

by Bruce P. Marion,
TomoSeis Incorporated,
Houston, Texas

Interwell Imaging Using Crosswell Seismic

The interwell region is a frontier, poorly understood and lacking information to optimally apply enhanced recovery techniques. 3D surface seismic lacks the resolution to characterize structure or monitor property changes. The barrier to enhanced recovery is an adequate description of heterogeneities between wells. Crosswell seismic provides seismic images between wells, at the resolution of well logs, to fill-in the information void that occurs in the interwell frontier. The talk will describe crosswell seismic data and cover the application and operation of crosswell seismic. Topics include:

- Concept and Benefits of Log-Scale Seismic Imaging
- Technology Convergence to Meet Real-World Problems
- Applications
 - Reservoir Monitoring: CO₂, steam, water
 - Reservoir Characterization/Structural Imaging at Reservoir Scale
 - Strategic Infill Wells
 - Targeted Horizontal Wells
 - Crosswell Project Elements
 - Survey Planning

- Information/Well/Field Requirements
- Survey Plans: coverage, duration, cost
- Data Acquisition
- Tools
 - Operations
 - Data Processing
 - Techniques
 - QC
- Deliverables/Schedule/Cost
- Integration/Interpretation

Biographical Sketch

Bruce P. Marion is president of TomoSeis Incorporated, Houston, Texas, which serves the market with crosswell services: survey planning, data acquisition, data processing and applications support. He was previously involved in the development of seismic while drilling (SWD) at Western Atlas and Tomex Corporation. He holds a B.S. and M.S. in electrical engineering from Texas A&M University and the Engineers Degree from Stanford University. □

Emerging Technology Dinner Mtg, •Thursday, Nov.19, • Westchase Hilton, 9999 Westheimer, Social 5:30 p.m., Dinner 6:30 p.m.