

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

GEOLOGIC BIBLIOGRAPHY OF  
THE GULKANA QUADRANGLE, ALASKA

By

W. Michael Wade, Warren J. Nokleberg, Oscar J. Ferrians, Jr.,  
and John R. Williams

Open-File Report 86-332

This report is preliminary and has not been  
edited or reviewed for conformity with  
Geological Survey standards

1986



## BIBLIOGRAPHY

- Abercrombie, W. R., Captain, 1899, Report on explorations in Alaska: in Glenn, E. F., and Abercrombie, W. R., 1899, Reports of explorations in the Territory of Alaska (Cooks Inlet, Susitna, Copper and Tanana Rivers), 1899, made under the direction of the Secretary of War: Washington, Government Printing Office, War Department, Adjustment General's Office, no. 25, p. 295-351.
- Alaska Department of Mines, 1946, Report of the Commissioner of Mines for the biennium ended December 31, 1946: Juneau, Alaska, 50 p.
- Alaska Division of Geological and Geophysical Surveys, 1973, Aeromagnetic map, northeast corner of Gulkana quadrangle, Alaska: Alaska Division of Geological and Geophysical Surveys Open-File Map AOF-12, 1 sheet, scale 1:250,000.
- Alaska Division of Geological and Geophysical Surveys, 1974, Annual Report 1973: Anchorage, Alaska, 59 p.
- Alaska Division of Geological and Geophysical Surveys, 1976, Biennial report, 1974-75: College, Alaska, 53 p.
- Alaska Division of Geological Survey, 1970, Report for the year 1970: College, Alaska, 86 p.
- Alaska Division of Mines and Geology, 1968, Report for the year 1968: College, Alaska, 67 p.
- Alaska Division of Mines and Minerals, 1961, Report for the year-1961: Juneau, Alaska, 67 p.
- Alaska Division of Mines and Minerals, 1965, Report for the year 1965: Juneau, Alaska, 99 p.
- Alaska Geological Society, 1970, Stratigraphic correlation section, Copper River Basin, Alaska: Anchorage, Alaska Geological Society Stratigraphic Committee, 1969-1970, 3 sections, vertical scale 1 inch = 400 feet.
- Alaskan Geology Branch, U.S. Geological Survey, 1972, The status of mineral resource information on the major land withdrawals of the Alaska Native Claims Settlement Act of 1971: U.S. Geological Survey Open-File Report 546, 164 p.
- Alaska Glacial Map Committee of the U.S. Geological Survey, 1965, Map showing extent of glaciations in Alaska: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-415, 1 sheet, scale 1:2,500,000.
- Alaska Railroad Commission, 1913, Railway routes in Alaska: U.S. House of Representatives, 62nd Congress, 3rd Session, Document No. 1346, 172 p.

- Andreasen, G. E., Dempsey, W. J., Henderson, J. R., and Gilbert, F. P., 1958, Aeromagnetic map of the Copper River Basin, Alaska: U.S. Geological Survey Geophysical Investigations Map GP-156, scale 1:125,000.
- Andreasen, G. E., Grantz, Arthur, Zietz, Isidore, and Barnes, D. F., 1964, Geologic interpretation of magnetic and gravity data in the Copper River Basin, Alaska: U.S. Geological Survey Professional Paper 316-H, 135-153 p.
- Barnes, D. F., 1967, Four preliminary gravity maps of parts of Alaska: U.S. Geological Survey Open-File Report 67-10, 5 p.
- Barnes, D. F., 1977, Preliminary Bouguer gravity map of central Alaska: U.S. Geological Survey Open-File Map 77-168-C, 1 sheet, scale 1:1,000,000.
- Barnes, D. F., 1977, Gravity map of the eastern part of southern Alaska: U.S. Geological Survey Open-File Map 77-169-C, 1 sheet, scale 1:1,000,000.
- Beikman, H. M., 1974, Preliminary geologic map of the southeast quadrant of Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-612, 2 sheets, scale 1:1,000,000.
- Beikman, H. M., Holloway, C. D., and MacKevett, E. M., Jr., 1977, Generalized geologic map of the eastern part of southern Alaska: U.S. Geological Survey Open-File Report 77-169-B, 1 sheet, scale 1:1,000,000.
- Benson, C. S., 1968, Glaciological studies on Mount Wrangell, Alaska, 1961: Arctic, v. 21, no. 3, p. 127-152.
- Benson, C. S., and Motyka, R. J., 1976, Preliminary results of research at the active summit of Mount Wrangell, Alaska [abs.]: EOS (American Geophysical Union Transactions), v. 57, no. 2, p. 88.
- Benson, C. S., and Motyka, R. J., 1977, Glacier-volcano interactions on Mount Wrangell, Alaska, in Annual report 1977-1978: Fairbanks, University of Alaska Geophysical Institute, p. 114-115.
- Benson, C. S., and Motyka, R. J., 1979, Glacier-volcano interactions on Mount Wrangell, Alaska, in Annual report 1977-1978: Fairbanks, University of Alaska Geophysical Institute, p. 1-25.
- Berg, H. C., and Cobb, E. H., 1967, Metalliferous lode deposits of Alaska: U.S. Geological Survey Bulletin 1246, 254 p.
- Black, R.F., 1958, Copper River plateau, in Williams, Howell, ed., Landscapes of Alaska: Berkeley and Los Angeles, University of California Press, p. 34-37.

- Dobrovolsky, Ernest, Schmoll, H. R., and Yehle, L. A., 1969, Geologic environmental factors related to TAPS (Trans-Alaska Pipeline System) from Valdez to Fairbanks, Alaska: U.S. Geological Survey Open-File Report 69-76, 1 sheet.
- Doyle, P. F., 1977, Streamflow and channel erosion along the TAPS route, in Blean, K. M., ed., The United States Geological Survey in Alaska: accomplishments during 1976: U.S. Geological Survey Circular 751-B, p. B7.
- Doyle, P. F., and Childers, J. M., 1977, Channel erosion surveys along TAPS route, Alaska, 1976: U.S. Geological Survey Open-File Report 77-170, 93 p.
- Eakins, G. R., Jones, B. K., and Forbes, R. B., 1977, Investigation of Alaska's uranium potential: Alaska Division of Geologic and Geophysical Surveys Open-File Report 109, 202 p.
- Eberlein, G. D., Gassaway, J. S., and Beikman, H. M., 1977, Preliminary geologic map of central Alaska: U.S. Geological Survey Open-File Map 77-168A, 1 sheet, scale 1:1,000,000.
- Emery, P. A., Jones, S. H., and Glass, R. L., 1985, Water resources of the Copper River Basin, Alaska: U.S. Geological Survey Hydrologic Investigations Atlas HA-686, 3 sheets, scales 1:2,000,000 and others.
- Emmel, K. S., and Coonrad, P. L., 1982, Geological literature on the Copper River basin and middle Tanana River basin, Alaska: Alaska Division of Geological and Geophysical Surveys Special Report 30, 11 p.
- Emmett, W. W., 1972, The hydraulic geometry of some Alaskan streams south of the Yukon River: U.S. Geological Survey Open-File Report 72-108, 102 p.
- Ferrians, O. J., Jr., 1963a, Till-like glaciolacustrine deposits in the Copper River basin, Alaska [abs.]: Geological Society of America Special Paper 73, p. 151.
- Ferrians, O. J., Jr., 1963b, Glaciolacustrine diamicton deposits in the Copper River basin, Alaska, in Short papers in geology and hydrology 1963: U.S. Geological Survey Professional Paper 475-C, p. C121-C125.
- Ferrians, O. J., Jr., 1965, Permafrost map of Alaska: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-445, scale 1:2,500,000.
- Ferrians, O. J., Jr., 1966, Effects of the earthquake of March 27, 1964, in the Copper River basin area, Alaska: U.S. Geological Survey Professional Paper 543-E, E1-E28.
- Ferrians, O. J., Jr., 1971a, Effects of the earthquake of March 27, 1964, in the Copper River basin area, Alaska [abs.], in The great Alaska earthquake of 1964 (geology): National Academy of Science Publication 1601, p. 282-283.

- Bottge, R. G., 1975, Impact of a natural gas pipeline on mineral and energy development in Alaska: U.S. Bureau of Mines Open-File Report 20-75, 177 p. plus 101 maps. (Also available as National Technical Information Service PB 240 638/AS).
- Brice, James, 1971, Measurement of lateral erosion at proposed river crossing sites of the Alaska pipeline: U.S. Geological Survey Open-File Report 539, 39 p.
- Brooks, A. H., 1902, The coal resources of Alaska: U.S. Geological Survey 22nd Annual Report, pt. 3, p. 515-571.
- Brooks, A. H., 1906, The geography and geology of Alaska; a summary of existing knowledge, with a section on climate, by Cleveland Abbe, Jr., and a topographic map and description thereof, by R. U. Goode: U.S. Geological Survey Professional Paper 45, 327 p., 1 plate.
- Burns, L. E., 1982, Gravity and aeromagnetic modelling of a large gabbroic body near the Border Ranges fault, southern Alaska: U.S. Geological Survey Open-File Report 82-460, 66 p. 3 plates, scale 1:250,000, 3 sheets.
- Capps, S. R., 1910, Glaciation on the north side of the Wrangell Mountains: Journal of Geology, v. 18, p. 33-57.
- Capps, S. R., 1912, Glaciations of the Alaska Range: Journal of Geology, v. 20, p. 415-437.
- Capps, S. R., 1932, Glaciation in Alaska, in Shorter contributions to general geology 1931: U.S. Geological Survey Professional Paper 170, p. 1-8.
- Capps, S. R., 1940, Geology of the Alaska Railroad region: U.S. Geological Survey Bulletin 907, 201 p.
- Carter, Claire, ed., 1974, United States Geological Survey Alaska Program, 1974: U.S. Geological Survey Circular 700, 63 p.
- Cederstrom, D. J., 1952, Summary of ground-water development in Alaska, 1950: U.S. Geological Survey Circular 169, 37 p.
- Chapin, Theodore, 1918, The Nelchina-Susitna region, Alaska: U.S. Geological Survey Bulletin 668, 67 p.
- Childers, J. M., 1975, Channel erosion surveys along southern segment of the TAPS route, Alaska, 1972 and 1973: U.S. Geological Survey Open-File Report (basic data), 57 p.
- Childers, J. M., Nauman, J. W., Kernodle, D. R., and Doyle, P. F., 1978, Water resources along the TAPS route, Alaska, 1970-1974: U.S. Geological Survey Open-File Report 78-137, 136 p.
- Churkin, Michael, Jr., 1973, Paleozoic and Precambrian rocks of Alaska and their role in its structural evolution: U.S. Geological Survey Professional Paper 740, 64 p.

- Cobb, E. H., 1973, Placer deposits of Alaska: U.S. Geological Survey Bulletin 1374, 213 p.
- Cobb, E. H., 1977, Placer deposits map of central Alaska: U.S. Geological Survey Open-File Report 77-168B, 64 p. plus map, scale 1:1,000,000.
- Cobb, E. H., 1979, Summary of references to mineral occurrences (other than mineral fuels and construction materials) in the Gulkana quadrangle, Alaska: U.S. Geological Survey Open-File Report 79-1247, 36 p.
- Cobb, E. H., and Kachadoorian, Reuben, 1961, Index of metallic and nonmetallic mineral deposits of Alaska compiled from published reports of Federal and State agencies through 1959: U.S. Geological Survey Bulletin 1139, 363 p.
- Connor, C. L., 1982, Pollen evidence for a mid-Wisconsin interstadial event in south-central Alaskan glaciolacustrine sediments [abs.]: Program and abstracts, American Quaternary Association Biennial Conference, 7th, Seattle, University of Washington, June 1982, p. 84.
- Conner, C. L., 1983, Late Pleistocene paleoenvironmental history of the Copper River Basin, south-central Alaska, in Thorson, R. M., and Hamilton, T. D., eds., Glaciation in Alaska, extended abstracts from a workshop: University of Alaska Museum Occasional Paper 2, p. 30-34.
- Connor, C. L., 1984 Late Quaternary pollen record from the Copper River Basin, south-central Alaska [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 276.
- Connor, C. L., 1984, Late Quaternary glaciolacustrine and vegetation history of the Copper River Basin, south-central Alaska: Missoula, University of Montana, May 1984, thesis submitted in partial fulfillment of the requirements for PhD degree in geology, 81 p., 7 apps., 1 plate, scale 1:1,000,000.
- Dadisman, S. V., 1980, Radiometric ages of rocks in south-central Alaska and western Yukon Territory: U.S. Geological Survey Open-File Report 80-183, 80 p.
- Decker, John, and Karl, S. M., 1977, Preliminary aeromagnetic map of central Alaska: U.S. Geological Survey Open-File Report 77-168-E, 1 sheet, scale 1:1,000,000.
- Decker, John, and Karl, S. M., 1977, Preliminary aeromagnetic map of the eastern part of southern Alaska: U.S. Geological Survey Open-File Report 77-169-E, 1 sheet, scale 1:1,000,000.
- Dickenson, K. A., and Campbell, J. A., 1978, Epigenetic mineralization and areas favorable for uranium exploration in Tertiary continental sedimentary rock in south-central Alaska - a preliminary report: U.S. Geological Survey Open-File Report 78-757, 13 p.

- Ferrians, O. J., Jr., 1971b, Preliminary engineering geologic maps of the proposed Trans-Alaska pipeline route, Gulkana quadrangle: U.S. Geological Survey Open-File Report 71-102, 2 sheets, scale 1:125,000.
- Ferrians, O. J., Jr., 1984, Pleistocene glacial history of the northeastern Copper River Basin, Alaska [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 282.
- Ferrians, O. J., Jr., Kachadoorian, Reuben, and Greene, G.W., 1969, Permafrost and related engineering problems in Alaska: U.S. Geological Survey Professional Paper 678, 37 p.
- Ferrians, O. J., Jr., and Nichols, D. R., 1965, Resume of Quaternary geology of the Copper River basin, in Guidebook for Field Conference F, central and south central Alaska: International Association for Quaternary Research Congress, 7th, Lincoln, Nebraska, 1965, p. 93-114.
- Ferrians, O. J., Jr., Nichols, D. R., and Williams, J. R., 1983, Copper River Basin, in Pewe, T. L., and Reger, R. D., eds., Richardson and Glenn Highways, Alaska, guidebook to permafrost and Quaternary geology: Alaska Division of Geological and Geophysical Surveys Guidebook 1, p. 137-175.
- Ferrians, O. J., Jr., Nichols, D. R., and Schmoll, H. R., 1958, Pleistocene volcanic mudflow in the Copper River basin, Alaska [abs.]: Geological Society of America Bulletin, v. 69, no. 12, pt. 2, p. 1563.
- Ferrians, O. J., Jr., and Schmoll, H. R., 1957, Extensive proglacial lake of Wisconsin age in the Copper River basin, Alaska [abs.]: Geological Society of America Bulletin, v. 68, no. 12, pt. 2, p. 1726.
- Fogleman, K. T., Stephens, C. D., Lahr, J. C., Helton, S. M., and Allan, M. A., 1978, Catalog of earthquakes in southern Alaska, October-December 1977: U.S. Geological Survey Open-File Report 78-1097, 28 p. Forbes, R. B., Carden, J. R., and Zdepski, J. M., 1977, The origin of low-level airborne radiometric anomalies in the Copper River basin region: U.S. Department of Energy Report Number GJBX-62(77), 57 p.
- Furst, F. I., 1968, The reconnaissance petrology of andesites from the Mount Wrangell caldera, Alaska: Fairbanks, University of Alaska M.S. thesis, 83 p.
- Galloway, J. P., 1984, Bibliography of published radiocarbon dates for Alaska: U.S. Geological Survey Open-File Report 84-21, 42 p.
- Gates, G. O., Grantz, Arthur, and Patton, W. W., Jr., 1968, Geology and natural gas and oil resources of Alaska in Natural Gases of North America: American Association of Petroleum Geologists Memoir 9, p. 3-48.
- Gatto, L. W., Merry, C. J., McKim, H. L., and Lawson, D. E., 1980, Environmental analysis of the upper Susitna River basin using landsat imagery: U.S. Army Cold Regions Research and Engineering Laboratory Report 80-4, 41 p.

- Grantz, Arthur, 1953, Preliminary report on the geology of the Nelchina area, Alaska: U.S. Geological Survey Open-File Report 53-79, 2 p., maps and sections.
- Grantz, Arthur, 1956, Possible origin of the placer gold deposits of the Nelchina area, Alaska [abs.]: Geological Society of America Bulletin, v. 67, no. 12, pt. 2, p. 1807.
- Grantz, Arthur, Jones, D. L., and Lanphere, M. A., 1966, Stratigraphy, paleontology and isotopic ages of upper Mesozoic rocks in the southwestern Wrangell Mountains, Alaska, in Geological Survey research 1966: U.S. Geological Survey Professional Paper 550-C, p. C39-C47.
- Grantz, Arthur, White, D. C., Whitehead, H. C., and Tagg, A. R., 1962, Saline springs, Copper River Lowland, Alaska: American Association of Petroleum Geologists Bulletin, v. 46, no. 11, p. 1890-2002.
- Hamilton, T. D., and Thorson, R. M., 1982, The Cordilleran ice sheet in Alaska, in Porter, S. C., ed., Late Pleistocene environments of the United States: University of Minnesota Press, Minneapolis, chapter 2, p. 38-52.
- Hansen, W. R., Eckel, E. B., Schaem, W. E., Lyle, R. E., George, Warren, and Chance, Genie, 1966, The Alaska earthquake, March 27, 1964: Field investigations and reconstruction effort: U.S. Geological Survey Professional Paper 541, 111 p.
- Ives, P. C., Levin, Betsy, Robinson, R. D., and Rubin, Meyer, 1964, U.S. Geological Survey radiocarbon dates VII: Radiocarbon, v. 6, p. 37-76.
- Jones, D. L., 1963, Upper Cretaceous (Campanian and Maestrichtian) ammonites from southern Alaska: U.S. Geological Survey Professional Paper 432, 53 p.
- Jones, D. L., 1967, Cretaceous ammonites from the lower part of the Matanuska Formation, southern Alaska, with a stratigraphic summary, by Arthur Grantz: U.S. Geological Survey Professional Paper 547, 49 p.
- Karlstrom, T. N. V., and others, 1964, Surficial deposits of Alaska: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-357, 2 sheets, scale 1:1,584,000.
- Lahr, J. C., and Stephens, C. D., 1980, Eastern Gulf of Alaska seismicity: Quarterly report to the National Oceanic and Atmospheric Administration for April 1, 1980 through June 30, 1980: U.S. Geological Survey Open-File Report 80-943, 8 p.
- Lamke, R. D., 1972, Floods in the summer of 1971 in south-central Alaska: U.S. Geological Survey Open-File Report 542, 88 p.
- Levin, Betsy, Ives, P. C., Oman, C. L., and Rubin, Meyer, 1965: U.S. Geological Survey Radiocarbon dates VIII: Radiocarbon, v. 7, p. 372-398.

- Loeffler, R. M., and Childers, J. M., 1978, Channel erosion surveys along the TAPS route, Alaska 1977: U.S. Geological Survey Open-File Report 78-611, 90 p.
- MacKevett, E. M., Jr., and Holloway, C. D., 1977, Map showing metalliferous and selected nonmetalliferous mineral deposits in the eastern part of southern Alaska: U.S. Geological Survey Open-File Map 77-169A, 1 sheet and 99 p. tabular material, scale 1:1,000,000.
- Mackevett, E. M., Jr., Singer, D. A., and Holloway, C. D., 1978, Maps and tables describing metalliferous mineral resource potential of southern Alaska: U.S. Geological Survey Open-File Report 78-1-E, 45 p. plus maps, scale 1:1,000,000.
- Martin, G. C., 1920, The Alaskan mining industry in 1918: U.S. Geological Survey Bulletin 712, p. 20.
- Mendenhall, W. C., 1900, A reconnaissance from Resurrection Bay to the Tanana River, Alaska, in 1898: U.S. Geological Survey 20th Annual Report, pt. 7, p. 265-340.
- Mendenhall, W. C., 1905, Geology of the central Copper River region, Alaska: U.S. Geological Survey Professional Paper 41, 133 p.
- Mendenhall, W. C., and Schrader, F. C., 1903, The mineral resources of the Mount Wrangell district, Alaska: U.S. Geological Survey Professional Paper 15, 71 p.
- Miller, D. J., Payne, T. G., and Gryc, George, 1959, Geology of possible petroleum provinces in Alaska, with an annotated bibliography by E. H. Cobb: U.S. Geological Survey Bulletin 1094, 131 p.
- Miller, T. P., and Smith, R. L., 1976, Ash flows associated with Wrangell Volcano, in Cobb, E. H., ed., The United States Geological Survey in Alaska: Accomplishments during 1975: U.S. Geological Survey Circular 733, p. 52.
- Moffit, F. H., 1912, Headwater regions of Gulkana and Susitna Rivers, Alaska, with accounts of the Valdez Creek and Chistochina placer districts: U.S. Geological Survey Bulletin 498, 82 p.
- Moffit, F. H., 1932, The Slana district, upper Copper River region: U.S. Geological Survey Bulletin 824, p. 111-124.
- Moffit, F. H., 1936, Upper Copper and Tanana Rivers: U.S. Geological Survey Bulletin 868-C, p. 135-143.
- Moffit, F. H., 1937, Recent mineral developments in the Copper River region: U.S. Geological Survey Bulletin 880-B, p. 97-109.
- Moffit, F. H., 1938, Geology of the Chitina Valley and adjacent area, Alaska: U.S. Geological Survey Bulletin 894, 137 p.

- Moffit, F. H., 1938, Geology of the Slana-Tok district, Alaska: U.S. Geological Survey Bulletin 904, 54 p.
- Moffit, F. H., 1944, Mining in the northern Copper River region, Alaska: U.S. Geological Survey Bulletin 943-B, p. 25-47.
- Moffit, F. H., 1954, Geology of the eastern part of the Alaska Range and adjacent area: U.S. Geological Survey Bulletin 989-D, p. 63-218.
- Mukherjee, N. R., and Mark Anthony, L., 1957, Geochemical prospecting: University of Alaska, School of Mines Bulletin 3, 81 p.
- Mulligan, J. J., 1974, Mineral resources of the trans-Alaska pipeline corridor: U.S. Bureau of Mines Information Circular 8626, 24 p.
- Nauman, J. W., and Kernodle, D. R., 1973, Field water-quality information along the proposed trans-Alaska pipeline corridor, September 1970 through September 1972: U.S. Geological Survey Open-File Report 582, 22 p.
- Nauman, J. W., and Kernodle, D. R., 1974, Aquatic organisms from selected sites along the proposed trans-Alaska pipeline corridor, September 1970 to September 1972: U.S. Geological Survey Open-File Report 74, 23 p.
- Nauman, J. W., and Kernodle, D. R., 1977, Aquatic organisms from selected sites along the trans-Alaska pipeline corridor, September 1970 to September 1972: U.S. Geological Survey Open-File Report 77-634, 55 p.
- Nelson, A. E., West, W. S., and Matzko, J. J., 1954, Reconnaissance for radioactive deposits in eastern Alaska, 1952: U.S. Geological Survey Circular 348, 21 p.
- Nichols, D. R., 1956, Permafrost and ground-water conditions in the Glennallen area, Alaska: U.S. Geological Survey Open-File Report 56-91, 18 p.
- Nichols, D. R., 1960, Slump structures in Pleistocene lake sediments, Copper River Basin, Alaska, *in* Short papers in the geologic sciences 1960: U.S. Geological Survey Professional Paper 400-B, p. B353-B354.
- Nichols, D. R., 1963, Origin of the course of the Copper River, Alaska [abs.]: Geological Society of America Special Paper 73, p. 210.
- Nichols, D. R., 1965, Glacial history of the Copper River Basin [abs.]: International Association for Quaternary Research Congress, 7th, Boulder, 1965, Abstract volume, p. 360.
- Nichols, D. R., 1966, Permafrost in the Recent Epoch, *in* International Conference on Permafrost, Lafayette, Ind., 1963, Proceedings: National Academy of Sciences, Washington D. C., National Research Council Publication 1287, p. 172-175.
- Nichols, D. R., 1984, Quaternary events in the southeastern Copper River Basin [abs.]: Geological Society of America Abstracts with Programs, v. 16, p. 325.

- Nichols, D. R., and Watson, J. R., Jr., 1955, Preliminary report on engineering permafrost studies in the Glennallen Area, Alaska [abs.]: Geological Society of America Bulletin, v. 66, no. 12, pt. 2, p. 1706.
- Nichols, D. R., and Yehle, L. A., 1961a, Analyses of gas and water from two mineral springs in the Copper River Basin, Alaska in Geological Survey research 1961: U.S. Geological Survey Professional Paper 424-D, p. D191-D194.
- Nichols, D. R., and Yehle, L. A., 1961b, Highway construction and maintenance problems in permafrost regions: Annual Symposium on Geology as Applied to Highway Engineering, 12th, Knoxville, 1961, Proceedings: University of Tennessee Engineering Experiment Station Bulletin 24, p. 19-29.
- Nichols, D. R., and Yehle, L. A., 1961c, Mud volcanoes in the Copper River Basin, Alaska, in Raasch, G.O., ed., Geology of the Arctic: Toronto, University of Toronto Press, v. 2, p. 1063-1087.
- Nichols, D. R., and Yehle, L. A., 1969, Engineering geologic map of the southeastern Copper River Basin, Alaska: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-524, scale 1:125,000, 1 sheet.
- Nichols, D. R., and Yehle, L. A., 1985, Volcanic debris flows, Copper River Basin, Alaska: Proceedings Fourth International Conference and Field Workshop on Landslides, Tokyo, p. 365-372.
- Nokleberg, W. J., Jones, D. L., and Silberling, N. J., 1985, Origin and tectonic evolution of the Maclaren and Wrangellia terranes, eastern Alaska Range, Alaska: Geological Society of America Bulletin, v. 96, p. 1251-1270.
- Norman, V. W., 1975, Scour at selected bridge sites in Alaska: U.S. Geological Survey Water-Resources Investigations 32-75, 171 p. (Also available as National Technical Information Service PB-248 337/AS.)
- Overstreet, W. C., Crenshaw, G. L., Hubert, A. E., Rosenblum, Sam, and Smith, R. J., 1975, Experimental results of atomic absorption analyses for indium and thallium in 803 nonmagnetic concentrates from Alaska: U.S. Geological Survey Open-File Report 75-253, 78 p.
- Overstreet, W. C., Hamilton, J. C., Boerngen, J. G., Rosenblum, Sam, Marsh, W. R., and Sainsbury, C. L., 1975, Minor elements in nonmagnetic concentrates from Alaska: National Technical Information Service PB-238 989/AS, 440 p.
- Paige, Sidney, and Knopf, Adolph, 1907, Reconnaissance in the Matanuska and Talkeetna basins, Alaska, with notes on the placers of the adjacent regions: U.S. Geological Survey Bulletin 314-F, p. 104-125.
- Pewe, T. L., 1968, Loess deposits of Alaska: International Geological Congress, 23rd Session, Prague, 1968, Proceedings, v. 8, p. 297-309.

- Pewe, T. L., 1975, Quaternary geology of Alaska: U.S. Geological Survey Professional Paper 835, 145 p.
- Plafker, George, and Mayo, L. R., 1965, Tectonic deformation, subaqueous slides and destructive waves associated with the Alaskan March 27, 1964 earthquake: an interim geologic evaluation: U.S. Geological Survey Open-File Report 259, 19 p.
- Plafker, George, and Rubin, Meyer, 1967, Vertical tectonic displacements in south-central Alaska during and prior to the great 1964 earthquake: Osaka City University Journal of Geosciences, v. 10, art. 1-7, p. 53-66.
- Post, Austin, and Mayo, L. R., 1971, Glacier-dammed lakes and outburst floods in Alaska: U.S. Geological Survey Hydrologic Investigations Atlas HA-455, 2 sheets and accompanying text, 10 p.
- Ransome, A. L., and Kerns, W. H., 1954, Names and definitions of regions, districts, and subdistricts in Alaska (used by the Bureau of Mines in statistical and economic studies covering the mineral industry of the Territory): U.S. Bureau of Mines Information Circular 7679, 91 p.
- Reitsema, R. H., 1979, Gases of mud volcanoes in the Copper River Basin, Alaska: *Geochimica et Cosmochimica Acta*, v. 43, no. 2, p. 183-187.
- Richter, D. H., 1963, Ahtell Creek area, Slana district [abs.] in Alaska Division of Mines and Minerals, Report for the year 1963: Juneau, Alaska, p. 49.
- Richter, D. H., 1964, Geology and mineral deposits of the Ahtell Creek area, Slana district, south-central Alaska: Alaska Division of Mines and Minerals Geology Report 6, 17 p.
- Richter, D. H., 1965, Slana district, eastern Alaska Range [abs.], in Alaska Division of Mines and Minerals, Report for the year 1965: Juneau, Alaska, p. 69-70.
- Richter, D. H., 1965, Geochemical investigation of the Slana district, south-central Alaska, 1963 and 1964: Alaska Division of Mines and Minerals Geochemical Report 2, 14 p.
- Richter, D. H., 1966, Geology of the Slana district, south-central Alaska: Alaska Division of Mines and Minerals Geologic Report 21, 51 p.
- Richter, D. H., and Matson, N. A., Jr., 1968, Distribution of gold and some base metals in the Slana area, eastern Alaska Range, Alaska: U.S. Geological Survey Circular 593, 20 p.
- Richter, D. H., and Matson, N. A., Jr., 1972, Metallic mineral resources map of the Gulkana quadrangle, Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-419, 1 sheet, scale 1:250,000.
- Richter, D. H., Smith, R. L., Yehle, L. A., and Miller, T. P., 1979, Geologic map of the Gulkana A-2 quadrangle, Alaska: U.S. Geological Survey Geologic Quadrangle Map GQ-1520, 1 sheet, scale 1:63,360.

- Rose, A. W., 1964, Paxson, Chistochina district [abs.] in Alaska Division of Mines and Minerals, Report for the year 1964: Juneau, Alaska, p. 45.
- Rose, A. W., and Saunders, R. H., 1965, Geology and geochemical investigations near Paxson, northern Copper River Basin, Alaska: Alaska Division of Mines and Minerals Geologic Report 13, 35 p.
- Rubin, Meyer, and Suess, H. E., 1956, U.S. Geological Survey Radiocarbon Dates III: Science, v. 123, no. 3194, p. 442-448.
- Rubin, Meyer, and Alexander, Corrinne, 1960, U.S. Geological Survey radiocarbon dates V: American Journal of Science Radiocarbon Supplement, v. 2, p. 129-185.
- Schmoll, H. R., 1961, Orientation of phenoclasts in laminated glaciolacustrine deposits, Copper River Basin, Alaska, in Short papers in the geologic and hydrologic sciences 1961: U.S. Geological Survey Professional Paper 424-C, p. C192-C195.
- Schmoll, H. R., 1984, Late Pleistocene morainal and glaciolacustrine geology in the upper Copper River-Mentasta Pass area, Alaska [abs.]: Geological Society of America, Cordilleran Section, 80th meeting, Anchorage, Alaska, May 30, 31, June 1, 1984, Abstracts with Programs, v. 16, no. 5, Abstract 47104, p. 332.
- Schrader, F. C., 1900, A reconnaissance of a part of Prince William Sound and the Copper River District, Alaska, in 1898: U.S. Geological Survey, 20th Annual Report, Part VII, Explorations in Alaska in 1898, p. 341-423.
- Schrader, F. C., and Spencer, A. C., 1901, The geology and mineral resources of a portion of the Copper River District, Alaska: U.S. Geological Survey, 94 p. [special publication].
- Schweger, C. E., 1981, Chronology of late glacial events from the Tangle Lakes, Alaska: Arctic Anthropology, v. 18, no. 1, p. 97-101.
- Sloan, C. E., 1976, Water-resources investigations of the Valdez-Delta Junction area, in Cobb, E. H., ed., The United States Geological Survey in Alaska: accomplishments during 1975: U.S. Geological Survey Circular 733, p. 47.
- Sloan, C. E., Zenone, Chester, and Mayo, L. R., 1975, Icings along the trans-Alaska pipeline route: U.S. Geological Survey Open-File Report 75-87, 39 p.
- Sloan, C. E., Zenone, Chester, and Mayo, L. R., 1976, Icings along the trans-Alaska pipeline route: U.S. Geological Survey Professional Paper 979, 31 p.
- Smith, P. S., 1936, Mineral industry of Alaska in 1934: U.S. Geological Survey Bulletin 868-A, p. 1-91.
- Smith, P. S., 1937, Mineral industry of Alaska in 1935: U.S. Geological Survey Bulletin 880-A, p. 1-95.

- Smith, P. S., 1938, Mineral industry of Alaska in 1936: U.S. Geological Survey Bulletin 897-A, p. 1-107.
- Smith, P. S., 1939a, Mineral industry of Alaska in 1937: U.S. Geological Survey Bulletin 910-A, p. 1-113.
- Smith, P. S., 1939b, Mineral industry of Alaska in 1938: U.S. Geological Survey Bulletin 917-A, p. 1-113.
- Smith, P. S., 1939c, Areal geology of Alaska: U.S. Geological Survey Professional Paper 192, 100 p.
- Smith, P. S., 1941, Mineral industry of Alaska in 1939: U.S. Geological Survey Bulletin 926-A, p. 1-106.
- Smith, P. S., 1942, Mineral industry of Alaska in 1940: U.S. Geological Survey Bulletin 933-A, p. 1-102.
- Smith, R. L., and Shaw, H. R., 1979, Igneous-related geothermal systems, in Muffler, L. J. P., ed., Assessment of geothermal resources of the United States, 1978: U.S. Geological Survey Circular 790, p. 12-17.
- Smith, R. L., Shaw, H. R., Luedke, R. G., and Russell, S. L., 1978, Comprehensive tables giving physical data and thermal energy estimates for young igneous systems of the United States: U.S. Geological Survey Open-File Report 78-925, 15 p. plus 13 sheets of tabular material.
- Staff, Alaska Field Operations Center, 1978, Mineral appraisal of the Wrangell-St. Elias region - A summary report: U.S. Bureau of Mines Open-File Report 64-78, 51 p.
- Stephens, C. D., Fogleman, K. A., Lahr, J. C., Helton, S. M., Cancilla, R. S., Tam, Roy, and Freiberg, J. A., 1980, Catalog of earthquakes in southern Alaska, January-March 1980: U.S. Geological Survey Open-File Report 80-1253, 55 p.
- Stephens, C. D., Lahr, J. C., Fogleman, K. A., Allan, M. A., and Helton, S. M., 1979, Catalog of earthquakes on southern Alaska, January-March 1978: U.S. Geological Survey Open-File Report 79-718, 31 p.
- Stephens, C. D., Lahr, J. C., and Rogers, J. A., 1981, Eastern Gulf of Alaska seismicity: Annual report to the National Oceanic and Atmospheric Administration for April 1, 1980, through March 31, 1981: U.S. Geological Survey Open-File Report 81-897, 32 p.
- Still, P. J., 1980, Index of streamflow and water-quality records to September 30, 1978, south-central Alaska: U.S. Geological Survey Open-File Report 80-600, 54 p.
- Swanson, J. E., 1984, Tazlina River meander loop - a case history, in Elliot, C. M., ed., River meandering: New York, American Society of Civil Engineers, p. 231-239.

- Tarr, R. S., and Martin, Lawrence, 1913, Glacial deposits of the continental type in Alaska: *Journal of Geology*, v. 21, p. 289-300.
- Thorne, R. L., 1946, Exploration of argentiferous lead-copper deposits of the Slana district, Alaska: U.S. Bureau of Mines Report Investigation 3940, 9 p.
- Thorson, R. M., 1984, Pattern and chronology of late Quaternary glaciation, northwest Copper River Basin [abs.]: *Geological Society of America Abstracts with Programs*, v. 16, p. 337.
- Thorson, R. M., Dixon, E. J., Jr., Smith, G. S., and Batten, A. R., 1981, Interstadial Proboscidean from south-central Alaska: Implications for biogeography, geology, and archaeology: *Quaternary Research*, v. 16, no. 3, p. 404-417.
- Trabant, D. C., 1976, Alaska glaciology studies, *in* Cobb, E. H., ed., *The United States Geological Survey in Alaska: Accomplishments during 1975*: U.S. Geological Survey Circular 733, p. 45-47.
- Trautman, M. A., 1963, Isotopes, Incorporated Radiocarbon Measurements III: *Radiocarbon*, v. 5, p. 62-79.
- Turner, D. L., Grybeck, D. J., and Wilson, F. H., 1975, Radiometric dates from Alaska -- A 1975 compilation: Alaska Division of Geological and Geophysical Surveys Special Report 10, 64 p.
- Turner, D. L., and Smith, T. E., 1974, Geochronology and generalized geology of the central Alaska Range, Clearwater Mountains and northern Talkeetna Mountains: Alaska Division of Geological and Geophysical Surveys Open-File Report AOF-72, 11 p.
- U.S. Army Corps of Engineers, 1955, Certain aspects of the engineering geology along the Glenn and Richardson Highways, Copper River Basin, Alaska: Office of the Chief of Engineers, U.S. Army, Engineer Intelligence Study 190, 20 p., 18 plates, scale 1:50,000.
- U.S. Army Corps of Engineers, 1959a, Terrain study of the Exercise Little Bear area, central Copper River Basin, Alaska: Department of the Army Engineering Intelligence Study 258, Washington, D. C., 73 p., 23 plates, scales 1:50,000 and 1:250,000.
- U.S. Army Corps of Engineers, 1960, Terrain study of the Exercise Willow Freeze area, Copper River Basin, Alaska: Department of the Army Engineering Intelligence Study 292, Washington, D. C., 87 p., 21 plates, scales 1:50,000, 1:100,000, and 1:250,000.
- U.S. Geological Survey, 1899, Maps and descriptions of routes of exploration in Alaska in 1898, with general information concerning the Territory: U.S. Geological Survey Special Publication, 138 p.
- U.S. Geological Survey, 1903, Investigations in Alaska, *in* U.S. Geological Survey: U.S. Geological Survey 24th Annual Report, p. 78-107.

- U.S. Geological Survey, 1960, Geological Survey research, 1960: Synopsis of Geologic Results: U.S. Geological Survey Professional Paper 400-A, p. A1-A136.
- U.S. Geological Survey, 1963, Geological Survey research 1963: Summary of investigations, prepared by members of the Conservation, Geologic, and Water Resources Divisions: U.S. Geological Survey Professional Paper 475-A, p. A1-A300.
- U.S. Geological Survey, 1965, Geological Survey research 1965: U.S. Geological Survey Professional Paper 525-A, p. A1-A376.
- U.S. Geological Survey, 1967, Geological Survey research 1967: U.S. Geological Survey Professional Paper 575-A, p. A1-A377.
- U.S. Geological Survey, 1969, Geological Survey research 1969: U.S. Geological Survey Professional Paper 650-A, p. A1-A425.
- U.S. Geological Survey, 1969, U.S. Geological Survey heavy metals program progress reports, 1968 - Field studies: U.S. Geological Survey Circular 621, 35 p.
- U.S. Geological Survey, 1976, Scientists eye steaming Mount Wrangell, Alaska: U.S. Geological Survey Earthquake Information Bulletin, v. 8, no. 1, p. 24-25.
- U.S. Geological Survey, 1976, Geological Survey research 1976: U.S. Geological Survey Professional Paper 1000, 414 p.
- U.S. Geological Survey, 1977, Geological Survey research 1977: U.S. Geological Survey Professional Paper 1050, 411 p.
- Vogel, J. C., and Waterbolk, H. T., 1972, Groningen radiocarbon dates X: Radiocarbon, v. 14, no. 1, p. 6-110.
- Wahrhaftig, Clyde, 1965, Physiographic divisions of Alaska: U.S. Geological Survey Professional Paper 482, 52 p.
- Waller R. M., 1966, Effects of the March 1964 Alaska earthquake on the hydrology of south-central Alaska: U.S. Geological Survey Professional Paper 544-A, p. A1-A28.
- Waller, R. M., and Sellkregg, L. F., 1962, Data on wells and springs along Glenn Highway (State 1), Alaska: U.S. Geological Survey in cooperation with Alaska Department of Health and Welfare, Basic Data Report, Water-Hydrological Data No. 5, 23 p., 1 plate.
- Wedow, Helmuth, Jr., Killeen, P. L., and others, 1954, Reconnaissance for radioactive deposits in eastern interior Alaska, 1946: U.S. Geological Survey Circular 331, 36 p.
- Wedow, Helmuth, Jr., and others, 1953, Preliminary summary of reconnaissance for uranium and thorium in Alaska, 1952: U.S. Geological Survey Circular 248, 15 p.

- Westgate, J. A., 1984, Quaternary tephrochronological studies in central Alaska and the Yukon: Implications for the Copper River Basin [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 339-340.
- White, D. E., and Williams, D. L., eds., 1975, Assessment of geothermal resources of the United States-1975: U.S. Geological Survey Circular 726, 155 p.
- Williams, J. R., 1970, Ground water in the permafrost regions of Alaska: U.S. Geological Survey Professional Paper 696, 83 p.
- Williams, J. R., 1984, Late Wisconsin glacial retreat and lake levels, Western Copper River Basin, Alaska [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 340.
- Williams, J. R., 1985, Engineering-geologic map of the southwestern Copper River Basin and upper Matanuska River valley, Alaska: U.S. Geological Survey Open-File Report 85-143, 2 sheets, scale, 1:125,000.
- Wilson, F. H., and Turner, D. L., 1975, Radiometric age map of Alaska—south-central Alaska: Alaska Division of Geology and Geophysical Surveys Open-File Report AOF-85, 12 p. plus map.