

Productivity and Recovery: Type Curves and EURs in Northern Williston Basin

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Abstract

Estimated ultimate recovery (EUR) can be used as an effective benchmarking tool when comparing plays and development practices.

Canadian Discovery has developed type curves for each of the major unconventional plays in the Western Canada Sedimentary Basin (WCSB), which includes the northern (Canadian) part of the Williston Basin. The Bakken, Midale, Frobisher, Alida and Torquay type curves were generated using the SPEE and USGS probabilistic type curve methodology. Each producing well is matched to one of these type curves to generate the Estimated Ultimate Recovery (EUR) for each producing well. There exists a wide spectrum of recovery within plays and between plays.

Using the EUR data for the individual wells, CDL has mapped these showing hot spots and trends through each resource play. The difference between the EUR and cumulative production provides an estimate of remaining recoverable oil. Mapping of the estimate of remaining recoverable oil provides an indication of the areas that hold promise for future operations.

The talk will outline the methodology (briefly) behind developing the type curves and forecasting the EURs to map both the a) EURs and b) estimated remaining recoverable oil for each of the plays (Bakken, Midale, Frobisher, Alida and Torquay) being developed in the Canadian portion of the Williston Basin. Conclusions will discuss the spectrum of results and some of the reasons behind these.

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