DAVID R. HOFFMAN

1327 Wildrye Ridge, Celina, Texas 75009
Phone: (832) 613-5421 david.r.hoffman@gmail.com

OBJECTIVE: Geological Consultant

SUMMARY: Geoscience specialist with extensive, current training and practical experience in geologic interpretation, reservoir characterization, 3D reservoir modeling and simulation, field development, petrophysics, reservoir characterization, data management, exploration, and project management at supervisory, mentor, and team member levels. Diverse international and domestic exploration and exploitation background, with an emphasis on multidisciplinary team-oriented, integrated solutions. Areas of technical specialization include reservoir characterization, reserves assessment, 3D modeling and visualization, geotechnical data management methodology and applications, petrophysics, log analysis, GIS applications, risk analysis, and geostatistics. Extensive experience in training, mentoring, and development of geoscience staff, including preparation and delivery of training classes at introductory and advanced levels. Prior teaching experience (adjunct faculty) at the community college level (1999-2005).

TECHNICAL PROFILE:

- *PC Software Expertise* – Petrel, GoCAD, ArcView, Spotfire, Crystal Reports, MS-Office (Word, PowerPoint, Excel, Access, Visio, Project, Outlook, and FrontPage).
- *Workstation Software Expertise* – SIS (Eclipse), Landmark (Landmark Suite Applications, OpenWorks, DecisionSpace, OpenWells), GeoGraphix, Neuralog, ArcView.
- *Operating Systems and Platforms* – MS-DOS, Windows, Unix/Linux.
- *Languages and Data Models* – Python, VBA, Visual BASIC, JavaScript, VBScript, Oracle SQL, MS-SQL+, PPDM, POSC.

SELECTED ACCOMPLISHMENTS:

Reservoir Characterization and 3D Earth Modeling

- Developed static geomodels for 11 producing reservoirs in Bahrain field, including full-field, sector, and other custom models for simulation, reserves, and operations. Developed specialized solutions for thermal modeling of fractured carbonates using an Effective Fracture Network (EFN) technique, and numerous Petrel workflows for reservoir characterization, property modeling, fracture modeling, and simulation support.
- Constructed geological- and simulation-scale 3D static reservoir models using Petrel and Gocad in California (Elk Hills and Long Beach), Qatar, and Argentina. Implemented 3D geomodeling efforts in Argentina with the construction of numerous full-field, sector, and pilot-area geomodels to support dynamic reservoir simulation projects and drilling operations.
- Provided geological support and coordination for Occidental's North American modeling and reservoir simulation efforts, resulting in better simulation models, reduced cycle time, and improved reservoir characterization.

- Developed data integration and loading tools to support geoscientists and engineers in the effective application of petrotechnical data for reservoir characterization and simulation applications resulting in $250M savings in consulting and development costs.
- Coordinated installation and implementation of $250K petrophysical evaluation software package (Schlumberger). Coordinated design and development of tools to link stratigraphic database information with application software, resulting in more efficient and accurate formation evaluation.

Geotechnical Data Management

- Designed and implemented corporate strategies and workflow procedures for the capture, standardization, storage and integration of geologic formation tops data, directional drilling data, well locations, drilling and testing data resulting in improved data accuracy and utilization. Created numerous cost-effective solutions for legacy data migration, database normalization, reserves simulation, risk analysis, data management and reporting, thermal modeling, economic evaluation, gas ratio analysis, and structural analysis eliminating costly commercial applications.
- Planned, implemented, and supervised an integrated, inter-departmental data management project using both PC- and UNIX-based, graphical user interface (GUI) application (FINDER®) with an annual budget of $1MM and a staff of 3 expatriate and 6 Indonesian programmers and technicians. Resulting data management system integrated all Maxus Southeast Sumatra geological, geophysical, and engineering data, and improved data utilization by 60%.
- Developed various PC and handheld-based petrophysical and mapping software applications to support office, field, and wellsite geologists and allow rapid integration of data to enterprise database. Created numerous data integration and migration applications and procedures to solve application integration problems not available from commercial software vendors.

Field Development and Asset Appraisal

- Provided technical oversight, mentoring, and training for $200MM+ Argentina drilling program (180 development wells/year, 25 exploration wells/year), implemented improved workflows and technical applications, and established strategic focus for production geoscience asset evaluation teams. Proposed and drilled 12 exploration/field appraisal wells with 100% success.
- Monitored exploration & appraisal drilling in Southern Bolivia; integrated new data and reinterpreted field geometry and reserves resulting in 4-fold increase in reserves and reduction of ARCO's corporate finding costs from >$3/bbl to less than $1/bbl in 1999.
- Supervised 9 Indonesian geologists and 1 technician, responsible for $65MM annual development drilling budget, conducted special stratigraphic mapping studies, reserves estimates, post-drilling evaluations, and petrophysical interpretations for Nilam Field, East Kalimantan.
- Re-evaluated stratigraphic mapping, petrophysical interpretations, and reserves assessment in the Farida-Zelda-Titi field area of offshore Sumatra, resulting in a $25MM recommendation for platform installation and drilling of eight development wells.
- Project Technical Advisor and Geological Advisor, Anschutz Ranch East equity determination project. Successfully negotiated an equity re-determination resulting in an 8% increase in Amoco's working interest in a giant overthrust gas field (Anschutz Ranch East), and performed computer-assisted structural evaluations to optimize Nitrogen injection programs

Project Management, Mentoring, and Staff Development

- Chief Geologist (Occidental Oil and Gas): Responsible for staff development, technical assurance, reserves reviews, training, industry consortia participation, recruiting for worldwide geoscience staff. Developed and delivered multiple technical training classes in uncertainty analysis, Petrel modeling methods, and data management.
- Head of Subsurface Studies (Bahrain): Supervising geological modeling, reservoir simulation, and technical data management and integration. Responsible for maintaining and upgrading static geological models, developing simulation scenarios, and coordinating technicians responsible for all Subsurface Department geotechnical data and related document management. Through automation and integration, achieved significant improvements in data management and simulation to support drilling of over 800 development wells in 6 years.
- Supervised 3 log analysts and 2 technicians in a 1-year project involving complete log editing, normalization, and petrophysical re-evaluation of 300+ development wells resulting in a 10% increase in proven gas reserves for a 10 TCF asset.
- Supervised 10 geologists and 2 technical assistants responsible for development operations in Alaska (North Slope and Cook Inlet operations), California Offshore, San Juan Basin (conventional & coalbed methane), and various parts of Nevada, Utah, Idaho, Oregon, and Washington. Coordinated $10MM Federal OCS acreage evaluation/bid package and monitored $12MM offshore drilling program.
- Supervised 4 geologists conducting Williston Basin drilling operations, acreage acquisition, and farm out evaluations. Created database application to monitor acreage position and 5-rig drilling operation ($20MM drilling budget). Successfully negotiated limited partnership funding with Apache and Snyder Oil Company on 600,000 acre North Dakota leasehold.

General Exploration and Reserves Evaluation

- Conducted detailed technical reviews of geological interpretations and models used to support reserves and volumetric estimates; introduced various methodologies for incorporating uncertainty in volume estimates; acted as company liaison with external and internal reserve audit teams.
- Responsible for oversight of successful Argentina exploration program, including prospect generation and appraisal development. Generated 8 exploration prospects, supervised generation of additional 32 prospects. Drilling results added 10-15 MMBOE proven reserves with only 4 dry or non-commercial wells.
- Responsible for regional stratigraphic studies, independent prospect generation, supervision and training of Indonesian exploration staff, and regional projects in the southern Kutai Basin. Conducted field work, developed prospects, and completed economic evaluation of lease blocks as part of possible PSC extension in East Kalimantan. Recommended and obtained approval for 3 exploratory drilling prospects.
- Developed stratigraphic and digital well log database of 700+ wells for the Williston Basin in late 1970's; utilized computer-aided lithofacies mapping and discriminate analysis studies to support acreage acquisitions and recommendations for 3 exploration well locations.

BUSINESS EXPERIENCE:

President, David Hoffman and Associates, LLC

2020 – Present

Occidental Petroleum, Domestic and International Locations

2017 – 2020	Chief Geologist, Occidental Oil and Gas Worldwide
2016 – 2017	Worldwide Engineering Group: Project Support Qatar, Oman, UAE, & Colombia
2015 – 2016	Head of Subsurface Studies Team (Tatweer Petroleum – Seconded)
2009 – 2015	Geomodeling Specialist, Occidental of Bahrain (Tatweer Petroleum – Seconded)
2006 – 2009	Manager of Geology, Occidental Argentina (Buenos Aires)
2005 – 2006	Production Geosciences Regional Coordinator, North American Assets
2004 – 2005	Senior Geological Advisor, Waterflood RMT (Elk Hills)
2001 – 2004	Senior Geological Advisor, Reservoir Modeling & Simulation Team (Elk Hills)

Saudi Aramco, Dhahran, Kingdom of Saudi Arabia

2000 – 2001	Geological Specialist, Exploration Technology Department

ARCO Latin America, Plano, Texas

1998 – 2000	Staff Exploration Geologist, Western Venezuela and Southern Bolivia
1997 – 1998	Staff Geologist, Exploration Systems Support Group.

Maxus Energy/YPF, Dallas, Texas and Jakarta, Indonesia

1996 – 1997	Senior Exploration Advisor, Data Management & Reservoir Characterization
1993 – 1996	Manager, Technical Database Project, Offshore Southeast Sumatra

Virginia Indonesia Co., Jakarta, Indonesia (Formerly Roy M. Huffington, Inc.)

1985 – 1993	Senior Staff Exploitation Geologist (1992) Senior Staff Petrophysicist (1990) Senior Staff Geologist, Exploration & Development (1985)

Amoco Production Company, Denver, Colorado

1975 – 1985	Staff Geologist (1984) Project Geologist (1980) Petroleum Geologist (1978) Geologist (1975)

TEACHING EXPERIENCE:

Bakersfield College, Bakersfield, California

2002-2005	**Adjunct Faculty, Physical Sciences**

Dallas Community College (El Centro Campus), Dallas, Texas

Fall 1999	**Adjunct Faculty, Geology**

EDUCATION:

M.Sc. - Geology, San Diego State University, San Diego, California (1975)
University of California, Berkeley (Graduate Studies 1972-1973)
Oregon State University, Corvallis (Geology Field Camp 1972)
B.A. - Geology, Sonoma State University, Rohnert Park, California (1972)

PROFESSIONAL AFFILIATIONS:

American Association of Petroleum Geologists (Since 1972)
AAPG Certified Petroleum Geologist #2972

SELECTED PUBLICATIONS:

Hoffman, David R., 2002, Effective Database Design for Geoscience Professionals: Houston, PennWell Publications, 263 p.

_____, 2013, *Petrel Workflow for Adjusting Geomodel Properties for Simulation:* Society of Petroleum Engineers, SPE-164420-MS, MEOS2013 Bahrain.

_____, and S. Shebani, 2016, *Multi-Application Technical Database Integration Using Vendor-Independent Solutions*: AAPG 12th Middle East Geosciences Conference and Exhibition, Bahrain.

Maili, Eduard, D. Hoffman, and F. Al-Tawash, 2013, *Framework Model Building in Highly Complex Structures Using Multi-Azimuth 3D Seismic Data: Case History from Bahrain Field*: Society of Petroleum Engineers, SPE-164428-MS, MEOS2013 Bahrain.

Complete list of published technical articles and abstracts available on request.