

# **Are Key Technological Changes of the Last Three Years Enough to Warrant Reprocessing? Interpolation and AVO Inversion for the Nisku at Brazeau**

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## Abstract/Excerpt

This case study shows the value of reprocessing a recent 3D seismic survey for AVO inversion as applied to a Nisku carbonate play. An important element of this work is the fact that this particular 3D has been the subject of a previously published AVO case study on the Nisku. As such, we have an excellent control study to compare against our new method. The key to our new method and the improvements we demonstrate, is an interpolation process. By performing 5D minimum weighted norm interpolation prior to the PSTM, the wavefield is better sampled leading to superior migration and AVO results. In order to support these assertions AVO attributes and analysis are compared between the original and reprocessed results. Validation is carried out using the current, improved, well control in the area.