

Cove contains an exceptionally well preserved outcrop which presents 2D and 3D exposures of the braided channel depositional environment of the Wolfville Formation. These outcrops demonstrate the stratigraphic complexities associated with the depositional environment. This study aims to: (1) investigate the heterogeneity of a braided channel complex including fluid migration baffles, interconnectivity between channel bodies, and barriers of fluid flow within stratigraphic packages, and (2) discern the potential of these outcrops as an analogue for other early Mesozoic syn-rift and post-rift reservoirs in the subsurface. Data from measured sections of the outcrops, LiDAR, high resolution photogrammetry, ground penetrating radar, scintillometer readings and permeameter readings have been compiled and a geological model of the study area has been constructed in Petrel. The model demonstrates how the lateral continuity of the architectural elements limits fluid flow through the higher permeable lithologies and impinges on the effective drainage of fluids in this simulated subsurface reservoir.

---

**Architecture and geometry of a braided channel  
complex in the Triassic Wolfville Formation**

---

JORDAN NICKERSON AND GRANT WACH

*Department of Earth Sciences, Dalhousie University, Halifax,  
Nova Scotia B3H 4J1, Canada <jr940315@dal.ca>*

The Wolfville Formation outcrops along the shoreline of the Minas Basin of the Bay of Fundy of Nova Scotia. Cambridge