



# **PIONEER**

NATURAL RESOURCES

**Credit Suisse  
Best of Breed Symposium**

**Spraberry/Wolfcamp  
Midland Basin**

**May 15, 2013**



**NYSE: PXD  
www.pxd.com**

# Forward-Looking Statements

*Except for historical information contained herein, the statements, charts and graphs in this presentation are forward-looking statements that are made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements and the business prospects of Pioneer are subject to a number of risks and uncertainties that may cause Pioneer's actual results in future periods to differ materially from the forward-looking statements. These risks and uncertainties include, among other things, volatility of commodity prices, product supply and demand, competition, the ability to obtain environmental and other permits and the timing thereof, other government regulation or action, the ability to obtain approvals from third parties and negotiate agreements with third parties on mutually acceptable terms, the receipt of approvals required to consummate the Company's Southern Wolfcamp joint interest transaction, litigation, the costs and results of drilling and operations, availability of equipment, services, resources and personnel required to complete the Company's operating activities, access to and availability of transportation, processing, fractionation and refining facilities, Pioneer's ability to replace reserves, implement its business plans or complete its development activities as scheduled, access to and cost of capital, the financial strength of counterparties to Pioneer's credit facility and derivative contracts and the purchasers of Pioneer's oil, NGL and gas production, uncertainties about estimates of reserves and resource potential and the ability to add proved reserves in the future, the assumptions underlying production forecasts, quality of technical data, environmental and weather risks, including the possible impacts of climate change, the risks associated with the ownership and operation of an industrial sand mining business and acts of war or terrorism. These and other risks are described in Pioneer's 10-K and 10-Q Reports and other filings with the Securities and Exchange Commission. In addition, Pioneer may be subject to currently unforeseen risks that may have a materially adverse impact on it. Pioneer undertakes no duty to publicly update these statements except as required by law.*

*Please see the slides included in the Appendix of this presentation for other important information.*

- **PXD Overview**
- **Midland Basin Geology and Resource Potential**
- **Potential Spraberry/Midland Growth Profile**
- **PXD's Southern Horizontal Wolfcamp Shale Joint Venture (Sinochem)**
- **PXD's Northern Spraberry/Wolfcamp Horizontal Appraisal Program**
- **Midland Basin and PXD Takeaways**

# PXD Overview

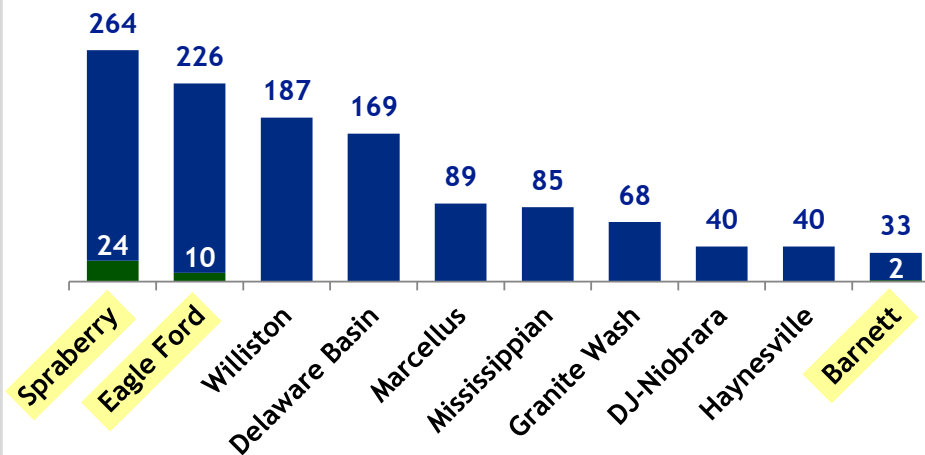
---

# Pioneer At A Glance

Total Enterprise Value (\$B)	\$20
2013 Drilling Capex (\$B)	\$2.8
Q1 2013 Production (MBOEPD)	171
2012 Reserves (BBOE)	1.1
2012 Reserves + Resource (BBOE)	>9.0

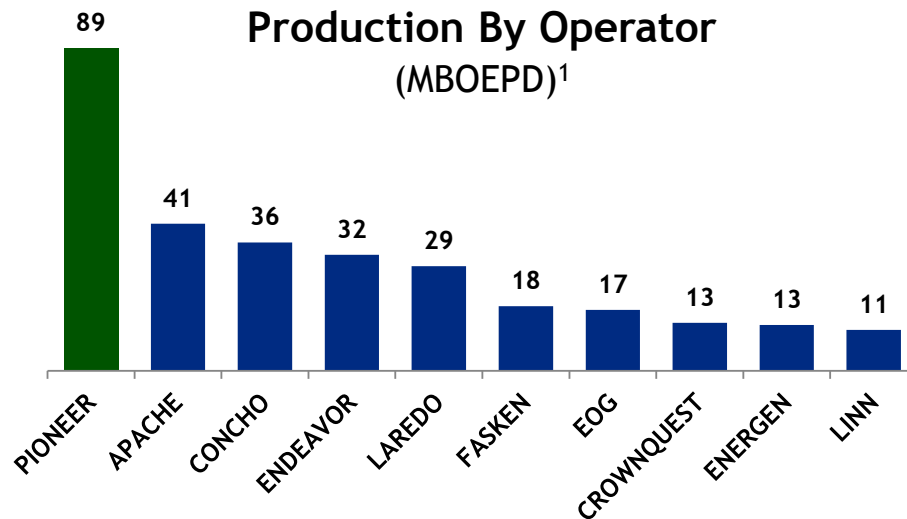
- Resource-focused strategy, with activity concentrated in 3 of the most active U.S. fields
- Best performing energy stock in S&P 500 since 2009
- Third largest oil producer in Texas
- Operating in core Spraberry/Wolfcamp asset since early 1980s
  - PXD holds ~900,000 acres in Spraberry/Wolfcamp
  - Largest producer in Spraberry/Wolfcamp with 24 rigs operating (9 horizontal and 15 vertical) and 7,000+ producing wells
  - Preeminent, low-cost operator benefitting from vertical integration strategy
- Attractive derivative positions and vertical integration protect margins
- Strong investment grade financial position

**Top U.S. Fields By Rig Count<sup>1</sup>**  
(Pioneer Operated Count in Green - 36 rigs)



1) Baker Hughes Rig Count (3/22/13) and PXD Internal

**Spraberry/Wolfcamp Gross Production By Operator (MBOEPD)<sup>1</sup>**

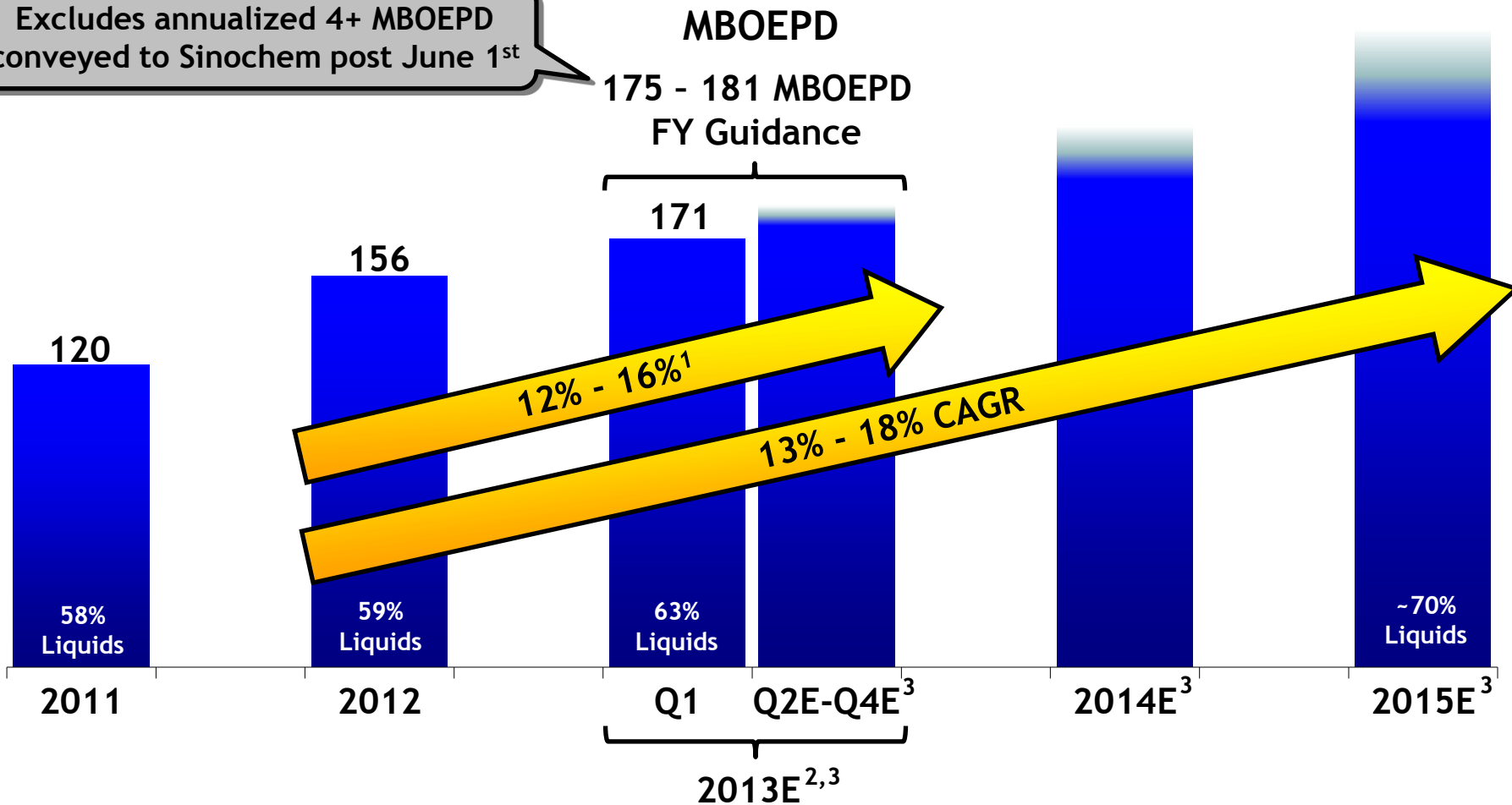


1) Year-end 2012 IHS data, gross reported oil and wet gas

# Targeting 13% - 18% Compound Annual Production Growth for 2013 - 2015

High end of 2013-2015 growth range assumes \$100 oil / \$4.25 gas; low end assumes \$85 oil / \$3.25 gas

Excludes annualized 4+ MBOEPD conveyed to Sinochem post June 1<sup>st</sup>



1) Assumes \$85/Bbl oil price and \$3.25/MMBtu gas price

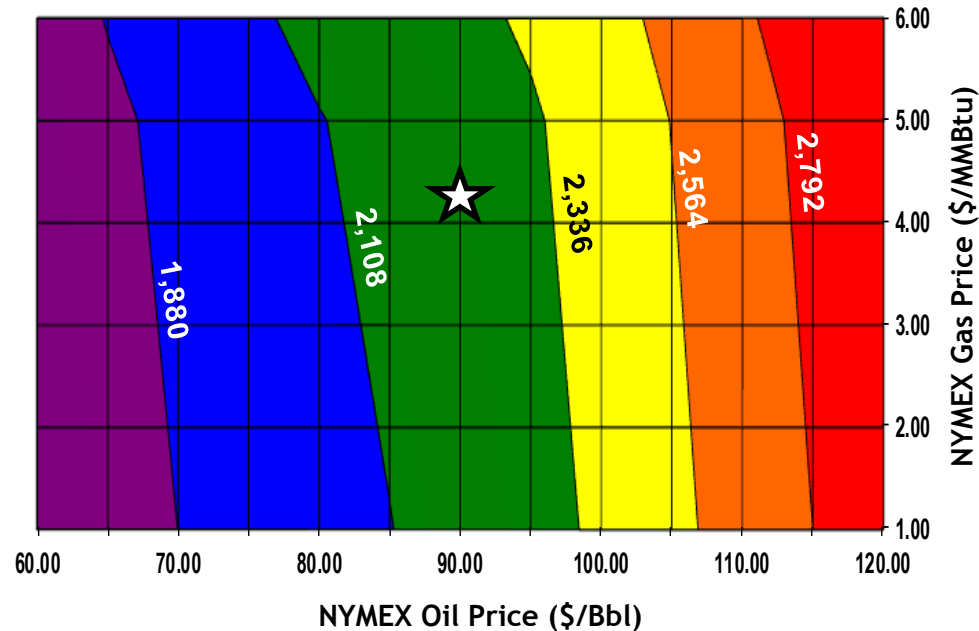
2) Excludes production attributable to the 40% joint interest transaction with Sinochem in the southern Wolfcamp area assuming a June 1, 2013 closing

3) Assumes no ethane rejected into the gas stream due to low ethane prices

# 2013E Capital Spending and Cash Flow<sup>1</sup>

- Capital program of \$3.0 B includes:
  - Drilling Capital: \$2.75 B
    - \$1,225 MM northern Spraberry/Wolfcamp area
      - \$400 MM for horizontal program
      - \$625 MM for vertical program
      - \$200 MM for infrastructure & automation
    - \$425 MM southern Wolfcamp joint interest area<sup>2</sup>
    - \$575 MM Eagle Ford Shale
    - \$185 MM Barnett Shale Combo
    - \$190 MM Alaska
    - \$150 MM Other (includes land capital for existing assets)
  - \$240 MM Other Capital
    - \$25 MM vertical integration
    - \$70 MM sand mine expansion
    - \$145 MM buildings, field offices and other
- Capital program funded from:
  - \$2.4 B operating cash flow and cash on hand
  - \$0.6 B joint interest cash proceeds<sup>2</sup>

Sensitivity to Commodity Prices (\$ MM)



☆ \$90/bbl oil and \$4.25/mcf gas

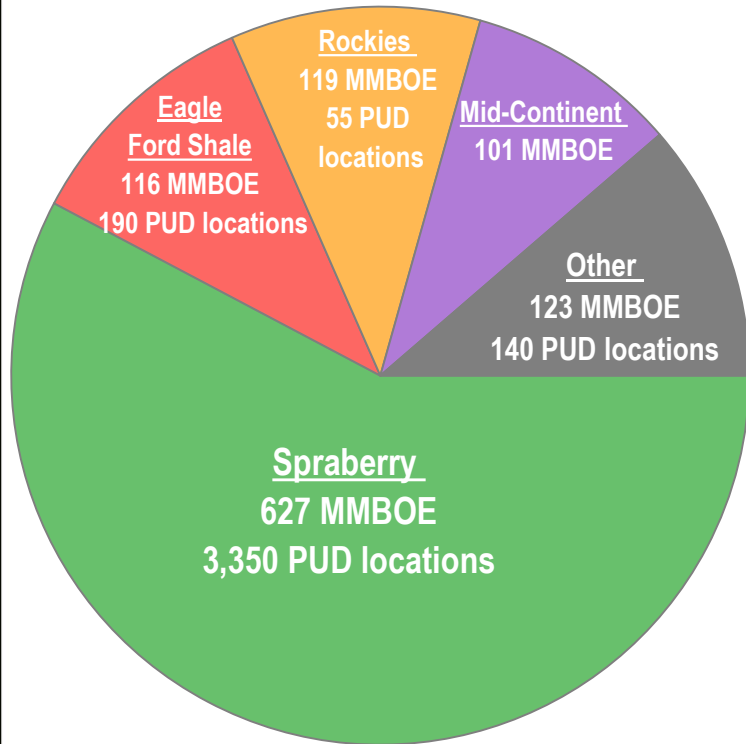
1) Capital spending excludes acquisitions, asset retirement obligations, capitalized interest and G&G G&A

2) Pioneer incurs 100% of capital costs from January 1<sup>st</sup> through estimated closing date of June 1<sup>st</sup>; Pioneer will be reimbursed by Sinochem for 40% of this amount as an adjustment at closing (not credited to cost incurred); Sinochem pays 40% of capital costs and carries Pioneer for 75% of Pioneer's 60% of capital costs post closing

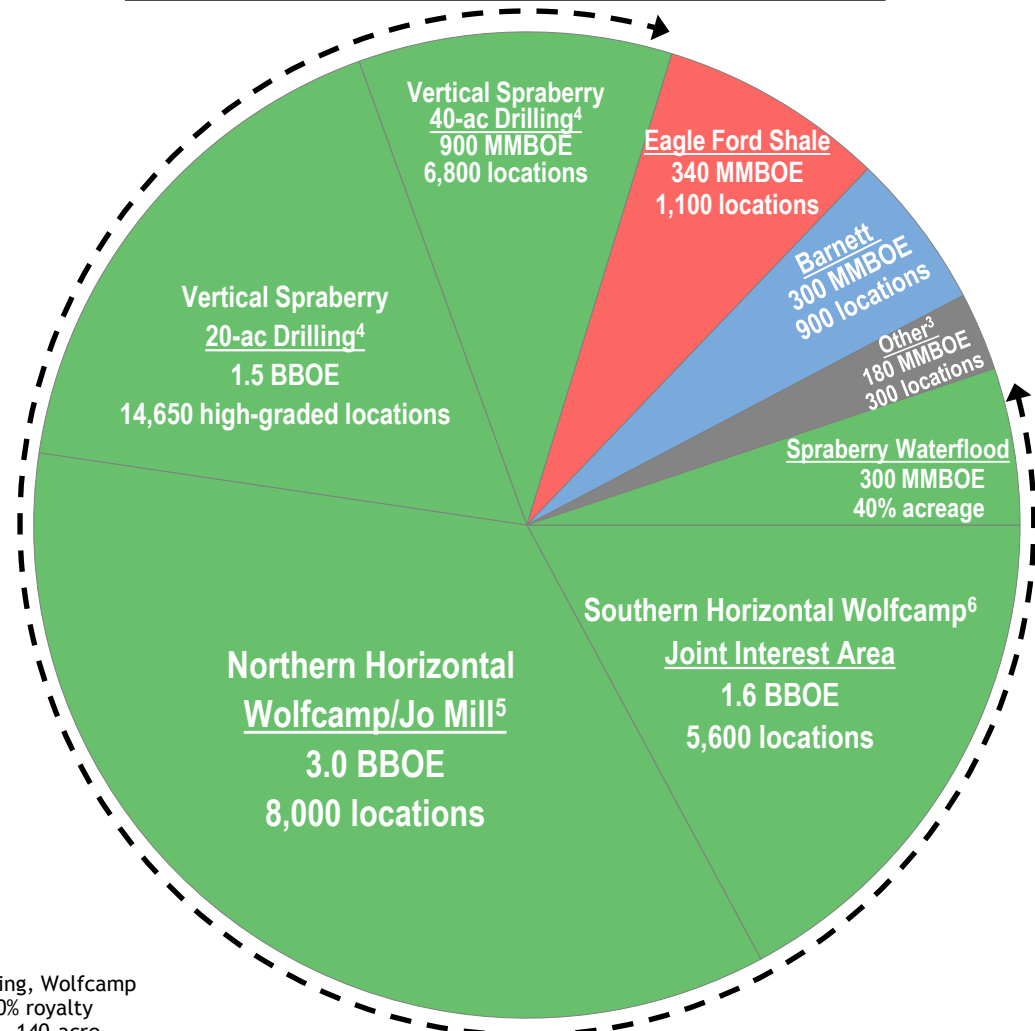
# Pioneer's Significant Proved Reserves and Resource Potential<sup>1</sup>

## Proved Reserves + Estimated Net Resource Potential of >9 BBOE and >40,000 Drilling Locations

12/31/12 Proved Reserves: 1.1 BBOE<sup>2</sup>



Additional Net Resource Potential: >8 BBOE



Permian >7 BBOE

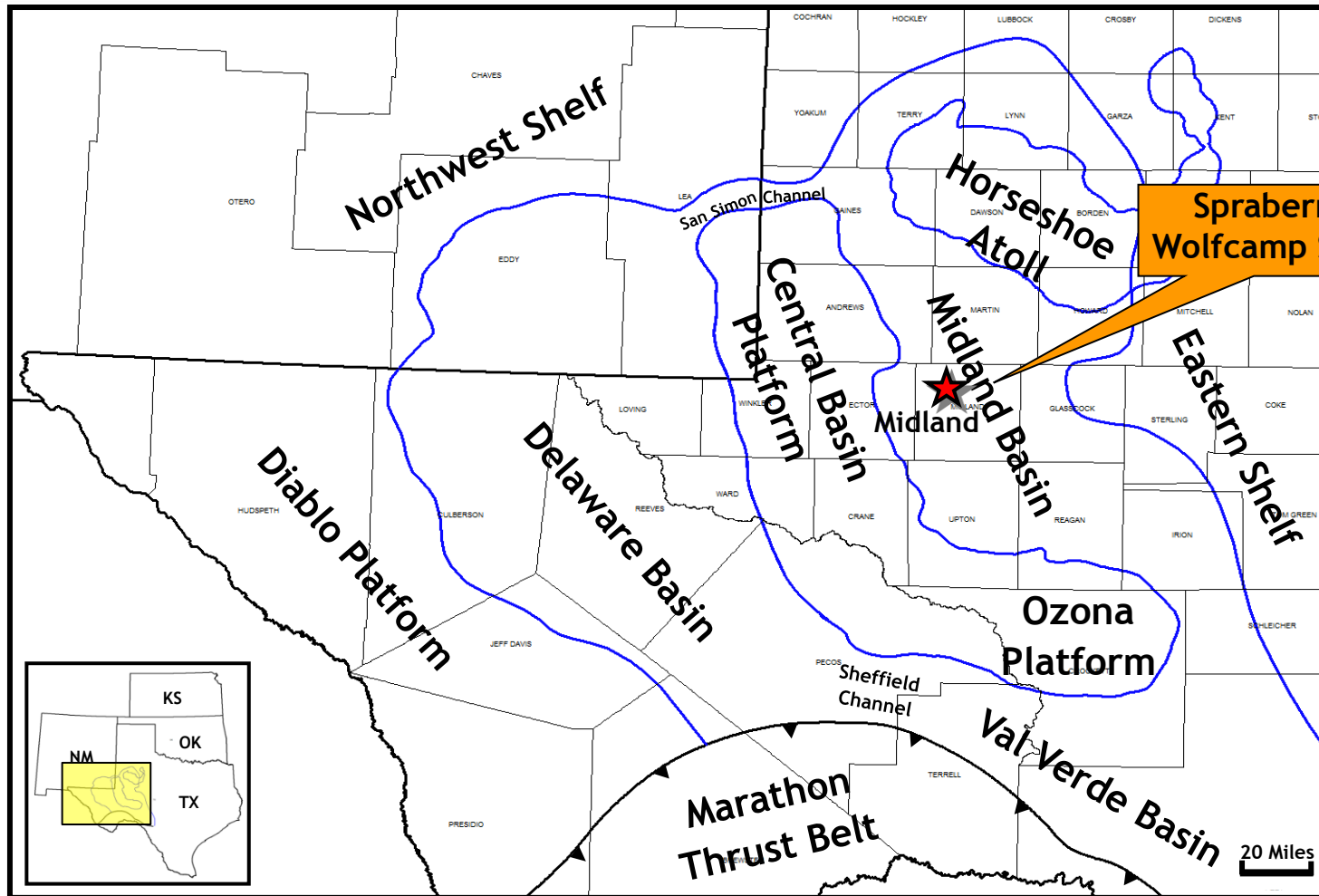
- 1) All drilling locations shown on a gross basis
- 2) SEC pricing of \$94.84/Bbl for oil and \$2.76/MMBtu for gas (NYMEX)
- 3) Primarily reflects Alaska, Raton and South Texas
- 4) Includes vertical well potential from Wolfcamp and deeper intervals
- 5) Assumes average EUR of 500 MBOE per well, >600,000 gross acres, 140-acre spacing, Wolfcamp A, B & D and Jo Mill intervals (excludes Spraberry Shale interval potential) and 20% royalty
- 6) Assumes average EUR of 575 MBOE per well, 5,600 locations, 207,000 net acres, 140-acre spacing, laterals in all intervals (A, B, C & D), 25% royalty and Pioneer's 60% share (reduced by ~1 BBOE associated with joint interest transaction)



# Midland Basin Geology and Resource Potential

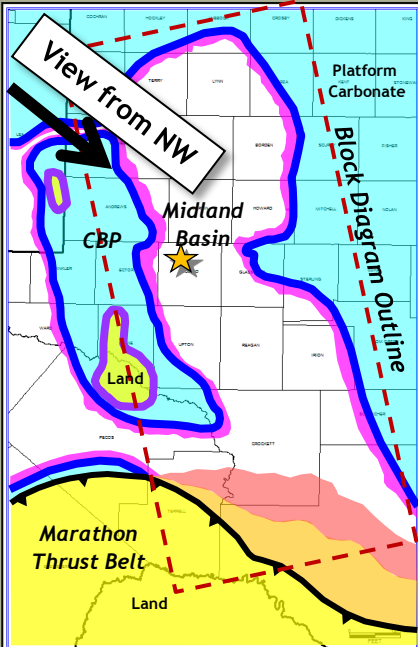
---

# Geologic Provinces of the Permian Basin

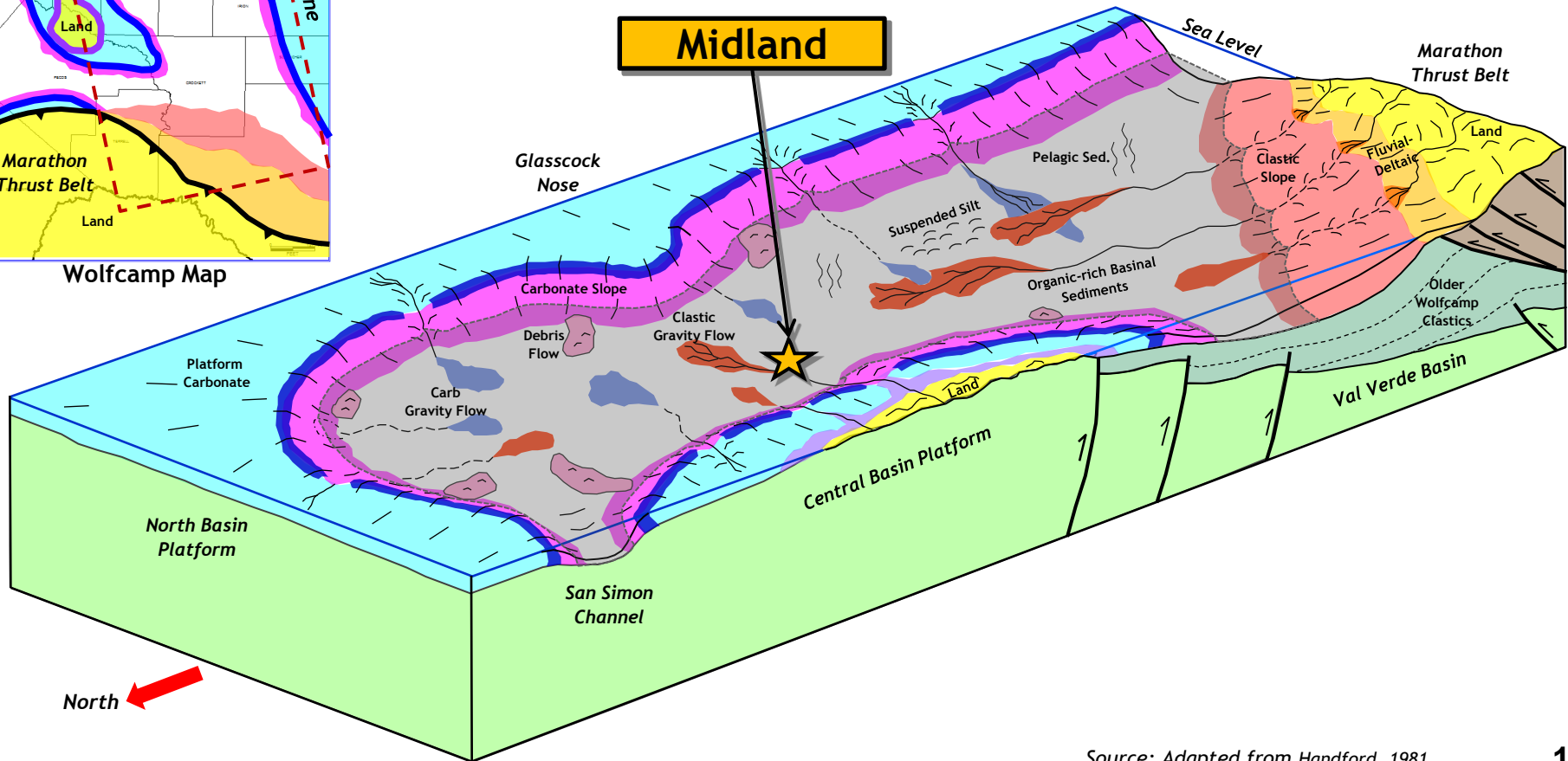


- Permian Basin is composed of multiple uplifts and basins that formed during the Pennsylvanian and early Permian ages
- Spraberry, Wolfcamp Shale and deeper intervals are located in the Midland Basin of the Permian Basin
- Spraberry/Wolfcamp field was discovered in 1943 with production commencing in 1949

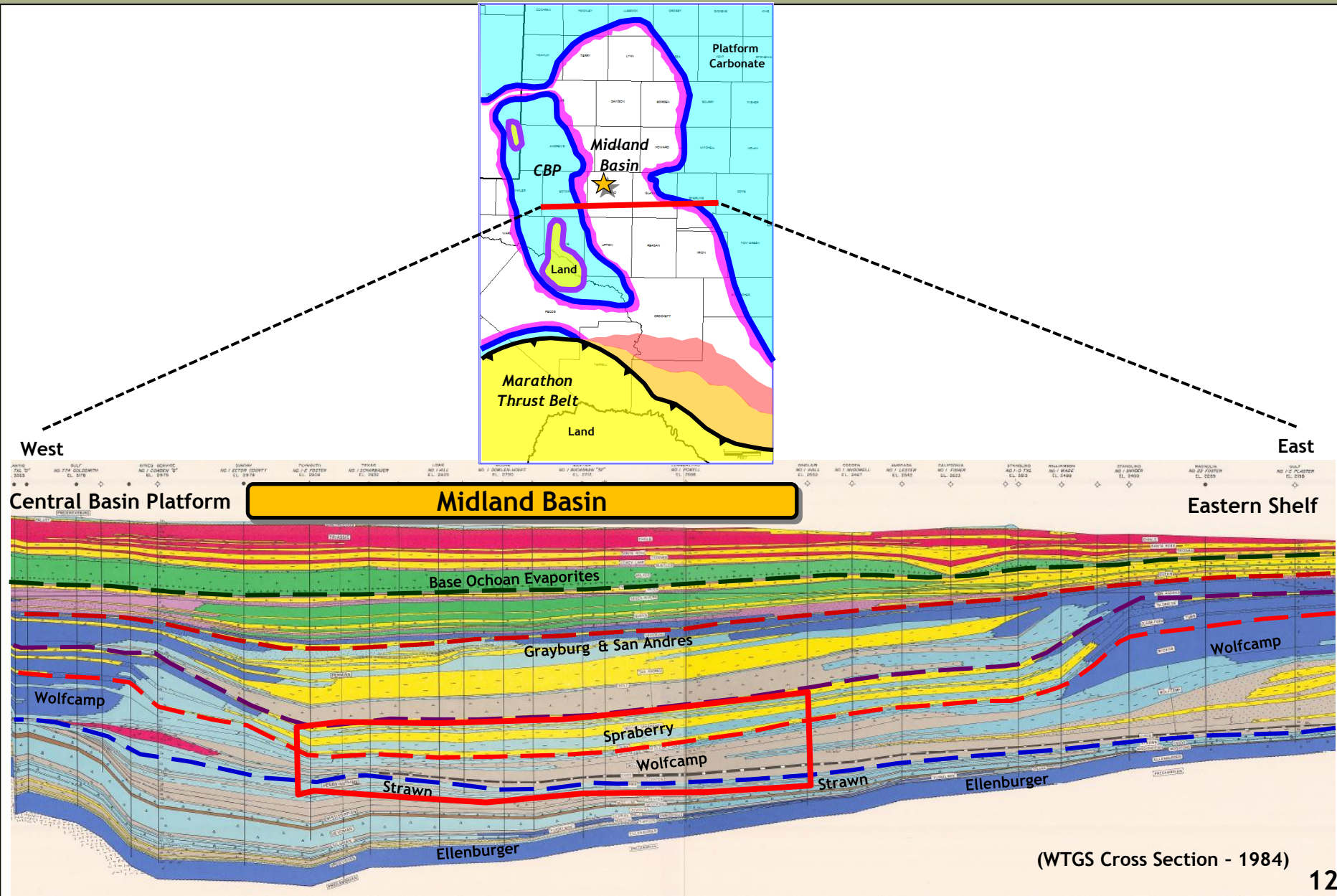
# Wolfcamp Depositional Model - Midland Basin



- |                              |                         |   |
|------------------------------|-------------------------|---|
| Platform Carbonate           | Land                    | Pelagic Sediments                       |
| Shelf Edge Carbonate         | Clastic Detrital        | Silt Cloud in Suspension                |
| Slope Sediments & Reef Talus | Fluvial - Deltaic       | Anaerobic Zone (Organic-rich Sediments) |
| Carbonate Debris Flows       | Delta                   |   |
| Carbonate Gravity Flows      | Clastic Slope Sediments |   |
| Basinal Sediments            | Clastic Gravity Flows   |   |



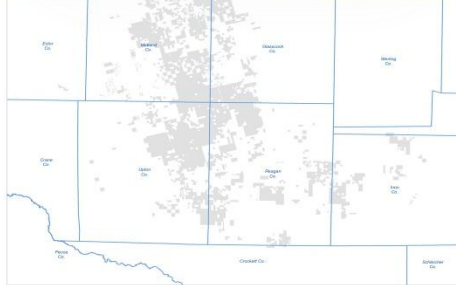
# Deposition of Midland Basin



# Progression of Spraberry/Wolfcamp Field Development<sup>1</sup>

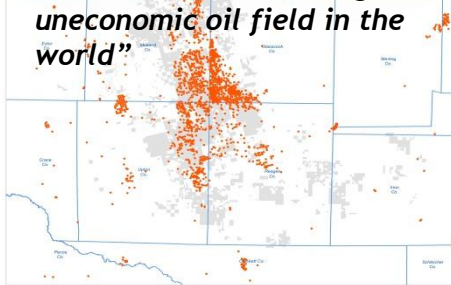
## 1940s - Discovery

- 1943 - Trace oil found from well drilled on the Abner Spraberry farm in Dawson County
- 1949 - Seaboard #2-D Lee drilled by Seaboard Oil Company IP'd at 319 BOPD



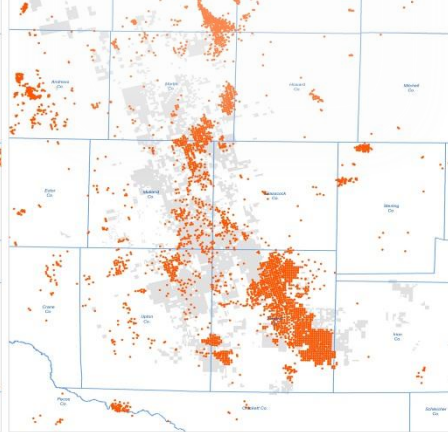
## 1950s - Early Development

- Major oil company development; principally Texaco, Phillips and Mobil
- 1951 - Time<sup>(2)</sup> magazine cites as most active oil field in U.S.
- 1953 - Considered "largest uneconomic oil field in the world"



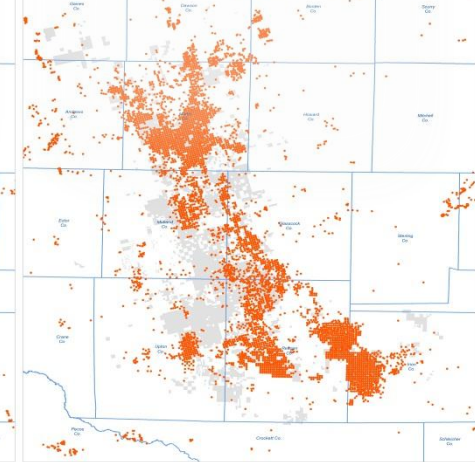
## 1960s - Field extension

- Continued development by Majors with a few minor Independents



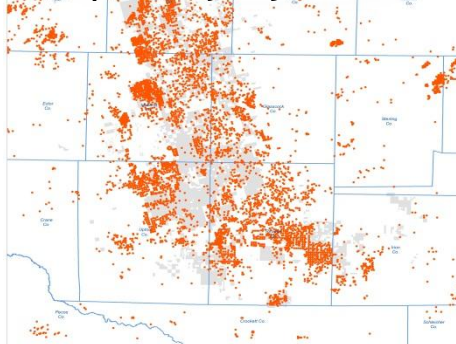
## 1970s - Dramatic expansion

- Continued development by Majors and Independents



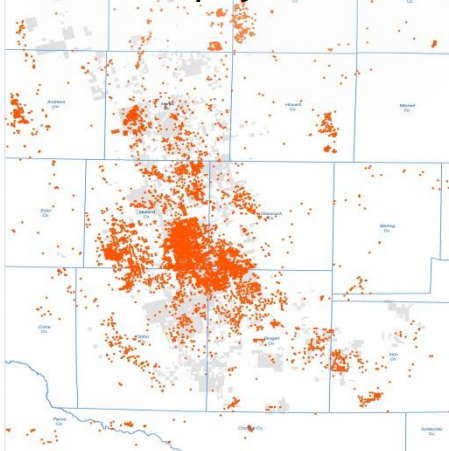
## 1980s - Expansion & Infill

- Independents including Parker & Parsley (Pioneer's predecessor Company) become large players; less emphasis by Majors



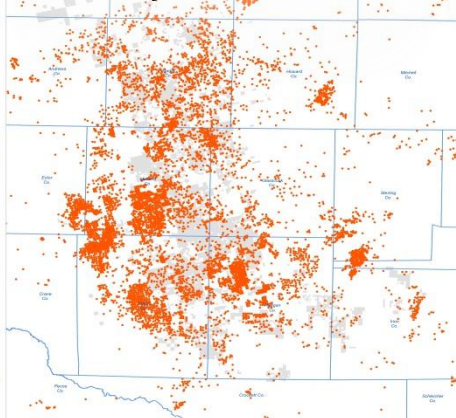
## 1990s - Infill and efficiency

- Independents become the dominant player



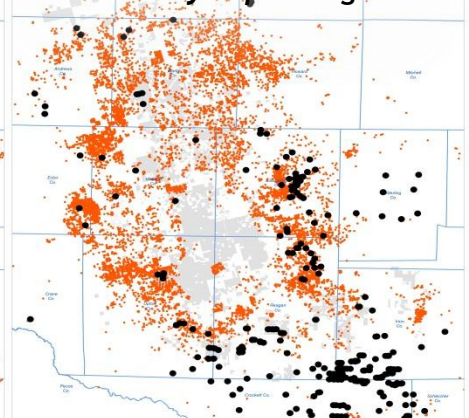
## 2000s - Infill and efficiency

- Independents continue to dominate the landscape driven by Pioneer



## 2010s - Deeper and horizontals

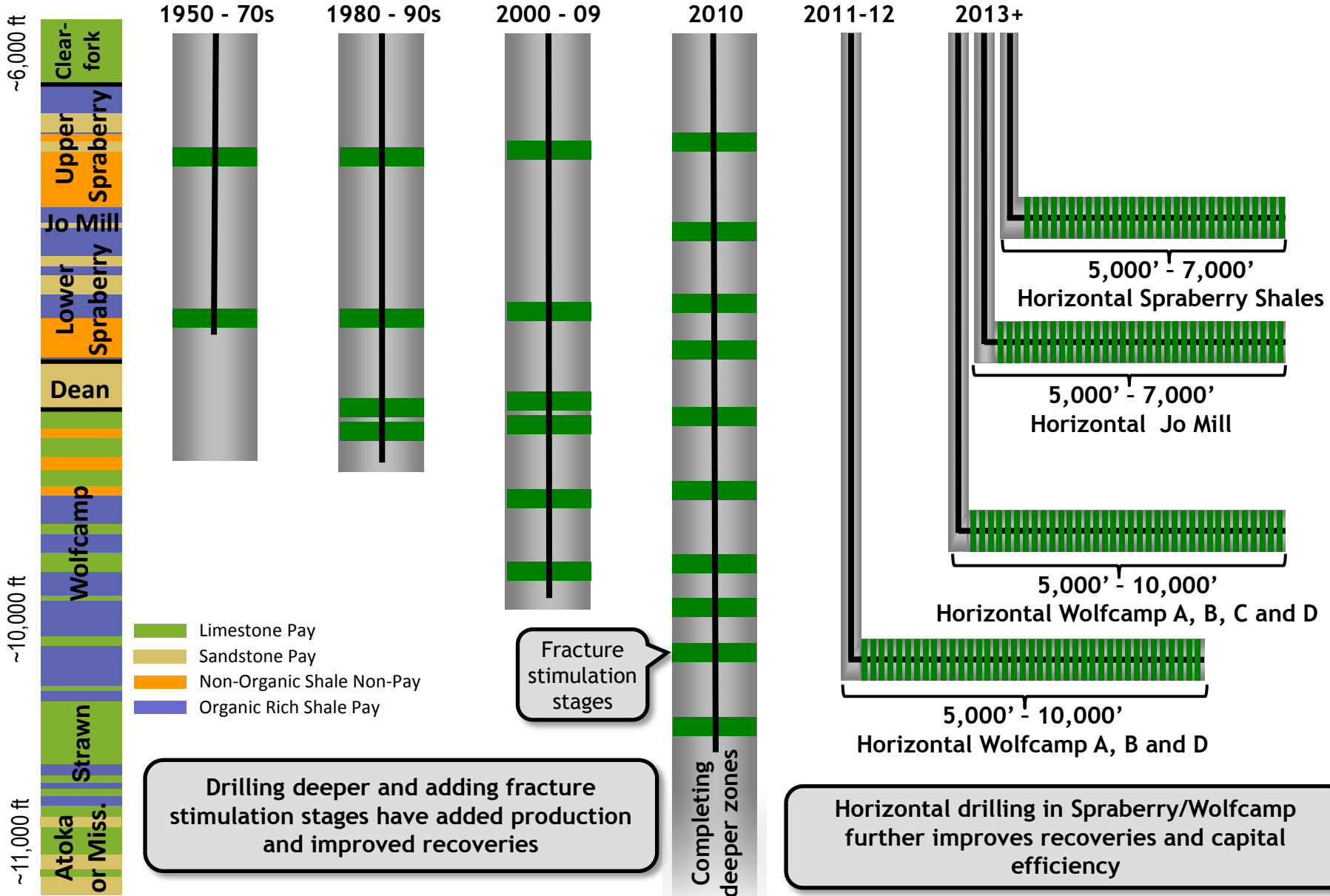
- Independents lead the charge going deeper; Horizontal oil shale activity expanding



1) Source: IHS Energy

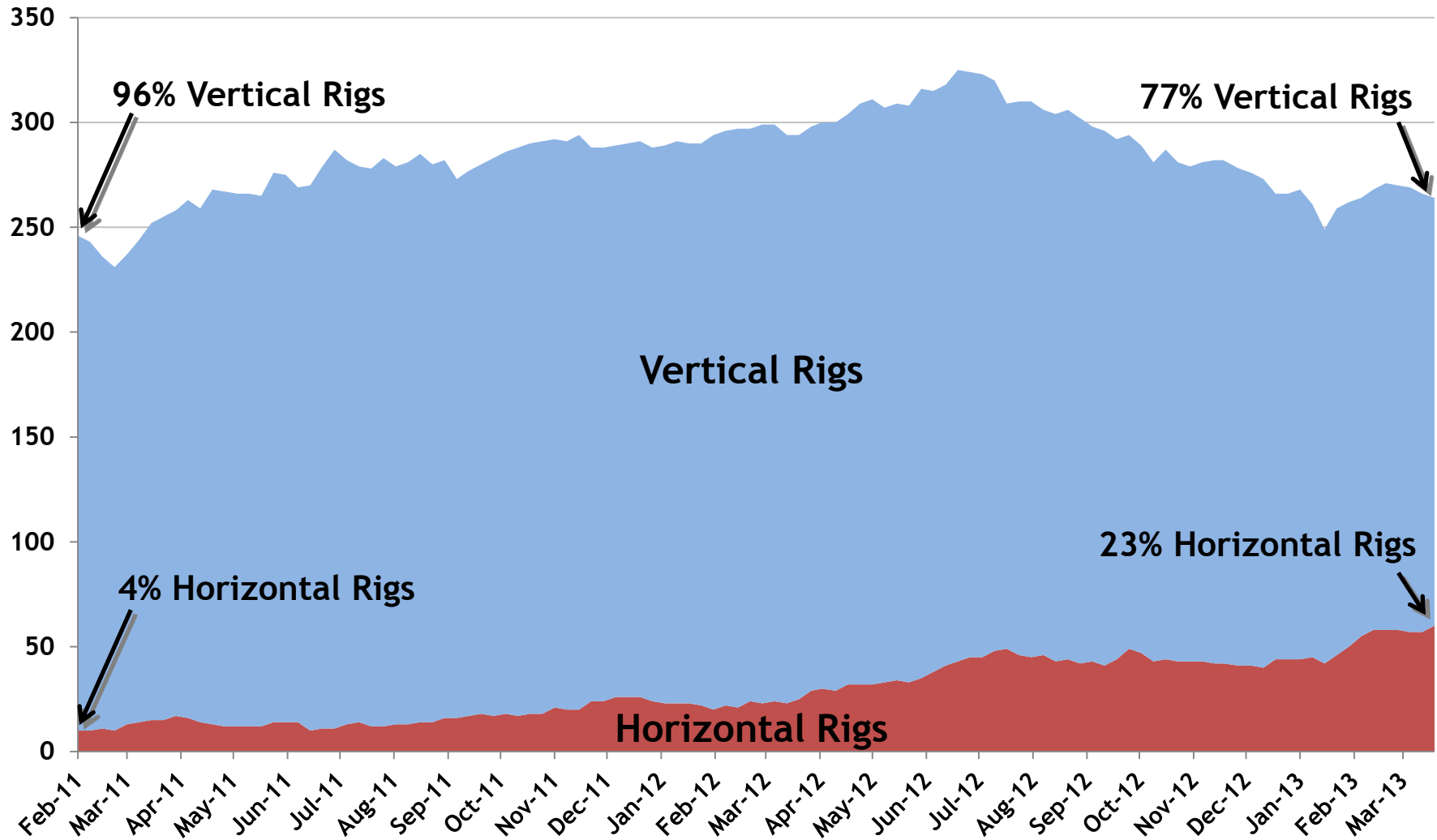
2) October 8, 1951. OIL: The Spraberry Trend, retrieved from <http://www.time.com/time/magazine/article/0,9171,859404,00.html>

# History of Spraberry/Wolfcamp Completions

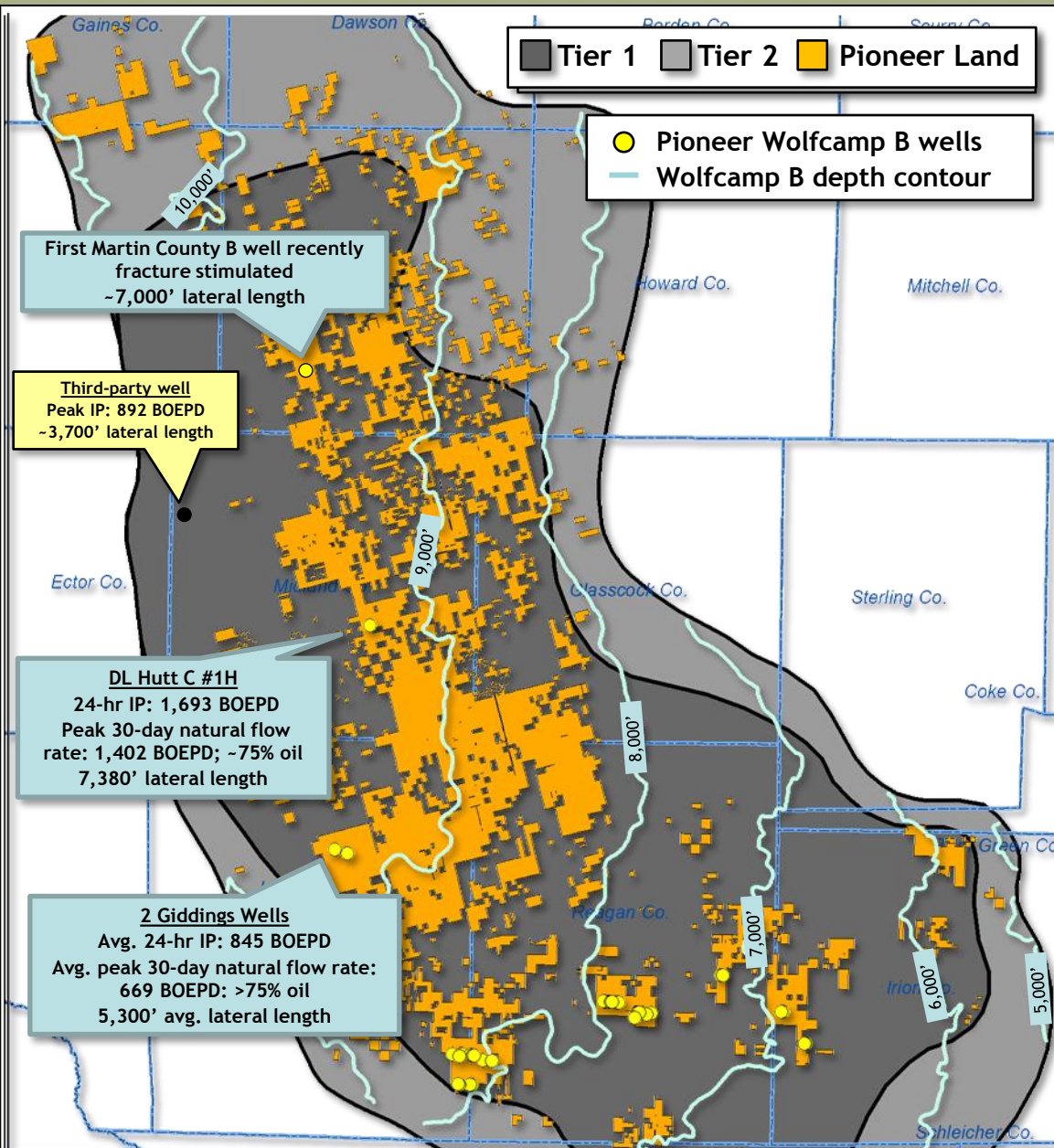


# Spraberry/Wolfcamp Rig Count

Counties: Andrews, Borden, Crockett, Dawson, Ector, Gaines, Glasscock, Howard, Irion, Martin, Midland, Mitchell, Reagan, Schleicher, Scurry, Sterling, Tom Green and Upton



# Wolfcamp B Interval Prospectivity Map



- Tier 1 is highest prospectivity acreage, as determined by several geologic properties, including:
  - Original oil in place (OOIP)
  - Kerogen content
  - Thermal maturity
  - Porosity
  - Brittle mineral fraction (fracability, low clay content)

- Geologic maps based on:
  - >70,000 logs
  - >1,400 square miles of 3-D seismic
  - >4,000 feet of core

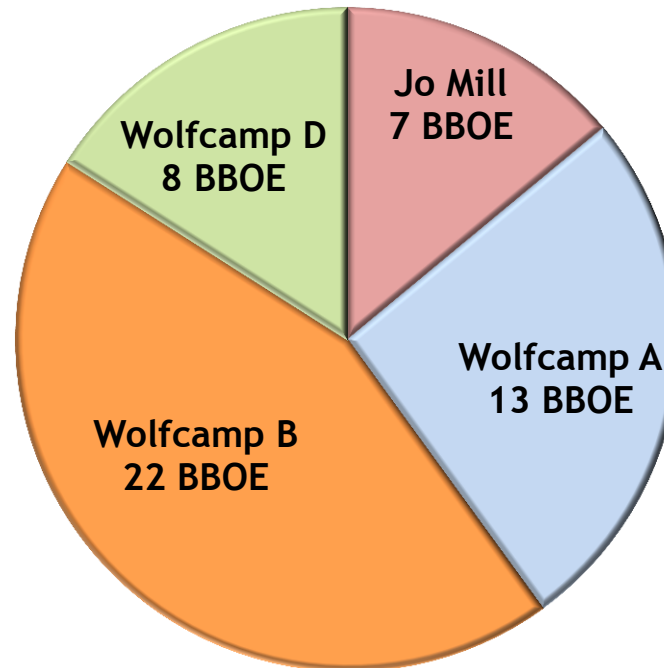
## Industry Wolfcamp B Prospectivity

- 4.8 MM risked acres (Upper B and Lower B)
- >34,000 potential well locations on 140-acre spacing
- 450 MBOE to 1 MMBOE EUR per well

**~22 BBOE Resource Potential**

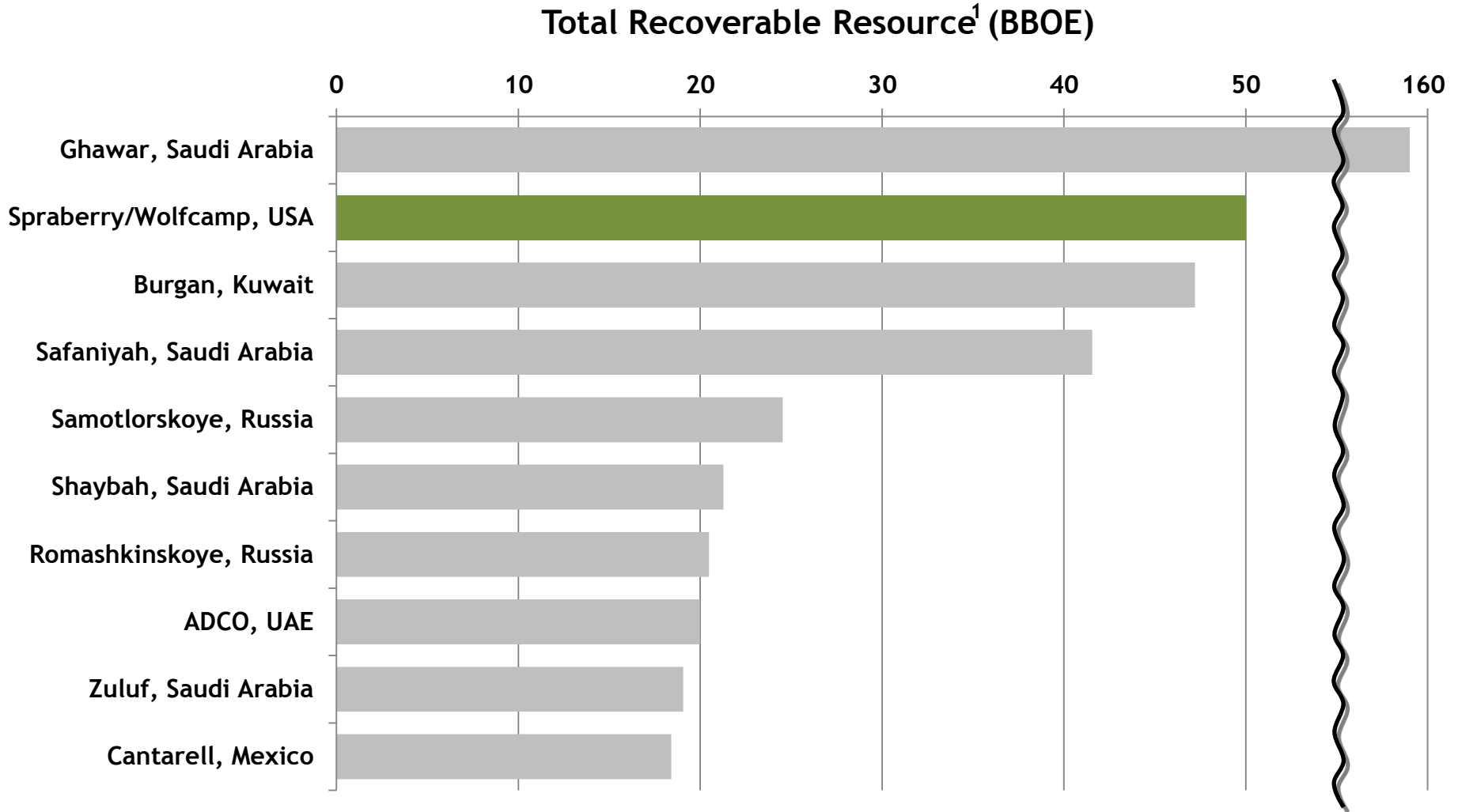


## 50 BBOE Recoverable Resource Potential by Industry Midland Basin Wolfcamp and Jo Mill Shales



- 50 BBOE recoverable resource potential by industry in four shale intervals where successful horizontal wells have been drilled
- Additional horizontal potential in two more Spraberry intervals, Strawn, Atoka and Barnett/Woodford intervals
- Assumes 140-acre spacing; down-spacing potential exists

# Largest Oil Fields Worldwide

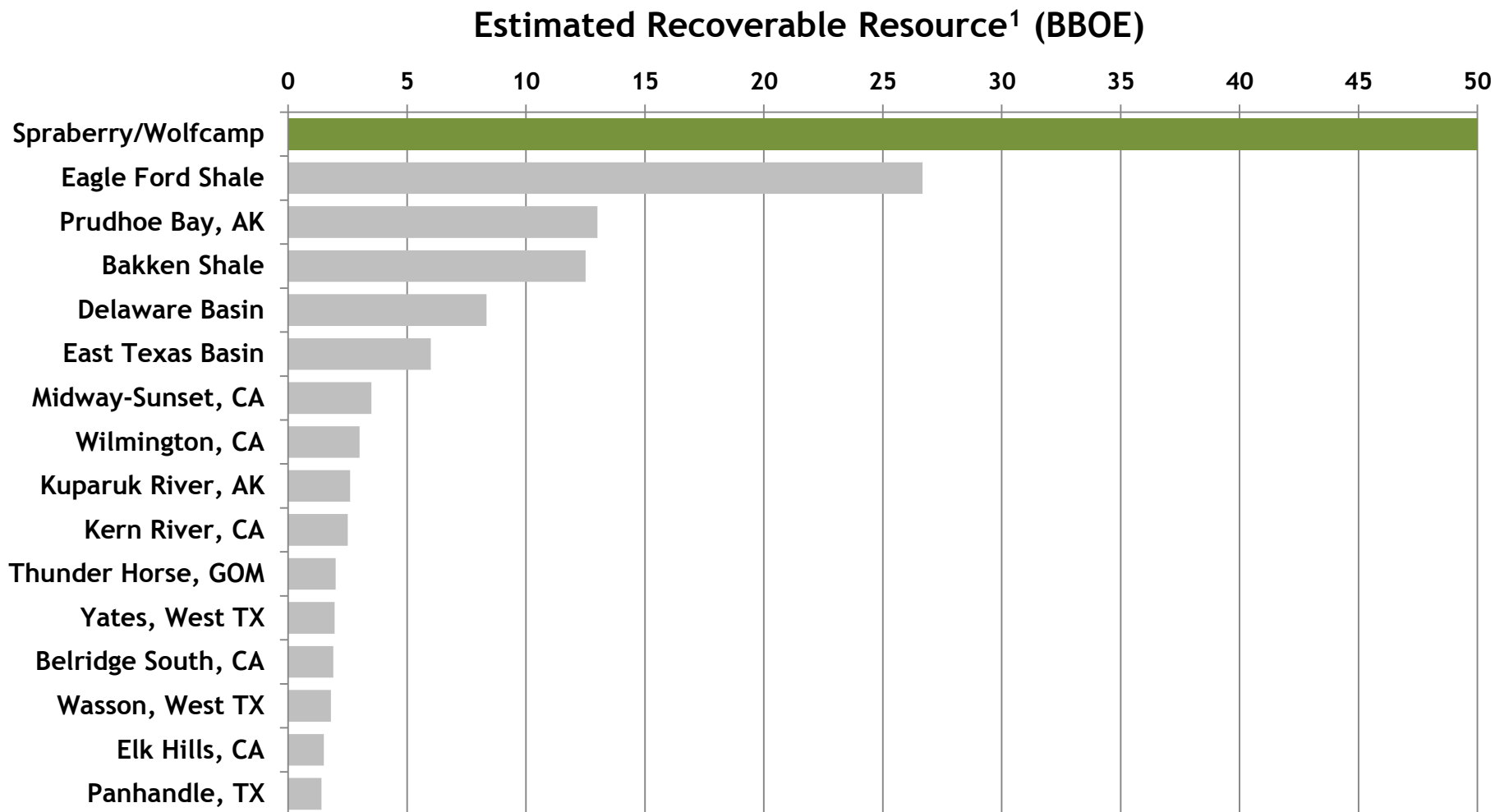


**Spraberry/Wolfcamp is the 2<sup>nd</sup> largest oil field in the world**

1) Total recoverable reserves includes oil and gas for all fields

Source: Wood Mackenzie for international fields; Spraberry/Wolfcamp from Pioneer

# Largest U.S. Oil Fields



**Spraberry/Wolfcamp is the largest oil field in the U.S.**

Source: DOE, EIA, ITG and other sources

1) Cumulative production + estimated recoverable resource

# Wolfcamp Comparison to Other Major U.S. Oil Shale Plays

## Major U.S. Oil Shale Play Characteristics

Attribute	Units	Wolfcamp Shale <sup>1</sup>	Eagle Ford <sup>2</sup> (Oil Window)	Bakken <sup>3</sup>
Age		Permian	Cretaceous	Devonian/Mississippian
Basin		Midland	South Texas	Williston
TVD Depth	ft	5,500 - 11,000	7,500 - 11,000	9,000 - 11,000
Thickness	ft	1,500 - 2,600	50 - 350	25 - 125
OOIP/Section	MMBO	80 - 220	30 - 90	10 - 20
Porosity	%	2 - 10	4 - 11	5 - 8
Quartz	%	20 - 50	10 - 25	30 - 60
Carbonate	%	10 - 60	60 - 75	30 - 80
Clay	%	10 - 45	10 - 40	25
TOC	%	2 - 6	1 - 7	2 - 18
Permeability	nd	10 - 3,000	40 - 1,300	50,000 - 500,000
Pressure Gradient	psi/ft	0.55 - 0.70	0.65 - 0.70	0.43 - 0.75
Recovery Factor	%	3 - 15	3 - 10	8 - 15

**Wolfcamp geology compares favorably to other major oil shale plays**

1) Pioneer internal research (modified according to recent core and petrophysical data); multiple intervals

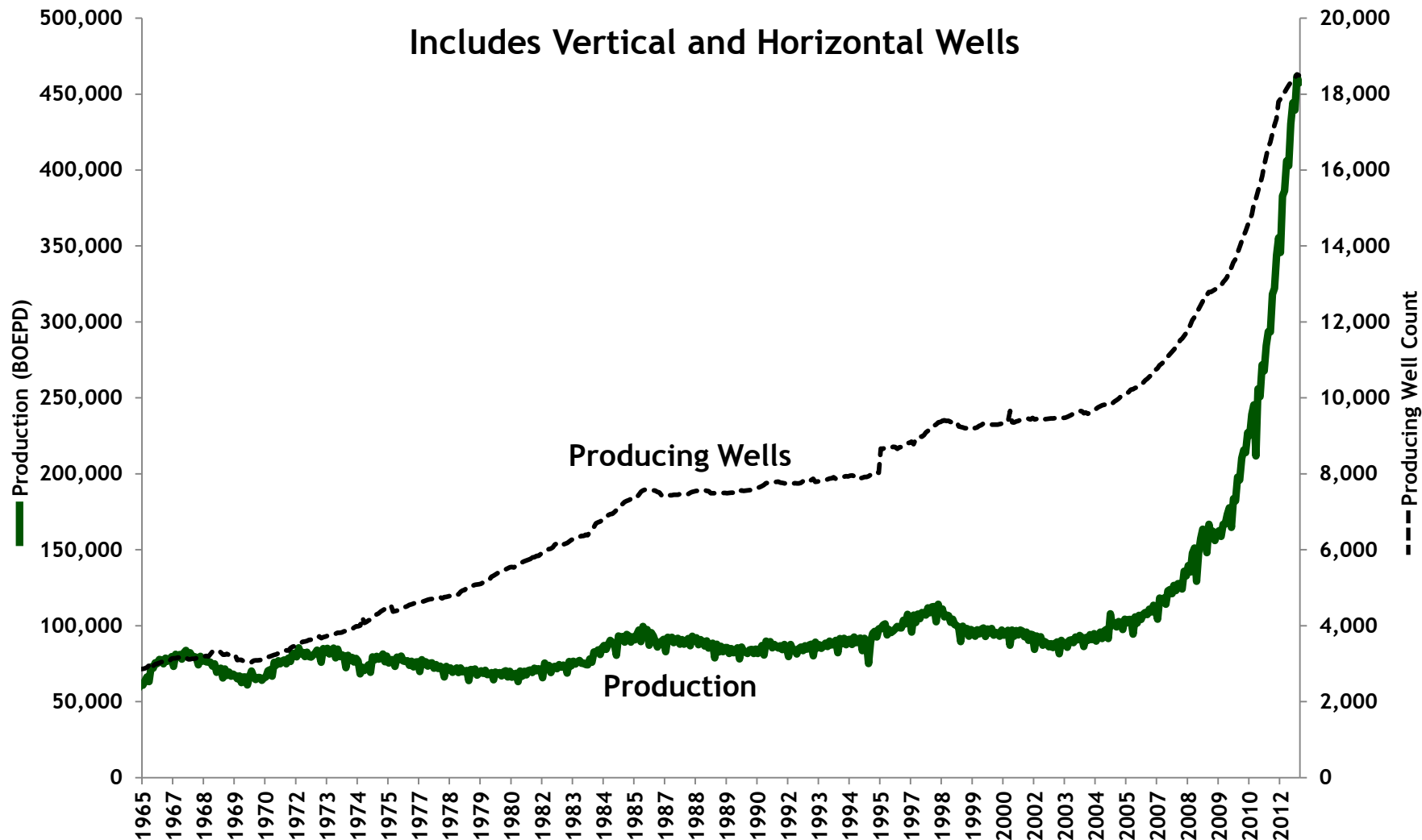
2) EOG Analyst Conference April 2010

3) Tudor, Pickering, Holt, "The Bakken Momentum Continues" November 2011, Hart Energy Bakken Playbooks 2008 and 2010, Jarvie - AAPG Section Meeting 2008

# Potential Spraberry/Midland Growth Profile

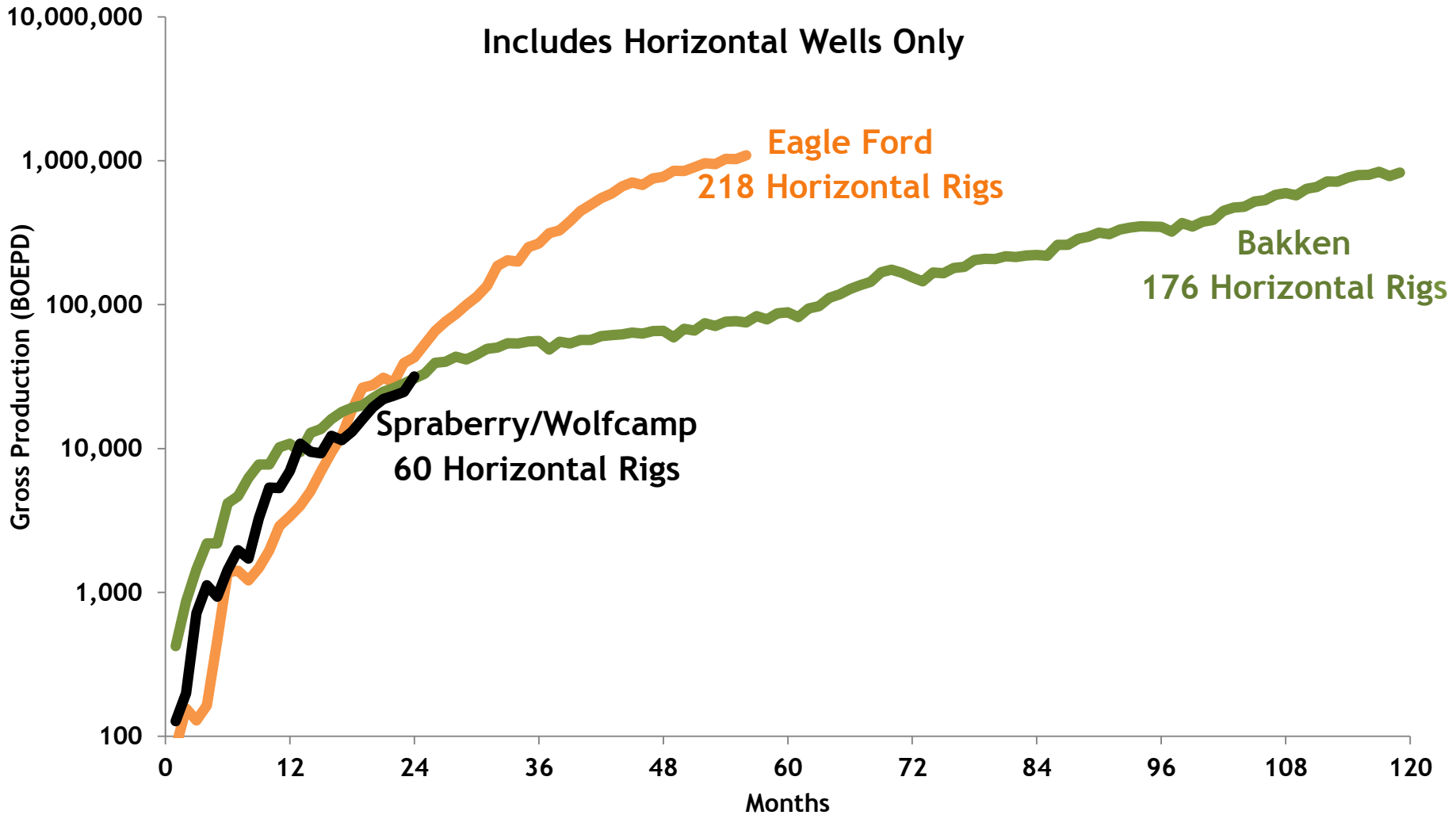
---

# Spraberry/Wolfcamp Production History



- From 2009 to 2012, production growth primarily attributable to increased vertical activity
- Post 2012, production growth expected to be driven by horizontal activity

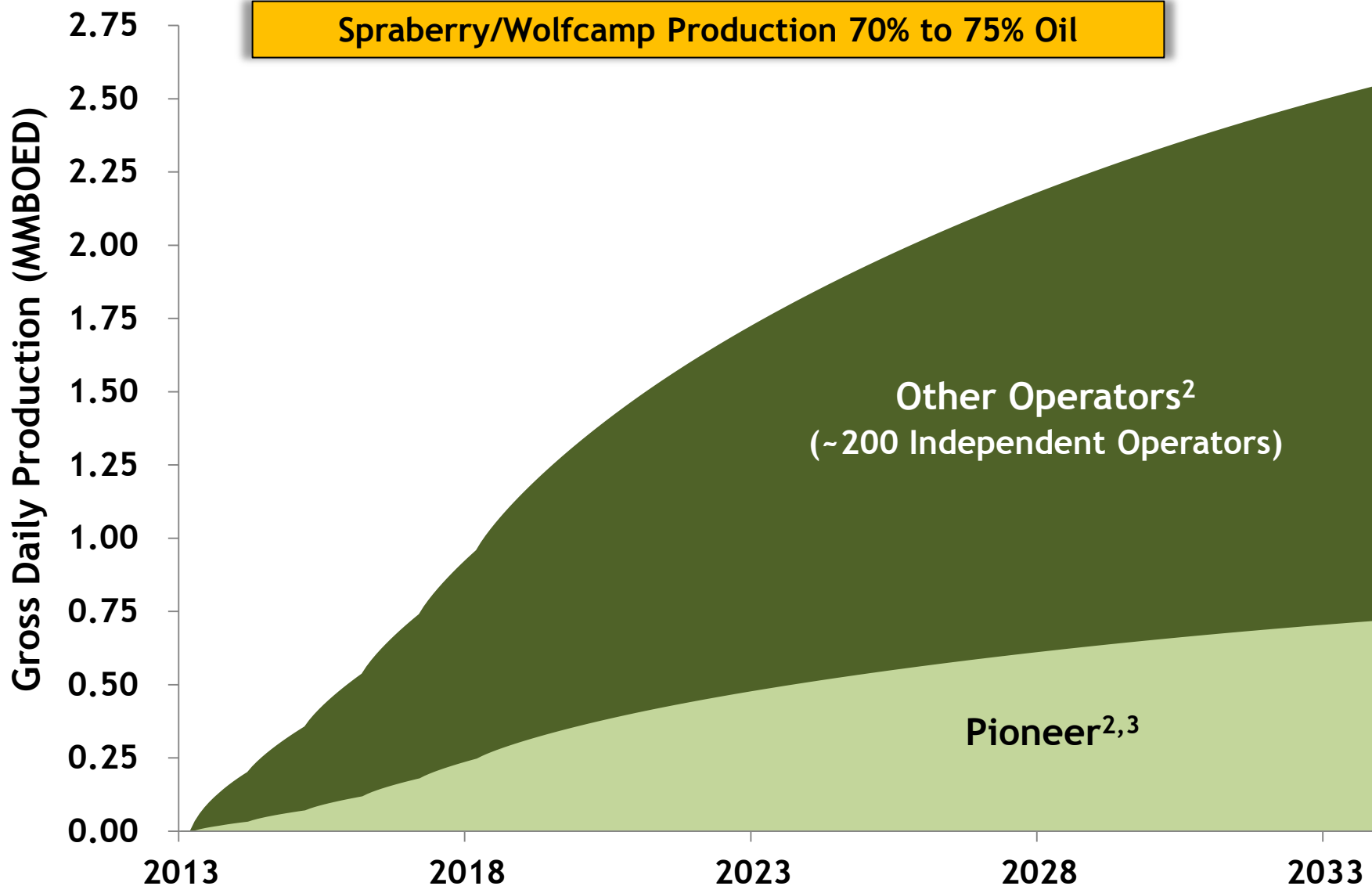
# Production Growth Profiles For 3 Largest U.S. Oil Shale Plays



**Spraberry/Wolfcamp horizontal growth trajectory similar to Bakken and Eagle Ford**

Note: Production data is from IHS and represents incremental production for the play beginning when horizontal drilling activity began in earnest; Rig count data from Baker Hughes as of 3/22/13 for selected counties identified on slide 9 for Spraberry/Wolfcamp; Initial month is November 2010 for Spraberry/Wolfcamp, April 2008 for Eagle Ford and January 2003 for Bakken

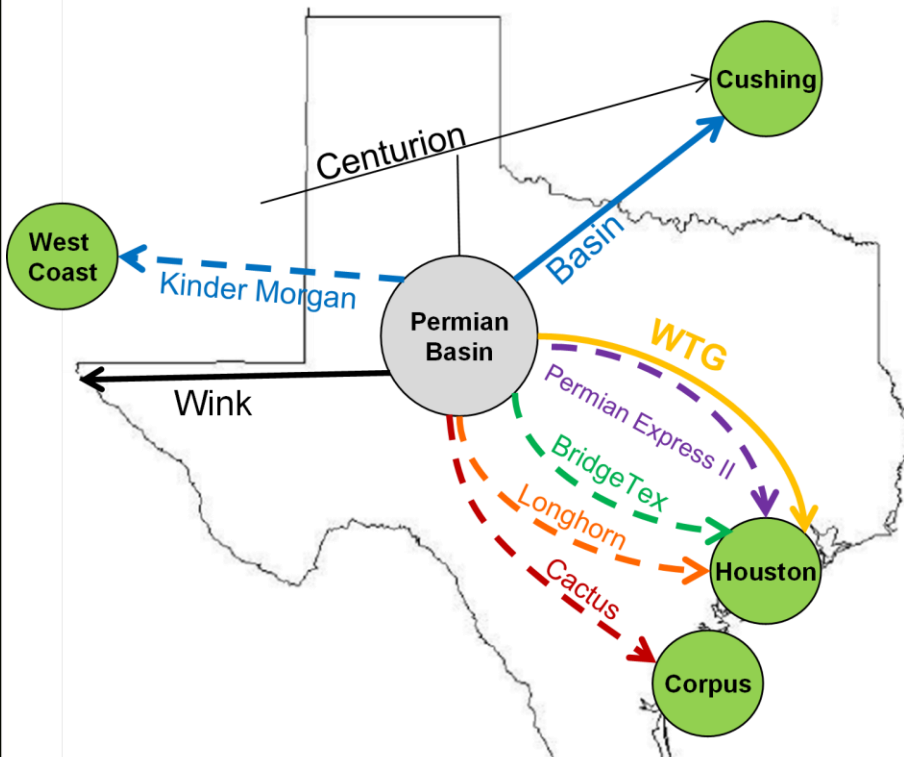
# Spraberry/Wolfcamp Horizontal Drilling Production Growth Profile<sup>1</sup>



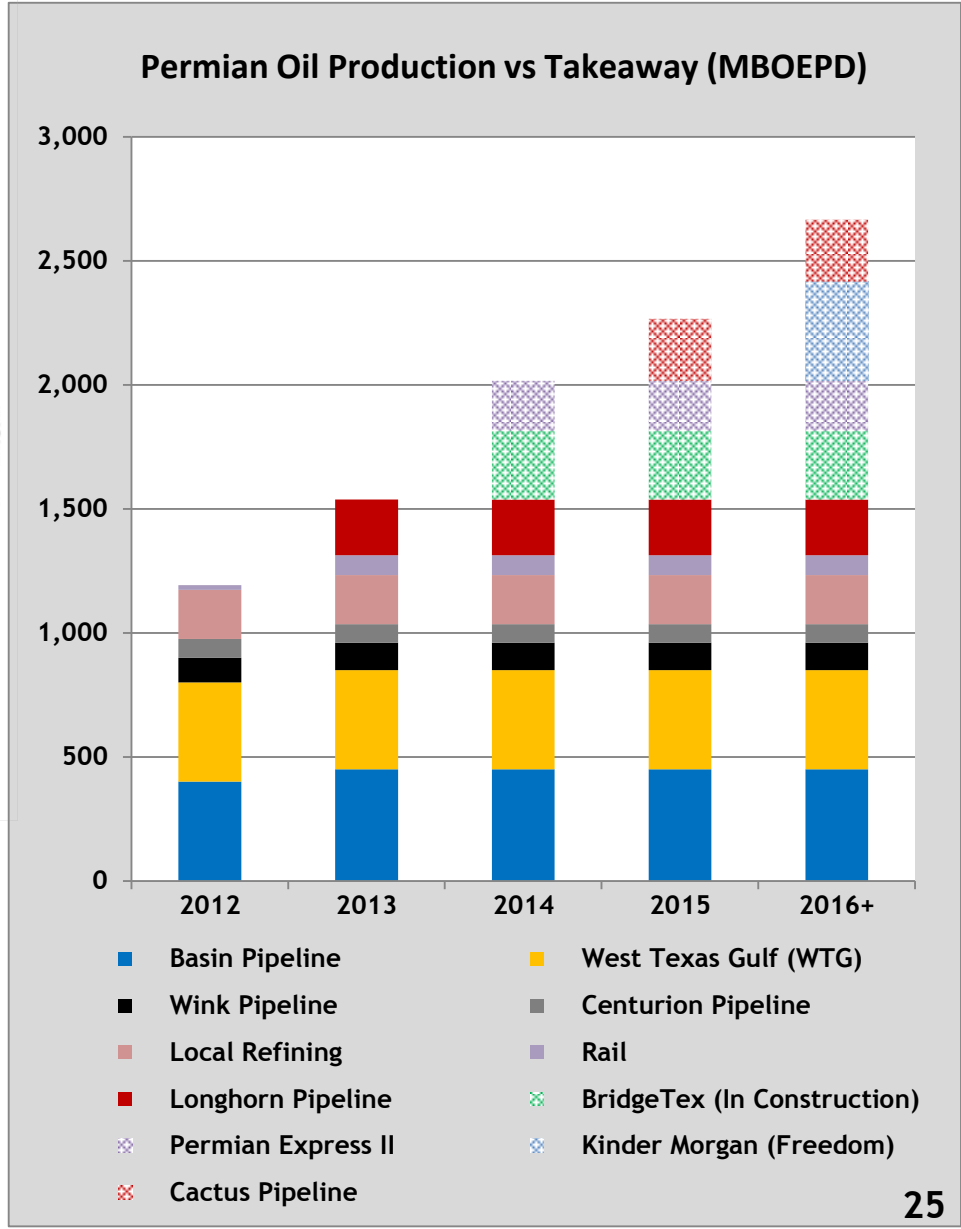
- 1) Potential impediments to achieving this forecast include oil price, capital, infrastructure (Midland and oil field) and people
- 2) Assumes ramp from 60 horizontal rigs in 2013 (~10 Pioneer rigs) to ~170 rigs per year in 2018 and thereafter (~50 Pioneer rigs)
- 3) Includes royalties and joint interest partner's share of production in southern Wolfcamp



# Permian Oil Production Takeaway Options



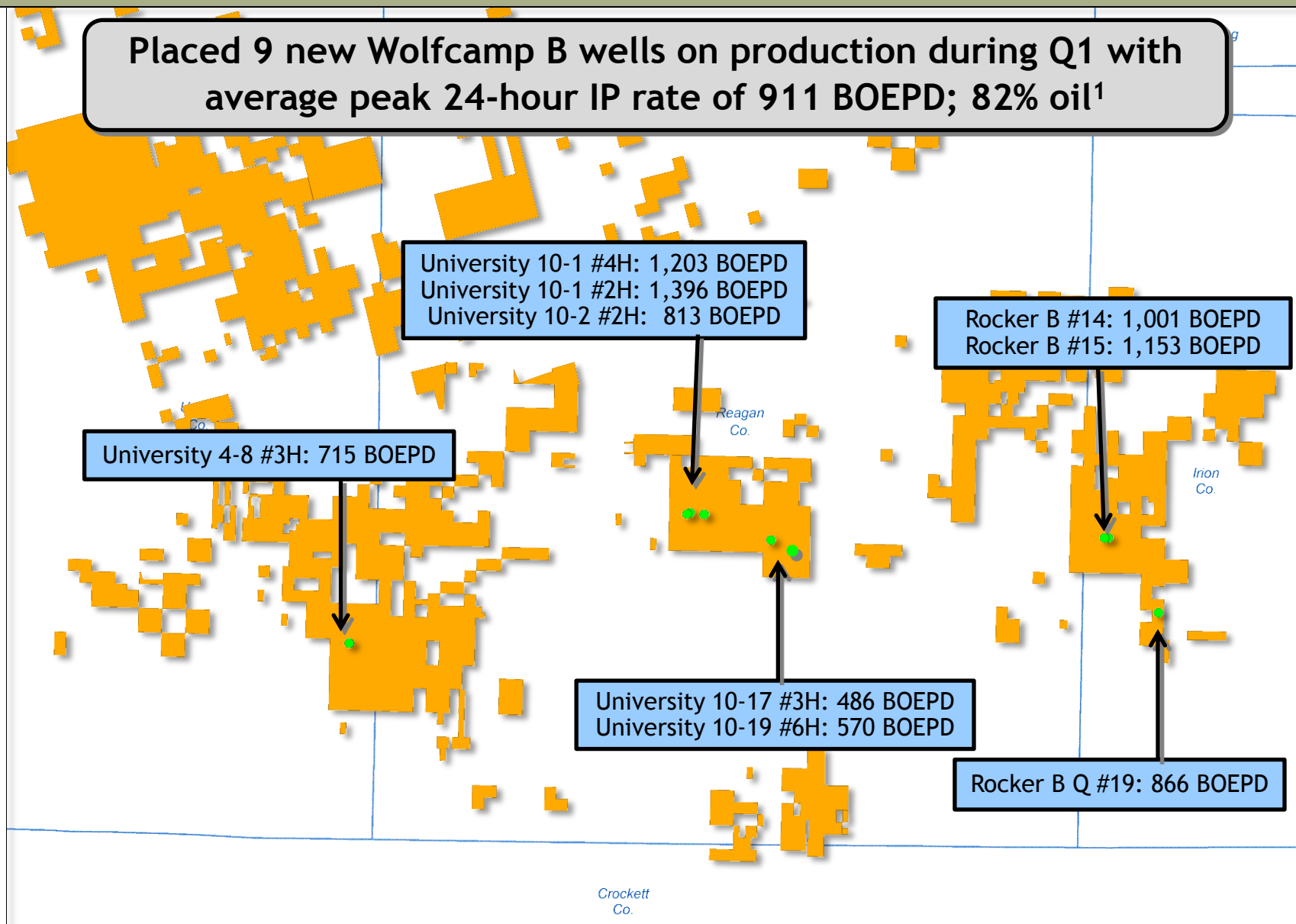
Permian Basin Crude Takeaway Capacity			
	Name	Capacity	Time Frame
Current	Basin	450,000	
	West Texas Gulf	400,000	
	Wink	120,000	
	Local Refinery	200,000	
	Rail	80,000	
	<b>Total Current</b>	<b>1,250,000</b>	
Planned	Longhorn	225,000	2Q-3Q 2013
	BridgeTex	278,000	2014
	Permian Express II	200,000	3Q-4Q 2014
	Cactus	250,000	3Q 2015
	Freedom	400,000	2016+



# **PXD's Southern Horizontal Wolfcamp Shale Joint Interest Area (Sinochem)**



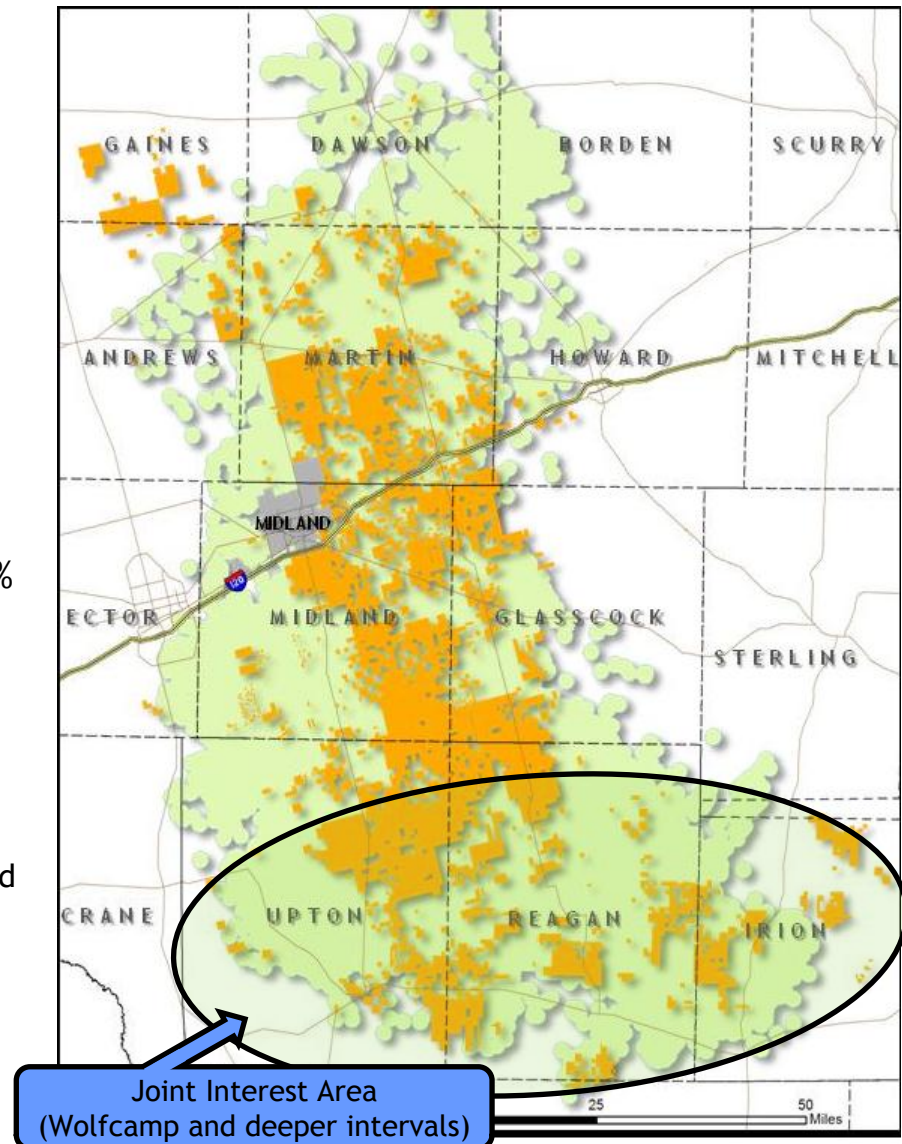
Placed 9 new Wolfcamp B wells on production during Q1 with average peak 24-hour IP rate of 911 BOEPD; 82% oil<sup>1</sup>



1) Lateral lengths average -7,100', except for University 10-1 #4H at -9,600'

# Southern Wolfcamp Joint Interest Area Drilling Program

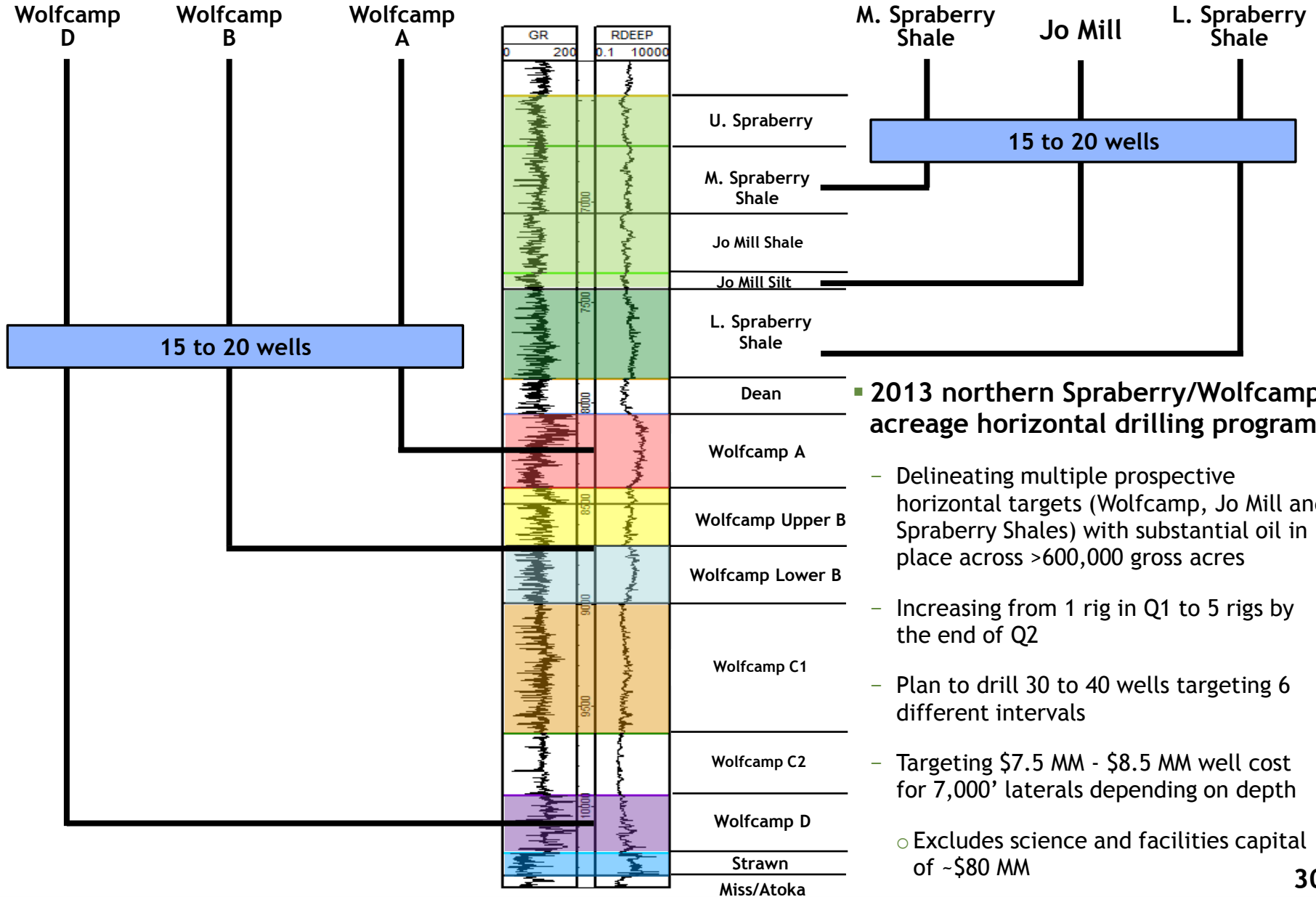
- **Currently running 7 rigs; expect to increase to 10 rigs in 2014 and 13 rigs in 2015**
  - Equates to 86 wells in 2013, 120 wells in 2014 and 165 wells in 2015
- **2013 drilling program continues to focus on delineating acreage**
  - Testing multiple Wolfcamp intervals
  - Targeting \$7.5 MM - \$8.0 MM gross development well cost for 8,300' lateral
  - Expect to drill >20 10,000' laterals in 2013; ~20% additional cost generates EUR increase of 40% - 60%
  - Expect ~70% pad drilling
  - Evaluating horizontal downspacing opportunities
  - Pumped 5 Wolfcamp B slickwater fracs through April; early results encouraging
    - Potential savings of up to \$1.0 MM/well compared to hybrid fracs
  - Expect gross science costs of ~\$20 MM
- **Drilling program for 2014 and beyond primarily focused on development drilling and accelerating production growth**



# **PXD's Northern Wolfcamp/Spraberry Horizontal Appraisal Program**



# Northern Spraberry/Wolfcamp Acreage - Pioneer's 2013 Drilling Plan



# Pioneer's Q2 Northern Spraberry/Wolfcamp Drilling Plan

- Initial rig drilled first two horizontal Wolfcamp Shale wells in Midland County

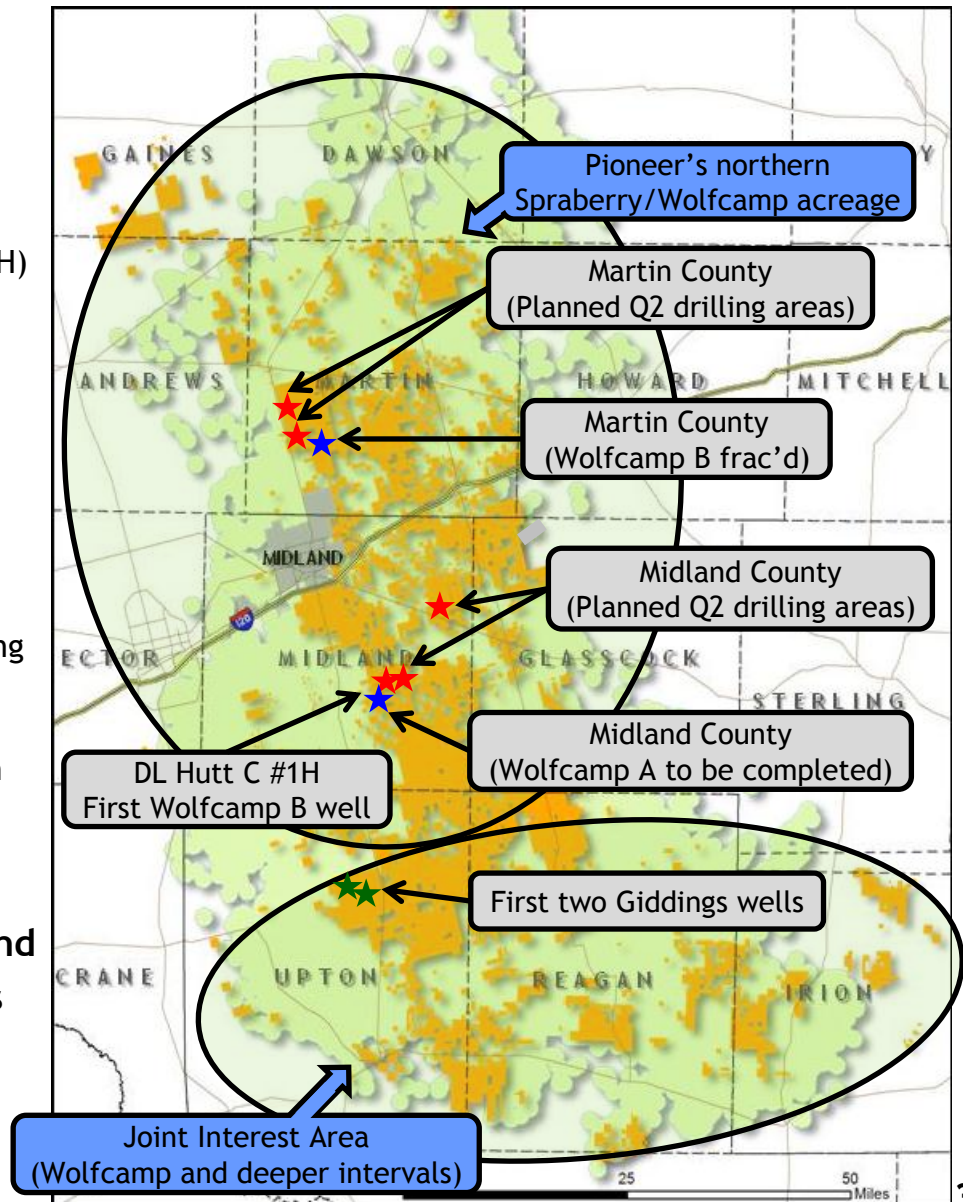
- ~25 miles north of highly successful Giddings horizontal Wolfcamp Shale wells
- First well completed in Wolfcamp B interval (DL Hutt C #1H)
- Second well expected to be completed in late May/early June in Wolfcamp A interval
- Rig moved to Martin County and drilled first Wolfcamp B well; recently fracture stimulated

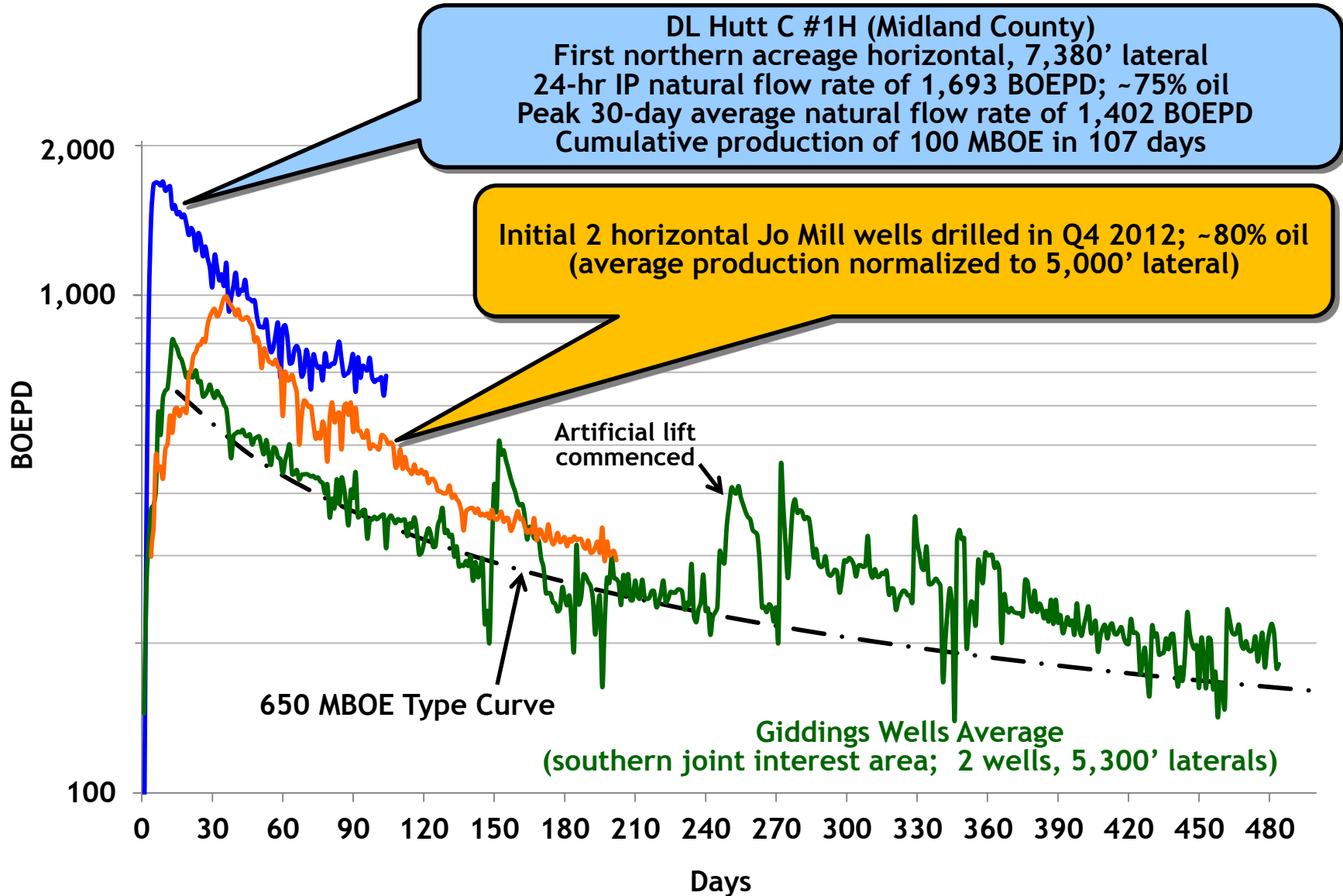
- Adding 4 horizontal rigs during Q2

- 3 rigs as planned and 1 additional rig to focus on developing the Hutt lease
- Capital for the incremental rig expected to be absorbed in existing 2013 drilling budget of \$2.75 billion

- 5-rig program will consist of 3 rigs focused on Wolfcamp Shales and 2 rigs focused on Jo Mill and Spraberry Shales in Midland and Martin counties

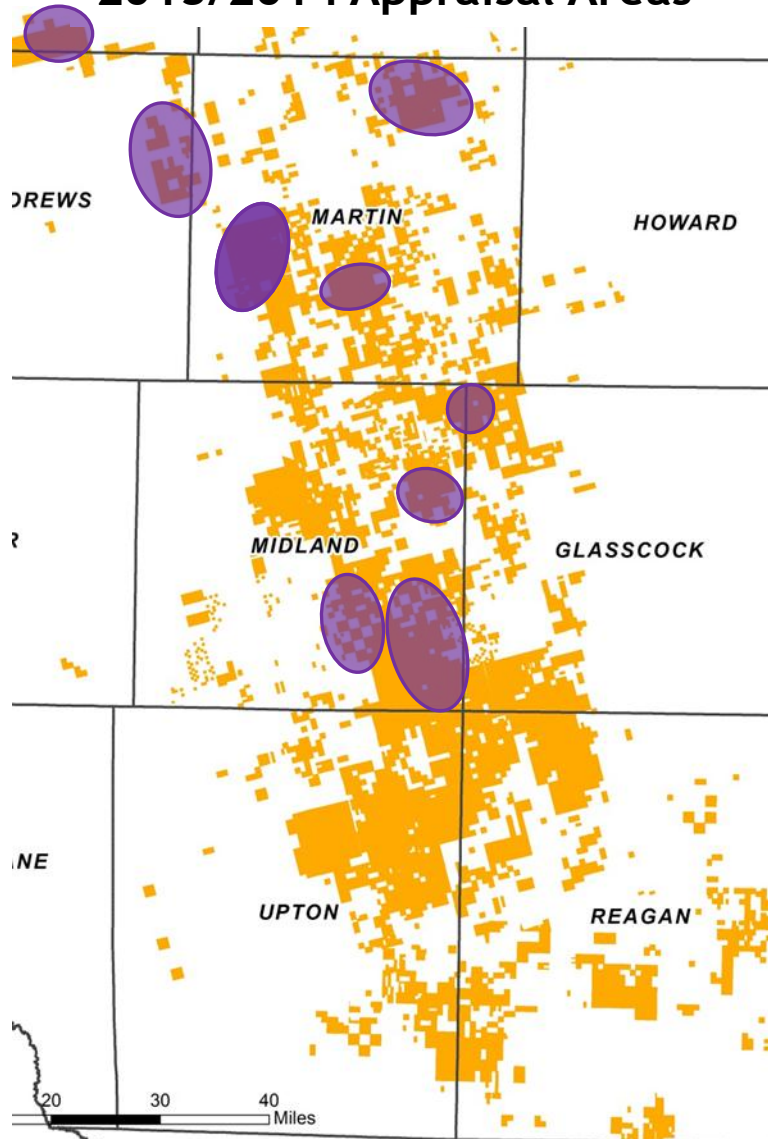
- Expect each rig to drill initial wells on 2-well pads to gain efficiencies; wells will be completed after second well on pad is drilled







## 2013/2014 Appraisal Areas



- **2013 drilling program expected to cost ~\$400 MM**
  - Appraise prospective acreage and confirm additional resource potential across 6 stacked intervals on >600,000 gross acres; totals >3 MM gross acres
    - Resource potential in Wolfcamp and Jo Mill intervals across northern Spraberry/Wolfcamp acreage estimated to be 3 BBOE
  - Deliver year-end 2013 horizontal production exit rate of 5 MBOEPD to 7 MBOEPD
  - Improve capital efficiency compared to vertical drilling
- **Expect to ramp up to 6 - 8 rigs during 2014 at a full-year cost of ~\$600 MM**
  - Continue appraisal program and development drilling
  - May also test horizontal drilling in deeper intervals below the Wolfcamp Shale

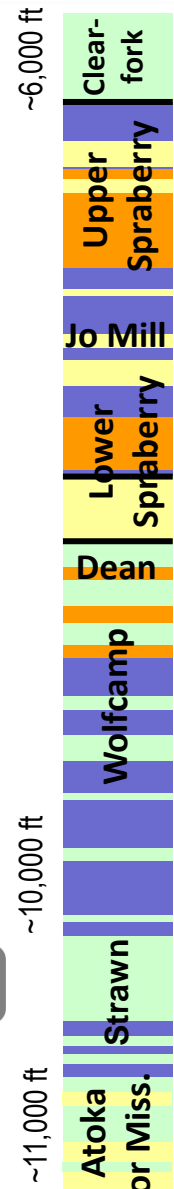
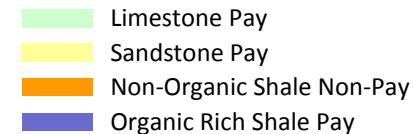
**Spending \$1 B over 2 years to confirm ~3 BBOE of resource potential and add substantial NAV**

# Spraberry Vertical Drilling Program

- Deeper drilling expected to account for 90% of 2013 vertical drilling program
- 2013 drilling program includes 15 vertical rigs that are forecast to drill ~300 wells
  - Required to meet continuous drilling obligations
- 15 rigs to 20 rigs required to keep vertical production flat
- Drilled 75 vertical wells in Q1; 130 vertical wells placed on production
  - Decreased frac bank by 55 vertical wells during Q1

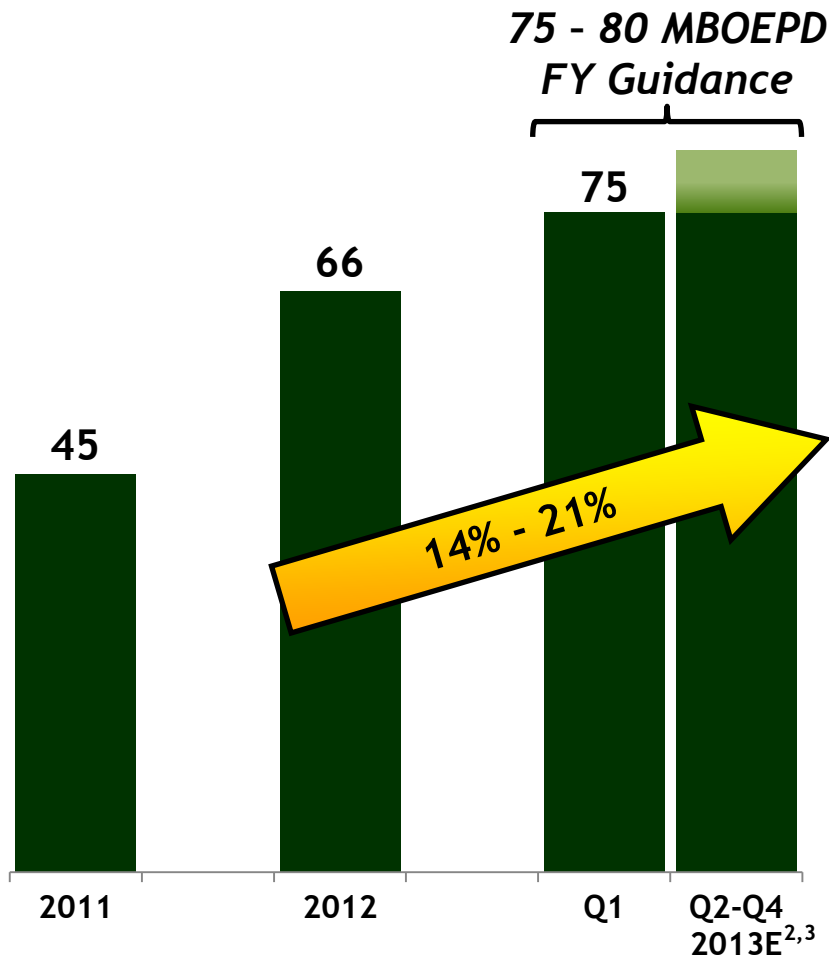
	Potential Incremental EUR (MBOE) <sup>1</sup>	Prospective PXD Acreage
Strawn	30	~85%
Atoka	50 - 70	40% - 50%
Mississippian	15 - 40	~20%

Deeper drilling provides potential to add up to 100 MBOE to a vertical Wolfcamp well EUR



1) Compares to average vertical well completed through the Lower Wolfcamp with an average EUR of 140 MBOE

## Spraberry/Wolfcamp Net Production<sup>1</sup> (MBOEPD)



- Q1 production benefited by ~2,000 BOEPD from reduction in vertical frac bank of 55 wells
- Q1 production negatively impacted by ~2,700 BOEPD due to reduced ethane recoveries resulting from Spraberry area gas processing facilities operating above capacity
- New gas processing capacity of 200 MMCFPD (Driver plant) came on line in mid-April, alleviating the ethane recovery issue
- Expect horizontal production to increase from an average of 2 MBOEPD in 2012 to 11 MBOEPD to 14 MBOEPD in 2013<sup>2</sup>
  - Q1 horizontal production of ~5,000 BOEPD

1) Includes production from Strawn, Atoka and Mississippian intervals in Spraberry vertical wells and horizontal Wolfcamp Shale, Jo Mill and Spraberry Shale wells  
 2) Production reduced after June 1<sup>st</sup> to reflect the divested volumes associated with the southern Wolfcamp joint interest transaction  
 3) Assumes no ethane rejected into the gas stream due to low ethane prices

# **PXD and Midland Basin Takeaways**



- Spraberry/Wolfcamp production has the potential to reach 2.5 million BOEPD with 70% - 75% oil over the next 20 years
- Combined with production growth from the Eagle Ford, Bakken and the remainder of the Permian Basin, the U.S. will significantly reduce crude oil imports
  - Could eventually result in the need for domestic crude oil to be exported
- Creation of hundreds of thousands of new long-term jobs
- Tremendous economic benefits at the local, state and federal levels
- Major reduction in the foreign trade deficit
- Greater U.S. energy security

- U.S. asset base
- High oil exposure from proved reserves + estimated net resource potential of >9 BBOE
- Drilling program focused in three liquids and resource rich core assets in Texas
  - Spraberry Vertical
  - Horizontal Wolfcamp Shale
    - Joint venture and recent successful equity offering accelerate future development
  - Eagle Ford Shale
- Strong production growth profile
- Vertical integration substantially improving returns
- Attractive derivative positions protect margins
- Strong investment grade financial position

# Appendix

# Rigs - Vertical vs. Horizontal

Vertical Rig



Horizontal Rig





# Vertical Drilling - Sand Supply for Fracs

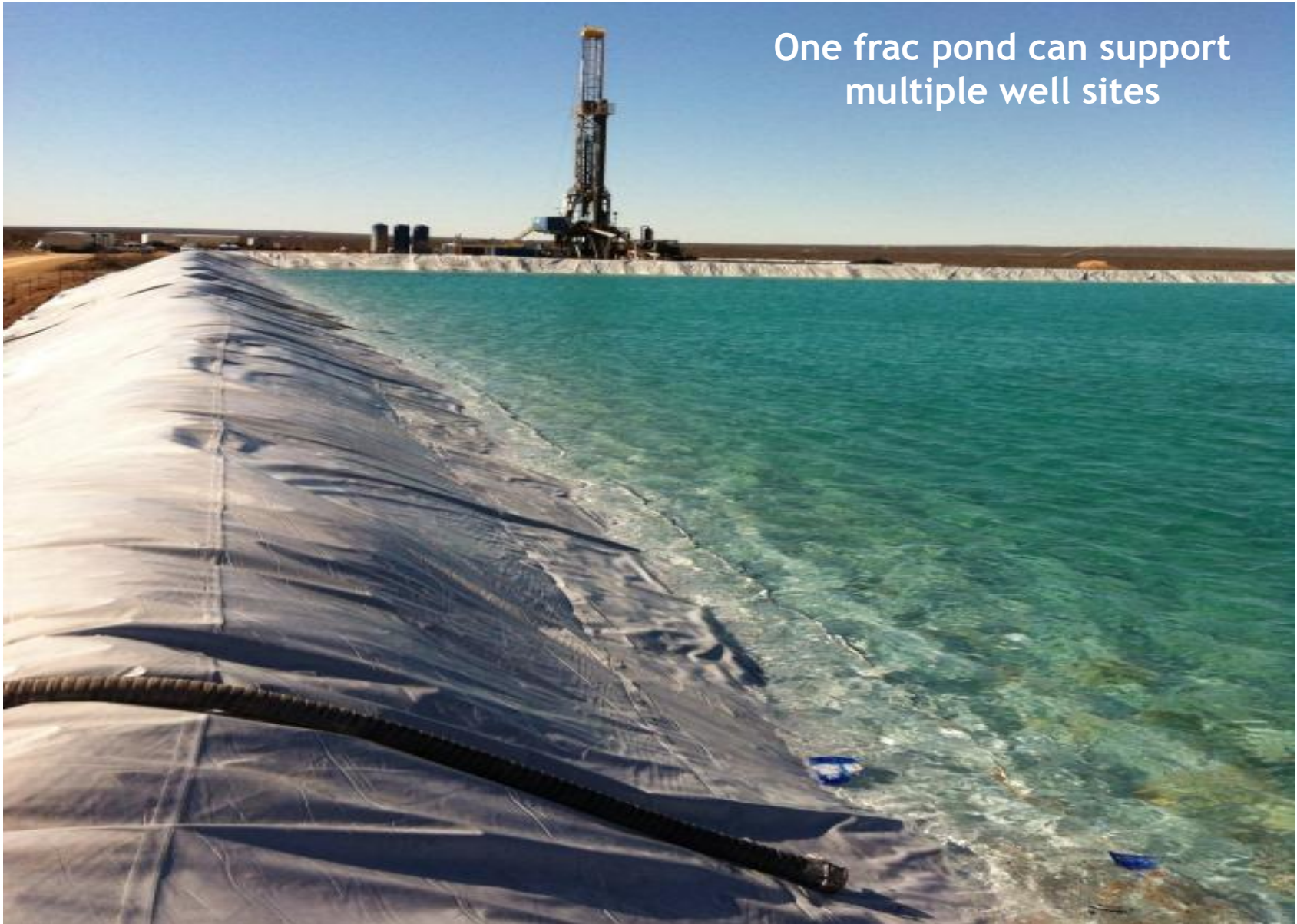


## Portable Sand Silos For Horizontal Wells





One frac pond can support  
multiple well sites



# Vertical Drilling - Tank Battery, Separators and Pumping Unit



## DL Hutt Horizontal Tank Battery and Separators



## DL Hutt Separators and Compressor Station for gas lift



# Water Disposal - Vertical vs. Horizontal Wells



**SWD Services Wells:**  
University 10-1 #2H  
University 10-1 #4H  
University 10-13 #5H  
University 10-13 #6H  
University 10-14 #5H  
University 10-14 #6H



Produced water piped from horizontal wells to central disposal facility



Fetching current location ...



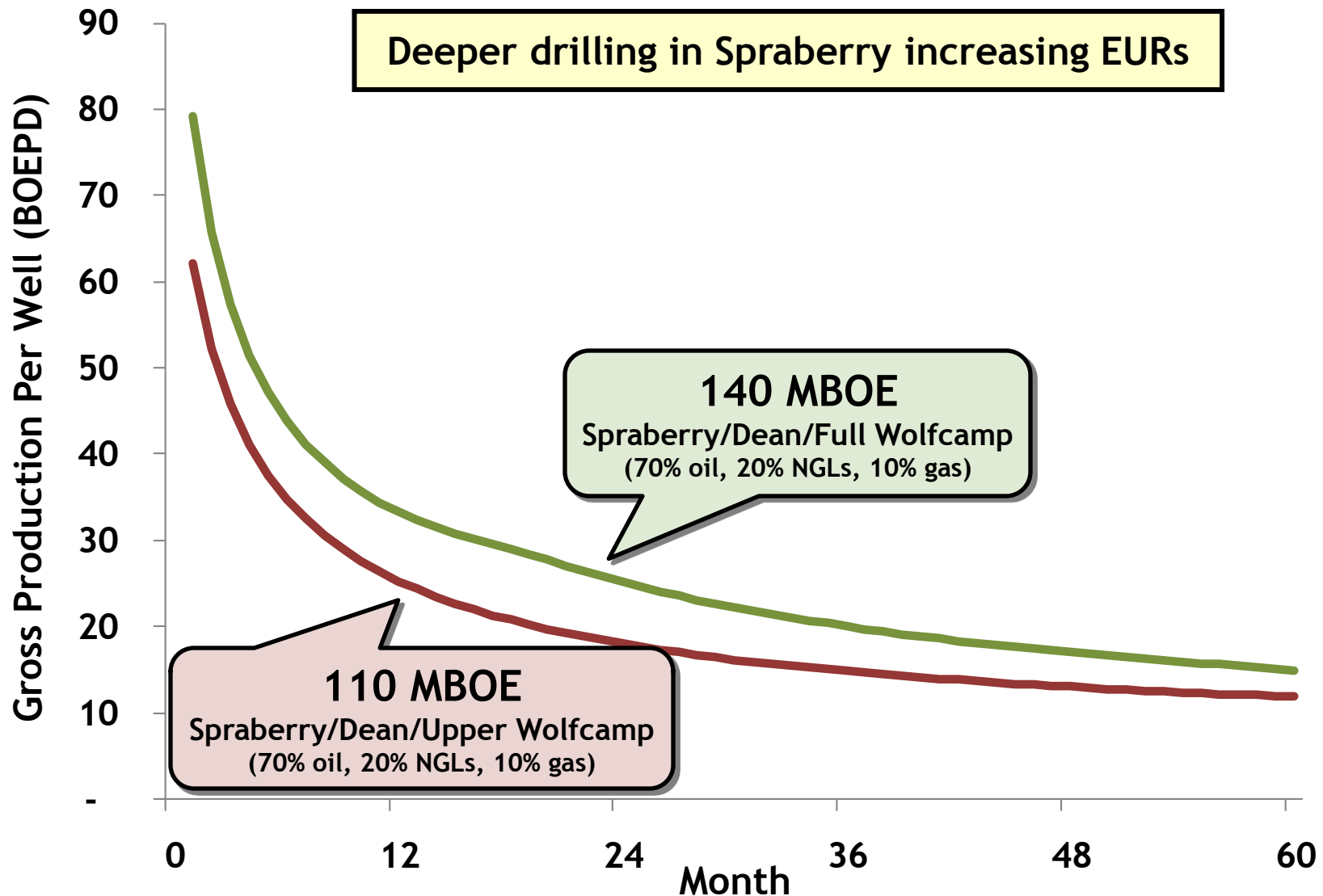
Feedback

# Permian Basin Man Camp





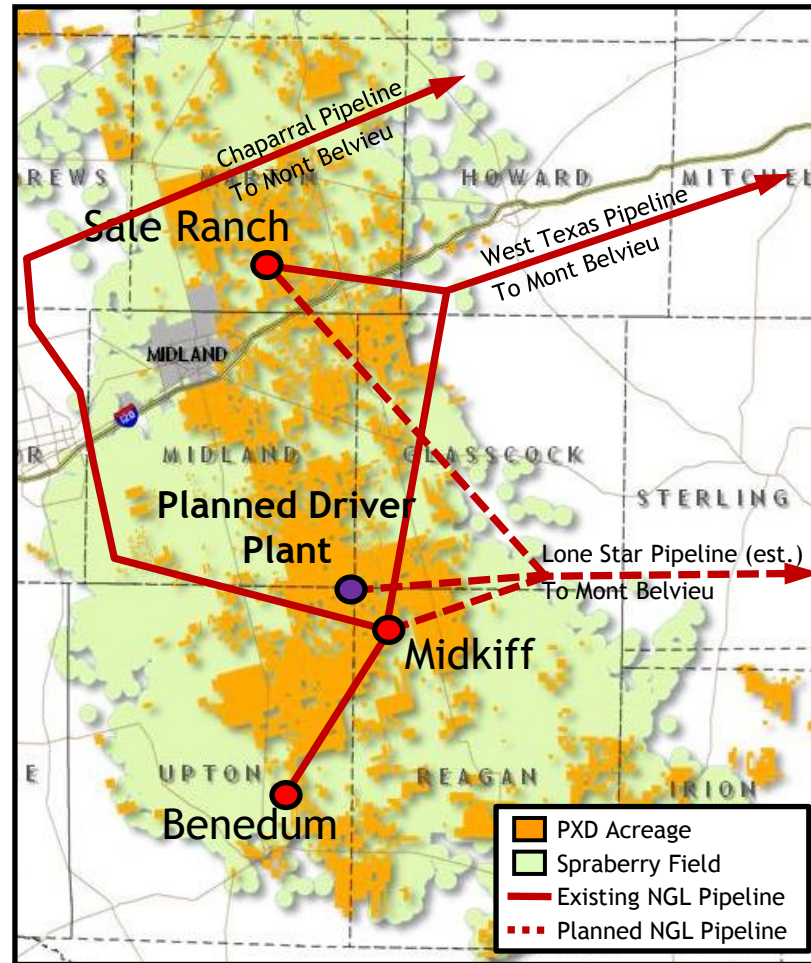
# 140 MBOE Spraberry 40-Acre Vertical Well Type Curve



Strawn / Atoka / Mississippian Potential Not Included

## Gas Processing

- **Midkiff / Benedum / Driver**
  - Current capacity: 460 MMCFD<sup>1</sup>
  - PXD production makes up ~40% of throughput
  - Includes 200 MMCFD<sup>1</sup> Driver Plant which came online April 2013
- **Sale Ranch**
  - Current capacity: 120 MMCFD<sup>1</sup>
  - Jameson Plant interconnect adds 40 MMCFD
  - PXD production makes up ~15% of Sale Ranch throughput
- **Expect Capacity Additions in the Benedum Area for 2014**



## Pipeline NGL Takeaway to Mont Belvieu

- **Chaparral & West Texas Pipelines**
  - PXD production throughput of ~9 MBPD
- **Lone Star Pipeline**
  - 4 MBPD to PXD increasing to 16 MBPD by 2020
  - Will connect to all PXD gas processing plants
- **Expect >425 MBPD, or ~50%, increase in fractionation capacity at Mont Belvieu in 2013**

**Expanding processing capacity and contracted takeaway to support Pioneer's aggressive production growth**

1) Wet gas stream with ~160 BBL/MMSCF NGL yield

*Cautionary Note to U.S. Investors --The U.S. Securities and Exchange Commission (the "SEC") prohibits oil and gas companies, in their filings with the SEC, from disclosing estimates of oil or gas resources other than "reserves," as that term is defined by the SEC. In this presentation, Pioneer includes estimates of quantities of oil and gas using certain terms, such as "resource," "resource potential," "oil in place," "EUR" or other descriptions of volumes of reserves, which terms include quantities of oil and gas that may not meet the SEC's definitions of proved, probable and possible reserves, and which the SEC's guidelines strictly prohibit Pioneer from including in filings with the SEC. These estimates are by their nature more speculative than estimates of proved reserves and accordingly are subject to substantially greater risk of being recovered by Pioneer. U.S. investors are urged to consider closely the disclosures in the Company's periodic filings with the SEC. Such filings are available from the Company at 5205 N. O'Connor Blvd., Suite 200, Irving, Texas 75039, Attention Investor Relations, and the Company's website at [www.pxd.com](http://www.pxd.com). These filings also can be obtained from the SEC by calling 1-800-SEC-0330.*