

SUMMARY

Highly creative and motivated team oriented principal geophysicist and manager with 20 years' experience with Western Atlas, Baker Hughes and Schlumberger. Extensive experience in project management, business development and P&L. Strong knowledge in 2D, 3D and 4D marine, land and down-hole survey design and modeling, field operations and processing. Projects included the Gulf of Mexico (GoM), offshore South America, offshore Canada, the Caribbean, and onshore United States and Canada. Managed geophysical projects, onshore and offshore, from planning phase through reservoir characterization phase. Developed and field implemented time-lapse monitoring programs for Carbon Capture and Storage (CCS) and Carbon Capture, Utilization and Storage (CCUS/EOR) projects. Have experience working with professionals of different technical and cultural backgrounds, Experience in:

- Marine, land, transition zone (TZ) Seismic design, modeling and acquisition
- Onshore and offshore surface seismic operations
- Infield and in-house Land, marine, ocean bottom cable (OBC) and nodes (OBN) processing and quality control, 2D, 3D and 4D
- Bore-hole, Vertical Seismic Profile (VSP) and cross well seismic, design, operations and processing
- Omega processing software
- Down-hole micro-seismic array design and deployment
- Down-hole fiber optics deployment for distributed temperature and acoustic sensing (DTS and DAS)
- Subsurface CO₂ monitoring plan development and field implementation
- Integrating geophysical and non-geophysical measurements for time-lapse analysis
- Innovation and technology selection and implementation
- Multi-discipline team management
- Business development planning
- Project management
- Technical sales
- Technical mentoring and coaching

PROFESSIONAL EXPERIENCE

New Mexico Tech - Petroleum Recovery Center, Research Engineer, 2018 – present
Lead Geophysics and field operations for several CCS/CCUS projects. Write, submit and secure funding for new projects.

GSNA Consulting Services, Inc., Geophysical Consultant, Houston, 2017 – 2018
Provide professional and geophysical consulting services to CCS and CCUS projects. Supervise field operations and processing of surface and bore-hole seismic data. Develop time-lapse CO₂ plume monitoring programs. Active projects include CCS and CCUS-EOR projects for Southwest Partnership (SWP) in the Anadarko Basin, New Mexico Tech and University of Utah. Mentor graduate students

Schlumberger Carbon Services, Seismic and Monitoring Manager/Principal Geophysicist, Houston, 2014 – 2017
Developed and implemented programs to monitor CO₂ plume migration and containment in the subsurface, and to verify cap-rock integrity, for several CCS and CCUS/EOR projects in the US, Canada, and Australia

- 20 projects onshore the United States, Canada and offshore/onshore Australia
- Managed design of baseline and monitor surveys for surface and borehole seismic data acquisition
- Managed surface and borehole seismic field operations
- Supervised processing and delivery of time lapse surface and bore-hole seismic data
- Collaborated with R&E on developing new methods for processing, interpretation and attribute generation for time lapse seismic data for CO₂ monitoring

- Authored and published technical papers and presented at conferences
- Business development to generate revenue for the segment
- Collaborated with clients and universities in preparing US Department of Energy (DOE) proposals for research projects funding

Schlumberger Petro Technical Services/WesternGeco, N. America Solution Design and Modeling Manager,

Houston, 2010 - 2014

Led a North America team of geophysicists, petro-physicists, and model builders that performed land, TZ, OBC, OBN and marine survey design, velocity model building, ray tracing and forward modeling

- Managed technical team, land acquisition operations, group P&L, performed business development, and technical sales support for multi-client, marine and land teams. Generated annual revenue in excess of \$5,000,000
- Collaborated with R&E to develop, test and commercialize seismic forward modeling software
- Prepared technical and budgetary proposals. Authored internal and external publications

Schlumberger/WesternGeco, N. America Land Survey Evaluation and Design Manager,

Houston, 2009 - 2010

Led a team of survey design geophysicists in designing high channel count surveys for onshore United States, Canada and the Middle East

- Managed technical team, data processing and client delivery, group P&L, performed business development, and field operation and technical sales support. Generated annual revenue in excess of \$3,000,000
- Managed studies of single sensor and non-linear vibroseis sweep technologies
- Evaluated new noise attenuation algorithms and application for high channel count single sensor data
- Performed project start up and testing of acquisition and processing parameters in the field
- Authored internal and external publications

Schlumberger/WesternGeco, Western Geophysical/Baker Hughes, 1998 - 2009

Houston, 2006 – 2009: Project Geophysicist

- A Member of WesternGeco's Integrated Solutions team - Survey Evaluation & Design
- Designed large marine, land OBC and OBN survey using ray tracing and forward modeling methods.
- Performed land project start up and testing of acquisition and processing parameters in the field
- Supported and mentored infield processing team. Supported sales team and field operations

Houston, 2004 – 2006, General Seismic Engineer

- Led large marine data processing projects, including newly developed Q-marine technology projects
- Processed 3D marine data from the GoM and West Africa
- Delivered data to clients, wrote final reports and ensured that their objectives are met.

Houston, 2003 – 2004, Senior Geophysicist/Commercialization Engineer

- Joined the commercialization team as part of cross training initiative
- Tested software packages developed by Schlumberger. Recommended solutions to engineers
- Software debugging and validation for correctness and geophysical soundness

Houston, 2001 – 2003, Geophysicist/Senior Geophysicist

- Led, processed, delivered data and final reports for 2D, 3D marine and Q-marine projects in the GoM

Houston, 1998 – 2001, Onboard Processing Geophysicist II and Quality Control

- Shift leader for on-board quality control and processing
- Projects included: surveys for Pemex that included US waters, Mexican and international waters, Conoco offshore Barbados, Burlington Resources offshore Suriname, BP offshore Colombia, ExxonMobil offshore Brazil, and Multi-client and BP offshore Brazil

EDUCATION**B.S. Electrical Engineering,**

Prairie View A&M University, Texas A&M University System, Prairie View, Texas

PROFESSIONAL MEMBERSHIP

Society of Exploration Geophysicists (SEG)

ADDENDUM

ADVISORY ROLES

Management Committee member for the SEG SEAM I and II projects, through September, 2014

Co-chair on the SEG SEAM II Acquisition and Processing Technical Committee, through September, 2014.

SELECTED PUBLICATIONS

"Multi-Scale Seismic Measurements for CO₂ monitoring in a EOR-CCUS Project", George El-Kaseeh, Robert Will, Robert Balch, Reid Grigg. Paper published in Energy Procedia journal, Elsevier, 2017

"Integrating Multi-Scale Seismic Measurements for EOR/CCUS", Robert Balch, Robert Will, George El-Kaseeh* (presenter), Reid Grigg, Ashley Hutton and Paige Czoski, SEG, October 2015, New Orleans Louisiana

"Development and implementation of a seismic characterization and CO₂ monitoring program for the Illinois Basin – Decatur Project", Couëslan, M. L., Smith, V., El-Kaseeh, G., Gilbert, J., Preece, N., Zhang, L. and Gulati, J. (2014), Greenhouse Gas Sci Technol, 4: 626–644. doi: 10.1002/ghg.1452

"Seismic feasibility tests in the Williston Basin to improve reservoir characterization", G. El-Kaseeh, N. Banik, A. Koesoemadinata, M. Egan and A. Salama, EAGE First Break, Vol 28, No 6, June 2010

"Requirements for resolution", Egan, M., Salama A., El-kaseeh G., Seissiger J., Canadian Society of Exploration Geophysicists (CSEG), 2009, Calgary, Canada

"Full Deghosting of OBC Data with Over/Under Source Acquisition", Egan M., El-Kaseeh G., Moldoveanu N., SEG convention, 2007, San Antonio, Texas