# Candidate Synopsis

**2007 – Present:** **INDEPENDENT ENERGY COMPANY**
**Senior Staff Reservoir Engineer**

Assigned to Southern Oklahoma Region, Duties:

- Assigned to five fields with geological and reservoir diversity
- Conducted study to justify infill drilling program and 60 booked PUD locations in E. Fitts Unit by determining success of past programs, empirically forecasting reserves by pattern, conducting volumetric studies and forecasting new wells using recovery curve analysis.
- Supported drilling program in Bumpass Springer Unit using volumetric, material balance and pressure transient analysis
- Designed and implemented company's first OilField Manager database with direct links to corporate databases (15,000 historic wells) and promoted use within reservoir engineering community

**2005 – 2007:** **GLOBAL ENERGY COMPANY**
**Senior Reservoir Engineering Advisor**

Assigned to Yemen, Duties:

- Performed scoping study for 150 mmcfpd gas cycling project using GAP software. Performing detailed economic study and directed simulation efforts for project.
- Performed economic feasibility study for Central Processing Facility for new field
- New field development for solution gas/gas cap drive field
- Annual submittals including reserves revisions, Board of Directors AFE, exploration economics, capital post-audit
- Evaluated geological prospects using risk analysis techniques and Merak World Peep fiscal models.
- Annual presentations at technical committee meeting and Petroleum Exploration and Production Authority (Ministry of Minerals, Republic of Yemen)

**Reservoir Engineering Advisor (2000 – 2005)**

Member of Subsurface Team (SST) and Ranger Reservoir Team (RRT) Duties:

- As member of multi-disciplined SST, assigned to Ranger East Waterflood Optimization project, a geologically-complex, faulted, multiple (turbidite) sand pay interval with significant flux issues. Tasked with understanding poorer recovery compared to Ranger West, an adjoining fault block with higher recovery.
- Built reservoir streamline simulation models utilizing FRONTSIM to identify unswept oil to be exploited thru island drilling and workover program. Overcame significant hurdles including understanding relative permeability, insitu permeability, and efflux/influx issues.
- As member of Ranger Reservoir Team (since 1/02), modeled majority of new concept wells and investment well work projects (add pays, conversions) to determine profitability and reserves capture component.
- Responsibilities expanded to include surveillance reservoir engineering over three fault blocks. Daily responsibilities include anything pertaining to surveillance engineering in the Ranger zone – voidage management, producer well enhancement, waterflood conformance and sand control.

**Reservoir Engineer (1997-2000)**

- Assigned to most mature waterflood (Grayburg, 98% water cut) in company portfolio. Charged with extending economic field life by utilizing past conformance history, current technology, and partnering opportunities with alliance partners as well as working with technical group within company.

- Leveraged off-site technician support to build production surveillance database to move field from "paper" data to "electronic" data. Digitized injection profiles, bottomhole injection pressures on vacuum wells, well history narratives, petrophysical data, and allocated preunitization production. Developed processes to reduce engineering manhours spent on pattern reviews while significantly enhancing quality of end product.
- Demonstrated viability of inexpensive plugback technologies to add significant reserves based on past history, encouraging co. technical group to perform 1st fieldwide simulation. Provided support to modelers, supervising technicians to gather well histories on 700 wells in 2 weeks.
- Began implementing model-identified work in Fall, 1999 to bring field off 7.5% historical decline to 3% decline. Began preparations for projected CO2 pilot scheduled for 2001.
- Performed waterflood forecast at well level (160 wells) using Ershaghi empirical tool, providing support.
- Provided engineering design of 11,600' Fusselman proposed waterflood, recommendations to upsize lift in mature fields, and review and recommendations for waterflood.

**1991 – 1997: ENERGY CONSULTING COMPANY**
**Reservoir Engineer (1995-1997)**

Responsible for long-term reservoir depletion strategies and development of yearly capital expenditure program. Increased production in major field of interest from 700 to 3000 BOPD.

- Recommended drilling and workover program to exploit banked up oil in late mature peripheral San Andres waterflood ($4.9MM capital program, 1995)
- Recommended polymer treatments for WOR reduction in high volume, high water cut producers in referenced waterflood.
- Recommended workover program to initiate pattern waterflooding in same waterflood ($4.5MM capital program, 1996)

**Operations Engineer (1991 - 1994)**

Responsible for developing workover projects to maximize production and minimize workover cost.

- Recommended major operational changes to 36 year old waterflood resulting in marginal field becoming a major focus area:
- $1.5MM workover program placing wells on ESP lift and utilizing inactive/marginal wellbores.
- $1.5MM program to exploit low pressure gas zone.

**1989 – 1991: OIL PRODUCTION COMPANY**
**Production Engineer**

Production and reservoir engineering responsibilities for diverse group of oil and gas fields including primary oil production (solution gas and waterdrive), mature and recent waterfloods and gas production.

- Yearly internal reserves auditing, capital and production budgeting and formal presentation of reserves evaluation to prominent U.S. and Canadian banks to establish investment line of credit for company owners.
- Major responsibility - developing a significant discovery:
  - Evaluation and completion of 14 development wells
  - Reservoir surveillance of multiple pay zones and reserves evaluation
  - Reservoir study to determine waterflood feasibility

**1988 – 1989: INDEPENDENT ENERGY COMPANY**

Production and reservoir engineering responsibilities for company's largest reserve base

- Reserves review, capital and production budgeting and bankers' presentation

- Waterflood surveillance and maintenance, including targeting injection and production wells for workover potential and implementing recommendations
- Special emphasis on conformance modification of injection wells and restoring injectivity following polymer program
- Review of offset operations purchase potential. Review led to $2MM purchase of offset lease.

**1985 – 1988:** **PRODUCTION COMPANY**
**Petroleum Engineer**

- Staff engineer and assistant to VP of Engineering in corporate office.
- Evaluation of geological prospects to assist division offices
- Two year program to develop database to track performance of yearly capital expenditure program. System replicates full-time task formerly performed by staff engineer, allowing greater value-added functions to be performed.

**EDUCATION:** Large State University
BS, Petroleum Engineering