Studies on Idaho's Geology and Minerals Released by the U.S. Bureau of Mines and the U.S. Geological Survey for 1983

Melinda Nichols

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Idaho Geological Survey
University of Idaho
Moscow, Idaho 83844

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Sources for this compilation were the monthly lists of new publications from the U.S. Bureau of Mines and the U.S. Geological Survey from January 1983 through July 1984.

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[1]Idaho Geological Survey, University of Idaho, Moscow, Idaho 83843.

U.S. BUREAU OF MINES

INFORMATION CIRCULARS

IC 8926. Minerals availability commodity directory on phosphate, by Dale R. Spangenberg, Edward F. Carey, and Paul M. Takosky. 1983. 678 p.

IC 8929. Economic evaluation of borehole and conventional mining systems in phosphate deposits, by Joseph A. Hrabik and Douglas J. Godesky. 1983. 34 p.

IC 8937. Phosphate rock availability--domestic: Minerals availability program appraisal, by R. J. Fantel, D. E. Sullivan, and G. R. Peterson. 1983. 57 p.

IC 8960. Microseismic instrumentation developments: A tape-triggering system and energy analyzer, by Bernard J. Steblay. 1983. 12 p.

MINERAL COMMODITY PROFILE

MCP. Phosphate rock, by W. F. Stowasser. 1983. 18 p.

MCP. Silver, by Robert G. Reese, Jr. 1983. 11 p.

MINERAL LAND ASSESSMENT REPORTS

MLA 22-83. Mineral investigation of the Selkirks RARE II areas (Nos. A, B, C, D-1125), Boundary County, Idaho, by John R. Benham. 1983. 8 p.

MLA 46-83. Mineral investigation of the Palisades RARE II areas (Nos. W4613 and E4613), Bonneville and Teton Counties, Idaho: Lincoln and Teton Counties, Wyoming, by John R. Benham. 1983. 11 p.

MLA 59-83. Mineral investigation of the White Cloud-Boulder RARE II area (No. 4551), Custer and Blaine Counties, Idaho, by Fredrick L. Johnson. 1983. 15 p.

MLA 87-83. Mines and prospects in the Seafoam mining district, Custer County, Idaho, by Nathan T. Lowe, Spencee L. Willett, and David A. Benjamin. 1983. 26 p.

MLA 88-83. Mines and prospects in the Loon Creek mining district, Custer County, Idaho, by James Ridenour, Spencee L. Willett, Michael S. Miller, Nathan T. Lowe, Andrew M. Leszcykowski, and David A. Benjamin. 1983. 21 p.

MLA 89-83. Mines and prospects in the Sheep Mountain mining district, Custer County, Idaho, by Andrew M. Leszcykowski, Nathan T. Lowe, James Ridenour, and Spencee L. Willett. 1983. 19 p.

OPEN-FILE REPORTS (available from NTIS)

OFR 150-83. Ground control in multi-level room and pillar mines, by William G. Pariseau. June 1983. 122 p.

OFR 180-83. Modeling of solution mining systems for deep mineral resources recovery, by Milton E. Wadsworth and H. Y. Sohn. May 1983. 110 p.

OFR 182-83. Leaching of uranium and fluorine from quenched slag, by C. M. Wai and K. A. Prisbrey. January 1982. 28 p.

SPECIAL PUBLICATIONS

SP 2-83. The domestic supply of critical minerals, by the White House Staff and the Bureau of Mines. 1983. 49 p.

U.S. GEOLOGICAL SURVEY

BULLETINS

B 1536. Idaho. Paleozoic rocks in Black Pine Mountains, Cassia County, Idaho, by J. F. Smith, Jr. 1983. 36 p.

CIRCULARS

C 0866. Geothermal resources of southern Idaho, by D. R. Mabey. 1983. 24 p.

C 902-A-P. Petroleum potential of wilderness lands in the western United States, by B. M. Miller, editor...F, Petroleum potential of wilderness lands in Idaho, by C. A. Sandberg, p. F1-F6...N, Petroleum potential of wilderness lands in Wyoming-Utah-Idaho thrust belt, by R. B. Powers, p. N1-N14.

MISCELLANEOUS FIELD STUDIES MAPS

MF-1354-B. Map showing results of audio-magnetotelluric studies in the northwestern part of the Wallace 1^{o} by 2^{o} quadrangle, Montana and Idaho, by C. L. Long. 1983. Scale 1:250,000.

MF-1447-A. Geologic map of the Selkirk roadless area, Boundary County, Idaho, by F. K. Miller. 1983. Scale 1:48,000.

MF-1447-B. Geochemical map of the Selkirk roadless area, Boundary County, Idaho, by F. K. Miller. 1983. Scale 1:48,000.

MF-1447-C. Mineral resource potential map of the Selkirk roadless area, Boundary County, Idaho, by F. K. Miller, U.S. Geological Survey, and J. R. Benham, U.S. Bureau of Mines. 1983. Scale 1:48,000.

MF-1448-A. Geologic and geochemical map of the Upper Priest roadless area, Bonner County, Idaho, by F. K. Miller. 1983. Scale 1:48,000.

MF-1448-B. Mineral resource potential map of the Upper Priest roadless area, Bonner County, Idaho, by F. K. Miller, U.S. Geological Survey, and D. K. Denton, Jr., U.S. Bureau of Mines. 1983. Scale 1:48,000.

MF-1462-A. Geologic and geophysical maps of the Great Rift instant study area, Blaine, Butte, Minidoka, and Power Counties, Idaho, by M. A. Kuntz, D. R. Mabey, D. E. Champion, W. D. Stanley, R. H. Lefebvre, E. C. Spiker, L. A. McBroome, and H. R. Covington. 1983. Two sheets, scale 1:125,000.

MF-1462-B. Mineral resource potential map of the Great Rift instant study area, Blaine, Butte, Minidoka, and Power Counties, Idaho, by J. Ridenour and R. B. Stotelmeyer, U.S. Bureau of Mines, and D. R. Mabey, M. A. Kuntz, D. E. Champion, R. H. Lefebvre, and W. D. Stanley, U.S. Geological Survey. 1983. Scale 1:125,000.

MF-1466-B. Idaho. Geophysical map of the Jerry Peak wilderness study area, Custer County, Idaho, by T. G. Hildenbrand, and D. R. Mabey. 1983. Scale 1:50,000.

MF-1495-A. Mineral resource potential map of the Selway-Bitterroot Wilderness, Idaho County, Idaho, and Missoula and Ravalli Counties, Montana, by M. I. Toth and B. W. Coxe, U.S. Geological Survey, and N. T. Zilka and M. M. Hamilton, U.S. Bureau of Mines. 1983. Scale 1:125,000.

MF-1495-B. Reconnaissance geologic map of the Selway-Bitterroot Wilderness, Idaho County, Idaho, and Missoula and Ravalli Counties, Montana, by M. I. Toth. 1983. Scale 1:125,000.

MF-1495-C. Geochemical maps of the Selway-Bitterroot Wilderness, Idaho County, Idaho, and Missoula and Ravalli Counties, Montana, by B. W. Coxe and M. I. Toth. 1983. Two sheets, scale 1:125,000.

MF-1500-A. Geologic map of the Ten Mile west roadless area, Boise and Elmore Counties, Idaho, by T. H. Kiilsgaard. 1983. Scale 1:62,500.

MF-1500-B. Geochemical map of the Ten Mile west roadless area, Boise and Elmore Counties, Idaho, by T. H. Kiilsgaard. 1983. Scale 1:62,500.

MF-1557-A. Mineral resource potential maps of the Blue Joint Wilderness study area, Ravalli County, Montana, and the Blue Joint roadless area, Lemhi County, Idaho, by Karen Lund and W. M. Rehn, U.S. Geological Survey, and J. R. Benham, U.S. Bureau of Mines. 1983. Scale 1:100,000.

MF-1557-B. Geologic map of the Blue Joint wilderness study area, Ravalli County, Montana, and the Blue Joint roadless area, Lemhi County, Idaho, by Karen Lund, W. M. Rhen, and C. D. Holloway. 1983. Scale 1:50,000.

MF-1566-A. Mineral resource potential map of the Mount Naomi roadless area, Cache County, Utah, and Franklin County, Idaho, by J. H. Dover, U.S. Geological Survey, and P. R. Bigsby, U.S. Bureau of Mines. 1983. Scale 1:100,000.

MF-1576-A. Mineral resource potential map of the special mining management zone--Clear Creek, Lemhi County, Idaho, by Karen Lund and K. V. Evans, U.S. Geological Survey, and L. E. Esparza, U.S. Bureau of Mines. 1983. Scale 1:50,000.

MF-1580. Idaho. Mineral resource potential, geologic and geochemical maps of part of the White Cloud-Boulder roadless areas, Custer County, Idaho, by F. S. Fisher, G. D. May, and D. H. McIntyre, U.S. Geological Survey and F. L. Johnson, U.S. Bureau of Mines. 1983. Scale 1:62,500.

MF-1601-A. Montana, Idaho. Mineral resource potential map of the Italian Peak and Italian Peak Middle roadless areas, Beaverhead County, Montana, and Clark and Lemhi Counties, Idaho, by Betty Skipp, J. C. Antweiler, and D. M. Kulik, U.S. Geological Survey and R. H. Lambeth and R. T. Mayerle, U.S. Bureau of Mines. 1983. Scale 1:62,500.

MF-1643. Geologic map of the North Hansel Mountains, Idaho and Utah, by R. W. Allmendinger. 1983. Scale 1:24,000.

MINERAL INVESTIGATIONS RESOURCE MAPS

MR-0071. Maps showing selected geology and phosphate resources of the Upper Valley quadrangle, Caribou County, Idaho, by P. D. Derkey, Pamela Palmer, and H. J. Wotruba, Idaho Bureau of Mines and Geology. 1983.

MISCELLANEOUS INVESTIGATIONS SERIES (MAPS)

I-1091-E. Map showing distribution, composition, and age of late Cenozoic volcanic centers in Idaho, western Montana, west-central South Dakota, and northwestern Wyoming, by R. G. Luedke and R. L. Smith. 1983. Two sheets. Scale 1:1,000,000.

I-1319. Geologic map and sections of the central Pioneer Mountains, Blaine and Custer Counties, central Idaho, by J. H. Dover. 1983. Two sheets, scale 1:48,000.

I-1372. Surficial geologic map of the eastern Snake River Plain and adjacent areas, 111° to 115° west, Idaho and Wyoming, by W. E. Scott. 1982 (1983). Two sheets, scale 1:250,000.

I-1450. Geologic map of the Cotterel Mountains and the northern Raft River Valley, Cassia County, Idaho, by K. L. Pierce, H. R. Covington, P. L. Williams, and D. H. McIntyre. 1983. Scale 1:48,000.

OPEN-FILE REPORTS

OF 83-0039. Compilation of ground-water quality data for selected wells in Elmore, Owyhee, Ada, and Canyon Counties, Idaho, 1945 through 1982, by D. J. Parliman. 156 p.

OF 83-0040. Activities in Idaho, status of projects, fiscal years 1982-83, compiled by L. K. Channel. 48 p.

OF 83-0051. Principal facts and complete Bouguer gravity anomaly map for the Dillon 1° x 2° quadrangle, Montana and Idaho, by H. E. Kaufmann, S. B. Sorensen, and K. J. O'Neill. 76 p., 1 over-size sheet, scale 1:250,000.

OF 83-0054. Statistical tables, sample locality maps, and an explanation of data sets for samples from the Selway-Bitterroot Wilderness, Idaho County, Idaho, and Missoula and Ravalli Counties, Montana, by B. W. Coxe and M. I. Toth. 96 p., 2 over-size sheets, scale 1:125,000.

OF 83-0151. Preliminary report on geology, geochemical exploration, and biogeochemical exploration of the Red Mountain stockwork, Yellow Pine district, Valley County, Idaho, by B. F. Leonard and J. A. Erdman. 52 p.

OF 83-0225. Hydrographs of water levels in observation wells in Idaho, 1971-82, by H. W. Young. 288 p.

OF 83-0236. Geochemical sample locality map for the White Cloud-Boulder roadless area, Custer County, Idaho, by F. S. Fisher, G. D. May, and D. H. McIntyre. 1 over-size sheet, scale 1:62,500.

OF 83-0245. Analytical data on the Meade Peak Phosphatic Shale Member of the Phosphoria Formation in the central Wooley Range, southeastern Idaho, by R. D. Hovland. 31 p.

OF 83-0305. Montana, Idaho. Distribution of Cadmium in samples of nonmagnetic heavy-mineral concentrate and in samples of stream sediment from the Wallace 1° x 2° quadrangle, Montana and Idaho, by D. L. Leach, D. M. Hopkins, J. A. Domenico, and H. E. Dawson. 6 p., 1 over-size sheet, scale 1:250,000.

OF 83-0306. Montana, Idaho. Distributions of total antimony in samples of nonmagnetic heavy-mineral concentrate and of total and partially extractable antimony in samples of stream sediment from the Wallace 1° x 2° quadrangle, Montana and Idaho, by D. L. Leach, D. M. Hopkins, J. A. Domenico, and H. E. Dawson. 7 p., 2 over-size sheets, scale 1:250,000.

OF 83-0307. Montana, Idaho. Distributions of total copper in samples of nonmagnetic heavy-mineral concentrate and of total and partially extractable copper in samples of stream sediment from the Wallace 1° x 2° quadrangle, Montana and Idaho, by D. L. Leach, D. M. Hopkins, J. A. Domenico, and H. E. Dawson. 8 p., 3 over-size sheets, scale 1:250,000.

OF 83-0308. Montana, Idaho. Distributions of total zinc in samples of nonmagnetic heavy-mineral concentrate and of total and partially extractable zinc in samples of stream sediment from the Wallace 1° x 2° quadrangle, Montana and Idaho, by D. L. Leach, D. M. Hopkins, J. A. Domenico, and R. J. Goldfarb. 7 p., 3 over-size sheets, scale 1:250,000.

OF 83-0309. Montana, Idaho. Distribution of total silver in samples of nonmagnetic heavy-mineral concentrate and of total and partially extractable silver in samples of stream sediment from the Wallace 1° x 2° quadrangle, Montana and Idaho, by D. L. Leach, D. M. Hopkins, J. A. Domenico, and R. J. Goldfarb. 7 p., 3 over-size sheets, scale 1:250,000.

OF 83-0329. Geologic map of part of the Sunbeam mine area, Custer County, Idaho, by D. H. McIntyre and K. M. Johnson. 1 over-size sheet, scale 1:1,200.

OF 83-0338. Oxygen and strontium isotopic studies of basaltic lavas from the Snake River Plain, Idaho, by W. P. Leeman and J. F. Whelan. 35 p.

OF 83-0397. Mineral resource potential of the Hells Canyon Wilderness and contiguous roadless areas, Wallowa County, Oregon, and Nez Perce and Adams Counties, Idaho, by G. C. Simmons, and J. L. Gualtieri, U.S. Geological Survey, and T. J. Close, F. E. Federspiel, A. M. Leszcykowski, and P. C. Hyndman, U.S. Bureau of Mines. 22 p.

OF 83-0412. Schlumberger soundings on the Snake River Plain near Nampa, Idaho, by R. J. Bisdorf. 57 p.

OF 83-0431-A. Idaho--basic data for thermal springs and wells as recorded in GEOTHERM, Part A, by J. D. Bliss. 64 p.

OF 83-0431-B. Idaho--basic data for thermal springs and wells as recorded in GEOTHERM, Part B, by J. D. Bliss. 509 p.

OF 83-0477. Reconnaissance drilling during 1980 in the Goose Creek coal field, Cassia County, Idaho, by R. T. Hildebrand. 28 p.

OF 83-0523. Geologic map of the Challis 1^{o} x 2^{o} quadrangle, Idaho, by F. S. Fisher, D. H. McIntyre, and K. M. Johnson. 41 p., 2 over-size sheets, scale 1:250,000.

OF 83-0599. Preliminary reconnaissance geologic map of the Copper Mountain quadrangle, Lemhi County, Idaho, by G. F. Embree, R. D. Hoggan, and E. J. William. 10 p., 1 over-size sheet, scale 1:24,000.

OF 83-0601. Preliminary geologic map of the Gypsy Peak area, Pend Oreille County, Washington, and Bonner and Boundary Counties, Idaho, by F. K. Miller. 15 p., 1 over-size sheet, scale 1:48,000.

OF 83-0602. Preliminary geologic map of the Smith Peak area, Bonner and Boundary Counties, Idaho, by F. K. Miller. 11 p., 1 over-size sheet, scale 1:48,000.

OF 83-0670. Geochemical characteristics of the metalliferous Salmon River sequence, central Idaho, by F. S. Fisher and G. D. May. 30 p., 1 over-size sheet, scale 1:24,000.

OF 83-0705. Analyses of samples from the Lava Creek mining district, Blaine and Butte Counties, Idaho, by B. M. Hillier, D. J. Grimes, Robert Vaughan, Belinda Arbogast, and Christine McDougal. 12 p., 1 over-size sheet, scale 1:24,000.

OF 83-0720. Preliminary map of the resource areas in the Basin and Range Province of Idaho, by George Wong. 8 p., 1 over-size sheet, scale 1:24,000.

OF 83-0724. Guidebook, 1983 Friends of the Pleistocene field trip, glacial sequence near McCall, Idaho, by S. M. Colman and K. L. Pierce. 31 p.

OF 83-0836. Abstracts of the symposium on the geology and mineral deposits of the Challis 1^{o} x 2^{o} quadrangle, Idaho, by F. S. Fisher and K. M. Johnson. 18 p.

OF 83-0837. Aeromagnetic map of the Gospel Hump area, Idaho. 1 over-size sheet, scale 1:62,500.

PROFESSIONAL PAPERS

P 1031. Medicine Lodge thrust system, east-central Idaho and southwest Montana, by E. T. Ruppel. 1978 (1983). 23 p.

P 1198. Melanges and their bearing on late Mesozoic and Tertiary subduction and interplate translation at the west edge of the North American plate, by K. F. Fox, Jr., 1983. 40 p.

REPORTS AVAILABLE ONLY THROUGH NTIS

PB 83-255 059. Spectrographic, chemical, and radio-activity analyses of rock, stream sediment, and soil samples from the Hell's Canyon study area, Wallowa County, Oregon, and Idaho and Adams Counties, Idaho, by S. K. McDanal, S. J. Sutley, J. G. Viets, and G. C. Simmons. 1983. 1 tape.

WATER-RESOURCE INVESTIGATIONS

WRI 83-4062. Idaho. Ground-water quality in the western Snake River basin, Swann Falls to Glenns Ferry, Idaho, by D. J. Parliman. 1983. 94 p.

WRI 83-4245. Idaho. Ground-water-level trends in Idaho, 1971-82, by H. W. Young and R. F. Norvitch. 1984. 32 p., 1 over-size sheet, scale 1:100,000.

OTHER

Geologic map index of Idaho, compiled by W. L. McIntosh and M. F. Eister. 1975. Free on application. (Reprint)

USGS STUDIES ON IDAHO PRIOR TO 1983

The following study was not included in previous IGS Technical Report (Open-File Report) 81-4.

1980

I-1127. Geologic map of the Preston 1^{o} x 2^{o} quadrangle, southeastern Idaho and western Wyoming, by S. S. Oriel and L. B. Platt. 1980. Scale 1:250,000.