

# Publications of the Geological Survey, 1982

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UNITED STATES DEPARTMENT OF THE INTERIOR



**UNITED STATES DEPARTMENT OF THE INTERIOR**

**JAMES G. WATT, *Secretary***

**GEOLOGICAL SURVEY**

**Dallas L. Peck, *Director***

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### **Publications of the Geological Survey**

This catalog is a list of (1) books and maps<sup>1</sup> that were published during 1982, and (2) articles by Geological Survey personnel in non-Geological Survey journals and books that came to our attention in 1982; it supplements the permanent catalogs "Publications of the Geological Survey, 1879-1961" and "Publications of the Geological Survey, 1962-1970." These permanent catalogs, as well as some others, are available under the conditions indicated below from the Eastern Distribution Branch, Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304, and the Western Distribution Branch, U.S. Geological Survey, Box 25286, Federal Center, Denver, CO 80225. The catalogs are also available over the counter at any of the Geological Survey offices that sell books.

Permanent catalogs "Publications of the Geological Survey, 1879-1961" and "Publications of the Geological Survey, 1962-1970" may be purchased for \$2.00 per copy.

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State catalogs, and a monthly catalog "New Publications of the Geological Survey" may be obtained free on request from the Eastern Distribution Branch, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

Those wishing to be placed on a free subscription list of the monthly catalog "New Publications of the Geological Survey" should apply in writing to the Geological Survey, 582 National Center, Reston, VA 22092.

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For prices of publications listed in this catalog refer to the January through December 1982 issues of the monthly list "New Publications of the Geological Survey." Prices listed include cost of domestic surface transportation. For transmittal outside the U.S.A. (except to Canada and Mexico), a surcharge of 25 percent of the net bill should be included to cover surface transportation.

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Professional papers, bulletins, water-supply papers, Techniques of Water-Resources Investigations, circulars, publications of general interest (such as leaflets, pamphlets, booklets), single copies of the Earthquake Information Bulletin, and some miscellaneous reports, including some from the foregoing series that have gone out of print at the Superintendent of Documents, are obtainable by mail from

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ROLLA, Missouri—1400 Independence Road  
DENVER, Colorado—Bldg. 41, Federal Center  
FAIRBANKS, Alaska—New Federal Bldg., 101 Twelfth Avenue

Survey maps are also sold by some 2,500 commercial dealers throughout the United States.

## BOOKS

### PROFESSIONAL PAPERS

- P 0264-F. ALASKA. Permafrost and ground water in Alaska, by D.M. Hopkins, T. N. V. Karlstrom, and others. 1955. 146 p.; plates 30-44 (A shorter contribution to general geology.) (Reprint.)
- P 0306-7. Geology and paleontology of Canal Zone and adjoining parts of Panama, by W. P. Woodring. 1982. p. 541-759; plates 83-124; 1 plate in pocket. Description of Tertiary mollusks (Pelecypods: Propeamussiidae to Cuspidariidae; additions to families covered in P 306-E; additions to gastropods; cephalopods).
- P 0420-D. CALIFORNIA. Geology of the northern Santa Ana Mountains, California, by J. E. Schoellhamer, J. G. Vedder, R. F. Yerkes, and D. M. Kinney. 1981. p. D1-D109; 4 plates in pocket. (Geology of the eastern Los Angeles Basin, southern California.)
- P 0492. Thermal springs of the United States and other countries of the world; a summary, G. A. Waring, revised by R. R. Blankenship and Ray Bentall. 1965. 1965. 383 p. (Reprint.)
- P 0610. Principal gold-producing districts of the United States, by A. H. Koschmann, and M. H. Bergendahl. 1968. 283 p. (Reprint.)
- P 0655-P. ARIZONA. Evapotranspiration before and after clearing phreatophytes, Gila River flood plain, Graham County, Arizona, by R. C. Culler, R. L. Hanson, R. M. Myrick, R. M. Turner, and F. P. Kipple. 1982. p. P1-P67; 1 plate in pocket. (Gila River phreatophyte project.)
- P 0680-G. Fossil corals from Midway Atoll, by J. W. Wells. 1982. p. G1-G6; 3 plates. (Geology of the Midway area, Hawaiian Islands.)
- P 0712C. NEVADA, CALIFORNIA. Hydrogeologic and hydrochemical framework, south-central Great Basin, Nevada-California, with special reference to the Nevada Test Site, by I. J. Winograd, and William Thordarson. 1975. p. C1-C23; 3 plates in pocket. (Hydrology of nuclear test sites.) (Reprint.)
- P 0813-T. Summary appraisals of the Nation's ground-water resources; New England region, by Allen Sinnott. 1982. p. T1-T23.
- P 0901. Explanatory text to accompany the Geologic map of the United States, by P. B. King, and H. M. Beikman. 1974. 40 p. (Reprint.)
- P 0907-F. The nature and use of copper reserve and resource data, by D. P. Cox, N. A. Wright, and G. J. Coakley. 1981. p. F1-F20. (Geology and resources of copper deposits.)
- P 1044-I. OREGON. The geothermal hydrology of Warner Valley, Oregon; a reconnaissance study, by E. A. Sammel, and R. W. Craig. 1981. 147 p.; 1 plate in pocket. (Geohydrology of geothermal systems.)
- P 1044-J. IDAHO, NEVADA. Hydrology and geochemistry of thermal ground water in southwestern Idaho and north-central Nevada, by H. W. Young, and R. E. Lewis. 1982. p. J1-J20; 2 plates in pocket. (Geohydrology of geothermal systems.) (Super-sedes Open-file report 80-2043.)
- P 1058. Application of Landsat products in range- and water-management problems in the Sahelian Zone of Mali, Upper Volta, and Niger, by M. E. Cooley, and R. M. Turner. 1982. 52 p.

2 PUBLICATIONS OF THE GEOLOGICAL SURVEY, 1982

- P 1066-H. KENTUCKY. Palaeocopid and podocopid Ostracoda from the Lexington Limestone and Clays Ferry Formation (Middle and Upper Ordovician) of central Kentucky, by S. M. Warshauer, West Virginia University, Morgantown, W. Va., and J. M. Berdan. 1982. p. H1-H80; 19 plates. (Contributions to the Ordovician paleontology of Kentucky and nearby States)
- P 1066-L. KENTUCKY. Some silicified strophomenacean brachiopods from the Ordovician of Kentucky, with comments on the genus *Pionomena*, by J. K. Pope. 1982. p. L1-L30. (Contributions to the Ordovician paleontology of Kentucky and nearby states.)
- P 1066-M. KENTUCKY. The brachiopod genera *Hebertella*, *Dalmanella*, and *Heterorthis* from the Ordovician of Kentucky, by L. G. Walker. 1982. 17 p.; 5 plates. (Contributions to the Ordovician paleontology of Kentucky and nearby states.)
- P 1067-E. VIRGINIA, MARYLAND. Uranium-series dating of mollusks and corals, and age of Pleistocene deposits, Chesapeake Bay area, Virginia and Maryland, by R. B. Mixon, B. J. Szabo, and J. P. Owens. 1982. p. E1-E18; 2 plates in pocket. (Surface and shallow subsurface geologic studies in the emerged coastal plain of the Middle Atlantic States.)
- P 1078. Tectonics of the Indonesian region, by W. B. Hamilton. 1979. 345 p.; 1 plate in pocket. (Reprint.)
- P 1080. The geologic investigation of the Taurus-Littrow Valley; Apollo 17 landing site, by E. W. Wolfe, N. G. Bailey, B. K. Lucchitta, W. R. Muehlberger, D. H. Scott, R. L. Sutton, and H. G. Wilshire, with a section on Apollo 17 lunar surface photography, by R. M. Batson, K. B. Larson, and R. L. Tyner. 1981. 280 p.; 9 plates in separate cover.
- P 1114. Procedures for estimating earthquake ground motions, by W. W. Hays. 1980. 77 p. (Reprint.)
- P 1153. Geological mapping by use of computer-enhanced imagery in western Saudi Arabia, by H. W. Blodgett, and G. F. Brown. 1982. 10 p.; 2 plates in pocket.
- P 1161-A-BB. Genesis of uranium- and gold-bearing Precambrian quartz-pebble conglomerates, edited by F. C. Armstrong. 1981. (Proceedings of a workshop, October 13-15, 1975, Golden, Colorado.) (Published as a single volume, not available as separate chapters.)
- A, Investigations of Witwatersrand uranium-bearing quartz-pebble conglomerates in 1944-45, by Weston Bourret.
- B, The Precambrian development of an oxygenic atmosphere, by J. W. Schopf.
- C, Uraninite oxidation and the Precambrian atmosphere, by D. E. Grandstaff.
- D, Uraniferous quartz-pebble conglomerates in South Africa, by J. W. von Backstrom.
- E, Examples that illustrate sedimentological aspects of the Proterozoic placer model on the Kaap-Vaal Craton, Witwatersrand, South Africa, by W. E. L. Minter.
- F, The Dominion Reef Group, western Transvaal, South Africa, by J. W. von Backstrom.
- G, The crossbedded nature of Proterozoic Witwatersrand placers in distal environments and a paleocurrent analysis of the Vaal Reef placer, by W. E. L. Minter.
- H, Primary dispersal patterns of uraninite in the Proterozoic Vaal Reef placer deposit, Witwatersrand, South Africa, by W. E. L. Minter.
- I, Examples of possible movement of gold in solution in the Witwatersrand, Ventersdorp, and Transvaal systems, by H. C. M. Whiteside.
- J, Microprobe analyses of uranium and thorium in uraninite from the Witwatersrand, South Africa, and Blind River, Ontario, Canada, by D. E. Grandstaff.

- K, Preliminary notes concerning the uranium-gold ratio and the gradient of heavy-mineral size distribution as factors of transport distance down the paleoslope of the Proterozoic Steyn Reef placer deposit, Orange Free State Goldfield, Witwatersrand, South Africa, by W. E. L. Minter.
- L, Geochemical studies on the origin of the detrital pyrites in the conglomerates of the Witwatersrand Goldfields, South Africa, by Rudolf Saager.
- M, Geochemistry and morphology of mineral components from the fossil gold and uranium placers of the Witwatersrand, by D. K. Hallbauer.
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- O, Some aspects of the development of the Vaal Reef uranium-gold carbon seams, Witwatersrand Sequence; organic geochemical and microbiological considerations, by J. E. Zumberge, Bartholomew Nagy, and L. A. Nagy.
- P, The distribution and sedimentary arrangement of carbon in South African Proterozoic placer deposits, by W. E. L. Minter.
- Q, Some aspects of Witwatersrand mineralization with special reference to uranium minerals, by C. E. Feather.
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- T, Uranium in Precambrian Moeda Formation, Minas Gerais, Brazil, by J. N. Villaca and L. A. M. Moura.
- U, The Blind River uranium deposits; the ores and their setting, by J. A. Robertson.
- V, Some metallogenic features of the Huronian and post-Huronian uraniumiferous conglomerates, by Vladimir Ruzicka.
- W, Temporal and other factors affecting deposition of uraniumiferous conglomerates, by S. M. Roscoe.
- X, Genesis of Canadian uraniumiferous quartz-pebble conglomerate ores, by H. W. Little.
- Y, Thorianite from the Hogatza placer, north-central Alaska, by M. H. Staatz.
- Z, Basal conglomerates and weathered zones in the Marquette Range Supergroup, Northern Peninsula of Michigan; age, indications of atmospheric oxygen, and uranium potential, by W. F. Cannon.
- AA, Genesis of uranium-gold pyritic conglomerates, by W. B. Myers.
- BB, Thoughts about uranium-bearing quartz-pebble conglomerates; a summary of ideas presented at the workshop, by B. J. Skinner.
- P 1170-B. PENNSYLVANIA. Mass movement in two selected areas of western Washington County, Pennsylvania, by J. S. Pomeroy. 1982. 17 p. (Shorter contributions to general geology.)
- P 1171. Cenozoic fossil mollusks from western Pacific islands; gastropods (Eulimidae and Volutidae through Terebridae), by H. S. Ladd. 1982. 100 p.; 41 plates.
- P 1172. Geoindex, by Patricia Fulton and Harold Johnson, assisted by W. L. McIntosh, Margaret Eister, Lawrence Balcerak, Donald Hanson, Richard Thoensen, and Pearl Porter. 1982. 298 p.
- P 1179. Systematic ice retreat in New England, by Carl Koteff, and Fred Pessi, Jr. 1981. 20 p. (Reprint.)

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- P 1182. NEVADA. Devonian and Mississippian rocks of the northern Antelope Range, Eureka County, Nevada, by R. K. Hose, A. K. Armstrong, A. G. Harris, and B. L. Mamet. 1982. 19 p.; 8 plates.
- P 1185. CALIFORNIA. Isotopic U-Pb ages of zircon from the granitoids of the central Sierra Nevada, California, by T. W. Stern, P. C. Bateman, B. A. Morgan, M. F. Newell, and D. L. Peck. 1981. 17 p.; 1 plate in pocket.
- P 1189. ALASKA. Late Bajocian ammonites from southern Alaska, by R. W. Imlay. 1982. 19 p.; 7 plates.
- P 1190. ALASKA. Late Jurassic ammonites from Alaska, by R. W. Imlay. 1981. 40 p.; 12 plates.
- P 1193. Resources for the twenty-first century—Proceedings of the International centennial symposium of the U.S. Geological Survey, held at Reston, Virginia, October 14-19, 1979, edited by F. C. Whitmore, Jr., and M. E. Williams. 1982. 345 p.
- P 1200-NJ. NEW JERSEY. The National Gazetteer of the United States of America; New Jersey 1982, prepared in cooperation with the U. S. Board on Geographic Names. 1982. 220 p.
- P 1201-A. WYOMING. Geology, paleontology, and correlation of Eocene volcanoclastic rocks, southeast Absaroka Range, Hot Springs County, Wyoming, by T. M. Bown. 1982. p. A1-A75; 6 plates in text, 1 plate in pocket. (Geology of the Absaroka Range, northwest Wyoming.)
- P 1202. NEW MEXICO. Deformation of host rocks and flow of magma during growth of minette dikes and breccia-bearing intrusions near Ship Rock, New Mexico, by P. T. Delaney, and D. D. Pollard. 1981. 61 p.; 1 plate in pocket.
- P 1206. Effects of flooding upon woody vegetation along parts of the Potomac River flood plain, by T. M. Yanosky. 1982. 21 p.
- P 1208. Geomorphology of New England, by C. S. Denny. 1982. 18 p.; 1 plate in pocket.
- P 1209. ALASKA. Stratiform zinc-lead deposits in the Drenchwater Creek area, Howard Pass Quadrangle, northwestern Brooks Range, Alaska, by W. J. Nokleberg, and G. R. Winkler. 1982. 22 p.; 2 plates in pocket. (Supersedes Open-file report 78-70-C.)
- P 1211. PENNSYLVANIA. Johnstown-western Pennsylvania storms and floods of July 19-20, 1977, by L. R. Hoxit, R. A. Maddox, and C. F. Chappell, National Oceanic and Atmospheric Administration, and S. A. Brua, U.S. Geological Survey. 1982.
- P 1212-A. ALASKA. Stratigraphy and diagenetic history of the lower part of the Triassic Chitstone Limestone, Alaska, by A. K. Armstrong, and E. M. MacKevett, Jr. 1982. p. A1-A26. 1982. (Geologic relations of Kennecott-type copper deposits, Wrangell Mountains, Alaska.)
- P 1215. Selection and investigation of sites for the disposal of radioactive wastes in hydraulically induced subsurface fractures, by R. J. Sun. 1982. 87 p. (Supersedes Open-file report 80-450.)
- P 1216-A. ALASKA. A Late Devonian (Frasnian) microbiota from the Farewell-Lyman Hills area, west-central Alaska, by B. L. Mamet, and George Plafker. 1982. p. A1-A12; 4 plates. (Contributions to paleontology.)
- P 1217. FLORIDA. Simulated effects of ground-water development on potentiometric surface of the Floridan Aquifer, west-central Florida, by W. E. Wilson, and J. M. Gerhart. 1982. 83 p.; 2 plates in pocket.
- P 1218. SOUTH CAROLINA. Aeroradioactivity maps in heavy-mineral exploration; Charleston, South Carolina, area, by E. R. Force, A. E. Grosz, P. J. Loferski, and A. H. Maybin. 1982. 19 p.; 2 plates in pocket. (Supersedes Open-file report 78-587.)

- P 1219. IDAHO. Digital classification of Landsat data for vegetation and land-cover mapping in the Blackfoot River watershed, southeastern Idaho, by L. R. Pettinger. 1982. 33 p.
- P 1221. UTAH. Tertiary volcanic rocks and uranium in the Thomas Range and northern Drum Mountains, Juab County, Utah, by D. A. Lindsey. 1982. 71 p.
- P 1222. GEORGIA, SOUTH CAROLINA. Upper Cretaceous subsurface stratigraphy and structure of coastal Georgia and South Carolina, by P. C. Valentine. 1982. 33 p.
- P 1224. IDAHO, MONTANA. Cenozoic block uplifts in east-central Idaho and south-west Montana, by E. T. Ruppel. 1982. 24 p.
- P 1227. The oilspill risk analysis model of the U.S. Geological Survey, by R. A. Smith, J. R. Slack, Timothy Wyant, and K. J. Lanfear. 1982. 40 p. (Supersedes Open-file report 80-687.)
- P 1229. PENNSYLVANIA. Landslides in the Greater Pittsburgh region, Pennsylvania, by J. S. Pomeroy. 1982. 48 p.; 12 plates.
- P 1231-B. VIRGINIA. Middle and upper Paleozoic granitic rocks in the Piedmont near Fredericksburg, Virginia; geochronology, by Louis Pavlides, T. W. Stern, J. G. Arth, K. G. Muth, and M. F. Newell. 1982. p. B1-B9. (Contributions to the geology of the Virginia Piedmont.)
- P 1232. Jurassic (Oxfordian and late Callovian) ammonites from the Western Interior region of the United States, by R. W. Imlay. 1982. 44 p.; 26 plates.
- P 1233. ALASKA. A late Oligocene or earliest Miocene molluscan fauna from Sitkinak Island, Alaska, by R. C. Allison, and Louie Marincovich, Jr. 1981. 11 p.; 3 plates.
- P 1234. WISCONSIN. Soil conservation and the reduction of erosion and sedimentation in the Coon Creek basin, Wisconsin, by S. W. Trimble, and S. W. Lund. 1982. 35 p.
- P 1235. ALASKA. Erosion and sedimentation in the Kenai River, Alaska, by K. M. Scott. 1982. 35 p.
- P 1237. Geochemistry of some rocks, mine spoils, stream sediments, soils, plants, and waters in the Western Energy Region of the conterminous United States, by R. J. Ebens and H. T. Shacklette, *with sections on* Field studies, by B. M. Anderson, J. G. Boerngen, J. J. Connor, W. E. Dean, J. A. Erdman, G. L. Feder, L. P. Gough, J. R. Herring, T. K. Hinkley, J. R. Keith, R. W. Klusman, J. M. McNeal, C. D. Ringrose, R. C. Severson, and R. R. Tidball. 1982. 173 p. (Statistical studies in field geochemistry.)
- P 1238. TEXAS. Geobiologic study of the South Texas outer continental shelf, by G. W. Hill, K. A. Roberts, J. L. Kindinger, and G. D. Wiley. 1982. 36 p.; 1 plate in pocket.
- P 1240-B. Facing geologic and hydrologic hazards; earth-science considerations, edited by W. W. Hays. 1981. p. B1-B108.
- P 1242. Perennial-streamflow characteristics related to channel geometry and sediment in Missouri River basin, by W. R. Osterkamp, and E. R. Hedman. 1982. 37 p.
- P 1243. COLORADO. Possible origins of till-like deposits near the summit of the Front Range in north-central Colorado, by R. F. Madole. 1982. 31 p.
- P 1246. Chemical weathering of basalts and andesites; evidence from weathering rinds, by S. M. Colman. 1982. 51 p.
- P 1248. CALIFORNIA. Compositional variations and abundances of selected elements in granitoid rocks and constituent minerals, central Sierra Nevada Batholith, California, by F. C. Dodge, H. T. Millard, Jr., and H. N. Elsheimer. 1982. 24 p.

6 PUBLICATIONS OF THE GEOLOGICAL SURVEY, 1982

- P 1249. WASHINGTON. Volcanic eruptions of 1980 at Mount St. Helens; the first 100 days, by B. L. Foxworthy, and Mary Hill. 1982. 125 p.
- P 1250. WASHINGTON. The 1980 eruptions of Mount St. Helens, Washington, edited by P. W. Lipman, and D. R. Mullineaux. 1981. 844 p.; 1 plate in pocket.
- P 1252. Estimation of the future rates of oil and gas discoveries in the western Gulf of Mexico, by L. J. Drew, J. H. Schuenemeyer, and W. J. Bawiec. 1982. 26 p.
- P 1258-A. ALASKA. Continuity equation model of the predicted drastic retreat of Columbia Glacier, Alaska, by L. A. Rasmussen, and M. F. Meier. 1982. p. A1-A23. (Studies of Columbia Glacier, Alaska.)
- P 1258-B. ALASKA. Finite element glacier dynamics model applied to Columbia Glacier, Alaska, by W. G. Sikonja. 1982. p. B1-B74. (Studies of Columbia Glacier, Alaska.)
- P 1265. Physiographic divisions and differential uplift in the Piedmont and Blue Ridge, by J. T. Hack. 1982. 49 p.
- P 1275. Geological Survey research 1981. 1982. 402 p.
- P 1283. MONTANA. Annual nutrient loadings, primary productivity, and trophic state of Lake Kocanusa, Montana and British Columbia, 1972-80, by P. F. Woods. 1982.

BULLETINS

- B 1278-F. The role of clays in fixing lithium, by H. C. Starkey. 1982. p. F1-F11. (Contributions to geochemical prospecting for minerals.)
- B 1426. Bibliography of reports resulting from U.S. Geological Survey technical cooperation with other countries, 1967-74, by W. E. Bergquist. 1976. 68 p. (Reprint.)
- B 1466. Element concentrations toxic to plants, animals, and man, by L. P. Gough, H. T. Shacklette, and A. A. Case. 1979. 80 p. (Reprint.)
- B 1490. ARIZONA. Mineral resources of the Galiuro Wilderness and contiguous further planning areas, Arizona, by S. C. Creasey, U.S. Geological Survey, and by J. E. Jinks, F. E. Williams, and H. C. Meeves, U.S. Bureau of Mines. *With a section on Aeromagnetic survey and interpretation*, by W. E. Davis, U.S. Geological Survey. 1981. 94 p.; 2 plates in pocket. (Studies related to wilderness-primitive areas.)
- B 1497. IDAHO. Mineral resources of the Boulder-Pioneer Wilderness Study Area, Blaine and Custer counties, Idaho, by U. S. Geological Survey, and U. S. Bureau of Mines. 1981. 303 p.; 5 plates in pocket. (Studies related to wilderness.)
- A, Geology of the Boulder-Pioneer Wilderness Study Area, Blaine and Custer counties, Idaho, by J. H. Dover, U.S. Geological Survey.
- B, Aeromagnetic studies of the Boulder-Pioneer Wilderness Study Area, Blaine and Custer counties, Idaho, by D. R. Mabey, U.S. Geological Survey.
- C, A geological and geochemical evaluation of the mineral resources of the Boulder-Pioneer Wilderness Study Area, Blaine and Custer counties, Idaho, by F. S. Simmons, U.S. Geological Survey.
- D, Economic appraisal of the Boulder-Pioneer Wilderness Study Area, Blaine and Custer counties, Idaho, by E. T. Tucheck and James Ridenour, U.S. Bureau of Mines.
- B 1500. ARIZONA. Mineral resources of the Rincon Wilderness Study Area, Pima County, Arizona. 1981. 62 p.; 2 plates in pocket. (Studies related to wilderness-wilderness areas.) (Supersedes Open-file report 78-596.)
- A, Geology of the Rincon Wilderness Study Area, Pima County, Arizona, by C. H. Thorman and Harald Drewes, U.S. Geological Survey.
- B, Mines, prospects, and mineralized areas of the Rincon Wilderness Study Area, Pima County, Arizona, by M. E. Lane, U.S. Bureau of Mines.



- B 1502-D. MONTANA. Lower Cretaceous Mount Pablo Formation, northwestern Montana, by M. R. Mudge, and D. D. Rice. 1982. 19 p. (Contributions to stratigraphy.)
- B 1506-A-E. CALIFORNIA. Mineral resources of the Sheep Mountain Wilderness Study Area and the Cucamonga Wilderness and additions, Los Angeles and San Bernardino counties, California, by U. S. Geological Survey, and U. S. Bureau of Mines. 1982. 92 p.; 2 plates in pocket. (Published as one volume.) (Studies related to wilderness.)
- A, Geology of the Sheep Mountain Wilderness Study Area and the Cucamonga Wilderness and additions, Los Angeles and San Bernardino counties, California, by J. G. Evans, U.S. Geological Survey.
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- C, Geologic and geochemical evaluation of mineral resources of the Sheep Mountain Wilderness Study Area and the Cucamonga Wilderness and additions, Los Angeles and San Bernardino counties, California, by J. G. Evans, U.S. Geological Survey.
- D, Economic appraisal of mineral resources of the Sheep Mountain Wilderness Study Area, Los Angeles and San Bernardino counties, California, by James Ridenour, S. W. Schmauch, and N. T. Zilka, U.S. Bureau of Mines.
- E, Economic appraisal of mineral resources of the Cucamonga Wilderness and additions, San Bernardino County, California, by N. T. Zilka and S. W. Schmauch, U.S. Bureau of Mines.
- B 1507. CALIFORNIA. The Vincent thrust, eastern San Gabriel Mountains, California, by J. G. Evans. 1982. 15 p.; 1 plate in pocket.
- B 1511. WISCONSIN. Mineral resources of the Rainbow Lake Wilderness Area and the Flynn Lake Wilderness Study Area, Bayfield County, Wisconsin, by W. F. Cannon, C. C. Cameron, and A. E. Grosz, U.S. Geological Survey, and by M. L. Dunn, Jr., G. C. Gazdik, and J. J. Hill, U.S. Bureau of Mines. 1981. 19 p.; 1 plate in pocket. (Studies related to wilderness-wilderness area.)
- B 1514. CALIFORNIA. Mineral resources of proposed additions to the Salmon-Trinity Alps Primitive Area, California, by P. E. Hotz and R. C. Greene, U.S. Geological Survey, and T. J. Close and R. K. Evans, U.S. Bureau of Mines. 1982. 54 p.; 1 plate in pocket. (Studies related to wilderness-primitive areas.)
- B 1515. NORTH CAROLINA. Mineral resources of the Craggy Mountain Wilderness Study Area and extension, Buncombe County, North Carolina, by F. G. Lesure and A. E. Grosz, U.S. Geological Survey, and by B. B. Williams and G. C. Gazdik, U.S. Bureau of Mines. 1982. 27 p.; 1 plate in pocket. (Studies related to wilderness-wilderness areas.) (Supersedes Open-file report 78-1091.)
- B 1516-A-D. CALIFORNIA. Mineral resources of the Minarets Wilderness and adjacent areas, Madera and Mono counties, California, by U.S. Geological Survey, and U.S. Bureau of Mines. 1982. 159 p.; 3 plates in pocket. (Studies related to wilderness-wilderness areas.) (Supersedes Open-file report 79-1472.)
- A, Regional setting, geology, and geochemical studies of the Minarets Wilderness and adjacent areas, Madera and Mono counties, California, by N. K. Huber, U.S. Geological Survey.
- B, Geophysical studies of the Minarets Wilderness and adjacent areas, Madera and Mono counties, California, by H. W. Oliver, U.S. Geological Survey.
- C, Geothermal-resource evaluation of the Minarets Wilderness and adjacent areas, Madera and Mono counties, California, by R. A. Bailey, U.S. Geological Survey.
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- B 1517. Index of generic names of fossil plants, 1974-1978, by A. D. Watt. 1982.
- B 1522. ALABAMA. Pleistocene(?) and Holocene fluvial history of Uphapee Creek, Macon County, Alabama, by H. W. Markewich, and R. A. Christopher. 1982. 16 p.
- B 1523. WYOMING. A review of the Proteutheria and Insectivora of the Willwood Formation (lower Eocene), Bighorn Basin, Wyoming, by T. M. Bown, and David Schankler. 1982. 79 p.; 10 plates.
- B 1526. KENTUCKY, WEST VIRGINIA. Coal geology of Adams, Blaine, Richardson, Sitka quadrangles, Kentucky, and Louisa Quadrangle, Kentucky-West Virginia, by P. T. Hayes, and C. W. Connor. 1982. 68 p.
- B 1527. CALIFORNIA. Age of the Coso Formation, Inyo County, California, by C. R. Bacon, D. M. Giovannetti, W. A. Duffield, G. B. Dalrymple, and R. E. Drake. 1982. 18 p.
- B 1528. VIRGINIA, WEST VIRGINIA. Chemical analyses and physical properties of 12 coal samples from the Pocahontas Field, Tazewell County, Virginia, and McDowell County, West Virginia, by V. A. Trent, J. H. Medlin, S. L. Coleman, and R. W. Stanton. 1982. 37 p.; 3 plates in pocket.
- B 1529-E. CALIFORNIA. Cenozoic rocks in the Barstow Basin area of southern California; stratigraphic relations, radiometric ages, and paleomagnetism, by D. B. Burke, J. W. Hillhouse, E. H. McKee, S. T. Miller, and J. L. Morton. 1982. p. E1-E16. (Contributions to stratigraphy.)
- B 1531. TENNESSEE, GEORGIA. Mineral resources of the Big Frog Wilderness Study Area and additions, Polk County, Tennessee, and Fannin County, Georgia, by J. F. Slack, U.S. Geological Survey and by G. C. Gazdik and M. L. Dunn, Jr., U.S. Bureau of Mines. 1982. 25 p. (Studies related to wilderness-wilderness areas.)
- B 1532. Map projections used by the U.S. Geological Survey, by J. P. Snyder. 1982. 313 p.; 1 plate in pocket.
- B 1533. COLORADO. Fluorine in a closed drainage basin, Saguache and Alamosa counties, Colorado, by R. E. Van Alstine, and F. O. Simon. 1982. 7 p.; 1 plate in pocket.
- B 1544. Thermodynamic properties of selected minerals in the system  $Al_2O_3$ -CaO-SiO<sub>2</sub>-H<sub>2</sub>O at 298.15° K and 1 bar (10<sup>5</sup> pascals) pressure and at higher temperatures, by B. S. Hemingway, J. L. Haas, Jr., and G. R. Robinson, Jr. 1982. 70 p. (This report is a supplement to Bulletin 1452.)

WATER-SUPPLY PAPERS

- W 1473. Study and interpretation of the chemical characteristics of natural water, second edition,, by J. D. Hem. 1970. 363 p.; 2 plates in pocket. (Reprint.)
- W 1580-D. Factors affecting the occurrence of floods in the Southwest, by M. A. Benson. 1964. p. D1-D72; 1 plate in pocket. (Reprint.) (Flood Hydrology.)
- W 1757-O. The corrosive well waters of Egypt's Western Desert, by F. E. Clarke. 1979. p. O1-O55. (Contributions to the hydrology of Africa and the Mediterranean region.)
- W 1869-A. Definition of stage-discharge relation in natural channels by step-backwater analysis, by J. F. Bailey, and H. A. Ray. 1966. p. A1-A24. (Reprint.)
- W 2028. A national study of the streamflow data-collection program, by M. A. Benson, and R. W. Carter. 1973. 44 p. (Reprint.)
- W 2064. Relationships between basic soils-engineering equations and basic ground-water flow equations, by D. G. Jorgensen. 1980. 40 p. (Reprint.)

- W 2073. NEW YORK. Geohydrologic appraisal of water resources of the South Fork, Long Island, New York, by Bronius Nemickas, and E. J. Koszalka. 1982. 55 p.; 9 plates in pocket.
- W 2077. MARYLAND. Ground water in the Piedmont upland of central Maryland, by C. A. Richardson. 1982. 42 p. (Supersedes Water-Resources Investigations 80-18.)
- W 2078. ILLINOIS. Some chemical characteristics of mine drainage in Illinois, by L. G. Toler. 1982. 47 p. (Supersedes Open-file report 80-416.)
- W 2079. An annotated key to the identification of commonly occurring and dominant genera of algae observed in the phytoplankton of the United States, by P. E. Greenson. 1982. 138 p.
- W 2080. VIRGINIA. Dendroclimatic estimates of a drought index for northern Virginia, by L. J. Puckett. 1981. 39 p. (Reprint.)
- W 2083. ALABAMA. Low-flow characteristics of Alabama streams, by R. H. Bingham. 1982. 27 p.; 2 plates in pocket.
- W 2084. TEXAS. Source areas of salinity and trends of salt loads in streamflow in the upper Colorado River, Texas, by Jack Rawson. 1982. 36 p.; 2 plates in pocket. (Supersedes Water-Resources Investigations 80-10.)
- W 2178. Design of surface-water data networks for regional information, by M. E. Moss, E. J. Gilroy, G. D. Tasker, and M. R. Karlinger. 1982. 33 p.
- W 2180. Summary of hydrologic testing in Tertiary limestone aquifer, Tenneco offshore exploratory well; Atlantic OCS, lease-block 427 (Jacksonville NH 17-5), by R. H. Johnston, P. W. Bush, R. E. Krause, J. A. Miller, and C. L. Sprinkle. 1982. 15 p. (Supersedes Open-file report 80-558.)
- W 2182. CALIFORNIA. Trap-efficiency study, Highland Creek flood-retarding reservoir near Kelseyville, California, water years 1966-77, by L. F. Trujillo. 1982. 15 p. (Supersedes Open-file report 80-735.)
- W 2183. FLORIDA. Hydrogeology and results of injection tests at waste-injection test sites in Pinellas County, Florida, by J. J. Hickey. 1982. 42 p.
- W 2185-A-D. NORTH CAROLINA. Water quality of North Carolina streams. 1982. (Published as a single volume, not available as separate chapters.)
- A, Program for evaluating stream quality in North Carolina, by H. B. Wilder and C. E. Simmons.
- B, Water quality characteristics of streams in forested and rural areas of North Carolina, by C. E. Simmons and R. C. Heath.
- C, Water quality of the French Broad River, North Carolina; an analysis of data collected at Marshall, 1958-77, by C. C. Daniel III, H. B. Wilder, and M. S. Weiner.
- D, Water quality of the Neuse River, North Carolina; variability, pollution loads, and long-term trends, by D. A. Harned.
- W 2186. IDAHO. Geothermal resources in the Banbury Hot Springs area, Twin Falls County, Idaho, by R. E. Lewis, and H. W. Young. 1982. 27 p. (Supersedes Open-file report 80-563.)
- W 2188. NEW YORK. Temporal trends in the acidity of precipitation and surface waters of New York, by N. E. Peters, R. A. Schroder, and D. E. Troutman. 1982. 35 p.
- W 2189. FLORIDA. Estimated effects of projected ground-water withdrawals on movement of the saltwater front in the Floridan Aquifer, 1976-2000, west-central Florida, by W. E. Wilson. 1982. 24 p.

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- W 2190. A study of trends in total phosphorus measurements at NASQAN stations, by R. A. Smith, R. M. Hirsch, and J. R. Slack. 1982. 34 p.
- W 2191. IDAHO. Hydrologic conditions at the Idaho National Engineering Laboratory; Idaho; emphasis 1974-1978, by J. T. Barraclough, B. D. Lewis, and R. G. Jensen. 1982.
- W 2193. Streamflow characteristics related to channel geometry of streams in Western United States, by E. R. Hedman, and W. R. Osterkamp. 1982. 17 p. (Prepared in cooperation with the U.S. Bureau of Land Management.)
- W 2194. Methods for collection and analysis of geopressured geothermal and oil field waters, by M. S. Lico, Y. K. Kharaka, W. W. Carothers, and V. A. Wright. 1982. 21 p.
- W 2196-B. FLORIDA. Production and decomposition of forest litter fall on the Apalachicola River flood plain, Florida, by J. F. Elder, and D. J. Cairns. 1982. B1-B42.
- W 2199. WYOMING. Verification of step-backwater computations on ephemeral streams in northeastern Wyoming, by S. A. Druse. 1982. 12 p.
- W 2203. KENTUCKY, VIRGINIA, WEST VIRGINIA. Investigation of trends in flooding in the Tug Fork Basin of Kentucky, Virginia, and West Virginia, by R. M. Hirsch, A. G. Scott, and Timothy Wyant. 1982. 37 p.

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- C 0777. A guide to obtaining information from the USGS., by P. F. Clarke, H. E. Hodgson, and G. W. North. 1982. 42 p. (Revised.)
- C 0838. WASHINGTON, IDAHO, OREGON, CALIFORNIA. Guides to some volcanic terranes in Washington, Idaho, Oregon, and northern California, edited by D. A. Johnston, and Julie Donnelly-Nolan. 1981. 189 p. (Reprint.)
- C 0844. ALASKA. The United States Geological Survey in Alaska; accomplishments during 1980, edited by W. L. Coonrad. 1982. 178 p.
- C 0846. CRIB-UTAH; Utah metal and nonmetal resource information available in the U.S. Geological Survey Mineral Data System-Computerized Resource Information Bank, by E. W. Tooker, and George Wong. 1982. 30 p.
- C 0847. U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979, by Robert Schneider, E. H. Roseboom, Jr., J. B. Robertson, and P. R. Stevens. 1982. 74 p.
- C 0848-A. Biota and biological principles of the aquatic environment, edited by P. E. Greeson. 1982. p. A1-A49. (Briefing papers on water quality.)
- C 0850-A. OREGON. Mount St. Helens volcanic-ash fall in the Bull Run watershed, Oregon, March-June 1980, by M. V. Shulters, and D. G. Clifton. 1981. p. A1-A15. (Reprint.) (Hydrologic effects of the eruptions of Mount St. Helens, Washington, 1980.)
- C 0850-H. WASHINGTON. Effects of the Mount St. Helens eruption on the benthic fauna of the Toutle River, Muddy River, and Pine Creek drainage basins, Washington, by L. A. Fuste. 1981. p. H1-H13.
- C 0853-D. Earthquakes in the United States, October-December 1980, by C. W. Stover, J. H. Minsch, P. K. Smith, and F. W. Baldwin. 1982. D1-D33.
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- C 0855. ALASKA. The Alaska Mineral Resource Assessment Program; guide to information about the geology and mineral resources of the Ketchikan and Prince Rupert quadrangles, southeastern Alaska, by H. C. Berg. 1982. 24 p.
- C 0856. Storage and retrieval of ground-water data at the U.S. Geological Survey, by M. W. Mercer, and C. O. Morgan. 1982. 9 p.
- C 0859. Bibliography of U.S. Geological Survey studies of lakes and reservoirs; the first 100 years, by T. C. Winter. 1982. 35 p.
- C 0860. Estimates of undiscovered recoverable conventional resources of oil and gas in the United States, by G. L. Dolton, K. H. Carlson, R. R. Charpentier, A. B. Coury, R. A. Crovelli, S. E. Frezon, A. S. Khan, J. H. Lister, R. H. McMullin, R. S. Pike, R. B. Powers, E. W. Scott, and K. L. Varnes. 1981. 87 p. (Supersedes and updates Circular 725; supersedes Open-file report 81-192.)
- C 0861. Geological studies of the COST nos. G-1 and G-2 wells, United States North Atlantic outer continental shelf, edited by P. A. Scholle, and C. R. Wenkam. 1982. 193 p.
- C 0862. The Geothermal Research Program of the U.S. Geological Survey, by W. A. Duffield, and Marianne Guffanti. 1982. 15 p.
- C 0863. Water-data program of the U.S. Geological Survey, by B. K. Gilbert, and T. J. Buchanan. 1982. 16 p.
- C 0865. Geographic research in the U.S. Geological Survey; bibliography, 1966-1980, by M. E. Graziani. 1982. 59 p.
- C 0871-A. Earthquakes in the United States, January-March 1981, by J. H. Minsch, C. W. Stover, P. K. Dunbar, and F. W. Baldwin. 1982. p. A1-A33.
- C 0871-B. Earthquakes in the United States, April-June 1981, by C. W. Stover, J. H. Minsch, P. K. Dunbar, and B. G. Reagor. 1982. p. B1-B33
- C 0871-C. Earthquakes in the United States July-September 1981, by C. W. Stover, J. H. Minsch, P. K. Dunbar, and G. W. Baldwin. 1981. p. C1-C34
- C 0874. Chemical composition of bulk precipitation in the North-Central and Northeastern United States, December 1980 through February 1981, by N. E. Peters, and J. E. Bonelli. 1982. 63 p.
- C 0875. U.S. Geological Survey activities, fiscal year 1981. 1981. 161 p.
- C 0877. CALIFORNIA, NEVADA. Potential hazards from future volcanic eruptions in the Long Valley-Mono Lake area, east-central California and southwest Nevada; a preliminary assessment, by C. D. Miller, D. R. Mullineaux, D. R. Crandell, and R. A. Bailey. 1982. 10 p. (Supersedes Open-file report 82-583.)
- C 0878-A. A U.S. Geological Survey data standard. 1982. p. A-A115. (Codes for the identification of hydrologic units in the United States and the Caribbean outlying areas.)
- C 0880. Goals and tasks of the landslide part of a ground-failure hazards reduction program. 1982. 49 p.
- C 0882. Sedimentary phosphate resources classification system of the U.S. Bureau of Mines and the U.S. Geological Survey. 1982. 9 p.
- C 0884. ALASKA. Annual report on Alaska's mineral resources. 1982. 59 p.

**TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS**

- TWI 03-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine. 1968. 60 p. (Reprint.)
- TWI 03-A7. Stage measurement at gaging stations, by T. J. Buchanan, and W. P. Somers. 1968. 28 p. (Reprint.)
- TWI 03-A9. Measurement of time of travel and dispersion in streams by dye tracing, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr. 1982. 44 p.
- TWI 03-C2. Field methods for measurement of fluvial sediment, by H. P. Guy, and V. W. Norman. 1970. 59 p. (Reprint.)
- TWI 04-B1. Low-flow investigations, by H. C. Riggs. 1972. 18 p. (Reprint.)
- TWI 04-B3. Regional analyses of streamflow characteristics, by H. C. Riggs. 1972. 15 p. (Reprint.)

**PERIODICALS**

**Earthquake Information Bulletins**

- Earthquake Information Bulletin, v. 13, no. 5, September-October. p. 162-199.
- Earthquake Information Bulletin, v. 13, no. 6, November-December 1981. p. 202-239.
- Earthquake Information Bulletin, v. 14, no. 1, January-February 1982. p. 1-44
- Earthquake Information Bulletin, v. 14, no. 2, March-April 1982. p. 45-80
- Earthquake Information Bulletin, v. 14, no. 3, May-June 1982. p. 81-120.
- Earthquake Information Bulletin, v. 14, no. 4, July-August 1982. p. 122-159.
- Earthquake Information Bulletin, v. 14, no. 5, September-October 1982. p. 163-199.

**Preliminary Determination of Epicenters**

- Preliminary determination of epicenters. Monthly listing for June 1981. 12 p.
- Preliminary determination of epicenters. Monthly listing for July 1981. 21 p.
- Preliminary determination of epicenters. Monthly listing for August 1981. 16 p.
- Preliminary determination of epicenters. Monthly listing for September 1981. 23 p.
- Preliminary determination of epicenters. Monthly listing for October 1981. 9 p.
- Preliminary determination of epicenters. Monthly listing for November 1981. 9 p.
- Preliminary determination of epicenters. Monthly listing for December 1981. 10 p.
- Preliminary determination of epicenters. Monthly listing for January 1982. 15 p.
- Preliminary determination of epicenters. Monthly listing for February 1982. 8 p.
- Preliminary determination of epicenters. Monthly listing for March 1982. 10 p.
- Preliminary determination of epicenters. Monthly listing for April 1982. 9 p.
- Preliminary determination of epicenters. Monthly listing for June 1982. 11 p.

**ARTICLES PUBLISHED IN OUTSIDE JOURNALS/BOOKS**

Articles by Geological Survey personnel in non-Geological Survey publications that came to our attention in 1982. In addition to Survey authors, this section includes non-Survey co-authors.

These publications are not available from the U.S. Geological Survey.

- OP-1. D. P. Adam and A. D. Mahood. Chrysophyte cysts as potential environmental indicators. Geological Society of America Bulletin, v. 92, no. 11, November 1981. p. I 839-I 844.
- OP-2. W. O. Addicott. Map series links plates and resources. Geotimes, v. 26, no. 10, October 1981. p. 19-21.

- OP-3. W. O. Addicott, R. Z. Poore, J. A. Barron, Kristin McDougall and H. D. Gower. CALIFORNIA. Miocene biostratigraphy of the Indian Creek-Shell Creek area, northern La Panza Range, San Luis Obispo County, California, in Neogene biostratigraphy of the northern La Panza Range, San Luis Obispo County, California (G. H. Blake, editor). Los Angeles, CA: Soc. Econ. Paleontol. Miner., Pac. Sect., October 18, 1980. p. 11-38.
- OP-4. W. O. Addicott, P. D. Snavely, Jr., R. Z. Poore and David Bukry. The marine Neogene sequence of Campo de Dalias and Campo de Nijar region, Almeria. *Estud. Geol. (Inst. Invest. Geol. "Lucas Mallada")*, v. 35, December 1979. p. 609-631.
- OP-5. T. A. Ager and J. D. Sims. ALASKA. Holocene pollen and sediment record from the Tangle Lakes area, Alaska. *Palynology*, v. 5, 1981. p. 85-98.
- OP-6. Keiiti Aki. HAWAII. Deep volcanic tremor and magma ascent mechanism under Kilauea, Hawaii. *JGR. Journal of Geophysical Research. B*, v. 86, no. 8, August 10, 1981. p. 7095-7109.
- OP-7. J. P. Albers. CALIFORNIA. A lithologic-tectonic framework for the metallogenic provinces of California. *Economic Geology and the Bulletin of the Society of Economic Geologists*, v. 76, no. 4, July 1981. p. 765-790.
- OP-8. J. P. Albers. CALIFORNIA. Metallic mineral deposits in California's tectonic framework. Publication - International Union of Geological Sciences, no. 5, 1980. p. 55-74.
- OP-9. J. P. Albers, R. W. Kistler and Loretta Kwak. CALIFORNIA. The Mule Mountain Stock, an early Middle Devonian pluton in northern California. *Isocron/West*, no. 31, August 1981. p. 17.
- OP-10. J. N. Aleinikoff, Cynthia Dusel-Bacon, H. L. Foster and Kiyoto Futa. ALASKA. Proterozoic zircon from augen gneiss, Yukon-Tanana Upland, east-central Alaska. *Geology (Boulder)*, v. 9, no. 10, October 1981. p. 469-473.
- OP-11. L. R. Alldredge. Magnetic signals from the core of the Earth and secular variation. *JGR. Journal of Geophysical Research. B*, v. 86, no. 9, September 10, 1981. p. 7957-7965.
- OP-12. L. R. Alldredge. Rectangular harmonic analysis applied to the geomagnetic field. *JGR. Journal of Geophysical Research. B*, v. 86, no. 4, April 10, 1981. p. 3021-3026.
- OP-13. L. R. Alldredge. Geomagnetic local and regional harmonic analyses. *JGR. Journal of Geophysical Research. B*, v. 87, no. 3, March 10, 1982. p. 1921-1926.
- OP-14. R. A. Alpher, I. J. Winograd and Tidu Maini. Radioactive waste disposal. *Science*, v. 215, no. 4535, February 19, 1982. p. 914-916.
- OP-15. R. E. Anderson and M. L. Zoback. The subsurface geometry of faults and the evolution of basins in the northern Basin and Range Province. *LPI Contribution*, no. 457, 1981. p. 93-95.
- OP-16. Gordon Andreasen. Formation and evolution of the Hellenic Arc and Trench; International symposium on HEAT, April 8-10, 1981, Athens, Greece. *Episodes*, v. 1981, no. 2, July 1981. p. 45-46.
- OP-17. D. J. Andrews. A stochastic fault model; 2, Time-dependent case. *JGR. Journal of Geophysical Research. B*, v. 86, no. 11, November 10, 1981. p. 10821-10834.
- OP-18. Sarah Andrews. COLORADO. Sedimentology of Great Sand Dunes, Colorado. Special Publication - Society of Economic Paleontologists and Mineralogists, no. 31, August 1981. p. 279-291.

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- OP-19. R. J. Anima. A diver operated reverse corer to collect samples of unconsolidated coarse sand. *Journal of Sedimentary Petrology*, v. 51, no. 2, June 1981. p. 653-654.
- OP-20. A. V. Applegate, G. O. Winston and J. G. Palacas. FLORIDA. Subdivision, stratigraphy of pre-Punta Gorda Florida rocks (lowermost Cretaceous-Jurassic?). *Oil and Gas Journal*, v. 80, no. 17, April 26, 1982. p. 207-216.
- OP-21. A. V. Applegate, G. O. Winston and J. G. Palacas. FLORIDA. Subdivision and regional stratigraphy of the pre-Punta Gorda rocks (lowermost Cretaceous-Jurassic?) in south Florida. *Transactions - Gulf Coast Association of Geological Societies*, v. 31, supplement. 1981. p. 447-453.
- OP-22. R. J. Archuleta. CALIFORNIA. Hypocenter for the 1979 Imperial Valley earthquake. *Geophysical Research Letters*, v. 9, no. 6, June 1982. p. 625-628.
- OP-23. R. J. Archuleta, Edward Cranswick, Charles Mueller and Paul Spudich. CALIFORNIA. Source parameters of the 1980 Mammoth Lakes, California, earthquake sequence. *JGR. Journal of Geophysical Research. B*, v. 87, no. 6, June 10, 1982. p. 4595-4607.
- OP-24. T. J. Armbrustmacher. COLORADO. The complex of alkaline rocks at Iron Hill, Powderhorn District, Gunnison County, Colorado. *Guidebook - New Mexico Geological Society*, no. 32, 1981. p. 293-296.
- OP-25. J. M. Armentrout, Kristin McDougall, P. T. Jefferis and E. A. Nesbitt. WASHINGTON. Geologic field trip guide for the Cenozoic stratigraphy and late Eocene paleoecology of southwestern Washington. *Bulletin - Oregon, Department of Geology and Mineral Industries*, no. 101, 1980. p. 79-120.
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- OF 82-0300-E. ALASKA. Preliminary geomagnetic data, College Observatory, Fairbanks, Alaska, May 1982, by J. B. Townshend, J. E. Papp, E. A. Sauter, T. K. Cunningham, and L. Y. Torrence. 22 p. (NC, Da, M, A; USGS, College Observatory, 800 Yukon Dr., Fairbanks, AK 99701.)
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- OF 82-0008. ILLINOIS, INDIANA. Land use and land cover and associated maps for Danville, Illinois; Indiana. Lat 40° to 41°, long 86° to 88°. This data set consists of 4 maps keyed to the USGS topographic map Danville at 1:250,000 (1 inch = about 4 miles). These maps are coded for statistical data development. The maps are (1) land use and land cover, (2) political unit, (3) hydrologic units, (6) State land ownership. Also included is one positive of the cultural base for Danville at 1:250,000. (†USGS, Eastern Mapping Ctr. (NCIC-E), National Center, Reston, VA 22092.)
- OF 82-0009. MINNESOTA. Land use and land cover and associated maps for International Falls, Minnesota. Lat 48° to 49°, long 92° to 94°. This data set consists of one map keyed to the USGS topographic map International Falls at 1:250,000 (1 inch = about 4 miles). This map is coded for statistical data development. The map is (1) land use and land cover. Also included is one positive of the cultural base for International Falls at 1:250,000. (†USGS, Mid-Continent Mapping Ctr. (NCIC-M), 1400 Independence Rd., Rolla, MO 65401.)
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- OF 82-0011. MINNESOTA. Land use and land cover and associated maps for Quetico, Minnesota. Lat 48° to 50°, long 90° to 92°. This data set consists of one map keyed to the USGS topographic map Quetico at 1:250,000. (1 inch = about 4 miles). This map is coded for statistical data development. The map is (1) land use and land cover. Also included is one positive of the cultural base for Quetico at 1:250,000 (†USGS, Mid-Continent Mapping Ctr. (NCIC-M), 1400 Independence Rd., Rolla, MO 65401.)
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- OF 82-0025. MINNESOTA. Land use and land cover and associated maps for St. Cloud, Minnesota. Lat 45° to 46°, long 94° to 96°. This data set consists of one map keyed to the USGS topographic map St. Cloud at 1:250,000 (1 inch = about 4 miles). This map is coded for statistical data development. The map is (1) land use and land cover. Also included is one positive of the cultural base for St. Cloud at 1:250,000. (†USGS, Mid-Continent Mapping Ctr. (NCIC-M), 1400 Independence Rd., Rolla, MO 65401.)
- OF 82-0226. MICHIGAN. Land use and land cover and associated maps for Flint, Michigan. Lat 43° to 44°, long 82° to 84°. This data set consists of one map keyed to the USGS topographic map Flint at 1:250,000 (1 inch = about 4 miles). This map is coded for statistical data development. The map is (1) land use and land cover. Also included is one positive of the cultural base for Flint at 1:250,000. (†USGS, Mid-Continent Mapping Ctr. (NCIC-M), 1400 Independence Rd., Rolla MO 65401.)
- OF 82-0228. ILLINOIS, INDIANA. Land use and land cover and associated maps for Belleville, Illinois; Indiana. Lat 38° to 39°, long 88° to 90°. This data set consists of one map keyed to the USGS topographic map Belleville at 1:250,000 (1 inch = about 4 miles). This map is coded for statistical data development. The map is (1) land use and land cover. Also included is one positive of the cultural base for Belleville at 1:250,000. (†USGS, Mid-Continent Mapping Ctr. (NCIC-M), 1400 Independence Rd., Rolla, MO 65401.)
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- OF 82-0440. TENNESSEE, GEORGIA, ALABAMA. Hydrology of area 20, Eastern Coal Province, Tennessee, Georgia, and Alabama, by E. F. Hollyday. 145 p. (NC; USGS, WRD, A-413 Federal Bldg., U.S. Courthouse, Nashville, TN 37203.) †A limited number of copies of this report are available from USGS, WRD, A-413 Federal Bldg., U.S. Courthouse, Nashville, TN 37203. (Water-Resources Investigations.)
- OF 82-0497. Seismic-reflection data collected in the Wilmington Canyon area during 1980, Gyre cruise 80-G-7B, by B. A. McGregor, and J. C. Hampson, Jr. 5 p. (NC, Da, M.) Original records may be examined at the USGS offices, Quissett Campus, Woods Hole, MA 02543. †Copies of those records can be purchased only from the National Geophysical and Solar-Terrestrial Data Center. Write to NOAA/EDIS/NGSDC, Code D621, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.
- OF 82-0498. 3.5-kHz data collected in the Wilmington Canyon area during 1980, Endeavor cruise 80-EN-056, by B. A. McGregor. 4 p. (NC, Da, M.) Original records may be examined at the USGS offices, Quissett Campus, Woods Hole, MA 02543. †Copies of those records can be purchased only from the National Geophysical and Solar-Terrestrial Data Center. Write to NOAA/EDIS/NGSDC, Code D621, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.
- OF 82-0499. Sidescan data collected in the Wilmington Canyon area during 1980, Gyre cruise 80-G-8B, by B. A. McGregor, J. C. Hampson, Jr., and W. B. Ryan. 5 p. (NC, Da, M.) Original records may be examined at the USGS offices, Quissett Campus, Woods Hole, MA 02543. †Copies of those records can be purchased only from the National Geophysical and Solar-Terrestrial Data Center. Write to NOAA/EDIS/NGSDC, Code D621, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.

- OF 82-0505. KENTUCKY, VIRGINIA, WEST VIRGINIA. Hydrology of area 13, Eastern Coal Province, Kentucky, Virginia, and West Virginia, by Jay Kiesler, Ferdinand Quinones-Marquez, D. S. Mull, and Karen York. 203 p. (NC; USGS, WRD, Room 572, 600 Federal Place, Louisville, KY 40202.) †A limited number of copies of this report are available from USGS, WRD, Room 572, 600 Federal Place, Louisville, KY 40202.
- OF 82-0595. NEW JERSEY. High-resolution seismic-reflection profiles collected over the Atlantic upper continental slope off New Jersey and Georges Bank, by D. C. Twichell, and N. G. Bailey. 2 p. (NC, Da, M.) Original records may be examined at the USGS offices, Quissett Campus, Woods Hole, Ma 02543. †Copies of those records can be purchased only from the National Geophysical Data Center. Write NOAA/EDIS/NGDC, Code D621, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.
- OF 82-0600. Midrange sidescan-sonar data from the continental slope off Georges Bank, between Lydonia and Oceanographer canyons, by D. W. O'Leary. 4 p. (NC, Da, M.) Original records may be examined at the USGS offices, Quissett Campus, Woods Hole, MA 02543. †Copies of those records can be purchased only from the National Geophysical and Solar-Terrestrial Data Center. Write to NOAA/EDIS/NGSDC, Code D621, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.
- OF 82-0605. High-resolution seismic data and bathymetric data from the central region of the Mississippi Fan, Gulf of Mexico, by C. E. Stelling, and J. L. Kindinger. 7 p. (NC, Da, M.) Original records may be examined at the USGS office, Corpus Christi State Univ., 6300 Ocean Dr. (P.O. Box 6732), Corpus Christi, TX 78411. †Copies of those records can be purchased only from the National Geophysical and Solar-Terrestrial Data Center. Write to NOAA/EDIS/NGSDC, Code D621, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.
- OF 82-0607. High-resolution seismic-reflection profiles from the R/V Columbus Iselin, cruise CI 7-78-2, over the continental shelf and slope in the Georges Bank area, by N. G. Bailey, and J. M. Aaron. 2 p. (NC, Da, M.) Original records may be examined at the USGS offices, Quissett Campus, Woods Hole, MA 02543. †Copies of those records can be purchased only from the National Geophysical and Solar-Terrestrial Data Center. Write to NOAA/EDIS/NGSDC, Code D621, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.
- OF 82-0630. FLORIDA. Hydrology of the Hamilton Lakes and vicinity, Polk County, central Florida, by W. G. Anderson, and E. P. Simonds. 38 p. (NC, Da, M, Wb; USGS, WRD, 325 John Knox Rd., Suite F-240, Tallahassee, FL 32303; USGS, WRD, 7815 Coral Way, Suite 110, Miami, FL 33155; USGS, WRD, 80 North Hughey Ave., Orlando, FL 32801; USGS, WRD, 4415 Beach Blvd., Suite 106, Jacksonville, FL 32207; USGS, WRD, Suite B-5, 4710 Eisenhower Blvd., Tampa, FL 33614; Libraries of the State University System of Florida.) †A limited number of copies of this report are available from USGS, WRD, 325 John Knox Rd., Suite F-240, Tallahassee, FL 32303. (Water-Resources Investigations.)
- OF 82-0636. ARKANSAS. Hydrology of area 42, Western Region, Interior Coal Province, Arkansas, by C. T. Bryant, F. P. Lyford, K. L. Stafford, and D. M. Johnson. 87 p. (NC; USGS, WRD, Room 2301, Federal Office Bldg., Little Rock, AR 72201; Bur. Land Management, 350 South Pickett St. Alexandria, VA 22304.) †A limited number of copies of this report are available from USGS, WRD, Room 2301, Federal Office Bldg., 700 West Capitol Ave., Little Rock, AR 72201. (Water-Resources Investigations.)

- OF 82-0637. COLORADO. Three-dimensional mathematical model for simulating the hydrologic system in the Piceance Basin, Colorado, by J. O. Taylor. 91 p., 9 over-size sheets. (NC, Da, Db, Wb; USGS, WRD (Box 25046, Mail Stop 415), Denver Federal Ctr., Denver, CO 80225.) †A limited number of copies of this report are available from USGS, WRD (Box 25046, Mail Stop 415), Denver Federal Ctr., Denver, CO 80225. (Water-Resources Investigations.)
- OF 82-0638. KENTUCKY, INDIANA. Hydrology of area 34, Interior Coal Province, Eastern Region, Kentucky and Indiana, by F. Quinones, K. L. York, and R. O. Plebuch. 126 p. (NC; USGS, WRD, Room 572, 600 Federal Pl., Louisville, KY 40202.) †A limited number of copies of this report are available from USGS, WRD, Room 572, Federal Bldg., 600 Federal Pl., Louisville, KY 40202. (Water-Resources Investigations.)
- OF 82-0647. PENNSYLVANIA, NEW YORK. Hydrology of area 2, Eastern Coal Province, Pennsylvania and New York, by W. J. Herb, D. E. Brown, L. C. Shaw, J. E. Stoner, and J. K. Felbinger. 159 p. (NC; USGS, WRD, Fourth Floor, Federal Bldg. (P.O. Box 1107), Harrisburg, PA 17108.) †A limited number of copies of this report are available from USGS, WRD, Fourth Floor, Federal Bldg. (P.O. Box 1107), Harrisburg, PA 17108. (Water-Resources Investigations.)
- OF 82-0648. WASHINGTON. Water resources of the Tulalip Indian Reservation, Washington, by B. W. Drost. 106 p. (NC; USGS, WRD, 1201 Pacific Ave., Suite 600, Tacoma, WA 98402.) †A limited number of copies of this report are available from USGS, WRD, 1201 Pacific Ave., Suite 600, Tacoma, WA 98402. (Water-Resources Investigations.)
- OF 82-0679. TENNESSEE, ALABAMA. Hydrology of area 21, Eastern Coal Province, Tennessee and Alabama, by J. V. May and others. 190 p. (NC; USGS, WRD, A-413 Federal Bldg., U. S. Courthouse, Nashville, TN 37203; USGS, 520 19th Ave., Tuscaloosa, AL 35401.) †A limited number of copies of this report are available from USGS, WRD, A-433 Federal Bldg., U.S. Courthouse, Nashville, TN 37203. (Water-Resources Investigations.)
- OF 82-0682. MONTANA, WYOMING. Hydrology of area 49, northern Great Plains and Rocky Mountain coal provinces, Montana and Wyoming, by S. E. Slagle and others. 157 p. (NC, Da, Db, U, S, Wb; USGS, WRD, Room 428, Federal Bldg., 301 South Park, Drawer 10076, Helena, MT 59626; USGS, WRD, 2525 Fourth Ave., North, Billings, MT 59101.) †A limited number of copies of this report are available from USGS, WRD, Federal Bldg., Drawer 10076, Helena, MT 59626. (Water-Resources Investigations.)
- OF 82-0683. ALABAMA. Synthesized flood frequency of urban streams in Alabama, by D. A. Olin, and R. H. Bingham. 13 p. (NC; USGS, 519A 19th Ave., Tuscaloosa, AL 35401.) †A limited number of copies of this report are available from USGS, WRD, Room 202, Oil and Gas Board Bldg. (P.O. Box V), University, AL 35486. (Water-Resources Investigations.)
- OF 82-0684. WASHINGTON. Lake-water quality and land-use relationships for selected lakes in the Port Townsend Quadrangle, Puget Sound region, Washington, by R. J. Gilliom. 1 p. (NC.) †A limited number of copies of this report are available from USGS, WRD, 1201 Pacific Ave., Suite 850, Tacoma, WA 98402. (Water-Resources Investigations.)

- OF 82-0718. High-resolution seismic-reflection profiles collected aboard R/V James M. Gilliss, cruise GS 7903-3, over the Atlantic continental slope and rise off New England, by N. G. Bailey, and J. M. Aaron. 2 p. (NC, Da, M.) Original records may be examined at the USGS offices, Quissett Campus, Woods Hole, MA 02543. †Copies of those records can be purchased only from the National Geophysical and Solar-Terrestrial Data Center. Write to NOAA/EDIS/NGSDC. Code D621, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.
- OF 82-0842. High-resolution seismic data and bathymetric, gravimetric, and magnetic data from the northern Gulf of Mexico collected during R/V Gyre cruise G-81-6, by J. L. Kindinger, C. E. Stelting, and R. J. Miller. 10 p. (NC, Da, M.) Original records may be examined at the USGS office, Corpus Christi Univ., 6300 Ocean Dr. (P.O. Box 6732), Corpus Christi, TX 78411. †Copies of those records can be purchased only from the National Geophysical Data Center. Write to NOAA/EDIS/NGDC, Code D621, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.
- OF 82-0896. Bibliography of reports resulting from U.S. Geological Survey scientific and technical cooperation with other countries, 1975 to June 1980, by W. E. Bergquist, E. J. Tinsley, and V. S. Upton. 114 p. (NC, Da, M.) †A limited number of copies of this report are available from the Office of International Geology, USGS, Mail Stop 917, Reston, VA 22092. (Replaces Open-file report 81-896.)
- OF 82-0940. High-resolution seismic-reflection profiles collected aboard R/V Eastward, cruise ESTW-80-8, over the Blake Escarpment, by N. G. Bailey, and K. M. Kent. 2 p. (NC, Da, M.) Original records may be examined at the USGS offices, Quissett Campus, Woods Hole, MA 02543. †Copies of those records can be purchased only from the National Geophysical Data Center. Write to NOAA, Code E64, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.
- OF 82-1095. GLORIA sidescan and seismic data collected by the DESV Starella along the continental slope and upper continental rise of the Eastern United States, by K. M. Scanlon. 3 p. (NC, Da, M.) †All data can be studied at the USGS office in Woods Hole, MA 02543. Microfilm copies of the sidescan-monitor record and the airgun and 10-kHz profiles and photographic copies of the GLORIA mosaics can be purchased only from the National Geophysical Data Center, NOAA, Code E64, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.

## MAPS

Geologic maps are available folded except for some wall maps that are available unfolded only.

### GEOLOGIC QUADRANGLE MAPS

- GQ-1544. MASSACHUSETTS, CONNECTICUT. Surficial geologic map of the Hampden Quadrangle, Massachusetts and Connecticut, by C. T. Hildreth, and R. B. Colton. 1982. Lat  $42^{\circ}$  to  $42^{\circ}07'30''$ , long  $72^{\circ}22'30''$  to  $72^{\circ}30'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 34 by 50 inches.
- GQ-1548. CALIFORNIA. Geologic map of the Millerton Lake Quadrangle, west-central Sierra Nevada, California, by P. C. Bateman, and A. J. Busacca. 1982. Lat  $37^{\circ}$  to  $37^{\circ}15'$ , long  $119^{\circ}30'$  to  $119^{\circ}45'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 23 by 34 inches.

- GQ-1553. IDAHO. Geologic map of the Yandell Springs Quadrangle, Bannock and Bingham counties, Idaho, by D. E. Trimble. 1982. Lat 43° to 43°15', long 112° to 112°15'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 25 by 30 inches.
- GQ-1555. CALIFORNIA. Geologic map of the Raymond Quadrangle, Madera and Mariposa counties, California, by P. C. Bateman, A. J. Busacca, D. E. Marchand, and W. N. Sawka. 1982. Lat 37° to 37°15', long 119°45' to 120°. Scale 1:62,500 (1 inch = about 1 mile). Sheet 23 by 38 inches.
- GQ-1558. WYOMING. Geologic map of the Arapahoe Butte Quadrangle, Fremont and Hot Springs counties, Wyoming, by R. E. Thaden. 1981. Lat 43°22'30" to 43°30', long 107°37'30" to 107°45'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 32 by 36 inches.
- GQ-1561. MASSACHUSETTS. Geologic map of the Goshen Quadrangle, Franklin and Hampshire counties, Massachusetts, by N. L. Hatch, Jr., and C. R. Warren. 1981. Lat 42°22'30" to 42°30', long 72°45' to 72°52'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 34 by 44 inches.
- GQ-1563. WYOMING. Geologic map of the Lake Helen Quadrangle, Big Horn and Johnson counties, Wyoming, by Fred Barker. 1982. Lat 44°15' to 44°22'30", long 107°07'30" to 107°15'. Scale 1:24,000 (1 inch = 2,000 feet.) Sheet 24 by 30 inches.
- GQ-1564. WYOMING. Geologic map of the Dead Indian Peak Quadrangle, Park County, Wyoming, by W. G. Pierce, W. H. Nelson, and H. J. Prostka. 1982. Lat 44°30' to 44°45', long 109°30' to 109°45'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 24 by 29 inches.
- GQ-1565. MASSACHUSETTS. Bedrock geologic map of the Woronoco Quadrangle, Hampden and Hampshire counties, Massachusetts, by R. S. Stanley, S. F. Clark, Jr., and N. L. Hatch, Jr. 1982. Lat 42°07'30" to 42°45', long 72°45' to 72°52'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 34 by 44 inches.
- GQ-1566. ALASKA. Geologic map of the Nabesna B-5 Quadrangle, Alaska, by P. C. Lowe, D. H. Richter, R. L. Smith, and H. R. Schmoll. 1982. Lat 62°15' to 62°30', long 143° to 143°30'. Scale 1:63,360 (1 inch = 1 mile). Sheet 26 by 42 inches.

## GEOPHYSICAL INVESTIGATIONS MAPS

- GP-0935. MONTANA. Aeromagnetic map of Montana, by Isidore Zietz, F. P. Gilbert, and S. L. Snyder. 1980. Two sheets. Lat 45° to 49°, long 110° to about 116°. Scale 1:500,000 (1 inch = about 8 miles). Sheets 39 by 45 inches. (Available unfolded only.)
- GP-0945. CALIFORNIA. Complete Bouguer gravity, aeromagnetic, and generalized geologic map of the Hollister 15-minute Quadrangle, California, by S. L. Robbins. 1982. Two sheets. Lat 36°45' to 37°, long 121°15' to 121°30'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 1, 32 by 33 inches; sheet 2, 28 by 33 inches.
- GP-0947. MICHIGAN. Aeromagnetic map of the eastern part of the northern peninsula of Michigan, by W. F. Cannon, and A. E. Fenichel. 1981. Lat about 45°30' to about 47°, long about 83°30' to about 86°45'. Scale 1:250,000 (1 inch = about 4 miles). Sheet 30 by 44 inches.
- GP-0948. Aeromagnetic map of east-central United States, by T. G. Hildenbrand, R. P. Kucks, and R. W. Johnson, Jr. 1981. Lat about 35° to about 43°, long about 77° to about 91°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 41 by 58 inches.
- GP-0949. COLORADO, NEW MEXICO, TEXAS. Complete Bouguer gravity anomaly map of the Rio Grande Rift, Colorado, New Mexico, and Texas, by Lindrith Cordell, G. R. Keller, and T. G. Hildenbrand. 1982. Lat 29° to 41°, long 102° to 109°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 39 by 55 inches. Supersedes Open-file report 78-958.

- GP-0951. SOUTH CAROLINA. Aeromagnetic map of South Carolina; in color, by Isidore Zietz, F. E. Riggle, and D. L. Daniels. 1982. Lat about 32° to about 35°, long about 79° to about 83°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 19 by 25 inches.
- GP-0953-A. Digital colored residual and regional Bouguer gravity maps of the conterminous United States with cut-off wavelengths of 250 km and 1000 km, by T. G. Hildenbrand, R. W. Simpson, R. H. Godsen, and M. F. Kane. 1982. Two sheets. Scale 1:7,500,000 (1 inch = about 118 miles). Sheet 1, 29 by 41 inches; sheet 2, 29 by 38 inches.
- GP-0954-A. Composite magnetic anomaly map of the United States; Part A, Conterminous United States, compiled under the direction of Isidore Zietz. 1982. Two sheets. Sheet 1, West half, lat about 23° to about 48°, long about 97° to about 128°. Sheet 2, East half, lat about 23° to about 48°, long about 64° to about 96°. Both sheets 41 by 51 inches. Scale 1:2,500,000 (1 inch = about 40 miles). (Available unfolded only.) (Accompanied by 59-page text.)

## MISCELLANEOUS INVESTIGATIONS SERIES MAPS

- I-1282. VIRGINIA. Piedmont geology of the Ladysmith and Lake Anna East quadrangles and vicinity, Virginia, by A. R. Bobyarchick, Louis Pavlides, and Karen Wier. 1981. Lat 38° to 38°07'30", long 77°29'35" to 77°45'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 36 by 51 inches.
- I-0316. OHIO. Glacial map of Ohio, by R. P. Goldthwait, G. W. White, and J. L. Forsyth. 1961. Lat about 39° to about 42°, long about 81° to about 84°. Scale 1:500,000 (1 inch = about 8 miles). Sheet 37 by 39 inches. (Reprint.)
- I-0345. NEW MEXICO, ARIZONA. Geology, structure, and uranium deposits of the Shiprock Quadrangle, New Mexico and Arizona, compiled by R. B. O'Sullivan, and H. M. Beikman. 1963. Two sheets. Lat 36° to 37°, long 108° to 110°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 1, 29 by 48 inches; sheet 2, 23 by 34 inches. (Reprint.)
- I-0465. Geologic map of the Aristarchus region of the Moon, by H. J. Moore. 1965. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 32 by 48 inches. (Reprint.)
- I-0736. COLORADO, UTAH. Geologic and structure map of the Grand Junction Quadrangle, Colorado and Utah, compiled by W. B. Cashion. 1973. Lat 39° to 40°, long 108° to 110°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 32 by 45 inches. (Reprint.)
- I-0875-D. Tectonic map of the Indonesian region, by Warren Hamilton. 1978. Lat 16°S to 12°N, long 90°E to 148°E. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 37 by 53 inches. (Reprint.)
- I-1039. COLORADO. Energy resources map of Colorado, by U.S. Geological Survey, and Colorado Geological Survey. 1977. Lat about 37° to about 41°, long about 102° to about 109°. Scale 1:500,000 (1 inch = about 8 miles). Sheet 42 by 58 inches. (Reprint.)
- I-1091-C. CALIFORNIA, NEVADA. Map showing distribution, composition, and age of late Cenozoic volcanic centers in California and Nevada, by R. G. Luedke, and R. L. Smith. 1981. Two sheets. Lat about 33° to 42°, long 114° to about 124°. Sheet 1, 40 by 46 inches, scale 1:1,000,000 (1 inch = about 16 miles); sheet 2, 38 by 55 inches, scale 1:500,000 (1 inch = about 8 miles).



- I-1091-D. OREGON, WASHINGTON. Map showing distribution, composition, and age of late Cenozoic volcanic centers in Oregon and Washington, by R. G. Luedke, and R. L. Smith. 1982. Lat 42° to 49°, long about 117° to 125°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 42 by 58 inches.
- I-1113. COLORADO. Geologic map of the northernmost Park Range and southernmost Sierra Madre, Jackson and Routt counties, Colorado, by G. L. Snyder. 1980. Lat about 40°42'30" to 41°, long about 106°22'30" to about 107°02'30". Scale 1:48,000 (1 inch = 4,000 feet). Sheet 41 by 58 inches.
- I-1175. VIRGINIA. Geologic map of the Occoquan Quadrangle and part of the Fort Belvoir Quadrangle, Prince William and Fairfax counties, Virginia, by V. M. Seiders, and R. B. Mixon. 1981. Lat 38°37'30" to 38°45', long 77°07'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 37 by 55 inches.
- I-1197. NEVADA. Geologic and tectonic maps of the Mercury Quadrangle, Nye and Clark counties, Nevada, by Harley Barnes, E. B. Ekren, C. L. Rodgers, and D. C. Hedlund. 1982. Lat 36°37'30" to 36°45', long 115°52'30" to 116°. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 42 by 58 inches.
- I-1219. NEVADA. Synthetic natural color Landsat photomosaic of Nevada. 1981. Two sheets. Scale 1:1,000,000 (1 inch = about 16 miles). Lat 35° to 42°, long 114° to 120°. Sheets 23 by 35 inches.
- I-1241. Preliminary pictorial map of (Jupiter) Europa. 1979. Scale 1:25,000,000 (1 inch = about 400 miles). Sheet 19 by 23 inches. (Reprint.)
- I-1251-B. NORTH CAROLINA, SOUTH CAROLINA. Aeromagnetic map of the Charlotte 1° by 2° Quadrangle, North Carolina and South Carolina, by D. L. Daniels, and Isidore Zietz. 1981. Lat 35° to 36°, long 80° to 82°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 35 inches.
- I-1251-C. NORTH CAROLINA, SOUTH CAROLINA. Aeromagnetic map of the Charlotte 1° by 2° Quadrangle, North Carolina and South Carolina; in color, by D. L. Daniels, and Isidore Zietz. 1981. Lat 35° to 36°, long 80° to 82°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 35 inches.
- I-1251-D. NORTH CAROLINA, SOUTH CAROLINA. Aeroradioactivity map of the Charlotte 1° by 2° Quadrangle, North Carolina and South Carolina; in color, by D. L. Daniels, and Isidore Zietz. 1982. Lat 35° to 36°, long 80° to 82°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 24 by 35 inches.
- I-1266. Map showing lava flows in the northwestern part of the Tharsis Quadrangle of Mars, by D. H. Scott, G. G. Schaber, K. C. Horstman, A. L. Dial, Jr., and K. L. Tanaka. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1267. Map showing lava flows in the northeast part of the Tharsis Quadrangle of Mars, by D. H. Scott, G. G. Schaber, K. C. Horstman, and A. L. Dial, Jr. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1268. Map showing lava flows in the southwest part of the Tharsis Quadrangle of Mars, by D. H. Scott, G. G. Schaber, K. C. Horstman, A. L. Dial, Jr., and K. L. Tanaka. 1981. Scale 1:2,000,000 (1 inch = about 32 miles.) Sheet 32 by 34 inches.
- I-1269. Map showing lava flows in the southeast part of the Tharsis Quadrangle of Mars, by D. H. Scott, G. G. Schaber, and K. L. Tanaka. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1270. Map showing lava flows in the northeast part of the Memnonia Quadrangle of Mars, by D. H. Scott, and G. G. Schaber. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.

- I-1271. Map showing lava flows in the southeast part of the Memnonia Quadrangle of Mars, by D. H. Scott, G. G. Schaber, K. C. Horstman, and A. L. Dial, Jr. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1272. Map showing lava flows in the northwest part of the Phoenicis Lacus Quadrangle of Mars, by D. H. Scott, G. G. Schaber, K. C. Horstman, A. L. Dial, Jr., and K. L. Tanaka. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1273. Map showing lava flows in the northwest part of the Thaumasia Quadrangle of Mars, by D. H. Scott, and K. L. Tanaka. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 40 inches.
- I-1274. Map showing lava flows in the southeast part of the Phoenicis Lacus Quadrangle of Mars, by D. H. Scott. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1275. Map showing lava flows in the southwest part of the Phoenicis Lacus Quadrangle of Mars, by D. H. Scott, G. G. Schaber, and A. L. Dial, Jr. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1276. Map showing lava flows in the southeast part of the Diacria Quadrangle of Mars, by D. H. Scott, K. L. Tanaka, and G. G. Schaber. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 30 by 47 inches.
- I-1277. Map showing lava flows in the northeast part of the Phoenicis Lacus Quadrangle of Mars, by D. H. Scott, and K. L. Tanaka. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1278. Map showing lava flows in the southwest part of the Arcadia Quadrangle of Mars, by D. H. Scott, K. L. Tanaka, and G. G. Schaber. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 29 by 47 inches.
- I-1279. Map showing lava flows in the northeast part of the Amazonis Quadrangle of Mars, by D. H. Scott, and K. L. Tanaka. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1280. Map showing lava flows in the southeast part of the Amazonis Quadrangle of Mars, by D. H. Scott, and K. L. Tanaka. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 34 inches.
- I-1281. Map showing lava flows in the northeast part of the Phaethontis Quadrangle of Mars, by D. H. Scott, and K. L. Tanaka. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 32 by 40 inches.
- I-1285. VIRGINIA. Stream control by foliation, joints, and folds in the Rappahannock River drainage system near Fredericksburg, Virginia, by S. L. Cranford, A. R. Borychick, Louis Pavlides, and Karen Wier. 1982. Lat 38° to 38°30', long 77°22'30" to 77°45'. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 40 by 55 inches.
- I-1286. Geologic map of the Diacria Quadrangle of Mars, by E. C. Morris, and K. A. Howard. 1981. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 34 by 42 inches.
- I-1295. Shaded relief map of the Coprates Northwest Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1301. Map showing relation of carbon dioxide-rich springs and gas wells to the tectonic framework of the conterminous United States, by W. P. Irwin, and Ivan Barnes. 1982. Lat 24° to 48°, long 78° to 120°. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 30 by 51 inches. (Accompanied by 9-page text.)
- I-1309. VIRGINIA. Map showing physical characteristics related to sanitary landfill siting in Fairfax County, Virginia, by J. N. Van Driel. 1982. Two sheets. Scale 1:48,000 (1 inch = 4,000 feet). Lat about 38°45' to about 39°, long 77°07'30" to 77°30'. Sheet 1, 42 by 49 inches; sheet 2, 28 by 40 inches.

- I-1311. WASHINGTON. Geologic map of the Wenatchee 1:100,000 Quadrangle, central Washington, by R. W. Tabor, R. B. Waitt, Jr., V. A. Frizzell, Jr., D. A. Swanson, G. R. Byerly, and R. D. Bentley. 1982. Lat 47° to 47°30', long 120° to 121°. Scale 1:100,000 (1 inch = 1.6 miles). Sheet 42 by 56 inches. (Accompanied by 26-page text.)
- I-1312. ARIZONA. Geologic map of the Cochise Head Quadrangle and adjacent areas, southeastern Arizona, by Harald Drewes. 1982. Two sheets. Lat about 32° to 32°10', long 109°10' to 109°22'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 1, 41 by 57 inches; sheet 2, 38 by 41 inches.
- I-1316. COLORADO. Map of snow avalanche areas and known accident sites in the Telluride region, San Miguel County, Colorado, by B. R. Armstrong, and P. E. Carrara. 1981. Lat about 37°52'30" to 38°, long about 107°45' to 107°52'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 31 by 53 inches.
- I-1317. MONTANA, WYOMING. Thickness, percent sand, and configuration of shallow hydrogeologic units in the Powder River basin, Montana and Wyoming, by B. D. Lewis, and W. R. Hotchkiss. 1981. Six sheets. Lat about 43° to 47°, long about 105° to 108°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheets 1-6, 27 by 43 inches.
- I-1320. Shaded relief map of the western region of Mars. 1982. Scale 1:15,000,000 (1 inch = about 240 miles). Sheet 27 by 40 inches.
- I-1321. Shaded relief map of the eastern region of Mars. 1982. Scale 1:15,000,000 (1 inch = about 240 miles). Sheet 30 by 31 inches.
- I-1322. Shaded relief map of the polar regions of Mars. 1982. Scale 1:15,000,000 (1 inch = about 240 miles). Sheet 26 by 40 inches.
- I-1325. Map showing localities and inferred distributions of the Huckleberry Ridge, Mesa Falls, and Lava Creek ash beds (Pearlette family ash beds) of Pleistocene age in the Western United States and southern Canada, by G. A. Izette, and R. E. Wilcox. 1982. Scale 1:4,000,000 (1 inch = about 64 miles). Sheet 42 by 56 inches.
- I-1326-A. Shaded relief map of the lunar polar regions. 1981. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 30 by 48 inches.
- I-1326-B. Map showing relief and surface markings of the lunar polar regions. 1981. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 30 by 48 inches.
- I-1337. Controlled photomosaic of the Eridania Southeast Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1338. Controlled photomosaic of the Eridania Southwest Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = 32 miles). Sheet 26 by 34 inches.
- I-1339. Controlled photomosaic of the Eridania Northeast Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 27 by 34 inches.
- I-1340. Controlled photomosaic of the Eridania North-central Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 27 by 34 inches.
- I-1347. Controlled photomosaic of the Mare Acidalium Northwest Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1348. Controlled photomosaic of the Mare Acidalium Northeast Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1349. Controlled photomosaic of the Mare Acidalium Southwest Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1350. Controlled photomosaic of the Mare Acidalium South-central Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.

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- I-1351. Controlled photomosaic of the Mare Acidalium Southeast Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1362. MONTANA. Geologic map and discussion of selected mineral resources of the North and South Moccasin Mountains, Fergus County, Montana, by D. A. Lindsey. 1982. Lat about 47°10' to about 47°20', long about 109°25' to 109°37'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 39 by 52 inches. (Accompanied by 8-page text.) (Supersedes Open-file report 80-832.)
- I-1363. ARIZONA. Geologic map and sections of the Bowie Mountain South Quadrangle, Cochise County, Arizona, by Harald Drewes. 1981. Lat 32° to 32°07'30" long 109°22'30" to 109°30'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 33 by 44 inches.
- I-1366. Viking Lander 1 rectified photomosaics, morning scene; camera 1. 1982. 5 sheets. Sheet 1, 30 by 40 inches; sheets 2-5, 31 by 36 inches.
- I-1367. Rectified photomosaics of the Viking Lander 1; evening scene, camera 2, Mars. 1982. 5 sheets. Sheet 1, 30 by 40 inches; sheets 2-5, 31 by 37 inches.
- I-1368. Rectified photomosaics of the Viking Lander 1; evening scene, camera 1, Mars. 1982. 5 sheets. Sheet 1, 30 by 40 inches; sheets 2-5, 31 by 37 inches.
- I-1371. WYOMING. Geologic map of upper Geyser Basin, Yellowstone National Park, Wyoming, by L. J. Muffler, D. E. White, M. H. Beeson, and A. H. Truesdell. 1982. Lat about 44°27' to about 44°29', long about 110°49' to about 110°52'. Scale 1:4,800 (1 inch = 400 feet). Sheet 38 by 40 inches.
- I-1373. WYOMING. Geologic map of lower Geyser Basin, Yellowstone National Park, Wyoming, by L. J. Muffler, D. E. White, A. H. Truesdell, and R. O. Fournier. 1982. Lat 44°30' to 44°35', long 110°45' to 110°55'. Scale 1:24,000 (1 inch = 2000 feet). Sheet 24 by 37 inches.
- I-1376. Controlled photomosaic of the Sinus Sabaeus Northwest Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1377. Controlled photomosaic of the Sinus Sabaeus Northeast Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1378. COLORADO. Paleovalley and geologic map of northeastern Colorado, by G. R. Scott. 1982. Lat 40° to 41°, long 102° to 104°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 24 by 30 inches. (Accompanied by 12-page text.)
- I-1381. Controlled photomosaic of the Margaritifer Sinus Northwest Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1382. Controlled photomosaic of the Margaritifer Sinus Northeast Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1384. Controlled photomosaic of the Elysium Southwest Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1385. Controlled photomosaic of the Elysium Northeast Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1386. Controlled photomosaic of the Elysium Northwest Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1387. Controlled photomosaic of the Elysium Southeast Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1392. Shaded relief map of the Diacria Quadrangle of Mars. 1981. Scale 1:4,336,000 (1 inch = about 69 miles). Sheet 33 by 34 inches.
- I-1393. Controlled photomosaic of the Noachis Southeast Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.

- I-1394. Controlled photomosaic of the Noachis North-central Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1395. Controlled photomosaic of the Noachis Northwest Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1396. Controlled photomosaic of the Noachis Northeast Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1397. Controlled photomosaic of the Cebrenia Northeast Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1398. Controlled photomosaic of the Cebrenia South-central Quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1399. Controlled photomosaic of the Cebrenia Southeast quadrangle of Mars. 1981. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1401. NEW YORK. Results of core drilling of the Ramapo Fault at Sky Meadow Road, Rockland County, New York, and assessment of evidence for reactivation to produce current seismicity, by N. M. Ratcliffe. 1982. Lat about 41°07'30" to about 41°15', long about 74° to about 74°07'30". Sheet 41 by 57 inches.
- I-1402. The properties and uses of selected map projections, by T. R. Alpha, and J. P. Snyder. 1982. Sheet 31 by 37 inches. (Supersedes map I-1096.)
- I-1403. IDAHO. Geologic map of the Strevell 15-minute quadrangle, Cassia County, Idaho, by J. F. Smith, Jr. 1982. Lat 42° to 42°15', long 113° to 113°15'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 30 by 35 inches.
- I-1404. UTAN. Surficial geologic map of the Salt Lake City North Quadrangle, Davis and Salt Lake counties, Utah, by R. V. Horn. 1982. Lat 40°45' to 40°52'30", long 111°52' 30" to 112°. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 28 by 38 inches.
- I-1405. ARKANSAS. Outcropping Tertiary units in southern Arkansas, by R. L. Hosman. 1982. Lat about 33°15' to about 34°45', long about 92° to about 94°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 37 by 44 inches.
- I-1412. Controlled photomosaic of the Syrtis Major Southeast Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1413. Controlled photomosaic of the Syrtis Major Southwest Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1414. Controlled photomosaic of the Syrtis Major Northeast Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1415. Controlled photomosaic of the Syrtis Major Northwest Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1419-A. COLORADO. Bouguer gravity map of the Pueblo 1° by 2° Quadrangle, south-central Colorado, by F. M. Boler, D. P. Klein, and M. D. Kleinkopf. 1982. Lat 38° to 39°, long 104° to 106°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 28 by 30 inches.
- I-1427. Controlled photomosaic of the Amenthes Northwest Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1428. Controlled photomosaic of the Amenthes Southeast Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1429. Controlled photomosaic of the Amenthes Southwest Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1431. Controlled photomosaic of the Casius Northwest Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.

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- I-1434. Controlled photomosaic of the Ismenius Lacus Northeast Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 22 by 34 inches.
- I-1434. Controlled photomosaic of the Ismenius Lacus Northwest Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1435. Controlled photomosaic of the Ismenius Lacus South-central Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1436. Controlled photomosaic of the Ismenius Lacus Southeast Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1437. Controlled photomosaic of the Ismenius Lacus Southwest Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1438. Controlled photomosaic of the Iapygia Northeast Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1439. Controlled photomosaic of the Iapygia Northwest Quadrangle. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1440. Controlled photomosaic of the Iapygia Southeast Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1441. Controlled photomosaic of the Iapygia Southwest Quadrangle of Mars. 1982. Scale 1:2,000,000 (1 inch = about 32 miles). Sheet 26 by 34 inches.
- I-1443. ALASKA. Vegetation and land cover, Arctic National Wildlife Refuge coastal plain, Alaska. 1982. Lat about 69°30' to about 70°, long about 143° to about 146°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 14 by 29 inches.
- I-1484. Preliminary pictorial map of Rhea. 1982. Scale 1:10,000,000 (1 inch = about 160 miles). Sheet 22 by 27 inches.
- I-1485. Preliminary pictorial map of Enceladus. 1982. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 15 by 15 inches.
- I-1487. Preliminary pictorial map of Tethys. 1982. Scale 1:10,000,000 (1 inch = about 160 miles). Sheet 16 by 21 inches. (Supersedes I-1390.)
- I-1488. Preliminary pictorial map of Dione. 1982. Scale 1:10,000,000 (1 inch = about 160 miles). Sheet 16 by 21 inches.
- I-1489. Preliminary pictorial map of Mimas. 1982. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 12 by 16 inches.

### Miscellaneous Investigations Series Maps—Marine Geology Atlases

Data gathered from many sources on the continental shelf are being analyzed, interpreted, and compiled by the Geological Survey. The results are being published as a marine geology atlas which ultimately will include a wide variety of geologic information that can facilitate mineral and petroleum exploration, development, and monitoring, and serve as an aid in coastal State planning.

- I-1182-B. ALASKA. Holocene marine sediments on middle and outer continental shelf of the Beaufort Sea north of Alaska, by D. A. Dinter. 1982. Two sheets. Lat about 70° to about 73°, long about 142° to about 156°. Scale 1:500,000 (1 inch = about 8 miles). Sheets 39 by 51 inches. (Accompanied by 5-page text.)
- I-1254-E. TEXAS. Map showing paleogeography of the continental shelf during the low stand of sea level, Wisconsin glacial epoch, Port Isabel 1° by 2° Quadrangle, Texas, by H. L. Berryhill, Jr. 1980. Lat 26° to 27°, long 96° to 98°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 45 by 26 inches. (Reprint.)

## OIL AND GAS INVESTIGATIONS CHARTS

- OC-0112. MONTANA. Subsurface cross section from southeastern Alberta, Canada, to Bowdoin Dome area, north-central Montana, showing correlation of Cretaceous rocks and shallow, gas-productive zones in low-permeability reservoirs, by D. D. Rice. 1981. Sheet 31 by 53 inches.
- OC-0115. MONTANA, WYOMING. Processed and interpreted U.S. Geological Survey seismic reflection profile and vertical seismic profile, Carter County, Montana, and Crook County, Wyoming, by R. T. Ryder, A. H. Balch, M. W. Lee, and J. J. Miller. 1981. Sheet 28 by 53 inches.
- OC-0116. WYOMING. Summary chart of geological data from Amoco Tierney unit 1 well, SW1/4 SE1/4, sec. 15, T.20 N., R.94 W., Sweetwater County, Wyoming, by D. J. Markochick, R. E. Lanham, H. G. Bucurel, and B. E. Law. 1982. Sheet 37 by 44 inches.
- OC-0117. WYOMING. Description of Eocene rocks in White Mountain at Rock Springs, Wyoming, by H. W. Roehler. 1981. Sheet 24 by 30 inches.
- OC-0121. Map showing approximate eastern limit of commercial oil and gas fields in relation to structural features and physiographic provinces in the Appalachian region, by K. C. Bayer. 1982. Lat about 29° to about 43°, long about 74° to about 90°. Scale 1:2,500,000 (1 inch = about 40 miles). Sheet 25 by 31 inches.

## MISCELLANEOUS FIELD STUDIES MAPS

Unless otherwise indicated these maps are printed in a very limited edition; therefore, no automatic distribution will be made.

- MF-0482. COLORADO. Reconnaissance geologic map of Colorado Springs and vicinity, Colorado, by G. R. Scott, and R. A. Wobus. 1973. Two sheets. Lat 38°37'30" to 39°, long 104°37'30" to 105°. Sheet 1, 23 by 30 inches; sheet 2, 15 by 32 inches. (Reprint.)
- MF-0585. CALIFORNIA. Preliminary map showing recency of faulting in coastal southern California, by J. I. Ziony, C. M. Wentworth, J. M. Buchanan-Banks, and H. C. Wagner. 1974. Three sheets. Sheet 1 and 2, scale 1:250,000 (1 inch = about 4 miles); sheet 3, scale 1:500,000 (1 inch = about 8 miles). Lat about 32°30' to about 35°, long about 116° to about 120°45'. Sheets 34 by 35 inches. (Reprint.)
- MF-0626. CALIFORNIA. Faults and their potential hazards in Santa Cruz County, California, by N. T. Hall, A. M. Sarna-Wojcicki, and W. R. Dupre. 1974. Three sheets. Scale 1:62,500 (1 inch = about 1 mile). Sheet 1, 37 by 47 inches; sheet 2, 28 by 40 inches; sheet 3, 23 by 37 inches. (Reprint.)
- MF-0705. COLORADO. Preliminary map of landslide deposits, Denver 1° by 2° Quadrangle, Colorado, by R. B. Colton, J. A. Holligan, and L. W. Anderson. 1975. Lat 39° to 40°, long 104° to 106°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 26 by 39 inches. (Reprint.)
- MF-0761. COLORADO. Preliminary geologic map of the Montrose 1° by 2° Quadrangle, southwestern Colorado, compiled by Ogdon Tweto, T. A. Steven, W. J. Hail, Jr., and R. H. Moench. 1976. Lat 38° to 39°, long 106° to 108°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 34 by 43 inches. (Reprint.)
- MF-0780-C. CALIFORNIA. Bouguer gravity map of southern San Francisco Bay region, California, by S. L. Robbins, C. W. Roberts, and R. H. Chapman. 1982. Scale 1:125,000 (1 inch = about 2 miles). Sheet 42 by 54 inches.

- MF-0786. Preliminary overview map of volcanic hazards in the 48 conterminous United States, by D. R. Mullineaux. 1976. Lat about 25° to about 45°, long about 65° to about 125°. Scale 1:7,500,000 (1 inch = about 118 miles). Sheet 29 by 38 inches. (Reprint.)
- MF-0789. ALASKA. Preliminary geologic map of northern Alaska, compiled by H. M. Beikman, and E. H. Lathram. 1976. Two sheets. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 1, 41 by 55 inches; sheet 2, 44 by 46 inches. (Reprint.)
- MF-0805. COLORADO. Reconnaissance geologic map of the Cripple Creek-Pikes Peak area, Teller, Fremont, and El Paso counties, Colorado, by R. A. Wobus, R. C. Epis, and G. R. Scott. 1976. Lat 38°37'30" to 38°52'30", long 105° to 105°15'. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 28 by 42 inches. (Reprint.)
- MF-0812. Seismicity map of the conterminous United States and adjacent areas, 1965-1974, by C. W. Stover. 1977. Lat about 23° to about 48°, long about 64° to about 128°. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 29 by 46 inches. (Reprint.)
- MF-0856. MASSACHUSETTS. Seismicity map of the State of Massachusetts, by C. W. Stover, L. M. Barnhard, B. G. Reagor, and S. T. Algermissen. 1980. Lat about 41° to 43°, long about 70° to about 72°. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 31 by 32 inches. (Reprint.)
- MF-0858-A. MONTANA. Mineral resources of the Choteau 1° by 2° Quadrangle, Montana, by R. L. Earhart, M. R. Mudge, J. W. Whipple, and J. J. Connor. 1981. Lat 47° to 48°, long 112° to 114°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 42 by 56 inches. (Reprint.)
- MF-0858-E. MONTANA. Geochemical and generalized maps showing the distribution and abundance of zinc in the Choteau 1° by 2° Quadrangle, Montana, by R. W. Leinz, and D. J. Grimes. 1980. Lat 47° to 48°, long 112° to 114°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 42 by 56 inches. (Reprint.)
- MF-0878-B. ALASKA. Mineral resources map of the Chandalar Quadrangle, Alaska, by J. H. DeYoung, Jr. 1978. Two sheets. Lat 67° to 68°, long 147° to 150°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 1, 27 by 39 inches; sheet 2, 31 by 46 inches. (Reprint.)
- MF-0880-H. ALASKA. Metalliferous mineral resource potential of the Seward and Blying Sound quadrangles, southern Alaska, by R. G. Tysdal, and J. E. Case. 1982. Lat 59°30' to 61°, long 147° to 150°. Scale 1:250,000 (1 inch = about 4 miles). Two sheets. Sheet 1, 35 by 40 inches; sheet 2, 42 by 50 inches. (Accompanied by 23-page text.)
- MF-0904. Summary table of Quaternary dating methods, compiled by S. M. Colman, and K. L. Pierce. 1977. Sheet 23 by 28 inches. (Reprint.)
- MF-0928-A. ALASKA. Maps showing land status and well locations and tables of well data, eastern North Slope Petroleum Province, Alaska, compiled by I. L. Tailleux, and S. E. Engwicht. 1978. Lat about 69° to about 71°, long about 144° to about 153°. Scale 1:500,000 (1 inch = about 8 miles). Sheets 26 by 33 inches. (Reprint.)
- MF-1000-A. MISSOURI. Map showing geologic structures in Rolla 1° by 2° Quadrangle, Missouri, by W. P. Pratt. 1982. Lat 37° to 38°, long 90° to 92°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 30 by 31 inches.
- MF-1001-B. MISSOURI. Structure contour map of buried Precambrian basement-rock surface, Rolla 1° by 2° Quadrangle and adjacent areas, Missouri, by E. B. Kisvarsanyi, Missouri Division of Geology and Land Survey. 1979. Lat 36°45' to 38°15', long 90° to 92°. Scale 1:250,000 (1 inch = about 4 miles). (Reprint.)
- MF-1002-F. MISSOURI. Preliminary isopach maps of the Cambrian Derby-Doerun Dolomite and the Cambrian Elvins Group, Rolla 1° by 2° Quadrangle, Missouri, by J. L. Thacker and K. H. Anderson, Missouri Division of Geology and Land Survey. 1979. Lat 36°45' to 38°15', long 90° to 92°. Two sheets. Scale 1:250,000 (1 inch = about 4 miles). Both sheets 31 by 36 inches. (Reprint.)



- MF-1002-G. MISSOURI. Preliminary isopach maps of the Cambrian Potosi Dolomite and the Cambrian Eminence Dolomite, Rolla 1° by 2° Quadrangle, Missouri, by J. L. Thacker and K. H. Anderson, Missouri Division of Geology and Land Survey. 1979. Two sheets. Lat 36°45' to 38°15', long 90° to 92°. Scale 1:250,000 (1 inch=about 4 miles). Sheets 31 by 36 inches. (Reprint.)
- MF-1002-I. MISSOURI. Regional depositional facies of the Cambrian Bonnetterre Formation, Rolla 1° by 2° Quadrangle, Missouri, by Geza Kisvarsanyi. 1982. Lat 37° to 38°, long 90° to 92°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 24 by 41 inches.
- MF-1004-A. MISSOURI. Generalized geologic and summary geochemical maps of the Rolla 1° by 2° Quadrangle, Missouri, by R. L. Erickson, E. L. Mosier, and J. G. Viets. 1978. Lat 37° to 38°, long 90° to 92°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 41 by 48 inches. (Reprint.)
- MF-1004-B. MISSOURI. Generalized geologic and geochemical maps of the Cambrian Bonnetterre Formation, Rolla 1° by 2° Quadrangle, Missouri, by R. L. Erickson, E. L. Mosier, J. G. Viets, and S. C. King. 1979. Lat 37° to 38°, long 90° to 92°. Scale 1:500,000 (1 inch = about 8 miles). Sheet 38 by 42 inches. (Reprint.)
- MF-1004-C. MISSOURI. Barium content in drill holes in the Rolla 1° by 2° Quadrangle, Missouri, by S. K. Odland, E. L. Mosier, and M. S. Erickson. 1982. Lat 37° to 38°, long 90° to 92°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 31 by 33 inches.
- MF-1005-B. MISSOURI. Mines, prospects, and occurrences of metallic minerals in the Rolla 1° by 2° Quadrangle, Missouri, by M. H. Miller. 1982. Two sheets. Lat 37° to 38°, long 90° to 92°. Scale 1:250,000 (1 inch = about 4 miles). Both sheets 24 by 36 inches. (Accompanied by 3 tables and references.)
- MF-1037. NEW MEXICO. Geologic map of the Tyrone Quadrangle, Grant County, New Mexico, by D. C. Hedlund. 1978. Lat 32°37'30" to 32°45', long 108°15'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 41 by 42 inches. (Reprint.)
- MF-1044-A. Map of prospective hydrocarbon provinces of the world, North and South America, by A. B. Coury, T. A. Hendricks, and T. F. Tyler. 1978. Sheet 44 by 45 inches. Scale 1:20,000,000 (1 inch = about 320 miles). (Reprint.)
- MF-1044-B. Map of prospective hydrocarbon provinces of the world; Europe, West Asia, and Africa, by A. B. Coury, and T. A. Hendricks. 1978. Scale 1:20,000,000 (1 inch = about 320 miles). Sheet 33 by 43 inches. (Reprint.)
- MF-1044-C. Map of prospective hydrocarbon provinces of the world; East Asia, Australia, and the Pacific, by A. B. Coury, and T. A. Hendricks. 1978. Scale 1:20,000,000 (1 inch = about 320 miles). Sheet 33 by 43 inches. (Reprint.)
- MF-1053-K. ALASKA. Mineral resource maps of the Chignik and Sutwik Island quadrangles, Alaska, by D. P. Cox, D. E. Detra, and R. L. Detterman. 1981. Two sheets. Lat 56° to 57°, long 156° to about 160°30'. Scale 1:250,000 (1 inch = about 4 miles). Sheet 1, 30 by 47 inches; sheet 2, 38 by 48 inches.
- MF-1053-M. ALASKA. Maps and tables showing geochronology and whole-rock geochemistry, Chignik and Sutwik Island quadrangles, Alaska, by F. H. Wilson, W. C. Gaum, and P. L. Herzon. 1981. Three sheets. Lat 56° to 57°, long 156° to about 160°30'. Scale 1:250,000 (1 inch = about 4 miles). Sheet 1, Sample locality map, 26 by 55 inches; sheet 2, Potassium-argon data, 28 by 33 inches; sheet 3, Whole-rock chemistry and sample descriptions, 30 by 41 inches.
- MF-1053-N. ALASKA. Megafossil sample locality map, checklists, and stratigraphic sections of the Chignik and Sutwik Island quadrangles, Alaska, by R. L. Detterman, M. E. Yount, and J. E. Case. 1981. Two sheets. Lat 56° to 57°, long 156° to 160°30'. Scale 1:250,000 (1 inch = about 4 miles). Sheet 1, 39 by 47 inches; sheet 2, 39 by 46 inches.

- MF-1101-C. CALIFORNIA. Map showing gravity and magnetic surveys of the Hoover Wilderness and adjacent study area, Mono and Tuolumne counties, California, by Donald Plouff. 1982. Two sheets. Lat 38° to 38°25', long 119°10' to 119°45'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 1, 40 by 52 inches; sheet 2, 37 by 39 inches.
- MF-1130-A. COLORADO. Cross section A-A' of Upper Cretaceous and lower Tertiary rocks, southern Piceance Creek basin, Colorado, by R. C. Johnson, M. P. Granica, and N. C. Dessenberger. 1979. Sheet 1, 29 by 35 inches; sheet 2, 20 by 24 inches. (Reprint.)
- MF-1138. ARIZONA. Preliminary geologic map of the Purgatory Canyon Quadrangle, Mohave County, Arizona, by M. L. Throckmorton. 1982. Lat 36°52'30" to 37°, long 113°37'30" to 113°45'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 32 by 43 inches.
- MF-1142. OHIO. Seismicity map of the State of Ohio, by C. W. Stover, B. G. Reagor, and S. T. Algermissen. 1979. Lat about 39° to about 42°, long about 81° to about 84°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 25 by 39 inches. (Reprint.)
- MF-1146-B. ARIZONA. Mineral resource potential map of the Turbinella-Gambel Oak Instant Study Area, Mohave County, Arizona, by M. L. Throckmorton, and L. R. Hamm. 1980. Lat about 36°50' to about 36°52'30", long about 113°40' to 113°45'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 24 by 36 inches. (Reprint.)
- MF-1158. Aeromagnetic map and associated depth map of the upper Mississippi Embayment region, by T. G. Hildenbrand, R. P. Kucks, M. F. Kane, and J. D. Hendricks. 1979. Lat 35° to 38°, long 86°30' to 92°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 27 by 37 inches. (Reprint.)
- MF-1160-B. ARIZONA. Map showing geochemical survey of the Paiute Primitive Study Area, Mohave County, Arizona, by H. A. Villalobos. 1981. Two sheets. Lat 36°45' to about 36°55', long 113°45' to about 113°55'. Scale 1:24,000 (1 inch = 2,000 feet). Sheets 40 by 50 inches. (Reprint.)
- MF-1162-A. ARIZONA. Geologic map of the Sierra Ancha Wilderness and Salome Study Area, Gila County, Arizona, by J. R. Bergquist, A. F. Shride, and C. T. Wrucke. 1981. Lat about 30°45' to 34°, long about 110°50' to 111°12'30". Scale 1:48,000 (1 inch = 4,000 feet). Sheet 46 by 50 inches. (Reprint.)
- MF-1162-G. ARIZONA. Complete Bouguer gravity map of the Sierra Ancha Wilderness and Salome Study Area, Gila County, Arizona, by D. M. Kulik. 1981. Lat about 33°45' to about 34°, long about 110°50' to about 111°10'. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 36 by 49 inches.
- MF-1162-H. ARIZONA. Map showing mineral resource potential of the Sierra Ancha Wilderness and Salome Study Area, Gila County, Arizona, by J. K. Otton, T. D. Light, A. F. Shride, J. R. Bergquist, C. T. Wrucke, P. K. Theobald, J. S. Duval, and D. M. Wilson. 1981. Lat 33°42'30" to 34°, long 110°45' to 111°15'. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 41 by 53 inches. (Accompanied by 6-page text.)
- MF-1163. COLORADO, UTAH, WYOMING. Geologic map of the Vernal 1° by 2° Quadrangle, Colorado, Utah, and Wyoming, by P. D. Rowley, Ogden Tweto, W. R. Hansen, and P. E. Carrara. 1979. Lat 40° to 41°, long 108° to 110°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 33 by 49 inches. (Reprint.) (Supersedes Open-file reports 75-588 and 78-573.)
- MF-1176-C. ALASKA. Map showing distribution of metamorphic rocks in the Survey Pass Quadrangle, Brooks Range, Alaska, by S. W. Nelson, and Donald Grybeck. 1981. Lat 67° to 68°, long 153° to 156°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 35 by 42 inches.

- MF-1176-D. ALASKA. Maps showing anomalous drainage areas of selected elements in the Survey Pass Quadrangle, Brooks Range, Alaska, by J. B. Cathrall, T. M. Billings, E. F. Cooley, and R. M. O'Leary. 1981. Lat 67° to 68°, long 153° to 156°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 38 by 48 inches.
- MF-1176-G. ALASKA. Map showing aeromagnetic survey and interpretation of the Survey Pass Quadrangle, Brooks Range, Alaska, by J. W. Cady, and S. W. Hackett. 1982. Lat 67° to 68°, long 153° to 156°. Scale 1:250,000 (1 inch = about 4 miles). Three sheets. Sheet 1, 22 by 25 inches; sheet 2, 25 by 29 inches; sheet 3, 25 by 34 inches. (Accompanied by 13-page text.)
- MF-1177-B. CALIFORNIA. Geochemical maps of the North Fork of the American River Wilderness Study Area, California, by D. S. Harwood. 1982. Lat about 39°05' to about 39°20', long about 120°25' to about 120°50'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 28 by 47 inches.
- MF-1177-C. CALIFORNIA. Mineral resource potential map of the North Fork of the American River Wilderness Study Area (RARE II No. 5-262), Placer County, California, by D. S. Harwood and Andrew Griscom, U.S. Geological Survey, and F. E. Federspiel, A. M. Leszczykowski and F. A. Spicker, U.S. Bureau of Mines. 1982. Lat about 39°05' to about 39°20', long about 120°20' to about 120°50'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 26 by 35 inches. (Accompanied by 7-page text.)
- MF-1178-A. MISSOURI. Geologic, geochemical, and geophysical maps of the Bell Mountain Wilderness Study Area, Iron County, Missouri, by W. P. Pratt, and R. L. Erickson. 1982. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 34 by 44 inches.
- MF-1178-B. MISSOURI. Mineral resources potential map of the Bell Mountain Wilderness Study Area, Iron County, Missouri, by W. P. Pratt and R. L. Erickson, U.S. Geological Survey, and Clarence Ellis, U.S. Bureau of Mines. 1982. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 24 by 29 inches. (Accompanied by 6-page text.)
- MF-1185-B. CALIFORNIA. Maps and interpretation of geochemical anomalies in the John Muir Wilderness, Fresno, Inyo, Madera, and Mono counties, California, by D. A. Dellinger, M. F. Diggles, and E. A. du Bray. 1982. Three sheets. Scale 1:125,000 (1 inch = about 2 miles). Lat about 37° to 37°45', long 118°30' to 119°15'. Sheet 1, 42 by 54 inches; sheet 2, 39 by 54 inches; sheet 3, 38 by 48 inches.
- MF-1185-C. CALIFORNIA. Mineral resource potential map of the John Muir Wilderness, Fresno, Inyo, Madera, and Mono counties, California, by E. A. duBray, D. A. Dellinger, M. F. Diggles, and H. W. Oliver, U.S. Geological Survey, and F. L. Johnson, H. K. Thurber, R. W. Morris, T. J. Perers, and D. S. Lindsey, U.S. Bureau of Mines. 1982. Lat about 36°30' to 37°45', long 118° to 119°15'. Scale 1:125,000 (1 inch = about 2 miles). Sheet 39 by 51 inches. (Accompanied by 10-page text.)
- MF-1186. MASSACHUSETTS. Maps showing geology and shallow structure of eastern Rhode Island Sound and Vineyard Sound, Massachusetts, by C. J. O'Hara, and R. N. Oldale. 1980. Five sheets. Lat about 41°15' to 41°40', long 70°45' to 71°15'. Scale 1:125,000 (1 inch = about 2 miles). Sheet 1, 33 by 29 inches; sheet 2, 36 by 48 inches; sheet 3, 41 by 43 inches; sheet 4, 28 by 34 inches; sheet 5, 41 by 49 inches. (Reprint.)
- MF-1192-A. WASHINGTON, IDAHO. Geologic map of Salmo-Priest Wilderness Study Area (RARE E6-981 A1-981), Pend Oreille County, Washington, and Boundary County, Idaho, by F. K. Miller. 1982. Lat about 48°52'30" to 49°, long about 117° to about 117°15'. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 25 by 36 inches.

- MF-1192-C. WASHINGTON, IDAHO. Mineral resource potential map of the Salmopriest Wilderness Study Area (RARE E6-981 A1-981), Pend Oreille County, Washington, and Boundary County, Idaho, by F. K. Miller and E. A. Rodriguez, U.S. Geological Survey, and S. W. Schmauch, U.S. Bureau of Mines. 1982. Lat about  $48^{\circ}52'30''$  to about  $49^{\circ}$ , long about  $117^{\circ}$  to about  $117^{\circ}15'30''$ . Scale 1:48,000 (1 inch = 4,000 feet). Sheet 24 by 30 inches. (Accompanied by 6-page text.)
- MF-1195. UTAH. Map showing vegetation distribution in the central part of the East Tintic Mountains, Utah, by Nancy Milton, and D. P. Madura. 1981. Lat about  $39^{\circ}$  to about  $40^{\circ}$ , long about  $112^{\circ}$  to  $112^{\circ}07'30''$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 26 by 35 inches.
- MF-1201-D. CALIFORNIA. Mineral resource potential map of the Mokelumne Wilderness and continuous roadless areas, central Sierra Nevada, California, by E. H. McKee, M. A. Chaffee, F. E. Federspiel, E. L. McHugh, E. E. Cather, D. F. Scott, and C. M. Rumsey. 1982. Lat about  $38^{\circ}25'$  to  $39^{\circ}$ , long  $119^{\circ}45'$  to  $120^{\circ}15'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 36 by 42 inches. (Accompanied by 10-page text.)
- MF-1204-A. NEVADA. Geologic map of the Virgin Mountains Instant Study Area, Clark County, Nevada, by R. K. Hose. 1980. Lat  $36^{\circ}30'$  to about  $36^{\circ}40'$ , long  $114^{\circ}$  to  $114^{\circ}15'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 23 by 33 inches. (Reprint.)
- MF-1204-B. NEVADA. Map showing mineral resource potential of the Virgin Mountains Instant Study Area, Clark County, Nevada, by R. K. Hose and R. R. Carlson, U.S. Geological Survey, and F. E. Federspiel and J. D. Huffsmith, U.S. Bureau of Mines. 1981. Lat  $36^{\circ}30'$  to about  $36^{\circ}40'$ , long  $114^{\circ}$  to about  $114^{\circ}15'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 26 by 33 inches. (Reprint.)
- MF-1204-C. NEVADA. Maps showing aeromagnetic survey and interpretation of the Virgin Mountains Instant Study Area, Clark County, Nevada, by Andrew Griscom. 1980. Lat  $36^{\circ}30'$  to about  $36^{\circ}40'$ , long  $114^{\circ}$  to  $114^{\circ}15'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 36 by 36 inches. (Reprint.)
- MF-1205. OREGON. Map showing landforms of the Umpqua South area, the Oregon Dunes National Recreation Area, by T. R. Alpha, R. E. Hunter, and B. M. Richmond. 1980. Two sheets. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 1, 29 by 47 inches. Sheet 2, lat about  $43^{\circ}35'$  to about  $43^{\circ}40'$ , long about  $124^{\circ}10'$  to about  $124^{\circ}15'$ ; sheet 35 by 48 inches. (Reprint.)
- MF-1207. ALASKA. Map showing environmental geology of Gulf of Alaska coastal area, Glacier Bay National Monument, by B. F. Molnia, and M. C. Wheeler. 1982. Lat  $58^{\circ}25'$  to  $58^{\circ}55'$ , long about  $137^{\circ}$  to  $138^{\circ}$ . Scale 1:63,360 (1 inch = 1 mile). Sheet 39 by 58 inches.
- MF-1221. COLORADO, UTAH. Lineaments and geologic structure of the northern Paradox Basin, Colorado and Utah, by J. D. Friedman, and S. L. Simpson. 1980. Two sheets. Scale 1:250,000 (1 inch = about 4 miles). Lat about  $38^{\circ}$  to about  $39^{\circ}45'$ , long  $108^{\circ}$  to about  $110^{\circ}$ . Sheet 1, 34 by 40 inches; sheet 2, 32 by 39 inches. (Reprint.)
- MF-1223. WYOMING. Measured sections of the Almond Formation (part), Ericson Sandstone, Rock Springs Formation, and Blair Formation (part) in the Camel Rock Quadrangle, Sweetwater County, Wyoming, by H. W. Roehler. 1980. Sheet 38 by 42 inches. (Reprint.)
- MF-1236-C. COLORADO. Aeromagnetic and complete Bouguer gravity anomaly maps of the Hunter-Fryingpan Wilderness Area, Pitkin County, Colorado, by D. L. Campbell. 1981. Two sheets. Lat about  $39^{\circ}07'30''$  to about  $39^{\circ}22'15''$ , long about  $106^{\circ}30'$  to about  $106^{\circ}52'30''$ . Scale 1:50,000 (1 inch = about 4,200 feet). Both sheets 36 by 57 inches.

- MF-1240-C. OREGON. Map showing geochemical characteristics of rock samples from the Kalmiopsis Wilderness, southwestern Oregon, by C. A. Carlson, N. J. Page, D. J. Grimes, and R. W. Leinz. 1982. Lat 42° to 42°30', long 123°45' to about 124°. Scale 1:62,500 (1 inch = about 1 mile). Sheet 42 by 47 inches.
- MF-1240-E. OREGON. Mineral resource potential map of the Kalmiopsis Wilderness, southwestern Oregon, by N. J. Page, D. J. Grimes, R. W. Leinz, R. W. Blakely, B. R. Lipin, M. P. Foose, and Floyd Gray, U.S. Geological Survey, and M. S. Miller, U.S. Bureau of Mines. 1982. Lat 42° to 42°30', long 123°45' to 124°15'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 38 by 47 inches. (Accompanied by 7-page text.)
- MF-1243-E. MONTANA. Mineral resource potential map of the Big Snowies Wilderness and contiguous RARE II study areas, Fergus, Golden Valley, and Wheatland counties, Montana, by D. A. Lindsey, U.S. Geological Survey, and F. E. Federspiel and J. D. Huffsmith, U.S. Bureau of Mines. 1982. Lat 46°30' to 47°, long 109° to 109°45'. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 29 by 36 inches. (Accompanied by 6-page text.)
- MF-1244-A. NEVADA. Geologic map of the Mount Moriah Further Planning (RARE II) Area, eastern Nevada, by R. K. Hose. 1981. Lat about 39° to about 39°30', long about 114° to about 114°15'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 26 by 33 inches.
- MF-1271-B. WEST VIRGINIA. Oil and gas resources of the Cheat Mountain Further Planning Area (RARE II), Randolph County, West Virginia, by E. G. Weed. 1981. Sheet 33 by 44 inches.
- MF-1273-B. CALIFORNIA. Geochemical maps of the Granite Chief Wilderness Study Area, California, by D. S. Harwood. 1982. Lat 39°05' to about 39°15', long about 120°15' to about 120°20'. Scale 1:95,000 (1 inch = about 8,000 feet). Sheet 24 by 28 inches.
- MF-1277. NEVADA. Geologic map of the Hawthorne Quadrangle, Mineral County, Nevada, by J. H. Stewart and D. C. Johannesen, Surficial geology by J. C. Dohrenwend. 1981. Lat 38°30' to 38°45', long 118°30' to 118°45'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 28 by 34 inches.
- MF-1288-B. ALABAMA. Geologic map of the Sipsey Wilderness and additions, Lawrence and Winston counties, Alabama, by S. P. Schweinfurth, V. A. Trent, and E. D. Helton. 1981. Lat 34°16' to 34°25', long 87°15' to 87°32'. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 40 by 41 inches.
- MF-1288-C. ALABAMA. Maps showing mines, quarries, oil and gas activity, and sample localities in and near the Sipsey Wilderness and additions, Lawrence and Winston counties, Alabama, by P. C. Mory, P. T. Behum, and R. B. Ross, Jr., U.S. Bureau of Mines. 1982. Lat about 34°16' to about 34°30', long about 87°15' to about 87°32'. Sheet 27 by 31 inches.
- MF-1290-C. NORTH CAROLINA. Mineral resource potential map of the Shining Rock Wilderness, Haywood County, North Carolina, by F. G. Lesure, U.S. Geological Survey and M. L. Dunn, Jr., U.S. Bureau of Mines. 1982. Lat about 35°20' to about 35°25', long about 82°47'30" to about 82°55'. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 29 by 32 inches. (Accompanied by 8-page text.)
- MF-1293. COLORADO. Preliminary geologic map of the Circle Dot Gulch Quadrangle, Garfield County, Colorado, by W. J. Hail, Jr. 1982. Lat 39°30' to 39°37'30", long 108°07'30" to 108°15'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 34 by 38 inches.

- MF-1294. CALIFORNIA. Map showing locations of radiocarbon-dated samples in southern California, by C. A. Hastorf, and J. C. Tinsley. 1981. Two sheets. Sheet 1, 33 by 53 inches, lat about 33° to about 35°, long 115° to about 121°, scale 1:500,000 (1 inch = about 8 miles); sheet 2, 32 by 46 inches, lat about 33°45' to about 34°15', long 117°30' to 119°, scale 1:125,000 (1 inch = about 2 miles). (Accompanied by 4 tables and references.)
- MF-1299. CALIFORNIA. Map showing geothermal resources of the Lake City-Surprise Valley known geothermal resource area, Modoc County, California, compiled by C. W. Hedel. 1981. Lat 41°07'30" to 42°, long 120° to 120°15'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 40 by 49 inches.
- MF-1308. WYOMING. Surface-subsurface correlations of the Eocene Green River Formation, on the west flank of the Rock Springs Uplift, Sweetwater County, Wyoming, by H. W. Roehler, U.S. Geological Survey, and L. G. Trudell, U.S. Department of Energy. 1981. Lat about 41°30' to about 41°45', long about 109°15' to about 109°30'. Sheet 33 by 51 inches.
- MF-1310. ARIZONA. Maps showing uranium-bearing diatremes of the Hopi Buttes, Arizona, by K. J. Wenrich, and J. F. Mascarenas. 1982. Two sheets. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 1, lat 35°22'30" to 35°39'59", long 109°52'30" to 110°32'; sheet 2, lat 35°04'18" to 35°22'30", long 109°52'30" to 110°32'. Sheet 1, 40 by 53 inches; sheet 2, 32 by 49 inches.
- MF-1315-B. ARIZONA. Mineral resource potential map of the Gila-San Francisco Wilderness Study Area, Graham and Greenlee counties, Arizona, by D. H. Richter, D. P. Klein, and V. A. Lawrence. 1982. Scale 1:62,500. (1 inch = about 1 mile). Sheet 27 by 42 inches. (Accompanied by 5-page text.)
- MF-1317-B. CALIFORNIA. Geochemical map showing anomalous drainage basins, Benton Range Further Planning (RARE II) Area, Mono County, California, by J. L. Donahoe, M. A. Chaffee, D. L. Fey, R. H. Hill, and S. J. Sutley. 1982. Lat 37°35' to 37°50', long 118°25' to about 118°40'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 26 by 41 inches.
- MF-1321. CALIFORNIA. Maps showing locations and descriptions of radiocarbon-dated samples from central and northern California, by C. A. Price. 1982. Two sheets. Scale 1:500,000 (1 inch = about 8 miles). Lat about 34° to 42°, long about 117° to about 124°. Sheet 1, 42 by 50 inches; sheet 2, 40 by 42 inches. (Accompanied by 38-page text.)
- MF-1322-A. CALIFORNIA. Geologic map of the Freel and Dardanelles Further Planning Areas, Alpine and El Dorado counties, California, by D. A. John, R. A. Armin, and W. J. Moore, *with* Quaternary geology, by J. C. Dohrenwend. 1981. Lat 38°40' to 38°55', long about 119°55' to 120°10'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 32 by 34 inches.
- MF-1332. UTAH. Preliminary geologic map of the Marjum Pass and Swasey Peak SW quadrangles, Millard County, Utah, by L. F. Hintze. 1981. Lat 39°15' to 39°22'30", long 113°15' to 113°30'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 39 by 50 inches.
- MF-1337-A. VIRGINIA. Geologic map of the James River Face Wilderness, Bedford and Rockbridge counties, Virginia, by C. E. Brown, and E. W. Spencer. 1981. Lat 32°30' to 37°37'30", long 79°22'30" to 79°30'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 28 by 41 inches.

- MF-1337-B. VIRGINIA. Geochemical survey of the James River Face Wilderness, Bedford and Rockbridge counties, Virginia, by C. E. Brown, and D. F. Siems. 1982. Lat  $37^{\circ}32'30''$  to  $37^{\circ}37'30''$ , long  $79^{\circ}22'30''$  to  $79^{\circ}30'$ . Scale 1:30,000 (1 inch = 2,500 feet). Sheet 43 by 51 inches.
- MF-1337-C. VIRGINIA. Map showing quarries, mines, prospects, and sample data in and near the James River Face Wilderness, Bedford and Rockbridge counties, Virginia, by G. C. Gazdik and R. B. Ross, Jr., U.S. Bureau of Mines. 1982. Sheet 28 by 41 inches.
- MF-1337-D. VIRGINIA. Mineral resource potential map of the James River Face Wilderness, Bedford and Rockbridge counties, Virginia, by C. E. Brown, U.S. Geological Survey, and G. C. Gazdik, U.S. Bureau of Mines. 1982. Lat  $37^{\circ}32'30''$  to  $37^{\circ}37'30''$ , long  $79^{\circ}22'30''$  to  $79^{\circ}30'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 27 by 34 inches. (Accompanied by 6-page text.)
- MF-1338-A. TENNESSEE. Geologic map of the Little Frog Roadless Area, Polk County, Tennessee, by E. R. Force. 1981. Lat  $35^{\circ}$  to  $35^{\circ}07'30''$ , long  $84^{\circ}22'30''$  to  $84^{\circ}30'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 30 by 35 inches.
- MF-1339-A. MISSOURI. Geologic, geochemical, and geophysical maps of the Rock Pile Mountain Wilderness Study Area, Madison County, Missouri, by W. P. Pratt, and R. L. Erickson. 1982. Lat about  $37^{\circ}15'$  to about  $37^{\circ}45'$ , long about  $90^{\circ}15'$  to about  $90^{\circ}45'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 30 by 37 inches.
- MF-1340-A. CALIFORNIA. Geologic maps of Ishi, Mill Creek, Polk Springs, and Butt Mountain Further Planning Areas, Tehama and Plumas counties, California, by J. A. Peterson, Robin Bradley, K. A. Johnson, and P. A. Lydon. 1982. Lat about  $40^{\circ}$  to about  $40^{\circ}20'$ , long  $121^{\circ}30'$  to  $121^{\circ}55'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 34 by 41 inches.
- MF-1340-B. CALIFORNIA. Maps showing geochemical analyses of the Ishi, Mill Creek, Polk Springs, and Butt Mountain Further Planning Areas, Tehama and Plumas counties, California, by J. A. Peterson, Robin Bradley, and K. A. Johnson. 1982. Lat about  $40^{\circ}$  to about  $40^{\circ}15'$ , long about  $121^{\circ}35'$  to about  $121^{\circ}50'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 40 by 40 inches.
- MF-1341-C. KENTUCKY. Mineral resource potential map of the Troublesome Roadless Area, McCreary County, Kentucky, W. R. Sigleo, U.S. Geological Survey, A. H. Randall, III, and R. B. Ross, Jr., U.S. Bureau of Land Management, and R. W. Hammack, U.S. Bureau of Mines. 1982. Lat  $36^{\circ}25'$  to  $36^{\circ}50'$ , long  $84^{\circ}27'$  to  $84^{\circ}54'$ . Sheet 30 by 33 inches. (Accompanied by 4-page text.)
- MF-1342-A. IDAHO, MONTANA. Geologic map of the Centennial Mountains Wilderness Study Area and contiguous areas, Idaho and Montana, by I. J. Witkind. 1982. Lat about  $44^{\circ}30'$  to about  $44^{\circ}37'30''$ , long about  $111^{\circ}25'$  to  $112^{\circ}10'$ . Scale 1:50,000 (1 inch = about 4,200 feet).
- MF-1342-C. MONTANA, IDAHO. Geophysical survey of the Centennial Mountains Wilderness Study Area and contiguous areas, Beaverhead County, Montana and Clark and Fremont counties, Idaho, by R. A. Martin. 1982. Lat  $44^{\circ}30'$  to about  $45^{\circ}$ , long about  $111^{\circ}20'$  to  $112^{\circ}15'$ . Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 34 by 40 inches.
- MF-1343-A. NEVADA. Geologic map of the Wheeler Peak and Highland Ridge Further Planning Areas, White Pine County, Nevada, by D. H. Whitebread. 1982. Lat about  $38^{\circ}45'$  to about  $39^{\circ}05'$ , long  $114^{\circ}05'$  to  $114^{\circ}25'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 26 by 39 inches.

- MF-1344-A. ARIZONA, NEW MEXICO. Geologic map of the Hells Hole Further Planning Area (RARE II), Greenlee County, Arizona, and Grant County, New Mexico, by J. C. Ratte, and D. C. Hedlund. 1981. Lat 32°45' to about 33°15', long about 108°45' to about 109°15'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 27 by 39 inches.
- MF-1344-E. ARIZONA, NEW MEXICO. Mineral resource potential map of the Hells Hole Further Planning Area (RARE II), Greenlee County, Arizona, and Grant County, New Mexico, by J. C. Ratte, J. R. Hassemmer, and R. A. Martin, U.S. Geological Survey, and J. P. Briggs, U.S. Bureau of Mines. 1982. Scale 1:62,500 (1 inch = about 1 mile). Sheet 25 by 27 inches. (Accompanied by 7-page text.)
- MF-1347-A. GEORGIA. Geologic map of the Tray Mountain Roadless Area, northern Georgia, by A. E. Nelson. 1982. Lat 34°45' to about 34°55', long 83°32'30" to 83°45'. Scale 1:30,000 (1 inch = about 1 mile). Sheet 36 by 48 inches.
- MF-1348-A. KENTUCKY. Geologic map of the Beaver Creek Wilderness, McCreary County, Kentucky, by K. J. Englund, and N. K. Teaford. 1981. Lat 36°50' to 36°57', long 84°22'30" to 84°30'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 24 by 31 inches.
- MF-1348-B. KENTUCKY. Geochemical survey, Beaver Creek Wilderness, McCreary County, Kentucky, by A. E. Grosz, and D. F. Siems. 1982. Lat 36°50' to 36°57', long 84°22'30" to 84°30'. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 29 by 44 inches.
- MF-1349. OREGON. Reconnaissance geologic map of the Selma Quadrangle, Josephine County, Oregon, by N. J. Page, Barry Moring, Floyd Gray, Jerome Cannon, and W. N. Blair. 1981. Lat 42°15' to 42°30', long 123°30' to 123°45'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 32 by 34 inches.
- MF-1353-A. UTAH. Geologic map of the Stansbury Roadless Area, Tooele County, Utah, by M. L. Sorensen. 1982. Lat about 40°20' to about 40°35', long 112°30' to 112°45'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 27 by 29 inches.
- MF-1353-B. UTAH. Map showing geochemical analyses of panned stream sediments, Stansbury Roadless area, Tooele County, Utah, by M. L. Sorensen. 1982. Lat 40°20' to about 40°35', long 112°30' to 112°45'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 24 by 38 inches.
- MF-1354-A. MONTANA, IDAHO. Generalized geologic map of the Wallace 1° by 2° Quadrangle, Montana and Idaho, by J. E. Harrison, A. B. Griggs, and J. D. Wells. 1981. Lat 47° to 48°, long 114° to 116°. Scale 1:25,000 (1 inch = about 4 miles). Sheet 22 by 32 inches. (Reprint.)
- MF-1355. HAWAII. Map showing distribution of the nodule beds of the 1800-1801 Kaupulehu flow on Hualalai Volcano, Island of Hawaii, by E. D. Jackson, and D. A. Clague. 1982. Scale 1:1,200 (1 inch = 100 feet). Sheet 24 by 30 inches.
- MF-1356-A. ARIZONA. Geochemical maps of the Pusch Ridge Wilderness Area, Pima County, Arizona, by M. E. Hinkle, J. E. Kilburn, R. G. Eppinger, III, and R. B. Tripp. 1981. Two sheets. Lat about 32°20' to 32°30', long about 110°40' to 111°. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 1, 35 by 43 inches; sheet 2, 42 by 42 inches.
- MF-1356-B. ARIZONA. Mineral resource potential map of the Pusch Ridge Wilderness Area, Pima County, Arizona, by M. E. Hinkle, U.S. Geological Survey, and G. S. Ryan, U.S. Bureau of Mines. 1982. Lat about 32°20' to 32°30', long about 110°40' to 111°. Scale 1:62,500 (1 inch = about 1 mile). Sheet 24 by 48 inches. (Accompanied by 9-page text.)



- MF-1356-C. ARIZONA. Mine and prospect map of the Pusch Ridge Wilderness Area, Pima County, Arizona, by G. S. Ryan, U.S. Bureau of Mines. 1982. Lat 32°15' to 32°30', long about 110°45' to 111°. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 30 by 49 inches.
- MF-1357. UTAH. Cross section of the Ferron Sandstone Member of the Mancos Shale in the Emery coal field, Emery and Sevier counties, central Utah, by T. A. Ryer. 1981. Sheet 22 by 47 inches.
- MF-1358-A. VIRGINIA. Geologic map of the Dolly Ann Roadless Area, Alleghany County, Virginia, by F. G. Lesure. 1981. Lat 37°45' to 37°52'30", long 79°52'30" to 80°. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 31 by 39 inches.
- MF-1358-B. VIRGINIA. Geochemical survey of the Dolly Ann Roadless Area, Alleghany County, Virginia, by F. G. Lesure. 1982. Lat 37°45' to 37°52'30", long 79°52'30" to 80°. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 34 by 38 inches.
- MF-1359. COLORADO. Map showing drill stem test and perforation recoveries of the Upper Cretaceous Mesaverde Group, Piceance Creek basin, Colorado, by V. F. Nuccio, and R. C. Johnson. 1981. Lat about 39° to about 40°15', long about 107°30' to about 108°45'. Scale 1:250,000 (1 inch = about 4 miles). Sheet 34 by 36 inches.
- MF-1360. A compilation of subsea energy and mineral resources of the United States including its possessions and Trust Territory of the Pacific Islands, by A. F. Holser, R. W. Rowland, and M. R. Goud. 1981. Lat 10°S to 70°N, long 50°W to 120°E. Scale 1:20,000,000 (1 inch = about 320 miles). Sheet 30 by 49 inches. (Reprint.)
- MF-1361-A. CALIFORNIA, NEVADA. Geologic map of the White Mountains Wilderness and Roadless Areas, California, and Nevada, compiled by E. H. McKee, M. F. Diggles, J. L. Donahoe, and G. S. Elliot. 1982. Lat about 37°15' to about 38°, long 118° to 118°30'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 40 by 56 inches.
- MF-1362. Bathymetric map of the Blake Escarpment, by L. E. Gilbert, and W. P. Dillon. 1981. Lat about 28°30' to about 30°30', long about 76° to about 77°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 27 by 48 inches.
- MF-1363. MISSOURI. Geologic map of the Dongola Quadrangle, Bollinger and Stoddard counties, Missouri, by D. H. Amos. 1981. Lat 37°07'30" to 37°15', long 89°52'30" to 90°. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 30 by 36 inches.
- MF-1364. ALASKA. Preliminary surficial geologic map of the Valdez B-1 Quadrangle, Alaska, by L. A. Yehle. 1981. Lat 61°15' to 61°30', long 144° to 144°22'30". Scale 1:63,360 (1 inch = 1 mile). Sheet 23 by 36 inches.
- MF-1365-A. CALIFORNIA. Geologic map of the east part of the Raymond Peak Roadless Area, Alpine County, California, by R. A. Armin, D. A. John, and W. J. Moore, with Quaternary geology, by J. C. Dohrenwend. 1982. Lat about 38°35' to about 38°45', long about 119°45' to about 119°55'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 25 by 35 inches.
- MF-1366-A. WYOMING. Aerial radiometric and magnetic surveys, Snowy Range Wilderness Study Area and contiguous area, southeastern Wyoming, by J. S. Duval, and J. A. Pitkin. 1981. Lat about 41°20' to about 41°27'30", long about 106°12'30" to about 106°22'30". Scale 1:50,000 (inch = about 4,200 feet). Sheet 40 by 48 inches.
- MF-1367. OREGON. Reconnaissance geologic map and mineral resource potential of the Gearhart Mountain Wilderness and Roadless Area (6225), Lake and Klamath counties, Oregon, by G. W. Walker, U.S. Geological Survey, and James Ridenour, U.S. Bureau of Mines. 1982. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 29 by 29 inches. (Accompanied by 4-page text.)

- MF-1368. HAWAII. Structural map of the summit area of Kilauea Volcano, Hawaii, by Patrice de Saint Ours. 1982. Lat  $19^{\circ}20'$  to  $19^{\circ}27'30''$ , long  $155^{\circ}12'30''$  to  $155^{\circ}20'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 24 by 35 inches.
- MF-1369-A. VIRGINIA. Geologic map of the Ramseys Draft Addition, Augusta and Highland counties, Virginia, by F. G. Lesure. 1982. Lat about  $38^{\circ}15'$  to about  $38^{\circ}25'$ , long  $79^{\circ}15'$  to about  $79^{\circ}25'$ . Scale 1:48,000 (1 inch = 4,000 feet). Sheet 32 by 33 inches.
- MF-1369-B. VIRGINIA. Geochemical survey of the Ramseys Draft Addition, Augusta and Highland counties, Virginia, by F. G. Lesure. 1982. Lat  $38^{\circ}15'$  to about  $38^{\circ}25'$ , long  $79^{\circ}15'$  to about  $79^{\circ}25'$ . Scale 1:48,000 (1 inch = 4,000 feet). Sheet 35 by 36 inches.
- MF-1369-C. VIRGINIA. Mineral resource potential map of the Ramseys Draft Addition, Augusta and Highland counties, Virginia, by F. G. Lesure, U.S. Geological Survey, and P. C. Mory, U.S. Bureau of Mines. 1982. Lat  $38^{\circ}15'$  to about  $38^{\circ}25'$ , long  $79^{\circ}15'$  to about  $79^{\circ}25'$ . Scale 1:48,000 (1 inch = 4,000 feet). Sheet 26 by 31 inches. (Accompanied by 8-page text.)
- MF-1370. MONTANA. Geology and mineral resource appraisal of the Square Butte area, Chouteau County, Montana, by M. E. MacLachlan, W. L. Campbell, and M. D. Kleinkopf, U.S. Geological Survey, and C. E. Larson, U.S. Bureau of Mines. 1981. Lat about  $47^{\circ}27'30''$  to  $47^{\circ}30'$ , long about  $110^{\circ}12'30''$  to about  $112^{\circ}17'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 35 by 45 inches.
- MF-1371. CALIFORNIA, NEVADA. Reconnaissance surficial geologic map of the Bridgeport Quadrangle, California and Nevada, by J. C. Dohrenwend, and G. F. Brem. 1982. Lat  $38^{\circ}15'$  to  $38^{\circ}30'$ , long  $119^{\circ}$  to  $119^{\circ}15'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 27 by 28 inches.
- MF-1372. NEVADA. Preliminary surficial geologic map of the Excelsior Mountain area, west-central Nevada, by J. C. Dohrenwend. 1982. Lat  $38^{\circ}$  to  $38^{\circ}30'$ , long  $118^{\circ}$  to  $118^{\circ}30'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 37 by 45 inches.
- MF-1373. NEVADA, CALIFORNIA. Reconnaissance surficial geologic map of the Aurora Quadrangle, Nevada and California, by J. C. Dohrenwend. 1982. Lat  $38^{\circ}15'$  to  $38^{\circ}30'$ , long  $118^{\circ}45'$  to  $119^{\circ}$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 27 by 27 inches.
- MF-1374. NEVADA. Reconnaissance surficial geologic map of the Gabbs-Luning area, west-central Nevada, by J. C. Dohrenwend. 1982. Lat  $38^{\circ}30'$  to  $38^{\circ}45'$ , long  $118^{\circ}$  to  $118^{\circ}30'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 28 by 36 inches.
- MF-1375-A. NEW MEXICO. Geologic map of the El Malpais Instant Study Area and adjacent areas, Valencia County, New Mexico, by C. H. Maxwell. 1981. Lat  $34^{\circ}37'30''$  to  $35^{\circ}03'$ , long  $107^{\circ}45'$  to  $108^{\circ}15'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 38 by 47 inches.
- MF-1375-B. NEW MEXICO. Aeromagnetic map of the El Malpais Instant Study Area and adjacent areas, Valencia County, New Mexico, by C. H. Maxwell. 1981. Lat  $34^{\circ}37'30''$  to  $35^{\circ}03'$ , long  $107^{\circ}45'$  to  $108^{\circ}15'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 34 by 41 inches.
- MF-1376. CALIFORNIA. Map showing the 200-foot thickness contour of surficial deposits and the landward limit of bay mud deposits of San Francisco, California, by W. B. Joyner. 1982. Lat  $37^{\circ}42'30''$  to  $37^{\circ}52'30''$ , long  $122^{\circ}20'$  to about  $122^{\circ}30'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 35 by 39 inches.

- MF-1377-A. MISSOURI. Geologic map of the Hercules Glades Wilderness and adjacent area, Taney County, Missouri, by M. H. Miller, K. C. Thomson, and S. A. Chesson. 1981. Lat  $36^{\circ}37'30''$  to  $36^{\circ}45'$ , long about  $92^{\circ}50'$  to  $93^{\circ}$ . Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 24 by 28 inches.
- MF-1377-B. MISSOURI. Geochemical map of Hercules Glades Wilderness, Taney County, Missouri, by M. H. Miller, and S. A. Chesson. 1982. Lat  $36^{\circ}37'30''$  to  $36^{\circ}45'$ , long about  $92^{\circ}52'30''$  to  $93^{\circ}$ . Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 19 by 22 inches.
- MF-1378. ARIZONA. Reconnaissance geologic map of the Presumido Peak Quadrangle, Arizona, by Gordon Haxel, D. J. May, and R. M. Tosdal. 1982. Lat about  $31^{\circ}$  to  $31^{\circ}45'$ , long  $111^{\circ}30'$  to  $111^{\circ}45'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 26 by 37 inches.
- MF-1379-A. OREGON. Geologic map of the Mount Hood Wilderness, Clackamas and Hood River counties, Oregon, by T. E. Keith, M. H. Beeson, and K. E. Bargar. 1982. Lat  $45^{\circ}15'$  to  $45^{\circ}30'$ , long  $121^{\circ}30'$  to  $122^{\circ}$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 28 by 42 inches.
- MF-1379-B. OREGON. Map showing geothermal investigations in the vicinity of the Mount Hood Wilderness, Clackamas and Hood River counties, Oregon, by J. H. Robison, T. E. Keith, M. H. Beeson, and K. E. Bargar. 1982. Lat  $45^{\circ}15'$  to  $45^{\circ}30'$ , long  $121^{\circ}30'$  to  $122^{\circ}$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 32 by 42 inches.
- MF-1379-C. OREGON. Geochemical map of the Mount Hood Wilderness, Clackamas and Hood River counties, Oregon, by T. E. Keith, K. E. Bargar, and M. H. Beeson. 1982. Lat  $45^{\circ}15'$ , long  $121^{\circ}30'$  to  $122^{\circ}$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 26 by 39 inches.
- MF-1379-D. OREGON. Aeromagnetic and Bouguer gravity maps of the Mount Hood Wilderness, Clackamas and Hood River counties, Oregon, by D. L. Williams, and T. E. Keith. 1982. Lat  $45^{\circ}15'$  to  $45^{\circ}30'$ , long about  $121^{\circ}30'$  to about  $122^{\circ}$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 35 by 52 inches.
- MF-1379-E. OREGON. Map showing mineral and geothermal resource potential of the Mount Hood Wilderness, Clackamas and Hood River counties, Oregon, by T. E. C. Keith, U.S. Geological Survey, and J. D. Causey, U.S. Bureau of Mines. 1982. Lat  $45^{\circ}15'$  to  $45^{\circ}30'$ , long  $121^{\circ}30'$  to  $122^{\circ}$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 28 by 40 inches. (Accompanied by 8-page text.)
- MF-1380-A. WASHINGTON. Geologic map of the Eagle Rock and Glacier Peak Roadless Areas, Snohomish and King counties, Washington, by R. W. Tabor, V. A. Frizzell, Jr., R. S. Yeats, and J. T. Whetten. 1982. Lat about  $47^{\circ}45'$  to  $48^{\circ}07'30''$ , long about  $121^{\circ}15'$  to about  $121^{\circ}30'$ . Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 32 by 47 inches.
- MF-1381-A. OREGON. Geologic map of the Wild Rogue Wilderness, Coos, Curry, and Douglas counties, Oregon, by Floyd Gray, Len Ramp, Barry Moring, Ian Douglas, and James Donahoe. 1982. Lat about  $42^{\circ}35'$  to  $42^{\circ}50'$ , long about  $123^{\circ}50'$  to  $124^{\circ}05'$ . Scale 1:48,000 (1 inch = 4,000 feet). Sheet 34 by 37 inches.
- MF-1382-A. NEVADA, CALIFORNIA. Geologic map of the Walker Lake  $1^{\circ}$  by  $2^{\circ}$  Quadrangle, California and Nevada, by J. H. Stewart, J. E. Carlson, and D. C. Johannesen. 1982. Lat  $38^{\circ}$  to  $39^{\circ}$ , long  $118^{\circ}$  to  $120^{\circ}$ . Scale 1:250,000 (1 inch=about 4 miles). Sheet 45 by 48 inches.

- MF-1382-C. NEVADA, CALIFORNIA. Surficial geologic map of the Walker Lake 1° by 2° Quadrangle, Nevada-California, by J. C. Dohrenwend. 1982. Lat 38° to 39°, long 118° to 120°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 37 by 47 inches.
- MF-1382-D. NEVADA, CALIFORNIA. Map showing late Cenozoic faults in the Walker Lake 1° by 2° Quadrangle, Nevada-California, by J. C. Dohrenwend. 1982. Lat 38° to 39°, long 118° to 120°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 27 by 42 inches.
- MF-1384. CALIFORNIA. Pre-Monterey subcrop and structure contour maps, western San Luis Obispo and Santa Barbara counties, south-central California, by C. A. Hall, Jr., University of California at Los Angeles. 1982. Six sheets. Scale 1:62,500 (1 inch = about 1 mile). Lat 34°30' to 35°30', long 119°52'30" to 121°45'. Sheet 1, 36 by 55 inches; sheet 2, 33 by 45 inches; sheet 3, 42 by 45 inches; sheet 4, 43 by 56 inches; sheets 5 and 6, 28 by 53 inches. (Accompanied by 28-page text.)
- MF-1385. MISSOURI. Geologic map of the Burfordville Quadrangle, Cape Girardeau and Bollinger counties, Missouri, by D. H. Amos. 1982. Lat 37°15' to 37°22'30", long 89°45' to 89°52'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 29 by 33 inches.
- MF-1386. WYOMING. Preliminary geologic map of the Banner Quadrangle, Sheridan and Johnson counties, Wyoming, by E. N. Hinrichs, and W. J. Mapel. 1982. Lat 44°30' to 44°37'30", long 106°45' to 106°52'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 29 by 33 inches.
- MF-1387. WYOMING. Geologic map of the Gillette 30' by 60' Quadrangle, Campbell and Crook counties, Wyoming, by M. C. Reheis. 1982. Lat 44° to 44°30', long 105° to 106°. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 34 by 45 inches.
- MF-1388. TEXAS. Seismicity map of the State of Texas, by B. G. Reagor, C. W. Stover, and S. T. Algermissen. 1982. Two sheets. Scale 1:1,000,000 (1 inch = about 16 miles). Lat about 26° to about 34°, long about 94° to about 106°. Sheet 1, 43 by 53 inches; sheet 2, 21 by 29 inches.
- MF-1389-A. CALIFORNIA. Geologic map of the Dinkey Lakes Roadless Area, Fresno County, California, by F. C. Dodge. 1982. Lat 37° to about 37°20', long 118°50' to 119°10'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 36 by 38 inches.
- MF-1390. NEW MEXICO. Stratigraphic framework and coal correlation of the Upper Cretaceous Fruitland Formation, Bisti-Ah-Shi-Sle-Pah area, San Juan Basin, New Mexico, by R. M. Flores, and M. F. Erpenbeck. 1982. Sheet 30 by 36 inches.
- MF-1391-A. NORTH CAROLINA. Mineral resource potential map of the Lost Cove and Harper Creek Roadless Area, Avery and Caldwell counties, North Carolina, by T. M. Crandall and R. B. Ross, Jr., U.S. Bureau of Mines, and J. W. Whitlow and W. R. Griffiths, U.S. Geological Survey. 1982. Lat about 35°45' to about 36°15', long 81°45' to 81°52'30". Scale 1:48,000 (1 inch = 4,000 feet.) Sheet 36 by 38 inches. (Accompanied by 14-page text.)
- MF-1393. Map showing characteristics of the Cabo Rojo West offshore sand deposit, southwestern Puerto Rico, by J. V. Trumbull, and J. L. Trias. 1982. Lat about 17°55' to about 17°57', long about 67°11' to about 67°16'. Scale 1:20,000 (1 inch = 1,667 feet). Sheet 38 by 49 inches.
- MF-1395-A. CALIFORNIA. Geologic map of the Domeland Wilderness and contiguous roadless area, Kern and Tulare counties, California, by J. R. Bergquist and A. M. Nitkiewicz, with geochronology by R. M. Tosdal. 1982. Lat 35°40' to 36°05', long 118°05' to 118°25'. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 43 by 44 inches.

- MF-1396. CALIFORNIA. Map showing surface ruptures associated with the Mammoth Lakes, California, earthquakes of May 1980, by M. M. Clark, J. C. Yount, P. R. Vaughan, and R. L. Zepeda. 1982. Lat about 37°35' to about 37°40', long about 118°50' to about 118°55'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 36 by 37 inches.
- MF-1397. MASSACHUSETTS. Photographs of the upper Pleistocene section at Sankaty Head cliff, Nantucket Island, Massachusetts, by R. N. Oldale. 1982. Two sheets. Both sheets, 40 by 43 inches.
- MF-1398. COLORADO. Preliminary geologic map of the Sagebrush Hill Quadrangle, Rio Blanco County, Colorado, by J. R. Donnell. 1982. Lat 39°52'30" to 40°, long 108°30' to 108°37'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 30 by 36 inches.
- MF-1399. CALIFORNIA. Map showing sampled radiolarian localities in the western Paleozoic and Triassic belt, Klamath Mountains, California, by W. P. Irwin, D. L. Jones, and C. D. Blome. 1982. Lat about 40°30' to about 42°, long about 122°45' to about 124°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 26 by 40 inches.
- MF-1400-A. NEVADA. Geologic map of the Sugarloaf Roadless Area, Esmeralda County, Nevada, compiled by E. H. McKee. 1982. Lat 37°50' to 38°, long 118°05' to 118°25'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 22 by 32 inches.
- MF-1401. CALIFORNIA. Geologic maps of the Sacramento-San Joaquin Delta, California, by B. F. Atwater. 1982. Envelope 1 of 3. 7 sheets (1-7 of 21). Lat 38°07'30" to 38°30', long 121°22'30" to 121°45'. Scale 1:24,000 (1 inch = 2,000 feet). Sheets include the following areas: Clarksburg, Florin, Liberty Island, Courtland, Bruceville, Rio Vista, and Isleton. Sheets 1-6, 22 by 36 inches; sheet 7, 24 by 36 inches. Envelope 2 of 3. 7 sheets (8-14 of 21). Lat 37°52'30" to 38°15', long 121°15' to 121°52'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheets include the following areas: Brentwood, Lodi South, Terminous, Bouldin Island, Jersey Island, Antioch North, and Thornton. Sheets 22 by 36 inches. Envelope 3 of 3. 7 sheets (15-21 of 21). Lat 37°45' to 38°, long 121°15' to 121°37'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheets include the following areas: Woodward Island, Holt, Stockton West, Clifton Court, Forebay, Union Island, and Lathrop. Sheets 15-20, 22 by 36 inches; sheet 21, 26 by 37 inches. (Accompanied by 1-page explanation.)
- MF-1402. Carolina Trough structure contour maps, by C. K. Paull, and W. P. Dillon. 1982. Two sheets. Lat 31° to 36°, long 73° to 79°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 1, 35 by 49 inches; sheet 2, 29 by 49 inches.
- MF-1404. MONTANA. Reconnaissance geologic map of the Miller Coulee Quadrangle, Valley County, Montana, by R. B. Colton, S. T. Whitaker, and W. C. Ehler. 1982. Lat 48° to 48°15', long 106°45' to 107°. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 24 by 28 inches.
- MF-1405-A. ILLINOIS. Geologic map of the Lusk Creek Roadless Area, Pope County, Illinois, by J. S. Klasner. 1982. Lat about 37°30' to about 37°32'30", long about 88°30' to about 88°32'30". Sheet 27 by 37 inches.
- MF-1407. NEW MEXICO. Reconnaissance geologic map of the Mule Canyon Quadrangle, Rio Arriba County, New Mexico, by Kim Manley, and R. A. Wobus. 1982. Lat 36°37'30" to 36°45', long 106° to 106°07'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 29 by 32 inches.
- MF-1408. NEW MEXICO. Reconnaissance geologic map of the Las Tablas Quadrangle, Rio Arriba County, New Mexico, by Kim Manley, and R. A. Wobus. 1982. Lat 36°30', long 106° to 106°07'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 29 by 38 inches.

- MF-1409. NEW MEXICO. Reconnaissance geologic map of the Burned Mountain Quadrangle, Rio Arriba County, New Mexico, by R. A. Wobus, and Kim Manley. 1982. Lat  $36^{\circ}37'30''$  to  $36^{\circ}45'$ , long  $106^{\circ}07'30''$  to  $106^{\circ}15'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 28 by 33 inches.
- MF-1410. NEVADA. Geologic map and oil shale deposits of the Elko West Quadrangle, Elko County, Nevada, by B. J. Solomon, and S. W. Moore. 1982. Lat  $40^{\circ}45'$  to  $40^{\circ}52'30''$ , long  $115^{\circ}45'$  to  $115^{\circ}52'30''$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 35 by 36 inches.
- MF-1411-A. CALIFORNIA. Geologic map of the Laurel-McGee and Wheeler Ridge Roadless Areas, Inyo and Mono counties, California, compiled by V. A. Langenheim, J. L. Donahoe, and E. H. McKee. 1982. Lat  $37^{\circ}20'$  to  $37^{\circ}40'$ , long  $118^{\circ}35'$  to  $118^{\circ}55'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 30 by 39 inches.
- MF-1413. MONTANA. Geologic map of the Twomile Creek Quadrangle, Richland and Roosevelt counties, Montana, by R. B. Colton. 1982. Lat  $48^{\circ}$  to  $48^{\circ}07'30''$ , long  $104^{\circ}37'30''$  to  $104^{\circ}45'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 24 by 29 inches.
- MF-1414. MONTANA. Geologic map of the Cedar Coulee Quadrangle, Roosevelt and Richland counties, Montana, by R. B. Colton. 1982. Lat  $48^{\circ}$  to  $48^{\circ}07'30''$ , long  $104^{\circ}15'$  to  $104^{\circ}22'30''$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 24 by 29 inches.
- MF-1415-C. GEORGIA, TENNESSEE. Mineral resource potential map of the Cohutta Wilderness and the Hemp Top Roadless Area, northern Georgia and southeastern Tennessee, by J. E. Gair, U.S. Geological Survey, and G. C. Gazdik and M. L. Dunn, Jr., U.S. Bureau of Mines. 1982. Lat  $34^{\circ}50'$  to  $35^{\circ}01'$ , long  $84^{\circ}30'$  to  $84^{\circ}40'$ . Scale 1:48,000 (1 inch = 4,000 feet). Sheet 23 by 29 inches. (Accompanied by 10-page text.)
- MF-1416-A. CALIFORNIA. Geologic map of the Carson-Iceberg and Leavitt Lake Roadless Areas, central Sierra Nevada, California, by W. J. Keith, J. C. Dohrenwend, J. R. Giusso, and D. A. John. 1982. Lat  $38^{\circ}15'$  to  $38^{\circ}40'$ , long  $119^{\circ}30'$  to  $120^{\circ}05'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 40 by 46 inches.
- MF-1417-A. CALIFORNIA. Geologic map of the Mount Raymond Roadless Area, central Sierra Nevada, California, by N. K. Huber. 1982. Scale 1:62,500 (1 inch = about 1 mile). Sheet 18 by 23 inches.
- MF-1418-A. WASHINGTON. Geologic map of the Wonder Mountain Roadless Area, Mason County, Washington, by R. W. Tabor. 1982. Lat about  $47^{\circ}27'30''$  to  $47^{\circ}32'30''$ , long  $123^{\circ}15'$  to  $123^{\circ}30'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 24 by 26 inches.
- MF-1419-A. CALIFORNIA. Geologic map of the Chips Creek and Bucks Lake Roadless Areas, Butte and Plumas counties, California, by M. L. Sorensen, and Henry Pietropaoli. 1982. Lat about  $39^{\circ}50'$  to about  $40^{\circ}05'$ ; long about  $121^{\circ}05'$  to about  $121^{\circ}25'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 27 by 37 inches.
- MF-1420. WASHINGTON. Physiographic diagrams of Mount St. Helens, Washington, showing changes in its summit crater, 1981, by T. R. Alpha, J. M. Morley, Bobbie Myers, and Terry Leighley. 1982. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 33 by 40 inches.
- MF-1421. NEVADA. Geologic map and oil shale deposits of the Elko East Quadrangle, Elko County, Nevada, by B. J. Solomon, and S. W. Moore. 1982. Lat  $40^{\circ}45'$  to  $40^{\circ}52'30''$ , long  $115^{\circ}37'30''$  to  $115^{\circ}45'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 37 by 37 inches.

- MF-1422. CALIFORNIA. Map showing recently active and dormant landslides near La Honda, central Santa Cruz Mountains, California, by G. F. Wieczorek. 1982. Lat about  $37^{\circ}15'$  to about  $37^{\circ}25'$ , long about  $122^{\circ}15'$  to about  $122^{\circ}25'$ . Scale 1:4,800 (1 inch = 400 feet). Sheet 42 by 55 inches.
- MF-1425-A. NEW MEXICO, ARIZONA. Geologic map of Bunk Robinson Peak and Whitmire Canyon Roadless Areas, Coronado National Forest, New Mexico and Arizona, by P. T. Hayes. 1982. Lat  $31^{\circ}20'$  to about  $31^{\circ}35'$ , long about  $108^{\circ}55'$  to about  $109^{\circ}05'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 25 by 30 inches.
- MF-1426-A. CALIFORNIA. Geologic map of the Coyote SE and Table Mountain Roadless Areas, Inyo County, California, by G. S. Elliott, and E. H. McKee. 1982. Lat  $37^{\circ}05'$  to  $37^{\circ}22'$ , long  $118^{\circ}15'$  to  $118^{\circ}40'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 26 by 40 inches.
- MF-1426-A. CALIFORNIA. Geologic map of the Coyote SE and Table Mountain Roadless Areas, Inyo County, California, by G. S. Elliott, and E. H. McKee. 1982. Lat  $37^{\circ}05'$  to  $37^{\circ}22'$ , long  $118^{\circ}15'$  to  $118^{\circ}40'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 26 by 40 inches. (Reprint.)
- MF-1427-A. CALIFORNIA. Geologic map of the Bald Rock and Middle Fork Feather River Roadless Areas, Butte and Plumas counties, California, by M. L. Sorensen, and Henry Pietropaoli. 1982. Lat  $39^{\circ}35'$  to  $39^{\circ}55'$ , long  $120^{\circ}50'$  to about  $120^{\circ}50'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 30 by 44 inches.
- MF-1428. WYOMING. Surficial geologic map of the Reno Junction  $30'$  by  $60'$  quadrangle, Campbell and Weston counties, Wyoming, by M. C. Reheis, and D. A. Coates. 1982. Lat  $43^{\circ}30'$  to  $44^{\circ}$ , long  $105^{\circ}$  to  $106^{\circ}$ . Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 36 by 47 inches.
- MF-1431. NEW MEXICO. Geologic map of the Dorsey Ranch Quadrangle, Grant County, New Mexico, by T. L. Finnell. 1982. Lat  $32^{\circ}52'30''$  to  $33^{\circ}$ , long  $108^{\circ}22'30''$  to  $108^{\circ}30'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 29 by 35 inches.
- MF-1432. NEW MEXICO. Map of erosion potential and sediment sources in the Navajo Mine area, San Juan County, New Mexico, by D. L. Weide. 1982. Lat  $36^{\circ}22'30''$  to  $36^{\circ}37'30''$ , long  $108^{\circ}22'30''$  to  $108^{\circ}37'30''$ . Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 35 by 50 inches.
- MF-1433. MONTANA. Seismic reflection study of Flathead Lake, Montana, by R. J. Wold. 1982. Lat about  $47^{\circ}45'$  to about  $48^{\circ}$ , long about  $114^{\circ}$  to about  $114^{\circ}15'$ . Sheet 34 by 37 inches.
- MF-1434. IDAHO. Geologic map of Mt. Jordan and vicinity, Custer County, Idaho, by Fess Foster. 1982. Sheet 30 by 39 inches.
- MF-1438. WASHINGTON. Distribution and description of geologic units in the Mukilteo Quadrangle, Washington, by J. P. Minard. 1982. Lat  $47^{\circ}52'30''$  to  $48^{\circ}$ , long  $122^{\circ}15'$  to  $122^{\circ}22'30''$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 26 by 34 inches.
- MF-1439. VIRGINIA. Maps showing coal resources of the Big A Mountain Quadrangle, Russell and Buchanan counties, Virginia, by C. R. Meissner, Jr., and S. E. Heermann. 1982. Lat  $37^{\circ}$  to  $37^{\circ}07'30''$ , long  $82^{\circ}$  to  $82^{\circ}07'30''$ . Sheet 41 by 45 inches.
- MF-1440. NEW MEXICO. Geologic map of the Canones Quadrangle, Rio Arriba County, New Mexico, by Kim Manley. 1982. Lat  $36^{\circ}07'30''$  to  $36^{\circ}15'$ , long  $106^{\circ}22'30''$  to  $106^{\circ}30'$ . Scale 1:24,000. Sheet 28 by 31 inches.
- MF-1441. ALASKA. Geology of the Siniktanney Mountain Ophiolite, Howard Pass Quadrangle, Alaska, by S. W. Nelson, and W. H. Nelson. 1982. Scale 1:63,360 (1 inch = 1 mile). Sheet 32 by 50 inches.

- MF-1442-A. PENNSYLVANIA. Geologic map of the Allegheny Front and Hickory Creek Roadless Areas, Warren County, Pennsylvania, by S. P. Schweinfurth, N. L. Hickling, and M. A. Person. 1982. Lat  $41^{\circ}38'$  to  $41^{\circ}50'$ , long  $79^{\circ}13'$  to  $79^{\circ}21'30''$ . Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 34 by 36 inches.
- MF-1443. NEW JERSEY. Detailed bathymetric map of the United States continental slope between Lindenkohl Canyon and Toms Canyon, offshore New Jersey, by J. R. Kirby, J. M. Robb, and J. C. Hampson, Jr. 1982. Lat about  $38^{\circ}50'$  to about  $39^{\circ}05'$ , long about  $72^{\circ}20'$  to about  $73^{\circ}$ . Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 40 by 52 inches.
- MF-1444-A. PENNSYLVANIA. Geologic map of the Clarion River Roadless Area, Elk County, Pennsylvania, by S. P. Schweinfurth, N. L. Hickling, and M. A. Person. 1982. Lat  $41^{\circ}21'30''$  to  $41^{\circ}25'30''$ , long  $78^{\circ}45'$  to  $78^{\circ}51'$ . Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 24 by 34 inches.
- MF-1445. IDAHO. Reconnaissance geologic map of the Ulysses Mountain Quadrangle, Lemhi County, Idaho, by D. A. Lopez. 1982. Lat  $45^{\circ}15'$  to  $45^{\circ}30'$ , long  $114^{\circ}$  to  $114^{\circ}15'$ . Scale 1:48,000 (1 inch = 4,000 feet). Sheet 27 by 30 inches.
- MF-1446. IDAHO, MONTANA. Reconnaissance geologic map of the Gibbonsville Quadrangle, Lemhi County, Idaho, and Beaverhead County, Montana, by D. A. Lopez. 1982. Lat  $45^{\circ}30'$  to  $45^{\circ}37'30''$ , long  $113^{\circ}52'30''$  to  $114^{\circ}$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 29 by 30 inches.
- MF-1449. COLORADO. Interpretation of aerial radiometric data for the Lake City Caldera and vicinity, Hinsdale, San Juan, and Ouray counties, Colorado, by J. A. Pitkin, and J. S. Duval. 1982. Lat about  $37^{\circ}50'$  to  $38^{\circ}05'$ , long  $107^{\circ}15'$  to about  $107^{\circ}40'$ . Sheet 40 by 55 inches.
- MF-1450. NEW MEXICO. Geologic map of the Broke Off Mountain Quadrangle, Rio Arriba County, New Mexico, by Kim Manley. 1982. Lat  $36^{\circ}45'$  to  $36^{\circ}52'30''$ , long  $106^{\circ}07'30''$  to  $106^{\circ}15'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 25 by 28 inches.
- MF-1451. NEW MEXICO, COLORADO. Geologic map of the Bighorn Peak Quadrangle, Rio Arriba County, New Mexico, and Conejos County, Colorado, by Kim Manley. 1982. Lat  $36^{\circ}52'30''$  to  $37^{\circ}$ , long  $106^{\circ}07'30''$  to  $106^{\circ}15'$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 26 by 28 inches.
- MF-1452-A. CALIFORNIA. Geologic map of the Marble Mountain Wilderness, Siskiyou County, California, by M. M. Donato and R. G. Coleman, U.S. Geological Survey, and C. G. Barnes and M. A. Kays, University of Oregon, and W. G. Ernst, University of California. 1982. Lat about  $41^{\circ}20'$  to  $41^{\circ}45'$ , long  $123^{\circ}$  to  $123^{\circ}30'$ . Scale 1:48,000 (1 inch = 4,000 feet). Sheet 42 by 58 inches.
- MF-1454. UTAH. Maps showing an aerial radiometric and magnetic survey of the Deer Flat area, San Juan County, Utah, by Eric Fellenberg, International Atomic Energy Agency trainee from the Comision Chilena de Energia Nuclear, Santiago, Chile, and J. S. Duval and J. A. Pitkin, U.S. Geological Survey. 1982. Two sheets. Lat about  $37^{\circ}38'$  to about  $37^{\circ}40'$ , long about  $110^{\circ}$  to  $110^{\circ}04'$ . Scale 1:62,500 (1 inch = about 1 mile). Sheet 1, 40 by 47 inches; sheet 2 40 by 42 inches.
- MF-1455. CALIFORNIA. Map showing relationship of historic to prehistoric landslides, Pacific Palisades area, City of Los Angeles, California, by J. T. McGill. 1982. Lat about  $34^{\circ}$  to about  $34^{\circ}05'$ , long about  $118^{\circ}30'$  to about  $118^{\circ}40'$ . Scale 1:4,800 (1 inch = 400 feet). Sheet 34 by 55 inches.



- MF-1458-A. NEVADA. Geologic map of the Muddy Mountains Wilderness Study Area, Clark County, Nevada, by R. G. Bohannon. 1982. Lat about 36°15' to about 36°20', long about 114°35' to about 114°50'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 33 by 42 inches.
- MF-1458-B. NEVADA. Geochemical map of the Muddy Mountains Wilderness Study Area, Clark County, Nevada, by R. G. Bohannon, and J. D. Vine. 1982. Lat about 36°15' to about 36°20', long about 114°35' to about 114°50'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 30 by 38 inches.
- MF-1458-C. NEVADA. Mineral resource potential map of the Muddy Mountains Wilderness Study Area, Clark County, Nevada, by R. G. Bohannon, U.S. Geological Survey, and A. M. Leszczyowski, L. E. Esparza, and C. M. Rumsey, U.S. Bureau of Mines. 1982. Lat about 36°15' to about 36°20', long about 114°35' to about 114°50'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 20 by 43 inches. (Accompanied by 11-page text.)
- MF-1459. MISSOURI. Geologic map of the Millersville Quadrangle, Cape Girardeau and Bollinger counties, Missouri, by D. H. Amos. 1982. Lat 37°22'30" to 37°30', long 89°45' to 89°52'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 30 by 35 inches.
- MF-1460. ALASKA. Free air gravity map, Norton Basin, Alaska, by M. A. Fisher, R. J. Childs, and H. W. Magistrale. 1982. Lat about 63° to about 64°30', long 162°30' to 169°. Scale 1:250,000 (1 inch = about 4 miles.) Sheet 38 by 56 inches.
- MF-1463-A. ARIZONA, NEW MEXICO. Geophysical surveys of the lower San Francisco Wilderness Study Area and contiguous roadless area, Greenlee County, Arizona, and Catron and Grant counties, New Mexico, by R. A. Martin. 1982. Lat 33°10' to 33°17'30", long 108°52'30" to 109°15'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 24 by 37 inches.
- MF-1464-A. NEW MEXICO. Geologic map of the Manzano Wilderness, Valencia and Torrance counties, New Mexico, by C. H. Maxwell, and R. A. Wobus. 1982. Lat about 34°35' to about 34°47'30", long about 106°22' to about 106°30'. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 28 by 35 inches.
- MF-1464-B. NEW MEXICO. Geochemical and geophysical maps of the Manzano Wilderness, Valencia and Torrance counties, New Mexico, by C. H. Maxwell, and R. A. Wobus. 1982. Lat about 34°35' to about 34°47'30", long about 106°22'30" to about 106°30'. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 28 by 50 inches.
- MF-1466-A. IDAHO. Geologic map of the Jerry Peak Wilderness Study Area, Custer County, Idaho, by D. H. McIntyre. 1982. Lat 44° to 44°15', long 114° to 114°22'30". Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 26 by 47 inches.
- MF-1475-D. ARIZONA, UTAH. Mineral resource potential map of the Vermilion Cliffs-Paria Canyon Instant Study Area, Coconino County, Arizona, and Kane County, Utah, by A. L. Bush, U.S. Geological Survey, and M. E. Lane, U.S. Bureau of Mines. 1982. Lat about 36°45' to about 37°, long about 111°45' to 112°15'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 37 by 46 inches. (Accompanied by 10-page text.)
- MF-1477. UTAH. Surficial geologic map along part of the Wasatch Front, Great Salt Lake and Utah Lake valleys, Utah, compiled by R. D. Miller. 1982. Lat 39°52'30" to 40°30', long 111°30' to 112°. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 32 by 34 inches. (Accompanied by 14-page text.)
- MF-1478-A. CALIFORNIA. Mineral resource potential map of the Whitewater Wilderness Study Area, Riverside and San Bernardino counties, California, by J. C. Matti, B. F. Cox, C. M. Obi, R. E. Powell, M. E. Hinkle, and Andrew Griscom, U.S. Geological Survey, and E. L. McHugh, U.S. Bureau of Mines. 1982. Lat about 33°57'30" to about 34°02'30", long 116°37'30" to 116°45'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 36 by 48 inches. (Accompanied by 6-page text.)

MF-1490. MONTANA. Maps showing geology and outcrops of part of the Virginia City and Alder quadrangles, Madison County, Montana, by K. L. Wier. 1982. Two sheets. Lat  $45^{\circ}51'$  to about  $45^{\circ}20'$ , long about  $111^{\circ}55'$  to about  $112^{\circ}02'30''$ . Scales 1:12,000 (1 inch = 1,000 feet) and 1:4,750 (1 inch = about 396 feet). Sheet 1, 38 by 51 inches; sheet 2, 29 by 33 inches.

MF-1493-A. CALIFORNIA. Mineral resource potential map of the Bighorn Mountains Wilderness Study Area (CDCA-217), San Bernardino County, California, by J. C. Matti, B. F. Cox, E. A. Rodriguez, C. M. Obi, R. E. Powell, M. E. Hinkle, and Andrew Griscom, U.S. Geological Survey, and Charles Sabine and G. J. Cwick, U.S. Bureau of Mines. 1982. Lat about  $34^{\circ}12'30''$  to  $34^{\circ}22'30''$ , long about  $116^{\circ}27'30''$  to about  $116^{\circ}45'$ . Scale 1:48,000 (1 inch = 4,000 feet). Sheet 40 by 45 inches. (Accompanied by 10-page text.)

#### SPECIAL GEOLOGIC MAPS

ALASKA. Coal fields of the United States; sheet 2, Alaska, by F. F. Barnes. 1961. Lat about  $54^{\circ}$  to  $68^{\circ}$ , long about  $116^{\circ}$  to about  $176^{\circ}$ . Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 28 by 35 inches. (Available unfolded only.) (Reprint.)

#### HYDROLOGIC INVESTIGATIONS ATLASES

HA-0219. WYOMING. Ground-water reconnaissance of the Great Divide and Washakie basins and some adjacent areas, southwestern Wyoming, by G. E. Welder, and L. J. McGreevy. 1966. Three sheets. Lat  $41^{\circ}$  to about  $42^{\circ}15'$ , long  $107^{\circ}$  to about  $109^{\circ}15'$ . Scale 1:250,000 (1 inch = about 4 miles). Sheet 1, 37 by 45 inches; sheet 2, 36 by 44 inches, Hydrologic map showing generalized piezometric contours in the Great Divide Basin, specific conductance of ground water, and spring and well locations; sheet 3, 15 by 28 inches, Generalized section of the geologic formations. (Accompanied by 10-page text). (Reprint.)

HA-0644. NORTH DAKOTA, SOUTH DAKOTA. Geohydrology of the Standing Rock Indian Reservation, North and South Dakota, by Lewis Howells. 1982. 5 sheets. Lat about  $45^{\circ}30'$  to about  $46^{\circ}15'$ , long about  $100^{\circ}30'$  to  $102^{\circ}$ . Scales 1:250,000 (1 inch = about 4 miles) and 1:500,000 (1 inch = about 8 miles). Sheet 1, 36 by 45 inches; sheets 2 and 5, 41 by 47 inches; sheet 3, 34 by 48 inches; sheet 4, 27 by 43 inches.

HA-0645. CALIFORNIA. Dissolved-solids concentrations of ground water in the Sacramento Valley, California, by R. P. Fogelman. 1982. Lat  $38^{\circ}05'$  to  $40^{\circ}20'$ , long  $120^{\circ}45'$  to  $122^{\circ}45'$ . Sheet 30 by 44 inches.

HA-0653. WISCONSIN. Flood of July 1-5, 1978, on the Kickapoo River, southwestern Wisconsin, by P. E. Hughes, J. S. Hannuksela, and W. J. Danchuk. 1981. Seven sheets. Lat about  $43^{\circ}$  to about  $46^{\circ}$ , long about  $87^{\circ}$  to about  $92^{\circ}$ . Scale 1:500,000 (1 inch = about 8 miles). Sheets 25 by 37 inches.

HA-0656. TEXAS. Flood of May 24-25, 1981, in the Austin, Texas, metropolitan area, by B. C. Massey, W. E. Reeves, and W. A. Lear. 1982. Two sheets. Both sheets 32 by 35 inches.

#### HYDROLOGIC UNIT MAPS

IOWA. Hydrologic unit map. 1974. State of Iowa. Lat about  $41^{\circ}$  to about  $43^{\circ}$ , long about  $90^{\circ}$  to about  $96^{\circ}$ . Scale 1:500,000 (1 inch = about 8 miles). Sheet 33 by 46 inches. (Reprint.)

- MONTANA.** Hydrologic unit map. 1974. State of Montana. Two sheets. Scale 1:500,000 (1 inch = about 8 miles). Lat about 45° to about 49°, long about 104° to about 115°. Sheets 40 by 46 inches. (Reprint.)
- UTAH.** Hydrologic unit map. 1974. State of Utah. Lat 37° to 42°, long 109° to 114°. Scale 1:500,000 (1 inch = about 8 miles). Sheet 39 by 50 inches. (Reprint.)
- VIRGINIA.** Hydrologic unit map. 1974. State of Virginia. Lat about 37° to about 39°, long about 76° to about 83°. Scale 1:500,000 (1 inch = about 8 miles). Sheet 29 by 62 inches. (Reprint.)
- WASHINGTON.** Hydrologic unit map. 1974. State of Washington. Lat about 46° to about 49°, long about 117° to about 124°. Scale 1:500,000 (1 inch = about 8 miles). Sheet 38 by 51 inches. (Reprint.)
- WYOMING.** Hydrologic unit map. 1974. State of Wyoming. Lat about 41° to about 45°, long about 104° to about 111°. Scale 1:500,000 (1 inch = about 8 miles). Sheet 40 by 56 inches. (Reprint.)

#### LAND USE AND LAND COVER MAPS

The U.S. Geological Survey is now publishing its land use and land cover maps in a new two-color series. L-series maps have land use and land cover information printed in black over planimetric base map information such as transportation features, streams and lakes, locational grids, and place names in another color.

These maps have been available previously through the Survey's open-file procedure. Along with their associated maps (political units, census county subdivision, hydrologic units, and Federal land ownership), reproducible copies of the land use and land cover maps will continue to be available in black-line format, on a variety of materials, from the open file.

- L-0086. ALABAMA.** Land use and land cover, 1972-76, Andalusia, Alabama. 1982. Lat 31° to 32°, long 86° to 88°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 35 inches.
- L-0087. GEORGIA, ALABAMA.** Land use and land cover, 1974-75, Atlanta, Georgia; Alabama. 1982. Lat 33° to 34°, long 84° to 86°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 35 inches.
- L-0088. ALABAMA.** Land use and land cover, 1972-75, Birmingham, Alabama. 1982. Lat 33° to 34°, long 86° to 88°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 35 inches.
- L-0090. ALABAMA, TENNESSEE.** Land use and land cover, 1972-76, Alabama; Tennessee. 1982. Lat 34° to 35°, long 86° to 88°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 33 inches.
- L-0091. ALABAMA, GEORGIA.** Land use and land cover, 1973, Phenix City, Alabama; Georgia. 1982. Lat 32° to 33°, long 84° to 86°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 35 inches.
- L-0096. MISSOURI.** Land use and land cover, 1972-73, Jefferson City, Missouri. 1982. Lat 38° to 39°, long 92° to 94°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 33 inches.
- L-0097. MISSOURI.** Land use and land cover, 1972-75, Moberly, Missouri. 1982. Lat 39° to 40°, long 92° to 94°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 33 inches.
- L-0100. MISSOURI.** Land use and land cover, 1972-73, Springfield, Missouri. 1982. Lat 37° to 38°, long 92° to 94°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 24 by 34 inches.

- L-0101. MISSOURI, ILLINOIS. Land use and land cover, 1972-76, St. Louis, Missouri; Illinois. 1982. Lat 38° to 39°, long 90° to 92°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 33 inches.
- L-0106. NORTH CAROLINA. Land use and land cover, 1972, Raleigh, North Carolina. 1982. Lat 35° to 36°, long 78° to 80°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 34 inches.
- L-0111. MARYLAND, WEST VIRGINIA, PENNSYLVANIA, VIRGINIA. Land use and land cover, 1973, Cumberland, Maryland; West Virginia; Pennsylvania; Virginia. 1982. Lat 39° to 40°, long 78° to 80°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 23 by 33 inches.
- L-0123. CALIFORNIA. Land use and land cover, 1973, Sacramento, California. 1982. Lat 38° to 39°, long 120° to 122°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 24 by 34 inches.
- L-0165. CALIFORNIA. Land use and land cover, 1974-76, San Jose, California. 1981. Lat 37° to 37°30', long 121° to 122°. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 29 by 43 inches.

# INDEX

[This is not a detailed index of Geological Survey publications issued in 1982, but a listing derived for the most part from titles and divided into a general index, including subjects and areas, and an author index]

## ABBREVIATIONS USED

<p>B Bulletin          C Circular          GP- Geophysical Investigations Map          GQ- Geologic Quadrangle Map          HA- Hydrologic Investigations Atlas          I- Miscellaneous Investigations Series          L- Land Use and Land Cover Map          MF- Miscellaneous Field Studies Map          OC- Oil and Gas Investigations Chart</p>		<p>OF Open-File Report          OP Articles Published in Outside Journals/Books          P Professional Paper          p. Page number of publications having no series designation          PB-, ADA Report available only through the National Technical Information Service          TWI Techniques of Water-Resources Investigations          W Water-Supply Paper</p>
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## GENERAL

**absolute age** *see also* geochronology; isotopes

**absolute age—applications**

*changes of level:* Uranium-series age of the Eel Point terrace, San Clemente Island, California

OP-806

*neotectonics:* Regional neotectonic analysis of the Sonoran Desert, Arizona and California

OF 82-0057

*sedimentation:* Geochemical evidence for modern sediment accumulation on the continental shelf off southern New England

OP-116

**absolute age—catalogs**

*K/Ar:* Index to K-Ar age determinations for the State of Oregon

OF 82-0596

**absolute age—dates**

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