State investigations, 1955: 106 p. text and tables, 8 graphs, 1 map. Dec. 9, 1956. 170 North Main St., Logan, Utah; 300 Federal Bldg., Salt Lake City, Utah; 429 Federal Bldg., Boise, Idaho; Bldg. 25 Denver Federal Center, Denver, Colo.; 2236 General Services Bldg., Washington, D. C.
51. Hartshorn, J. H., and Hanshaw, P. M., Surficial geologic map along Route 110 relocation from Lowell to Littleton, Mass.: 1 map with descriptive text. Apr. 23, 1956. Room 1, 270 Dartmouth St., Boston, Mass.
52. Hecht, R. J., Reconnaissance map of southeastern Massachusetts showing the distribution of deposits of Quaternary age: 1 map. July 20, 1956. 927 Post Office Bldg., Boston, Mass.; 1242-G General Services Bldg., Washington, D. C.
53. Herrick, E. H., Memorandum on the possibilities of irrigation in the Capulin area, Colfax and Union Counties, N. Mex.: 11 p., 1 fig. Nov. 19, 1956. 279 Geology Bldg., University of New Mexico, Albuquerque, N. Mex.; 1242-G General Services Bldg., Washington, D. C.
54. Hogenson, G. M., Geology and ground-water resources of the Umatilla River basin area, Oregon: 215 p., 12 pls. Aug. 10, 1956. 1001 NE Lloyd Blvd., Portland, Oreg.; 1242-G General Services Bldg., Washington, D. C.
55. Holland, P. H., and Irelan, Burdige, Guadalupe and Blanco River seepage investigations: 33 p. text and tables, 24 maps and charts. Mar. 16, 1956. 302 West 15 St., Austin, Tex.; 300 West Vickery St., Fort Worth, Tex.; 1013 Federal Bldg., Houston, Tex.; 1602 West Beauregard St., San Angelo, Tex.; 318-19 Federal Bldg., Wichita Falls, Tex.; 2236 General Services Bldg., Washington, D. C.
56. Holland, P. H., and Lee, Frank C., Low-flow investigation of the Pedernales River, Tex.: 20 p., 1 map, 2 charts. Apr. 16, 1956. 302 West 15th St., Austin, Tex.; 300 West Vickery St., Fort Worth, Tex.; 1013 Federal Bldg., Houston, Tex.; 1602 West Beauregard St., San Angelo, Tex.; 318-19 Federal Bldg., Wichita Falls, Tex.; 2236 General Services Bldg., Washington, D. C.
57. Huber, N. K., The environmental control of sedimentary iron minerals and its relation to the origin of the Ironwood iron formation: 95 p., 12 figs., 13 tables. Mar. 8, 1956. First National Bank Bldg., Iron Mountain, Mich.

58. Ireland, Burdge, Chemical quality standards for irrigation waters: 8 p., 1 fig. Dec. 4, 1956. 302 West 15th St., Austin, Tex.; 1242-E General Services Bldg., Washington, D. C.
59. James, H. L., Johnny Gulch talc deposit, Madison County, Mont.: 8 p., 3 illus. Feb. 1, 1956. Office of the Director, Montana Bureau of Mines and Geology, Montana School of Mines, Butte, Mont.
60. Jenkins, E. D., Results of pumping tests in the Widefield area, Fountain Valley, Colo.: 15 sheets. June 19, 1956. Denver Federal Center, Bldg. 25, Denver, Colo.; 1242-G General Services Bldg., Washington, D. C.
61. Johnson, F. A., Waterpower possibilities of Crater Lake, Long Lake, and Speel River near Juneau, Alaska: 69 p., 1 pl., 6 figs., 13 tables. Feb. 1, 1956. 4 Homewood Place, Menlo Park, Calif.; 724 Appraisers Bldg., San Francisco, Calif.; 529 Post Office and Court House, Los Angeles, Calif.; 244 Federal Bldg., Tacoma, Wash.; 117 Federal Bldg., Juneau, Alaska; 210 Glover Bldg., Anchorage, Alaska; Wright Bldg., Palmer, Alaska; Mines Bldg., College, Alaska; 1033 General Services Bldg., Washington, D. C.
62. Johnson, F. A., and Soward, K. S., Preliminary report on waterpower possibilities of Bradley Lake, Alaska, with a chapter on Tentative Geologic Conclusions on Bradley Lake power site: 85 p., 3 pls., 3 figs., 8 tables. June 6, 1956. 4 Homewood Place, Menlo Park, Calif.; 724 Appraisers Bldg., San Francisco, Calif.; 468 Customhouse, Denver, Colo.; 244 Federal Bldg., Tacoma, Wash.; 117 Federal Bldg., Juneau, Alaska; 210 Glover Bldg., Anchorage, Alaska; Wright Bldg., Palmer, Alaska; Mines Bldg., College, Alaska; 1033 General Services Bldg., Washington, D. C.
63. Johnston, P. M., Geology of the Great Falls Park area, Fairfax County, Va.: 5 p. Dec. 10, 1956. 1242-G General Services Bldg., Washington, D. C.
64. Jones, J. R., Map of east-central South Dakota showing area underlain by more than 25 feet of stratified sand and gravel: 1 map. Sept. 5, 1956. 202 Osborn Bldg., Huron, S. Dak.; 510 Rudge-Guenzel Bldg., Lincoln, Nebr.; 1242-G General Services Bldg., Washington, D. C.
65. Jones, W. R., The Central mining district, Grant County, New Mexico: 1 pl., 2 index maps, 3 tables. Feb. 1, 1956. Office of the Director, New Mexico Bureau of Mines and Mineral Resources, Socorro, N. Mex.; Western New Mexico College Library, Silver City, N. Mex.
66. Kachadoorian, Reuben, Engineering geology of the Katalla area, Alaska: 21 p., 5 pl., 2 figs. Oct. 29, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; Brooks Memorial Mines Bldg., College, Alaska; 117 Federal Bldg., Juneau, Alaska; 210 Glover Bldg., Anchorage, Alaska; 468 New Customhouse, Denver, Colo.; 1031 Bartlett Bldg., Los Angeles, Calif.; 724 Appraisers Bldg., San Francisco, Calif.; 504 Federal Bldg., Salt Lake City, Utah; S. 157 Howard St., Spokane, Wash.; Territorial Dept. of Mines, Territorial Bldg., Juneau, Alaska.
67. Kachadoorian, Reuben, Engineering geology of the Nenana-Rex area, Alaska: 20 p., 1 pl., 2 figs. Apr. 24, 1956. Geological Survey library, 4 Homewood Place, Menlo Park, Calif.; Brooks Memorial Mines Bldg., College, Alaska; 117 Federal Bldg., Juneau, Alaska; 210 Glover Bldg., Anchorage, Alaska; 468 New Customhouse, Denver, Colo.; 1031 Bartlett Bldg., Los Angeles, Calif.; 724 Appraisers Bldg., San Francisco, Calif.; 504 Federal Bldg., Salt Lake City, Utah; S. 157 Howard St., Spokane, Wash.; Territorial Dept. of Mines, Territorial Dept. of Mines, Territorial Bldg., Juneau, Alaska.
68. Kachadoorian, Reuben, Engineering geology of the Warford Mesa subdivision, Orinda, Calif.: 14 p., 1 pl. Dec. 18, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; 724 Appraisers Bldg., San Francisco, Calif.; California Division of Mines, Ferry Bldg., San Francisco, Calif.
69. Kaiser, E. P., Preliminary report on the geology and deposits of monazite, thorite, and niobium-bearing rutile of the Mineral Hill district, Lemhi County, Idaho: 43 p., 5 figs., 4 tables. Sept. 11, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; S. 157 Howard St., Spokane, Wash.; Idaho Bureau of Mines and Geology, Moscow, Idaho.
70. Keech, C. F., Water levels in observation wells in Nebraska during 1955: 106 p., 2 figs. Sept. 1956. 507 Rudge-Guenzel Bldg., Lincoln, Nebr.; 1242-G General Services Bldg., Washington, D. C.
71. Keller, A. S., and Cass, J. T., Petroliferous sand of the Chignik formation at Chignik Lagoon, Alaska: 5 p., 2 figs. Aug. 22, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo., and 4 Homewood Place, Menlo Park, Calif.; Brooks Memorial Mines Bldg., College, Alaska; 117 Federal Bldg., Juneau, Alaska; 210 Glover Bldg., Anchorage, Alaska; 468 New Customhouse, Denver, Colo.; 1031 Bartlett Bldg., Los Angeles, Calif.; 724 Appraisers Bldg., San Francisco, Calif.; 504 Federal Bldg., Salt Lake City, Utah; S. 157 Howard St., Spokane, Wash.; Territorial Dept. of Mines, Territorial Bldg., Juneau, Alaska.



72. Kunkel, Fred, A brief hydrologic and geologic reconnaissance of Pinto Basin, Joshua Tree National Monument, Riverside County, Calif.: 35 p., 5 pls. Oct. 8, 1956. 221 Redondo Ave., Long Beach, Calif.; 2929 Fulton Ave., Sacramento, Calif.; 1242-G General Services Bldg., Washington, D. C.
73. Kunkel, Fred, Data on water wells in Cuddeback, Superior, and Harper Valleys, San Bernardino County, Calif.: 73 p., 1 pl. July 10, 1956. 221 Redondo Ave., Long Beach, Calif.; 2929 Fulton Ave., Sacramento, Calif.; 1242-G General Services Bldg., Washington, D. C.
74. Kupfer, D. H., and Bassett, A. M., Preliminary geologic map of part of southeastern Mojave Desert, Calif.: 1 map and explanation. Dec. 24, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; 116 North Alexander Ave., Claremont, Calif.; 1031 Bartlett Bldg., Los Angeles, Calif.; California Division of Mines, Ferry Bldg., San Francisco, Calif.
75. Laine, L. L., Surface-water resources of Polecat Creek basin, Oklahoma: 20 p., 2 figs. Sept. 26, 1956. 208 NW, 5th St., Oklahoma City, Okla.; 2236 General Services Bldg., Washington, D. C.
76. Lohr, E. W., Chemical character of the public water supplies of the larger cities of Alaska, Hawaii, and Puerto Rico, 1954: 39 p., 1 fig. Mar. 6, 1956. 1242-E General Services Bldg., Washington, D. C.
77. Mapel, W. J., and Robinson, C. S., Geologic and structure contour maps of the northern and western flanks of the Black Hills, Wyoming, Montana, and South Dakota: 2 maps (4 parts each) and 9 p. table. July 9, 1956. Geological Survey libraries, Denver Federal Center, Denver, Colo. and 4 Homewood Place, Menlo Park, Calif.; 468 New Customhouse, Denver, Colo.; Billings, Mont.
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