



# A.J. DAVIDOFF LLC

Geologic and Geophysical Consulting Services for  
The Legal, Renewable, and Oil and Gas Industries

## KATHLEEN KRAUSE

### PROFESSIONAL EXPERIENCE

2022 to  
Present

Krause Subsurface Consulting LLC  
Geologist and Geophysicist

Conducted regional evaluations and play-based analyses of the Pelotas Basin in Brazil, including well-to-seismic ties, AVO analysis, and 2D seismic velocity modeling for depth conversion.

Interpreted complex mud and salt structures in the Red Sea and Nile Delta to enhance imaging for exploration, utilizing first-pass datasets.

Developed a framework for interpreting mass transport complexes in the Carnarvon Basin.

Analyzed low-resolution datasets to delineate geological complexes, contributing to the development of a machine learning neural network within a four-week timeframe.

2016 to 2021

Schlumberger WesternGeco  
Geologist

Constructed structural and stratigraphic frameworks in sedimentary depositional basins at both regional and local scales, interpreting formations in complex faulted areas to delineate traps and reservoirs.

Supervised exploration initiatives, specializing in deepwater basins and the characterization of salt and shale bodies, including extensional salt systems in the Northern Gulf of Mexico and contractional systems in the Southern Gulf.

Substantial field experience at Vector in the Permian Basin, Kathleen generated high-value reservoir models in Kuwait Bay by integrating seismic, well, and petrophysical data.

Established salt body labeling for machine learning applications using vintage multicient datasets, enhancing neural network adaptability.

Built highly detailed carbonate raft maps for the Perdido Basin, leading to improved structural imaging.

2013-2016 Schlumberger WesternGeco  
Geophysicist

Conceptualized workflows to maximize value for internal and external clients by leveraging the latest technologies, including Full Waveform Inversion (FWI). She specialized in isotropic and anisotropic velocity analysis on both 2D and 3D seismic data.

Generated velocity models through comprehensive gather analysis and well correlation, significantly enhancing the imaging of sub-salt structures in Guajira, Colombia, and the Nova Scotian Shelf.

Developed an iterative workflow for salt scenarios and Intra Salt Tomography, improving subsalt imaging of hydrocarbon targets in the central Perdido Basin.

Mentored team members across three segments and three countries, fostering collaboration and efficiency in multiple managed projects.

Structured workflows utilizing Standard Operating Guidelines (SOGs) and FWI to enhance the overall valuation of final products.

## **EDUCATION**

M.S., Geology, University of Houston, TX, 2016

B.S., Geology, Oklahoma State University, Stillwater, OK, 2013