How Do You Survive In 2016?







Sources of Capital for E&Ps in 2016



Asset Sales



Joint Ventures







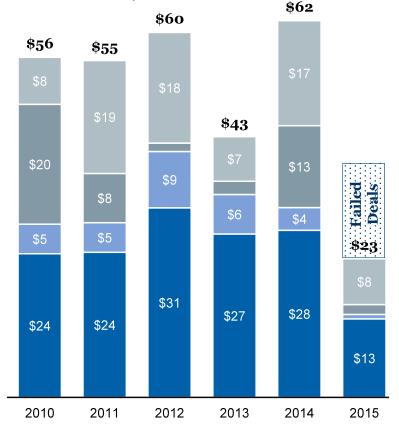
Corporate Restructurings

- Debt for equity exchanges
- Bankruptcies (20+ already)

Quiet A&D Market In 2015; 2016 Expected To Be Much Busier

Annual U.S. E&P Onshore A&D Supply (\$B) (1)

- Conventional Gas
- Gas Resource Plays
- Conventional Oil
- Oil Resource Plays



Key Drivers to 2016 Supply

- 1 Borrowing base redeterminations
- 2 Capital markets largely closed
- 3 Lack of hedging
- 4 2015 failed deals coming back around

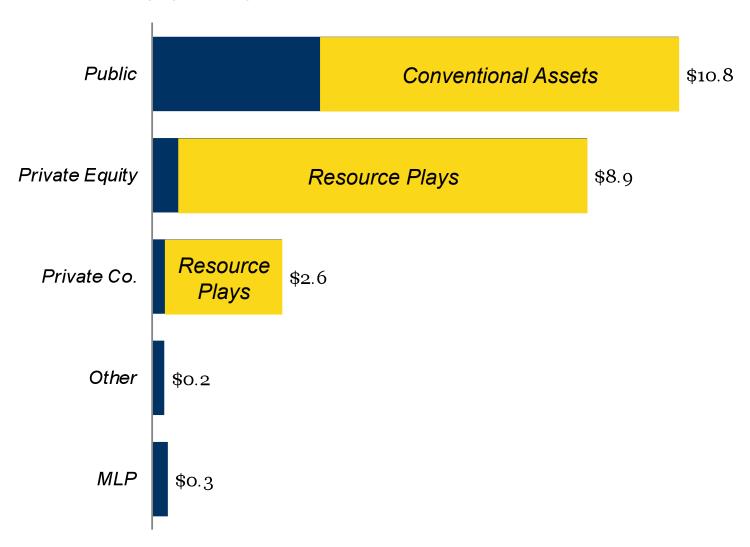
Annual Deal Count (\$100 MM+) (2)

Region	2014	2015
Conventional	39	23
Delaware Basin	4	7
Midland Basin	21	9
Bakken	8	2
Eagle Ford	9	2
Niobrara	6	3
SCOOP / STACK	1	2
Marcellus / Utica	13	5
Other	21	4
Total	122	57

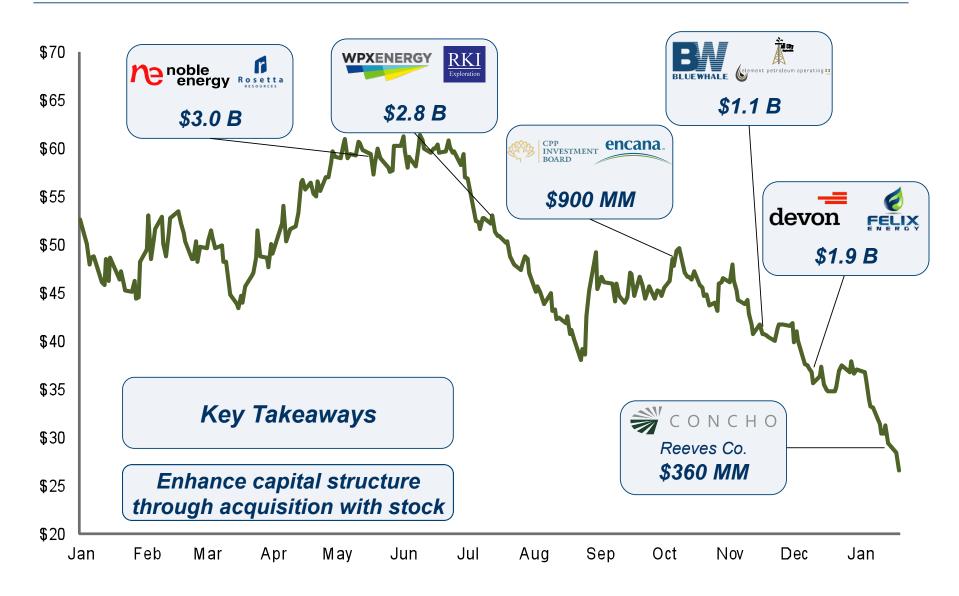
⁽¹⁾ Includes onshore U.S. asset transactions greater than \$20 million. (2) Includes onshore U.S. resource and conventional asset transactions greater than \$100 million in select regions. Source: RBC Richardson Barr internal database, public filings, company press releases.

Who is Selling?

2015 Asset Supply by Seller Type (\$ MM)

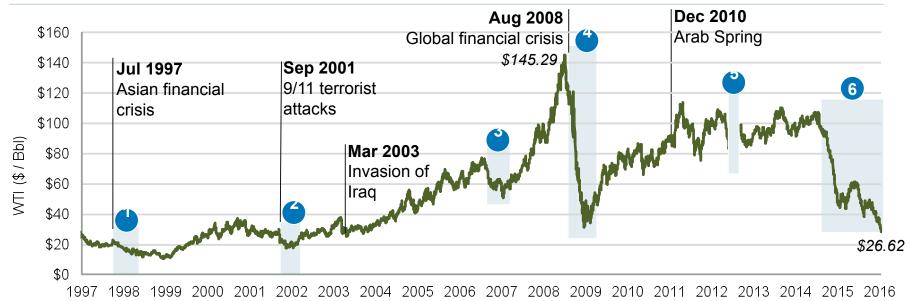


Most Interesting Transactions Over The Last 12 Months



Commodity Supply/Demand Fundamentals Trumping Geopolitics

WTI Oil Price – 1997 to 2015



Event	Asian Financial Crisis	2 9/11 Attacks	3 Reduced Demand	4 Global Financial Crisis	5 Economic Slowdown	6 Oversupply
Oil price decline	41%	38%	32%	69%	29%	75%
Decline Period	5-7 months	~2 months	5-6 months	5-6 months	2-4 months	18 months +
Recovery	2-3 years	~1 year	~6 months	3-4 years	~2 months	?

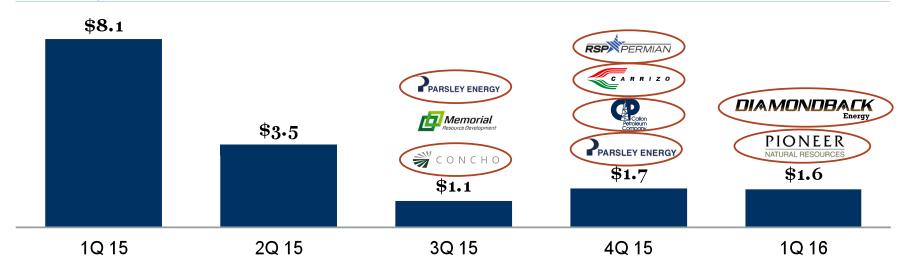
How Are Oil Prices Affecting Deal Making?



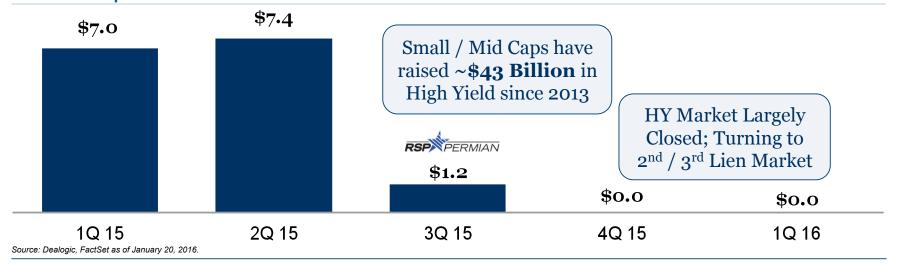
Source: RBC Research, Bloomberg and Factset as of January 20, 2016.

Capital Markets Have Shut Down...Except For The Permian

E&P Equity Capital Markets

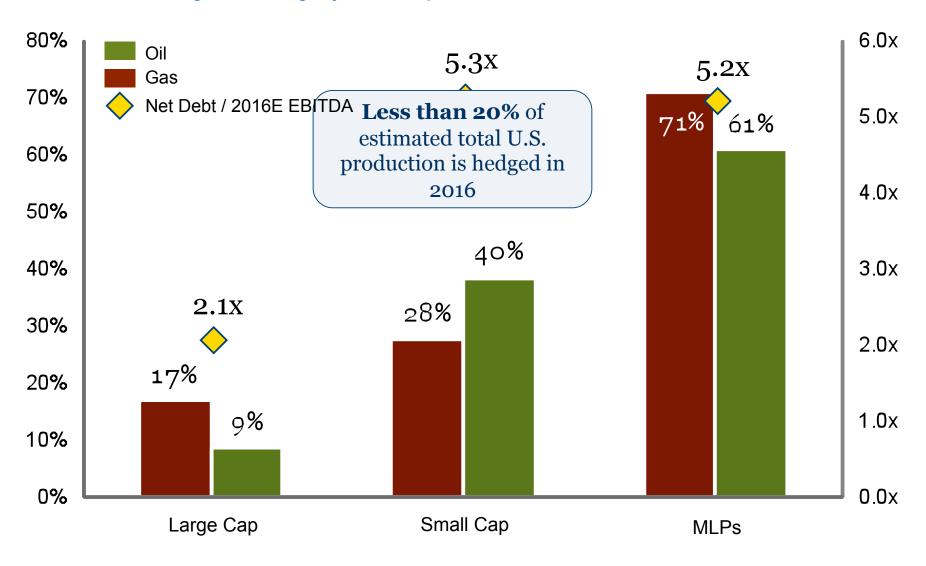


E&P Debt Capital Markets

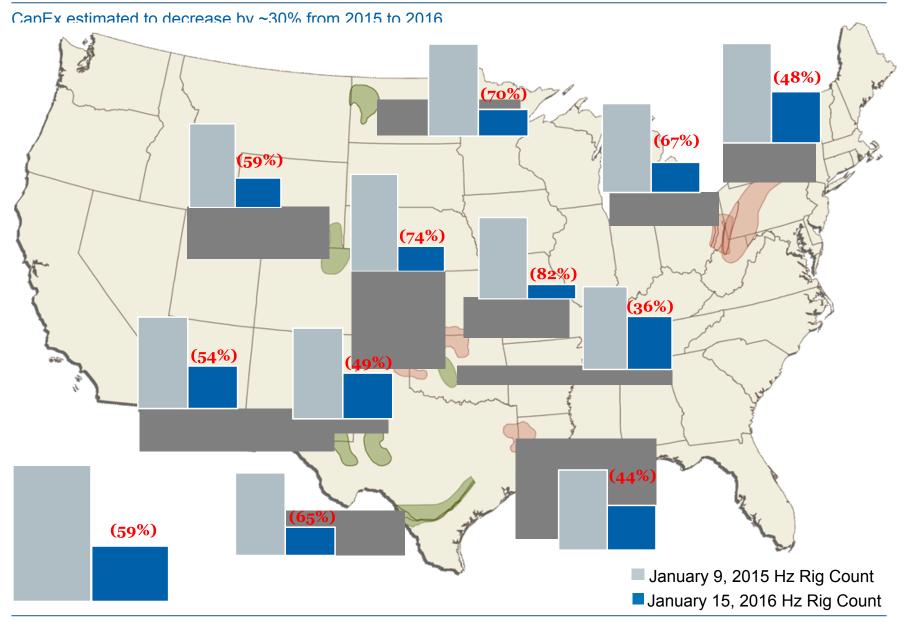


Lack of Hedging Will Lead To Increased Asset Supply

2016 Total Prod. Hedged & Leverage by Market Cap



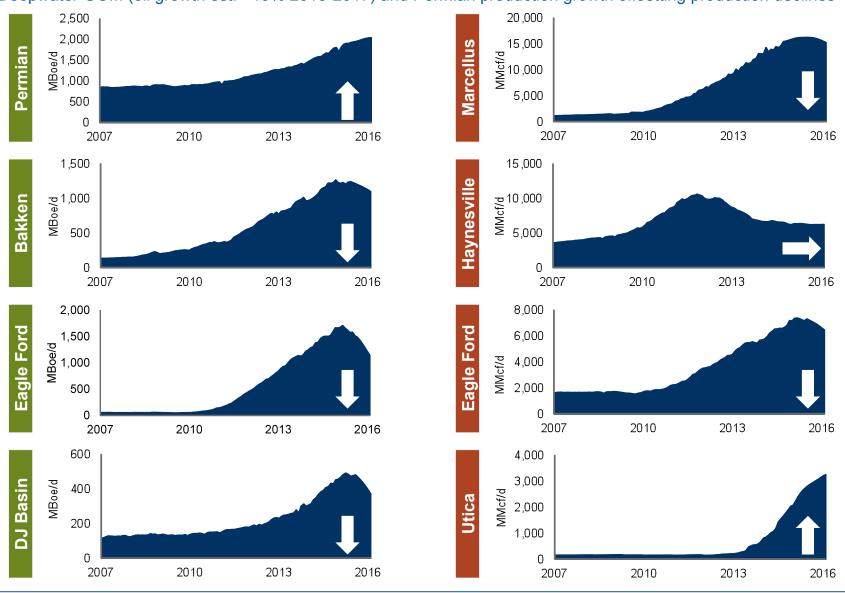
Decrease in Rig Activity & CapEx Across U.S. Resource Plays...



⁹ Sources: Baker Hughes Rig Count. Regions per Baker Hughes – SCOOP / STACK, Midland Basin, Delaware Basin per RBC Richardson Barr, OPEC, IEA, EIA, RBC Research.

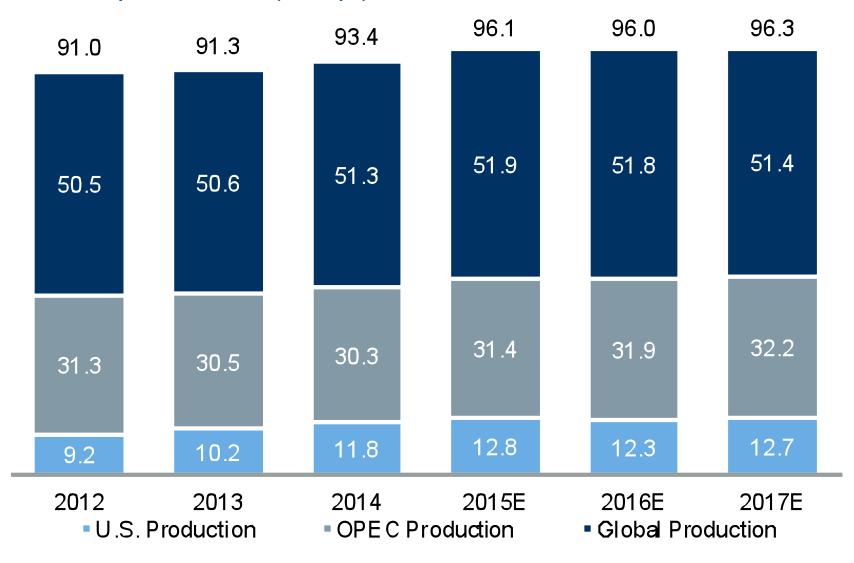
... Causing Production Declines In Most U.S. Basins...

Deepwater GOM (oil growth est. +19% 2015-2017) and Permian production growth offsetting production declines



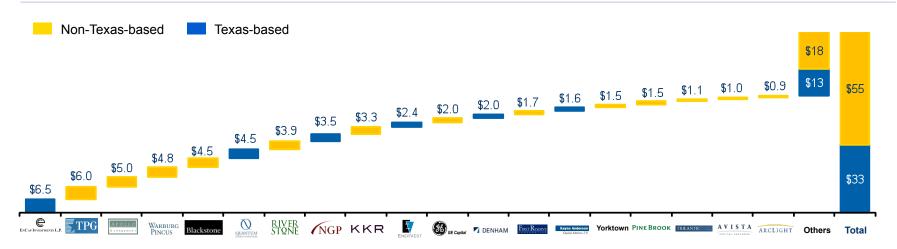
...However, Global Supply Expected To Increase

Global Liquids Production (MMBopd)

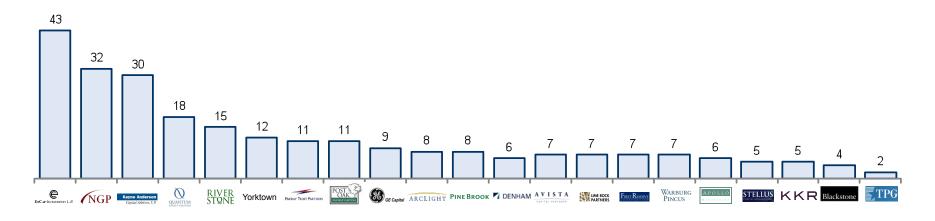


Private Equity Armed With \$85+ Billion

Financial Sponsors Increasingly Active In The E&P Space – ~\$85+ B In E&P Focused Capital



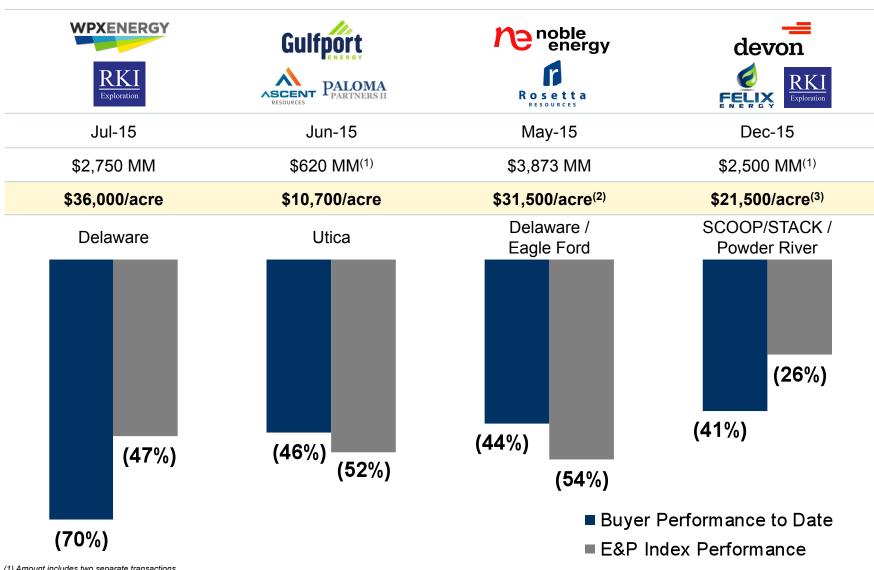
Financial Sponsor Universe – 250+ Total U.S.-Focused E&P Management Teams



Source: RBC Richardson Barr internal database.

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Publics' Cautious Acquisition Posture Creating Opportunity for Private Equity



⁽¹⁾ Amount includes two separate transactions.

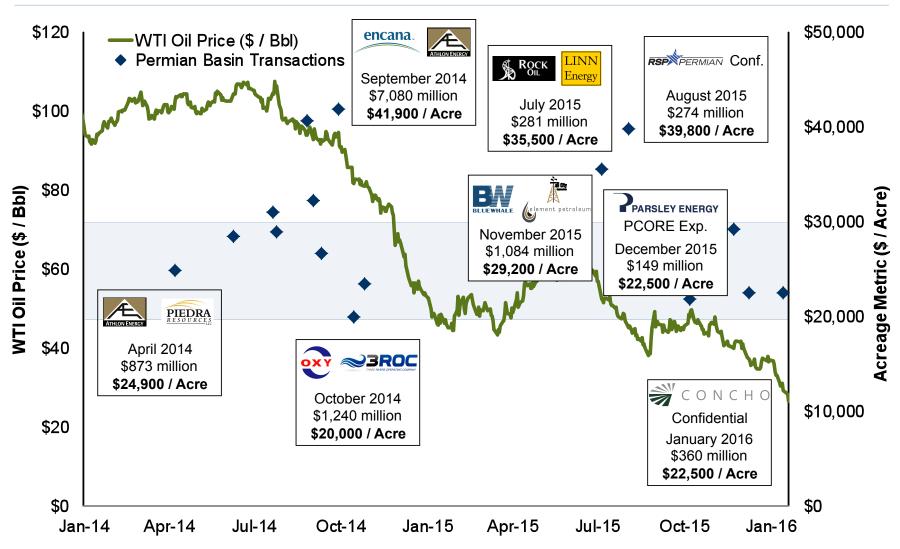
Source: Factset data as of 1/14/2016.

⁽²⁾ Represents Delaware undeveloped acreage value only.

⁽³⁾ Represents Felix undeveloped acreage only.

When Will Core-of-Core Valuations Start To Be Impacted?

Permian Basin Valuations Versus Oil Price



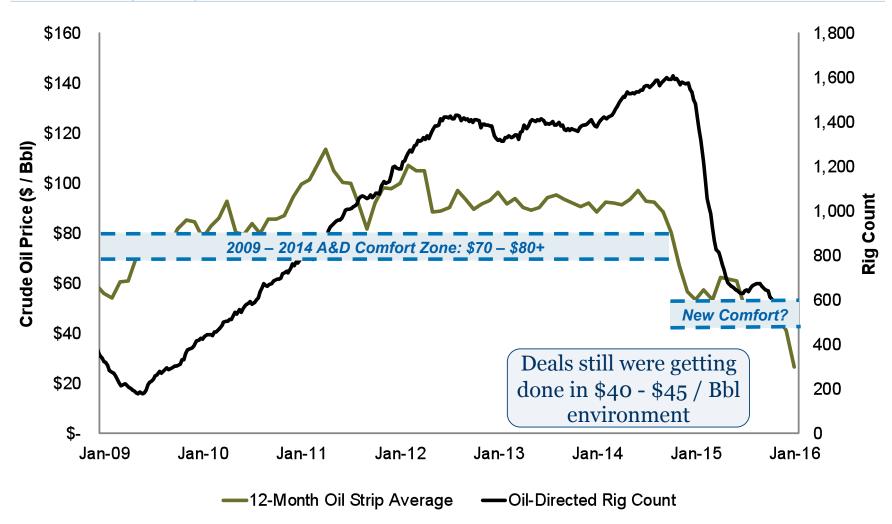
RBC Insights On Current Buyer Methodology

15

December Catagory	Present Value (\$MM) At Varying Discount Rates								
Reserve Category		PV ₈	PV ₁₀	PV ₁₂	PV ₁₅	PV ₂₀	PV ₂₅	PV ₃₀	PV ₄₀
PDP		M	\checkmark						
PDNP				\checkmark	W				
Bench 1 (Core)						X	M		
Bench 2 (Core)						X	M		
Bench 3 (Emerging Core)							X	X	

A&D Adjusts As It Needs To – Just Need Stability

Oil Price vs. Rig Activity



Source: Bloomberg and Baker Hughes data as of January 14, 2016.

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How Do You Get A Deal Done In The Current Environment?

- 1 Sellers acceptance of bid valuations
- 2 Market for bigger deals is very efficient (you're not going to "steal" anything)
- 3 Marry technical valuation with market metrics
- 4 Creativity to narrow bid / ask spread (e.g. price kickers)
- 5 Pre-empt "bird-in-hand" for a seller more valuable in this kind of market

RBC Deal In The Market: Vanguard SCOOP / STACK

Opportunity Highlights

Asset Overview

- 20,000+ net acres across the SCOOP / STACK
 - Acreage is predominantly held by production
- Current net production of ~8,000 Boepd
 - 50% liquids / 50% gas
- Exposure to multiple high-return zones including Woodford, Meramec and Springer
- Single-well economics providing attractive, industry leading returns in current environment

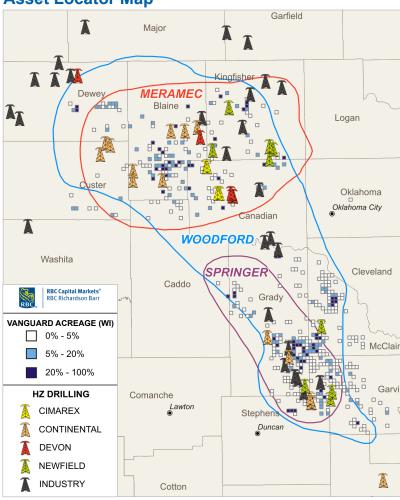
Tremendous Horizontal Upside from Multiple Stacked Pays

- SCOOP / STACK has emerged as a premier U.S. resource play
- Low breakeven development costs with commodity diversification
- Operators testing and optimizing development through downspacing and staggered lateral tests

Key Dates

Executive Summary	In The Market
Data Room Presentations	January 26 th – February 19 th
Bid Date	February 22 nd
PSA Signed	Early March

Asset Locator Map



RBC Deal In The Market: EnerVest Barnett

Opportunity Highlights

Asset Overview

- 116,444 gross / 72,601 net acres spanning all major phase windows of the Barnett (93% HBP)
 - Avg. 56% WI / 44% NRI
- Upside includes low-risk development drilling, downspacing opportunities (250' spacing successfully tested), re-fracs and uphole recompletions

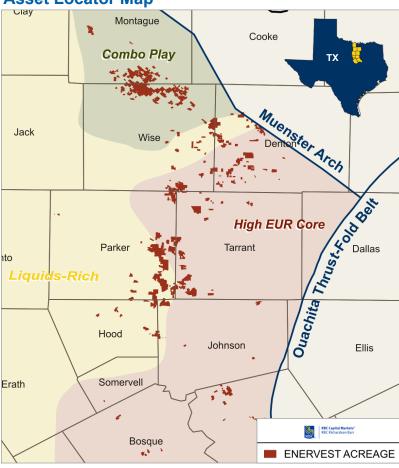
Substantial Production Base With Deep Inventory

- Recent net production of ~160 MMcfpd (64% gas)
- Shallow base decline of ~14% forecast in 2016
- ~1,400 producing wells, ~87% EnerVest operated
- Over 1,300 quantified horizontal drilling locations
- ~400 identified behind pipe and refrac opportunities

Key Dates

Executive Summary	February 4 th		
Data Room Presentations	February 15 th – March 11 th		
Bid Date	March 15th		
PSA Signed	Early April		

Asset Locator Map



Recent U.S. RBC Richardson Barr Transactions

\$500+ Million









Confidential

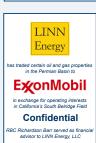
BC Richardson Barr served as finan-

advisor to Apache Corporation

December 2014

M





November 2014

LINN

Energy

has traded certain oil and gas propertie

E%onMobil

in exchange for operating interests in the Hugoton Basin

Confidential

advisor to LINN Energy, LLC

August 2014

Note:



SANDRIDGE

has divested its offshore Gulf of Mexico

and onshore Gulf Coast properties and related assets to

FIELDWOOD FNERGY

\$750,000,000

advisor to SandRidge Energy, Inc.

February 2014







\$100 - \$500 Million





RBC Richardson Barr provided a Fair Market Valuation of the assets to EnerVest, Ltd.

September 2015



has divested its natural gas producing properties and related assets in the Arkoma Basin and Ark-La-Tex area to a Confidential Buyer

\$102,000,000 BC Richardson Barr served as financi advisor to Marathon Oil Company

September 2015



as divested certain oil and gas produ



\$281,000,000 advisor to LINN Energy, LLC

August 2015



July 2015

has divested certain oil and gas

rth Central Texas on the Eastern Shi

Mingon

\$120,000,000



has divested all of its oil and gas properties in the Mid-Continent and Ark-La-Tex regions to two Confidential Buyers

\$324,000,000

RBC Richardson Barr is served as a financial advisor to SM Energy

June 2015

LINN

Energy

has divested certain oil and gas

Fleur de Lis Energy, L.L.C

\$350,000,000

November 2014



has divested its natural gas producing properties and related assets in East
Texas and the Arkoma Basin to a
Confidential Buyer

\$218,000,000

RBC Richardson Barr served as financia visor to Southwestern Energy Compa March 2015

Camterra Resources \$185,100,000

BC Richardson Barr served as final advisor to Forest Oil Corporation

December 2014

advisor to LCS Production Company

November 2014



producing oil and gas properties and properties and related assets in the asehold interests in the Eagle Ford Shale to Permian Basin to



\$250,000,000

October 2014





advisor to Cimarex Energy Company

October 2014



gas properties in the Permian Basin to a Confidential buyer

Confidential

advisor to Capstone Natural Resource Partners, L.P.

September 2014

Represents select RBC Richardson Barr advised transactions.

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