#### <u>Summary</u>

Seismic Data Processing:

- supervision, turnaround time, costing, quality control, testing, parameter selection
- production issues, theory, time series analysis
- hands-on experience with 2D and 3D production processing and special projects including modeling of AVO responses and amplitude preservation processing and Depth Migration

Seismic Data Acquisition:

- land, transition zone, marine survey design and costing
- theory and principles, field experience, parameter selection, crew supervision and quality control Management:
  - have management training (Athabasca U. MBA program) and much management experience
  - highly organized, ensuring coordination of several concurrent projects
  - personable, and able to motivate people to produce
  - experienced in Strategy Development and at dealing in and with all levels of management

### Experience

1983 - present: Western Geophysical Co. of Canada, Calgary

Western Geophysical Co. of Nigeria, Lagos, Port Harcourt, Warri Western Geophysical Co., London Western Geophysical Co. of Nigeria, Port Harcourt Western Geophysical Co., Luanda, Angola Baker Atlas, Asia Pacific Region, Kuala Lumpur, Malaysia Petroleum Geo-Services, Data Processing, Middle East / Canada Paradigm Geophysical, Calgary, Canada Olympic Seismic, Calgary, Canada Consulting in Calgary and to Dayboro Geophysical, Brisbane, Australia

#### 2008 - present: Geophysical Consultant, Michael West Geophysical Consulting Ltd., Calgary

• seismic specialist, problem solving in 3D and 2D seismic data processing, 3D and 2D survey design, field project geophysics and QC and special projects

2006 - 2008: VP Operations, Olympic Seismic Ltd. (Seitel Data), Calgary, Canada

- responsible for the technical integrity of 26,000 km<sup>2</sup> 3D and 1,500,000 km 2D seismic library
- analysis of all incoming seismic opportunities with respect to re-sale potential
- initiating/managing new data creation field projects, client negotiations and contracts

### 2004 - 2005: Manager, Depth Imaging, Paradigm Geophysical, Calgary, Canada

- supervision and QC of depth migration projects
- developing applications of depth imaging
- related seismic processing issues such as statics and near-surface velocity modeling
- 2003 2004: Manager, Geophysics, PGS, Calgary, Canada
  - evaluating the potential for land data acquisition and processing operations in Calgary
  - compiling costs for a business plan, representing PGS in Calgary for new opportunities in seismic

2000 - 2003: Manager, Geophysics, PGS, Data Processing, Middle East, Cairo

- compiling technology, computer production and costs for Data Processing tenders
- ensuring geophysical integrity of 2D, 3D land, transition zone, marine processing
- implementing new technology, test processing, parameter decisions in production work in Cairo and Abu Dhabi offices
- special projects, training programs, technology transfer from the research group
- marketing presentations, product improvement

2000 - District Manager, Borehole Seismic, Baker Atlas, Asia Pacific region, Kuala Lumpur

- responsible for borehole seismic services, acquisition, processing, marketing and finances
- budget preparation, cost analysis marketing VSP, velocity surveys, seismic while drilling
- cross-well seismic techniques
- 1998 1999: Center Manager, Western Geophysical, Luanda, Angola Data Processing Center,
  - set up the Angola processing center and related operations from scratch
  - supervising the successful completion of 4000 sq. km. marine 3D processing work including pre-stack time migration; also AVO processing projects
  - managing the daily operations of the processing center
  - compiling tenders; dealing with clients on technical and production issues
- 1996 1997: Ass'nt Processing Supervisor, Western Geophysical Processing Center, Nigeria
  - organizing and expediting several concurrent 3D and 2D processing projects
  - analyzing data and testing processing parameters, reports, liaising with clients
  - amplitude preservation processing, statics analysis, AVO processing
- 1994 1995: Area Geophysicist, EAME, Western Geophysical Co., London
  - 3D geophysicist for land, marine, transition zone crews in Europe, Africa, Middle East
  - 3D survey design and marketing presentations, special projects planning
  - supervision of seismic QC departments, in-field data processing
- 1991 1993: Resident Geophysicist, Western Geophysical Co., Nigeria
  - same duties as above, but for the swamp/land and transition zone crews in Nigeria
- **1989 1990: Field Supervisor,** on assignment to NAGECO, Tripoli, Libya
  - supervising all aspects of seismic data acquisition and quality control, field statics compilation
  - crew personnel management and interfacing with client geophysicists
- 1988 Marine Seismic Coordinator, Western Geophysical Co. of Canada
  - preparation and presentation of acquisition bids, negotiating details with clients
  - liaising with government, clients and crew for management of offshore 2D and 3D marine seismic surveys
- 1983 1987: 3D Coordinator, Western Geophysical Co. of Canada
  - 3D acquisition techniques for land and marine seismic crews
  - managed a five-man group responsible for design, marketing, pricing and quality control of 3D acquisition and processing testing / coordination for 3D land activity, Canada
  - land 3D seismic data processing issues
  - optimizing cost-benefit problems and presenting seminars on 3D seismic to exploration groups
- 1983 Morris Magnetics, London, Ontario: Junior Geophysicist
  - magnetic susceptibility and remnant magnetization studies

# <u>Education</u>

2005: Graduate Diploma in Management, Athabasca University, Alberta, Canada

1983: B.Sc. Geophysics, University of Western Ontario, London, Ontario

1975: Recording Engineering, Fanshawe College, London, Ontario

Supplementary: CSEG 3D survey design acquisition and proc., Xerox Selling Skills III, UNIX/OMEGA

## **Publications**

The Industrial Wind Turbine Seismic Source, Published in June 2019, Recorder Magazine, www.CSEG.ca Wavelet-consistent Reprocessing of Multi-environment 3D Seismic from Abu Dhabi, Presented at the AAPG, Cairo, 2002 Shallow Pattern Vs. Deep Hole Sources - a study on the Niger Delta for Shell Petroleum Dev. Co., 1993 Comparisons of 3 different Shallow Pattern sources - a study on the Niger Delta for Shell Petroleum, 1992 The Use of Seismic Tools in Reservoir Development and Management, presented to the Petroleum society, CIM conv., June 1987 The Use of the 3D Seismic Technique to Reduce Risks in Mining, Presented to the CIM convention, November 1986 Design Considerations for Land 3D Seismic Acquisition, presented at the CSEG Convention, May, 1985

# <u>Memberships</u>

CSEG SEG APEGGA

## <u>Languages</u>

English Portuguese some Arabic, French