1995 Master of Science in Environmental Quality Engineering, University of Alaska; Anchorage, Alaska
1985 Master of Science in Petroleum Engineering, Tulsa University; Tulsa, Oklahoma
1982 Bachelor of Arts in Physics, William Jewell College; Liberty, Missouri

JOHN BRADEN, P.E.

Registered Professional Engineer

Registered Professional Petroleum Engineer, State of Alaska, EP-10151

Registered Professional Engineer specializing in production and classical reservoir engineering with diverse experience in Alaska that includes:

- Downhole surveillance and optimization in light and viscous oil with miscible gas waterflood
- Reservoir and production engineering in dry gas fields
- Chemical EOR screening and pilot testing,
- Exploration engineering analysis, well test design and execution
- Classical reserve analysis and reporting
- Pressure transient analysis
- Well stimulation candidate analysis and design

PROFESSIONAL EXPERIENCE

West Sak Unit Drillsite Petroleum Engineer, ConocoPhillips Alaska, Inc (10/2014 -10/2016)

- Responsible for base production of 60 to 70 viscous oil producers and injectors: ESP and gas lift optimization, pattern optimization with waterflood and water-alternating-gas injectors, remedial wellwork evaluation and infill development.
- Evaluated and identified West Sak waterflood changes to increase injectivity and throughput, resulting in increased recovery by the end of field life**.**

Kuparuk River Unit Drillsite Petroleum Engineer, ConocoPhillips Alaska, Inc (12/2010 -10/2014)

- Responsible for base production of 110 to 140 producers and injectors: maximize production through optimization, remedial wellwork evaluation, economic justification, and support infill development.
- Project integration manager for Chemical EOR and conformance polymer pilot projects
- Alaska EOR team member that investigated future EOR application at Kuparuk

Cook Inlet Development Engineer, ConocoPhillips Alaska, Inc (10/2002 -12/2010)

- Production/reservoir engineer responsible for all downhole engineering of two prolific gas fields in the Cook Inlet area with the responsibility for reservoir management, gas forecasts, generation and economic justification for drilling 5 new wells and stimulation/workover programs.
- Other duties included monitor and review production, internal and regulatory reporting, coordinate Plans of Development, field life planning, well testing, Working Interest Owner relations, assist with the budget process and commercial issues.
- Project integration manager for $58MM compressor addition, which was on-schedule, on-budget and delivered above the target rate.
- Successfully permitted two Class I injection wells

Kuparuk Development Engineering Supervisor, ConocoPhillips Alaska, Inc (7/2000 -10/2002)

- Supervisor of 12 engineer group responsible for reservoir management, crude oil forecasts, identification and economic justification of stimulation/workover opportunities for over 1000 Kuparuk wells.
- Improving group morale in low-price environment by creating a cohesive team environment
- Pursued additional funding for incremental wellwork and delivered incremental rate as promised
- Worked salary inequity issues with Human Resources.

Exploration Engineer, ARCO Alaska, Inc (1/1996- 7/2000)

- One of three engineers responsible working in an inter-disciplinary group to generate and evaluate exploration prospects.
- Tasks included rate and reserve estimation, economic evaluation, well test design, on-site testing supervision and post-well evaluation.
- Exploration projects included Tarn, Meltwater, Nanuq, Fiord, Lone Creek, and West Gold Hill.
- Compiled and developed a model to evaluate property potential for Lease Sales 86, 87 and 170

ARCO Alaska Prudhoe Bay Reservoir Engineering, ARCO Alaska, Inc. (11/1993 - 11/1996)

- Responsible for annual forecast that was the basis for SEC, DOE and IRS reporting.
- Updated long-term PBU Field fuel gas usage forecast.
- Unit and internal coordinator of a multi-company field development plan involving Operations, Reservoir and Facility Engineering, as well as Business and Health, Safety & Environmental.
- Supplied technical support to team negotiating the value and use of hydrocarbon fluids. Received Exceptional Contribution Award for work on Gas Conditioning Task Force.
- Member of a four-person team charged to develop a plan to meet current and future lease operating cost targets. Performed detailed performance benchmarking to identify high cost drivers and recommended reductions. Received Exceptional Contribution Award from Vice President.

Prudhoe Bay Special Projects Engineer, ARCO Alaska, Inc. (3/1990 - 11/1993)

- Chairman of Unit Formation Damage Team that convened technical experts to address a broad range of formation damage issues, oversaw contract work with ARCO, BP and Exxon labs, and directed lab efforts in building a geochemical flow model. Established new drilling mud salinity guidelines. Designed, performed and advised on stimulation flowback analyses.
- Performed numerous pressure transient analyses (PTA) and advised other personnel on PTA design and analysis. Co-authored paper with Med Kamal on multi-composite reservoir behavior.
- Defined improved method of acquiring static pressure data saving 72 MMBO of deferred oil.
- Developed a systematic approach to reduce production well test times without compromising accuracy.
- Designed method to analyze waterflood well declines curves and evaluate recovery implications of wellwork for 75 waterflood wells. Determined additional recovery versus accelerated rate benefits of wellwork treatments for economic analysis.

Prudhoe Bay Stimulation Engineer, ARCO Alaska, Inc. (4/1988 - 3/1990)

- Support field capacity by recommending stimulation candidates designed chemical and fracture treatments for producers and injectors. Supported economic analysis for operator discretion wellwork.
- Performed on-site engineering and post-treatment analysis of stimulation treatments.
- Built field apparatus and ran field experiments to evaluate PWI core plugging and test stimulation treatments. Evaluated use of oxidizers for injection well treatments.
- Developed criteria for use of down-hole shut-in tools at Prudhoe Bay for pressure testing.
- Developed and performed gel-pig flowline cleanout.

Prudhoe Bay Drill Site Surveillance Engineer, ARCO Alaska, Inc. (7/1985 - 4/1988)

- Production and injection well monitoring for 19 producers and 14 injectors in a water-alternating-gas flood that included a radioactive tracer program
- Selected and justified stimulation / workover candidates.