

CSEG Technical Luncheon

Hydrocarbon prospectivity in Newfoundland and Labrador's offshore: A systematic and data driven approach to exploration

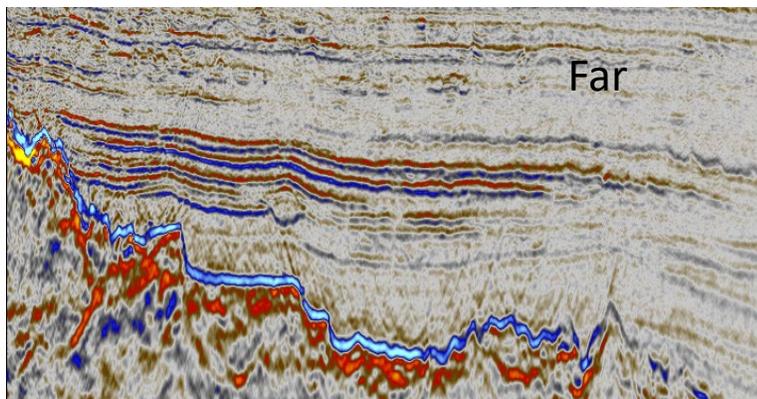
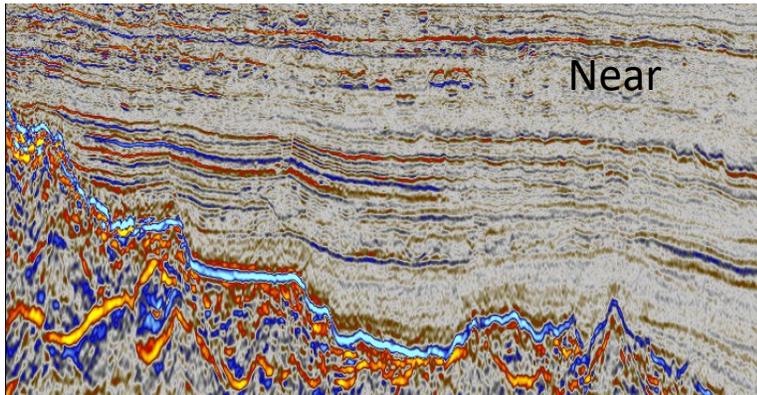
Presented by Victoria Mitchell

March 7th, 2023

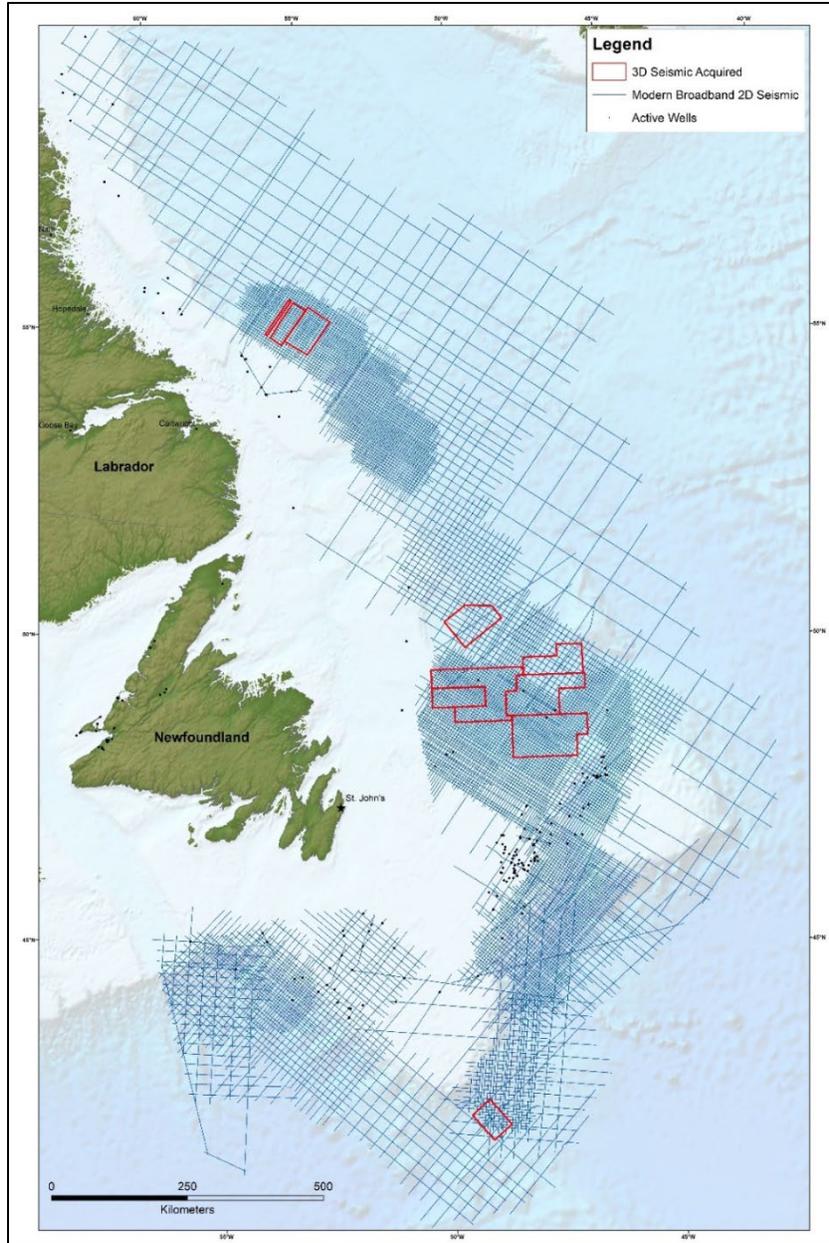
The offshore of Newfoundland and Labrador has been largely underexplored for hydrocarbons. Success in the Jeanne d'Arc Basin in the late 1970s and early 1980s led to decades of exploration focused near those proven discoveries. The Bay du Nord discovery in the Flemish Pass Basin is to be the first development outside the Jeanne d'Arc.

Newfoundland and Labrador's offshore spans over 1.8 million square kilometers and less than 10% is currently under licence. Since 2011 OilCo, Newfoundland and Labrador's state owned oil and gas company (formerly Nalcor Energy), in partnership with TGS and PGS, has undertaken a large scale seismic program over the slope and deep water. This 2D and 3D seismic data has identified previously undefined sedimentary basins and opened up new exploration play trends in multiple frontier basins. This data set has been instrumental in securing over \$4 billion in work commitments over frontier acreage since 2015.

In this talk we will highlight some of the exciting play trends that have been identified in the Newfoundland and Labrador offshore, discuss upcoming prospects to be drilled this year, and introduce those that will be offered in the 2023 scheduled license round.



Near stack and far stack 3D seismic images over the Blue Jacket prospect in the 2023 Call for Bids region showing stacked deep water fans which exhibit Class III/II AVO response. Image courtesy of PGS.



Map of multicient 2D (blue lines) and 3D (red polygons) seismic data acquired by TGS/PGS/Oilco from 2011-present over the Newfoundland and Labrador margin

Bio: Victoria Mitchell holds a BSc and MSc in geophysics from Memorial University and has recently completed a Master's Certificate in Project Management from York's Schulich School of Business. She is a geophysicist with 15 years of experience in the oil and gas industry and has been with the Oil and Gas Corporation of Newfoundland and Labrador (formerly Nalcor Energy) for 6 years. In her current role she is part of the exploration team, whose mandate is to identify oil and gas opportunities in the province's slop and deepwater basins.