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Received by OSTI

JUL 07 1987

DOE/ID/12524--T2

DE87 011630

ALASKA GEOTHERMAL BIBLIOGRAPHY

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May 1987

This work was performed under Grant DE-FG07-84ID12524 from the U. S. Department of Energy and funding from the State of Alaska, Department of Natural Resources.

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INTRODUCTION - ALASKA GEOTHERMAL BIBLIOGRAPHY

The Alaska geothermal bibliography is presented in five sections. The first section, pages 5-72, is a standard format alphabetical bibliography which lists all publications, through 1986, that discuss any facet of geothermal energy in Alaska. In addition, selected publications about geology, geophysics, hydrology, volcanology, etc., which discuss areas where geothermal resources are located are included, though the geothermal resource itself may not be mentioned. The bibliography contains 748 entries.

The second section, pages 73-134, is an alphabetical listing by author regardless of where the author's name appears in the citation. Each entry gives the first author, year of publication, abbreviated title and codes for subject category. The subject codes are listed in order of emphasis in the article. Table 1, page 223, lists the abbreviations most commonly used in the shortened titles. Table 2, page 227, provides an index of subject codes.

The third section, pages 135-187, is a listing of references for each of the 123 geothermal sites in alphabetical order. Each main entry gives the site name and identification number. Figure 1, page 233, shows the areas covered by figures 2 through 11, pages 234-243, on which the locations of the geothermal sites are shown. Table 3, page 228, provides the identification key. For consistency, geothermal site ID numbers are the same as those used on the NOAA map of Geothermal Resources of Alaska, 1:2,500,000, (Motyka and others, 1983). The map is available from the Alaska Division of Geological and Geophysical Surveys. Under each geothermal site is a listing of authors, abbreviated titles, and subject codes. Several sites are included which do not appear on the NOAA map. They fall into one of three categories: 1) sites which have had geothermal manifestations in recent past -- eg. Bogoslof; 2) sites which are good candidates for the occurrence of a geothermal resource due to presence of Recent volcanism -- eg. Edgecumbe; 3) sites which have been identified since 1983, the map's publication date -- eg. Upper Noatak. Early references sometimes used different names for the same site so Table 4, page 231, is included which gives the known aliases.

The fourth section, pages 188-191, is a supplemental listing of references by geographical region. Figure 1, page 233, shows the boundaries of the regions used in this section and Figures 2 through 11, pages 234-243, are enlargements of each region with the geothermal sites indicated. Under each main entry is again, a listing of authors, abbreviated titles, and subject codes. References in this section generally cover a large geographic area and

are not usually listed in section three under any specific geothermal site.

The fifth section is a listing of references by subject. Main entries are identical to those listed in Table 2, page 227. Under each subject is, as usual, a listing of authors, abbreviated titles and subject codes. The subject heading "Geothermal" contains every reference which specifically mentions a geothermal site regardless of context. Actual geothermal studies are marked "R" in the subject code.

All or any part of this bibliography is available on 5 1/4 inch computer diskettes, formatted in the MS-DOS operating system. It is available as an ASCII text file or as a set of 4 document (*.DOC) files for use with Microsoft Word. Total storage required is 730K with the largest file 360K. The bibliographic data base used to index the references is written in dBASE III and is also available. Total storage requirements for the four DBF files is 790K with 490K for the largest. Additional hard copies of this 259 page document can be obtained at \$0.10 per page.

ALASKA GEOTHERMAL BIBLIOGRAPHY

SECTION I

STANDARD BIBLIOGRAPHICAL LISTING

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Ach, J., and DeLong, S. E., 1980, Magmatic evolution of Little Sitkin and Semisopchnoi volcanoes, Alaska [abs.]: EOS, v. 61, p. 1140.
- Adams, D. D., 1983, Geology of the northern contact area of Arrigetch Peaks pluton, Brooks Range, Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 86 p.
- Adams, D. D., 1984, Geology of the northern contact area of the Arrigetch Peaks pluton, Brooks Range, Alaska [abs.]: Geological Society of America, Cordilleran Section, Abstracts with Programs, v. 16, no. 5, p. 265.
- Alaska Geological Consultants, 1975, ERDA Geothermal energy program, Drum Thermal Springs Area: Report of Oct 1975 for AHTNA Native Regional Corporation.
- Allely, R. D., 1986, Interpretation of seismic-refraction profiles at the proposed site for a geothermal power plant, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p. B15-B20.
- Allen, E. T., and Zies, E. G., 1923, A chemical study of the fumaroles of the Katmai region: National Geographic Society, Contributed Technical Papers, Katmai Series, v. 2, p. 75-155.
- Andreasen, G. E., Dempsen, 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, A., Zietz, I., 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, p. 135-153.
- Anma, K., 1971, An aeromagnetic survey in the Valley of Ten Thousand Smokes, Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 97 p.
- Anonymous, 1953, Activity of Trident Volcano: Volcano Letters, no. 520, p. 5-6.
- Anonymous, 1953, Eruption of Trident Volcano, Alaska: Volcano Letters, no. 519, p. 7.
- Anonymous, 1975, Alaska Regional Profiles, 1975, v. 3, Southwest Region, sponsored by Alaska with the Joint Federal-State

- Land Use Planning Commission for Alaska: Wheelright Lithography Co., Salt Lake City, 313 p.
- Anonymous, 1982, Gates of the Arctic, Reed River Hot Springs: National Park Service, Denver Service Center, Branch of Special Programs, Special Report, 19 p.
- Arce, G. N., 1983, Volcanic hazards from Makushin Volcano, Northern Unalaska Island, Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 142 p.
- Arce, G. N., and Economides, M. J., 1982, Analysis of volcanic hazards from Makushin Volcano, Unalaska Island: Proceedings IV New Zealand Geothermal Workshop, p. 93-99.
- Bader, J. W., 1984, Geologic map of the Demarcation Point, Mount Michelson, Flaxman Island, and Barter Island quadrangles, Alaska: U. S. Geological Survey Open-file Report 84-569, scale 1:250,000.
- Bader, J. W., and Bird, K. J., 1986, Geologic map of Demarcation Point, Mt. Michelson, Flaxman Island, and Barter Island quadrangles, N.E. Alaska, Latitudes 69 deg to 70 deg 45 min N, Longitudes 141 - 147 deg W: U. S. Geological Survey Miscellaneous Investigations Map I-1791, 1 pl., scale 1:250,000.
- Baker, D. R., and Egglar, D. H., 1983, Fractionation paths of Atka (Aleutians) high alumina basalt: Constraints from phase relations: Journal of Volcanology and Geothermal Research, v. 18, p. 387-404.
- Baker, R. O., Lebida, R. C., Pyle, W. D., and Britch, R. P., 1977, An investigation of selected Alaska geothermal springs sources as possible salmon hatchery sites: National Technical Information Service IDO/1624-1, 173 p.
- Barnes, Ivan, and McCoy, G. A., 1979, Possible role of mantle-derived CO₂ in causing two "phreatic" explosions in Alaska: Geology, v. 7, p. 434-435.
- Barnes, Ivan, and Miller, T. P., 1974, Geothermal studies in Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 6, no. 7, p. 645-646.
- Barnwell, W. W., and Pearson, K. S., 1984, Alaska's Resource Inventory: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Special Report 36, 59 p.
- Barrett, S. A., 1978, A three-dimensional magnetic model of Augustine Volcano: Fairbanks, University of Alaska, unpublished M.S. thesis, 175 p.

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Barrett, S. A., Stone, D. B., and Kienle, J., 1977, A three-dimensional model of Augustine Volcano [abs.]: EOS, v. 58, no. 3, p. 196
- Basecu, N., 1980, Geothermal energy in Alaska: Geo-heat Utilization Center Quarterly Bulletin, v. 5, p. 1-3.
- Beaglehole, J. C., ed., 1967, The journals of Captain James Cook on his voyages of Discovery III. The voyage of the Resolution and Discovery 1776-1778: Cambridge University Press, Cambridge, 361 p.
- Becker, G. F., 1898, Reconnaissance of the goldfields of southern Alaska with some notes on general geology: U. S. Geological Survey 18th Annual Report, Part III, Economic Geology, p. 28-31, p. 50-58, pl. X.
- Beebee, J., and Kirkwood, P., 1979, Unalaska: Prospects for geothermal energy: Energy Systems Inc., report to Alaska Division of Geological and Geophysical Surveys, 12 p.
- Beget, J. E., 1986, Prehistoric tephra eruptions, debris avalanches, and tsunamis at Mt. St. Augustine: the geologic record [abs.]: EOS, v. 67, no. 44, p. 1260.
- Beikman, H. M., 1974, Preliminary geologic map of the southeast quadrant of Alaska: U. S. Geological Survey Misc. Field Studies Map MF-612, scale 1:1,000,000.
- Beikman, H. M., 1974, Preliminary geologic map of the southwest quadrant of Alaska: U. S. Geological Survey Misc. Field Studies Map MF-611, scale 1:1,000,000.
- Beikman, H. M., 1975, Preliminary geologic map of southeastern Alaska: U. S. Geological Survey Misc. Field Studies Map MF-673, scale 1:1,000,000.
- Beikman, H. M., compiler, 1980, Geologic map of Alaska: U. S. Geological Survey, scale 1:2,500,000.
- Beikman, H. M., and Lathram, E. H., 1976, Preliminary geological map of northern Alaska: U. S. Geological Survey Misc. Field Studies Map MF-789, scale 1:1,000,000
- Benson, C. S., Bingham, D. K., and Wharton, G. B., 1975, Glaciological and volcanological studies at the summit of Mt Wrangell, Alaska: Proceedings of Moscow Snow and Ice Symposium, Aug. 1971, IAHS-AISH Publication no. 104, p. 95-98.
- Benson, C. S., and Follett, A. B., 1986, Application of photogrammetry to the study of volcano-glacier interactions on Mount Wrangell, Alaska: Photogrammetric Engineering and Remote Sensing, v. 52, no. 6, p. 813-827.

Benson, C. S., and Motyka, R. J., 1978, Glacier-volcano interactions on Mount Wrangell, Alaska: Fairbanks, University of Alaska, Geophysical Institute, Annual Report 1977-78, p. 1-25.

Benson, C. S., Motyka, R. J., Bingham, D. K., Wharton, G. B., MacKeith, P., and Sturm, M., 1985, Glaciological and volcanological studies on Mt. Wrangell, Alaska, in Kotlyakov, Vinogradov, and Glazovsky, eds., Glaciological Researches No. 27, Soviet Geophysical Committee, Academy of Sciences of the U. S. S. R., p. 114-133.

Berg, H. C., Elliott, R. L., Smith, J. G., and Koch, R. D., 1978, Geologic map of the Ketchikan and Prince Rupert Quadrangles, Alaska: U. S. Geological Survey Open File Report 78-73-A, scale 1:250,000.

Berg, H. C., and Hinckley, D. W., 1963, Reconnaissance geology of northern Baranof Island, Alaska: U. S. Geological Survey Bulletin 1141-O, p. 1-24.

Berg, E., and Kienle, J., 1966, Gravity measurements in the Katmai volcano area, Alaska: Fairbanks, University of Alaska, Geophysical Institute Scientific Report UAG R-176, 14 p.

Berg, E., Kubota, S., and Kienle, J., 1967, Preliminary determination of crustal structure in the Katmai National Monument, Alaska: Bulletin of the Seismological Society of America, v. 57, no. 6, p. 1367-1392.

Berry, G. W., Grim, P. J., and Ikelman, J. A., 1980, Thermal spring list for the United States: NOAA Geophysical Records Document no. 12, 60 p., 2 pl., scale 1:5,000,000.

Biggar, N. E., 1974, A geological and geophysical study of Chena Hot Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute, unpublished M.S. thesis, 72 p., 2 pl., scale 1:31,680 and 1:1,250.

Bingham, D. K., 1967, Ice motion and heat flow studies, Mt. Wrangell, Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 117 p.

Bingham, D. K., and Benson, C. S., 1967, Glaciological studies on Mt. Wrangell, Alaska, Part II -Ice motion and heat flow studies: Proceedings 18th Alaska Science Conference.

Bingham, D. K., and Benson, C. S., 1968, Ash temperature variations on Mt. Wrangell, Alaska: New Zealand Journal of Geology and Geophysics, v. 11, no. 3, p. 781-786.

- Black, R. F., 1974, Geology and ancient Aleuts, Amchitka and Umnak Islands, Aleutians: Arctic Anthropology, v. 11, no. 2, p. 126-140.
- Black, R. F., 1974, Late Quaternary sea level changes, Umnak Island, Aleutians--Their effects on ancient Aleuts and their causes: Quaternary Research, v. 4, p. 264-281.
- Black, R. F., 1975, Late Quaternary geomorphic processes: Effects on the ancient Aleuts of Umnak Island in the Aleutians: Arctic, v. 28, no. 3, p. 159-169.
- Black, R. F., 1976, Geology of Umnak Island, eastern Aleutian Islands as related to the Aleuts: Arctic and Alpine Research, v. 8, n. 1, p. 7-35.
- Black, R. F., 1980, Isostatic, tectonic, and eustatic movements of sea level in the Aleutian Islands, Alaska, in Morner, N. A., ed., Earth rheology, isostasy and eustasy: New York, J. Wiley & Sons, p. 231-248.
- Black, R. F., 1981, Holocene sea level changes in the Aleutian Islands: New data from Atka Island, in Colquhoun, D. J., ed., Holocene sea level fluctuations, magnitude and causes: International Geological Congress Publication no. 61, p. 1-12.
- Black, R. F., 1981, Late Quaternary climatic changes in the Aleutian Islands, Alaska, in Mahaney, W. C., ed., Quaternary paleoclimate: Norwich, U. K., Geoabstracts Ltd., p. 47-62.
- Black, R. F., 1983, Glacial chronology of the Aleutian Islands, in Thorson, R. M., and Hamilton, T. D., eds., Glaciation in Alaska: Alaskan Quaternary Center, Fairbanks, University of Alaska Museum, Occasional Paper no. 2, p. 5-10.
- Blackwell, D. D., Steele, J. L., 1986, DNAG Geothermal map of North America [abs.]: EOS, v. 67, no. 44, p. 137.
- Blanchard, D. C., and Tailleux, I. L., 1982, Preliminary geothermal isograd map, NPRA, in Conrad, W. L., ed., The U. S. Geological Survey in Alaska: Accomplishments during 1980: U. S. Geological Survey Circular 844, p. 46-48.
- Bliss, J. P., 1983, Alaska, basic data for thermal springs and wells as recorded in GEOTHERM: U. S. Geological Survey Open-file Report 83-426, 114 p.
- Blodgett, R. B., and Gilbert, W. G., 1983, The Cheeneetuk Limestone, a new Early(?) to Middle Devonian formation in the Mc Grath A-4 and A-5 quadrangles, west-central Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Professional Report 85, 6 p., 1 pl., scale 1:63,360.

- Bordet, P., Marinelli, G., Mittempergher, M., and Tazieff, H., 1963, Contributions a l'etude volcanologique du Katmai et de la Vallee des Dix Mille Fumees (Alaska): Memoires de la Societe Geologique de Belgique, Brussel, Belgium, IN-8 (7), 70 p.
- Bordet, P., and Tazieff, H., 1963, Remarks on the eruption of Katmai and the Valley of Ten Thousand Smokes and on the problem of ignimbrites: Societe Geologique de France Bulletin, v. 5, no. 2, ser. 7, p. 210-213.
- Boyd, T. M., and Jacob, K. H., 1984, Seismicity of the Unalaska region, Alaska: Alaska Division of Geological and Geophysical Surveys report in preparation.
- Brew, D. A., and Ford, A. B., 1985, Preliminary reconnaissance geologic map of the Juneau, Taku River, Atlin and part of the Skagway 1:250,000 quadrangles, southeastern Alaska: U. S. Geological Survey Open-file Report 85-395, 23 p., 2 pl., scale 1:250,000.
- Brew, D. A., Muffler, L. J. P., and Loney, R. A., 1965, Eruptive history of the Mt. Edgecumbe volcanic field, Kruzof Island, southeastern Alaska [abs.]: Proceedings of the 16th Alaska Science Conference in Juneau, p. 115-116.
- Brew, D. A., Muffler, L. J. P., and Loney, R. A., 1969, Reconnaissance geology of the Mount Edgecumbe Volcanic field, Kruzof Island, southeastern Alaska: U. S. Geological Survey Professional Paper 650 D, p. D1-D25.
- Brew, D. A., Ovenshine, A. T., Karl, S. M., and Hunt, S. J., 1984, Preliminary reconnaissance geologic map of the Petersburg and parts of the Port Alexander and Sumdum 1:250,000 quadrangles, southeastern Alaska: U. S. Geological Survey, Open-file Report 84-405, 42 p., 1 pl., scale 1:250,000.
- Brook, C. A., Mariner, R. H., Mabey, D. R., Swanson, J. R., Guffanti, M., and Muffler, L. J. P., 1979, Hydrothermal convection systems with reservoir temperatures < 90 deg C., in Muffler, L. J. P., ed., Assessment of geothermal resources of the United States--1978: U. S. Geological Survey Circular 790, p. 18-85.
- Brophy, J. G., and Marsh, B. D., 1984, Petrology and geochemistry of the Cold Bay volcanic center, Alaska Peninsula, southwestern Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 15, no. 6, p. 534.
- Brosge, W. P., and Patton, W. W. Jr., 1982, Regional bedrock geologic maps along the Dalton Highway, Yukon crossing to

- Toolik, Alaska: U. S. Geological Survey Open-file Report 82-1071, 5 p., 1 pl. scale 1:500,000.
- Brosge, W. P., and Pessell, G. H., 1977, Preliminary Reconnaissance geologic map of the Survey Pass quadrangle: U. S. Geological Survey Open-file Map 77-27, scale 1:250,000.
- Brown, J. S., 1899, Shishaldin as a field for exploration: National Geographic Magazine, v. 10, no. 8, p. 281-288.
- Buddington, A. F., and Chapin, T., 1929, Geology and mineral deposits of southeastern Alaska: U. S. Geological Survey Bulletin 800, 398 p.
- Bundtzen, T. K., and Gilbert, W. G., 1983, Outline of geology and mineral resources of upper Kuskoswim region, Alaska: Alaska Geological Society Journal, v. 3, p. 101-118.
- Bundtzen, T. K., and Kline, J. T., 1986, Coal, peat, and geothermal potential of the Kuskokwim area plan: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-88, 13 p.
- Bunker, C. M., Hedge, C. E., and Sainsbury, C. L., 1977, Radiometric concentrations and preliminary radiometric ages of rocks of the Kigluaik Mountains, Seward Peninsula, Alaska: U. S. Geological Survey Open-file Report 77-735, 36 p.
- Burk, C. A., 1965, Geology of the Alaska Peninsula-island arc and continental margin, parts 1, 2, and 3: Geological Society of America Memoir 99, 250 p., 3 pl., scale 1:500,000 and 1:250,000.
- Buzzell, R. G., and Gibson, D. E., 1986, Nome-Taylor Road: Cultural resources survey along mile 21 to mile 68, Seward Peninsula, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-5, 79 p.
- Byers, F. M. Jr., 1959, Geology of Umnak and Bogoslof Islands, Aleutian Island, Alaska: U. S. Geological Survey Bulletin 1028-L, p. 107-367.
- Byers, F. M. Jr., 1961, Petrology of three volcanic suites, Umnak and Bogoslof Islands, Aleutian Islands, Alaska: Geological Society of America Bulletin, v. 72, p. 93-128.
- Byers, F. M. Jr., and Barth, T. F. W., 1948, Geology of Akutan Island, unpublished geologic map and field notes: U. S. Geological Survey Archives, Menlo Park, California.

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

Byers, F. M. Jr., and Barth, T. F. W., 1953, Volcanic activity on Akun and Akutan Islands: Proceedings, 7th Pacific Science Congress, 1949, New Zealand, v. 2, p. 382-397.

Byers, F. M. Jr., and Brannock, W. W., 1949, Volcanic activity on Umnak and Great Sitkin Islands, 1946-1948: EOS, v. 30, no. 5, p. 719-734.

Cady, W. M., Wallace, R. E., Hoare, J. M., and Weber, F. R., 1955, The central Kuskokwin region, Alaska: U. S. Geological Survey, Professional Paper 268, 132 p.

Campbell, D. A., and Economides, M. J., 1984, A summary of geothermal exploration and data from stratigraphic test well no. 1, Makushin volcano, Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 8, p. 1-8.

Capps, S. R., 1934, Notes on the geology of the Alaska Peninsula and Aleutian Islands: U. S. Geological Survey Bulletin 857-D, p. 141-153.

Capps, S. R., 1935, The southern Alaska Range: U. S. Geological Survey Bulletin 862, 101 p.

Carey, D. L., Nicholas, T. J., Hutterer, G. W., Dejong, P. K., and Grabacki, S. T., 1983, The Unalaska Geothermal exploration project: Introduction and land, regulatory and environmental aspects: Geothermal Resources Council Transactions, v. 7, p. 83-88.

Carrick, S., and Maurer, M. A., 1986, Hydrology, surface water and water quality, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p. 11-135, 2 pl., scale 1:24,000.

Carter, L. D., and Galloway, J. P., 1978, Preliminary geologic maps of the proposed natural gas pipeline route in the Tanana River valley, Alaska: U. S. Geological Survey Open-file Report 78-794, 26 p., 3 pl., scale 1:125,000

Case, J. E., Detterman, R. L., and Wilson, F. H., 1980, Tertiary volcanic centers on the Alaska Peninsula: U. S. Geological Survey Professional Paper 1175, 111 p.

Cass, J. T., 1959, Reconnaissance geologic map of the Melozitna quadrangle, Alaska: U. S. Geological Survey Miscellaneous geologic investigations map I-290, scale 1:250,000.

Chaigneau, M., and Bordet, P., 1963, Gaz occlus dans les verres de la vallee des Dix Mille Fumees (Katmai, Alaska): Academie de Science, Comptes Rendus, v. 256, p. 3167-3169.

- Chapman, R. M., Yeend, W. E., Brosge, W. P., and Reiser, H. N., 1975, Preliminary geologic map of the Tanana and northeast part of the Kantishna River quadrangles, Alaska: U. S. Geological Survey Open-file Report 75-337, 1 pl., scale 1:250,000.
- Chapman, R. M., Yeend, W. E., Brosge, W. P., and Reiser, H. N., 1982, Reconnaissance geologic map of the Tanana quadrangle: U. S. Geological Survey Open-file Report 82-734, 18 p., 1 pl., scale 1:250,000.
- Church, R. E., Crick, R. W., and Lian, E. B., 1970, Copper River basin stratigraphic correlation section: Alaska Geological Society, 2 pl.
- Clark, G. A., 1912, The Katmai eruption (June 1912): Seismological Society of America Bulletin, v. 2, p. 226-229.
- Coats, R. R., 1947, Geology of northern Adak Island: U. S. Geological Survey Alaskan Volcano Investigation Report 2, pt. 5, p. 72-85.
- Coats, R. R., 1947, Geology of northern Kanaga Island: U. S. Geological Survey Alaskan Volcano Investigations Report 2, pt. 6, p. 89-94.
- Coats, R. R., 1950, Volcanic activity in the Aleutian arc: U. S. Geological Survey Bulletin 974-B, p. 1-47.
- Coats, R. R., 1952, Magmatic differentiation in Tertiary and Quaternary volcanic rocks from Adak and Kanaga Islands, Aleutian Islands, Alaska: Geological Society of America Bulletin, v. 63, p. 486-514.
- Coats, R. R., 1953, Geology of Buldir Island, Aleutian Islands, Alaska: U. S. Geological Survey Bulletin 989-A, p. 1-26.
- Coats, R. R., 1956, Geology of Northern Adak Island, Alaska: U. S. Geological Survey Bulletin 1028-C, p. 45-67.
- Coats, R. R., 1956, Geology of northern Kanaga Island, Alaska: U. S. Geological Survey Bulletin 1028-D, p. 69-81.
- Coats, R. R., 1956, Reconnaissance geology of some western Aleutian Islands, Alaska: U. S. Geological Survey Bulletin 1028-E, p. 82-100.
- Coats, R. R., 1959, Geological reconnaissance of Gareloi Island, Aleutian Islands, Alaska: U. S. Geological Survey Bulletin 1028-J, p. 249-256.
- Coats, R. R., 1959, Geological reconnaissance of Semisopochnoi Island, western Aleutian Islands, Alaska: U. S. Geological Survey Bulletin 1028-O, p. 447-519.

- Coats, R. R., 1962, Magma type and the crustal structure in the Aleutian arc, in Macdonald, G. A., and Kuno, H., eds., The crust of the Pacific basin: American Geophysical Union Monograph 6, p. 92-109.
- Coats, R. R., and Marsh, B. D., 1984, Reconnaissance geology and petrology of northern Tanaga, Aleutian Islands, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 16, p. 474.
- Coats, R. R., Nelson, W. H., Lewis, R. Q., and Powers, H. A., 1961, Geologic reconnaissance of Kiska Island, Aleutian Islands, Alaska: U. S. Geological Survey Bulletin 1028-R, p. 563-581.
- Collazzi, E. J., and Ireland, R. R. W., 1986, Hydrologic reconnaissance of the Kuskokwim River basin between Sleetmute and Aniak, Alaska 1982-1983: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-16, 1 pl., scale 1:385,000.
- Collier, A. J., 1902, A reconnaissance of the northwestern portion of the Seward Peninsula, Alaska: U. S. Geological Survey Professional Paper 2, 70 p., 12 pl.
- Combellick, R. A., 1986, Engineering geology of the proposed site for a geothermal power plant on Unalaska Island, Alaska, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p. B1-B14, 2 pl., scale 1:480.
- Conrad, W. K., and Kay, R. W., 1984, Ultramafic and mafic inclusions from Adak Island: Crystallization history and implications for the nature of primary magmas and crustal evolution in the Aleutian arc: Journal of Petrology, v. 25, p. 88-125.
- Conwell, C. N., and Schell, L. C., 1977, Energy Resource Map of Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, scale 1:2,500,000.
- Corwin, R. F., and Fitterman, D. V., 1983, Self potential survey results - Makushin volcano geothermal area, Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 7, p. 89-94.
- Curtis, G. H., 1955, Importance of Novarupta during eruption of Mt. Katmai, Alaska in 1912 [abs.]: Geological Society of America Bulletin, v. 66, p. 1547.

- Curtis, G. H., 1968, The stratigraphy of the ejecta of the 1912 eruption of Mount Katmai and Novarupta, Alaska: Geological Society of America, Memoir 116, p. 153-210.
- Daily, I. M., 1912, Report on the eruption of Katmai volcano: Geological Society of America Bulletin, v. 44, p. 641-644.
- Daley, E. E., 1986, Petrology, geochemistry, and the evolution of magmas from Augustine Volcano, Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 103 p.
- Daley, E. E., and Swanson, S. E., 1985, Low pressure fractionation in arc volcanoes: An example from Augustine Volcano, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 17, no. 7, p. 558.
- Dall, W. H., 1870, Alaska and its resources: Lee and Shepard, Boston, 627 p. (Reprinted in 1970 by Arno & New York Times Press, American Environmental Studies series.)
- Dall, W. H., 1870, The new Bogosloff volcano: Science, v. 4, no. 80, p. 138-139.
- Dall, W. H., 1884, New volcano island in Alaska: Science, v. 3, no. 51, p. 89-93.
- Dall, W. H., 1885 Further notes on Bogoslof island: Science, v. 5, no. 101, p. 32-33.
- Dames and Moore, 1980, Geothermal drilling studies near Unalaska, Alaska: Unpublished final report submitted to State of Alaska, Division of Energy and Power Development, Anchorage, 5 p.
- Davidson, G., 1884, The new Bogoslof volcano in Bering Sea: Science, v. 3, no. 57, p. 282-286.
- Davidson, G., 1884, Notes on the volcanic eruption of Mount St. Augustine, Alaska, Oct. 6, 1883: Science, v. 3, no. 54, p. 186-189.
- Davidson, G., 1884, The first ascent of the Volcano Makushin: Appalachia, v. 4, no. 1, p. 1-11.
- Davidson, G., 1884, A new volcano island in Alaska: Science, v. 3, no. 51, p. 89-92.
- Davidson, G., 1893, The eruption of Volcano Weniaminof: Geographical Society of the Pacific, Transactions and Proceedings, v. 3, p. 59-63.
- Davies, J. N., 1986, Seismic hazards constraints, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska:

- Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p. M1-M28.
- Davies, J. N., and Kienle, J., 1986, The 1986 eruption of Mt. St. Augustine, Alaska: A case study in the successes and failures of scientific advice during a volcanic crisis [abs.]: EOS, v. 67, no. 44, p. 1259.
- Davydov, G. L., 1809, Two voyages to Russian America 1802-1807: Bearne, C, translator, Pierce, R. A., ed., Limestone Press, 1977, Kingston, Ontario, Canada, 258 p.
- Dean, K. G., Forbes, R. B., Turner, D. L., and Eaton, F. D., 1981, Application of radar and infrared airborne remote sensing to geothermal resource assessment at Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute, final report submitted to NASA (Grant NAG9-8), 21 p.
- Decker, J., 1980, Geology of a Cretaceous subduction complex western Chichagof Island, southeastern Alaska: Stanford University, Stanford California, unpublished Ph.D. thesis, 135 p., 1 pl., scale 1:63,360.
- Decker, J., 1980, Geologic map of western Chichagof Island, southeastern Alaska: U. S. Geological Survey Open-file Report 80-150, 2 pl., scale 1:63,360.
- Decker, J., 1984, The Kuskokwim group: A post-accretionary successor basin in southwest Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 277.
- Decker, J., and Hoare, J. M., 1982, Sedimentology of the Cretaceous Kuskokwim Group, southwest Alaska, in Coonrad, W. L., ed., The U. S. Geological Survey in Alaska: Accomplishments during 1980: U. S. Geological Survey Circular 844, p. 81-82.
- Decker, J., Reifenhstahl, R. R., and Coonrad, W. L. 1984, Compilation of geologic data from the Russian Mission A-3 quadrangle: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Report of Investigation 84-19, 1 pl., scale 1:63,360.
- Decker, J., Reifenhstahl, R. R., and Coonrad, W. L., 1984, Compilation of geologic data from the Sleetmute B-5 quadrangle, southwestern Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 84-44.
- Decker, R. W., 1964, Geophysical investigations in Katmai National Monument, Alaska [abs.]: EOS, v. 45, p. 124.

- Decker, R. W., 1967, Investigations at active volcanoes: EOS, v. 48, n. 2, p. 639-647.
- Denig-Chakroff, D. N., 1985, Unalaska/Dutch Harbor reconnaissance study findings and recommendations: Report for the Alaska Power Authority, 199 p.
- Denig-Chakroff, D. N., Reeder, J. W., and Economides, M. J., 1985, Development potential of the Makushin geothermal reservoir of Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 6, part I, p. 177-182.
- Detterman, R. L., 1968, Recent volcanic activity on Augustine Island, Alaska: U. S. Geological Survey Professional Paper 600-C, p. C126-C129.
- Detterman, R. L., 1973, Geologic map of the Iliamna B-2 quadrangle, Augustine Island, Alaska: U. S. Geological Survey Map GQ-1068, scale 1:25,000.
- Detterman, R. L., Case, J. E., Wilson, F. H., Yount, M. E., and Allaway, W. H. Jr., 1983, Generalized geologic map of the Ugashik, Bristol Bay, and part of the Karluk quadrangles, Alaska: U. S. Geological Survey Miscellaneous Field Studies Map MF-1539-A, scale 1:250,000.
- Detterman, R. L., and Hartsock, J. K., 1966, Geology of the Iniskin-Tuxedni region, Alaska: U. S. Geological Survey Professional Paper 512, 78 p.
- Detterman, R. L., Hudson, T. L., Plafker, G., Tysdal, R. G., and Hoare, J. M., 1976, Reconnaissance geologic map along Bruin Bay and Lake Clark faults in Kenai and Tyonek quadrangles, Alaska: U. S. Geological Survey Open-file Report 76-477, 4 p., 1 pl.
- Detterman, R. L., Miller, T. P., Wilson, F. H., and Yount, M. E., 1985, Geologic map of the Ugashik and western Karluk quadrangles, Alaska: U. S. Geological Survey Miscellaneous Geological Investigations Map I-685, scale 1:250,000.
- Detterman, R. L., Miller, T. P., Yount, M. E., and Wilson, F. H., 1979, Generalized geologic map of Chignik and Sutwik Island quadrangles, Alaska: U. S. Geological Survey Miscellaneous Investigations Series Map I-1053, scale 1:250,000.
- Detterman, R. L., Miller, T. P., Yount, M. E., and Wilson, F. H., 1981, Geologic map of the Chignik and Sutwik Island quadrangles, Alaska: U. S. Geological Survey Miscellaneous Geological Investigations Map I-1229, scale 1:250,000.
- Detterman, R. L., Miller, T. P., Yount, M. E., and Wilson, F. H., 1981, Quaternary geologic map of the Chignik and Sutwik

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Island quadrangles, Alaska: U. S. Geological Survey Miscellaneous Geological Investigations Map I-1292, scale 1:250,000.
- Detterman, R. L., Wilson, F. H., Yount, M. E., and Miller, T. P., 1986, Quaternary geologic map of the Ugashik, Bristol Bay and part of the Karluk quadrangles, Alaska: U. S. Geological Survey Miscellaneous Field Investigations Map I-1801, scale 1:250,000.
- Detterman, R. L., and Reed, B. L., 1964, Preliminary map of the geology of the Iliamna quadrangle, Alaska: U. S. Geological Survey Miscellaneous Geological Investigations Map I-407, scale 1:250,000.
- Detterman, R. L., and Reed, B. L., 1968, Geology of the Iliamna quadrangle, Alaska: U. S. Geological Survey Open-file Map 68-72, 2 pl., scale 1:200,000.
- Detterman, R. L., and Reed, B. L., 1973, Surficial deposits of the Iliamna quadrangle, Alaska: U. S. Geological Survey Bulletin, 1368-A, p. A1-A64.
- Detterman, R. L., and Reed, B. L., 1980, Stratigraphy, structure, and economic geology of the Iliamna quadrangle, Alaska: U. S. Geological Survey Bulletin 1368-B, 86 p. 1 pl., scale 1:250,000.
- Dickey, D. B., 1983, Tertiary sedimentary rocks and tectonic implications of the Farewell fault zone, McGrath quadrangle, Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 54 p.
- Dickey, D. B., 1984, Cenozoic non-marine sedimentary rocks of the Farewell fault zone, McGrath quadrangle, Alaska: Sedimentary Geology, v. 38, p. 443-463.
- Dickey, D. B., Gilbert, W. G., and Kline, J. T., 1982, Cenozoic nonmarine sedimentary rocks and structure of the Farewell fault segment of the Denali fault system, southwest Alaska [abs.]: Geological Society of America, Abstracts with Programs, p. 166.
- Diller, J. S., 1884, Volcanic sand which fell at Unalaska, Alaska, Oct. 20, 1883, and some considerations concerning its composition: Science, v. 3, p. 651-654.
- Diller, J. S., 1893, Our youngest volcano: National Geographic Magazine, v. 5, p. 93-96.
- Dillon, J. T., Adams, D. D., and Adler, P., 1983, Geologic map of the Melozitna A-4 quadrangle: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Report of Investigations 83-18, 1 pl., scale 1:63,360.

- Dixon, J. P., and Pulpan, H., 1986, Crustal structure in the area of the 1985 Dall City, Alaska earthquake sequence [abs.]: EOS, v. 67, no. 44, p. 1198.
- Doroshin, P., 1870, Some volcanoes, their eruptions, and earthquakes in the former Russian holdings in America: Verhandlungen der Russisch-Kaiserlichen Mineralogischen Gesellschaft zu St. Petersburg, Zweite Serie, Funfter Rand: 25-44 (in Russian).
- Dover, J. H., and Mayaoka, R. T., 1985, Major rock packages of the Ray Mountains, Tanana and Bettles quadrangles, in Bartsch-Winkler, S., and Reed, K. M., eds., U. S. Geological Survey in Alaska: Accomplishments during 1983: U. S. Geological Survey Circular 945, p. 32-36.
- Drewes, H., Fraser, G. D., Snyder, G. L., and Barnett, H. F. Jr. 1961, Geology of Unalaska Island and adjacent insular shelf, Aleutian Islands, Alaska: U. S. Geological Survey Bulletin 1028-S, p. 583-676.
- Dumond, D. E., 1979, People and pumice on the Alaska Peninsula, in Sheets, P. D., and Grayson, D. K., eds., Volcanic activity and human ecology: New York, Academic Press, p. 373-392.
- Dunn, R., 1909, Conquering our greatest volcano: Harpers Monthly Magazine, v. 82, no. 3, p. 497-509.
- Eakins, G. R., 1969, A sulfur deposit, Stepovak Bay, Alaska Peninsula [abs.], in Alaska Division of Mines and Geology, Report for the 1969: Fairbanks, Alaska Division of Mines and Minerals, p. 10.
- East, J. S., 1982, Preliminary geothermal investigations at Manley Hot Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG-290, 76 p.
- East, J. S., 1982, Geothermal investigation of Manley Hot Springs, Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 95 p.
- Eberlein, G. D., Churkin, M. Jr., Carter, C., Berg, H. C., and Ovenshine, A. T., 1983, Geology of the Craig quadrangle, Alaska: U. S. Geological Survey Open-file Report 83-91, 53 p., 1 pl., scale 1:250,000.
- 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 pl., scale 1:1,000,000.

- Economides, M. J., Ansari, J., Arce, G. N., and Reeder, J. W., 1982, Engineering and geological analyses of the geothermal energy potential of selected sites in the State of Alaska: Proceedings of VIII Workshop on Geothermal Reservoir Engineering, Stanford University, 7 p.
- Economides, M. J., and Arce, G. N., 1983, Geothermal development in Alaska - an engineering and geologic analysis: Geothermics, v. 3, p. 241-264.
- Economides, M. J., Economides, C. E., Kunza, J. F., and Lofgren, B. E., 1982, A field-wide reservoir engineering analysis of the Pilgrim Springs, Alaska geothermal reservoir: Proceedings, 8th Workshop in Geothermal Reservoir Engineering, Stanford University, Stanford, California.
- Economides, M. J., Morris, C. W., and Campbell, D. A., 1985, Evaluation of the Makushin geothermal reservoir, Unalaska Island: Proceedings of the Tenth Workshop on Geothermal Reservoir Engineering, SGP-TR-84, Stanford University, Stanford, Ca., p. 227-232.
- Economides, M. J., Reeder, J. W., and Markle, D. R., 1981, Unalaska geothermal development: Proceedings of New Zealand geothermal workshop, University of Auckland and the New Zealand Ministry of Works, p. 7-12.
- Edsall, D. W., 1976, Trace elements in tephra as indicators of magmatic composition in the Aleutian arc: Geological Society of America Bulletin, v. 87, p. 1269-1272.
- Eickelberger, J. C., and Hildreth, W., 1986, Research drilling at Katmai, Alaska [abs.]: EOS, v. 67, no. 41, p. 778-780.
- Emanuel, R. P., 1984, Hydrologic and volcanic hazards from the Mount Spurr, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 281.
- Emery, P., and Jones, S., 1984, Hydrologic atlas of the Copper River Basin, Alaska: U. S. Geological Survey - Hydrologic Atlas 686.
- Emmel, K. S., and Coonrod, P. L., 1982, Geological literature on the Copper River basin and middle Tanana River basins: Fairbanks, Alaska Division of Geological and Geophysical Surveys Special Report 30, 11 p.
- Escher, B. G., 1922, On the hot "lahar" (mud flow) of the Valley of Ten Thousand Smokes, Alaska: Koninklijke Akademie van Wetenschappen, Proceedings Science Section, v. 24, p. 282-293.
- Estes, S. A., 1978, Seismotectonic studies of lower Cook Inlet, Kodiak Island and the Alaska Peninsula areas of Alaska:

- Fairbanks, University of Alaska, unpublished M.S. thesis, 142 p.
- Federman, A. N., and Scheidegger, K. F., 1984, Compositional heterogeneity of the distal tephra deposits from the 1912 eruption of Novarupta, Alaska: *Journal of Volcanology and Geothermal Research*, v. 21, p. 233-254.
- Fenner, C. N., 1920, The Katmai region, Alaska, and the great eruption of 1912: *Journal of Geology*, v. 28, no. 7, p. 569-606.
- Fenner, C. N., 1920, Geology of the Katmai region, Alaska, and the great eruption of 1912 [abs.]: *Geological Society of America Bulletin*, v. 31, no. 1, p. 140.
- Fenner, C. N., 1923, The origin and mode of emplacement of the great tuff deposit of the Valley of Ten Thousand Smokes: *National Geographic Society, Contributed Technical Papers, Katmai Series*, no. 1, 74 p.
- Fenner, C. N., 1923, The origin and mode of emplacement of the great tuff deposit in the Valley of Ten Thousand Smokes: *Science*, v. 57, p. 496-497.
- Fenner, C. N., 1926, The Katmai magmatic province: *Journal of Geology*, v. 34, p. 673-772.
- Fenner, C. N., 1930, Mount Katmai and Mount Mageik: *Zeitschrift fur Vulkanologie*, v. 13, p. 1-24.
- Fenner, C. N., 1937, Tuffs and other volcanic deposits of Katmai and Yellowstone Park: *EOS, 18th Annual Meeting, Part 1*, p. 236-239.
- Fenner, C. N., 1950, The chemical kinetics of the Katmai eruption: *American Journal of Science*, v. 248, n. 9, p. 593-627, (part 1), v. 248, n. 10, p. 697-725, (part 2).
- Ferrians, O. J. Jr., and Nichols, D. R., 1965, Copper River basin, *in* Pewe, T. L. & Others, eds., *Guide book for field conference F, International association for Quaternary Research, Fairbanks, 1965: Academy of Science, Lincoln, Nebraska*, p. 93-114.
- Ferrians, O. J. Jr., Nichols, D. R., and Schmoll, H. R., 1958, Pleistocene volcanic mudflow in the Copper River basin, Alaska: *Geological Society of America Bulletin*, v. 69, no. 12, pt. 2, p. 1563.
- Ferrians, O. J. Jr., Nichols, D. R., and Williams, J. R., 1983, Copper River Basin, *in* Pewe, T. R., and Reger, R. D., eds., *Richardson & Glenn Hwy, Alaska, Guidebook to Permafrost and*

- Quaternary Geology: Alaska Division of Geological & Geophysical Surveys, Guidebook 1, p. 137-175.
- Ferrians, O. J. Jr., and Schmoll, H. R., 1957, Extensive proglacial lake of Wisconsin age in the Copper River basin, Alaska: Geological Society of America Bulletin, v. 68, no. 12, pt. 2, p. 1726.
- Fierstein, J. E., and Hildreth, W., 1984, Grain-size of pyroclastic deposits of Novarupta, Katmai National Park, Alaska [abs.]: EOS, v. 65, no. 45, p. 1149.
- Fierstein, J. E., and Hildreth, W., 1986, Ejecta dispersal and dynamics of the 1912 eruptions of Novarupta, Katmai National Park, Alaska [abs.]: EOS, v. 67, no. 44, p. 1246.
- Finch, R. H., 1935, Akutan volcano: Zeitschrift fur Vulkanologie, v. 16, no. 3, p. 155-160.
- Fitch, E., 1927, Mineral waters of the United States & American spas: Lea & Febiger, Philadelphia, Pa. 799p.
- Forbes, R. B., 1975, Geothermal energy and wind power...alternate energy sources for Alaska: Fairbanks, University of Alaska Geophysical Institute and Alaska Energy Office Report, 144 p., 7 appendices.
- Forbes, R. B., ed., 1976, Geothermal energy and wind power - alternative energy sources for Alaska: Fairbanks, Geophysical Institute report to National Science Foundation.
- Forbes, R. B., 1979, A geological and geophysical assessment of the geothermal potential of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, 39 p.
- Forbes, R. B., and Biggar, N. E., 1973, Alaska's geothermal resource potential: Northern Engineer, v. 5, no. 1, p. 6-10.
- Forbes, R. B., Gedney, L., Van Wormer, D., and Hook, J., 1975, A geophysical reconnaissance of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute, Technical Report UAG-231, 26 p.
- Forbes, R. B., and Kienle, J., 1971, Petrology of pre-1912 pyroclastic deposits in the Valley of 10,000 Smokes, Alaska [abs.]: Proceedings International Union of Geodesy and Geophysics - International Association for Volcanology and Chemistry of the Earth's Interior: Symposium on Acid Volcanism, Moscow, USSR, Aug 1971.
- Forbes, R. B., and Kienle, J., 1971, Mount Saint Augustine -- restless volcano: Pacific Search, v. 6, p. 3-4.

- Forbes, R. B., Kienle, J., and Harlow, D. H., 1971, Microseismicity of Augustine Volcano, Alaska [abs.]: Proceedings International Union of Geodesy and Geophysics - International Association for Volcanology and Chemistry of the Earth's Interior: Symposium on Acid Volcanism, Moscow, USSR, Aug. 1971.
- Forbes, R. B., Leonard, L. E., and Dinkel, D. H., 1975, Total energy utilization potential of Alaskan thermal springs: Proceedings of the United Nations Geothermal Symposium, San Francisco, California, May 1975, p. 2209-2215.
- Forbes, R. B., Leonard, L. E., and Dinkel, D. H., 1975, Utilization of geothermal energy resources in rural Alaska communities: Fairbanks, University of Alaska, Geophysical Institute Report UAGR-232, 83 p.
- Forbes, R. B., Turner, D. L., and Naeser, C. W., 1975, Downhole fission track 40K/40Ar age determinations and the measurement of perturbations in the geothermal gradient [abs.]: International Conference on Geothermometry and Geobarometry, Pennsylvania State University, Extended abstracts volume 1975.
- Forbes, R. B., Turner, D. L., Naeser, D. W., and Hawkins, D. B., 1977, Downhole fission track 40K/40Ar age determinations and the measurement of perturbations in the geothermal gradient: Fairbanks, University of Alaska, Geophysical Institute progress report RDL-229-T11-1 to ERDA under contract No. # (45-1)-229, Task Agreement 11, 37 p.
- Forbes, R. B., Wescott, E. M., Osterkamp, T. E., Kienle, J., Turner, D. L., and Kline, J. T., 1979, The Pilgrim Springs hydrothermal system: Theories and models: Proceedings of 30th Alaska Science Conference, American Association for the Advancement of Science, p. 60-61.
- Forbes, R. B., Wescott, E. M., Turner, D. L., Kienle, J., Osterkamp, T. E., Hawkins, D. B., Kline, J. T., Swanson, S. E., Reger, R. D., and Harrison, 1979, A geological and geophysical assessment of the geothermal potential of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, 39 p., 1 pl.
- Foresman, J. B., 1968, Photogeologic and geomorphic study of the Copper River basin, Alaska: Surface Projects Section, Phillips Petroleum Co. Job No. P-2094.
- Foresman, J. B., 1970, Mud volcanoes and abnormal pressure, Copper River basin, Alaska: Tulsa, Oklahoma, University of Tulsa, unpublished M.S. thesis, 39 p.

- Foster, H. L., 1970, Reconnaissance geologic map of the Tanacross quadrangle, Alaska: U. S. Geological Survey, Miscellaneous Geological Investigations Map I-593, 1 pl., scale 1:250,000.
- Foster, H. L., Brabb, E. E., Weber, F. R., and Forbes, R. B., 1970, Regional geology of Yukon-Tanana Upland, Alaska [abs.]: American Association of Petroleum Geologists Bulletin, v. 54, no. 12, p. 2481.
- Foster, H. L., Laird, J., Keith, T. E. C., Cushing, G. W., and Menzie, W. D., 1983, Preliminary geologic map of the Circle quadrangle, Alaska: U. S. Geological Survey Open-file Report 83-170-A, 24 p., 1 pl., scale 1:250,000.
- Foster, H. L., Laird, J., Keith, T. E. C., Cushing, G. W., and Menzie, W. D., 1983, Preliminary geologic map of the Circle quadrangle, Alaska: U. S. Geological Survey Open-file Report 83-170A, 1 pl., scale 1:250,000.
- Foster, H. L., Weber, F. R., Forbes, R. B., and Brabb, E. E., 1973, Regional geology of Yukon-Tanana Upland, Alaska, in Arctic Geology: American Association of Petroleum Geologists, Memoir no. 19, p. 388-395.
- Fournelle, J., and Marsh, B. D., 1986, Shishaldin Volcano, Unimak Island, Aleutians: Unordinary arc lavas. I. Chemistry, mineralogy and petrology [abs.]: EOS, v. 67, no. 44, p. 1276.
- Fraser, G. D., and Barnett, H. F. Jr., 1959, Geology of the Delarof and westernmost Andreanof Islands, Aleutian Islands, Alaska: U. S. Geological Survey Bulletin 1028-I, p. 211-248.
- Fraser, G. D., and Snyder, G. L., 1959, Geology of southern Adak Island and Kagalaska Island, Alaska: U. S. Geological Survey Bulletin 1028-M, p. 371-408.
- Fry, W. H., 1912, Mineral content of volcanic ashes from Kodiak (Alaska): Science, v. 36, p. 681-682.
- Funk, J. M., 1973, Late Quaternary geology of Cold Bay, Alaska, and vicinity: Storrs, Connecticut, University of Connecticut, unpublished M.S. thesis, 45 p.
- Funk, J. M., 1973, The late Quaternary history of Cold Bay, Alaska and its implications to the configuration of the Bering Land Bridge [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 2, p. 162.
- Furst, J. I., 1968, The reconnaissance petrology of andesites from the Mt. Wrangell caldera: Fairbanks, University of Alaska, unpublished M.S. thesis, 83 p.

- Gassaway, J. S., and Abramson, B. S., 1977, Map and table showing distribution of known thermal springs in selected igneous rocks in central Alaska: U. S. Geological Survey Open-file Report 77-168H, scale 1:1,000,000.
- Gates, O., Powers, H. A., and Wilcox, R. E., 1971, Geology of the Near Islands, Alaska: U. S. Geological Survey Bulletin 1028-U, p. 709-782.
- Gedney, L., Matteson, C., and Forbes, R. B., 1970, Seismic refraction profiles of the ash flow in the Valley of 10,000 Smokes, Katmai National Monument, Alaska: Journal of Geophysical Research, v. 75, p. 2619-2624.
- Gilbert, W. G., 1981, Preliminary geologic map and geochemical data, Cheeneetnuk River area, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Open-file Report 153, 10 p., 2 pl., scale 1:63,360.
- Gilbert, W. G., and Solie, D. N., 1983, Preliminary geologic map of Mc Grath A-3 quadrangel, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Report of Investigation 83-7, 1 pl., scale 1:40,000.
- Godwin, L. H., Haigler, L. B., Rioux, R. L., White, D. E., Muffler, L. J. P., and Wayland, R. G., 1971, Classification of public lands valuable for geothermal steam and associated geothermal resources: U. S. Geological Survey Circular 647, 18 p.
- Gosink, T., Borchert, M., and Chuan, R., 1986, Mt. St. Augustine ash, March, 1986: Differences between aerosol and surface materials [abs.]: EOS, v. 67, no. 44, p. 1260.
- Gosink, J. P., and Osterkamp, T. E., 1980, A preliminary investigation of the possible existence of a hot water aquifer under the Pilgrim River: Fairbanks, University of Alaska, Geophysical Institute Report to Alaska Division of Energy and Power Development, 44 p.
- Grantz, A., White, D. E., 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. 1990-2002.
- Grewingk, C., 1850, Beitrag zur Kenntnisse der orographischen und geognostischen Beschaffenheit der Nordwest-Küste Amerikas mit den aliegenden Inseln: Verhandlungen der Russisch-Kaiserlichen Mineralogischen Gesellschaft zur St. Petersburg, Jahrgang 1848 und 1849, p. 76-342.
- Griggs, R. F., 1917, The Valley of Ten Thousand Smokes: National Geographic Society explorations in the Katmai

- district of Alaska: National Geographic Magazine, v. 31, no. 1, p. 13-68.
- Griggs, R. F., 1918, the great hot mud flow of the Valley of Ten Thousand Smokes: Ohio Journal of Science, v. 19, p. 117-142.
- Griggs, R. F., 1918, The Valley of Ten Thousand Smokes: An account of the discovery and exploration of the most wonderful volcanic region in the world: National Geographic Magazine, v. 33, no. 2, p. 115-169.
- Griggs, R. F., 1918, The eruption of Katmai: Nature, v. 101, no. 25, p. 497-499.
- Griggs, R. F., 1919, The character of the eruption [of Katmai] as indicated by its effects on nearby vegetation: Ohio Journal of Science, v. 19, p. 173-209.
- Griggs, R. F., 1919, The Katmai National Monument and the Valley of Ten Thousand Smokes: Science, v. 49, p. 236-237.
- Griggs, R. F., 1921, The Katmai National Monument and the Valley of Ten Thousand Smokes: Science, v. 49, p. 236-237.
- Griggs, R. F., 1921, Our greatest national monument: The National Geographic Society completes its explorations in the Valley of Ten Thousand Smokes: National Geographic Magazine, v. 40, no. 3, p. 219-292.
- Griggs, R. F., 1922, The Valley of Ten Thousand Smokes: National Geographic Society, Washington, 340 p.
- Griggs, R. F., 1923, Observations on the incandescent sand flow of the Valley of Ten Thousand Smokes: Koninklijke Akademie van Wetenschappen, Amsterdam, Proceedings Ser. Science, v. 25, p. 42-50.
- Hamilton, T. D., 1973, Geomorphic role of snow and ice during the Katmai eruption [abs.]: Geological Society of America, Abstracts with Programs, v. 5, no. 1, p. 48-49.
- Hansen, E., Sherman, G., and Knaebel, J., 1981, Preliminary report on the mineral potential of the Alaskan Peninsula: U. S. Bureau of Mines, Open-file Report 36-81, 38 p.
- Harmon, R. S., Nehring, N. L., Motyka, R. J., White, L. D., and Borthwick, J., 1982, Hydrogen and oxygen isotope composition of fumarole condensates from the Augustine Volcano, Alaska: International Association of Geochemistry and Cosmochemistry, Fourth International Symposium on Water-Rock Interaction, October 1982.

- Harmon, R. S., Strong, D. F., Hoefs, J., and Moorbath, S., 1984, Augustine Volcano, Alaska: Chemical and isotopic character [abs.]: Geological Society of America, Abstracts with Programs, v. 16, p. 530.
- Harrison, W., and Hawkins, D. B., 1980, Water and heat flow measurements and their relationship to power estimates at Pilgrim Springs, Alaska, in Turner, D. L., and Forbes, R. B., eds., A geological and geophysical study of the geothermal potential of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute, Report UAG-R-271, p.101-112.
- Hawkins, D. B., and Harrison, W., 1979, Measurement of flow rate of Pilgrim Hot Springs and estimation of ground water velocity in the upper 10 meters of unconsolidated sediments [abs.]: Proceedings 30th Alaska Science Conference, American Association for the Advancement of Science, p. 57.
- Hawkins, D. B., and Motyka, R. J., 1985, A multivariate statistical analysis and chemical mass balance analysis of waters of the Copper River basin, Alaska, in Wallick, E., and Hitchon, B., eds., Proceedings of 1st Annual Canadian-American Conference on Hydrogeology: Banff, Alberta, National Water-well Association, p. 238-249.
- Henning, R. A., Olds, B., and Rennick, P., 1981, Wrangell-Saint Elias International Mountain Wilderness: Alaska Geographic, v. 8, no. 1, 144 p.
- Henning, R. A., Rosenthal, C. H., Olds, B., and Reading, E., 1976, Alaska's Volcanoes: Alaska Geographic, v. 4, no 1., 88 p.
- Herreid, G., 1966, The geology and geochemistry of the Inmachuk River map area, Seward Peninsula, Alaska: Fairbanks, Alaska Division of Mines and Minerals, Geologic Report no. 23, 25 p.
- Hickel, W. J., 1972, Geothermal Energy, A national proposal for geothermal resources research: Final report of the Geothermal Resources Research Conf., Battelle Seattle Research Center, Sept. 18-20, 1971. Sponsored by NSF & University of Alaska, Fairbanks, 95 p.
- Higbie, R. G., 1975, The Katmai eruption and the Valley of Ten Thousand Smokes: National Geographic Society Research Report, V. 8, p. 141-170.
- Hildreth, W., 1980, Novarupta 1912: Petrology of the ejecta [abs.]: EOS, v. 61, no. 6, p. 66.
- Hildreth, W., 1981, The 1912 eruption in the Valley of Ten Thousand Smokes, Katmai National Monument, Alaska [abs.]:

- International Association of Volcanology and Chemistry of the Earth's Interior, Symposium on Arc Volcanism August 28-September 9, 1981, Tokyo & Hakone, Japan, p. 126-127.
- Hildreth, W., 1983, The compositionally zoned eruption of 1912 in the Valley of Ten Thousand Smokes, Katmai National Park, Alaska: *Journal of Volcanology and Geothermal Research*, v. 18, p. 1-56.
- Hildreth, W., and Fierstein, J. E., 1986, Near-vent ejecta around Novarupta, eruption on 1912, Katmai National Park, Alaska [abs.]: *EOS*, V. 67, no. 44, p. 1246.
- Hildreth, W., Fierstein, J. E., Grunder, A. L., and Jager, L., 1981, The 1912 eruption in the Valley of Ten Thousand Smokes, Katmai National Park: A summary of the stratigraphy and petrology of the ejecta, *in* Coonrad, W. L., and Elliott, R. E., eds., *The U. S. Geological Survey in Alaska: Accomplishments during 1981: U. S. Geological Survey Circular 868*, p. 37-39.
- Hildreth, W., and Grunder, A. L., 1980, The Valley of Ten Thousand Smokes tuff, II, compositional and isotopic variability of the ejecta [abs.]: *Geological Society of America, Abstracts with Programs*, v. 12, p. 111.
- Hoare, J. M., and Coonrad, W. L., 1959, *Geology of the Russian Mission quadrangle, Alaska: U. S. Geological Survey, Miscellaneous Geological Investigations Map I-292*, 1 pl., scale 1:250,000.
- Hobbs, P. V., Radke, L. F., and Stith, J. L. 1977, Eruptions of the St. Augustine Volcano: Airborne measurements and observations: *Science*, v. 195, no. 4281, p. 871-873.
- Holmes, C. E., 1986, Archaeological evaluation of the proposed Makushin geothermal power facility, Unalaska Island, Alaska, *in* Updike, R. G., ed., *Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60*, p. L1-L8, 1 pl, scale 1:24,000.
- Homan, F., 1972, *Energy from the Earth: Alaska Construction and Oil Report*, April 1972, p. 64-71.
- Hopkins, D. M., 1963, *Geology of the Imuruk Lake area, Seward Peninsula, Alaska: U. S. Geological Survey Bulletin 1141-C*, 101 p.
- Hopkins, J. P., and Hopkins, D. M., 1958, *Seward Peninsula, in* Howel, W., ed., *Landscapes of Alaska, their geologic evolution: Berkeley & Los Angeles, University of California Press*, p. 104-110.

- Hopkins, D. M., and Taber, B., 1962, Stratigraphy of the pre-Quaternary bedded rocks of the Manley Hot Springs area, Alaska: Unpublished U. S. Geological Survey Bulletin, 131 p.
- House, L., Sykes, L., Davies, J. N., and Jacob, K. H., 1981, Identification of a possible seismic gap near Unalaska Island, eastern Aleutians, Alaska, *in* Simson, D. W., and Richards, P. G., eds., Earthquake prediction, an international Review: American Geophysical Union, Maurice Ewing Series, v. 4, p. 81-92.
- Hrdlicka, A., 1945, The Aleutian and Commander Islands and their inhabitants: Wistar Institute of Anatomy and Biology, Philadelphia, 630 p.
- Hubbard, B. R., 1931, A world inside a mountain: National Geographic Magazine, v. 60, no. 3, p. 319-354.
- Hubbard, B. R., 1931, Geologic features of Aniakchak and Veniaminof craters, Alaska [abs.]: Journal of the Washington Academy of Sciences, v. 21, no. 2, p. 29-30.
- Hubbard, B. R., 1935, Cradle of the storms: Veil-Ballou Press, New York, 283 p.
- Hudson, T. L., 1977, Genesis of a zoned granite stock, Seward Peninsula, Alaska: U. S. Geological Survey Open-file Report 77-35, 188 p.
- Hudson, T. L., 1977, Genesis of a zoned granite stock, Seward Peninsula, Alaska: Stanford, California, Stanford University, unpublished Ph.D. thesis, 190 p.
- Hudson, T. L., compiler, 1977, Geologic map of Seward Peninsula, Alaska: U. S. Geological Survey Open-file Report 77-796-A, scale 1:1,000,000.
- Hudson, T. L., 1979, Igneous and metamorphic rocks of the Serpentine Hot Springs area, Seward Peninsula, Alaska: U. S. Geological Survey Professional Paper 1079, 27 p.
- Hudson, T. L., and Plafker, G. 1978, Kigluaik and Bendeleben faults, Seward Peninsula: U. S. Geological Survey Circular 772-B, 4 p.
- Imm, T. A., 1986, Preliminary detailed stratigraphic sections and bedrock maps of the Lisburne group, Mt. Michelson C-3 and C-4 quadrangles, western Sadlerochit Mountains and northwest Shublik Mountains, northwestern Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-86e, 34 p., 2 pl., scale 1:24,000.

- Isselhardt, C. F., Matlick, J. S., Parmentier, P. P., and Bamford, R. W., 1983, Temperature gradient hole results from Makushin geothermal area, Unalaska Island, Alaska: Geothermal Resources Council Transactions, V. 7, p. 95-98.
- Isselhardt, C. F., Motyka, R. J., Matlick, J. S., Parmentier, P. P., and Hutterer, G. W., 1983, Geothermal resource model for the Makushin geothermal area, Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 7, p. 99-104.
- Jackson, S., 1880, Alaska, and missions on the north Pacific coast: Dodd, Mead, & Co., New York, 327 p.
- Jacob, K. H., and Boyd, T. M., 1985, Analysis of data from a temporary seismic network on Unalaska Island: Alaska Division of Geological and Geophysical Surveys, Public-data File 85-59, 47 p.
- Jaggard, T. A. Jr., 1908, Journal of the technology expedition to the Aleutian Islands, 1907: Technology Review, v. 10, p. 1-37.
- Jaggard, T. A. Jr., 1908, The evolution of Bogoslof Volcano: Bulletin of the American Geographical Society, v. 40, p. 385-400.
- Jaggard, T. A. Jr., 1927, Eruption of Mageik in Alaska: The Volcano Letter, Hawaiian Volcano Observatory, no. 147.
- Jaggard, T. A. Jr., 1908, The evolution of Bogoslof [abs.]: Science, v. 28, p. 575.
- Johnson, D. A., 1976, Evidence for a zoned magma chamber 6-10 km beneath Augustine Volcano, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 8, p. 942-943.
- Johnson, D. A., 1978, Magma mixing prior to eruptions of Augustine Volcano, Alaska--implications for the eruption and magmatic evolution of the volcano [abs.]: Geological Society of America, Abstracts with Programs, 1978, p. 110-111.
- Johnson, D. A., 1978, Volatiles, magma mixing, and the mechanism of eruption of Augustine Volcano, Alaska: Seattle, Washington, University of Washington, unpublished Ph.D. thesis, 177 p.
- Johnson, D. A., 1979, Onset of volcanism at Augustine Volcano, lower Cook Inlet, in Johnson, K. M., and Williams, J. A., eds., U. S. Geological Survey in Alaska: Accomplishments during 1978: U. S. Geological Survey Circular 804-B, p. B78-B80.

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Johnson, D. A., 1979, Volcanic gas studies at Alaskan volcanoes, in Johnson, K. M., and Williams, J. R., eds., U. S. Geological Survey in Alaska: Accomplishments during 1978: U. S. Geological Survey Circular 804-B, p. B83-B84.
- Johnson, D. A., 1980, Volcanic contribution of chlorine to the stratosphere - more significant to ozone than previously estimated: Science, v. 209, no. 4455, p. 491-493.
- Johnson, D. A., and Detterman, R. L., 1979, Revision of the recent eruption history of Augustine - elimination of the "1902 eruption", in Johnson, K. M., and Williams, J. R., eds., U. S. Geological Survey in Alaska: Accomplishments during 1978: U. S. Geological Survey Circular 804-B, p. B80-B83.
- Johnson, D. A., and Grunder, A. L., 1980, The Valley of Ten Thousand Smokes Tuff: II. Compositional and isotopic variability of the ejecta [abs.]: Geological Society of America, Abstracts with Programs, v. 12, no. 3, p. 111.
- Johnson, D. A., and Hildreth, W., 1980, The Valley of Ten Thousand Smokes tuff, I. emplacement, compaction and welding [abs.]: Geological Society of America, Abstracts with Program, v. 12. p. 113.
- Johnson, D. A., and Hildreth, W., 1980, The Valley of Ten Thousand Smokes Tuff: I. Emplacement, compaction, and welding [abs.]: Geological Society of America, Abstracts with Programs, v. 12, no. 3, p. 113.
- Johnson, D. A., Schmincke, H. U., and Kienle, J., 1977, The eruption of Augustine Volcano, Alaska and evaluation of the hazards for future eruptions [abs.]: Geological Society of America, Abstracts with Programs, v. 9, no. 4, p. 442-443.
- Johnson, P. R., and Hartman, C. W., 1969, Environmental atlas of Alaska: Fairbanks, University of Alaska, Institute of Arctic Environmental Engineering, 111 p.
- Jones, D., 1986, Coastal engineering, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p. D1-D5.
- Jones, D. L., Silberling, N. J., Coney, P. J., and Plafker, G., 1984, Lithostratographic terrane map of Alaska (west of the 141st meridian), in Silberling, N. J., and Jones, D. L., eds., Lithotectonic terrane maps of the North American Cordillera: U. S. Geological Survey Open-file Report 84-523, p. A1-A12, 1 pl., scale 1:5,000,000.

- Juhle, R. W., 1955, Iliamna Volcano and its basement: U. S. Geological Survey Open-file Report 55-77, 74 p.
- Juhle, R. W., and Coulter, H. W., 1955, The Mt. Spurr eruption, July 9, 1953: EOS, v. 36, no. 2, p. 199-202.
- Kase, J. D., 1986, Trocadero Soda Springs: Alaska Magazine, Feb. 1986, p. 30-31.
- Katsui, Y., 1984, Okmok: Volcanological Society of Japan, Bulletin of volcanic eruptions, no. 22.
- Kay, S. M., and Kay, R. W., 1982, Mafic mineralogy in calc-alkaline Aleutian volcanic rocks: Evidence for primitive magmas and magma mixing [abs.]: Geological Society of America, Abstracts with Programs, v. 14, no. 7. p. 526
- Kay, S. M., Kay, R. W., and Citron, G. P., 1982, Tectonic controls on tholeiitic and calc-alkaline magmatism in the Aleutian arc: Journal of Geophysical Research, v. 87, no. B5, p. 4051-4072.
- Keith, T. E. C., 1984, Preliminary observations on fumarole distribution and alteration, Valley of 10,000 Smokes, Alaska, in Reed, K. M., and Bartsch-Winkler, S., eds., U. S. Geological Survey in Alaska: Accomplishments in 1982: U. S. Geological Survey Circular 939, p. 82-85.
- Keith, T. E. C., 1985, Active hydrothermal alteration in the vicinity of the Novarupta dome, Valley of 10,000 Smokes, Alaska [abs.]: EOS, v. 66, no. 46, p. 1154.
- Keith, T. E. C., 1986, Distribution of hydrothermal alteration associated with Novarupta caldera, Katmai National Park, Alaska [abs.]: EOS, v. 67, no. 44, p. 1246.
- Keith, T. E. C., and Foster, H. L., 1979, Big Windy Creek hot springs, Circle A-1 quadrangle, Alaska, in Johnson, K. M., and Williams, J. R., eds., U. S. Geological Survey in Alaska: Accomplishments during 1978: U. S. Geological Survey Circular 804-B, p. B55-B57.
- Keith, T. E. C., Presser, T. S., and Foster, H. L., 1981, New chemical and isotope data for the hot springs along Big Windy Creek, Circle A-1 quadrangle, Alaska, in Albert, N. R. D., and Hudson, T. L., eds., U. S. Geological Survey in Alaska: Accomplishments during 1979: U. S. Geologic Survey Circular 823-B, p. B25-B28.
- Keller, A. S., 1955, General geology of the Katmai area, Alaska [abs.]: Geological Society of America Bulletin, v. 66, no. 12, p. 1703.

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Keller, A. S., and Reiser, H. N., 1959, Geology of the Mt. Katmai Area, Alaska: U. S. Geological Survey Bulletin 1058-G, p. 261-298.
- Kennedy, G. C., and Waldron, H. H., 1955, Geology of Pavlof Volcano and vicinity, Alaska: U. S. Geological Survey Bulletin 1028-A, p. 1-18.
- Kerr, F. A., 1948, Lower Stikine and western Iskut River areas, British Columbia, Canada: Canada Geologic Surveys Memoir 246, 94 p.
- Kienle, J., 1968, Gravity survey of Katmai National Monument: Fairbanks, University of Alaska, unpublished Ph.D. thesis, 151 p.
- Kienle, J., 1969, Gravity traverses in the Valley of Ten Thousand Smokes, Katmai National Monument, Alaska [abs.]: EOS, v. 50, no. 4, p. 340.
- Kienle, J., 1969, Gravity measurements in the Aleutian Archipelago and their interpretation [abs.]: EOS, v. 50, no. 4, p. 205.
- Kienle, J., 1970, Gravity traverses in the Valley of Ten Thousand Smokes, Katmai National Monument, Alaska: Journal of Geophysical Research, v. 75, no. 32, p. 6641-6649.
- Kienle, J., 1972, Volcanogenic micro-earthquakes of Augustine Volcano, Alaska [abs.]: EOS, v. 53, no. 11, p. 1044.
- Kienle, J., 1974, Alaskan volcano studies with special reference to Augustine Volcano, in Colp, J. L., and Furumoto, A. F., eds., The utilization of volcano power: Proceedings of U. S. - Japan Cooperative Science Seminar, Hilo, Hawaii, Feb. 4-8, 1974, p. 205-224.
- Kienle, J., 1976, Seismic monitoring of Pavlov Volcano, in Comprehensive study of seismotectonics of the Aleutian arc: Lamont-Doherty Geological Observatory, Columbia University Annual Progress Report for ERDA under contract (11-1) 3134, p. 38-40.
- Kienle, J., 1986, Augustine Volcano, southwest Alaska [abs.]: EOS, v. 67, no. 44, p. 804.
- Kienle, J., Bingham, D. K., and Forbes, R. B., 1970, Seismic geologic evidence of pre-1912 tuff deposits in the Valley of Ten Thousand Smokes, Katmai National Monument, Alaska [abs.]: EOS, V. 51, no. 11, p. 829.
- Kienle, J., and Forbes, R. B., 1974, Alaskan volcano studies, with special reference to Augustine Volcano, in Colp, J. L.,

- and others, eds., The utilization of volcano energy: Sandia National Laboratory, p. 205,223.
- Kienle, J., and Forbes, R. B., 1977, Augustine - Evolution of a volcano: Fairbanks, University of Alaska, Geophysical Institute, Annual Report 1976, p. 26-49.
- Kienle, J., Forbes, R. B., and Harlow, D. H., 1971, Recent microearthquake swarm activity at Augustine Volcano, Alaska [abs.]: EOS, v. 52, no. 11, p. 925.
- Kienle, J., Kowalik, Z., and Murty, T. S., 1986, Tsunamis from large mass-movements at Augustine Volcano, Cook Inlet, Alaska [abs.]: EOS, v. 67, no. 44, p. 1259-1260.
- Kienle, J., Kyle, P. R., Self, S., Motyka, R. J., and Lorenz, V., 1980, Ukinrek Maars, Alaska, I. April 1977 eruption sequence, petrology and tectonic setting: Journal of Volcanology and Geothermal Research, v. 7, p. 11-37.
- Kienle, J., Lalla, D. J., Pearson, C. F., and Barrett, S. A., 1979, Search for shallow magma accumulations at Augustine Volcano: Fairbanks, University of Alaska, Geophysical Institute, Final Report to U. S. Dept. of Energy, Washington, D. C., 157 p.
- Kienle, J., and Lockhart, A. B., 1979, Seismic and gravity surveys of Pilgrim Springs Alaska [abs.]: Proceedings of 30th Alaska Science Conference, American Association for the Advancement of Science, p. 59.
- Kienle, J., and Lockhart, A. B., 1980, Gravity survey of the Pilgrim Springs geothermal area, Alaska, in Turner, D. L., and Forbes, R. B., eds., Geological and Geophysical study of the geothermal potential of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, UAG-R-271, p. 73-80.
- Kienle, J., Motyka, R. J., Lalla, D. J., Estes, S. A., and Huot, J. P., 1978, Formation of two maars behind the Aleutian volcanic arc, Alaska Peninsula, April 1977, preliminary results: field reconnaissance, geochemistry and seismicity: Fairbanks, University of Alaska, Geophysical Institute Report UAG-R-257, 26 p.
- Kienle, J., and Pulpan, H., 1975, Tidally triggered microearthquake activity at Augustine Volcano, Alaska [abs.]: Proceedings International Union of Geodesy and Geophysics Interdisciplinary Symposium 14: Deep and shallow structures of volcanoes, Grenoble, France, Aug. 25 - Sept. 6, 1975, p. 206.
- Kienle, J., Self, S., Motyka, R. J., and Huot, J. P., and Lalla, D. J., 1978, Formation of 2 maars behind the Aleutian

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- volcanic arc in April 1977 [abs.]: Geological Society of America, Abstracts with Programs, v. 10, p. 112.
- Kienle, J., and Shaw, G. E., 1977, Augustine volcano eruption: Initial explosive phase, January 1976--impact on the atmosphere: Fairbanks, University of Alaska, Alaskan Earthquake Analysis Center Seismological Report no. 1, UAG-R-249, 48 p.
- Kienle, J., and Swanson, S. E., 1980, Volcanic hazards from future eruptions of Augustine Volcano, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG-R-275, 122 p.
- Kienle, J., and Swanson, S. E., 1983, Volcanism in the eastern Aleutian arc: Late Quaternary and Holocene centers, tectonic setting and petrology: Journal of Volcanology and Geothermal Research, v. 17, p. 393-432.
- Kienle, J., and Swanson, S. E., 1983, Volcanism in the eastern Aleutian arc: Late Quaternary and Holocene centers, tectonic setting and petrology, in Sheridan, M. F., and Barberi, F., eds., Explosive volcanism, developments in volcanology, v. 3: New York, Elsevier, p. 393-432.
- Kienle, J., and Swanson, S. E., 1985, Volcanic hazards from future eruptions of Augustine Volcano, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG R-275, Second Edition, 122 p.
- Kienle, J., Swanson, E. E., and Pulpan, H., 1981, Volcanic centers in the Katmai area, Alaska [abs.]: EOS, v. 62, p. 430.
- Kienle, J., Swanson, S. E., and Pulpan, H., 1981, Subduction and magmatism in the eastern Aleutian arc [abs.]: International Association of Volcanology and Chemistry of the Earth's Interior, Symposium on Arc Volcanism, August 28-September 9, 1981, Tokyo & Hakone, Japan, p. 177-178.
- Kienle, J., Swanson, S. E., and Pulpan, H., 1983, Magmatism and subduction in the eastern Aleutian arc, in Shimozuru, D., and Yokoyama, I., eds., Arc volcanism: Physics and tectonics: Tokyo, Japan, Terra Scientific Publishing Co., p. 191-224.
- King, J., 1909, The Tanana valley: Alaska Yukon Magazine, v. 7, no. 5, p. 251-258.
- Kline, J. T., 1980, Test drilling report--Procedures and results of two test holes drilled at Pilgrim Springs, Alaska in October and November, 1979: Fairbanks, Alaska Division of Geological and Geophysical Surveys Report to Alaska Division of Energy and Power Development, 6 p.

- Kline, J. T., 1981, Surficial geology of lower Pilgrim Valley and vicinity, western Seward Peninsula, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report AOF 140, 2 pl., scale 1:24,000.
- Kline, J. T., Reger, R. D., McFarlane, R. M., and Williams, T., 1980, Surficial geology and test drilling at Pilgrim Springs, Alaska, in Turner, D. L., and Forbes, R. B., eds., Geological & geophysical study of the geothermal potential of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, UAG-R-271, p. 21-28.
- Knappen, R. S., 1926, Geology and mineral resources of the Aniakchak district: U. S. Geological Survey Bulletin 797, p. 161-223.
- Knappen, R. S., 1933, Aniakchak and Veniaminof volcanoes, Alaska [abs.]: Geological Society of America Bulletin, v. 44, no. 1, p. 90-91.
- Knopf, A., 1912, The Sitka mining district, Alaska: U. S. Geological Survey Bulletin 504, 32 p.
- Kodosky, L. G., and Keskinen, M., 1986, Preliminary observations on fumarole distribution and alteration at Augustine Volcano, Alaska [abs.]: EOS, v. 67, no. 44, p. 1260.
- Kosco, D. G., 1981, Characteristics of andesitic to dacitic volcanism at Katmai National Park, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 13, p. 490.
- Kosco, D. G., 1981, Part I: The Edgecumbe volcanic field, Alaska: an example of tholeiitic and calc-alkaline volcanism; Part II: Characteristics of andesitic to dacitic volcanism at Katmai National Park, Alaska: Berkeley, California, University of California, unpublished Ph.D. thesis, 249 p.
- Krause, K., 1986, Transmission powerline and road corridor geotechnical study for the proposed Makushin geothermal field power facility on Unalaska Island, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p C1-C17, 1 pl, scale 1:24,000.
- Kubota, S., and Berg, E., 1967, Evidence for magma in the Katmai volcanic range: Bulletin of Volcanology, v. 31, p. 175-214.
- Kunza, J. F., and Lofgren, B. E., 1983, Pilgrim Springs, Alaska geothermal resource exploration, drilling and testing:

Geothermal Resources Council, Transactions, v. 7, p. 301-304.

- Lachenbruch, A. H., Sass, J. H., Marshall, B. V., Moses, T. H. Jr., Munroe, R. J., and Smith, E. P., 1984, Geothermal studies in Alaska: Conditions at Prudhoe Bay, in Coonrad, W. L., and Elliott, R. L., eds., U. S. Geological Survey in Alaska: Accomplishments during 1981: U. S. Geological Survey Circular 868, p. 19-20.
- Lalla, D. J., 1987, Seismologic and thermal studies at Augustine Volcano: Fairbanks, University of Alaska, Ph.D. Thesis (in preparation).
- Lalla, D. J., and Kienle, J., 1974, Infrared radiation thermometry of Augustine Volcano, Alaska [abs.]: EOS, v. 56, no. 12, p. 1199.
- Lalla, D. J., and Kienle, J., 1975, Micro earthquake activity and volcanic tremor associated with strombolian eruptions of Pavlov Volcano, Alaska [abs.]: Proceedings International Union of Geodesy and Geophysics Interdisciplinary Symposium 14: Deep and shallow structures of volcanoes, Grenoble, France, Aug. 25 - Sept. 5, 1975, p. 107.
- Lalla, D. J., and Kienle, J., 1976, Thermal studies on Augustine Volcano, Alaska [abs.]: EOS, v. 57, no. 4, p. 347.
- Lalla, D. J., and Kienle, J., 1978, Evolution of seismicity at Augustine volcano, 1970-1976 eruption [abs.]: Geological Society of America, Abstracts with Programs 1978, v. 10, no. 3, p. 113.
- Lalla, D. J., and Kienle, J., 1980, Problems in volcanic seismology on Augustine Volcano, Alaska [abs.]: EOS, v. 61, no. 6, p. 68.
- Lalla, D. J., and Kienle, J., 1986, Seismic and thermal precursors to the January, 1976 eruption of Augustine Volcano, Alaska: International Volcanological Congress, Auckland-Hamilton-Rotorua, New Zealand, Programme and Abstracts, in press.
- Lankford, S. M., and Hill, J. M., 1979, Stratigraphy and depositional environment of the Dutch Harbor member of the Unalaska formation, Unalaska Island, Alaska: U. S. Geological Survey Bulletin 1457-B, p. B1-B14.
- Lawton, N. O., 1909, Makushin sulfur deposits, Unalaska: Mining & Science Press, v. 98, p. 259-260.
- Lawver, L. A., Lachenbruch, A. H., and Moses, T. H. Jr., 1979, Status of regional heat-flow studies in Alaska, in Johnson, K. M., and Williams, J. R., eds., U. S. Geological Survey in

- Alaska: Accomplishments during 1978: U. S. Geological Survey Circular 804-B, p. B5-B7.
- LeCompte, J. R., 1981, Preliminary maps showing interpretation of Landsat imagery of the Ugashik and Karluk quadrangles, Alaska: U. S. Geological Survey Open-file Report 81-776, 2 pl., scale 1:250,000.
- LeCompte, J. R., and Steele, W. C., 1981, Maps showing interpretation of Landsat imagery of the Chignik and Sutwik Island quadrangles, Alaska: U. S. Geological Survey Miscellaneous Field Studies Map MF-1053-O, 2 pl., scale 1:250,000.
- Leonard, L. E., 1975, What's old in geothermal energy: Northern Engineer, v. 6, no. 4, p. 3-7.
- Lewis, R. Q., Nelson, W. H., and Powers, H. A., 1960, Geology of Rat Islands, Aleutian Islands, Alaska: U. S. Geological Survey Bulletin 1028-Q, p. 533-562.
- Limke, A. J., and Beget, J. E., 1986, Emplacement velocities and rheological properties of pyroclastic flows during the March 27-April 8 eruption of Mt. St. Augustine, Alaska [abs.]: EOS, v. 67, no. 44, p. 1259.
- Lockhart, A. B., 1981, Gravity survey of the central Seward Peninsula, in Wescott, E. M., and Turner, D. L., eds., Geothermal reconnaissance survey of the central Seward Peninsula, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, UAG-R-284, p. 61-72.
- Lockhart, A. B., and Kienle, J., 1980, Seismic refraction and gravity surveys of Pilgrim Springs KGRA, Alaska: Geothermal Resources Council, Transactions, v. 4, p. 213-216.
- Lofgren, B., ed., 1983, Geothermal energy development at Pilgrim Springs, Alaska: Woodward & Clyde, consultants, report to Alaska Division of Energy and Power Development, 62 p.
- Loney, R. A., Berg, H. C., Pomeroy, J. S., and Brew, D. A., 1963, Reconnaissance geologic map of Chichagof Island and northwestern Baranof Island, Alaska: U. S. Geological Survey Miscellaneous Geologic Investigations, Map I-388, scale 1:250,000.
- Loney, R. A., Brew, D. A., Muffler, L. J. P., and Pomeroy, J. S., 1975, Reconnaissance geology of Chichagof, Baranof and Kruzof Islands, southeastern Alaska: U. S. Geological Survey Professional Paper no. 792, 105 p.
- Loney, R. A., Brew, D. A., and Lanphere, M. A., 1967, Post-Paleozoic radiometric ages and their relevance to fault

- movements, northern southeastern Alaska: Geological Society of America Bulletin, v. 78, p. 511-526.
- Loney, R. A., Condon, W. H., and Dutro, J. T. Jr., 1963, Geology of the Freshwater Bay Area, Chichagof Island, Alaska: U. S. Geological Survey Bulletin 1108-C, p. C1-C54.
- Loney, R. A., Pomeroy, J. S., Brew, D. A., and Muffler, L. J. P., 1964, Reconnaissance geologic map of Baranof and Kruzof Islands, Alaska: U. S. Geological Survey, Miscellaneous Geologic Investigations Map, I-411, scale 1:250,000.
- Long, W. E., 1986, Glacial hazard constraints, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p. F1-F15, 1 pl., scale 1:24,000.
- Longenkamp, D., Nelson, J. S., and England, J. M., 1974, Electrical resistivity survey for geothermal resources, Pilgrim Springs, Alaska: Harding-Lawson Associates report to Stefano and Associates, Anchorage, Ak.
- Lorenz, V., 1982, The 1977 explosive eruption of the Ukinrek Maars, Alaska: Terra Cognita, v. 2, p. 205-206.
- Lovering, T. S., 1955, Alteration near an acid halogen-sulfur fumarole [abs.]: Geological Society of America Bulletin, v., 66, no. 12, p. 1590.
- Lovering, T. S., 1957, Halogen-acid alteration of ash at Fumarole no. 1, Valley of Ten Thousand Smokes, Alaska: Geological Society of America Bulletin, v. 68, p. 1585-1604.
- Lyle, W. M., 1973, Geology and mineral evaluation of the Aniakchak River drainage, Alaska Peninsula: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 26, 11 p.
- Lyle, W. M., and Dobey, P. L., 1974, Geologic evaluation of the Herendeen Bay area, Alaska Peninsula: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 48, 20 p., 3 pl., scale 1:63,360.
- MacGregor, A. G., 1952, Eruptive mechanisms--Mt. Pelee, the Soufriere of St. Vincent (West Indies) and the Valley of Ten Thousand Smokes (Alaska): Bulletin Volcanologique, V. 12, p. 49-74, with discussion p. 5-6.
- MacKevett, E. M. Jr., 1976, Geologic map of the Mc Carthy quadrangle, Alaska: U. S. Geological Survey Miscellaneous Field Studies Map MF-773 A, scale 1:250,000.

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- MacKevett, E. M. Jr., 1978, Geologic map of the Mc Carthy quadrangle, Alaska: U. S. Geological Survey Miscellaneous Geologic Investigations Map I-1032, scale 1:250,000.
- Maddren, A. G., 1919, Sulphur on Unalaska and Akun Islands and near Stepovak Bay, Alaska: U. S. Geological Survey Bulletin 692-E, p. 283-298.
- March, G. D., 1986, Avalanche hazard constraints, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p. G1-G8, 2 pl., scale 1:24,000.
- Mariner, R. H., Brook, C. A., Swanson, J. R., and Mabey, D. R., 1978, Selected data for hydrothermal convection systems in the United States with estimated temperatures > = 90 deg. C.: U. S. Geological Survey Open-file Report 78-858.
- Markle, D. R., 1979, Geothermal energy in Alaska: Site data base and development status: Anchorage, Alaska Division of Mineral & Energy Management report to U. S. Dept. of Energy under contract DE-AC03-79SF1049, 2 vols, 545 p.
- Markle, D. R., 1979, Prospects for geothermal energy development at Pilgrim Springs, Alaska [abs.]: Proceedings 30th Alaska Science Conference, American Association for the Advancement of Science, p. 62.
- Marsh, B. D., 1974, Aleutian island arc magmatism: Berkley, California, University of California, unpublished Ph.D. thesis.
- Marsh, B. D., 1980, Geology and petrology of northern Atka, Aleutian Islands, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 12, p. 476.
- Marsh, B. D., 1982, The Aleutians, in Thorpe, R. S., ed., Orogenic andesites and related rocks: New York, John Wiley & Sons, p. 99-113.
- Martin, G. C., 1913, The recent eruption of Katmai volcano in Alaska: National Geographic Magazine, v. 24, p. 131-181.
- Martin, G. C., 1917, Mineral resources of Alaska: U. S. Geological Survey Bulletin 692, 400 p.
- Martin, G. C., and Katz, F. J., 1910, Outline of the geology and mineral resources of the Iliamna and Clark Lakes region: U. S. Geological Survey Bulletin 442, p. 179-200.

- Martin, G. C., and Katz, F. J., 1912, A geologic reconnaissance of the Iliamna region, Alaska: U. S. Geological Survey Bulletin 485, 138 p.
- Matlick, J. S., and Parmentier, P. P., 1983, Geothermal manifestations and results of a mercury soil survey in the Makushin geothermal area, Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 7, p. 305-309.
- Matumoto, T., 1971, Seismic body waves observed in the vicinity of Mt. Katmai, Alaska, and evidence for the existence of molten chambers [abs.]: Geological Society of America Bulletin, v. 82, p. 2905-2920.
- Matumoto, T., and Molnar, P., 1967, A shadow effect on S waves observed in the vicinity of Mount Katmai, Alaska [abs.]: EOS, v. 48, p. 199.
- Matumoto, T., and Ward, P. L., 1967, Microearthquake study of Mt. Katmai and vicinity, Alaska: Journal of Geophysical Research, v. 72, p. 2557-2568.
- Mauk, F. J., and Kienle, J., 1973, Microearthquakes at St. Augustine Volcano, Alaska, triggered by earthtides: Science, v. 182, no. 4110, p. 386-389.
- McNutt, S. R., 1983, Seismic and eruptive activity of Pavlov Volcano, 1973-1983, related to Shumagin seismic gap? [abs.]: EOS, v. 64, no. 18, p. 258.
- McNutt, S. R., 1984, Eruption cycles and characteristics, and the state of stress at Pavlov Volcano, eastern Aleutians [abs.]: EOS v. 65, no. 15, p. 242.
- McNutt, S. R., and Beavan, R. J., 1981, Volcanic earthquakes at Pavlov Volcano correlated with the solid earth tide: Nature, v. 294, p. 615-618.
- McNutt, S. R., and Beavan, R. J., 1984, Periodic eruptions of Pavlov Volcano, Alaska: The effects of sea level and an aseismic slip event [abs.]: EOS, v. 65, no. 45, p. 1149.
- McNutt, S. R., and Mori, J., 1983, Analysis of B-type earthquakes and explosions at Pavlov Volcano, Alaska [abs.]: EOS, v. 64, no. 5, p. 45.
- Meaker, P., 1908, The Tanana Valley of Alaska: Alaska Yukon Magazine, v. 4, no. 6, p. 437-449.
- Meigs, A. J., 1986, Structural evolution of the eastern Sadlerochit Mountains, northeastern Brooks Range, Alaska: A preliminary report based on summer 1986 field season: Fairbanks, Alaska Division of Geological and Geophysical

- Surveys, Public-data File 86-86f, 6 p., 1 pl., scale 1:25,000.
- Mendenhall, W. C., 1903, The mineral resources of the Mount Wrangell district, Alaska: U. S. Geological Survey Professional Paper no. 15, p. 1-71.
- Mendenhall, W. C., 1905, Geology of the central Copper River region, Alaska: U. S. Geological Survey Professional Paper no. 41, 133 p.
- Menyaylov, I. V., 1969, Fumarolnyye gazy piroklasticheskikh potokov vulkonov Bezmyannogo i Katmai: Vulkany i izverzheniya, Moscow, Izdatelstvo Nauka, p. 78-81.
- Menzie, W. D., Foster, H. L., Tripp, R. B., and Yeend, W. E., 1983, Mineral resource assessment of the Circle quadrangle, Alaska: U. S. Geological Survey Open-file Report 83-170B, 61 p., 1 pl., scale 1:250,000.
- Merriam, C. H., 1901, The birth of an American volcano, Bogoslof in Bering Sea: Everybodys Magazine, v. 5, p. 293-301.
- Merrill, G. P., 1885, On hornblende andesites from the new volcano on Bogosloff Island in Bering Sea: Proceedings of United States National Museum, v. 8, no. 3, p. 31-33.
- Merriman, C. H., 1910, Bogoslof, our newest volcano: Smithsonian Institute, Harriman Alaska Series, v. 2, p. 291-336.
- Mertie, J. B. Jr., 1930, Geology of the Eagle-Circle District, Alaska: U. S. Geological Survey Bulletin 816, 167 p.
- Mertie, J. B. Jr., 1932, The Yukon-Tanana region, Alaska: U. S. Geological Survey Bulletin 872, 276 p.
- Mertie, J. B. Jr., 1934, Mineral deposits of the Rampart and Hot Springs districts: U. S. Geological Survey Bulletin 844-D, p. 163-246.
- Metzner, R. C., 1975, A magnetotelluric investigation of Augustine Island Volcano: Fairbanks, University of Alaska, unpublished M. S. thesis, 116 p.
- Miller, T. P., 1970, Petrology of the plutonic rocks of west-central Alaska: U. S. Geological Survey Open-file Report 454, 76 p.
- Miller, T. P., 1971, Petrology of the plutonic rocks of west-central Alaska: Stanford, California, Stanford University, unpublished Ph.D. thesis, 78 p.

- Miller, T. P., 1972, Potassium-rich alkaline intrusive rocks of western Alaska: Geological Society of America Bulletin, v. 83, p. 2111-2128.
- Miller, T. P., compiler, 1973, Distribution and chemical analyses of thermal springs in Alaska: U. S. Geological Survey Open-file Map 570, scale 1:2,500,000.
- Miller, T. P., 1976, Augustine Volcano: Alaska's Volcanoes, northern link of the ring of fire, Alaska Geographic, v. 4, no. 1, p. 17-28.
- Miller, T. P., 1978, Post-caldera airfall pumice at Aniakchak caldera: U. S. Geological Survey Professional Paper 1109, p. 84.
- Miller, T. P., 1984, Two-stage volcanism at the Ugashik-Peulik volcanic center, Alaska Peninsula [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 322.
- Miller, T. P., and Barnes, Ivan, 1974, Potential for geothermal energy development in Alaska [abs.]: American Association of Petroleum Geologists Bulletin, v. 58, no. 7, p. 1450.
- Miller, T. P., and Barnes, Ivan, 1976, Potential for geothermal energy development in Alaska - summary: Circum-Pacific energy and mineral resources, American Association of Petroleum Geologist Memoir no. 25, p. 149-153.
- Miller, T. P., Barnes, Ivan, and Patton, W. W. Jr., 1975, Geologic setting and chemical characteristics of hot springs in west-central Alaska: Journal of Research, U. S. Geological Survey, v. 3, no. 2, p. 149-162.
- Miller, T. P., Grybeck, D. G., Elliott, R. L., and Hudson, T. L., 1972, Preliminary geologic map of the eastern Solomon and southeastern Bendeleben quadrangles, eastern Seward Peninsula, Alaska: U. S. Geological Survey Open-file Report 537, 11 p., 1 pl., scale 1:250,000.
- Miller, T. P., Patton, W. W. Jr., and Lanphere, M. A., 1966, Preliminary report on a plutonic belt in west-central Alaska: U. S. Geological Survey Professional Paper 550-D, p. D158-D162.
- Miller, T. P., and Smith, R. L., 1975, Ash flows on the Alaska Peninsula: a preliminary report on their distribution, composition, and age [abs.]: Geological Society of America, Abstracts with Programs, v. 7, p. 1201.
- Miller, T. P., and Smith, R. L., 1975, Alaska geothermal study, in Yount, M. E., ed., The U. S. Geological Survey Alaska Program, 1975: U. S. Geological Survey Circular 722, p. 39.

Miller, T. P., and Smith, R. L., 1976, "New" volcanoes in the Aleutian volcanic arc, in Cobb, E. H., ed., U. S. Geological Survey in Alaska: Accomplishments during 1975: U. S. Geological Survey Circular 773, p. 11.

Miller, T. P., and Smith, R. L., 1976, Ash flows associated with Wrangell Volcano, in Cobb, E. H., ed., U. S. Geological Survey in Alaska: Accomplishments during 1975: U. S. Geological Survey Circular 733, p. 52.

Miller, T. P., and Smith, R. L., 1976, Two caldera forming eruptions on Umnak Island, eastern Aleutian Islands, in Cobb, E. H., ed., U. S. Geological Survey in Alaska: Accomplishments during 1975: U. S. Geological Survey Circular 733, p. 45.

Miller, T. P., and Smith, R. L., 1977, Spectacular mobility of ash flows around Aniakchak and Fisher calderas, Alaska: Geology, v. 5, p. 173-176.

Miller, T. P., and Smith, R. L., 1983, Calderas of the eastern Aleutian arc [abs.]: EOS, v. 64, no. 45, p. 877.

Moffit, F. H., 1905, The Fairhaven gold placers, Seward Peninsula, Alaska: U. S. Geological Survey Bulletin 247, 85 p.

Monger, J. W. H., and Berg, H. C., 1985, Lithostratographic terrane map western Canada and southeastern Alaska, in Silberling, N. J., and Jones, D. L., eds., Lithotectonic terrane maps of the North American Cordillera: U. S. Geological Survey Open-file Report 84-523, p. B1-B12, 1 pl., scale 1:5,000,000.

Morgan, L., ed., 1980, The Aleutians: Alaska Geolgraphic, v. 7, no. 3, 224 p.

Morris, D., 1985, Katmai National Park and Preserve, Draft general management plan: U. S. Department of the Interior, National Park Service, 158 p.

Morrison-Knudson Co., Inc., 1981, Geothermal potential in the Aleutians: Unalaska: Report for Alaska Division of Energy and Power Development, p. 2-5.

Motyka, R. J., 1977, Katmai Caldera: Glaciers growth, lake rise, and geothermal activity, in Short Notes on Alaskan Geology, 1977: Fairbanks, Alaska Division of Geological and Geophysical Surveys Report No. 55, p. 17-22.

Motyka, R. J., 1978, Surveillance of Katmai Caldera and Crater Lake, Alaska, 1977: Fairbanks, University of Alaska,

Geophysical Institute report to U. S. Park Service P. O.
PX9100-7-1009, 19 p.

Motyka, R. J., 1982, Thermal fluid geochemistry of the Makushin and Akutan geothermal prospects, in Geothermal direct heat program roundup technical conference proceedings, v. 1: Earth Science Laboratory, University of Utah Research Institute Publication ESL-98, Salt Lake City, p. 8-32.

Motyka, R. J., 1982, Fluid geochemistry of the Makushin geothermal area, Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 6, p. 107-110.

Motyka, R. J., 1982, High temperature hydrothermal resources in the Aleutian Arc [abs.]: Alaska Geological Society Symposium, 1982, Program with Abstracts, p. 41-42.

Motyka, R. J., 1983, High-temperature hydrothermal resources in the Aleutian arc: Proceedings of Alaska Geological Society Symposium on western Alaska geology and resource potential, Journal of Alaska Geological Society, v. 3, p. 87-99.

Motyka, R. J., 1983, Geochemical and isotopic studies of waters and gases from the Makushin geothermal area, Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 7, p. 103-108.

Motyka, R. J., 1983, Increases and fluctuations in thermal activity at Mount Wrangell, Alaska: Fairbanks, University of Alaska, unpublished Ph.D. thesis, 349 p.

Motyka, R. J., 1984, Chemistry of thermal waters and fumarole gases from North Crater, Mt. Wrangell, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 323.

Motyka, R. J., and Benson, C. S., 1982, Cyclic heat fluctuations in heat flow from the North Crater, Mt. Wrangell, Alaska [abs.]: Proceedings Northwest meeting of American Geophysical Union, Sept. 15-16, 1982.

Motyka, R. J., Ferrell, V. M., and Benson, C. S., 1977, Glaciological-volcanological investigations in Katmai National Monument [abs.]: in Scott, S. A., ed., 4th Annual National Park Service Pacific Northwest Region Science Management Conference, p. 22.

Motyka, R. J., Forbes, R. B., and Moorman, M. A., 1980, Geochemistry of Pilgrim springs thermal waters, in Turner, D. L., and Forbes, R. B., eds., Geological and geophysical study of the geothermal potential of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, UAG-R-271, p. 43-52.

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

Motyka, R. J., Hawkins, D. B., Poreda, R. J., and Jeffries, A., 1986, Geochemistry, isotopic composition, and the origin of fluids emanating from mud volcanoes in the Copper River basin, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-34, 87 p.

Motyka, R. J., Kodosky, L. G., and Evans, W., 1986, A review of gas sampling at Augustine Volcano, Alaska: 1982-1986 [abs.]: EOS, v. 67, no. 44, p. 1260.

Motyka, R. J., MacKeith, P., and Benson, C. S., 1978, Increased heating and geothermal heat flow at Mt. Wrangell Caldera, Alaska [abs.]: EOS, v. 59, no. 12, p. 1201.

Motyka, R. J., MacKeith, P., and Benson, C. S., 1980, Mt. Wrangell caldera: Utilization of glacier ice to measure heat flow and infer thermal regime [abs.]: EOS, v. 61, no. 6, p. 69.

Motyka, R. J., and Moorman, M. A., 1980, Assessment of thermal spring sites in southern southeastern Alaska--Preliminary results and evaluation [abs.]: Proceedings of 31th Alaska Science Conference, Anchorage, Ak., American Association for the Advancement of Science, p. 135.

Motyka, R. J., and Moorman, M. A., 1981, Reconnaissance of thermal spring sites in the Aleutian Arc, Atka Island to Becharof Lake: Geothermal Resources Council Transactions, v. 5, p. 111-114.

Motyka, R. J., and Moorman, M. A., 1987, Geothermal resources of southeast Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Professional Report (in press).

Motyka, R. J., Moorman, M. A., and Liss, S. A., 1981, Assessment of thermal spring sites, Aleutian arc, Atka Island to Becharof Lake--preliminary results and evaluation: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 144, 173 p.

Motyka, R. J., Moorman, M. A., and Liss, S. A., 1983, Geothermal resources of Alaska: Geophysical Data Center, National Oceanic and Atmospheric Administration, 1 pl., scale 1:2,500,000.

Motyka, R. J., Moorman, M. A., and Poreda, R. J., 1982, Fluid geochemistry of the Makushin geothermal area, Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 6, p. 107-110.

Motyka, R. J., Moorman, M. A., and Poreda, R. J., 1982, Fluid geochemistry of Hot Springs Bay Valley, Akutan Island, Alaska: Geothermal Resources Council Transactions, v. 6, p. 103-106.

- Motyka, R. J., Moorman, M. A., and Poreda, R. J., 1983, Progress report - thermal fluid investigations of the Makushin geothermal area: Fairbanks, Alaska Division of Geological and Geophysical Surveys Report of Investigations 83-15, 48 p.
- Motyka, R. J., Moorman, M. A., and Reeder, J. W., 1980, Assessment of thermal spring sites in southern southeastern Alaska - Preliminary results and evaluation: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 127, 72 p.
- Motyka, R. J., and Queen, L. D., 1984, 1983 and 1984 Alaska Division of Geological and Geophysical Surveys geothermal fluids sampling and well logging at the Makushin geothermal area:: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 84-51, 50 p.
- Motyka, R. J., Queen, L. D., Janik, C. J., Sheppard, D. S., Poreda, R. J., and Liss, S. A., 1986, Fluid geochemistry and fluid mineral equilibria in test wells and thermal gradient holes at the Makushin Geothermal area, Unalaska Island, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-59, 155 p.
- Motyka, R. J., Wescott, E. M., Turner, D. L., Swanson, S. E., Romick, J. D., Moorman, M. A., Poreda, R. J., Witte, W., Petzinger, B., Allely, R. D., 1985, A geological, geochemical and geophysical survey of the geothermal resources at Hot Springs Bay Valley, Akutan Island, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys report to U. S. Department of Energy, 167 p., 2 pl., scale 1:20,000.
- Muffler, L. J. P., 1973, Geothermal resources, in Brobst, D. A., and Pratt, W. P., eds., United States Mineral Resources: U. S. Geological Survey Professional Paper 820, p. 251-261.
- Muffler, L. J. P., 1979, Assessment of geothermal resources of the United States--1978: U. S. Geological Survey Circular 790, 163 p.
- Muller, E. H., Juhle, R. W., and Coulter, H. W., 1954, Current volcanic activity in Katmai National Monument: Science, v. 119, p. 319-321.
- Myers, J. D., 1978, Petrography and petrogenesis of the Edgecumbe volcanic field, Kruzof Island, SE Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 10, no. 7, p. 461.
- Myers, J. D., 1979, Geology and petrology of the Edgecumbe volcanic field, southeastern Alaska: Transform fault

volcanism and magma mixing: Baltimore, Maryland, John Hopkins University, unpublished Ph.D. thesis, 306 p.

Myers, J. D., and Marsh, B. D., 1981, Geology and petrogenesis of the Edgacumbe volcanic field, southeastern Alaska: The interaction of basalt and sialic crust: Contributions to Mineralogy and Petrology, v. 77, p. 272-287.

Myers, J. D., Marsh, B. D., and Sinha, A. K., 1986, Strontium isotopic and selected trace element variations between two Aleutian volcanic centers (Adak and Atka): Implications for the development of arc volcanic plumbing systems: Journal of Geology (in press)

Myers, J. D., Sinha, A. K., and Marsh, B. D., 1984, Assimilation of crustal material by basaltic magma: Strontium isotopic and trace element data from the Edgacumbe volcanic field, southeast Alaska: Journal of Petrology, v. 25, pt. 1, p. 1-26.

Nakamura, K., Jacob, K. H., and Davies, J. N., 1977, Volcanoes as possible indicators of tectonic stress orientation - Aleutians and Alaska: Pure and Applied Geophysics, v. 115, p. 87-112.

Nathenson, M., Guffanti, M., Sass, J. H., and Monroe, R. M., 1983, Regional heat flow and temperature gradients, in Reed, M. J., ed., Assessment of low-temperature geothermal resources of the United States-1982: U. S. Geological Survey Circular 892, 73 p.

Nava, J. A., 1975, A note on hot springs in southeastern Alaska: Arctic, v. 28, no. 2, p. 143-144.

Nava, J. A., and Morrison, P., 1974, A note on hot springs in the interior of Alaska: Arctic, Sept. 1974, p. 241-243.

Neal, R. J., and Swanson, S. E., 1983, Petrology - Geochemistry of Westdahl and Pogromni Volcanoes, Unimak Island, Alaska [abs.]: EOS, v. 64, no. 45, p. 893.

Nehring, N. L., Mariner, R. H., White, L. D., Huebner, M. A., Roberts, E. D., Harmon, K., Bowen, P. A., and Tanner, L., 1979, Sulfate geothermometry of thermal waters in the western United States: U. S. Geological Survey Open-file Report 79-1135, 11 p.

Nelson, S. W., and Grybeck, D. G., 1978, The Arrigetch Peaks and Mt. Igikpak plutons, Survey Pass quadrangles, Alaska, in Johnson, K. M., ed., U. S. Geological Survey in Alaska: Accomplishments during 1977: U. S. Geological Survey Circular 772-B, p. B7-B9.

- Nelson, W. H., 1959, Geology of Segula, Davidof and Khvostof Islands, Alaska: U. S. Geological Survey Bulletin 1028-F, p. 257-266.
- Nichols, C. R., and Reeder, J. W., 1983, Alaska geothermal resource characteristics and their implication for large and small scale hydrothermal development: Proceedings 4th Alaska Alternative Energy Conference, Anchorage, 1983, p. 100-102.
- Nichols, D. R., and Yehle, L. A., 1961, Analyses of gas and water from two mineral springs: the Copper River basin, Alaska: Short papers in the geologic and hydrologic sciences 1961, U. S. Geological Survey Professional Paper 424-D, p. D191-D194.
- Nichols, D. R., and Yehle, L. A., 1961, Mud volcanoes in the Copper River basin, Alaska, in Raasch, G. D., ed., Geology of the Arctic: University of Toronto Press, Toronto, 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, 1 pl., scale 1:125,000.
- Nye, C. J., 1982, The Wrangell Volcanoes: Voluminous volcanism associated with microplate accretion [abs.]: Geological Society of America, Abstracts with Programs, v. 14, p. 221.
- Nye, C. J., 1983, Petrology and geochemistry of Okmok and Wrangell Volcanoes, Alaska: Santa Cruz, California, University of California, unpublished Ph.D. thesis, 208 p.
- Nye, C. J., 1986, Volcanic hazards constraints, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p. E1-E15, 1 pl., scale 1:24,000.
- Nye, C. J., Queen, L. D., and Motyka, R. J., 1984, Geologic map of the Makushin geothermal area, Unalaska Island, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Report of Investigations 84-3, 1 pl., scale 1:24,000.
- Nye, C. J., and Reid, M. R., 1986, Geochemistry of primary and least fractionated lavas from Okmok Volcano, central Aleutians: Implications for arc magmagenesis: Journal of Geophysical Research, v 91, no. B10, p. 10271-10287.
- Nye, C. J., Reid, M. R., and Gill, J. B., 1983, High temperature parental magmas from Okmok Volcano, central Aleutians:

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Implications for arc magmagenesis [abs.]: EOS, v. 64, p. 892.
- Nye, C. J., and Swanson, S. E., 1986, Implications of chemical stratigraphy for magmatic plumbing geometry at the Makushin volcanic field, central Aleutians [abs.]: EOS, v. 67, no. 7, p. 86.
- Nye, C. J., and Swanson, S. E., 1987, Geochemical, petrological, and geological constraints on magma chamber geometry and dynamics at the Makushin volcanic field, central Aleutians [abs.]: Hawaii symposium on how volcanoes work, Jan. 19-25, 1987, (in press).
- Nye, C. J., Swanson, S. E., and Reeder, J. W., 1986, Petrology and geochemistry of Quaternary volcanic rocks from Makushin Volcano, central Aleutian arc: Fairbanks, Alaska Division of Geological and Geophysical Survey Public-data File 86-80, 123 p., 1 pl., scale 1:50,000.
- Nye, C. J., and Turner, D. L., 1986, Geology and geochemistry of the Spurr volcanic system, south-central Alaska [abs.]: EOS, v. 67, no. 44, p. 1276.
- Ogle, W., 1976, Visit to a number of Alaskan hot springs to aid in the selection of a site for the possible installation of a small binary geothermal electric generating plant: Report to Federal Energy Research and Development Administration, 51 p.
- Okada, H., and Okada, A., 1974, The Hot Springs Village site, preliminary report of the 1972 excavations at Port Moller, Alaska: The Institute for Study of North Eurasian Cultures, Hokkaido University, Sapporo, Japan, 20 p., 14 pl.
- Okada, H., and Okada, A., 1980, Prehistory of the Alaska Peninsula as seen from the hot springs site, Port Moller, in Kotani, Y., and Workman, W. B., eds., Alaska Native culture and history, Senri Ethnological Studies, no. 4: National Museum of Ethnology, Osaka, Japan, p. 103-112.
- Okada, H., Okada, A., and Kotani, Y., 1979, The Hot Springs Village site(3), preliminary report of the 1977 excavations at Port Moller, Alaska: The Institute for Study of North Eurasian Cultures, Hokkaido University, Sapporo, Japan, 49 p.
- Okada, H., Okada, A., Kotani, Y., and Hattori, K., 1976, The Hot Springs Village site (2), preliminary report of the 1974 excavations at Port Moller, Alaska: The Institute for Study of North Eurasian Cultures, Hokkaido University, Sapporo, Japan, 20 p., 20 pl.

GEO THERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Okimura, H., 1930, The eruption of Katmai, Alaska 1912: Volcano Letter 305, p. 1-3.
- Osterkamp, T. E., Forbes, R. B., Gaffi, R. G., Hanscom, J. T., Kane, M. L., and Stephens, C. A., 1979, Shallow thermal, electrical conductivity, and hydrologic measurements at Pilgrim Springs, Alaska [abs.]: Proceedings 30th Alaska Science Conference, American Association for the Advancement of Science, p. 56.
- Osterkamp, T. E., Gosink, J. P., Forbes, R. B., Gaffi, R. G., Hanscom, J. T., Kane, M. L., Stephens, C. A., and Kline, J. T., 1980, A reconnaissance study of the hydrothermal characteristics and accessible power of Pilgrim Springs, in Turner, D. L., and Forbes, R. B., eds., Geological and Geophysical study of the geothermal potential of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, UAG-R-271, p. 113-156.
- Page, R. A., Waller, J. A., and Stephens, C. D., 1982, Recent seismicity around Spurr, Redoubt, and Iliamna volcanoes, southern Alaska [abs.]: Proceedings of 33rd Alaska Science Conference, American Association for the Advancement of Science, p. 129.
- Palache, C., 1904, Geology about Chichagof Cove, Stepovak Bay; With notes on Popof and Unga Islands (Alaska): Harriman Alaska Expedition, v. 4, p. 69-88.
- Parmentier, P. P., Reeder, J. W., and Henning, M. W., 1983, Geology and hydrothermal alteration of Makushin geothermal area, Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 7, p. 181-185.
- Patton, W. W. Jr., 1973, Reconnaissance geology of the northern Yukon-Koyukuk province, Alaska: U. S. Geological Survey Professional Paper 774-A, 17 p.
- Patton, W. W. Jr., and Hoare, J. M., 1968, The Kaltag Fault, west-central Alaska: U. S. Geological Survey Research 1968, U. S. Geological Survey Professional Paper 600-D, p. D147-D153.
- Patton, W. W. Jr., and Miller, T. P., 1966, Regional geologic map of the Hughes quadrangle, Alaska: U. S. Geological Survey, Miscellaneous Geologic Investigations Map I-459, scale 1:250,000.
- Patton, W. W. Jr., and Miller, T. P., 1970, Preliminary geologic investigation in the Kanuti region, Alaska: U. S. Geological Survey Bulletin 1312-J, 10 p.
- Patton, W. W. Jr., Miller, T. P., and Chapman, R. M., and Yeend, W. E., 1978, Geologic map of the Melozitna quadrangle,

- Alaska: U. S. Geological Survey Miscellaneous Geologic Investigations Map I-1071, scale 1:250,000.
- Patton, W. W. Jr., Miller, T. P., and Tailleir, I. L., 1968, Regional geologic map of the Shungnak and southern part of the Ambler River quadrangles, Alaska: U. S. Geological Survey Miscellaneous Geologic Investigations Map I-554, scale 1:250,000.
- Pavia, E. A., 1986, Structure and stratigraphy of the northeastern Okpilak batholith and Jago River area, Romanzof Mountains, northeastern Brooks Range, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-86g, 6 p., 1 pl., scale 1:25,000.
- Peale, A. C., 1886, Mineral springs of the United States: U. S. Geological Survey Bulletin 32, 235 p.
- Pearson, C. F., 1977, Seismic refraction study of Augustine Volcano, 1977: Fairbanks, University of Alaska, unpublished M.S. thesis, 131 p.
- Pearson, C. F., and Kienle, J., 1978, A seismic refraction study of Augustine Volcano, Alaska [abs.]: EOS, v. 59, no. 4, p. 311.
- Perfit, M. R., Bruechner, H. K., Lawrence, J. R., and Kay, R. W., 1980, Trace element and isotopic variations in a zoned pluton and associated rocks, Unalaska Island: A model for fractionation in the Aleutian calc-alkaline suite: Contributions to Mineralogy and Petrology, v. 73, p. 69-87.
- Perrey, A., 1866, Documents sur les tremblements de terre et les phenomenes volcaniques des Iles Aleutiennes, de la Peninsula d'Alaska et de la cote NO. d'Amerique: Academie des Sciences, Arts et Belleslettres, Dijon, Memoir, 2nd. ser., v. 13, sec. sc., p. 121-151.
- Petrov, I., 1884, Alaska, its population, industries, and resources: U.S. Department of Interior, Census Office, 10th Census of the U.S., v. 8, p. 19-93.
- Pewe, T. L., 1975, Quaternary geology of Alaska: U. S. Geological Survey Professional Paper 835, 145 p., 1 pl., scale 1:2,500,000.
- Poreda, R. J., Craig, H. A., and Motyka, R. J., 1981, Helium isotope variations along the Alaskan-Aleutian arc [abs.]: EOS, v. 62, no. 45, p. 1082.
- Powers, H. A., 1953, Current activity of Aleutian volcanoes: Volcano Letters, no. 522, p. 6.

- Powers, H. A., 1956, Activity of Alaskan volcanoes, 1949-1953: Report on Volcanology, 8th Pacific Science Congress, Quezon City, v. II, p. 21-22.
- Powers, H. A., 1958, Alaska Peninsula-Aleutian Islands, in Williams, H., ed., Landscapes of Alaska: University of California Press, p. 61-75.
- Powers, S., 1916, Recent changes in Bogoslof volcano: Geological Review, v. 2, p. 218-221.
- Prosser, W. T., 1912, Volcanic road-building: Literary Digest, v. 44, p. 586-587.
- Pulpan, H., and Kienle, J., 1978, Seismic and volcanic risk studies, western Gulf of Alaska: Fairbanks, University of Alaska, Seismological Report no. 3, 93 p.
- Queen, L. D., 1984, Lithologic log and hydrothermal alteration of core from the Makushin Geothermal area, Unalaska, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Report of Investigations 84-23, 1 sheet.
- Queen, L. D., 1987, Alteration, fluid inclusion, and water-rock equilibrium in the Makushin hydrothermal system, Unalaska Island, Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 99 p.
- Queen, L. D., and Motyka, R. J., 1984, Changes in the Makushin geothermal system: Evidence from alteration mineralogy [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 329.
- Ramdohr, P., 1962, Erzmikroskopische Untersuchungen an Magnetiten der Exhalationen im Valley of 10,000 Smokes: Neues Jahrbuch Mineralogie Monatschrift, v. 1962, n. 3-4, p. 49-59.
- Ray, D. K., 1967, Geochemistry and petrology of the Mt. Trident Andesites, Katmai National Monument, Alaska: Fairbanks, University of Alaska, unpublished Ph.D. thesis, 198 p.
- Ray, D. K., Forbes, R. B., Katsura, T., Matsumoto, H., and Haramura, H., 1966, The petrology and geochemistry of the Mount Trident andesites [abs.]: Proceedings of 11th Pacific Science Conference, Tokyo, Japan.
- Reck, H., 1930, Das Tal der Zehntausende Dampfe: Zeitschrift Vulkanologie, Band 13, Heft 1, p. 61-65.
- Reed, B. L., and Lanphere, M. A., 1972, Generalized geologic map of the Alaska-Aleutian Range batholith showing K/Ar ages of the plutonic rocks: U. S. Geological Survey Miscellaneous Field Studies Map MF-372, 2 pl, scale 1:1,000,000.

- Reed, B. L., and Lanphere, M. A., 1973, Plutonic rocks of the Alaska-Aleutian Range batholith, in Pitcher, M., ed., Arctic Geology: American Association of Petroleum Geologists Memoir 19, p. 421-430.
- Reed, B. L., and Lanphere, M. A., 1973, Alaska-Aleutian Range batholith: geochronology, chemistry, and relation to circum-Pacific plutonism: Geological Society of America Bulletin, v. 84, p. 2583-2610.
- Reed, M. J., Mariner, R. H., Brook, C. A., and Sorey, M. L., 1983, Selected data for low-temperature (less than 90 deg C.) geothermal systems in the United States: Reference data for U. S. Geological Survey Circular 892: U. S. Geological Survey Open-file Report 83-250, 129 p.
- Reeder, J. W., 1981, Vapor-dominated hydrothermal manifestations on Unalaska Island, and their geologic and tectonic setting [abs.]: Proceedings of 1981 International Association of Volcanology and Chemistry of the Earth's Interior and Volcanological Society of Japan, Symposium on arc volcanism, p. 297-298.
- Reeder, J. W., 1981, Initial assessment of hydrothermal resources of the Summer Bay region on Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 5, p. 123-126.
- Reeder, J. W., 1982, Hydrothermal resources of the northern part of Unalaska Island, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 163, 17 p.
- Reeder, J. W., 1982, The hydrothermal energy potential of the Aleutian arc with an emphasis on the Makushin Volcano region of Unalaska Island [abs.]: Alaska Geological Society, Program and Abstracts, Anchorage, 1982, p. 51-52.
- Reeder, J. W., 1982, Hydrothermal resources of the Makushin Volcano region of Unalaska Island, Alaska, in Watson, S. T., ed., Transactions of 3rd Circum-Pacific Energy and Mineral Resources Conference: Honolulu, Hawaii, 1982, p. 441-450.
- Reeder, J. W., 1983, Preliminary dating of the caldera-forming Holocene volcanic events for the eastern Aleutian Islands [abs.]: Geological Society of America, Abstracts with Programs, v. 15, no. 6, p. 668.
- Reeder, J. W., 1984, Fault and volcanic dike orientations of the Makushin Volcano region of the Aleutian arc [abs.]: International Symposium on Recent Crustal Movements of the Pacific Region, Wellington, New Zealand, 1984, p. 44.

- Reeder, J. W., 1984, Okmok: Bulletin of Volcanic Eruptions, no. 22, p. 92-94.
- Reeder, J. W., 1986, Ground stability & springwater geothermal resource assessment of the Makushin (Broad Bay) Valley, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, p. H1-H11, J1-J37, 3 pl, scale 1:24,000.
- Reeder, J. W., Coonrod, P. L., Bragg, N. J., and Denig-Chakroff, D. N., and Markle, D. R., 1980, Alaska geothermal implementation plan: Draft prepared by the Alaska Department of Natural Resources and the Department of Commerce and Economic Development for the U. S. Department of Energy, 108 p.
- Reeder, J. W., Denig-Chakroff, D. N., and Economides, M. J., 1985, The geology and geothermal resource of the Makushin Volcano region of Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 6, Part I, p. 479-484.
- Reeder, J. W., Economides, M. J., and Markle, D. R., 1982, Economic and engineering considerations for geothermal development in the Makushin Volcano region of Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 6, p. 386-388.
- Reeder, J. W., Lahr, J. C., Thomas, J., Conens, S., and Blackford, M., 1977, Seismological aspects of the recent eruption of Augustine Volcano [abs.]: EOS, v. 58, no. 12, p. 1188.
- Reeder, J. W., Motyka, R. J., and Wiltse, M. A., 1980, The State of Alaska Geothermal Program: Geothermal Resources Council Transactions, v. 4, p. 823-826.
- Reger, R. D., 1978, Reconnaissance geology of the new capital site and vicinity, Anchorage quadrangle, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 113A, 1 pl., scale 1:63,360.
- Reger, R. D., and Carver, C. L., 1978, Reconnaissance geologic materials map of the new capital site and vicinity, Anchorage quadrangle: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 113B, 1 pl., scale 1:63,360.
- Reifenstuhel, R. R., 1984, The Crawfish Inlet Pluton, Baranof Island, southeastern Alaska: Anatexis or magmatic compositional evolution [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 330.

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Reifenstuhll, R. R., 1984, A geological and geophysical study of the Goddard Hot Springs area, Baranof Island, southeastern Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 113 p.
- Reifenstuhll, R. R., 1986, Geology of the Goddard Hot Springs area, Baranof Island, southeastern Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-2, 82 p., 1 pl., scale 1:63,360.
- Reitsema, R. H., 1979, Gases of the mud volcanoes in the Copper River basin, Alaska: Geochimica et Cosmochimica Acta, v. 43, p. 183-187.
- Republic Geothermal Inc., 1982, The Unalaska geothermal exploration project, phase 1A: RGI Final report prepared for the Alaska Power Authority, 65 p., 13 appendices, 3 pl., scale 1:24,000 & 1:50,000.
- Republic Geothermal Inc., 1983, The Unalaska Geothermal Exploration Project, Phase 1B: RGI Final report prepared for the Alaska Power Authority, 160 p., 16 appendices, 9 pl., scale 1:24,000 & 1:50,000.
- Republic Geothermal Inc., 1984, The Unalaska Geothermal Exploration Project, Phase II: RGI Final report prepared for the Alaska Power Authority, 104 p., 13 appendices.
- Republic Geothermal Inc., 1985, The Unalaska Geothermal Exploration Project, Phase III: RGI Final report Prepared for the Alaska Power Authority, 105 p., 11 appendices.
- Richter, D. H., 1975, Geologic map of the Nabesna quadrangle, Alaska: U. S. Geological Survey Miscellaneous Field Studies Map MF-655A, scale 1:250,000.
- Richter, D. H., 1976, Geologic map of the Nabesna quadrangel, Alaska: U. S. Geological Survey Miscellaneous Investigations Map I-932, scale 1:250,000.
- Richter, D. H., Smith, J. G., Ratte, J. C., and Leeman, P. P., 1984, Shield volcanoes in the Wrangell Mountains, Alaska, in Reed, K. M., and Bartsch-Winkler, S., eds., U. S. Geological Survey in Alaska: Accomplishments dunring 1982: U. S. Geological Survey Circular 939, p. 71-75.
- Richter, D. H., Smith, R. L., Yehle, L. A., and Miller, T. P., 1979, Geologic map of the Gulkana A-2 quagrange, Alaska: U. S. Geological Survey Geologic Quadrangle Map GQ-1520, scale 1:63,360.
- Riehle, J. R., 1985, A reconnaissance of the major Holocene tephra deposits in the upper Cook Inlet region, Alaska:

Journal of Volcanology and Geothermal Research, v. 26, p. 37-74.

- Riehle, J. R., Kienle, J., and Emmel, K. S., 1981, Lahars in the Crescent River valley, lower Cook Inlet, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Geologic Report 53, 10 p.
- Robinson, G. D., 1948, Exploring Aleutian volcanoes: National Geographic Magazine, v. 94, no. 4, p. 509-522.
- Robinson, M. S., and Decker, J., 1986, Preliminary age dates and analytical data for selected igneous rocks from the Sleetmute, Russian Mission, Taylor Mountains, and Bethel quadrangles, southwestern Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-99, 8 p.
- Robinson, M. S., Decker, J., Reifenstuhel, R. R., and Murphy, J. M., 1984, Bedrock geology of the Chuilnuk and Kiokluk Mountains, southwest Alaska [abs.]: Geological Society of America, Cordilleran Section, Abstracts with Programs, v. 16, no. 5, p. 330.
- Robinson, M. S., Decker, J., Reifenstuhel, R. R., Murphy, J. M., and Box, S. E., 1984, Geologic map of the Sleetmute B-5 quadrangle: Fairbanks, Alaska Division of Geologic and Geophysical Surveys Report of Investigation 84-10, 1 pl., scale 1:40,000.
- Robinson, M. S., Nye, C. J., and Decker, J., 1986, Preliminary whole rock major oxide and trace element geochemistry of selected igneous rocks from the Sleetmute, Russian Mission, and Taylor Mountains quadrangles, southwestern Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-98, 8 p.
- Robinson, M. S., Reifenstuhel, R. R., Smith, T. E., and Bakke, A., 1986, Preliminary bedrock geologic map of part of the Mt. Michelson C-4 quadrangle, Sadlerochit Mountains, northeastern Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-1b, 16 p., 1 pl., scale 1:25,000.
- Robinson, M. S., and Stevens, D. L., 1983, Geologic map of the Seward Peninsula, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Report of Investigations 83-20, 1 pl., scale 1:500,000.
- Robinson, M. S., and Stevens, D. L., 1984, Geologic map of the Seward Peninsula: Fairbanks, Alaska Division of Geological and Geophysical Surveys in cooperation with the Bering Straits Native Corporation, Special Report 34, 1 pl., scale 1:500,000.

- Roehn, J. C., 1941, Pumice deposits (Katmai National Monument): Alaska Territorial Department of Mines Mineral Investigations MI 126-1, 10 p.
- Rogers, J. A., 1986, Preliminary bedrock geologic map of the northern central Shublik Mountains and Ignek valley, northeastern Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-86a, 15 p., 1 pl., scale 1:25,000.
- Romick, J. D., 1982, The igneous petrology and geochemistry of northern Akutan Island, Alaska: Fairbanks, University of Alaska, unpublished M.S. thesis, 151 p.
- Romick, J. D., 1983, Igneous petrology and geochemistry of northern Akutan Island, Alaska [abs.]: EOS, v. 64, no. 9, p. 90.
- Romick, J. D., 1986, The igneous petrology and geochemistry of northern Akutan Island, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-52, 84 p.
- Romick, J. D., and Swanson, S. E., 1983, The petrology and fractionation of lavas from Akutan Island, Alaska [abs.]: EOS, v. 64, no. 45, p. 892-3.
- Rosenbruch, J. C., and Bottge, R. G., 1975, Geothermal Energy: Economic potential of three sites in Alaska: U. S. Bureau of Mines Information Circular 8692, 40 p.
- Rosenthal, F. W., 1908, The hot springs of southeastern Alaska: Alaska Yukon Magazine, v. 4, no. 1, p. 415-416.
- Rossmann, D. L., 1959, Geology and ore deposits of northwestern Chichagof Island, Alaska: U. S. Geological Survey Bulletin 1058-E, p. 139-214.
- Rubenstone, J. L., Langmuir, C. H., and Hildreth, W., 1985, Isotope and trace element data bearing on the sources and evolution of magmas in the Katmai region, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 17, no. 7, p. 710.
- Sainsbury, C. L., Hudson, T. L., Kachadoorian, R., and Richards, T., 1970, Geology, mineral deposits and geochemical and radiometric anomalies, Serpentine Hot Springs area, Seward Peninsula, Alaska: U. S. Geological Survey Bulletin 1312H, 19 p.
- Sainsbury, C. L., Kachadoorian, R., Smith, T. E., and Todd, W. C., 1968, Cassiterite in gold placers at Humbolt Creek,

- Serpentine-Kougarok area, Seward Peninsula, Alaska: U. S. Geological Survey Circular 565, 7 p.
- Sammel, E. A., 1979, Occurrence of low-temperature geothermal water in the U. S., in Muffler, L.J.P., ed., Assessment of geothermal resources of the United States - 1978: U. S. Geological Survey Circular 790, p. 86-131.
- Sayre, J. D., and Hagelbarger, P. R., 1918, A study of temperatures in the Valley of Ten Thousand Smokes: Ohio Journal of Science, v. 19, p. 249-278.
- Sbar, M. L., and Matumoto, T., 1972, Refraction profiles in the Valley of Ten Thousand Smokes, Katmai, Alaska: Bulletin Volcanologique, v. 35, no. 2, p. 335-349.
- Scheidegger, K. F., Corliss, J. B., Jezek, P. A., and Ninkovich, D., 1977, Ash layer record of explosive volcanic eruptions of the Aleutian and Kamchatkan volcanic arcs [abs.]: EOS, v. 58, no. 12, p. 1248.
- Scheidegger, K. F., and Kulm, L. D., 1973, Explosive, cyclic Aleutian arc volcanism: Evidence from volcanic ash layers recovered from DSDP Site 178, Gulf of Alaska [abs.]: Geological Society of America, Abstracts with Programs, V. 5, no. 7, p. 795.
- Schmincke, H. U., and Johnson, D. A., 1977, Contrasting pyroclastic flow deposits of the 1976 eruption of Augustine Volcano, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 9, p. 1161.
- Schnell, R. C., and Sheridan, P. J., 1986, Arctic gas and aerosol sampling program (AGASP-II), March-April 1986 [abs.]: EOS, v. 67, no. 44, p. 900
- Schrader, F. C., and Spencer, A. C., 1901, The geology and mineral resources of a portion of the Copper River district, Alaska: U. S. Government Printing Office, special publication, p. 1-94.
- Self, S., Kienle, J., and Huot, J. P., 1978, Mechanisms and deposits of the 1977 Ukinrek maar-forming eruption, Alaska Peninsula [abs.]: Geological Society of America, Geological Association of Canada, and Mineral Association of Canada Meeting, Abstracts with Programs, v. 10, no. 7, p. 489.
- Self, S., Kienle, J., and Huot, J. P., 1980, Ukinrek Maars, Alaska II, deposits and formation of the 1977 craters: Journal of Volcanology and Geothermal Research, v. 7, p. 39-65.
- Shackelford, D. C., 1983, Historical activity of Pavlov volcano: Volcano News, no. 14, July 1983, p. 5-6.

- Shelikhov, G. I., 1790 A voyage to America 1783-1786: Ramsay, M., translator, Pierce, R. A., ed., Limestone Press 1981, Kingston, Ontario, Canada 163 p.
- Shipley, J. W., 1919, Valley of Ten Thousand Smokes: Science, v. 49, no. 1277, p. 489-91.
- Shipley, J. W., 1920, Some chemical observations on the volcanic emanations and incrustations in the Valley of Ten Thousand Smokes, Katmai, Alaska: American Journal of Science, v. 50, p. 141-153.
- Shipley, J. W., 1920, Nature of the Katmai volcanic gasses and encrustations: Nature, v. 104, p. 595-597.
- Shore, R. A., 1985, Resistivity survey and interpretation: in Republic Geothermal Inc., The Unalaska Geothermal Exploration Project, Phase III, Final report prepared for Alaska Power Authority, Appendix E.
- Siebert, L., Glicken, H., and Kienle, J., 1986, Debris avalanches and lateral blast at Mt. St. Augustine volcano, Alaska [abs.]: EOS, v. 67, no. 44, p. 1259.
- Silberman, M. L., Moll, E. J., Chapman, R. M., Patton, W. W. Jr., and Connor, C. L., 1978, Potassium-argon age of granitic and volcanic rocks from the Ruby, Medfra, and adjacent quadrangles, west-central Alaska, in Johnson, K. M., and Williams, J. R., eds., U. S. Geological Survey in Alaska: Accomplishments during 1978: U. S. Geological Survey Circular 804-B, p. B63-B66.
- Simkin, T., Siebert, L., McClelland, L., Bridge, D., Newhall, C. G., and Latten, J. H., 1981, Volcanoes of the World: Smithsonian Institution, Hutchinson Ross Publishing Co., Stroudsburg, Pennsylvania, 232 p.
- Simons, F. S., and Mathewson, D. E., 1955, Geology of Great Sitkin Island, Alaska: U. S. Geological Survey Bulletin 1028-B, p. 21-43.
- Sloan, C. E., 1976, Chemical analysis of sample from Bailey Bay Hot Spring: U. S. Geological Survey Central Laboratory, Denver, Colorado, Water Quality Analysis File, Lab ID 216065, record 24824.
- Sloan, C. E., 1976, Chemical analysis of sample from Bell Island Hot Springs: U. S. Geological Survey Central Laboratory, Denver, Colorado, Water Quality Analysis File, Lab ID 216064, record 24821.
- Sloan, C. E., 1976, Chemical analysis of sample from Chief Shakes Hot Springs: U. S. Geological Survey Central

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

Laboratory, Denver, Colorado, Water Quality Analysis File,
Lab ID 216063, record 24818.

- 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, 28 p.
- Smith, W. R., 1925, The Cold Bay Katmai District, in Brooks, A. H., ed., Mineral Resources of Alaska-Report on Progress of Investigation in 1923: U. S. Geological Survey Bulletin 773, p. 183-213.
- Smith, W. R., 1925, Aniakchak Crater, Alaska Peninsula, in Mendenhall, W. C., ed., Shorter contributions to general geology: U. S. Geological Survey Professional Paper 132, p. 139-149.
- Smith, W. R., and Baker, A. A., 1924, The Cold Bay-Chignik district Alaska: U. S. Geological Survey Bulletin 755-D, p. 151-218.
- Snyder, G. L., 1954, Eruption of Trident volcano, Katmai National Monument, Alaska, February-June 1953: U. S. Geological Survey Circular 318, p. 318-324.
- Snyder, G. L., 1959, Geology of Little Sitkin Island, Alaska: U. S. Geological Survey Bulletin 1028-H, p. 169-210.
- Snyder, G. L., and Fraser, G. D., 1963, Pillowed lavas, 1: Intrusive layered lava pods and pillowed lavas on Unalaska Island, Alaska: U. S. Geological Survey Professional Paper 454-B, p. B1-B23.
- Solie, D. N., 1983, The Middle Fork plutonic complex, Mc Grath A-3 quadrangle, southwest Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Report of Investigations 83-16, 17 p.
- Sosman, R. B., 1919, The temperature inversions in the fumaroles of the Valley of Ten Thousand Smokes, Alaska Peninsula: Washington Academy of Science Journal, v. 9, p. 292-293.
- Spencer, S. G., Long, G. A., and Chapman-Riggsbee, W., 1982, An analysis of geothermal resource development on Unalaska Island, Alaska: Geothermal Resources Council Transactions, v. 6, p. 393-396.

GEO THERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Spurr, J. E., 1900, A reconnaissance in southwestern Alaska in 1898: U. S. Geological Survey 20th Annual Report, v. 7, p. 43-263.
- Stearns, N. D., Stearns, H. T., and Waring, G. A., 1937, Thermal springs in the United States: U. S. Geological Survey, Water-supply Paper 679-B, p. 59-206.
- Stefano, R. R., 1974, Low temperature utilization of geothermal water in Alaska at Pilgrim Hot Springs: Proceedings of General short course on geothermal resources, Boise, Idaho, Available from Idaho Dept. of Water Resources, Boise, Idaho, 14 p.
- Stefano, R. R., 1975, Water from Pilgrim Hot Springs could heat Nome: Alaska Construction & Oil, February 1975, p. 25-26.
- Stern, R. O., and Stirling, S., 1982, Pilgrim Hot Springs Road, Cultural Resources Survey, in Stern, R. O., ed., Cultural Resources Survey: Alaska Division of Parks, Office of History and Archaeology, Miscellaneous Publications - History and Archaeology Series, no. 31, p. 336-348.
- Stewart, R. J., 1975, Late Cenozoic explosive eruptions in the Aleutians and Kuril Island arcs: Nature, v. 258, p. 505-506.
- Still, P. J., 1980, Index of stream flow and water-quality records to Sept. 30, 1978, south-central Alaska: U. S. Geological Survey Open-file Report 80-600, 54 p.
- Stith, J. L., Hobbs, P. V., and Radke, L. F., 1977, Observations of a nuée ardente from the St. Augustine Volcano: Geophysical Research Letters, v. 4, no. 7, p. 259-262.
- Stoltzfus, C. F., 1982, The Copper River basin regional planning model study: Final report for Copper River Native Association, 61 p.
- Stone, D. B., Anma, K., and Tribble, M., 1971, Magnetic anomalies in the Valley of Ten Thousand Smokes [abs.]: EOS, v. 52, no. 11, p. 925.
- Stone, D. B., and Kienle, J., 1975, Pavlov: Volcanological Society of Japan, Bulletin of Volcanic Eruptions, no. 13, p. 50.
- Stone, D. B., and Packer, D. R., 1972, Paleomagnetic measurements in the Valley of Ten Thousand Smokes [abs.]: EOS, v. 53, no. 11, p. 1132.
- Stoney, G. M., 1884, The new volcano of the Bering Sea: Science, v. 4, no. 92, p. 432-434.

- Stoney, G. M., 1900, Naval explorations in Alaska: An account of two naval expeditions in northern Alaska with official maps of the country explored: U. S. Naval Institute, Annapolis, Md., 105 p.
- Swanson, S. E., 1983, Mineralogy and fractionation in the Makushin volcanic field, Unalaska, Island, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 15, no. 6, p. 703.
- Swanson, S. E., and Blum, J. D., 1984, Evolution of volcanic centers in the Aleutian Arc [abs.]: Geological Society of America, Abstracts with Programs, v. 16, p. 671.
- Swanson, S. E., Daley, E. E., and Nye, C. J., 1986, Magmatic evolution of Augustine Volcano from composition of quenched liquid (glass) [abs.]: EOS, v. 67, no. 44, p. 1259.
- Swanson, S. E., and Kienle, J., 1982, Volcanic centers in Katmai National Park, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, 28 p.
- Swanson, S. E., Kienle, J., and Fenn, P. M., 1981, Geology and petrology of Kaguyak Crater, Alaska [abs.]: EOS, v. 62, p. 1062.
- Swanson, S. E., Nye, C. J., and Motyka, R. J., 1983, Petrology of the Makushin volcanic field, Unalaska Island, Alaska [abs.]: EOS, v. 64, no. 18, p. 335.
- Swanson, S. E., Turner, D. L., Forbes, R. B., and Maynard, D., 1980, Bedrock geology of the Pilgrim Springs geothermal area, Alaska, in Turner, D. L., and Forbes, R. B., eds., Geological & Geophysical study of the geothermal potential of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, UAG R-271, p. 7-20.
- Taber, J. T., 1972, Seismicity of geothermal areas, Iceland, El Salvador, Imperial Valley, California, New Mexico, Alaska, Hawaii, New Zealand: Socorro, New Mexico, New Mexico Institute of Mines and Technology, unpublished M. S. thesis.
- Tams, E., 1924, Erdbeben und ausbruch des Katmai im Jahre 1912: Zeitschrift fur Vulkanologie, v. 8, no.3, p. 137-149.
- Thompson, J. M., and Keith, T. E. C., 1984, Chloride and fluoride in waters draining the Valley of Ten Thousand Smokes, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 336.
- Till, A. B., 1984, Redoubt volcano, Cook Inlet, Alaska: Stratigraphy and volcanic hazards [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 337.

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Turner, D. L., and Forbes, R. B., eds., 1980, A geological and geophysical study of the geothermal energy potential of Pilgrim Springs, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, UAG-271: prepared for U. S. Department of Energy, Division of Geothermal Energy, and Alaska Division of Energy & Power Development, 165 p.
- Turner, D. L., Forbes, R. B., Albanese, M. D., Lockhart, A. B., and Seed, S. M., 1980, Geothermal resources of Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG-R-279, prepared for U. S. Department of Energy, Division of Geothermal Energy, 19 p., 2 pl. scale 1:2,500,000.
- Turner, D. L., Forbes, R. B., Wescott, E. M., Kienle, J., Osterkamp, T. E., Swanson, S. E., Hawkins, D. B., Harrison, W., Gosink, J. P., Kline, J. T. 1980, Summary of results of a geological and geophysical investigation of the geothermal energy potential of the Pilgrim Springs area, Alaska: Geothermal Resources Council Transactions, v. 4, p. 93-95.
- Turner, D. L., Grybeck, D. G., and Wilson, F. H., 1975, Radiometric dates from Alaska: A 1975 compilation: Fairbanks, Alaska Division of Geological and Geophysical Surveys Special Report 10, 64 p.
- Turner, D. L., and Nye, C. J., 1986, Geochronology of eruptive events at Mt. Spurr, Alaska, in Turner, D. L., and Wescott, E. M., eds., Geothermal energy resource investigations at Mt. Spurr, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG R-308, p. 20-27, 1 pl., scale 1:2860.
- Turner, D. L., Nye, C. J., Beget, J. E., and Wescott, E. M., 1986, The Mt. Spurr, Alaska geothermal energy assessment project: Introduction, geologic overview, and present geothermal manifestation, in Turner, D. L., and Wescott, E. M., eds., Geothermal energy resource investigations at Mt. Spurr, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG R-308, p. 7-19, 1 pl., scale 1:2860.
- Turner, D. L., and Swanson, S. E., 1981, Continental rifting - A new tectonic model for the central Seward Peninsula, in Wescott, E. M., and Turner, D. L., eds., Geothermal reconnaissance survey of the central Seward Peninsula, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report, UAG-R-284, p. 7-36.
- Turner, D. L., Swanson, S. E., Forbes, R. B., and Maynard, D., 1979, Geology and tectonic setting of Pilgrim Springs, Alaska [abs.]: Proceedings of 30th Alaska Science Conference, American Association for the Advancement of Science, p. 52-53.

- Turner, D. L., Swanson, S. E., and Wescott, E. M., 1981, Continental rifting - a new tectonic model for geothermal exploration of the central Seward Peninsula: Geothermal Resources Council Transactions, v. 5, p. 213-216.
- Turner, D. L., and Wescott, E. M., 1982, A preliminary investigation of the geothermal energy resources of the Lower Susitna Basin: Fairbanks, University of Alaska, Geophysical Institute Report UAG-R-287, 50 p.
- Turner, D. L., and Wescott, E. M., eds., Geothermal energy resource investigations at Mt. Spurr, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG R-308, 98 p., 5 pl., scales 1:2860 & 1:6250.
- Turner, D. L., Wescott, E. M., and Bratt, D., 1986, Mercury and helium soil surveys at Mt. Spurr, Alaska, in Turner, D. L., and Wescott, E. M., eds., Geothermal energy resource investigations at Mt. Spurr, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG R-308, p. 66-79, 2 pl., scale 1:6250.
- Turner, D. L., Wescott, E. M., Nye, C. J., and Motyka, R. J., 1983, Summary and evaluation of geological, geochemical, and geophysical data relevant to geothermal energy exploration in the eastern Copper River basin, Alaska, in Wescott, E. M., and Turner, D. L., eds., Final report of investigation of the geothermal energy potential of the eastern Copper River basin, Alaska: for Alaska Division of Geological & Geophysical Surveys, RSA 82-5X-67B, p. 1-49.
- Twenhofel, W. S., and Sainsbury, C. L., 1958, Fault patterns in southeastern Alaska: Geological Society of America Bulletin, v. 69, p. 1431-1442.
- Updike, R. G., 1986, Construction materials assessment, in Updike, R. G., ed., Engineering geology technical feasibility study, Makushin geothermal power project Unalaska, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-60, p. K1-K41, 1 pl, scale 1:24,000.
- Updike, R. G., ed., 1986, Engineering geology, technical feasibility study, Makushin geothermal power project, Unalaska Alaska: Fairbanks, Alaska Division of Geological & Geophysical Surveys, Public-data File 86-60, 261 p., 17 pl., scale 1:24,000.
- Veniaminov, I., 1840, Notes on the islands of the Unalaska district: St. Petersburg, Russiisko-Amerikanskoi Kompanii, v. 3, p. 21-24.

- Viglino, J. A., Harmon, R. S., Borthwick, J., Nehring, N. L., Motyka, R. J., White, L. D., and Johnson, D. A., 1985, Stable-isotope evidence for a magmatic component in fumarole condensates from Augustine Volcano, Cook Inlet, Alaska, USA: *Chemical Geology*, v. 49, p. 141-157.
- VonLangsdorff, G. H., 1814, *Voyages and travels in various parts of the world during the years 1803,4,5,6,7.*: H. Colburn, Lonton, pt. 1, 368 p., 16 pl., pt. 2, 392 p., 5 pl.
- Waldron, H. H., 1961, *Geologic reconnaissance of Frosty Peak Volcano and vicinity, Alaska*: U. S. Geological Survey Bulletin 1028-T, p. 677-708.
- Wanek, A., 1973, *Geothermal areas by meridians and acreages*: U. S. Geological Survey for Alaska Land Use Planning Commission, 28 p.
- Ward, P. L., and Matumoto, T., 1967, A summary of volcanic and seismic activity in Katmai National Monument, Alaska: *Bulletin Volcanologique*, v. 31, p. 107-129.
- Ward, P. L., and Ward, S. N., 1966, Volcanic activity in Katmai National Monument in early August 1965: *Earthquake Notes*, v. 37, no. 3, p. 19-34.
- Waring, G. A., 1917, *Mineral springs of Alaska*: U. S. Geological Survey Water-Supply Paper 418, 114 p.
- Waring, G. A., 1965, *Thermal springs of the United States and other countries of the world - a summary*: U. S. Geological Survey Professional Paper 492, 383 p. (revised by Blankenship, R. R., and Bentall, R.).
- Wendler, G., 1967, Heat flow by conduction and latent heat in volcanic soil of Mt. Wrangell, Alaska: *Pure and Applied Geophysics*, v. 68, no. 3, p. 41-48.
- Wescott, E. M., 1981, Helium and mercury surveys, *in* Wescott, E. M., and Turner, D. L., eds., *Geological and geophysical study of the Chena Hot Springs geothermal Area, Alaska*: Fairbanks, University of Alaska, Geophysical Institute Report, UAG-R-283, p. 54-61.
- Wescott, E. M., 1981, Helium and mercury in the central Seward Peninsula rift system, Alaska, *in* Ruscetta, C. A. and Foley, D., eds., *Geothermal Direct Heat Program*: Earth Science Laboratory, University of Utah Research Institute Report ESL-59, p. 63-77.
- Wescott, E. M., Sydora, R., and Peace, J. 1979, Resistivity survey of Pilgrim Hot Springs [abs.]: *Proceedings 30th Alaska Science Conference, American Association for the Advancement of Science*, p. 55.

- Wescott, E. M., Sydora, R., Peace, J., and Lockhart, A. B., 1980, Electrical resistivity survey of the Pilgrim Springs geothermal area, Alaska: Geothermal Resources Council Transactions, v. 4, p. 257-259.
- Wescott, E. M., and Turner, D. L., 1981, A geological and geophysical study of the Chena Hot Springs geothermal Area, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG-R-283, 65 p.
- Wescott, E. M., and Turner, D. L., 1981, Geothermal reconnaissance survey of the central Seward Peninsula, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG-R-284, 123 p.
- Wescott, E. M., and Turner, D. L., 1982, Geothermal energy resource assessment of parts of Alaska: Fairbanks, University of Alaska, Geophysical Institute final report to U.S. Dept. of Energy, Division of Geothermal Energy, cooperative agreement DE-FC07-79-ET-27034, 69 p.
- Wescott, E. M., and Turner, D. L., 1983, Geothermal energy resource exploration of the eastern Copper River basin, Alaska: Geothermal Resources Council Transactions, v. 7, p. 211-213.
- Wescott, E. M., and Turner, D. L., eds., 1983, Final report on the investigation of the geothermal energy resource potential of the eastern Copper River basin, Alaska: Fairbanks, University of Alaska, Geophysical Institute, report to Alaska Division of Geological and Geophysical Surveys, RSA-82-SX-670, 113p., 4 pl., scale 1:63,360.
- Wescott, E. M., and Turner, D. L., eds., 1985, Geothermal energy resource investigations in the eastern Copper River basin, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG-R-302, 158 p., 8 pl., scale 1:63,360.
- Wescott, E. M., Turner, D. L., Motyka, R. J., Witte, W., and Petzinger, B., 1982, Helium and mercury surveys of parts of Unalaska Island: Fairbanks, University of Alaska, Geophysical Institute report to Alaska Division of Geological and Geophysical Surveys, 15 p.
- Wescott, E. M., Turner, D. L., Nye, C. J., Beget, J. E., and Motyka, R. J., 1985, Preliminary report on geothermal resource investigations at Mt. Spurr, Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Public-data File, unpublished report 85-65, 22 p.
- Wescott, E. M., Turner, D. L., Witte, W., and Petzinger, B., 1982, A geophysical survey of Hot Springs Bay Valley, Akutan

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Island, Alaska: Geothermal Resources Council Transactions, v. 6, p. 185-188.
- Wescott, E. M., and Witte, W., 1982, Gravity survey of lower Susitna basin: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 162, 7 p., 2 pl., scale 1:63,360.
- Wescott, E. M., Witte, W., Moore, P., and Echelmeyer, K., 1986, Ice thickness measurements in the basin surrounding the summit of Mt. Spurr, Alaska, in Turner, D. L., and Wescott, E. M., eds., Geothermal energy resource investigations at Mt. Spurr, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG R-308, p. 28-40.
- Wescott, E. M., Witte, W., Moore, P., and Turner, D. L., 1986, Electrical geophysical surveys for potential geothermal reservoirs on the south side of Mt. Spurr, Alaska, in Turner, D. L., and Wescott, E. M., eds., Geothermal energy resource investigations at Mt. Spurr, Alaska: Fairbanks, University of Alaska, Geophysical Institute Report UAG R-308, p. 41-65, 1 pl., scale 1:2860.
- Wescott, E. M., Witte, W., and Petzinger, B., 1981, Geophysical surveys of Summer Bay warm springs: Fairbanks, University of Alaska, Geophysical Institute report to Alaska Division of Geological and Geophysical Surveys, 20 p.
- Westdahl, F., 1900, Mountains on Unimak Island, Alaska: National Geographic Magazine, v. 14, p. 91-99.
- White, D. E., and Willaims, D. L., eds., 1975, Assessment of geothermal resources of the United States - 1975: U. S. Geological Survey Circular 726, 155 p.
- Whympet, F., 1868, A journey from Norton Sound, Bering Sea to Fort Yukon: Royal Geographic Society Journal, v. 38, p. 219-237.
- Wilcox, R. E., 1953, The eruption of Mount Spurr, Alaska: Volcano Letters, no. 521, p. 8.
- Wilcox, R. E., 1959, Some effects of recent volcanic ash falls with especial reference to Alaska: U. S. Geological survey Bulletin 1028-N, p. 409-476.
- Williams, H., 1955, Preliminary notes on the geological work done on Mt. Katmai and in the Valley of Ten Thousand Smokes, Alaska, in Luntet, R. S., compiler, Interim report on Katmai Project, Katmai National Monument: U. S. National Park Service, p. 55-61.
- Williams, H., Curtis, G. H., and Juhle, R. W., 1956, Mount Katmai and the Valley of Ten Thousand Smokes, Alaska (a new

interpretation of the great eruption of 1912): Proceedings 8th Pacific Science Congress, University of Philippines, v. 2, p. 129.

- 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 pl., scale 1:125,000.
- Williams, J. R., and Johnson, K. M., 1980, Map and description of late Tertiary and Quaternary deposits, Valdez quadrangle, Alaska: U. S. Geological Survey Open-file Report 80-892C, 2 pl., scale 1:250,000.
- Wilson, C. R., and Forbes, R. B., 1969, Infrasonic waves from Alaskan volcanic eruptions: Journal of Geophysical Research, v. 74, no. 18, p. 4511-4522.
- Wilson, C. R., and Forbes, R. B., 1969, Infrasonic waves from Alaskan volcanic eruptions [abs.]: EOS, v. 50, p. 341.
- Wilson, C. R., and Kienle, J., 1976, Infrasonic signals generated by Augustine volcano during the 1976 eruption [abs.]: American Geophysical Union Annual Meeting, Special Augustine Session, April 14, 1976.
- Wilson, F. H., 1977, Some plutonic rocks of southwestern Alaska - a data compilation: U. S. Geological Survey Open-file Report 77-501, 9 p., 4 pl., scale 1:1,000,000.
- Wilson, F. H., Detterman, R. L., and Case, J. E., 1985, The Alaska Peninsula terrane: a definition: U. S. Geological Survey Open-file Report 85-450, 19 p.
- Wilson, F. H., and Shew, N., 1981, Maps and tables showing preliminary results of potassium-argon age studies in the Circle quadrangle, Alaska, with a compilation of previous dating work: U. S. Geological Survey Open-file Report 81-889, 1 pl., scale 1:250,000.
- Wilson, F. H., and Turner, D. L., 1975, Radiometric age map of southeast Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 82, 11 p., 1 pl., scale 1:1,000,000.
- Wilson, F. H., and Turner, D. L., 1975, Radiometric age map of Aleutian Islands: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 83, 10 p., 1 pl., scale 1:2,500,000.
- Wilson, F. H., and Turner, D. L., 1975, Radiometric age map of southwest Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file Report 84, 12 p., 1 pl., scale 1:1,000,000.

GEOHERMAL BIBLIOGRAPHY

BIBLIOGRAPHY LISTING

- Wilson, F. H., and Turner, D. L., 1975, Radiometric age map of northern Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file 86, 11 p., 1 pl., scale 1:1,000,000.
- Wilson, F. H., and Turner, D. L., 1975, Radiometric age map of south-central Alaska: Fairbanks, Alaska Division of Geological and Geophysical Surveys Open-file 85, 12 p., 1 pl., scale 1:1,000,000.
- Wiltse, M. A., 1986, Radon hazard assessment orientation survey, Circle Hot Springs area, phase 1: Fairbanks, Alaska Division of Geological and Geophysical Surveys, Public-data File 86-82, 11 p.
- Winkler, G. R., Silberman, M. L., Grantz, A., Miller, R. J., and Mac Kevett, E. M. Jr., 1981, Folio of the Valdez quadrangle, Alaska: U. S. Geological Survey Open-file Report 80-895-A, 2 pl., scale 1:250,000.
- Woodruff, L. G., and Anderson, A. T., 1980, An arrested state of magma mixing, Pavlof Volcano, Alaska: EOS, v. 61, no. 6, p. 68.
- Woodward-Clyde, 1983, Geothermal energy development at Pilgrim Springs, Alaska: Woodward-Clyde report to Alaska Division of Energy and Power Development, 60 p.
- Workman, W. B., 1979, The significance of volcanism in the prehistory of subarctic northwest North America, in Sheets, P. D., and Grayson, D. K., eds., Volcanic Activity and Human Ecology: New York, Academic Press, p. 339-371.
- Wright, C. W., 1906, Nonmetallic deposits of southeastern Alaska, in Brooks, A., ed., Report on progress of investigations of mineral resources of Alaska: U. S. Geological Survey Bulletin 284, p. 55-60.
- Wright, F. E., and Wright, C. W., 1908, The Ketchikan and Wrangell mining districts, Alaska: U. S. Geological Survey Bulletin 347, 210 p.
- Yehle, L. A., and Nichols, D. R., 1980, Reconnaissance map and description of the Chetaslina volcanic debris flow (new name), southeastern Copper River Basin and Adjacent areas, south central Alaska: U. S. Geological Survey, Miscellaneous Field Study Map MF-1209, scale 1:250,000.
- Yehle, L. A., Odum, J. K., and Reneau, D., 1985, Generalized interpretation of geologic materials from shot holes drilled for the Trans-Alaska crustal transect project, Copper River basin and adjacent regions, Alaska, May-June 1984: U. S. Geological Survey Open-file Report 85-582, 35 p.

- Yount, M. E., 1984, Redoubt Volcano, Cook Inlet, Alaska, mineralogy and chemistry [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 340.
- Yount, M. E., Miller, T. P., Emanuel, R. P., and Wilson, F.H., 1985, Eruption in an ice-filled caldera, Mount Veniaminof, Alaska Peninsula, in Bartsch-Winkler, S., and Reed, K. M., eds., The U. S. Geological Survey in Alaska: Accomplishments in 1983: U. S. Geological Survey Circular 945, p. 60-62.
- Yount, M. E., Wilson, F. H., and Miller, J. W., 1985, Newly discovered Holocene volcanic vents, Port Moller and Stepovak Bay quadrangles, in Bartsch-Winkler, S., and Reed, K. M., eds., U. S. Geological Survey in Alaska: Accomplishments during 1983: U. S. Geological Survey Circular 945, p. 60-62.
- Zies, E. G., 1921, Hot springs of the Valley of Ten Thousand Smokes: Journal of Geology, v. 32, no. 4, p. 302-310.
- Zies, E. G., 1924, Fumarolic incrustations in the Katmai Region [abs.]: Geological Society of America Bulletin, v. 35, no. 1, p. 123.
- Zies, E. G., 1924, The fumarolic incrustations in the Valley of Ten Thousand Smokes: National Geographic Society, Contributed Technical Papers, Katmai Series 3, p. 159-179.
- Zies, E. G., 1929, The Valley of Ten Thousand Smokes: I The fumarolic incrustations and the bearing ore deposition. II The acid gases contributed to the sea during volcanic activity: National Geographic Society, Contributed Technical Papers, Katmai Series, v. 4, p. 1-79.

ALASKA GEOTHERMAL BIBLIOGRAPHY

SECTION II

AUTHOR LISTING

(see Table I - Abbreviations used in short references - Pg. 223)
(see Table II - Codes used in short references - Pg. 227)

AUTHOR	TOPIC
Abramson, B. S.	
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak R,Fs	
Ach, J.	
Ach & DeLong 1980 Magma evo L. Sitkin & Semisopochnoi [abs.]	PG
Adams, D. D.	
Adams 1983 Geol northern Arrigetch pluton (thesis)	Gr
Adams 1984 Geol northern Arrigetch Peaks pluton [abs.]	Gr
Dillon & others 1983 Geol map Melozitna A-4 Quad	Gr
Adler, P.	
Dillon & others 1983 Geol map Melozitna A-4 Quad	Gr
Alaska Geological Consultants	
AGS 1975 Drum thermal springs area	DP
Albanese, M. D.	
Turner & others 1980 Geothermal resources Alaska	R,Fs
Allaway, W. H. Jr.	
Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q	Gr
Allely, R. D.	
Allely 1986 Seismic refraction Makushin	Ps
Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP	DP
Allen, E. T.	
Allen & Zies 1923 Chem study fumaroles Katmai region	Ff
Anderson, A. T.	
Woodruff & Anderson 1980 Arrested magma mixing Pavlov	PG
Andreasen, G. E.	
Andreasen & others 1958 Aeromag Copper River basin	Pr
Andreasen & others 1964 Geol inter mag & grav Copper Rvr basn	Pr
Anma, K.	
Anma 1971 Aeromag survey VTTS (thesis)	Pr
Stone & others 1971 Magnetic anomalies VTTS [abs.]	Pr

AUTHOR

TOPIC

Anonymous

Anonymous	1953 Activity of Trident	V
Anonymous	1953 Eruption of Trident	V
Anonymous	1975 Ak regional profiles SW region	C
Anonymous	1982 Reed River Hot Springs	Fs

Ansari, J.

Economides & others	1982 Eng,geol anal geothermal sites	EF,Er
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Arce, G. N.

Arce	1983 Volcanic hazards Makushin Volcano (thesis)	Eg
Arce & Economides	1982 Volcanic hazards Makushin Volcano	Eg
Economides & Arce	1983 Geothermal in Ak - eng & geol anal	EF,Er
Economides & others	1982 Eng,geol anal geothermal sites	EF,Er

Bader, J. W.

Bader	1984 Geol map eastern N. slope Ak.	Gr
Bader & Bird	1986 Geol map NE Alaska	Gr

Baker, A. A.

Smith & Baker	1924 Cold Bay-Chignik dist	Gr,H
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Baker, D. R.

Baker & Eggler	1983 Atka high alumina basalt	PG
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Baker, R. O.

Baker & others	1977 Geotherm springs-salmon hatchery site	R,DP,Fs
----------------	--	---------

Bakke, A.

Robinson & others	1986 Geol map Mt. Michelson C-4 Quad	Gr
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Bamford, R. W.

Isselhardt & others	1983 Temp grads Makushin geothermal area	HS
---------------------	--	----

Barnes, D. F.

Andreasen & others	1964 Geol inter mag & grav Copper Rvr basn	Pr
--------------------	--	----

Barnes, Ivan

Barnes & McCoy	1979 Mantle-derived CO2 in 2 phreatic expl	Fs,Ff,V
Barnes & Miller	1974 Geotherm studies in Alaska [abs.]	R,Fs
Miller & Barnes	1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes	1976 Geotherm develop Ak summary	DP,Gr,V
Miller & others	1975 Geol & chem hot springs W cent Ak	R,Fs

AUTHOR

TOPIC

Barnett, H. F. Jr.

Drewes & others 1961 Geol Unalaska & adjacent shelf Gr
 Fraser & Barnett 1959 Geol Delarof & Andreanof Islands Gr

Barnwell, W. W.

Barnwell & Pearson 1984 Ak resource inventory DP

Barrett, S. A.

Barrett 1978 Magnetic model of Augustine Volcano (thesis) V,Ps
 Barrett & others 1977 Model of Augustine Volcano [abs.] V,Ps
 Kienle & others 1979 Shallow magma at Augustine V

Barth, T. F. W.

Byers & Barth 1948 Geol Akutan Island Gr
 Byers & Barth 1953 Volc activity Akun & Akutan Islands V

Basecu, N.

Basecu 1980 Geothermal in Alaska R

Beaglehole, J. C.

Beaglehole 1967 Journals of Captain James Cook H

Beavan, R. J.

McNutt & Beavan 1981 Quakes at Pavlov earth tides V
 McNutt & Beavan 1984 Pavlov sea level & aseismic slip [abs.] V

Becker, G. F.

Becker 1898 Recon of goldfields southern Alaska H

Beebee, J.

Beebee & Kirkwood 1979 Unalaska-geothermal prospects C,EF

Beget, J. E.

Beget 1986 Prehistoric tephra at Augustine [abs.] V,Gs
 Limke & Beget 1986 Pyroclastic flows Augustine [abs.] V
 Turner & others 1986 Mt. Spurr geothermal project R,Gs,V
 Wescott & others 1985 Prelim rept gthrml invest Mt Spurr Gs,Ps,Gc

Beikman, H. M.

Beikman 1974 Prelim geol map SE Quad of Alaska Gr
 Beikman 1974 Prelim geol map SW Quad Alaska G
 Beikman 1975 Prelim geol map SE Alaska Gr

AUTHOR

TOPIC

Beikman 1980 Geologic map of Alaska	Gr
Beikman & Lathram 1975 Prelim geol map N Ak	Gr
Eberlein & others 1977 Prelim geol map central Alaska	Gr

Benson, C. S.

Benson & Follett 1986 Photogrammetry study Mt. Wrangell	V
Benson & Motyka 1978 Glac-volc interaction Mt. Wrangell	V
Benson & others 1975 Glac & volc studies Mt. Wrangell	V
Benson & others 1985 Glacio-volcano studies Mt. Wrangell	V
Bingham & Benson 1967 Mt. Wrangell ice & heat studies	V,HS
Bingham & Benson 1968 Ash temp variations Mt Wrangell	V,HS
Motyka & Benson 1982 Flucts in heat flow Mt Wrangell [abs.]	V,HS
Motyka & others 1977 Glac-volc investigations Katmai [abs.]	V
Motyka & others 1978 Increased heat Mt Wrangell [abs.]	HS
Motyka & others 1980 Mt Wrangell glac meas heat flow [abs.]	V,HS

Berg, E.

Berg & Keinle 1966 Gravity meas Katmai volc area	Pr
Berg & others 1967 Crustal structure - Katmai	Ps
Kubota & Berg 1967 Magma in Katmai range	V,Pr

Berg, H. C.

Berg & Hinckley 1963 Recon geol northern Baranof Is.	Gr
Berg & others 1978 Geol map Ketchikan & Prince Rupert Q Ak.	Gr
Eberlein & others 1983 Geol map Craig Q	Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Monger & Berg 1985 Terrane map SE Ak. & W. Can.	Gr

Berry, G. W.

Berry & others 1980 Thermal spring list U.S.	R
--	---

Biggar, N. E.

Biggar 1974 Geol & geophys stdy at Chena HS (thesis)	Gs,Ps,Fs,Fw
Forbes & Biggar 1973 Ak geothermal resource potential	R,HS

Bingham, D. K.

Benson & others 1975 Glac & volc studies Mt. Wrangell	V
Benson & others 1985 Glacio-volcano studies Mt. Wrangell	V
Bingham 1967 Ice & heat studies Mt. Wrangell (thesis)	V,HS
Bingham & Benson 1967 Mt. Wrangell ice & heat studies	V,HS
Bingham & Benson 1968 Ash temp variations Mt Wrangell	V,HS
Kienle & others 1970 Seism evidence pre 1912 tuff VTTS [abs.]	Gr

Bird, K. J.

Bader & Bird 1986 Geol map NE Alaska	Gr
--------------------------------------	----

AUTHOR

TOPIC

Black, R. F.

Black	1974	Geol & ancient Aleuts	Gr
Black	1974	Late Quat sea level changes Umnak Is	Gr
Black	1975	Late Quat geomorph Umnak Is	Gr
Black	1976	Geol Umnak related to Aleuts	Gr
Black	1980	Movements sea level Aleutian Is	Gr
Black	1981	Holo sea level changes Aleutian Islands	Gr
Black	1981	Late Quat climatic changes Aleutian Islands	Gr
Black	1983	Glacial chronology Aleutians	Gr

Blackford, M.

Reeder & others	1977	Seism Augustine volc [abs.]	V,Ps
-----------------	------	-----------------------------	------

Blackwell, D. D.

Blackwell & Steele	1986	NA geothermal map [abs.]	R,HS
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Blanchard, D. C.

Blanchard & Tailleux	1982	Prelim geothermal isograd map NPRA	HS
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Bliss, J. P.

Bliss	1983	Ak basic data thermal springs & wells	R,Fs,Fw
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Blodgett, R. B.

Blodgett & Gilbert	1983	Cheeneetnuk limestone Mc Grath	Gr
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Blum, J. D.

Swanson & Blum	1984	Evol of volc centers Aleutian arc [abs]	V,Gr
----------------	------	---	------

Borchert, M.

Gosink & others	1986	Augustine ash [abs.]	V
-----------------	------	----------------------	---

Bordet, P.

Bordet & Tazieff	1963	Erupt of Katmai & ignimbrites	V
Bordet & others	1963	Katmai	V
Chaigneau & Bordet	1963	Gas in glass in VTTS (Fr)	P,V

Borthwick, J.

Harmon & others	1982	Isotopes from Augustine fumaroles	Ff
Vigilino & others	1985	Isot evid magma comp in fum cond Augst	V,Ff

Bottge, R. G.

Rosenbruch & Bottge	1975	Econ potent 3 sites Ak	EF
---------------------	------	------------------------	----

AUTHOR	TOPIC
Bowen, P. A.	
Nehring & others 1979 Sulfate geotherm western U. S.	R,Fs
Box, S. E.	
Robinson & others 1984 Geologic map Sleetmute B-5 Q	Gr
Boyd, T. M.	
Boyd & Jacob 1984 Seismicity of Unalaska	Pr
Jacob & Boyd 1985 Seismic network on Unalaska	Pr
Brabb, E. E.	
Foster & others 1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others 1973 Geology Yukon-Tanana upland	Gr
Bragg, N. J.	
Reeder & others 1980 Geothermal implementation plan	DP
Brannock, W. W.	
Byers & Brannock 1949 Volc activity Umnak & Great Sitkin Is	V
Bratt, D.	
Turner & others 1986 Hg and He surveys Mt. Spurr	Gc,R
Brew, D. A.	
Brew & Ford 1985 Geol map Juneau, Taku, Atlin, Skag Quad	Gr
Brew & others 1965 Eruptive history Mt. Edgecumbe [abs.]	V
Brew & others 1969 Recon geol Mt Edgecumbe	Gs
Brew & others 1984 Geologic map Peterbrg, Sumdum, P. Alex	Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1964 Recon geol map Baranof & Kruzof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Bridge, D.	
Simkin & others 1981 Volcanoes of the World	V,R
Britch, R. P.	
Baker & others 1977 Geotherm springs-salmon hatchery site	R,DP,Fs
Brook, C. A.	
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Mariner & others 1978 Data for hydrothermal systems >= 90	R,Fs
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs

AUTHOR	TOPIC
Brophy, J. G.	
Brophy & Marsh 1984 Petro & geochem Cold Bay volc [abs.]	PG
Brosge, W. P.	
Brosge & Patton 1982 Bedrock geol maps Dalton Hwy	Gr
Brosge & Pessel 1977 Prelim recon geol map Survey Pass Q	Gr
Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q	Gr
Chapman & others 1982 Recon geol map Tanana Q	Gr
Brown, J. S.	
Brown 1899 Shishaldin	H
Bruechner, H. K.	
Perfit & others 1980 Model for fract in Aleut calc-alk suite	PG
Buddington, A. F.	
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Bundtzen, T. K.	
Bundtzen & Gilbert 1983 Geology upper Kuskokwim	Gr
Bundtzen & Kline 1986 Coal, peat & geotherm in Kuskokwim	R,DP
Bunker, C. M.	
Bunker & others 1977 Prelim radio ages of rocks Kigluaik Mts	Gr
Burk, C. A.	
Burk 1965 Geol Ak Penin-island arc & continental margin	Gr
Buzzell, R. G.	
Buzzell & Gibson 1986 Nome-Taylor Rd. cultural resources	C
Byers, F. M. Jr.	
Byers 1959 Geol Umnak & Bogoslof Islands	Gr
Byers 1961 Petro 3 volc suites Umnak & Bogoslof Islands	PG
Byers & Barth 1948 Geol Akutan Island	Gr
Byers & Barth 1953 Volc activity Akun & Akutan Islands	V
Byers & Brannock 1949 Volc activity Umnak & Great Sitkin Is	V
Cady, W. M.	
Cady & others 1955 Geology central Kuskokwim	Gr

AUTHOR	TOPIC
Campbell, D. A.	
Campbell & Economides 1984 Summary Well no. 1 Makushin volc	Er
Economides & others 1985 Eval Makushin geothermal reservoir	Er
Capps, S. R.	
Capps 1934 Notes geol Ak Penin & Aleutian Islands	Gr
Capps 1935 Southern Alaska Range	Gr
Carey, D. L.	
Carey & others 1983 Unalaska geotherm land, regs, & environ	DP
Carrick, S.	
Carrick & Maurer 1986 Hydrology - Makushin	Gs
Carter, C.	
Eberlein & others 1983 Geol map Craig Q	Gr
Carter, L. D.	
Carter & Galloway 1978 Geol map proposed gas line	Gr
Carver, C. L.	
Reger & Carver 1978 Recon geol materials map capital site	Gr
Case, J. E.	
Case & others 1980 Tertiary volc centers Ak Penin.	Gr,V
Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q	Gr
Wilson & others 1985 Alaska Peninsula terrane	Gr
Cass, J. T.	
Cass 1959 Recon geol map Melozitna Q Ak.	Gr
Chaigneau, M.	
Chaigneau & Bordet 1963 Gas in glass in VTTS (Fr)	P,V
Chapin, T.	
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Chapman, R. M.	
Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q	Gr
Chapman & others 1982 Recon geol map Tanana Q	Gr
Patton & others 1978 Geol map Melozitna Q	Gr
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr

AUTHOR	TOPIC
Chapman-Riggsbee, W.	
Spencer & others 1982 Anal geothrm res devel Unalaska	EF,DP
Chuan, R.	
Gosink & others 1986 Augustine ash [abs.]	V
Church, R. E.	
Church & others 1970 Copper River basin strat correl section	Gs
Churkin, M. Jr.	
Eberlein & others 1983 Geol map Craig Q	Gr
Citron, G. P.	
Kay & others 1982 Tectonic control of magmatism Aleut arc	PG
Clark, G. A.	
Clark 1912 Katmai eruption	V,H
Coats, R. R.	
Coats 1947 Geol N Adak Island	Gr
Coats 1947 Geol N Kanaga Is.	Gr
Coats 1950 Volc activity Aleutian arc	R,V
Coats 1952 Magmatic different Adak & Kanaga Islands	PG
Coats 1953 Geol Buldir Island	Gr
Coats 1956 Geol N Adak Island	Gr
Coats 1956 Geol N Kanaga Island	Gr
Coats 1956 Recon geol W Aleutian Islands	Gr
Coats 1959 Geol recon Gareloi Island	Gr
Coats 1959 Geol recon Semisopochnoi Island	Gr
Coats 1962 Magma type & crustal structure Aleutian arc	PG
Coats & Marsh 1984 Recon geol & petrol N Tanaga [abs.]	Gr
Coats & others 1961 Geol recon Kiska Island	Gr
Collazzi, E. J.	
Collazzi & Ireland 1986 Hydrology lower Kuskokwim basin	Gr
Collier, A. J.	
Collier 1902 Recon NW Seward Penin	H,Gr
Combellick, R. A.	
Combellick 1986 Eng geol power plant site Makushin	Eg

AUTHOR	TOPIC
Condon, W. H.	
Loney & others 1963 Geol Freshwater Bay Chichagof Is	Gr
Conens, S.	
Reeder & others 1977 Seism Augustine volc [abs.]	V,Ps
Coney, P. J.	
Jones & others 1984 Terrane map Alaska	Gr
Connor, C. L.	
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Conrad, W. K.	
Conrad & Kay 1984 Inclusions Adak Is-nature of primary magma	PG
Conwell, C. N.	
Conwell & Schell 1977 Energy resource map Alaska	R
Coonrad, W. L.	
Decker & others 1984 Geology Sleetmute B-5 Quad	Gr
Hoare & Coonrad 1959 Geol map Russian Mission Quad	Gr
Coonrod, P. L.	
Emmel & Coonrod 1982 Geol Literature Copper River basin	Gr
Reeder & others 1980 Geothermal implementation plan	DP
Corliss, J. B.	
Scheidegger & others 1977 Ash volc Aleut & Kamchat arc [abs.]	V
Corwin, R. F.	
Corwin & Fitterman 1983 Self potential Makushin geotherm area	Ps
Coulter, H. W.	
Juhle & Coulter 1955 Mt. Spurr eruption 1953	V
Muller & others 1954 Volcanic activity Katmai	V
Craig, H. A.,	
Poreda & others 1981 He isot vars Ak-Aleut arc [abs.]	R,Fs,Ff
Crick, R. W.	
Church & others 1970 Copper River basin strat correl section	Gs

AUTHOR

TOPIC

Curtis, G. H.

- Curtis 1955 Importance of Novarupta [abs.] V
 Curtis 1968 Stratigraphy of ejecta 1912 eruption Katmai V
 Williams & others 1956 Mt Katmai & VTS new interp 1912 eruptn V

Cushing, G. W.

- Foster & others 1983 Geologic map Circle Q Gr
 Foster & others 1983 Prelim geol map Circle Quad Gr

Daily, I. M.

- Daily 1912 Eruption of Katmai V,H

Daley, E. E.

- Daley 1986 Petro, geochem & evol magmas Augustine (thesis) PG
 Daley & Swanson 1985 Low press fractionation Augustine [abs.] PG
 Swanson & others 1986 Magmatic evolution Augustine [abs.] PG,V

Dall, W. H.

- Dall 1870 Alaska and its resources H
 Dall 1870 Bogosloff volcano H,V
 Dall 1884 New volcano island H,V
 Dall 1889 Notes on Bogoslof island H,V

Dames and Moore

- Dames & Moore 1980 Geothermal drilling studies Unalaska Er

Davidson, G.

- Davidson 1884 First ascent Makushin H
 Davidson 1884 New Bogoslof volcano H,V
 Davidson 1884 New volcano in Alaska H,V
 Davidson 1884 Notes volc eruption Augustine H,V
 Davidson 1893 Eruption of Veniaminof H,V

Davies, J. N.

- Davies 1986 Seismic hazards - Makushin Eg,Ps
 Davies & Kienle 1986 Augustine eruption & advice [abs.] V,C
 House & others 1981 Seismic gap near Unalaska Gs
 Nakamura & others 1977 Volc tectonic stress orient Aleut & Ak R,V

Davydov, G. L.

- Davydov 1809 Voyages to Russian America 1802-1807 H

AUTHOR

TOPIC

DeLong, S. E.

Ach & DeLong 1980 Magma evo L. Sitkin & Semisopchnoi [abs.] PG

Dean, K. G.

Dean & others 1981 Remote sensing Pilgrim Springs Ps

Decker, J.

Decker 1980 Geol Cret. subduct complx Chichagof Is (thesis) Gr

Decker 1980 Geol map W Chichagof Island Gr

Decker 1984 Kuskokwim group Gr

Decker & Hoare 1982 Cretaceous Kuskokwim Group Gs

Decker & others 1984 Geol data Russian Mission A-3 Quad Gr

Decker & others 1984 Geology Sleetmute B-5 Quad Gr

Robinson & Decker 1986 Ages & analysis from SW Alaska Gr,PG

Robinson & others 1984 Bdrck geol Chuilnuk & Kiokluk Mts [abs] Gr

Robinson & others 1984 Geologic map Sleetmute B-5 Q Gr

Robinson & others 1986 Rocks from Sleetmute, Russian Mission Q PG

Decker, R. W.

Decker 1964 Geophys investigations Katmai [abs.] Ps

Decker 1967 Invest at active volcanoes V

Dejong, P. K.

Carey & others 1983 Unalaska geotherm land, regs, & environ DP

Dempsen, W. J.

Andreasen & others 1958 Aeromag Copper River basin Pr

Denig-Chakroff, D. N.

Denig-Chakroff 1985 Unalaska recon study EF

Denig-Chakroff & others 1985 Development pot Mak reservoir Er,DP

Reeder & others 1980 Geothermal implementation plan DP

Reeder & others 1985 Geol geotherm resource Makushin R,Gs

Detterman, R. L.

Case & others 1980 Tertiary volc centers Ak Penin. Gr,V

Detterman 1968 Volcanic activity Augustine Island V

Detterman 1973 Geol map Iliamna B-2 Quad Augustine Island Gr

Detterman & Hartssock 1966 Geol Iniskin-Tuxedni region Gr

Detterman & Reed 1964 Prelim geol map Iliamna Q Gr

Detterman & Reed 1968 Geol Iliamna Q Gr

Detterman & Reed 1973 Surficial deposits Iliamna Q Gr

Detterman & Reed 1980 Strat, struct, & econ geol Iliamna Q Gr

Detterman & others 1976 Geol map by faults in Kenai & Tyonek Q Gr

Detterman & others 1979 Geol map Chignik & Sutwik Is Q Gr

Detterman & others 1981 Geol map Chignik & Sutwik Is Q Gr

AUTHOR

TOPIC

Detterman & others 1981 Quat geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q	Gr
Detterman & others 1985 Geol map Ugashik & W Karluk Q	Gr
Detterman & others 1986 Quat map Ugashik-Bristol Bay-Karluk Q	Gr
Johnson & Detterman 1979 Revision of eruptive history Augustine V	
Wilson & others 1985 Alaska Peninsula terrane	Gr

Dickey, D. B.

Dickey 1983 Tertiary seds & tectonics Farewell fault area	Gs, PG
Dickey 1984 Cenozoic rocks Farewell area	Gr
Dickey & others 1982 Cenozoic seds & Farewell fault	Gr

Diller, J. S.

Diller 1884 Volcanic sand Unalaska	H, V
Diller 1893 Our youngest volcano	H

Dillon, J. T.

Dillon & others 1983 Geol map Melozitna A-4 Quad	Gr
--	----

Dinkel, D. H.

Forbes & others 1975 Utilization geothermal rural Ak	Fs, DP, Ef
Forbes & others 1975 Utilization of Alaska thermal springs	DP

Dixon, J. P.

Dixon & Pulpan 1986 Crustal structure-Dall City [abs.]	Ps
--	----

Dobey, P. L.

Lyle & Dobey 1974 Geol evaluation Herendeen Bay area	Gr
--	----

Doroshin, P.

Doroshin 1870 Volcanoes, eruptions & earthquakes	H
--	---

Dover, J. H.

Dover & Mayaoka 1985 Rocks Ray Mts, Tanana & Bettles Q	Gr
--	----

Drewes, H.

Drewes & others 1961 Geol Unalaska & adjacent shelf	Gr
---	----

Dumon, D. E.

Dumond 1979 People & pumice Ak Penin.	V, C
---------------------------------------	------

Dunn, R.

Dunn 1909 Conquering Mt Wrangell	H
----------------------------------	---

AUTHOR

TOPIC

Dutro, J. T. Jr.

Loney & others 1963 Geol Freshwater Bay Chichagof Is Gr

Eakins, G. R.

Eakins 1969 Sulfur deposit Stepovak Bay [abs.] Gr

East, J. S.

East 1982 Geotherm investigation Manley HS (thesis) Fs,Fw,Gs,Ps

East 1982 Prelim geothermal investigation Manley HS Gs,Ps,Fs

Eaton, F. D.

Dean & others 1981 Remote sensing Pilgrim Springs Ps

Eberlein, G. D.

Eberlein & others 1977 Prelim geol map central Alaska Gr

Eberlein & others 1983 Geol map Craig Q Gr

Echelmeyer, K.

Wescott & others 1986 Ice thickness Mt. Spurr summit Ps

Economides, C. E.

Economides & others 1982 Reservoir eng analysis Pilgrim Sprg Er

Economides, M. J.

Arce & Economides 1982 Volcanic hazards Makushin Volcano Eg

Campbell & Economides 1984 Summary Well no. 1 Makushin volc Er

Denig-Chakroff & others 1985 Development pot Mak reservoir Er,DP

Economides & Arce 1983 Geothermal in Ak - eng & geol anal EF,Er

Economides & others 1981 Unalaska geothermal development DP

Economides & others 1982 Eng,geol anal geothermal sites EF,Er

Economides & others 1982 Reservoir eng analysis Pilgrim Sprg Er

Economides & others 1985 Eval Makushin geothermal reservoir Er

Reeder & others 1982 Econ & eng geoth develop Makushin EF,Eg,DP

Reeder & others 1985 Geol geotherm resource Makushin R,Gs

Edsall, D. W.

Edsall 1976 Trace elem in tephra Aleutians V

Eggler, D. H.

Baker & Eggler 1983 Atka high alumina basalt PG

Eickelberger, J. C.

Eickelberger & Hildreth 1986 Drilling in Katmai [abs.] V,Gs,Ps

AUTHOR

TOPIC

Elliott, R. L.

Berg & others 1978 Geol map Ketchikan & Prince Rupert Q Ak. Gr
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q Gr

Emanuel, R. P.

Emanuel 1984 Hydro & volc hazards Mt Spurr [abs.] Eg
Yount & others 1985 Eruption Mt Veniaminof V

Emery, P.

Emery & Jones 1984 Hydrologic atlas Copper River basin Gs

Emmel, K. S.

Emmel & Coonrod 1982 Geol Literature Copper River basin Gr
Riehle & others 1981 Lahars Crescent River Lower Cook Inlet V

England, J. M.

Longenkamp & others 1974 Elec resist survey Pilgrim Springs Ps

Escher, B. G.

Escher 1922 Lahar VTTS V,H

Estes, S. A.

Estes 1978 Seismotectonic studies lower Cook Inlet (thesis) Pr
Kienle & others 1978 Formation 2 maars Ak Penin prelim results V

Evans, W.

Motyka & others 1986 Augustine gas sampling [abs.] Ff

Federman, A. N.

Federman & Scheidegger 1984 Distal tephra 1912 Novarupta V

Fenn, P. M.

Swanson & others 1981 Geol & petro Kaguyak Crater [abs.] PG

Fenner, C. N.

Fenner 1920 Geol Katmai 1912 eruption [abs.] V,H
Fenner 1920 Katmai great eruption of 1912 V,H
Fenner 1923 Tuff deposit VTTS V,H
Fenner 1923 Tuff deposit VTTS V,H
Fenner 1926 Katmai magmatic province PG
Fenner 1930 Mt Katmai & Mt Mageik V,H

AUTHOR

TOPIC

Fenner 1937 Tuffs of Katmai & Yellowstone V,H
Fenner 1950 Chemical kinetics Katmai eruption PG

Ferrell, V. M.

Motyka & others 1977 Glac-volc investigations Katmai [abs.] V

Ferrians, O. J. Jr.

Ferrians & Nichols 1965 Copper River basin Gr
Ferrians & Schmoll 1957 Wisc proglacial lake Copper River bsn Gr
Ferrians & others 1958 Pleist volc mudflow Copper River basin V
Ferrians & others 1983 Copper River basin Gr

Fierstein, J. E.

Fierstein & Hildreth 1984 Pyroclastic deposits Novarupta [abs.] V
Fierstein & Hildreth 1986 Novarupta ejecta [abs.] V
Hildreth & Fierstein 1986 Novarupta near vent ejecta [abs.] V
Hildreth & others 1981 VTS summary of strat & petro of ejecta PG

Finch, R. H.

Finch 1935 Akutan volcano V,H

Fitch, E.

Fitch 1927 Mineral waters of the U.S. H

Fitterman, D. V.

Corwin & Fitterman 1983 Self potential Makushin geotherm area Ps

Follett, A. B.

Benson & Follett 1986 Photogrammetry study Mt. Wrangell V

Forbes, R. B.

Dean & others 1981 Remote sensing Pilgrim Springs Ps
Forbes 1975 Geothermal energy & wind power R,DP
Forbes 1976 Geothermal energy for Alaska R
Forbes 1979 Geol, geoph assmt of geotherm pot Pilgrim HS Gs,Ps
Forbes & Biggar 1973 Ak geothermal resource potential R,HS
Forbes & Kienle 1971 Augustine V
Forbes & Kienle 1971 Petro pre 1912 pyroclast VTS [abs] PG,Gs,V
Forbes & others 1971 Seismicity Augustine [abs.] Ps,V
Forbes & others 1975 Fission track age & geotherm grad [abs.] HS
Forbes & others 1975 Geophysical recon Pilgrim Springs Ps
Forbes & others 1975 Utilization geothermal rural Ak Fs,DP,Ef
Forbes & others 1975 Utilization of Alaska thermal springs DP
Forbes & others 1977 Fission track age & geothermal gradient HS
Forbes & others 1979 Geol, geoph assmt geotherm pot Pilgrim Gs,Ps
Forbes & others 1979 Pilgrim springs hydrothermal system RM

AUTHOR

TOPIC

Foster & others 1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others 1973 Geology Yukon-Tanana upland	Gr
Gedney & others 1970 Seismic refraction - Katmai	Ps
Kienle & Forbes 1974 Ak volc studies Augustine	V
Kienle & Forbes 1977 Augustine - Evolution of volcano	V
Kienle & others 1970 Seism evidence pre 1912 tuff VTTS [abs.]	Gr
Kienle & others 1971 Microquake swarm Augustine [abs.]	V,Ps
Motyka & others 1980 Geochemistry Pilgrim thermal waters	Fs,Fw
Osterkamp & others 1979 Conduct & hydrol meas Pilgrim HS [abs]	Ps
Osterkamp & others 1980 Recon study access power Pilgrim	Ps,Gs,DP
Ray & others 1966 Petro & geochem Mt Trident andesites [abs.]	PG
Swanson & others 1980 Bedrock geol Pilgrim springs area	Gs
Turner & Forbes 1980 Geol geophy stdy Pilgrim *,Gs,Ps,RM,Fs,Fw,HS	
Turner & others 1979 Geol & tect setting Pilgrim spr [abs.]	Gs
Turner & others 1980 Geothermal resources Alaska	R,Fs
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM
Wilson & Forbes 1969 Infrasonic waves & volc erupt [abs.]	V
Wilson & Forbes 1969 Infrasonic waves Ak volc eruptions	V

Ford, A. B.

Brew & Ford 1985 Geol map Juneau, Taku, Atlin, Skag Quad	Gr
--	----

Foresman, J. B.

Foresman 1968 Photogeol & geomorph Copper River basin	Gs
Foresman 1970 Mud volcanoes Copper River basin (thesis)	Gs

Foster, H. L.

Foster 1970 Recon geol map Tanacross Quad	Gr
Foster & others 1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others 1973 Geology Yukon-Tanana upland	Gr
Foster & others 1983 Geologic map Circle Q	Gr
Foster & others 1983 Prelim geol map Circle Quad	Gr
Keith & Foster 1979 Big Windy Creek HS	Fs
Keith & others 1981 Chem & isot data Big Windy Creek HS	Fs
Menzie & others 1983 Mineral assmt Circle Quad	Gr

Fournelle, J.

Fournelle & Marsh 1986 Shishaldin lavas [abs.]	PG,V
--	------

Fraser, G. D.

Drewes & others 1961 Geol Unalaska & adjacent shelf	Gr
Fraser & Barnett 1959 Geol Delarof & Andreanof Islands	Gr
Fraser & Snyder 1959 Geol S Adak & Kagalaska Islands	Gr
Snyder & Fraser 1963 Pillowed lavas Unalaska	Gr

Fry, W. H.

Fry 1912 Mineral content volcanic ashes	V,H
---	-----

AUTHOR	TOPIC
Funk, J. M.	
Funk 1973 Late Quat geol Cold Bay (thesis)	Gr
Funk 1973 Late Quat hist Cold Bay [abs.]	Gr
Furst, J. I.	
Furst 1968 Recon petrol Mt Wrangell caldera (thesis)	PG
Gaffi, R. G.	
Osterkamp & others 1979 Conduct & hydrol meas Pilgrim HS [abs]	Ps
Osterkamp & others 1980 Recon study access power Pilgrim	Ps,Gs,DP
Galloway, J. P.	
Carter & Galloway 1978 Geol map proposed gas line	Gr
Gassaway, J. S.	
Eberlein & others 1977 Prelim geol map central Alaska	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak R,	Fr
Gates, O.	
Gates & others 1971 Geol Near Islands	Gr
Gedney, L.	
Forbes & others 1975 Geophysical recon Pilgrim Springs	Ps
Gedney & others 1970 Seismic refraction - Katmai	Ps
Gibson, D. E.	
Buzzell & Gibson 1986 Nome-Taylor Rd. cultural resources	C
Gilbert, F. P.	
Andreasen & others 1958 Aeromag Copper River basin	Pr
Gilbert, W. G.	
Blodgett & Gilbert 1983 Cheeneetnuk limestone Mc Grath	Gr
Bundtzen & Gilbert 1983 Geology upper Kuskokwim	Gr
Dickey & others 1982 Cenozoic seds & Farewell fault	Gr
Gilbert 1981 Geologic map Cheeneetnuk River area	Gs
Gilbert & Solie 1983 Prelim geol map Mc Grath A-3 Quad	Gr
Gill, J. B.	
Nye & others 1983 Parental magmas Okmok: arc magmagen [abs.]	PG

AUTHOR

TOPIC

Glicken, H.

Siebert & others 1986 Debris avalanches Augustine [abs.] V

Godwin, L. H.

Godwin & others 1971 Classif of public land for geothermal R,DP

Gosink, J. P.

Gosink & Osterkamp 1980 Prelim invest hot water Pilgrim River HS

Osterkamp & others 1980 Recon study access power Pilgrim Ps,Gs,DP

Turner & others 1980 Sum geol geophys invest Pilgrim spr RM

Gosink, T.

Gosink & others 1986 Augustine ash [abs.] V

Grabacki, S. T.

Carey & others 1983 Unalaska geotherm land, regs, & environ DP

Grantz, A.

Andreasen & others 1964 Geol inter mag & grav Copper Rvr basn Pr

Grantz & others 1962 Saline springs Copper River basin Fs

Winkler & others 1981 Folio Valdez Q Gr

Grewingk, C.

Grewingk 1850 Historic geology NW North America (Ger) V,H

Griggs, R. F.

Griggs 1917 VTTS H

Griggs 1918 Eruption of Katmai V,H

Griggs 1918 VTTS H

Griggs 1918 VTTS mud flow V,H

Griggs 1919 Character of Katmai eruption H,V

Griggs 1919 Katmai & VTTS H,V

Griggs 1921 VTTS H

Griggs 1921 VTTS V,H

Griggs 1922 VTTS V,H

Griggs 1923 VTTS V,H

Grim, P. J.

Berry & others 1980 Thermal spring list U.S. R

Grunder, A. L.

Hildreth & Grunder 1980 VTTS comp & isotope of ejecta [abs.] PG

Hildreth & others 1981 VTTS summary of strat & petro of ejecta PG

Johnson & Grunder 1980 VTTS Tuff II Comp & isot ejecta [abs.] V

AUTHOR

TOPIC

Grybeck, D. G.

Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q Gr
 Nelson & Grybeck 1978 Arrigetch Peaks & Igikpak plutons Gr
 Turner & others 1975 Rad dates Ak 1975 compilation Gr

Guffanti, M.

Brook & others 1979 Hydrothermal systems <90 deg R,Fs
 Nathenson & others 1983 Regional heat flow R,HS

Hagelbarger, P. R.

Sayre & Hagelbarger 1918 Temps in VTTS H,HS

Haigler, L. B.

Godwin & others 1971 Classif of public land for geothermal R,DP

Hamilton, T. D.

Hamilton 1973 Snow & ice during Katmai eruption [abs.] V

Hanscom, J. T.

Osterkamp & others 1979 Conduct & hydrol meas Pilgrim HS [abs] Ps
 Osterkamp & others 1980 Recon study access power Pilgrim Ps,Gs,DP

Hansen, E.

Hansen & others 1981 Mineral potential Ak Penin. Gr

Haramura, H.

Ray & others 1966 Petro & geochem Mt Trident andesites [abs.] PG

Harlow, D. H.

Forbes & others 1971 Seismicity Augustine [abs.] Ps,V
 Kienle & others 1971 Microquake swarm Augustine [abs.] V,Ps

Harmon, K.

Nehring & others 1979 Sulfate geotherm western U. S. R,Fs

Harmon, R. S.

Harmon & others 1982 Isotopes from Augustine fumaroles Ff
 Harmon & others 1984 Augustine chem & isot character [abs.] PG
 Viglino & others 1985 Isot evid magma comp in fum cond Augst V,Ff

AUTHOR	TOPIC
Harrison, W.	
Forbes & others 1979 Geol, geoph assmt geothrm pot Pilgrim	Gs,Ps
Harrison & Hawkins 1980 Water & heat flow Pilgrim HS	HS,DP
Hawkins & Harrison 1979 Flow rate Pilgrim HS [abs.]	HS,DP
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM
Hartman, C. W.	
Johnson & Hartman 1969 Environmental atlas of Ak	C
Hartsock, J. K.	
Detterman & Hartsock 1966 Geol Iniskin-Tuxedni region	Gr
Hattori, K.	
Okada & others 1976 Hot springs village Port Moller	C
Hawkins, D. B.	
Forbes & others 1977 Fission track age & geothermal gradient	HS
Forbes & others 1979 Geol, geoph assmt geothrm pot Pilgrim	Gs,Ps
Harrison & Hawkins 1980 Water & heat flow Pilgrim HS	HS,DP
Hawkins & Harrison 1979 Flow rate Pilgrim HS [abs.]	HS,DP
Hawkins & Motyka 1985 Stat & chem anal H2O Copper River bsn	Fs,Fw
Motyka & others 1986 Geochem isot org mud volc Copper R	Fs,Ff,Fw
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM
Hedge, C. E.	
Bunker & others 1977 Prelim radio ages of rocks Kigluaik Mts	Gr
Henderson, J. R.	
Andreasen & others 1958 Aeromag Copper River basin	Pr
Henning, M. W.	
Parmentier & others 1983 Geol & hydrotherm alter Makushin	Gs,HA
Henning, R. A.	
Henning & others 1976 Alaska's volcanoes	V,R
Henning & others 1981 Wrangell-St Elias Wilderness	C
Herreid, G.	
Herreid 1966 Geol & geochem Inmachuk River	Gr
Hickel, W. J.	
Hickel 1972 National proposal for geothermal research	DP

AUTHOR

TOPIC

Higbie, R. G.

Higbie 1975 VTTS

V

Hildreth, W.

Eickelberger & Hildreth 1986 Drilling in Katmai [abs.] V,Gs,Ps
 Fierstein & Hildreth 1984 Pyroclastic deposits Novarupta [abs.] V
 Fierstein & Hildreth 1986 Novarupta ejecta [abs.] V
 Hildreth 1980 Novarupta 1912 Petro of ejecta [abs.] PG
 Hildreth 1981 1912 eruption VTTS [abs.] PG
 Hildreth 1983 Zoned eruption 1912 VTTS PG
 Hildreth & Fierstein 1986 Novarupta near vent ejecta [abs.] V
 Hildreth & Grunder 1980 VTTS comp & isotope of ejecta [abs.] PG
 Hildreth & others 1981 VTTS summary of strat & petro of ejecta PG
 Johnson & Hildreth 1980 VTTS Tuff I Empl, comp & weld [abs.] V
 Johnson & Hildreth 1980 VTTS comp & isot of ejecta [abs.] V
 Rubenstone & others 1985 Isot & trace elem Katmai [abs.] PG

Hill, J. M.

Lankford & Hill 1979 Strat & depos envirn Dutch Harbor member Gr

Hinckley, D. W.

Berg & Hinckley 1963 Recon geol northern Baranof Is. Gr

Hoare, J. M.

Cady & others 1955 Geology central Kuskokwim Gr
 Decker & Hoare 1982 Cretaceous Kuskokwim Group Gs
 Detterman & others 1976 Geol map by faults in Kenai & Tyonek Q Gr
 Hoare & Coonrad 1959 Geol map Russian Mission Quad Gr
 Patton & Hoare 1968 Kaltag Fault W-C Ak Gr

Hobbs, P. V.

Hobbs & others 1977 Eruption of Augustine V
 Stith & others 1977 Nuee ardent Augustine Volc V

Hoefs, J.

Harmon & others 1984 Augustine chem & isot character [abs.] PG

Holmes, C. E.

Holmes 1986 Archaeological evaluation Makushin C

Homan, F.

Homan 1972 Energy from the earth R,DP

AUTHOR	TOPIC
Hook, J.	
Forbes & others 1975 Geophysical recon Pilgrim Springs	Ps
Hopkins, D. M.	
Hopkins 1963 Imuruk Lake Seward Penin	Gr
Hopkins & Hopkins 1958 Seward Peninsula	Gr
Hopkins & Taber 1962 Stratigraphy Manley HS	Gs
Hopkins, J. P.	
Hopkins & Hopkins 1958 Seward Peninsula	Gr
House, L.	
House & others 1981 Seismic gap near Unalaska	Gs
Hrdlicka, A.	
Hrdlicka 1945 Aleutian Is & inhabitants	C,H
Hubbard, B. R.	
Hubbard 1931 Geol Aniakchak & Veniaminof [abs.]	Gr,H
Hubbard 1931 World inside a mountain	V,H
Hubbard 1935 Cradle of storms	V,H
Hudson, T. L.	
Detterman & others 1976 Geol map by faults in Kenai & Tyonek Q	Gr
Hudson 1977 Geol map Seward Penin	Gr
Hudson 1977 Zoned granite stock Seward Penin	PG
Hudson 1977 Zoned granite stock Seward Penin. (thesis)	PG
Hudson 1979 Ig & meta rocks Serpentine HS area	Gs
Hudson & Plafker 1978 Kigluaik & Bendeleben faults	Gr
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q	Gr
Sainsbury & others 1970 Geol min dep geochem & rad Serpentine	Gr
Huebner, M. A.	
Nehring & others 1979 Sulfate geotherm western U. S.	R,Fs
Hunt, S. J.	
Brew & others 1984 Geologic map Peterbrg, Sumdum, P. Alex	Gr
Huot, J. P.	
Kienle & others 1978 Form. 2 maars behind volc arc [abs.]	V
Kienle & others 1978 Formation 2 maars Ak Penin prelim results	V
Self & others 1978 Mechanisms & deposits Ukinrek [abs.]	Ps,Gs,V
Self & others 1980 Ukinrek Maars II deposits & formation	V

AUTHOR

TOPIC

Huttrer, G. W.

Carey & others 1983 Unalaska geotherm land, regs, & environ DP
Isselhardt & others 1983 Geotherm resource model Makushin RM,HS

Ikelman, J. A.

Berry & others 1980 Thermal spring list U.S. R

Imm, T. A.

Imm 1986 Geol & strat Mt Michelson quads Gr

Ireland, R. R. W.

Collazzi & Ireland 1986 Hydrology lower Kuskokwim basin Gr

Isselhardt, C. F.

Isselhardt & others 1983 Geotherm resource model Makushin RM,HS
Isselhardt & others 1983 Temp grads Makushin geothermal area HS

Jackson, S.

Jackson 1880 Alaska & its missions H,C

Jacob, K. H.

Boyd & Jacob 1984 Seismicity of Unalaska Pr
House & others 1981 Seismic gap near Unalaska Gs
Jacob & Boyd 1985 Seismic network on Unalaska Pr
Nakamura & others 1977 Volc tectonic stress orient Aleut & Ak R,V

Jager, L.

Hildreth & others 1981 VTTS summary of strat & petro of ejecta PG

Jaggar, T. A. Jr.

Jaggar 1908 Evolution Bogoslof Volcano V,H
Jaggar 1908 Evolution of Bogoslof [abs.] H,V
Jaggar 1908 Technical expedition to Aleutians H
Jaggar 1927 Eruption of Mageik V,H

Janik, C. J.

Motyka & others 1986 Makushin well chem equilib *,Fw,Fs,Ff,HA,RM

Jeffries, A.

Motyka & others 1986 Geochem isot org mud volc Copper R Fs,Ff,Fw

AUTHOR

TOPIC

Jezek, P. A.

Scheidegger & others 1977 Ash volc Aleut & Kamchat arc [abs.] V

Johnson, D. A.

Johnson 1976 Zoned magma chamber Augustine [abs.] V

Johnson 1978 Magma mixing Augustine volcano (thesis) PG

Johnson 1978 Magma mixing Augustine volcano [abs.] PG

Johnson 1979 Volc gas studies Ak volcanoes R,Ff

Johnson 1979 Volcanism at Augustine V,Gs

Johnson 1980 Volc contr Cl to stratosphere V,Ff

Johnson & Detterman 1979 Revision of eruptive history Augustine V

Johnson & Grunder 1980 VTTS Tuff II Comp & isot ejecta [abs.] V

Johnson & Hildreth 1980 VTTS Tuff I Empl, comp & weld [abs.] V

Johnson & Hildreth 1980 VTTS comp & isot of ejecta [abs.] V

Johnson & others 1977 Augustine Volc, evaluat hazards [abs.] V,Eg

Schmincke & Johnson 1977 Pyroclastic flows Augustine [abs]

Vigilino & others 1985 Isot evid magma comp in fum cond Augst V,Ff

Johnson, K. M.

Williams & Johnson 1980 Map Tert & Quat deposits Valdez Q Gr

Johnson, P. R.

Johnson & Hartman 1969 Environmental atlas of Ak C

Jones, D.

Jones 1986 Coastal engineering - Makushin Eg

Jones, D. L.

Jones & others 1984 Terrane map Alaska Gr

Jones, S.

Emery & Jones 1984 Hydrologic atlas Copper River basin Gs

Juhle, R. W.

Juhle 1955 Iliamna Volcano Gs

Juhle & Coulter 1955 Mt. Spurr eruption 1953 V

Muller & others 1954 Volcanic activity Katmai V

Williams & others 1956 Mt Katmai & VTTS new interp 1912 eruptn V

Kachadoorian, R.

Sainsbury & others 1968 SnO₂ Humbolt Cr Serpentine-Kougarok Gr

Sainsbury & others 1970 Geol min dep geochem & rad Serpentine Gr

AUTHOR

TOPIC

Kane, M. L.

Osterkamp & others 1979 Conduct & hydrol meas Pilgrim HS [abs] Ps
Osterkamp & others 1980 Recon study access power Pilgrim Ps,Gs,DP

Karl, S. M.

Brew & others 1984 Geologic map Peterbrg, Sumdum, P. Alex Gr

Kase, J. D.

Kase 1986 Trocadero soda springs C

Katsui, Y.

Katsui 1984 Okmok V

Katsura, T.

Ray & others 1966 Petro & geochem Mt Trident andesites [abs.] PG

Katz, F. J.

Martin & Katz 1910 Geol & min resources Iliamna & Lake Clark H,Gr
Martin & Katz 1912 Geol recon Iliamna Region H,Gr

Kay, R. W.

Conrad & Kay 1984 Inclusions Adak Is-nature of primary magma PG
Kay & Kay 1982 Aleut volc rock, primitive magmas [abs.] PG
Kay & others 1982 Tectonic control of magmatism Aleut arc PG
Perfit & others 1980 Model for fract in Aleut calc-alk suite PG

Kay, S. M.

Kay & Kay 1982 Aleut volc rock, primitive magmas [abs.] PG
Kay & others 1982 Tectonic control of magmatism Aleut arc PG

Keith, T. E. C.

Foster & others 1983 Geologic map Circle Q Gr
Foster & others 1983 Prelim geol map Circle Quad Gr
Keith 1984 Prelim obs fumaroles VTTS HA
Keith 1985 Hydrotherm alt Novarupta dome VTTS [abs.] HA
Keith 1986 Hydrothermal alteration Novarupta [abs.] HA,V
Keith & Foster 1979 Big Windy Creek HS Fs
Keith & others 1981 Chem & isot data Big Windy Creek HS Fs
Thompson & Keith 1984 Cl & F in waters VTTS [abs.] Fs

Keller, A. S.

Keller 1955 Geol Katmai [abs.] Gr
Keller & Reiser 1959 Geol Katmai Gr

AUTHOR

TOPIC

Kennedy, G. C.

Kennedy & Waldron 1955 Geol Pavlof volcano

Gr

Kerr, F. A.

Kerr 1948 Stikine & Iskut River area BC, Canada

Gr

Keskinen, M.

Kodosky & Keskinen 1986 Fumarole alt Augustine [abs.]

HA, Ff, V

Kienle, J.

Barrett & others 1977 Model of Augustine Volcano [abs.]

V, Ps

Berg & Kienle 1966 Gravity meas Katmai volc area

Pr

Berg & others 1967 Crustal structure - Katmai

Ps

Davies & Kienle 1986 Augustine eruption & advice [abs.]

V, C

Forbes & Kienle 1971 Augustine

V

Forbes & Kienle 1971 Petro pre 1912 pyroclast VTTS [abs.]

PG, Gs, V

Forbes & others 1971 Seismicity Augustine [abs.]

Ps, V

Forbes & others 1979 Geol, geoph assmt geotherm pot Pilgrim

Gs, Ps

Forbes & others 1979 Pilgrim springs hydrothermal system

RM

Johnson & others 1977 Augustine Volc, evaluat hazards [abs.]

V, Eg

Kienle 1968 Gravity Survey Katmai (thesis)

V, Ps

Kienle 1969 Gravity in the Aleutians [abs.]

Pr

Kienle 1969 Gravity traverse VTTS, Katmai [abs.]

V, Ps

Kienle 1970 Gravity traverse VTTS

Pr

Kienle 1972 Volc micro-quakes Augustine [abs.]

V, Ps

Kienle 1974 Alaskan volcano studies esp. Augustine

V

Kienle 1976 Seismic monitoring Pavlov

V, Ps

Kienle 1986 Augustine Volcano [abs.]

V

Kienle & Forbes 1974 Ak volc studies Augustine

V

Kienle & Forbes 1977 Augustine - Evolution of volcano

V

Kienle & Lockhart 1979 Seism & grav survey Pilgrim HS [abs.]

Ps

Kienle & Lockhart 1980 Gravity survey Pilgrim geotherm area

Ps

Kienle & Pulpan 1975 Tide caused quakes at Augustine [abs.]

Ps, V

Kienle & Shaw 1977 Augustine erupt - initial phase 1976

V

Kienle & Swanson 1980 Volcanic hazards Augustine

V, Eg

Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs

V, PG

Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers

V, PG

Kienle & Swanson 1985 Volc hazards Augustine 2nd ed.

V, Eg

Kienle & others 1970 Seism evidence pre 1912 tuff VTTS [abs.]

Gr

Kienle & others 1971 Microquake swarm Augustine [abs.]

V, Ps

Kienle & others 1978 Form. 2 maars behind volc arc [abs.]

V

Kienle & others 1978 Formation 2 maars Ak Penin prelim results

V

Kienle & others 1979 Shallow magma at Augustine

V

Kienle & others 1980 Ukinrek Maars 1977 eruption

V

Kienle & others 1981 Subd & magma E Aleut arc [abs.]

R, PG

Kienle & others 1981 Volcanic centers Katmai [abs.]

V, R

Kienle & others 1983 Magmatism subduction E Aleutian arc

V, PG

Kienle & others 1986 Augustine & tsunamis [abs.]

V

Lalla & Kienle 1974 Infrared thermometry Augustine [abs.]

V, HS

Lalla & Kienle 1975 Microquakes, tremors at Pavlov [abs.]

Ps, V

AUTHOR

TOPIC

Lalla & Kienle 1976 Thermal studies Augustine [abs.]	V,HS
Lalla & Kienle 1978 Evolution seismicity Augustine [abs.]	V,Ps
Lalla & Kienle 1980 Problems volc seismo Augustine [abs.]	V,Ps
Lalla & Kienle 1986 Seis therm precursors erupt Augustine	V,Ps,HS
Lockhart & Kienle 1980 Seism & grav survey Pilgrim spr KGRA	Ps
Mauk & Kienle 1973 Microquake Augustine earthtides	Ps,V
Pearson & Kienle 1978 Seismic refr study Augustine [abs.]	V,Ps
Pulpan & Kienle 1978 Seismic & volcanic risks, Alaska	V,Eg
Riehle & others 1981 Lahars Crescent River Lower Cook Inlet	V
Self & others 1978 Mechanisms & deposits Ukinrek [abs.]	Ps,Gs,V
Self & others 1980 Ukinrek Maars II deposits & formation	V
Siebert & others 1986 Debris avalanches Augustine [abs.]	V
Stone & Kienle 1975 Pavlov	V
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
Swanson & others 1981 Geol & petro Kaguyak Crater [abs.]	PG
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM
Wilson & Kienle 1976 Infrasonic signals Augustine volc [abs.]	V

King, J.

King 1909 Tanana Valley

H

Kirkwood, P.

Beebee & Kirkwood 1979 Unalaska-geothermal prospects

C,EF

Kline, J. T.

Bundtzen & Kline 1986 Coal, peat & geotherm in Kuskokwim	R,DP
Dickey & others 1982 Cenozoic seds & Farewell fault	Gr
Forbes & others 1979 Geol, geoph assmt geotherm pot Pilgrim	Gs,Ps
Forbes & others 1979 Pilgrim springs hydrothermal system	RM
Kline 1980 Test drilling Pilgrim 1979	Er
Kline 1981 Surf geol Pilgrim vicinity	Gs
Kline & others 1980 Surf geol & drilling Pilgrim HS	Gs,Er
Osterkamp & others 1980 Recon study access power Pilgrim	Ps,Gs,DP
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM

Knaebel, J.

Hansen & others 1981 Mineral potential Ak Penin.

Gr

Knappen, R. S.

Knappen 1926 Geol & min resources Aniakchak	Gr
Knappen 1933 Aniakchak & Veniaminof volcanoes [abs.]	Gr,H

Knopf, A.

Knopf 1912 Sitka mining district

H,Gr

Koch, R. D.

Berg & others 1978 Geol map Ketchikan & Prince Rupert Q Ak.

Gr

AUTHOR

TOPIC

Kodosky, L. G.

Kodosky & Keskinen 1986 Fumarole alt Augustine [abs.]
 Motyka & others 1986 Augustine gas sampling [abs.]

HA, Ff, V
 Ff

Kosco, D. G.

Kosco 1981 Andesitic volcanism at Katmai
 Kosco 1981 Edgecumbe volc & Katmai (thesis)

PG
 PG

Kotani, Y.

Okada & others 1976 Hot springs village Port Moller
 Okada & others 1979 Hot springs village Port Moller

C
 C

Kowalik, Z.

Kienle & others 1986 Augustine & tsunamis [abs.]

V

Krause, K.

Krause 1986 Power & road corridor study Makushin

Eg, Ps, DP

Kubota, S.

Berg & others 1967 Crustal structure - Katmai
 Kubota & Berg 1967 Magma in Katmai range

Ps
 V, Pr

Kulm, L. D.

Scheidegger & Kulm 1973 Cyclic Aleut volc ash DSDP 178 [abs.]

V

Kunza, J. F.

Economides & others 1982 Reservoir eng analysis Pilgrim Sprg
 Kunza & Lofgren 1983 Pilgrim HS expl, drill, & testing

Er
 Er

Kyle, P. R.

Kienle & others 1980 Ukinrek Maars 1977 eruption

V

Lachenbruch, A. H.

Lachenbruch & others 1984 Geotherm Prudhoe Bay
 Lawver & others 1979 Regional heat flow Ak

HS
 HS

Lahr, J. C.

Reeder & others 1977 Seism Augustine volc [abs.]

V, Ps

AUTHOR

TOPIC

Laird, J.

Foster & others 1983 Geologic map Circle Q	Gr
Foster & others 1983 Prelim geol map Circle Quad	Gr

Lalla, D. J.

Kienle & others 1978 Form. 2 maars behind volc arc [abs.]	V
Kienle & others 1978 Formation 2 maars Ak Penin prelim results	V
Kienle & others 1979 Shallow magma at Augustine	V
Lalla 1987 Seismo & thermal studies Augustine (thesis)	V,Ps,HS
Lalla & Kienle 1974 Infrared thermometry Augustine [abs.]	V,HS
Lalla & Kienle 1975 Microquakes, tremors at Pavlov [abs.]	Ps,V
Lalla & Kienle 1976 Thermal studies Augustine [abs.]	V,HS
Lalla & Kienle 1978 Evolution seismicity Augustine [abs.]	V,Ps
Lalla & Kienle 1980 Problems volc seismo Augustine [abs.]	V,Ps
Lalla & Kienle 1986 Seis therm precursors erupt Augustine	V,Ps,HS

Langmuir, C. H.

Rubenstone & others 1985 Isot & trace elem Katmai [abs.]	PG
--	----

Langsdorff, G. H. von

Langsdorff 1814 Voyages 1803-1807	H
-----------------------------------	---

Lankford, S. M.

Lankford & Hill 1979 Strat & depos envirn Dutch Harbor member	Gr
---	----

Lanphere, M. A.

Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Miller & others 1966 Prelim plutonic belt W cent Ak	Gr
Reed & Lanphere 1972 Geol map Ak-Aleut batholith K/Ar ages	Gr
Reed & Lanphere 1973 Ak-Aleut batholith, geochron & chem	Gr
Reed & Lanphere 1973 Plutonic rocks Ak-Aleut batholith	Gr

Larsen, M.

Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP	
---	--

Lathram, E. H.

Beikman & Lathram 1975 Prelim geol map N Ak	Gr
---	----

Latten, J. H.

Simkin & others 1981 Volcanoes of the World	V,R
---	-----

Lawrence, J. R.

Perfit & others 1980 Model for fract in Aleut calc-alk suite	PG
--	----

AUTHOR	TOPIC
Lawton, N. O.	
Lawton 1909 Makushin sulfur deposits	GS
Lawver, L. A.	
Lawver & others 1979 Regional heat flow Ak	HS
LeCompte, J. R.	
LeCompte 1981 Prelim map Landsat Ugashik & Karluk Q	Gr
LeCompte & Steele 1981 Map Landsat Chignik & Sutwik Is Q	Gr
Lebida, R. C.	
Baker & others 1977 Geotherm springs-salmon hatchery site R,DP,Fs	
Leeman, P. P.	
Richter & others 1984 Shield volc Wrangell Mts	V
Leonard, L. E.	
Forbes & others 1975 Utilization geothermal rural Ak	Fs,DP,Ef
Forbes & others 1975 Utilization of Alaska thermal springs	DP
Leonard 1975 Geothermal energy	R
Lewis, R. Q.	
Coats & others 1961 Geol recon Kiska Island	Gr
Lewis & others 1960 Geol Rat Islands, Aleutians	Gr
Lian, E. B.	
Church & others 1970 Copper River basin strat correl section	GS
Limke, A. J.	
Limke & Beget 1986 Pyroclastic flows Augustine [abs.]	V
Liss, S. A.	
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others 1986 Makushin well chem equilib *	Fw,Fs,Ff,HA,RM
Lockhart, A. B.	
Kienle & Lockhart 1979 Seism & grav survey Pilgrim HS [abs.]	Ps
Kienle & Lockhart 1980 Gravity survey Pilgrim geotherm area	Ps
Lockhart 1981 Gravity survey central Seward Penin.	Pr
Lockhart & Kienle 1980 Seism & grav survey Pilgrim spr KGRA	Ps

AUTHOR

TOPIC

Turner & others 1980 Geothermal resources Alaska
Wescott & others 1980 Resis survey Pilgrim spr area

R,Fs
Ps

Lofgren, B. E.

Economides & others 1982 Reservoir eng analysis Pilgrim Sprg Er
Kunza & Lofgren 1983 Pilgrim HS expl, drill, & testing Er
Lofgren 1983 Geotherm devel Pilgrim springs DP,Gs,Ps

Loney, R. A.

Brew & others 1965 Eruptive history Mt. Edgecumbe [abs.] V
Brew & others 1969 Recon geol Mt Edgecumbe Gs
Loney & others 1963 Geol Freshwater Bay Chichagof Is Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is Gr
Loney & others 1964 Recon geol map Baranof & Kruzof Is Gr
Loney & others 1967 Radio ages & fault movements N SE Ak Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is Gr

Long, G. A.

Spencer & others 1982 Anal geothrm res devel Unalaska EF,DP

Long, W. E.

Long 1986 Glacial hazard Makushin Eg

Longenkamp, D.

Longenkamp & others 1974 Elec resist survey Pilgrim Springs Ps

Lorenz, V.

Kienle & others 1980 Ukinrek Maars 1977 eruption V
Lorenz 1982 Eruption Ukinrek Maars V

Lovering, T. S.

Lovering 1955 Alteration near halogen-sulfur fumarole [abs.] HA
Lovering 1957 Halogen-acid alteration VTTS HA,Ff

Luedke, R. G.

Smith & others 1978 Data & therm energy est young ig sys US R,HS

Lyle, W. M.

Lyle 1973 Geol & mineral evaluation Aniakchak R drainage Gr
Lyle & Dobey 1974 Geol evaluation Herendeen Bay area Gr

Mabey, D. R.

Brook & others 1979 Hydrothermal systems <90 deg R,Fs
Mariner & others 1978 Data for hydrothermal systems >= 90 R,Fs

AUTHOR

TOPIC

MacGregor, A. G.

MacGregor 1952 Eruptive mechanisms VTTS

V

MacKeith, P.

Benson & others 1985 Glacio-volcano studies Mt. Wrangell

V

Motyka & others 1978 Increased heat Mt Wrangell [abs.]

HS

Motyka & others 1980 Mt Wrangell glac meas heat flow [abs.] V,HS

MacKevett, E. M. Jr.

MacKevett 1976 Geol map McCarthy Q

Gr

MacKevett 1978 Geol map McCarthy Q

Gr

Winkler & others 1981 Folio Valdez Q

Gr

Maddren, A. G.

Maddren 1919 Sulfur on Unalaska & Akun Is & Stepovak Bay

H,Gr

March, G. D.

March 1986 Avalanche hazards- Makushin

Eg

Marinelli, G.

Bordet & others 1963 Katmai

V

Mariner, R. H.

Brook & others 1979 Hydrothermal systems <90 deg

R,Fs

Mariner & others 1978 Data for hydrothermal systems >= 90

R,Fs

Nehring & others 1979 Sulfate geotherm western U. S.

R,Fs

Reed & others 1983 Data low temp geothermal systems US HS,R,Fs

Markle, D. R.

Economides & others 1981 Unalaska geothermal development

DP

Markle 1979 Geotherm Ak site data base & devel status R,Fs,Gr,C

Markle 1979 Geothermal energy devel Pilgrim HS

DP

Reeder & others 1980 Geothermal implementation plan

DP

Reeder & others 1982 Econ & eng geoth develop Makushin EF,Eg,DP

Marsh, B. D.

Brophy & Marsh 1984 Petro & geochem Cold Bay volc [abs.]

PG

Coats & Marsh 1984 Recon geol & petrol N Tanaga [abs.]

Gr

Fournelle & Marsh 1986 Shishaldin lavas [abs.]

PG,V

Marsh 1974 Aleutian arc magmatism (thesis)

V,PG

Marsh 1980 Geol & petrol N Atka Is [abs.]

Gr

Marsh 1982 Aleutians - orogenic andesites

Gr,PG

Myers & Marsh 1981 Geol & petrogen Edgecumbe volcanics

PG

AUTHOR	TOPIC
Myers & others 1984 Assim crust by basalt magma Edgecumbe	PG
Myers & others 1986 Isot var Adak & Atka volc plumb	V,PG,Gr
Marshall, B. V.	
Lachenbruch & others 1984 Geotherm Prudhoe Bay	HS
Martin, G. C.	
Martin 1913 Eruption Katmai	V,H
Martin 1917 Mineral resources of Ak.	H,Gr
Martin & Katz 1910 Geol & min resources Iliamna & Lake Clark	H,Gr
Martin & Katz 1912 Geol recon Iliamna Region	H,Gr
Mathewson, D. E.	
Simons & Mathewson 1955 Geol Great Sitkin Is	Gr
Matlick, J. S.	
Isselhardt & others 1983 Geotherm resource model Makushin	RM,HS
Isselhardt & others 1983 Temp grads Makushin geothermal area	HS
Matlick & Parmentier 1983 Hg soil survey Makushin	Gc,Fs,Ff
Matsumoto, H.	
Ray & others 1966 Petro & geochem Mt Trident andesites [abs.]	PG
Matteson, C.	
Gedney & others 1970 Seismic refraction - Katmai	Ps
Matumoto, T.	
Matumoto 1971 Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Molnar 1967 Shadow effect S waves Katmai [abs.]	Pr,V
Matumoto & Ward 1967 Microquake study Katmai	Pr,V
Sbar & Matumoto 1972 Refraction VTTS	Pr
Ward & Matumoto 1967 Sum volc & seismic activity Katmai	V,Pr
Mauk, F. J.	
Mauk & Kienle 1973 Microquake Augustine earthtides	Ps,V
Maurer, M. A.	
Carrick & Maurer 1986 Hydrology - Makushin	Gs
Mayaoka, R. T.	
Dover & Mayaoka 1985 Rocks Ray Mts, Tanana & Bettles Q	Gr

AUTHOR	TOPIC
Maynard, D.	
Swanson & others 1980 Bedrock geol Pilgrim springs area	Gs
Turner & others 1979 Geol & tect setting Pilgrim spr [abs.]	Gs
McClelland, L.	
Simkin & others 1981 Volcanoes of the World	V,R
McCoy, G. A.	
Barnes & McCoy 1979 Mantle-derived CO2 in 2 phreatic expl	Fs,Ff,V
McFarlane, R. M.	
Kline & others 1980 Surf geol & drilling Pilgrim HS	Gs,Er
McNutt, S. R.	
McNutt 1983 Activity Pavlov Shumagin gap? [abs.]	V
McNutt 1984 Eruption & stress Pavlov [abs.]	V
McNutt & Beavan 1981 Quakes at Pavlov earth tides	V
McNutt & Beavan 1984 Pavlov sea level & aseismic slip [abs.]	V
McNutt & Mori 1983 B type quakes Pavlov [abs.]	V
Meaker, P.	
Meaker 1908 Tanana Valley	H,C
Meigs, A. J.	
Meigs 1986 Structural evol Sadlerochit Mts.	Gr
Mendenhall, W. C.	
Mendenhall 1903 Mineral resources Mt Wrangell district	H,Gr
Mendenhall 1905 Geology central Copper River region	H,Gr
Menyaylov, I. V.	
Menyaylov 1969 Comparison Bezmyany & Katmai (Rus)	V,Ff
Menzie, W. D.	
Foster & others 1983 Geologic map Circle Q	Gr
Foster & others 1983 Prelim geol map Circle Quad	Gr
Menzie & others 1983 Mineral assmt Circle Quad	Gr
Merriam, C. H.	
Merriam 1901 Birth of Bogoslof	H,V

AUTHOR	TOPIC
Merrill, G. P.	
Merrill 1885 Hornblende andesites from Bogosloff	H,Gs,PG
Merriman, C. H.	
Merriman 1910 Bogoslof new volcano	V
Mertie, J. B. Jr.	
Mertie 1930 Geology Eagle-Circle district	Gr
Mertie 1932 Yukon Tanana region	Gr
Mertie 1934 Mineral deposits Rampart & Hot Springs district	Gr
Metzner, R. C.	
Metzner 1975 Magnetotelluric invest. Augustine (thesis)	Ps,V
Miller, J. W.	
Yount & others 1985 New Holo vent Port Moller & Stepovak Bay Q	V
Miller, R. J.	
Winkler & others 1981 Folio Valdez Q	Gr
Miller, T. P.	
Barnes & Miller 1974 Geotherm studies in Alaska [abs.]	R,Fs
Detterman & others 1979 Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981 Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981 Quat geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1985 Geol map Ugashik & W Karluk Q	Gr
Detterman & others 1986 Quat map Ugashik-Bristol Bay-Karluk Q	Gr
Miller 1970 Petro plutonic rocks W central Ak	PG
Miller 1971 Petro plutonic rocks W cent Ak (thesis)	PG
Miller 1972 K rich intrusive rocks W Ak	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller 1976 Augustine volcano	V
Miller 1978 Airfall pumice Aniakchak	V
Miller 1984 2 stage volcanism Ugashik-Peulik [abs.]	PG
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Miller & Smith 1975 Ak geothermal study	R
Miller & Smith 1975 Ash flows Ak Penin prelim rpt [abs.]	V,Gr
Miller & Smith 1976 2 caldera forming eruptions Umnak	V
Miller & Smith 1976 Ash flows Wrangell volcano	V
Miller & Smith 1976 New volcanoes Aleutian arc	V
Miller & Smith 1977 Mobile ash flows Aniakchak & Fisher calds	V
Miller & Smith 1983 Calderas E Aleutian arc [abs.]	Gr
Miller & others 1966 Prelim plutonic belt W cent Ak	Gr
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs

AUTHOR

TOPIC

Patton & Miller 1966 Regional geol map Hughes Q	Gr
Patton & Miller 1970 Prelim geol invest Kanuti	Gr
Patton & others 1968 Reg geol map Shungnak & Ambler River Q	Gr
Patton & others 1978 Geol map Melozitna Q	Gr
Richter & others 1979 Geol map Gulkana A-2 Q	Gr
Yount & others 1985 Eruption Mt Veniaminof	V
Mittempergher, M.	
Bordet & others 1963 Katmai	V
Moffit, F. H.	
Moffit 1905 Fairhaven gold placers Seward Penin	H,Gr
Moll, E. J.	
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Molnar, P.	
Matumoto & Molnar 1967 Shadow effect S waves Katmai [abs.]	Pr,V
Monger, J. W. H.	
Monger & Berg 1985 Terrane map SE Ak. & W. Can.	Gr
Monroe, R. M.	
Nathenson & others 1983 Regional heat flow	R,HS
Moorbath, S.	
Harmon & others 1984 Augustine chem & isot character [abs.]	PG
Moore, P.	
Wescott & others 1986 Geophysical surveys Mt. Spurr	Ps,R
Wescott & others 1986 Ice thickness Mt. Spurr summit	Ps
Moorman, M. A.	
Motyka & Moorman 1980 Assmt thermal spring S SE Ak [abs.]	R,Fs
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & Moorman 1987 Geotherm resources SE Ak	R,Fs,Fw
Motyka & others 1980 Assmt therm spr S SE Ak	R,Fs
Motyka & others 1980 Geochemistry Pilgrim thermal waters	Fs,Fw
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1982 Fluid geochem Hot Springs Akutan	Fs,Ff
Motyka & others 1982 Fluid geochemistry Makushin area	Fs,Ff
Motyka & others 1983 Fluid investigations Makushin area	Fs,Ff
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others 1985 Geol geoc geophys Akutan *	Gs,Fs,Ps,RM,Ff,DP
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM

AUTHOR	TOPIC
Morgan, L.	
Morgan 1980 Aleutians	C
Mori, J.	
McNutt & Mori 1983 B type quakes Pavlov [abs.]	V
Morris, C. W.	
Economides & others 1985 Eval Makushin geothermal reservoir	Er
Morris, D.	
Morris 1985 Katmai Park draft management plan	C,DP
Morrison, P.	
Nava & Morrison 1974 Note on hot springs interior Ak	R,Fs
Morrison-Knudson Co., Inc.	
Morrison-Knudson Co. 1981 Geotherm potential Aleut Unalaska	R
Moses, T. H. Jr.	
Lachenbruch & others 1984 Geotherm Prudhoe Bay	HS
Lawver & others 1979 Regional heat flow Ak	HS
Motyka, R. J.	
Benson & Motyka 1978 Glac-volc interaction Mt. Wrangell	V
Benson & others 1985 Glacio-volcano studies Mt. Wrangell	V
Harmon & others 1982 Isotopes from Augustine fumaroles	Ff
Hawkins & Motyka 1985 Stat & chem anal H2O Copper River bsn	Fs,Fw
Isselhardt & others 1983 Geotherm resource model Makushin	RM,HS
Kienle & others 1978 Form. 2 maars behind volc arc [abs.]	V
Kienle & others 1978 Formation 2 maars Ak Penin prelim results	V
Kienle & others 1980 Ukinrek Maars 1977 eruption	V
Motyka 1977 Katmai caldera geothermal activity	V,Fs
Motyka 1978 Surveillance Katmai caldera & crater lake	V
Motyka 1982 Fluid geochem Makushin & Akutan geotherm area	Ff,Fs
Motyka 1982 Fluid geochemistry of Makushin	Fs,Ff
Motyka 1982 High temp hydrotherm Aleutian arc [abs.]	R,Fs,Ff
Motyka 1983 Geochem & isotope study water & gas Makushin	Fs,Ff
Motyka 1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka 1983 Thermal activity Mt Wrangell (thesis)	V,HS,Ff
Motyka 1984 Chem of water & gas Mt Wrangell [abs.]	Ff
Motyka & Benson 1982 Flucts in heat flow Mt Wrangell [abs.]	V,HS
Motyka & Moorman 1980 Assmt thermal spring S SE Ak [abs.]	R,Fs
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & Queen 1984 Makushin fluids samps & well log	Fs,Ff,Fw,PG

AUTHOR

TOPIC

Motyka & others 1977 Glac-volc investigations Katmai [abs.] V
 Motyka & others 1978 Increased heat Mt Wrangell [abs.] HS
 Motyka & others 1980 Assmt therm spr S SE Ak R, Fs
 Motyka & others 1980 Geochemistry Pilgrim thermal waters Fs, Fw
 Motyka & others 1980 Mt Wrangell glac meas heat flow [abs.] V, HS
 Motyka & others 1981 Assmt thermal spring Aleutian arc R, Fs, Ff, Gr
 Motyka & others 1982 Fluid geochem Hot Springs Akutan Fs, Ff
 Motyka & others 1982 Fluid geochemistry Makushin area Fs, Ff
 Motyka & others 1983 Fluid investigations Makushin area Fs, Ff
 Motyka & others 1983 Geothermal resources of Alaska R, Fs, Ff, Fw
 Motyka & others 1985 Geol geoc geophys Akutan *, Gs, Fs, Ps, RM, Ff, DP
 Motyka & others 1986 Augustine gas sampling [abs.] Ff
 Motyka & others 1986 Geochem isot org mud volc Copper R Fs, Ff, Fw
 Motyka & others 1986 Makushin well chem equilib *, Fw, Fs, Ff, HA, RM
 Nye & others 1984 Geol map Makushin geothermal area Gs
 Poreda & others 1981 He isot vars Ak-Aleut arc [abs.] R, Fs, Ff
 Queen & Motyka 1984 Changes in Makushin geoth system [abs.] HA
 Reeder & others 1980 Ak. geothermal program DP
 Swanson & others 1983 Petro Makushin volc [abs.] PG
 Turner & others 1980 Sum geol geophys invest Pilgrim spr RM
 Turner & others 1983 Sum, eval gthrm exp Copper R bsn Gs, Ps, Fs, RM
 Viglino & others 1985 Isot evid magma comp in fum cond Augst V, Ff
 Wescott & others 1982 He & Hg survey parts Unalaska Gc
 Wescott & others 1985 Prelim rept gthrm invest Mt Spurr Gs, Ps, Gc

Muffler, L. J. P.

Brew & others 1965 Eruptive history Mt. Edgecumbe [abs.] V
 Brew & others 1969 Recon geol Mt Edgecumbe Gs
 Brook & others 1979 Hydrothermal systems <90 deg R, Fs
 Godwin & others 1971 Classif of public land for geothermal R, DP
 Loney & others 1964 Recon geol map Baranof & Kruzof Is Gr
 Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is Gr
 Muffler 1973 Geothermal resources R
 Muffler 1979 Assmt geothermal resources U. S. R, Fs, HS

Muller, E. H.

Muller & others 1954 Volcanic activity Katmai V

Munroe, R. J.

Lachenbruch & others 1984 Geotherm Prudhoe Bay HS

Murphy, J. M.

Robinson & others 1984 Bdrck geol Chuilnuk & Kiokluk Mts [abs] Gr
 Robinson & others 1984 Geologic map Sleetmute B-5 Q Gr

Murty, T. S.

Kienle & others 1986 Augustine & tsunamis [abs.] V

AUTHOR

TOPIC

Myers, J. D.

Myers 1978 Petro & petrogenesis Edgecumbe volc [abs.] PG
 Myers 1979 Geol, petro Edgecumbe: trnsfrm fault volc (thesis) PG
 Myers & Marsh 1981 Geol & petrogen Edgecumbe volcanics PG
 Myers & others 1984 Assim crust by basalt magma Edgecumbe PG
 Myers & others 1986 Isot var Adak & Atka volc plumb V,PG,Gr

Naeser, D. W.

Forbes & others 1977 Fission track age & geothermal gradient HS

Nakamura, K.

Nakamura & others 1977 Volc tectonic stress orient Aleut & Ak R,V

Nathenson, M.

Nathenson & others 1983 Regional heat flow R,HS

Nava, J. A.

Nava 1975 Note on hot springs SE Ak R,Fs
 Nava & Morrison 1974 Note on hot springs interior Ak R,Fs

Neal, R. J.

Neal & Swanson 1983 Petro geochem Westdahl & Pogromni [abs.] PG

Nehring, N. L.

Harmon & others 1982 Isotopes from Augustine fumaroles Ff
 Nehring & others 1979 Sulfate geotherm western U. S. R,Fs
 Viglino & others 1985 Isot evid magma comp in fum cond Augst V,Ff

Nelson, J. S.

Longenkamp & others 1974 Elec resist survey Pilgrim Springs Ps

Nelson, S. W.

Nelson & Grybeck 1978 Arrigetch Peaks & Igikpak plutons Gr

Nelson, W. H.

Coats & others 1961 Geol recon Kiska Island Gr
 Lewis & others 1960 Geol Rat Islands, Aleutians Gr
 Nelson 1959 Geol Segula, Davidov, & Khvostov Islands Gr

Newhall, C. G.

Simkin & others 1981 Volcanoes of the World V,R

AUTHOR

TOPIC

Nicholas, T. J.

Carey & others 1983 Unalaska geotherm land, regs, & environ DP

Nichols, C. R.

Nichols & Reeder 1983 Ak geothermal & hydrotherm development R,DP

Nichols, D. R.

Ferrians & Nichols 1965 Copper River basin	Gr
Ferrians & others 1958 Pleist volc mudflow Copper River basin	V
Ferrians & others 1983 Copper River basin	Gr
Nichols & Yehle 1961 Anal gas & water Copper River basin	Fs
Nichols & Yehle 1961 Mud volc Copper River basin	Fs
Nichols & Yehle 1969 Eng geol map SE Copper River basin	Gs
Yehle & Nichols 1980 Recon map Chetaslina debris flow Copper R	V

Ninkovich, D.

Scheidegger & others 1977 Ash volc Aleut & Kamchat arc [abs.] V

Nye, C. J.

Nye 1982 Wrangell volcs & microplate accretion [abs.]	V
Nye 1983 Petro & geochem Okmok & Wrangell volcs (thesis)	PG,V
Nye 1986 Volcanic hazards, Makushin	V,Eg
Nye & Reid 1986 Geochem pri lava Okmok Volc: arc magmagenesis	PG
Nye & Swanson 1986 Chem strat magma plumb Makushin [abs]	V,Gs,PG
Nye & Swanson 1987 Makushin magma chamber	PG,Gs,V
Nye & Turner 1986 Geology & geochemistry Spurr [abs.]	Gs,PG,V
Nye & others 1983 Parental magmas Okmok: arc magmagen [abs.]	PG
Nye & others 1984 Geol map Makushin geothermal area	Gs
Nye & others 1986 Petro geochem Quat volc Makushin	*,V,Gs,PG
Robinson & others 1986 Rocks from Sleetmute, Russian Mission Q	PG
Swanson & others 1983 Petro Makushin volc [abs.]	PG
Swanson & others 1986 Magmatic evolution Augustine [abs.]	PG,V
Turner & Nye 1986 Geochronology Mt. Spurr	V
Turner & others 1983 Sum, eval gthrm exp Copper R bsn	Gs,Ps,Fs,RM
Turner & others 1986 Mt. Spurr geothermal project	R,Gs,V
Wescott & others 1985 Prelim rept gthrm invest Mt Spurr	Gs,Ps,Gc

Odum, J. K.

Yehle & others 1985 Geol frm drilling in Copper R. basin Gr

Ogle, W.

Ogle 1976 Ak. hot spring site for small binary plant R,DP,Fs

AUTHOR

TOPIC

Okada, A.

Okada & Okada 1974 Hot springs village Port Moller	C
Okada & Okada 1980 Hot springs site Port Moller	C
Okada & others 1976 Hot springs village Port Moller	C
Okada & others 1979 Hot springs village Port Moller	C

Okada, H.

Okada & Okada 1974 Hot springs village Port Moller	C
Okada & Okada 1980 Hot springs site Port Moller	C
Okada & others 1976 Hot springs village Port Moller	C
Okada & others 1979 Hot springs village Port Moller	C

Okimura, H.

Okimura 1930 Eruption Katmai	V,H
------------------------------	-----

Olds, B.

Henning & others 1976 Alaska's volcanoes	V,R
Henning & others 1981 Wrangell-St Elias Wilderness	C

Osterkamp, T. E.

Forbes & others 1979 Geol, geoph assmt geothrm pot Pilgrim	Gs,Ps
Forbes & others 1979 Pilgrim springs hydrothermal system	RM
Gosink & Osterkamp 1980 Prelim invest hot water Pilgrim River	HS
Osterkamp & others 1979 Conduct & hydrol meas Pilgrim HS [abs]	Ps
Osterkamp & others 1980 Recon study access power Pilgrim	Ps,Gs,DP
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM

Ovenshine, A. T.

Brew & others 1984 Geologic map Peterbrg, Sumdum, P. Alex	Gr
Eberlein & others 1983 Geol map Craig Q	Gr

Packer, D. R.

Stone & Packer 1972 Paleomag VTTS [abs.]	Pr
--	----

Page, R. A.

Page & others 1982 Seism Spurr, Redoubt, & Iliamna [abs.]	V
---	---

Palache, C.

Palache 1904 Geol Chichagof Cove, Stepovak Bay	Gr,H
--	------

Parmentier, P. P.

Isselhardt & others 1983 Geotherm resource model Makushin	RM,HS
Isselhardt & others 1983 Temp grads Makushin geothermal area	HS

AUTHOR

TOPIC

- Matlick & Parmentier 1983 Hg soil survey Makushin Gc,Fs,Ff
 Parmentier & others 1983 Geol & hydrotherm alter Makushin Gs,HA
- Patton, W. W. Jr.
- Brosge & Patton 1982 Bedrock geol maps Dalton Hwy Gr
 Miller & others 1966 Prelim plutonic belt W cent Ak Gr
 Miller & others 1975 Geol & chem hot springs W cent Ak R,Fs
 Patton 1973 Recon geology N Yukon-Koyukuk Gr
 Patton & Hoare 1968 Kaltag Fault W-C Ak Gr
 Patton & Miller 1966 Regional geol map Hughes Q Gr
 Patton & Miller 1970 Prelim geol invest Kanuti Gr
 Patton & others 1968 Reg geol map Shungnak & Ambler River Q Gr
 Patton & others 1978 Geol map Melozitna Q Gr
 Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q Gr
- Pavia, E. A.
- Pavia 1986 Structure & strat Okpilak batholith area Gr
- Peace, J.
- Wescott & others 1980 Resis survey Pilgrim spr area Ps
- Peale, A. C.
- Peale 1886 Mineral springs of US H,R
- Pearson, C. F.
- Kienle & others 1979 Shallow magma at Augustine V
 Pearson 1977 Seismic refr Augustine (thesis) V,Ps
 Pearson & Kienle 1978 Seismic refr study Augustine [abs.] V,Ps
- Pearson, K. S.
- Barnwell & Pearson 1984 Ak resource inventory DP
- Perfit, M. R.
- Perfit & others 1980 Model for fract in Aleut calc-alk suite PG
- Perrey, A.
- Perrey 1866 Quakes & volcanism Aleutians & Ak Penin (Fr) H
- Pessell, G. H.
- Brosge & Pessel 1977 Prelim recon geol map Survey Pass Q Gr
- Petrov, I.
- Petrov 1884 Alaska population & resources H,C

AUTHOR

TOPIC

Petzinger, B.

Motyka & others 1985 Geol geoc geophys Akutan *	Gs,Fs,Ps,RM,Ff,DP
Wescott & others 1981 Geophys survey Summer Bay	Ps
Wescott & others 1982 Geophys survey Hot Springs Akutan Is	Ps
Wescott & others 1982 He & Hg survey parts Unalaska	Gc

Pewe, T. L.

Pewe 1975 Quaternary geology of Ak	Gr
------------------------------------	----

Plafker, G.

Detterman & others 1976 Geol map by faults in Kenai & Tyonek Q	Gr
Jones & others 1984 Terrane map Alaska	Gr

Pomeroy, J. S.

Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1964 Recon geol map Baranof & Kruzof Is	Gr

Poreda, R. J.

Motyka & others 1982 Fluid geochem Hot Springs Akutan	Fs,Ff
Motyka & others 1982 Fluid geochemistry Makushin area	Fs,Ff
Motyka & others 1983 Fluid investigations Makushin area	Fs,Ff
Motyka & others 1985 Geol geoc geophys Akutan *	Gs,Fs,Ps,RM,Ff,DP
Motyka & others 1986 Geochem isot org mud volc Copper R	Fs,Ff,Fw
Motyka & others 1986 Makushin well chem equilib *	Fw,Fs,Ff,HA,RM
Poreda & others 1981 He isot vars Ak-Aleut arc [abs.]	R,Fs,Ff

Powers, H. A.

Coats & others 1961 Geol recon Kiska Island	Gr
Gates & others 1971 Geol Near Islands	Gr
Lewis & others 1960 Geol Rat Islands, Aleutians	Gr
Powers 1953 Activity Aleut volcanoes	V
Powers 1956 Activity AK volcanoes 1949-53	V
Powers 1958 Ak. Penin Aleut Is	V

Powers, S.

Powers 1916 Changes in Bogoslof volc	H,V
--------------------------------------	-----

Presser, T. S.

Keith & others 1981 Chem & isot data Big Windy Creek HS	Fs
---	----

Prosser, W. T.

Prosser 1912 Volcanic road-building	H,V
-------------------------------------	-----

AUTHOR

TOPIC

Pulpan, H.

Dixon & Pulpan 1986 Crustal structure-Dall City [abs.]	Ps
Kienle & Pulpan 1975 Tide caused quakes at Augustine [abs.]	Ps,V
Kienle & others 1981 Subd & magma E Aleut arc [abs.]	R,PG
Kienle & others 1981 Volcanic centers Katmai [abs.]	V,R
Kienle & others 1983 Magmatism subduction E Aleutian arc	V,PG
Pulpan & Kienle 1978 Seismic & volcanic risks, Alaska	V,Eg

Pyle, W. D.

Baker & others 1977 Geotherm springs-salmon hatchery site	R,DP,Fs
---	---------

Queen, L. D.

Motyka & Queen 1984 Makushin fluids samps & well log	Fs,Ff,Fw,PG
Motyka & others 1986 Makushin well chem equilib *	Fw,Fs,Ff,HA,RM
Nye & others 1984 Geol map Makushin geothermal area	Gs
Queen 1984 Lith log & hydrotherm alt of core from Makushin	HA
Queen 1987 Alt, H2O-rock equil, Makushin (thesis)	HA,Fw,Gs,Gc,HS
Queen & Motyka 1984 Changes in Makushin geoth system [abs.]	HA

Radke, L. F.

Hobbs & others 1977 Eruption of Augustine	V
Stith & others 1977 Nuee ardent Augustine Volc	V

Ramdohr, P.

Ramdohr 1962 Magnetite from fumaroles VTTS (Ger)	HA
--	----

Ratte, J. C.

Richter & others 1984 Shield volc Wrangell Mts	V
--	---

Ray, D. K.

Ray 1967 Geochem & petro Mt Trident andesites (thesis)	PG
Ray & others 1966 Petro & geochem Mt Trident andesites [abs.]	PG

Reading, E.

Henning & others 1976 Alaska's volcanoes	V,R
--	-----

Reck, H.

Reck 1930 Review VTTS (Ger)	H,V
-----------------------------	-----

Reed, B. L.

Detterman & Reed 1964 Prelim geol map Iliamna Q	Gr
Detterman & Reed 1968 Geol Iliamna Q	Gr
Detterman & Reed 1973 Surficial deposits Iliamna Q	Gr

AUTHOR

TOPIC

Detterman & Reed 1980 Strat, struct, & econ geol Iliamna Q	Gr
Reed & Lanphere 1972 Geol map Ak-Aleut batholith K/Ar ages	Gr
Reed & Lanphere 1973 Ak-Aleut batholith, geochron & chem	Gr
Reed & Lanphere 1973 Plutonic rocks Ak-Aleut batholith	Gr

Reed, M. J.

Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
--	---------

Reeder, J. W.

Denig-Chakroff & others 1985 Development pot Mak reservoir	Er,DP
Economides & others 1981 Unalaska geothermal development	DP
Economides & others 1982 Eng,geol anal geothermal sites	EF,Er
Motyka & others 1980 Assmt therm spr S SE Ak	R,Fs
Nichols & Reeder 1983 Ak geothermal & hydrotherm development	R,DP
Nye & others 1986 Petro geochem Quat volc Makushin	*,V,Gs,PG
Parmentier & others 1983 Geol & hydrotherm alter Makushin	Gs,HA
Reeder 1981 Initial assmt hydrotherm Summer Bay Unalaska	Er,Gs
Reeder 1981 V-D hydrotherm maifest Unalaska [abs.]	Gs,Ff
Reeder 1982 Hydrotherm potential Aleut arc - Makushin [abs]	DP
Reeder 1982 Hydrothermal resources Makushin region	DP
Reeder 1982 Hydrothermal resources N Unalaska Is	Fs,Ff
Reeder 1983 Prelim dating Holo volcanic E Aleut Is [abs.]	V,Gr
Reeder 1984 Fault & dike orientation Makushin [abs.]	Gr
Reeder 1984 Okmok	V
Reeder 1986 Ground stability, spring water Broad Bay	Eg,Fs,Gs
Reeder & others 1977 Seism Augustine volc [abs.]	V,Ps
Reeder & others 1980 Ak. geothermal program	DP
Reeder & others 1980 Geothermal implementation plan	DP
Reeder & others 1982 Econ & eng geoth develop Makushin	EF,Eg,DP
Reeder & others 1985 Geol geotherm resource Makushin	R,Gs

Reger, R. D.

Forbes & others 1979 Geol, geoph assmt geothrm pot Pilgrim	Gs,Ps
Kline & others 1980 Surf geol & drilling Pilgrim HS	Gs,Er
Reger 1978 Recon geol capital site	Gr
Reger & Carver 1978 Recon geol materials map capital site	Gr
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM

Reid, M. R.

Nye & Reid 1986 Geochem pri lava Okmok Volc: arc magmagenesis	PG
Nye & others 1983 Parental magmas Okmok: arc magmagen [abs.]	PG

Reifenstuhl, R. R.

Decker & others 1984 Geol data Russian Mission A-3 Quad	Gr
Decker & others 1984 Geology Sleetmute B-5 Quad	Gr
Reifenstuhl 1984 Crawfish Inlet Pluton Baranof Is [abs.]	Gs,PG
Reifenstuhl 1984 Geol & geophys Goddard HS (thesis)	Gs,Ps,Fs
Reifenstuhl 1986 Geol Goddard Hot Springs	Gs,Ps,Fs
Robinson & others 1984 Bdrck geol Chuilnuk & Kiokluk Mts [abs]	Gr

AUTHOR

TOPIC

Robinson & others 1984 Geologic map Sleetmute B-5 Q Gr
 Robinson & others 1986 Geol map Mt. Michelson C-4 Quad Gr

Reiser, H. N.

Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q Gr
 Chapman & others 1982 Recon geol map Tanana Q Gr
 Keller & Reiser 1959 Geol Katmai Gr

Reitsema, R. H.

Reitsema 1979 Gases of mud volc Copper River basin Fs

Reneau, D.

Yehle & others 1985 Geol frm drilling in Copper R. basin Gr

Rennick, P.

Henning & others 1981 Wrangell-St Elias Wilderness C

Republic Geothermal Inc.

Republic 1982 Unalaska Gtrml Proj 1A Er, Hs, Fs, Ff, Gs, Ps, DP, RM, HA
 Republic 1983 Unalaska Gtrml Proj 1B Er, HS, Fs, Ff, Gs, Ps, DP, RM, HA
 Republic 1984 Unalaska Gtrml Proj II Er, HS, Fs, Fw, Gs, Ps, DP, RM, HA
 Republic 1985 Unalaska Gtrml Proj III *, Er, HS, Fw, Gs, Ps, DP, RM, HA

Richards, T.

Sainsbury & others 1970 Geol min dep geochem & rad Serpentine Gr

Richter, D. H.

Richter 1976 Geol map Nabesna Q Gr
 Richter & others 1979 Geol map Gulkana A-2 Q Gr
 Richter & others 1984 Shield volc Wrangell Mts V

Riehle, J. R.

Riehle 1985 Recon Holo tephra deposits upper Cook Inlet V
 Riehle & others 1981 Lahars Crescent River Lower Cook Inlet V

Rioux, R. L.

Godwin & others 1971 Classif of public land for geothermal R, DP

Roberts, E. D.

Nehring & others 1979 Sulfate geotherm western U. S. R, Fs

Robinson, G. D.

Robinson 1948 Exploring Aleutian volc V, H

AUTHOR

TOPIC

Robinson, M. S.

Robinson & Decker 1986 Ages & analysis from SW Alaska	Gr,PG
Robinson & Stevens 1983 Geol map Seward Penin	Gr
Robinson & Stevens 1984 Geol map Seward Penin	Gr
Robinson & others 1984 Bdrck geol Chuilnuk & Kiokluk Mts [abs]	Gr
Robinson & others 1984 Geologic map Sleetmute B-5 Q	Gr
Robinson & others 1986 Geol map Mt. Michelson C-4 Quad	Gr
Robinson & others 1986 Rocks from Sleetmute, Russian Mission Q	PG

Roehn, J. C.

Roehn 1941 Pumice deposits Katmai	G
-----------------------------------	---

Rogers, J. A.

Rogers 1986 Geology Shublik Mts	Gr
---------------------------------	----

Romick, J. D.

Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP	
Romick 1982 Ig petro & geochem N. Akutan Is (thesis)	PG
Romick 1983 Ig petro & geochem N. Akutan Is [abs.]	PG
Romick 1986 Ig pet and geochem N. Akutan	PG
Romick & Swanson 1983 Petro & fract lava Akutan Is [abs.]	PG

Rosenbruch, J. C.

Rosenbruch & Bottge 1975 Econ potent 3 sites Ak	EF
---	----

Rosenthal, C. H.

Henning & others 1976 Alaska's volcanoes	V,R
--	-----

Rosenthal, F. W.

Rosenthal 1908 Hot springs of southeast Alaska	H,R
--	-----

Rossman, D. L.

Rossman 1959 Geol & ore dep NW Chichagof Is	Gr
---	----

Rubenstone, J. L.

Rubenstone & others 1985 Isot & trace elem Katmai [abs.]	PG
--	----

Russell, S. L.

Smith & others 1978 Data & therm energy est young ig sys US	R,HS
---	------

AUTHOR

TOPIC

Sainsbury, C. L.

Bunker & others 1977 Prelim radio ages of rocks Kigluaik Mts	Gr
Sainsbury & others 1968 SnO ₂ Humbolt Cr Serpentine-Kougarok	Gr
Sainsbury & others 1970 Geol min dep geochem & rad Serpentine	Gr
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr

Sammel, E. A.

Sammel 1979 Low temp. geothermal in U.S.	R
--	---

Sass, J. H.

Lachenbruch & others 1984 Geotherm Prudhoe Bay	HS
Nathenson & others 1983 Regional heat flow	R,HS

Sayre, J. D.

Sayre & Hagelbarger 1918 Temps in VTTS	H,HS
--	------

Sbar, M. L.

Sbar & Matumoto 1972 Refraction VTTS	Pr
--------------------------------------	----

Scheidegger, K. F.

Federman & Scheidegger 1984 Distal tephra 1912 Novarupta	V
Scheidegger & Kulm 1973 Cyclic Aleut volc ash DSDP 178 [abs.]	V
Scheidegger & others 1977 Ash volc Aleut & Kamchat arc [abs.]	V

Schell, L. C.

Conwell & Schell 1977 Energy resource map Alaska	R
--	---

Schmincke, H. U.

Johnson & others 1977 Augustine Volc, evaluat hazards [abs.]	V,Eg
Schmincke & Johnson 1977 Pyroclastic flows Augustine [abs]	

Schmoll, H. R.

Ferrians & Schmoll 1957 Wisc proglacial lake Copper River bsn	Gr
Ferrians & others 1958 Pleist volc mudflow Copper River basin	V

Schnell, R. C.

Schnell & Sheridan 1986 Arctic gas & aerosols-Augustine [abs.]	V
--	---

Schrader, F. C.

Schrader & Spencer 1901 Geol & min res Copper River dist	H,Gr
--	------

AUTHOR

TOPIC

Seed, S. M.

Turner & others 1980 Geothermal resources Alaska

R,Fs

Self, S.

Kienle & others 1978 Form. 2 maars behind volc arc [abs.]

V

Kienle & others 1980 Ukinrek Maars 1977 eruption

V

Self & others 1978 Mechanisms & deposits Ukinrek [abs.]

Ps,Gs,V

Self & others 1980 Ukinrek Maars II deposits & formation

V

Shackelford, D. C.

Shackelford 1983 Hist activity Pavlov Volc

V

Shaw, G. E.

Kienle & Shaw 1977 Augustine erupt - initial phase 1976

V

Shaw, H. R.

Smith & Shaw 1979 Igneous related geothermal systems

R,HS

Smith & others 1978 Data & therm energy est young ig sys US

R,HS

Shelikhov, G. I.

Shelikhov 1790 Voyage to America 1783-1786

H,C

Sheppard, D. S.

Motyka & others 1986 Makushin well chem equilib *,Fw,Fs,Ff,HA,RM

Sheridan, P. J.

Schnell & Sheridan 1986 Arctic gas & aerosols-Augustine [abs.]

V

Sherman, G.

Hansen & others 1981 Mineral potential Ak Penin.

Gr

Shew, N.

Wilson & Shew 1981 Prelim K-Ar studies Circle Q

Gr

Shipley, J. W.

Shipley 1919 VTTS

H

Shipley 1920 Chem obs VTTS

HA,Ff

Shipley 1920 Katmai gas & encrustations

HA,Ff,V

Shore, R. A.

Shore 1985 Resist survey & interp

Ps,RM

AUTHOR

TOPIC

Siebert, L.

Siebert & others 1986 Debris avalanches Augustine [abs.] V
 Simkin & others 1981 Volcanoes of the World V,R

Silberling, N. J.

Jones & others 1984 Terrane map Alaska Gr

Silberman, M. L.

Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q Gr
 Winkler & others 1981 Folio Valdez Q Gr

Simkin, T.

Simkin & others 1981 Volcanoes of the World V,R

Simons, F. S.

Simons & Mathewson 1955 Geol Great Sitkin Is Gr

Sinha, A. K.

Myers & others 1984 Assim crust by basalt magma Edgecumbe PG
 Myers & others 1986 Isot var Adak & Atka volc plumb V,PG,Gr

Sloan, C. E.

Sloan 1976 Chem anal Bailey Bay HS Fs
 Sloan 1976 Chem anal Bell Is HS Fs
 Sloan 1976 Chem anal Chief Shakes HS Fs

Smith, E. P.

Lachenbruch & others 1984 Geotherm Prudhoe Bay HS

Smith, J. G.

Berg & others 1978 Geol map Ketchikan & Prince Rupert Q Ak. Gr
 Richter & others 1984 Shield volc Wrangell Mts V

Smith, R. L.

Miller & Smith 1975 Ak geothermal study R
 Miller & Smith 1975 Ash flows Ak Penin prelim rpt [abs.] V,Gr
 Miller & Smith 1976 2 caldera forming eruptions Umnak V
 Miller & Smith 1976 Ash flows Wrangell volcano V
 Miller & Smith 1976 New volcanoes Aleutian arc V
 Miller & Smith 1977 Mobile ash flows Aniakchak & Fisher calds V
 Miller & Smith 1983 Calderas E Aleutian arc [abs.] Gr
 Richter & others 1979 Geol map Gulkana A-2 Q Gr

AUTHOR	TOPIC
Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Smith & others 1978 Data & therm energy est young ig sys US	R,HS
Smith, T. E.	
Robinson & others 1986 Geol map Mt. Michelson C-4 Quad	Gr
Sainsbury & others 1968 SnO ₂ Humbolt Cr Serpentine-Kougarok	Gr
Smith, W. R.	
Smith 1925 Aniakchak Crater	Gr,H
Smith 1925 Cold Bay Katmai dist	Gr,H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr,H
Snyder, G. L.	
Drewes & others 1961 Geol Unalaska & adjacent shelf	Gr
Fraser & Snyder 1959 Geol S Adak & Kagalaska Islands	Gr
Snyder 1954 Eruption Trident Katmai	V
Snyder 1959 Geol Little Sitkin Is	Gr
Snyder & Fraser 1963 Pillowed lavas Unalaska	Gr
Solie, D. N.	
Gilbert & Solie 1983 Prelim geol map Mc Grath A-3 Quad	Gr
Solie 1983 Plutons in Mc Grath A-3 Quad	Gs
Sorey, M. L.	
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Sosman, R. B.	
Sosman 1919 Temp in fumaroles VTTS	H,HS
Spencer, A. C.	
Schrader & Spencer 1901 Geol & min res Copper River dist	H,Gr
Spencer, S. G.	
Spencer & others 1982 Anal geothrm res devel Unalaska	EF,DP
Spurr, J. E.	
Spurr 1900 Recon in SW Ak 1898	H,Gr
Stearns, H. T.	
Stearns & others 1937 Thermal springs in U.S.	R,Fs
Stearns, N. D.	
Stearns & others 1937 Thermal springs in U.S.	R,Fs

AUTHOR	TOPIC
Steele, J. L.	
Blackwell & Steele 1986 NA geothermal map [abs.]	R,HS
Steele, W. C.	
LeCompte & Steele 1981 Map Landsat Chignik & Sutwik Is Q	Gr
Stefano, R. R.	
Stefano 1974 Low temp use Pilgrim HS	DP
Stefano 1975 Pilgrim HS could heat Nome	DP
Stephens, C. A.	
Osterkamp & others 1979 Conduct & hydrol meas Pilgrim HS [abs] Ps	
Osterkamp & others 1980 Recon study access power Pilgrim Ps,Gs,DP	
Stephens, C. D.	
Page & others 1982 Seism Spurr, Redoubt, & Iliamna [abs.]	V
Stern, R. O.	
Stern & Stirling 1982 Pilgrim Hot Springs Road	C,R
Stevens, D. L.	
Robinson & Stevens 1983 Geol map Seward Penin	Gr
Robinson & Stevens 1984 Geol map Seward Penin	Gr
Stewart, R. J.	
Stewart 1975 Late Cenozoic erupt Aleutians & Kuril Is arcs	V
Still, P. J.	
Still 1980 Index water qual records to 1978	Gr
Stirling, S.	
Stern & Stirling 1982 Pilgrim Hot Springs Road	C,R
Stith, J. L.	
Stith & others 1977 Nuee ardent Augustine Volc	V
Stoltzfus, C. F.	
Stoltzfus 1982 Copper River basin planning study	C

AUTHOR

TOPIC

Stone, D. B.

Barrett & others 1977 Model of Augustine Volcano [abs.]	V,Ps
Stone & Kienle 1975 Pavlov	V
Stone & Packer 1972 Paleomag VTTS [abs.]	Pr
Stone & others 1971 Magnetic anomalies VTTS [abs.]	Pr

Stoney, G. M.

Stoney 1884 Volcano in Bering Sea	H,V
Stoney 1900 Naval expl Alaska	H,Gr

Strong, D. F.

Harmon & others 1984 Augustine chem & isot character [abs.]	PG
---	----

Sturm, M.

Benson & others 1985 Glacio-volcano studies Mt. Wrangell	V
--	---

Swanson, J. R.

Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Mariner & others 1978 Data for hydrothermal systems >= 90	R,Fs

Swanson, S. E.

Daley & Swanson 1985 Low press fractionation Augustine [abs.]	PG
Forbes & others 1979 Geol, geoph assmt geotherm pot Pilgrim	Gs,Ps
Kienle & Swanson 1980 Volcanic hazards Augustine	V,Eg
Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & Swanson 1985 Volc hazards Augustine 2nd ed.	V,Eg
Kienle & others 1981 Subd & magma E Aleut arc [abs.]	R,PG
Kienle & others 1981 Volcanic centers Katmai [abs.]	V,R
Kienle & others 1983 Magmatism subduction E Aleutian arc	V,PG
Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP	
Neal & Swanson 1983 Petro geochem Westdahl & Pogromni [abs.]	PG
Nye & Swanson 1986 Chem strat magma plumb Makushin [abs]	V,Gs,PG
Nye & Swanson 1987 Makushin magma chamber	PG,Gs,V
Nye & others 1986 Petro geochem Quat volc Makushin	*,V,Gs,PG
Romick & Swanson 1983 Petro & fract lava Akutan Is [abs.]	PG
Swanson 1983 Min & fract Makushin volc [abs.]	PG
Swanson & Blum 1984 Evol of volc centers Aleutian arc [abs]	V,Gr
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
Swanson & others 1980 Bedrock geol Pilgrim springs area	Gs
Swanson & others 1981 Geol & petro Kaguyak Crater [abs.]	PG
Swanson & others 1983 Petro Makushin volc [abs.]	PG
Swanson & others 1986 Magmatic evolution Augustine [abs.]	PG,V
Turner & Swanson 1981 Continent rifting new model Seward Pen	Gr
Turner & others 1979 Geol & tect setting Pilgrim spr [abs.]	Gs
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM
Turner & others 1981 Continent rifting new model Seward Pen	Gr

AUTHOR	TOPIC
Sydora, R.	
Wescott & others 1979 Resis survey Pilgrim HS [abs.]	Ps
Wescott & others 1980 Resis survey Pilgrim spr area	Ps
Sykes, L.	
House & others 1981 Seismic gap near Unalaska	Gs
Taber, B.	
Hopkins & Taber 1962 Stratigraphy Manley HS	Gs
Taber, J. T.	
Taber 1972 Seismicity geotherm areas Ak & other (thesis)	R,Pr
Tagg, A. R.	
Grantz & others 1962 Saline springs Copper River basin	Fs
Tailleur, I. L.	
Blanchard & Tailleir 1982 Prelim geothermal isograd map NPRA	HS
Patton & others 1968 Reg geol map Shungnak & Ambler River Q	Gr
Tams, E.	
Tams 1924 Katmai (Ger)	V,H
Tanner, L.	
Nehring & others 1979 Sulfate geotherm western U. S.	R,Fs
Tazieff, H.	
Bordet & Tazieff 1963 Erupt of Katmai & ignimbrites	V
Bordet & others 1963 Katmai	V
Thomas, J.	
Reeder & others 1977 Seism Augustine volc [abs.]	V,Ps
Thompson, J. M.	
Thompson & Keith 1984 Cl & F in waters VTTS [abs.]	Fs
Till, A. B.	
Till 1984 Redoubt-strat & volc hazards [abs.]	Eg,PG
Todd, W. C.	
Sainsbury & others 1968 SnO ₂ Humbolt Cr Serpentine-Kougarok	Gr

AUTHOR

TOPIC

Trible, M.

Stone & others 1971 Magnetic anomalies VTTs [abs.]

Pr

Tripp, R. B.

Menzie & others 1983 Mineral assmt Circle Quad

Gr

Turner, D. L.

Dean & others 1981 Remote sensing Pilgrim Springs Ps
 Forbes & others 1975 Fission track age & geotherm grad [abs.] HS
 Forbes & others 1977 Fission track age & geothermal gradient HS
 Forbes & others 1979 Geol, geoph assmt geotherm pot Pilgrim Gs,Ps
 Forbes & others 1979 Pilgrim springs hydrothermal system RM
 Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP
 Nye & Turner 1986 Geology & geochemistry Spurr [abs.] Gs,PG,V
 Swanson & others 1980 Bedrock geol Pilgrim springs area Gs
 Turner & Forbes 1980 Geol geophy stdy Pilgrim *,Gs,Ps,RM,Fs,Fw,HS
 Turner & Nye 1986 Geochronology Mt. Spurr V
 Turner & Swanson 1981 Continent rifting new model Seward Pen Gr
 Turner & Wescott 1982 Prelim invest gthrm L Susitna Gs,Ps,Gc,HS
 Turner & Wescott 1986 Geotherm invest Mt. Spurr *,R,Ps,Gc,V,Gs,RM
 Turner & others 1975 Rad dates Ak 1975 compilation Gr
 Turner & others 1979 Geol & tect setting Pilgrim spr [abs.] Gs
 Turner & others 1980 Geothermal resources Alaska R,Fs
 Turner & others 1980 Sum geol geophys invest Pilgrim spr RM
 Turner & others 1981 Continent rifting new model Seward Pen Gr
 Turner & others 1983 Sum, eval gthrm exp Copper R bsn Gs,Ps,Fs,RM
 Turner & others 1986 Mt. Spurr geothermal project R,Gs,V
 Turner & others 1986 Hg and He surveys Mt. Spurr Gc,R
 Wescott & Turner 1981 Geol & geophys Chena HS *,Gs,Ps,Gc
 Wescott & Turner 1981 Geotherm recon C Seward Pen Gs,Ps,Gc,HS,RM
 Wescott & Turner 1982 Geotherm assmt parts of Ak R,Gs,Ps,Gc
 Wescott & Turner 1983 Geotherm expl E Copper R basin Ps,Gc,Fs,Fw
 Wescott & Turner 1983 Geotherm potent Copper R basin Gs,Ps,Gc,DP
 Wescott & Turner 1985 Geotherm invest Copper *,Gs,Ps,Gc,DP,Fs,Fw
 Wescott & others 1982 Geophys survey Hot Springs Akutan Is Ps
 Wescott & others 1982 He & Hg survey parts Unalaska Gc
 Wescott & others 1985 Prelim rept gthrm invest Mt Spurr Gs,Ps,Gc
 Wescott & others 1986 Geophysical surveys Mt. Spurr Ps,R
 Wilson & Turner 1975 Rad age map Aleutians Gr
 Wilson & Turner 1975 Rad age map N Ak Gr
 Wilson & Turner 1975 Rad age map SC Ak Gr
 Wilson & Turner 1975 Rad age map SE Ak Gr
 Wilson & Turner 1975 Rad age map SW Ak Gr

Twenhofel, W. S.

Twenhofel & Sainsbury 1958 Fault patterns SE Ak

Gr

AUTHOR

TOPIC

Tysdal, R. G.

Detterman & others 1976 Geol map by faults in Kenai & Tyonek Q Gr

Updike, R. G.

Updike 1986 Construction materials Makushin

Eg

Updike 1986 Eng geol, feasibil study Makushin

*,Eg,Gs,Ps,Fs,DP

Van Wormer, D.

Forbes & others 1975 Geophysical recon Pilgrim Springs

Ps

Veniaminov, I.

Veniaminov 1840 Notes on islands Unalaska district

H

Viglino, J. A.

Viglino & others 1985 Isot evid magma comp in fum cond Augst V,Ff

VonLangsdorff, G. H.

VonLangsdorff 1814 Voyages & travels 1803-1807

H

Waldron, H. H.

Kennedy & Waldron 1955 Geol Pavlof volcano

Gr

Waldron 1961 Geol recon Frosty Peak volc

Gr

Wallace, R. E.

Cady & others 1955 Geology central Kuskokwim

Gr

Waller, J. A.

Page & others 1982 Seism Spurr, Redoubt, & Iliamna [abs.]

V

Wanek, A.

Wanek 1973 Geotherm areas by meridian & acreage

R

Ward, P. L.

Matumoto & Ward 1967 Microquake study Katmai

Pr,V

Ward & Matumoto 1967 Sum volc & seismic activity Katmai

V,Pr

Ward & Ward 1966 Volc activity in Katmai

V

Ward, S. N.

Ward & Ward 1966 Volc activity in Katmai

V

AUTHOR

TOPIC

Waring, G. A.

Stearns & others 1937 Thermal springs in U.S.	R, Fs
Waring 1917 Mineral springs Ak	Fs, R
Waring 1965 Thermal springs US & world - a summary	Fs

Wayland, R. G.

Godwin & others 1971 Classif of public land for geothermal	R, DP
--	-------

Weber, F. R.

Cady & others 1955 Geology central Kuskokwim	Gr
Foster & others 1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others 1973 Geology Yukon-Tanana upland	Gr

Wendler, G.

Wendler 1967 Heat flow Mt. Wrangell	V, HS
-------------------------------------	-------

Wescott, E. M.

Forbes & others 1979 Geol, geoph assmt geothrm pot Pilgrim	Gs, Ps
Forbes & others 1979 Pilgrim springs hydrothermal system	RM
Motyka & others 1985 Geol geoc geophys Akutan *	Gs, Fs, Ps, RM, Ff, DP
Turner & Wescott 1982 Prelim invest gthrm L Susitna	Gs, Ps, Gc, HS
Turner & Wescott 1986 Geotherm invest Mt. Spurr *	R, Ps, Gc, V, Gs, RM
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM
Turner & others 1981 Continent rifting new model Seward Pen	Gr
Turner & others 1983 Sum, eval gthrm exp Copper R bsn	Gs, Ps, Fs, RM
Turner & others 1986 Mt. Spurr geothermal project	R, Gs, V
Turner & others 1986 Hg and He surveys Mt. Spurr	Gc, R
Wescott 1981 He & Hg cent Seward Penin	Gc
Wescott 1981 He & Hg surveys Chena HS	Gc
Wescott & Turner 1981 Geol & geophys Chena HS	*, Gs, Ps, Gc
Wescott & Turner 1981 Geotherm recon C Seward Pen	Gs, Ps, Gc, HS, RM
Wescott & Turner 1982 Geotherm assmt parts of Ak	R, Gs, Ps, Gc
Wescott & Turner 1983 Geotherm expl E Copper R basin	Ps, Gc, Fs, Fw
Wescott & Turner 1983 Geotherm potent Copper R basin	Gs, Ps, Gc, DP
Wescott & Turner 1985 Geotherm invest Copper *	Gs, Ps, Gc, DP, Fs, Fw
Wescott & Witte 1982 Gravity survey L Susitna basin	Ps
Wescott & others 1979 Resis survey Pilgrim HS [abs.]	Ps
Wescott & others 1980 Resis survey Pilgrim spr area	Ps
Wescott & others 1981 Geophys survey Summer Bay	Ps
Wescott & others 1982 Geophys survey Hot Springs Akutan Is	Ps
Wescott & others 1982 He & Hg survey parts Unalaska	Gc
Wescott & others 1985 Prelim rept gthrm invest Mt Spurr	Gs, Ps, Gc
Wescott & others 1986 Geophysical surveys Mt. Spurr	Ps, R
Wescott & others 1986 Ice thickness Mt. Spurr summit	Ps

Westdahl, F.

Westdahl 1900 Mountains on Unimak	H
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AUTHOR	TOPIC
Wharton, G. B.	
Benson & others 1975 Glac & volc studies Mt. Wrangell	V
Benson & others 1985 Glacio-volcano studies Mt. Wrangell	V
White, D. E.	
Godwin & others 1971 Classif of public land for geothermal	R,DP
Grantz & others 1962 Saline springs Copper River basin	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
White, L. D.	
Harmon & others 1982 Isotopes from Augustine fumaroles	Ff
Nehring & others 1979 Sulfate geotherm western U. S.	R,Fs
Viglino & others 1985 Isot evid magma comp in fum cond Augst	V,Ff
Whitehead, H. C.	
Grantz & others 1962 Saline springs Copper River basin	Fs
Whymper, F.	
Whymper 1868 Journey Norton Sound to Fort Yukon	H
Wilcox, R. E.	
Gates & others 1971 Geol Near Islands	Gr
Wilcox 1953 Eruption Mt Spurr	V
Wilcox 1959 Volcanic ash falls Alaska	V
Willaims, D. L.	
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Williams, H.	
Williams 1955 Prelim geol Katmai & VTTS	Gr
Williams & others 1956 Mt Katmai & VTTS new interp 1912 eruptn	V
Williams, J. R.	
Ferrians & others 1983 Copper River basin	Gr
Williams 1985 Eng geol map Copper River basin	Eg
Williams & Johnson 1980 Map Tert & Quat deposits Valdez Q	Gr
Williams, T.	
Kline & others 1980 Surf geol & drilling Pilgrim HS	Gs,Er

AUTHOR

TOPIC

Wilson, C. R.

Wilson & Forbes 1969	Infrasonic waves & volc erupt [abs.]	V
Wilson & Forbes 1969	Infrasonic waves Ak volc eruptions	V
Wilson & Kienle 1976	Infrasonic signals Augustine volc [abs.]	V

Wilson, F. H.

Case & others 1980	Tertiary volc centers Ak Penin.	Gr,V
Detterman & others 1979	Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981	Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981	Quat geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1983	Geol map Ugashik-Bristol Bay-Karluk Q	Gr
Detterman & others 1985	Geol map Ugashik & W Karluk Q	Gr
Detterman & others 1986	Quat map Ugashik-Bristol Bay-Karluk Q	Gr
Turner & others 1975	Rad dates Ak 1975 compilation	Gr
Wilson 1977	Plutonic rocks SW Ak data compilation	Gr
Wilson & Shew 1981	Prelim K-Ar studies Circle Q	Gr
Wilson & Turner 1975	Rad age map Aleutians	Gr
Wilson & Turner 1975	Rad age map N Ak	Gr
Wilson & Turner 1975	Rad age map SC Ak	Gr
Wilson & Turner 1975	Rad age map SE Ak	Gr
Wilson & Turner 1975	Rad age map SW Ak	Gr
Wilson & others 1985	Alaska Peninsula terrane	Gr
Yount & others 1985	Eruption Mt Veniaminof	V
Yount & others 1985	New Holo vent Port Moller & Stepovak Bay Q	V

Wiltse, M. A.

Reeder & others 1980	Ak. geothermal program	DP
Wiltse 1986	Radon hazard assessment Circle HS	Gc

Winkler, G. R.

Winkler & others 1981	Folio Valdez Q	Gr
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Witte, W.

Motyka & others 1985	Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP	
Wescott & Witte 1982	Gravity survey L Susitna basin	Ps
Wescott & others 1981	Geophys survey Summer Bay	Ps
Wescott & others 1982	Geophys survey Hot Springs Akutan Is	Ps
Wescott & others 1982	He & Hg survey parts Unalaska	Gc
Wescott & others 1986	Geophysical surveys Mt. Spurr	Ps,R
Wescott & others 1986	Ice thickness Mt. Spurr summit	Ps

Woodruff, L. G.

Woodruff & Anderson 1980	Arrested magma mixing Pavlov	PG
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Woodward-Clyde

Woodward-Clyde 1983	Geothermal development Pilgrim spr	DP
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AUTHOR

TOPIC

Workman, W. B.

Workman 1979 Signif volc in prehist of subarctic

C

Wright, C. W.

Wright 1906 Nonmetallic deposits SE Ak.

Gr,H

Wright & Wright 1908 Ketchikan & Wrangell mining districts

Gr,H

Wright, F. E.

Wright & Wright 1908 Ketchikan & Wrangell mining districts

Gr,H

Yeend, W. E.

Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q

Gr

Chapman & others 1982 Recon geol map Tanana Q

Gr

Menzie & others 1983 Mineral assmt Circle Quad

Gr

Patton & others 1978 Geol map Melozitna Q

Gr

Yehle, L. A.

Nichols & Yehle 1961 Anal gas & water Copper River basin

Fs

Nichols & Yehle 1961 Mud volc Copper River basin

Fs

Nichols & Yehle 1969 Eng geol map SE Copper River basin

Gs

Richter & others 1979 Geol map Gulkana A-2 Q

Gr

Yehle & Nichols 1980 Recon map Chetaslina debris flow Copper R

V

Yehle & others 1985 Geol frm drilling in Copper R. basin

Gr

Yount, M. E.

Detterman & others 1979 Geol map Chignik & Sutwik Is Q

Gr

Detterman & others 1981 Geol map Chignik & Sutwik Is Q

Gr

Detterman & others 1981 Quat geol map Chignik & Sutwik Is Q

Gr

Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q

Gr

Detterman & others 1985 Geol map Ugashik & W Karluk Q

Gr

Detterman & others 1986 Quat map Ugashik-Bristol Bay-Karluk Q

Gr

Yount 1984 Redoubt mineralogy & chem [abs.]

V,PG

Yount & others 1985 Eruption Mt Veniaminof

V

Yount & others 1985 New Holo vent Port Moller & Stepovak Bay Q

V

Zies, E. G.

Allen & Zies 1923 Chem study fumaroles Katmai region

Ff

Zies 1921 Hot springs in VTTS

Fs

Zies 1924 Fumarolic incrustations Katmai [abs.]

HA

Zies 1924 Fumarolic incrustations VTTS

HA

Zies 1929 VTTS I-fumarolic incrustations, II-acid gases

Ff,HA

Zietz, I.

Andreasen & others 1964 Geol inter mag & grav Copper Rvr basn

Pr

ALASKA GEOTHERMAL BIBLIOGRAPHY

SECTION III

GEOTHERMAL SITE LISTING

(see Table I - Abbreviations used in short references - Pg. 223)
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GEOHERMAL SITE

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Adak AA-4

Berry & others 1980 Thermal spring list U. S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Coats 1947 Geol N Adak Island	Gr
Coats 1952 Magmatic different Adak & Kanaga Islands	PG
Coats 1956 Geol N Adak Island	Gr
Coats 1956 Recon geol W Aleutian Islands	Gr
Conrad & Kay 1984 Inclusions Adak Is-nature of primary magma	PG
Fraser & Snyder 1959 Geol S Adak & Kagalaska Islands	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka 1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Myers & others 1986 Isot var Adak & Atka volc plumb	V,PG,Gr
Peale 1886 Mineral springs of US	H,R
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Akun Strait AA-23

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Byers & Barth 1953 Volc activity Akun & Akutan Islands	V
Coats 1956 Recon geol W Aleutian Islands	Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Peale 1886 Mineral springs of US	H,R
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1965 Thermal springs US & world - a summary	Fs

Akutan Volcano AA-21

Brown 1899 Shishaldin	H
Byers & Barth 1948 Geol Akutan Island	Gr
Byers & Barth 1953 Volc activity Akun & Akutan Islands	V
Davidson 1893 Eruption of Veniaminof	H,V
Finch 1935 Akutan volcano	V,H
House & others 1981 Seismic gap near Unalaska	Gs
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Motyka 1982 Fluid geochem Makushin & Akutan geotherm area	Ff,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP	
Prosser 1912 Volcanic road-building	H,V
Reeder 1983 Prelim dating Holo volcanic E Aleut Is [abs.]	V,Gr
Romick 1982 Ig petro & geochem N. Akutan Is (thesis)	PG
Romick 1983 Ig petro & geochem N. Akutan Is [abs.]	PG
Romick 1986 Ig pet and geochem N. Akutan	PG
Romick & Swanson 1983 Petro & fract lava Akutan Is [abs.]	PG
Smith & Shaw 1979 Igneous related geothermal systems	R,HS

GEOHERMAL SITE

TOPIC

Swanson & Blum 1984 Evol of volc centers Aleutian arc [abs] V,Gr
 Wescott & others 1982 Geophys survey Hot Springs Akutan Is Ps
 White & Williams 1975 Assmt geothermal resources US R,Fs,HS

Aniakchak AA-34

Berry & others 1980 Thermal spring list U.S. R
 Bliss 1983 Ak basic data thermal springs & wells R,Fs,Fw
 Detterman & others 1979 Geol map Chignik & Sutwik Is Q Gr
 Detterman & others 1981 Geol map Chignik & Sutwik Is Q Gr
 Detterman & others 1981 Quat geol map Chignik & Sutwik Is Q Gr
 Hansen & others 1981 Mineral potential Ak Penin. Gr
 Hubbard 1931 Geol Aniakchak & Veniaminof [abs.] Gr,H
 Hubbard 1931 World inside a mountain V,H
 Knappen 1926 Geol & min resources Aniakchak Gr
 Knappen 1933 Aniakchak & Veniaminof volcanoes [abs.] Gr,H
 LeCompte & Steele 1981 Map Landsat Chignik & Sutwik Is Q Gr
 Lyle 1973 Geol & mineral evaluation Aniakchak R drainage Gr
 Markle 1979 Geotherm Ak site data base & devel status R,Fs,Gr,C
 Miller 1978 Airfall pumice Aniakchak V
 Miller & Barnes 1974 Geotherm devel Ak [abs.] DP,Gr,V
 Miller & Barnes 1976 Geotherm develop Ak summary DP,Gr,V
 Miller & Smith 1976 New volcanoes Aleutian arc V
 Motyka & others 1981 Assmt thermal spring Aleutian arc R,Fs,Ff,Gr
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Reed & others 1983 Data low temp geothermal systems US HS,R,Fs
 Smith 1925 Aniakchak Crater Gr,H
 Smith & Baker 1924 Cold Bay-Chignik dist Gr,H
 Smith & Shaw 1979 Igneous related geothermal systems R,HS
 Turner & others 1980 Geothermal resources Alaska R,Fs
 White & Williams 1975 Assmt geothermal resources US R,Fs,HS

Arrigetch NC-39

Adams 1983 Geol northern Arrigetch pluton (thesis) Gr
 Adams 1984 Geol northern Arrigetch Peaks pluton [abs.] Gr
 Berry & others 1980 Thermal spring list U.S. R
 Brosge & Pessel 1977 Prelim recon geol map Survey Pass Q Gr
 Nelson & Grybeck 1978 Arrigetch Peaks & Igikpak plutons Gr

Augustine SC-11

Barrett 1978 Magnetic model of Augustine Volcano (thesis) V,Ps
 Barrett & others 1977 Model of Augustine Volcano [abs.] V,Ps
 Beget 1986 Prehistoric tephra at Augustine [abs.] V,Gs
 Daley 1986 Petro, geochem & evol magmas Augustine (thesis) PG
 Daley & Swanson 1985 Low press fractionation Augustine [abs.] PG
 Davidson 1884 Notes volc eruption Augustine H,V
 Davies & Kienle 1986 Augustine eruption & advice [abs.] V,C
 Decker 1967 Invest at active volcanoes V
 Detterman 1968 Volcanic activity Augustine Island V
 Detterman 1973 Geol map Iliamna B-2 Quad Augustine Island Gr
 Detterman & Reed 1964 Prelim geol map Iliamna Q Gr

Detterman & Reed 1968 Geol Iliamna Q	Gr
Detterman & Reed 1973 Surficial deposits Iliamna Q	Gr
Detterman & Reed 1980 Strat, struct, & econ geol Iliamna Q	Gr
Estes 1978 Seismotectonic studies lower Cook Inlet (thesis)	Pr
Forbes & Kienle 1971 Augustine	V
Forbes & others 1971 Seismicity Augustine [abs.]	Ps,V
Gosink & others 1986 Augustine ash [abs.]	V
Harmon & others 1982 Isotopes from Augustine fumaroles	Ff
Harmon & others 1984 Augustine chem & isot character [abs.]	PG
Hobbs & others 1977 Eruption of Augustine	V
Johnson 1976 Zoned magma chamber Augustine [abs.]	V
Johnson 1978 Magma mixing Augustine volcano (thesis)	PG
Johnson 1978 Magma mixing Augustine volcano [abs.]	PG
Johnson 1979 Volc gas studies Ak volcanoes	R,Ff
Johnson 1979 Volcanism at Augustine	V,Gs
Johnson 1980 Volc contr Cl to stratosphere	V,Ff
Johnson & Detterman 1979 Revision of eruptive history Augustine	V
Johnson & others 1977 Augustine Volc, evaluat hazards [abs.]	V,Eg
Kienle 1972 Volc micro-quakes Augustine [abs.]	V,Ps
Kienle 1974 Alaskan volcano studies esp. Augustine	V
Kienle 1986 Augustine Volcano [abs.]	V
Kienle & Forbes 1974 Ak volc studies Augustine	V
Kienle & Forbes 1977 Augustine - Evolution of volcano	V
Kienle & Pulpan 1975 Tide caused quakes at Augustine [abs.]	Ps,V
Kienle & Shaw 1977 Augustine erupt - initial phase 1976	V
Kienle & Swanson 1980 Volcanic hazards Augustine	V,Eg
Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & Swanson 1985 Volc hazards Augustine 2nd ed.	V,Eg
Kienle & others 1971 Microquake swarm Augustine [abs.]	V,Ps
Kienle & others 1979 Shallow magma at Augustine	V
Kienle & others 1986 Augustine & tsunamis [abs.]	V
Kodosky & Keskinen 1986 Fumarole alt Augustine [abs.]	HA,Ff,V
Lalla 1987 Seismo & thermal studies Augustine (thesis)	V,Ps,HS
Lalla & Kienle 1974 Infrared thermometry Augustine [abs.]	V,HS
Lalla & Kienle 1976 Thermal studies Augustine [abs.]	V,HS
Lalla & Kienle 1978 Evolution seismicity Augustine [abs.]	V,Ps
Lalla & Kienle 1980 Problems volc seismo Augustine [abs.]	V,Ps
Lalla & Kienle 1986 Seis therm precursors erupt Augustine	V,Ps,HS
Limke & Beget 1986 Pyroclastic flows Augustine [abs.]	V
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Martin & Katz 1910 Geol & min resources Iliamna & Lake Clark	H,Gr
Martin & Katz 1912 Geol recon Iliamna Region	H,Gr
Mauk & Kienle 1973 Microquake Augustine earthtides	Ps,V
Metzner 1975 Magnetotelluric invest. Augustine (thesis)	Ps,V
Miller 1976 Augustine volcano	V
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others 1986 Augustine gas sampling [abs.]	Ff
Pearson 1977 Seismic refr Augustine (thesis)	V,Ps
Pearson & Kienle 1978 Seismic refr study Augustine [abs.]	V,Ps
Poreda & others 1981 He isot vars Ak-Aleut arc [abs.]	R,Fs,Ff
Prosser 1912 Volcanic road-building	H,V
Reeder & others 1977 Seism Augustine volc [abs.]	V,Ps
Riehle 1985 Recon Holo tephra deposits upper Cook Inlet	V

GEOHERMAL SITE

TOPIC

Schmincke & Johnson 1977 Pyroclastic flows Augustine [abs]
 Schnell & Sheridan 1986 Arctic gas & aerosols-Augustine [abs.] V
 Siebert & others 1986 Debris avalanches Augustine [abs.] V
 Stith & others 1977 Nuee ardent Augustine Volc V
 Swanson & others 1986 Magmatic evolution Augustine [abs.] PG,V
 Viglino & others 1985 Isot evid magma comp in fum cond Augst V,Ff
 White & Williams 1975 Assmt geothermal resources US R,Fs,HS
 Wilson & Kienle 1976 Infrasonic signals Augustine volc [abs.] V

Bailey Bay SE-17

Baker & others 1977 Geotherm springs-salmon hatchery site R,DP,Fs
 Berg & others 1978 Geol map Ketchikan & Prince Rupert Q Ak. Gr
 Berry & others 1980 Thermal spring list U.S. R
 Brook & others 1979 Hydrothermal systems <90 deg R,Fs
 Buddington & Chapin 1929 Geol & mineral deposits SE Ak Gr
 Forbes & others 1975 Utilization geothermal rural Ak Fs,DP,Ef
 Markle 1979 Geotherm Ak site data base & devel status R,Fs,Gr,C
 Miller 1973 Distribution & chem analysis thermal springs Ak R,Fs
 Motyka & Moorman 1980 Assmt thermal spring S SE Ak [abs.] R,Fs
 Motyka & Moorman 1987 Geotherm resourcers SE Ak R,Fs,Fw
 Motyka & others 1980 Assmt therm spr S SE Ak R,Fs
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Muffler 1979 Assmt geothermal resources U. S. R,Fs,HS
 Nava 1975 Note on hot springs SE Ak R,Fs
 Ogle 1976 Ak. hot spring site for small binary plant R,DP,Fs
 Sloan 1976 Chem anal Bailey Bay HS Fs
 Turner & others 1980 Geothermal resources Alaska R,Fs
 Waring 1917 Mineral springs Ak Fs,R
 Waring 1965 Thermal springs US & world - a summary Fs
 White & Williams 1975 Assmt geothermal resources US R,Fs,HS
 Wright 1906 Nonmetallic deposits SE Ak. Gr,H
 Wright & Wright 1908 Ketchikan & Wrangell mining districts Gr,H

Baker Island SE-11

Berry & others 1980 Thermal spring list U.S. R
 Bliss 1983 Ak basic data thermal springs & wells R,Fs,Fw
 Buddington & Chapin 1929 Geol & mineral deposits SE Ak Gr
 Eberlein & others 1983 Geol map Craig Q Gr
 Kase 1986 Trocadero soda springs C
 Markle 1979 Geotherm Ak site data base & devel status R,Fs,Gr,C
 Motyka & Moorman 1980 Assmt thermal spring S SE Ak [abs.] R,Fs
 Motyka & Moorman 1987 Geotherm resourcers SE Ak R,Fs,Fw
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Reed & others 1983 Data low temp geothermal systems US HS,R,Fs
 Turner & others 1980 Geothermal resources Alaska R,Fs

Baranof SE-10

Berg & Hinckley 1963 Recon geol northern Baranof Is. Gr
 Berry & others 1980 Thermal spring list U.S. R
 Bliss 1983 Ak basic data thermal springs & wells R,Fs,Fw
 Buddington & Chapin 1929 Geol & mineral deposits SE Ak Gr

GEO THERMAL SITE

TOPIC

Knopf 1912 Sitka mining district	H,Gr
Loney & others 1964 Recon geol map Baranof & Kruzof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava 1975 Note on hot springs SE Ak	R,Fs
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Rosenthal 1908 Hot springs of southeast Alaska	H,R
Turner & others 1980 Geothermal resources Alaska	R,Fs
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Wright 1906 Nonmetallic deposits SE Ak.	Gr,H

Barnes Lake SE-15

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Kerr 1948 Stikine & Iskut River area BC, Canada	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & Moorman 1980 Assmt thermal spring S SE Ak [abs.]	R,Fs
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & others 1980 Assmt therm spr S SE Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Turner & others 1980 Geothermal resources Alaska	R,Fs
Wright & Wright 1908 Ketchikan & Wrangell mining districts	Gr,H

Battleship NC-5

Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Hudson 1977 Geol map Seward Penin	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1972 K rich intrusive rocks W Ak	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben	Q Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Robinson & Stevens 1983 Geol map Seward Penin	Gr
Robinson & Stevens 1984 Geol map Seward Penin	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs

Bell Island SE-18

Baker & others 1977 Geotherm springs-salmon hatchery site	R,DP,Fs
Berg & others 1978 Geol map Ketchikan & Prince Rupert	Q Ak. Gr
Berry & others 1980 Thermal spring list U.S.	R
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr

GEOHERMAL SITE

TOPIC

Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman	1980 Assmt thermal spring S SE Ak [abs.]	R,Fs
Motyka & Moorman	1987 Geotherm resources SE Ak	R,Fs,Fw
Motyka & others	1980 Assmt therm spr S SE Ak	R,Fs
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler	1979 Assmt geothermal resources U. S.	R,Fs,HS
Nava	1975 Note on hot springs SE Ak	R,Fs
Ogle	1976 Ak. hot spring site for small binary plant	R,DP,Fs
Sloan	1976 Chem anal Bell Is HS	Fs
Turner & others	1980 Geothermal resources Alaska	R,Fs
Waring	1917 Mineral springs Ak	Fs,R
Waring	1965 Thermal springs US & world - a summary	Fs
White & Williams	1975 Assmt geothermal resources US	R,Fs,HS
Wright	1906 Nonmetallic deposits SE Ak.	Gr,H
Wright & Wright	1908 Ketchikan & Wrangell mining districts	Gr,H

Big Windy NC-34

Berry & others	1980 Thermal spring list U.S.	R
Foster & others	1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others	1973 Geology Yukon-Tanana upland	Gr
Foster & others	1983 Geologic map Circle Q	Gr
Foster & others	1983 Prelim geol map Circle Quad	Gr
Gassaway & Abramson	1977 Map & table thermal springs cntr Ak	R,Fs
Keith & Foster	1979 Big Windy Creek HS	Fs
Keith & others	1981 Chem & isot data Big Windy Creek HS	Fs
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Menzie & others	1983 Mineral assmt Circle Quad	Gr
Mertie	1930 Geology Eagle-Circle district	Gr
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava & Morrison	1974 Note on hot springs interior Ak	R,Fs
Turner & others	1980 Geothermal resources Alaska	R,Fs
Waring	1917 Mineral springs Ak	Fs,R
Waring	1965 Thermal springs US & world - a summary	Fs
Wilson & Shew	1981 Prelim K-Ar studies Circle Q	Gr

Bogoslof AA-39

Berry & others	1980 Thermal spring list U.S.	R
Brown	1899 Shishaldin	H
Byers	1959 Geol Umnak & Bogoslof Islands	Gr
Byers	1961 Petro 3 volc suites Umnak & Bogoslof Islands	PG
Dall	1870 Bogosloff volcano	H,V
Dall	1884 New volcano island	H,V
Dall	1889 Notes on Bogoslof island	H,V
Davidson	1884 New Bogoslof volcano	H,V
Davidson	1884 New volcano in Alaska	H,V
Diller	1893 Our youngest volcano	H
Jaggard	1908 Evolution Bogoslof Volcano	V,H
Jaggard	1908 Evolution of Bogoslof [abs.]	H,V
Merriam	1901 Birth of Bogoslof	H,V
Merrill	1885 Hornblende andesites from Bogosloff	H,Gs,PG

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Merriman	1910 Bogoslof new volcano	V
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & others	1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Powers	1916 Changes in Bogoslof volc	H,V
Prosser	1912 Volcanic road-building	H,V
Stoney	1884 Volcano in Bering Sea	H,V
Stoney	1900 Naval expl Alaska	H,Gr
Turner & others	1980 Geothermal resources Alaska	R,Fs
Waring	1917 Mineral springs Ak	Fs,R
Waring	1965 Thermal springs US & world - a summary	Fs
White & Williams	1975 Assmt geothermal resources US	R,Fs,HS

Bradfield Canal SE-16

Bliss	1983 Ak basic data thermal springs & wells	R,Fs,Fw
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman	1980 Assmt thermal spring S SE Ak [abs.]	R,Fs
Motyka & Moorman	1987 Geotherm resources SE Ak	R,Fs,Fw
Motyka & others	1980 Assmt therm spr S SE Ak	R,Fs
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Peale	1886 Mineral springs of US	H,R
Turner & others	1980 Geothermal resources Alaska	R,Fs
Wright	1906 Nonmetallic deposits SE Ak.	Gr,H
Wright & Wright	1908 Ketchikan & Wrangell mining districts	Gr,H

Cheeneetnuk SC-23

Blodgett & Gilbert	1983 Cheeneetnuk limestone Mc Grath	Gr
Bundtzen & Gilbert	1983 Geology upper Kuskokwim	Gr
Bundtzen & Kline	1986 Coal, peat & geotherm in Kuskokwim	R,DP
Cady & others	1955 Geology central Kuskokwim	Gr
Decker	1984 Kuskokwim group	Gr
Decker & Hoare	1982 Cretaceous Kuskokwim Group	Gs
Dickey	1983 Tertiary seds & tectonics Farewell fault area	Gs,PG
Dickey & others	1982 Cenozoic seds & Farewell fault	Gr
Gilbert	1981 Geologic map Cheeneetnuk River area	Gs

Chena NC-32

Berry & others	1980 Thermal spring list U.S.	R
Biggar	1974 Geol & geophys stdy at Chena HS (thesis)	Gs,Ps,Fs,Fw
Bliss	1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others	1979 Hydrothermal systems <90 deg	R,Fs
Forbes & Biggar	1973 Ak geothermal resource potential	R,HS
Forbes & others	1975 Utilization geothermal rural Ak	Fs,DP,Ef
Foster & others	1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others	1973 Geology Yukon-Tanana upland	Gr
Foster & others	1983 Geologic map Circle Q	Gr
Foster & others	1983 Prelim geol map Circle Quad	Gr
Gassaway & Abramson	1977 Map & table thermal springs cntr Ak	R,Fs
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Menzie & others	1983 Mineral assmt Circle Quad	Gr
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs

GEOHERMAL SITE

TOPIC

Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Muffler 1979 Assmt geothermal resources U. S.	R, Fs, HS
Reed & others 1983 Data low temp geothermal systems US	HS, R, Fs
Reeder & others 1980 Ak. geothermal program	DP
Turner & others 1980 Geothermal resources Alaska	R, Fs
Waring 1917 Mineral springs Ak	Fs, R
Waring 1965 Thermal springs US & world - a summary	Fs
Wescott 1981 He & Hg surveys Chena HS	Gc
Wescott & Turner 1981 Geol & geophys Chena HS	*, Gs, Ps, Gc
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS
Wilson & Shew 1981 Prelim K-Ar studies Circle Q	Gr

Chief Shakes SE-14

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R, Fs, Fw
Brew & others 1984 Geologic map Peterbrg, Sumdum, P. Alex	Gr
Brook & others 1979 Hydrothermal systems <90 deg	R, Fs
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Kerr 1948 Stikine & Iskut River area BC, Canada	Gr
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Motyka & Moorman 1980 Assmt thermal spring S SE Ak [abs.]	R, Fs
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R, Fs, Fw
Motyka & others 1980 Assmt therm spr S SE Ak	R, Fs
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Muffler 1979 Assmt geothermal resources U. S.	R, Fs, HS
Ogle 1976 Ak. hot spring site for small binary plant	R, DP, Fs
Rosenbruch & Bottge 1975 Econ potent 3 sites Ak	EF
Sloan 1976 Chem anal Chief Shakes HS	Fs
Turner & others 1980 Geothermal resources Alaska	R, Fs
Waring 1917 Mineral springs Ak	Fs, R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS
Wright & Wright 1908 Ketchikan & Wrangell mining districts	Gr, H

Chiginagak AA-36

Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q	Gr
Detterman & others 1985 Geol map Ugashik & W Karluk Q	Gr
Detterman & others 1986 Quat map Ugashik-Bristol Bay-Karluk Q	Gr
LeCompte 1981 Prelim map Landsat Ugashik & Karluk Q	Gr
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP, Gr, V
Miller & Barnes 1976 Geotherm develop Ak summary	DP, Gr, V
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Smith & Baker 1924 Cold Bay-Chignik dist	Gr, H

Chuginadak AA-10

Berry & others 1980 Thermal spring list U.S.	R
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Motyka & others 1981 Assmt thermal spring Aleutian arc	R, Fs, Ff, Gr
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw

GEOHERMAL SITE

TOPIC

Turner & others 1980 Geothermal resources Alaska	R, Fs
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS

Chuilnuk SC-2

Anonymous 1975 Ak regional profiles SW region	C
Berry & others 1980 Thermal spring list U.S.	R
Collazzi & Ireland 1986 Hydrology lower Kuskokwim basin	Gr
Decker & Hoare 1982 Cretaceous Kuskokwim Group	Gs
Decker & others 1984 Geology Sleetmute B-5 Quad	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R, Fs
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Robinson & Decker 1986 Ages & analysis from SW Alaska	Gr, PG
Robinson & others 1984 Bdrck geol Chuilnuk & Kiokluk Mts [abs]	Gr
Robinson & others 1984 Geologic map Sleetmute B-5 Q	Gr
Robinson & others 1986 Rocks from Sleetmute, Russian Mission Q	PG

Circle NC-33

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R, Fs, Fw
Brook & others 1979 Hydrothermal systems <90 deg	R, Fs
Forbes & Biggar 1973 Ak geothermal resource potential	R, HS
Forbes & others 1975 Utilization geothermal rural Ak	Fs, DP, Ef
Foster & others 1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others 1973 Geology Yukon-Tanana upland	Gr
Foster & others 1983 Geologic map Circle Q	Gr
Foster & others 1983 Prelim geol map Circle Quad	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R, Fs
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Menzie & others 1983 Mineral assmt Circle Quad	Gr
Mertie 1930 Geology Eagle-Circle district	Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Muffler 1979 Assmt geothermal resources U. S.	R, Fs, HS
Nehring & others 1979 Sulfate geotherm western U. S.	R, Fs
Ogle 1976 Ak. hot spring site for small binary plant	R, DP, Fs
Reeder & others 1980 Ak. geothermal program	DP
Turner & others 1980 Geothermal resources Alaska	R, Fs
Waring 1917 Mineral springs Ak	Fs, R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS
Wilson & Shew 1981 Prelim K-Ar studies Circle Q	Gr
Wiltse 1986 Radon hazard assessment Circle HS	Gc

Clear Creek NC-7

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R, Fs, Fw
Brook & others 1979 Hydrothermal systems <90 deg	R, Fs
Forbes & others 1975 Utilization geothermal rural Ak	Fs, DP, Ef
Forbes & others 1975 Utilization of Alaska thermal springs	DP

GEOTHERMAL SITE

TOPIC

Hudson	1977 Geol map Seward Penin	Gr
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller	1972 K rich intrusive rocks W Ak	PG
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others	1972 Prelim geol map Solomon & SE Bendeleben Q	Gr
Miller & others	1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler	1979 Assmt geothermal resources U. S.	R,Fs,HS
Ogle	1976 Ak. hot spring site for small binary plant	R,DP,Fs
Reeder & others	1980 Ak. geothermal program	DP
Robinson & Stevens	1983 Geol map Seward Penin	Gr
Robinson & Stevens	1984 Geol map Seward Penin	Gr
White & Williams	1975 Assmt geothermal resources US	R,Fs,HS

Cold Bay AA-28

Berry & others	1980 Thermal spring list U.S.	R
Bliss	1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others	1979 Hydrothermal systems <90 deg	R,Fs
Brophy & Marsh	1984 Petro & geochem Cold Bay volc [abs.]	PG
Funk	1973 Late Quat geol Cold Bay (thesis)	Gr
Funk	1973 Late Quat hist Cold Bay [abs.]	Gr
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman	1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others	1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler	1979 Assmt geothermal resources U. S.	R,Fs,HS
Turner & others	1980 Geothermal resources Alaska	R,Fs
Waldron	1961 Geol recon Frosty Peak volc	Gr
White & Williams	1975 Assmt geothermal resources US	R,Fs,HS

Copper Glacier SC-19

Henning & others	1981 Wrangell-St Elias Wilderness	C
Mendenhall	1903 Mineral resources Mt Wrangell district	H,Gr
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Richter	1975 Geol map Nabesna Q	Gr
Richter	1976 Geol map Nabesna Q	Gr
Turner & others	1980 Geothermal resources Alaska	R,Fs

Dall NC-10

Berry & others	1980 Thermal spring list U.S.	R
Brosge & Patton	1982 Bedrock geol maps Dalton Hwy	Gr
Dixon & Pulpan	1986 Crustal structure-Dall City [abs.]	Ps
Gassaway & Abramson	1977 Map & table thermal springs cntr Ak	R,Fs
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others	1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava & Morrison	1974 Note on hot springs interior Ak	R,Fs
Turner & others	1980 Geothermal resources Alaska	R,Fs

GEO THERMAL SITE

TOPIC

Dulbai NC-13

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R, Fs, Fw
Brook & others 1979 Hydrothermal systems <90 deg	R, Fs
Cass 1959 Recon geol map Melozitna Q Ak.	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R, Fs
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R, Fs
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Muffler 1979 Assmt geothermal resources U. S.	R, Fs, HS
Patton & others 1978 Geol map Melozitna Q	Gr
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R, Fs

Edgecumbe SE-19

Brew & others 1965 Eruptive history Mt. Edgecumbe [abs.]	V
Brew & others 1969 Recon geol Mt Edgecumbe	Gs
Kosco 1981 Edgecumbe volc & Katmai (thesis)	PG
Myers 1978 Petro & petrogenesis Edgecumbe volc [abs.]	PG
Myers 1979 Geol, petro Edgecumbe: trnsfrm fault volc (thesis)	PG
Myers & Marsh 1981 Geol & petrogen Edgecumbe volcanics	PG
Myers & others 1984 Assim crust by basalt magma Edgecumbe	PG
Smith & Shaw 1979 Igneous related geothermal systems	R, HS
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS
Workman 1979 Signif volc in prehist of subarctic	C

Egg Island AA-27

Bliss 1983 Ak basic data thermal springs & wells	R, Fs, Fw
Coats 1956 Recon geol W Aleutian Islands	Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R, Fs, Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R, Fs, Ff, Gr
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Peale 1886 Mineral springs of US	H, R
Turner & others 1980 Geothermal resources Alaska	R, Fs
Waldron 1961 Geol recon Frosty Peak volc	Gr

Emmons Lake AA-29

Berry & others 1980 Thermal spring list U.S.	R
Kennedy & Waldron 1955 Geol Pavlof volcano	Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP, Gr, V
Miller & Barnes 1976 Geotherm develop Ak summary	DP, Gr, V
Motyka 1983 High temp hydrothermal resources Aleut arc	R, Fs, Ff
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R, Fs, Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R, Fs, Ff, Gr
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Reeder & others 1980 Ak. geothermal program	DP

GEOTHERMAL SITE

TOPIC

Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Turner & others 1980 Geothermal resources Alaska	R,Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

False Pass AA-25

Baker & others 1977 Geotherm springs-salmon hatchery site	R,DP,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Turner & others 1980 Geothermal resources Alaska	R,Fs

Fish Bay SE-8

Berg & Hinckley 1963 Recon geol northern Baranof Is.	Gr
Berry & others 1980 Thermal spring list U.S.	R
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Knopf 1912 Sitka mining district	H,Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1964 Recon geol map Baranof & Kruzof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1987 Geotherm resources SE Ak	R,Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Nava 1975 Note on hot springs SE Ak	R,Fs
Rossmann 1959 Geol & ore dep NW Chichagof Is	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Gas Rocks AA-38

Berry & others 1980 Thermal spring list U.S.	R
Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q	Gr
Detterman & others 1985 Geol map Ugashik & W Karluk Q	Gr
Detterman & others 1986 Quat map Ugashik-Bristol Bay-Karluk Q	Gr
LeCompte 1981 Prelim map Landsat Ugashik & Karluk Q	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1984 2 stage volcanism Ugashik-Peulik [abs.]	PG
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Smith 1925 Cold Bay Katmai dist	Gr,H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr,H
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs

GEOTHERMAL SITE

TOPIC

Geyser Bight

AA-12

Berry & others 1980 Thermal spring list U.S.	R
Black 1974 Geol & ancient Aleuts	Gr
Black 1974 Late Quat sea level changes Umnak Is	Gr
Black 1975 Late Quat geomorph Umnak Is	Gr
Black 1976 Geol Umnak related to Aleuts	Gr
Bliss 1983 Ak basic data thermal springs & wells	R, Fs, Fw
Brook & others 1979 Hydrothermal systems <90 deg	R, Fs
Byers 1959 Geol Umnak & Bogoslof Islands	Gr
Byers 1961 Petro 3 volc suites Umnak & Bogoslof Islands	PG
Byers & Brannock 1949 Volc activity Umnak & Great Sitkin Is	V
Coats 1956 Recon geol W Aleutian Islands	Gr
Forbes & Biggar 1973 Ak geothermal resource potential	R, HS
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP, Gr, V
Miller & Barnes 1976 Geotherm develop Ak summary	DP, Gr, V
Motyka 1983 High temp hydrothermal resources Aleut arc	R, Fs, Ff
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R, Fs, Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R, Fs, Ff, Gr
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Muffler 1979 Assmt geothermal resources U. S.	R, Fs, HS
Nehring & others 1979 Sulfate geotherm western U. S.	R, Fs
Ogle 1976 Ak. hot spring site for small binary plant	R, DP, Fs
Petrov 1884 Alaska population & resources	H, C
Reeder & others 1980 Ak. geothermal program	DP
Turner & others 1980 Geothermal resources Alaska	R, Fs
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS

Glacier Valley

AA-17

Arce 1983 Volcanic hazards Makushin Volcano (thesis)	Eg
Arce & Economides 1982 Volcanic hazards Makushin Volcano	Eg
Boyd & Jacob 1984 Seismicity of Unalaska	Pr
Carey & others 1983 Unalaska geotherm land, regs, & environ	DP
Corwin & Fitterman 1983 Self potential Makushin geotherm area	Ps
Denig-Chakroff 1985 Unalaska recon study	EF
Drewes & others 1961 Geol Unalaska & adjacent shelf	Gr
Economides & others 1981 Unalaska geothermal development	DP
Economides & others 1982 Eng, geol anal geothermal sites	EF, Er
Economides & others 1985 Eval Makushin geothermal reservoir	Er
Isselhardt & others 1983 Geotherm resource model Makushin	RM, HS
Isselhardt & others 1983 Temp grads Makushin geothermal area	HS
Jacob & Boyd 1985 Seismic network on Unalaska	Pr
Martin 1917 Mineral resources of Ak.	H, Gr
Matlick & Parmentier 1983 Hg soil survey Makushin	Gc, Fs, Ff
Morrison-Knudson Co. 1981 Geotherm potential Aleut Unalaska	R
Motyka 1982 Fluid geochem Makushin & Akutan geotherm area	Ff, Fs
Motyka 1982 Fluid geochemistry of Makushin	Fs, Ff
Motyka 1983 Geochem & isotope study water & gas Makushin	Fs, Ff
Motyka 1983 High temp hydrothermal resources Aleut arc	R, Fs, Ff

GEOHERMAL SITE

TOPIC

Motyka & Moorman 1981 Recon thermal spr Aleutian arc R,Fs,Ff
 Motyka & Queen 1984 Makushin fluids samps & well log Fs,Ff,Fw,PG
 Motyka & others 1981 Assmt thermal spring Aleutian arc R,Fs,Ff,Gr
 Motyka & others 1982 Fluid geochemistry Makushin area Fs,Ff
 Motyka & others 1983 Fluid investigations Makushin area Fs,Ff
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Motyka & others 1986 Makushin well chem equilib *,Fw,Fs,Ff,HA,RM
 Nichols & Reeder 1983 Ak geothermal & hydrotherm development R,DP
 Nye & Swanson 1986 Chem strat magma plumb Makushin [abs] V,Gs,PG
 Nye & Swanson 1987 Makushin magma chamber PG,Gs,V
 Nye & others 1984 Geol map Makushin geothermal area Gs
 Nye & others 1986 Petro geochem Quat volc Makushin *,V,Gs,PG
 Parmentier & others 1983 Geol & hydrotherm alter Makushin Gs,HA
 Queen 1984 Lith log & hydrotherm alt of core from Makushin HA
 Queen 1987 Alt, H2O-rock equil, Makushin (thesis) HA,Fw,Gs,Gc,HS
 Queen & Motyka 1984 Changes in Makushin geoth system [abs.] HA
 Reeder 1981 V-D hydrotherm manifest Unalaska [abs.] Gs,Ff
 Reeder 1982 Hydrotherm potential Aleut arc - Makushin [abs] DP
 Reeder 1982 Hydrothermal resources Makushin region DP
 Reeder 1982 Hydrothermal resources N Unalaska Is Fs,Ff
 Reeder 1984 Fault & dike orientation Makushin [abs.] Gr
 Reeder & others 1980 Ak. geothermal program DP
 Reeder & others 1982 Econ & eng geoth develop Makushin EF,Eg,DP
 Reeder & others 1985 Geol geotherm resource Makushin R,Gs
 Republic 1983 Unalaska Gtrml Proj 1B Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
 Republic 1984 Unalaska Gtrml Proj II Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA
 Republic 1985 Unalaska Gtrml Proj III *,Er,HS,Fw,Gs,Ps,DP,RM,HA
 Shore 1985 Resist survey & interp Ps,RM
 Snyder & Fraser 1963 Pillowed lavas Unalaska Gr
 Spencer & others 1982 Anal geothrm res devel Unalaska EF,DP
 Swanson 1983 Min & fract Makushin volc [abs.] PG
 Swanson & others 1983 Petro Makushin volc [abs.] PG
 Turner & others 1980 Geothermal resources Alaska R,Fs

Goddard SE-9

Berry & others 1980 Thermal spring list U.S. R
 Bliss 1983 Ak basic data thermal springs & wells R,Fs,Fw
 Brew & others 1984 Geologic map Peterbrg, Sumdum, P. Alex Gr
 Brook & others 1979 Hydrothermal systems <90 deg R,Fs
 Buddington & Chapin 1929 Geol & mineral deposits SE Ak Gr
 Economides & Arce 1983 Geothermal in Ak - eng & geol anal EF,Er
 Economides & others 1982 Eng,geol anal geothermal sites EF,Er
 Jackson 1880 Alaska & its missions H,C
 Knopf 1912 Sitka mining district H,Gr
 Loney & others 1964 Recon geol map Baranof & Kruzof Is Gr
 Loney & others 1967 Radio ages & fault movements N SE Ak Gr
 Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is Gr
 Markle 1979 Geotherm Ak site data base & devel status R,Fs,Gr,C
 Miller 1973 Distribution & chem analysis thermal springs Ak R,Fs
 Motyka & Moorman 1987 Geotherm resourcers SE Ak R,Fs,Fw
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Muffler 1979 Assmt geothermal resources U. S. R,Fs,HS
 Nava 1975 Note on hot springs SE Ak R,Fs

GEOHERMAL SITE

TOPIC

Peale 1886 Mineral springs of US	H,R
Reeder & others 1980 Ak. geothermal program	DP
Reifenstuh1 1984 Crawfish Inlet Pluton Baranof Is [abs.]	Gs,PG
Reifenstuh1 1984 Geol & geophys Goddard HS (thesis)	Gs,Ps,Fs
Reifenstuh1 1986 Geol Goddard Hot Springs	Gs,Ps,Fs
Rosenthal 1908 Hot springs of southeast Alaska	H,R
Turner & others 1980 Geothermal resources Alaska	R,Fs
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Wright 1906 Nonmetallic deposits SE Ak.	Gr,H

Granite Mt. NC-8

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Hudson 1977 Geol map Seward Penin	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1970 Petro plutonic rocks W central Ak	PG
Miller 1971 Petro plutonic rocks W cent Ak (thesis)	PG
Miller 1972 K rich intrusive rocks W Ak	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Robinson & Stevens 1983 Geol map Seward Penin	Gr
Robinson & Stevens 1984 Geol map Seward Penin	Gr
Turner & Swanson 1981 Continent rifting new model Seward Pen	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Turner & others 1981 Continent rifting new model Seward Pen	Gr
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Great Sitkin AA-5

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Byers & Brannock 1949 Volc activity Umnak & Great Sitkin Is	V
Coats 1956 Recon geol W Aleutian Islands	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Motyka 1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Poreda & others 1981 He isot vars Ak-Aleut arc [abs.]	R,Fs,Ff
Shelikhov 1790 Voyage to America 1783-1786	H,C
Simons & Mathewson 1955 Geol Great Sitkin Is	Gr

GEO THERMAL SITE

TOPIC

Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Hague AA-30

Kennedy & Waldron 1955 Geol Pavlof volcano	Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Turner & others 1980 Geothermal resources Alaska	R,Fs

Hawk NC-9

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1970 Petro plutonic rocks W central Ak	PG
Miller 1971 Petro plutonic rocks W cent Ak (thesis)	PG
Miller 1972 K rich intrusive rocks W Ak	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Patton & others 1968 Reg geol map Shungnak & Ambler River Q	Gr
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Rosenbruch & Bottge 1975 Econ potent 3 sites Ak	EF
Turner & others 1980 Geothermal resources Alaska	R,Fs

Hornor NC-16

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava & Morrison 1974 Note on hot springs interior Ak	R,Fs
Patton & Hoare 1968 Kaltag Fault W-C Ak	Gr
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Reeder & others 1980 Ak. geothermal program	DP
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
Whympers 1868 Journey Norton Sound to Fort Yukon	H

Hot Springs Bay AA-22

Baker & others 1977 Geotherm springs-salmon hatchery site	R,DP,Fs
Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Byers & Barth 1948 Geol Akutan Island	Gr
Byers & Barth 1953 Volc activity Akun & Akutan Islands	V

GEOHERMAL SITE

TOPIC

Coats	1956 Recon geol W Aleutian Islands	Gr
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka	1982 Fluid geochem Makushin & Akutan geotherm area	Ff,Fs
Motyka	1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka	1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka & Moorman	1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others	1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others	1982 Fluid geochem Hot Springs Akutan	Fs,Ff
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others	1985 Geol geoc geophys Akutan *	Gs,Fs,Ps,RM,Ff,DP
Peale	1886 Mineral springs of US	H,R
Romick	1982 Ig petro & geochem N. Akutan Is (thesis)	PG
Romick	1983 Ig petro & geochem N. Akutan Is [abs.]	PG
Romick	1986 Ig pet and geochem N. Akutan	PG
Romick & Swanson	1983 Petro & fract lava Akutan Is [abs.]	PG
Turner & others	1980 Geothermal resources Alaska	R,Fs
Waring	1965 Thermal springs US & world - a summary	Fs
Wescott & others	1982 Geophys survey Hot Springs Akutan Is	Ps
White & Williams	1975 Assmt geothermal resources US	R,Fs,HS

Hot Springs Cove AA-14

Berry & others	1980 Thermal spring list U.S.	R
Black	1974 Geol & ancient Aleuts	Gr
Black	1974 Late Quat sea level changes Umnak Is	Gr
Black	1975 Late Quat geomorph Umnak Is	Gr
Black	1976 Geol Umnak related to Aleuts	Gr
Bliss	1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others	1979 Hydrothermal systems <90 deg	R,Fs
Byers	1959 Geol Umnak & Bogoslof Islands	Gr
Byers	1961 Petro 3 volc suites Umnak & Bogoslof Islands	PG
Byers & Brannock	1949 Volc activity Umnak & Great Sitkin Is	V
Forbes & others	1975 Utilization geothermal rural Ak	Fs,DP,Ef
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka	1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka & Moorman	1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others	1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler	1979 Assmt geothermal resources U. S.	R,Fs,HS
Ogle	1976 Ak. hot spring site for small binary plant	R,DP,Fs
Reeder & others	1980 Ak. geothermal program	DP
Turner & others	1980 Geothermal resources Alaska	R,Fs
Waring	1965 Thermal springs US & world - a summary	Fs
White & Williams	1975 Assmt geothermal resources US	R,Fs,HS

Hutlinana NC-29

Berry & others	1980 Thermal spring list U.S.	R
Bliss	1983 Ak basic data thermal springs & wells	R,Fs,Fw
Foster & others	1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others	1973 Geology Yukon-Tanana upland	Gr
Gassaway & Abramson	1977 Map & table thermal springs cntr Ak	R,Fs

GEO THERMAL SITE

TOPIC

Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Mertie	1932 Yukon Tanana region	Gr
Mertie	1934 Mineral deposits Rampart & Hot Springs district	Gr
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others	1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava & Morrison	1974 Note on hot springs interior Ak	R,Fs
Reed & others	1983 Data low temp geothermal systems US	HS,R,Fs
Turner & others	1980 Geothermal resources Alaska	R,Fs
Waring	1917 Mineral springs Ak	Fs,R
Waring	1965 Thermal springs US & world - a summary	Fs

Iliamna SC-12

Capps	1935 Southern Alaska Range	Gr
Detterman & Hartsock	1966 Geol Iniskin-Tuxedni region	Gr
Detterman & others	1976 Geol map by faults in Kenai & Tyonek Q	Gr
Estes	1978 Seismotectonic studies lower Cook Inlet (thesis)	Pr
Johnson	1979 Volc gas studies Ak volcanoes	R,Ff
Juhle	1955 Iliamna Volcano	Gs
Kienle & Swanson	1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson	1983 Volc E Aleut arc Quat & Holo centers	V,PG
Martin & Katz	1910 Geol & min resources Iliamna & Lake Clark	H,Gr
Martin & Katz	1912 Geol recon Iliamna Region	H,Gr
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Page & others	1982 Seism Spurr, Redoubt, & Iliamna [abs.]	V
Poreda & others	1981 He isot vars Ak-Aleut arc [abs.]	R,Fs,Ff
Prosser	1912 Volcanic road-building	H,V
Riehle	1985 Recon Holo tephra deposits upper Cook Inlet	V
White & Williams	1975 Assmt geothermal resources US	R,Fs,HS
White & Williams	1975 Assmt geothermal resources US	R,Fs,HS
Wilson & Kienle	1976 Infrasonic signals Augustine volc [abs.]	V

Inmachuk NC-37

Herreid	1966 Geol & geochem Inmachuk River	Gr
Hopkins	1963 Imuruk Lake Seward Penin	Gr
Hudson	1977 Geol map Seward Penin	Gr
Lockhart	1981 Gravity survey central Seward Penin.	Pr
Miller	1972 K rich intrusive rocks W Ak	PG
Moffit	1905 Fairhaven gold placers Seward Penin	H,Gr
Robinson & Stevens	1983 Geol map Seward Penin	Gr
Robinson & Stevens	1984 Geol map Seward Penin	Gr
Turner & others	1980 Geothermal resources Alaska	R,Fs
Waring	1917 Mineral springs Ak	Fs,R
Waring	1965 Thermal springs US & world - a summary	Fs

Ishtalitna NC-22

Chapman & others	1975 Prelim geol map Tanana & NE Kantishan Q	Gr
Chapman & others	1982 Recon geol map Tanana Q	Gr
Dover & Mayaoka	1985 Rocks Ray Mts, Tanana & Bettles Q	Gr
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw

GEOHERMAL SITE

TOPIC

Patton & Miller 1970 Prelim geol invest Kanuti	Gr
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs

Kagamil AA-11

Berry & others 1980 Thermal spring list U.S.	R
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Kaguyak SC-21

Allen & Zies 1923 Chem study fumaroles Katmai region	Ff
Berg & Keinle 1966 Gravity meas Katmai volc area	Pr
Bordet & others 1963 Katmai	V
Decker 1964 Geophys investigations Katmai [abs.]	Ps
Johnson 1980 Volc contr Cl to stratosphere	V,Ff
Keller & Reiser 1959 Geol Katmai	Gr
Kienle 1968 Gravity Survey Katmai (thesis)	V,Ps
Kienle 1969 Gravity traverse VTTS, Katmai [abs.]	V,Ps
Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & others 1981 Volcanic centers Katmai [abs.]	V,R
Kosco 1981 Andesitic volcanism at Katmai	PG
Kosco 1981 Edgecumbe volc & Katmai (thesis)	PG
Kubota & Berg 1967 Magma in Katmai range	V,Pr
Matumoto 1971 Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Ward 1967 Microquake study Katmai	Pr,V
Morris 1985 Katmai Park draft management plan	C,DP
Shipley 1919 VTTS	H
Smith 1925 Cold Bay Katmai dist	Gr,H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr,H
Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
Swanson & others 1981 Geol & petro Kaguyak Crater [abs.]	PG
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Kanaga AA-3

Berry & others 1980 Thermal spring list U.S.	R
Coats 1947 Geol N Kanaga Is.	Gr
Coats 1952 Magmatic different Adak & Kanaga Islands	PG
Coats 1956 Geol N Kanaga Island	Gr
Coats 1956 Recon geol W Aleutian Islands	Gr
Fraser & Barnett 1959 Geol Delarof & Andreanof Islands	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Peale 1886 Mineral springs of US	H,R
Shelikhov 1790 Voyage to America 1783-1786	H,C

GEOTHERMAL SITE

TOPIC

Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Wilcox 1959 Volcanic ash falls Alaska	V

Kanutai NC-25

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Dover & Mayaoka 1985 Rocks Ray Mts, Tanana & Bettles Q	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Patton & Miller 1970 Prelim geol invest Kanuti	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Katmai SC-6

Allen & Zies 1923 Chem study fumaroles Katmai region	Ff
Anma 1971 Aeromag survey VTTS (thesis)	Pr
Berg & Keinle 1966 Gravity meas Katmai volc area	Pr
Berg & others 1967 Crustal structure - Katmai	Ps
Berry & others 1980 Thermal spring list U.S.	R
Bordet & Tazieff 1963 Erupt of Katmai & ignimbrites	V
Bordet & others 1963 Katmai	V
Chaigneau & Bordet 1963 Gas in glass in VTTS (Fr)	P,V
Clark 1912 Katmai eruption	V,H
Curtis 1955 Importance of Novarupta [abs.]	V
Curtis 1968 Stratigraphy of ejecta 1912 eruption Katmai	V
Daily 1912 Eruption of Katmai	V,H
Decker 1964 Geophys investigations Katmai [abs.]	Ps
Eickelberger & Hildreth 1986 Drilling in Katmai [abs.]	V,Gs,Ps
Escher 1922 Lahar VTTS	V,H
Federman & Scheidegger 1984 Distal tephra 1912 Novarupta	V
Fenner 1920 Geol Katmai 1912 eruption [abs.]	V,H
Fenner 1920 Katmai great eruption of 1912	V,H
Fenner 1923 Tuff deposit VTTS	V,H
Fenner 1923 Tuff deposit VTTS	V,H
Fenner 1926 Katmai magmatic province	PG
Fenner 1930 Mt Katmai & Mt Mageik	V,H
Fenner 1937 Tuffs of Katmai & Yellowstone	V,H
Fenner 1950 Chemical kinetics Katmai eruption	PG
Fierstein & Hildreth 1984 Pyroclastic deposits Novarupta [abs.]	V
Forbes & Biggar 1973 Ak geothermal resource potential	R,HS
Forbes & Kienle 1971 Petro pre 1912 pyroclast VTTS [abs]	PG,Gs,V
Fry 1912 Mineral content volcanic ashes	V,H
Gedney & others 1970 Seismic refraction - Katmai	Ps
Griggs 1917 VTTS	H

GEO THERMAL SITE

TOPIC

Griggs	1918 Eruption of Katmai	V,H
Griggs	1918 VTTS	H
Griggs	1918 VTTS mud flow	V,H
Griggs	1919 Character of Katmai eruption	H,V
Griggs	1919 Katmai & VTTS	H,V
Griggs	1921 VTTS	H
Griggs	1921 VTTS	V,H
Griggs	1922 VTTS	V,H
Griggs	1923 VTTS	V,H
Hamilton	1973 Snow & ice during Katmai eruption [abs.]	V
Higbie	1975 VTTS	V
Hildreth	1980 Novarupta 1912 Petro of ejecta [abs.]	PG
Hildreth	1981 1912 eruption VTTS [abs.]	PG
Hildreth	1983 Zoned eruption 1912 VTTS	PG
Hildreth & Grunder	1980 VTTS comp & isotope of ejecta [abs.]	PG
Hildreth & others	1981 VTTS summary of strat & petro of ejecta	PG
Johnson	1979 Volc gas studies Ak volcanoes	R,Ff
Johnson	1980 Volc contr Cl to stratosphere	V,Ff
Johnson & Grunder	1980 VTTS Tuff II Comp & isot ejecta [abs.]	V
Johnson & Hildreth	1980 VTTS Tuff I Empl, comp & weld [abs.]	V
Johnson & Hildreth	1980 VTTS comp & isot of ejecta [abs.]	V
Keith	1984 Prelim obs fumaroles VTTS	HA
Keith	1985 Hydrotherm alt Novarupta dome VTTS [abs.]	HA
Keller	1955 Geol Katmai [abs.]	Gr
Keller & Reiser	1959 Geol Katmai	Gr
Kienle	1968 Gravity Survey Katmai (thesis)	V,Ps
Kienle	1969 Gravity traverse VTTS, Katmai [abs.]	V,Ps
Kienle	1970 Gravity traverse VTTS	Pr
Kienle & Swanson	1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson	1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & others	1970 Seism evidence pre 1912 tuff VTTS [abs.]	Gr
Kienle & others	1981 Volcanic centers Katmai [abs.]	V,R
Kosco	1981 Andesitic volcanism at Katmai	PG
Kosco	1981 Edgumbe volc & Katmai (thesis)	PG
Kubota & Berg	1967 Magma in Katmai range	V,Pr
Lovering	1955 Alteration near halogen-sulfur fumarole [abs.]	HA
Lovering	1957 Halogen-acid alteration VTTS	HA,Ff
MacGregor	1952 Eruptive mechanisms VTTS	V
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Martin	1913 Eruption Katmai	V,H
Matumoto	1971 Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Molnar	1967 Shadow effect S waves Katmai [abs.]	Pr,V
Matumoto & Ward	1967 Microquake study Katmai	Pr,V
Menyaylov	1969 Comparison Bezymyany & Katmai (Rus)	V,Ff
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & Barnes	1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes	1976 Geotherm develop Ak summary	DP,Gr,V
Morris	1985 Katmai Park draft management plan	C,DP
Motyka	1977 Katmai caldera geothermal activity	V,Fs
Motyka	1978 Surveillance Katmai caldera & crater lake	V
Motyka & others	1977 Glac-volc investigations Katmai [abs.]	V
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muller & others	1954 Volcanic activity Katmai	V
Okimura	1930 Eruption Katmai	V,H

GEOHERMAL SITE

TOPIC

Poreda & others 1981 He isot vars Ak-Aleut arc [abs.]	R,Fs,Ff
Ramdohr 1962 Magnetite from fumaroles VTTS (Ger)	HA
Reck 1930 Review VTTS (Ger)	H,V
Roehn 1941 Pumice deposits Katmai	G
Rubenstein & others 1985 Isot & trace elem Katmai [abs.]	PG
Sayre & Hagelbarger 1918 Temps in VTTS	H,HS
Sbar & Matumoto 1972 Refraction VTTS	Pr
Shipley 1919 VTTS	H
Shipley 1920 Chem obs VTTS	HA,Ff
Shipley 1920 Katmai gas & encrustations	HA,Ff,V
Smith 1925 Cold Bay Katmai dist	Gr,H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr,H
Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Sosman 1919 Temp in fumaroles VTTS	H,HS
Stone & Packer 1972 Paleomag VTTS [abs.]	Pr
Stone & others 1971 Magnetic anomalies VTTS [abs.]	Pr
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
Tams 1924 Katmai (Ger)	V,H
Thompson & Keith 1984 Cl & F in waters VTTS [abs.]	Fs
Turner & others 1980 Geothermal resources Alaska	R,Fs
Ward & Matumoto 1967 Sum volc & seismic activity Katmai	V,Pr
Ward & Ward 1966 Volc activity in Katmai	V
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
Wilcox 1959 Volcanic ash falls Alaska	V
Williams 1955 Prelim geol Katmai & VTTS	Gr
Williams & others 1956 Mt Katmai & VTTS new interp 1912 eruptn	V
Zies 1921 Hot springs in VTTS	Fs
Zies 1924 Fumarolic incrustations Katmai [abs.]	HA
Zies 1924 Fumarolic incrustations VTTS	HA
Zies 1929 VTTS I-fumarolic incrustations, II-acid gases	Ff,HA

Kenmore AA-26

Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Turner & others 1980 Geothermal resources Alaska	R,Fs

Kilo NC-23

Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q	Gr
Chapman & others 1982 Recon geol map Tanana Q	Gr
Dover & Mayaoka 1985 Rocks Ray Mts, Tanana & Bettles Q	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava & Morrison 1974 Note on hot springs interior Ak	R,Fs
Patton & Miller 1970 Prelim geol invest Kanuti	Gr
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs

GEOHERMAL SITE

TOPIC

Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs

Kliuchef AA-7

Berry & others 1980 Thermal spring list U.S.	R
Coats 1956 Recon geol W Aleutian Islands	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Marsh 1980 Geol & petrol N Atka Is [abs.]	Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Motyka 1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Myers & others 1986 Isot var Adak & Atka volc plumb	V,PG,Gr
Peale 1886 Mineral springs of US	H,R
Reeder & others 1980 Ak. geothermal program	DP
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Korovin AA-6

Baker & Eggler 1983 Atka high alumina basalt	PG
Berry & others 1980 Thermal spring list U.S.	R
Coats 1956 Recon geol W Aleutian Islands	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Marsh 1980 Geol & petrol N Atka Is [abs.]	Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka 1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Myers & others 1986 Isot var Adak & Atka volc plumb	V,PG,Gr
Peale 1886 Mineral springs of US	H,R
Reeder & others 1980 Ak. geothermal program	DP
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Kukak SC-9

Allen & Zies 1923 Chem study fumaroles Katmai region	Ff
Griggs 1919 Katmai & VTTS	H,V
Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kosco 1981 Andesitic volcanism at Katmai	PG
Kosco 1981 Edgecumbe volc & Katmai (thesis)	PG
MacGregor 1952 Eruptive mechanisms VTTS	V
Morris 1985 Katmai Park draft management plan	C,DP
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muller & others 1954 Volcanic activity Katmai	V

GEOHERMAL SITE

TOPIC

Reck 1930 Review VTTS (Ger)	H,V
Smith 1925 Cold Bay Katmai dist	Gr,H
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Kupreanoff AA-33

Detterman & others 1979 Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981 Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981 Quat geol map Chignik & Sutwik Is Q	Gr
Eakins 1969 Sulfur deposit Stepovak Bay [abs.]	Gr
Hubbard 1931 Geol Aniakchak & Veniaminof [abs.]	Gr,H
Hubbard 1931 World inside a mountain	V,H
Knappen 1933 Aniakchak & Veniaminof volcanoes [abs.]	Gr,H
LeCompte & Steele 1981 Map Landsat Chignik & Sutwik Is Q	Gr
Maddren 1919 Sulfur on Unalaska & Akun Is & Stepovak Bay	H,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Palache 1904 Geol Chichagof Cove, Stepovak Bay	Gr,H
Prosser 1912 Volcanic road-building	H,V
Yount & others 1985 Eruption Mt Veniaminof	V
Yount & others 1985 New Holo vent Port Moller & Stepovak Bay Q	V

Kwiniuk NC-6

Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Forbes & others 1975 Utilization geothermal rural Ak	Fs,DP,Ef
Hudson 1977 Geol map Seward Penin	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1972 K rich intrusive rocks W Ak	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Robinson & Stevens 1983 Geol map Seward Penin	Gr
Robinson & Stevens 1984 Geol map Seward Penin	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs

Lava Creek NC-4

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Hudson 1977 Geol map Seward Penin	Gr
Hudson & Plafker 1978 Kigluaik & Bendeleben faults	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1972 K rich intrusive rocks W Ak	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS

GEOHERMAL SITE

TOPIC

Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Robinson & Stevens 1983 Geol map Seward Penin	Gr
Robinson & Stevens 1984 Geol map Seward Penin	Gr
Turner & Swanson 1981 Continent rifting new model Seward Pen	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Turner & others 1981 Continent rifting new model Seward Pen	Gr
Turner & others 1981 Continent rifting new model Seward Pen	Gr
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Little Melozitna NC-20

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Cass 1959 Recon geol map Melozitna Q Ak.	Gr
Forbes & others 1975 Utilization geothermal rural Ak	Fs,DP,Ef
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Patton & others 1978 Geol map Melozitna Q	Gr
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Little Sitkin AA-1

Ach & DeLong 1980 Magma evo L. Sitkin & Semisopochnoi [abs.]	PG
Berry & others 1980 Thermal spring list U.S.	R
Coats 1956 Recon geol W Aleutian Islands	Gr
Lewis & others 1960 Geol Rat Islands, Aleutians	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Snyder 1959 Geol Little Sitkin Is	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Lower Division NC-11

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1970 Petro plutonic rocks W central Ak	PG
Miller 1971 Petro plutonic rocks W cent Ak (thesis)	PG

GEOTHERMAL SITE

TOPIC

Miller 1972 K-rich intrusive rocks W Ak	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Miller & others 1966 Prelim plutonic belt W cent Ak	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R, Fs
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Nava & Morrison 1974 Note on hot springs interior Ak	R, Fs
Patton & others 1968 Reg geol map Shungnak & Ambler River Q	Gr
Reed & others 1983 Data low temp geothermal systems US	HS, R, Fs
Rosenbruch & Bottge 1975 Econ potent 3 sites Ak	EF
Turner & others 1980 Geothermal resources Alaska	R, Fs

Lower Klawasi SC-16

AGS 1975 Drum thermal springs area	DP
Andreasen & others 1958 Aeromag Copper River basin	Pr
Andreasen & others 1964 Geol inter mag & grav Copper Rvr basn	Pr
Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R, Fs, Fw
Church & others 1970 Copper River basin strat correl section	Gs
Economides & Arce 1983 Geothermal in Ak - eng & geol anal	EF, Er
Economides & others 1982 Eng, geol anal geothermal sites	EF, Er
Emery & Jones 1984 Hydrologic atlas Copper River basin	Gs
Emmel & Coonrod 1982 Geol Literature Copper River basin	Gr
Ferrians & Nichols 1965 Copper River basin	Gr
Ferrians & Schmoll 1957 Wisc proglaial lake Copper River bsn	Gr
Ferrians & others 1958 Pleist volc mudflow Copper River basin	V
Ferrians & others 1983 Copper River basin	Gr
Foresman 1968 Photogeol & geomorph Copper River basin	Gs
Foresman 1970 Mud volcanoes Copper River basin (thesis)	Gs
Grantz & others 1962 Saline springs Copper River basin	Fs
Hawkins & Motyka 1985 Stat & chem anal H2O Copper River bsn	Fs, Fw
Henning & others 1981 Wrangell-St Elias Wilderness	C
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Mendenhall 1903 Mineral resources Mt Wrangell district	H, Gr
Mendenhall 1905 Geology central Copper River region	H, Gr
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Motyka & others 1986 Geochem isot org mud volc Copper R	Fs, Ff, Fw
Nichols & Yehle 1961 Anal gas & water Copper River basin	Fs
Nichols & Yehle 1961 Mud volc Copper River basin	Fs
Nichols & Yehle 1969 Eng geol map SE Copper River basin	Gs
Reed & others 1983 Data low temp geothermal systems US	HS, R, Fs
Reeder & others 1980 Ak. geothermal program	DP
Reitsema 1979 Gases of mud volc Copper River basin	Fs
Stoltzfus 1982 Copper River basin planning study	C
Turner & others 1980 Geothermal resources Alaska	R, Fs
Turner & others 1983 Sum, eval gthrm exp Copper R bsn	Gs, Ps, Fs, RM
Wescott & Turner 1983 Geotherm expl E Copper R basin	Ps, Gc, Fs, Fw
Wescott & Turner 1983 Geotherm potent Copper R basin	Gs, Ps, Gc, DP
Wescott & Turner 1985 Geotherm invest Copper *	Gs, Ps, Gc, DP, Fs, Fw
Williams 1985 Eng geol map Copper River basin	Eg
Yehle & others 1985 Geol frm drilling in Copper R. basin	Gr

GEOTHERMAL SITE

TOPIC

Lower Ray NC-26

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R, Fs, Fw
Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q	Gr
Chapman & others 1982 Recon geol map Tanana Q	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R, Fs
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R, Fs
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Patton & Miller 1970 Prelim geol invest Kanuti	Gr
Reed & others 1983 Data low temp geothermal systems US	HS, R, Fs
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R, Fs
Waring 1917 Mineral springs Ak	Fs, R
Waring 1965 Thermal springs US & world - a summary	Fs

Makushin Valley AA-18

Allely 1986 Seismic refraction Makushin	Ps
Arce 1983 Volcanic hazards Makushin Volcano (thesis)	Eg
Arce & Economides 1982 Volcanic hazards Makushin Volcano	Eg
Beebee & Kirkwood 1979 Unalaska-geothermal prospects	C, EF
Berry & others 1980 Thermal spring list U.S.	R
Boyd & Jacob 1984 Seismicity of Unalaska	Pr
Campbell & Economides 1984 Summary Well no. 1 Makushin volc	Er
Carey & others 1983 Unalaska geotherm land, regs, & environ	DP
Carrick & Maurer 1986 Hydrology - Makushin	Gs
Coats 1956 Recon geol W Aleutian Islands	Gr
Combellick 1986 Eng geol power plant site Makushin	Eg
Corwin & Fitterman 1983 Self potential Makushin geotherm area	Ps
Davies 1986 Seismic hazards - Makushin	Eg, Ps
Denig-Chakroff 1985 Unalaska recon study	EF
Denig-Chakroff & others 1985 Development pot Mak reservoir	Er, DP
Drewes & others 1961 Geol Unalaska & adjacent shelf	Gr
Economides & Arce 1983 Geothermal in Ak - eng & geol anal	EF, Er
Economides & others 1981 Unalaska geothermal development	DP
Economides & others 1982 Eng, geol anal geothermal sites	EF, Er
Economides & others 1985 Eval Makushin geothermal reservoir	Er
Holmes 1986 Archaeological evaluation Makushin	C
Isselhardt & others 1983 Geotherm resource model Makushin	RM, HS
Isselhardt & others 1983 Temp grads Makushin geothermal area	HS
Jacob & Boyd 1985 Seismic network on Unalaska	Pr
Jones 1986 Coastal engineering - Makushin	Eg
Krause 1986 Power & road corridor study Makushin	Eg, Ps, DP
Long 1986 Glacial hazard Makushin	Eg
March 1986 Avalanche hazards- Makushin	Eg
Martin 1917 Mineral resources of Ak.	H, Gr
Matlick & Parmentier 1983 Hg soil survey Makushin	Gc, Fs, Ff
Morrison-Knudson Co. 1981 Geotherm potential Aleut Unalaska	R
Motyka 1982 Fluid geochem Makushin & Akutan geotherm area	Ff, Fs
Motyka 1982 Fluid geochemistry of Makushin	Fs, Ff
Motyka 1983 Geochem & isotope study water & gas Makushin	Fs, Ff

Motyka	1983 High temp hydrothermal resources Aleut arc	R, Fs, Ff
Motyka & Moorman	1981 Recon thermal spr Aleutian arc	R, Fs, Ff
Motyka & Queen	1984 Makushin fluids samps & well log	Fs, Ff, Fw, PG
Motyka & others	1981 Assmt thermal spring Aleutian arc	R, Fs, Ff, Gr
Motyka & others	1982 Fluid geochemistry Makushin area	Fs, Ff
Motyka & others	1983 Fluid investigations Makushin area	Fs, Ff
Motyka & others	1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Motyka & others	1986 Makushin well chem equilib *	Fw, Fs, Ff, HA, RM
Nichols & Reeder	1983 Ak geothermal & hydrotherm development	R, DP
Nye	1986 Volcanic hazards, Makushin	V, Eg
Nye & Swanson	1986 Chem strat magma plumb Makushin [abs]	V, Gs, PG
Nye & Swanson	1987 Makushin magma chamber	PG, Gs, V
Nye & others	1984 Geol map Makushin geothermal area	Gs
Nye & others	1986 Petro geochem Quat volc Makushin	*, V, Gs, PG
Parmentier & others	1983 Geol & hydrotherm alter Makushin	Gs, HA
Peale	1886 Mineral springs of US	H, R
Queen	1984 Lith log & hydrotherm alt of core from Makushin	HA
Queen	1987 Alt, H ₂ O-rock equil, Makushin (thesis)	HA, Fw, Gs, Gc, HS
Queen & Motyka	1984 Changes in Makushin geoth system [abs.]	HA
Reeder	1981 V-D hydrotherm manifest Unalaska [abs.]	Gs, Ff
Reeder	1982 Hydrotherm potential Aleut arc - Makushin [abs]	DP
Reeder	1982 Hydrothermal resources Makushin region	DP
Reeder	1982 Hydrothermal resources N Unalaska Is	Fs, Ff
Reeder	1984 Fault & dike orientation Makushin [abs.]	Gr
Reeder	1986 Ground stability, spring water Broad Bay	Eg, Fs, Gs
Reeder & others	1980 Ak. geothermal program	DP
Reeder & others	1982 Econ & eng geoth develop Makushin	EF, Eg, DP
Reeder & others	1985 Geol geotherm resource Makushin	R, Gs
Republic	1983 Unalaska Gtrml Proj 1B	Er, HS, Fs, Ff, Gs, Ps, DP, RM, HA
Republic	1984 Unalaska Gtrml Proj II	Er, HS, Fs, Fw, Gs, Ps, DP, RM, HA
Republic	1985 Unalaska Gtrml Proj III	*, Er, HS, Fw, Gs, Ps, DP, RM, HA
Shore	1985 Resist survey & interp	Ps, RM
Snyder & Fraser	1963 Pillowed lavas Unalaska	Gr
Spencer & others	1982 Anal geothrm res devel Unalaska	EF, DP
Swanson	1983 Min & fract Makushin volc [abs.]	PG
Swanson & others	1983 Petro Makushin volc [abs.]	PG
Turner & others	1980 Geothermal resources Alaska	R, Fs
Updike	1986 Construction materials Makushin	Eg
Updike	1986 Eng geol, feasibil study Makushin	*, Eg, Gs, Ps, Fs, DP

Makushin Volcano AA-16

Arce	1983 Volcanic hazards Makushin Volcano (thesis)	Eg
Arce & Economides	1982 Volcanic hazards Makushin Volcano	Eg
Berry & others	1980 Thermal spring list U.S.	R
Boyd & Jacob	1984 Seismicity of Unalaska	Pr
Brown	1899 Shishaldin	H
Campbell & Economides	1984 Summary Well no. 1 Makushin volc	Er
Carey & others	1983 Unalaska geotherm land, regs, & environ	DP
Corwin & Fitterman	1983 Self potential Makushin geotherm area	Ps
Davidson	1884 First ascent Makushin	H
Davidson	1884 New volcano in Alaska	H, V
Davidson	1893 Eruption of Veniaminof	H, V
Denig-Chakroff	1985 Unalaska recon study	EF

GEO THERMAL SITE

TOPIC

Diller 1884 Volcanic sand Unalaska	H,V
Drewes & others 1961 Geol Unalaska & adjacent shelf	Gr
Economides & Arce 1983 Geothermal in Ak - eng & geol anal	EF,Er
Economides & others 1981 Unalaska geothermal development	DP
Economides & others 1982 Eng,geol anal geothermal sites	EF,Er
Economides & others 1985 Eval Makushin geothermal reservoir	Er
House & others 1981 Seismic gap near Unalaska	Gs
Isselhardt & others 1983 Geotherm resource model Makushin	RM,HS
Isselhardt & others 1983 Temp grads Makushin geothermal area	HS
Jacob & Boyd 1985 Seismic network on Unalaska	Pr
Lawton 1909 Makushin sulfur deposits	Gs
Maddren 1919 Sulfur on Unalaska & Akun Is & Stepovak Bay	H,Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Martin 1917 Mineral resources of Ak.	H,Gr
Matlick & Parmentier 1983 Hg soil survey Makushin	Gc,Fs,Ff
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Morrison-Knudson Co. 1981 Geotherm potential Aleut Unalaska	R
Motyka 1982 Fluid geochem Makushin & Akutan geotherm area	Ff,Fs
Motyka 1982 Fluid geochemistry of Makushin	Fs,Ff
Motyka 1983 Geochem & isotope study water & gas Makushin	Fs,Ff
Motyka & others 1982 Fluid geochemistry Makushin area	Fs,Ff
Motyka & others 1983 Fluid investigations Makushin area	Fs,Ff
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others 1986 Makushin well chem equilib *	Fw,Fs,Ff,HA,RM
Nichols & Reeder 1983 Ak geothermal & hydrotherm development	R,DP
Nye 1986 Volcanic hazards, Makushin	V,Eg
Nye & Swanson 1986 Chem strat magma plumb Makushin [abs]	V,Gs,PG
Nye & Swanson 1987 Makushin magma chamber	PG,Gs,V
Nye & others 1984 Geol map Makushin geothermal area	Gs
Nye & others 1986 Petro geochem Quat volc Makushin	*,V,Gs,PG
Parmentier & others 1983 Geol & hydrotherm alter Makushin	Gs,HA
Perfit & others 1980 Model for fract in Aleut calc-alk suite	PG
Queen 1984 Lith log & hydrotherm alt of core from Makushin	HA
Queen 1987 Alt, H2O-rock equil, Makushin (thesis)	HA,Fw,Gs,Gc,HS
Queen & Motyka 1984 Changes in Makushin geoth system [abs.]	HA
Reeder 1981 V-D hydrotherm manifest Unalaska [abs.]	Gs,Ff
Reeder 1982 Hydrotherm potential Aleut arc - Makushin [abs]	DP
Reeder 1982 Hydrothermal resources Makushin region	DP
Reeder 1982 Hydrothermal resources N Unalaska Is	Fs,Ff
Reeder 1983 Prelim dating Holo volcanic E Aleut Is [abs.]	V,Gr
Reeder 1984 Fault & dike orientation Makushin [abs.]	Gr
Reeder & others 1980 Ak. geothermal program	DP
Reeder & others 1982 Econ & eng geoth develop Makushin	EF,Eg,DP
Reeder & others 1985 Geol geotherm resource Makushin	R,Gs
Republic 1983 Unalaska Gtrml Proj 1B	Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
Republic 1984 Unalaska Gtrml Proj II	Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA
Republic 1985 Unalaska Gtrml Proj III	*,Er,HS,Fw,Gs,Ps,DP,RM,HA
Shore 1985 Resist survey & interp	Ps,RM
Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Snyder & Fraser 1963 Pillowed lavas Unalaska	Gr
Spencer & others 1982 Anal geothrm res devel Unalaska	EF,DP
Swanson 1983 Min & fract Makushin volc [abs.]	PG

GEOHERMAL SITE

TOPIC

Swanson & Blum 1984 Evol of volc centers Aleutian arc [abs] V,Gr
 Swanson & others 1983 Petro Makushin volc [abs.] PG
 Updike 1986 Eng geol, feasibil study Makushin *,Eg,Gs,Ps,Fs,DP
 Veniaminov 1840 Notes on islands Unalaska district H
 Waring 1965 Thermal springs US & world - a summary Fs
 White & Williams 1975 Assmt geothermal resources US R,Fs,HS
 Wilcox 1959 Volcanic ash falls Alaska V

Manley NC-27, NC-28

Bliss 1983 Ak basic data thermal springs & wells R,Fs,Fw
 Brook & others 1979 Hydrothermal systems <90 deg R,Fs
 Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q Gr
 Chapman & others 1982 Recon geol map Tanana Q Gr
 East 1982 Geotherm investigation Manley HS (thesis) Fs,Fw,Gs,Ps
 East 1982 Prelim geothermal investigation Manley HS Gs,Ps,Fs
 Forbes & others 1975 Utilization geothermal rural Ak Fs,DP,Ef
 Forbes & others 1975 Utilization of Alaska thermal springs DP
 Foster & others 1970 Geol Yukon-Tanana upland [abs.] Gr
 Foster & others 1973 Geology Yukon-Tanana upland Gr
 Gassaway & Abramson 1977 Map & table thermal springs cntr Ak R,Fs
 Hopkins & Taber 1962 Stratigraphy Manley HS Gs
 King 1909 Tanana Valley H
 Leonard 1975 Geothermal energy R
 Markle 1979 Geotherm Ak site data base & devel status R,Fs,Gr,C
 Meaker 1908 Tanana Valley H,C
 Mertie 1932 Yukon Tanana region Gr
 Mertie 1934 Mineral deposits Rampart & Hot Springs district Gr
 Miller 1973 Distribution & chem analysis thermal springs Ak R,Fs
 Miller & others 1975 Geol & chem hot springs W cent Ak R,Fs
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Muffler 1979 Assmt geothermal resources U. S. R,Fs,HS
 Ogle 1976 Ak. hot spring site for small binary plant R,DP,Fs
 Reed & others 1983 Data low temp geothermal systems US HS,R,Fs
 Reeder & others 1980 Ak. geothermal program DP
 Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q Gr
 Turner & others 1980 Geothermal resources Alaska R,Fs
 Waring 1917 Mineral springs Ak Fs,R
 Waring 1965 Thermal springs US & world - a summary Fs
 White & Williams 1975 Assmt geothermal resources US R,Fs,HS

Mc Questen NC-21

Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q Gr
 Chapman & others 1982 Recon geol map Tanana Q Gr
 Dover & Mayaoka 1985 Rocks Ray Mts, Tanana & Bettles Q Gr
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Patton & Miller 1970 Prelim geol invest Kanuti Gr
 Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q Gr
 Turner & others 1980 Geothermal resources Alaska R,Fs

GEOTHERMAL SITE

TOPIC

Melozi NC-17

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R, Fs, Fw
Brook & others 1979 Hydrothermal systems <90 deg	R, Fs
Cass 1959 Recon geol map Melozitna Q Ak.	Gr
Dillon & others 1983 Geol map Melozitna A-4 Quad	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R, Fs
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R, Fs
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Muffler 1979 Assmt geothermal resources U. S.	R, Fs, HS
Nava & Morrison 1974 Note on hot springs interior Ak	R, Fs
Ogle 1976 Ak. hot spring site for small binary plant	R, DP, Fs
Patton & others 1978 Geol map Melozitna Q	Gr
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R, Fs
Waring 1917 Mineral springs Ak	Fs, R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS

Milky River AA-18

Baker & Eggler 1983 Atka high alumina basalt	PG
Marsh 1980 Geol & petrol N Atka Is [abs.]	Gr
Motyka 1983 High temp hydrothermal resources Aleut arc	R, Fs, Ff
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Reeder & others 1980 Ak. geothermal program	DP
Turner & others 1980 Geothermal resources Alaska	R, Fs

Minook NC-41

Berry & others 1980 Thermal spring list U.S.	R
Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q	Gr
Chapman & others 1982 Recon geol map Tanana Q	Gr
Foster & others 1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others 1973 Geology Yukon-Tanana upland	Gr
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Mertie 1932 Yukon Tanana region	Gr
Mertie 1934 Mineral deposits Rampart & Hot Springs district	Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R, Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R, Fs
Turner & others 1980 Geothermal resources Alaska	R, Fs
Waring 1917 Mineral springs Ak	Fs, R
Waring 1965 Thermal springs US & world - a summary	Fs

Mother Goose AA-35

Baker & others 1977 Geotherm springs-salmon hatchery site	R, DP, Fs
Berry & others 1980 Thermal spring list U.S.	R
Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q	Gr
Detterman & others 1985 Geol map Ugashik & W Karluk Q	Gr
Detterman & others 1986 Quat map Ugashik-Bristol Bay-Karluk Q	Gr

GEOHERMAL SITE

TOPIC

LeCompte	1981 Prelim map Landsat Ugashik & Karluk Q	Gr
Markle	1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka	1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka & Moorman	1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others	1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nehring & others	1979 Sulfate geotherm western U. S.	R,Fs
Smith & Baker	1924 Cold Bay-Chignik dist	Gr,H
Turner & others	1980 Geothermal resources Alaska	R,Fs

Mt. Douglas SC-10

Berry & others	1980 Thermal spring list U.S.	R
Estes	1978 Seismotectonic studies lower Cook Inlet (thesis)	Pr
Kienle & Swanson	1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson	1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kosco	1981 Andesitic volcanism at Katmai	PG
Kosco	1981 Edgecumbe volc & Katmai (thesis)	PG
Miller	1973 Distribution & chem analysis thermal springs Ak	R,Fs
Morris	1985 Katmai Park draft management plan	C,DP
Motyka & others	1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muller & others	1954 Volcanic activity Katmai	V
Swanson & Kienle	1982 Volc centers Katmai	V,Gr
Turner & others	1980 Geothermal resources Alaska	R,Fs
Waring	1965 Thermal springs US & world - a summary	Fs
White & Williams	1975 Assmt geothermal resources US	R,Fs,HS

Mt. Griggs SC-5

Allen & Zies	1923 Chem study fumaroles Katmai region	Ff
Berg & Keinle	1966 Gravity meas Katmai volc area	Pr
Berg & others	1967 Crustal structure - Katmai	Ps
Bordet & others	1963 Katmai	V
Decker	1964 Geophys investigations Katmai [abs.]	Ps
Griggs	1919 Katmai & VTS	H,V
Johnson	1979 Volc gas studies Ak volcanoes	R,Ff
Johnson	1980 Volc contr Cl to stratosphere	V,Ff
Keller	1955 Geol Katmai [abs.]	Gr
Keller & Reiser	1959 Geol Katmai	Gr
Kienle	1968 Gravity Survey Katmai (thesis)	V,Ps
Kienle	1969 Gravity traverse VTS, Katmai [abs.]	V,Ps
Kienle & Swanson	1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson	1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & others	1981 Volcanic centers Katmai [abs.]	V,R
Kosco	1981 Edgecumbe volc & Katmai (thesis)	PG
Kubota & Berg	1967 Magma in Katmai range	V,Pr
MacGregor	1952 Eruptive mechanisms VTS	V
Matumoto	1971 Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Ward	1967 Microquake study Katmai	Pr,V
Miller & Barnes	1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes	1976 Geotherm develop Ak summary	DP,Gr,V
Morris	1985 Katmai Park draft management plan	C,DP
Motyka & others	1977 Glac-volc investigations Katmai [abs.]	V

GEOHERMAL SITE

TOPIC

Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Muller & others 1954 Volcanic activity Katmai	V
Poreda & others 1981 He isot vars Ak-Aleut arc [abs.]	R, Fs, Ff
Reck 1930 Review VTTS (Ger)	H, V
Rubenstone & others 1985 Isot & trace elem Katmai [abs.]	PG
Shipley 1919 VTTS	H
Smith 1925 Cold Bay Katmai dist	Gr, H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr, H
Spurr 1900 Recon in SW Ak 1898	H, Gr
Swanson & Kienle 1982 Volc centers Katmai	V, Gr
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS

Mt. Mageik SC-4

Allen & Zies 1923 Chem study fumaroles Katmai region	Ff
Berg & Keinle 1966 Gravity meas Katmai volc area	Pr
Berg & others 1967 Crustal structure - Katmai	Ps
Bordet & others 1963 Katmai	V
Decker 1964 Geophys investigations Katmai [abs.]	Ps
Fenner 1930 Mt Katmai & Mt Mageik	V, H
Griggs 1919 Katmai & VTTS	H, V
Jaggar 1927 Eruption of Mageik	V, H
Johnson 1979 Volc gas studies Ak volcanoes	R, Ff
Johnson 1980 Volc contr Cl to stratosphere	V, Ff
Keller 1955 Geol Katmai [abs.]	Gr
Keller & Reiser 1959 Geol Katmai	Gr
Kienle 1968 Gravity Survey Katmai (thesis)	V, Ps
Kienle 1969 Gravity traverse VTTS, Katmai [abs.]	V, Ps
Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V, PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V, PG
Kienle & others 1981 Volcanic centers Katmai [abs.]	V, R
Kosco 1981 Andesitic volcanism at Katmai	PG
Kosco 1981 Edgecumbe volc & Katmai (thesis)	PG
Kubota & Berg 1967 Magma in Katmai range	V, Pr
MacGregor 1952 Eruptive mechanisms VTTS	V
Matumoto 1971 Seism body waves Katmai & molten chmbr [abs.]	Pr, V
Matumoto & Ward 1967 Microquake study Katmai	Pr, V
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP, Gr, V
Miller & Barnes 1976 Geotherm develop Ak summary	DP, Gr, V
Morris 1985 Katmai Park draft management plan	C, DP
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Muller & others 1954 Volcanic activity Katmai	V
Reck 1930 Review VTTS (Ger)	H, V
Rubenstone & others 1985 Isot & trace elem Katmai [abs.]	PG
Shipley 1919 VTTS	H
Smith 1925 Cold Bay Katmai dist	Gr, H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr, H
Swanson & Kienle 1982 Volc centers Katmai	V, Gr
White & Williams 1975 Assmt geothermal resources US	R, Fs, HS

Mt. Martin SC-3

Allen & Zies 1923 Chem study fumaroles Katmai region	Ff
Berg & Keinle 1966 Gravity meas Katmai volc area	Pr

GEO THERMAL SITE

TOPIC

Berg & others 1967	Crustal structure - Katmai	Ps
Bordet & others 1963	Katmai	V
Decker 1964	Geophys investigations Katmai [abs.]	Ps
Griggs 1919	Katmai & VTTS	H,V
Johnson 1980	Volc contr C1 to stratosphere	V,Ff
Keller 1955	Geol Katmai [abs.]	Gr
Keller & Reiser 1959	Geol Katmai	Gr
Kienle 1968	Gravity Survey Katmai (thesis)	V,Ps
Kienle 1969	Gravity traverse VTTS, Katmai [abs.]	V,Ps
Kienle & Swanson 1983	Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983	Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & others 1981	Volcanic centers Katmai [abs.]	V,R
Kosco 1981	Andesitic volcanism at Katmai	PG
Kosco 1981	Edgcumbe volc & Katmai (thesis)	PG
Kubota & Berg 1967	Magma in Katmai range	V,Pr
MacGregor 1952	Eruptive mechanisms VTTS	V
Matumoto 1971	Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Ward 1967	Microquake study Katmai	Pr,V
Miller & Barnes 1974	Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976	Geotherm develop Ak summary	DP,Gr,V
Morris 1985	Katmai Park draft management plan	C,DP
Motyka & others 1983	Geothermal resources of Alaska	R,Fs,Ff,Fw
Muller & others 1954	Volcanic activity Katmai	V
Reck 1930	Review VTTS (Ger)	H,V
Rubenstone & others 1985	Isot & trace elem Katmai [abs.]	PG
Shipley 1919	VTTS	H
Smith 1925	Cold Bay Katmai dist	Gr,H
Smith & Baker 1924	Cold Bay-Chignik dist	Gr,H
Swanson & Kienle 1982	Volc centers Katmai	V,Gr
White & Williams 1975	Assmt geothermal resources US	R,Fs,HS

Mt. Rynda SE-13

Brew & others 1984	Geologic map Peterbrg, Sumdum, P. Alex	Gr
Buddington & Chapin 1929	Geol & mineral deposits SE Ak	Gr
Kerr 1948	Stikine & Iskut River area BC, Canada	Gr
Markle 1979	Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & Moorman 1980	Assmt thermal spring S SE Ak [abs.]	R,Fs
Motyka & Moorman 1987	Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & others 1980	Assmt therm spr S SE Ak	R,Fs
Motyka & others 1983	Geothermal resources of Alaska	R,Fs,Ff,Fw
Turner & others 1980	Geothermal resources Alaska	R,Fs
Wright & Wright 1908	Ketchikan & Wrangell mining districts	Gr,H

Mt. Spurr SC-14

Capps 1935	Southern Alaska Range	Gr
Detterman & others 1976	Geol map by faults in Kenai & Tyonek Q	Gr
Emanuel 1984	Hydro & volc hazards Mt Spurr [abs.]	Eg
Juhle & Coulter 1955	Mt. Spurr eruption 1953	V
Kienle & Swanson 1983	Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983	Volc E Aleut arc Quat & Holo centers	V,PG
Miller & Smith 1976	New volcanoes Aleutian arc	V
Motyka & others 1983	Geothermal resources of Alaska	R,Fs,Ff,Fw

GEOHERMAL SITE

TOPIC

Nye & Turner 1986 Geology & geochemistry Spurr [abs.]	Gs,PG,V
Page & others 1982 Seism Spurr, Redoubt, & Iliamna [abs.]	V
Powers 1953 Activity Aleut volcanoes	V
Riehle 1985 Recon Holo tephra deposits upper Cook Inlet	V
Turner & Nye 1986 Geochronology Mt. Spurr	V
Turner & Wescott 1986 Geotherm invest Mt. Spurr *,R,Ps,Gc,V,Gs,RM	
Turner & others 1986 Mt. Spurr geothermal project	R,Gs,V
Turner & others 1986 Hg and He surveys Mt. Spurr	Gc,R
Wescott & others 1985 Prelim rept gthrml invest Mt Spurr	Gs,Ps,Gc
Wescott & others 1986 Geophysical surveys Mt. Spurr	Ps,R
Wescott & others 1986 Ice thickness Mt. Spurr summit	Ps
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Wilcox 1953 Eruption Mt Spurr	V
Wilcox 1959 Volcanic ash falls Alaska	V

Mt. Trident SC-7

Allen & Zies 1923 Chem study fumaroles Katmai region	Ff
Anonymous 1953 Activity of Trident	V
Anonymous 1953 Eruption of Trident	V
Berg & Keindle 1966 Gravity meas Katmai volc area	Pr
Berg & others 1967 Crustal structure - Katmai	Ps
Bordet & others 1963 Katmai	V
Decker 1964 Geophys investigations Katmai [abs.]	Ps
Decker 1967 Invest at active volcanoes	V
Griggs 1919 Katmai & VTTS	H,V
Johnson 1979 Volc gas studies Ak volcanoes	R,Ff
Johnson 1980 Volc contr Cl to stratosphere	V,Ff
Keller 1955 Geol Katmai [abs.]	Gr
Keller & Reiser 1959 Geol Katmai	Gr
Kienle 1968 Gravity Survey Katmai (thesis)	V,Ps
Kienle 1969 Gravity traverse VTTS, Katmai [abs.]	V,Ps
Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & others 1981 Volcanic centers Katmai [abs.]	V,R
Kosco 1981 Andesitic volcanism at Katmai	PG
Kosco 1981 Edgecumbe volc & Katmai (thesis)	PG
Kubota & Berg 1967 Magma in Katmai range	V,Pr
MacGregor 1952 Eruptive mechanisms VTTS	V
Matumoto 1971 Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Ward 1967 Microquake study Katmai	Pr,V
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Morris 1985 Katmai Park draft management plan	C,DP
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muller & others 1954 Volcanic activity Katmai	V
Powers 1953 Activity Aleut volcanoes	V
Ray 1967 Geochem & petro Mt Trident andesites (thesis)	PG
Ray & others 1966 Petro & geochem Mt Trident andesites [abs.]	PG
Reck 1930 Review VTTS (Ger)	H,V
Rubenstone & others 1985 Isot & trace elem Katmai [abs.]	PG
Shipley 1919 VTTS	H
Smith 1925 Cold Bay Katmai dist	Gr,H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr,H

GEOHERMAL SITE

TOPIC

Snyder 1954 Eruption Trident Katmai	V
Spurr 1900 Recon in SW Ak 1898	H,Gr
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Wilcox 1959 Volcanic ash falls Alaska	V
Wilson & Forbes 1969 Infrasonic waves & volc erupt [abs.]	V
Wilson & Forbes 1969 Infrasonic waves Ak volc eruptions	V

Mt. Wrangell SC-18

Andreasen & others 1958 Aeromag Copper River basin	Pr
Andreasen & others 1964 Geol inter mag & grav Copper Rvr basin	Pr
Benson & Follett 1986 Photogrammetry study Mt. Wrangell	V
Benson & Motyka 1978 Glac-volc interaction Mt. Wrangell	V
Benson & others 1975 Glac & volc studies Mt. Wrangell	V
Benson & others 1985 Glacio-volcano studies Mt. Wrangell	V
Bingham 1967 Ice & heat studies Mt. Wrangell (thesis)	V,HS
Bingham & Benson 1967 Mt. Wrangell ice & heat studies	V,HS
Bingham & Benson 1968 Ash temp variations Mt Wrangell	V,HS
Church & others 1970 Copper River basin strat correl section	Gs
Dunn 1909 Conquering Mt Wrangell	H
Emmel & Coonrod 1982 Geol Literature Copper River basin	Gr
Ferrians & others 1958 Pleist volc mudflow Copper River basin	V
Ferrians & others 1983 Copper River basin	Gr
Furst 1968 Recon petrol Mt Wrangell caldera (thesis)	PG
Henning & others 1976 Alaska's volcanoes	V,R
Henning & others 1981 Wrangell-St Elias Wilderness	C
MacKevett 1976 Geol map McCarthy Q	Gr
MacKevett 1978 Geol map McCarthy Q	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Mendenhall 1903 Mineral resources Mt Wrangell district	H,Gr
Mendenhall 1905 Geology central Copper River region	H,Gr
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Miller & Smith 1976 Ash flows Wrangell volcano	V
Motyka 1983 Thermal activity Mt Wrangell (thesis)	V,HS,Ff
Motyka 1984 Chem of water & gas Mt Wrangell [abs.]	Ff
Motyka & Benson 1982 Flucts in heat flow Mt Wrangell [abs.]	V,HS
Motyka & others 1978 Increased heat Mt Wrangell [abs.]	HS
Motyka & others 1980 Mt Wrangell glac meas heat flow [abs.]	V,HS
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nye 1982 Wrangell volcs & microplate accretion [abs.]	V
Nye 1983 Petro & geochem Okmok & Wrangell volcs (thesis)	PG,V
Richter 1975 Geol map Nabesna Q	Gr
Richter 1976 Geol map Nabesna Q	Gr
Richter & others 1984 Shield volc Wrangell Mts	V
Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Stoltzfus 1982 Copper River basin planning study	C
Turner & others 1980 Geothermal resources Alaska	R,Fs
Turner & others 1983 Sum, eval gthrm exp Copper R bsn	Gs,Ps,Fs,RM
Wendler 1967 Heat flow Mt. Wrangell	V,HS
Wescott & Turner 1983 Geotherm expl E Copper R basin	Ps,Gc,Fs,Fw
Wescott & Turner 1983 Geotherm potent Copper R basin	Gs,Ps,Gc,DP
Wescott & Turner 1985 Geotherm invest Copper *	Gs,Ps,Gc,DP,Fs,Fw

GEOTHERMAL SITE

TOPIC

White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Williams & Johnson 1980 Map Tert & Quat deposits Valdez Q	Gr
Winkler & others 1981 Folio Valdez Q	Gr
Workman 1979 Signif volc in prehist of subarctic	C
Yehle & Nichols 1980 Recon map Chetaslina debris flow Copper R	V

Neka Bay SE-2

Brew & Ford 1985 Geol map Juneau, Taku, Atlin, Skag Quad	Gr
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Knopf 1912 Sitka mining district	H,Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava 1975 Note on hot springs SE Ak	R,Fs
Rossman 1959 Geol & ore dep NW Chichagof Is	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr
Waring 1965 Thermal springs US & world - a summary	Fs

North Peril Strait SE-4

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Decker 1980 Geol Cret. subduct complx Chichagof Is (thesis)	Gr
Decker 1980 Geol map W Chichagof Island	Gr
Knopf 1912 Sitka mining district	H,Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Martin 1917 Mineral resources of Ak.	H,Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava 1975 Note on hot springs SE Ak	R,Fs
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Rossman 1959 Geol & ore dep NW Chichagof Is	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs

Novarupta SC-20

Allen & Zies 1923 Chem study fumaroles Katmai region	Ff
Anma 1971 Aeromag survey VTTs (thesis)	Pr
Berg & Keinle 1966 Gravity meas Katmai volc area	Pr
Berg & others 1967 Crustal structure - Katmai	Ps

GEOHERMAL SITE

TOPIC

Bordet & others 1963 Katmai	V
Chaigneau & Bordet 1963 Gas in glass in VTTS (Fr)	P,V
Curtis 1955 Importance of Novarupta [abs.]	V
Curtis 1968 Stratigraphy of ejecta 1912 eruption Katmai	V
Daily 1912 Eruption of Katmai	V,H
Decker 1964 Geophys investigations Katmai [abs.]	Ps
Eickelberger & Hildreth 1986 Drilling in Katmai [abs.]	V,Gs,Ps
Escher 1922 Lahar VTTS	V,H
Federman & Scheidegger 1984 Distal tephra 1912 Novarupta	V
Fenner 1920 Geol Katmai 1912 eruption [abs.]	V,H
Fenner 1923 Tuff deposit VTTS	V,H
Fierstein & Hildreth 1984 Pyroclastic deposits Novarupta [abs.]	V
Fierstein & Hildreth 1986 Novarupta ejecta [abs.]	V
Forbes & Kienle 1971 Petro pre 1912 pyroclast VTTS [abs]	PG,Gs,V
Fry 1912 Mineral content volcanic ashes	V,H
Gedney & others 1970 Seismic refraction - Katmai	Ps
Griggs 1918 Eruption of Katmai	V,H
Griggs 1918 VTTS mud flow	V,H
Griggs 1919 Character of Katmai eruption	H,V
Griggs 1919 Katmai & VTTS	H,V
Griggs 1921 VTTS	V,H
Griggs 1922 VTTS	V,H
Griggs 1923 VTTS	V,H
Hamilton 1973 Snow & ice during Katmai eruption [abs.]	V
Higbie 1975 VTTS	V
Hildreth & Fierstein 1986 Novarupta near vent ejecta [abs.]	V
Johnson 1980 Volc contr Cl to stratosphere	V,Ff
Johnson & Grunder 1980 VTTS Tuff II Comp & isot ejecta [abs.]	V
Johnson & Hildreth 1980 VTTS Tuff I Empl, comp & weld [abs.]	V
Keith 1984 Prelim obs fumaroles VTTS	HA
Keith 1985 Hydrotherm alt Novarupta dome VTTS [abs.]	HA
Keith 1986 Hydrothermal alteration Novarupta [abs.]	HA,V
Keller 1955 Geol Katmai [abs.]	Gr
Keller & Reiser 1959 Geol Katmai	Gr
Kienle 1968 Gravity Survey Katmai (thesis)	V,Ps
Kienle 1969 Gravity traverse VTTS, Katmai [abs.]	V,Ps
Kienle 1970 Gravity traverse VTTS	Pr
Kienle & others 1981 Volcanic centers Katmai [abs.]	V,R
Kosco 1981 Andesitic volcanism at Katmai	PG
Kosco 1981 Edgumbe volc & Katmai (thesis)	PG
Kubota & Berg 1967 Magma in Katmai range	V,Pr
MacGregor 1952 Eruptive mechanisms VTTS	V
Matumoto 1971 Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Ward 1967 Microquake study Katmai	Pr,V
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Morris 1985 Katmai Park draft management plan	C,DP
Okimura 1930 Eruption Katmai	V,H
Ramdohr 1962 Magnetite from fumaroles VTTS (Ger)	HA
Reck 1930 Review VTTS (Ger)	H,V
Rubenstone & others 1985 Isot & trace elem Katmai [abs.]	PG
Sbar & Matumoto 1972 Refraction VTTS	Pr
Shipley 1919 VTTS	H
Shipley 1920 Katmai gas & encrustations	HA,Ff,V

GEOTHERMAL SITE

TOPIC

Smith 1925 Cold Bay Katmai dist	Gr,H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr,H
Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Stone & others 1971 Magnetic anomalies VTTS [abs.]	Pr
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Nylen SE-7

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Knopf 1912 Sitka mining district	H,Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & Moorman 1987 Geotherm resources SE Ak	R,Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Rossman 1959 Geol & ore dep NW Chichagof Is	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr

Okmok AA-15

Berry & others 1980 Thermal spring list U.S.	R
Black 1974 Geol & ancient Aleuts	Gr
Black 1974 Late Quat sea level changes Umnak Is	Gr
Black 1975 Late Quat geomorph Umnak Is	Gr
Black 1976 Geol Umnak related to Aleuts	Gr
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Byers 1959 Geol Umnak & Bogoslof Islands	Gr
Byers 1961 Petro 3 volc suites Umnak & Bogoslof Islands	PG
Byers & Brannock 1949 Volc activity Umnak- & Great Sitkin Is	V
Davidson 1884 New volcano in Alaska	H,V
Forbes & Biggar 1973 Ak geothermal resource potential	R,HS
Katsui 1984 Okmok	V
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Miller & Smith 1976 2 caldera forming eruptions Umnak	V
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nye 1983 Petro & geochem Okmok & Wrangell volcs (thesis)	PG,V
Nye & Reid 1986 Geochem pri lava Okmok Volc: arc magmagenesis	PG
Nye & others 1983 Parental magmas Okmok: arc magmagen [abs.]	PG
Petrov 1884 Alaska population & resources	H,C
Poreda & others 1981 He isot vars Ak-Aleut arc [abs.]	R,Fs,Ff
Reeder 1983 Prelim dating Holo volcanic E Aleut Is [abs.]	V,Gr
Reeder 1984 Okmok	V
Reeder & others 1980 Ak. geothermal program	DP
Robinson 1948 Exploring Aleutian volc	V,H
Smith & Shaw 1979 Igneous related geothermal systems	R,HS

GEOHERMAL SITE

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Turner & others 1980 Geothermal resources Alaska	R,Fs
VonLangsdorff 1814 Voyages & travels 1803-1807	H
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Wilcox 1959 Volcanic ash falls Alaska	V

Okpilak NC-35

Bader 1984 Geol map eastern N. slope Ak.	Gr
Bader & Bird 1986 Geol map NE Alaska	Gr
Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Pavia 1986 Structure & strat Okpilak batholith area	Gr
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Robinson & others 1986 Geol map Mt. Michelson C-4 Quad	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs

Ophir SC-1

Anonymous 1975 Ak regional profiles SW region	C
Baker & others 1977 Geotherm springs-salmon hatchery site	R,DP,Fs
Berry & others 1980 Thermal spring list U.S.	R
Decker & others 1984 Geol data Russian Mission A-3 Quad	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Hoare & Coonrad 1959 Geol map Russian Mission Quad	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Robinson & Decker 1986 Ages & analysis from SW Alaska	Gr,PG
Robinson & others 1984 Bdrck geol Chuilnuk & Kiokluk Mts [abs]	Gr
Robinson & others 1986 Rocks from Sleetmute, Russian Mission Q	PG
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1965 Thermal springs US & world - a summary	Fs

Partov Cove AA-13

Berry & others 1980 Thermal spring list U.S.	R
Black 1974 Geol & ancient Aleuts	Gr
Black 1974 Late Quat sea level changes Umnak Is	Gr
Black 1975 Late Quat geomorph Umnak Is	Gr
Black 1976 Geol Umnak related to Aleuts	Gr
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Byers 1959 Geol Umnak & Bogoslof Islands	Gr
Byers 1961 Petro 3 volc suites Umnak & Bogoslof Islands	PG
Byers & Brannock 1949 Volc activity Umnak & Great Sitkin Is	V
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Reeder & others 1980 Ak. geothermal program	DP

GEOHERMAL SITE

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Turner & others 1980 Geothermal resources Alaska

R,Fs

Pavlov AA-31

Berry & others 1980 Thermal spring list U.S.	R
Davidson 1893 Eruption of Veniaminof	H,V
Decker 1967 Invest at active volcanoes	V
Kennedy & Waldron 1955 Geol Pavlof volcano	Gr
Kienle 1976 Seismic monitoring Pavlov	V,Ps
Lalla & Kienle 1975 Microquakes, tremors at Pavlov [abs.]	Ps,V
McNutt 1983 Activity Pavlov Shumagin gap? [abs.]	V
McNutt 1984 Eruption & stress Pavlov [abs.]	V
McNutt & Beavan 1981 Quakes at Pavlov earth tides	V
McNutt & Beavan 1984 Pavlov sea level & aseismic slip [abs.]	V
McNutt & Mori 1983 B type quakes Pavlov [abs.]	V
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Powers 1953 Activity Aleut volcanoes	V
Prosser 1912 Volcanic road-building	H,V
Shackelford 1983 Hist activity Pavlov Volc	V
Stone & Kienle 1975 Pavlov	V
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Woodruff & Anderson 1980 Arrested magma mixing Pavlov	PG

Pilgrim NC-1, NC-2

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Bunker & others 1977 Prelim radio ages of rocks Kigluaik Mts	Gr
Buzzell & Gibson 1986 Nome-Taylor Rd. cultural resources	C
Dean & others 1981 Remote sensing Pilgrim Springs	Ps
Economides & Arce 1983 Geothermal in Ak - eng & geol anal	EF,Er
Economides & others 1982 Eng,geol anal geothermal sites	EF,Er
Economides & others 1982 Reservoir eng analysis Pilgrim Sprg	Er
Forbes 1979 Geol, geoph assmt of geotherm pot Pilgrim HS	Gs,Ps
Forbes & Biggar 1973 Ak geothermal resource potential	R,HS
Forbes & others 1975 Geophysical recon Pilgrim Springs	Ps
Forbes & others 1975 Utilization geothermal rural Ak	Fs,DP,Ef
Forbes & others 1975 Utilization geothermal rural Ak	Fs,DP,Ef
Forbes & others 1975 Utilization of Alaska thermal springs	DP
Forbes & others 1979 Geol, geoph assmt geothrm pot Pilgrim	Gs,Ps
Forbes & others 1979 Pilgrim springs hydrothermal system	RM
Gosink & Osterkamp 1980 Prelim invest hot water Pilgrim River	HS
Harrison & Hawkins 1980 Water & heat flow Pilgrim HS	HS,DP
Hawkins & Harrison 1979 Flow rate Pilgrim HS [abs.]	HS,DP
Homan 1972 Energy from the earth	R,DP
Hopkins & Hopkins 1958 Seward Peninsula	Gr
Hudson 1977 Geol map Seward Penin	Gr
Hudson & Plafker 1978 Kigluaik & Bendeleben faults	Gr
Kienle & Lockhart 1979 Seism & grav survey Pilgrim HS [abs.]	Ps
Kienle & Lockhart 1980 Gravity survey Pilgrim geotherm area	Ps
Kline 1980 Test drilling Pilgrim 1979	Er

GEOTHERMAL SITE

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Kline 1981 Surf geol Pilgrim vicinity	Gs
Kline & others 1980 Surf geol & drilling Pilgrim HS	Gs,Er
Kunza & Lofgren 1983 Pilgrim HS expl, drill, & testing	Er
Lockhart 1981 Gravity survey central Seward Penin.	Pr
Lockhart & Kienle 1980 Seism & grav survey Pilgrim spr KGRA	Ps
Lofgren 1983 Geotherm devel Pilgrim springs	DP,Gs,Ps
Longenkamp & others 1974 Elec resist survey Pilgrim Springs	Ps
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Markle 1979 Geothermal energy devel Pilgrim HS	DP
Miller 1972 K rich intrusive rocks W Ak	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1980 Geochemistry Pilgrim thermal waters	Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Nichols & Reeder 1983 Ak geothermal & hydrotherm development	R,DP
Ogle 1976 Ak. hot spring site for small binary plant	R,DP,Fs
Osterkamp & others 1979 Conduct & hydrol meas Pilgrim HS [abs]	Ps
Osterkamp & others 1980 Recon study access power Pilgrim	Ps,Gs,DP
Reeder & others 1980 Ak. geothermal program	DP
Robinson & Stevens 1983 Geol map Seward Penin	Gr
Robinson & Stevens 1984 Geol map Seward Penin	Gr
Stefano 1974 Low temp use Pilgrim HS	DP
Stefano 1975 Pilgrim HS could heat Nome	DP
Stern & Stirling 1982 Pilgrim Hot Springs Road	C,R
Swanson & others 1980 Bedrock geol Pilgrim springs area	Gs
Turner & Forbes 1980 Geol geophy stdy Pilgrim *,	Gs,Ps,RM,Fs,Fw,HS
Turner & Swanson 1981 Continent rifting new model Seward Pen	Gr
Turner & others 1979 Geol & tect setting Pilgrim spr [abs.]	Gs
Turner & others 1980 Geothermal resources Alaska	R,Fs
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM
Turner & others 1981 Continent rifting new model Seward Pen	Gr
Waring 1917 Mineral springs Ak	Fs,R
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
Wescott 1981 He & Hg cent Seward Penin	Gc
Wescott & Turner 1981 Geotherm recon C Seward Pen	Gs,Ps,Gc,HS,RM
Wescott & others 1979 Resis survey Pilgrim HS [abs.]	Ps
Wescott & others 1980 Resis survey Pilgrim spr area	Ps
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Woodward-Clyde 1983 Geothermal development Pilgrim spr	DP

Pocahontas NC-18

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Cass 1959 Recon geol map Melozitna Q Ak.	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1970 Petro plutonic rocks W central Ak	PG
Miller 1971 Petro plutonic rocks W cent Ak (thesis)	PG
Miller & others 1966 Prelim plutonic belt W cent Ak	Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Patton 1973 Recon geology N Yukon-Koyukuk	Gr

GEOHERMAL SITE

TOPIC

Patton & others 1978 Geol map Melozitna Q	Gr
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs

Port Moller AA-32

Baker & others 1977 Geotherm springs-salmon hatchery site	R,DP,Fs
Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Coats 1956 Recon geol W Aleutian Islands	Gr
Lyle & Dobey 1974 Geol evaluation Herendeen Bay area	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Okada & Okada 1974 Hot springs village Port Moller	C
Okada & Okada 1980 Hot springs site Port Moller	C
Okada & others 1976 Hot springs village Port Moller	C
Okada & others 1979 Hot springs village Port Moller	C
Peale 1886 Mineral springs of US	H,R
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs

Red Hill Spring NC-36

Bader 1984 Geol map eastern N. slope Ak.	Gr
Bader & Bird 1986 Geol map NE Alaska	Gr
Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Imm 1986 Geol & strat Mt Michelson quads	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Meigs 1986 Structural evol Sadlerochit Mts.	Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Rogers 1986 Geology Shublik Mts	Gr

Redoubt SC-13

Capps 1935 Southern Alaska Range	Gr
Decker 1967 Invest at active volcanoes	V
Detterman & Hartsock 1966 Geol Iniskin-Tuxedni region	Gr
Detterman & others 1976 Geol map by faults in Kenai & Tyonek Q	Gr
Johnson 1979 Volc gas studies Ak volcanoes	R,Ff
Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V,PG
Martin & Katz 1910 Geol & min resources Iliamna & Lake Clark	H,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Page & others 1982 Seism Spurr, Redoubt, & Iliamna [abs.]	V
Prosser 1912 Volcanic road-building	H,V
Riehle 1985 Recon Holo tephra deposits upper Cook Inlet	V
Riehle & others 1981 Lahars Crescent River Lower Cook Inlet	V

GEOHERMAL SITE

TOPIC

Till	1984 Redoubt-strat & volc hazards [abs.]	Eg, PG
White & Williams	1975 Assmt geothermal resources US	R, Fs, HS
Wilcox	1959 Volcanic ash falls Alaska	V
Wilson & Forbes	1969 Infrasonic waves & volc erupt [abs.]	V
Wilson & Forbes	1969 Infrasonic waves Ak volc eruptions	V
Yount	1984 Redoubt mineralogy & chem [abs.]	V, PG

Reed River NC-15

Adams	1983 Geol northern Arrigetch pluton (thesis)	Gr
Adams	1984 Geol northern Arrigetch Peaks pluton [abs.]	Gr
Anonymous	1982 Reed River Hot Springs	Fs
Berry & others	1980 Thermal spring list U.S.	R
Brook & others	1979 Hydrothermal systems <90 deg	R, Fs
Brosge & Pessel	1977 Prelim recon geol map Survey Pass Q	Gr
Markle	1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Miller	1973 Distribution & chem analysis thermal springs Ak	R, Fs
Motyka & others	1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Muffler	1979 Assmt geothermal resources U. S.	R, Fs, HS
Nava & Morrison	1974 Note on hot springs interior Ak	R, Fs
Nelson & Grybeck	1978 Arrigetch Peaks & Igikpak plutons	Gr
Stoney	1900 Naval expl Alaska	H, Gr
Turner & others	1980 Geothermal resources Alaska	R, Fs
Waring	1917 Mineral springs Ak	Fs, R
Waring	1965 Thermal springs US & world - a summary	Fs

Seguam AA-9

Berry & others	1980 Thermal spring list U.S.	R
Markle	1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Miller	1973 Distribution & chem analysis thermal springs Ak	R, Fs
Miller & Barnes	1974 Geotherm devel Ak [abs.]	DP, Gr, V
Miller & Barnes	1976 Geotherm develop Ak summary	DP, Gr, V
Motyka & others	1981 Assmt thermal spring Aleutian arc	R, Fs, Ff, Gr
Motyka & others	1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Peale	1886 Mineral springs of US	H, R
Smith & Shaw	1979 Igneous related geothermal systems	R, HS
Turner & others	1980 Geothermal resources Alaska	R, Fs
Waring	1965 Thermal springs US & world - a summary	Fs
White & Williams	1975 Assmt geothermal resources US	R, Fs, HS

Semisopchnoi AA-2

Ach & DeLong	1980 Magma evo L. Sitkin & Semisopchnoi [abs.]	PG
Coats	1956 Recon geol W Aleutian Islands	Gr
Coats	1959 Geol recon Semisopchnoi Island	Gr
Lewis & others	1960 Geol Rat Islands, Aleutians	Gr
Markle	1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Miller & Barnes	1974 Geotherm devel Ak [abs.]	DP, Gr, V
Miller & Barnes	1976 Geotherm develop Ak summary	DP, Gr, V
Motyka & others	1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Smith & Shaw	1979 Igneous related geothermal systems	R, HS
Turner & others	1980 Geothermal resources Alaska	R, Fs
Waring	1965 Thermal springs US & world - a summary	Fs

GEOHERMAL SITE

TOPIC

White & Williams 1975 Assmt geothermal resources US

R,Fs,HS

Serpentine

NC-3

Berry & others 1980 Thermal spring list U.S.

R

Bliss 1983 Ak basic data thermal springs & wells

R,Fs,Fw

Brook & others 1979 Hydrothermal systems <90 deg

R,Fs

Collier 1902 Recon NW Seward Penin

H,Gr

Forbes & others 1975 Utilization geothermal rural Ak

Fs,DP,Ef

Hopkins & Hopkins 1958 Seward Peninsula

Gr

Hudson 1977 Geol map Seward Penin

Gr

Hudson 1977 Zoned granite stock Seward Penin

PG

Hudson 1977 Zoned granite stock Seward Penin. (thesis)

PG

Hudson 1979 Ig & meta rocks Serpentine HS area

GS

Markle 1979 Geotherm Ak site data base & devel status R,Fs,Gr,C

Miller 1973 Distribution & chem analysis thermal springs Ak

R,Fs

Miller & others 1975 Geol & chem hot springs W cent Ak

R,Fs

Motyka & others 1983 Geothermal resources of Alaska

R,Fs,Ff,Fw

Muffler 1979 Assmt geothermal resources U. S.

R,Fs,HS

Nehring & others 1979 Sulfate geotherm western U. S.

R,Fs

Ogle 1976 Ak. hot spring site for small binary plant

R,DP,Fs

Robinson & Stevens 1983 Geol map Seward Penin

Gr

Robinson & Stevens 1984 Geol map Seward Penin

Gr

Sainsbury & others 1968 SnO2 Humbolt Cr Serpentine-Kougarok

Gr

Sainsbury & others 1970 Geol min dep geochem & rad Serpentine

Gr

Turner & others 1980 Geothermal resources Alaska

R,Fs

Waring 1917 Mineral springs Ak

Fs,R

Waring 1965 Thermal springs US & world - a summary

Fs

White & Williams 1975 Assmt geothermal resources US

R,Fs,HS

Shishaldin

AA-24

Brown 1899 Shishaldin

H

Decker 1967 Invest at active volcanoes

V

Fournelle & Marsh 1986 Shishaldin lavas [abs.]

PG,V

Markle 1979 Geotherm Ak site data base & devel status

R,Fs,Gr,C

Motyka & others 1983 Geothermal resources of Alaska

R,Fs,Ff,Fw

Powers 1953 Activity Aleut volcanoes

V

Prosser 1912 Volcanic road-building

H,V

Westdahl 1900 Mountains on Unimak

H

White & Williams 1975 Assmt geothermal resources US

R,Fs,HS

Snowy Mt.

SC-8

Allen & Zies 1923 Chem study fumaroles Katmai region

Ff

Berg & Keinle 1966 Gravity meas Katmai volc area

Pr

Berg & others 1967 Crustal structure - Katmai

Ps

Bordet & others 1963 Katmai

V

Decker 1964 Geophys investigations Katmai [abs.]

Ps

Griggs 1919 Katmai & VTTS

H,V

Keller 1955 Geol Katmai [abs.]

Gr

Keller & Reiser 1959 Geol Katmai

Gr

Kienle 1968 Gravity Survey Katmai (thesis)

V,Ps

Kienle 1969 Gravity traverse VTTS, Katmai [abs.]

V,Ps

GEOHERMAL SITE

TOPIC

Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & others 1981 Volcanic centers Katmai [abs.]	V,R
Kosco 1981 Andesitic volcanism at Katmai	PG
Kosco 1981 Edgecumbe volc & Katmai (thesis)	PG
Kubota & Berg 1967 Magma in Katmai range	V,Pr
MacGregor 1952 Eruptive mechanisms VTTS	V
Matumoto 1971 Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Ward 1967 Microquake study Katmai	Pr,V
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Morris 1985 Katmai Park draft management plan	C,DP
Muller & others 1954 Volcanic activity Katmai	V
Reck 1930 Review VTTS (Ger)	H,V
Rubenstone & others 1985 Isot & trace elem Katmai [abs.]	PG
Shipley 1919 VTTS	H
Smith 1925 Cold Bay Katmai dist	Gr,H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr,H
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

South NC-10

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1970 Petro plutonic rocks W central Ak	PG
Miller 1971 Petro plutonic rocks W cent Ak (thesis)	PG
Miller 1972 K rich intrusive rocks W Ak	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1966 Prelim plutonic belt W cent Ak	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Patton & others 1968 Reg geol map Shungnak & Ambler River	Q Gr
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Rosenbruch & Bottge 1975 Econ potent 3 sites Ak	EF
Turner & others 1980 Geothermal resources Alaska	R,Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Summer Bay AA-19, AA-20

Beebee & Kirkwood 1979 Unalaska-geothermal prospects	C,EF
Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Boyd & Jacob 1984 Seismicity of Unalaska	Pr
Dames & Moore 1980 Geothermal drilling studies Unalaska	Er
Drewes & others 1961 Geol Unalaska & adjacent shelf	Gr
Economides & Arce 1983 Geothermal in Ak - eng & geol anal	EF,Er
Economides & others 1981 Unalaska geothermal development	DP
Economides & others 1982 Eng,geol anal geothermal sites	EF,Er
Jacob & Boyd 1985 Seismic network on Unalaska	Pr

GEOHERMAL SITE

TOPIC

Lankford & Hill 1979 Strat & depos envirn Dutch Harbor member	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R,Fs,Ff
Motyka & others 1981 Assmt thermal spring Aleutian arc	R,Fs,Ff,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Peale 1886 Mineral springs of US	H,R
Reeder 1981 Initial assmt hydrotherm Summer Bay Unalaska	Er,Gs
Reeder 1982 Hydrothermal resources N Unalaska Is	Fs,Ff
Rosenbruch & Bottge 1975 Econ potent 3 sites Ak	EF
Turner & others 1980 Geothermal resources Alaska	R,Fs
Wescott & others 1981 Geophys survey Summer Bay	Ps
Wescott & others 1982 He & Hg survey parts Unalaska	Gc

Sun Mt. NC-14

Cass 1959 Recon geol map Melozitna Q Ak.	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1970 Petro plutonic rocks W central Ak	PG
Miller 1971 Petro plutonic rocks W cent Ak (thesis)	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1966 Prelim plutonic belt W cent Ak	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Patton 1973 Recon geology N Yukon-Koyukuk	Gr
Patton & others 1978 Geol map Melozitna Q	Gr
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs

Tanaga

Coats & Marsh 1984 Recon geol & petrol N Tanaga [abs.]	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs

Tatlawiksuk SC-22

Blodgett & Gilbert 1983 Cheeneetnuk limestone Mc Grath	Gr
Bundtzen & Gilbert 1983 Geology upper Kuskokwim	Gr
Bundtzen & Kline 1986 Coal, peat & geotherm in Kuskokwim	R,DP
Cady & others 1955 Geology central Kuskokwim	Gr
Decker 1984 Kuskokwim group	Gr
Decker & Hoare 1982 Cretaceous Kuskokwim Group	Gs
Dickey 1983 Tertiary seds & tectonics Farewell fault area	Gs,PG
Dickey & others 1982 Cenozoic seds & Farewell fault	Gr
Gilbert 1981 Geologic map Cheeneetnuk River area	Gs

Tenakee SE-5, SE-6

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Economides & Arce 1983 Geothermal in Ak - eng & geol anal	EF,Er
Economides & others 1982 Eng,geol anal geothermal sites	EF,Er

GEO THERMAL SITE

TOPIC

Knopf 1912 Sitka mining district	H,Gr
Loney & others 1963 Geol Freshwater Bay Chichagof Is	Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava 1975 Note on hot springs SE Ak	R,Fs
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Reeder & others 1980 Ak. geothermal program	DP
Rosenthal 1908 Hot springs of southeast Alaska	H,R
Rossmann 1959 Geol & ore dep NW Chichagof Is	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Wright 1906 Nonmetallic deposits SE Ak.	Gr,H

Tenakee Inlet SE-3

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Knopf 1912 Sitka mining district	H,Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Nava 1975 Note on hot springs SE Ak	R,Fs
Rosenthal 1908 Hot springs of southeast Alaska	H,R
Rossmann 1959 Geol & ore dep NW Chichagof Is	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Tetlin NC-40

Carter & Galloway 1978 Geol map proposed gas line	Gr
Foster 1970 Recon geol map Tanacross Quad	Gr

GEOTHERMAL SITE

TOPIC

Tolovana NC-31

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Forbes & others 1975 Utilization geothermal rural Ak	Fs,DP,Ef
Foster & others 1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others 1973 Geology Yukon-Tanana upland	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Mertie 1932 Yukon Tanana region	Gr
Mertie 1934 Mineral deposits Rampart & Hot Springs district	Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Nava & Morrison 1974 Note on hot springs interior Ak	R,Fs
Turner & others 1980 Geothermal resources Alaska	R,Fs
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Tunalkten Lake NC-19

Berry & others 1980 Thermal spring list U.S.	R
Forbes & others 1975 Utilization geothermal rural Ak	Fs,DP,Ef
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1970 Petro plutonic rocks W central Ak	PG
Miller 1971 Petro plutonic rocks W cent Ak (thesis)	PG
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1966 Prelim plutonic belt W cent Ak	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Patton 1973 Recon geology N Yukon-Koyukuk	Gr
Patton & Miller 1966 Regional geol map Hughes Q	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs

Twin Lakes SE-12

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brew & others 1984 Geologic map Peterbrg, Sumdum, P. Alex	Gr
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Kerr 1948 Stikine & Iskut River area BC, Canada	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Motyka & Moorman 1980 Assmt thermal spring S SE Ak [abs.]	R,Fs
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & others 1980 Assmt therm spr S SE Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Turner & others 1980 Geothermal resources Alaska	R,Fs
Wright & Wright 1908 Ketchikan & Wrangell mining districts	Gr,H

Ukinrek AA-37

Barnes & McCoy 1979 Mantle-derived CO₂ in 2 phreatic expl Fs,Ff,V
 Berry & others 1980 Thermal spring list U.S. R
 Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q Gr
 Detterman & others 1985 Geol map Ugashik & W Karluk Q Gr
 Detterman & others 1986 Quat map Ugashik-Bristol Bay-Karluk Q Gr
 Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs V,PG
 Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers V,PG
 Kienle & others 1978 Form. 2 maars behind volc arc [abs.] V
 Kienle & others 1978 Formation 2 maars Ak Penin prelim results V
 Kienle & others 1980 Ukinrek Maars 1977 eruption V
 LeCompte 1981 Prelim map Landsat Ugashik & Karluk Q Gr
 Lorenz 1982 Eruption Ukinrek Maars V
 Miller 1984 2 stage volcanism Ugashik-Peulik [abs.] PG
 Motyka & others 1981 Assmt thermal spring Aleutian arc R,Fs,Ff,Gr
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Self & others 1978 Mechanisms & deposits Ukinrek [abs.] Ps,Gs,V
 Self & others 1980 Ukinrek Maars II deposits & formation V
 Smith & Baker 1924 Cold Bay-Chignik dist Gr,H
 Turner & others 1980 Geothermal resources Alaska R,Fs

Upper Division NC-11

Gassaway & Abramson 1977 Map & table thermal springs cntr Ak R,Fs
 Miller 1970 Petro plutonic rocks W central Ak PG
 Miller 1971 Petro plutonic rocks W cent Ak (thesis) PG
 Miller 1972 K rich intrusive rocks W Ak PG
 Miller & others 1966 Prelim plutonic belt W cent Ak Gr
 Motyka & others 1983 Geothermal resources of Alaska R,Fs,Ff,Fw
 Nava & Morrison 1974 Note on hot springs interior Ak R,Fs
 Patton & others 1968 Reg geol map Shungnak & Ambler River Q Gr
 Rosenbruch & Bottge 1975 Econ potent 3 sites Ak EF

Upper Klawasi SC-17

AGS 1975 Drum thermal springs area DP
 Andreasen & others 1958 Aeromag Copper River basin Pr
 Andreasen & others 1964 Geol inter mag & grav Copper Rvr basn Pr
 Berry & others 1980 Thermal spring list U.S. R
 Bliss 1983 Ak basic data thermal springs & wells R,Fs,Fw
 Church & others 1970 Copper River basin strat correl section Gs
 Economides & Arce 1983 Geothermal in Ak - eng & geol anal EF,Er
 Economides & others 1982 Eng,geol anal geothermal sites EF,Er
 Emery & Jones 1984 Hydrologic atlas Copper River basin Gs
 Emmel & Coonrod 1982 Geol Literature Copper River basin Gr
 Ferrians & Nichols 1965 Copper River basin Gr
 Ferrians & Schmoll 1957 Wisc progacial lake Copper River bsn Gr
 Ferrians & others 1958 Pleist volc mudflow Copper River basin V
 Ferrians & others 1983 Copper River basin Gr
 Foresman 1968 Photogeol & geomorph Copper River basin Gs
 Foresman 1970 Mud volcanoes Copper River basin (thesis) Gs
 Grantz & others 1962 Saline springs Copper River basin Fs
 Hawkins & Motyka 1985 Stat & chem anal H₂O Copper River bsn Fs,Fw

GEOHERMAL SITE

TOPIC

Henning & others 1981 Wrangell-St Elias Wilderness	C
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Mendenhall 1903 Mineral resources Mt Wrangell district	H,Gr
Mendenhall 1905 Geology central Copper River region	H,Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others 1986 Geochem isot org mud volc Copper	R Fs,Ff,Fw
Nichols & Yehle 1961 Anal gas & water Copper River basin	Fs
Nichols & Yehle 1961 Mud volc Copper River basin	Fs
Nichols & Yehle 1969 Eng geol map SE Copper River basin	Gs
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Reeder & others 1980 Ak. geothermal program	DP
Reitsema 1979 Gases of mud volc Copper River basin	Fs
Richter & others 1979 Geol map Gulkana A-2 Q	Gr
Stoltzfus 1982 Copper River basin planning study	C
Turner & others 1980 Geothermal resources Alaska	R,Fs
Turner & others 1983 Sum, eval gthrm exp Copper R bsn	Gs,Ps,Fs,RM
Wescott & Turner 1983 Geotherm expl E Copper R basin	Ps,Gc,Fs,Fw
Wescott & Turner 1983 Geotherm potent Copper R basin	Gs,Ps,Gc,DP
Wescott & Turner 1985 Geotherm invest Copper *	Gs,Ps,Gc,DP,Fs,Fw
Williams 1985 Eng geol map Copper River basin	Eg
Yehle & others 1985 Geol frm drilling in Copper R. basin	Gr

Upper Noatak NC-38

Brosge & Pessel 1977 Prelim recon geol map Survey Pass Q	Gr
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Upper Ray NC-24

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q	Gr
Chapman & others 1982 Recon geol map Tanana Q	Gr
Dover & Mayaoka 1985 Rocks Ray Mts, Tanana & Bettles Q	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Nava & Morrison 1974 Note on hot springs interior Ak	R,Fs
Patton & Miller 1970 Prelim geol invest Kanuti	Gr
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs

Veniaminof

Davidson 1893 Eruption of Veniaminof	H,V
Hubbard 1931 Geol Aniakchak & Veniaminof [abs.]	Gr,H
Smith & Shaw 1979 Igneous related geothermal systems	R,HS

White Mt. SC-24

Bundtzen & Gilbert 1983 Geology upper Kuskokwim	Gr
Bundtzen & Kline 1986 Coal, peat & geotherm in Kuskokwim	R,DP
Cady & others 1955 Geology central Kuskokwim	Gr

GEO THERMAL SITE

TOPIC

Decker 1984 Kuskokwim group	Gr
Decker & Hoare 1982 Cretaceous Kuskokwim Group	Gs
Dickey 1983 Tertiary seds & tectonics Farewell fault area	Gs,PG
Dickey 1984 Cenozoic rocks Farewell area	Gr
Dickey & others 1982 Cenozoic seds & Farewell fault	Gr
Gilbert 1981 Geologic map Cheeneetnuk River area	Gs
Gilbert & Solie 1983 Prelim geol map Mc Grath A-3 Quad	Gr
Solie 1983 Plutons in Mc Grath A-3 Quad	Gs

White Sulfur SE-1

Berry & others 1980 Thermal spring list U.S.	R
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Decker 1980 Geol Cret. subduct complx Chichagof Is (thesis)	Gr
Decker 1980 Geol map W Chichagof Island	Gr
Knopf 1912 Sitka mining district	H,Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Martin 1917 Mineral resources of Ak.	H,Gr
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Nava 1975 Note on hot springs SE Ak	R,Fs
Rossmann 1959 Geol & ore dep NW Chichagof Is	Gr
Turner & others 1980 Geothermal resources Alaska	R,Fs
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS

Willow SC-15

Capps 1935 Southern Alaska Range	Gr
Detterman & others 1976 Geol map by faults in Kenai & Tyonek Q	Gr
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Reger 1978 Recon geol capital site	Gr
Reger & Carver 1978 Recon geol materials map capital site	Gr
Still 1980 Index water qual records to 1978	Gr
Turner & Wescott 1982 Prelim invest gthrm L Susitna	Gs,Ps,Gc,HS
Wescott & Witte 1982 Gravity survey L Susitna basin	Ps

ALASKA GEOTHERMAL BIBLIOGRAPHY

SECTION IV

ADDITIONAL REGIONAL LISTING

(see Table I - Abbreviations used in short references - Pg. 223)
(see Table II - Codes used in short references - Pg. 227)
(see Figures for geothermal region locations - Pgs. 233-243)

REGION

TOPIC

Alaska Peninsula

Beaglehole	1967 Journals of Captain James Cook	H
Burk	1965 Geol Ak Penin-island arc & continental margin	Gr
Capps	1934 Notes geol Ak Penin & Aleutian Islands	Gr
Case & others	1980 Tertiary volc centers Ak Penin.	Gr,V
Davydov	1809 Voyages to Russian America 1802-1807	H
Doroshin	1870 Volcanoes, eruptions & earthquakes	H
Dumond	1979 People & pumice Ak Penin.	V,C
Estes	1978 Seismotectonic studies lower Cook Inlet (thesis)	Pr
Grewingk	1850 Historic geology NW North America (Ger)	V,H
Hansen & others	1981 Mineral potential Ak Penin.	Gr
Henning & others	1976 Alaska's volcanoes	V,R
Hubbard	1935 Cradle of storms	V,H
Kienle	1974 Alaskan volcano studies esp. Augustine	V
Kienle & Forbes	1974 Ak volc studies Augustine	V
Kienle & others	1983 Magmatism subduction E Aleutian arc	V,PG
Miller & Smith	1975 Ak geothermal study	R
Miller & Smith	1975 Ash flows Ak Penin prelim rpt [abs.]	V,Gr
Miller & Smith	1983 Calderas E Aleutian arc [abs.]	Gr
Nakamura & others	1977 Volc tectonic stress orient Aleut & Ak	R,V
Perrey	1866 Quakes & volcanism Aleutians & Ak Penin (Fr)	H
Powers	1956 Activity AK volcanoes 1949-53	V
Powers	1958 Ak. Penin Aleut Is	V
Pulpan & Kienle	1978 Seismic & volcanic risks, Alaska	V,Eg
Reed & Lanphere	1973 Ak-Aleut batholith, geochron & chem	Gr
Reed & Lanphere	1973 Plutonic rocks Ak-Aleut batholith	Gr
Shelikhov	1790 Voyage to America 1783-1786	H,C
Simkin & others	1981 Volcanoes of the World	V,R
Smith & others	1978 Data & therm energy est young ig sys US	R,HS
Spurr	1900 Recon in SW Ak 1898	H,Gr
Wilson & others	1985 Alaska Peninsula terrane	Gr
Workman	1979 Signif volc in prehist of subarctic	C

Aleutians

Beaglehole	1967 Journals of Captain James Cook	H
Black	1980 Movements sea level Aleutian Is	Gr
Black	1981 Late Quat climatic changes Aleutian Islands	Gr
Black	1983 Glacial chronology Aleutians	Gr
Burk	1965 Geol Ak Penin-island arc & continental margin	Gr
Capps	1934 Notes geol Ak Penin & Aleutian Islands	Gr
Coats	1950 Volc activity Aleutian arc	R,V
Coats	1962 Magma type & crustal structure Aleutian arc	PG
Davydov	1809 Voyages to Russian America 1802-1807	H
Doroshin	1870 Volcanoes, eruptions & earthquakes	H
Edsall	1976 Trace elem in tephra Aleutians	V
Grewingk	1850 Historic geology NW North America (Ger)	V,H
Henning & others	1976 Alaska's volcanoes	V,R
Hrdlicka	1945 Aleutian Is & inhabitants	C,H
Hubbard	1935 Cradle of storms	V,H
Jaggar	1908 Technical expedition to Aleutians	H
Kay & Kay	1982 Aleut volc rock, primitive magmas [abs.]	PG
Kay & others	1982 Tectonic control of magmatism Aleut arc	PG

REGION

TOPIC

Kienle 1969 Gravity in the Aleutians [abs.]	Pr
Kienle 1974 Alaskan volcano studies esp. Augustine	V
Kienle & Forbes 1974 Ak volc studies Augustine	V
Kienle & others 1981 Subd & magma E Aleut arc [abs.]	R,PG
Kienle & others 1983 Magmatism subduction E Aleutian arc	V,PG
Marsh 1974 Aleutian arc magmatism (thesis)	V,PG
Marsh 1982 Aleutians - orogenic andesites	Gr,PG
Miller & Smith 1983 Calderas E Aleutian arc [abs.]	Gr
Morgan 1980 Aleutians	C
Motyka 1982 High temp hydrotherm Aleutian arc [abs.]	R,Fs,Ff
Nakamura & others 1977 Volc tectonic stress orient Aleut & Ak	R,V
Perrey 1866 Quakes & volcanism Aleutians & Ak Penin (Fr)	H
Powers 1956 Activity AK volcanoes 1949-53	V
Powers 1958 Ak. Penin Aleut Is	V
Reed & Lanphere 1972 Geol map Ak-Aleut batholith K/Ar ages	Gr
Reed & Lanphere 1973 Ak-Aleut batholith, geochron & chem	Gr
Reeder 1982 Hydrotherm potential Aleut arc - Makushin [abs]	DP
Scheidegger & Kulm 1973 Cyclic Aleut volc ash DSDP 178 [abs.]	V
Scheidegger & others 1977 Ash volc Aleut & Kamchat arc [abs.]	V
Shelikhov 1790 Voyage to America 1783-1786	H,C
Simkin & others 1981 Volcanoes of the World	V,R
Smith & others 1978 Data & therm energy est young ig sys US	R,HS
Stewart 1975 Late Cenozoic erupt Aleutians & Kuril Is arcs	V
Wilson & Turner 1975 Rad age map Aleutians	Gr
Workman 1979 Signif volc in prehist of subarctic	C

Interior

Beikman & Lathram 1975 Prelim geol map N Ak	Gr
Eberlein & others 1977 Prelim geol map central Alaska	Gr

Northern

Beikman & Lathram 1975 Prelim geol map N Ak	Gr
Blanchard & Tailleir 1982 Prelim geothermal isograd map NPRA	HS
Lachenbruch & others 1984 Geotherm Prudhoe Bay	HS
Wilson & Turner 1975 Rad age map N Ak	Gr

Seward Peninsula

Hopkins & Hopkins 1958 Seward Peninsula	Gr
Hudson 1977 Geol map Seward Penin	Gr

South Central

Beikman 1974 Prelim geol map SE Quad of Alaska	Gr
Beikman 1974 Prelim geol map SW Quad Alaska	G
Davydov 1809 Voyages to Russian America 1802-1807	H
Shelikhov 1790 Voyage to America 1783-1786	H,C
Wilson 1977 Plutonic rocks SW Ak data compilation	Gr
Wilson & Turner 1975 Rad age map SC Ak	Gr
Wilson & Turner 1975 Rad age map SW Ak	Gr

REGION

TOPIC

South East

Beikman 1975 Prelim geol map SE Alaska	Gr
Grewingk 1850 Historic geology NW North America (Ger)	V,H
Monger & Berg 1985 Terrane map SE Ak. & W. Can.	Gr
Wilson & Turner 1975 Rad age map SE Ak	Gr

Southeastern Quadrant

Beikman 1974 Prelim geol map SE Quad of Alaska	Gr
Schrader & Spencer 1901 Geol & min res Copper River dist	H,Gr
Wilson & Turner 1975 Rad age map SC Ak	Gr

Southwestern Quadrant

Beikman 1974 Prelim geol map SW Quad Alaska	G
Spurr 1900 Recon in SW Ak 1898	H,Gr
Wilson 1977 Plutonic rocks SW Ak data compilation	Gr
Wilson & Turner 1975 Rad age map SW Ak	Gr

Statewide

Barnes & Miller 1974 Geotherm studies in Alaska [abs.]	R,Fs
Barnwell & Pearson 1984 Ak resource inventory	DP
Basecu 1980 Geothermal in Alaska	R
Beikman 1980 Geologic map of Alaska	Gr
Blackwell & Steele 1986 NA geothermal map [abs.]	R,HS
Conwell & Schell 1977 Energy resource map Alaska	R
Dall 1870 Alaska and its resources	H
Fitch 1927 Mineral waters of the U.S.	H
Forbes 1975 Geothermal energy & wind power	R,DP
Forbes & Biggar 1973 Ak geothermal resource potential	R,HS
Forbes & others 1975 Utilization of Alaska thermal springs	DP
Godwin & others 1971 Classif of public land for geothermal	R,DP
Hickel 1972 National proposal for geothermal research	DP
Homan 1972 Energy from the earth	R,DP
Johnson & Hartman 1969 Environmental atlas of Ak	C
Jones & others 1984 Terrane map Alaska	Gr
Lawver & others 1979 Regional heat flow Ak	HS
Leonard 1975 Geothermal energy	R
Mariner & others 1978 Data for hydrothermal systems ≥ 90	R,Fs
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Miller & Smith 1975 Ak geothermal study	R
Nathenson & others 1983 Regional heat flow	R,HS
Pewe 1975 Quaternary geology of Ak	Gr
Reeder & others 1980 Geothermal implementation plan	DP
Sammel 1979 Low temp. geothermal in U.S.	R
Simkin & others 1981 Volcanoes of the World	V,R
Taber 1972 Seismicity geotherm areas Ak & other (thesis)	R,Pr
Turner & others 1975 Rad dates Ak 1975 compilation	Gr
Wanek 1973 Geotherm areas by meridian & acreage	R
Wescott & Turner 1982 Geotherm assmt parts of Ak	R,Gs,Ps,Gc

ALASKA GEOTHERMAL BIBLIOGRAPHY

SECTION V

SUBJECT LISTING

(see Table I - Abbreviations used in short references - Pg. 223)

(see Table II - Codes used in short references - Pg. 227)

SUBJECT

ADDITIONAL TOPICS

Cultural, socio-economic data, environmental studies C

Anonymous 1975 Ak regional profiles SW region	C
Beebee & Kirkwood 1979 Unalaska-geothermal prospects	C,EF
Buzzell & Gibson 1986 Nome-Taylor Rd. cultural resources	C
Davies & Kienle 1986 Augustine eruption & advice [abs.]	V,C
Dumond 1979 People & pumice Ak Penin.	V,C
Henning & others 1981 Wrangell-St Elias Wilderness	C
Holmes 1986 Archaeological evaluation Makushin	C
Hrdlicka 1945 Aleutian Is & inhabitants	C,H
Jackson 1880 Alaska & its missions	H,C
Johnson & Hartman 1969 Environmental atlas of Ak	C
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Meaker 1908 Tanana Valley	H,C
Morgan 1980 Aleutians	C
Morris 1985 Katmai Park draft management plan	C,DP
Okada & Okada 1974 Hot springs village Port Moller	C
Okada & Okada 1980 Hot springs site Port Moller	C
Okada & others 1976 Hot springs village Port Moller	C
Okada & others 1979 Hot springs village Port Moller	C
Petrov 1884 Alaska population & resources	H,C
Shelikhov 1790 Voyage to America 1783-1786	H,C
Stern & Stirling 1982 Pilgrim Hot Springs Road	C,R
Stoltzfus 1982 Copper River basin planning study	C
Workman 1979 Signif volc in prehist of subarctic	C

Development & planning DP

AGS 1975 Drum thermal springs area	DP
Baker & others 1977 Geotherm springs-salmon hatchery site	R,DP,Fs
Barnwell & Pearson 1984 Ak resource inventory	DP
Barnwell & Pearson 1984 Ak resource inventory	DP
Bundtzen & Kline 1986 Coal, peat & geotherm in Kuskokwim	R,DP
Carey & others 1983 Unalaska geotherm land, regs, & environ	DP
Denig-Chakroff & others 1985 Development pot Mak reservoir	Er,DP
Economides & others 1981 Unalaska geothermal development	DP
Forbes 1975 Geothermal energy & wind power	R,DP
Forbes & others 1975 Utilization geothermal rural Ak	Fs,DP,EF
Forbes & others 1975 Utilization of Alaska thermal springs	DP
Godwin & others 1971 Classif of public land for geothermal	R,DP
Harrison & Hawkins 1980 Water & heat flow Pilgrim HS	HS,DP
Hawkins & Harrison 1979 Flow rate Pilgrim HS [abs.]	HS,DP
Hickel 1972 National proposal for geothermal research	DP
Homan 1972 Energy from the earth	R,DP
Krause 1986 Power & road corridor study Makushin	Eg,Ps,DP
Lofgren 1983 Geotherm devel Pilgrim springs	DP,Gs,Ps
Markle 1979 Geothermal energy devel Pilgrim HS	DP
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Morris 1985 Katmai Park draft management plan	C,DP
Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP	
Nichols & Reeder 1983 Ak geothermal & hydrotherm development	R,DP
Ogle 1976 Ak. hot spring site for small binary plant	R,DP,Fs
Osterkamp & others 1980 Recon study access power Pilgrim	Ps,Gs,DP

SUBJECT

ADDITIONAL TOPICS

Reeder 1982 Hydrotherm potential Aleut arc - Makushin [abs] DP
 Reeder 1982 Hydrothermal resources Makushin region DP
 Reeder & others 1980 Ak. geothermal program DP
 Reeder & others 1980 Geothermal implementation plan DP
 Reeder & others 1982 Econ & eng geoth develop Makushin EF,Eg,DP
 Republic 1982 Unalaska Gtrml Proj 1A Er,Hs,Fs,Ff,Gs,Ps,DP,RM,HA
 Republic 1983 Unalaska Gtrml Proj 1B Er,Hs,Fs,Ff,Gs,Ps,DP,RM,HA
 Republic 1984 Unalaska Gtrml Proj II Er,Hs,Fs,Fw,Gs,Ps,DP,RM,HA
 Republic 1985 Unalaska Gtrml Proj III *,Er,Hs,Fw,Gs,Ps,DP,RM,HA
 Spencer & others 1982 Anal geothrm res devel Unalaska EF,DP
 Stefano 1974 Low temp use Pilgrim HS DP
 Stefano 1975 Pilgrim HS could heat Nome DP
 Updike 1986 Eng geol, feasibil study Makushin *,Eg,Gs,Ps,Fs,DP
 Wescott & Turner 1983 Geotherm potent Copper R basin Gs,Ps,Gc,DP
 Wescott & Turner 1985 Geotherm invest Copper *,Gs,Ps,Gc,DP,Fs,Fw
 Woodward-Clyde 1983 Geothermal development Pilgrim spr DP

Economic feasibility studies EF

Beebee & Kirkwood 1979 Unalaska-geothermal prospects C,EF
 Denig-Chakroff 1985 Unalaska recon study EF
 Economides & Arce 1983 Geothermal in Ak - eng & geol anal EF,Er
 Economides & others 1982 Eng,geol anal geothermal sites EF,Er
 Forbes & others 1975 Utilization geothermal rural Ak Fs,DP,Ef
 Reeder & others 1982 Econ & eng geoth develop Makushin EF,Eg,DP
 Rosenbruch & Bottge 1975 Econ potent 3 sites Ak EF
 Spencer & others 1982 Anal geothrm res devel Unalaska EF,DP

Engineering geology, hazard studies Eg

Arce 1983 Volcanic hazards Makushin Volcano (thesis) Eg
 Arce & Economides 1982 Volcanic hazards Makushin Volcano Eg
 Combellick 1986 Eng geol power plant site Makushin Eg
 Davies 1986 Seismic hazards - Makushin Eg,Ps
 Economides & others 1985 Eval Makushin geothermal reservoir Er
 Emanuel 1984 Hydro & volc hazards Mt Spurr [abs.] Eg
 Johnson & others 1977 Augustine Volc, evaluat hazards [abs.] V,Eg
 Jones 1986 Coastal engineering - Makushin Eg
 Kienle & Swanson 1980 Volcanic hazards Augustine V,Eg
 Kienle & Swanson 1985 Volc hazards Augustine 2nd ed. V,Eg
 Krause 1986 Power & road corridor study Makushin Eg,Ps,DP
 Long 1986 Glacial hazard Makushin Eg
 March 1986 Avalanche hazards- Makushin Eg
 Nye 1986 Volcanic hazards, Makushin V,Eg
 Pulpan & Kienle 1978 Seismic & volcanic risks, Alaska V,Eg
 Reeder 1986 Ground stability, spring water Broad Bay Eg,Fs,Gs
 Reeder & others 1982 Econ & eng geoth develop Makushin EF,Eg,DP
 Till 1984 Redoubt-strat & volc hazards [abs.] Eg,PG
 Updike 1986 Construction materials Makushin Eg
 Updike 1986 Eng geol, feasibil study Makushin *,Eg,Gs,Ps,Fs,DP
 Williams 1985 Eng geol map Copper River basin Eg

SUBJECT

ADDITIONAL TOPICS

Exploration geochemistry Gc

Matlick & Parmentier 1983 Hg soil survey Makushin Gc,Fs,Ff
 Queen 1987 Alt, H2O-rock equil, Makushin (thesis) HA,Fw,Gs,Gc,HS
 Turner & Wescott 1982 Prelim invest gthrm L Susitna Gs,Ps,Gc,HS
 Turner & Wescott 1986 Geotherm invest Mt. Spurr *,R,Ps,Gc,V,Gs,RM
 Turner & others 1986 Hg and He surveys Mt. Spurr Gc,R
 Wescott 1981 He & Hg cent Seward Penin Gc
 Wescott 1981 He & Hg surveys Chena HS Gc
 Wescott & Turner 1981 Geol & geophys Chena HS *,Gs,Ps,Gc
 Wescott & Turner 1981 Geotherm recon C Seward Pen Gs,Ps,Gc,HS,RM
 Wescott & Turner 1982 Geotherm assmt parts of Ak R,Gs,Ps,Gc
 Wescott & Turner 1983 Geotherm expl E Copper R basin Ps,Gc,Fs,Fw
 Wescott & Turner 1983 Geotherm potent Copper R basin Gs,Ps,Gc,DP
 Wescott & Turner 1985 Geotherm invest Copper *,Gs,Ps,Gc,DP,Fs,Fw
 Wescott & others 1982 He & Hg survey parts Unalaska Gc
 Wescott & others 1985 Prelim rept gthrm invest Mt Spurr Gs,Ps,Gc
 Wiltse 1986 Radon hazard assessment Circle HS Gc

Final report, for areas with numerous interim reports *

Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP
 Motyka & others 1986 Makushin well chem equilib *,Fw,Fs,Ff,HA,RM
 Nye & others 1986 Petro geochem Quat volc Makushin *,V,Gs,PG
 Republic 1985 Unalaska Gtrml Proj III *,Er,HS,Fw,Gs,Ps,DP,RM,HA
 Turner & Forbes 1980 Geol geophy stdy Pilgrim *,Gs,Ps,RM,Fs,Fw,HS
 Turner & Wescott 1986 Geotherm invest Mt. Spurr *,R,Ps,Gc,V,Gs,RM
 Updike 1986 Eng geol, feasibil study Makushin *,Eg,Gs,Ps,Fs,DP
 Wescott & Turner 1981 Geol & geophys Chena HS *,Gs,Ps,Gc
 Wescott & Turner 1985 Geotherm invest Copper *,Gs,Ps,Gc,DP,Fs,Fw

Fumarole chemistry Ff

Allen & Zies 1923 Chem study fumaroles Katmai region Ff
 Barnes & McCoy 1979 Mantle-derived CO2 in 2 phreatic expl Fs,Ff,V
 Barnes & McCoy 1979 Mantle-derived CO2 in 2 phreatic expl Fs,Ff,V
 Chaigneau & Bordet 1963 Gas in glass in VTTS (Fr) P,V
 Harmon & others 1982 Isotopes from Augustine fumaroles Ff
 Johnson 1979 Volc gas studies Ak volcanoes R,Ff
 Johnson 1980 Volc contr Cl to stratosphere V,Ff
 Kodosky & Keskinen 1986 Fumarole alt Augustine [abs.] HA,Ff,V
 Lovering 1957 Halogen-acid alteration VTTS HA,Ff
 Matlick & Parmentier 1983 Hg soil survey Makushin Gc,Fs,Ff
 Menyaylov 1969 Comparison Bezymyany & Katmai (Rus) V,Ff
 Motyka 1982 Fluid geochem Makushin & Akutan geotherm area Ff,Fs
 Motyka 1982 Fluid geochemistry of Makushin Fs,Ff
 Motyka 1982 High temp hydrotherm Aleutian arc [abs.] R,Fs,Ff
 Motyka 1983 Geochem & isotope study water & gas Makushin Fs,Ff
 Motyka 1983 High temp hydrothermal resources Aleut arc R,Fs,Ff
 Motyka 1983 Thermal activity Mt Wrangell (thesis) V,HS,Ff
 Motyka 1984 Chem of water & gas Mt Wrangell [abs.] Ff
 Motyka & Moorman 1981 Recon thermal spr Aleutian arc R,Fs,Ff
 Motyka & Queen 1984 Makushin fluids samps & well log Fs,Ff,Fw,PG
 Motyka & others 1981 Assmt thermal spring Aleutian arc R,Fs,Ff,Gr

SUBJECT

ADDITIONAL TOPICS

Motyka & others 1982 Fluid geochem Hot Springs Akutan	Fs,Ff
Motyka & others 1982 Fluid geochemistry Makushin area	Fs,Ff
Motyka & others 1983 Fluid investigations Makushin area	Fs,Ff
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others 1985 Geol geoc geophys Akutan *	Gs,Fs,Ps,RM,Ff,DP
Motyka & others 1986 Augustine gas sampling [abs.]	Ff
Motyka & others 1986 Geochem isot org mud volc Copper	R Fs,Ff,Fw
Motyka & others 1986 Makushin well chem equilib *	Fw,Fs,Ff,HA,RM
Poreda & others 1981 He isot vars Ak-Aleut arc [abs.]	R,Fs,Ff
Reeder 1981 V-D hydrotherm manifest Unalaska [abs.]	Gs,Ff
Reeder 1982 Hydrothermal resources N Unalaska Is	Fs,Ff
Republic 1985 Unalaska Gtrml Proj III *	Er,HS,Fw,Gs,Ps,DP,RM,HA
Shipley 1920 Chem obs VTTS	HA,Ff
Shipley 1920 Katmai gas & encrustations	HA,Ff,V
Viglino & others 1985 Isot evid magma comp in fum cond Augst V	Ff
Zies 1929 VTTS I-fumarolic incrustations, II-acid gases	Ff,HA

Geology Gr, Gs

Adams 1983 Geol northern Arrigetch pluton (thesis)	Gr
Adams 1984 Geol northern Arrigetch Peaks pluton [abs.]	Gr
Andreasen & others 1958 Aeromag Copper River basin	Pr
Andreasen & others 1964 Geol inter mag & grav Copper Rvr basn	Pr
Arce 1983 Volcanic hazards Makushin Volcano (thesis)	Eg
Bader 1984 Geol map eastern N. slope Ak.	Gr
Bader & Bird 1986 Geol map NE Alaska	Gr
Beget 1986 Prehistoric tephra at Augustine [abs.]	V,Gs
Beikman 1974 Prelim geol map SE Quad of Alaska	Gr
Beikman 1974 Prelim geol map SW Quad Alaska	G
Beikman 1975 Prelim geol map SE Alaska	Gr
Beikman 1980 Geologic map of Alaska	Gr
Beikman & Lathram 1975 Prelim geol map N Ak	Gr
Berg & Hinckley 1963 Recon geol northern Baranof Is.	Gr
Berg & others 1978 Geol map Ketchikan & Prince Rupert Q Ak.	Gr
Biggar 1974 Geol & geophys stdy at Chena HS (thesis)	Gs,Ps,Fs,Fw
Black 1974 Geol & ancient Aleuts	Gr
Black 1974 Late Quat sea level changes Umnak Is	Gr
Black 1975 Late Quat geomorph Umnak Is	Gr
Black 1976 Geol Umnak related to Aleuts	Gr
Black 1980 Movements sea level Aleutian Is	Gr
Black 1981 Holo sea level changes Aleutian Islands	Gr
Black 1983 Glacial chronology Aleutians	Gr
Blodgett & Gilbert 1983 Cheeneetnuk limestone Mc Grath	Gr
Brew & Ford 1985 Geol map Juneau, Taku, Atlin, Skag Quad	Gr
Brew & others 1969 Recon geol Mt Edgecumbe	Gs
Brew & others 1984 Geologic map Peterbrg, Sumdum, P. Alex	Gr
Brophy & Marsh 1984 Petro & geochem Cold Bay volc [abs.]	PG
Brosge & Patton 1982 Bedrock geol maps Dalton Hwy	Gr
Brosge & Pessel 1977 Prelim recon geol map Survey Pass Q	Gr
Buddington & Chapin 1929 Geol & mineral deposits SE Ak	Gr
Bundtzen & Gilbert 1983 Geology upper Kuskokwim	Gr
Bundtzen & Kline 1986 Coal, peat & geotherm in Kuskokwim	R,DP
Bunker & others 1977 Prelim radio ages of rocks Kigluaik Mts	Gr
Burk 1965 Geol Ak Penin-island arc & continental margin	Gr

SUBJECT

ADDITIONAL TOPICS

Byers 1959 Geol Umnak & Bogoslof Islands	Gr
Byers & Barth 1948 Geol Akutan Island	Gr
Cady & others 1955 Geology central Kuskokwim	Gr
Capps 1934 Notes geol Ak Penin & Aleutian Islands	Gr
Capps 1935 Southern Alaska Range	Gr
Carter & Galloway 1978 Geol map proposed gas line	Gr
Case & others 1980 Tertiary volc centers Ak Penin.	Gr,V
Cass 1959 Recon geol map Melozitna Q Ak.	Gr
Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q	Gr
Chapman & others 1982 Recon geol map Tanana Q	Gr
Church & others 1970 Copper River basin strat correl section	Gs
Coats 1947 Geol N Adak Island	Gr
Coats 1947 Geol N Kanaga Is.	Gr
Coats 1950 Volc activity Aleutian arc	R,V
Coats 1953 Geol Buldir Island	Gr
Coats 1956 Geol N Adak Island	Gr
Coats 1956 Geol N Kanaga Island	Gr
Coats 1956 Recon geol W Aleutian Islands	Gr
Coats 1959 Geol recon Gareloi Island	Gr
Coats 1959 Geol recon Semisopochnoi Island	Gr
Coats & Marsh 1984 Recon geol & petrol N Tanaga [abs.]	Gr
Coats & others 1961 Geol recon Kiska Island	Gr
Collazzi & Ireland 1986 Hydrology lower Kuskokwim basin	Gr
Collier 1902 Recon NW Seward Penin	H,Gr
Curtis 1955 Importance of Novarupta [abs.]	V
Curtis 1968 Stratigraphy of ejecta 1912 eruption Katmai	V
Decker 1980 Geol Cret. subduct complx Chichagof Is (thesis)	Gr
Decker 1980 Geol map W Chichagof Island	Gr
Decker 1984 Kuskokwim group	Gr
Decker & Hoare 1982 Cretaceous Kuskokwim Group	Gs
Decker & others 1984 Geol data Russian Mission A-3 Quad	Gr
Decker & others 1984 Geology Sleetmute B-5 Quad	Gr
Detterman 1973 Geol map Iliamna B-2 Quad Augustine Island	Gr
Detterman & Hartsock 1966 Geol Iniskin-Tuxedni region	Gr
Detterman & Reed 1964 Prelim geol map Iliamna Q	Gr
Detterman & Reed 1968 Geol Iliamna Q	Gr
Detterman & Reed 1973 Surficial deposits Iliamna Q	Gr
Detterman & Reed 1980 Strat, struct, & econ geol Iliamna Q	Gr
Detterman & others 1976 Geol map by faults in Kenai & Tyonek Q	Gr
Detterman & others 1979 Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981 Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981 Quat geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q	Gr
Detterman & others 1985 Geol map Ugashik & W Karluk Q	Gr
Detterman & others 1986 Quat map Ugashik-Bristol Bay-Karluk Q	Gr
Dickey 1983 Tertiary seds & tectonics Farewell fault area	Gs,PG
Dickey 1984 Cenozoic rocks Farewell area	Gr
Dickey & others 1982 Cenozoic seds & Farewell fault	Gr
Diller 1884 Volcanic sand Unalaska	H,V
Dillon & others 1983 Geol map Melozitna A-4 Quad	Gr
Dover & Mayaoka 1985 Rocks Ray Mts, Tanana & Bettles Q	Gr
Drewes & others 1961 Geol Unalaska & adjacent shelf	Gr
Eakins 1969 Sulfur deposit Stepovak Bay [abs.]	Gr
East 1982 Geotherm investigation Manley HS (thesis)	Fs,Fw,Gs,Ps

SUBJECT

ADDITIONAL TOPICS

Eberlein & others 1977 Prelim geol map central Alaska	Gr
Eberlein & others 1983 Geol map Craig Q	Gr
Economides & Arce 1983 Geothermal in Ak - eng & geol anal	EF,Er
Edsall 1976 Trace elem in tephra Aleutians	V
Eickelberger & Hildreth 1986 Drilling in Katmai [abs.]	V,Gs,Ps
Emery & Jones 1984 Hydrologic atlas Copper River basin	Gs
Emmel & Coonrod 1982 Geol Literature Copper River basin	Gr
Escher 1922 Lahar VTTS	V,H
Federman & Scheidegger 1984 Distal tephra 1912 Novarupta	V
Fenner 1920 Geol Katmai 1912 eruption [abs.]	V,H
Fenner 1930 Mt Katmai & Mt Mageik	V,H
Fenner 1937 Tuffs of Katmai & Yellowstone	V,H
Ferrians & Nichols 1965 Copper River basin	Gr
Ferrians & Schmoll 1957 Wisc proglacial lake Copper River bsn	Gr
Ferrians & others 1983 Copper River basin	Gr
Fierstein & Hildreth 1984 Pyroclastic deposits Novarupta [abs.]	V
Forbes 1979 Geol, geoph assmt of geotherm pot Pilgrim HS	Gs,Ps
Forbes & Kienle 1971 Petro pre 1912 pyroclast VTTS [abs]	PG,Gs,V
Foresman 1968 Photogeol & geomorph Copper River basin	Gs
Foresman 1970 Mud volcanoes Copper River basin (thesis)	Gs
Foster 1970 Recon geol map Tanacross Quad	Gr
Foster & others 1970 Geol Yukon-Tanana upland [abs.]	Gr
Foster & others 1973 Geology Yukon-Tanana upland	Gr
Foster & others 1983 Geologic map Circle Q	Gr
Foster & others 1983 Prelim geol map Circle Quad	Gr
Fraser & Barnett 1959 Geol Delarof & Andreanof Islands	Gr
Fraser & Snyder 1959 Geol S Adak & Kagalaska Islands	Gr
Fry 1912 Mineral content volcanic ashes	V,H
Funk 1973 Late Quat geol Cold Bay (thesis)	Gr
Funk 1973 Late Quat hist Cold Bay [abs.]	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Gates & others 1971 Geol Near Islands	Gr
Gilbert 1981 Geologic map Cheeneetnuk River area	Gs
Gilbert & Solie 1983 Prelim geol map Mc Grath A-3 Quad	Gr
Griggs 1918 Eruption of Katmai	V,H
Griggs 1922 VTTS	V,H
Griggs 1923 VTTS	V,H
Hansen & others 1981 Mineral potential Ak Penin.	Gr
Herreid 1966 Geol & geochem Inmachuk River	Gr
Higbie 1975 VTTS	V
Hoare & Coonrad 1959 Geol map Russian Mission Quad	Gr
Hopkins 1963 Imuruk Lake Seward Penin	Gr
Hopkins & Hopkins 1958 Seward Peninsula	Gr
Hopkins & Taber 1962 Stratigraphy Manley HS	Gs
Hubbard 1931 Geol Aniakchak & Veniaminof [abs.]	Gr,H
Hudson 1977 Geol map Seward Penin	Gr
Hudson 1979 Ig & meta rocks Serpentine HS area	Gs
Hudson & Plafker 1978 Kigluaik & Bendeleben faults	Gr
Imm 1986 Geol & strat Mt Michelson quads	Gr
Jaggar 1908 Technical expedition to Aleutians	H
Johnson 1976 Zoned magma chamber Augustine [abs.]	V
Johnson 1979 Volcanism at Augustine	V,Gs
Johnson & Grunder 1980 VTTS Tuff II Comp & isot ejecta [abs.]	V
Johnson & Hildreth 1980 VTTS Tuff I Empl, comp & weld [abs.]	V

SUBJECT

ADDITIONAL TOPICS

Jones & others 1984 Terrane map Alaska	Gr
Juhle 1955 Iliamna Volcano	Gs
Keith 1984 Prelim obs fumaroles VTTS	HA
Keith 1985 Hydrotherm alt Novarupta dome VTTS [abs.]	HA
Keller 1955 Geol Katmai [abs.]	Gr
Keller & Reiser 1959 Geol Katmai	Gr
Kennedy & Waldron 1955 Geol Pavlof volcano	Gr
Kerr 1948 Stikine & Iskut River area BC, Canada	Gr
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V, PG
Kienle & others 1970 Seism evidence pre 1912 tuff VTTS [abs.]	Gr
Kienle & others 1980 Ukinrek Maars 1977 eruption	V
Kline 1981 Surf geol Pilgrim vicinity	Gs
Knappen 1926 Geol & min resources Aniakchak	Gr
Knappen 1933 Aniakchak & Veniaminof volcanoes [abs.]	Gr, H
Knopf 1912 Sitka mining district	H, Gr
Lankford & Hill 1979 Strat & depos envirn Dutch Harbor member	Gr
Lawton 1909 Makushin sulfur deposits	Gs
LeCompte 1981 Prelim map Landsat Ugashik & Karluk Q	Gr
LeCompte & Steele 1981 Map Landsat Chignik & Sutwik Is Q	Gr
Lewis & others 1960 Geol Rat Islands, Aleutians	Gr
Loney & others 1963 Geol Freshwater Bay Chichagof Is	Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1964 Recon geol map Baranof & Kruzof Is	Gr
Loney & others 1967 Radio ages & fault movements N SE Ak	Gr
Loney & others 1975 Recon geol Chichagof, Baranof & Kruzof Is	Gr
Lovering 1955 Alteration near halogen-sulfur fumarole [abs.]	HA
Lyle 1973 Geol & mineral evaluation Aniakchak R drainage	Gr
Lyle & Dobey 1974 Geol evaluation Herendeen Bay area	Gr
MacKevett 1976 Geol map McCarthy Q	Gr
MacKevett 1978 Geol map McCarthy Q	Gr
Markle 1979 Geotherm Ak site data base & devel status	R, Fs, Gr, C
Marsh 1974 Aleutian arc magmatism (thesis)	V, PG
Marsh 1980 Geol & petrol N Atka Is [abs.]	Gr
Martin 1917 Mineral resources of Ak.	H, Gr
Martin & Katz 1910 Geol & min resources Iliamna & Lake Clark	H, Gr
Martin & Katz 1912 Geol recon Iliamna Region	H, Gr
Meigs 1986 Structural evol Sadlerochit Mts.	Gr
Mendenhall 1903 Mineral resources Mt Wrangell district	H, Gr
Mendenhall 1905 Geology central Copper River region	H, Gr
Menzie & others 1983 Mineral assmt Circle Quad	Gr
Merrill 1885 Hornblende andesites from Bogosloff	H, Gs, PG
Mertie 1930 Geology Eagle-Circle district	Gr
Mertie 1932 Yukon Tanana region	Gr
Mertie 1934 Mineral deposits Rampart & Hot Springs district	Gr
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP, Gr, V
Miller & Barnes 1976 Geotherm develop Ak summary	DP, Gr, V
Miller & Smith 1975 Ash flows Ak Penin prelim rpt [abs.]	V, Gr
Miller & Smith 1976 2 caldera forming eruptions Umnak	V
Miller & Smith 1976 Ash flows Wrangell volcano	V
Miller & Smith 1976 New volcanoes Aleutian arc	V
Miller & Smith 1983 Calderas E Aleutian arc [abs.]	Gr
Miller & others 1966 Prelim plutonic belt W cent Ak	Gr
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q	Gr
Miller & others 1975 Geol & chem hot springs W cent Ak	R, Fs

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ADDITIONAL TOPICS

Moffit 1905 Fairhaven gold placers Seward Penin H,Gr
 Monger & Berg 1985 Terrane map SE Ak. & W. Can. Gr
 Motyka & Queen 1984 Makushin fluids samp's & well log Fs,Ff,Fw,PG
 Motyka & others 1981 Assmt thermal spring Aleutian arc R,Fs,Ff,Gr
 Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP
 Myers & others 1984 Assim crust by basalt magma Edgecumbe PG
 Nakamura & others 1977 Volc tectonic stress orient Aleut & Ak R,V
 Nelson 1959 Geol Segula, Davidov, & Khvostov Islands Gr
 Nelson & Grybeck 1978 Arrigetch Peaks & Igikpak plutons Gr
 Nichols & Yehle 1969 Eng geol map SE Copper River basin Gs
 Nye & Swanson 1986 Chem strat magma plumb Makushin [abs] V,Gs,PG
 Nye & Swanson 1987 Makushin magma chamber PG,Gs,V
 Nye & Turner 1986 Geology & geochemistry Spurr [abs.] Gs,PG,V
 Nye & others 1984 Geol map Makushin geothermal area Gs
 Nye & others 1986 Petro geochem Quat volc Makushin *,V,Gs,PG
 Osterkamp & others 1980 Recon study access power Pilgrim Ps,Gs,DP
 Palache 1904 Geol Chichagof Cove, Stepovak Bay Gr,H
 Parmentier & others 1983 Geol & hydrotherm alter Makushin Gs,HA
 Patton 1973 Recon geology N Yukon-Koyukuk Gr
 Patton & Hoare 1968 Kaltag Fault W-C Ak Gr
 Patton & Miller 1966 Regional geol map Hughes Q Gr
 Patton & Miller 1970 Prelim geol invest Kanuti Gr
 Patton & others 1968 Reg geol map Shungnak & Ambler River Q Gr
 Patton & others 1978 Geol map Melozitna Q Gr
 Pavia 1986 Structure & strat Okpilak batholith area Gr
 Perrey 1866 Quakes & volcanism Aleutians & Ak Penin (Fr) H
 Pewe 1975 Quaternary geology of Ak Gr
 Queen 1987 Alt, H2O-rock equil, Makushin (thesis) HA,Fw,Gs,Gc,HS
 Ray & others 1966 Petro & geochem Mt Trident andesites [abs.] PG
 Reed & Lanphere 1972 Geol map Ak-Aleut batholith K/Ar ages Gr
 Reed & Lanphere 1973 Ak-Aleut batholith, geochron & chem Gr
 Reed & Lanphere 1973 Plutonic rocks Ak-Aleut batholith Gr
 Reeder 1981 V-D hydrotherm maifest Unalaska [abs.] Gs,Ff
 Reeder 1983 Prelim dating Holo volcanic E Aleut Is [abs.] V,Gr
 Reeder 1984 Fault & dike orientation Makushin [abs.] Gr
 Reeder & others 1985 Geol geotherm resource Makushin R,Gs
 Reger 1978 Recon geol capital site Gr
 Reger & Carver 1978 Recon geol materials map capital site Gr
 Reifenstuhel 1984 Crawfish Inlet Pluton Baranof Is [abs.] Gs,PG
 Reifenstuhel 1984 Geol & geophys Goddard HS (thesis) Gs,Ps,Fs
 Reifenstuhel 1986 Geol Goddard Hot Springs Gs,Ps,Fs
 Republic 1982 Unalaska Gtrml Proj 1A Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
 Republic 1983 Unalaska Gtrml Proj 1B Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
 Republic 1984 Unalaska Gtrml Proj II Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA
 Republic 1985 Unalaska Gtrml Proj III *,Er,HS,Fw,Gs,Ps,DP,RM,HA
 Richter 1975 Geol map Nabesna Q Gr
 Richter 1976 Geol map Nabesna Q Gr
 Richter & others 1979 Geol map Gulkana A-2 Q Gr
 Riehle 1985 Recon Holo tephra deposits upper Cook Inlet V
 Robinson & Decker 1986 Ages & analysis from SW Alaska Gr,PG
 Robinson & Stevens 1983 Geol map Seward Penin Gr
 Robinson & Stevens 1984 Geol map Seward Penin Gr
 Robinson & others 1984 Bdrck geol Chuilnuk & Kiokluk Mts [abs] Gr
 Robinson & others 1984 Geologic map Sleetmute B-5 Q Gr

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ADDITIONAL TOPICS

Robinson & others 1986 Geol map Mt. Michelson C-4 Quad	Gr
Roehn 1941 Pumice deposits Katmai	G
Rogers 1986 Geology Shublik Mts	Gr
Romick 1986 Ig pet and geochem N. Akutan	PG
Rossman 1959 Geol & ore dep NW Chichagof Is	Gr
Sainsbury & others 1968 SnO2 Humbolt Cr Serpentine-Kougarok	Gr
Sainsbury & others 1970 Geol min dep geochem & rad Serpentine	Gr
Schnell & Sheridan 1986 Arctic gas & aerosols-Augustine [abs.]	V
Schrader & Spencer 1901 Geol & min res Copper River dist	H,Gr
Self & others 1978 Mechanisms & deposits Ukinrek [abs.]	Ps,Gs,V
Silberman & others 1978 Age of rocks Ruby, Medfra & adj Q	Gr
Simons & Mathewson 1955 Geol Great Sitkin Is	Gr
Smith 1925 Aniakchak Crater	Gr,H
Smith 1925 Cold Bay Katmai dist	Gr,H
Smith & Baker 1924 Cold Bay-Chignik dist	Gr,H
Snyder 1959 Geol Little Sitkin Is	Gr
Snyder & Fraser 1963 Pillowed lavas Unalaska	Gr
Solie 1983 Plutons in Mc Grath A-3 Quad	Gs
Spurr 1900 Recon in SW Ak 1898	H,Gr
Still 1980 Index water qual records to 1978	Gr
Stoney 1900 Naval expl Alaska	H,Gr
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
Swanson & others 1980 Bedrock geol Pilgrim springs area	Gs
Till 1984 Redoubt-strat & volc hazards [abs.]	Eg,PG
Turner & Nye 1986 Geochronology Mt. Spurr	V
Turner & Swanson 1981 Continent rifting new model Seward Fen	Gr
Turner & Wescott 1982 Prelim invest gthrm L Susitna	Gs,Ps,Gc,HS
Turner & Wescott 1986 Geotherm invest Mt. Spurr *,R,Ps,Gc,V,Gs,RM	
Turner & others 1975 Rad dates Ak 1975 compilation	Gr
Turner & others 1979 Geol & tect setting Pilgrim spr [abs.]	Gs
Turner & others 1981 Continent rifting new model Seward Pen	Gr
Turner & others 1983 Sum, eval gthrm exp Copper R bsn Gs,Ps,Fs,RM	
Turner & others 1986 Mt. Spurr geothermal project	R,Gs,V
Twenhofel & Sainsbury 1958 Fault patterns SE Ak	Gr
Updike 1986 Eng geol, feasibil study Makushin *,Eg,Gs,Ps,Fs,DP	
Waldron 1961 Geol recon Frosty Peak volc	Gr
Wescott & Turner 1981 Geol & geophys Chena HS	*,Gs,Ps,Gc
Wescott & Turner 1981 Geotherm recon C Seward Pen	Gs,Ps,Gc,HS,RM
Wescott & Turner 1982 Geotherm assmt parts of Ak	R,Gs,Ps,Gc
Wescott & Turner 1983 Geotherm potent Copper R basin	Gs,Ps,Gc,DP
Wescott & Turner 1985 Geotherm invest Copper *,Gs,Ps,Gc,DP,Fs,Fw	
Wescott & others 1985 Prelim rept gthrm invest Mt Spurr Gs,Ps,Gc	
Williams 1955 Prelim geol Katmai & VTTS	Gr
Wilson 1977 Plutonic rocks SW Ak data compilation	Gr
Wilson & Shew 1981 Prelim K-Ar studies Circle Q	Gr
Wilson & Turner 1975 Rad age map Aleutians	Gr
Wilson & Turner 1975 Rad age map N Ak	Gr
Wilson & Turner 1975 Rad age map SC Ak	Gr
Wilson & Turner 1975 Rad age map SE Ak	Gr
Wilson & Turner 1975 Rad age map SW Ak	Gr
Wilson & others 1985 Alaska Peninsula terrane	Gr
Winkler & others 1981 Folio Valdez Q	Gr
Woodward-Clyde 1983 Geothermal development Pilgrim spr	DP
Wright 1906 Nonmetallic deposits SE Ak.	Gr,H

SUBJECT

ADDITIONAL TOPICS

Wright & Wright 1908 Ketchikan & Wrangell mining districts Gr,H
 Yehle & others 1985 Geol frm drilling in Copper R. basin Gr

Geophysics Pr, Ps

Allely 1986 Seismic refraction Makushin Ps
 Andreasen & others 1958 Aeromag Copper River basin Pr
 Andreasen & others 1964 Geol inter mag & grav Copper Rvr basn Pr
 Anna 1971 Aeromag survey VTTS (thesis) Pr
 Barrett 1978 Magnetic model of Augustine Volcano (thesis) V,Ps
 Barrett & others 1977 Model of Augustine Volcano [abs.] V,Ps
 Berg & Keinle 1966 Gravity meas Katmai volc area Pr
 Berg & others 1967 Crustal structure - Katmai Ps
 Biggar 1974 Geol & geophys stdy at Chena HS (thesis) Gs,Ps,Fs,Fw
 Boyd & Jacob 1984 Seismicity of Unalaska Pr
 Corwin & Fitterman 1983 Self potential Makushin geotherm area Ps
 Davies 1986 Seismic hazards - Makushin Eg,Ps
 Dean & others 1981 Remote sensing Pilgrim Springs Ps
 Decker 1964 Geophys investigations Katmai [abs.] Ps
 Dixon & Pulpan 1986 Crustal structure-Dall City [abs.] Ps
 East 1982 Geotherm investigation Manley HS (thesis) Fs,Fw,Gs,Ps
 East 1982 Prelim geothermal investigation Manley HS Gs,Ps,Fs
 Eickelberger & Hildreth 1986 Drilling in Katmai [abs.] V,Gs,Ps
 Estes 1978 Seismotectonic studies lower Cook Inlet (thesis) Pr
 Forbes 1979 Geol, geoph assmt of geotherm pot Pilgrim HS Gs,Ps
 Forbes 1979 Geol, geoph assmt of geotherm pot Pilgrim HS Gs,Ps
 Forbes & others 1971 Seismicity Augustine [abs.] Ps,V
 Forbes & others 1975 Geophysical recon Pilgrim Springs Ps
 Forbes & others 1979 Geol, geoph assmt geothrm pot Pilgrim Gs,Ps
 Gedney & others 1970 Seismic refraction - Katmai Ps
 House & others 1981 Seismic gap near Unalaska Gs
 Jacob & Boyd 1985 Seismic network on Unalaska Pr
 Kienle 1968 Gravity Survey Katmai (thesis) V,Ps
 Kienle 1969 Gravity in the Aleutians [abs.] Pr
 Kienle 1969 Gravity traverse VTTS, Katmai [abs.] V,Ps
 Kienle 1970 Gravity traverse VTTS Pr
 Kienle 1972 Volc micro-quakes Augustine [abs.] V,Ps
 Kienle 1976 Seismic monitoring Pavlov V,Ps
 Kienle & Lockhart 1979 Seism & grav survey Pilgrim HS [abs.] Ps
 Kienle & Lockhart 1980 Gravity survey Pilgrim geotherm area Ps
 Kienle & Pulpan 1975 Tide caused quakes at Augustine [abs.] Ps,V
 Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs V,PG
 Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers V,PG
 Kienle & others 1970 Seism evidence pre 1912 tuff VTTS [abs.] Gr
 Kienle & others 1971 Microquake swarm Augustine [abs.] V,Ps
 Kienle & others 1978 Formation 2 maars Ak Penin prelim results V
 Krause 1986 Power & road corridor study Makushin Eg,Ps,DP
 Kubota & Berg 1967 Magma in Katmai range V,Pr
 Lalla 1987 Seismo & thermal studies Augustine (thesis) V,Ps,HS
 Lalla & Kienle 1974 Infrared thermometry Augustine [abs.] V,HS
 Lalla & Kienle 1975 Microquakes, tremors at Pavlov [abs.] Ps,V
 Lalla & Kienle 1978 Evolution seismicity Augustine [abs.] V,Ps
 Lalla & Kienle 1980 Problems volc seismo Augustine [abs.] V,Ps
 Lalla & Kienle 1986 Seis therm precursors erupt Augustine V,Ps,HS

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ADDITIONAL TOPICS

Lockhart 1981 Gravity survey central Seward Penin.	Pr
Lockhart & Kienle 1980 Seism & grav survey Pilgrim spr KGRA	Ps
Lofgren 1983 Geotherm devel Pilgrim springs	DP,Gs,Ps
Longenkamp & others 1974 Elec resist survey Pilgrim Springs	Ps
Matumoto 1971 Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Molnar 1967 Shadow effect S waves Katmai [abs.]	Pr,V
Matumoto & Ward 1967 Microquake study Katmai	Pr,V
Mauk & Kienle 1973 Microquake Augustine earthtides	Ps,V
McNutt 1983 Activity Pavlov Shumagin gap? [abs.]	V
McNutt 1984 Eruption & stress Pavlov [abs.]	V
McNutt & Beavan 1981 Quakes at Pavlov earth tides	V
McNutt & Beavan 1984 Pavlov sea level & aseismic slip [abs.]	V
McNutt & Mori 1983 B type quakes Pavlov [abs.]	V
Metzner 1975 Magnetotelluric invest. Augustine (thesis)	Ps,V
Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP	
Nakamura & others 1977 Volc tectonic stress orient Aleut & Ak R,V	
Osterkamp & others 1979 Conduct & hydrol meas Pilgrim HS [abs]	Ps
Osterkamp & others 1980 Recon study access power Pilgrim	Ps,Gs,DP
Page & others 1982 Seism Spurr, Redoubt, & Iliamna [abs.]	V
Pearson 1977 Seismic refr Augustine (thesis)	V,Ps
Pearson & Kienle 1978 Seismic refr study Augustine [abs.]	V,Ps
Pulpan & Kienle 1978 Seismic & volcanic risks, Alaska	V,Eg
Reeder & others 1977 Seism Augustine volc [abs.]	V,Ps
Reifenstuhel 1984 Geol & geophys Goddard HS (thesis)	Gs,Ps,Fs
Reifenstuhel 1986 Geol Goddard Hot Springs	Gs,Ps,Fs
Republic 1982 Unalaska Gtrml Proj 1A Er,Hs,Fs,Ff,Gs,Ps,DP,RM,HA	
Republic 1983 Unalaska Gtrml Proj 1B Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA	
Republic 1984 Unalaska Gtrml Proj II Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA	
Republic 1985 Unalaska Gtrml Proj III *,Er,HS,Fw,Gs,Ps,DP,RM,HA	
Sbar & Matumoto 1972 Refraction VTTs	Pr
Self & others 1978 Mechanisms & deposits Ukinrek [abs.]	Ps,Gs,V
Shore 1985 Resist survey & interp	Ps,RM
Stone & Packer 1972 Paleomag VTTs [abs.]	Pr
Stone & others 1971 Magnetic anomalies VTTs [abs.]	Pr
Taber 1972 Seismicity geotherm areas Ak & other (thesis)	R,Pr
Turner & Forbes 1980 Geol geophy stdy Pilgrim *,Gs,Ps,RM,Fs,Fw,HS	
Turner & Wescott 1982 Prelim invest gthrm L Susitna	Gs,Ps,Gc,HS
Turner & Wescott 1986 Geotherm invest Mt. Spurr *,R,Ps,Gc,V,Gs,RM	
Turner & others 1983 Sum, eval gthrm exp Copper R bsn	Gs,Ps,Fs,RM
Updike 1986 Eng geol, feasibil study Makushin *,Eg,Gs,Ps,Fs,DP	
Ward & Matumoto 1967 Sum volc & seismic activity Katmai	V,Pr
Wescott 1981 He & Hg surveys Chena HS	Gc
Wescott & Turner 1981 Geol & geophys Chena HS	*,Gs,Ps,Gc
Wescott & Turner 1982 Geotherm assmt parts of Ak	R,Gs,Ps,Gc
Wescott & Turner 1983 Geotherm expl E Copper R basin	Ps,Gc,Fs,Fw
Wescott & Turner 1983 Geotherm potent Copper R basin	Gs,Ps,Gc,DP
Wescott & Turner 1985 Geotherm invest Copper *,Gs,Ps,Gc,DP,Fs,Fw	
Wescott & Witte 1982 Gravity survey L Susitna basin	Ps
Wescott & others 1979 Resis survey Pilgrim HS [abs.]	Ps
Wescott & others 1980 Resis survey Pilgrim spr area	Ps
Wescott & others 1981 Geophys survey Summer Bay	Ps
Wescott & others 1982 Geophys survey Hot Springs Akutan Is	Ps
Wescott & others 1985 Prelim rept gthrm invest Mt Spurr	Gs,Ps,Gc
Wescott & others 1986 Geophysical surveys Mt. Spurr	Ps,R

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ADDITIONAL TOPICS

Wescott & others 1986 Ice thickness Mt. Spurr summit	Ps
Wilson & Forbes 1969 Infrasonic waves & volc erupt [abs.]	V
Wilson & Forbes 1969 Infrasonic waves Ak volc eruptions	V
Yehle & others 1985 Geol frm drilling in Copper R. basin	Gr

Geothermal R

AGS 1975 Drum thermal springs area	DP
Allen & Zies 1923 Chem study fumaroles Katmai region	Ff
Anonymous 1982 Reed River Hot Springs	Fs
Baker & others 1977 Geotherm springs-salmon hatchery site	R,DP,Fs
Barnes & McCoy 1979 Mantle-derived CO2 in 2 phreatic expl	Fs,Ff,V
Barnes & Miller 1974 Geotherm studies in Alaska [abs.]	R,Fs
Barnwell & Pearson 1984 Ak resource inventory	DP
Basecu 1980 Geothermal in Alaska	R
Beebee & Kirkwood 1979 Unalaska-geothermal prospects	C,EF
Berry & others 1980 Thermal spring list U.S.	R
Biggar 1974 Geol & geophys stdy at Chena HS (thesis)	Gs,Ps,Fs,Fw
Blackwell & Steele 1986 NA geothermal map [abs.]	R,HS
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
Brook & others 1979 Hydrothermal systems <90 deg	R,Fs
Bundtzen & Kline 1986 Coal, peat & geotherm in Kuskokwim	R,DP
Carey & others 1983 Unalaska geotherm land, regs, & environ	DP
Chaigneau & Bordet 1963 Gas in glass in VTTS (Fr)	P,V
Combellick 1986 Eng geol power plant site Makushin	Eg
Conwell & Schell 1977 Energy resource map Alaska	R
Corwin & Fitterman 1983 Self potential Makushin geotherm area	Ps
Dames & Moore 1980 Geothermal drilling studies Unalaska	Er
Davidson 1884 First ascent Makushin	H
Dean & others 1981 Remote sensing Pilgrim Springs	Ps
Denig-Chakroff 1985 Unalaska recon study	EF
Denig-Chakroff & others 1985 Development pot Mak reservoir	Er,DP
East 1982 Geotherm investigation Manley HS (thesis)	Fs,Fw,Gs,Ps
East 1982 Prelim geothermal investigation Manley HS	Gs,Ps,Fs
Economides & Arce 1983 Geothermal in Ak - eng & geol anal	EF,Er
Economides & others 1981 Unalaska geothermal development	DP
Economides & others 1982 Eng,geol anal geothermal sites	EF,Er
Economides & others 1982 Reservoir eng analysis Pilgrim Sprg	Er
Economides & others 1985 Eval Makushin geothermal reservoir	Er
Ferrians & others 1958 Pleist volc mudflow Copper River basin	V
Fitch 1927 Mineral waters of the U.S.	H
Forbes 1975 Geothermal energy & wind power	R,DP
Forbes 1976 Geothermal energy for Alaska	R
Forbes 1979 Geol, geoph assmt of geotherm pot Pilgrim HS	Gs,Ps
Forbes & Biggar 1973 Ak geothermal resource potential	R,HS
Forbes & others 1975 Geophysical recon Pilgrim Springs	Ps
Forbes & others 1975 Utilization geothermal rural Ak	Fs,DP,EF
Forbes & others 1975 Utilization of Alaska thermal springs	DP
Forbes & others 1979 Geol, geoph assmt geothrm pot Pilgrim	Gs,Ps
Forbes & others 1979 Pilgrim springs hydrothermal system	RM
Foresman 1970 Mud volcanoes Copper River basin (thesis)	Gs
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Godwin & others 1971 Classif of public land for geothermal	R,DP
Griggs 1918 VTTS mud flow	V,H

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ADDITIONAL TOPICS

Griggs 1921 VTTS	V,H
Griggs 1922 VTTS	V,H
Hansen & others 1981 Mineral potential Ak Penin.	Gr
Harrison & Hawkins 1980 Water & heat flow Pilgrim HS	HS,DP
Hawkins & Harrison 1979 Flow rate Pilgrim HS [abs.]	HS,DP
Hawkins & Motyka 1985 Stat & chem anal H2O Copper River bsn	Fs,Fw
Hickel 1972 National proposal for geothermal research	DP
Homan 1972 Energy from the earth	R,DP
Hudson 1979 Ig & meta rocks Serpentine HS area	Gs
Johnson 1979 Volc gas studies Ak volcanoes	R,Ff
Kase 1986 Trocadero soda springs	C
Keith 1986 Hydrothermal alteration Novarupta [abs.]	HA,V
Keith & Foster 1979 Big Windy Creek HS	Fs
Keith & others 1981 Chem & isot data Big Windy Creek HS	Fs
Kienle & Lockhart 1979 Seism & grav survey Pilgrim HS [abs.]	Ps
Kienle & Lockhart 1980 Gravity survey Pilgrim geotherm area	Ps
Kienle & others 1978 Form. 2 maars behind volc arc [abs.]	V
Kienle & others 1978 Formation 2 maars Ak Penin prelim results	V
Kienle & others 1980 Ukinrek Maars 1977 eruption	V
Kienle & others 1981 Subd & magma E Aleut arc [abs.]	R,PG
King 1909 Tanana Valley	H
Kline 1980 Test drilling Pilgrim 1979	Er
Kline 1981 Surf geol Pilgrim vicinity	Gs
Kline & others 1980 Surf geol & drilling Pilgrim HS	Gs,Er
Kodosky & Keskinen 1986 Fumarole alt Augustine [abs.]	HA,Ff,V
Kunza & Lofgren 1983 Pilgrim HS expl, drill, & testing	Er
Lawton 1909 Makushin sulfur deposits	Gs
Leonard 1975 Geothermal energy	R
Lockhart & Kienle 1980 Seism & grav survey Pilgrim spr KGRA	Ps
Lofgren 1983 Geotherm devel Pilgrim springs	DP,Gs,Ps
Longenkamp & others 1974 Elec resist survey Pilgrim Springs	Ps
Lovering 1957 Halogen-acid alteration VTTS	HA,Ff
Maddren 1919 Sulfur on Unalaska & Akun Is & Stepovak Bay	H,Gr
Mariner & others 1978 Data for hydrothermal systems >= 90	R,Fs
Markle 1979 Geotherm Ak site data base & devel status	R,Fs,Gr,C
Markle 1979 Geothermal energy devel Pilgrim HS	DP
Matlick & Parmentier 1983 Hg soil survey Makushin	Gc,Fs,Ff
Meaker 1908 Tanana Valley	H,C
Menyaylov 1969 Comparison Bezymyany & Katmai (Rus)	V,Ff
Miller 1973 Distribution & chem analysis thermal springs Ak	R,Fs
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Miller & Smith 1975 Ak geothermal study	R
Miller & others 1975 Geol & chem hot springs W cent Ak	R,Fs
Morrison-Knudson Co. 1981 Geotherm potential Aleut Unalaska	R
Motyka 1977 Katmai caldera geothermal activity	V,Fs
Motyka 1978 Surveillance Katmai caldera & crater lake	V
Motyka 1982 Fluid geochem Makushin & Akutan geotherm area	Ff,Fs
Motyka 1982 Fluid geochemistry of Makushin	Fs,Ff
Motyka 1982 High temp hydrotherm Aleutian arc [abs.]	R,Fs,Ff
Motyka 1983 Geochem & isotope study water & gas Makushin	Fs,Ff
Motyka 1983 High temp hydrothermal resources Aleut arc	R,Fs,Ff
Motyka 1983 Thermal activity Mt Wrangell (thesis)	V,HS,Ff
Motyka 1984 Chem of water & gas Mt Wrangell [abs.]	Ff

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ADDITIONAL TOPICS

Motyka & Moorman 1980 Assmt thermal spring S SE Ak [abs.]	R, Fs
Motyka & Moorman 1981 Recon thermal spr Aleutian arc	R, Fs, Ff
Motyka & Moorman 1987 Geotherm resources SE Ak	R, Fs, Fw
Motyka & others 1977 Glac-volc investigations Katmai [abs.]	V
Motyka & others 1980 Assmt therm spr S SE AK	R, Fs
Motyka & others 1980 Geochemistry Pilgrim thermal waters	Fs, Fw
Motyka & others 1981 Assmt thermal spring Aleutian arc	R, Fs, Ff, Gr
Motyka & others 1982 Fluid geochem Hot Springs Akutan	Fs, Ff
Motyka & others 1982 Fluid geochemistry Makushin area	Fs, Ff
Motyka & others 1983 Fluid investigations Makushin area	Fs, Ff
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Motyka & others 1985 Geol geoc geophys Akutan *	Gs, Fs, Ps, RM, Ff, DP
Motyka & others 1986 Makushin well chem equilib *	Fw, Fs, Ff, HA, RM
Muffler 1973 Geothermal resources	R
Muffler 1979 Assmt geothermal resources U. S.	R, Fs, HS
Nathenson & others 1983 Regional heat flow	R, HS
Nava 1975 Note on hot springs SE Ak	R, Fs
Nava & Morrison 1974 Note on hot springs interior Ak	R, Fs
Nehring & others 1979 Sulfate geotherm western U. S.	R, Fs
Nichols & Reeder 1983 Ak geothermal & hydrotherm development	R, DP
Nichols & Yehle 1961 Anal gas & water Copper River basin	Fs
Nichols & Yehle 1961 Mud volc Copper River basin	Fs
Nye & Swanson 1986 Chem strat magma plumb Makushin [abs]	V, Gs, PG
Nye & others 1984 Geol map Makushin geothermal area	Gs
Nye & others 1986 Petro geochem Quat volc Makushin	*, V, Gs, PG
Ogle 1976 Ak. hot spring site for small binary plant	R, DP, Fs
Okada & Okada 1974 Hot springs village Port Moller	C
Okada & Okada 1980 Hot springs site Port Moller	C
Okada & others 1976 Hot springs village Port Moller	C
Okada & others 1979 Hot springs village Port Moller	C
Osterkamp & others 1979 Conduct & hydrol meas Pilgrim HS [abs]	Ps
Osterkamp & others 1980 Recon study access power Pilgrim	Ps, Gs, DP
Parmentier & others 1983 Geol & hydrotherm alter Makushin	Gs, HA
Peale 1886 Mineral springs of US	H, R
Poreda & others 1981 He isot vars Ak-Aleut arc [abs.]	R, Fs, Ff
Queen 1984 Lith log & hydrotherm alt of core from Makushin	HA
Queen 1987 Alt, H ₂ O-rock equil, Makushin (thesis)	HA, Fw, Gs, Gc, HS
Queen & Motyka 1984 Changes in Makushin geoth system [abs.]	HA
Ramdohr 1962 Magnetite from fumaroles VTTS (Ger)	HA
Reed & others 1983 Data low temp geothermal systems US	HS, R, Fs
Reeder 1981 Initial assmt hydrotherm Summer Bay Unalaska	Er, Gs
Reeder 1981 V-D hydrotherm manifest Unalaska [abs.]	Gs, Ff
Reeder 1982 Hydrotherm potential Aleut arc - Makushin [abs]	DP
Reeder 1982 Hydrothermal resources Makushin region	DP
Reeder 1982 Hydrothermal resources N Unalaska Is	Fs, Ff
Reeder 1984 Fault & dike orientation Makushin [abs.]	Gr
Reeder 1986 Ground stability, spring water Broad Bay	Eg, Fs, Gs
Reeder & others 1980 Ak. geothermal program	DP
Reeder & others 1980 Geothermal implementation plan	DP
Reeder & others 1982 Econ & eng geoth develop Makushin	EF, Eg, DP
Reeder & others 1985 Geol geotherm resource Makushin	R, Gs
Reifenstuhl 1984 Geol & geophys Goddard HS (thesis)	Gs, Ps, Fs
Reitsema 1979 Gases of mud volc Copper River basin	Fs
Republic 1983 Unalaska Gtrml Proj 1B	Er, HS, Fs, Ff, Gs, Ps, DP, RM, HA

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ADDITIONAL TOPICS

Republic 1984 Unalaska Gtrml Proj II	Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA
Republic 1985 Unalaska Gtrml Proj III	*,Er,HS,Fw,Gs,Ps,DP,RM,HA
Romick 1986 Ig pet and geochem N. Akutan	PG
Rosenbruch & Bottge 1975 Econ potent 3 sites Ak	EF
Rosenthal 1908 Hot springs of southeast Alaska	H,R
Sainsbury & others 1970 Geol min dep geochem & rad Serpentine	Gr
Sammel 1979 Low temp. geothermal in U.S.	R
Sayre & Hagelbarger 1918 Temps in VTTS	H,HS
Self & others 1980 Ukinrek Maars II deposits & formation	V
Shipley 1919 VTTS	H
Shipley 1920 Chem obs VTTS	HA,Ff
Shore 1985 Resist survey & interp	Ps,RM
Sloan 1976 Chem anal Bailey Bay HS	Fs
Sloan 1976 Chem anal Bell Is HS	Fs
Sloan 1976 Chem anal Chief Shakes HS	Fs
Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Smith & others 1978 Data & therm energy est young ig sys US	R,HS
Sosman 1919 Temp in fumaroles VTTS	H,HS
Spencer & others 1982 Anal geothrm res devel Unalaska	EF,DP
Stefano 1974 Low temp use Pilgrim HS	DP
Stefano 1975 Pilgrim HS could heat Nome	DP
Stern & Stirling 1982 Pilgrim Hot Springs Road	C,R
Swanson & others 1980 Bedrock geol Pilgrim springs area	Gs
Taber 1972 Seismicity geotherm areas Ak & other (thesis)	R,Pr
Thompson & Keith 1984 Cl & F in waters VTTS [abs.]	Fs
Turner & Forbes 1980 Geol geophy stdy Pilgrim	*,Gs,Ps,RM,Fs,Fw,HS
Turner & Nye 1986 Geochronology Mt. Spurr	V
Turner & Swanson 1981 Continent rifting new model Seward Pen	Gr
Turner & Wescott 1982 Prelim invest gthrm L Susitna	Gs,Ps,Gc,HS
Turner & Wescott 1986 Geotherm invest Mt. Spurr	*,R,Ps,Gc,V,Gs,RM
Turner & others 1979 Geol & tect setting Pilgrim spr [abs.]	Gs
Turner & others 1980 Geothermal resources Alaska	R,Fs
Turner & others 1980 Sum geol geophys invest Pilgrim spr	RM
Turner & others 1981 Continent rifting new model Seward Pen	Gr
Turner & others 1983 Sum, eval gthrm exp Copper R bsn	Gs,Ps,Fs,RM
Turner & others 1986 Mt. Spurr geothermal project	R,Gs,V
Turner & others 1986 Hg and He surveys Mt. Spurr	Gc,R
Updike 1986 Eng geol, feasibil study Makushin	*,Eg,Gs,Ps,Fs,DP
Viglino & others 1985 Isot evid magma comp in fum cond Augst	V,Ff
Wanek 1973 Geotherm areas by meridian & acreage	R
Waring 1917 Mineral springs Ak	Fs,R
Waring 1965 Thermal springs US & world - a summary	Fs
Wescott 1981 He & Hg cent Seward Penin	Gc
Wescott 1981 He & Hg surveys Chena HS	Gc
Wescott & Turner 1981 Geol & geophys Chena HS	*,Gs,Ps,Gc
Wescott & Turner 1981 Geotherm recon C Seward Pen	Gs,Ps,Gc,HS,RM
Wescott & Turner 1982 Geotherm assmt parts of Ak	R,Gs,Ps,Gc
Wescott & Turner 1983 Geotherm expl E Copper R basin	Ps,Gc,Fs,Fw
Wescott & Turner 1983 Geotherm potent Copper R basin	Gs,Ps,Gc,DP
Wescott & Turner 1985 Geotherm invest Copper	*,Gs,Ps,Gc,DP,Fs,Fw
Wescott & Witte 1982 Gravity survey L Susitna basin	Ps
Wescott & others 1979 Resis survey Pilgrim HS [abs.]	Ps
Wescott & others 1980 Resis survey Pilgrim spr area	Ps
Wescott & others 1982 Geophys survey Hot Springs Akutan Is	Ps

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ADDITIONAL TOPICS

Wescott & others 1982 He & Hg survey parts Unalaska	Gc
Wescott & others 1985 Prelim rept gthrml invest Mt Spurr	Gs,Ps,Gc
Wescott & others 1986 Geophysical surveys Mt. Spurr	Ps,R
Wescott & others 1986 Ice thickness Mt. Spurr summit	Ps
White & Williams 1975 Assmt geothermal resources US	R,Fs,HS
Wiltse 1986 Radon hazard assessment Circle HS	Gc
Woodward-Clyde 1983 Geothermal development Pilgrim spr	DP
Zies 1921 Hot springs in VTTS	Fs
Zies 1924 Fumarolic incrustations Katmai [abs.]	HA
Zies 1924 Fumarolic incrustations VTTS	HA
Zies 1929 VTTS I-fumarolic incrustations, II-acid gases	Ff,HA

Heat flow studies and estimates of thermal energy HS

Bingham 1967 Ice & heat studies Mt. Wrangell (thesis)	V,HS
Bingham & Benson 1967 Mt. Wrangell ice & heat studies	V,HS
Bingham & Benson 1968 Ash temp variations Mt Wrangell	V,HS
Blackwell & Steele 1986 NA geothermal map [abs.]	R,HS
Blanchard & Tailleux 1982 Prelim geothermal isograd map NPRA	HS
Forbes & Biggar 1973 Ak geothermal resource potential	R,HS
Forbes & others 1975 Fission track age & geotherm grad [abs.]	HS
Forbes & others 1977 Fission track age & geothermal gradient	HS
Gosink & Osterkamp 1980 Prelim invest hot water Pilgrim River	HS
Harrison & Hawkins 1980 Water & heat flow Pilgrim HS	HS,DP
Hawkins & Harrison 1979 Flow rate Pilgrim HS [abs.]	HS,DP
Isselhardt & others 1983 Geotherm resource model Makushin	RM,HS
Isselhardt & others 1983 Temp grads Makushin geothermal area	HS
Keith 1984 Prelim obs fumaroles VTTS	HA
Keith 1985 Hydrotherm alt Novarupta dome VTTS [abs.]	HA
Lachenbruch & others 1984 Geotherm Prudhoe Bay	HS
Lalla 1987 Seismo & thermal studies Augustine (thesis)	V,Ps,HS
Lalla & Kienle 1974 Infrared thermometry Augustine [abs.]	V,HS
Lalla & Kienle 1976 Thermal studies Augustine [abs.]	V,HS
Lalla & Kienle 1986 Seis therm precursors erupt Augustine	V,Ps,HS
Lawver & others 1979 Regional heat flow Ak	HS
Motyka 1983 Thermal activity Mt Wrangell (thesis)	V,HS,Ff
Motyka & Benson 1982 Flucts in heat flow Mt Wrangell [abs.]	V,HS
Motyka & others 1978 Increased heat Mt Wrangell [abs.]	HS
Motyka & others 1980 Mt Wrangell glac meas heat flow [abs.]	V,HS
Muffler 1979 Assmt geothermal resources U. S.	R,Fs,HS
Nathenson & others 1983 Regional heat flow	R,HS
Queen 1987 Alt, H2O-rock equil, Makushin (thesis)	HA,Fw,Gs,Gc,HS
Reed & others 1983 Data low temp geothermal systems US	HS,R,Fs
Republic 1982 Unalaska Gtrml Proj 1A	Er,Hs,Fs,Ff,Gs,Ps,DP,RM,HA
Republic 1983 Unalaska Gtrml Proj 1B	Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
Republic 1984 Unalaska Gtrml Proj II	Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA
Republic 1985 Unalaska Gtrml Proj III	*,Er,HS,Fw,Gs,Ps,DP,RM,HA
Sayre & Hagelbarger 1918 Temps in VTTS	H,HS
Smith & Shaw 1979 Igneous related geothermal systems	R,HS
Smith & others 1978 Data & therm energy est young ig sys US	R,HS
Sosman 1919 Temp in fumaroles VTTS	H,HS
Turner & Forbes 1980 Geol geophy stdy Pilgrim	*,Gs,Ps,RM,Fs,Fw,HS
Turner & Wescott 1982 Prelim invest gthrm L Susitna	Gs,Ps,Gc,HS
Wendler 1967 Heat flow Mt. Wrangell	V,HS

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ADDITIONAL TOPICS

White & Williams 1975 Assmt geothermal resources US
 White & Williams 1975 Assmt geothermal resources US

R,Fs,HS
 R,Fs,HS

Historic reports *H*

Beaglehole 1967 Journals of Captain James Cook	H
Becker 1898 Recon of goldfields southern Alaska	H
Brown 1899 Shishaldin	H
Clark 1912 Katmai eruption	V,H
Collier 1902 Recon NW Seward Penin	H,Gr
Daily 1912 Eruption of Katmai	V,H
Dall 1870 Alaska and its resources	H
Dall 1870 Bogosloff volcano	H,V
Dall 1884 New volcano island	H,V
Dall 1889 Notes on Bogoslof island	H,V
Davidson 1884 First ascent Makushin	H
Davidson 1884 New Bogoslof volcano	H,V
Davidson 1884 New volcano in Alaska	H,V
Davidson 1884 Notes volc eruption Augustine	H,V
Davidson 1893 Eruption of Veniaminof	H,V
Davydov 1809 Voyages to Russian America 1802-1807	H
Diller 1884 Volcanic sand Unalaska	H,V
Diller 1893 Our youngest volcano	H
Dunn 1909 Conquering Mt Wrangell	H
Escher 1922 Lahar VTTS	V,H
Fenner 1920 Geol Katmai 1912 eruption [abs.]	V,H
Fenner 1920 Katmai great eruption of 1912	V,H
Fenner 1923 Tuff deposit VTTS	V,H
Fenner 1923 Tuff deposit VTTS	V,H
Fenner 1930 Mt Katmai & Mt Mageik	V,H
Fenner 1937 Tuffs of Katmai & Yellowstone	V,H
Finch 1935 Akutan volcano	V,H
Fitch 1927 Mineral waters of the U.S.	H
Fry 1912 Mineral content volcanic ashes	V,H
Grewingk 1850 Historic geology NW North America (Ger)	V,H
Griggs 1917 VTTS	H
Griggs 1918 Eruption of Katmai	V,H
Griggs 1918 Eruption of Katmai	V,H
Griggs 1918 VTTS	H
Griggs 1918 VTTS mud flow	V,H
Griggs 1919 Katmai & VTTS	H,V
Griggs 1921 VTTS	H
Griggs 1921 VTTS	V,H
Griggs 1922 VTTS	V,H
Griggs 1923 VTTS	V,H
Hrdlicka 1945 Aleutian Is & inhabitants	C,H
Hubbard 1931 Geol Aniakchak & Veniaminof [abs.]	Gr,H
Hubbard 1931 World inside a mountain	V,H
Hubbard 1935 Cradle of storms	V,H
Jackson 1880 Alaska & its missions	H,C
Jaggar 1908 Evolution Bogoslof Volcano	V,H
Jaggar 1908 Evolution of Bogoslof [abs.]	H,V
Jaggar 1908 Technical expedition to Aleutians	H
Jaggar 1927 Eruption of Mageik	V,H

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ADDITIONAL TOPICS

King 1909 Tanana Valley	H
Knappen 1933 Aniakchak & Veniaminof volcanoes [abs.]	Gr,H
Martin 1913 Eruption Katmai	V,H
Meaker 1908 Tanana Valley	H,C
Merriam 1901 Birth of Bogoslof	H,V
Merrill 1885 Hornblende andesites from Bogoslof	H,Gs,PG
Miller & others 1966 Prelim plutonic belt W cent Ak	Gr
Okimura 1930 Eruption Katmai	V,H
Palache 1904 Geol Chichagof Cove, Stepovak Bay	Gr,H
Peale 1886 Mineral springs of US	H,R
Perrey 1866 Quakes & volcanism Aleutians & Ak Penin (Fr)	H
Petrov 1884 Alaska population & resources	H,C
Prosser 1912 Volcanic road-building	H,V
Reck 1930 Review VTTS (Ger)	H,V
Robinson 1948 Exploring Aleutian volc	V,H
Rosenthal 1908 Hot springs of southeast Alaska	H,R
Sayre & Hagelbarger 1918 Temps in VTTS	H,HS
Schrader & Spencer 1901 Geol & min res Copper River dist	H,Gr
Shelikhov 1790 Voyage to America 1783-1786	H,C
Shipley 1919 VTTS	H
Sosman 1919 Temp in fumaroles VTTS	H,HS
Spurr 1900 Recon in SW Ak 1898	H,Gr
Stoney 1884 Volcano in Bering Sea	H,V
Stoney 1900 Naval expl Alaska	H,Gr
Tams 1924 Katmai (Ger)	V,H
Veniaminov 1840 Notes on islands Unalaska district	H
VonLangsdorff 1814 Voyages & travels 1803-1807	H
Westdahl 1900 Mountains on Unimak	H
Whymper 1868 Journey Norton Sound to Fort Yukon	H
Wright 1906 Nonmetallic deposits SE Ak.	Gr,H

Hydrothermal alteration and fumarolic encrustations HA

Keith 1986 Hydrothermal alteration Novarupta [abs.]	HA,V
Kodosky & Keskinen 1986 Fumarole alt Augustine [abs.]	HA,Ff,V
Lovering 1955 Alteration near halogen-sulfur fumarole [abs.]	HA
Lovering 1957 Halogen-acid alteration VTTS	HA,Ff
Motyka & others 1986 Makushin well chem equilib *,Fw,Fs,Ff,HA,RM	
Parmentier & others 1983 Geol & hydrotherm alter Makushin	Gs,HA
Queen 1984 Lith log & hydrotherm alt of core from Makushin	HA
Queen 1987 Alt, H ₂ O-rock equil, Makushin (thesis)	HA,Fw,Gs,Gc,HS
Queen & Motyka 1984 Changes in Makushin geoth system [abs.]	HA
Ramdohr 1962 Magnetite from fumaroles VTTS (Ger)	HA
Republic 1982 Unalaska Gtrml Proj 1A Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA	
Republic 1983 Unalaska Gtrml Proj 1B Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA	
Republic 1984 Unalaska Gtrml Proj II Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA	
Republic 1985 Unalaska Gtrml Proj III *,Er,HS,Fw,Gs,Ps,DP,RM,HA	
Shipley 1920 Chem obs VTTS	HA,Ff
Shipley 1920 Katmai gas & encrustations	HA,Ff,V
Zies 1924 Fumarolic incrustations Katmai [abs.]	HA
Zies 1924 Fumarolic incrustations VTTS	HA
Zies 1929 VTTS I-fumarolic incrustations, II-acid gases	Ff,HA

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ADDITIONAL TOPICS

Maps

Andreasen & others 1958 Aeromag Copper River basin	Pr
Bader 1984 Geol map eastern N. slope Ak.	Gr
Bader & Bird 1986 Geol map NE Alaska	Gr
Beikman 1974 Prelim geol map SE Quad of Alaska	Gr
Beikman 1974 Prelim geol map SW Quad Alaska	G
Beikman 1975 Prelim geol map SE Alaska	Gr
Beikman 1980 Geologic map of Alaska	Gr
Beikman & Lathram 1975 Prelim geol map N Ak	Gr
Berg & others 1978 Geol map Ketchikan & Prince Rupert Q Ak.	Gr
Berry & others 1980 Thermal spring list U.S.	R
Biggar 1974 Geol & geophys stdy at Chena HS (thesis) Gs,Ps,Fs,Fw	R,HS
Blackwell & Steele 1986 NA geothermal map [abs.]	Gr
Blodgett & Gilbert 1983 Cheeneetnuk limestone Mc Grath	Gr
Brew & Ford 1985 Geol map Juneau, Taku, Atlin, Skag Quad	Gr
Brew & others 1984 Geologic map Peterbrg, Sumdum, P. Alex	Gr
Brosge & Patton 1982 Bedrock geol maps Dalton Hwy	Gr
Brosge & Pessel 1977 Prelim recon geol map Survey Pass Q	Gr
Burk 1965 Geol Ak Penin-island arc & continental margin	Gr
Carrick & Maurer 1986 Hydrology - Makushin	Gs
Carter & Galloway 1978 Geol map proposed gas line	Gr
Cass 1959 Recon geol map Melozitna Q Ak.	Gr
Chapman & others 1975 Prelim geol map Tanana & NE Kantishan Q	Gr
Chapman & others 1982 Recon geol map Tanana Q	Gr
Collazzi & Ireland 1986 Hydrology lower Kuskokwim basin	Gr
Combellick 1986 Eng geol power plant site Makushin	Eg
Conwell & Schell 1977 Energy resource map Alaska	R
Decker 1980 Geol Cret. subduct complx Chichagof Is (thesis)	Gr
Decker 1980 Geol map W Chichagof Island	Gr
Decker & others 1984 Geol data Russian Mission A-3 Quad	Gr
Detterman 1973 Geol map Iliamna B-2 Quad Augustine Island	Gr
Detterman & Reed 1964 Prelim geol map Iliamna Q	Gr
Detterman & Reed 1968 Geol Iliamna Q	Gr
Detterman & Reed 1980 Strat, struct, & econ geol Iliamna Q	Gr
Detterman & others 1976 Geol map by faults in Kenai & Tyonek Q	Gr
Detterman & others 1979 Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981 Geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1981 Quat geol map Chignik & Sutwik Is Q	Gr
Detterman & others 1983 Geol map Ugashik-Bristol Bay-Karluk Q	Gr
Detterman & others 1985 Geol map Ugashik & W Karluk Q	Gr
Detterman & others 1986 Quat map Ugashik-Bristol Bay-Karluk Q	Gr
Dillon & others 1983 Geol map Melozitna A-4 Quad	Gr
Eberlein & others 1977 Prelim geol map central Alaska	Gr
Eberlein & others 1983 Geol map Craig Q	Gr
Foster 1970 Recon geol map Tanacross Quad	Gr
Foster & others 1983 Geologic map Circle Q	Gr
Foster & others 1983 Prelim geol map Circle Quad	Gr
Gassaway & Abramson 1977 Map & table thermal springs cntr Ak	R,Fs
Gilbert 1981 Geologic map Cheeneetnuk River area	Gs
Gilbert & Solie 1983 Prelim geol map Mc Grath A-3 Quad	Gr
Hoare & Coonrad 1959 Geol map Russian Mission Quad	Gr
Holmes 1986 Archaeological evaluation Makushin	C
Hudson 1977 Geol map Seward Penin	Gr

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ADDITIONAL TOPICS

Imm 1986 Geol & strat Mt Michelson quads	Gr
Jones & others 1984 Terrane map Alaska	Gr
Krause 1986 Power & road corridor study Makushin	Eg, Ps, DP
LeCompte 1981 Prelim map Landsat Ugashik & Karluk Q	Gr
LeCompte & Steele 1981 Map Landsat Chignik & Sutwik Is Q	Gr
Loney & others 1963 Recon geol map Chichagof & NW Baranof Is	Gr
Loney & others 1964 Recon geol map Baranof & Kruzof Is	Gr
Long 1986 Glacial hazard Makushin	Eg
MacKevett 1976 Geol map McCarthy Q	Gr
MacKevett 1978 Geol map McCarthy Q	Gr
March 1986 Avalanche hazards- Makushin	Eg
Meigs 1986 Structural evol Sadlerochit Mts.	Gr
Menzie & others 1983 Mineral assmt Circle Quad	Gr
Miller 1973 Distribution & chem analysis thermal springs Ak R, Fs	
Miller & others 1972 Prelim geol map Solomon & SE Bendeleben Q	Gr
Monger & Berg 1985 Terrane map SE Ak. & W. Can.	Gr
Motyka & others 1983 Geothermal resources of Alaska	R, Fs, Ff, Fw
Motyka & others 1985 Geol geoc geophys Akutan *, Gs, Fs, Ps, RM, Ff, DP	
Nichols & Yehle 1969 Eng geol map SE Copper River basin	Gs
Nye 1986 Volcanic hazards, Makushin	V, Eg
Nye & others 1984 Geol map Makushin geothermal area	Gs
Nye & others 1986 Petro geochem Quat volc Makushin	*, V, Gs, PG
Patton & Miller 1966 Regional geol map Hughes Q	Gr
Patton & others 1968 Reg geol map Shungnak & Ambler River Q	Gr
Patton & others 1978 Geol map Melozitna Q	Gr
Pavia 1986 Structure & strat Okpilak batholith area	Gr
Pewe 1975 Quaternary geology of Ak	Gr
Reed & Lanphere 1972 Geol map Ak-Aleut batholith K/Ar ages	Gr
Reifenstuhl 1986 Geol Goddard Hot Springs	Gs, Ps, Fs
Republic 1982 Unalaska Gtrml Proj 1A	Er, Hs, Fs, Ff, Gs, Ps, DP, RM, HA
Republic 1983 Unalaska Gtrml Proj 1B	Er, HS, Fs, Ff, Gs, Ps, DP, RM, HA
Richter 1975 Geol map Nabesna Q	Gr
Richter 1976 Geol map Nabesna Q	Gr
Richter & others 1979 Geol map Gulkana A-2 Q	Gr
Robinson & Stevens 1983 Geol map Seward Penin	Gr
Robinson & Stevens 1984 Geol map Seward Penin	Gr
Robinson & others 1984 Geologic map Sleetmute B-5 Q	Gr
Robinson & others 1986 Geol map Mt. Michelson C-4 Quad	Gr
Rogers 1986 Geology Shublik Mts	Gr
Turner & Nye 1986 Geochronology Mt. Spurr	V
Turner & Wescott 1986 Geotherm invest Mt. Spurr	*, R, Ps, Gc, V, Gs, RM
Turner & others 1980 Geothermal resources Alaska	R, Fs
Turner & others 1986 Mt. Spurr geothermal project	R, Gs, V
Turner & others 1986 Hg and He surveys Mt. Spurr	Gc, R
Updike 1986 Construction materials Makushin	Eg
Updike 1986 Eng geol, feasibil study Makushin	*, Eg, Gs, Ps, Fs, DP
Wescott & Turner 1983 Geotherm expl E Copper R basin	Ps, Gc, Fs, Fw
Wescott & Turner 1985 Geotherm invest Copper	*, Gs, Ps, Gc, DP, Fs, Fw
Wescott & Witte 1982 Gravity survey L Susitna basin	Ps
Wescott & others 1986 Geophysical surveys Mt. Spurr	Ps, R
Williams 1985 Eng geol map Copper River basin	Eg
Williams & Johnson 1980 Map Tert & Quat deposits Valdez Q	Gr
Wilson 1977 Plutonic rocks SW Ak data compilation	Gr
Wilson & Shew 1981 Prelim K-Ar studies Circle Q	Gr

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ADDITIONAL TOPICS

Wilson & Turner 1975 Rad age map Aleutians	Gr
Wilson & Turner 1975 Rad age map N Ak	Gr
Wilson & Turner 1975 Rad age map SC Ak	Gr
Wilson & Turner 1975 Rad age map SE Ak	Gr
Wilson & Turner 1975 Rad age map SW Ak	Gr
Winkler & others 1981 Folio Valdez Q	Gr
Yehle & Nichols 1980 Recon map Chetaslina debris flow Copper R	V

Petrology and geochemistry of rocks PG

Ach & DeLong 1980 Magma evo L. Sitkin & Semisopochnoi [abs.]	PG
Baker & Eggler 1983 Atka high alumina basalt	PG
Brophy & Marsh 1984 Petro & geochem Cold Bay volc [abs.]	PG
Byers 1961 Petro 3 volc suites Umnak & Bogoslof Islands	PG
Chaigneau & Bordet 1963 Gas in glass in VTTS (Fr)	P,V
Coats 1952 Magmatic different Adak & Kanaga Islands	PG
Coats 1962 Magma type & crustal structure Aleutian arc	PG
Conrad & Kay 1984 Inclusions Adak Is-nature of primary magma	PG
Daley 1986 Petro, geochem & evol magmas Augustine (thesis)	PG
Daley & Swanson 1985 Low press fractionation Augustine [abs.]	PG
Fenner 1926 Katmai magmatic province	PG
Fenner 1950 Chemical kinetics Katmai eruption	PG
Forbes & Kienle 1971 Petro pre 1912 pyroclast VTTS [abs]	PG,Gs,V
Fournelle & Marsh 1986 Shishaldin lavas [abs.]	PG,V
Furst 1968 Recon petrol Mt Wrangell caldera (thesis)	PG
Harmon & others 1984 Augustine chem & isot character [abs.]	PG
Herreid 1966 Geol & geochem Inmachuk River	Gr
Hildreth 1980 Novarupta 1912 Petro of ejecta [abs.]	PG
Hildreth 1981 1912 eruption VTTS [abs.]	PG
Hildreth 1983 Zoned eruption 1912 VTTS	PG
Hildreth & Grunder 1980 VTTS comp & isotope of ejecta [abs.]	PG
Hildreth & others 1981 VTTS summary of strat & petro of ejecta	PG
Hudson 1977 Zoned granite stock Seward Penin	PG
Hudson 1977 Zoned granite stock Seward Penin. (thesis)	PG
Johnson 1978 Magma mixing Augustine volcano (thesis)	PG
Johnson 1978 Magma mixing Augustine volcano [abs.]	PG
Kay & Kay 1982 Aleut volc rock, primitive magmas [abs.]	PG
Kay & others 1982 Tectonic control of magmatism Aleut arc	PG
Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & others 1981 Subd & magma E Aleut arc [abs.]	R,PG
Kienle & others 1983 Magmatism subduction E Aleutian arc	V,PG
Kosco 1981 Andesitic volcanism at Katmai	PG
Kosco 1981 Edgecumbe volc & Katmai (thesis)	PG
Marsh 1974 Aleutian arc magmatism (thesis)	V,PG
Marsh 1982 Aleutians - orogenic andesites	Gr,PG
Merrill 1885 Hornblende andesites from Bogosloff	H,Gs,PG
Miller 1970 Petro plutonic rocks W central Ak	PG
Miller 1971 Petro plutonic rocks W cent Ak (thesis)	PG
Miller 1972 K rich intrusive rocks W Ak	PG
Miller 1984 2 stage volcanism Ugashik-Peulik [abs.]	PG
Motyka & Queen 1984 Makushin fluids samps & well log	Fs,Ff,Fw,PG
Myers 1978 Petro & petrogenesis Edgecumbe volc [abs.]	PG
Myers 1979 Geol, petro Edgecumbe: trnsfrm fault volc (thesis)	PG

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ADDITIONAL TOPICS

Myers & Marsh 1981 Geol & petrogen Edgumbe volcanics PG
 Myers & others 1984 Assim crust by basalt magma Edgumbe PG
 Myers & others 1986 Isot var Adak & Atka volc plumb V,PG,Gr
 Neal & Swanson 1983 Petro geochem Westdahl & Pogromni [abs.] PG
 Nye 1983 Petro & geochem Okmok & Wrangell volcs (thesis) PG,V
 Nye & Reid 1986 Geochem pri lava Okmok Volc: arc magmagenesis PG
 Nye & Swanson 1986 Chem strat magma plumb Makushin [abs] V,Gs,PG
 Nye & Swanson 1987 Makushin magma chamber PG,Gs,V
 Nye & Turner 1986 Geology & geochemistry Spurr [abs.] Gs,PG,V
 Nye & others 1983 Parental magmas Okmok: arc magmagen [abs.] PG
 Nye & others 1986 Petro geochem Quat volc Makushin *,V,Gs,PG
 Perfit & others 1980 Model for fract in Aleut calc-alk suite PG
 Ramdohr 1962 Magnetite from fumaroles VTS (Ger) HA
 Ray 1967 Geochem & petro Mt Trident andesites (thesis) PG
 Ray & others 1966 Petro & geochem Mt Trident andesites [abs.] PG
 Reed & Lanphere 1972 Geol map Ak-Aleut batholith K/Ar ages Gr
 Reed & Lanphere 1973 Ak-Aleut batholith, geochron & chem Gr
 Reifenstuhl 1984 Crawfish Inlet Pluton Baranof Is [abs.] Gs,PG
 Robinson & Decker 1986 Ages & analysis from SW Alaska Gr,PG
 Robinson & others 1986 Rocks from Sleetmute, Russian Mission Q PG
 Romick 1982 Ig petro & geochem N. Akutan Is (thesis) PG
 Romick 1983 Ig petro & geochem N. Akutan Is [abs.] PG
 Romick 1986 Ig pet and geochem N. Akutan PG
 Romick & Swanson 1983 Petro & fract lava Akutan Is [abs.] PG
 Rubenstone & others 1985 Isot & trace elem Katmai [abs.] PG
 Swanson 1983 Min & fract Makushin volc [abs.] PG
 Swanson & Blum 1984 Evol of volc centers Aleutian arc [abs] V,Gr
 Swanson & others 1981 Geol & petro Kaguyak Crater [abs.] PG
 Swanson & others 1983 Petro Makushin volc [abs.] PG
 Swanson & others 1986 Magmatic evolution Augustine [abs.] PG,V
 Till 1984 Redoubt-strat & volc hazards [abs.] Eg,PG
 Woodruff & Anderson 1980 Arrested magma mixing Pavlov PG
 Yount 1984 Redoubt mineralogy & chem [abs.] V,PG

Reservoir engineering Er

Campbell & Economides 1984 Summary Well no. 1 Makushin volc Er
 Dames & Moore 1980 Geothermal drilling studies Unalaska Er
 Denig-Chakroff & others 1985 Development pot Mak reservoir Er,DP
 Economides & Arce 1983 Geothermal in Ak - eng & geol anal EF,Er
 Economides & others 1982 Eng,geol anal geothermal sites EF,Er
 Economides & others 1982 Reservoir eng analysis Pilgrim Sprg Er
 Kline 1980 Test drilling Pilgrim 1979 Er
 Kline & others 1980 Surf geol & drilling Pilgrim HS Gs,Er
 Kunza & Lofgren 1983 Pilgrim HS expl, drill, & testing Er
 Reeder 1981 Initial assmt hydrotherm Summer Bay Unalaska Er,Gs
 Republic 1982 Unalaska Gtrml Proj 1A Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
 Republic 1983 Unalaska Gtrml Proj 1B Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
 Republic 1984 Unalaska Gtrml Proj II Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA
 Republic 1985 Unalaska Gtrml Proj III *,Er,HS,Fw,Gs,Ps,DP,RM,HA

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ADDITIONAL TOPICS

Resource model RM

Forbes & others 1979 Pilgrim springs hydrothermal system RM
 Isselhardt & others 1983 Geotherm resource model Makushin RM, HS
 Motyka & others 1985 Geol geoc geophys Akutan *,Gs,Fs,Ps,RM,Ff,DP
 Motyka & others 1986 Makushin well chem equilib *,Fw,Fs,Ff,HA,RM
 Republic 1982 Unalaska Gtrml Proj 1A Er,Hs,Fs,Ff,Gs,Ps,DP,RM,HA
 Republic 1983 Unalaska Gtrml Proj 1B Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
 Republic 1984 Unalaska Gtrml Proj II Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA
 Republic 1985 Unalaska Gtrml Proj III *,Er,HS,Fw,Gs,Ps,DP,RM,HA
 Shore 1985 Resist survey & interp Ps,RM
 Turner & Forbes 1980 Geol geophy stdy Pilgrim *,Gs,Ps,RM,Fs,Fw,HS
 Turner & Wescott 1986 Geotherm invest Mt. Spurr *,R,Ps,Gc,V,Gs,RM
 Turner & others 1980 Sum geol geophys invest Pilgrim spr RM
 Turner & others 1983 Sum, eval gthrm exp Copper R bsn Gs,Ps,Fs,RM
 Wescott & Turner 1981 Geotherm recon C Seward Pen Gs,Ps,Gc,HS,RM

Spring and stream chemistry Fs

Anonymous 1982 Reed River Hot Springs Fs
 Baker & others 1977 Geotherm springs-salmon hatchery site R,DP,Fs
 Barnes & McCoy 1979 Mantle-derived CO2 in 2 phreatic expl Fs,Ff,V
 Barnes & Miller 1974 Geotherm studies in Alaska [abs.] R,Fs
 Biggar 1974 Geol & geophys stdy at Chena HS (thesis) Gs,Ps,Fs,Fw
 Bliss 1983 Ak basic data thermal springs & wells R,Fs,Fw
 Brook & others 1979 Hydrothermal systems <90 deg R,Fs
 Carrick & Maurer 1986 Hydrology - Makushin Gs
 East 1982 Geotherm investigation Manley HS (thesis) Fs,Fw,Gs,Ps
 East 1982 Prelim geothermal investigation Manley HS Gs,Ps,Fs
 Forbes & others 1975 Utilization geothermal rural Ak Fs,DP,Ef
 Gassaway & Abramson 1977 Map & table thermal springs cntr Ak R,Fs
 Grantz & others 1962 Saline springs Copper River basin Fs
 Hawkins & Motyka 1985 Stat & chem anal H2O Copper River bsn Fs,Fw
 Keith & Foster 1979 Big Windy Creek HS Fs
 Keith & others 1981 Chem & isot data Big Windy Creek HS Fs
 Mariner & others 1978 Data for hydrothermal systems >= 90 R,Fs
 Markle 1979 Geotherm Ak site data base & devel status R,Fs,Gr,C
 Matlick & Parmentier 1983 Hg soil survey Makushin Gc,Fs,Ff
 Miller 1973 Distribution & chem analysis thermal springs Ak R,Fs
 Miller & others 1975 Geol & chem hot springs W cent Ak R,Fs
 Motyka 1977 Katmai caldera geothermal activity V,Fs
 Motyka 1982 Fluid geochem Makushin & Akutan geotherm area Ff,Fs
 Motyka 1982 Fluid geochemistry of Makushin Fs,Ff
 Motyka 1982 High temp hydrotherm Aleutian arc [abs.] R,Fs,Ff
 Motyka 1983 Geochem & isotope study water & gas Makushin Fs,Ff
 Motyka 1983 High temp hydrothermal resources Aleut arc R,Fs,Ff
 Motyka 1984 Chem of water & gas Mt Wrangell [abs.] Ff
 Motyka & Moorman 1980 Assmt thermal spring S SE Ak [abs.] R,Fs
 Motyka & Moorman 1981 Recon thermal spr Aleutian arc R,Fs,Ff
 Motyka & Moorman 1987 Geotherm resourcers SE Ak R,Fs,Fw
 Motyka & Queen 1984 Makushin fluids samps & well log Fs,Ff,Fw,PG
 Motyka & others 1980 Assmt therm spr S SE Ak R,Fs
 Motyka & others 1980 Geochemistry Pilgrim thermal waters Fs,Fw
 Motyka & others 1981 Assmt thermal spring Aleutian arc R,Fs,Ff,Gr

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ADDITIONAL TOPICS

Motyka & others 1982	Fluid geochem Hot Springs Akutan	Fs,Ff
Motyka & others 1982	Fluid geochemistry Makushin area	Fs,Ff
Motyka & others 1983	Fluid investigations Makushin area	Fs,Ff
Motyka & others 1983	Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others 1985	Geol geoc geophys Akutan *	Gs,Fs,Ps,RM,Ff,DP
Motyka & others 1986	Geochem isot org mud volc Copper	R Fs,Ff,Fw
Motyka & others 1986	Makushin well chem equilib *	Fw,Fs,Ff,HA,RM
Muffler 1979	Assmt geothermal resources U. S.	R,Fs,HS
Nava & Morrison 1974	Note on hot springs interior Ak	R,Fs
Nehring & others 1979	Sulfate geotherm western U. S.	R,Fs
Nichols & Yehle 1961	Anal gas & water Copper River basin	Fs
Nichols & Yehle 1961	Mud volc Copper River basin	Fs
Ogle 1976	Ak. hot spring site for small binary plant	R,DP,Fs
Poreda & others 1981	He isot vars Ak-Aleut arc [abs.]	R,Fs,Ff
Reed & others 1983	Data low temp geothermal systems US	HS,R,Fs
Reeder 1982	Hydrothermal resources N Unalaska Is	Fs,Ff
Reeder 1986	Ground stability, spring water Broad Bay	Eg,Fs,Gs
Reifenstuhl 1984	Geol & geophys Goddard HS (thesis)	Gs,Ps,Fs
Reifenstuhl 1986	Geol Goddard Hot Springs	Gs,Ps,Fs
Reitsema 1979	Gases of mud volc Copper River basin	Fs
Republic 1982	Unalaska Gtrml Proj 1A	Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
Republic 1983	Unalaska Gtrml Proj 1B	Er,HS,Fs,Ff,Gs,Ps,DP,RM,HA
Republic 1984	Unalaska Gtrml Proj II	Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA
Republic 1985	Unalaska Gtrml Proj III *	Er,HS,Fw,Gs,Ps,DP,RM,HA
Sloan 1976	Chem anal Bailey Bay HS	Fs
Sloan 1976	Chem anal Bell Is HS	Fs
Sloan 1976	Chem anal Chief Shakes HS	Fs
Thompson & Keith 1984	Cl & F in waters VTTS [abs.]	Fs
Turner & Forbes 1980	Geol geophy stdy Pilgrim *	Gs,Ps,RM,Fs,Fw,HS
Turner & others 1980	Geothermal resources Alaska	R,Fs
Turner & others 1983	Sum, eval gthrm exp Copper R bsn	Gs,Ps,Fs,RM
Updike 1986	Eng geol, feasibil study Makushin *	Eg,Gs,Ps,Fs,DP
Waring 1917	Mineral springs Ak	Fs,R
Waring 1965	Thermal springs US & world - a summary	Fs
Wescott & Turner 1983	Geotherm expl E Copper R basin	Ps,Gc,Fs,Fw
Wescott & Turner 1985	Geotherm invest Copper *	Gs,Ps,Gc,DP,Fs,Fw
White & Williams 1975	Assmt geothermal resources US	R,Fs,HS
Zies 1921	Hot springs in VTTS	Fs

Volcanology V

Ach & DeLong 1980	Magma evo L. Sitkin & Semisopochnoi [abs.]	PG
Anonymous 1953	Activity of Trident	V
Anonymous 1953	Eruption of Trident	V
Arce 1983	Volcanic hazards Makushin Volcano (thesis)	Eg
Arce & Economides 1982	Volcanic hazards Makushin Volcano	Eg
Barnes & McCoy 1979	Mantle-derived CO2 in 2 phreatic expl	Fs,Ff,V
Barrett 1978	Magnetic model of Augustine Volcano (thesis)	V,Ps
Barrett & others 1977	Model of Augustine Volcano [abs.]	V,Ps
Beget 1986	Prehistoric tephra at Augustine [abs.]	V,Gs
Benson & Follett 1986	Photogrammetry study Mt. Wrangell	V
Benson & Motyka 1978	Glac-volc interaction Mt. Wrangell	V
Benson & others 1975	Glac & volc studies Mt. Wrangell	V

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ADDITIONAL TOPICS

Benson & others 1985 Glacio-volcano studies Mt. Wrangell	V
Bingham 1967 Ice & heat studies Mt. Wrangell (thesis)	V,HS
Bingham & Benson 1967 Mt. Wrangell ice & heat studies	V,HS
Bingham & Benson 1968 Ash temp variations Mt Wrangell	V,HS
Bordet & Tazieff 1963 Erupt of Katmai & ignimbrites	V
Bordet & others 1963 Katmai	V
Brew & others 1965 Eruptive history Mt. Edgecumbe [abs.]	V
Byers & Barth 1953 Volc activity Akun & Akutan Islands	V
Byers & Brannock 1949 Volc activity Umnak & Great Sitkin Is	V
Case & others 1980 Tertiary volc centers Ak Penin.	Gr,V
Chaigneau & Bordet 1963 Gas in glass in VTTS (Fr)	P,V
Clark 1912 Katmai eruption	V,H
Coats 1947 Geol N Adak Island	Gr
Coats 1947 Geol N Kanaga Is.	Gr
Coats 1950 Volc activity Aleutian arc	R,V
Coats 1952 Magmatic different Adak & Kanaga Islands	PG
Coats 1953 Geol Buldir Island	Gr
Coats 1956 Geol N Kanaga Island	Gr
Coats 1956 Recon geol W Aleutian Islands	Gr
Coats 1962 Magma type & crustal structure Aleutian arc	PG
Coats & others 1961 Geol recon Kiska Island	Gr
Curtis 1955 Importance of Novarupta [abs.]	V
Curtis 1968 Stratigraphy of ejecta 1912 eruption Katmai	V
Daily 1912 Eruption of Katmai	V,H
Daley & Swanson 1985 Low press fractionation Augustine [abs.]	PG
Dall 1870 Bogosloff volcano	H,V
Dall 1884 New volcano island	H,V
Dall 1889 Notes on Bogoslof island	H,V
Davidson 1884 New Bogoslof volcano	H,V
Davidson 1884 New volcano in Alaska	H,V
Davidson 1893 Eruption of Veniaminof	H,V
Davies & Kienle 1986 Augustine eruption & advice [abs.]	V,C
Decker 1967 Invest at active volcanoes	V
Detterman 1968 Volcanic activity Augustine Island	V
Diller 1884 Volcanic sand Unalaska	H,V
Doroshin 1870 Volcanoes, eruptions & earthquakes	H
Dumond 1979 People & pumice Ak Penin.	V,C
Edsall 1976 Trace elem in tephra Aleutians	V
Eickelberger & Hildreth 1986 Drilling in Katmai [abs.]	V,Gs,Ps
Emanuel 1984 Hydro & volc hazards Mt Spurr [abs.]	Eg
Escher 1922 Lahar VTTS	V,H
Federman & Scheidegger 1984 Distal tephra 1912 Novarupta	V
Fenner 1920 Geol Katmai 1912 eruption [abs.]	V,H
Fenner 1920 Katmai great eruption of 1912	V,H
Fenner 1923 Tuff deposit VTTS	V,H
Fenner 1923 Tuff deposit VTTS	V,H
Fenner 1926 Katmai magmatic province	PG
Fenner 1930 Mt Katmai & Mt Mageik	V,H
Fenner 1937 Tuffs of Katmai & Yellowstone	V,H
Fenner 1950 Chemical kinetics Katmai eruption	PG
Ferrians & others 1958 Pleist volc mudflow Copper River basin	V
Fierstein & Hildreth 1984 Pyroclastic deposits Novarupta [abs.]	V
Fierstein & Hildreth 1986 Novarupta ejecta [abs.]	V
Finch 1935 Akutan volcano	V,H

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ADDITIONAL TOPICS

Forbes & Kienle 1971 Augustine	V
Forbes & Kienle 1971 Petro pre 1912 pyroclast VTTS [abs.]	PG,Gs,V
Forbes & others 1971 Seismicity Augustine [abs.]	Ps,V
Foresman 1970 Mud volcanoes Copper River basin (thesis)	Gs
Fournelle & Marsh 1986 Shishaldin lavas [abs.]	PG,V
Fry 1912 Mineral content volcanic ashes	V,H
Furst 1968 Recon petrol Mt Wrangell caldera (thesis)	PG
Gosink & others 1986 Augustine ash [abs.]	V
Grewingk 1850 Historic geology NW North America (Ger)	V,H
Griggs 1918 Eruption of Katmai	V,H
Griggs 1918 VTTS mud flow	V,H
Griggs 1919 Character of Katmai eruption	H,V
Griggs 1919 Katmai & VTTS	H,V
Griggs 1921 VTTS	V,H
Griggs 1922 VTTS	V,H
Griggs 1923 VTTS	V,H
Hamilton 1973 Snow & ice during Katmai eruption [abs.]	V
Henning & others 1976 Alaska's volcanoes	V,R
Higbie 1975 VTTS	V
Hildreth 1980 Novarupta 1912 Petro of ejecta [abs.]	PG
Hildreth 1981 1912 eruption VTTS [abs.]	PG
Hildreth 1983 Zoned eruption 1912 VTTS	PG
Hildreth & Fierstein 1986 Novarupta near vent ejecta [abs.]	V
Hildreth & Grunder 1980 VTTS comp & isotope of ejecta [abs.]	PG
Hildreth & others 1981 VTTS summary of strat & petro of ejecta	PG
Hobbs & others 1977 Eruption of Augustine	V
Hubbard 1931 World inside a mountain	V,H
Hubbard 1935 Cradle of storms	V,H
Jaggar 1908 Evolution Bogoslof Volcano	V,H
Jaggar 1908 Evolution of Bogoslof [abs.]	H,V
Jaggar 1927 Eruption of Mageik	V,H
Johnson 1976 Zoned magma chamber Augustine [abs.]	V
Johnson 1978 Magma mixing Augustine volcano (thesis)	PG
Johnson 1978 Magma mixing Augustine volcano [abs.]	PG
Johnson 1979 Volcanism at Augustine	V,Gs
Johnson 1980 Volc contr Cl to stratosphere	V,Ff
Johnson & Detterman 1979 Revision of eruptive history Augustine	V
Johnson & Grunder 1980 VTTS Tuff II Comp & isot ejecta [abs.]	V
Johnson & Hildreth 1980 VTTS Tuff I Empl, comp & weld [abs.]	V
Johnson & Hildreth 1980 VTTS comp & isot of ejecta [abs.]	V
Johnson & others 1977 Augustine Volc, evaluat hazards [abs.]	V,Eg
Juhle 1955 Iliamna Volcano	Gs
Juhle & Coulter 1955 Mt. Spurr eruption 1953	V
Katsui 1984 Okmok	V
Kay & others 1982 Tectonic control of magmatism Aleut arc	PG
Keith 1986 Hydrothermal alteration Novarupta [abs.]	HA,V
Kennedy & Waldron 1955 Geol Pavlof volcano	Gr
Kienle 1968 Gravity Survey Katmai (thesis)	V,Ps
Kienle 1969 Gravity traverse VTTS, Katmai [abs.]	V,Ps
Kienle 1972 Volc micro-quakes Augustine [abs.]	V,Ps
Kienle 1974 Alaskan volcano studies esp. Augustine	V
Kienle 1986 Augustine Volcano [abs.]	V
Kienle & Forbes 1974 Ak volc studies Augustine	V
Kienle & Forbes 1977 Augustine - Evolution of volcano	V

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ADDITIONAL TOPICS

Kienle & Pulpan 1975 Tide caused quakes at Augustine [abs.]	Ps,V
Kienle & Shaw 1977 Augustine erupt - initial phase 1976	V
Kienle & Swanson 1980 Volcanic hazards Augustine	V,Eg
Kienle & Swanson 1983 Volc E Aleut arc L Quat & Holo cntrs	V,PG
Kienle & Swanson 1983 Volc E Aleut arc Quat & Holo centers	V,PG
Kienle & Swanson 1985 Volc hazards Augustine 2nd ed.	V,Eg
Kienle & others 1971 Microquake swarm Augustine [abs.]	V,Ps
Kienle & others 1978 Form. 2 maars behind volc arc [abs.]	V
Kienle & others 1978 Formation 2 maars Ak Penin prelim results	V
Kienle & others 1979 Shallow magma at Augustine	V
Kienle & others 1980 Ukinrek Maars 1977 eruption	V
Kienle & others 1981 Subd & magma E Aleut arc [abs.]	R,PG
Kienle & others 1981 Volcanic centers Katmai [abs.]	V,R
Kienle & others 1983 Magmatism subduction E Aleutian arc	V,PG
Kienle & others 1986 Augustine & tsunamis [abs.]	V
Knappen 1933 Aniakchak & Veniaminof volcanoes [abs.]	Gr,H
Kodosky & Keskinen 1986 Fumarole alt Augustine [abs.]	HA,FF,V
Kosco 1981 Andesitic volcanism at Katmai	PG
Kosco 1981 Edgecumbe volc & Katmai (thesis)	PG
Kubota & Berg 1967 Magma in Katmai range	V,Pr
Lalla 1987 Seismo & thermal studies Augustine (thesis)	V,Ps,HS
Lalla & Kienle 1974 Infrared thermometry Augustine [abs.]	V,HS
Lalla & Kienle 1975 Microquakes, tremors at Pavlov [abs.]	Ps,V
Lalla & Kienle 1976 Thermal studies Augustine [abs.]	V,HS
Lalla & Kienle 1978 Evolution seismicity Augustine [abs.]	V,Ps
Lalla & Kienle 1980 Problems volc seismo Augustine [abs.]	V,Ps
Lalla & Kienle 1986 Seis therm precursors erupt Augustine	V,Ps,HS
Lawton 1909 Makushin sulfur deposits	Gs
Limke & Beget 1986 Pyroclastic flows Augustine [abs.]	V
Lorenz 1982 Eruption Ukinrek Maars	V
MacGregor 1952 Eruptive mechanisms VTTS	V
Martin 1913 Eruption Katmai	V,H
Matumoto 1971 Seism body waves Katmai & molten chmbr [abs.]	Pr,V
Matumoto & Molnar 1967 Shadow effect S waves Katmai [abs.]	Pr,V
Matumoto & Ward 1967 Microquake study Katmai	Pr,V
Mauk & Kienle 1973 Microquake Augustine earthtides	Ps,V
McNutt 1983 Activity Pavlov Shumagin gap? [abs.]	V
McNutt 1984 Eruption & stress Pavlov [abs.]	V
McNutt & Beavan 1981 Quakes at Pavlov earth tides	V
McNutt & Beavan 1984 Pavlov sea level & aseismic slip [abs.]	V
McNutt & Mori 1983 B type quakes Pavlov [abs.]	V
Menyaylov 1969 Comparison Bezymyany & Katmai (Rus)	V,FF
Merriam 1901 Birth of Bogoslof	H,V
Merriman 1910 Bogoslof new volcano	V
Metzner 1975 Magnetotelluric invest. Augustine (thesis)	Ps,V
Miller 1976 Augustine volcano	V
Miller 1978 Airfall pumice Aniakchak	V
Miller 1984 2 stage volcanism Ugashik-Peulik [abs.]	PG
Miller & Barnes 1974 Geotherm devel Ak [abs.]	DP,Gr,V
Miller & Barnes 1976 Geotherm develop Ak summary	DP,Gr,V
Miller & Smith 1975 Ash flows Ak Penin prelim rpt [abs.]	V,Gr
Miller & Smith 1976 2 caldera forming eruptions Umnak	V
Miller & Smith 1976 Ash flows Wrangell volcano	V
Miller & Smith 1976 New volcanoes Aleutian arc	V

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ADDITIONAL TOPICS

Miller & Smith 1977 Mobile ash flows Aniakchak & Fisher calds	V
Miller & Smith 1983 Calderas E Aleutian arc [abs.]	Gr
Motyka 1977 Katmai caldera geothermal activity	V,Fs
Motyka 1978 Surveillance Katmai caldera & crater lake	V
Motyka 1983 Thermal activity Mt Wrangell (thesis)	V,HS,Ff
Motyka & Benson 1982 Flucts in heat flow Mt Wrangell [abs.]	V,HS
Motyka & others 1977 Glac-volc investigations Katmai [abs.]	V
Motyka & others 1978 Increased heat Mt Wrangell [abs.]	HS
Motyka & others 1980 Mt Wrangell glac meas heat flow [abs.]	V,HS
Muller & others 1954 Volcanic activity Katmai	V
Myers 1979 Geol, petro Edgecumbe: trnsfrm fault volc (thesis)	PG
Myers & Marsh 1981 Geol & petrogen Edgecumbe volcanics	PG
Myers & others 1986 Isot var Adak & Atka volc plumb	V,PG,Gr
Nakamura & others 1977 Volc tectonic stress orient Aleut & Ak R,	V
Nye 1982 Wrangell volcs & microplate accretion [abs.]	V
Nye 1983 Petro & geochem Okmok & Wrangell volcs (thesis)	PG,V
Nye 1986 Volcanic hazards, Makushin	V,Eg
Nye & Reid 1986 Geochem pri lava Okmok Volc: arc magmagenesis	PG
Nye & Swanson 1986 Chem strat magma plumb Makushin [abs]	V,Gs,PG
Nye & Swanson 1987 Makushin magma chamber	PG,Gs,V
Nye & Turner 1986 Geology & geochemistry Spurr [abs.]	Gs,PG,V
Nye & others 1983 Parental magmas Okmok: arc magmagen [abs.]	PG
Okimura 1930 Eruption Katmai	V,H
Page & others 1982 Seism Spurr, Redoubt, & Iliamna [abs.]	V
Pearson 1977 Seismic refr Augustine (thesis)	V,Ps
Pearson & Kienle 1978 Seismic refr study Augustine [abs.]	V,Ps
Perfit & others 1980 Model for fract in Aleut calc-alk suite	PG
Perrey 1866 Quakes & volcanism Aleutians & Ak Penin (Fr)	H
Powers 1916 Changes in Bogoslof volc	H,V
Powers 1953 Activity Aleut volcanoes	V
Powers 1956 Activity AK volcanoes 1949-53	V
Powers 1958 Ak. Penin Aleut Is	V
Prosser 1912 Volcanic road-building	H,V
Pulpan & Kienle 1978 Seismic & volcanic risks, Alaska	V,Eg
Reck 1930 Review VTTS (Ger)	H,V
Reeder 1983 Prelim dating Holo volcanic E Aleut Is [abs.]	V,Gr
Reeder 1984 Okmok	V
Reeder & others 1977 Seism Augustine volc [abs.]	V,Ps
Richter & others 1984 Shield volc Wrangell Mts	V
Riehle 1985 Recon Holo tephra deposits upper Cook Inlet	V
Riehle & others 1981 Lahars Crescent River Lower Cook Inlet	V
Robinson 1948 Exploring Aleutian volc	V,H
Scheidegger & Kulm 1973 Cyclic Aleut volc ash DSDP 178 [abs.]	V
Scheidegger & others 1977 Ash volc Aleut & Kamchat arc [abs.]	V
Schmincke & Johnson 1977 Pyroclastic flows Augustine [abs]	
Schnell & Sheridan 1986 Arctic gas & aerosols-Augustine [abs.]	V
Self & others 1978 Mechanisms & deposits Ukinrek [abs.]	Ps,Gs,V
Self & others 1980 Ukinrek Maars II deposits & formation	V
Shackelford 1983 Hist activity Pavlov Volc	V
Shipley 1919 VTTS	H
Shipley 1920 Katmai gas & encrustations	HA,Ff,V
Siebert & others 1986 Debris avalanches Augustine [abs.]	V
Simkin & others 1981 Volcanoes of the World	V,R
Smith & Shaw 1979 Igneous related geothermal systems	R,HS

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ADDITIONAL TOPICS

Snyder 1954 Eruption Trident Katmai	V
Stewart 1975 Late Cenozoic erupt Aleutians & Kuril Is arcs	V
Stith & others 1977 Nuee ardent Augustine Volc	V
Stone & Kienle 1975 Pavlov	V
Stoney 1884 Volcano in Bering Sea	H,V
Swanson & Blum 1984 Evol of volc centers Aleutian arc [abs.]	V,Gr
Swanson & Kienle 1982 Volc centers Katmai	V,Gr
Swanson & others 1981 Geol & petro Kaguyak Crater [abs.]	PG
Swanson & others 1983 Petro Makushin volc [abs.]	PG
Swanson & others 1986 Magmatic evolution Augustine [abs.]	PG,V
Tams 1924 Katmai (Ger)	V,H
Till 1984 Redoubt-strat & volc hazards [abs.]	Eg,PG
Turner & Nye 1986 Geochronology Mt. Spurr	V
Turner & Swanson 1981 Continent rifting new model Seward Pen	Gr
Turner & Wescott 1986 Geotherm invest Mt. Spurr *	R,Ps,Gc,V,Gs,RM
Turner & others 1986 Mt. Spurr geothermal project	R,Gs,V
Updike 1986 Eng geol, feasibil study Makushin *	Eg,Gs,Ps,Fs,DP
Ward & Matumoto 1967 Sum volc & seismic activity Katmai	V,Pr
Ward & Ward 1966 Volc activity in Katmai	V
Wendler 1967 Heat flow Mt. Wrangell	V,HS
Wescott & others 1986 Ice thickness Mt. Spurr summit	Ps
Wilcox 1953 Eruption Mt Spurr	V
Wilcox 1959 Volcanic ash falls Alaska	V
Williams & others 1956 Mt Katmai & VTTS new interp 1912 eruptn	V
Wilson & Forbes 1969 Infrasonic waves & volc erupt [abs.]	V
Wilson & Forbes 1969 Infrasonic waves Ak volc eruptions	V
Wilson & Kienle 1976 Infrasonic signals Augustine volc [abs.]	V
Yehle & Nichols 1980 Recon map Chetaslina debris flow Copper R	V
Yount 1984 Redoubt mineralogy & chem [abs.]	V,PG
Yount & others 1985 Eruption Mt Veniaminof	V
Yount & others 1985 New Holo vent Port Moller & Stepovak Bay Q	V

Well chemistry Fw

Biggar 1974 Geol & geophys stdy at Chena HS (thesis)	Gs,Ps,Fs,Fw
Bliss 1983 Ak basic data thermal springs & wells	R,Fs,Fw
East 1982 Geotherm investigation Manley HS (thesis)	Fs,Fw,Gs,Ps
Hawkins & Motyka 1985 Stat & chem anal H2O Copper River bsn	Fs,Fw
Motyka & Moorman 1987 Geotherm resourcers SE Ak	R,Fs,Fw
Motyka & Queen 1984 Makushin fluids samps & well log	Fs,Ff,Fw,PG
Motyka & others 1980 Geochemistry Pilgrim thermal waters	Fs,Fw
Motyka & others 1983 Geothermal resources of Alaska	R,Fs,Ff,Fw
Motyka & others 1986 Geochem isot org mud volc Copper R	Fs,Ff,Fw
Motyka & others 1986 Makushin well chem equilib *	Fw,Fs,Ff,HA,RM
Queen 1987 Alt, H2O-rock equil, Makushin (thesis)	HA,Fw,Gs,Gc,HS
Republic 1984 Unalaska Gtrml Proj II	Er,HS,Fs,Fw,Gs,Ps,DP,RM,HA
Republic 1985 Unalaska Gtrml Proj III *	Er,HS,Fw,Gs,Ps,DP,RM,HA
Turner & Forbes 1980 Geol geophy stdy Pilgrim *	Gs,Ps,RM,Fs,Fw,HS
Wescott & Turner 1983 Geotherm expl E Copper R basin	Ps,Gc,Fs,Fw

ALASKA GEOTHERMAL BIBLIOGRAPHY

TABLES

Table 1: Abbreviations used in short references.

&	and
<	less than
=	equal to
>	greater than
abs	abstract
adj	adjacent
aeromag	aeromagnetic
Ak.	Alaska
Aleut	Aleutians
alk	alkaline
alt, alter	alteration
anal	analysis
assim	assimilation
assmt	assessment
Augst	Augustine
basn, bsn	basin
bdrck	bedrock
cald	caldera
Can	Canada
cent, cntr, C	center, central
chmbr	chamber
chem	chemical, chemistry
Cl	Chlorine
classif	classification
cmplx	complex
comp	composition, compaction
cond	condensates
conduct	conductivity
contr	contribution
correl	correlation
cr	creek
Cret	Cretaceous
DSDP	Deep Sea Drilling Project
dep, depos	deposit(s), depositional
devel	development
different	differentiation
dist	district
E	east, eastern
econ	economic
elect	electrical
elem	element
empl	emplacement
eng	engineering
envir, environ	environment
equil	equilibria(ium)
erupt	eruption
est	especially, estimates
eval	evaluation
evid	evidence
evo, evol	evolve(d), evolution

expl
F
feasibil
fluct
form
Fr
fract
frm
fum
geochem
geochron
geol
geomorph
geoph(ys)
Ger
glac, glacio
grad
grav
gthrm, geotherm

H₂O
He
Hg
hist
Holo
HS
hwy
hydro
hydrothrm
ig
indx
inter(p)
invest
is
isot
K
K/Ar
KGRA

L
lith
mag
magma
magmagen
Mak
meas
meta
min
N
NA
NE
NPRA

explosions, explosive,
explanation, exploration
Fluorine
feasibility
fluctuations
formation
French
fractionation
from
fumarole
geochemistry, geochemical
geochronology
geology
geomorphology
geophysics, geophysical
German
glacial, glaciological
gradient
gravity
geothermal,
geothermometry
water
Helium
Mercury
historic
Holocene
Hot Spring
highway
hydrology, hydrological
hydrothermal
igneous
index
interpretation
investigation
island
isotope, isotopic
Potassium
Potassium / Argon
Known Geothermal Resource
Area
lower
lithologic(al)
magnetic
magmatism
magmagenesis
Makushin
measure, measurements
metamorphic, metamorphism
mineral
north, northern
North America(n)
northeast, northeastern
National Petroleum
Reserve Alaska

NW	northwest, northwestern
obs	observations
org	origin
P. Alex.	Port Alexander
paleomag	paleomagnetic
penin	peninsula
petro, petrol	petrology
Pleist	Pleistocene
plumb	plumbing
pot	potential
prehist	prehistoric
prelim	preliminary
pri	primary
proj	project
Q, Quad	quadrangle
quakes	earthquakes
qual	quality
Quat	Quaternary
R	river
rad, radio	radiometric
recon	reconnaissance
refr	refraction
reg	regulation, regional
rept, rpt	report
res	resources
resis	resistivity
Rus	Russian
S	south, southern
SC	south-central
SE	southeast
SW	southwest
seids	sediments
seism, (o)	seismology,
	seismological,
	seismicity
signif	significant
SnO ₂	cassiterite
spr	spring
stat	statistical
stdy	study
strat	stratigraphy,
	stratigraphic
struct	structure, structural
subd, subduct	subduction
sum	summary
surf	surficial
sys	system
tect	tectonic
temp	temperature
Tert	Tertiary
therm	thermal
trnsfrm	transform
US	United States
V-D	vapor dominated

VTTS
var
volc

W
weld
Wisc

Valley of 10,000 Smokes
variation
volcanic, volcanological,
volcano
West, western
welding
Wisconsinian

Table 2. Codes used in the short references.

Code	Topic
C	Cultural, socio-economic data, environmental studies
DP	Development and planning
EF	Economic feasibility studies
Eg	Engineering geology, hazard studies
Er	Engineering - reservoir
Ff	Fluid chemistry - fumaroles
Fs	Fluid chemistry - springs
Fw	Fluid chemistry - wells
Gc	Exploration geochemistry
Gr	Geology - regional study
Gs	Geology - site specific study
H	Historic report
HA	Hydrothermal alteration study, includes fumarolic encrustations
HS	Heat flow studies and estimates of thermal energy contents
PG	Petrology and geochemistry of rocks
Pr	Geophysics - regional study
Ps	Geophysics - site specific study
R	Regional geothermal study
RM	Resource model
V	Volcanology
*	Final report. For those areas with numerous interim and preliminary reports, * indicates a synthesis of all previous work.

Table 3. Listing of geothermal sites in Alaska with the codes used on the NOAA map. See reference Motyka and others 1983, Geothermal resources of Alaska. Nine additional sites are included here.

Codes AA - Aleutian Arc and lower Alaska Peninsula

1	Little Sitkin
2	Semisopochnoi
3	Kanaga
4	Adak
5	Great Sitkin
6	Korovin
7	Kliuchef
8	Milky River
9	Seguam
10	Chuginadak
11	Kagamil
12	Geyser Bight
13	Hot Springs Cove
14	Partov Cove
15	Okmok Caldera
16	Makushin Volcano
17	Glacier Valley
18	Makushin Valley
19	Summer Bay
20	Summer Bay Well
21	Akutan Volcano
22	Hot Springs Bay
23	Akun Strati
24	Shishaldin
25	False Pass
26	Kenmore
27	Egg Island
28	Cold Bay
29	Emmons Lake
30	Hague
31	Pavlov
32	Port Moller
33	Kupreanoff
34	Aniakchak
35	Mother Goose
36	Chuginagak
37	Ukinrek
38	Gas Rocks
39	Bogoslof

Codes NC - North Central Alaska

1	Pilgrim Springs
2	Pilgrim Wells
3	Serpentine
4	Lava Creek
5	Battleship Mountain
6	Kwiniuk
7	Clear Creek
8	Granite Mountain
9	Hawk
10	South
11	Upper Division
12	Lower Division
13	Dulbai
14	Sun Mountain
15	Reed River
16	Hornor
17	Melozi
18	Pocahontas
19	Tunalkten Lake
20	Little Melozitna
21	McQuesten
22	Ishtalitna
23	Kilo
24	Upper Ray River
25	Kanuti
26	Lower Ray River
27	Manley
28	Manley Wells
29	Hutlinana
30	Dall
31	Tolovana
32	Chena
33	Circle
34	Big Windy
35	Okpilak
36	Red Hill Spring
37	Inmachuk
38	Upper Noatak
39	Arrigetch
40	Tetlin
41	Minook

Codes SC - South Central Alaska and upper Alaska
Peninsula

1	Ophir
2	Chuilnuk
3	Mt. Martin
4	Mt. Mageik
5	Mt. Griggs
6	Katmai Caldera
7	Mt. Trident
8	Snowy Mt.
9	Kukak
10	Mt. Douglas
11	Augustine
12	Iliamna
13	Redoubt
14	Mt. Spurr
15	Willow Well
16	Lower Klawasi
17	Upper Klawasi
18	North Crater Mt. Wrangell
19	Copper Glacier
20	Novarupta
21	Kaguyak
22	Tatlawiksuk
23	Cheeneetnuk
24	White Mountain

Codes SE - South East Alaska

1	White Sulfur
2	Neka Bay
3	Tenakee Inlet
4	North Peril Strait
5	Tenakee
6	Tenakee Wells
7	Nylen
8	Fish Bay
9	Goddard
10	Baranof
11	Baker Island
12	Twin Lakes
13	Mt. Rynda
14	Chief Shakes
15	Barnes Lake
16	Bradfield Canal
17	Bailey Bay
18	Bell Island
19	Edgecumbe

Table 4. List of aliases

Name of spring as used in this report.	Names applied to same spring in previous literature.
Akun Strait	S.W. Akun
Aniakchak	Surprise Lake
Baker Island	Craig, Dalton
Barnes Lake	Paradise
Battleship Mountain	Mt. Kachauik
Big Windy	Wolfe
Chief Shakes	Shakes
Circle	Arctic Circle Hot Springs
Dulbai	Dulbatna Mt., LeDonne
Egg Island	Amak
False Pass	Morzhovoi
Goddard	Sitka Hot Springs
Granite Mountain	Sweepstakes
Hague	near Pavlov
Kenmore	Stan Christianson
Kwiniuk	Elim
Lower Division	Division, Souby, Davidson
Lower Klawasi	Shrub (Drum Group)
Manley	Baker
Melozi	Melozitna
Milky River	Atka
Minook	Conway
Mt. Rynda	South Stikine
Neka Bay	Nika Bay
Partov Cove	Umnak Island
Pilgrim	Kruzgumepa
Serpentine	Arctic, Spring Creek
South	Purcell Mountain
Tenakee	Hooniah Hot Spring
Twin Lakes	West Shakes
Upper Ray	Ray River
White Sulfur	Hooniah warm spring

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FIGURES

FIGURE 1

Fig. 1. Map of Alaska divided into the 10 geographical regions listed in section 4. Figures 2-11 are enlargements of each of these regions with the individual thermal sites indicated..

FIGURE 2

Fig. 2. Geothermal spring localities in the region referred to as Southeastern. The numerals correspond to those prefixed by SE on the NOAA map.

FIGURE 3

Fig. 3. Geothermal spring localities in the region referred to as Southeast Quadrant. The numerals correspond to those prefixed by SC on the NOAA map.

FIGURE 4

Fig. 4. Geothermal spring localities in the region referred to as South Central. The numerals correspond to those prefixed by SC on the NOAA map.

FIGURE 5

Fig. 5. Geothermal spring localities in region referred to as Southwest Quadrant. The numerals correspond to those prefixed by SC on the NOAA map.

FIGURE 6

Fig. 6. Geothermal spring localities in the region referred to as Alaska Peninsula. Numerals 1-14 correspond to those labeled SC on the NOAA map, and 25-38 correspond to those labeled AA.

FIGURE 7

Fig. 7. Geothermal spring localities in the eastern portion of the region referred to as the Aleutians. The numerals correspond to those prefixed by AA on the NOAA map.

FIGURE 8

Fig. 8. Geothermal spring localities in the western portion of the region referred to as the Aleutians. The numerals correspond to those prefixed by AA on the NOAA map.

FIGURE 9

Fig. 9. Geothermal spring localities in the region referred to as the Interior. The numerals correspond to those prefixed by NC on the NOAA map.

FIGURE 10

Fig. 10. Geothermal spring localities in the region referred to as the Seward Peninsula. The numerals correspond to those prefixed by NC on the NOAA map.

FIGURE 11

Fig. 11. Geothermal spring localities in the region referred to as Northern. The numerals correspond to those those prefixed by NC on the NOAA map.

APPENDICES

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APPENDICES

APPENDIX A - MAJOR GEOTHERMAL PROJECTS IN ALASKA

STATEWIDE

The first extensive compilation of information on Alaskan thermal springs was done by Waring, 1917. Since then many additional thermal springs have been discovered and sampled. Several data compilations on Alaskan thermal springs have been published which included additional chemical data that had become available. The most notable of these publications include Miller, 1973, Gassaway and Abramson, 1977, and Turner & others, 1980.

The Alaska Division of Geological and Geophysical Surveys began its assessment of geothermal resources in Alaska in 1979. This program included reconnaissance investigations of as many known thermal sites as possible. Major funding for this project was provided by the State of Alaska and the U. S. Department of Energy. Over 85 of the approximately 120 known thermal sites have now been visited with the major portion of this reconnaissance work being performed between 1979 and 1982. The reconnaissance survey of a thermal site usually included reconnaissance of local geology, geochemical sampling of the thermal fluids, and measurements of vent temperatures and rates of discharge. The location and a summary of thermal sites in Alaska can be found on the statewide geothermal resources map (1:2,500,000) (Motyka and others, 1983). More detailed, technical regional geothermal resources maps at a scale of 1:1,000,000 are currently in preparation. The results of the reconnaissance investigations of thermal sites in the Aleutian Islands and Alaska Peninsula are reported in Motyka and others, 1981; and for southern southeast Alaska in Motyka and others, 1980. Our geochemical analyses of thermal spring waters in Alaska have also been reported in Bliss, 1983.

ADAK

Saline thermal springs emanate along the Bering Sea coast at the base of Mount Adagdak, a Tertiary-Quaternary volcanic center located northwest of the Adak Naval Base. Geothermometers applied to the spring waters give reservoir temperature estimates of 160° - 190°C. Exploratory drilling on the flanks and base of Mount Adagdak was undertaken by the U. S. Navy in 1977. Temperature gradients measured as high as 80°C/km and the temperature at the bottom of one 600 m deep hole was 66°C. There has been no further exploration since then but the U. S. Navy is considering re-examining the Adak area's geothermal potential. Adak, a strategic

military base, has a population of over 3,000 people making it the largest settlement in the Aleutian Islands.

Agencies involved:

Department of the Navy, Naval Weapons Center, Energy
Program Management Office
Department of the Navy, Adak Naval Station
Alaska Division of Geological & Geophysical Surveys
U. S. Geological Survey, Alaska Branch
U. S. Fish and Wildlife Service

AKUTAN

Several thermal springs and a small fumarole field are located in Hot Springs Bay Valley, about 4 km northwest of Akutan Harbor and 10 km northeast of active Akutan Volcano. The chloride-rich springs have surface discharge temperatures ranging from 40° - 85°C; geothermometers give reservoir temperature estimates of 180° - 190°C. Geophysical investigations suggest that much of the valley is underlain by warm waters. The resource area lies close to a small but well-protected natural harbor that serves as the base of operations for several bottom-fishing and crabbing vessels, floating fish processors and a shore-based bottom-fish processing plant. Geothermal resources in the valley have the potential of supplying all the energy needs, through direct use and electrical power generation, for the processors and the nearby village of Akutan.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
Geophysical Institute, U. of Alaska
Akutan Village Council
Aleut Corporation
U. S. Fish and Wildlife Service

ATKA

Two major fumarole fields, Kliuchef and Milky River and associated low-Cl, $\text{HCO}_3\text{-SO}_4$ rich thermal springs are located on the west flank of the strato-volcano, Mt. Kliuchef. A third geothermal field, Korovin, lies in a valley about 6 km southwest of Korovin Volcano. Gas geothermometry gives reservoir temperature estimates of 170° - 300°C. The nearby native village of Atka has a subsistence based economy and is actively seeking an energy source to help develop a local commercial fishing industry. The proximity of the geothermal resources on northeast Atka to a good harbor and potential users make the area particularly attractive for further exploration.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
Atka Village Council
Aleut Corporation
U. S. Fish and Wildlife Service

BARANOF

Waters from eight thermal springs ranging from 40° - 50°C in temperature are used to heat local dwellings, a general store and a commercial bath house. The estimated reservoir temperature, based on geothermometry, is 95°C. The springs flow from fractures in an Eocene trondjemite pluton. The site lies within the Tongass National Forest.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
U. S. Forest Service, Tongass National Forest

BELL ISLAND and BAILEY BAY

At Bell Island, waters from numerous springs ranging in temperatures from 67° - 74°C are collected in cisterns and used to heat lodges, cabins, and the swimming pool of a fishing resort complex. The owner has expressed interest in cascaded direct-use of the thermal spring waters for greenhouses and aquaculture. Geothermometers give an estimated reservoir temperature of 135°C. Nearby Bailey Bay Hot Springs have surface discharge temperatures as high as 91°C and an estimated reservoir temperature of 150°C. The U. S. Forest Service has proposed placing the Bailey Bay site into an ecological preserve status.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
U. S. Forest Service, Tongass National Forest
Bell Island Hot Springs Fishing Resort

CHENA and CIRCLE

These sites are both examples of hydrothermal resources resulting from the percolation and circulation of meteoric waters along fractures and faults in Cretaceous intrusive bodies and overlying metamorphic units in central Alaska. Additionally both have similar histories of development and direct use, first serving local mining communities as bathing and small-scale agricultural facilities, and later

becoming major recreational areas for residents of Fairbanks. At Circle water from nine springs, with a maximum temperature of 60°C and combined flow of 1700 lpm, is used to heat a large hotel, swimming pool, and small greenhouse. At Chena effluent from ten springs, with a combined flow of 840 lpm and maximum temperature of 57°C, is used to heat a lodge and enclosed swimming pool. Owners of both resorts would eventually like to drill wells to increase hot water production, but are presently working to expand the direct use of natural discharge. Based on geothermometry, estimated reservoir temperatures for both sites are 130° - 145°C.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
Geophysical Insitiute, U. of Alaska
U. S. Geological Survey, Alaska Branch
Chena Hot Springs Resort
Circle Hot Springs Resort

GODDARD

Four springs ranging in temperature from 30° - 66°C are located 22 km south of Sitka on the coast of Baranof Island. Geothermometry gives a reservoir temperature estimate of 140°C. The site was developed as a health spa complete with hospital facilities during the 1920's. The spring waters are currently used for community bath houses. The city of Sitka, which owns the springs, has considered further development of the area but the Sitka community residents have expressed their desire to maintain the area as a recreational site.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
Sitka City and Borough Government

KLAWASI - COPPER RIVER BASIN

Two groups of mud volcanoes are located in the Copper River Basin: the Tolsana group west of Glennallen and the Klawasi group east of Glennallen. Although both groups discharge highly saline waters, the Klawasi group is distinguished by warmer waters (20°C) accompanied by vast amounts of CO₂. The saline waters emanating from both groups are thought to originate from over-pressured zones in Cretaceous marine sediments that underlie the basin. The proximity of the Klawasi group to the extremely large Quaternary volcanoes of the western Wrangell Mountains lead many to speculate that a significant geothermal resource might underlie the mud

volcanoes. This view was supported when researchers from the Geophysical Institute, University of Alaska found gravity, magnetic, self-potential, and helium anomalies in the Klawasi area, the combination of which they suggested might indicate hydrothermal activity. However, recent geochemical and isotopic investigations of the mud volcano fluids by ADGGS have shown that the reservoirs feeding the Klawasi mud volcanoes are probably of moderate temperature (100° to 125°C). Fluid geochemical and isotopic evidence also suggests that a body of magma has intruded deep-seated limestone formations beneath the Klawasi area and is responsible for the production of the large quantities of CO₂ through thermogenic and geochemical processes. Land ownership in the region is divided among the local native corporation, the State of Alaska, and the National Park Service.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
Geophysical Institute, U. of Alaska
U. S. Geological Survey, Alaska Branch
Wrangell - St. Elias National Park
AHTNA - Copper River Native Association

MAKUSHIN

The Makushin geothermal area is associated with Makushin Volcano, a major volcanic center in the Aleutian arc. The hydrothermal system consists of a boiling hot-water reservoir overlain by a discontinuous vapor-dominated zone that discharges steam and gases from several fumarole fields located on the south and east flanks of the volcano. Numerous low-Cl, HCO₃-SO₄ rich thermal springs emanate downslope from the fumaroles; several alkali-Cl, HCO₃-SO₄ rich thermal springs occur at lower elevations. Gas geothermometry applied to a 150°C superheated fumarole gives a reservoir temperature estimate of 300°C. Host reservoir rock is a highly-fractured gabbro-norite stock. Reconnaissance investigations of the area's geothermal resources were undertaken by the Alaska Division of Geological and Geophysical Surveys in 1980 and 1981 under a program funded by the U. S. Department of Energy and the State of Alaska. From 1982 - 1984 the Alaska Power Authority administered a state funded \$5 million exploratory drilling program with Republic Geothermal, Inc. of California the prime contractor. Three 460 m deep thermal gradient holes were drilled in 1982. The hottest temperature encountered was 195°C at the bottom of the hole drilled at the head of Makushin Valley. In 1983 a 593 m test well (ST-1) drilled near the same site verified that a resource suitable for generating electrical power exists. Bottom hole temperature measurements were 195°C with

geothermometers indicating deeper reservoir temperatures of 220°C and higher. Engineering tests indicate that the single fracture encountered could supply two production wells each capable of driving a 5 MW turbine. In 1984, electrical resistivity surveys and an additional thermal gradient hole drilled to 490 m near Sugarloaf Cone delineated the north and east boundaries of the wedge shaped main reservoir which dips to the south and west of ST-1. The conclusion of all results indicate that the hydrothermal fluids which feed ST-1 are derived from a deep parent reservoir approximately centrally located beneath the volcano and any future production wells should be sited at or upvalley of ST-1. A geological engineering and hazards study of the site has been recently completed by ADGGS. The resource area lies 25 km west of the village of Unalaska and Dutch Harbor, the largest natural deep-water harbor in the Aleutian Islands. The village and harbor serve as the major base of operations for the rich North Pacific and Bering Sea fisheries and for oil and gas exploration on the Bering Sea shelf. The 10 MW electrical power needs of the community and fish processing industry is currently supplied by diesel-fired generators.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
Alaska Power Authority
Geophysical Institute, U. of Alaska
Republic Geothermal Inc., California
Ounalashka Corporation
Unalaska Village Council
Aleut Corporation
U. S. Fish and Wildlife Service
Alaska Department of Fish and Game
Alaska Division of Oil and Gas

MANLEY

Hot springs at Manley, centered on the 236-acre Dart homestead, are used to heat a house, large greenhouses, and a small commercial bath, as well as providing the primary water supply for the community of Manley. Discharge temperatures range from 18° - 61°C, with reservoir estimates of 70° - 130°C. The Bean Ridge Native Corporation has selected all available land surrounding the Dart property and are interested in geothermal exploration and development. Geophysical and geochemical studies have been carried out to help site a well on the Dart property. Capital limitations prevent immediate development of the resource, but a potential for greater direct use of spring waters exists. From 1906 to 1912 Manley was the site of the most extensive direct use of geothermal energy to date in Alaska. During the height of placer mining activity in the

Tofty, Eureka, and Baker Cr. areas, Manley served as a trade center which boasted a 60 room hotel, public baths, extensive poultry, hog and dairy barns, greenhouses and commercial truck gardens all heated with geothermal energy.

Agencies involved:

Geophysical Institute, U. of Alaska
Alaska Division of Geological & Geophysical Surveys
Bean Ridge Native Corporation
Manley Hot Springs Resort

MOUNT SPURR

Mount Spurr is a large andesitic stratovolcano located on the west side of upper Cook Inlet. The volcano last erupted in 1953 scattering ash over Anchorage 130 km to the east. Surface manifestations of geothermal activity include a 1 km long zone of warm springs (40°C) in the valley immediately south of Crater Peak, a fumarole field around Crater Peak, and evidence of ice melting by hydrothermal activity at an elevation of 2900 m. Preliminary results of geological and geochemical studies of Mount Spurr volcanic rocks by ADGGS and the University of Alaska provide abundant evidence for a shallow-level magma system which has been active during late Pleistocene and Holocene time. Geophysical and geochemical surveys were conducted in 1985 by the University of Alaska, Geophysical Institute in the area south of Mount Spurr. These investigations located large electrical self-potential anomalies and extensive zones of low resistivity which are overlapped and surrounded by areas of anomalously high He and Hg values. The south side of Mt. Spurr has been the site of two State of Alaska geothermal lease sales. The lease holders are actively exploring for geothermal resources which they plan to use for agricultural purposes. Anchorage presently obtains most of its electricity from turbines fired by natural gas from the upper Cook Inlet oil fields. A part of Mt. Spurr lies within a National Park.

Agencies involved:

Geophysical Institute, U. of Alaska
Alaska Division of Geological & Geophysical Surveys
Alaska Division of Oil and Gas
U. S. Geological Survey, Alaska Branch

PILGRIM

Two hot springs (81°C) and a large oval of thawed ground in an area of deep continuous permafrost are surface manifestations of geothermal resources in the Pilgrim River valley 75 km north of Nome, Alaska. The valley is believed

to be a downdropped fault block of pre-Phanerozoic gneiss and intrusive Mesozoic granites which is overlain by a thick (200m) sequence of Tertiary (?) sediments. A shallow pancake-shaped hot water reservoir (1 km²) was postulated from reconnaissance geologic, geophysical, hydrologic and geochemical studies conducted by the Geophysical Institute, University of Alaska and ADGGS. The reservoir was later substantiated by six geothermal gradient wells drilled under contract to the Alaska Division of Energy and Power Development during 1979 and 1982. The reservoir, 14 m below the surface, is 20 m thick and 91°C. No deep conduit was discovered and the source for the heat is still in question. Cation and silica geothermometers predict reservoir temperatures of 110° - 148°C. There is probably 19 MW available for local direct-use development. A road now connects Nome to the springs which are used currently for recreation. Future development is uncertain. The springs and surrounding land are owned by the Catholic Church.

Agencies involved:

Geophysical Institute, U. of Alaska
Alaska Division of Geological & Geophysical Surveys
Alaska Department of Commerce and Economic Development
Woodward-Clyde Consultants

SUMMER BAY

Two thermal springs located near the village of Unalaska about two km up-valley from Summer Bay on Unalaska Island, feebly emit chloride-rich 30°C waters. In 1980 two shallow test wells spaced 200 m apart were drilled into iron-stained sediments located on the shore of a lake about 1/2 km downvalley from the springs. Both wells encountered a warm water aquifer at about 13 m and bedrock at 17 m. Artesian flow from well 1 was 180 lpm at 50°C; well 2 flow was 30 lpm and 44°C. The wells have been plugged and the geothermal resource remains un-utilized.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
Alaska Department of Commerce and Economic Development
Ounalashka Corporation
Unalaska Village Council

TENAKEE

Eighteen springs ranging from 30° - 40°C in temperature lie along the shoreline at Tenakee Village. The springs appear to originate as meteoric waters that circulate along deep fractures associated with nearby fault zones.

Geothermometry gives reservoir temperature estimates of 65° - 100°C. Waters from one of the springs is used for a community bath house. Under a U. S. Department of Energy Program, the Alaska Department of Commerce and Economic Development contracted for exploratory drilling to determine whether hot waters suitable for direct-use were present at shallow depths. Six test wells were drilled; the deepest reached 30 m (100 ft.) and produced 30°C waters at a rate of about 8 lpm. Water temperatures and flow rates from the wells were deemed insufficient for district heating.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
Alaska Department of Commerce and Economic Development
Village of Tenakee

UMNAK

Numerous hot springs, fumaroles, and several small geysers with temperatures to 102°C are located in Geyser Bight Valley, and constitute probably the best known, most widespread, and hottest thermal spring system in Alaska. Silica and cation geothermometers give reservoir temperature estimates of 180° - 200°C; sulfate-water oxygen isotope geothermometry suggests deep reservoir temperatures are as high as 265°C. The resource area lies between huge Okmok Caldera to the northwest and Mount Recheschnoi and Vsevidof, two large stratovolcanoes, to the southwest. Chloride thermal springs also occur in neighboring Hot Springs Cove and Partov Cove valleys. Lands in the Geyser Bight and surrounding areas have been selected by the State of Alaska, Nikolski Village Corporation, St. George Village Association and the Aleut Corporation. The nearest community is the native village of Nikolski, 40 km southwest of Geyser Bight. Because of the remoteness of the three sites, the lack of protected deep-water harbors, and low population base, geothermal resource development appears unlikely in the near future.

Agencies involved:

Alaska Division of Geological & Geophysical Surveys
U. S. Geological Survey
U. S. Fish and Wildlife Service
Aleut Corporation
Nikolski Village Council
St. George Village Association

WILLOW - LOWER SUSITNA BASIN

Four nonproducing exploratory oil wells drilled into the thick Tertiary sedimentary sequence overlying granitic basement rocks in this area had geothermal gradients of 41° to 123°C/km. Limited geophysical and geochemical data from the area have been interpreted by Turner and Wescott (1982) as possibly indicating a shallow low-grade geothermal reservoir 100 km² in area, that could be tapped for direct use. There is no surface manifestation of the resource, no fluids were encountered in the wells, and the source of the heat remains highly speculative. Traditionally an area of small-scale agricultural activity, it has recently seen extensive suburban development. Other potential users include the State Division of Parks, Nancy Lake Recreation Area.

Agencies involved:

Geophysical Institute, University of Alaska

APPENDIX B -AGENCIES INVOLVED IN ALASKA GEOTHERMAL RESOURCES

EXPLORATION AND ASSESSMENT

Federal

- U. S. Department of Energy, Idaho Operations Office,
785 DOE Place, Idaho Falls, ID 83402.
- U. S. Geological Survey, Branch of Igneous and Geothermal
Processes, MS-910, 345 Middlefield Rd., Menlo Park, CA
94025.
- U. S. Geological Survey, Water Resources Division, MS-34,
345 Middlefield Rd., Menlo Park, CA 94025.
- U. S. Geological Survey, Alaska Branch, Gould Hall, Alaska
Pacific University, Anchorage, AK 99501.
- U. S. Department of the Navy, Naval Weapons Center, Energy
Program Management Office, China Lake, CA 93555-6001.

State

Alaska Department of Natural Resources, Division of
Geological and Geophysical Surveys, 794 University
Ave., Fairbanks, AK 99709; Pouch 7-028, Anchorage, AK
99510; PO Box 772116, Eagle River, AK 99577; Pouch M,
Juneau, AK 99811.

Alaska Power Authority, 701 E Tudor Road, PO Box 190869,
Anchorage, AK 99519-0869.

University of Alaska
Geophysical Institute
Geology Department
Petroleum Engineering Department
Fairbanks, AK 99755.

Alaska Department of Fish & Game, Division of Fisheries
Rehabilitation, Enhancement & Development, 333
Raspberry, Anchorage, AK 99518; PO Box 3-2000, Juneau,
AK 99802.

Private

Dames & Moore, 800 Cordova, Suite 101, Anchorage, AK 99501.

Geothermal Resources International Exploration Co., 1825 S. Grant St., Suite 900, San Mateo, CA, 94402.

Premier Geophysics Inc. 1184 Forge Walk, Vancouver, BC, Canada V6H-3P9.

Republic Geothermal, 11823 E. Slauson Ave, Sante Fe Springs, CA, 90670.

William Ogle, 3801 W 44th Ave, Anchorage, AK 99502.

Woodward-Clyde, One Walnut Creek Center, 100 Pringle Ave, Walnut Creek, CA 94596 (Ben E. Lofgren).

ECONOMIC DEVELOPMENT

Ahtna' T'aene Nene', Copper River Native Association, Drawer G, Copper Center, AK 99573.

Akutan Village Council, Akutan, AK 99553.

Alaska Department of Commerce and Economic Development, Suite 722 Frontier Building, 3601 'C' Street, Anchorage, AK 99503; PO Box D, Juneau, AK 99811.

Alaska Power Authority, 701 E. Tudor Road, PO Box 190869, Anchorage, AK 99519-0869.

Aleut Corporation, 2550 Denali, Suite 900, Anchorage, AK 99503.

Atka Village Council, Atka, AK 99502.

Bean Ridge Native Corporation, Manley Hot Springs, AK 99756.

Dennis P. Carroll, Box 80562, Fairbanks, AK 99708.

Chaluka Corporation, Nikolski, AK 99638.

Roger & Barbara Cotting, Chena Hot Springs Corp., 1919 Lathrop St., Drawer 25, Fairbanks, AK 99707.

Chuck Dart, Manley Hot Springs, AK 99756.

Jim Dawson & Bud Seltenreick, 2165 Dawson Road, North Pole, AK 99705.

Suzan Dilley, SR 2690, Wasilla, AK 99687.

False Pass Native Corporation, False Pass, AK 99583.

Dolly Faulkner, PO Box 246, Bethel, AK 99559.

Geothermal Resources International Exploration Co., 1825 S.
Grant St., Suite 900, San Mateo, CA 94402.

Doris Loennig Attorney, 515 7th Ave., Fairbanks, AK 99701.

Robert Miller, PO Box 729, Fairbanks, AK 99707.

Ounalashka Corporation, P.O Box 149, Unalaska, AK 99685.

Don Peterson, Box 8762, Ketchikan, AK 99901.

C. J. Phillips, Nome, AK 99762.

Richard Rome & Donna Waidtlow, 12404 NE 29th St., Bellevue,
WA 98005.

Seth-de-ya-ah Native Corporation, PO Box 849, Fairbanks, AK
99707.

City of Sitka, Box 79, 304 Lake St., Sitka, AK 99835.

St. George Village Association, St. George Island, AK 99660.

Tanadquisix Village Corporation, St. Paul Island, AK 99660.

City of Tenakee Springs, PO Box 52, Tenakee Springs, AK
99841.

Unalaska Village Council, Unalaska, AK 99685.

LEASING, PERMITTING AND REGULATORY

Federal

U. S. Bureau of Land Management, Fairbanks Support Center,
1541 Gafney, Fairbanks, AK 99703-1399.

U. S. Fish and Wildlife Service, 1011 E. Tudor Rd.,
Anchorage, AK 99503; Aleutian National Wildlife
Refuge, Box 5251, Seattle, WA 98791.

U. S. Forest Service, 709 W. 9th St., Juneau, AK 99801;
Tongass Forest Manager, 9 1/2 Mile Glacier Hwy, Juneau,
AK 99801.

U. S. Environmental Protection Agency, Region X, 1200 Sixth
St. Seattle, WA 98101.

State

Alaska Department of Natural Resources, Division of Oil and Gas, 3601 'C' St., PO Box 7034, Anchorage, AK 99510-0734.

Alaska Department of Natural Resources, Division of Land and Water Management, 3601 'C' St., PO Box 7005, Anchorage, AK 99510-0734.

Alaska Department of Fish and Game, 333 Raspberry Rd., Anchorage, AK 99502; PO Box 3-2000, Juneau, AK 99802.

Alaska Department of Environmental Conservation, 437 'E' Street, Suite 200, Anchorage, AK 99501.

MISCELLANEOUS

U. S. National Oceanic and Atmospheric Administration, 600 Spruce St., Boulder, CO 80302.

University of Utah Research Institute, 391 Chipeta Way, Suite C, Salt Lake City, UT 84108.

U. S. National Park Service, Alaska Regional Office, 540 W. Fifth Ave., Anchorage, AK 99501.