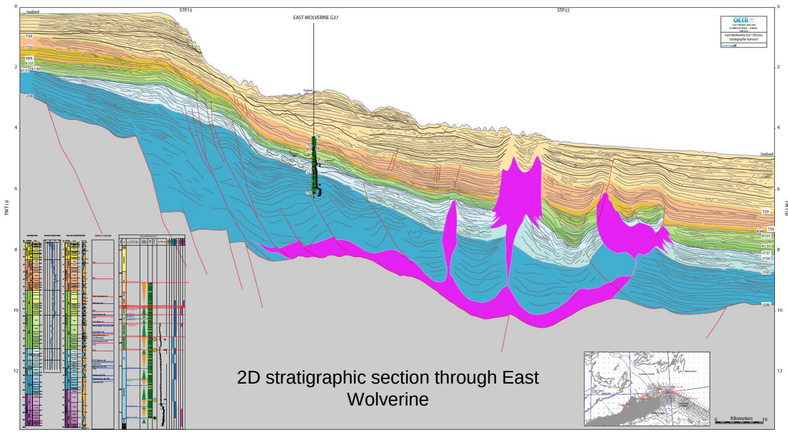
CONCLUSIONS

An offshore area located in the southeast of the Nova Scotia will be called for bid end of 2014. This area bear only one exploration well, Tantallon-M-41, and is located to the west of the Laurentian sub-basin.

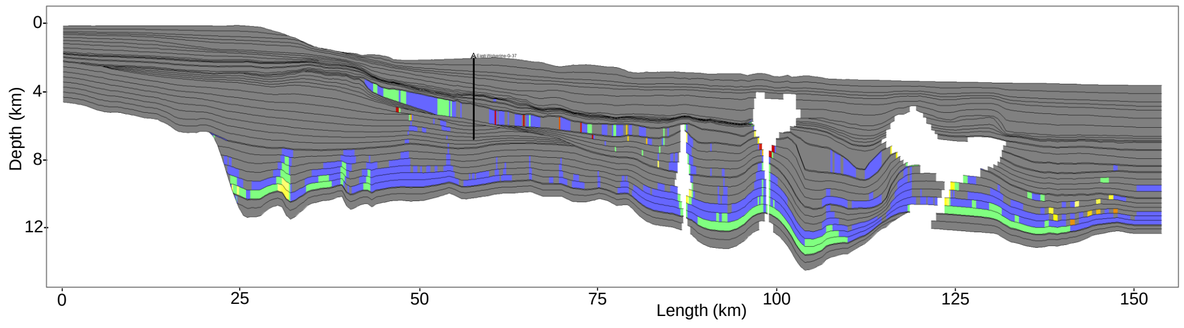
The Laurentian sub-basin project leads to the following findings:

- A regional geodynamic and tectonic setting in the Laurentian basin in both sides of the Newfoundland Transform Zone NTZ
- The nine TVDSS structure maps for nine horizons from J200 up to T29
- A sequence stratigraphy breakdown at 4 wells namely, Bandol-1, East Wolverine-G-37, Emerillon-C-56 and Heron-H-73
- The quantitative petrophysical analysis of these 4 wells
- The Gross Deposit Environment (GDE) maps for nine intervals defined in between the seismic horizons consistent with petrophysical results and seismic stratigraphy and morphology
- The identification and characterization of 5 sources rocks with arguments for Early Jurassic sourcing from Heron and & DSDP 547B wells
- 1D and 2D modelling along 4 transects trough Louisbourg-J-47, Dauntless-D-35, Bandol-1 and East Wolverine-G-37 showing:
  - Early Jurassic Pliensbachien source rock as the main contributor of the petroleum system
  - Mainly gas accumulations as the rapid burial on the overall sections enhances a rapid temperature evolution from 120°C to 150°C leading to an increasing secondary cracking risk in the source rock.



2D stratigraphic section through East Wolverine

Mass of Gas per Area (Reference Scenario)



Gas is present in rather substantial quantities in the lower depths of the model. If out of a source rock layer and not marked of by a structural element, these gas quantities should be considered as diffuse distributions which have dissipated through geological time and no commercial value should be attached to them.

Volume of Gas per Area (10^3 cf/m2)

10 40 80 120 160 200

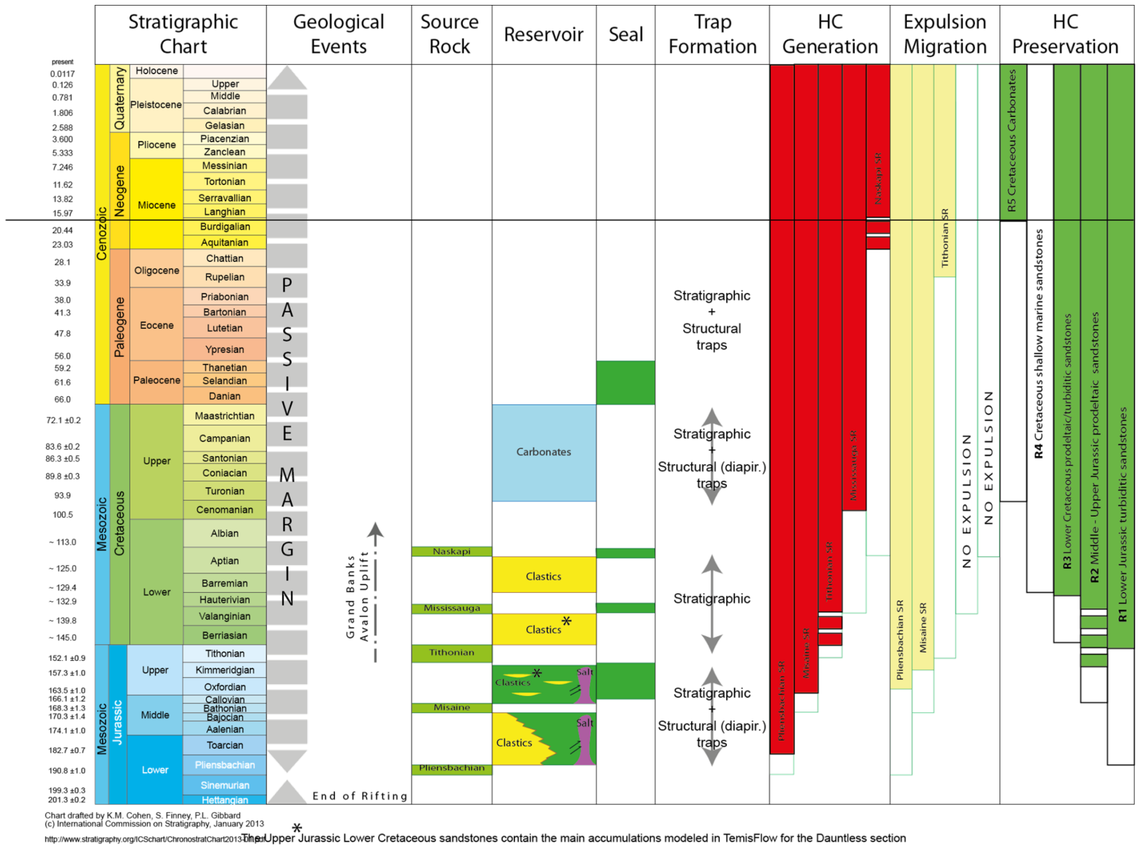


Chart drafted by K.M. Cohen, S. Finney, P.L. Gibbard
(c) International Commission on Stratigraphy, January 2013
http://www.stratigraphy.org/ICSchart/ChronostratChart2013Dec.pdf

* The Upper Jurassic Lower Cretaceous sandstones contain the main accumulations modeled in TemisFlow for the Dauntless section

Petroleum chart for petroleum systems of Laurentian sub-basin