

Studies on Idaho's Geology and
Minerals Released by the U.S. Bureau
of Mines and the U.S. Geological
Survey for 1981

Serena Smith

Technical Report 82-10
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Idaho Geological Survey
University of Idaho
Moscow, Idaho 83844

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by
Serena Smith¹

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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 1981 through July 1982.

U. S. BUREAU OF MINES

OPEN-FILE REPORTS (available from NTIS)

- OFR 1-81. Improved ore recovery from phosphate open-pits in the Phosphoria Formation, by W. A. Young, G. M. Pugh, G. D. Vandersluis, and V. Lim. March 1980. 314 p., 50 figs. (PB 81-167512).
- OFR 51-81. Preconditioning an entire stope block for rock burst control, by Wilson Blake. May 1980. 32 p., 15 figs. Data collected from Hecla Mining Company's Star mine. (PB 81-214983).
- OFR 52-81. Wallrock reactions to mining beyond a preconditioned zone at the Star mine, Burke, Idaho, by Wilson Blake. April 1980. 45 p. (PB 81-214355).
- OFR 93-81. Development and evaluation of polymer modified portland cement concrete lagging for mine openings, by R. D. Eash and H. W. Kirchner. October 1, 1980. 127 p., 38 figs. Data collected from Bunker Hill mine. (PB 81-223331).
- OFR 161(2)-81. Control of water pollution from surface mining operations, v. II, by D. R. Jessey, J. M. Stangl, A. H. Hirsch, D. H. Dike, G. R. Brown, and E. W. Schroeder. January 31, 1981. 275 p., 57 figs. Contains detailed reports on mines located in Cobalt and Fernwood, Idaho, and DeLamar, Idaho-Oregon, among others. (PB 82-139312).

MINERAL INDUSTRY SURVEY

The Mineral Industry of Idaho in 1981 (Annual, Preliminary). 2 p.

MINERAL LAND ASSESSMENT REPORT

MLA 20-81. Mineral resource potential of the Upper Priest Lake RARE II Area (A1-123), Bonner County, Idaho, by D. K. Denton, Jr. 1981. 9 p., 1 fig.

PREPRINTS

The Mineral Industry of Idaho, by D. W. Lockard and E. H. Bennett. 12 p., 1 fig. (This preprint is a chapter from the *Minerals Yearbook, 1977.*)

The Mineral Industry of Idaho, by D. W. Lockard and E. H. Bennett. 13 p., 1 fig. (This preprint is a chapter from the *Minerals Yearbook, 1978-79.*)

REPORT OF INVESTIGATIONS

RI 8534. Direct preparation of phosphoric acid from intermediate-grade western phosphatic shale, by P. C. Good, T. N. Goff, and C. B. Daellenbach. 1981. 12 p., 2 figs. Data collected in southeastern Idaho.

SPECIAL PUBLICATION

SP 2-81. Federal land status in the Overthrust Belt of Idaho, Montana, Utah, and Wyoming, 1979, by O. L. Schumacher, A. W. Berg, F. V. Carrillo, R. A. Pense, and R. B. Davis. 1980. 22 p., 6 figs.

U. S. GEOLOGICAL SURVEY

BULLETIN

B 1467. Mineral resources of the Scotchman Peak Wilderness Study Area, Lincoln and Sanders Counties, Montana, and Bonner County, Idaho. 1981. Pages A1-A14, B1-B5, C1-C24, D1-D26; 2 plates in pocket.

CIRCULAR

- C 0838. Guides to some volcanic terranes in Washington, Idaho, Oregon, and northern California, by D. A. Johnston and Julie Donnelly-Nolan, editors. 1981. 189 p.

GEOLOGIC QUADRANGLE MAP

- GQ-1543. Geologic map of the Gilmore quadrangle, Lemhi and Custer Counties, Idaho, by E. T. Ruppel and D. A. Lopez. 1981. Scale 1:62,500. Sheet 30 by 41 inches.

MISCELLANEOUS FIELD STUDIES MAPS

- MF-1342-B. Mineral resource potential map of the Centennial Mountains Wilderness Study Area and contiguous areas, Idaho and Montana, by I. J. Witkind and L. C. Huff, U. S. Geological Survey, and James Ridenour, M. D. Conyac, and R. B. McCulloch, U. S. Bureau of Mines. 1981. Scale 1:50,000. Sheet 35 by 58 inches. (Accompanied by 7-page text.)
- MF-1354-A. Generalized geologic map of the Wallace 1° x 2° quadrangle, Montana and Idaho, by J. E. Harrison, A. B. Griggs, and J. D. Wells. 1981. Scale 1:250,000. Sheet 24 by 34 inches.

MISCELLANEOUS INVESTIGATIONS SERIES (MAPS)

- I-0768. Geologic map of the Spokane quadrangle, Washington, Idaho, and Montana, by A. B. Griggs. 1973. Scale 1:250,000. Sheet 27 by 46 inches. (Reprint).
- I-1256. Geologic map of Owyhee County, Idaho, west of longitude 116°, by E. B. Ekren, D. H. McIntyre, E. H. Bennett, and H. E. Malde. 1981. Scale 1:125,000. Sheet 1, 31 by 34 inches; sheet 2, 40 by 45 inches.

OPEN-FILE REPORTS

- OF 81-0142. Radionuclide concentrations in streams in the upper Blackfoot River basin, southeastern Idaho, by W. H. Low. 22 p., 1 over-size sheet.

- OF 81-0178. Principal facts for gravity stations in part of the Wallace 1° x 2° quadrangle, Idaho and Montana, by M. R. Brickey, Viki Bankey, and M. D. Kleinkopf. 35 p.
- OF 81-0196. Analytical results for 60 water samples from Mount Naomi Wilderness Study Area, Utah-Idaho, by J. B. McHugh. 18 p.
- OF 81-0463. Proposed correlation of an allochthonous quartzite sequence in the Albion Mountains, Idaho, with Proterozoic Z and Lower Cambrian strata of the Pilot Range, Utah and Nevada, by D. M. Miller. 38 p.
- OF 81-0507. Surficial geologic map of the eastern Snake River Plain and adjacent areas, 111°-115° west, Idaho and Wyoming, by W. E. Scott. 3 over-size sheets, scale 1:250,000.
- OF 81-0526. Hydrologic conditions at the Idaho National Engineering Laboratory, Idaho, emphasis: 1974-1978, by J. T. Barraclough, B. D. Lewis, and R. G. Jensen. 122 p.
- OF 81-0569. Geologic factors pertinent to the proposed A. J. Wiley Hydroelectric Project No. 2845, Bliss, Idaho, by H. E. Malde. 76 p., 4 over-size sheets.
- OF 81-0652. Principal facts for gravity stations in the Challis, Idaho, 1° x 2° quadrangle, by M. W. Webring and D. R. Maybe. 25 p., 1 over-size sheet, scale 1:250,000.
- OF 81-0689. Plan of study for the regional aquifer-system analysis of the Snake River Plain, Idaho and eastern Oregon, by G. F. Lindholm. 23 p.
- OF 81-0797. Reconnaissance geologic map of the Columbia River Basalt Group, northern Oregon and western Idaho, by D. A. Swanson, J. L. Anderson, V. E. Camp, P. R. Hooper, W. H. Taubeneck, and T. L. Wright. 35 p., 6 over-size sheets, scale 1:250,000.

- OF 81-0841. Radioelement and radiogenic heat distribution in drill holes Mahogany 5-4-1 and Murphy 7-4-1, Idaho, by C. M. Bunker and C. A. Bush. 14 p.
- OF 81-0909. Method of estimating flood-frequency parameters for streams in Idaho, by L. C. Kjelstrom and R. L. Moffatt. 101 p., 4 over-size sheets.
- OF 81-0930. Aeromagnetic map of the Ten Mile West area, Idaho. 1 over-size sheet, scale 1:62,500.
- OF 81-0933. Aeromagnetic map of the Jerry Peak area, Idaho. 1 over-size sheet, scale 1:62,500.
- OF 81-0934. Aeromagnetic map of the Mt. Naomi area, Idaho and Utah. 1 over-size sheet, scale 1:62,500.
- OF 81-1011. Ground-water quality in east-central Idaho valleys, by D. J. Parlman. 62 p., 3 over-size sheets.
- OF 81-1153. Audio-magnetotelluric data log and station-location map for part of the Wallace 1° x 2° quadrangle, Idaho and Montana, by Carl Long, Charles Tippens, and Vernon Lewis. 29 p.
- OF 81-1162. Aeromagnetic map of the Italian Peak area, Idaho and Montana. 1 over-size sheet, scale 1:62,500.
- OF 81-1163. Aeromagnetic map of the Sublette Range area, Idaho and Wyoming. 1 over-size sheet, scale 1:62,500.
- OF 81-1256. Permit requirements for energy and other natural resources for the State of Idaho, by Dearborn Associates. 96 p.

- OF 81-1344. Selected Mo and W assays from stream-sediment samples and panned heavy-mineral concentrates, Challis, Idaho 2° topographic quadrangle, by J. E. Callahan, E. F. Cooley, and G. J. Neuerburg. 13 p.
- OF 81-1354. Some stratigraphic sections of the Madison Group in the Overthrust Belt of western Wyoming and southeastern Idaho, by W. J. Sando and J. T. Dutro, Jr. 100 p.
- OF 81-1357. Leasable mineral and waterpower land classification map of the Soda Springs 30' by 1° quadrangle, Idaho and Wyoming, D. A. DeCicco, compiler. 1 over-size sheet, scale 1:100,000. (This map is a revision of the NW quarter of the previously published Preston 1° x 2° map (scale 1:250,000), Open-File Report 78-723.)

PROFESSIONAL PAPERS

- P-1142. Jurassic (Bathonian and Callovian) ammonites in eastern Oregon and western Idaho, by R. W. Imlay. 1981. 24 p., 5 plates.
- P-1226-A-C. Petrologic and structural studies in the northwestern Sierra Nevada, California. 1981. 2 plates in pocket. Part C, Extension of Sierra Nevada-Klamath suture system into eastern Oregon and western Idaho, by Anna Hietanan. 11 p.

REPORTS AVAILABLE ONLY THROUGH NTIS

- PB-81 153 736. Using channel geometry to estimate flood flows at ungaged sites in Idaho, by W. A. Harenberg. 1980 (1981). 57 p. (Water Resources Investigations 80-32). May be obtained from the National Technical Information Service, U. S. Department of Commerce, Springfield, VA 22161.