

MS, Geology, 1977
Texas Tech University, Lubbock, TX
BS, Geology, 1974
Texas Tech University, Lubbock, TX

GEORGE THOMAS (TOM) MORAHAN
Geophysicist

- ◆ American Association of Petroleum Geologists (AAPG)
- ◆ Society of Exploration Geophysicists (SEG)
- ◆ Geological Society of America (GSA)
- ◆ Alaska Geological Society (AGS) (Secretary, 2003-2006)
- ◆ Geophysical Society of Alaska (GSA)
- ◆ Southeast Asia Petroleum Exploration Society (SEAPEX)

Geophysicist with over 32 years of worldwide seismic mapping and interpretation experience. Produces high quality, geologically consistent work on all scales from multiple 2D and 3D seismic data sets. Expertise ranges from initial opportunity identification through leasing, exploration, and field mapping. Has worked for many years in integrated team environments and can communicate results effectively to managers and co-venturers.

PROFESSIONAL SKILLS

Seismic Interpretation and Mapping

- Prospect-scale to basin-scale mapping from 2D, 3D, and combined seismic data sets
- Provides accurate and consistent maps in areas of limited 2D seismic control and complex geology

Prospect Generation

- Experience identifying a large variety of structural and stratigraphic trap styles and evaluating amplitude, attribute, and AVO responses
- Accomplished prospector with ability to gain funding for projects and discover oil and gas
- Experience with quantitative risk assessment and valuation of drilling opportunities and farm-ins

Communications

- Preparation of high-quality presentations and reports to communicate plans and results to management and co-venturers
- Effective in a team environment, respected by co-workers

Data Handling

- Experience working with phase, amplitude, timing, and other adjustments to better match diverse 2D and 3D seismic data sets
- Experience achieving accurate depth conversion models and well ties through mapping and analysis of seismic velocities and well logs, velocity surveys and VSP's

Software

- High level of expertise using Landmark Seisworks 2D and 3D, Poststack/PAL, Seismic Balance, and Syntool applications, and Petrosys mapping software
- Recent experience (since 9/07) with the Geographix suite of seismic, well data, and mapping tools
- Recent training using the Roxar RMS reservoir modeling system
- Experienced in using standard PC applications such as MS Office Basic, MS Project, MS Access, and the ArcGIS suite

PROFESSIONAL EXPERIENCE

Petrotechnical Resources Alaska (PRA), Anchorage, AK

Consulting Geophysicist, 9/2007 to present

- Mapping from regional and field-specific 2D seismic data sets in support of gas hydrates evaluation
- Building of consistent log pick database across producing field areas
- Interpretation of 3D surveys in support of field development activities

ConocoPhillips Alaska Inc., Anchorage, AK

Principal Geophysicist, 2002 to 8/2007

- "Top to bottom" North Alaska regional and prospect mapping from 2D and 3D seismic data
- Lease sale preparation and seismic acquisition planning in NPRA and adjacent offshore areas

Phillips Petroleum International Exploration, Bartlesville, OK

Principal Geophysicist, 1997 to 2002

- Regional and prospect mapping within the Phillips Bozhong concession in Bohai Bay, China
- Appraisal work on the PL19-3 field and discovery of the PL25-6 field, Bozhong Block, China
- Seismic evaluation of two Tarim Basin blocks
- Evaluation of farm-in and leasing opportunities in various Asian basins

Phillips Petroleum China, Beijing, China

Principal Geophysicist, 1995 to 1997

- Evaluation of exploration opportunities in the Ordos, Tarim, Pearl River Mouth, Yinggehai, and other basins of China
- Planning and logistical support of seismic acquisition in Shanxi Province for coalbed methane exploration

Nigeria Partnership Operations, Phillips Petroleum Co., Bartlesville, OK

Principal Geophysicist, 1992 to 1995

- Evaluation and approval of exploration and development drilling plans, seismic acquisition and processing, and new production facilities within NAOC-operated OML's 60, 61, 62, and 63
- Mapping from 2D and 3D seismic data sets
- Budget and cost tracking and management

Onshore Gulf Coast Exploration, Phillips Petroleum Co., Houston, TX

Supervisor, 1989 to 1992

- Exploration activities in the Wilcox, Vicksburg, and Yegua trends of onshore Texas and Updip Smackover trend of Alabama
- Evaluation of exploration opportunities throughout the region

Rocky Mountains/Mid-Continent Exploration, Phillips Petroleum Co., Denver, CO

Supervisor, 1986 to 1989

- Exploration activities in the Morrow fluvial play, Paradox Basin, and other basins of the region

Seismic Stratigraphy Section, Phillips Petroleum Europe/Africa, London, England

Supervisor, 1984 to 1986

- Regional mapping, seismic inversion, and seismic modeling studies in the Central Graben and Southern Gas Basin areas of the North Sea

Seismic Stratigraphy Section, Phillips Petroleum Asia, Singapore

Supervisor, 1980 to 1984

- Regional sequence stratigraphy, structural mapping, and depth conversion projects in the Pearl River Mouth Basin of China, Gippsland Basin of Australia, and Khorat Plateau of Thailand
- Additional studies and modeling work in various basins of the Philippines, Indonesia, Thailand, and Australia

Phillips Petroleum Company, Bartlesville, OK

Geophysicist, 1976 to 1980

- Seismic data processing California and Alaska
- Seismic modeling and inversion studies in the Midland and Powder River Basins

Atlantic Richfield Company, Midland, TX

Geophysics Summer Intern, 1975

US Navy, Quonset Point, RI

Aviation Antisubmarine Operator 2nd Class, 1969 to 1972

PUBLICATION

Decision Analysis of Exploration Opportunities in the Onshore US at Phillips Petroleum

Michael R. Walls, G. Thomas Morahan, James S. Dyer

INTERFACES 25:6 November-December 1995 (pp. 39-56)