

# Weyburn: Midale

## Summary

The Mississippian Midale in southeast Saskatchewan has produced substantial hydrocarbons since the 1950's. Since 2012, several companies have utilized multi-stage hydraulic fracturing in lower permeability Midale reservoirs with impressive results. Low production decline rates and existing facilities lead to strong economics, and the play is further boosted by large original oil-in-place (OOIP) volumes as it covers a large geographic area. The reservoirs are dolostones in the upper "Marly" unit and limestone in the lower "Vuggy" unit. The overlying Midale Evaporite, an extensive evaporitic mud flat/playa lake deposit within the basal Ratcliffe Beds, provides a seal for hydrocarbon accumulation.

In Weyburn, unit operators have used CO2 injection to increase recovery. There are some drilling opportunities around the fringes of these large units on non-unitized fee land.

## Play Synopsis

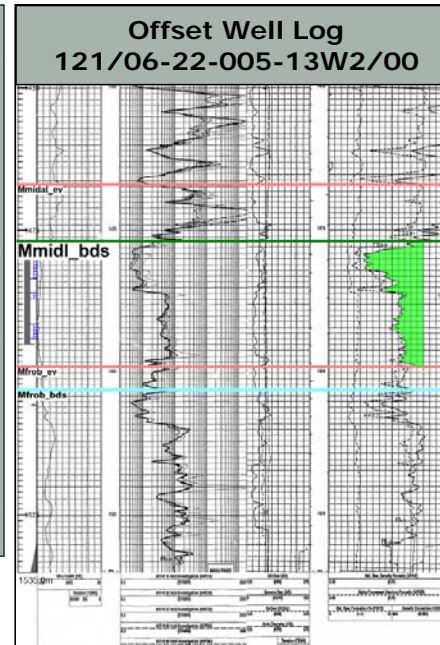
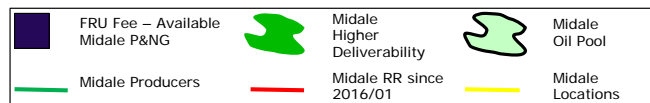
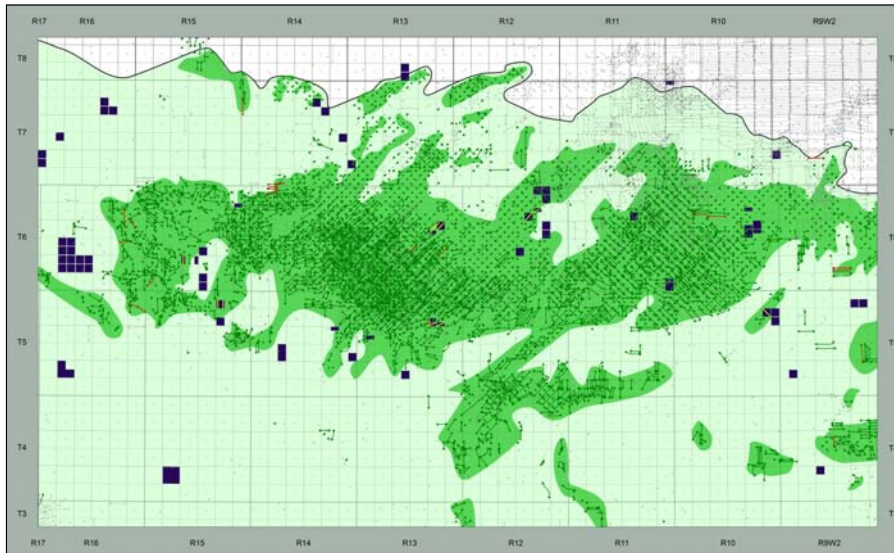
Fluid	Oil, 31 API
Active operators	Cenovus
Completions	Open hole
Depth	1650-1750m
Lithology	Carbonate
Average Porosity	13%
Water Saturation	45%
Type well EUR	175 Mboe
Type well IP(90)	88 boed

## Capital Costs

DCET \$1.7MM

## With 20% Lessor Royalty

IRR BT	62%
Payout	1.7 years
F&D	\$9.72/boe
Netback (IP90)	\$45.11/boe
Recycle Ratio	4.64



## Type Curve Analysis

