

Differentially Stuck

Meridee J Fockler Canadian Discovery Ltd.

Summary

The pursuit of oil, heavy oil and liquids dominated activity in the Western Canada Sedimentary Basin in 2018. The differentials between West Texas Intermediate (WTI) and the major western Canadian crudes (Western Canada Select (WCS) and Edmonton Light Sweet Crude) became more problematic as the year progressed and impacted companies' budgets for 2019.

Workflow

Canadian Discovery continuously evaluates public drilling, land sale and completions activity, as well as production results over all zones in the Basin. This analysis highlights the trends and geological zones that industry pursued in 2018.

Observations

Oil prices, which had slowly risen throughout 2017 and the first half of 2018, gave way to an increasingly large differential between western Canadian crudes and world benchmarks in the latter half of the year. At year end, companies were curtailing 2019 budgets, but not before 2018 drilling activity reached levels similar to 2017. The Colony-Lloydminster heavy oil zones, Viking, McMurray (oil sands) and Montney were the most actively drilled targets in 2018. The South Duvernay light oil play extended out of the East Shale Basin and northwestwards into Pembina and Wildwood, and the Duvernay fueled a number of large Crown land sales. The Mannville rewarded explorers with a Rex discovery at Leduc-Woodbend and accelerated development of the Clearwater at Marten Hills and Nipisi. Cardium oil and liquids in central Alberta and Mississippian subcrop oil in southeastern Saskatchewan also continued to attract the drill bit.

Recent exploration activity also suggests some strategic diversification away from hydrocarbons, with a few operators pursuing lithium from brines in mature oil fields and helium from the Paleozoic.

Additive Information

Synthesis and review of large-scale exploration and development trends across the WCSB in 2018.

GeoConvention 2019