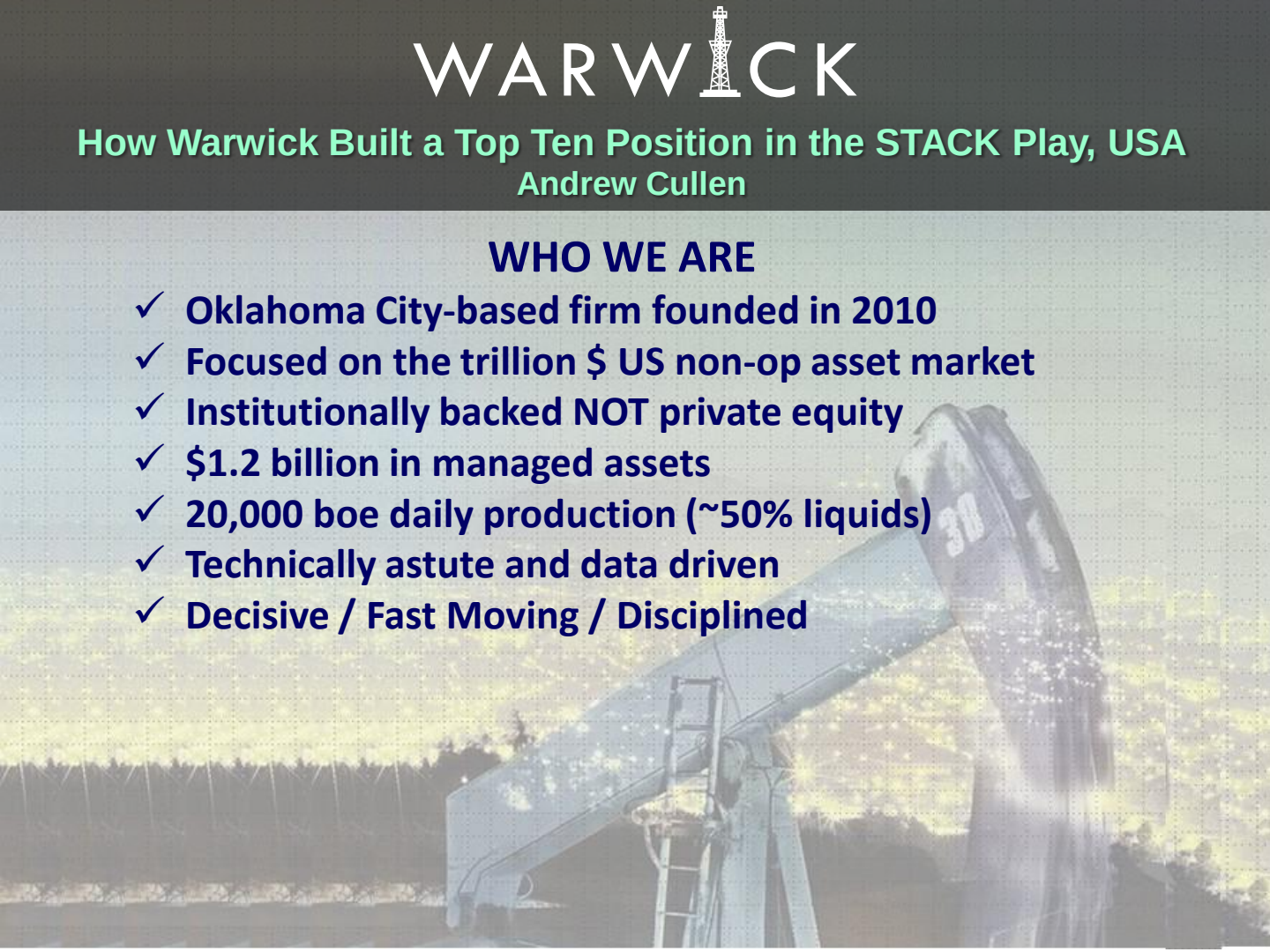


WARWICK



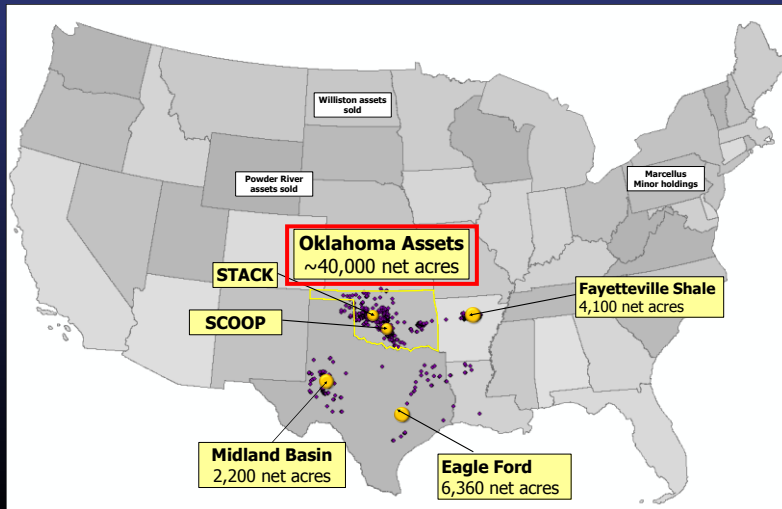
How Warwick Built a Top Ten Position in the STACK Play, USA Andrew Cullen

WHO WE ARE

- ✓ Oklahoma City-based firm founded in 2010
 - ✓ Focused on the trillion \$ US non-op asset market
 - ✓ Institutionally backed NOT private equity
 - ✓ \$1.2 billion in managed assets
 - ✓ 20,000 boe daily production (~50% liquids)
 - ✓ Technically astute and data driven
 - ✓ Decisive / Fast Moving / Disciplined
- 

CRITICAL SUCCESS FACTORS

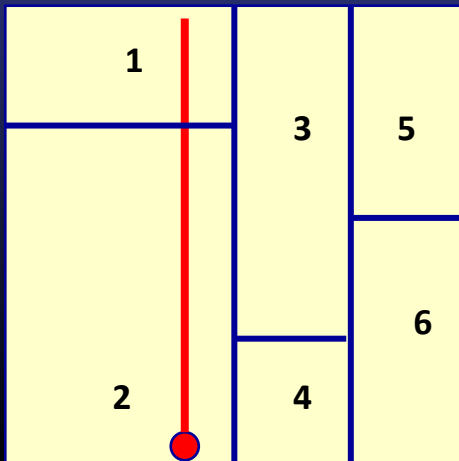
- Fully integrated Geology-Engineering-Land Databases
- Evaluated every major onshore US play > 650 type curves
- Mapping entire petroleum systems - rock & fluid properties
- Early production data & normalized to a per foot basis.
- Acreage assessed in terms of access, activity, and pricing
- Acquire at discount & lock in hedges for stable returns



BACKGROUND FOR ONSHORE US NON-OP ASSETS (Micro-aggregation)

- Tax-Royalty Fiscal System
- Individuals NOT the State hold mineral rights
- Fractional mineral interests can be sold or pass through estates
- Each lease is negotiated separately for length and royalty
- Producing wells hold leases without time limits
- Minority working interest owners can force drilling
- Horizontal drilling units pool all interests proportionately

1 section 640 acres ~ 2.6km²



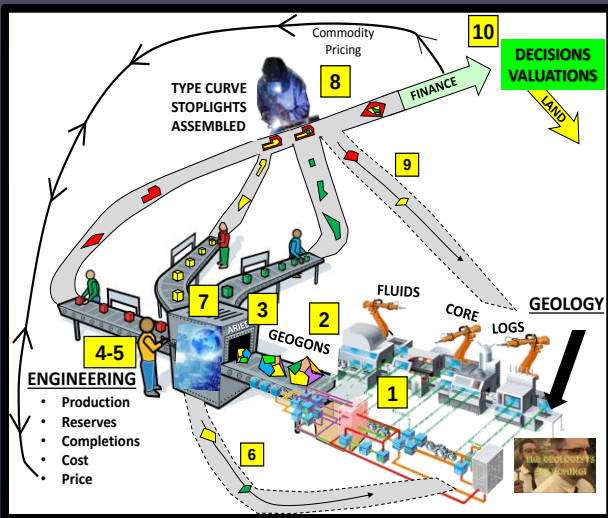
Example of a section with 6 different owners in spacing unit. Operator #2 proposes a horizontal well to others in the unit. Clock starts on 30 days to pay on AFE for 8-12\$mm well. Others elect-in or lose their entire interest in ALL wells.

When other owners do NOT elect-in, they often sell their non-operated working interest to a third party, e.g. Warwick.

Warwick typically pays for acreage, keeps all interest in 1st well & gives small royalty on subsequent wells in a unit.

8-10 well down-spacings can get rather expensive.

THE TYPE CURVE FACTORY



- Regional mapping rock-fluid properties
- Geological polygons sent to Engineering
- Analyze, production, completions & costs for a well set of Type Curves
- ENG feed back loop to GEO
- Type Curve economics run
- Price and PV sensitivities
- Valuations to LAND for leasing

ALL PLAYS RANKED – BEST SELECTED

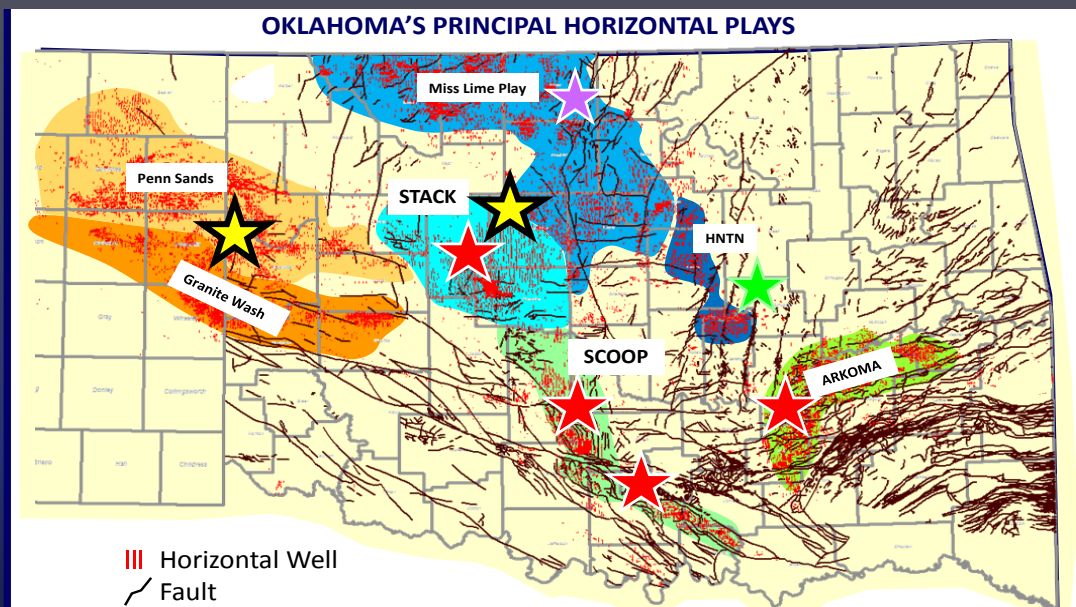
In 2016 Warwick strategically focused on *STACK & **SCOOP plays Anadarko Basin, Oklahoma

*** STACK: Sooner Trend Anadarko (basin) Canadian-Kingfisher (counties)**

**** SCOOP: South Central Oklahoma Oil Province**

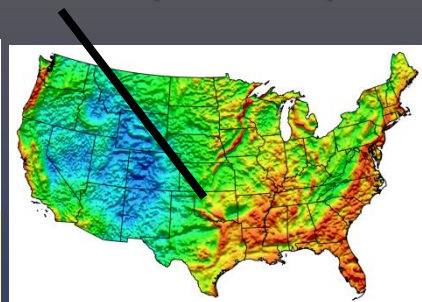
MULTIPLE HORIZONTAL PLAYS IN THE ANADARKO BASIN

28,000 horizontal wells. Vertical wells are now unconventional



4 Horizontal Play Types

1. Source-rock shales (Woodford and Springer shales) ★
2. Tight reservoirs adjacent to source rocks (Meramec) ★
3. Transition zones in tight reservoirs - long distance migration ★
4. Dewatering of dual porosity carbonates ★

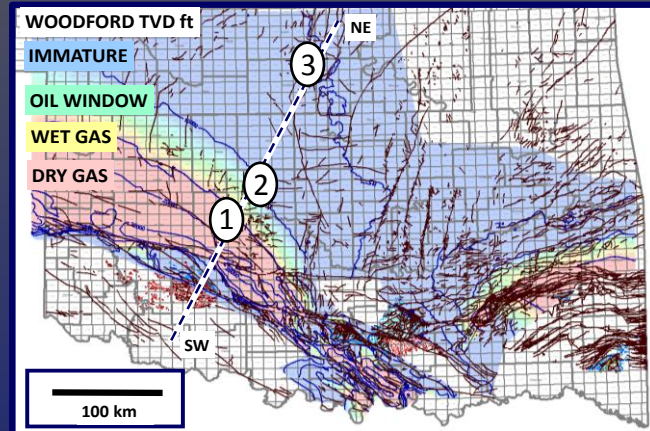
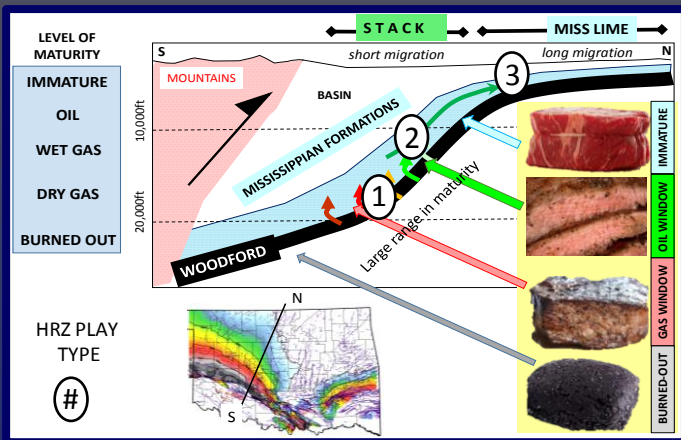


> 40,000ft of sediment
>15 billion boe produced
RESERVOIRS
Cambrian to Permian
SOURCE ROCKS
Ord. Miss. Penn.

Classic example of the Wilson Cycle

- Failed arm of Cambrian rift during opening of Iapetus Sea
- Carboniferous inversion- assembly of Pangea
- Triassic-Jurassic rifting in Gulf of Mexico

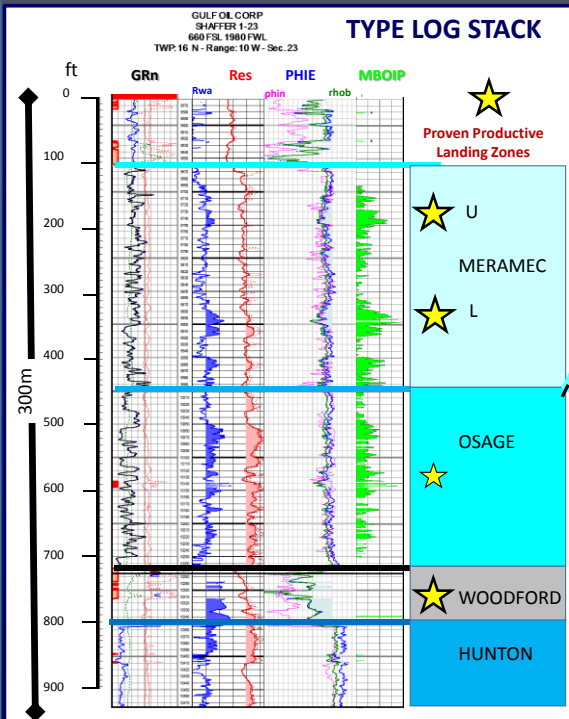
CARBONIFEROUS HORIZONTAL PLAY TYPES SOURCE ROCKS IMMATURE TO GAS WINDOW



STACK & SCOOP hydrocarbons from:

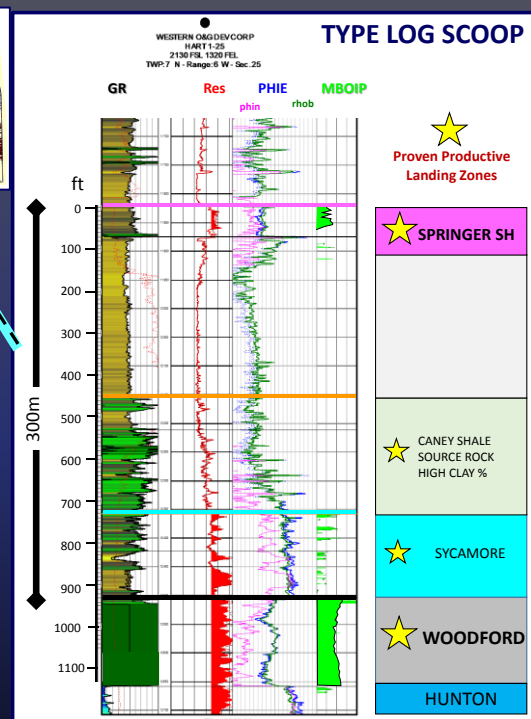
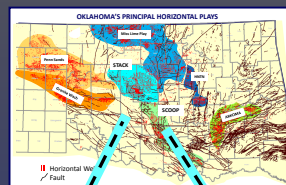
- Woodford, Meramec, Springer
- Light oil (40° API / 1,000 GOR)
- Dry Gas window (GOR >100,000)

STACK-SCOOP MULTIPLE HORIZONTAL TARGETS



STACK

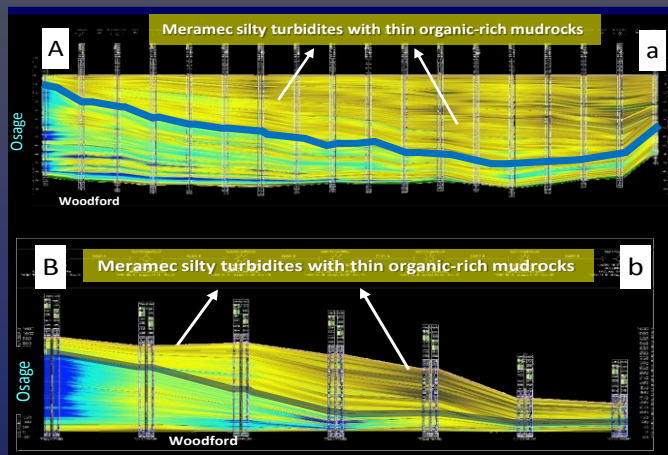
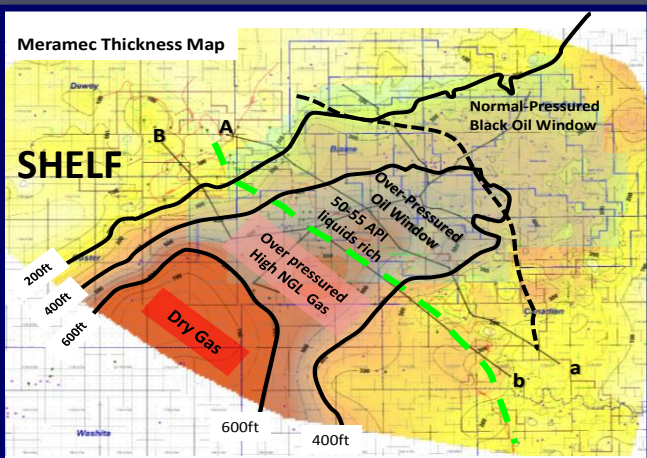
Current focus is on the Meramec.
Woodford was the initial basal target
Osage productive & being appraised



SCOOP

Woodford original target- active drilling.
Springer discovered later – active drilling
Sycamore productive & being appraised

The Meramec formation: turbidite siltstones deposited in foresets & small fan lobes on the ramp and basin floor outboard of the Osage shelf.



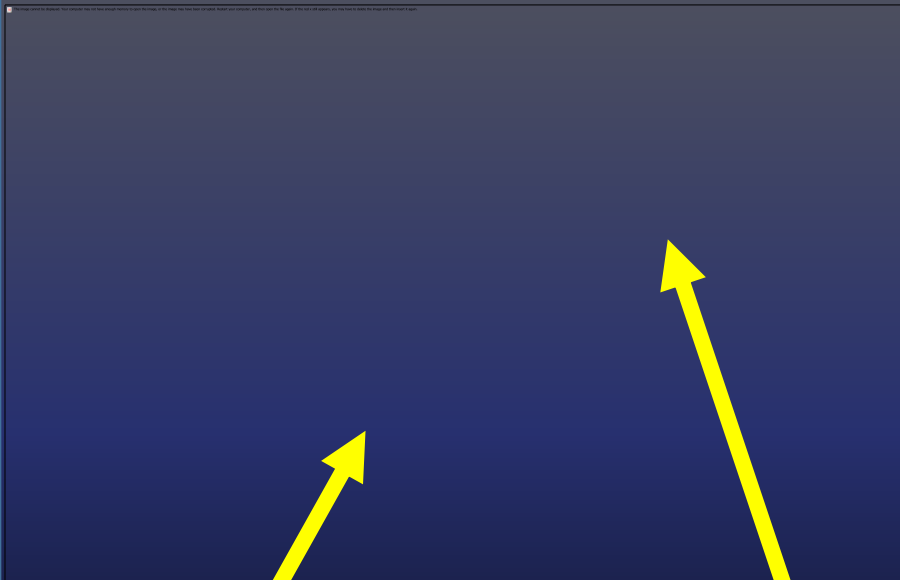
Turbidite siltstones 30-70% quartz.

Source rocks with > 6%TOC



STOCK TANK OIL and GAS IN PLACE

ESTIMATED ULTIMATE RESERVES

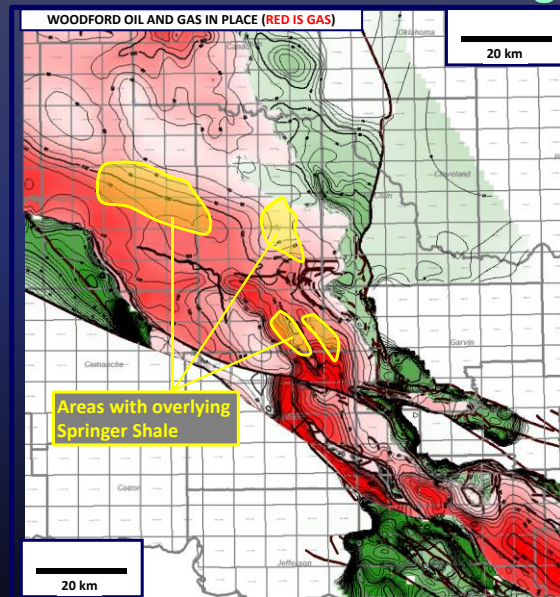


**Continental, Devon, Newfield down-spacing units.
6 to 10 wells 800-1,200 mboe per well 40%-60% liquids.**

High-NGL to dry gas window with wells having 20bcfg EUR

The SCOOP - Woodford first Oklahoma shale play ; Springer discovered later
Prolific legacy vertical production in the Golden Trend and Carter-Knox
Woodford shale thick enough to support stacked completions with 12 well down-spacing

SCOOP Woodford play
EUR: 976mmbo and 28tcfg



Springer restricted deposition
only locally overlies Woodford

WARWICK ENERGY GROUP **SOLID DIVERSED HOLDINGS ACROSS THE STACK**

<10% WI in most sections. Exposure to all major operators

Oil Window - 800-1200 mboe per well with 40-70% liquids

Gas Window- 15-20 bcfg per well & high BTU gas up-dip



- Thru integrated disciplined work processes Warwick has built a large & diversified position in the STACK within the 2 years
- >1,660 wells drilled to date; 40 rigs currently drilling
- About 15,000 remaining economic locations (PUD+PROB) at the current Strip prices.
- Warwick will have an interest in ~14% of these future wells.
- This position will deliver volumes and value for many years to come

WARWICK HOLDS A SIMILAR POSITION IN THE SCOOP

WE DID NOT COME THIS FAR - TO COME THIS FAR

- Continue to BUY & SELL core positions in US plays
- Will grow through portfolio diversification
- Currently evaluating:
 - Deepwater Gulf of Mexico: Miocene
 - Indonesia: Unconventional PSC – tight sands
 - Kurdistan: Oligocene field development

Opportunities Wanted

THANK YOU