

Strategy for Assembling the Stratigraphic Jigsaw Puzzle of the Lower Cretaceous Mannville/Blairmore Groups and Equivalents

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Summary (PLACEHOLDER)

The Mannville Group (Blairmore / Luscar / Bullhead-Fort St. John / Cantuar-Pense / Swan River) is arguably the most widespread and best-studied stratigraphic interval in the Western Canada Sedimentary Basin. Nonetheless the stratigraphic nomenclature and correlation of internal units are complex and localized within subbasins and often constrained by provincial boundaries. Our strategy is to use "big data" and innovative software to attempt to reconcile the basin stratigraphy on a detail not previously possible. Our primary tool is to utilize digital well logs in .las format combined with the Tops Database compiled by the ATLAS organizers. To that end the University of Alberta has acquired donations of entire collections of logs from provincial geological surveys totaling approximately 200,000 wells.

Over the last decade there has also been an ever-increasing abundance of radiometric studies, primarily utilizing U-Pb from detrital zircons across the various Mannville subbasins. These have provided evidence of provenance as well as age dates with precision in the range of 10^5 - 10^6 years BP.

Theory / Method / Workflow

Results, Observations, Conclusions

Novel/Additive Information

Acknowledgements

References

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