



P.W. (PHIL) PANTELLA, P.Eng.

Associate

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Phil Pantella has been a Sproule professional since 2008. He is an experienced engineer and manager with a proven record in reservoir engineering studies, field development planning projects, and reserves reporting. Phil also has broad geographical experience in the Western Canadian Sedimentary Basin as well as Europe, the North Sea, Russia, North and West Africa, the Middle East, India, the Far East, and Central and South America.

Diplomas and Degrees

- ❖ B.Sc. Chemical Engineering (1972), University of Saskatchewan, Saskatoon, Saskatchewan

Memberships

- ❖ Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA)
- ❖ Society of Petroleum Engineers (SPE)
- ❖ Society of Petroleum Engineers of the American Institute of Mining, Metallurgical and Petroleum Engineers (AIME)

Work Responsibilities

- ❖ Estimate reserves and economics of oil and gas properties.
- ❖ Reservoir engineering studies.
- ❖ Reservoir analysis.
- ❖ Exploitation and development engineering.
- ❖ Well test analyses and pool modelling of oil and gas reservoirs.
- ❖ Production optimization and forecasting.

Previous Employers

- ❖ 2006-2008 **Trident Exploration Corp.**, Calgary, Alberta — *Manager, Reserves and Simulation*
 - ❖ Coordinated quarterly and annual Corporate reserves evaluations with company engineers, reviewing preliminary results and, where appropriate, providing well performance evidence to support higher bookings.
 - ❖ Presented reserves assignments to Vice-President, Engineering, and Reserves Committee; and provided reserves valuation details in response to company lender queries in support of corporate financings.
 - ❖ Provided work scope, technical guidelines and supervision for a reservoir simulation study that investigated early time performance of a major company coalbed methane asset and concluded that actual performance was in line with preliminary design expectations.

- ❖ 2005 **Schlumberger Canada**, Calgary, Alberta — *Consultant*
 - ❖ Documented an International Standard for Schlumberger internal Reserves Categorization and Reporting procedures.
 - ❖ Provided technical supervision and project co-ordination for a reservoir description and modeling study to estimate recoverable hydrocarbons in an offshore gas discovery under alternative drilling programs.

- ❖ 2003-2005 **Viking Holdings Inc.**, Calgary, Alberta — *Manager, Reservoir Engineering*
 - ❖ Coordinated Annual Reserves Evaluation with company engineers, monitored preliminary assignments and, where appropriate, provided evidence for higher bookings.
 - ❖ Analyzed and presented results of the reserves valuation to Board of Directors and contributed to Annual Filing under National Instrument 51-101.
 - ❖ Prepared and presented to company banking consortium a mid-year performance review.
 - ❖ Provided technical support to ongoing asset acquisition and divestiture initiatives.
 - ❖ Supervised technical evaluations of asset development studies.
 - ❖ Provided reservoir engineering support to Operations' selection of drilling and workover candidates for efficient asset exploitation.

- ❖ 2001-2003 **Schlumberger Limited**, Calgary, Alberta — *Operations Manager, Canada: Data and Consulting Services*
 - ❖ Established the Data and Consulting Services group, integrating the businesses of GeoQuest's Interpretation and Computing Services, the Holditch-Reservoir Technologies consultancy and Schlumberger's Production Enhancement Group.
 - ❖ Developed an organizational structure to deploy the diverse technical expertise in the predecessor organizations (processing raw field logs, single well production enhancement opportunities, reservoir engineering, and field simulation studies).
 - ❖ Directed, through project managers, the completion of several major production enhancement studies including a 900 well program for a major operator.
 - ❖ Produced business plans, budget targets, and monthly operating reports.
 - ❖ Recruited technical personnel to bolster expertise in anticipated growth areas.

- ❖ 1999-2000 **Schlumberger Limited**, Calgary, Alberta — *Chief Engineer, Canada: Holditch-Reservoir Technologies*
 - ❖ Provided technical oversight on reservoir studies and operations management processes in emerging international markets.
 - ❖ Completed a reservoir modeling study of a major East African asset to improve production and recovery through infill drilling.
 - ❖ Designed a standard workflow for fully integrated field development planning studies, produced the flow charts and text for publication throughout Schlumberger as the accepted study process (the basis for a Patent Application in the U.S. and Europe).
 - ❖ Developed and documented a formal Peer Review process to enable more effective quality control and financial management of major projects.
 - ❖ Designed an online project library system for the Schlumberger network to serve as a technical guide for developing and conducting reservoir studies worldwide.

- ❖ 1998-1999 **Schlumberger Limited**, Calgary, Alberta — *Vice President, Asia-Pacific: GeoQuest Reservoir Technologies*
 - ❖ Initiated the establishment of an Asia-Pacific Region office in Perth, Australia and introduced the reservoir study services to be offered by Schlumberger in the Region.
 - ❖ Provided direction and technical oversight to the Region business development efforts being undertaken in Indonesia, Malaysia, China, and Japan.

- ❖ 1997-1998 **Schlumberger Limited**, Calgary, Alberta — *Vice-President, Special Projects, GeoQuest Reservoir Technologies*
 - ❖ Assisted the Division Vice President with broad worldwide responsibilities for strategic planning, operations management, professional staff development, compensation, recruiting and technical oversight on key projects.
 - ❖ Designed and implemented a professional staff career progression to reconcile Schlumberger's structure with established professional responsibility rankings.
 - ❖ Directed the implementation of project management and project financial reporting processes in operating offices.
 - ❖ Prepared, or reviewed, proposals for major reservoir studies in the CIS, Mexico, Venezuela, Indonesia, and Australia.

- ❖ 1995-1997 **Schlumberger Limited**, Calgary, Alberta — *Vice-President, Operations, Canada: GeoQuest Reservoir Technologies*
 - ❖ Directed the integration of the INTERA Petroleum Division acquired by Schlumberger in 1995 through its GeoQuest operations.
 - ❖ Managed all aspects, technical, business, financial, and personnel of the Canadian consulting operations and supported international consulting initiatives.
 - ❖ Conducted or participated in several Canadian reservoir exploitation studies including Willesden Green, Grand Forks, Huxley, and White Rose.
 - ❖ Provided project oversight on reservoir studies in Venezuela's Lake Maracaibo.
 - ❖ Supervised the completion of a large fractured reservoir study in Iran (Marun).

- ❖ 1992-1995 **INTERA Petroleum Division**, Calgary, Alberta — *Vice-President, Operations, Canada*
 - ❖ Provided operations management, technical oversight, and business development to a multi-disciplinary team specialized in petroleum reservoir description, analysis and exploitation studies.
 - ❖ Managed the domestic sales and applications support for the ECLIPSE suite of reservoir modeling software and contributed to software enhancement planning.
 - ❖ Conducted reservoir optimization studies on Canadian properties including Little Bow, Taber, Black Spruce, Countess, Jumpbush, East Eagle, Boundary Lake.
 - ❖ Coordinated an industry sponsored study to examine the effectiveness of horizontal drilling in several prototype reservoir systems.
 - ❖ Conducted reservoir development studies in Indonesia (Air Serdang, Guruh).
 - ❖ Supervised a reservoir modeling study of a fractured reservoir in Iran (Marun).

- ❖ 1991 **Morrison Petroleum Ltd.**, Calgary, Alberta — *Manager, Reservoir Engineering*
 - ❖ Provided operations management, technical oversight, and business development to a multi-disciplinary team specialized in petroleum reservoir description, analysis and exploitation studies.
 - ❖ Managed the domestic sales and applications support for the ECLIPSE suite of reservoir modeling software and contributed to software enhancement planning.
 - ❖ Conducted reservoir optimization studies on Canadian properties including Little Bow, Taber, Black Spruce, Countess, Jumpbush, East Eagle, Boundary Lake.
 - ❖ Coordinated an industry sponsored study to examine the effectiveness of horizontal drilling in several prototype reservoir systems.
 - ❖ Conducted reservoir development studies in Indonesia (Air Serdang, Guruh).
 - ❖ Supervised a reservoir modeling study of a fractured reservoir in Iran (Marun).

- ❖ 1988-1990 **Western-Atlas Integrated Technologies.**, Calgary, Alberta — *General Manager, Canadian Operations*
 - ❖ Conducted technical reviews and surveillance of company properties in Little Bow, Long Coulee, Taber, Grand Forks, Hays, and Provost.
 - ❖ Provided technical evaluations of acquisition prospects to identify opportunities.
 - ❖ Participated with exploration and development geologists in prospect generation.
 - ❖ Represented company in joint interest operations and unitization negotiations.

- ❖ 1980-1988 **Petresim Engineering Ltd.**, Calgary, Alberta — *Executive Vice President*
 - ❖ Established, with a partner, this reservoir engineering consultancy in 1980, successfully grew the operations, and participated in negotiating its sale to Core Laboratories Canada Ltd.(1985); merging with US affiliates as Western-Atlas Integrated Technologies(1988).
 - ❖ Designed the feature guidelines for the first commercial 4-component miscible flood simulator.
 - ❖ Provided sales, training, and applications support for the VIP simulation software.

- ❖ Conducted or supervised reservoir exploitation studies on several Canadian properties including Bonnie Glen, Weyburn, Bashaw, Pembina, Taber, Willesden Green, Caroline, Kakwa, Muskeg, and Spirit River.
- ❖ Conducted or supervised secondary and tertiary hydrocarbon miscible flood studies in Joffre, Pembina, Swan Hills, Morinville, and Rainbow.
- ❖ Provided technical oversight for offshore California reservoir simulation studies.

- ❖ 1974-1980 **INTERCOMP Resource Development and Engineering Ltd.**
 - 1979 to 1980 — General Manager, Engineering; Canadian Operations*
 - ❖ Provided management and technical support to a team of professional engineers and geoscientists specializing in reservoir modeling studies of oil and gas assets.
 - ❖ Conducted Field Development Planning Study for a Guatemalan reservoir.

- ❖ 1974-1980 **INTERCOMP Resource Development and Engineering Ltd. (Cont'd)**
 - 1978 to 1979 — Staff Consultant; Canadian Operations*
 - ❖ Provided technical supervision and mentoring to professional staff.
 - ❖ Conducted compositional simulation of CO₂ injection for enhanced recovery.
 - ❖ Provided simulation software client support, training, and trouble-shooting.

 - 1974 to 1977 — Senior Reservoir Engineer; European Operations*
 - ❖ Conducted reservoir modeling studies for field development planning on several North Sea oil and gas fields including Thistle, Statfjord, and Heimdal.
 - ❖ Enhanced and maintained the simulation models for several major gas storage fields in Germany including Bierwang, Stockstadt, and Engelbostel.
 - ❖ Participated in a gas utilization study of 12 gas discoveries in Libya.
 - ❖ Participated in a study of the production rate sensitivity of 5 oilfields in Nigeria.
 - ❖ Provided on-site consulting and simulation software installation and training.

- ❖ 1972-1974 **Alberta Energy Resources Conservation Board**
 - 1973 to 1974 — Projects Engineer; Calgary*
 - ❖ Processed operator submissions pertaining to enhanced oil recovery projects.
 - ❖ Conducted performance reviews of Beaverhill Lake and Zama fields.

 - 1972 — Field Engineer; Edmonton*
 - ❖ Conducted field visits for surveillance of drilling and production operations.

Regional Specialties

- ❖ Reservoir modeling study - East Africa
- ❖ Technical oversight – Indonesia, Malaysia, China and Japan
- ❖ Reservoir study project oversight – Venezuela
- ❖ Reservoir development studies - Indonesia
- ❖ Reservoir modeling study - Iran
- ❖ Fracture reservoir studies – Libya and offshore Sicily
- ❖ Field development planning study – Guatemala
- ❖ Simulation models of gas storage fields – Germany
- ❖ Gas utilization study – Libya
- ❖ Study of production rates – Nigerian oilfields

Publications

- ❖ HRT Processes for Integrated Projects, internal Schlumberger document, 2000
- ❖ Co-inventor, U.S. Patent Application 60/183,836 – Integrated Reservoir Optimization.
- ❖ “Enhanced Heavy Oil Production by Horizontal Drilling – A Case Study”, Asgarpour, S.; Springer, S.; Pantella, P.; and Singhal, A.; CIM/SPE 90-126, International CIM/SPE Technical Meeting, June, 1990, Calgary.
- ❖ “Design Calculations for Slurry Flow in Pipelines”, Thesis prepared for B. Sc. Degree, University of Saskatchewan, 1972.