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EDUCATION

- B.A. Rice University, 1972
- Fulbright scholar: University of Helsinki, Helsinki, Finland. August, 1972-May, 1973.
- M.S. University of Washington, 1976
"Bedrock geology of the Ross Lake fault zone, Skymo Creek area, North Cascades National Park, Washington." (P.A. Misch, advisor)
- Ph.D. University of Washington, 1981
"Structure and petrology of a portion of a regional thrust zone in the central Chugach Mountains, Alaska." (P.A. Misch, advisor)

PROFESSIONAL EXPERIENCE AND EMPLOYMENT

- Professor, joint appointment with the Department of Geology and Geophysics and the Geophysical Institute, University of Alaska, Fairbanks.* Teaching responsibilities: graduate classes (geologic evolution of Alaska, geometry and analysis of fold-and-thrust structures, global tectonics, mountain belts of the world, structural analysis, tectonics and sedimentation, active tectonics), undergraduate classes (structural geology, geology of Alaska, sedimentary and structural geology for petroleum engineers, field geology), and supervision of graduate students. Research activities: Primary responsibility for administration of a major program of structural, stratigraphic, and sedimentological studies in the Brooks Range; conducting and advising graduate students in structural geological studies in the Brooks Range; structural studies in northeastern Russia; synthesis and publication of results of previous research in the Brooks Range, southwestern Alaska, and south-central Alaska. Assistant Professor, August, 1985 to June, 1991; Associate Professor, July, 1991 to June, 1995; Professor, July, 1995 to present.
- Geologist, Denali Province, ARCO Alaska, Inc.* Evaluation of petroleum potential of Neogene fold-and-thrust belt in the Katalla-Yakataga area of the Gulf of Alaska coast. Party chief for field studies in the Katalla-Yakataga area, including structural analysis, depositional facies interpretation, and reservoir and source-rock sampling. Also consulted with explorationists on structural and tectonic problems in southern and interior Alaska. January-August, 1985.
- Geologist, Regional Study Group, ARCO Alaska, Inc.* Specialist in structural geology and tectonics for small group responsible for conducting regional tectonic and stratigraphic studies throughout Alaska. Duties included conducting field geological studies for synthesis projects, monitoring new geologic developments, liaison with geological surveys and academia, and consultation with explorationists on structural and tectonic problems. Main geographic area of

interest was the Brooks Range and North Slope, but specific projects dealt with areas throughout Alaska, northwestern Canada, and northeastern USSR. Co-party chief for Brooks Range field studies during two field seasons, involving structural and stratigraphic reconnaissance, detailed mapping, and cross-section construction. Continued field studies in southwestern Alaska begun in previous position. September, 1982-December, 1984.

- Geologist, Bering Sea Province, ARCO Alaska, Inc.* Responsible for determination of the regional geologic history and development of models for the tectonic evolution of onshore southwestern Alaska and the Bering Sea shelf and its basins. Party chief for field studies in southwestern Alaska during four field seasons, involving reconnaissance to determine structural and stratigraphic relationships, and detailed stratigraphic and sedimentological studies. Well-site work on North Slope and Bering Sea exploration wells. April, 1981-August, 1982.
- Geologist, BP Alaska Exploration, Inc.* Minerals exploration work in western, central, and southeastern Alaska, including reconnaissance geologic mapping, geochemical sampling, and minerals prospecting for porphyry molybdenum and massive sulfide deposits. May-October, 1979.
- Geologist, Shannon & Wilson, Inc.* Regional mapping and detailed studies of strike-slip, thrust, and normal faults as part of a seismic hazard assessment for a nuclear power plant in Iran. April-July, 1978.
- Teaching assistant, Department of Geological Sciences, University of Washington.* Subjects included: introductory geology, mineralogy, optical mineralogy, structural geology, petrology, igneous petrology, and summer field mapping course. September, 1973-June, 1977.

PRIMARY AREAS OF EXPERIENCE AND EXPERTISE

Current knowledge of global geology and tectonics, structural styles, and the settings and controls on basin evolution. Specific areas of experience and expertise include:

- Extensive field experience in a wide range of structural settings, particularly sedimentary rocks in contractional and strike-slip environments
- Detailed field study of fold-and-thrust structures, especially fault-related folds and duplexes, and interpretation of their geometry and kinematics using balanced structural cross sections and structural analysis
- Regional synthesis in frontier areas using field studies combined with existing surface, well, and seismic data, with emphasis on depositional and tectonic history, structural style, and basin evolution
- Integration of thermochronologic and structural data to add age and paleodepth control to structural interpretations and to assess structural control on thermal history
- The role of active mountain-building structures in topography and seismicity
- Organization and management of interdisciplinary studies, both in the field and the laboratory

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- Geological Society of America
- American Association of Petroleum Geologists
- American Geophysical Union
- Alaska Geological Society

HISTORY OF RESEARCH SUPPORT

2004-2006: \$589,805, two-year contract. “Fluid migration and trap formation in the Brooks Range foothills and southern Colville basin”. \$457,629 from the Department of Energy through the Arctic Energy Technology Development Laboratory, with the remainder in cost-sharing from UAF and industry. My role as a co-principal investigator is to supervise development of balanced structural cross sections and interpretation of structural evolution and unroofing history.

2000-2002: Annual proposals to the petroleum industry for four faculty and their students to conduct a variety of geological studies in the Brooks Range and its foothills. The projects involve four faculty from the University of Alaska. \$173,500 was received from Anadarko, BP, Chevron-Exxon, and Petro-Canada when I was principal investigator for this project.

1998-2003: \$1,033,768 contract, with \$749,920 from the Department of Energy and the remainder from cost-sharing. “The influence of fold and fracture development on reservoir behavior of the Lisburne Group of northern Alaska”. The project was a four-year multi-disciplinary study of the geometry and kinematics of detachment folds, fracture development within those folds, and consequences of folding on reservoir characteristics and behavior. I was principal investigator on this project, with co-principal investigators including another structural geologist, a reservoir engineer, and a carbonate geologist.

1996-1997: \$105,000 in grants from petroleum industry sponsors including ARCO, BP, Chevron, Fina, Phillips, and Union Texas. “Crustal-scale evolution of the Brooks Range and Colville basin of northern Alaska”. This was the first phase of a long-term project to integrate balanced reconstructions of the Brooks Range, quantitative basin analysis of the Colville basin, and gravity models of both. The objective is to develop a reconstruction of the tectonic evolution of the region that incorporates a wide range of data types and relates deformation and erosion in the Brooks Range to subsidence and deposition in the basin. I was co-principal investigator on this project, which involved researchers from three universities.

1993-1995: \$116,124 National Science Foundation (Tectonics Program) grant (EAR-9304482), “Geometry and kinematics of detachment folds, northeastern Brooks Range, Alaska”. This funding supported work by a Ph.D. student (T.X. Homza) and myself to use natural examples to constrain geometric and kinematic models of detachment folds.

1986-1995: \$1,963,000 in grants from petroleum industry sponsors including Amoco, ARCO, BP, Chevron, Conoco, Elf, Exxon, Japan National, Marathon, Mobil, Murphy, Phillips, Shell, Texaco, and Unocal, plus in-kind support from sponsors and the Alaska Division of Geological and Geophysical Surveys. “Integrated geologic studies in the Arctic National Wildlife Refuge, Alaska”. This funding resulted from annual proposals to support research in the northeastern Brooks Range by 3 to 4 faculty and their graduate students. I had primary responsibility for administering the program; authorship of the annual proposal rotated among the faculty involved.

1993-1994: Full field support from the Russian Academy of Sciences, Yakutian Institute of Geological Sciences to participate in structural studies in the Chersky Range of eastern Siberia. This study was aimed at determining the origin of regional arcuate trends in an

orogenic belt formed by collision of displaced terranes with a passive continental margin.

1990 & 1992: Full field support from the U.S. Geological Survey to participate in the northern Brooks Range part of the Trans-Alaska Crustal Transect (TACT). My contribution to this project was to do a major portion of the mapping, construct balanced cross-sections, and help develop a structural interpretation based on geophysical data.

1986-1988: \$18,000 Petroleum Research Fund type G (starter) grant, "Structural geologic studies in the northeastern Brooks Range". This funding provided initial support for structural studies in addition to that described above.

GRADUATE STUDENTS SUPERVISED

Graduated

- A.V. Anderson, Ph.D., 1993, Stratigraphic variation across a Middle Devonian to Mississippian rift-basin margin and implications for subsequent fold and thrust geometry, northeastern Brooks Range, Alaska
- P.K. Atkinson, M.S., 2001, A geometric analysis of detachment folds in the northeastern Brooks Range, Alaska, and a conceptual model for their kinematic evolution.
- S.P. Bemis, M.S., 2004, Neotectonic framework of the north-central Alaska Range foothills.
- M.S. Broadwell, M.S., 2001, Geometry and kinematics of the Yakataga anticline, Icy Bay, Alaska.
- R.M. Chmielowski, M.S., 1998, Structural geometry and evolution of the Toyuk thrust zone, Brooks Range, Alaska
- R.K. Glenn, M.S., 1991, Range-front structure and lithostratigraphy of the Atigun Gorge area, northcentral Brooks Range, Alaska
- E.A. Grischkowsky, M.S., 2002, Thrust-breakthrough of folds southwest of Galbraith Lake, central Brooks Range, Alaska.
- T.X. Homza, M.S., 1992, A detachment fold-truncation duplex, southwest Bathtub Ridge, northeastern Brooks Range, Alaska
- T.X. Homza, Ph.D., 1995, Geometry and kinematics of detachment folds, northeastern Brooks Range, Alaska
- M.A. Jadamec, M.S., 2003, A geometric analysis of thrust-truncated asymmetric folds, upper Marsh Fork area, eastern Brooks Range, Alaska.
- B.S. McMullen, M.S., 1989, Structural geometry and evolution of the western Shublik Mountains, northeastern Brooks Range, Alaska
- A.J. Meigs, M.S., 1989, Structural geometry and sequence in the eastern Sadlerochit Mountains, northeastern Brooks Range, Alaska
- E.A. Pavia, M.S., 1997, Lithostratigraphy and structural evolution of the northeastern Okpilak batholith area, northeastern Brooks Range, Alaska
- P. Peapples, M.S., 1994, Timing and controls on fold-and-thrust deformation of the Jago stock, northeastern Brooks Range, Alaska
- J.A. Rogers, M.S., 1992, Lateral variation of range-front structures and structural evolution of the central Shublik Mountains and Ignek Valley, northeastern Brooks Range, Alaska
- J.A. Ziegler, M.S., 1989, A detailed structural analysis across a regional unconformity, forks of the Canning River, Franklin Mountains, northeastern Brooks Range, Alaska

In progress

R.D. Bailey, M.S., Origin of asymmetric thrust-truncated folds: testing kinematic models against natural examples, upper Marsh Fork area, eastern Brooks Range, Alaska.

J.G. Clough, Ph.D., Stratigraphy and depositional setting of pre-Mississippian carbonate rocks of the Sadlerochit and Shublik Mountains, northeastern Brooks Range, Alaska.

PUBLICATIONS**Theses**

Wallace, W.K., 1981, Structure and petrology of a portion of a regional thrust zone in the central Chugach Mountains, Alaska: Ph.D. dissertation, University of Washington, Seattle, WA, 254 p.

Wallace, W.K., 1976, Bedrock geology of the Ross Lake fault zone, Skymo Creek area, North Cascades National Park, Washington: M.S. thesis, University of Washington, Seattle, WA, 111 p.

Papers**2004**

Hanks, C.L., Wallace, W.K., Atkinson, P.K., Brinton, J., Bui, T., Jensen, J., and Lorenz, J., 2004, Character, relative age and implications of fractures and other mesoscopic structures associated with detachment folds: An example from the Lisburne Group of the northeastern Brooks Range, Alaska: Bulletin of Canadian Petroleum Geology, v. 52, no. 2, p. 121-138.

Wallace, W.K., and Homza, T.X., 2004, Detachment folds versus fault-propagation folds, and their truncation by thrust faults, in McClay, K.R., editor, Thrust tectonics and petroleum systems: American Association of Petroleum Geologists Memoir 82, p. 324-355.

2003

Atkinson, P.K., and Wallace, W.K., 2003, Competent unit thickness variation in detachment folds in the northeastern Brooks Range, Alaska: geometric analysis and a conceptual model: Journal of Structural Geology, v. 25, no. 10, p. 1751-1771.

Eberhart-Phillips, D. and many co-authors, including Wallace, W.K., 2003, The 2002 Denali fault earthquake, Alaska: A large magnitude, slip-partitioned event: Science, v. 300, 16 May, p. 1113-1118 (plus supporting online material).

2002

O'Sullivan, P.B., and Wallace, W.K., 2002, Out-of-sequence, basement-involved structures in the Sadlerochit Mountains region of the Arctic National Wildlife Refuge, Alaska: Evidence and implications from fission-track thermochronology: Geological Society of America Bulletin, v. 114, no. 11, p. 1356-1378.

2000

Chmielowski, R.M., Wallace, W.K., and O'Sullivan, P.B., 2000, Duplex structure and Paleocene displacement of the Toyuk thrust zone near the Dalton Highway, north-central Brooks Range, Alaska, in Pinney, D.S., and Davis, P.K., editors, Short Notes on Alaska Geology 1999: Alaska Division of Geological and Geophysical Surveys Professional Report 119, p.

11-31.

1998

O'Sullivan, P.B., Wallace, W.K., and Murphy, J.M., 1998, Fission-track evidence for apparent out-of-sequence Cenozoic deformation along the Philip Smith Mountain front, northeastern Brooks Range, Alaska: *Earth and Planetary Science Letters*, v. 164, p. 435-449.

Wallace, W.K., and Homza, T.X., 1998, Detachment folds with fixed hinges and variable detachment depth, northeastern Brooks Range, Alaska: Reply: *Journal of Structural Geology*, v. 20, no. 11, p. 1591-1595.

1997

Homza, T.X., and Wallace, W.K., 1997, Detachment folds with fixed hinges and variable detachment depth, northeastern Brooks Range, Alaska: *Journal of Structural Geology*, v. 19, nos. 3-4 (special issue on fault-related folding), p. 337-354.

Moore, T.E., Wallace, W.K., Mull, C.G., Adams, K.E., Plafker, G., and Nokleberg, W.J., 1997, Crustal implications of bedrock geology along the Trans-Alaska Crustal Transect in the Brooks Range, northern Alaska: *Journal of Geophysical Research*, v. 102, no. B9 (special section on the USGS Trans-Alaska Crustal Transect), p. 20,645-20,684.

Peapples, P.R., Wallace, W.K., Hanks, C.L., O'Sullivan, P.B., and Layer, P.W., 1997, Style, controls, and timing of fold-and-thrust deformation of the Jago stock, northeastern Brooks Range, Alaska: *Canadian Journal of Earth Sciences*, v. 34, no. 7, p. 992-1007.

Wallace, W.K., Moore, T.E., and Plafker, G., 1997, Multistory duplexes with forward dipping roofs, north central Brooks Range, Alaska: *Journal of Geophysical Research*, v. 102, no. B9 (special section on the USGS Trans-Alaska Crustal Transect), p. 20,773-20,796.

1995

Homza, T.X., and Wallace, W.K., 1995, Geometric and kinematic models for detachment folds with fixed and variable detachment depths: *Journal of Structural Geology*, v. 17, no. 4, p. 475-588.

O'Sullivan, P.B., Hanks, C.L., Wallace, W.K., and Green, P.F., 1995, Multiple episodes of Cenozoic denudation in the northeastern Brooks Range: Fission track data from the Okpilak batholith: *Canadian Journal of Earth Sciences*, v. 32, no. 8, p. 1106-1118.

1994

Anderson, A.V., Wallace, W.K., and Mull, C.G., 1994, Depositional record of a major tectonic transition in northern Alaska: Middle Devonian to Mississippian rift-basin margin deposits, upper Kongakut River region, eastern Brooks Range, Alaska, in Thurston, D., and Fujita, K., eds., 1992 Proceedings International Conference on Arctic Margins, U.S. Minerals Management Service Outer Continental Shelf Study 94-0040, p. 71-76.

Decker, J., Bergman, S.C., Blodgett, R.B., Box, S.E., Bundtzen, T.K., Clough, J.G., Coonrad, W.L., Gilbert, W.G., Miller, M.L., Murphy, J.M., Robinson, M.S., and Wallace, W.K., 1994, Chapter 9: Geology of southwestern Alaska, *in* Plafker, G., and Berg, H.C., eds., *The geology of Alaska: The Geology of North America*, Geological Society of America, Boulder, Colorado, v. G1, p. 285-310.

Hanks, C.L., Wallace, W.K., and O'Sullivan, P., 1994, The Cenozoic structural evolution of the northeastern Brooks Range, Alaska, *in* Thurston, D., and Fujita, K., eds., 1992 Proceedings International Conference on Arctic Margins, U.S. Minerals Management Service Outer Continental Shelf Study 94-0040, p. 263-268.

LePain, D.L., Crowder, R.K., and Wallace, W.K., 1994, Early Carboniferous transgression on a passive continental margin: Deposition of the Kekiktuk Conglomerate, northeastern Brooks Range, Alaska: *American Association of Petroleum Geologists Bulletin*, v. 78, no. 5, p. 679-699.

Moore, T.E., Wallace, W.K., Bird, K.J., Karl, S.M., Mull, C.G., and Dillon, J.T., 1994, Chapter 3: Geology of northern Alaska, *in* Plafker, G., and Berg, H.C., eds., *The geology of Alaska: The Geology of North America*, Geological Society of America, Boulder, Colorado, v. G1, p. 49-140.

Moore, T.E., Wallace, W.K., Mull, C.G., Karl, S.M., and Bird, K.J., 1994, Generalized geologic map and sections for northern Alaska, *in* Plafker, G., and Berg, H.C., eds., *The geology of Alaska: The Geology of North America*, Geological Society of America, Boulder, Colorado, v. G1, p. Plate 6.

1993

Wallace, W.K., 1993, Detachment folds and a passive-roof duplex: Examples from the northeastern Brooks Range, Alaska, *in* Solie, D.N., and Tannian, F., eds., *Short Notes on Alaskan Geology 1993: Alaska Division of Geological and Geophysical Surveys Geologic Report 113*, p. 81-99.

1990

Hanks, C.L., and Wallace, W.K., 1990, Cenozoic thrust emplacement of a Devonian batholith, northeastern Brooks Range: Involvement of crystalline rocks in a foreland fold-and-thrust belt: *Geology*, v. 18, no. 5, p. 395-398.

Wallace, W.K., and Hanks, C.L., 1990, Structural provinces of the northeastern Brooks Range, Arctic National Wildlife Refuge, Alaska: *American Association of Petroleum Geologists Bulletin*, v. 74, no. 7, p. 1100-1118.

1989

Nokleberg, W.J., Plafker, G., Lull, J.S., Wallace, W.K., and Winkler, G.R., 1989, Structural analysis of the southern Peninsular, southern Wrangellia, and northern Chugach terranes along the Trans-Alaskan Crustal Transect (TACT), northern Chugach Mountains, Alaska: *Journal of Geophysical Research*, v. 94, no. B4, p. 4297-4320.

Wallace, W.K., Hanks, C.L., and Rogers, J.F., 1989, The southern Kahiltna terrane: Implications for the tectonic evolution of southwestern Alaska: Geological Society of America Bulletin, v. 101, no. 11, p. 1389-1407.

1987

Boak, J.M., Turner, D.L., Henry, D.J., Moore, T.E., and Wallace, W.K., 1987, Petrology and K-Ar ages of the Misheguk igneous sequence - an allochthonous mafic and ultramafic complex - and its metamorphic aureole, western Brooks Range, Alaska, in TAILLEUR, I.L., and WEIMER, P., eds., Alaskan North Slope geology: Pacific section, Society of Economic Paleontologists and Mineralogists, and Alaska Geological Society, Book 50, p. 737-745.

Stone, D.B., and Wallace, W.K., 1987, A geologic framework of Alaska: Episodes, v. 10, no. 4, p. 283-289.

1984

Wallace, W.K., and Engebretson, D.C., 1984, Relationships between plate motions and Late Cretaceous to Paleogene magmatism in southwestern Alaska: Tectonics, v. 3, no. 2, p. 295-315; Publisher's correction: Tectonics, v. 3, no. 4, p. 497-498.

Reports

2004

Wallace, W.K., Hanks, C.L., Jensen, J., Whalen, M.T., Atkinson, P.K., Brinton, J., Bui, T., Jadamec, M.A., Karpov, A.V., Lorenz, J.C., McGee, M.M., Parris, T.M., and Shackleton, J.R., 2004, The influence of fold and fracture development on reservoir behavior of the Lisburne Group of northern Alaska: U.S. Department of Energy, final report for September, 1998 to September, 2002, DOE award DE-AC26-98BC15102, 271 p.

2003

Wallace, W.K., Hanks, C.L., Jensen, J., Whalen, M.T., Brinton, J., Bui, T., and McGee, M.M., 2003, The influence of fold and fracture development on reservoir behavior of the Lisburne Group of northern Alaska: U.S. Department of Energy, semi-annual report for June 2001 to January 2002, DOE award DE-AC26-98BC15102, 100 p.

2002

Wallace, W.K., Hanks, C.L., Whalen, M.T., Jensen, J., Atkinson, P.K., Brinton, J., Bui, T., Jadamec, M.A., Karpov, A.V., Krumhardt, A.P., Lorenz, J.C., McGee, M.M., and Shackleton, J.R., 2002, The influence of fold and fracture development on reservoir behavior of the Lisburne Group of northern Alaska: U.S. Department of Energy, semi-annual report for January-June 2001, DOE award DE-AC26-98BC15102, 131 p.

2001

Wallace, W.K., Hanks, C.L., Whalen, M.T., Jensen, J., Shackleton, J.R., Jadamec, M.A., McGee, M.M., and Karpov, A.V., 2001, The influence of fold and fracture development on reservoir behavior of the Lisburne Group of northern Alaska: U.S. Department of Energy, semi-annual report for May 2000-January 2001, DOE award DE-AC26-98BC15102, 104 p.

Wallace, W.K., Hanks, C.L., Whalen, M.T., Jensen, J., Lorenz, J., Atkinson, P.K., Brinton, J.S., and Karpov, A.V., 2001, The influence of fold and fracture development on reservoir behavior of the Lisburne Group of northern Alaska: U.S. Department of Energy, annual report for May 1999-May 2000, DOE award DE-AC26-98BC15102, 147 p.

2000

Reifenstuhl, R.R., Mull, C.G., Harris, E.E., LePain, D.L., Pinney, D.S., and Wallace, W.K., 2000, Geologic map of the Sagavanirktok B-1 quadrangle, eastern North Slope, Alaska: Alaska Division of Geological and Geophysical Surveys Report of Investigations 2000-1A, 15 p., 1 sheet, scale 1:63,360.

Reifenstuhl, R.R., Mull, C.G., Harris, E.E., LePain, D.L., and Wallace, W.K., 2000, Interpretive bedrock geologic map of the Sagavanirktok B-1 quadrangle, eastern North Slope, Alaska: Alaska Division of Geological and Geophysical Surveys Report of Investigations 2000-1B, 11 p., 1 sheet, scale 1:63,360.

Wallace, W.K., Hanks, C.L., Whalen, M.T., Jensen, J., Atkinson, P.K., and Brinton, J.S., 2000, The influence of fold and fracture development on reservoir behavior of the Lisburne Group of northern Alaska: U.S. Department of Energy, semi-annual report for May-October 1999, DOE award DE-AC26-98BC15102, 83 p.

1999

Cole, F., Bird, K.J., Mull, C.G., Wallace, W.K., Sassi, W., Murphy, J.M., and Lee, M., 1998, A balanced cross section and kinematic and thermal model across the northeastern Brooks Range mountain front, Arctic National Wildlife Refuge, Alaska, in ANWR Assessment Team, Oil and Gas Resource Potential of the 1002 area, Arctic National Wildlife Refuge, Alaska: U.S. Geological Survey Open File Report 98-34, CD-ROM, p. SM 1-60.

1992

Moore, T.E., Wallace, W.K., Bird, K.J., Karl, S.M., Mull, C.G., and Dillon, J.T., 1992, Stratigraphy, structure, and geologic synthesis of northern Alaska: U.S. Geological Survey Open-File Report 92-330, 183 p., 1 sheet.

Plafker, G., Lull, J.S., Nokleberg, W.J., Pessel, G.H., Wallace, W.K., and Winkler, G.R., 1992, Geologic map of the Valdez A-4, B-3, B-4, C-3, C-4, and D-4 quadrangles, northern Chugach Mountains and southern Copper River basin, Alaska: U.S. Geological Survey Miscellaneous Investigations Series map I-2164, 1 sheet scale 1:125,000.

Wallace, W.K., 1992, Detachment folds above a passive-roof duplex: An example from the northeastern Brooks Range, Alaska: Alaska Division of Geological and Geophysical Surveys, Public Data File 92-9, 41 p.

1989

Hanks, C.L., and Wallace, W.K., 1989, Preliminary geologic map of the northern margin of the Okpilak batholith between McCall Creek and the Okpilak River, northeastern Brooks Range, Alaska: Alaska Division of Geological and Geophysical Surveys Public Data File 89-1f, 13 p., 1 sheet scale 1:25,000.

Plafker, G., Lull, J.S., Nokleberg, W.J., Pessel, G.H., Wallace, W.K., and Winkler, G.R., 1989, Geologic map of the Valdez A-4, B-3, B-4, C-3, C-4, and D-4 quadrangles, northern Chugach Mountains and southern Copper River basin, Alaska: U.S. Geological Survey Open-File Report 89-569, 1 sheet scale 1:125,000.

Reviews

Hanks, C.L., and Wallace, W.K., 1992, Review of Dalton Highway, Yukon River to Prudhoe Bay, Alaska, edited by C.G. Mull and K.E. Adams (1989): American Association of Petroleum Geologists Bulletin, v. 76, no. 2, p. 292-293.

Abstracts2003

Bemis, S.P., and Wallace, W.K., 2003, Active structures in the foothills of the north-central Alaska Range: EOS Transactions, v. 84, no. 46, abstract S12A-0380.

Finzel, E.S., McCarthy, P.J., and Wallace, W.K., 2003, Facies architecture and syntectonic fold geometry of fluvial conglomerate in the Cretaceous Nanushuk Formation, Brooks Range foothills, Alaska: American Association of Petroleum Geologists Pacific Section Meeting, Los Angeles.

Finzel, E.S., McCarthy, P.J., Wallace, W.K., and LePain, D.L., 2003, Architectural analysis and fold geometry of syntectonic fluvial conglomerate in the Nanushuk Formation, Brooks Range foothills, Alaska: Geological Society of America Abstracts with Programs, v. 35, no. 6, p. 509.

Finzel, E.S., McCarthy, P.J., Wallace, W.K., and LePain, D.L., 2003, Facies architecture and syntectonic fold geometry of fluvial conglomerate in the Cretaceous Nanushuk Formation, Brooks Range foothills, Alaska: Alaska Geological Society, 2003 Geology Symposium, Fairbanks, Alaska, abstract volume, p. 33.

Hanks, C.L., Wallace, W.K., and Parris, M., 2003, Progressive fracturing and folding during burial, deformation and unroofing in the northeastern Brooks Range, Alaska: American Association of Petroleum Geologists Annual Convention, Salt Lake City, Official Program, v. 12, p. A70.

Hanks, C.L., Wallace, W.K., and Parris, T.M., 2003, Progressive fracturing in late Paleozoic rocks of the northeastern Brooks Range: Implications for conditions of burial, deformation, and unroofing in an evolving fold-and-thrust belt: Alaska Geological Society, 2003

Geology Symposium, Fairbanks, Alaska, abstract volume, p. 36.

O'Sullivan, P.B., Moore, T.E., Potter, C.J., and Wallace, W.K., 2003, Thermo-chronologic constraints on the Cenozoic thermal history of the southern North Slope foreland basin, Alaska: American Association of Petroleum Geologists Annual Convention, Salt Lake City, Official Program, v. 12, p. A130.

Wallace, W.K., 2003, Geometry and evolution of detachment folds in deformed foreland basin deposits of the Brooks Range foothills, northern Alaska: American Association of Petroleum Geologists Annual Convention, Salt Lake City, Official Program, v. 12, p. A177.

2002

Craw, P., Haeussler, P., Crone, A., Personius, S., and Wallace, W., 2002, Surface rupture on the Susitna Glacier fault associated with the M7.9 Denali fault earthquake: Supplement, EOS Transactions, v. 83, no. 47, p. 3-4.

Denali earthquake geologic field team (including W.K. Wallace), 2002, Initial observations and implications of surface rupture and slip distribution associated with the Mw7.9 Denali fault earthquake: Supplement, EOS Transactions, v. 83, no. 47, p. 4.

Hanks, C.L., Parris, M., and Wallace, W.K., 2002, Limitations on the thermal conditions during formation of fractures and detachment folds in the northeastern Brooks Range: American Association of Petroleum Geologists, Pacific Section Conference, Anchorage, Program and Abstracts, p. 78.

Jadamec, M.A., and Wallace, W.K., 2002, Evolution and extension of thrust-truncated detachment folds in the upper Marsh Fork area of the eastern Brooks Range, and implications for the eastward extent of the Endicott Mountains allochthon: American Association of Petroleum Geologists, Pacific Section Conference, Anchorage, Program and Abstracts, p. 82.

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