

Importance of Low Angle Migration Paths in Alberta – Detection and 3-D Visualization

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Abstract

The importance of low angle migration paths will be demonstrated via a series of examples covering oil, gas or water migration. All of the examples used are based exclusively on public domain data released by the Alberta Board; they include problems in wells, gas compositions, pressures, cumulative hydrocarbon productions (as of December 2003) and formation tops. One example will however invoke proprietary data of cutting descriptions graciously released by Canstrat.

Exploration tools dealing with 3-D multidisciplinary data have proved to be very valuable in deciphering some of the hidden structural elements that control the hydrocarbon distribution and migration paths in Alberta. All of the findings presented here could not have been achieved without the easily accessible public domain data base available to all of us geoscientists. The western Alberta Basin may still have some surprises left for us.