



Extended Laterals Reaching From North Dakota to Oklahoma!

February 27, 2013

INDEPENDENT

MEANS



Continental
RESOURCES

Transferring Long Lateral Drilling Technology from Bakken to SCOOP



Transferring Long Lateral Drilling Technology from Bakken to SCOOP

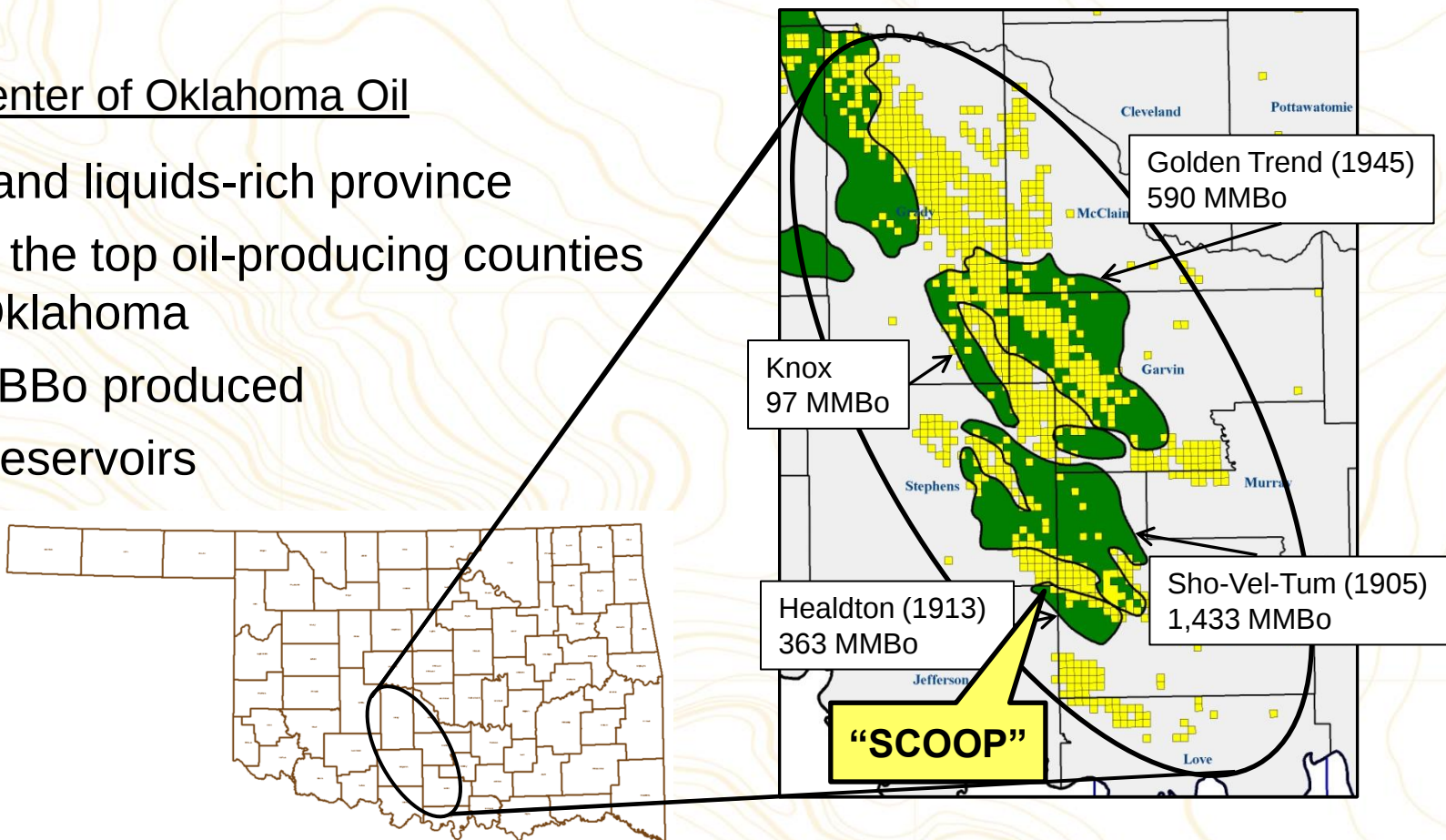
- 💧 What's the SCOOP?
- 💧 How will longer laterals impact the SCOOP?
- 💧 Benefits
 - Reduced cycle times
 - Improved efficiencies
 - Positive Economic impact
- 💧 Challenges
 - Managing Torque & Drag
 - Cleaning the hole
 - BHA Design
 - Complex Drilling Demands Great Team Work

What's the "SCOOP"?

South Central Oklahoma Oil Province

Epicenter of Oklahoma Oil

- 🔥 Oil and liquids-rich province
- 🔥 3 of the top oil-producing counties in Oklahoma
- 🔥 3.2 BBo produced
- 🔥 60 reservoirs



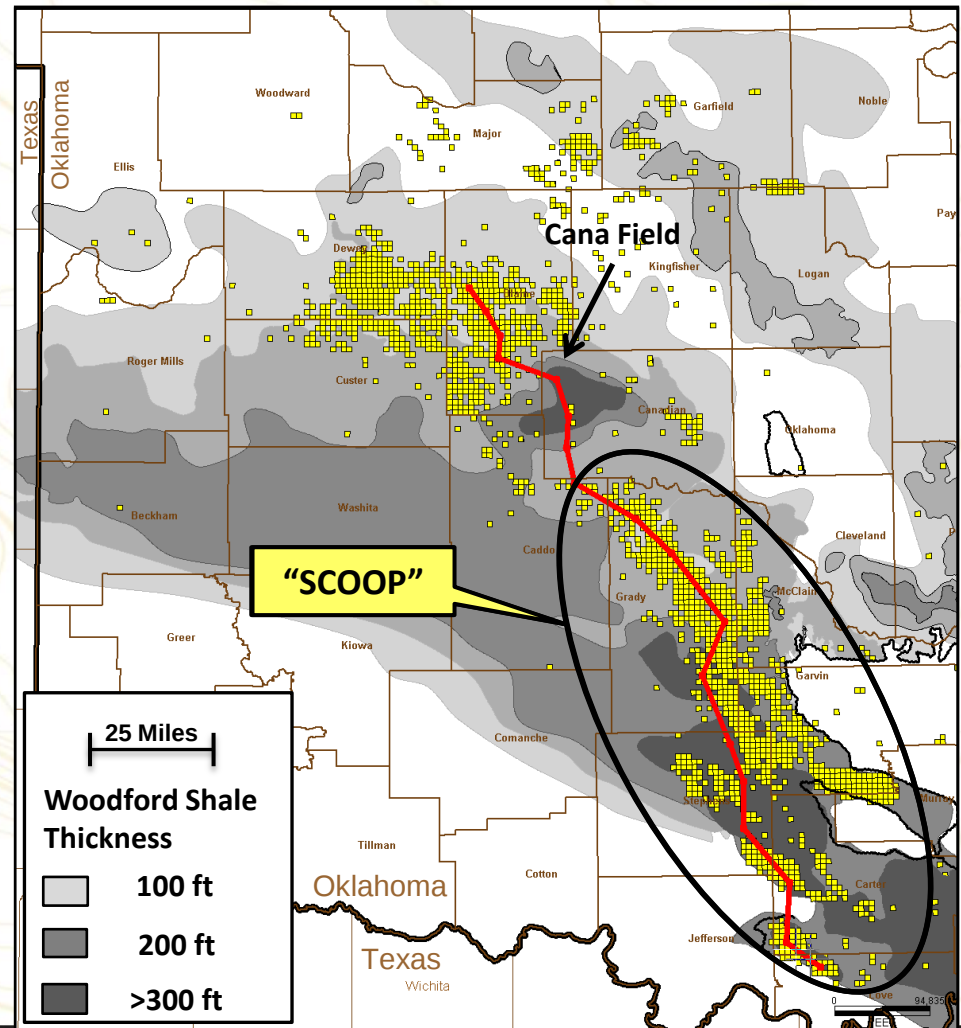
Here's the "SCOOP"

World-Class Resource Shale

- 💧 One of the thickest, best quality resource shale reservoirs in the country
 - Up to 400' oil-rich shale
 - Dual reservoir target
- 💧 Excellent siliceous reservoir
 - Highly fractured
- 💧 Source of the oil

The Woodford Shale

70 BBo remains in-situ



Drilling the SCOOP

Tough 12-14" Vertical

- 💧 Sharp, ratty sands
 - Deese, Gibson, Hart
- 💧 Crooked Hole Country

8-3/4" Vertical

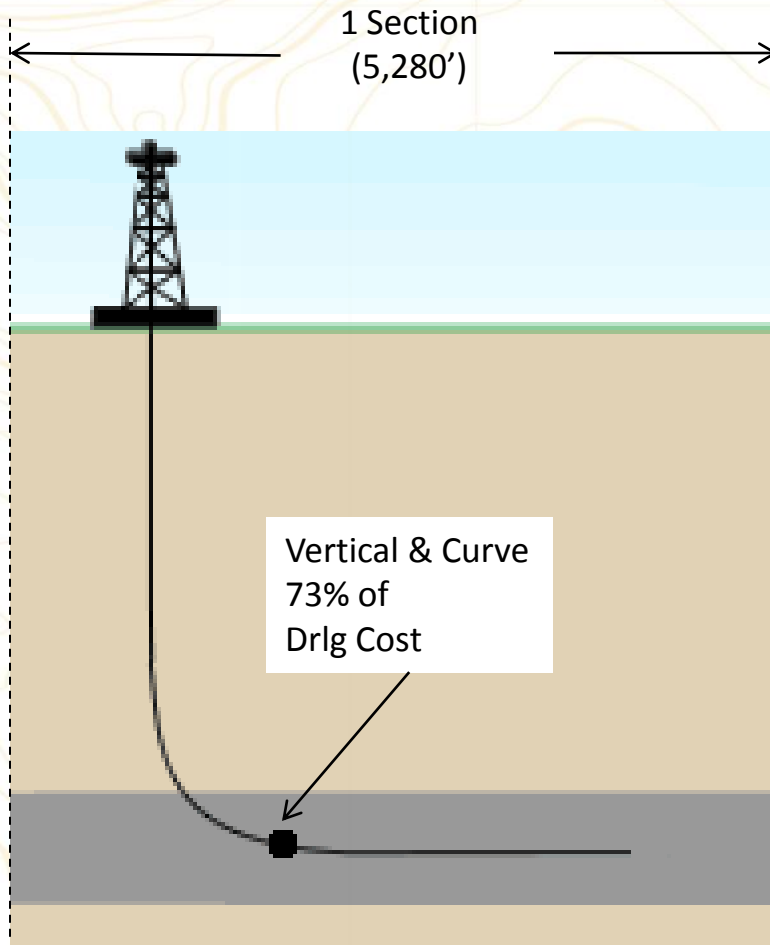
- 💧 Losses in 8-3/4" hole
 - Primrose, Cunningham, Britt

Sensitive Curves

- 💧 Caney shale sensitive to inclination
- 💧 Inconsistent doglegs



SCOOP Single Unit Economics

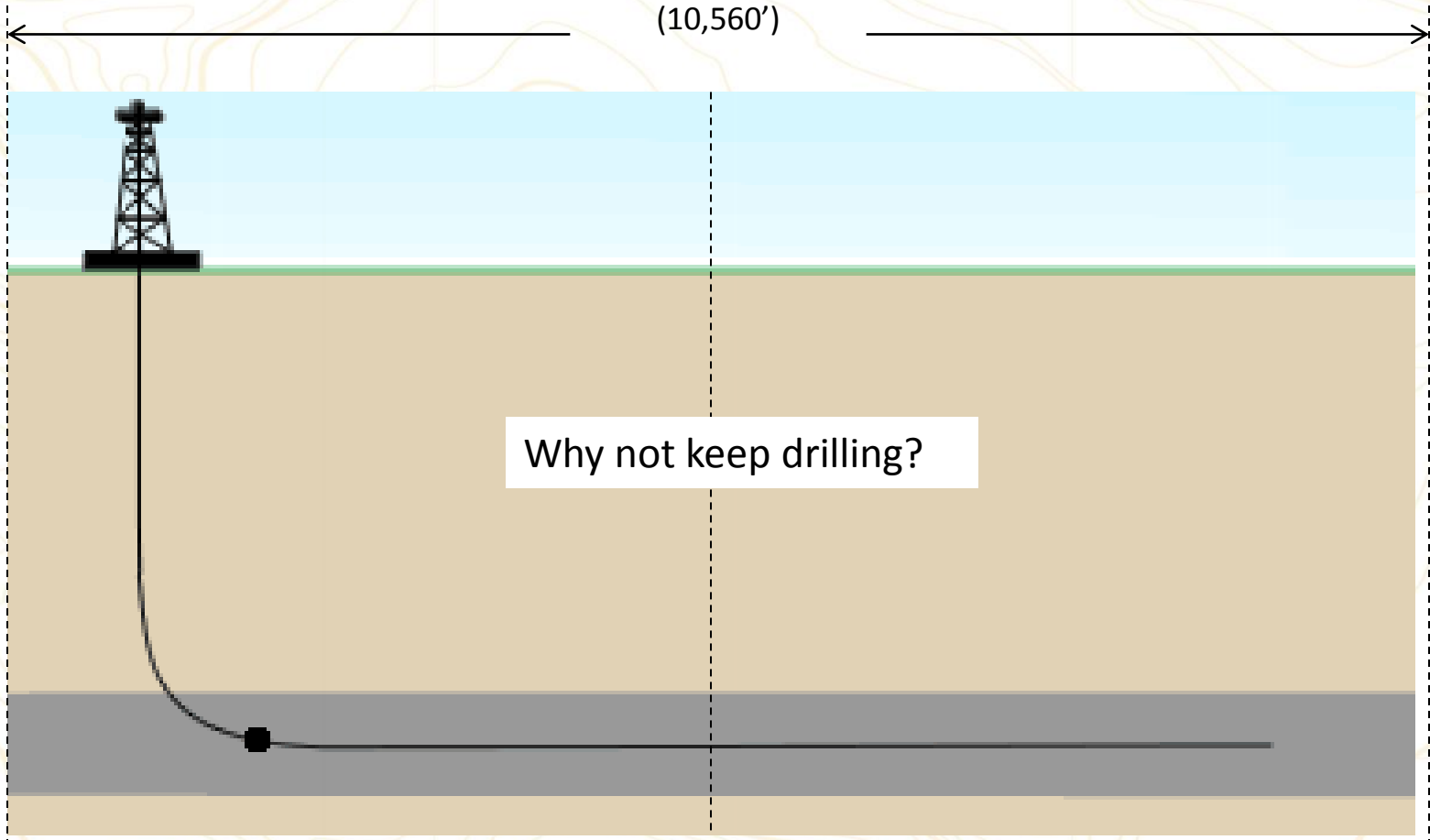


Single Unit Well Costs

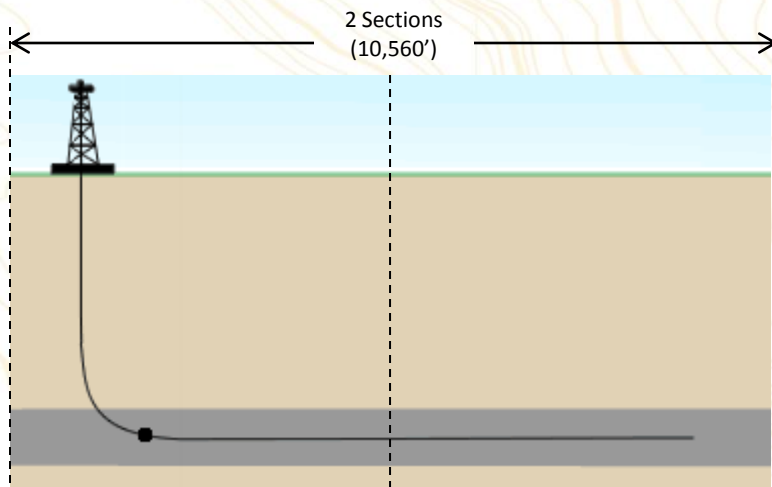
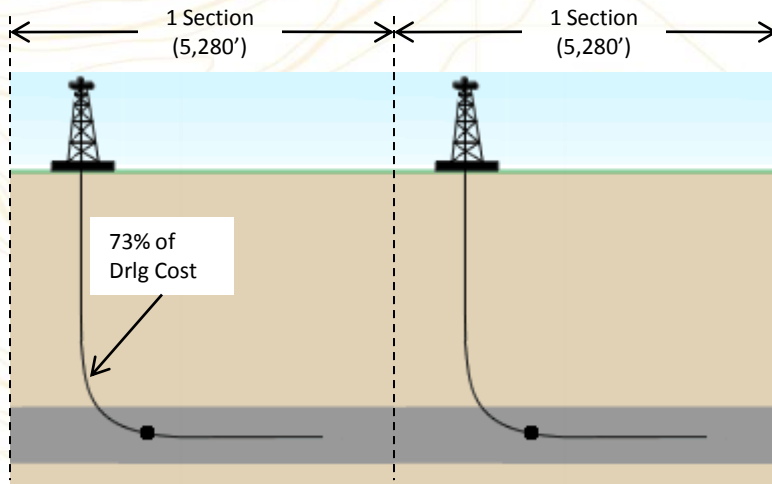
- Approximately 73% of drilling cost is to reach the target formation.
- From this point the lateral is drilling in the target formation.

SCOOP Multi Unit Economics

2 Sections
(10,560')

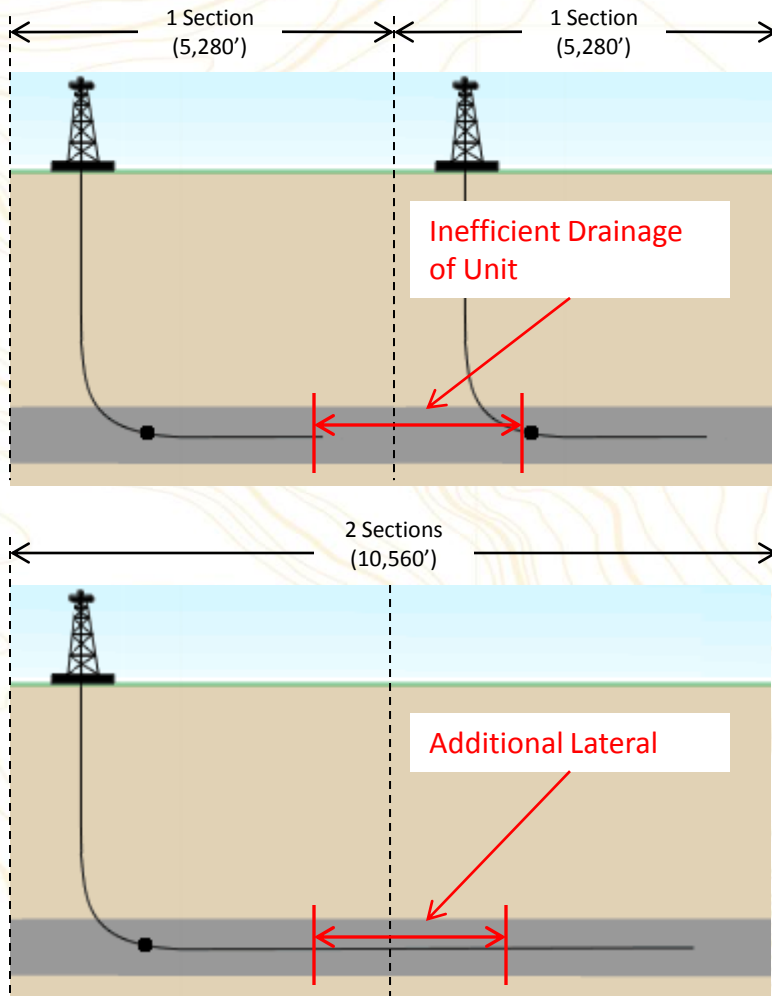


SCOOP Single vs Multi Unit Economics



- 1 Single Unit Wells
 - 4,500' lateral
- 2 Single Unit Wells
 - = 2 x Original Drilling Cost
 - 9,000' lateral
- 1 Multi Unit Well
 - = 1.3 x Original Drilling Cost
 - 9,800' lateral

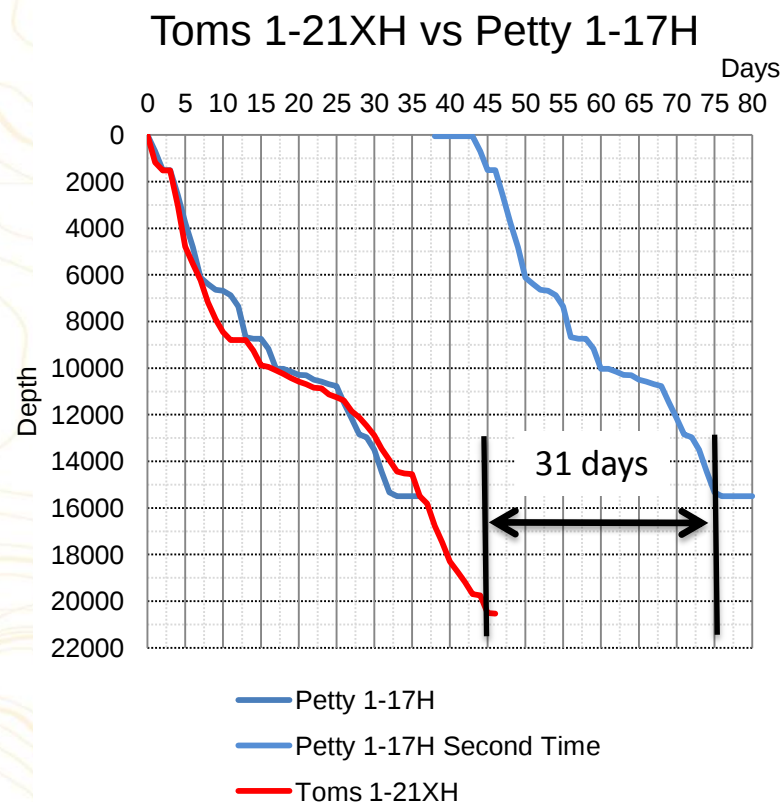
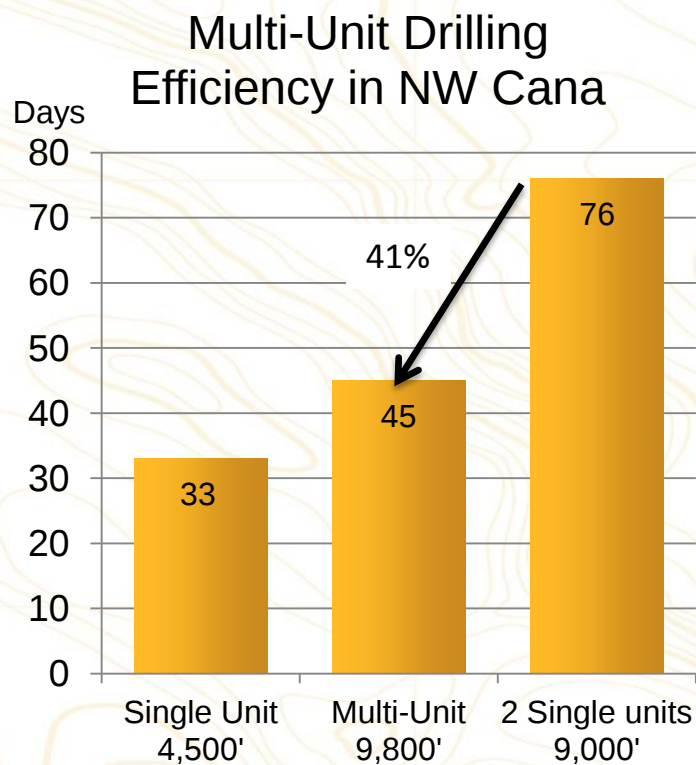
SCOOP Single vs Multi Unit Economics



- 2 Single Unit Wells
 - Unit setbacks create uncompleted formation.
 - Potentially Inefficient Drainage
 - Potentially Stranded Minerals
- 1 Multi Unit Well
 - Additional 800' or 2-3 completion stages.
 - 8-9% more producing lateral.

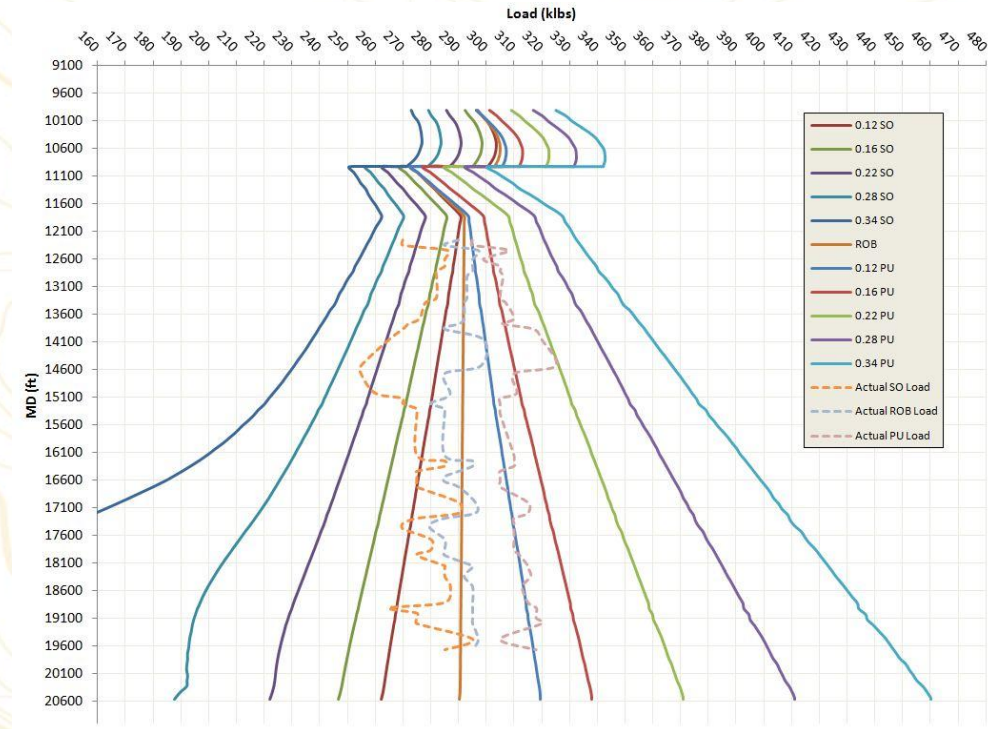
Efficiencies Gained in NW Cana

1st cross-unit (extended lateral) well in OK (HB 1909)
Toms 1-21XH



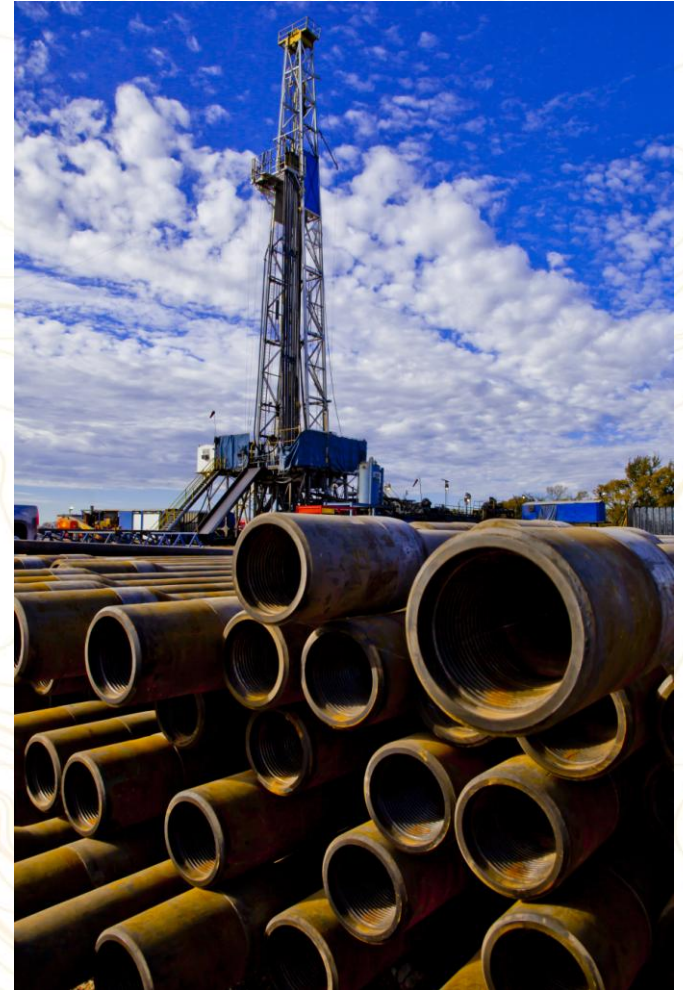
Challenge: Managing Torque & Drag

- 🔥 2 Most Impactful Characteristics of T&D
 - Tortuosity
 - Hole Cleaning



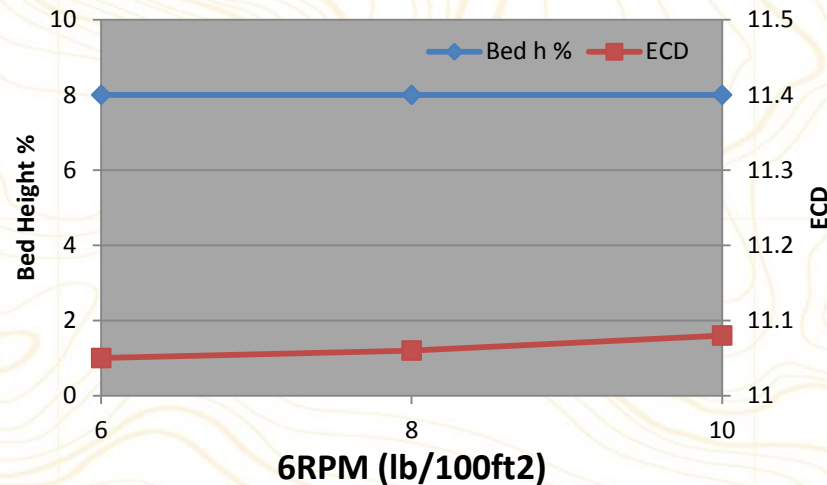
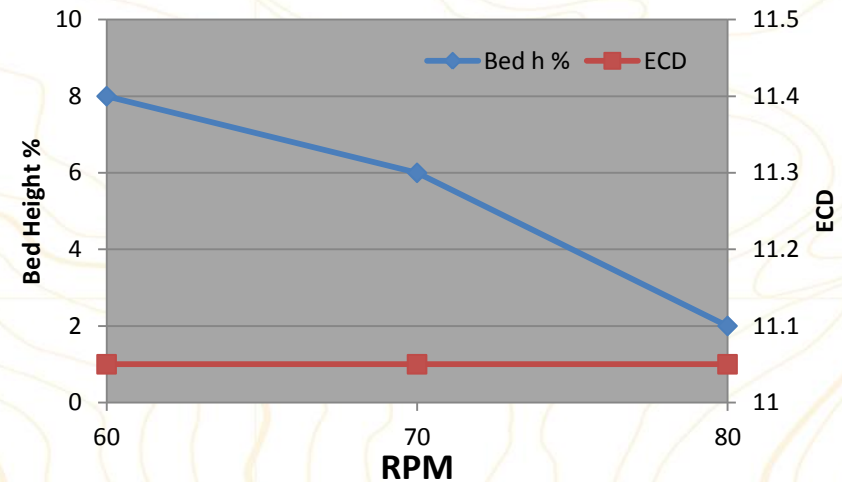
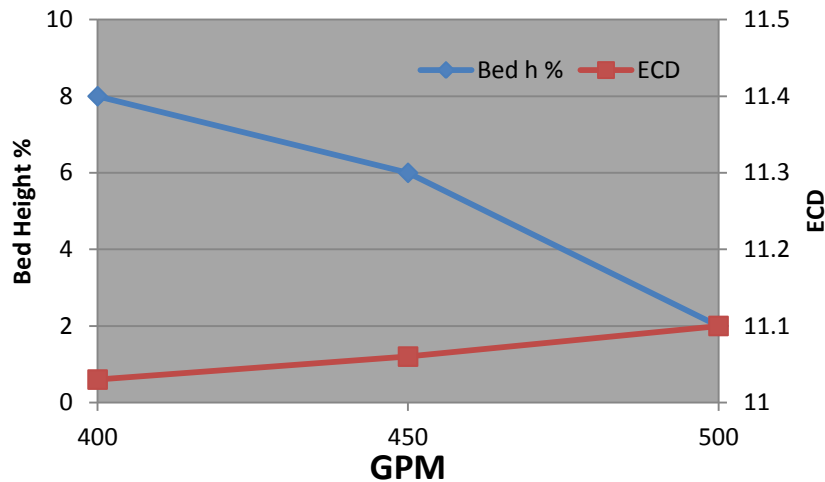
Challenge: Managing Torque & Drag

- Tortuosity
 - Smooth Wellbore
 - BHA Design
 - 10° to $12^{\circ}/100'$ curve
 - Minimize sliding/steering
 - Rotate!
 - Great Teamwork

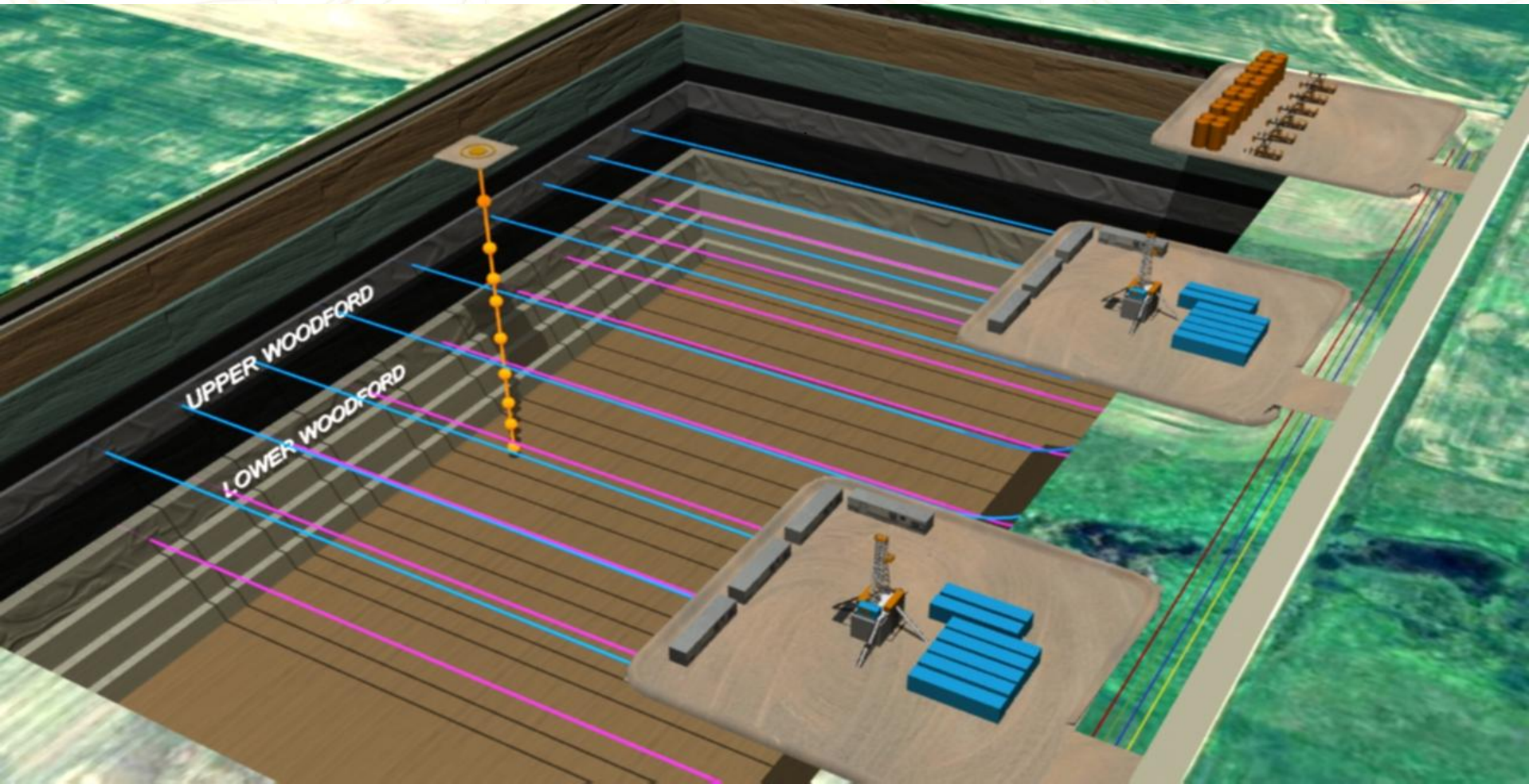


Challenges: Hole Cleaning

💧 Clean hole with GPM & RPM.



Transferring Multiple Reservoir Technology too!



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SCOOP: Doubling Down!

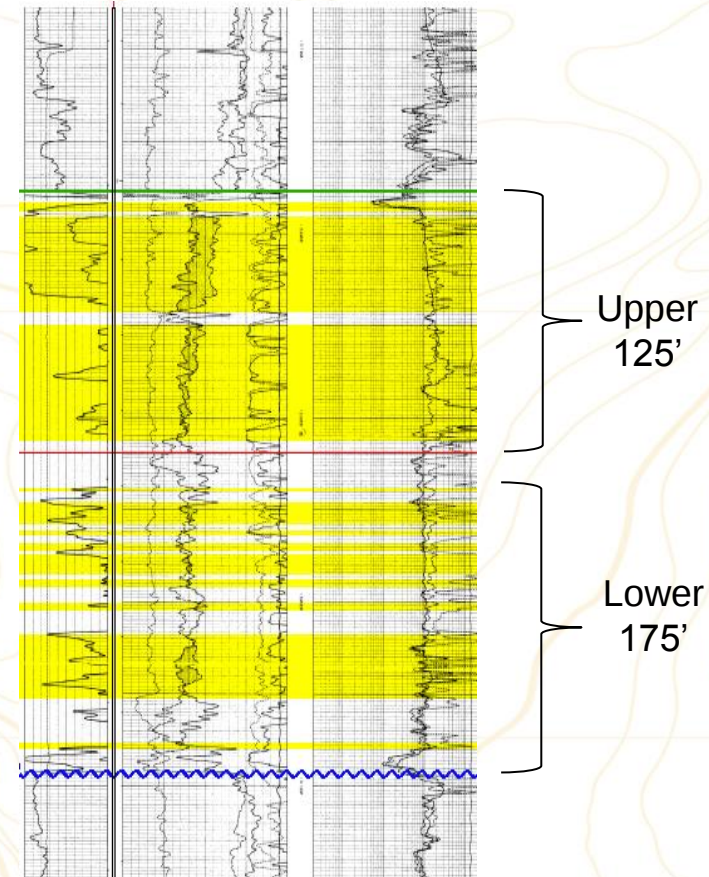
🔥 Stacked laterals

- Woodford thickness typically 200-300'
- Frac height is 70-100' (internal studies)
- Requires 2 wells to stimulate Woodford
- Both targets proven commercial

🔥 Testing the concept

- Continue to analyze data from both targets
- Plan 2013 test of high/low

SCOOP Type Log



Summary

- 💧 The SCOOP is growing horizontally and vertically through technology transfer!
- 💧 Great team work will overcome the challenges of long laterals.
- 💧 Benefits of long laterals and multiple reservoirs will develop the SCOOP into CLR's next high impact oil & liquids-rich play!

Questions?