



GRACE, SHURSEN, MOORE & ASSOCIATES, INC.

A Professional Team of Registered Consulting Petroleum Engineers

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RESUME

ROBERT D. GRACE

PERSONAL

Birth Date: June 2, 1941
Marital Status: Married, two children
Christian
Valid Passport: 016507355, 04/10/2010
Hobbies: Avid Hunter, Gun Enthusiast, and Outdoorsman, Sports and Physical Fitness

EDUCATION

BS and MS Degrees in Petroleum Engineering from the University of Oklahoma.

CERTIFICATION

- MMS Certified Instructor for Well Control School
- H₂S Safety, December 2004
- Registered Professional Engineer

MEMBERSHIPS

- Society of Petroleum Engineers
- Society of Petroleum Evaluation Engineers
- Life Member of the National Registry of Who's Who

WELL CONTROL QUALIFICATIONS

- Engineered Canada's first relief well with wellbore intercept and casing penetration, January 2005
- Well Control Consultant – Industries oldest blowout – Old Salty – Peace River Alberta, 2003
- Project Manager, Chinese Petroleum Company Blowout at CHK-140W. Biggest blowout ever on island of Taiwan, 1997.
- Consultant to Kuwait Oil Company, Al-AWDA Project, responsible for 300 fires in Burgan Field, Kuwait, 1991. Accomplished in four months.
- Specializing in Pressure Control Operations and Fluid Dynamics for well control.
- Pioneered fluid dynamics in well control.
- Specializing in deep drilling and completion technology.
- Pioneered modern relief well technology.

- Engineered and managed world's deepest relief well with wellbore interception below 16,000'.
- Managed and controlled what is reported to be the biggest blowout in Texas history.

DRILLING AND COMPLETION QUALIFICATIONS

- Forty years experience in deep drilling and completion technology worldwide.
- Specializing in directional drilling and horizontal drilling.

TRAINING QUALIFICATIONS

Formed GSM Training Services. Thirty years experience in training in Drilling Practices, Completion Practices, Deep Drilling and Completion Technology, Well Control and Advanced Well Control. Conducted seminars in almost every oil field in the world.

EXPERT WITNESS QUALIFICATIONS

Qualified as an expert witness in drilling operations and well control in the district courts of Texas and Oklahoma, US Federal Court, Oklahoma Corporation Commission, the Texas Railroad Commission and the Tax Court of Canada. Qualified as an expert in all phases of petroleum engineering including areas of Drilling Operations, Completions, Well Control, Environmental, Contractual Relationships, Prudence of Operation, Tubular Failures, Reservoir Engineering and Property Evaluation.

EXPERIENCE

1976 - Present

Formed Grace, Shursen, Moore and Associates, Inc. (Registered Petroleum Engineers), in Amarillo, Texas serving the industry in all phases of petroleum engineering.

1975 - 1976

Associate Professor of Petroleum Engineering and Acting Department Head at Montana College of Mineral Science and Technology. Lectured in Drilling Practices, Completion Practices, Reservoir Engineering, and Pressure Control. Prepared and presented technical papers for the SPE.

Participated in consulting activities. Evaluated drilling operations in the Rocky Mountains, Alaska and Guatemala. Involved in drilling research in geothermal exploration with a major independent research organization.

1968 - 1975

Consulting Petroleum Engineer located in Amarillo, Texas. Involved in all phases of petroleum engineering including:

- Supervising drilling and completion operations with special expertise in deep drilling and completion technology and pressure control.
- Property evaluation for sale or acquisition.
- Property evaluation for various legal proceedings including estate tax studies.
- Expert witness in legal proceedings.
- Operating oil and gas properties.
- Clientele included independent operators, major companies, drilling contractors and law firms.
- Lectured worldwide on Drilling Practices and Technology.

1967 - 1968

CREST EXPLORATION, Amarillo, Texas - Engineering and Operations Manager. Functioned in all phases of petroleum engineering. Supervised operations in the Texas Panhandle, Oklahoma, South Texas, New Mexico, and Wyoming.

1964 - 1967

HUMBLE OIL AND REFINING COMPANY, Oklahoma City, Oklahoma and Amarillo, Texas. Functioned in all phases of petroleum engineering. Ultimately, responsible for all drilling and completion programs for the Oklahoma City District which included the Texas Panhandle, Oklahoma, Kansas, and Arkansas.

PUBLICATIONS

Authored Blowout and Well Control Handbook released by Gulf Publishing in 2003.

Authored the book Advanced Blowout and Well Control released by Gulf Publishing in 1994.

Authored significant contributions to the industry standard Drilling Practices Manual, First Edition published by Pennwell in 1974.

Co-authored Pressure Control Manual and Completion Practices Manual.

Personally authored numerous technical papers for presentation at professional meetings.

"Non-Classic Pressure Control Techniques," Featured dinner speaker at meeting of Society of Petroleum Engineers.

"Pressure Control," Presented paper at the Deep Well Symposium in Amarillo, Texas. October 1976.

"How to Control Blowouts in Underbalanced Drilling," Petroleum Engineer

Chapter on Pressure Control for Tenneco Drilling Manual.

"Good Shutin Procedures Optimize Pressure Control," Oil & Gas Journal, Aug. 1983

"In Search of The Apache Key," SPE/AIME, April 1984

"Deep Apache Well Controlled Successfully," Petroleum Engineer, March 1985

"Case History of Texas' Largest Blowout Shows Successful Techniques of Deepest Relief Well," Oil & Gas Journal, May 1985

"Pressure Control in Balance," Oil & Gas Journal, Jan. 1986

"Unique Fluid Dynamics Control - South Louisiana Blowout," CADE/CAODC Conference, April 1987

"Fluid Dynamics Kill Wyoming Icicle," World Oil, April 1987

"Further Discussion of Application of Oil Muds," SPE Drilling Engineer, Sept. 1987

"Fluid Dynamics Used to Kill South Louisiana Blowout," World Oil, April 1989

"Downhole Fires During Air Drilling: Causes and Cures," World Oil, May 1989

"Blowout Control Methods (Sonatrach RN-36, Algeria)" presented at International Well Control Symposium, Baton Rouge, LA, Nov. 1989

"Operations at a Deep Relief Well," World Oil, May 1990

"Why Well Control Safety Factors May Not Be Safe," World Oil, June 1990

"Spindletop Revisited: Operation at a Deep Relief Well," SPE, October, 1991.

"Underground blowout killed with quick snubbing operation," Oil & Gas Journal, October, 1993.

"Analyzing and Understanding the Underground Blowout," SPE/IADC Drilling Conference, February 1994.

"Computer Modeling Critical in Control of Blowout in Algerian Sahara: The Blowout at RN-36," IADC Conference, June 1994.

