

GEOLOGICAL SURVEY CIRCULAR 706



Reports and Maps of the
Geological Survey Released
Only in the Open Files,
January through April, 1974

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By Betsy A. Weld, Kathleen T. Iseri, and Gary W. Horton

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United States Department of the Interior

ROGERS C. B. MORTON, *Secretary*



Geological Survey

V. E. McKelvey, *Director*

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INTRODUCTION

As of May 1, 1974, the U.S. Geological Survey announces its open-file reports in the monthly list "New Publications of the Geological Survey." Cumulative lists of open-file reports will appear with our other publications in annual catalogs.

This circular contains a list of maps and reports released by the U.S. Geological Survey from January 1 through April 30, 1974, that are available for public inspection in the open files. These maps and reports may be consulted at the indicated depositories, and copies may be made upon request (at the requestor's expense).

The reports are arranged alphabetically by author; each report is preceded by a serial number that is used to identify the report in the index (p. 9), and is followed by the depositories at which it may be consulted.

Most open-file reports are on file in at least one of the major U.S. Geological Survey depositories listed below. Many are also on file at depositories selected as appropriate for the individual reports. All depositories are U.S. Geological Survey offices unless a State Geological Survey or other organization is specifically indicated. The following symbols are used in the list to indicate the major depositories:

- A Public Inquiries Office, Rm. 108, Skyline Bldg. 508 2d Ave., Anchorage, AK 99501.
- Da Library, Bldg. 25, Federal Center, Denver, CO 80225.
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- M Library, 345 Middlefield Rd., Menlo Park, CA 94025.
- NC Library, Rm. 4A100, National Center, 12201 Sunrise Valley Drive, Reston, VA 22092.
- S Public Inquiries Office, Rm. 678, U.S. Court House Bldg., West 920 Riverside Ave., Spokane, WA 99201.
- SF Public Inquiries Office, Rm. 504, Custom House, 555 Battery St., San Francisco, CA 94111.
- T Public Inquiries Office, Rm. 1C45, 1100 Commerce St., Dallas, TX 75202.
- U Public Inquiries Office, Rm. 8102, Federal Office Bldg., 125 South State St., Salt Lake City, UT 84111.

Open-file reports released during past years have been listed in the following circulars (* indicates report is out of print):

<i>Year(s)</i>	<i>Circular</i>	<i>Year</i>	<i>Circular</i>
1946-47	*56	1961	463
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1959	*428	1972	668
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MAPS AND REPORTS

1. Adolphson, D. G., and LeRoux, E. F., Water resources of the proposed Rockyford area, Badlands National Monument, Shannon County, South Dakota: 38 p., 4 figs. (NC; 231 Federal Bldg., Huron, SD 57350.)
2. Adolphson, D. G., and LeRoux, E. F., Water-supply sites for Wind Cave National Park, Custer County, South Dakota: 28 p., 4 figs. (NC; 231 Federal Bldg., Huron, SD 57350.)
3. Allcott, G. H., and Lakin, H. W., Statistical summary of geochemical data furnished by 85 laboratories for six geochemical exploration reference samples: 103 p., incl. 98 tabular. (NC, Da, M.)
4. Alpha, T. R., [Orthographic drawing of] Almeria España: 1 sheet. (NC, Da, M.)
5. Alpha, T. R., [Orthographic drawing of] Bering Sea: 1 sheet. (NC, Da, M.)
6. Anderson, L. A., and Johnson, G. R., A self-potential survey of Long Valley caldera, Mono County, California: 3 p., 3 pl. (NC, Da, M, SF, LA; California Div. Mines and Geology: Resources Bldg., 1416 9th St., Sacramento, CA 95814; Ferry Bldg., San Francisco, CA 94111; State Office Bldg., 107 So. Broadway, Los Angeles, CA 90012.)
7. Bailey, R. A., Preliminary geologic map and cross-sections of Casa Diablo geothermal area, Long Valley Caldera, Mono County, California: Map, cross-sections (2 sheets), scale 1:20,000. (NC, Da, M, SF, LA; California Div. Mines and Geology: 118 Resources Bldg., 1416 9th St., Sacramento, CA 95814; Ferry Bldg., San Francisco, CA 94111; State Office Bldg., 107 So. Broadway, Los Angeles, CA 90012.)
8. Bayer, K. C., A preliminary seismicity study of the southern Nevada region, quarterly report, April-June 1973: 93 p., incl. 10 figs., 63 tabular pages. (NC, Da, Db, M, SF, LA, U.)
9. Bedinger, M. S., Pearson, F. J. Jr., Reed, J. E., Sniegocki, R. T., and Stone, C. G., The waters of Hot Springs National Park, Arkansas—their origin, nature, and management: 122 p., 12 figs. (NC; 2301 Federal Office Bldg., 700 West Capitol Ave., Little Rock, AR 72201.)
10. Bennett, G. D., Electric analog simulation of the aquifer along the south coast of Puerto Rico: 238 p., 36 figs. (NC; Bldg. 652, Fort Buchanan, PR 00934.)
11. Blakey, J. F., and Skinner, P. W., A network for continuous monitoring of water quality in the Trinity River basin, Texas: 42 p., 1 fig. (NC; 630 Federal Bldg., 300 East 8th St., Austin, TX 78701.)
12. Bodenlos, A. J., Brazil geological education project, 1958-1965: 13 p. (NC, Da, M.)
13. Boettcher, A. J., Evaluation of the ground-water supply at eight sites in Glacier National Park, northwestern Montana: 36 p., 17 figs., NC; 421 Federal Bldg., 316 N. Park Ave., Helena, MT 59601.)
14. Cannon, W. F., and Klasner, J. S., Preliminary geologic map of the Witch Lake quadrangle, Michigan: 7 p., 1 map (scale 1:62,500). NC, Da, M; Michigan Dept. Nat. Resources, Geol. Survey Div., Stevens T. Mason Bldg., Lansing, MI 48026.)
15. Carpenter, D. H., Floods of August and September 1971 in Maryland and Delaware: 41 p., 5 figs. (NC; 8809 Satyr Hill Rd., Parkville, MD 21234.)
16. Cline, D. R., A ground-water investigation of the Lummi Indian Reservation area, Washington: 124 p., 9 figs. (NC; Room 300, 1305 Tacoma Ave. South, Tacoma, WA 98402.)
17. Cooper, A. K., MAGDEP—a computer program for finding depth to basement from total field magnetic profiles: 75 p. (NC, Da, M.)
18. Cosner, O. J., and Horwich, Esther, Grid-coordinate generation program: 25 p., 2 figs., (NC; Room 304, 200 West Grace St., Richmond, VA 23220.)
19. Cox, E. R., Water resources of Grand Teton National Park, Wyoming: 114 p., 7 figs. (NC; 4015 Warren Ave., Cheyenne, WY 82001.)
20. Dalrymple, G. B., and Lanphere, M. A., Preliminary potassium-argon age data on volcanic rocks of Long Valley caldera and vicinity, Mono County, California: 3 sheets (scale 1:65,000), 1 p. tabular material. (NC, Da, M, SF, LA; California Div. Mines and Geology, Resources Bldg., 1416 9th St., Sacramento, CA 95814.)
21. Dibblee, T. W., Jr., Geologic maps of the Monterey, Salinas, Gonzales, Point Sur, Jamesburg, Soledad and Junipero Serra 15' quadrangles, Monterey County, California: 7 sheets, scale 1:62,500. (NC, Da, M, SF, LA; California Div. Mines and Geology: Ferry Bldg., San Francisco, CA 94111; State Office Bldg., 107 South Broadway, Los Angeles, CA 90012; 118 Resources Bldg., 1416 9th St., Sacramento, CA 95814.)
22. Dibblee, T. W., Jr., Geologic map of the Redlands quadrangle, California: 1 sheet, scale 1:62,500. (NC, Da, M, SF, LA; California Div. Mines and Geology: Ferry Bldg., San Francisco, CA 94111; State Office Bldg., 107 South Broadway, Los Angeles, CA 90012; 118 Resources Bldg., 1416 9th St., Sacramento, CA 95814.)
23. Downey, J. S., Preliminary map showing availability of ground water from major glacial-drift aquifers in Griggs and Steele Counties, North Dakota: 6 p., 2 figs. (NC; 348 New Federal Bldg., Bismark, ND 58501.)
24. Duffield, W. A., and Fournier, R. O., Reconnaissance study of the geothermal resources of Modoc County, California: 20 p., 1 pl., 1 fig., 3

- tables. (NC, Da, M, SF, LA; California Div. Mines and Geology: Resources Bldg., 1416 9th St., Sacramento, CA 95814; Ferry Bldg., San Francisco, CA 94111; State Office Bldg., 107 So. Broadway, Los Angeles, CA 90012.)
25. Dunn, Bernard, Addendum to "Susquehanna River at Unadilla, New York, floodflow characteristics at proposed bridge site including channel and highway relocations": 5 p., 2 figs. (NC; 343 U.S. Post Office and Court House, Albany, NY 12201.)
 26. Dunn, Bernard, Hydraulic analysis, Chenango River, Broome County, New York: 15 p., 6 figs. (NC; 343 Post Office & Court House, Albany, NY 12201.)
 27. Dyni, J. R., Nahcolite analyses of seven drill cores from the saline facies of the Green River Formation in northwest Colorado: 45 p., incl. 1 text fig. and 8 tables. (NC, Da, M, Db, U.)
 28. Edwards, M. D., Hydrologic data processing system for Brazil: 76 p., 9 figs. (NC.)
 29. Edwards, M. D., The implementation of a hydrologic data processing system in Brazil: 39 p., 7 figs. (NC.)
 30. Espenshade, G. H., Rankin, D. W., Shaw, K. W., Neuman, R. B., Preliminary geologic map of the east half of the Winston-Salem quadrangle, N.C.-Va.-Tenn.: map, explanation (2 sheets), scale 1:200,000. (NC; 301 West Cumberland Ave. (Rm. LL-3), Knoxville, TN 37902; North Carolina Dept. Nat. and Econ. Resources, Raleigh, NC 27611; Virginia Dept. of Conservation and Econ. Devel., Div. of Mineral Resources, Charlottesville, VA 22903.)
 31. Feder, G. L., A conceptual model of the hydrologic system supplying the large springs in the Ozarks: 148 p., 14 figs. (NC, Da.)
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 33. Fournier, R. O., White, D. E., and Truesdell, A. H., Geochemical indicators of subsurface temperature, Part I: basic assumptions: 16 p., 1 fig. (NC, Da, M, SF, LA; California Div. Mines and Geology: Resources Bldg., 1416 9th St., Sacramento, CA 95814; Ferry Bldg., San Francisco, CA 94111; State Office Bldg., 107 So. Broadway, Los Angeles, CA 90012.)
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 43. Grazis, S. L., Preliminary geologic map and coal resources of the Scaper Reservoir quadrangle, Campbell County, Wyoming: 2 sheets. (NC, Da, M, Db, U; 2001 Federal Bldg. and Post Office, Casper, WY 82601; Geol. Survey of Wyoming, Univ. Wyoming, Laramie, WY 82070.)
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51. Hoover, D. B., Frischknecht, F. C., and Tippens, C. L., Evaluation of audio-magnetotelluric techniques as a reconnaissance exploration tool in Long Valley, Mono and Inyo Counties, California: 38 p., 27 figs., 11 pl. (NC, Da, M, SF, LA; California Div. Mines and Geology: Resources Bldg., 1416 9th St., Sacramento, CA 95814; Ferry Bldg., San Francisco, CA 94111; and State Office Bldg., 107 So. Broadway, Los Angeles, CA 90012.)
52. Hubbard, H. A., Bedrock geology of the Porcupine Mountains, Michigan: 2 p., 1 map, scale 1:62,500. (NC; Michigan Dept. Nat. Resources, Geol. Survey Div., Stevens T. Mason Bldg., Lansing, MI 48026.)
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60. Lahr, J. C., Page, R. A., Thomas, J. A., Catalog of earthquakes in south-central Alaska, April-June 1972: 35 p., 9 figs., 1 table. (A, S, SF, LA, NC, Da, Db, M; Brooks Bldg., College, AK 99701; 441 Federal Bldg., Juneau, AK 99801; Alaska Div. Geol. and Geophys. Survey, 509 Goldstein Bldg., Juneau, AK 99801; 323 E. 4th Ave., Anchorage, AK 99504; University Ave., College, AK 99701.)
61. Lee, W. H. K., Earthquakes and China: a guide to some background materials: 88 p., 13 figs., 18 p. tabular appendix. (NC, Da, M.)
62. Lemke, R. W., Reconnaissance engineering geology of the Wrangell area, Alaska, with emphasis on evaluation of earthquake and other geologic hazards: 103 p., 1 pl. (scale 1:7,200). (NC, Da, M, A, S, SF, LA, Db; Brooks Bldg., College, AK 99701; 441 Federal Bldg., Juneau, AK 99801; Alaska Div. Geol. and Geophys. Surveys, 509 Goldstein Bldg., Juneau, AK 99801; 323 E. 4th Ave., Anchorage AK 99504; University Ave., College, AK 99701; Wrangell Public Library, Wrangell, AK 99929.)
63. Lewis, R. E., Data on wells, springs, and thermal springs in Long Valley, Mono County, California: 68 p., 13 figs. (NC, M, SF, LA; 855 Oak Grove Ave., Menlo Park, CA 94025; Room W-2234, 2800 Cottage Way, Sacramento, CA 95825; 13245 Harbor Blvd., Garden Grove, CA 92643.)
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67. Mariner, R. H., Rapp, J. B., Willey, L. W., and Presser, T. S., The chemical composition and estimated minimum thermal reservoir temperatures of selected hot springs in Oregon: 27 p., 1 fig. (NC; 855 Oak Grove Avenue, Menlo Park, CA 94025.)
68. Marvin, R. F., A tabulation of K-Ar, Rb-Sr, and Pb- α ages obtained for materials within the United States (including Alaska and Hawaii) during the years 1956 through 1964: 174 p. (172 tabular). (NC, Da, M.)

69. Marvin, R. F., A tabulation of K-Ar, Rb-Sr, and Pb- α ages obtained for materials within the United States (including Alaska and Hawaii) during the years 1965 through 1968: 245 p. (243 tabular). (NC, Da, M.)
70. Marvin, R. F., A tabulation of K-Ar, Rb-Sr, and Pb- α ages obtained for materials within the the United States (including Alaska and Hawaii) during the years 1969 through 1971: 193 p. (192 tabular). (NC, Da, M.)
71. McGreevy, L. J., Seepage study of streams crossing Chester Valley, Chester County, Pa.: 12 p., 2 figs. (NC; P.O. Box 1107, 4th Floor, Federal Bldg., 228 Walnut St., Harrisburg, PA 17108.)
72. Meyer, F. W., Availability of ground water for the U.S. Navy well field near Florida City, Dade County, Florida: 50 p., 18 figs. (NC; Suite F-240, 325 John Knox Rd., Tallahassee, FL 32303.)
73. Meyer, F. W., Preliminary evaluation of hydraulic characteristics of a deep artesian well from natural water level fluctuations, Miami, Florida: 58 p., 9 figs. (NC; Suite F-240, 325 John Knox Rd., Tallahassee, FL 32303.)
74. Moore, R. B., and Wolfe, E. H., Geologic map of the eastern San Francisco volcanic field, Arizona: 2 sheets, scale 1:50,000. (NC, Da, M; 601 East Cedar Ave., Flagstaff, AZ 86001.)
75. Nathenson, Manuel, Flashing flow in hot water geothermal wells: 31 p., 3 tables, 13 figs. (NC, Da, LA, M, SF.)
76. Navarro, Richard, Structural and free field seismic measurements of the Zonia mine blast, Arizona: 27 p., 4 figs., 2 tables. (NC, Da, Db, M, SF, LA, U.)
77. Navarro, Richard, King, K. W., Brockman, S. R., and Wuollet, G. M., Rio Blanco seismic effects, Colorado: 99 p., 23 figs., 5 tables. (NC, Da, Db, M, U.)
78. Nelson, L. M., Sediment transport by streams in the Deschutes and Nisqually River basin, Washington, November 1971-June 1973: 26 p., 19 figs. (NC; Rm. 300, 1305 Tacoma Ave. S., Tacoma, WA 98402.)
79. Newell, W. L., Geologic map of the Frakes quadrangle and part of the Eagan quadrangle, southeastern Kentucky: 2 sheets, scale 1:24,000. (NC; Kentucky Geol. Survey, 307 Mineral Industries Bldg., 120 Graham Ave., Lexington, KY 40506.)
80. Offield, T. W., and van Vloten, Roger, Structure and chromite deposits in Alpine-type ultramafic complexes: 15 p., 5 figs. (NC, Da, M.)
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82. Parker, G. G., Jr., Surface-water investigations on the Lummi Indian Reservation, Washington, 80 p., 21 figs. (NC; Room 300, 1305 Tacoma Ave. South, Tacoma, WA 98402.)
83. Parker, G. G., Jr., Urbanized areas served by sewers and septic tanks in the Seattle-Tacoma urban complex and adjacent areas, Washington: 10 p., 1 fig. (NC; Rm. 300, 1305 Tacoma Ave. South, Tacoma, WA 98402.)
84. Perry, W. J., Jr., Minard, J. P., Weed, E. G. A., Robbins, E. I., and Rhodehamel, E. C., Stratigraphy of the Atlantic continental margin of the United States north of Cape Hatteras—a brief survey: 51 p., 11 figs., 1 table. (NC, Da, M; USGS, Woods Hole Oceanog. Inst., Woods Hole, MA 02543.)
85. Phoenix, D. A., Proposed water-supply investigations in Sidamo Province, Ethiopia: 75 p., 20 figs. (NC.)
86. Pillmore, C. L., Geologic and structure contour maps of the Ute Creek 1° SE quadrangle, Colfax County, New Mexico: 2 sheets, scale 1:24,000. (NC, Da, Db, M, U; Rm. 1-C-45, 1100 Commerce St., Dallas, TX 75202; 223 Geology Bldg., Univ. New Mexico, Albuquerque, NM 87106; New Mexico Bur. Mines and Mineral Resources, Socorro, NM 87801.)
87. Pitt, W. A. J., Jr., Effects of septic tank effluent on ground-water quality, Dade County, Florida: An interim report: 58 p., 17 figs. (NC; Suite F240, 325 John Knox Rd., Tallahassee, FL 32303.)
88. Rawson, Jack, Maderak, M. L., and Hughes, L. S., Quality of surface waters in the Colorado River basin, Texas 1966-72 water years: 74 p., 8 figs. (NC; 630 Federal Bldg., 300 East 8th St., Austin, TX 78701.)
89. Robertson, J. B., Digital modeling of radioactive and chemical waste transport in the aquifer underlying the Snake River plain at the National Reactor Testing Station, Idaho: 19 p., 22 figs. (NC; P. O. Box 2230, NRTS, CF 690, Room 164, Idaho Falls, ID 83401.)
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92. Schroeder, E. E., Estimating the magnitude of peak discharges for selected flood frequencies on small streams in east Texas: 19 p., 4 figs. (NC; 630 Federal Bldg., 300 East 8th St., Austin, TX 78701.)
93. Shampine, W. J., U.S. Geological Survey's water-quality program in Indiana: 24 p., 5 figs. (NC; 1819 N. Meridian St., Indianapolis, IN 46202.)
94. Shearman, J. O., and Swisshelm, R. V., Jr., Derivation of homogeneous streamflow records

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 96. Snively, P. D., Jr., Tiffin, D. L., MacLeod, N. S., and Currie, R. G., Preliminary gravity and magnetic maps of the Strait of Juan de Fuca, British Columbia, Canada, and Washington, United States: 10 p., 3 figs. (NC, Da, M, SF, LA, S.)
 97. Stankowski, S. J., and Velnich, A. J., A summary of peak stages and discharges for the flood of August 1973 in New Jersey: 14 p., 2 figs. (NC; P.O. Box 1238, Trenton, NJ 08607.)
 98. Stanley, W. D., Jackson, D. B., and Zohdy, A. A. R., Preliminary results of deep electrical studies in the Long Valley caldera, Mono and Inyo Counties, California: 62 p., 53 figs., 14 pl. (NC, Da, M, SF, LA; California Div. Mines and Geology: Resources Bldg., 1416 9th St., Sacramento, CA 95814; Ferry Bldg., San Francisco, CA 94111; State Office Bldg., 107 So. Broadway, Los Angeles, CA 90012.)
 99. Thomas, W. O., Jr., and Corley, R. K., Floodflows from small drainage areas in Oklahoma: progress report and data compilation: 47 p., 19 figs. (NC; 4301 Federal Bldg. and Court House, 200 NW 4th St., Oklahoma City, OK 73102.)
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