

**R. W. FRAZIER**  
Senior Vice President

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## **EDUCATION**

B.S. in Mechanical Engineering, Texas Tech University, 1967  
Permian Basin Graduate Center (2 Semesters) - Fundamentals of Reservoir Engineering  
Many Training Schools and Seminars on Reservoir Engineering, Production Engineering, Basic Geology, Formation Evaluation, Logging, Economics, Risk Analysis, Regulatory Affairs, Supervision, Ethics, and Management

## **RELEVANT AREAS OF EXPERTISE**

**U.S.:** Permian, Anadarko, Arkoma, Fort Worth, Denver, San Juan, Black Warrior, Appalaichian, Wind River, Williston, Green River, and Uinta Basins; Gulf Coast; East Texas; South Texas; Gulf of Mexico; California (Belridge, Midway Sunset); Alaskan North Slope; Kansas Hugoton. **Russia:** Timan-Pechora, W. Siberian, E. Siberian, Volga-Ural, Baltic Basins. **Other FSU:** Ukraine, Kazakhstan, Azerbaijan. **Europe:** North Sea, United Kingdom, Denmark, Netherlands. **South America:** Colombia, Venezuela, Argentina, Peru. **Africa:** Algeria.

**Activities:** Reserve audits and determinations, SEC reserves disclosures; development plan design/evaluation; project management; waterflooding; enhanced oil recovery (CO<sub>2</sub>, polymer, surfactant, enriched gas, thermal); economic, risk, and sensitivity analyses; acquisitions and divestitures; project financing (bank loans, production payments, vendor and mezzanine financing); PVT and core analysis; material balance/volumetrics/analogy applications; prospect evaluation (decision trees, expected value); Fair Market Values; nodal analysis; pressure transient testing; deliverability/productivity; develop/customize technical and economic evaluation models; PSAs.

## **EXPERIENCE**

1998 - Present	<b><u>Miller and Lents, Ltd. - Houston, Texas</u></b>
2003	Senior Vice President
2002-2003	President
2000-2002	Senior Vice President
1998-1999	Vice President
1995 - 1998	<b><u>T. J. Smith &amp; Co., Inc., - Houston, Texas</u></b>
1977 - 1995	<b><u>Miller and Lents, Ltd., - Houston, Texas</u></b>
1994-1995	Senior Vice President
1988-1994	Vice President
1977-1988	Consulting Engineer

In consulting firm positions listed above, performed many varied assignments for all types of clients, including individuals, small independent companies, international conglomerates, pipelines, law firms, banks, trusts, and insurance companies. Reserve studies and cash flow projections for properties ranging from single well stripper

leases to total fields containing billions of barrels of oil and trillions of cubic feet of gas, including both domestic and foreign properties, onshore and offshore. Feasibility studies for enhanced oil recovery through horizontal drilling and fluid injection. Risk analysis of workover programs, drilling programs, and exploration prospects. Evaluations ranging from individual wells to entire companies for sale, acquisition, or merger.

1967 - 1977 **Exxon Company, USA**

- 1977 **Senior Staff Engineer - Headquarters - Houston** - Provided technical and logistical support to Headquarters Management. Coordinated and evaluated the company's drilling and workover programs. Planned allocation of capital spending and manpower.
- 1975 - 1977 **District Engineering Manager - Oklahoma City** - Supervised 20 professionals in developing and implementing engineering work for more than 100 producing fields in seven states. Coordinated engineering activities with operations, geology, and drilling groups. Testified as an expert witness before the Oklahoma Corporation Commission.
- 1974 - 1975 **Supervising Reservoir Engineer - Oklahoma City** - Supervised eight engineers and coordinated group's activities with field operations, geology and other groups. Established goals and objectives, prepared production forecasts, and set up programs for surveillance, drilling, workover, and enhanced recovery.
- 1973 - 1974 **Senior Reservoir Engineer - Midland, Texas** - Conducted reservoir optimization projects for the Division's major fields. Developed reservoir models, conducted simulation studies, and testified at Texas Railroad Commission hearings.
- 1969 - 1973 **Reservoir Engineer - Andrews, Texas** - Assisted with reservoir surveillance, workover recommendations, waterflood design, and budgeting for several large unitized fields. Testified before the New Mexico Oil Conservation Commission.
- 1967 - 1969 **Production Engineer - Midland, Texas** - Production engineering and reservoir engineering surveillance work with emphasis on artificial lift and workovers. Assisted research group in conducting a tertiary recovery (surfactant injection) pilot.
- 1967 **Associate Engineer - Division - Midland, Texas** - Screened properties and gathered the appropriate support data to prioritize sales candidates and prepare offering memoranda.

**PROFESSIONAL ORGANIZATIONS**

Registered Professional Engineer – State of Texas  
Society of Petroleum Engineers, Inc.

**OTHER**

Nationality:	American
Language Skills:	English
Years with Firm:	From 1977-1995; Since 1998
Software Skills:	Excel, Lotus 123, Access, PowerPoint, Word, Outlook, Aries™, PEEP™, OGRE™, Piper™, Virtuwell™.