

Preliminary evaluation of the compositional sedimentary variation of the Jurassic Iroquois and Mohican formations of the Scotian Basin, Nova Scotia, Canada

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The compositional sedimentary variation of the Jurassic Iroquois and Mohican formations of the Scotian Basin (Canada) was evaluated in 9 wells (566 cutting samples) using a Thermo Scientific Niton xl3t gold+ XRF analyser and the SandClass geochemical compositional classification based in major elements. Our data shows that these two formations present a large inter and intra unit compositional variation, even between closely related wells. It is clear that these units represent very dynamic depositional systems with apparent lateral facies variability. The integration of our data with those previously published will enable refinement of the currently accepted stratigraphic frameworks and/or the definition of new paleoenvironmental models, through finer-tuning of the sedimentological, biological, and hydro-atmospheric conditions correlative of sedimentation for the referred time interval. We acknowledge the industry and government partners of the Basin and Reservoir Lab and the consortium Source Rock and Geochemistry of the Central Atlantic Margins for their support of this project. [Poster]