

John A. Andrew - Exploration Geologist, Geophysicist and Project Manager

Dr. Andrew received a BS degree in Geology from University of Tulsa and MS and Ph.D. degrees in Geology, (Geophysics minor) from the University of Wisconsin. Dr. Andrew is working with TPA as a stratigraphic geophysical consultant. He was with Shell Oil Company in Operating Divisions in Midland, Houston, and New Orleans from 1968 to 1976, where he advanced to Senior Geologist. He was then promoted to Staff Research Geologist in Shell's Bellaire Research Center where he worked from 1976 to 1980, developing Shell's seismic stratigraphy concepts and techniques to fully integrate seismic and geology. From 1980 to 1982 he was the in-house advisor and mentor to Marathon Oil Company staff in the general area of seismic stratigraphy. He applied his knowledge to Marathon's operations and taught seismic stratigraphy in both domestic and international offices.

In 1982 he co-founded and became President/CEO of StratSeis Inc., a technical consulting/data acquisition company specializing in seismic data acquisition using nonlinear vibroseis technology. The resulting high-frequency seismic data were especially useful for seismo-stratigraphic interpretation. Since 1986, he has been consulting in: (1) seismic stratigraphy, stratigraphic models and obtaining stratigraphy from 2D and 3D seismic data; (2) improving seismic resolution, frequency and bandwidth using nonlinear vibroseis sweeps, methods and technology; (3) applied geology and geophysics for gas and oil exploration, prospecting, evaluation and exploitation; and (4) employing technology and the synergistic interpretation of multiple data to minimize cost and reduce risk in gas/oil exploration.

He has a number of publications on seismic stratigraphy; synergistic interpretation of magnetic, Landsat and seismic data in North East Montana; surface sediments of the Northern Kara Sea (Offshore Western Siberia); magnetic stratigraphy of Arctic Ocean sediments; and the stratigraphy of ND. His most recent papers describe a Lodgepole exploration model based on an integration of seismic and geochemical data, seismic problems in the Lodgepole Play and the importance of frequency when resolving stratigraphic questions.

During his 6-year tenure with Shell in New Orleans, he worked on 7 federal offshore lease sales. Shell bid on 28 OCS tracts mapped by Dr. Andrew, winning 16. He was instrumental in identifying and mapping an unconventional prospect that became a 4+ TCFG field. During his 2 years at Marathon, Dr. Andrew was the key contributor in the discovery of a Paradox Basin oil field (Tin Cup Mesa – about 3.5 million barrels of oil) using seismo-stratigraphic techniques. He also assisted in other discoveries in the Big Horn, Greater Green River, Paradox, Powder River, Williston and Wind River Basins.