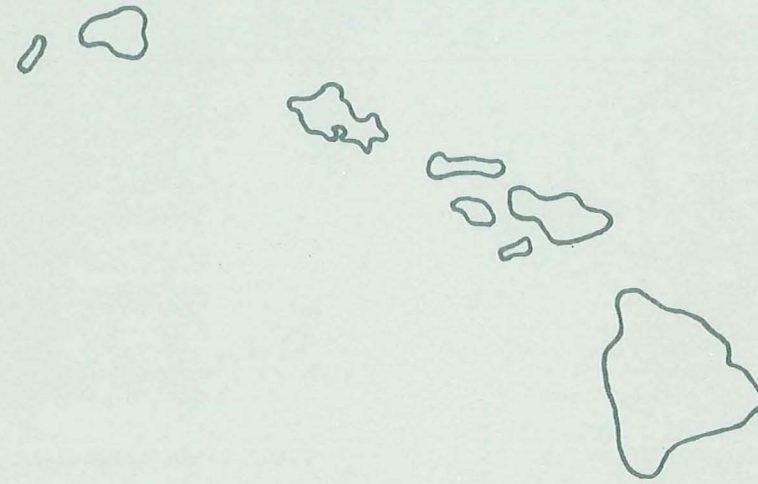


✓ GL03268 2 of 7

List of Geological Survey
Geologic and Water-Supply Reports and Maps for

HAWAII



January 1979

U.S. DEPARTMENT OF THE INTERIOR

MISCELLANEOUS FIELD STUDIES MAPS—Continued

(1 inch = about 80 miles) and 1:7,500,000 (1 inch = about 118 miles). Sheet 1, 31 by 41 inches; sheet 2, 32 by 42 inches. \$1.50 per set.

MF-986. Bathymetric and geologic maps of Kealahou Bay, Hawaii, by W. R. Normark, P. W. Lipman, J. P. Lockwood, and J. G. Moore. 1978. Sheet 39 by 39 inches. 75°.

MISCELLANEOUS INVESTIGATIONS SERIES

- I-175. Paleotectonic maps of the Jurassic System, by E. D. McKee, S. S. Oriel, V. E. Swanson, J. E. MacLachlan, J. C. MacLachlan, K. B. Ketner, J. W. Goldsmith, R. Y. Bell, and D. J. Jameson, *with a separate section on Paleogeography*, by R. W. Imlay. 1956. Scales 1:2,500,000 and 1:5,000,000. \$15.
- I-299. Epigenetic uranium deposits in the United States, by W. I. Finch, I. S. Parrish, and G. W. Walker. 1959. Scale 1:5,000,000. 3 sheets. \$4.25 per set.
- I-300. Paleotectonic maps of the Triassic System, by E. D. McKee, S. S. Oriel, K. B. Ketner, M. E. MacLachlan, J. W. Goldsmith, J. C. MacLachlan, and M. R. Mudge. 1959. Scale 1:5,000,000. \$15.
- I-450. Paleotectonic maps of the Permian System, by E. D. McKee, S. S. Oriel, and others. 1967. \$38.
- Order* I-456. Bathymetric, topographic, and structural map of the south-central flank of Kilauea Volcano, Hawaii, by J. G. Moore and D. L. Peek. 1965. Scale 1:62,500. \$1.25.
- Order* I-677. Bathymetry and geology—East cape of the Island of Hawaii, by J. G. Moore. 1971. Scale 1:62,500. \$1.25.
- I-688. Generalized tectonic map of North America, by P. B. King and G. J. Edmonston. 1972. Scale 1:15,000,000. \$1.75.
- I-911. Magnetic declination in the United States—Epoch 1975.0, by E. B. Fabiano. 1975. Scale 1:5,000,000. \$3.
- I-912. Magnetic inclination in the United States—Epoch 1975.0, by N. W. Peddie, W. J. Jones, and E. B. Fabiano. 1976. Two sheets. Scale 1:5,000,000. \$3.
- I-913. Magnetic horizontal intensity in the United States—Epoch 1975.0, by E. B. Fabiano and W. J. Jones. 1976. Two sheets. Scale 1:5,000,000. \$3.
- I-914. Magnetic vertical intensity in the United States—Epoch 1975.0, by W. J. Jones and E. B. Fabiano. 1976 (1977). Two sheets. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 33 by 47 inches. \$3.
- I-915. Magnetic total intensity in the United States—Epoch 1975.0, by E. B. Fabiano, N. W. Peddie, and W. J. Jones. 1976. Two sheets. Scale 1:5,000,000. \$3.
- I-1088. Geologic map of the crater section of Haleakala National Park, Maui, Hawaii, by G. A. Macdonald. 1978. Lat about 20°42'30" to about 20°45', long about 156°10' to about 156°15'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 22 by 31 inches. \$1.50. Accompanied by 8-page text.

MISCELLANEOUS REPORTS (free upon application to

Geological Survey, 1200 South Eads Street, Arlington

List 1. Press releases, preliminary maps, and preliminary 1938, and Jan. 1, 1945.

List 2. Press releases, preliminary maps, and preliminary 1945, and Jan. 1, 1946.

REFERENCE LIBRARIES

Many of the publications listed herein may be consulted at the following libraries in HONOLULU:

Bernice Pauahi Bishop Museum.
Chaminade College Library.
Civil Engineering Dept., University
of Hawaii.

Geological Survey, 1833 Kalakaua Ave.
Library of Hawaii.
University of Hawaii Library.

☆ U.S. Government Printing Office: 1979—281—359/57

*USGS Aeromag
map of Hawaii
is not indicated,
but is needed.*

CIRCULARS—Continued

- C 766-D. Earthquakes in the United States, October-December 1976, by J. H. Minsch, C. W. Stover, W. J. Person, R. B. Simon, and B. G. Reagor. 1978. p. D1-D31.
- C 777. A guide to obtaining information from the USGS 1978, compiled by P. F. Clarke, H. E. Hodgson, and G. W. North. 1978. 36 p.
- C 780. Earthquake Hazards Reduction Program—Fiscal year 1978 studies supported by the U.S. Geological Survey, by R. M. Hamilton. 1978. 36 p.
- C 785-A. Seismic engineering program report, January-April 1978. 1978. 11 p.

MAPS, CHARTS, AND ATLASES

(See ordering instructions on p. I.)

COASTAL MAPPING HANDBOOK, edited by M. Y. Ellis. 1978. 200 p. \$5.25.

GEOLOGIC MAP INDEX OF HAWAII. 1977. Free on application.

UNITED STATES GEOLOGICAL SURVEY YEARBOOK, fiscal year 1977. 1978. 229 p. \$4.75.

GEOLOGIC QUADRANGLE MAPS

- Order* GQ-667. Geologic map of the Kilauea Crater quadrangle, Hawaii, by D. W. Peterson. 1967. Lat 19° 22'30" to 19° 30', long 155° 15' to 155° 22'30". Scale 1:24,000. \$1.75.
- Order* GQ-827. Geologic map of the Kau Desert quadrangle, Hawaii, by G. W. Walker. 1969 (1970). Lat 19° 15' to 19° 22'30", long 155° 15' to 155° 22'30". Scale 1:24,000. \$1.75.
- Order* GQ-897. Geologic map of the Mauna Loa quadrangle, Hawaii, by G. A. Macdonald. 1971. Lat 19° 22'30" to 19° 30', long 155° 30' to 155° 37'30". Scale 1:24,000. \$1.75.
- Order* GQ-957. Geologic map of the Kipuka Pakekake quadrangle, Hawaii, by G. A. Macdonald. 1971. Lat 19° 22'30" to 19° 30', long 155° 22'30" to 155° 30'. Scale 1:24,000. \$1.75.

HYDROLOGIC INVESTIGATIONS ATLASES

- HA-200. Chemical quality of public water supplies of the United States and Puerto Rico., 1962, shown as Statewide averages, mainly in graphic and tabular form, by C. N. Durfor and Edith Becker. 1964. \$1.25.
- HA-218. Fresh-water springs of Hawaii from infrared images, by W. A. Fischer, D. A. Davis, and T. M. Sousa. 1966. \$1.25.
- HA-239. Floods in Kahaluu area, Oahu, Hawaii, by M. M. Miller. 1966. Scale 1:12,000. \$2.
- HA-267. Land use and its effects on the basal water supply, Pearl Harbor area, Oahu, Hawaii, 1931-65, by R. H. Dale. 1967. Scale 1:62,500. 2 sheets. \$3.50 per set.
- HA-314. Floods in Waimanalo area, Oahu, Hawaii, by Reuben Lee and W. C. F. Chang. 1968. Scale 1:12,000. \$2.
- HA-358. Ground water in the Waianae district, Oahu, Hawaii, by K. J. Takasaki. 1971. Scale 1:62,500. 2 sheets. \$3 per set.
- HA-473. Floods in Punaluu-Hauula area, Oahu, Hawaii, by T. M. Ushijima and C. J. Ewart. 1973. (1974). Scale 1:12,000. \$1.25.
- HA-531. Floods in Waiahole-Waikane area, Oahu, Hawaii, by C. J. Ewart and Reuben Lee. 1974 (1975). Scale 1:12,000. \$1.75.

STATE HYDROLOGIC UNIT MAP

Hawaii 1974. An overprint of the 1:500,000-scale State base map. Shows counties, location and names of all cities and towns and most of the smaller settlements and railroads in black; water features in blue; hydrologic boundaries and codes in red; county codes in green. No contours. \$1.25.

MISCELLANEOUS FIELD STUDIES MAPS

- MF-811. Preliminary map showing products of eruptions, 1962-1974, from the Upper East Rift Zone of Kilauea Volcano, Hawaii, by R. T. Holcomb. 1976. Lat 19°15' to about 19°22'30", long 155°07'30" to 155°15'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 34 by 44 inches. 75¢.
- MF-916. Preliminary map of young faults in the United States as a guide to possible fault activity, compiled by K. A. Howard and others. 1978. Two sheets. Scales 1:5,000,000

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGIC AND WATER-SUPPLY REPORTS AND MAPS

HAWAII

January 1979

This list contains reports and maps published by the Geological Survey relating to the geology and mineral and water resources of Hawaii. A separate list of bibliographies and publications of general interest is available on request, as are a general catalog of Geological Survey publications (not including topographic maps) and State indexes to topographic mapping.

Bulletins, professional papers, water-supply papers, and other book reports for which a price is stated, including some that have gone out of the print at the Government Printing Office, as indicated by an asterisk (*), are for sale by the BRANCH OF DISTRIBUTION, U.S. GEOLOGICAL SURVEY, 1200 SOUTH EADS STREET, ARLINGTON, VA 22202, and from the U.S. Geological Survey, Public Inquiries Offices: Federal Bldg., 300 North Los Angeles Street, Room 7638, Los Angeles, CA 90012, and Customhouse, 555 Battery Street, Room 504, San Francisco, CA 94111 (authorized agents of Superintendent of Documents). Prepayment is required and should be made by check or money order payable to the U.S. Geological Survey. Numerous libraries and educational institutions throughout the country are depositories for this material, and a list of Hawaii depositories is included.

Maps, folios, hydrologic atlases, and charts are sold by the Geological Survey. They may be purchased over the counter or ordered from the BRANCH OF DISTRIBUTION, U.S. GEOLOGICAL SURVEY, BLDG. 41, FEDERAL CENTER, DENVER, CO 80225. Remittances should be made by check or money order payable to U.S. Geological Survey. A discount of 30 percent is allowed on an order of \$300 or more, based on the retail price. No other discount is applicable. Maps may also be purchased *over the counter* at the U.S. Geological Survey offices where books are sold and at the Survey's Public Inquiries Offices: Geological Survey, National Center, Room 1C402, 12201 Sunrise Valley Drive, Reston, Va., and General Services Building, Room 1028, 19th and F Streets, NW., Washington, D.C.

Reference to geologic information on Hawaii may be obtained from the following Geological Survey publications: Bibliographies of North American Geology - Bulletins *746 (1785-1918), *747 (1785-1918), *823 (1919-28), *937 (1929-39), *985 (1950), *1025 (1951), *1035 (1952-53), *1049 (1940-49), *1054 (1954), *1065 (1955), *1075 (1956), *1095 (1957), *1115 (1958), *1145 (1959), *1195 (1950-59) set of 4 volumes, *1196 (1960), *1197 (1961), *1232 (1962), *1233 (1963), *1234 (1964), *1235 (1965), 1266 (1966) \$8.25, *1267 (1967), *1268 (1968), 1269 (1969) \$11.35, and 1370 (1970) \$8.70. Bibliographies and indexes of publications relating to ground water are Water-Supply Papers *992 (1879-1945), *1492 (1946-1955), *1863 (1963), and *1864 (1964). A water resources investigations folder for Hawaii, Guam, and American Samoa, available free upon request to the Geological Survey, 420 National Center, 12201 Sunrise Valley Drive, Reston, VA 22092, shows the location of stream-gaging stations, observation wells, quality-of-water sample collection sites, areal hydrologic studies, average annual runoff, average discharge of principal streams, and availability of ground water. A brief text lists the hydrologic network, the areal and State-wide projects, and selected references. Additional information on Hawaii is obtainable from U.S. Geological Survey, 300 Ala Moana Blvd., Room 6110 (P.O. Box 50166), Honolulu, HI 96850, and the Manager-Chief Engineer, Division of Water and Land Development, State Department of Land and Natural Resources, Honolulu, HI 96809.

Information on altitudes in the United States is contained in Bulletins *5, *76, *160, *274, *689, *817, and *1212; information on boundaries and areas of the United States and the several States, with historical outlines of boundary changes, is contained in Bulletins *13, *171, *226, *302, *689, *817, *1212, and Professional Paper 909; information on re-

sults of primary triangulation and primary traverse from 1894 to 1918 is contained in Bulletins *122, *181, *201, *216, *245, *276, *310, *440, *496, *551, *644, *709, and parts 1 of the *18th, *19th, *20th, and *21st Annual Reports. Further information on more recent triangulation, transit traverse, and spirit leveling in Hawaii is obtainable upon specific request.

Current publications are announced by means of monthly notices, "New Publications of the Geological Survey." Free on application to the Geological Survey, 329 National Center, 12201 Sunrise Valley Drive, Reston, VA 22092.

ANNUAL REPORTS

*Fourth, 1882-83. 1884. Contains: Hawaiian volcanoes, by C. E. Dutton. p. 75-219.

*Nineteenth, 1897-98. Part 6 contains: Mineral resources of Hawaii. p. 681-686.

(Beginning with the twenty-third (1901-2), the annual reports of the Geological Survey contain no technical papers but were published separately until 1933. Since 1933 a condensed form has been included in the annual report of the Secretary of the Interior. For the fiscal years 1936 to 1963, a limited number of copies of the report as it appeared in the annual report of the Secretary were reprinted separately for official use; copies of these may be had free by persons directly interested, insofar as they are in stock.)

MINERAL RESOURCES OF THE UNITED STATES

The annual volumes of Mineral Resources of the United States contain statistics of production by calendar years and matters relating to technology and resources. Some of the chapters deal with a particular mineral or group of minerals, but much of the information is statistical. These volumes are not listed. The volumes of Mineral Resources were issued by the Geological Survey for the years 1882-1923. Reports for 1924 and subsequent years are published by the Bureau of Mines, Washington, DC 20240, as Minerals Yearbooks.

PROFESSIONAL PAPERS

*88. Lavas of Hawaii and their relations, by Whitman Cross. 1915. 97 p.

*214-D. Petrography of the island of Hawaii, by G. A. Macdonald. 1949. p. 51-96.

P 373. Aerial photographs in geologic interpretation and mapping, by R. G. Ray. 1960. 230 p. \$5.25. (Reprint.)

*400-A. Geological Survey Research 1960, Synopsis of geological results. 1960. p. A1-A136.

*400-B. Short papers in geological sciences, Articles 1-232. 1960. p. B1-B515. Contains the following article, which is not available separately.

163. Pahala ash—An unusual deposit from Kilauea Volcano, Hawaii, by G. D. Fraser. p. B35.

*424-A. Geological Survey Research 1961, Synopsis of geologic and hydrologic results. 1961. p. A1-A194.

*424-B. Short papers in the geologic and hydrologic sciences, Articles 1-146, 1961. p. B1-B344. Contains the following article, which is not available separately.

89. Xenolithic nodules in the 1800-1801 Kaupulehu flow of Hualalai Volcano, by D. H. Richter and K. J. Murata. p. B214.

*424-C. Short papers in the geologic and hydrologic sciences, Articles 147-292. 1961. p. C1-C398. Contains the following article, which is not available separately.

219. Weathered basalt in the eastern part of Kauai, Hawaii, by S. H. Patterson and C. E. Robertson. p. C195.

*424-D. Short papers in the geologic and hydrologic sciences, Articles 293-435. 1961. p. D1-D408. Contains the following articles, which are not available separately.

359. Relation of discharge rate to drawdown in wells in Oahu, Hawaii, by E. R. Lubke. p. D204.

360. Preliminary gravity survey of Kilauea Volcano, Hawaii, by H. L. Krivoy and J. P. Eaton. p. D205.

377. Discharge of ground water by phreatophytes in the Waianae district, Oahu, Hawaii, by C. P. Zones. p. D240.

*450-A. Geological Survey Research 1962, Synopsis of geologic, hydrologic, and topographic results. 1962. p. A1-A257.

*450-B. Short papers in geology, hydrology, and topography, Articles 1-59. 1962. p. B1-B145. Contains the following articles, which are not available separately.

CIRCULARS—Continued

721. Earth-science information in land-use planning—Guidelines for earth scientists and planners, by William Spangle and Associates; F. Beach Leighton and Associates; and Baxter, McDonald and Company. 1976. 28 p. (Reprint.)

723-A. Earthquakes in the United States, January-March 1974, by C. W. Stover, R. B. Simon, and W. J. Person. 1976. p. A1-A18.

723-B. Earthquakes in the United States, April-June 1974, by R. B. Simon, C. W. Stover, and W. J. Person. 1976. p. B1-B24.

723-C. Earthquakes in the United States, July-September 1974, by C. W. Stover, R. B. Simon, and W. J. Person. 1976. p. C1-C19.

C 723-D. Earthquakes in the United States, October-December 1974, by C. W. Stover, R. B. Simon, and W. J. Person. 1976. p. D1-D27.

C 725. Geological estimates of undiscovered recoverable oil and gas resources in the United States, by B. M. Miller, H. L. Thomsen, G. L. Dolton, A. B. Coury, T. A. Hendricks, F. E. Lennartz, R. B. Powers, E. G. Sable, and K. L. Varnes. 1975. 78 p. (Reprint.)

ESL 726. Assessment of geothermal resources of the United States—1975, by D. E. White and D. L. Williams, editors. 1975. 155 p. (Reprint.)

729. Earthquake prediction—Opportunity to avert disaster, 1976. 35 p. (A conference on earthquake warning and response held in San Francisco, California, on November 7, 1975.) (Reprint.)

731. A guide to State programs for the reclamation of surface mined areas, by E. A. Imhoff, T. O. Friz, and J. R. LaFavers. 1976. 33 p.

736-A. Seismic engineering program report, January-March 1976. 1976. 17 p.

736-B. Seismic engineering program report, April-June 1976. 1976. 12 p.

C 736-C. Seismic engineering program report, July-September 1976. 1976 (1977). 14 p.

C 736-D. Seismic engineering program report, October-December 1976. 1977. 23 p.

order 740. Earthquakes and related catastrophic events, Island of Hawaii, November 29, 1975: A preliminary report, by R. I. Tilling, R. Y. Koyanagi, P. W. Lipman, J. P. Lockwood, J. G. Moore, and D. A. Swanson. 1976. 33 p.

C 742. Bibliography and index of U.S. Geological Survey publications relating to coal, 1971-1975, by F. K. Walker. 1976. 32 p. (Supersedes Circular 709 and is a supplement to Bulletin 1377.)

C 744. Research by the U.S. Geological Survey on organic materials in water, by R. A. Baker. 1976 (1977). 6 p.

C 745. Water consumption by nuclear powerplants and some hydrological implications, by E. V. Giusti and E. L. Meyer. 1977 (1978). 14 p.

C 749-A. Earthquakes in the United States, January-March 1975, by R. B. Simon, C. W. Stover, and W. J. Person. 1977. p. A1-A35.

C 749-B. Earthquakes in the United States, April-June 1975, by W. J. Person, R. B. Simon, and C. W. Stover. 1977. p. B1-B27.

C 749-C. Earthquakes in the United States, July-September 1975, by C. W. Stover, R. B. Simon, W. J. Person, and J. H. Minsch. 1977. p. C1-C29.

C 749-D. Earthquakes in the United States, October-December 1975, by J. H. Minsch, C. W. Stover, W. J. Person, and R. B. Simon. 1977. p. D1-D27.

C 756. Collection, storage, retrieval, and publication of water-resources data, compiled by C. R. Showen. 1978. 39 p.

C 757. Coal geology and the future—Symposium abstracts and selected references, edited by C. R. Meissner, Jr., C. B. Cecil, and G. D. Stricker. 1977. 20 p.

C 762-A. Seismic engineering program report, January-April 1977. 1977. 28 p.

C 763. Progress report on selected geophysical activities of the United States, 1973-76—A quadrennium of cooperation and progress, edited by J. N. Jordan and K. L. Svendsen. 1977. 37 p.

C 765. Estimated use of water in the United States in 1975, by C. R. Murray and E. B. Reeves. 1977. 39 p.

C 766-A. Earthquakes in the United States, January-March 1976, by R. B. Simon, C. W. Stover, W. J. Person, and J. H. Minsch. 1978. p. A1-A33.

C 766-B. Earthquakes in the United States, April-June 1976, by R. B. Simon, C. W. Stover, W. J. Person, and J. H. Minsch. 1977. 27 p.

C 766-C. Earthquakes in the United States, July-September 1976, by C. W. Stover, R. B. Simon, W. J. Person, and J. H. Minsch. 1978. p. C1-C25.

WATER-SUPPLY PAPERS—Continued

Annual reports of the Geological Survey containing data of the water resources of the United States

Year	WBP	Price	Year	WBP	Price	Year	WBP	Price	Year	WBP	Price
Stream measurements in the years mentioned											
1919	*515		1932-33	*755		1947	*1095				
1920	*516		1933-34	*770		1948	*1125				
1921	*535		1934-35	*795		1949	*1155				
1922	*555		1935-36	*815		1950	*1185				
1923	*575		1936-37	*835		1951	*1219				
1924	*595		1937-38	*865		1952	*1249				
1925	*615		1939	*885		1953	*1289				

CIRCULARS (Circulars are distributed free upon specific request to the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202, as long as editions last.)

- *64. Preliminary maps and reports released by the Geologic Division and the Conservation Division, 1948, compiled by R. A. Atherton, Jane Titcomb, and R. E. Spratt. 1949. 22 p.
- *367. Developed and potential water power of the United States and other countries of the world, December 1954, by L. L. Young. 1955. 14 p., 1 fig. (See Circular 483.)
- *395. Index of surface-water records to September 30, 1955, Hawaii, by E. G. Bailey. 1956. 12 p. (Superseded by Circulars 515, 586, and 666.)
- Open-file report lists for 1949-74 (annual, except as indicated):
Circulars *149 (1949-50), *227 (1951), *263 (1952), *337 (1953), *364 (1954), *379 (1955), *401 (1956), *403 (1957), *412 (1958), *428 (1959), *448 (1960), *463 (1961), *473 (1962), 488 (1963), 498 (1964), *518 (1965), 528 (1966), 548 (1967), 568 (1968), 618 (1969), 638 (1970), 648 (1971), 668 (1972), 696 (1973), and 706 (1974).
- 435. Summary of preliminary findings in ground-water studies of southern Oahu, Hawaii, by F. N. Visher and J. F. Mink. 1960. 16 p.
- *456. Estimated use of water in the United States, 1960, by K. A. MacKichan and J. C. Kammerer. 1961 (1962). 44 p. (See Circulars 556 and 676.)
- *483. Summary of developed and potential waterpower of the United States and other countries of the world, 1955-62, by L. L. Young. 1964. 38 p.
- *515. Index of surface-water records to December 31, 1968—Hawaii and other Pacific areas, by H. P. Eisenhuth. 1965. 24 p. (Superseded by Circulars 586 and 666.)
- *533. Regional trends in water-well drilling in the United States, by Gerald Meyer and G. G. Wyrick. 1966. 8 p.
- 556. Estimated use of water in the United States, 1965, by C. R. Murray. 1968 (1969). 53 p. (See Circular 676.)
- 586. Index of surface-water records to September 30, 1967, Hawaii and other Pacific areas, by H. P. Eisenhuth. 1968. 25 p. (Superseded by Circular 666.)
- *C 645. A procedure for evaluating environmental impact, by L. B. Leopold, F. E. Clark, B. B. Hanshaw, and J. R. Balsley. 1971. 13 p. (Reprint.)
- 666. Index of surface-water records to September 30, 1970—Part 16, Hawaii and other Pacific areas. 1971. 27 p.
- 676. Estimated use of water in the United States in 1970, by C. R. Murray and E. B. Reeves. 1972. 37 p.
- 682. Summary of United States mineral resources, by D. A. Brobst, W. P. Pratt, and V. E. McKelvey. 1973. 19 p.
- 701. Goals, strategy, and tasks of the earthquake hazard reduction program, by R. E. Wallace. 1974. 26 p. (Reprint.)
- 713. Seismic engineering program report, October-December 1974. 1974. 19 p.
- 715-E. Selection of streamflow and reservoir-release models for river-quality assessment, by M. E. Jennings, J. O. Shearman, and D. P. Bauer. 1976. p. E1-E12.
- 717-A. Seismic engineering program report, January-March 1975. 1975. 17 p.
- 717-B. Seismic engineering program report, April-June 1975. 1976. 6 p.
- 717-C. Seismic engineering program report, July-September 1975. 1976. 17 p.
- 717-D. Seismic engineering program report, October-December 1975. 1976. 16 p.
- 720. Mineral resource management of the Outer Continental Shelf, by M. V. Adams, C. B. John, R. F. Kelly, A. E. LaPointe, and R. W. Meurer. 1975. 32 p. (Reprint.)

PROFESSIONAL PAPERS—Continued

- 20. Recent growth of Halemaumau, Kilauea Volcano, Hawaii, by D. H. Richter, J. G. Moore, and R. T. Haugen. p. B53.
- 29. Index of refraction measurements of fused Hawaiian rocks, by D. B. Stewart. p. B76.
- *450-C. Short papers in geology and hydrology. Articles 60-119. 1962. p. C1-C146. Contains the following article, which is not available separately.
108. Effect of the Haiku tunnel on Kahaluu Stream, Oahu, Hawaii, by G. T. Hirashima. p. C118.
- *474-D. The 1961 eruption of Kilauea Volcano, Hawaii, by D. H. Richter, W. U. Ault, J. P. Eaton, and J. G. Moore. 1964. p. D1-D34. (See GQ-667; Professional Papers 537-A, B, C, D, E, and 607.)
- *475-A. Geological Survey Research 1963, Summary of investigations. 1963. p. A1-A300.
- *475-B. Short papers in geology and hydrology, Articles 1-59. 1963. p. B1-B219. Contains the following articles, which are not available separately.
6. Some new data on the arsenic content of basalt, by A. J. Bartel, E. J. Fennelly, Claude Huffman, Jr., and L. F. Rader, Jr. p. B20.
20. Pillow structures of submarine basalts east of Hawaii, by J. G. Moore and R. K. Reed. p. B153.
- *475-C. Short papers in geology and hydrology, Articles 60-121. 1963. p. C1-C234. Contains the following article, which is not available separately.
89. Gravity survey of the island of Hawaii, by W. T. Kinoshita, H. L. Krivoy, D. R. Mabey, and R. R. MacDonald. p. C114.
- *475-D. Short papers in geology and hydrology, Articles 122-172. 1964. p. D1-D223. Contains the following article, which is not available separately.
144. Hawaiian seismic events during 1962, by R. Y. Koyanagi. p. D112.
- *492. Thermal springs of the United States and other countries of the world—A summary, by G. A. Waring, revised by R. R. Blankenship and Ray Bentall. 1965. h383 p.
- *501-A. Geological Survey Research 1964. 1964. p. A1-A367.
- *501-B. Geological Survey Research 1964. 1964. p. B1-B191. Contains the following article, which is not available separately.
T-phase of May 11, 1962, recorded in Hawaii, by H. L. Krivoy and R. A. Eppley. p. B105.
- *501-C. Geological Survey Research 1964. 1964. p. C1-C197. Contains the following article, which is not available separately.
Seismicity of the lower east rift zone of Kilauea Volcano, Hawaii, January 1962-March 1963, by R. Y. Koyanagi. p. C103.
- *501-D. Geological Survey Research 1964. 1964 (1965). p. D1-D209. Contains the following articles, which are not available separately.
Temperatures in the crust and melt of Alae lava lake, Hawaii, after the August 1963 eruption of Kilauea Volcano—A preliminary report, by D. L. Peck, J. G. Moore, and George Kojima. p. D1.
Giant submarine landslides on the Hawaiian Ridge, by J. G. Moore. p. D95.
- *525-A. Geological Survey Research 1965. 1965. p. A1-A376.
- *525-B. Geological Survey Research 1965. 1965. p. B1-B195. Contains the following article, which is not available separately.
Hawaiian seismic events during 1963, by R. Y. Koyanagi and E. T. Endo. p. B13.
- *525-C. Geological Survey Research 1965. 1965. p. C1-C219. Contains the following article, which is not available separately.
X-ray determinative curve for Hawaiian olivines of composition $Fe_{0.76-0.88}$, by K. J. Murata, Harry Bastron, and W. W. Brannock. p. C35.
- *537-A. Chemistry of the lavas of the 1959-60 eruption of Kilauea Volcano, Hawaii, by K. J. Murata and D. H. Richter. 1966. p. A1-A26.
- *537-B. Petrology of the Kilauea Iki lava lake, Hawaii, by D. H. Richter and J. G. Mooge. 1966. p. B1-B26.
- *537-C. An acid fumarolic gas from Kilauea Iki, Hawaii, by K. J. Murata. 1966. p. C1-C6.
- *537-D. Petrography of the lavas of the 1959-60 eruption of Kilauea Volcano, Hawaii, by D. H. Richter and K. J. Murata. 1966. p. D1-D12.
- *537-E. Chronological narrative of the 1959-60 eruption of Kilauea Volcano, Hawaii, by D. H. Richter, J. P. Eaton, K. J. Murata, W. U. Ault, and H. L. Krivoy. 1970 (1971). p.

PROFESSIONAL PAPERS—Continued

- E1-E73. Title page and contents for volume available free on application to the Geological Survey.
- *544-C. Hydrologic effects of the earthquake of March 27, 1964, outside Alaska, by R. C. Vorhis, E. E. Rexin, and R. W. Coble. 1967. p. C1-C54.
- *550-A. Geological Survey Research 1966. 1966. p. A1-A385.
- *550-B. Geological Survey Research 1966. 1966. p. B1-B227. Contains the following article, which is not available separately.
Lava coils of some recent historic flows, Hawaii, by D. L. Peck. p. B148.
- *550-C. Geological Survey Research 1966. 1966. p. C1-C269. Contains the following article, which is not available separately.
Organic geochemistry of three North Pacific deep-sea sediment samples, by J. G. Palacas, V. E. Swanson, and G. W. Moore. p. C102.
- *550-D. Geological Survey Research 1966. 1966. p. D1-D267. Contains the following articles, which are not available separately.
Volcanic rocks dredged southwest of the Hawaiian Islands, by C. G. Engel and A. E. J. Engel. p. D104.
"Eclogite" in Hawaiian basalts, by E. D. Jackson. p. D151.
Rate of palagonitization of submarine basalt adjacent to Hawaii, by J. G. Moore. p. D163.
- P 574-G. Q-mode factor analysis of geochemical and petrologic data matrices with constant row-sums, by A. T. Miesch. 1976. p. G1-G47. 95¢. (Statistical studies in field geochemistry.)
- *575-A. Geological Survey Research 1967. 1967. p. A1-A377.
- *575-B. Geological Survey Research 1967. 1967. p. B1-B265. Contains the following articles, which are not available separately.
Water and deuterium in pumice from the 1959-60 eruption of Kilauea Volcano, Hawaii, by Irving Friedman. p. B120.
Geochemistry of deep-sea sediment along the 160°W meridian in the North Pacific Ocean, by V. E. Swanson, J. G. Palacas, and A. H. Love. p. B137.
- *575-C. Geological Survey Research 1967. 1967. p. C1-C251. Contains the following article, which is not available separately.
May 1963 earthquakes and deformation in the Koaie fault zone, Kilauea Volcano, Hawaii, by W. T. Kinoshita. p. C173.
- *575-D. Geological Survey Research 1967. 1967. p. D1-D297. Contains the following articles, which are not available separately.
Infrared radiation from Alae lava lake, Hawaii, by R. W. Decker and D. L. Peck. p. D169.
A determination of the daily mean discharge of Waiakea Pond springs, Hilo, Hawaii, by G. T. Hirashima. p. D242.
- *600-A. Geological Survey Research 1968. 1968. p. A1-A371.
- *600-B. Geological Survey Research 1968. 1968. p. B1-B235. Contains the following article, which is not available separately.
Hawaiian seismic events during 1965, by R. Y. Koyanagi. p. B95.
- *600-C. Geological Survey Research 1968. 1968. p. C1-C225. Contains the following article, which is not available separately.
Earthquakes from common sources beneath Kilauea and Mauna Loa Volcanoes in Hawaii from 1962 to 1965, by R. Y. Koyanagi, p. C120.
- *607. The December 1965 eruption of Kilauea Volcano, Hawaii, by R. S. Fiske and R. Y. Koyanagi. 1968. 21 p.
- *614-C. The October 1963 eruption of Kilauea Volcano, Hawaii, by J. G. Moore and R. Y. Koyanagi. 1969. p. C1-C13.
- P 628. The tectonics of North America—A discussion to accompany the Tectonic Map of North America scale 1:5,000,000, by P. B. King. 1969. 94 p. \$3. (Reprint.)
- *650-A. Geological Survey Research 1969. 1969 (1970). p. A1-A425. \$7.55.
- *650-B. Geological Survey Research 1969. 1969. p. B1-B203. \$4.60. Contains the following article, which is not available separately.
Hawaiian seismic events during 1966, by R. Y. Koyanagi. p. B113.
- *650-C. Geological Survey Research 1969. 1969. p. C1-C247. \$5.40. Contains the following article, which is not available separately.
Hawaiian seismic events during 1967, by R. Y. Koyanagi. p. C79.

WATER-SUPPLY PAPERS—Continued

- *1855. Ground-water levels in the United States, 1961-65—Southwestern States. 1968. 125 p. (See table.)
- *1871. Water data for metropolitan areas, compiled by W. J. Schneider. 1968. 397 p.
- *1874. Water in the Kahuku area, Oahu, Hawaii, by K. J. Takasaki and Santos Valenciano. 1969. 59 p.
- *1894. Water resources of windward Oahu, Hawaii, by K. J. Takasaki, G. T. Hirashima, and E. R. Lubke. 1969. 119 p.
- *1899-D. Water resources of north-central Oahu, Hawaii, by J. C. Rosenau, E. R. Lubke, and R. H. Nakahara. 1971. p. D1-D40. 60¢.
- *1966. Quality of surface waters of the United States, 1965—Parts 12-16, Pacific slope basins in Washington and Upper Columbia River basin to Hawaii and other Pacific areas. 1970. 462 p.
- *1970-B. Summary of floods in the United States during 1968, by J. O. Rostvedt and others. 1972 (1973). p. B1-B73. 90¢.
- *1996. Quality of surface waters of the United States, 1966—Parts 12-16, North Pacific slope basins, Alaska, and Hawaii and other Pacific areas. 1971. 433 p.
- *1999-B. Availability of streamflow for recharge of the basal aquifer in the Pearl Harbor area, Hawaii, by G. T. Hirashima. 1971. p. B1-B26.
- *1999-M. Tunnels and dikes of the Koolau Range, Oahu, Hawaii, and their effect on storage depletion and movement of ground water, by G. T. Hirashima. 1971. p. M1-M21.
- *2016. Quality of surface waters of the United States, 1967—Parts 12-16, North Pacific slope basins, Alaska, and Hawaii and other Pacific areas. 1972. 431 p. \$3.85.
- *2030. Summary of floods in the United States during 1969, by J. K. Reid and others. 1975. 173 p. \$1.90.
- W 2041. Elements needed in design of a ground-water-quality monitoring network in the Hawaiian Islands, by K. J. Takasaki. 1977. 23 p.; plates in pocket. \$6.35. (Supersedes Open-file report 76-263.)
2100. Quality of surface waters of the United States, 1968—Parts 12-16, North Pacific slope basins, Alaska, Hawaii, and other Pacific areas, 1973. 464 p. \$3.05.
- W 2137. Surface water supply of the United States, 1966-70, part 16—Hawaii and other Pacific areas. 1977. 750 p. \$5.85.
2150. Quality of surface waters of the United States, 1969—Parts 12-16, North Pacific slope basins, Alaska, Hawaii, and other Pacific areas. 1974. 480 p. \$3.50.
2160. Quality of surface waters of the United States, 1970—Parts 12-16, North Pacific slope basins, Alaska, and Hawaii and other Pacific areas. 1976. 501 p. \$4.70.
- W 2162. Ground-water levels in the United States, 1971-74, Southwestern States. 1977. 86 p. \$2.25.

Annual reports of the Geological Survey containing data of the water resources of the United States

Year	WSP	Price	Year	WSP	Price	Year	WSP	Price	Year	WSP	Price
Information on water levels and artesian pressure in observation wells											
1935	*777		1942	*949		1949	*1161		1958-60	*1770	
1936	*817		1943	*991		1950	*1170		1961-65	*1855	
1937	*840		1944	*1021		1951	*1196		1966-70	*2010	\$1.15
1938	*845		1945	*1028		1952	*1228				
1939	*886		1946	*1076		1953	*1270				
1940	*911		1947	*1101		1954	*1326				
1941	*941		1948	*1131		1955	*1409				
Stream measurements in the years mentioned											
1909-11	*318		1926	*635		1940	*905		1954	*1349	
1912	*336		1927	*655		1941	*935		1955	*1399	
1913	*373		1928	*675		1942	*965		1956	*1449	
1914-15	*430		1929	*695		1943	*985		1957-58	*1569	
1916	*445		1929-30	*710		1944	*1015		1959	*1639	
1917	*465		1930-31	*725		1945	*1045		1960	*1719	
1918	*485		1931-32	*740		1946	*1065		1961-65	*1937	\$6.75

BULLETINS—Continued

- B 1442. Selected bibliography and index of earth science reports and maps relating to land-resource planning and management published by the U.S. Geological Survey through October 1976, compiled by M. F. Eister. 1978. 76 p. \$2.20.
- B 1450-A. Principles of the mineral resource classification system of the U.S. Bureau of Mines and U.S. Geological Survey. 1976. p. A1-A5. 35¢. (Mineral resource classification systems of the U.S. Bureau of Mines and U.S. Geological Survey.)
- B 1450-B. Coal resource classification system of the U.S. Bureau of Mines and U.S. Geological Survey. 1976. p. B1-B7. 35¢. (Mineral resource classification systems of the U.S. Bureau of Mines and U.S. Geological Survey.)

WATER-SUPPLY PAPERS

- *77. The water resources of Molokai, Hawaiian Islands, by Waldemar Lindgren. 1903. 62 p.
- *318. Water resources of Hawaii, 1909-11, by W. F. Martin and C. H. Pierce. 1913. 522 p. (See table.)
- *336. Water resources of Hawaii, 1912, by C. H. Pierce and G. K. Larrison. 1914. 392 p. (See table.)
- *558. Preliminary index to river surveys made by the United States Geological Survey and other agencies, by B. E. Jones and R. O. Helland. 1926. 108 p. (See Water-Supply Paper 995.)
- *596-A. Methods of exploring and repairing leaky artesian wells: Preface, by O. E. Meinzer; p. 1-3; Methods of exploring and repairing leaky artesian wells on the island of Oahu, Hawaii, by John McCombs. 1928. p. 4-24.
- *616. Geology and water resources of the Kau district, Hawaii (including parts of Kilauea and Mauna Loa Volcanoes), by H. T. Stearns and W. O. Clark, with a chapter on Ground water in the Hawaiian Islands, by O. E. Meinzer. 1930. 194 p.
- *995. Index to river surveys made by the United States Geological Survey and other agencies revised to July 1, 1947, by B. E. Jones and R. O. Helland. 1948. 145 p.
- *1137-C. Flood of August 1950 in the Waimea area, Kauai, Hawaii, by R. K. Chun. 1952. p. 327-349.
- *1137-I. Summary of floods in the United States during 1950. 1954. p. 957-991.
- *1319. Compilation of records of surface waters of Hawaii through 1950. 1961 (1962). 316 p.
- *1360-A. Reservoirs in the United States, by N. O. Thomas and G. E. Harbeck, Jr. 1956. p. 1-99. (Superseded by Water-Supply Paper 1838.)
- *1460-A. Chemical character of public water supplies of the larger cities in Alaska, Hawaii, and Puerto Rico, 1954, by W. W. Lohr. 1957. p. 1-39.
1473. Study and interpretation of the chemical characteristics of natural water, *second edition*, by J. D. Hem. 1970. 363 p. \$3.35. (Reprinted.)
- *1530. Summary of floods in the United States during 1956. 1964. 85 p.
- *1660-B. Summary of floods in the United States during 1958. 1963. p. B1-B97.
- *1739. Compilation of records of surface waters of Hawaii, July 1950-June 1960. 1964. 136 p.
- *1770. Ground-water levels in the United States, 1956-60, Southwestern States. 1963. 160 p. (Includes Hawaii.) (See table.)
- *1778. Ground-water resources in southern Oahu, Hawaii, by F. N. Visher and J. F. Mink. 1964. 133 p.
- *1800. The role of ground water in the national water situation, by C. L. McGuinness. 1963. 1,121 p.
- *1809-P. Water-supply potential from an asphalt-lined catchment near Holualoa, Kona, Hawaii, by S. S. W. Chinn. 1965. p. P1-P25.
- *1812. Public water supplies of the 100 largest cities in the United States, 1962, by C. N. Durfor and Edith Becker. 1964. 364 p.
- *1830-B. Summary of floods in the United States during 1963, by J. O. Rostvedt and others. 1968 (1969). p. B1-B120.
- *1838. Reservoirs in the United States, by R. O. R. Martin and R. L. Hanson. 1966. 115 p.
- *1840-C. Summary of floods in the United States during 1964, by J. O. Rostvedt and others. 1970. p. C1-C124.
- *1850-E. Summary of floods in the United States during 1965, by J. O. Rostvedt and others. 1970. p. E1-E110.

PROFESSIONAL PAPERS—Continued

- *650-D. Geological Survey Research 1969. 1969 (1970). p. D1-D299. Contains the following article, which is not available separately.
Hawaiian seismic events during 1968, by R. Y. Koyanagi. p. D168.
- *656. Investigations of ferruginous bauxite and other mineral resources on Kauai and a reconnaissance of ferruginous bauxite deposits on Maui, Hawaii, by S. H. Patterson. 1971. 74 p.
- *680-A. Deep drilling on Midway atoll, by H. S. Ladd, J. I. Tracey, Jr., and M. G. Gross. 1970. p. A1-A22.
- *680-B. Petrology of the basalt cores from Midway atoll, by G. A. Macdonald. 1969. p. B1-B10.
- *680-C. Larger Foraminifera from deep drill holes on Midway atoll, by W. S. Cole. 1969. p. C1-C15.
- *680-D. Electrical resistivity measurements, Midway and Kure atolls, by G. V. Keller. 1969. p. D1-D8.
- *680-E. Smaller Foraminifera from Midway drill holes, by Ruth Todd and Doris Low. 1970. p. E1-E49. \$1. (Professional Paper 680 issued only as separate chapters under the general title "Geology of the Midway area, Hawaiian Islands.")
- 680-F. Late Cenozoic Ostracoda from Midway Island drill holes, by J. C. Holden. 1976. p. F1-F43; 17 plates. \$1.90.
- *700-A. Geological Survey Research 1970. 1970. p. A1-A426.
- P 710. Jasperoid in the United States—Its characteristics, origin, and economic significance, by T. G. Lovering. 1972. 164 p. \$3.75. (Reprint.)
- *735. Chemistry of Kilauea and Mauna Loa lava in space and time, by T. L. Wright. 1971 (1972). 40 p. \$1.10.
- *750-A. Geological Survey Research 1971. 1971 (1972). p. A1-A418. \$5.95.
- *750-C. Geological Survey Research 1971. 1971. p. C1-C259. Contains the following article, which is not available separately.
Hawaiian seismic events during 1969, by R. Y. Koyanagi and E. T. Endo. p. C158.
- *800-A. Geological Survey Research 1972. 1972 (1973). p. A1-A320.
- *800-C. Geological Survey Research 1972. 1972. p. C1-C283. Contains the following article, which is not available separately.
Partial draining and crustal subsidence of Alae lava lake, Kilauea Volcano, Hawaii, by D. A. Swanson and D. W. Peterson. p. C1.
- *800-D. Geological Survey Research 1972. 1972. p. D1-D227. \$5.05. Contains the following article, which is not available separately.
Distribution of earthquakes related to mobility of the south flank of Kilauea Volcano, Hawaii, by R. Y. Koyanagi, D. A. Swanson, and E. T. Endo. p. D89.
- P 813-M. Summary appraisals of the Nation's ground-water resources—Hawaii region, by K. J. Takasaki. 1978. p. M1-M29. \$1.50. (Supersedes Open-file report 77-825.)
820. United States mineral resources, D. A. Brobst and W. P. Pratt, editors. 1973. 722 p. \$14.35.
840. Descriptions and analyses of eight new USGS rock standards, compiled and edited by F. J. Flanagan. 1976. 192 p. \$3.10.
850. Geological Survey Research 1973. 1973 (1974). 366 p. \$5.30.
853. Paleotectonic investigations of the Pennsylvanian System in the United States, by E. D. McKee, E. J. Crosby, and others. 1975 (1976). Pt. 1, Introduction and regional analyses of the Pennsylvanian System, 349 p.; Pt. II, Interpretive summary and special features of the Pennsylvanian System, 192 p.; Pt. III, 17 plates in pocket. \$41 per set.
856. Structure and origin of the Koae fault system, Kilauea Volcano, Hawaii, by W. A. Duffield. 1975. 12 p. \$1.70.
874. North American species of *Tempuskyia* and their stratigraphic significance, by S. R. Ash and C. B. Read, with a section on Stratigraphy and age of the *Tempuskyia*-bearing rocks of southern Hidalgo County, N. Mex., by R. A. Zeller, Jr. 1976. 42 p.; 13 plates showing fossils. \$2.05.
- Order 890. The August and October 1968 east rift eruptions of Kilauea Volcano, Hawaii, by D. B. Jackson, D. A. Swanson, R. Y. Koyanagi, and T. L. Wright. 1975 (1976). 33 p. \$1.35.
- Order 891. The February 1969 east rift eruption of Kilauea Volcano, Hawaii, by D. A. Swanson, D. B. Jackson, R. Y. Koyanagi, and T. L. Wright. 1976. 30 p.; plate in pocket. \$2.05.

PROFESSIONAL PAPERS—Continued

900. Geological Survey Research 1974. 1974 (1975). 349 p. \$6.10.
- P 902. Precambrian geology of the United States: An explanatory text to accompany the Geologic Map of the United States, by P. B. King. 1976 (1977). 85 p. \$2. (Reprint.)
- P 903. The Paleozoic and Mesozoic rocks; a discussion to accompany the Geologic Map of the United States, by P. B. King and H. M. Beikman. 1976. 76 p. \$1.90.
- P 904. The Cenozoic rocks; a discussion to accompany the Geologic Map of the United States, by P. B. King and H. M. Beikman. 1978. 82 p. \$2.75.
909. Boundaries of the United States and the several States, by F. K. Van Zandt. 1976. 191 p. \$5.20.
- P 933. Geology and resources of fluorine in the United States, edited by D. R. Shawe, with sections by D. R. Shawe, R. E. Van Alstine, R. G. Worl, A. V. Heyl, R. D. Trace, R. L. Parker, W. R. Griffiths, C. L. Sainsbury, and J. B. Cathcart. 1976. 99 p.; 28 figs. \$2.20.
- P 935-A. The eruption of August 1963 and the formation of Alae lava lake, Hawaii, by D. L. Peck and W. T. Kinoshita. 1976 (1977). p. A1-A33. \$1.15. (Solidification of Alae lava lake, Hawaii.)
- P 935-B. Cooling and vesiculation of Alae lava lake, Hawaii, by D. L. Peck. 1978. 59 p. \$2.50. (Solidification of Alae lava lake, Hawaii.)
- P 935-C. Crystallization and differentiation of the Alae Magma, Alae lava lake, Hawaii, by T. L. Wright and D. L. Peck. 1978. p. C1-C20. \$1.40. (Solidification of Alae lava lake, Hawaii.)
940. Mineral resource perspectives 1975. 1976. 24 p. \$1.20.
- P 950. Nature to be commanded..., by G. D. Robinson and A. M. Spieker, editors. 1978. 95 p. \$6.25.
- P 957. Lead in the environment, T. G. Lovering, editor. 1976. 90 p. \$2.10.
- P 959-A-F. Geology and resources of titanium. A, Titanium contents and titanium partitioning in rocks, by E. R. Force; B, Metamorphic source rocks of titanium placer deposits—A geochemical cycle, by E. R. Force; C, Rutile and sphene in blueschist and related high-pressure facies rocks, by M. C. Blake, Jr., and B. A. Morgan; D, Titanium deposits in anorthosite massifs, by Norman Herz; E, Titanium deposits in alkalic igneous rocks, by Norman Herz; and F, Titanium minerals in deposits of other minerals, by E. R. Force. p. A1-A10; B1-B16; C1-C6; D1-D6; E1-E6; F1-F5. \$1.90. (Contributions to geology of titanium.)
961. Petrology, mineralogy, and geochemistry of the east Molokai Volcanic Series, Hawaii, by M. H. Beeson. 1976. 53 p. \$1.55.
963. Displacement of the south flank of Kilauea Volcano: The result of forceful intrusion of magma into the rift zones, by D. A. Swanson, W. A. Duffield, and R. S. Fiske. 1976. 39 p. \$1.15.
964. A land use and land cover classification system for use with remote sensor data, by J. R. Anderson, E. E. Hardy, J. T. Roach, and R. E. Witmer. 1976. 28 p. 75¢. (Reprint.)
975. Geological Survey Research 1975. 1975 (1976). 373 p. \$5.
- P 978. PACER—Data entry, retrieval, and update for the National Coal Resources Data System (Phase I), by S. M. Cargill, A. C. Olson, A. L. Medlin, and M. D. Carter. 1976. 107 p. \$2.20.
- P 1000. Geological Survey Research 1976. 1976 (1977). 414 p. \$5.50.
- P 1004. Cooling and crystallization of tholeiitic basalt, 1965 Makaopuhi lava lake, Hawaii, by T. L. Wright and R. T. Okamura. 1977. 78p. \$2.75.
- P 1006-A,B. Demand and supply of nonfuel minerals and materials for the United States energy industry, 1975-90—A preliminary report. A, Demand for nonfuel minerals and materials by the United States energy industry, 1975-90, by J. P. Albers, W. J. Bawiec, and L. F. Rooney. p. A1-A19. B, Supply of nonfuel minerals and materials for the United States energy industry, 1975-90, by G. H. Goudarzi, L. F. Rooney, and G. L. Shaffer. p. B1-B37. 1976. \$1.70. (Reprint.)
- P 1015. Proceedings of the first annual William Pecora Memorial Symposium, October 1975, Sioux Falls, South Dakota, by P. W. Woll and W. A. Fischer, editors. 1977. 370 p. \$6.50.
- P 1050. Geological Survey Research 1977. 1977 (1978). 411 p. \$6.

BULLETINS

- *148. Analyses of rocks, with a chapter on Analytical methods, laboratory of the United States Geological Survey, 1880 to 1896, by F. W. Clarke and W. F. Hillebrand. 1897. Contains: The carbonate rocks—Hawaiian Islands. p. 276.
- *168. Analyses of rocks from the laboratory of the United States Geological Survey, 1880-1903, tabulated by F. W. Clarke. 1904. Contains: Igneous and crystalline rocks—Hawaiian Islands. p. 272; The carbonate rocks—Hawaiian Islands. p. 337.
- *509. Mineralogical notes, series 2, by W. T. Schaller. 1912. Contains: Notes on minerals from gabbro of Waimea Canyon, Hawaii. p. 85-87.
- *561. Results of spirit leveling in Hawaii, 1910 to 1913, inclusive. 1914. 42 p.
- *591. Analyses of rocks and minerals from the laboratory of the United States Geological Survey, 1880-1914, tabulated by F. W. Clarke. 1915. Contains: Igneous and crystalline rocks—Hawaiian Islands. p. 211; The carbonate rocks—Hawaiian Islands. p. 248.
- *896. Lexicon of geologic names of the United States (including Alaska), by M. G. Wilmarth. 1938. Part 1, A-L, p. 1-1244; part 2, M-Z, p. 1245-2396. (See Bulletins 1200 and 1350.)
- *974-A. The 1949 summit eruption of Mauna Loa, Hawaii, by G. A. Macdonald and J. B. Orr. 1950. p. 1-33.
- *974-D. Report of the Hawaiian Volcano Observatory for 1948-49, by R. H. Finch and G. A. Macdonald. 1951. p. 103-133. 20¢.
- *994. Structures and forms of basaltic rocks in Hawaii, by C. K. Wentworth and G. A. Macdonald. 1963 (1964). 98 p.
- *996-B. Hawaiian volcanoes during 1950, by R. H. Finch and G. A. Macdonald. 1953. p. 27-89.
- *996-D. Hawaiian volcanoes during 1951, by G. A. Macdonald and C. K. Wentworth. 1954. p. 141-216.
- *1021-B. Hawaiian volcanoes during 1952, by G. A. Macdonald. 1955. p. 15-108.
- *1021-D. Hawaiian volcanoes during 1953, by G. A. Macdonald and J. P. Eaton. 1955. p. 127-166.
- *1061-B. Hawaiian volcanoes during 1954, by G. A. Macdonald and J. P. Eaton. 1957. p. 17-72.
- *1084-C. Selenium content of some volcanic rocks from Western United States and Hawaiian Islands, by D. F. Davidson and H. A. Powers. 1959. p. 69-81.
- *1148. Summary of rock salt deposits in the United States as possible storage sites for radioactive waste materials, by W. G. Pierce and E. I. Rich. 1962. 91 p.
- *1171. Hawaiian volcanoes during 1955, by G. A. Macdonald and J. P. Eaton. 1964. 170 p.
- *1200. Lexicon of geologic names of the United States for 1936-60, by G. C. Keroher and others. 1966. Part 1, A-F (v. 1, p. 1-1448); part 2, G-O (v. 2, p. 1449-2886); part 3, P-Z (v. 3, p. 2887-4341). (See Bulletin 1350.)
- *1350. Lexicon of geologic names of the United States for 1961-67, by G. C. Keroher. 1970. 848 p. \$6.55.
- B 1377. Bibliography and index of U.S. Geological Survey publications relating to coal, 1882-1970, by Paul Averitt and Lorreda Lopez. 1972. 173 p. \$2.50. (Reprint.)
1412. Coal resources of the United States, January 1, 1974, by Paul Averitt. 1975. 131 p. \$1.60. (Reprint.)
- B 1419. Annotated bibliography of the geology of selenium, 1958-74, by C. A. Gent. 1976. 49 p. 80¢.
- B 1422-A. Changes in stratigraphic nomenclature by the U.S. Geological Survey, 1975, by G. V. Cohee and W. B. Wright. 1976. p. A1-A84. \$1.15. (Contributions to stratigraphy.)
1428. Directory of U.S. Geological Survey program activities in coastal areas, 1974-76, edited by P. A. Marcus. 1976. 154 p. \$1.75.
- B 1432. The Reinhardt Thiessen coal thin-section slide collection of the U.S. Geological Survey—Catalogue and notes, by J. M. Schopf and O. G. Oftedahl. 1976. 85¢.
- B 1435-A. Changes in stratigraphic nomenclature by the U.S. Geological Survey, 1976, by N. F. Sohl and W. B. Wright. 1977 (1978). p. A1-A151. \$2.75. (Contributions to stratigraphy.)