



Bakken and Permian: Deal Metrics in the Two Hottest Plays

Ward Polzin
July 11, 2012

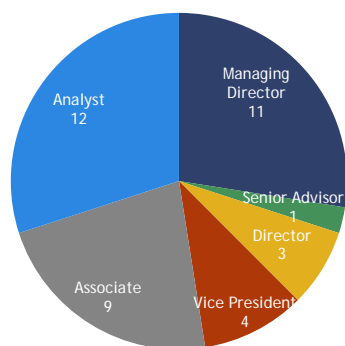
Industry Leading Investment Banking Practice

Top Energy Advisor⁽¹⁾

(\$ in millions)

2010 - 2012 YTD		2010 - 2012 YTD	
Firm	# Deals	Firm	Value (\$MM)
Tudor Pickering Holt & Co	63	Barclays	\$143,412
RBC Capital Markets	45	Goldman Sachs	121,989
Barclays	44	Tudor Pickering Holt & Co	76,902
Jefferies & Company	37	Credit Suisse	71,046
Bank of America Merrill Lynch	34	Evercore Partners Inc	65,828
Goldman Sachs	30	Citi	64,354
JPMorgan	30	Morgan Stanley	60,881
Credit Suisse	28	Jefferies & Company	57,868
Citi	28	JPMorgan	50,179
Deutsche Bank	20	Deutsche Bank	40,258

Overview



Total Team: 40

- Coverage of Midstream/MLP, OFS, Power and Upstream sectors
- Senior execution expertise in M&A, Corporate Finance, A&D and Capital Markets
- Industry/engineering expertise integrated into IB effort across all sectors
- Three-year old team achieved >25% market share⁽¹⁾ in 2010

Advisory

- Sell-side & Buy-side
- Joint Ventures
- Opinions
- Special Committee
- Strategic advisory
- Restructuring



Midstream/MLP



OFS



Power



Upstream

Capital Markets

- Public Equity
- Hybrids
- Fixed income
- Private placements
- QIU

TPH combines banking expertise with engineering talent to deliver high quality advice to energy clients

Banking Expertise



Engineering Talent



(1) Source: Dealogic: United States Oil & Gas - Exploration & Development/Field Equipment & Services/Diversified/Pipeline and Utility & Energy - Gas, pending and completed M&A transactions announced 1/1/2010 to 6/22/2012.

TPH Resource Experience

TPH Investment Banking

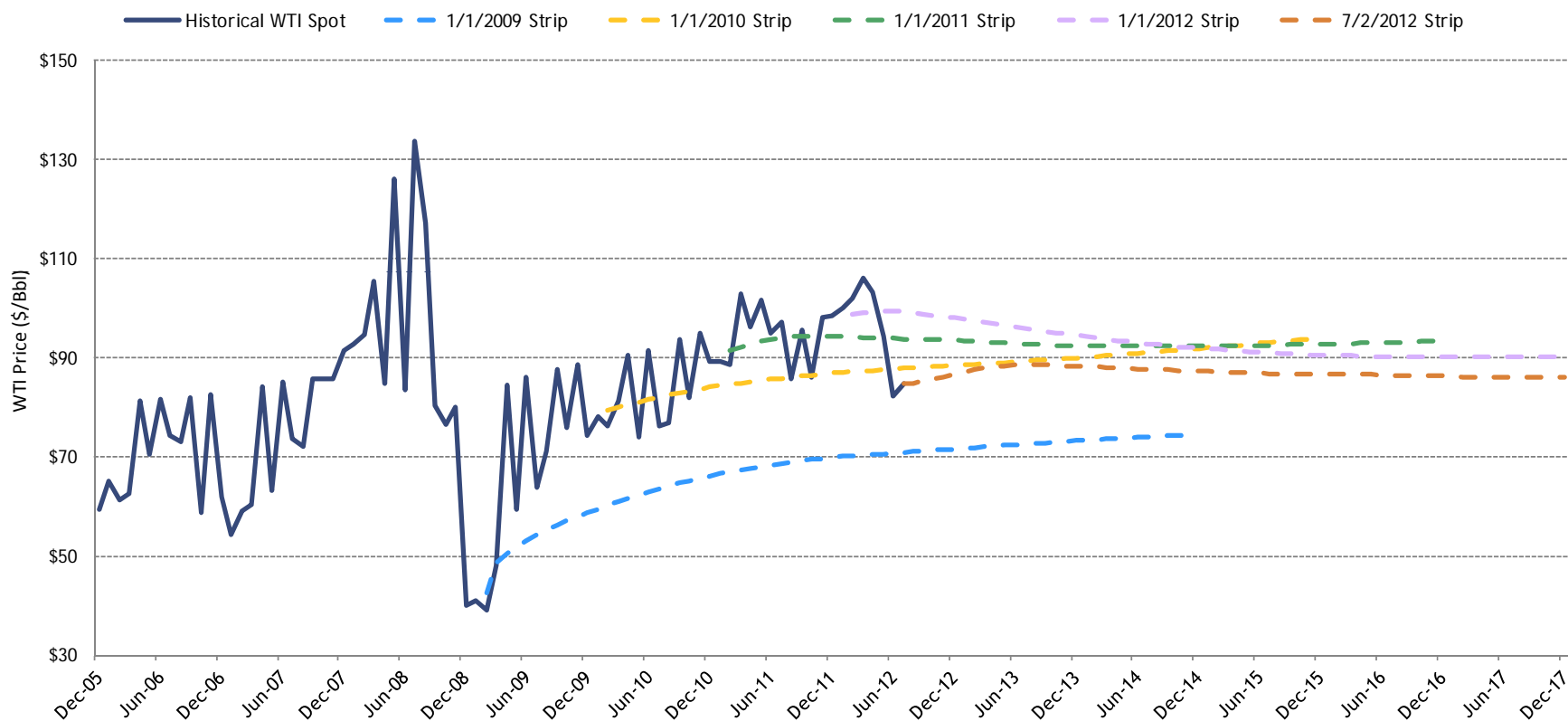
TPH Research

Bakken	<ul style="list-style-type: none"> ■ Current Sell-side: Helis Oil & Gas ■ Current Sell-side: Cornerstone Natural Resource ■ Buy-side: Crestview Partners acquisition of Samson Investment Company ■ Buy-side: Statoil ASA acquisition of Brigham Exploration ■ Sell-side: Citation Oil & Gas Corp. sale to multiple buyers ■ Sell-side: Kaiser Francis Oil Company ■ Sell-side: TRZ Energy (Tracker) sale to Hess ■ Sell-side: American Oil & Gas sale to Hess ■ Atinum investment in Triangle Petroleum ■ Capital markets: Oasis IPO/high yield & multiple BEXP follow-on offerings 	<ul style="list-style-type: none"> ■ Upstream companies covered with Bakken exposure: 12 <ul style="list-style-type: none"> □ Selected Bakken operator coverage: CLR, EOG, HES, NFX, OAS, OXY, STO, WLL, XOM ■ Published detailed Williston Basin primer
Permian	<ul style="list-style-type: none"> ■ Buy-side: Apollo & Riverstone acquisition of El Paso's upstream business ■ Buy-side: Laredo Petroleum acquisition of Broad Oak Energy ■ Sell-side: OGX Resources sale to undisclosed buyer ■ Sell-side: Eagle Oil and Gas to Comstock Resources ■ Sell-side: RKI Exploration & Production equity investment ■ Sell-side: Yates Drilling Company to undisclosed buyer ■ Buy-side: Crestview acquisition of equity in Select Energy Services ■ Sell-side: Arena Resources merger with SandRidge Energy 	<ul style="list-style-type: none"> ■ Upstream companies covered with Permian exposure: 24 <ul style="list-style-type: none"> □ Selected Permian operator coverage: APA, APC, BRY, CXO, DVN, EOG, OXY, PXD, SD, WLL, XEC ■ Published detailed Permian Basin primer focused on the Spraberry Trend in March 2009
Eagle Ford	<ul style="list-style-type: none"> ■ Sell-side: Antares Energy sale to Chesapeake ■ Buy-side: CNOOC/Chesapeake Joint Venture ■ Sell-side: Pioneer Joint Venture with Reliance ■ Buy-side: Large integrated ■ Buy-side: Potential \$400MM private equity investment 	<ul style="list-style-type: none"> ■ Upstream companies covered with Eagle Ford exposure: 15 <ul style="list-style-type: none"> □ Selected Eagle Ford operator coverage: APC, EOG, GDP, HK, NFX, PXD, ROSE, SM ■ Recently released "Shallow Dive" into Eagle Ford in 2010 ■ Continuing close coverage of well results in play
Haynesville	<ul style="list-style-type: none"> ■ Sell-side: Ellora Energy sale to ExxonMobil ■ Sell-side: Undisclosed Private Company to undisclosed buyer ■ Buy-side: Large public company seeking to establish E Tx position ■ Regency/GE/Alinda Haynesville Expansion Project (midstream) 	<ul style="list-style-type: none"> ■ Upstream companies covered with Haynesville exposure: 13 <ul style="list-style-type: none"> □ Selected Haynesville operator coverage: APC, BG, CHK, GDP, RRC, XCO, XOM ■ Significant recent focus on midstream issues in basin
Marcellus	<ul style="list-style-type: none"> ■ Buy-side: \$400MM Private Equity Joint Venture ■ Buy-side: Enerplus Joint Venture with Chief for \$406MM ■ Buy-side: Potential \$500MM Private Equity investment ■ Sell-side: Quest Resources Corp to Multi 	<ul style="list-style-type: none"> ■ Upstream companies covered with Marcellus exposure: 16 <ul style="list-style-type: none"> □ Selected Marcellus operator coverage: CHK, COG, CRZ, RRC, SWN, UPL, XCO ■ Released in-depth report on the play simultaneously with initiation of Cabot in June
Niobrara	<ul style="list-style-type: none"> ■ Sell-side: DIA mineral lease sale ■ Sell-side: Undisclosed private company ■ Sell-side: Joint Resources ■ Buy-side: CNOOC/Chesapeake Joint Venture 	<ul style="list-style-type: none"> ■ Upstream companies covered with Niobrara exposure: 14 <ul style="list-style-type: none"> □ Selected Niobrara operator coverage: APC, CHK, CLR, EOG, NBL, SM
Utica	<ul style="list-style-type: none"> ■ Sell-side: Marquette sale to Hess ■ Sell-side: PDC Energy Joint Venture 	<ul style="list-style-type: none"> ■ Upstream companies covered with Utica exposure: 8 <ul style="list-style-type: none"> □ Selected Utica operator coverage: APC, CHK, HES

Commodity Prices Set the Stage

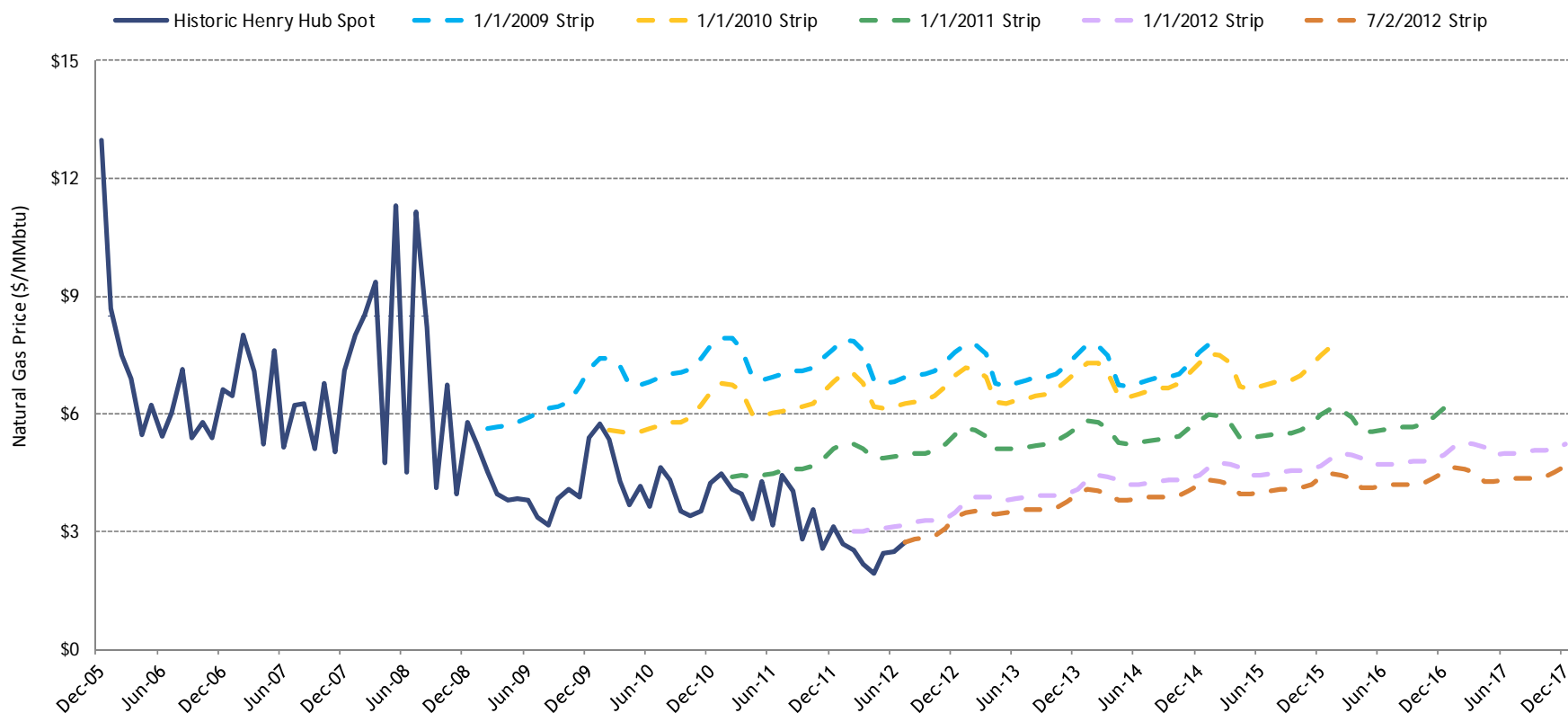
Long Term Oil Price is Key

Today's Question: At what oil price do we drop rigs?



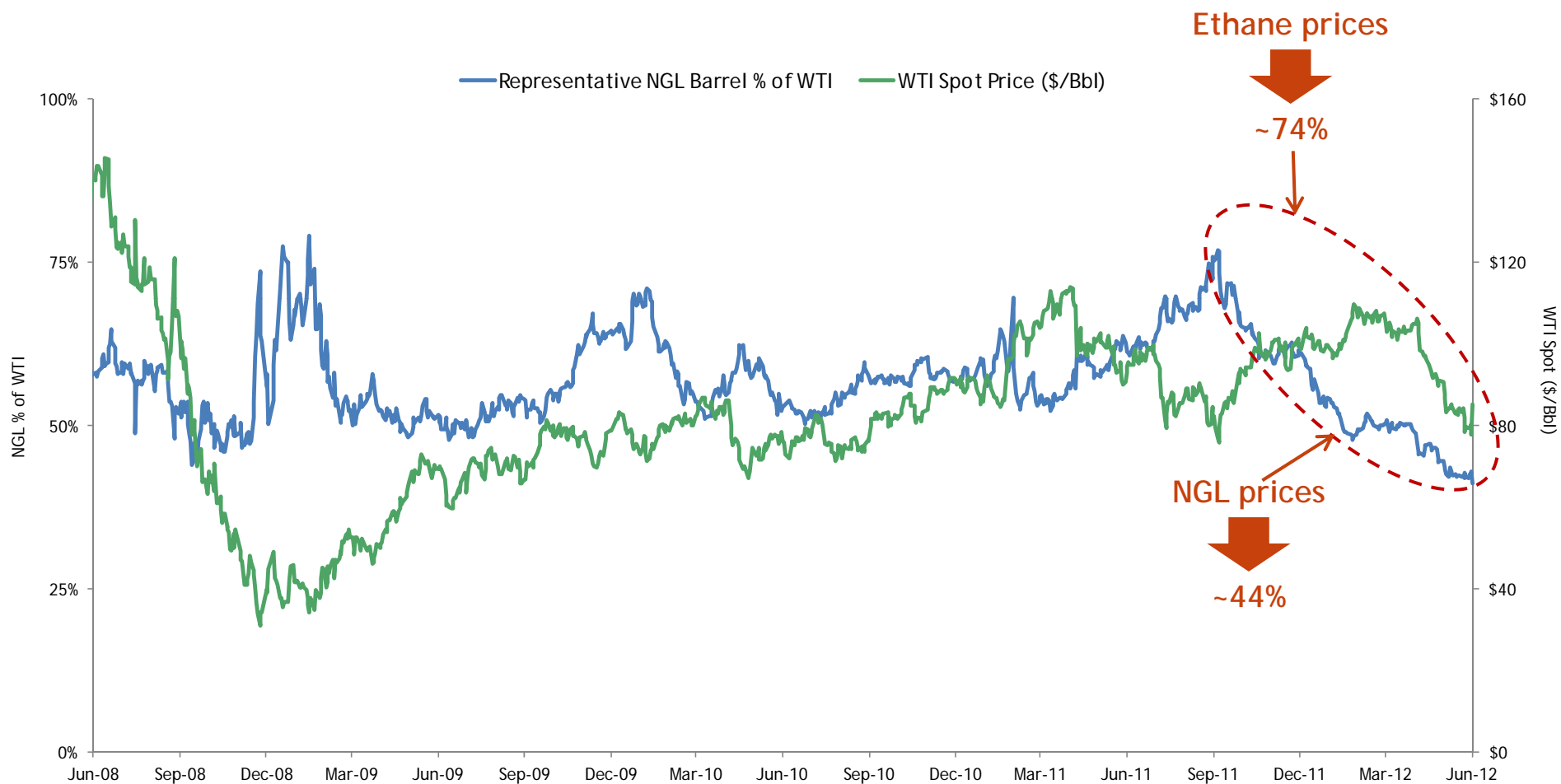
Source: Bloomberg as of 7/2/2012.

Negative Gas Outlook Impacting Deal Metrics



Source: Bloomberg as of 7/2/2012.

Recent Decline in NGL Prices

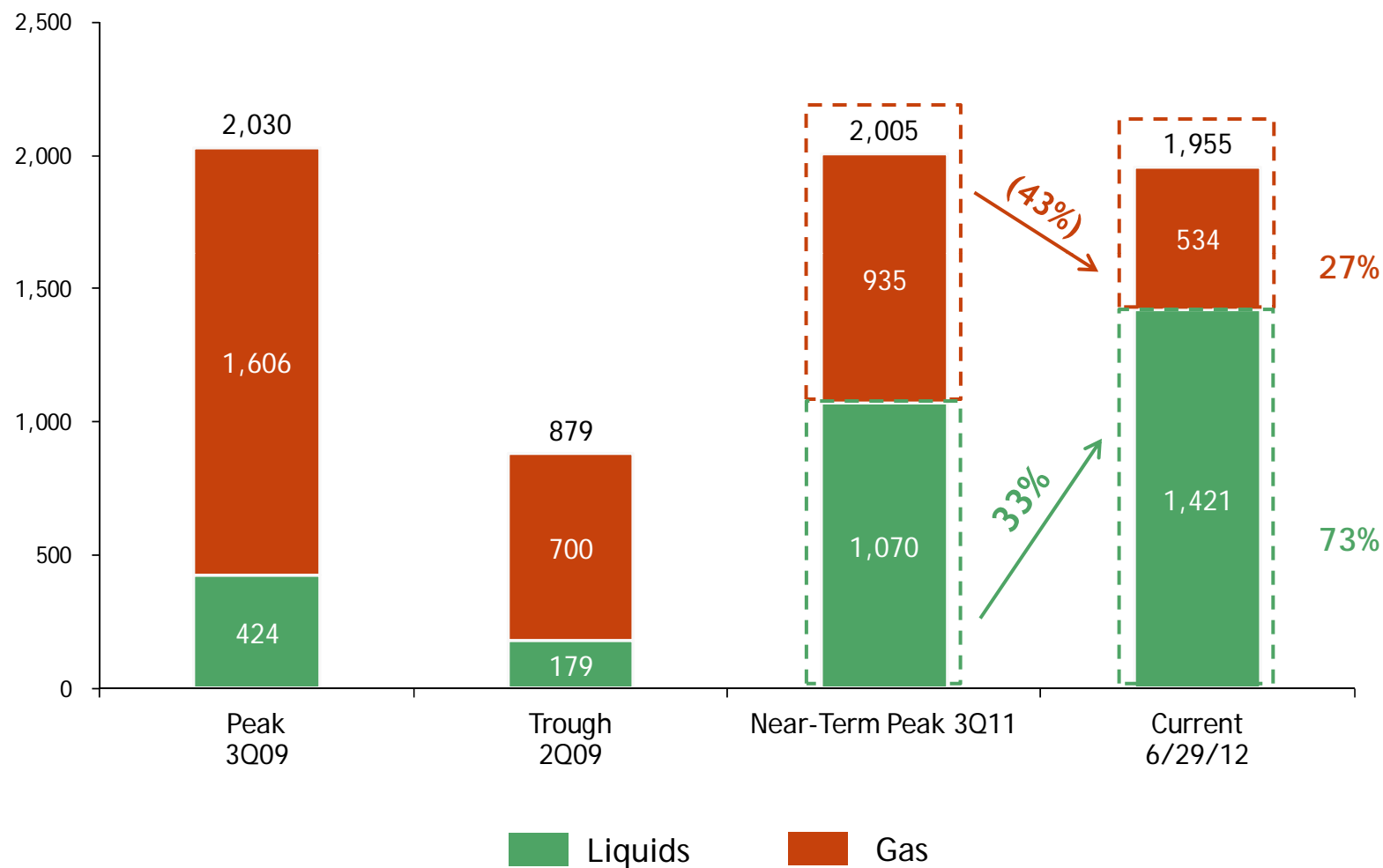


Source: Bloomberg as of 7/2/2012.

Note: Representative consists of barrel 40% ethane, 10% normal butane, 25% propane, 15% natural gasoline and 10% iso butane.

Liquids Rig Count Shift Has Been Dramatic

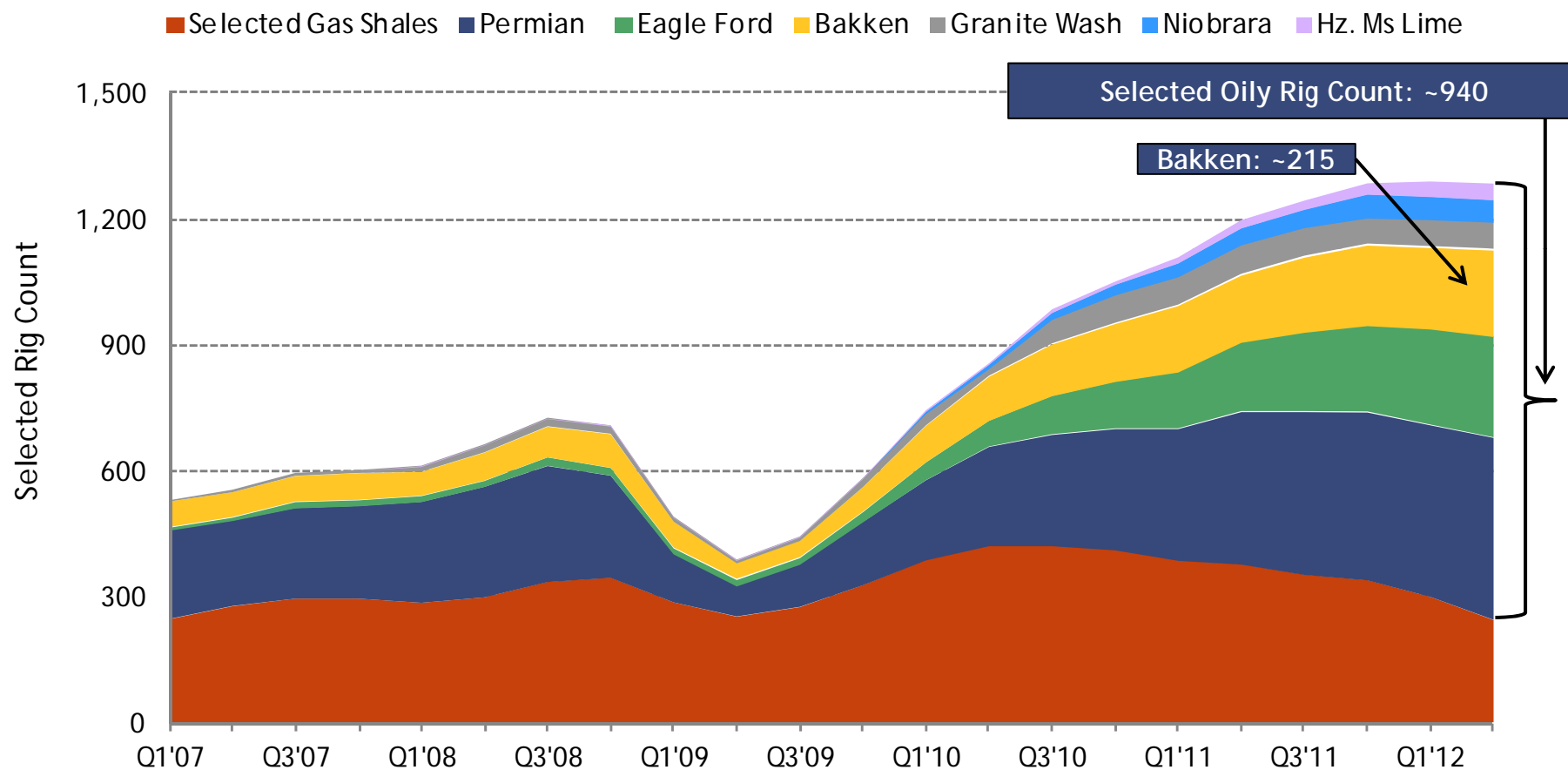
U.S. Onshore Rig Count



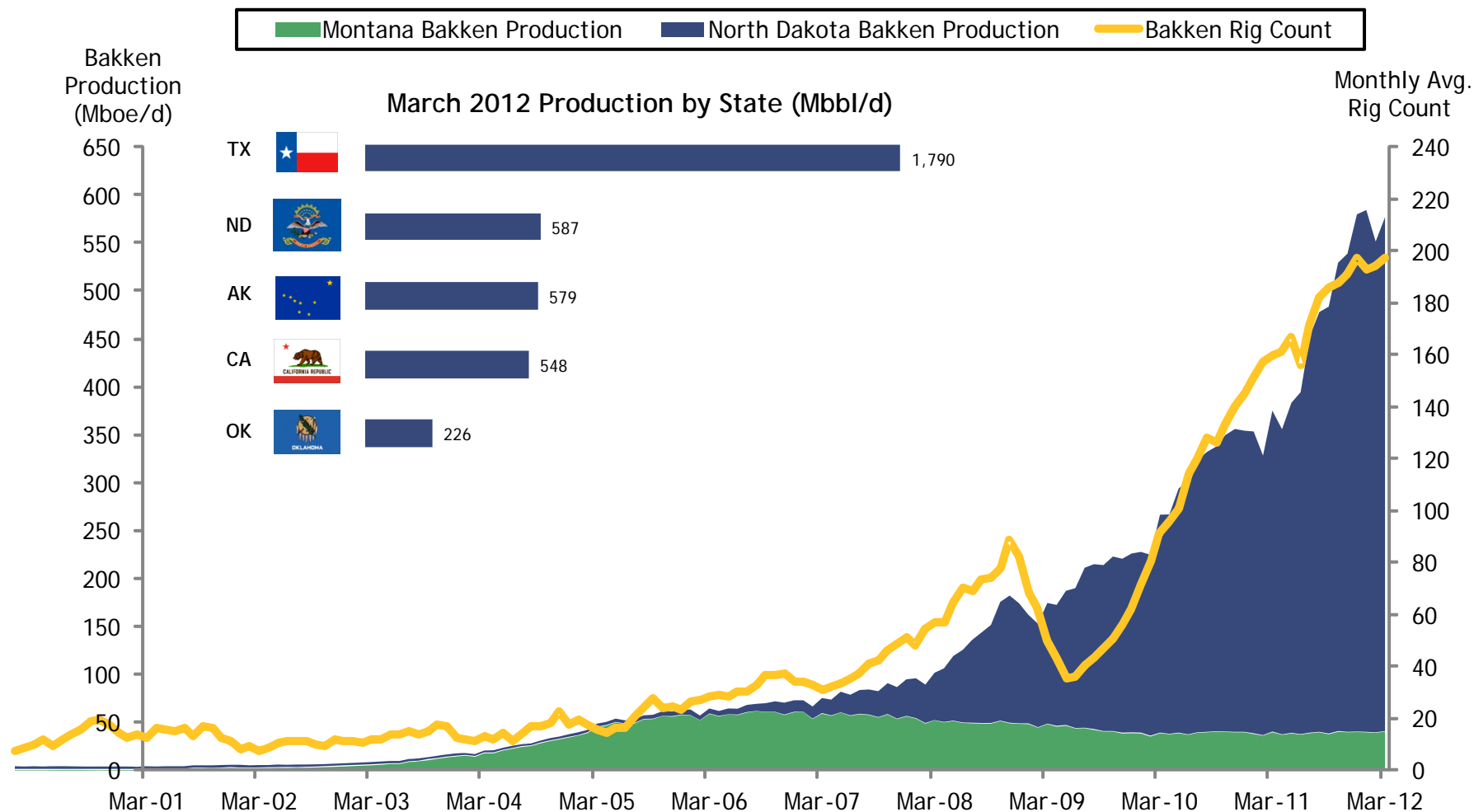
Source: Baker Hughes as of 6/29/2012.

Note: "Peak 3Q09" defined as 9/12/2008, "Trough 2Q09" defined as 6/5/2009, and "Near-Term Peak" as 10/7/2011.

Permian and Bakken Driving Oily Rig Shift



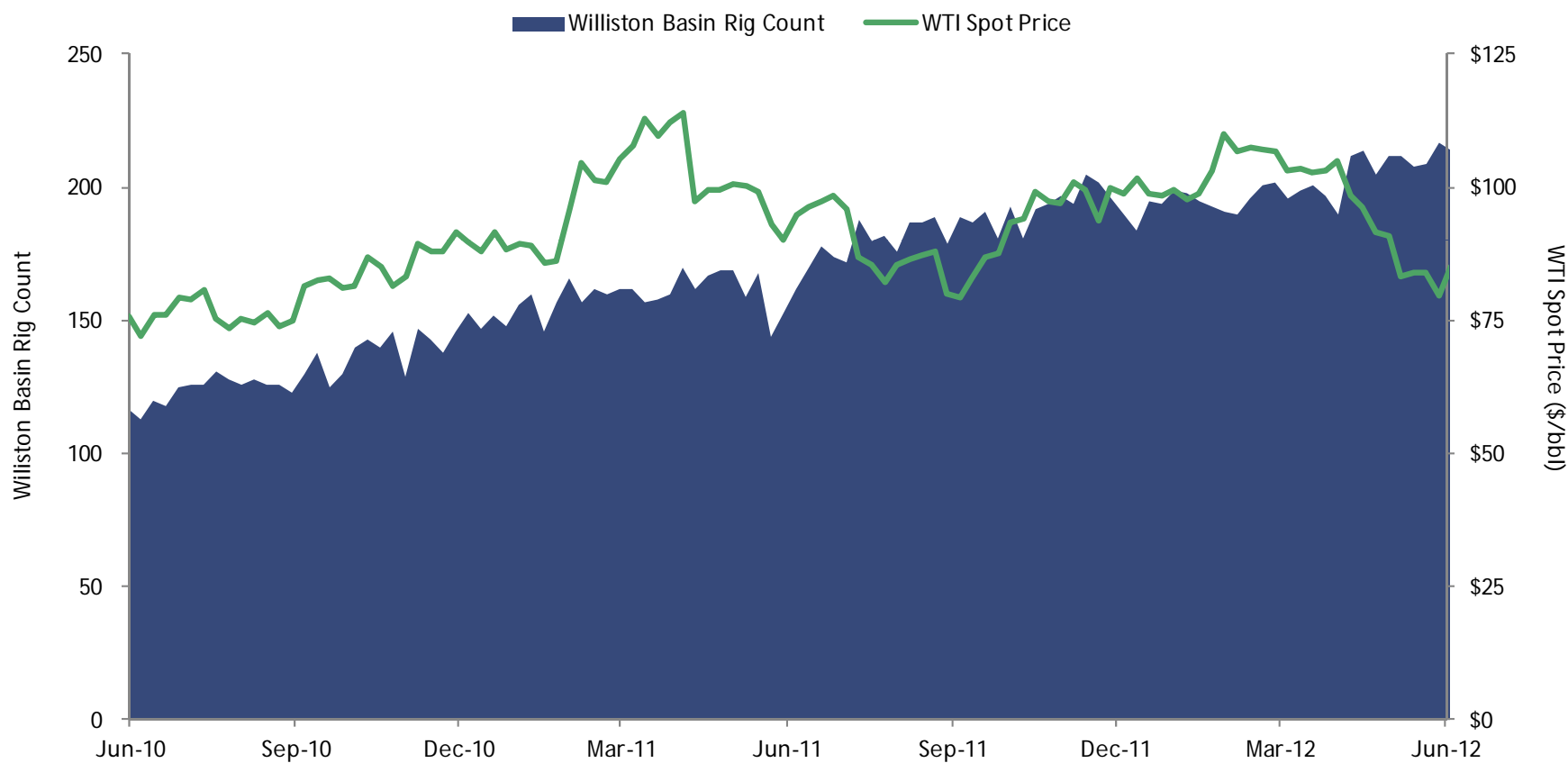
Bakken Vaults North Dakota to #2 US Producer



Source: Baker Hughes Montana and North Dakota rig count, HPDI and EIA.
 Note: HPDI production data reported with a 3 month lag.
 Note: Texas, North Dakota and Alaska production per state industrial commissions.

Bakken Rig Count Close to a Peak?

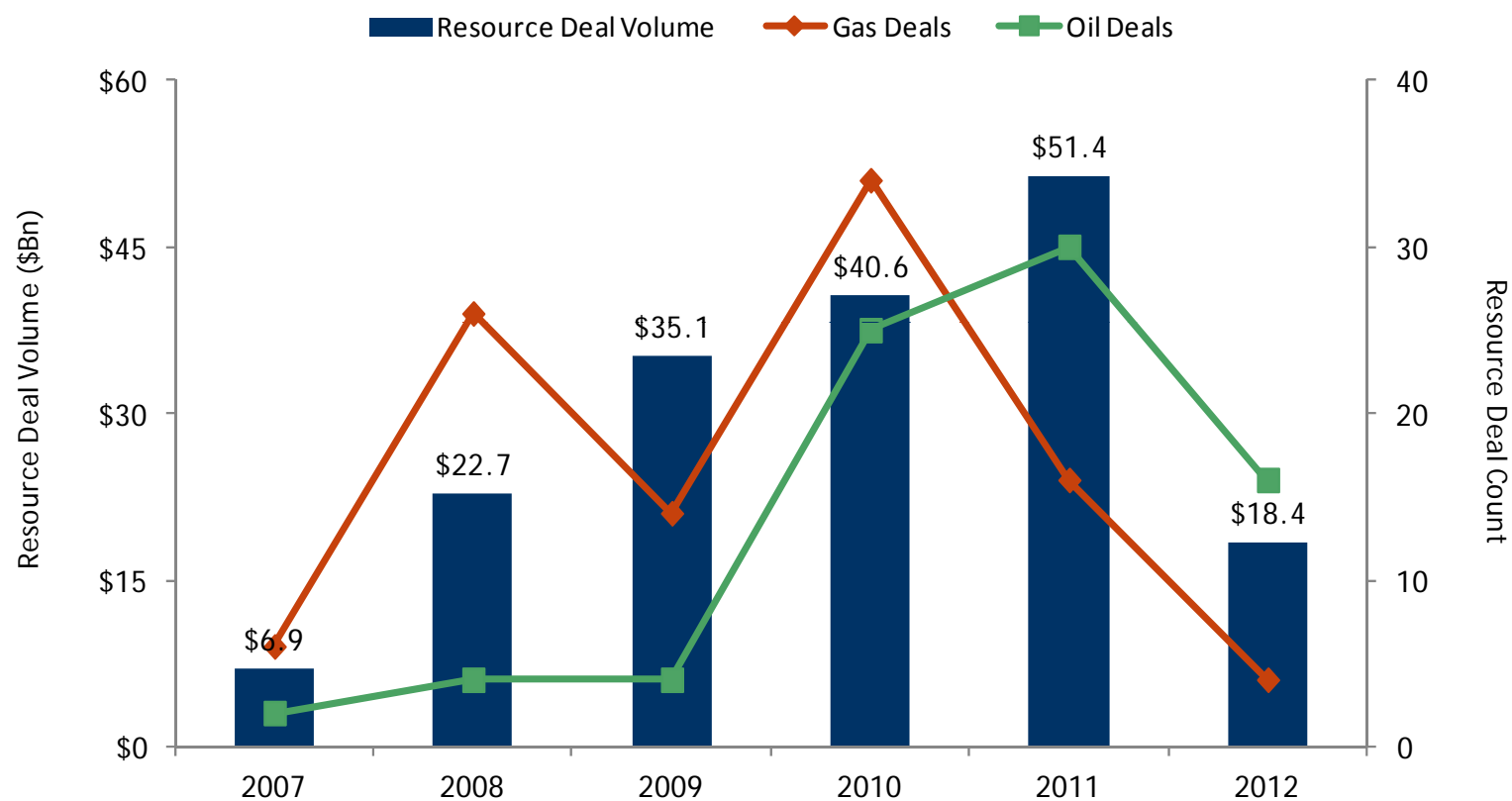
Has Bakken rig count peaked in the 200 - 225 rig range in light of the current commodity backdrop?



Source: HPDI and RigData as of 7/2/2012.

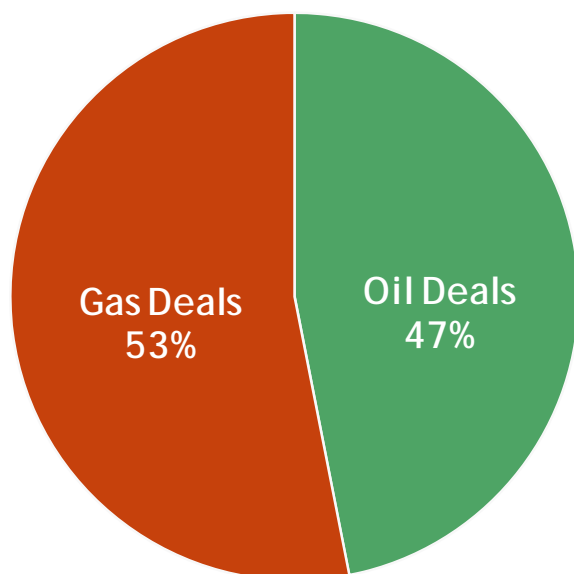
Deal Flow Follows Commodities

Gas Down, Oil Up: Shocking!

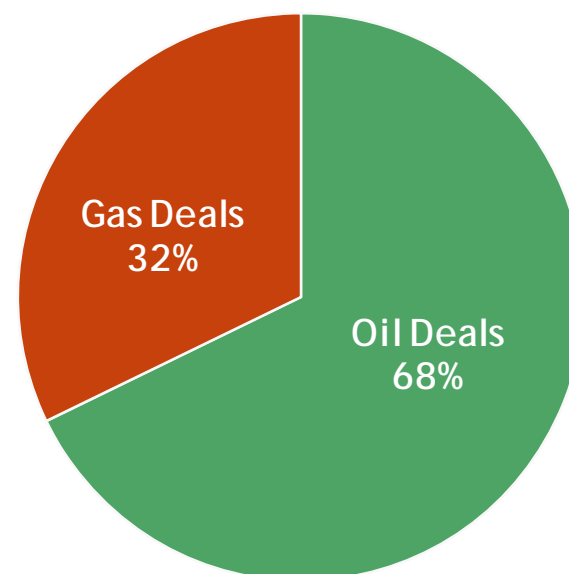



Deals Shifting to Oil/Liquids-Rich

2010 Deal Count



2011 - 2012 YTD Deal Count



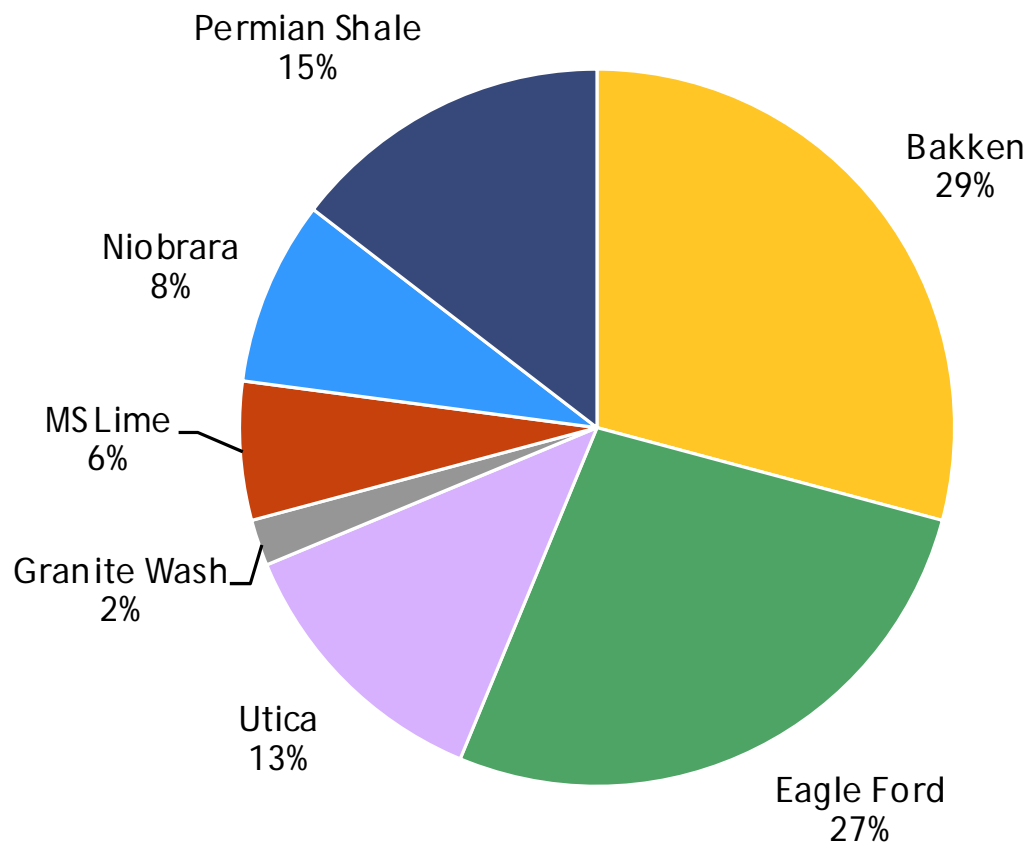
 Gas Transactions

 Oil/Liquids-Rich Transactions

Source: IHS Herold as of 7/2/2012. Includes transactions greater than \$50 million in which United States is the primary country.
Note: Oil and gas transactions are separated on the basis of reserve composition.

Diversity Among Oil/Liquids-Rich Deal Flow

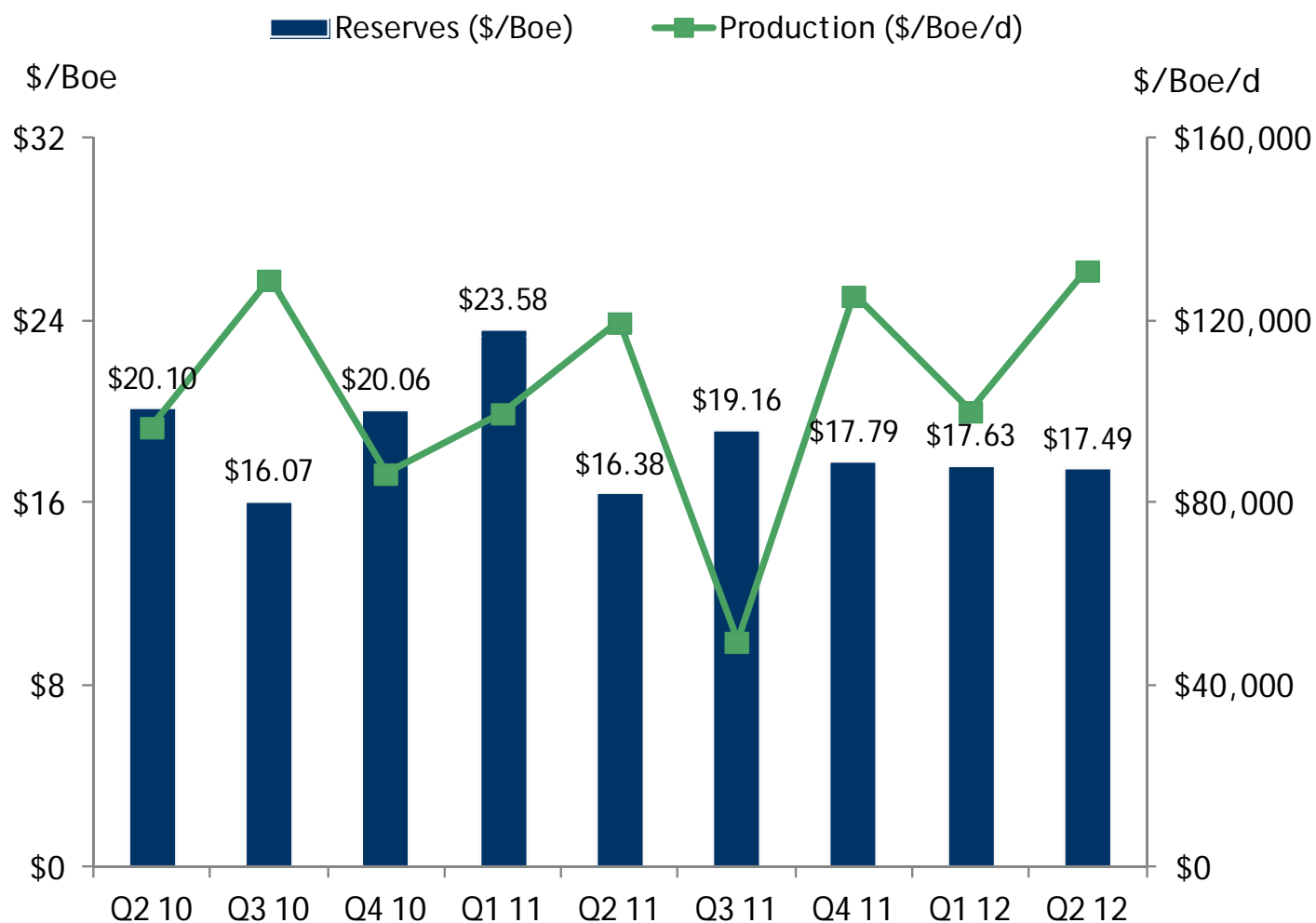
2011 - Present Deal Count



Source: IHS Herold as of 7/2/2012.

Note: Deal value >\$50 million. Reflects transactions where United States listed as primary country. Excludes JVs.

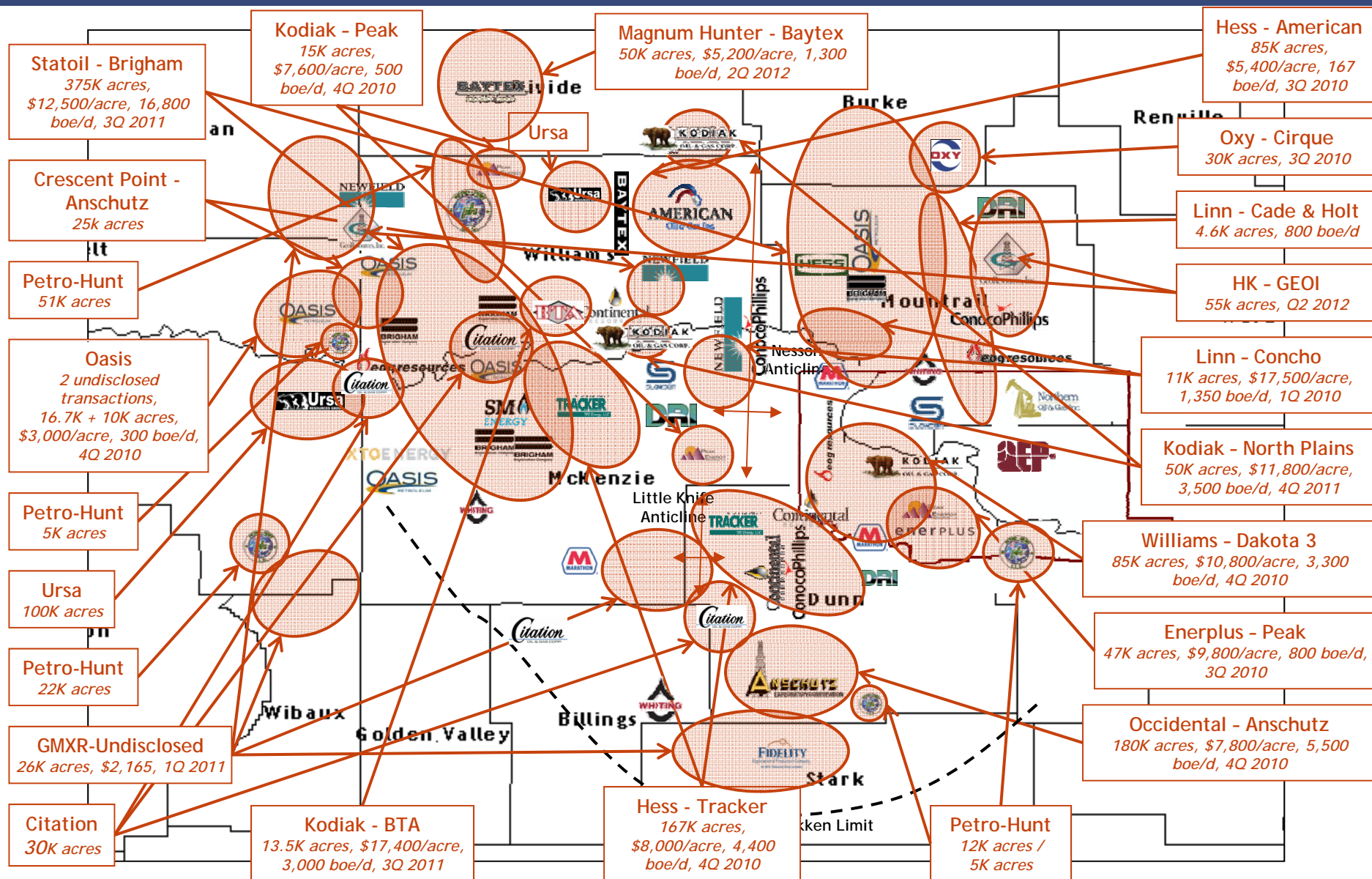
Conventional Oil Metrics Stable



Source: IHS Herold as of 7/2/2012.
 Note: Deal value >\$50 million. Reflects transactions where United States listed as primary country. Excludes JVs.

Bakken Deal Specifics

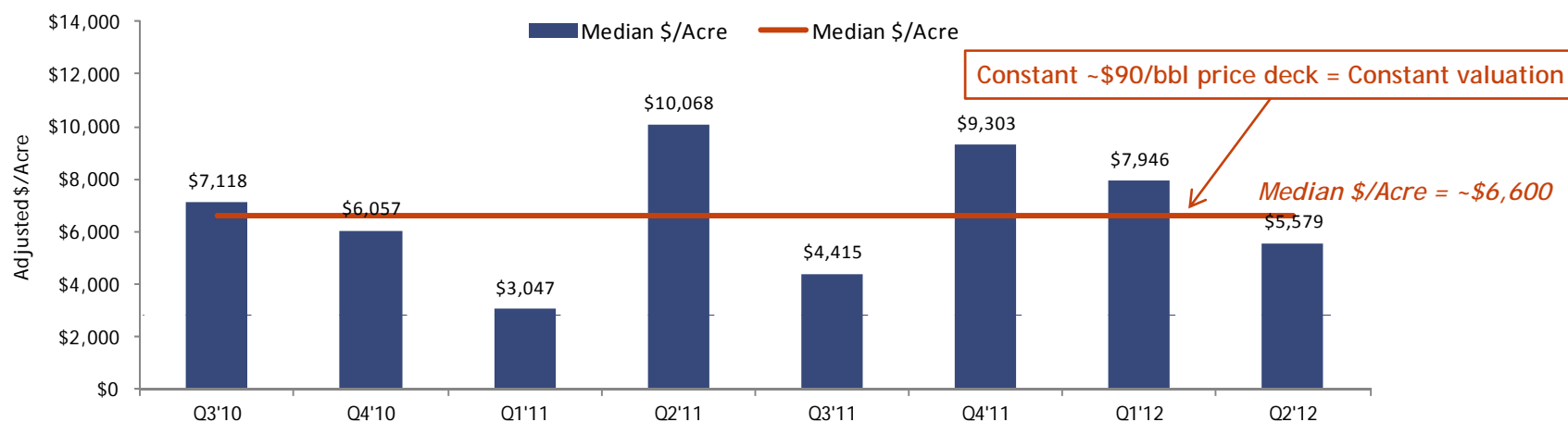
Strong Deal Market Throughout the Basin



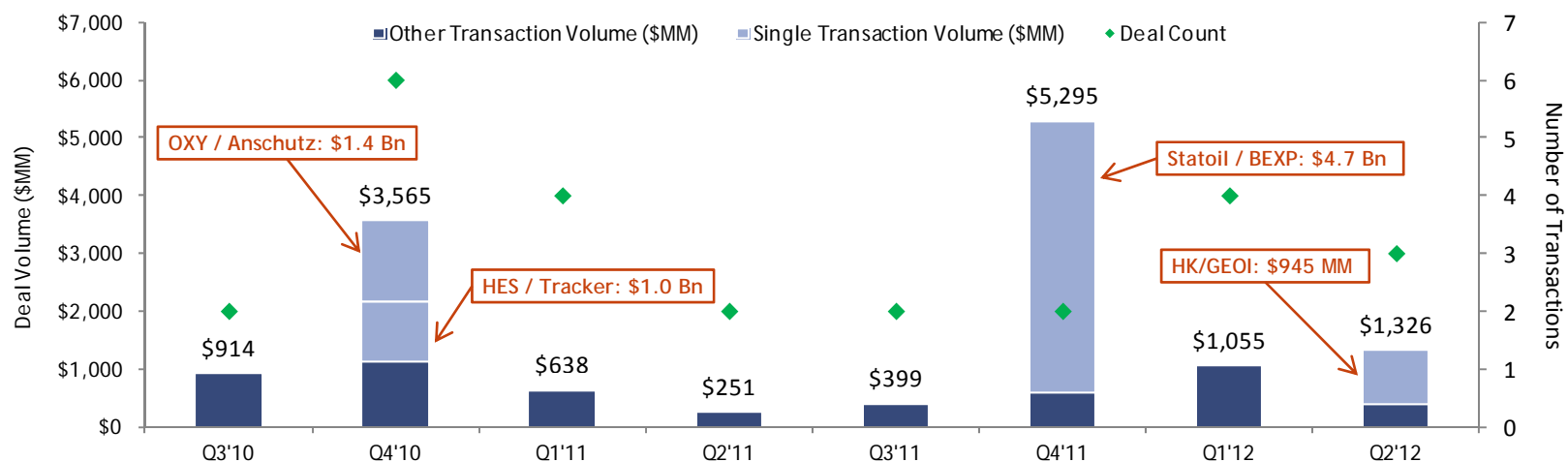
Note: TPH estimates of current market conditions.

Bakken Transactions Through Time

Deal Metrics Remain Stable⁽¹⁾



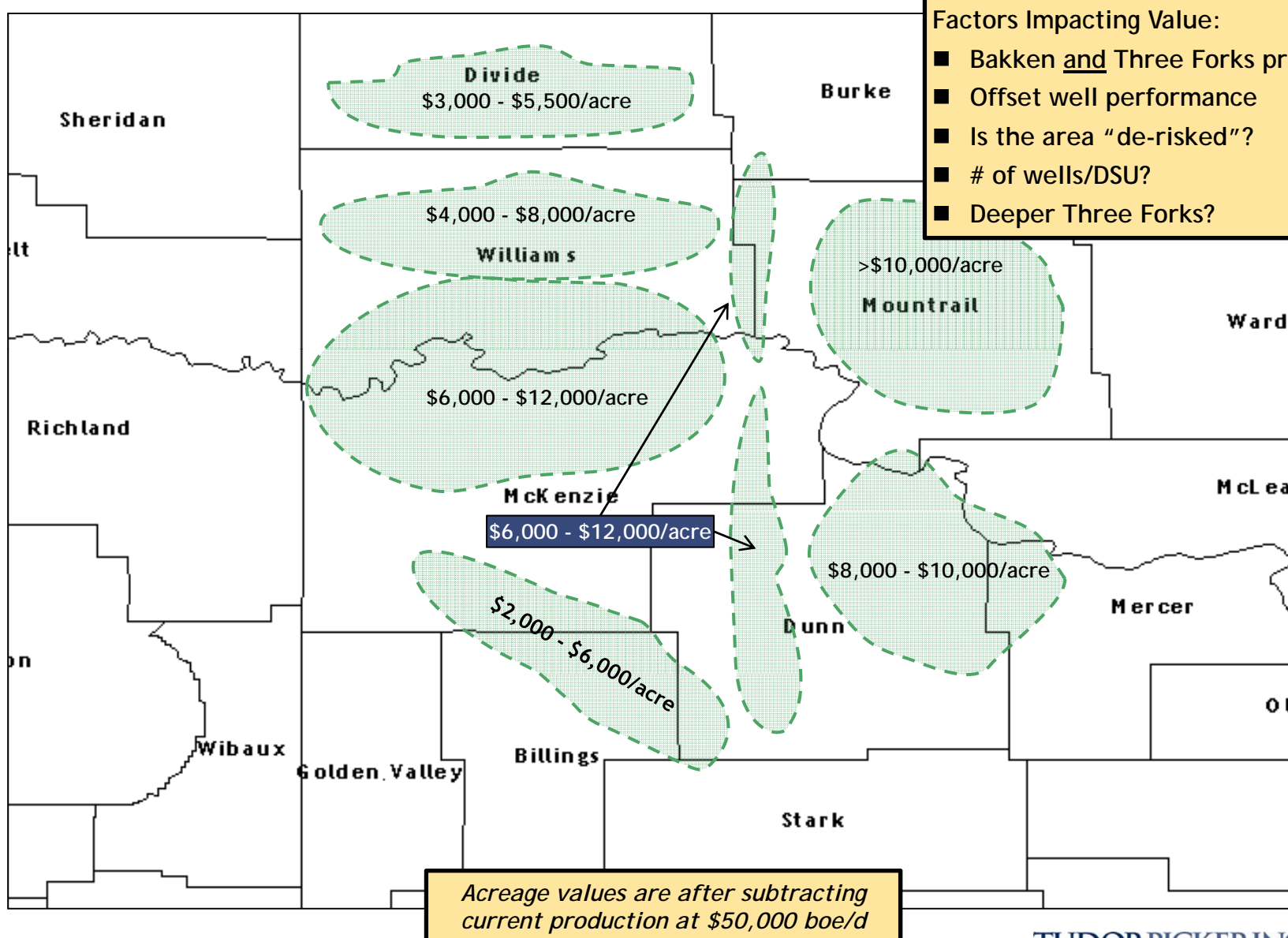
Bakken Deal Flow Shaped by Large Transactions



Source: Company Investor Presentations and press releases.

(1) Adjusted \$/acre estimate excludes PDP and does not correct for developed acres. PDP valued at \$50,000 boe/d.

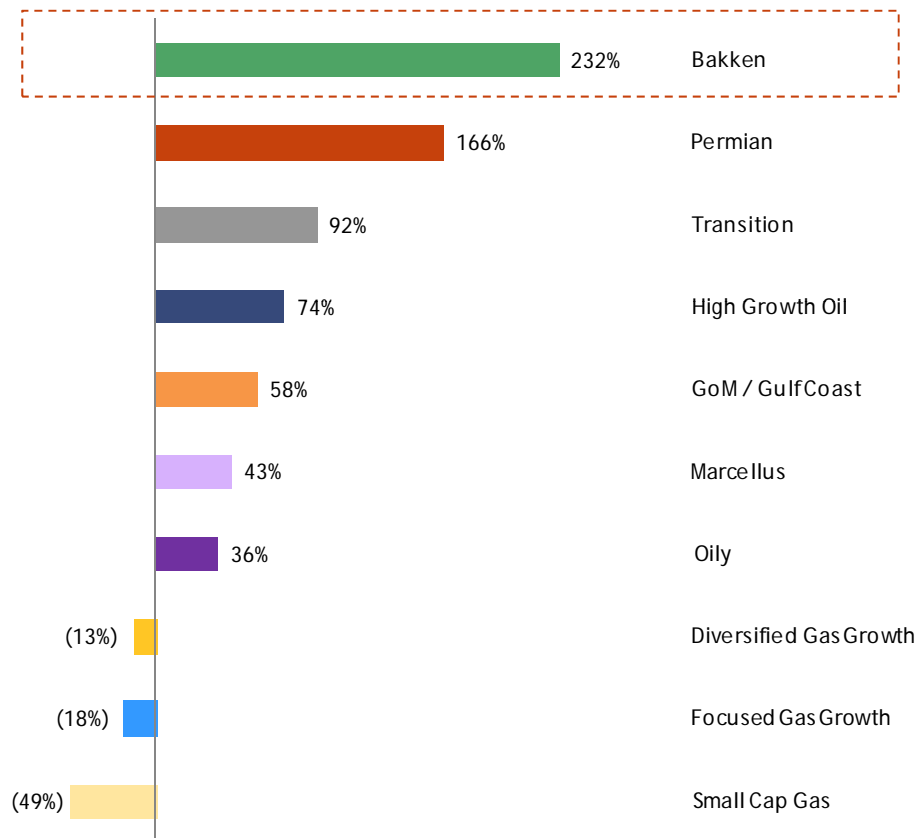
Strong Deal Metrics Throughout the Basin



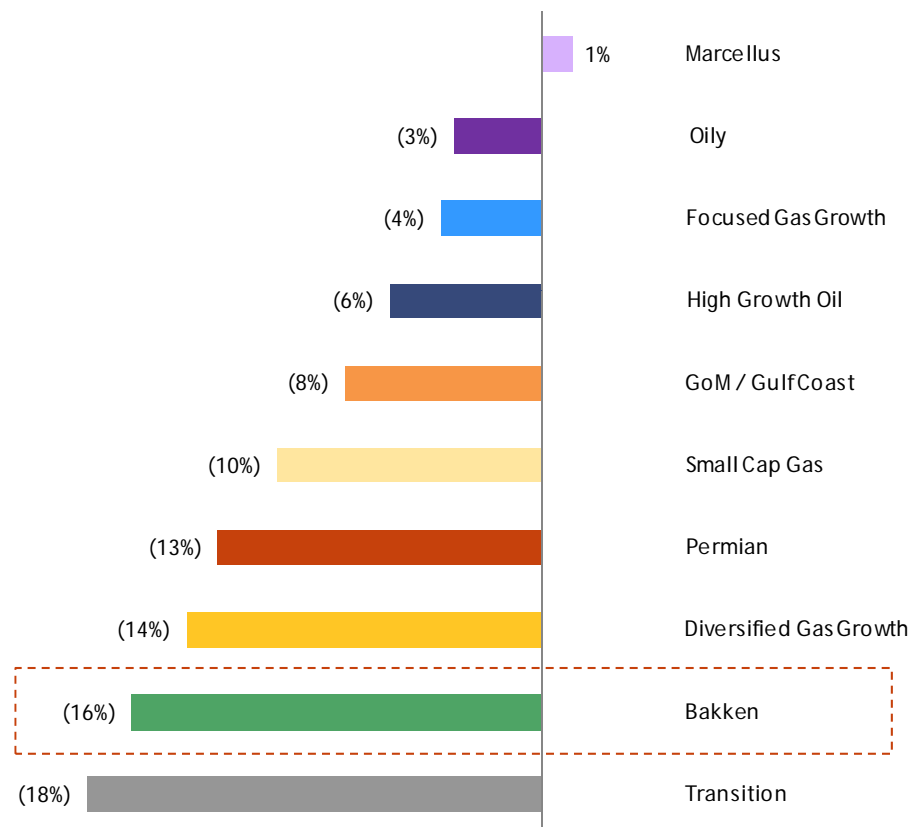
Note: TPH estimates of current market conditions.

Bakken Pure Play Public Companies...A Tale of the Tape

2011 Performance



2012 YTD Performance



Source: FactSet as of 7/2/2012.

Bakken: OAS, KOG, NOG, TPLM and BEXP (until acquired by STO).

Transition: AREX, EOG, ROSE, SD and SM.

High Growth Oil: CLR, CXO, DNR and OAS.

Oily: BRY, CWEI, PXD, PXP, REN, VQ and WLL.

GOM / Gulf Coast: ATPG, CPE, CXPO, EPL, EXXI, MCF, PQ, SFY, SGY and WT1.

Focused Gas Growth: COG, GDP, KWK, RRC, SWN and UPL.

Diversified Gas Growth: CHK, DVN, ECA, EOG, FST, NFX, QEP, XCO, and XEC.

Small Cap Gas: BBG, CRK, GMXR, PETD and PVA.

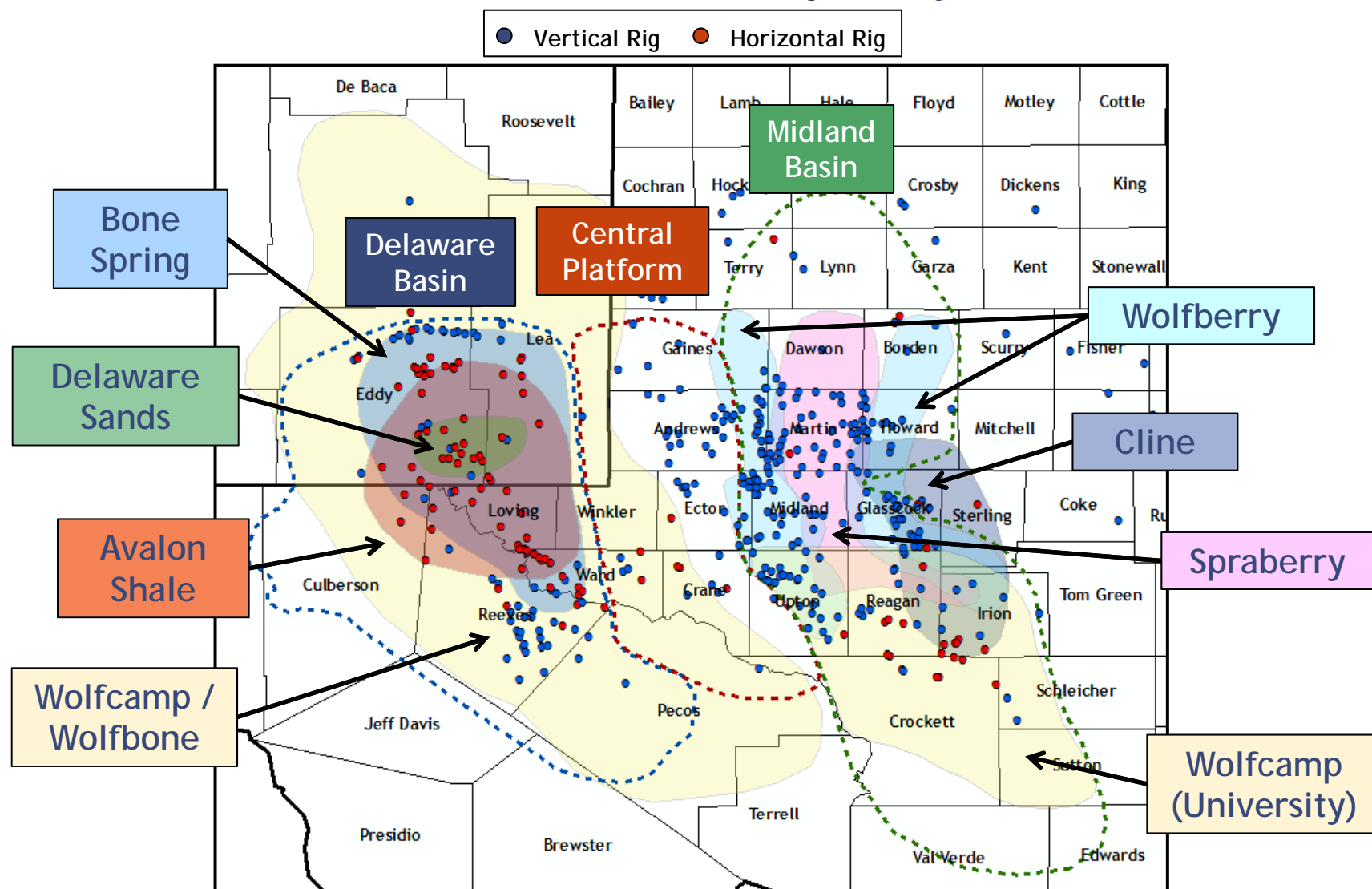
Permian: AREX, CWEI, CXO, LPI and PXD.

Marcellus: GOG, RRC and EQT.

Permian Deal Metrics

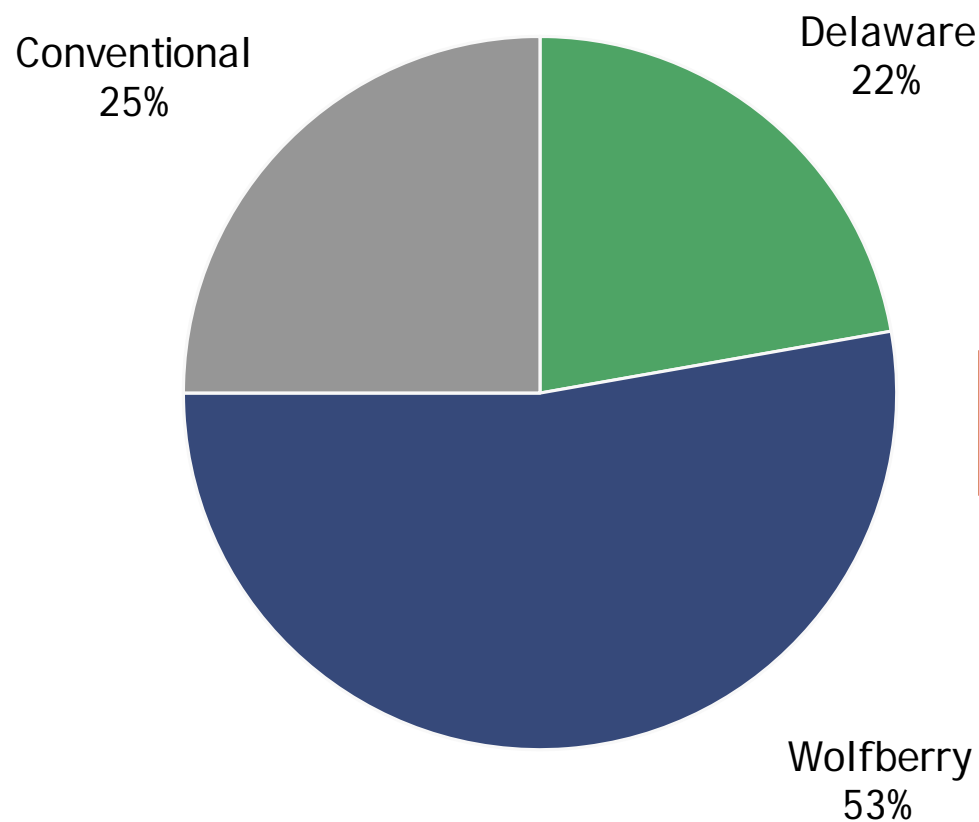
Stacked Oil Plays Drive the Permian

Current Permian Drilling Activity



Permian M&A Deal Flow

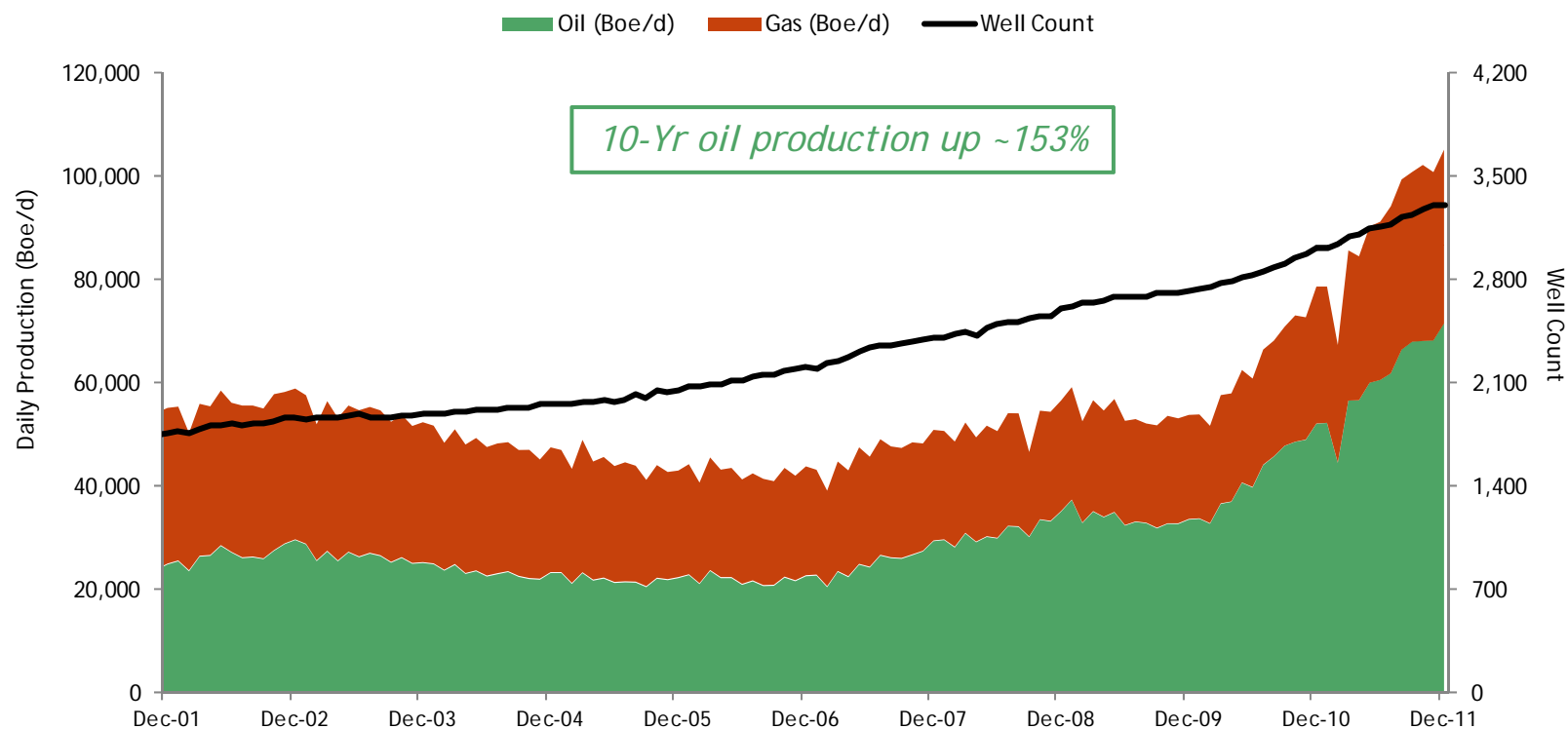
2009 - 2012 YTD Deal Flow



*75% of deals in
"resource" plays*

Industry Weighted Towards Oily Production

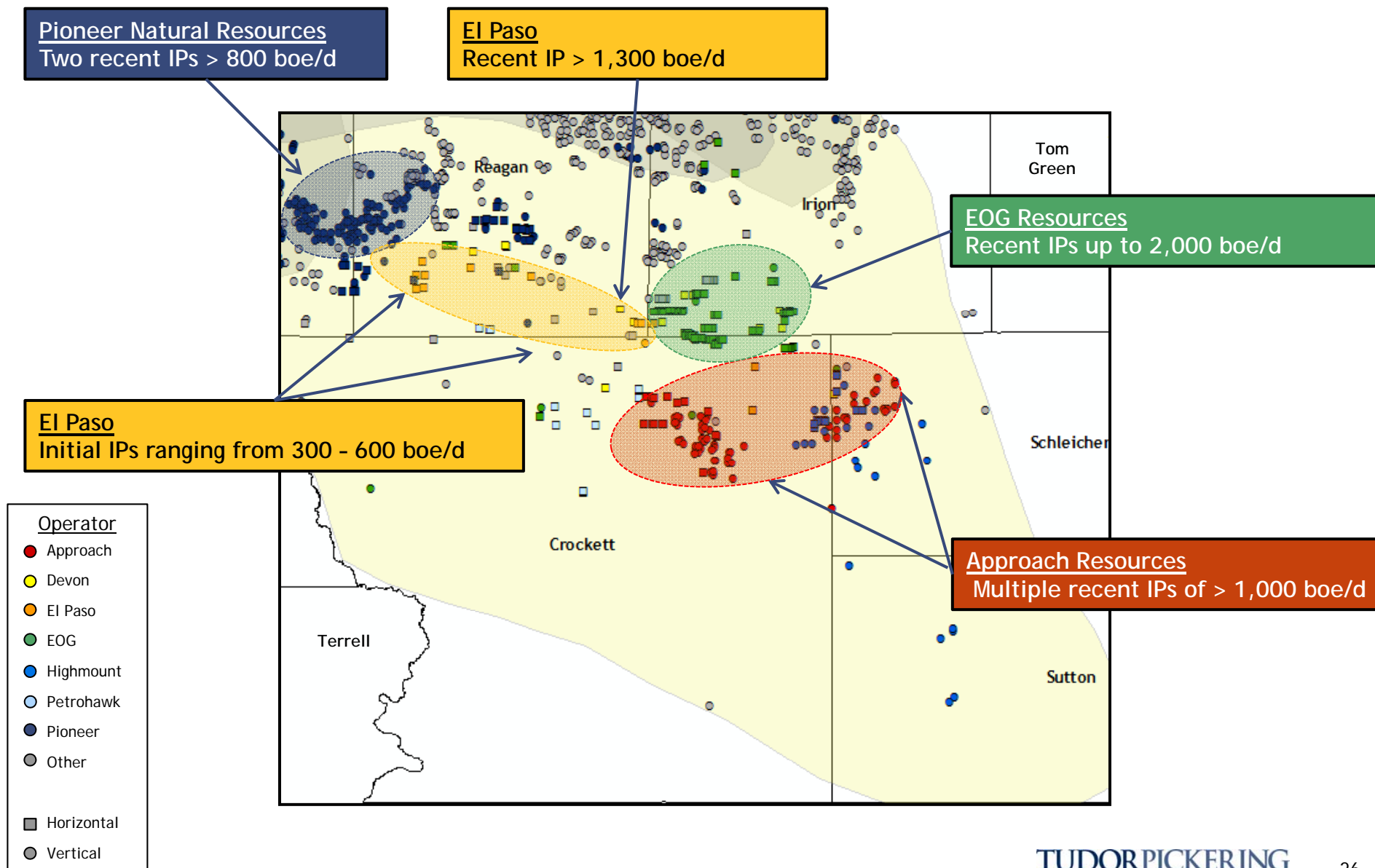
Wolfcamp and Bone Spring Production



Source: HPDI.

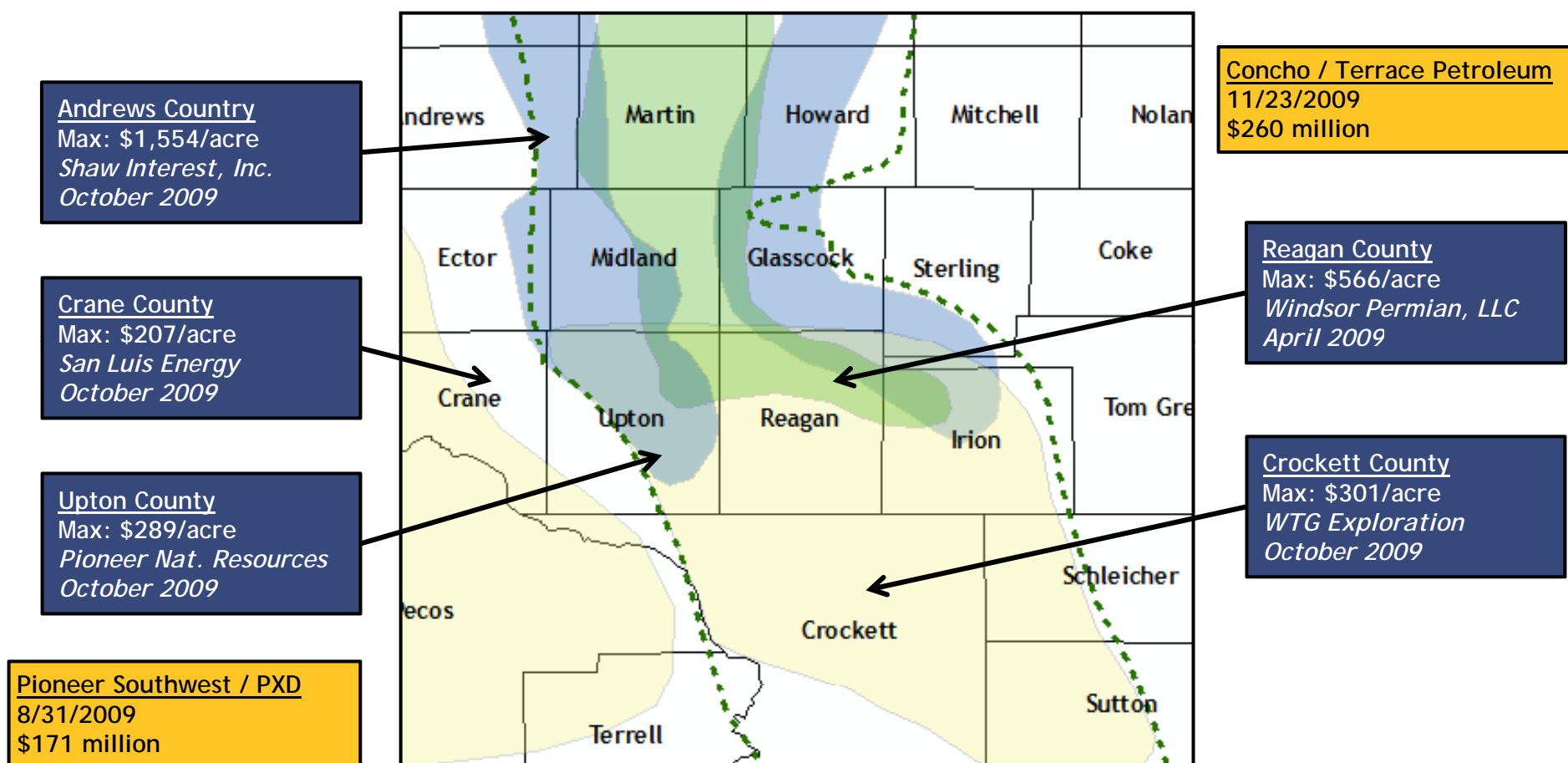
Note: Includes all Texas producing wells with Wolfcamp, Bone Spring or Trend Area as a target reservoir; Excludes wells with field reported as Spraberry.

Midland University Lands Wolfcamp Results



Source: HPDI. All horizontal and vertical Wolfcamp, Wolfberry, and Wolfork permits from 1/1/2011.

The Evolution of a Permian Play...Wolfberry 2009



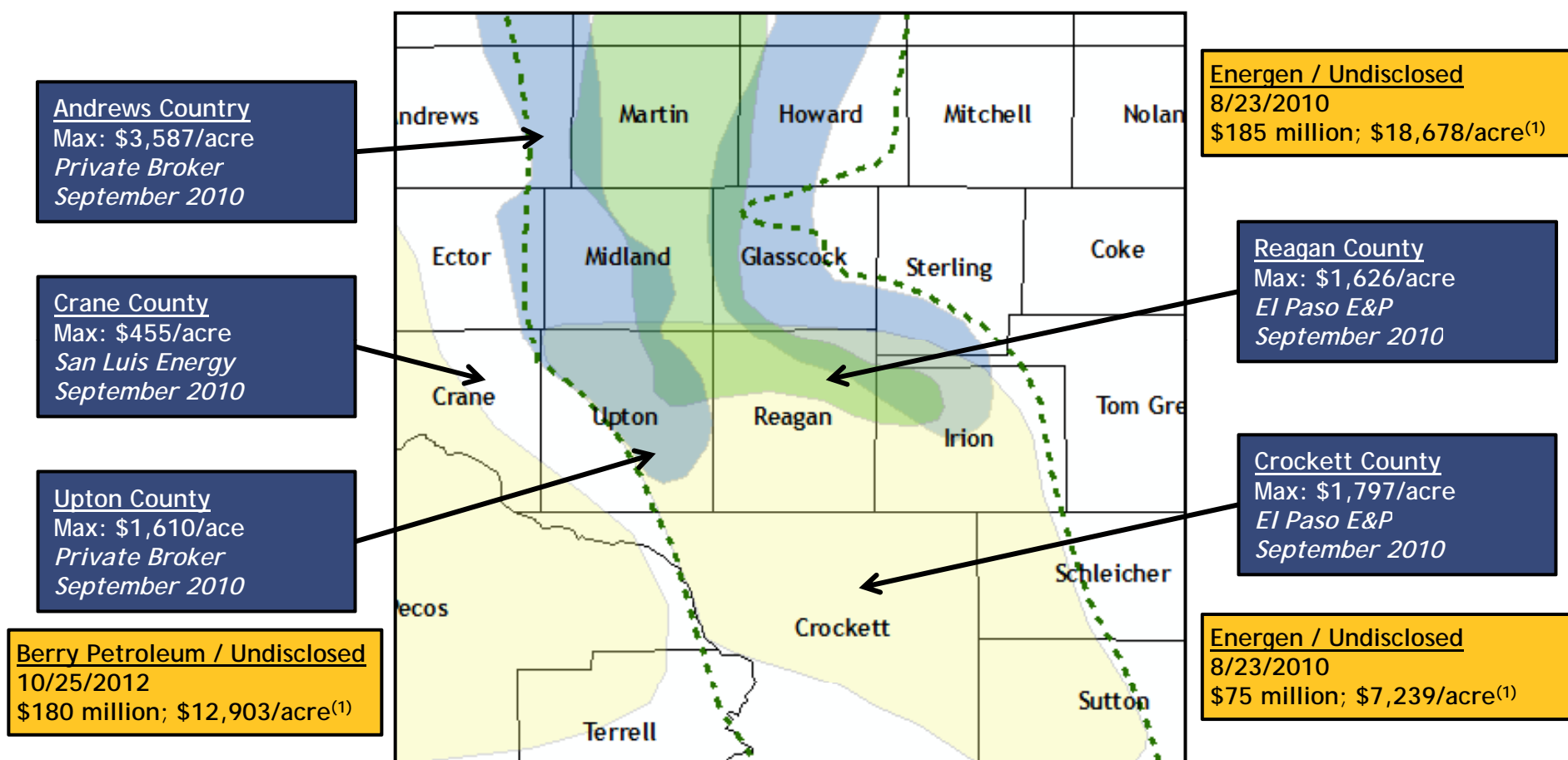
■ Lease Sales ■ M&A Deals

UT Lands 2009 Lease Sale
157 Tracts Sold for average \$287/acre
Highest bid \$1,555/acre

Source: UT Lands, Company Investor Presentations and press releases.

(1) \$/acre estimate excludes PDP and does not correct for developed acres. PDP valued at \$50,000/Boe/d.

The Evolution of a Permian Play...Wolfberry 2010



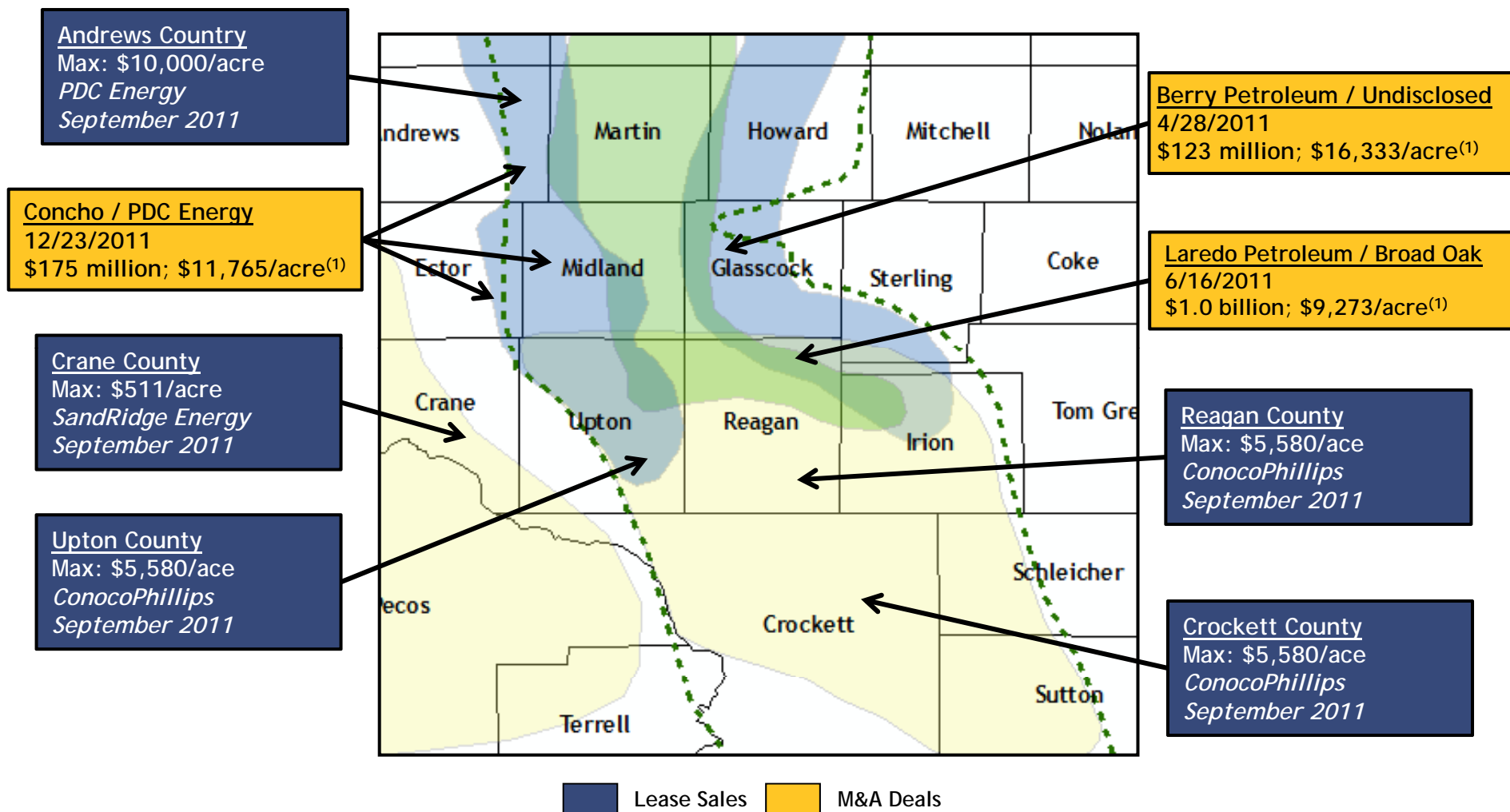
■ Lease Sales ■ M&A Deals

UT Lands 2010 Lease Sale
510 Tracts Sold for average \$985/acre
Highest bid \$3,587/acre

Source: UT Lands, Company Investor Presentations and press releases.

(1) \$/acre estimate excludes PDP and does not correct for developed acres. PDP valued at \$50,000/Boe/d.

The Evolution of a Permian Play...Wolfberry 2011

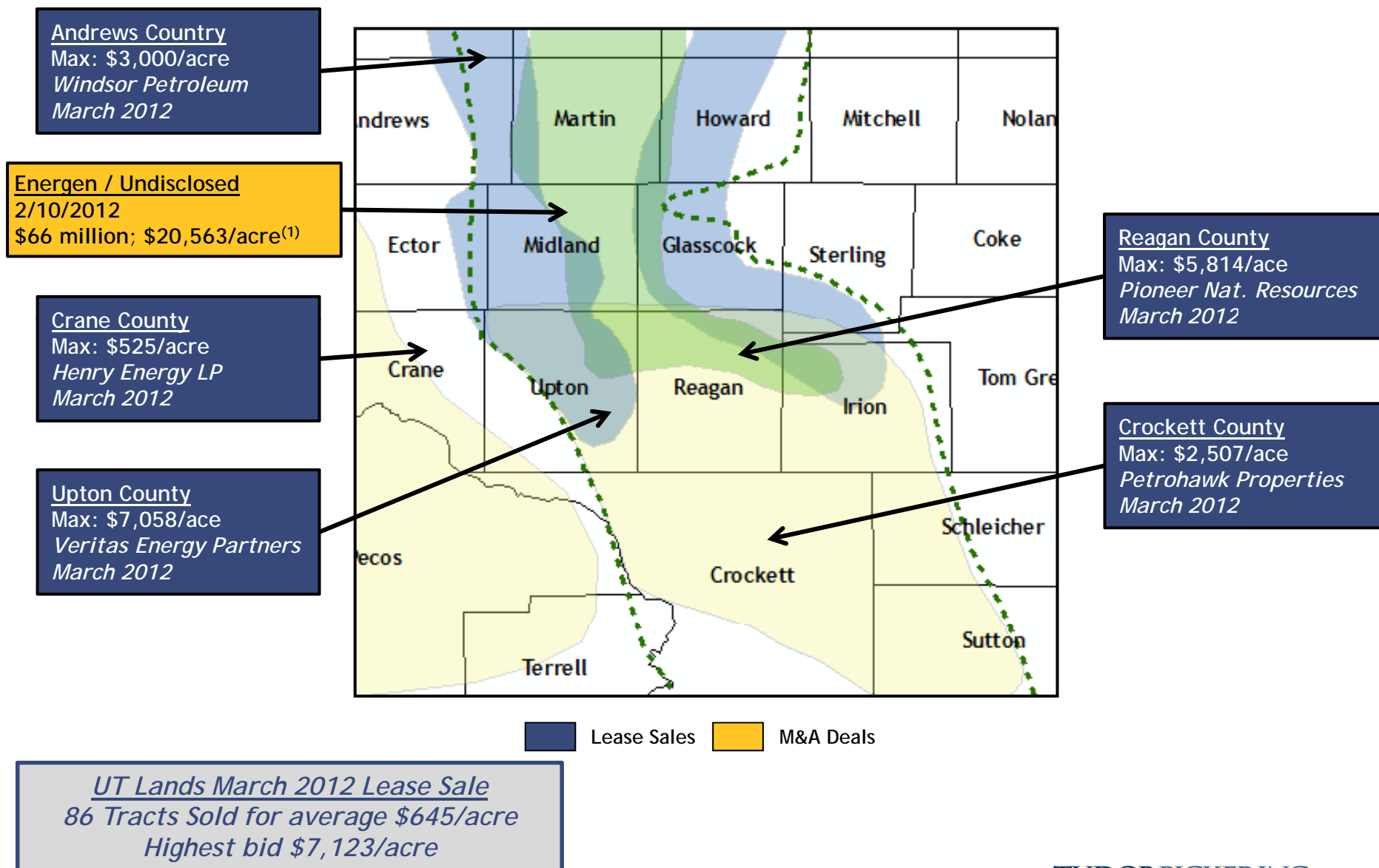


UT Lands 2011 Lease Sale
 496 Tracts Sold for average \$2,245/acre
 Highest bid \$10,000/acre

Source: UT Lands, Company Investor Presentations and press releases.

(1) \$/acre estimate excludes PDP and does not correct for developed acres. PDP valued at \$50,000/Boe/d.

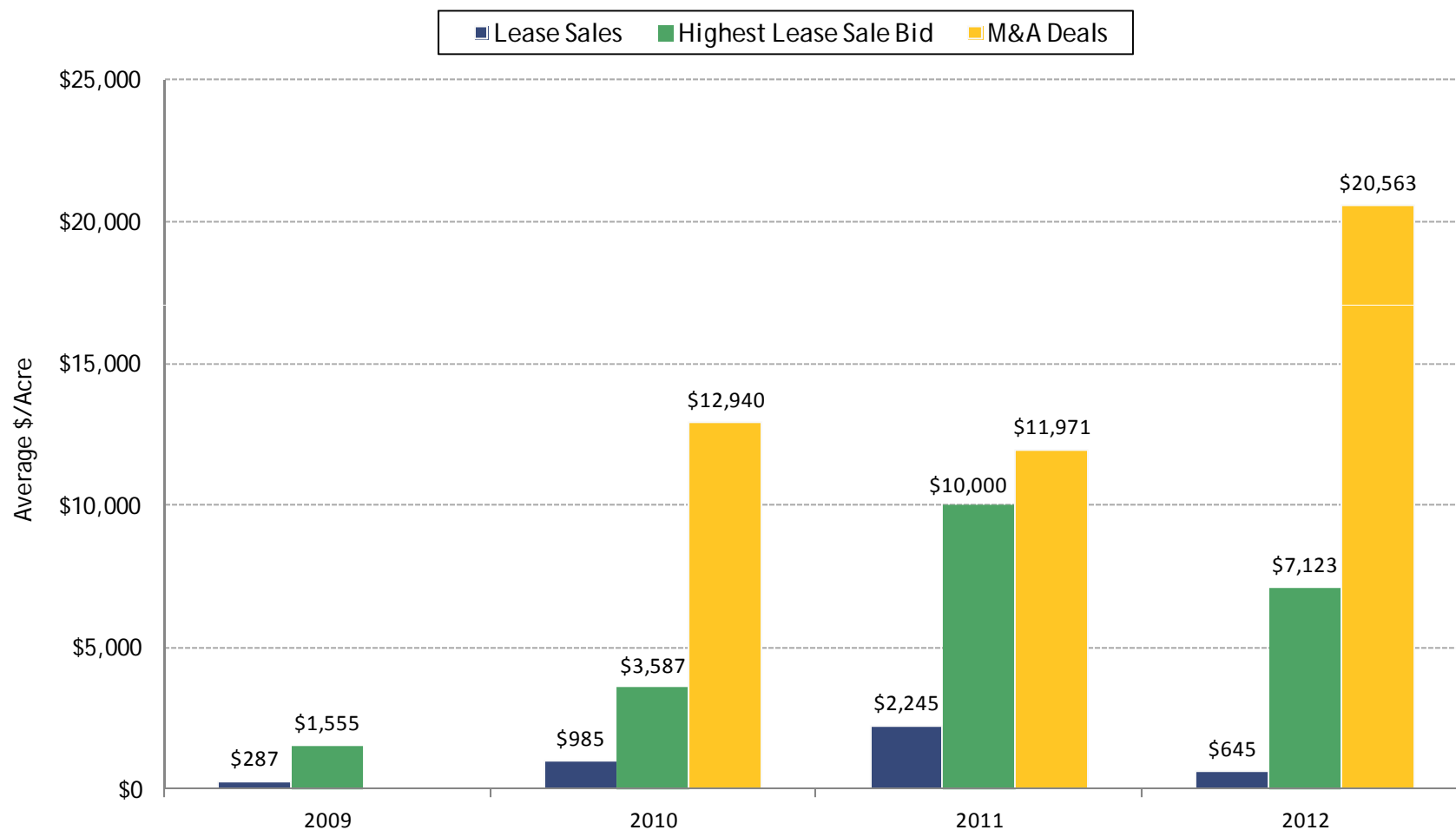
The Evolution of a Permian Play...Wolfberry 2012



Source: UT Lands, Company Investor Presentations and press releases.

(1) \$/acre estimate excludes PDP and does not correct for developed acres. PDP valued at \$50,000/Boe/d.

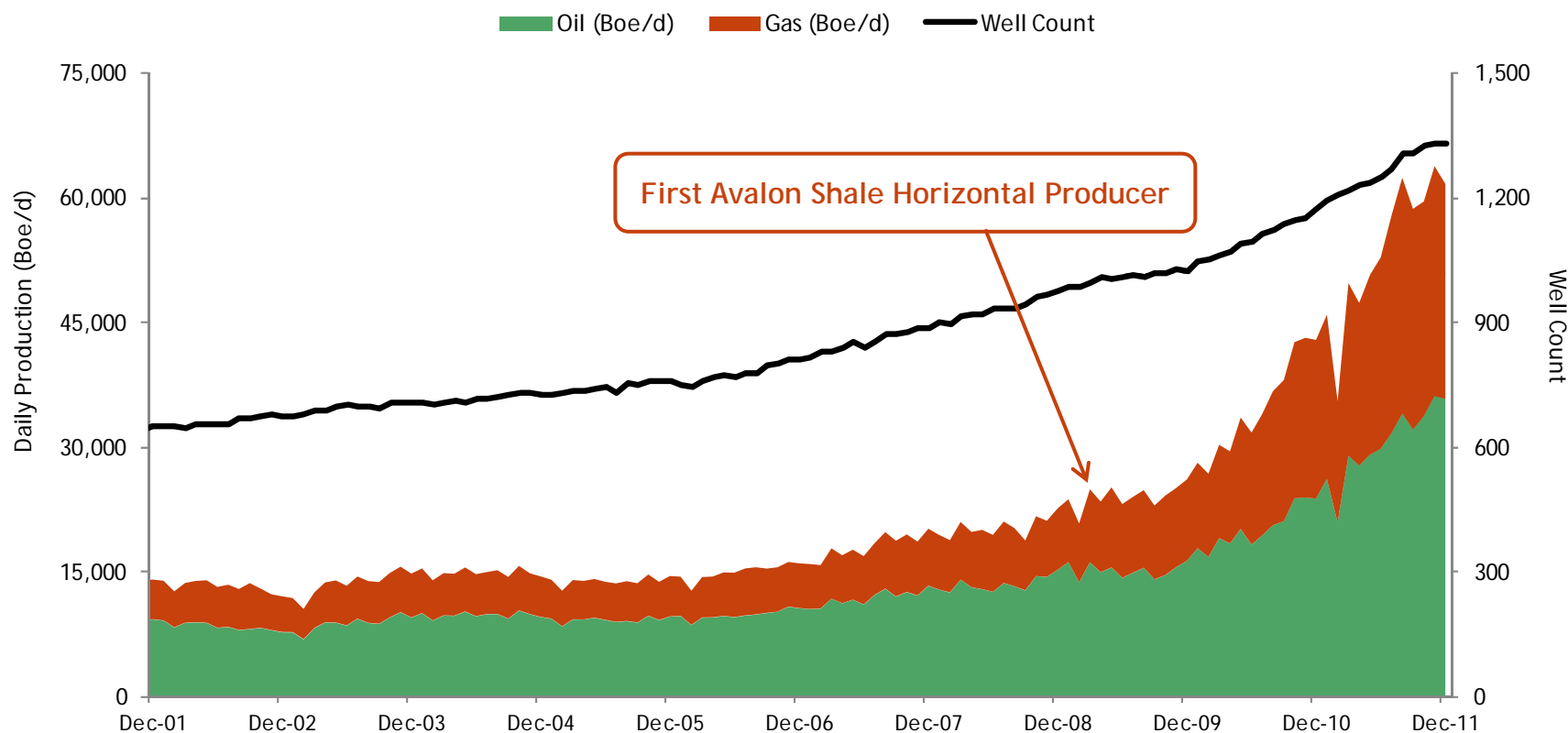
Wolfberry / Wolfcamp Acreage Now First In Class



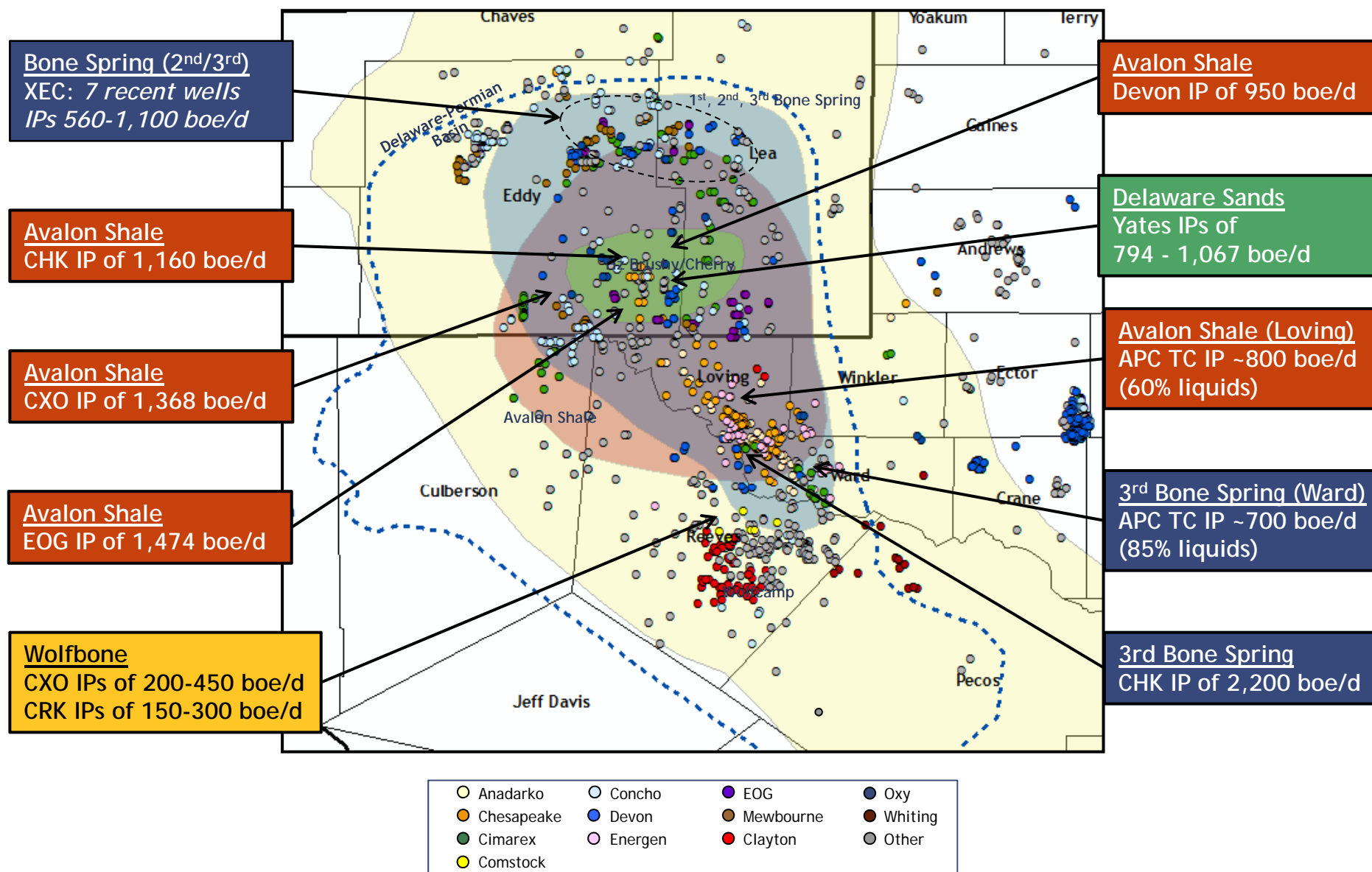
Source: Company Investor Presentations and press releases.

Note: \$/acre estimate excludes PDP and does not correct for developed acres. PDP valued at \$50,000/Boe/d.

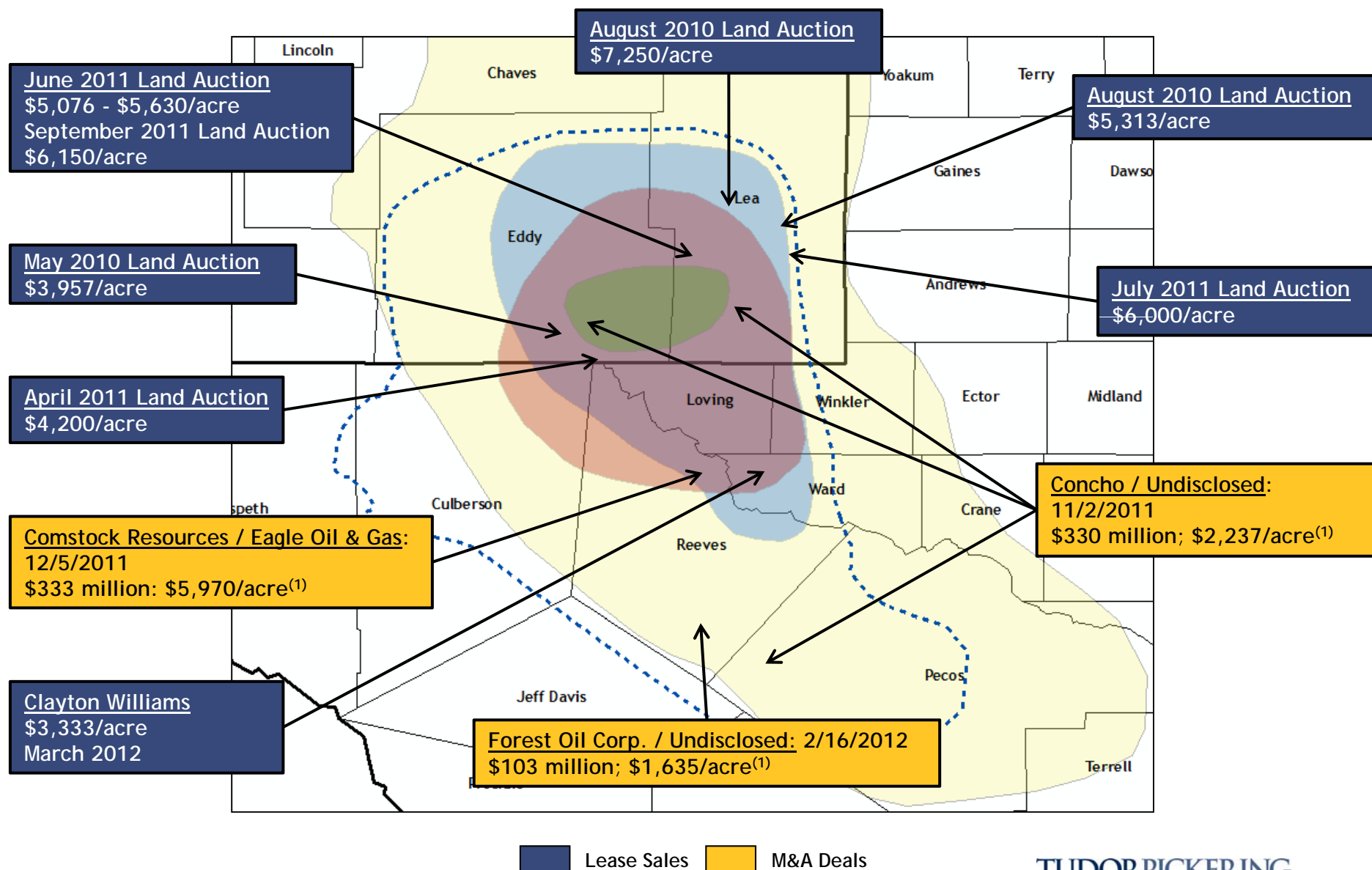
Avalon / Bone Spring Production Rapidly Increasing



Recent Industry Results in the Delaware



Recent Notable Delaware Basin Transactions

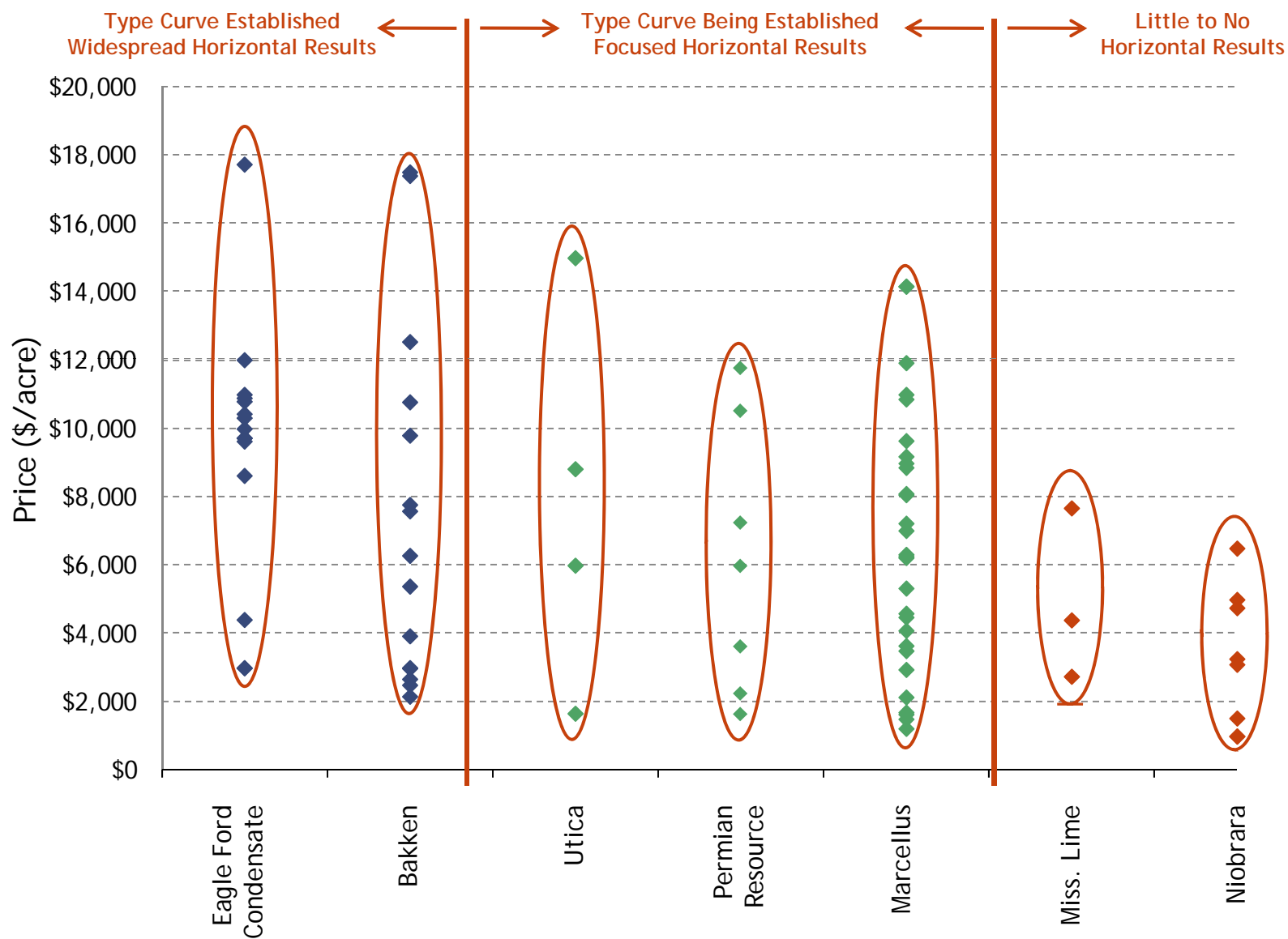


Source: Company Investor Presentations and press releases.

(1) \$/acre estimate excludes PDP and does not correct for developed acres. PDP valued at \$50,000/Boe/d.

Conclusions

Metrics Should Increase With Drilling



Permian – Right Place at Right Time

- Oil prices to remain strong
- Liquids pricing strong enough
- Oil deals increasing
- Horizontal applications
- Vertical – accessing new pay
- Scale – running room
- Multiple targets
- Open for business

Bakken Themes – Now and In The Future

Major Themes and Catalysts as the Bakken Continues to Evolve

- 1) Completion Technology
- 2) Well Performance
- 3) Infill Drilling/Spacing
- 4) Three Forks
- 5) Deep Three Forks
- 6) Drilling Costs
- 7) Western Rough Rider



*Bakken Values will
Rise*

- 1) Continues to Advance
- 2) IPs Define Sweet Spots
- 3) Denser Over Time with Pad Drilling
- 4) Similar to Bakken and Contiguous
- 5) Emerging Value
- 6) Improve With Time
- 7) Core Extends West of the Nesson



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The firm, headquartered in Houston, Texas, has approximately 130 employees and offices in Denver, Colorado; and in New York, New York. Its affiliate, Tudor, Pickering Holt & Co. International, LLP, is located in London, England.

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