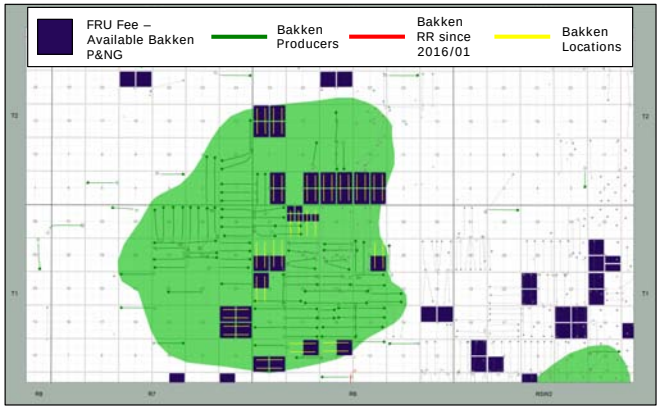
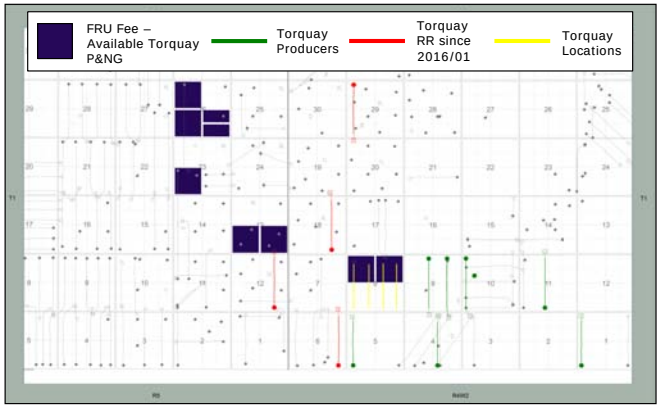
Taylorton-Pinto: Bakken & Torquay

Freehold ROYALTIES LTD.

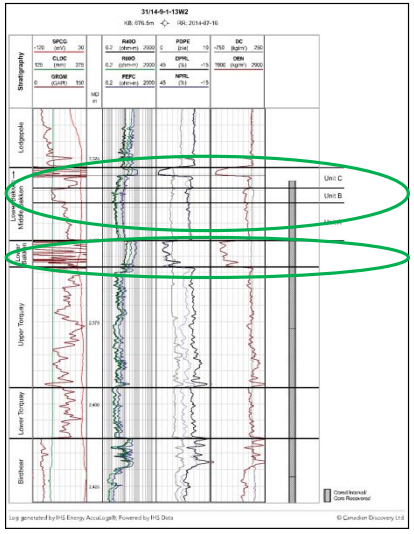
Summary

Production from the Bakken began in earnest in 2004, with the advent of multi-stage horizontal fracturing technology. Along the Canada-US border development has been underway in the Torquay formation in recent years, directly below the Bakken. Both of these zones continue to be targeted for oil production. The Bakken remains a lucrative formation, which is in part due to secondary recovery techniques, while the extent of the Torquay play is still being delineated by area operators. The oil in the Bakken and Torquay is trapped by a decrease in permeability which prevents the oil from continuing to migrate to the north.





Offset Well Petrophysical Analysis



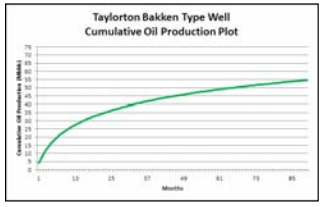
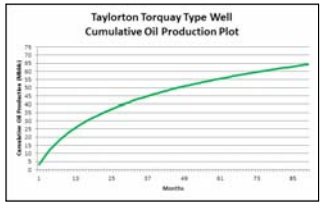
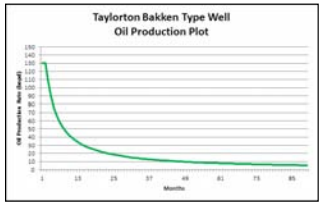
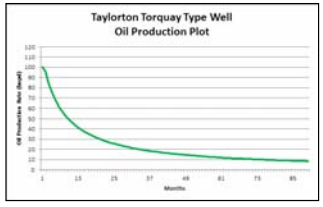
Play Synopsis

Fluid	Oil, 43 API	
Active operators	Crescent Point	
Completions	Multi-stage Hydraulic Fracturing	
Depth	2000-3000 m	
Lithology	Sandstone	
Average Porosity	12%	
Water Saturation	30%	
Type Well EUR	Bakken 74 Mboe	Torquay 97 Mboe
Type Well IP(90)	Bakken 140 boed	Torquay 107 boed

Capital Costs

DCET	$1.8MM

With 20% Lessor Royalty

	Bakken	Torquay
IRR BT	34%	40%
Payout	2.1 years	2.1 years
F&D	$23.26/boe	$18.56/boe
Netback (IP90)	$42.00boe	$41.02/boe
Recycle Ratio	1.81	2.21

Type Curve Analysis