

Ms. O'Brien-Authier is a highly motivated Petroleum Engineer with more than 32 years of diverse experience in reservoir development, oil and gas production operations, and planning. Industry work experience focused on drilling, completion, production optimization, and reservoir management of oil and gas wells under primary, secondary and tertiary flooding conditions. Erin is a proven problem solver and team player with a solid work ethic, excellent organizational skills, and strong interpersonal and communication skills. She most recently is on contract for Petrotechnical Resources Alaska (PRA) to BP as a senior reservoir engineer working on identifying drilling prospect for Prudhoe Bay. She also worked for PRA as a Cook Inlet production engineer contracted to Chevron. Prior to that, she worked several years as a Prudhoe Bay reservoir engineer for BP Exploration (Alaska) Inc. and ARCO Alaska.

February 2012 – Present: PRA consultant for BP - Senior Reservoir Engineer – New Wells Delivery Team, Gravity Drainage (GD) of Prudhoe Bay Alaska

- Optimized development and production management strategies for seven GD pads (>200 wells).
- Provided senior reservoir engineering support to economically justify drilling ~15 to 20 rotary/coil sidetrack packages each year.
- Performed reservoir and economic evaluations for new development, and provided senior technical oversight with respect to drilling and perforating new wells.
- Identified production maintenance/management optimization strategies, wellwork and other rate enhancing opportunities within area and mentored less experience pad engineers to progress opportunities.
- Worked with co-owners to obtain technical and financial approvals.
- Generated post-drill analyses for all drilling projects.
- Fostered team work and provided leadership, counsel and advice to my peers and co-workers with less experience.

October 2010 – January 2012: PRA consultant for Chevron - Production Engineer – Cook Inlet Fields of Alaska

- Optimized economic development and production management strategies for Ninilchik and Happy Valley Gas Fields. This included new drilling and wellwork.
- Led the effort to retest the Red 1 well and justify building a 10 mile pipeline and facility for Red Pad.
- Worked with operators at Happy Valley to implement a successful capillary soap string program.
- Performed reserve analysis and booked reserves for gas fields.
- Filed necessary state sundries and reports.
- Presented Plan of Depletion (POD) for Happy Valley and NNA#1 Disposal well.

July 1999 – June 2010: BPXA - Senior Reservoir Engineer - Gravity Drainage (GD) of Prudhoe Bay Alaska

- Optimized development and production management strategies for several GD pads (>200 wells).
- Performed reservoir and economic evaluations for new development, and provided senior technical oversight with respect to pad reviews, well workovers; identified production maintenance/management optimization strategies and other rate enhancing opportunities within area.
- Provided senior reservoir engineering support to economically justify drilling ~15 to 20 rotary/coil sidetrack packages each year and perform ~10 rig workovers (RWO) each year.
- Worked with co-owners to obtain technical and financial approvals.
- Generated post-drill analyses for drilling and RWO projects, and consolidated the entire GD annual retrospect analysis to confirm drilling and RWO program economic results.
- Coordinated development meetings to help optimize package delivery and rig scheduling.
- Identified cost savings or efficiency improvement opportunities for the drilling program.
- Key team member supporting implementation of the Flow Station 1 UZI (up-dip Zone 4 injection) project.
- Performed Sag River oil development and gas cap appraisal.
- Fostered team work and provided leadership, counsel and advice to my peers and co-workers with less experience.

Nov 1996 – June 1999: ARCO Alaska, Inc. - Senior Reservoir Engineer – Prudhoe Bay Resource Development (Eastern Gravity Drainage)

- Performed reservoir analysis and prepared technical packages for drilling in GD. Package preparation included developing existing-value calculations, reserve estimates and economic analyses for more than 60 coiled tubing sidetracks, rotary rig sidetracks, new wells, and rig workovers.
- Provided senior technical support with respect to directional planning, pre-spud meetings, and development of drilling and perforation strategies for new penetrations.

- Team lead for prioritization of Prudhoe Bay Geophysical/Geological development work to support development drilling operations.
- Troubleshoot reserve analysis and forecasting programs and recommended changes.
- Mentored several first-year engineers.
- Performed post-drill analysis using decline curve performance, and compared results with other available reserve prediction tools, continually identifying ways to optimize post-drill analysis.

July 1994 - Nov. 1996, ARCO Alaska, Inc. - Senior Reservoir Engineer – Kuparuk Field, Alaska, Central Production Facility 3

- Led Reservoir Performance Analysis (RPA) Team through pattern material balance (350 patterns) and rate forecasting to optimize secondary/tertiary flooding and performance, and identify future development drilling opportunities.
- Helped justify and optimize CPF3 MWAG/IWAG (miscible water alternating gas / immiscible water alternating gas) injection projects.
- Active member of several drilling teams which included reservoir analysis and economic justification of sidetracking old wellbores or drilling new wells.

April 1992 – July 1994, ARCO Alaska, Inc. - Senior Project Engineer – Kuparuk Full Field Group

- Coordinated Long Range Plan, Capital Budget and drilling schedule. Helped develop comprehensive work plan to reduce drilling, completion, operations and maintenance costs.

Feb. 1989 – April 1992, ARCO Alaska, Inc. - Senior Operations Engineer – Kuparuk Central Production Facility-2

- Expanded surveillance technical expertise to include hydraulic refracturing, gas-lift design/optimization, immiscible water alternating gas injection surveillance, and new drilling and completion technology in arctic conditions.
- Led drilling effort for new Kuparuk Drill Site 2M.

May 1981 – Jan. 1989, Union Pacific Resources Company in Denver, Colorado - Petroleum Engineer – Oil and Gas Fields in Rocky Mountain Region

- Performed duties as drilling engineer, production operations engineer, and reservoir engineer for hundreds of wells in the Rocky Mountain area.
- Expertise included drilling, completion, and operation of oil and gas wells in CO, MT, WY, and KS; production forecasting, reserve evaluation and project justification; supervision of field operations including hydraulic fracturing, acid stimulation and remedial operations; and reservoir equity negotiations.

TECHNICAL and ANALYTICAL SKILLS

- Strong reservoir evaluation skills
- Detailed working knowledge of well work, drilling and production operations
- Proven economic evaluation skills
- Strong computer skills (Excel, Word, FORECAST, Powerpoint, Canvas, DSS, etc.)
- Excellent communication skills, both written and oral