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Learnings from FiberOptic Science Pad – ECA Swan Pilot

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Summary

Some of the most important questions regarding the development of an unconventional field revolves around well spacing and hydraulic fracture completion strategy, both of which were addressed through a specifically designed science pilot on a recent Montney pad near Dawson Creek, BC.

The success of any field pilot depends on a combination of upfront planning, operation excellence during execution and extensive post-project interpretations and reviews. This presentation demonstrates one such pilot that Encana conducted in the Swan area utilizing a “Stacked Data” approach where multiple sources of data were collected and analyzed at the same time to reduce the uncertainty in the interpreted results.

The Montney reservoir primarily a low permeability siltstone with Encana’s acreage sitting on the liquids rich retrograde fairway as the in-situ fluid transitions from gas to oil. A science pad with pilots consisting of permanent fiber optic install, microseismic, tracers and various other data sources was executed and analyzed. The accelerated learnings here have directly translated to improved well performance, operational efficiency, and cost savings.