

# Torxen Energy Doubled Oil Production and Saved USD 10 Million, Canada

Integrated subsurface modeling optimized drilling and completion results

**Torxen Energy wanted to reduce finding and development costs for new horizontal locations in the Palliser Block in southern Alberta. Partnering with Asset Performance Solutions, Torxen Energy saved more than USD 10 million of stratigraphic well costs while doubling field oil production using integrated subsurface models and workflows. The PeriScope\* bed boundary mapping service enabled developing two previously inaccessible thin bed sands while also reducing completion costs.**

## Reduce finding and development costs

Torxen Energy wanted to reduce the cost associated with developing horizontal wells in the basin. The complex petroleum system in the area required stratigraphic wells to be drilled to prove the horizontal well designs; however, the stratigraphic wells provided little to no productive value to the asset.

## Enable advanced field development

Asset performance solutions (APS) combines global technical expertise, industry-leading technologies, digital solutions, and services to accelerate field development, increase production efficiency, and unlock additional resources. PeriScope service accurately detects multiple formation layers and fluid boundary positions, enabling advanced well placement services for challenging stratigraphies. The combination of inversion models with additional azimuthal measurements provides precise delineation of reservoir layers and formation evaluation while drilling.

## Decrease time and cost to first oil

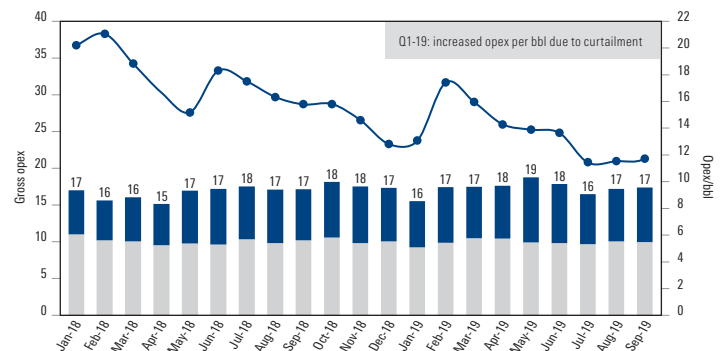
Deploying Schlumberger geological and geophysical software with subsurface modeling saved Torxen Energy USD 10 million by reducing the number of stratigraphic wells needed to ensure horizontal locations. PeriScope service enabled completely new horizontal plays to the asset field development plan. Enhanced subsurface characterization and horizontal drilling and completions methodologies added more than 100 new horizontal locations to the field development plan.

Using PeriScope service, Torxen enabled effective geosteering in a 0.5- to 2-m thick sand throughout the horizontal section. The wells were actively steered in high-quality sands and therefore required no stimulation, saving USD 300,000 per well in fracturing costs. Integration of operation schedules reduced cycle time from rig release to fracture operation to 45 days from 75 days. An integrated hydraulic fracture model enabled cost and productivity optimization of individual stages. The Schlumberger safe operating envelope flowback practices improved flow assurance for the wells, saving USD 200,000 per incident in sand cleanout costs.

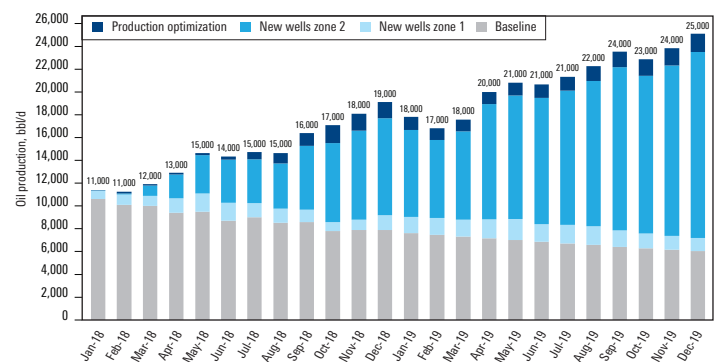
The APS team more than doubled oil production in the first year and reduced finding cost as well as unit oil opex by more than 35% using fit-for-purpose technologies and workflows. A holistic approach to field development started with subsurface characterization, drilling, and completions design and execution and with a lifecycle approach to well production. Taking this approach enabled Torxen Energy to maximize reserve access and production methodologies that reduced costs and improved performance.

**“Schlumberger technology has played a key role in doubling the oil production and reducing costs during our first year of activity.”**

John Brannan, CEO and President, Torxen Energy



Torxen Energy decreased oil opex per barrel by 35% in one year using asset performance solutions.



The Asset Performance Solutions team more than doubled oil production in the first year.

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