

Charting the Best Course: When the Ducks Are Quacking...

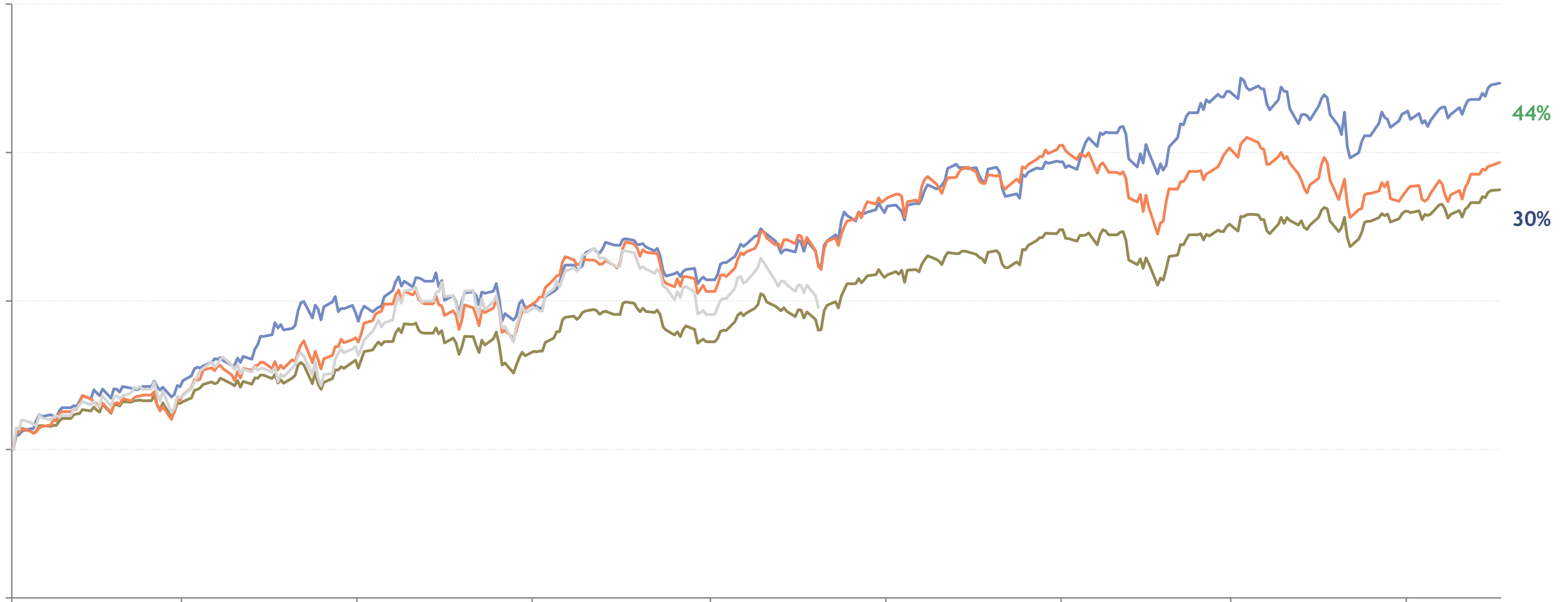
June 10, 2014

Energy Capital Markets Have Been Robust -- Little Concern On the Horizon

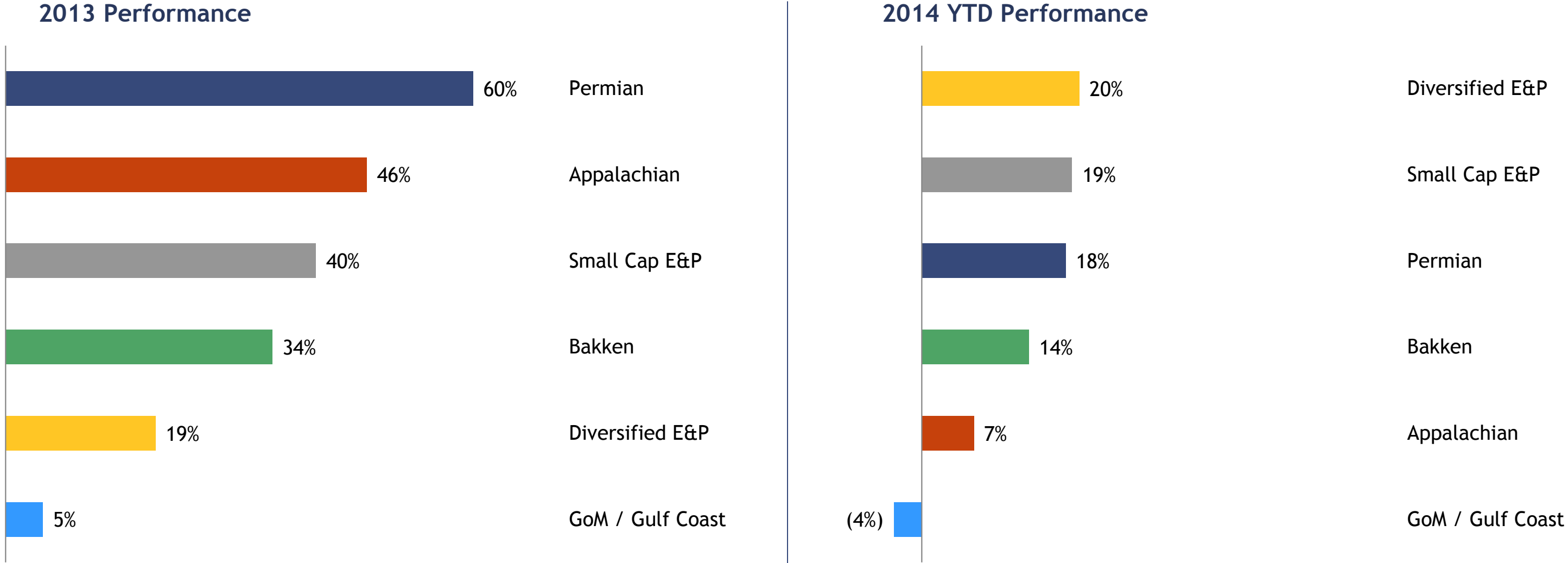
- Investors continue to embrace the *upcycle* for the *upstream*
 - Confidence in the stability of oil prices...cautious but growing optimism in the natural gas outlook.
 - Despite formidable share price performance, valuations are not stretched.
 - Scarcity of opportunities has resulted in halo-effect for well-positioned businesses.
- Upstream assets will continue to move to the *appropriate* owner in the *appropriate* structure
 - Returns are coming under closer scrutiny by investors.
 - Focused business are being richly rewarded in the marketplace.
 - Public equity a most strategic arrow in the quiver.
- Situation-specifics dictate the appropriate path forward
 - Heading into the public marketplace not as daunting given the potential reward construct.
 - The right guy might write the big check.
 - Upstream MLPs are getting more attention.

Upstream Stories Have Been Stellar Performers

Relative Performance Since January 2013



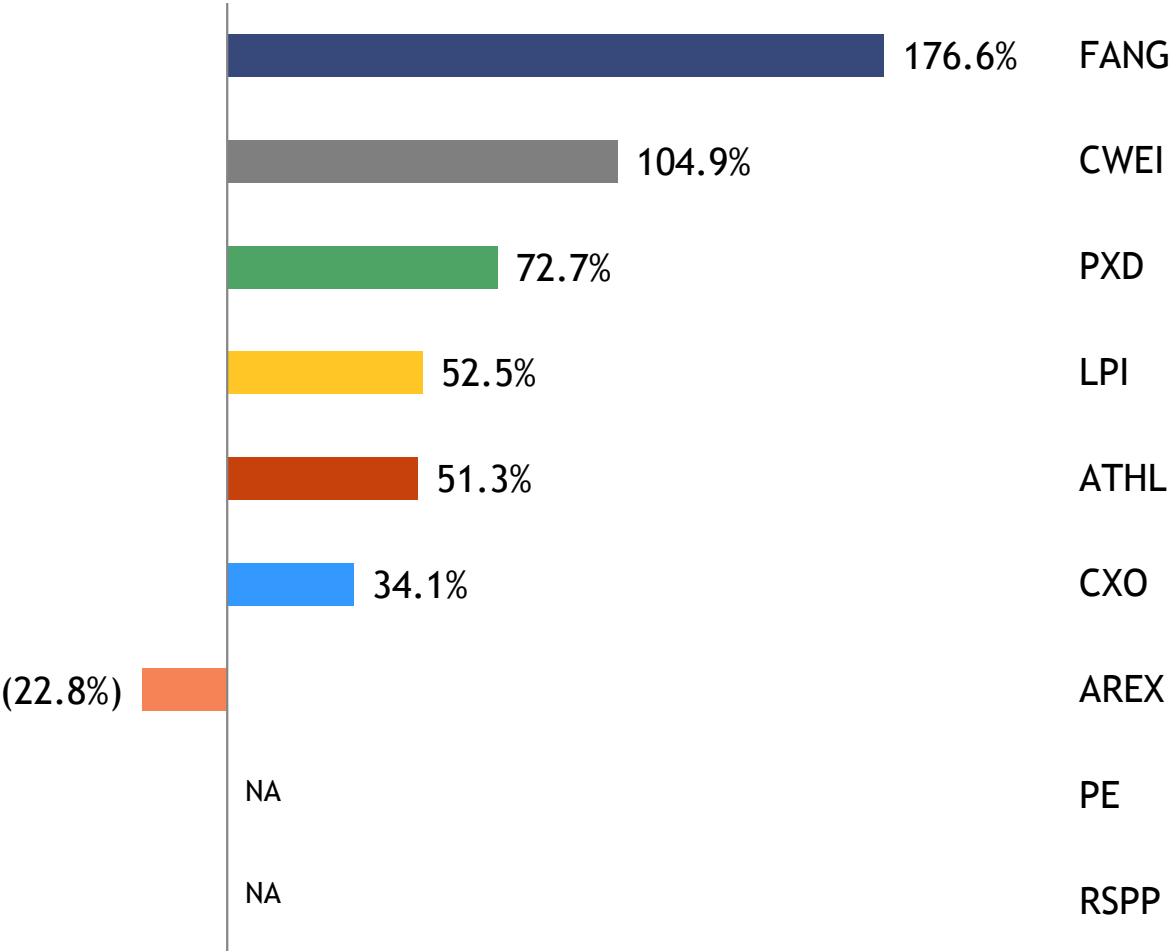
Divergent Performance In Upstream Segment Confirms Investor Selectivity



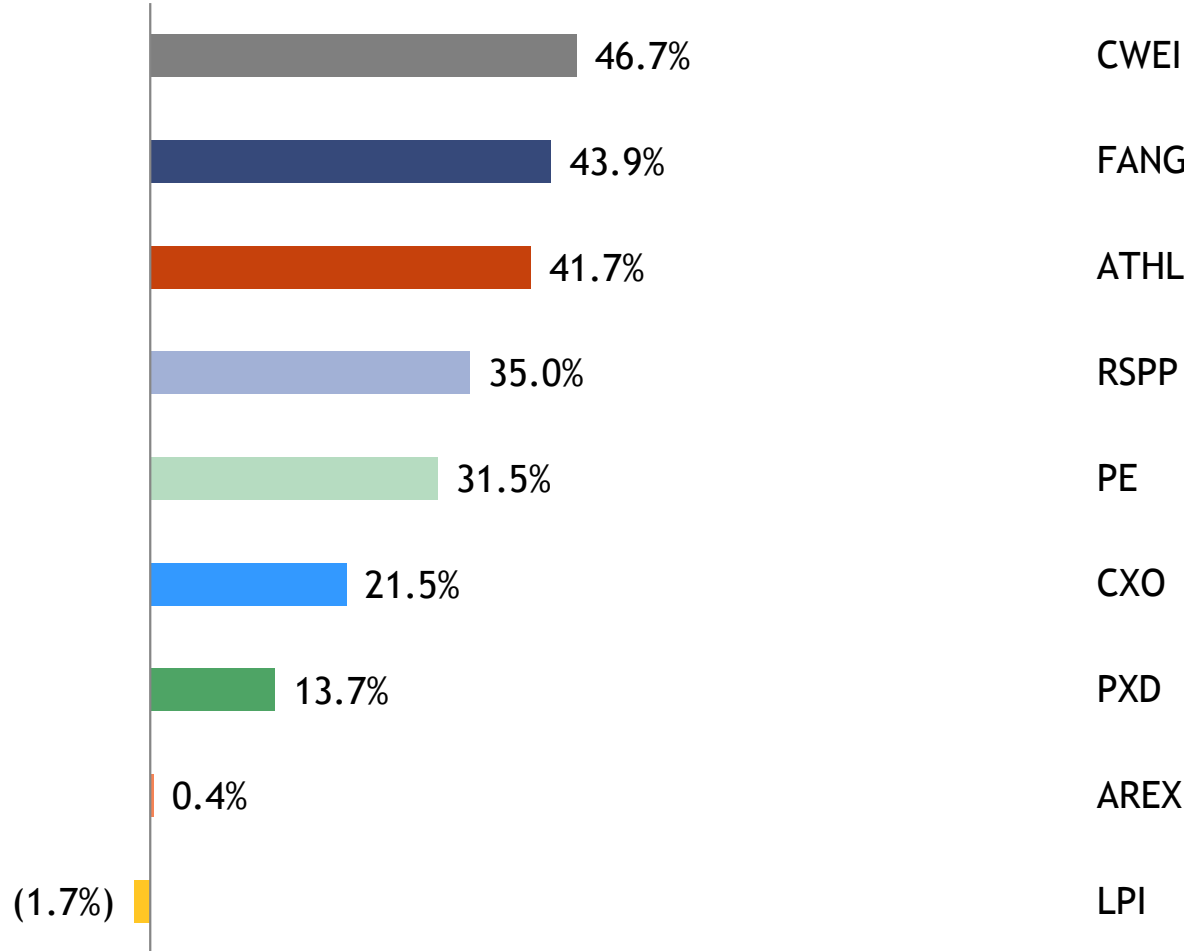
Source: FactSet as of 6/2/2014.
 Bakken: KOG, OAS, NOG, CLR, TPLM, and WLL.
 Appalachia: AR, COG, CNX, EQT, RICE, and RRC.
 Permian: ATHL, AREX, CWEI, CXO, FANG, LPI, PXD, RSPP and PE.
 GoM / Gulf Coast: EXXI, MCF, PQ, SARA, SFY, SGY and WTI.
 Diversified E&P: APA, APC, CHK, DVN, ECA, EOG, EPE, NFX, QEP, XCO and XEC.
 Small Cap E&P: GDP, KWK, UPL, BBG, CRK, GST, PVA, PDCE and REN.

Clearly, The Permian Has Been The Place To Be

2013 Performance

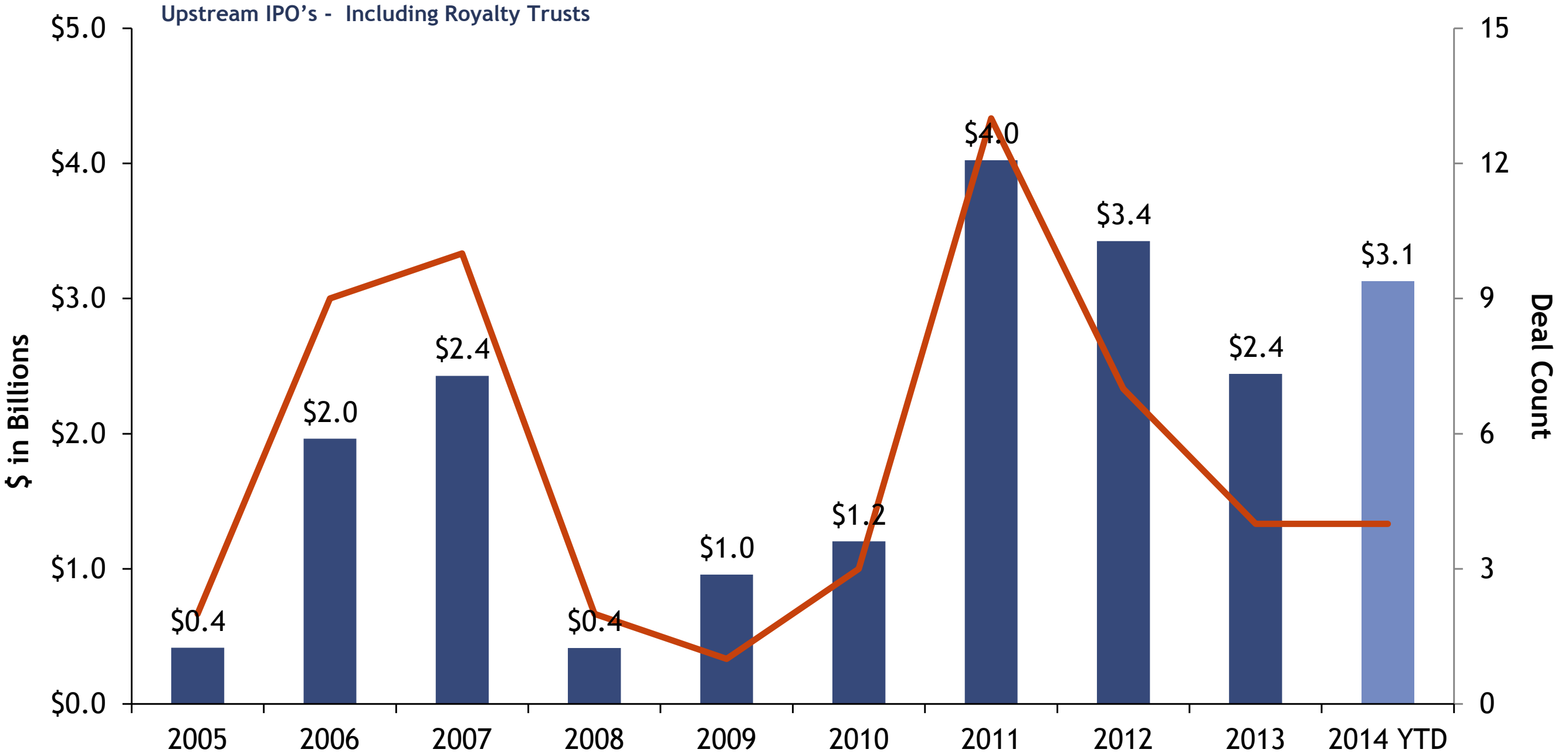


2014 YTD Performance



Source: FactSet as of 6/2/2014.

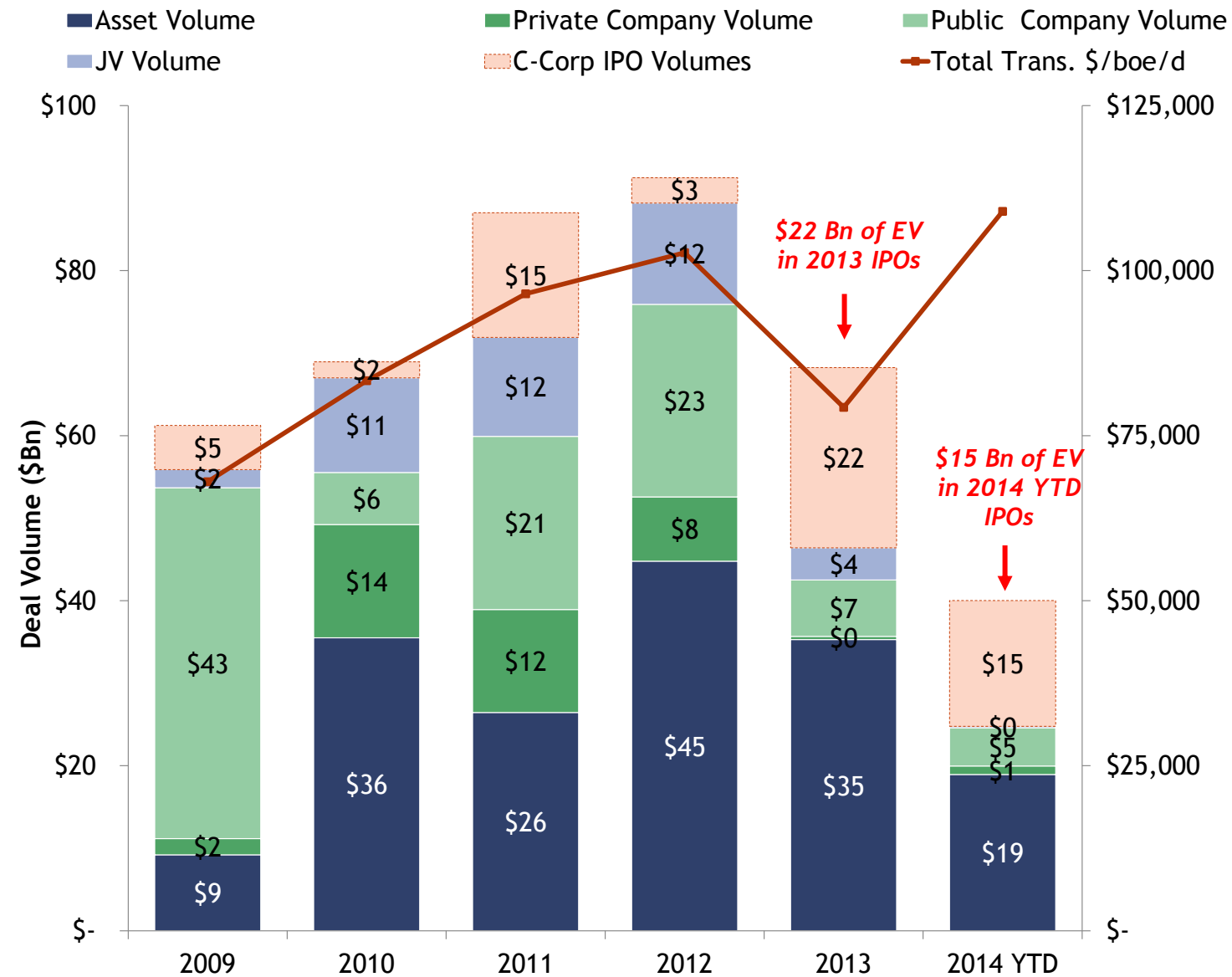
Public Investors Have Opened Their Checkbooks -- \$13Bn In IPO Equity Raised Since '10



Sources: FactSet, Dealogic and Wall Street Research. As of 6/2/2014.

M&A Activity Rebounding from Relatively Slow 2013

Upstream Asset & Corporate Transaction Activity: 2006 - Present⁽¹⁾



Selected 2014 YTD Upstream M&A Transactions ≥ \$750 MM

A	B	C	D	E	F
Date	Buyer	Seller(s)	Deal Level	Value (\$MM)	Key Takeaways
1/29/2014 - 5/1/2014	AMERICAN ENERGY PARTNERS	ENDURING RESOURCES HESS	Asset	\$984 - \$7,800	Renewed CEO with private backing amassing positions in premier plays
5/7/2014	encana	FREEPORT-McMORAN OIL & GAS	Asset	\$3,100	New CEO affecting oil weighting strategy with low risk portfolio addition
4/8/2014	ATHLON ENERGY	PIEDRA RESOURCES Hiberniaresources	Asset	\$873	Premium valuation for premium assets funded with premium currency
3/31/2014	MAVERICK AMERICAN NATURAL GAS	encana	Asset	\$1,800	Sponsor-backed E&P acquiring MLP-able assets; PE making larger bets
2/6/2014	BAYTEX ENERGY CORP.	AURORA OIL & GAS LIMITED	Corporate	\$2,325	Canadian operators becoming active acquirors in the U.S.

Upstream M&A activity slowed by ~50% in 2013, relative to 2012 levels, with significant volumes cannibalized by the IPO market

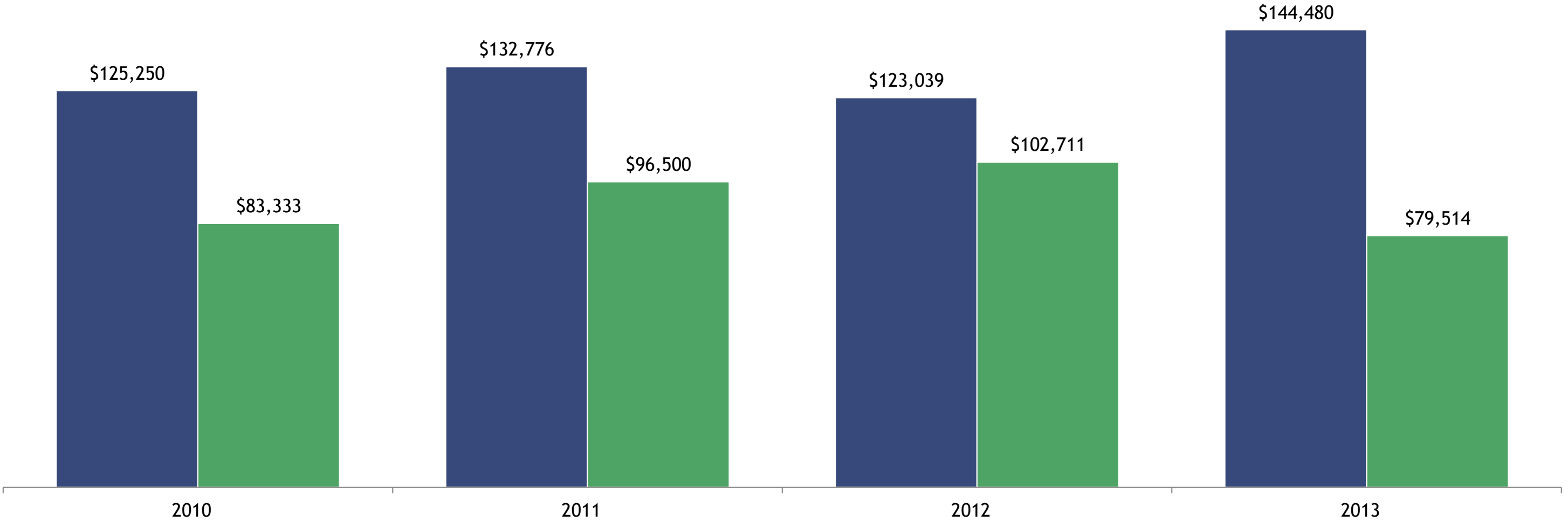
Source: Company filings and IHS Herold.

(1) Deal value ≥ \$50 MM. Reflects transactions where United States listed as primary country.

Disconnect Between Public vs. Private Has Been Remarkable

Several Considerations Have Been Responsible For Valuation Gap

Permian Basin Specific: *Flowing Metric (\$/Boe/d)*^(1,2)



A&D Metric (Discount) / Premium	(33%)	(27%)	(17%)	(45%)
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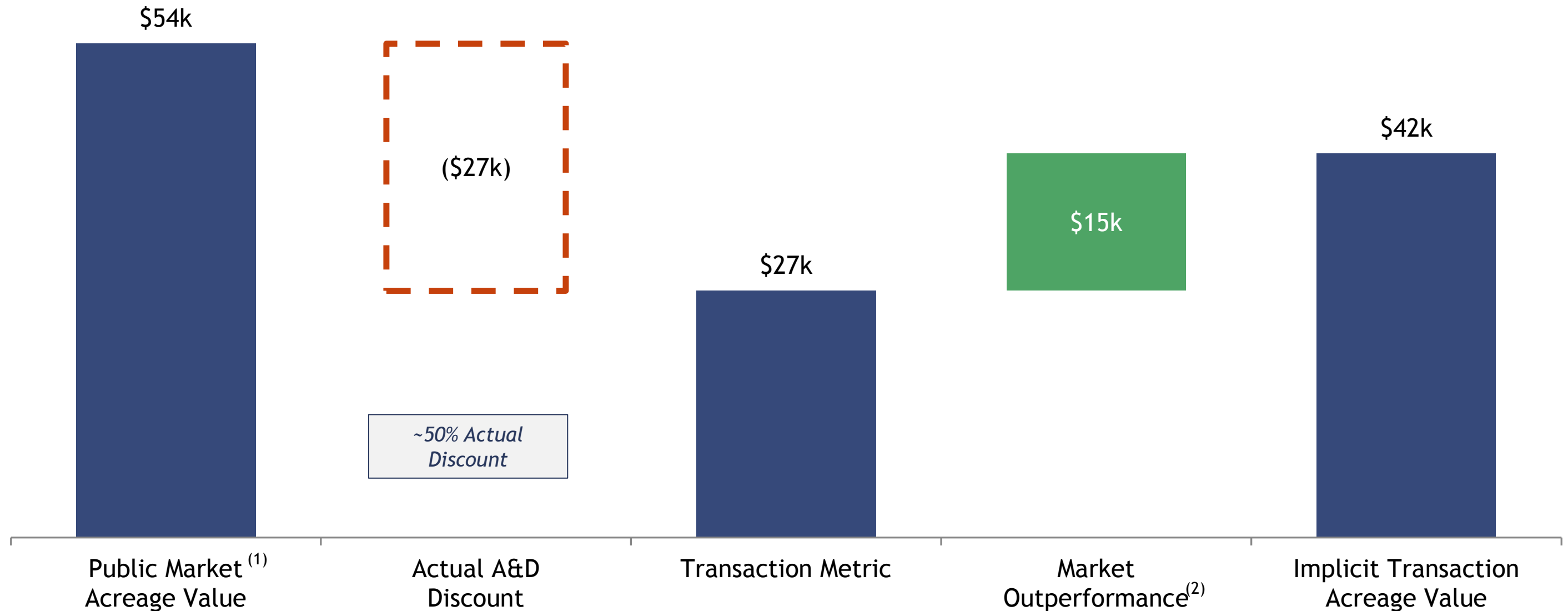
So How Does This Change?

Source: FactSet and Herold.
 Note: All public and private valuations shown reflect weighted averages.
 (1) Permian includes: ATHL, AREX, FANG, LPI, CXO, PXD and RSPP.
 (2) Flowing metric based on average production for each respective time period.

Core Positions in Key Basins Still Transacting at Attractive Levels

Companies Are Being Rewarded in the Marketplace for Consolidating Core Assets

Athlon's 4/8/14 Acquisition - Trading Metrics - (\$/Adj. Acre)



Source: Company press releases.

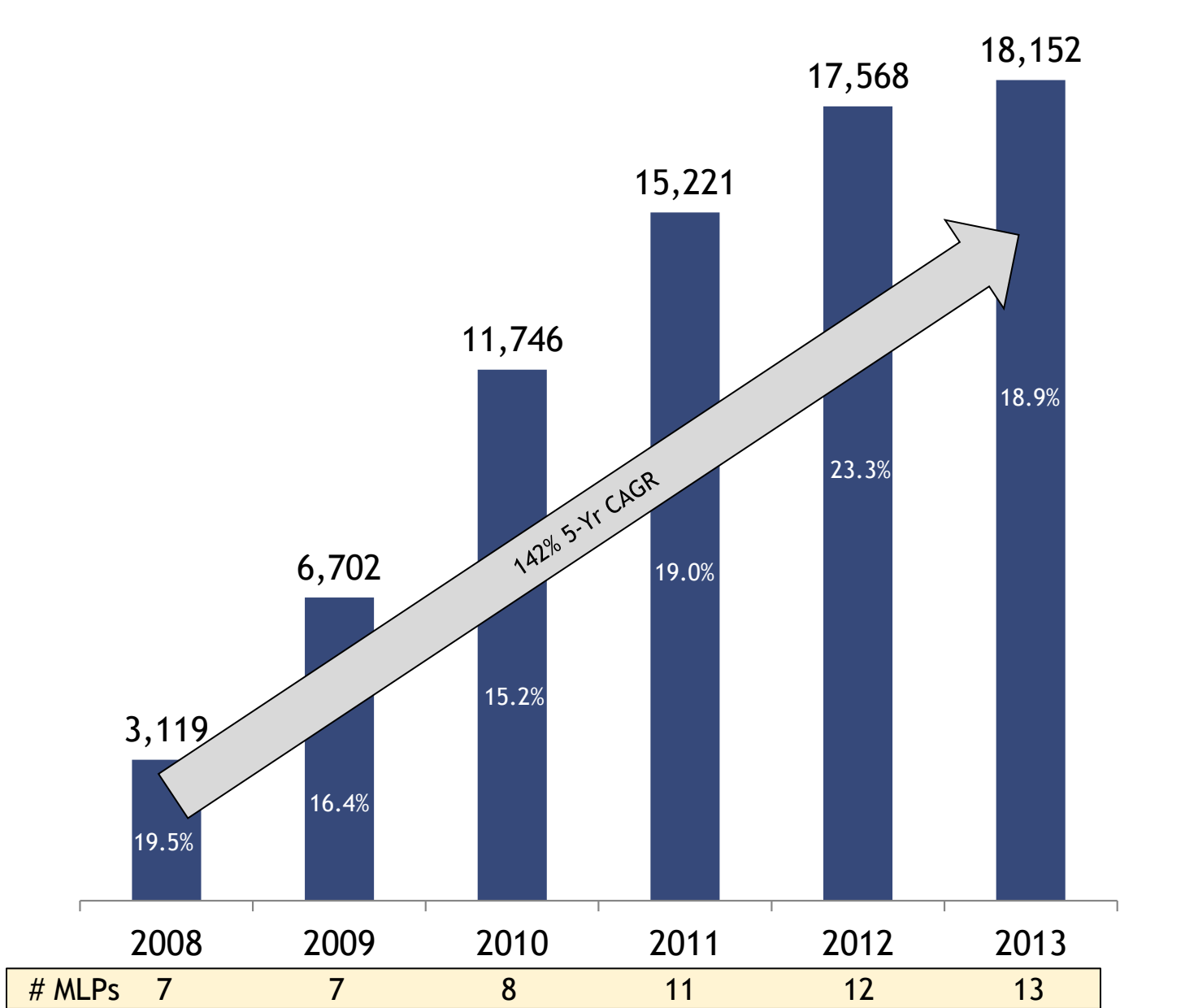
Note: Reflects adjusted acreage metrics, adjusted at \$60k/boe/d.

(1) Assumes 50k of FANG acreage is core and 29k of RSPP acreage is core.

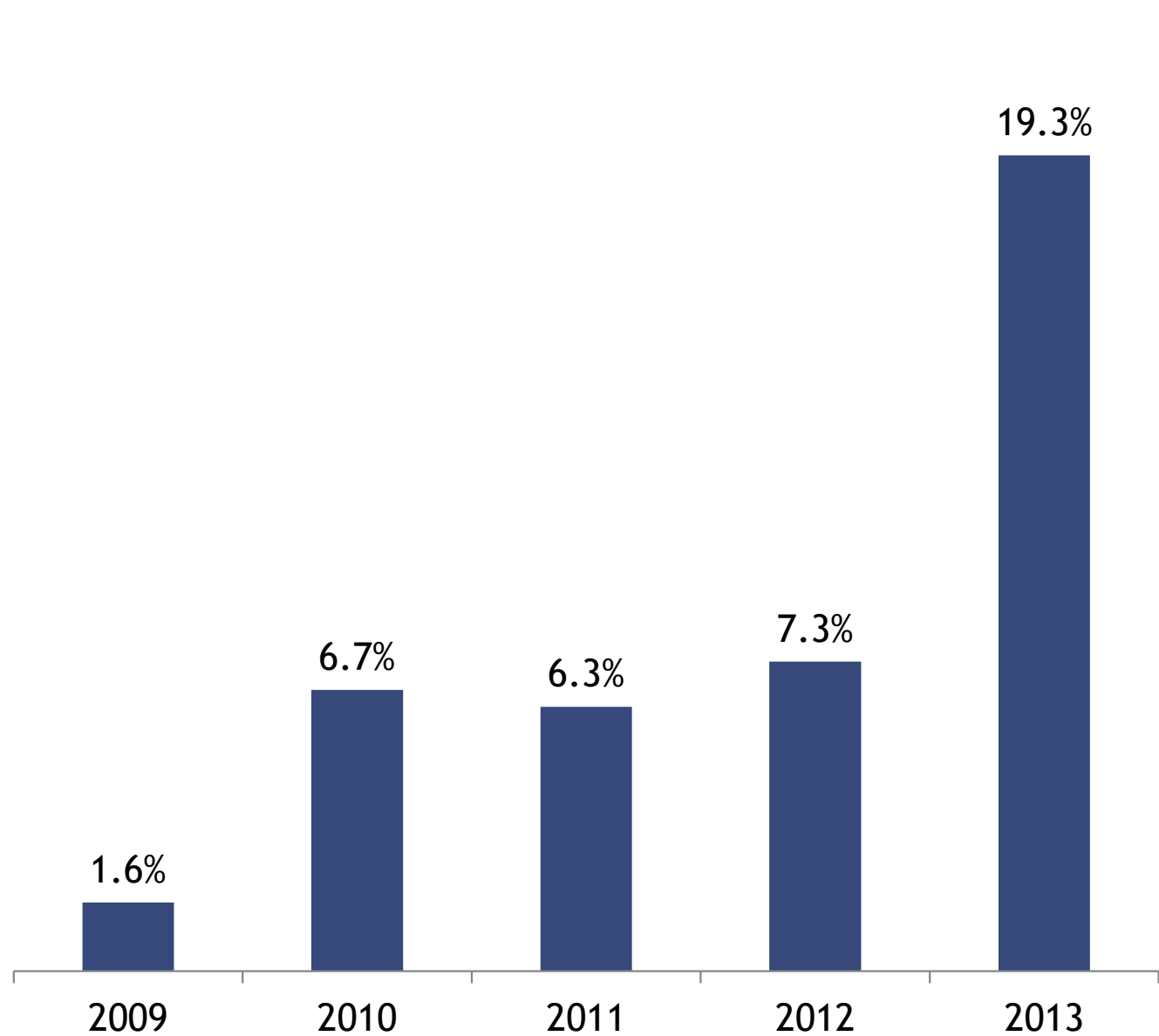
(2) Reflects 1-day change in performance from closing price on April 8th to closing price on April 9th; equity value increase was \$329mm.

Upstream MLP Presence is Expanding and Likely Accelerating

Aggregate Upstream MLP Market Capitalization by Period⁽¹⁾⁽²⁾



MLP Acquisitions (% of Upstream Deal Volume)



Source: FactSet, Company filings, IHS Herold, and Dealogic.

(1) Based on the last trading day of a given period.

(2) Percentage data labels reflect % owned by institutional investors.

Valuation Arbitrage between Structures is Dramatic

- Investor demand for yield has increased the valuation arbitrage between structures
- Upstream C-Corp companies may seek alternative ways to capture the “MLP” valuation for diversified legacy assets
- While creating a MLP can be somewhat burdensome, upstream companies can realize the multiple through:
 - JVs / partnerships with MLPs
 - Strategic asset sales to MLPs
 - Asset or well conveyance to MLPs

	EV / 2014E EBITDAX	EV / Reserves (\$/boe)	EV / Production (\$/boe/d)
Diversified Large Cap ⁽¹⁾	5.1x	\$18.13	\$72,459
Mid-Cap E&P ⁽²⁾	6.4x	\$18.49	\$86,398
Upstream MLP ⁽³⁾	8.1x	\$19.29	\$96,371
Royalty Trust ⁽⁴⁾	8.5x	\$15.15	\$81,672

Source: Company filings, presentations & press releases, as of 6/2/14.

(1) Includes: APA, APC, CHK, COP, DVN, EOG, HES, MRO, MUR, NBL, OXY, SU-TSE, TLM-TSE.

(2) Includes: AREX, BBG, BCEI, CRZO, CWEI, CRK, FST, KOG, LPI, MHR, NOG, OAS, PDCE, KWK, REN, REXX, ROSE, SGY, SFY, UPL, XCO.

(3) Includes: ARP, BBEP, CEP, EROC, EVEP, LGCY, LINE, LRE, MCEP, MEMP, NSLP, QRE, VNR.

(4) Includes: SDT, PER, MVO, ECT, CHKR, NDRO, ROYT.

Appendix One - IPO Case Studies

Parsley Energy IPO Overview

May 22, 2014
\$1,065 million



TPH acted as a Senior Co-Manager on Parsley's initial public offering



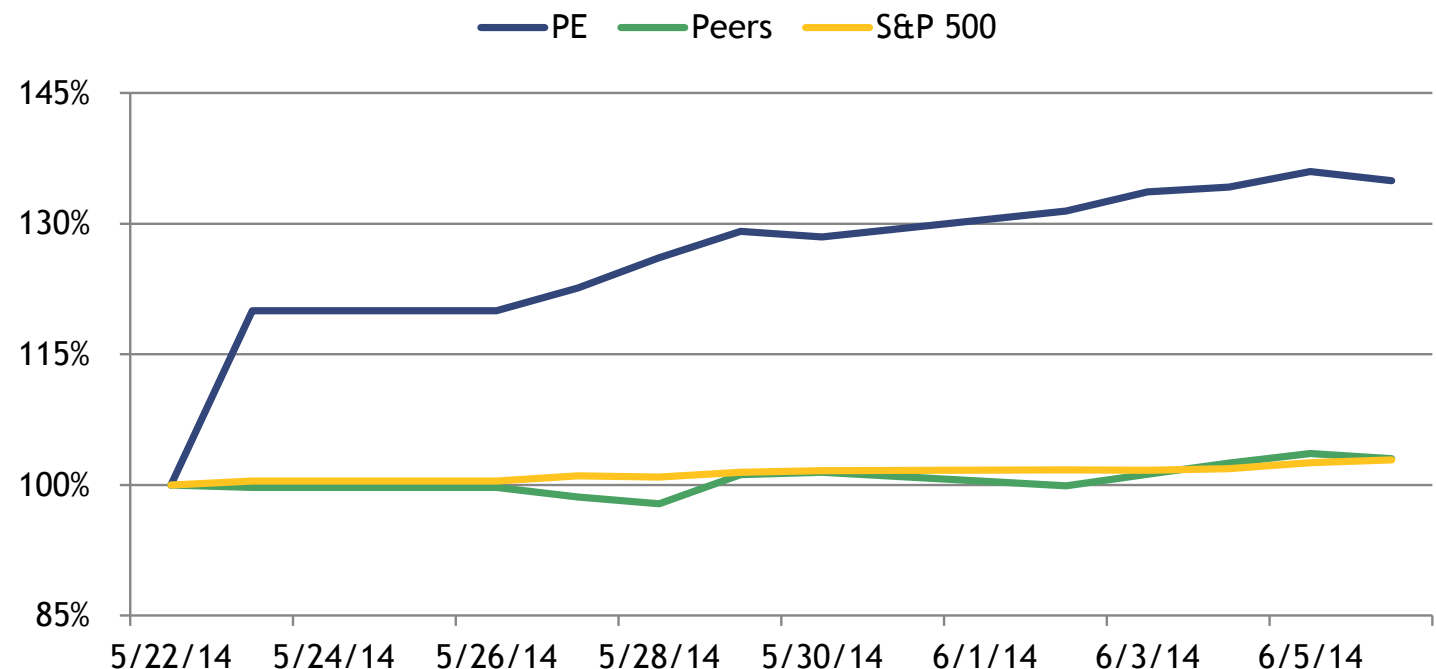
Offering Summary

Issuer:	Parsley Energy (NYSE: PE)
Offering Date:	May 22, 2014
Amount Offered:	\$1,065 MM
Shares Offered:	~57.5 MM
Filing Range:	\$15.00 - \$18.00
Offer Price:	\$18.50
Offering Composition:	87% primary
Market Cap at Pricing:	\$2,195 MM
Offering as % of Mkt Cap:	49%
Debt Post-IPO:	\$550 MM
Enterprise Value:	~\$2,465 MM
2013E EBITDA:	\$76 MM
1-Day Stock Performance:	20%

Transaction Overview⁽¹⁾

- On May 22, 2014, Parsley priced its \$1,065 million IPO
 - The offering was upsized from ~43mm to 50mm shares
 - Priced at \$18.50, above the range of \$15.00 - \$18.00
 - 87% primary
- Parsley is a pure-play Permian producer targeting the Horizontal and Vertical Wolfcamp and Wolfberry respectively
- TPH acted as a Senior Co-Manager

Market Performance Since IPO⁽²⁾



Source: Company filings, WS Estimates, FactSet.
 (1) Includes exercise of the over-allotment option.
 (2) Peers include ATHL, FANG, LPI and RSPP.

Rice Energy IPO Overview

January 23, 2014
\$924 million



Initial Public Offering
TPH & Co. acted as Co-Manager



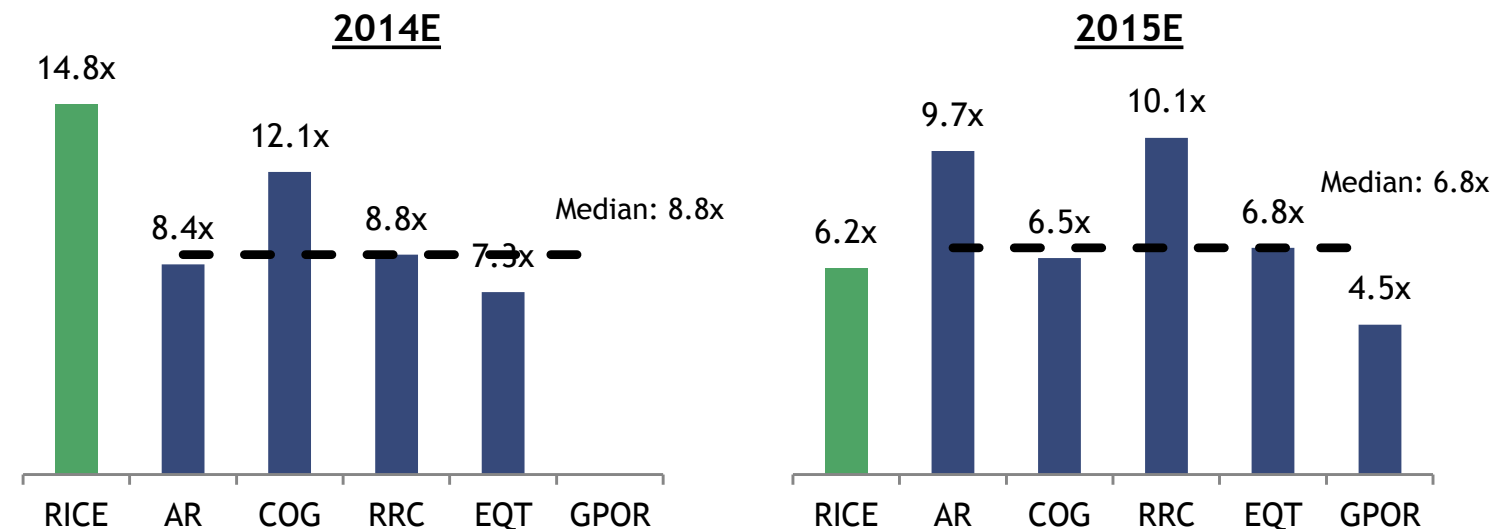
Offering Summary

Issuer:	Rice Energy (NYSE: RICE)
Offering Date:	January 23, 2014
Amount Offered:	\$924 MM
Shares Offered:	44 MM
% Primary	68%
Filing Range:	\$19.00 - \$21.00
Offer Price:	\$21.00
Equity Value at Pricing:	\$2,678 MM
Enterprise Value at Pricing:	\$2,536 MM

Transaction Overview

- On January 23, 2014, Rice Energy priced its \$924 million initial public offering
 - The offering was upsized from 40mm to 44mm shares
 - 30mm primary, 14mm secondary (NGP)
 - Net cash post-IPO
 - Priced at \$21/share, the high end of the \$19-\$21/share initial filing range
 - TPH acted as a co-manager on the offering
- First publicly-traded Utica-focused pure play company

Relative Valuation (EV/EBITDA)⁽¹⁾



Source: Company filings, FactSet.

Note: All statistics reflect the base offer only and do not account for potential exercise of the 15% overallotment option (all secondary shares).

(1) Comparable multiples per TPH and Wall Street equity research. All multiples are adjusted for expected 2014 and 2015 outspend.

RSP Permian IPO Overview

January 16, 2014
\$390 million



Initial Public Offering
TPH & Co. acted as Bookrunner



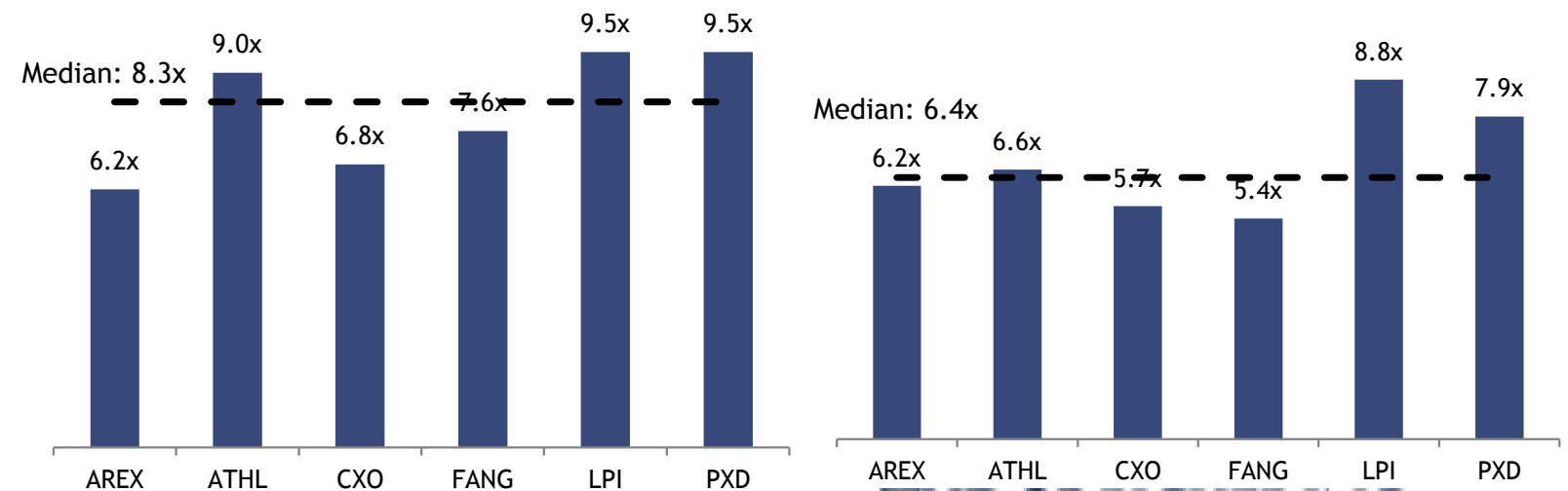
Offering Summary

Issuer:	RSP Permian (NYSE:RSP)
Offering Date:	January 16, 2014
Amount Offered:	\$449
Shares Offered:	23.0
% Primary	40.1%
Filing Range:	\$19.00 - \$21.00
Offer Price:	\$19.50
Equity Value at Pricing:	\$1,414
Enterprise Value at Pricing:	\$1,393
EV / 2014E EBITDA ⁽³⁾	7.4x
EV / 2015E EBITDA ⁽³⁾	5.5x

Transaction Overview⁽¹⁾

- On January 16, 2014, RSP Permian completed its \$[400] MM initial public offering
- Offering priced at \$19.50/share versus the filing range of \$19 - \$21/share
- The base offering was 46% primary and 54% secondary
- Primary proceeds used to pay down debt; the company will have a clean balance sheet post-IPO
- Secondary proceeds will go to the selling shareholder, NGP, the company's PE sponsor
- TPH acted as a bookrunner on the offering
- Active throughout the process, including S-1 drafting and roadshow presentation drafting

Relative Valuation (EV/EBITDA)⁽¹⁾



Source: Company filings, FactSet.

Note: All statistics reflect the base offer only and do not account for potential exercise of the 15% overallotment option.

(1) Comparable multiples for ATHL, CXO, FANG, LPI and PXD per TPH equity research. All multiples are adjusted for expected 2014 and 2015 outspend. AREX per Wall Street Research.



EP Energy's IPO Overview

January 16, 2014
~\$704 million

EP ENERGY

Initial Public Offering
TPH & Co. acted as a Sr. Co-Manager

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Offering Summary

Issuer:	EP Energy (NYSE:EPE)
Offering Date:	January 16, 2013
Amount Offered (Excl. Ovl.):	\$704 MM
Shares Offered (Excl. Ovl.):	35 MM
Filing Range:	\$23.00 - \$27.00
Offer Price:	\$20.00
Offering Composition:	100 % Primary (Ovl: 100% Primary)
Market Cap. at IPO:	\$4,877 MM
Enterprise Value at IPO:	\$9,203 MM

Transaction Overview

- On January 16, 2014, EP Energy completed its \$704 MM initial public offering
 - 100% primary with proceeds used to repay debt
 - Offering was priced at \$20 vs. filing range of \$23 - \$27/share
 - During the roadshow, key comparables traded +0.6% higher
- TPH acted as a Senior Co-Manager on the offering

Asset Summary

Asset	Net acres	Production	2014E Capex
Permian	138,130	6 Mboe/d	36%
Eagle Ford	96,126	40 Mboe/d	52%
Uinta	170,523	12 Mboe/d	12%
Haynesville	36,718	148 Mmcfe/d	-

Antero Resources IPO Case Study

October 9, 2013
~\$1.6 billion



Initial Public Offering
TPH & Co. acted as Senior Co-Manager

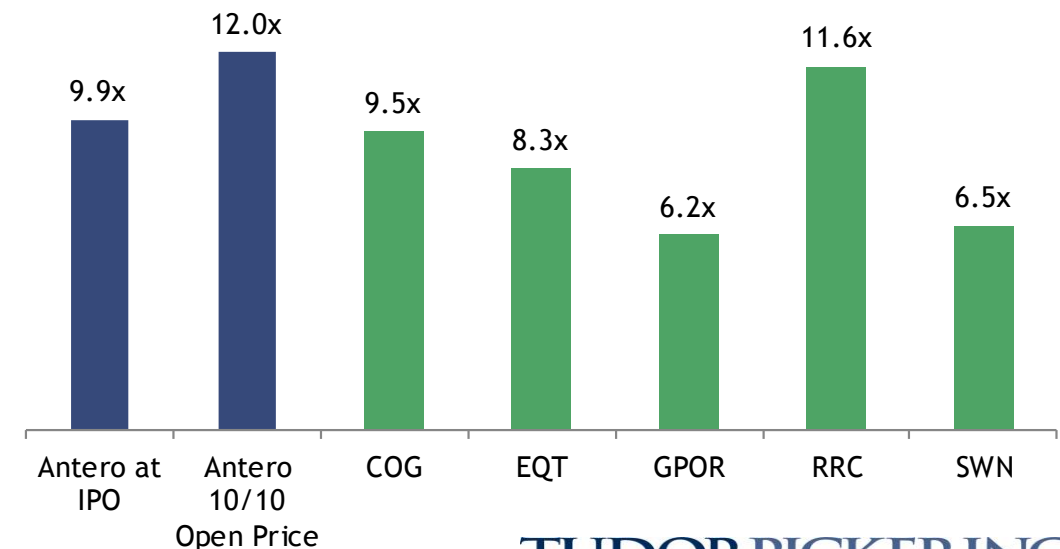


Issuer:	Antero Resources (NYSE:AR)
Offering Date:	October 9, 2013
Amount Offered:	\$1,808 MM
Original Shares Offered (w/shoe):	35 MM
Upsized Shares Offered (w/shoe):	41 MM
Original Filing Range:	\$38.00 - \$42.00
Revised Filing Range:	\$43.00 - \$44.00
Offer Price:	\$44.00
Offering Composition:	92% primary
Market Cap at Pricing:	\$11,681 MM
Offering as % of Mkt Cap:	15%
Net Debt Pre-IPO:	\$2,432 MM
Net Debt Post-IPO:	\$834 MM
Enterprise Value:	\$12,515 MM

Transaction Overview

- On October 9, 2013, TPH & Co. acted as a Senior Co-Manager on Antero Resources' \$1.6 billion initial public offering
 - Offering priced at \$44/share, at the top end of the revised range (revised from \$38-\$42 to \$43-\$44 per share)
 - Offering was upsized from 30 million shares to 35.725 million shares
 - On October 10, 2013, Antero's shares opened at \$55.02/share (up 25% from the IPO price)
- The roadshow was shortened and pricing accelerated due to strong demand
- The base offering was 100% primary with proceeds used to repay outstanding borrowings under the company's credit facility
 - The 15% overallotment will be \$86mm primary and \$150mm secondary

Relative Valuation (EV/2014E EBITDA)⁽¹⁾



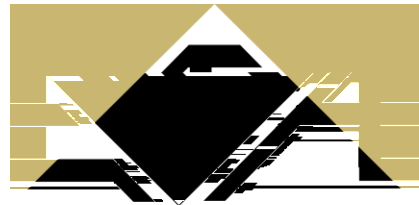
Source: Company filings.

Note: All statistics reflect the base offer only and do not account for potential exercise of the 15% overallotment option.

(1) Antero multiples based on IPO price and underwriter analyst model estimates. Comparable multiples for COG, RRC, and SWN per TPH equity research. Multiples for EQT and GPOR per Wall Street consensus. All multiples are adjusted for expected 2014 outspend (EBITDA less capex).

Athlon Energy IPO Overview

August 1, 2013
\$316 million



ENERGYATHLON

TPH acted as a Senior Co-Manager on Athlon's initial public offering

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Offering Summary

Issuer:	Athlon Energy (NYSE:ATHL)
Offering Date:	August 1, 2013
Amount Offered:	\$316 MM
Shares Offered:	15.8 MM
Filing Range:	\$18.00 - \$20.00
Offer Price:	\$20.00
Offering Composition:	100% primary
Market Cap at Pricing:	\$1,646 MM
Offering as % of Mkt Cap:	19.2%
Net Debt Pre-IPO:	\$504 MM
Net Debt Post-IPO:	\$209 MM
Enterprise Value:	\$1,855 MM
Current Production:	~12 Mboe/d

Transaction Overview⁽¹⁾

- On August 1, 2013, TPH acted as a Co-Manager on Athlon Energy's \$316 million initial public offering
- The offering was 100% primary with proceeds used to repay debt (overallotment is 100% selling shareholders, majority owner is Apollo)
- ATHL priced its IPO on a day when Permian stocks rose dramatically on Pioneer's better than expected Wolfcamp A results (LPI +13%, PXD +13%, FANG +12%, CXO +6%)
- Investor appetite was strong throughout the roadshow and was amplified by PXD news
- Orders filled the book early in the roadshow

Key Statistics⁽²⁾

	EBITDA	EV / EBITDA	Daily Production (MBoe/d)	EV / Production (\$/Boe/d)
2013	\$207	9.3x	12	\$160,458
2014	345	6.3x	18	120,198
2015	637	3.7x	25	93,284

Source: Company filings, WS Estimates, FactSet.

(1) Before exercise of the overallotment option.

(2) EV multiples use TPH Research year-end balance sheet estimates for EV calculation.

Diamondback Energy IPO Overview

October 11, 2012
\$219 million

DIAMONDBACK
Energy

TPH acted as a Senior Co-Manager on Diamondback's initial public offering

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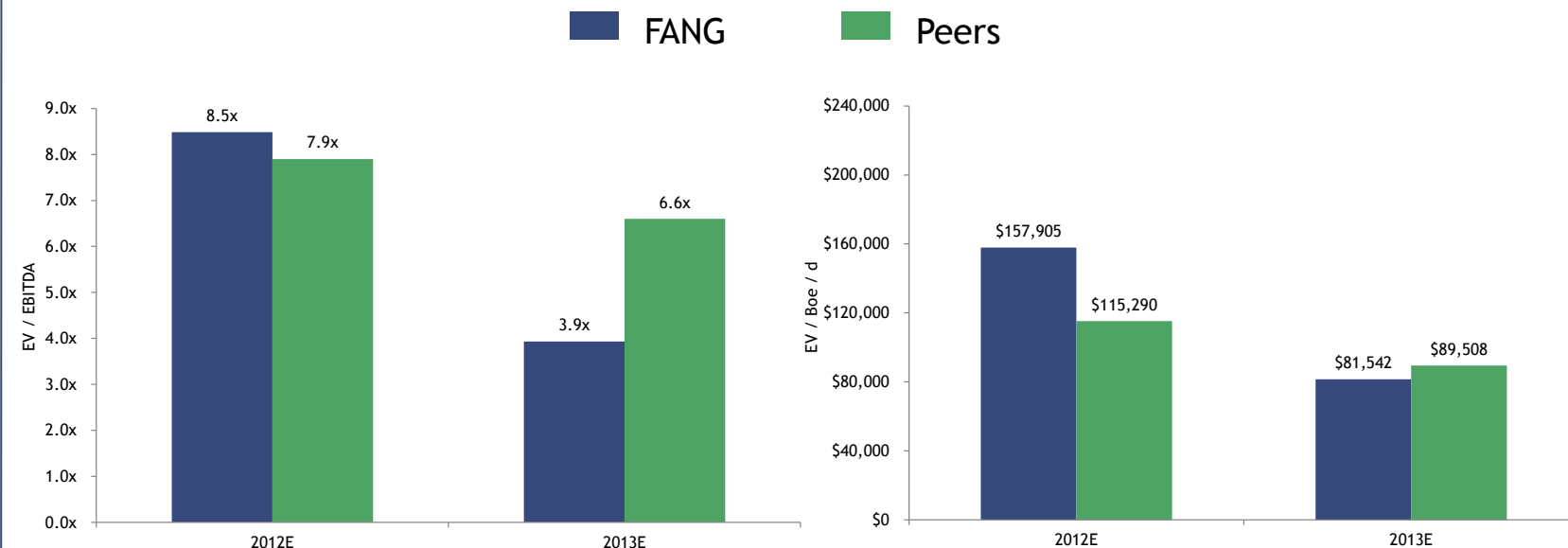
Offering Summary

Issuer:	Diamondback Energy (NASD:FANG)
Offering Date:	October 11, 2012
Amount Offered:	\$252 MM
Shares Offered:	12.5 MM
Filing Range:	\$17.00 - \$19.00
Offer Price:	\$17.50
Offering Composition:	100% primary
Market Cap at Pricing:	\$614 MM
Offering as % of Mkt Cap:	31%
Debt Pre-IPO:	\$178 MM
Debt Post-IPO:	\$0 MM
Enterprise Value:	\$594 MM
2012E EBITDA:	\$70 MM
1-Day Stock Performance:	0%

Transaction Overview⁽¹⁾

- On October 11, 2012, TPH acted as a Senior Co-Manager on Diamondback Energy's \$219 million initial public offering
- Diamondback is a pure-play Permian producer targeting the Wolfberry play
- Management had over 40 one-on-one meetings and met with additional institutions in group functions during the 9-day U.S. roadshow
- Despite volatile markets, the offering priced at \$17.50/share (within the range of \$17.00 - \$19.00)
- The offering was 100% primary with proceeds used to repay debt and fund drilling and development activities

Relative Valuation at IPO⁽²⁾



Source: Company filings, WS Estimates, FactSet.

(1) Before exercise of the overallotment option.

(2) Diamondback multiples based on IPO price and TPH estimates. Permian Peers based on consensus estimates for EBITDA and production. As of 10/12/2012. Permian Peers Index includes: AREX, CWEL, CXO, LPI, and PXD.

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Appendix Two - IPO and Transaction Comps

Upstream IPOs Detail

(\$ in millions)									
Offering Summary / Performance									
Issuer	FANG	ATHL	RSPP	PE	Permian Median	JONE	AR	EPE	RICE
Date	10/11/2012	8/1/2013	1/16/2014	5/22/2014		7/23/2013	10/9/2013	1/16/2014	1/23/2014
Amount Offered	\$252	\$363	\$449	\$1,065	\$406	\$188	\$1,808	\$704	\$1,050
Shares Offered	14.4	15.8	23.0	57.5	19.4	12.5	35.7	35.2	50.0
Filing Range	\$17.00 - \$19.00	\$18.00 - \$20.00	\$19.00 - \$21.00	\$15.00 - \$18.00		\$17.00-\$19.00	\$38.00 - \$42.00	\$23.00 - \$27.00	\$19.00 - \$21.00
Offer Price	\$17.50	\$20.00	\$19.50	\$18.50		\$15.00	\$44.00	\$20.00	\$21.00
Offer vs. Filing Midpoint	(8%)	5%	(3%)	12%		(17%)	10%	(20%)	5%
Offering Composition	100% primary	87% primary	40% primary	87% primary		100% primary	92% primary	100% primary	60% primary
Market Cap @ Pricing	\$614	\$1,646	\$1,414	\$2,195	\$1,530	\$740	\$11,446	\$4,895	\$2,688
Offering as % of Cap	41%	19%	32%	48%	36%	25%	14%	14%	39%
Enterprise Value @ IPO	\$639	\$1,855	\$1,425	\$2,465	\$1,640	\$1,140	\$12,365	\$9,800	\$2,894
Aftermarket									
1 day	0%	38%	3%	20%		(8%)	18%	(10%)	4%
10 day	(1%)	32%	3%	28%		(6%)	25%	(9%)	12%
Current	335%	114%	35%	31%		18%	40%	(2%)	49%
At IPO Trading Multiples									
EV / FY-1 EBITDAX	4.5x	6.3x	7.7x	NA	6.3x	4.4x	10.6x	6.0x	9.5x
EV / FY-2 EBITDAX	3.9x	5.5x	4.6x	NA	4.6x	3.9x	9.3x	5.1x	6.4x
EV / IPO Production (\$/boe/d)	\$172,144	\$155,139	\$192,568	\$269,017	\$182,356	\$65,517	\$124,899	\$111,364	\$107,858
EV / FY-2 Production (\$/boe/d)	\$104,072	\$104,802	\$141,089	NA	\$104,802	\$49,138	\$81,260	\$99,090	\$53,202
Current Trading Multiples									
EV / 2014 EBITDAX	10.2x	10.4x	9.0x	NA	10.2x	5.0x	13.7x	5.7x	13.1x
EV / 2015 EBITDAX	7.4x	7.1x	6.1x	NA	7.1x	4.1x	9.6x	5.0x	7.8x
EV / 2014 Production (\$/boe/d)	\$241,190	\$199,255	\$183,018	NA	\$199,255	\$66,064	\$111,799	\$92,070	\$82,735
EV / 2015 Production (\$/boe/d)	\$162,035	\$127,472	\$121,487	NA	\$127,472	\$52,865	\$74,398	\$79,827	\$44,023

Upstream IPOs Detail



Sources: FactSet, Dealogic and Wall Street Research. As of 6/2/2014.

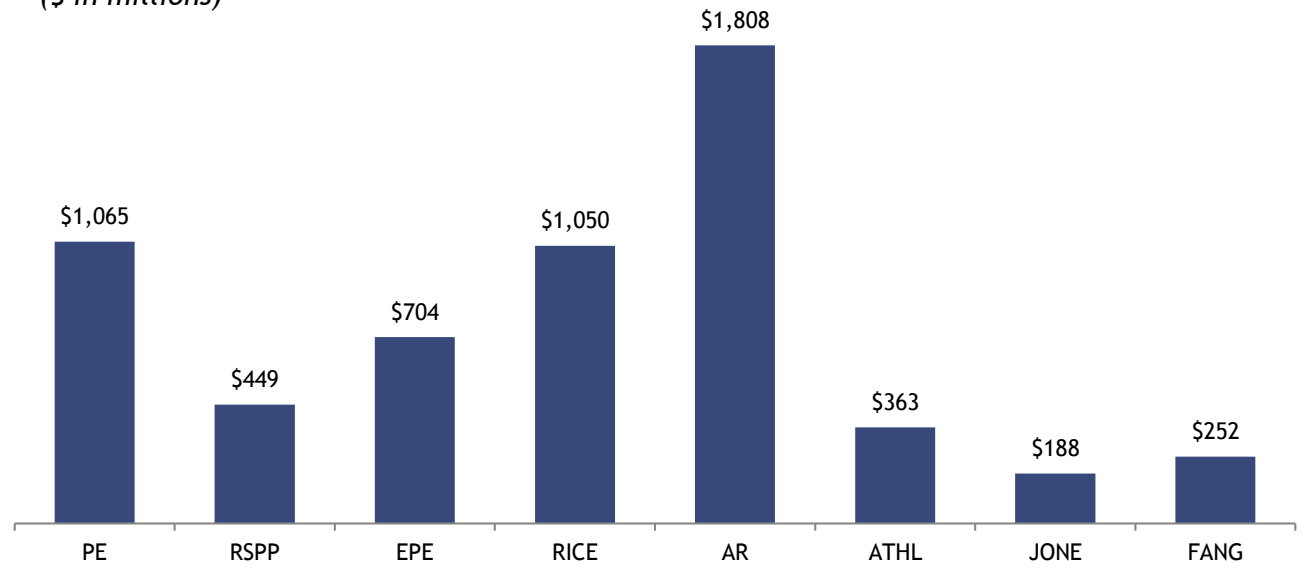
Note: FY-1 reflects NTM, and FY-2 reflects next full year.

(1) Estimates reflect TPH research.

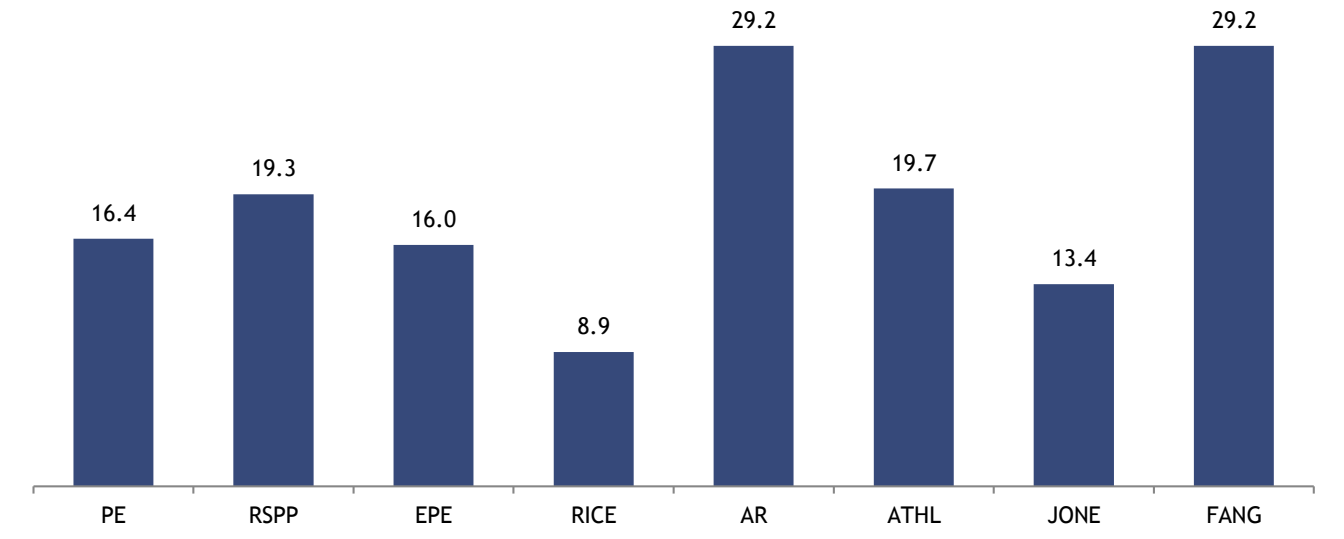
(2) FY-2 production reflects 2015.

IPO Sizing Considerations

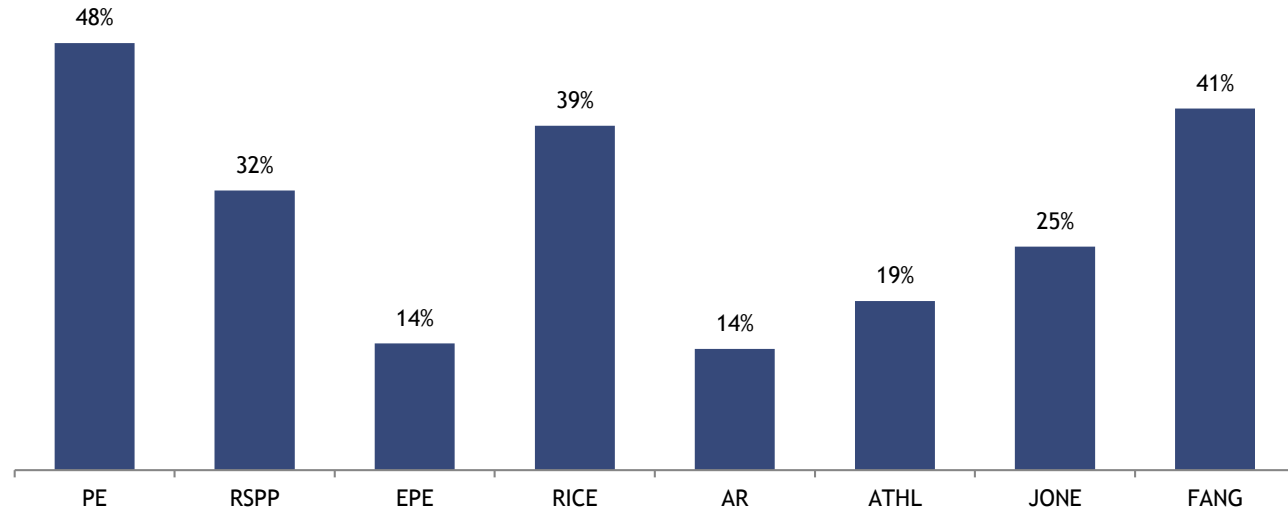
IPO Size
(\$ in millions)



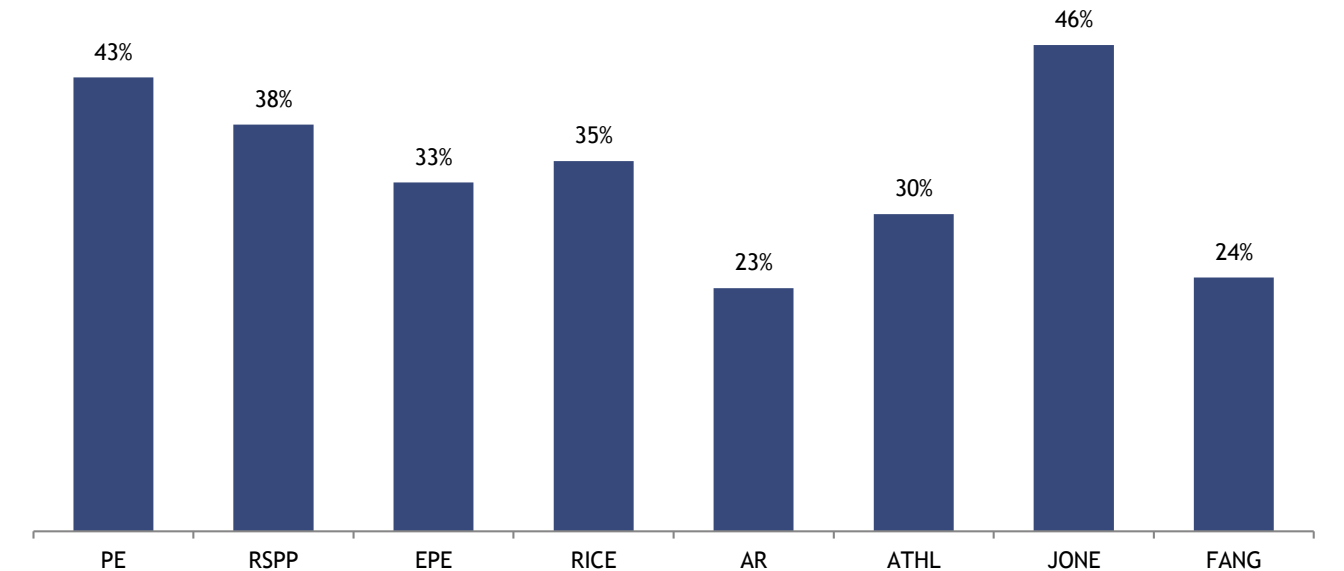
Proved Reserves / Production (at IPO)



IPO Size as % of Pro Forma Market Cap

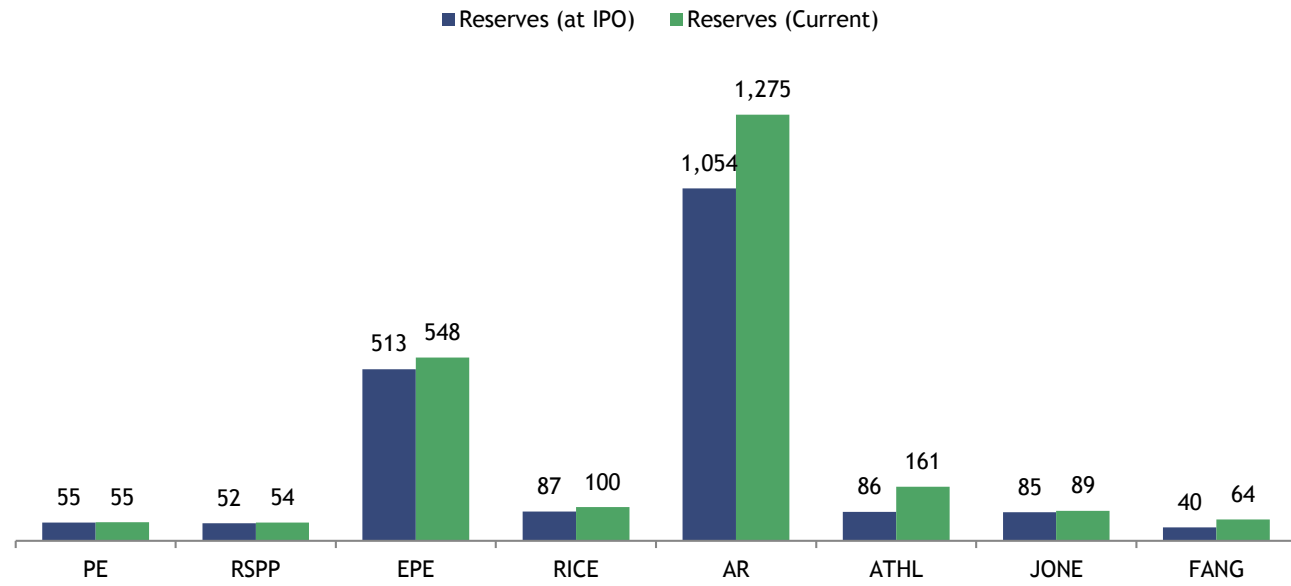


Percent Proved Developed (at IPO)

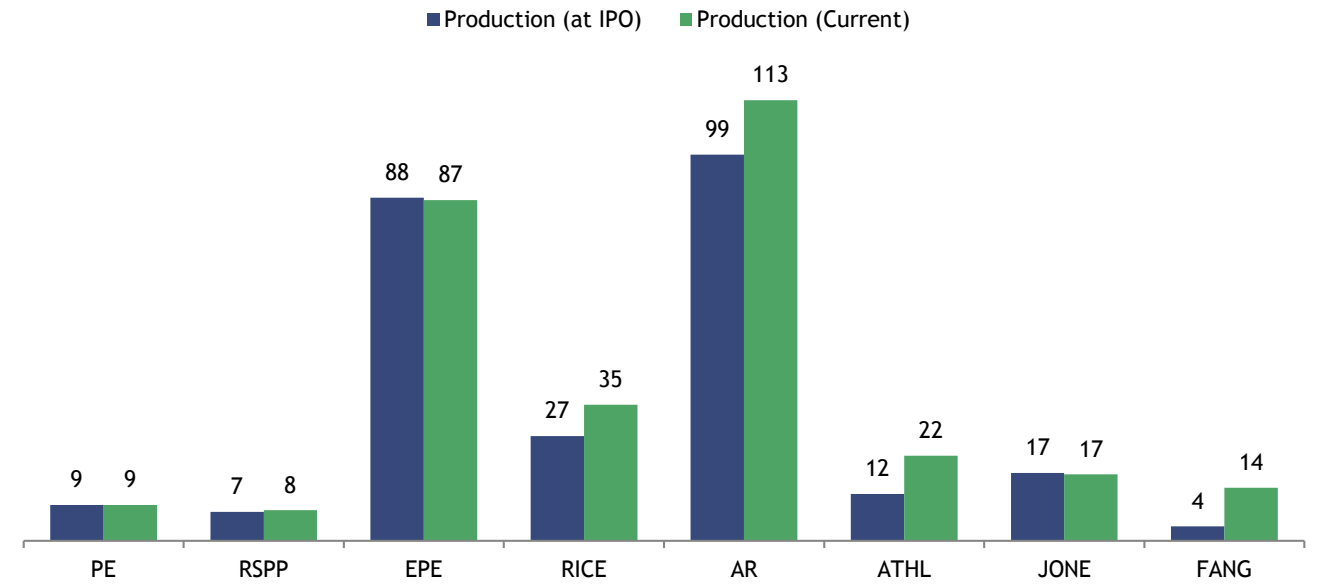


IPO Sizing Considerations

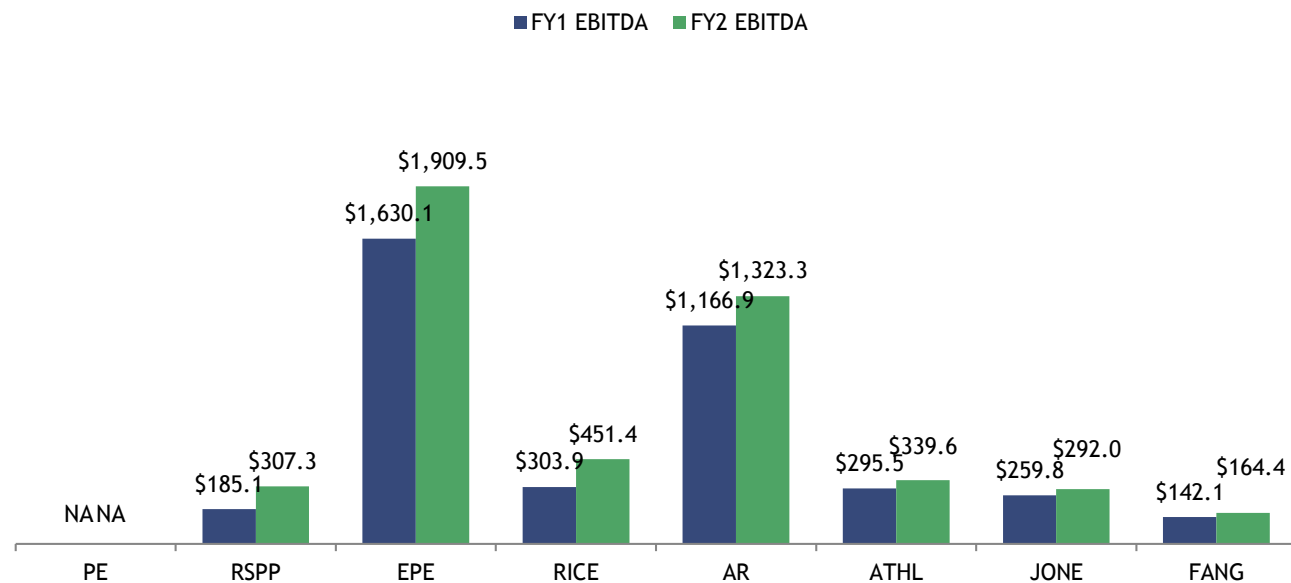
Proved Reserves (MMboe)



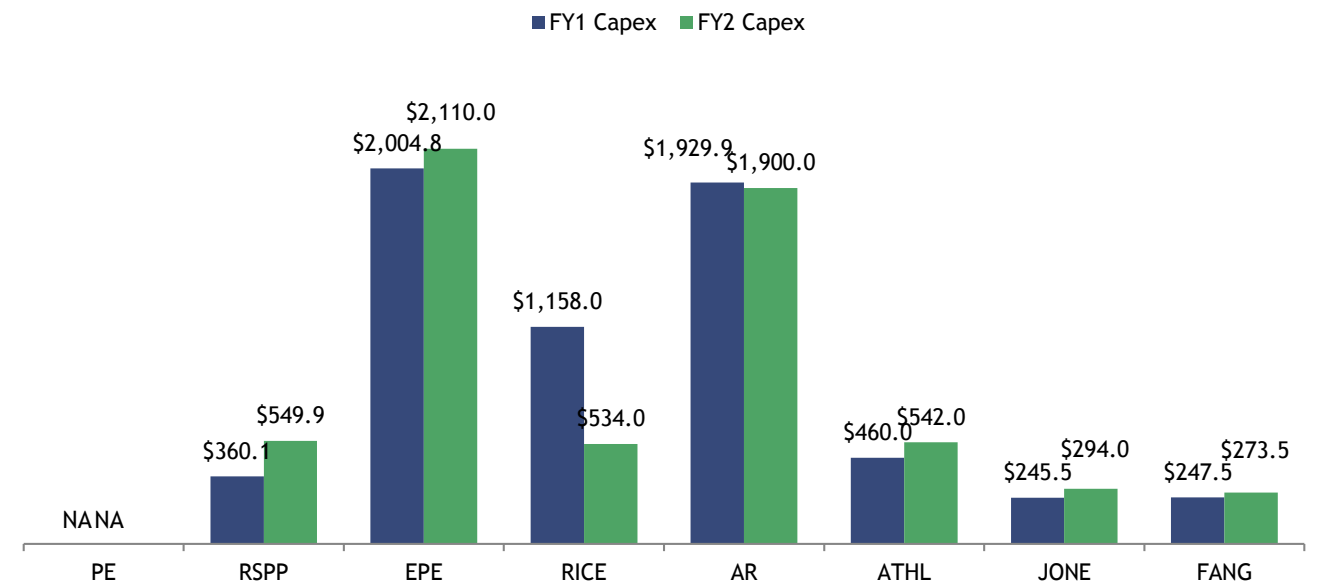
Production (Mboe/d)



FY-1 and FY-2 EBITDA for IPO Comparables



FY-1 and FY-2 Capex for IPO Comparables



Sources: FactSet, Dealogic and Wall Street Research. As of 5/16/2014.

Note: FY-1 reflects NTM, and FY-2 reflects next FY. FY-1 and FY-2 for Silver Creek represent 2014E and 2015E respectively per unrisksed base case TPH NAV model.

Conventional Oil Activity 2014 YTD

(\$ in millions, unless otherwise noted)

Conventional US Oil Transactions >\$50MM

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Date Announced	Buyer	Seller	Deal Type	Transaction Value	Proved Reserves (MMBoe)	Production (Boe/d)	% Oil	% PD	Proved (\$/Boe)	Production \$/Boe/d	NYMEX 12 Mo. Oil Strip	NYMEX 12 Mo. Gas Strip	Asset Location
5/20/14	W&T Offshore, Inc.	Woodside Petroleum Ltd	Asset	\$51	2	1,660	87%	100%	\$26.84	\$30,723	\$97.89	\$4.44	Deepwater
5/8/14	Freeport-McMoRan Copper & Gold Inc.	Apache Corporation	Asset	1,400			75%				95.95	\$4.70	Deepwater
5/7/14	Atlas Resource Partners, L.P.	Undisclosed company(ies)	Asset	420	47	2,900		53%	8.94	144,828	94.84	4.75	Rockies
5/6/14	Legacy Reserves LP	WPX Energy Inc.	Asset	358	46	10,500	17%	100%	7.77	34,049	95.01	4.67	Rockies
5/5/14	Memorial Production Partners LP	Merit Energy Company	Asset	935	83	5,900		59%	11.27	158,475	95.38	4.66	Rockies
4/30/14	Undisclosed company(ies)	Royal Dutch Shell plc	Asset	90							96.79	4.78	Rockies
4/7/14	SK Innovation Co., Ltd.	KA Henry ;Plymouth Exploration, LLC	Asset	366							96.46	4.52	MidCon
3/26/14	Legacy Reserves LP	Undisclosed company(ies)	Asset	112	9	890	95%		12.44	125,843	94.71	4.51	Permian Shelf
3/13/14	Fieldwood Energy LLC	Black Elk Energy	Asset	50		2,000				85,000	96.05	4.63	Gulf Coast
3/12/14	Undisclosed company(ies)	Midstates Petroleum Company	Asset	170		20,800	64%	71%	28.60	110,577	96.05	4.63	Shelf
3/12/14	Energy XXI (Bermuda) Limited	EPL Oil & Gas, Inc.	Corporate	2,300	80	4,000			3.76	166,250	96.57	4.67	California
2/17/14	Goldleaf Jewelry Co. Ltd.	ERG Resources LLC	Corporate	665	177	1,100				166,364	95.91	4.65	Rockies
2/12/14	Fidelity Exploration & Production Company	Ballard Petroleum Holdings LLC	Asset	183		2,850			18.67	129,684	94.02	4.63	Gulf Coast
2/7/14	Pyramid Oil Company	Yuma Energy, Inc.	Corporate	370	20	26,400	89%	65%	7.36	8,144			MidCon
1/13/14	Undisclosed company(ies)	Chesapeake Energy	Asset	215	29	25,000	51%	72%	19.58	44,800	91.71	4.26	Shelf
1/7/14	Fieldwood Energy, LLC	SandRidge Energy Inc.	Asset	1,120	57	900	91%	100%	27.08	78,222	95.79	4.19	Shelf
1/2/14	EPL Oil & Gas, Inc.	CNOOC Limited	Asset	70	3								
Total Conventional Oil Volumes (\$MM)				\$8,875									
Median				\$358	46	2,900	81%	71.7%	\$12.44	\$110,577	\$95.91	\$4.63	
Mean				\$522	50	8,069	71%	77.6%	\$15.66	\$98,689	\$95.54	\$4.58	

Conventional Gas Activity 2014YTD

(\$ in millions, unless otherwise noted)

Conventional US Gas Transactions >\$50MM

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Date Announced	Buyer	Seller	Deal Type	Transaction Value	Proved Reserves (Bcfe)	Production (Mcf/d)	% Gas	% PD	Proved (\$/Mcf)	Production \$/Mcf/d	NYMEX 12 Mo. Oil Strip	NYMEX 12 Mo. Gas Strip	Asset Location
5/16/14	Undisclosed company(ies)	Chesapeake Energy Corporation	Asset	\$310		34,510				\$8,983	\$97.31	\$4.45	MidCon
5/6/14	EnerVest, Ltd.;FourPoint Energy, LLC	QEP Resources, Inc.	Asset	275	180	31,880	62%	52%	1.53	8,626	95.01	4.67	MidCon
4/30/14	Indigo Minerals LLC	EP Energy, Inc.	Asset	150	84	21,000	85%		1.79	7,143	96.79	4.78	Gulf Coast
4/29/14	Undisclosed company(ies)	Encana Corporation	Asset	530	200	107,200	97%		2.65	4,944	96.36	4.80	Gulf Coast
3/31/14	Maverick American Natural Gas	Encana Corporation	Asset	1,800	1,493	351,200	100%		1.21	5,125	96.67	4.56	Rockies
2/14/14	Atlas Resource Partners, L.P.	GeoMet, Inc.	Asset	107	103	22,000	100%	100%	1.04	4,864	96.42	4.72	NorthEast
2/13/14	Merit Energy Company	Occidental Petroleum Corporation	Asset	1,400	408	110,000	70%		3.43	12,727	96.31	4.64	MidCon
Total Conventional Gas Volumes (\$MM)				\$735									
Median				\$275	132	31,880	74%	52%	\$1.66	\$8,626	\$96.79	\$4.67	
Mean				\$245	132	29,130	74%	52%	\$1.66	\$8,251	\$96.37	\$4.63	

Resource Transaction Comparables

A	B	C	D	E	F	G	H	I	J	K	L	M
Date Announced	Buyer	Seller	Joint Venture Strategic/Financial	Transaction Value (\$MM)	Proved Reserves (MMBoe)	Production (Boe/d)	Net Acres	\$ / Proved Boe	\$/Boe/d	TV / Acres (\$/acre)	Adj. TV / (\$/acre)	Adj. TV / Undeveloped (\$/acre)
Bakken												
2/4/14	Undisclosed company(ies)	Oasis Petroleum Inc.	-	\$333	NA	2,691	8,354	NA	\$123,746	\$39,861	\$23,755	NA
1/30/14	Liberty Resources II LLC	Sequel Energy	-	455	31	4,012	53,000	\$14.82	113,410	8,585	4,800	NA
1/9/14	Emerald Oil	Kodiak Oil and Gas	-	\$68	NA		20,800	NA	NA	3,281	NA	NA
9/9/13	Undisclosed company(ies)	Emerald Oil Inc.	-	113	NA	850	26,580	NA	132,941	4,251	2,652	\$2,652
9/5/13	Oasis Petroleum Inc.	Undisclosed compan(ies)	-	1,450	44	9,000	136,000	33.04	161,111	10,662	7,353	12,160
9/5/13	Oasis Petroleum Inc.	Undisclosed compan(ies)	-	65	2	300	25,000	36.45	216,667	2,600	2,000	3,005
8/27/13	Whiting Petroleum Corporation	Petro-Hunt	-	260	17	2,420	17,282	15.20	107,438	15,045	8,043	17,711
8/6/13	Triangle Petroleum	Kodiak Oil and Gas	-	82	NA	1,150	5,620	NA	71,304	14,591	4,359	5,191
6/27/13	Halcon Resources Corp.	Resolute Energy Corp.	-	75	10	946	19,400	7.88	79,281	3,866	1,428	1,585
6/3/13	Kodiak Oil & Gas	Liberty Resources	-	660	NA	5,700	42,000	NA	115,789	15,714	8,929	18,125
12/10/12	Enerplus	Halliburton Energy Services	-	131	NA	1,550	NA	NA	84,516	NA	NA	NA
11/8/12	Continental Resources	Samson Resources	-	650	NA	6,500	120,000	NA	100,000	5,417	6,125	NA
10/22/12	Halcon Resources Corp.	Petro-Hunt Group	-	1,450	42	10,500	81,000	34.20	138,095	17,901	11,420	12,612
9/20/12	Exxon Mobil; XTO Energy	Denbury Resources	-	1,965	96	15,400	196,000	20.47	127,597	10,026	6,097	6,928
9/12/12	WellStar Energy Corp.	Undisclosed company(ies)	-	52	NA	360	7,159	NA	143,056	7,194	4,679	23,823
8/23/12	QEP Energy	Helis Oil & Gas et. All	-	1,380	NA	10,500	27,600	NA	131,429	50,000	30,978	37,131
4/18/12	Magnum Hunter	Baytex Energy	-	311	9	1,295	50,400	36.16	240,154	6,171	4,886	5,624
3/28/12	Continental Resources, Inc.	Wheatland Oil	-	340	17	2,109	37,900	20.00	161,214	8,971	6,189	NA
2/22/12	Continental Resources	Newfield Exploration	-	276	NA	NA	23,161	NA	NA	11,917	NA	NA
11/14/11	Kodiak Oil & Gas Corp	North Plains Energy	-	590	20	3,500	NA	29.95	168,571	NA	NA	9,047
10/17/11	Statoil ASA	Brigham Exploration Company	-	4,705	67	16,800	375,000	70.43	280,060	12,547	10,307	NA
9/28/11	Kodiak Oil & Gas Corp	BTA	-	235	NA	3,000	13,500	NA	78,333	17,407	6,296	6,940
8/31/11	Crescent Point Energy	Anschutz Exploration Corporation	-	164	NA	750	50,000	NA	8,666	2,500	2,530	NA
5/23/11	Kodiak Oil & Gas Corp	Ursa Resources Group LLC.	-	88	NA	NA	25,000	NA	NA	3,000	NA	NA
4/28/11	Linn Energy	Cade Holt, Other Undisclosed	-	163	6	1,150	6,200	27.17	141,739	26,290	17,016	38,894
3/4/11	Triangle Petroleum	Slawson / Undisclosed	-	59	NA	NA	15,000	NA	NA	3,933	NA	NA
2/28/11	Linn Energy	Concho Resources Inc	-	196	8	1,350	11,193	24.81	145,185	17,511	11,480	NA
1/28/11	GMX Resources	Undisclosed	-	56	NA	NA	26,087	NA	NA	2,165	NA	NA
1/19/11	Magnum Hunter Resources Corp	NuLoch Resources Inc	-	327	6	1,550	122,280	55.42	210,968	2,674	2,040	4,359
12/10/10	Occidental Petroleum Corporation	Anschutz Exploration Corporation	-	1,400	NA	5,500	180,000	NA	254,545	7,778	6,250	11,038
		Median		\$268	17	2,420	26,334	\$28.56	\$132,941	\$8,778	\$6,189	\$9,047
Barnett												
9/4/13	EnerVest, Ltd;EV Energy Partners	Carrizo Oil & Gas Incorporated	-	236	33	7,333	9,500	7.03	32,127	24,800	NA	NA
3/29/13	Tokyo Gas Company	Quicksilver	Strategic	485	49	11,447	35,000	9.83	42,368	13,857	NA	NA
11/19/12	Atlas Resource Partners	DTE Energy Company	-	255	35	3,800	88,000	7.29	67,105	2,898	739	1,018
5/17/12	Atlas Resource Partners	Titan Operating (Riverstone Holdings)	-	184	42	4,000	16,000	4.42	46,037	11,509	NA	NA
4/2/12	KKR (Premier Natural Resources)	WPX Energy	-	306	NA	NA	93,000	NA	NA	3,290	NA	NA
3/16/12	Atlas Resource Partners	Carrizo Oil & Gas	-	190	52	5,833	12,000	3.65	32,571	15,833	NA	NA
11/3/11	EnerVest Ltd; EV Energy Partners,LP	Undisclosed private company	-	233	47	4,459	15,816	4.99	52,253	14,732	635	2,890
11/3/11	EnerVest Ltd; EV Energy Partners,LP	Encana Oil & Gas	-	975	195	18,659	66,184	4.99	52,253	14,732	635	985
4/27/11	KKR Natural Resources; Premier Natur	Carrizo Oil & Gas Incorporated	-	104	20	1,383	13,000	5.10	75,181	8,000	2,679	3,360
2/28/11	Legend Natural Gas IV LP	Range Resources Corporation	-	900	NA	18,833	52,000	NA	47,788	17,308	NA	NA
1/25/11	KKR Natural Resources;Premier Natur	ConocoPhillips	-	150	16	NA	36,500	9.68	NA	4,110	NA	NA
10/27/10	EV Energy Partners LP	Talon Oil & Gas LLC	-	300	55	4,500	6,110	5.48	66,667	49,100	12,275	21,096
10/27/10	EnerVest Ltd	Talon Oil & Gas LLC	-	667	122	10,019	14,097	5.47	66,573	47,315	11,779	20,243
5/11/10	Quicksilver Resources Incorporated	Marshall R Young Oil	-	115	21	1,667	NA	5.52	68,954	NA	NA	NA
1/4/10	Total SA	Chesapeake Energy Corporation	Strategic	2,250	125	29,167	75,000	18.00	77,143	30,000	10,556	14,184
12/15/09	Sumitomo Corporation	Carrizo Oil & Gas Incorporated	Financial	16	NA	2,083	NA	NA	7,536	NA	NA	NA
12/3/09	Talon Oil & Gas LLC	Denbury Resources Incorporated	-	210	31	4,596	NA	6.88	45,692	NA	NA	NA
7/8/09	EOG Resources Incorporated	Undisclosed	-	134	NA	2,000	25,000	NA	67,050	5,364	1,364	1,364
5/18/09	Eni SpA	Quicksilver Resources Incorporated	Strategic	280	22	2,750	3,575	12.82	101,818	78,322	39,860	39,860
		Median		\$236	35	4,548	16,000	\$5.48	\$66,620	\$14,732	\$6,000	\$3,360

Source: IHS Herold.
Note: Adjusted TV based on \$50,000/boe/d.

Resource Transaction Comparables

A	B	C	D	E	F	G	H	I	J	K	L	M
Date Announced	Buyer	Seller	Joint Venture Strategic/Financial	Transaction Value (\$MM)	Proved Reserves (MMBoe)	Production (Boe/d)	Net Acres	\$ / Proved Boe	\$/Boe/d	TV / Acres (\$/acre)	Adj. TV / (\$/acre)	Adj. TV / Undeveloped (\$/acre)
Eagle Ford												
5/7/14	Encana Corporation	Freeport-McMoRan Copper & Gold Inc.	-	\$3,100	59	53,333	45,500	\$52.69	\$58,125	\$68,132	\$9,524	NA
5/6/14	PT Saka Energi Indonesia	Swift Energy Company	Financial	175	32	515	2,988	5.55	339,582	58,568	49,944	NA
3/25/14	Memorial Production Partners LP	Alta Mesa Holdings LP	-	173	7	1,650	800	23.38	104,848	216,250	113,125	\$186,656
2/24/14	Lonestar Resources, Inc.	Undisclosed company(ies)	-	71	7	664	13,156	9.68	107,380	5,420	2,896	6,917
2/6/14	Baytex Energy	Aurora Oil & Gas Ltd	-	2,325	107	24,678	22,200	21.79	94,215	104,732	49,151	NA
12/9/13	Redman Resources LLC	Abraxas	-	73	4	655	1,200	19.21	111,450	60,833	33,542	34,178
11/21/13	Comstock Resources Incorporated	Ursa Resources Group	-	67	NA	NA	20,000	NA	NA	3,325	NA	3,325
11/20/13	Devon Energy Corporation	GeoSouthern; Blackstone Group L.P.	-	6,000	253	53,000	82,000	23.72	113,208	73,171	40,854	45,527
9/10/13	Marathon Oil Corporation	IBEX Mineral Resources; Beehive Partners	-	97	NA	NA	4,800	NA	NA	20,208	NA	NA
9/9/13	Sanchez Energy Corporation	Undisclosed company(ies); Sanchez Resources	-	220	11	2,000	3,600	19.64	110,000	61,111	33,333	41,667
7/3/13	EXCO Resources	Chesapeake	-	680	NA	6,100	55,000	NA	111,475	12,364	6,818	8,955
7/3/13	Kohlberg Kravis Roberts & Co	EXCO Resources	Strategic	133	NA	NA	20,939	NA	NA	6,352	NA	6,352
6/5/13	Rosetta Resources	Undisclosed company(ies)	-	126	NA	1,800	2,677	NA	70,000	47,075	13,450	38,503
5/2/13	Undisclosed company(ies)	Halcon Resources Corp.	-	144	4	1,811	24,189	39.88	79,514	5,953	2,210	2,251
4/29/13	BlackBrush, Terrance	Shell	Strategic	65	NA	NA	73,500	NA	NA	884	NA	NA
4/12/13	Schlumberger	Forest Oil Corp	Strategic	90	NA	NA	27,500	NA	NA	3,273	NA	3,270
4/3/13	Penn Virginia	Magnum Hunter Resources Corp.	-	401	12	3,173	19,037	33.42	126,379	21,064	12,730	14,964
3/25/13	Undisclosed company(ies)	ZaZa Energy	-	53	NA	NA	10,000	NA	NA	5,250	NA	5,645
3/18/13	Sanchez Energy	Hess Corporation	-	265	13	4,500	43,000	19.78	58,889	6,163	930	1,026
3/1/13	Aurora Oil and Gas	Cinco Natural Resources	-	118	7	1,620	2,721	17.54	72,531	43,183	13,414	19,826
2/6/13	Lonestar Resources	High Cotton Holdings	-	58	5	NA	1,107	11.67	NA	52,755	NA	69,816
12/17/12	NFR Energy	Undisclosed company(ies)	-	81	NA	NA	NA	NA	NA	NA	NA	NA
11/13/12	Sundance Energy Australia	Texon Petroleum	-	80	2	511	7,500	38.56	155,981	10,628	7,221	7,522
10/24/12	Marathon Oil Corporation	Undisclosed company(ies)	-	227	NA	2,900	4,300	NA	78,276	52,791	19,070	NA
7/30/12	KKR ⁽¹⁾	Comstock Resources	Financial	233	NA	NA	9,333	NA	NA	25,001	NA	26,920
6/22/12	Osaka Gas Company	Cabot Oil & Gas	Financial	250	NA	NA	17,500	NA	NA	14,286	NA	16,734
5/15/12	Aurora Oil & Gas Corp.	Undisclosed company(ies)	-	95	NA	2,024	1,440	NA	46,937	65,972	NA	NA
5/9/12	Marathon Oil	Paloma Resources	-	750	NA	7,000	17,000	NA	107,143	44,118	23,529	50,000
2/29/12	Undisclosed company(ies)	Pioneer Natural Resources Company	-	55	NA	NA	4,000	NA	NA	13,700	NA	NA
1/6/12	Marubeni Corporation	Hunt Oil Company	Strategic	1,300	NA	NA	18,200	NA	NA	71,429	NA	71,429
10/13/11	Notre-Dame Capital Inc	Gulfmark Energy Group Inc	-	55	NA	NA	NA	NA	NA	NA	NA	NA
9/29/11	Undisclosed	Whiting Petroleum	-	66	1	667	5,294	60.36	99,600	12,542	6,246	9,362
9/28/11	GAIL (India) Limited	Carrizo Oil & Gas Incorporated	Strategic	95	3	467	4,040	33.93	203,426	23,515	17,735	18,756
6/30/11	Undisclosed	Forest Oil Corporation	-	110	NA	NA	10,000	NA	NA	11,000	NA	NA
6/29/11	Mitsui & Company Ltd	SM Energy Company	Strategic	735	4	3,356	39,000	183.75	219,011	18,846	13,903	14,544
1/13/14	Undisclosed company(ies)	Chesapeake Energy	-	215	29	100	24,739	7.36	2,150,000	8,691	8,488	8,488
6/13/11	Statoil; Talisman	SM Energy Company	-	227	NA	NA	15,400	NA	NA	14,766	NA	14,766
6/1/11	Marathon Oil Corporation	Hilcorp Energy Company	-	3,500	100	NA	141,000	35.00	NA	24,823	NA	25,839
3/21/11	KNOC	Anadarko Petroleum Corporation	Strategic	1,550	150	NA	96,000	10.33	NA	16,146	NA	13,975
2/23/11	Penn Virginia Corporation	Undisclosed company(ies)	-	15	NA	NA	4,100	NA	NA	3,537	NA	3,537
2/22/11	U.S. Energy Corp.	Crimson Exploration Inc.	Strategic	NA	NA	NA	1,403	NA	NA	NA	NA	NA
12/31/10	Chesapeake; EnCap Investments	Escondido Resources II LLC	-	115	NA	NA	11,050	NA	NA	10,434	NA	NA
12/10/10	Aurora Oil & Gas Corporation	Undisclosed partner	-	120	1	NA	5,100	82.64	NA	23,529	NA	23,529
11/29/10	Chesapeake Energy Corporation	Antares Energy; San Isidro Development	-	200	NA	NA	23,180	NA	NA	8,628	NA	8,628
11/29/10	Marathon Oil Corporation	Denali Oil & Gas	-	10	NA	NA	17,000	NA	NA	588	NA	588
10/10/10	Statoil ASA	Talisman Energy Incorporated	Strategic	180	NA	NA	18,500	NA	NA	9,730	NA	9,730
10/10/10	Statoil ASA; Talisman Energy	Enduring Resources LLC	-	1,325	NA	5,500	97,000	NA	240,909	13,660	10,825	10,900
10/10/10	CNOOC Limited	Chesapeake Energy Corporation	Strategic	2,160	1	NA	200,000	NA	NA	10,800	NA	10,806
10/5/10	Plains Exploration & Production Co	Dan A Hughes Company	-	578	NA	2,000	60,000	NA	289,000	9,633	7,967	6,300
8/19/10	Blue Stone Oil & Gas LLC	Abraxas Petroleum Corp	-	19	NA	NA	6,250	NA	NA	3,000	NA	3,000
8/12/10	Penn Virginia	Cortez Resources LP	-	31	NA	NA	4,574	NA	NA	6,777	NA	6,777
6/24/10	Reliance Industries Ltd	Pioneer Natural Resources Company	Strategic	1,145	NA	900	118,350	NA	1,272,222	9,675	9,294	9,324
6/14/10	Kohlberg Kravis and Roberts & Co	Hilcorp Energy Company	Financial	400	NA	NA	40,000	NA	NA	10,000	NA	10,000
5/5/10	Talisman Energy	Common Resources LLC	-	360	NA	2,000	37,000	NA	180,000	9,730	7,027	7,027
4/12/10	Goodrich Petroleum Corporation	Blackbrush	Strategic	59	NA	NA	35,000	NA	NA	1,686	NA	1,686
3/28/10	Shell	Harrison Ranch	-	1,000	NA	NA	106,000	NA	NA	9,434	NA	9,434
3/22/10	Petrohawk	GeoSouthern, Weber Energy, AREF	Strategic	160	NA	NA	53,000	NA	NA	3,019	NA	3,019
2/24/10	Undisclosed	AREF Investment Group SAKC	-	159	NA	NA	53,000	NA	NA	3,000	NA	3,000
1/12/10	Anadarko; Newfield	TXCO Resources Inc	-	310	NA	1,500	380,000	NA	206,667	816	618	1,155
Median				\$167	7	2,000	18,200	\$23.38	\$111,450	\$11,682	\$8,488	\$9,398

Sources: IHS Herold, PLS, Harts, Company Filings and Press Releases.

Adjusted TV based on \$50,000/boe/d.

(1) KKR/Comstock: \$67MM committed transaction value, with the additional at KKR's option.

Resource Transaction Comparables

A	B	C	D	E	F	G	H	I	J	K	L	M
Date Announced	Buyer	Seller	Joint Venture Strategic/Financial	Transaction Value (\$MM)	Proved Reserves (MMBoe)	Production (Boe/d)	Net Acres	\$ / Proved Boe	\$/Boe/d	TV / Acres (\$/acre)	Adj. TV / (\$/acre)	Adj. TV / Undeveloped (\$/acre)
Fayetteville												
2/21/11	BHP Billiton Group	Chesapeake Energy Corporation	-	\$4,250	400	69,167	487,000	\$10.63	\$61,446	\$8,727	\$1,626	\$2,345
12/23/10	Exxon Mobil; XTO Energy	Petrohawk Energy Corporation	-	575	299	16,333	157,000	\$1.92	35,204	1,904	NA	NA
9/2/08	BP plc	Chesapeake Energy Corporation	Strategic	1,900	179	7,500	135,000	10.62	253,333	1,325	11,296	11,296
7/22/08	XTO Energy Incorporated	Undisclosed (Various)	-	1,300	31	3,333	280,000	42.16	390,000	110	4,048	4,048
4/3/08	XTO Energy Incorporated	Southwestern Energy Company	-	520	27	1,750	55,631	19.48	296,914	479	7,767	NA
1/7/08	Petrohawk Energy Corporation	Undisclosed private company	-	231	8	833	18,500	27.76	277,560	450	10,250	11,389
1/4/08	XTO Energy Incorporated	Contango Oil & Gas Company; Alta Resources LI	-	236	NA	NA	20,000	NA	NA	NA	NA	NA
11/27/07	Petrohawk Energy Corporation	Alta Resources; Contango; Undisclosed	-	343	10	1,833	24,078	34.30	187,091	415	10,438	NA
Median				\$547	31	3,333	95,316	\$19.48	\$253,333	\$479	\$9,009	\$7,672
Granite Wash												
1/31/14	FourPoint Energy, LLC	EnerVest, Ltd.	-	268	NA	5,833	NA	NA	45,943	NA	NA	NA
11/5/13	EnerVest Management Partners	SM Energy Company	-	343	34	8,500	58,000	10.17	40,353	5,914	NA	NA
10/3/13	Templar Energy LLC	Forest Oil Corporation	-	1,000	86	16,667	100,000	11.61	60,000	10,000	1,667	NA
5/21/13	EnerVest	Laredo Petroleum	-	438	29	9,625	104,000	15.37	45,506	4,212	NA	NA
4/4/13	Midstates Petroleum	Linn; Panther; Red Willow; Ute Indian Tribe	-	620	36	8,000	140,000	17.03	77,500	4,429	1,571	9,161
12/17/12	NFR Energy	TLP Energy, Trilantic Capital	-	655	40	6,500	64,000	16.38	100,769	10,234	5,156	NA
7/11/12	Unit	Noble Energy	-	595	44	10,000	84,000	13.51	59,450	7,077	1,125	2,548
1/23/12	Apache Corporation	Cordillera Energy Partners III	-	2,857	72	18,000	254,000	39.96	158,735	11,249	7,706	7,706
5/9/11	Linn Energy	Panther Energy	-	220	10	2,700	44,000	22.00	81,481	5,000	1,932	3,922
Median				\$595	38	8,500	92,000	\$15.87	\$60,000	\$6,496	\$1,799	\$5,814
Gulf Coast Shale												
3/14/14	Undisclosed company(ies)	Clayton Williams	-	71	1	744	NA	51	95,413	NA	NA	NA
11/14/13	Comstock Resources Incorporated	Undisclosed company(ies)	-	52	NA	NA	53,000	NA	NA	972	NA	972
8/8/13	Sanchez Energy	SR Acquisition I; Undisclosed company(ies)	-	78	NA	NA	40,000	NA	NA	1,955	1,955	1,955
9/23/11	Hilcorp Energy Company	BP plc	-	110	NA	NA	NA	NA	NA	NA	NA	NA
Median				\$75	1	744	46,500	\$51	\$95,413	\$1,463	\$1,955	\$1,463
Haynesville												
7/3/13	EXCO Resources	Chesapeake	-	320	NA	19,000	9,600	NA	16,842	33,333	NA	NA
3/15/13	Memorial Production Partners LP	WHT Energy Partners LLC	-	196	27	3,517	29,778	7.24	55,735	6,582	4,456	NA
9/27/11	NFR Energy LLC	SandRidge Energy Inc	-	231	NA	4,167	25,000	NA	55,440	9,240	6,240	NA
3/15/11	Undisclosed	Southwestern Energy Company	-	108	4	1,217	9,700	25.82	88,767	11,134	8,876	NA
10/12/10	Enduro Resource Partners	Denbury Resources Incorporated	-	218	NA	5,667	16,402	NA	38,382	13,261	7,042	NA
7/21/10	Exxon	Ellora Energy Inc	-	695	10	2,200	46,000	68.36	315,909	15,109	10,000	NA
6/16/10	EXCO Resources; BG	Southwestern Energy Company	-	355	5	2,833	20,063	68.71	125,294	17,694	15,152	15,305
5/3/10	Undisclosed	St. Mary	Financial	87	NA	NA	9,150	NA	NA	9,508	NA	NA
4/21/10	BG Group; EXCO Resources	Common Resources LLC	-	446	NA	2,000	29,200	NA	223,000	15,274	14,041	14,041
4/12/10	Goodrich Petroleum Corporation	BlackBrush Oil & Gas LP	Strategic	10	NA	NA	4,200	NA	NA	2,286	NA	NA
4/9/10	NFR Energy	Undisclosed	-	52	0	NA	20,332	NA	NA	2,562	NA	NA
Median				\$218	5	3,175	20,063	\$47.09	\$72,251	\$11,134	\$8,876	\$14,673

Source: IHS Herold.

Note: Adjusted TV based on \$50,000/boe/d for wet gas and \$18,000/boe/d for dry gas.

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Marcellus												
12/17/13	Chief Oil & Gas LLC; Enerplus Corporat	Chesapeake Energy Corporation	-	\$500	NA	21,667	NA	NA	\$23,077	NA	NA	NA
12/10/13	CONSOL Energy; Noble Energy	Dominion Resources Inc.	-	190	NA	NA	90,000	NA	NA	\$2,111	NA	NA
12/6/13	Rice Energy LLC	Alpha Natural Resources, Inc.	-	300	17	4,872	13,750	\$17.65	61,579	21,818	\$4,103	\$4,356
11/8/13	Enerplus	Undisclosed company(ies)	-	153	NA	7,000	17,000	NA	21,857	9,000	NA	NA
8/28/13	Zena Energy LLC	Hat Creek Energy	-	53	NA	NA	NA	NA	NA	NA	NA	NA
5/3/13	EQT	Chesapeake	-	113	NA	NA	99,000	NA	NA	1,141	NA	NA
4/29/13	Southwestern Energy	Chesapeake	-	93	NA	NA	162,000	NA	NA	574	NA	NA
12/18/12	Statoil ASA	Grenadier, PetroEdge, Protege	-	590	NA	5,000	70,000	NA	118,000	8,429	4,857	NA
10/25/12	Magnum Hunter	Viking International	-	107	4	475	51,500	\$28.84	224,632	2,072	1,611	8,604
12/12/11	Stone Energy	Magnum Hunter	Strategic	NA	NA	NA	1,925	NA	NA	NA	NA	NA
9/26/11	Antero Resources	CONSOL Energy	-	193	10	2,000	NA	19.30	96,500	NA	NA	NA
9/26/11	Lime Rock Partners; PDC Energy	National Grid; Seneca	-	153	NA	900	90,000	NA	169,444	1,694	1,514	NA
8/18/11	Noble Energy	CONSOL Energy	Financial	3,419	67	5,833	331,750	2.40	27,429	10,306	9,676	9,960
6/8/11	Exxon Mobil	Phillips Resources Inc; TW Phillips	-	1,690	38	8,333	317,000	44.47	202,800	5,331	4,858	NA
5/17/11	Undisclosed	Enerplus Corporation	-	575	NA	900	91,000	NA	638,889	6,319	6,141	NA
5/5/11	Chevron	Chief Oil & Gas; Tug Hill	-	1,600	NA	NA	228,000	NA	NA	7,018	NA	NA
4/8/11	Magnum Hunter Resources	Undisclosed private company	-	20	2	86	2,225	10.43	232,108	8,989	8,292	11,989
1/13/11	EXCO Resources	Undisclosed private company	-	95	NA	NA	NA	NA	NA	NA	NA	NA
1/10/11	Seneca Resources	EOG Resources	-	23	7	2,283	NA	3.29	10,073	NA	NA	NA
12/27/10	Magnum Hunter Resources	PostRock Energy	-	40	4	151	8,652	9.81	263,536	4,594	4,281	NA
12/21/10	EXCO Resources	Chief Oil & Gas; Radler 2000	-	459	NA	2,667	50,000	NA	172,275	9,188	8,228	6,521
12/1/10	Antero Resources	Bluestone Energy Partners	-	118	NA	2,167	40,000	NA	54,462	2,950	1,975	NA
11/10/10	Gastar Exploration	Mega Energy, Saga Petroleum	-	29	NA	71	62,000	NA	409,859	469	449	NA
11/9/10	Chevron	Atlas Energy Inc	-	4,308	141	13,883	486,000	30.51	310,272	8,863	5,144	NA
11/3/10	Stone Energy	Undisclosed	-	53	NA	NA	35,000	NA	NA	1,503	NA	NA
10/6/10	Chesapeake	Anschutz Exploration	-	850	NA	NA	500,000	NA	NA	1,700	NA	NA
9/22/10	Atinum Partners Co Ltd	Gastar	Strategic	70	NA	NA	17,100	NA	NA	4,094	NA	NA
8/31/10	Sumitomo	Rex Energy	Strategic	140	NA	NA	12,885	NA	NM	10,865	NA	NA
8/23/10	Enerplus Resources Fund	Sinclair Oil	-	150	NA	NA	70,000	NA	NM	2,143	NA	NA
8/5/10	Reliance Industries	Carrizo Oil and Gas	Strategic	65	NA	NA	10,440	NA	NM	6,226	NA	NA
8/5/10	Reliance Industries	Avista Capital Partners	Financial	327	NA	NA	52,200	NA	NM	6,264	NA	NA
5/28/10	Shell	East Resources; KKR	-	4,700	NA	10,000	650,000	NA	NM	7,231	6,954	NA
5/25/10	Williams Companies	Denham Capital; Alta Resources	-	501	NA	NA	42,000	NA	NA	11,929	NA	NA
5/11/10	Anadarko	Pennsylvania State Government	-	120	NA	NA	32,896	NA	NA	3,648	NA	NA
5/10/10	BG Group	EXCO	Strategic	950	44	6	93,000	21.51	NM	10,215	8,065	22,428
4/9/10	Reliance Industries Ltd	Atlas Energy Inc	-	1,700	NA	NA	120,000	NA	NA	14,167	NA	NA
4/9/10	Reliance Industries	Atlas Energy Inc	Strategic	1,700	NA	NA	120,000	NA	NM	14,167	NA	NA
3/22/10	CONSOL Energy	CNX Gas	-	987	53	7,599	NA	18.55	129,881	NA	NA	NA
3/15/10	CONSOL Energy	Dominion Resources	-	3,475	173	19	491,000	20.05	NM	7,077	3,500	NA
3/2/10	EQT Corp.	Undisclosed (Various)	-	260	NA	NA	58,000	NA	NA	4,483	NA	NA
2/15/10	Mitsui	Anadarko	Strategic	1,400	NA	NA	98,800	NA	NA	14,170	NA	NA
2/1/10	PGE	ExxonMobil	Strategic	NA	NA	NA	NA	NA	NA	NA	NA	NA
1/19/10	Chesapeake	Epsilon	Strategic	100	6	833	5,750	16.57	120,000	17,391	16,184	729
12/14/09	Empire Energy Corporation	Undisclosed company(ies)	-	38	9	833	303,000	\$4.07	\$45,600	125	NA	NA
10/29/09	Magnum Hunter Resources Corp	Triad Energy Corporation (Ohio)	-	81	5	1,000	88,417	15.46	81,000	916	\$351	351
Median				\$190	10	2,083	70,000	\$17.65	\$120,000	\$6,264	\$4,858	\$7,563

Source: IHS Herold.

Note: Adjusted TV based on \$50,000/boe/d for wet gas and \$18,000/boe/d for dry gas.

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MS Lime												
11/5/13	Clear Mountain Resources	Performance Energy Resources LLC	-	\$108	20	1,100	70,462	\$5.27	\$98,182	\$1,533	\$752	\$1,924
2/25/13	China Petrochem; Sinopec	Chesapeake Energy	Strategic	1,020	70	17,000	425,000	14.57	60,000	2,400	400	800
9/25/12	Atlas Resource Partners	Equal Energy Ltd.	-	40	NA	1,400	8,550	NA	28,571	4,678	NA	NA
8/13/12	Midstates Petroleum Company	Eagle Energy (Riverstone)	-	650	37	7,000	103,000	17.57	92,857	6,311	3,592	4,229
5/21/12	Natural Resource Partners	Undisclosed company(ies)	-	64	NA	NA	19,200	NA	NA	3,333	NA	3,333
12/22/11	Repsol YPF SA	SandRidge Energy Inc	Strategic	1,000	NA	NA	400,000	NA	NA	2,750	NA	2,750
9/7/11	Atinum Partners	SandRidge Energy Inc	Financial	500	NA	NA	113,000	NA	NA	4,425	NA	4,405
6/30/11	SandRidge Energy	Undisclosed	-	275	NA	NA	200,000	NA	NA	1,375	NA	1,375
3/31/11	SandRidge Energy	Undisclosed	-	95	NA	NA	120,000	NA	NA	792	NA	792
		Median		\$275	37	4,200	113,000	\$14.57	76,429	\$2,750	\$752	\$2,337
Niobrara												
3/5/14	Southwestern Energy Company	Quicksilver Resources; Royal Dutch Shell plc	-	180	85	NA	312,000	2.12	NA	577	NA	NA
3/4/14	Undisclosed company(ies)	Tekton Windsor LLC	-	200	NA	1,300	6,600	NA	153,846	30,303	20,455	22,424
10/4/12	Indian Oil Corp. Limited	Carrizo Oil & Gas	Strategic	83	NA	555	18,100	NA	148,649	4,558	3,025	3,558
5/14/12	PDC Energy	Merit Energy	-	327	29	2,800	35,000	11.20	116,786	9,343	5,343	6,149
7/13/11	Bill Barrett Corporation	Texas American Resources Company	-	150	7	650	28,000	21.43	230,769	5,357	4,196	7,892
4/4/11	Marubeni Corporation	Marathon Oil Corporation	Strategic	270	NA	NA	54,000	NA	NA	5,000	NA	5,000
3/2/11	Synergy Resources Corp.	Undisclosed company(ies)	-	NA	NA	NA	78,738	NA	NA	NA	NA	NA
3/1/11	Recovery Energy, Inc.	Wapiti Energy, LLC	-	12	NA	NA	8,060	NA	NA	1,526	NA	1,526
2/14/11	Halliburton	Samson Oil & Gas	-	9	NA	NA	2,819	NA	NA	3,264	NA	NA
1/31/11	CNOOC Limited	Chesapeake Energy Corporation	Strategic	1,267	NA	NA	266,400	NA	NA	4,756	NA	4,756
10/15/10	Chesapeake Energy Corporation	Samson Oil & Gas Ltd	-	74	NA	NA	23,766	NA	NA	3,100	NA	3,100
10/14/10	ITOCHU Corporation	Fidelity E&P; MDU Resources Group	Financial	NA	NA	NA	22,000	NA	NA	0	NA	NA
6/30/10	Rex Energy	Undisclosed	-	19	NA	NA	18,700	NA	NA	1,000	NA	NA
		Median		\$150	29	975	23,766	\$11.20	\$151,247	\$3,911	\$4,770	\$4,878

Source: IHS Herold.

Note: Adjusted TV Acre based on \$40,000/boe/d for MS lime and \$50,000/boe/d for Niobrara.

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Permian Resource												
5/1/14	Parsley Energy	Undisclosed private company(ies)	-	\$165	8	861	861	\$20.41	\$191,986	\$191,986	\$141,986	NA
4/30/14	Undisclosed company(ies)	Whiting Petroleum Corporation	-	76	NA	NA	41,044	NA	NA	1,852	NA	NA
4/30/14	EP Energy, Inc.	Undisclosed private company(ies)	-	153	NA	1,000	37,000	NA	153,000	4,135	2,784	NA
4/10/14	Parsley Energy	OGX Resources	-	133	NA	NA	4,867	NA	NA	27,286	NA	NA
4/8/14	Athlon Energy Inc.	Hibernia Holdings; Piedra Energy; Undisclosed	-	873	31	4,800	23,500	28.16	181,875	37,149	26,936	NA
3/31/14	RSP Permian	Undisclosed company(ies)	-	79	NA	500	13,431	NA	158,000	5,882	4,021	\$4,021
2/18/14	Diamondback Energy Inc.	Henry Resources; Others	-	288	7	2,155	4,683	41.52	133,643	61,499	38,490	38,490
1/24/14	Athlon Energy Inc.	Undisclosed company(ies)	-	88	3	750	5,645	30	117,333	15,589	8,946	10,567
12/13/13	BreitBurn Energy Partners LP	CrownRock LP	-	282	17	2,900	NA	16.99	97,241	NA	NA	NA
12/9/13	QEP Resources	EnerVest Management Partners	-	950	47	6,700	26,519	20.21	141,791	35,823	23,191	29,470
11/5/13	Eni	Quicksilver Resources Incorporated	-	52	NA	11	29,000	NA	NA	1,793	1,774	1,774
10/23/13	Brigham	Whiting Petroleum	-	150	5	200	32,138	31.27	750,500	4,670	4,359	NA
9/17/13	Red Willow	San Saba Resources LLC	-	NA	NA	150	10,200	NA	NA	NA	NA	NA
9/7/13	Diamondback Energy Inc.	Roff Oil & Gas; Element Petroleum Operating	-	165	NA	800	11,150	NA	206,250	14,798	11,211	21,891
9/3/13	Diamondback Energy Inc.	IBEX Mineral Resources; Beehive Partners	-	440	NA	1,600	NA	NA	275,000	NA	NA	NA
9/3/13	Devon Energy	Forest Oil Corporation	-	35	NA	NA	52,350	NA	NA	669	NA	NA
6/25/13	Cimarex Energy Co	Chevron Corporation	Strategic	60	NA	NA	104,000	NA	NA	577	NA	NA
5/8/13	Pioneer Natural Resources	Pioneer Southwest Energy Partners	-	818	24	3,881	17,083	34.80	210,877	47,911	36,551	NA
4/19/13	GE Energy Financial Services	Clayton Williams	-	214	15	2,372	17,720	14.23	90,210	12,077	5,383	6,644
3/15/13	Rosetta Resources	Comstock Resources	-	768	27	3,300	53,306	28.62	232,727	14,407	11,312	12,416
3/27/13	Prospect Capital Corp	H&M Oil & Gas	-	66	NA	235	44,590	NA	280,851	1,480	1,217	NA
1/30/13	Sinochem	Pioneer Natural Resources	Financial	1,700	NA	2,000	82,800	NA	850,000	20,531	19,324	19,431
12/28/12	Resolute Energy	RSP Permian; Other private parties	-	386	16	3,246	4,637	24.45	118,916	83,243	48,242	80,644
12/11/12	BreitBurn Energy Partners	CrownRock LP; Lynden Energy	-	190	14	1,850	NA	13.97	102,703	NA	NA	NA
12/3/12	Resolute Energy	Celero Energy	-	120	4	1,418	6,532	29.27	84,626	18,371	7,517	19,625
9/12/12	Royal Dutch Shell	Chesapeake	-	1,935	NA	26,000	618,000	NA	74,423	3,131	1,028	1,028
9/12/12	Chevron; EnerVest	Chesapeake	-	1,365	NA	10,000	347,000	NA	136,500	3,934	2,493	2,493
8/1/12	Sumitomo Corp.	Devon Energy	Financial	1,365	NA	NA	195,000	NA	NA	7,000	NA	NA
5/13/12	Concho Resources	Three Rivers Operating Co.	-	1,000	58	7,000	200,000	17.24	142,857	5,000	3,250	9,370
5/10/12	BreitBurn Energy Partners	Element Petroleum; CrownRock	-	220	10	2,100	4,600	23.16	104,762	47,826	25,000	31,250
5/1/12	Eagle Energy Trust	Undisclosed company(ies)	-	113	6	480	2,937	17.50	236,250	38,611	30,439	41,938
2/16/12	Forest Oil; Undisclosed company(ies)	Undisclosed	-	103	NA	NA	63,000	NA	NA	1,636	NA	NA
2/10/12	Energen	Undisclosed private company(ies)	-	66	9	NA	3,200	7.74	NA	20,563	NA	NA
12/31/11	Callon Petroleum Company	Undisclosed company(ies)	-	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/22/11	Concho Resources Inc	PDC Energy	-	175	NA	1,300	10,200	NA	134,615	17,157	10,784	17,188
12/6/11	Comstock Resources	Eagle Oil & Gas Company	-	333	23	1,400	44,000	14.34	237,643	7,561	5,970	6,634
11/2/11	Concho Resources Inc	Lone Star Oil & Gas; Undisclosed (various)	-	330	6	1,500	114,000	55.00	220,000	2,895	2,237	NA
10/27/11	Energen Resources Corp.	Undisclosed (Various)	-	54	3	200	NA	16.09	272,000	NA	NA	NA
10/27/11	Energen Resources Corp.	Undisclosed private company	-	158	14	1,200	NA	11.50	131,250	NA	NA	NA
10/27/11	Linn Energy	Undisclosed (Various)	-	105	8	800	NA	12.65	131,250	NA	NA	NA
6/16/11	Laredo Petroleum Inc	Broad Oak Energy Inc	-	1,000	NA	8,000	65,000	NA	125,000	15,385	9,231	9,231
5/5/11	Petrohawk Energy Corporation	Lone Star Oil & Gas; Undisclosed	-	455	NA	NA	325,000	NA	NA	1,400	NA	NA
4/28/11	Berry Petroleum Company	Piedra Resources	-	123	16	500	6,000	7.89	246,000	20,500	16,333	18,148
4/26/11	W&T Offshore Inc	Opal Resources	-	366	27	2,800	21,500	13.56	130,714	17,023	10,512	12,914
2/28/11	Linn Energy	SandRidge, Undisclosed	-	238	14	1,650	23,000	17.00	144,242	10,348	6,761	NA
2/25/11	Undisclosed	SandRidge Energy Inc	-	200	22	1,500	23,000	9.30	133,333	8,696	5,435	NA
1/7/11	Athlon Energy LP	SandRidge Energy Inc.	-	155	39	1,600	18,445	4.03	96,875	8,403	4,066	NA
12/31/10	Linn Energy	Cobra Oil & Gas	-	58	NA	NA	NA	NA	NA	NA	NA	NA
12/10/10	Energen Corporation	SandRidge Energy Inc	-	110	NA	NA	40,000	NA	NA	2,750	NA	NA
11/1/10	Energen Corporation	Undisclosed private company	-	75	8	NA	10,360	9.87	NA	7,239	NA	NA
10/25/10	Berry Petroleum Company	Key Energy Services Inc	-	180	NA	1,200	9,300	NA	150,000	19,355	12,903	NA
9/7/10	Linn Energy	Undisclosed (three deals or parties)	-	352	30	3,300	NA	11.74	106,727	NA	NA	NA
8/23/10	Energen Corporation	Limestone Exploration	-	185	18	28,533	8,700	10.29	6,484	21,264	NA	NA
7/20/10	Concho Resources Inc	Marbob Energy Corporation	-	1,659	76	14,000	118,473	21.82	118,473	14,000	8,091	NA
5/20/10	Petroleum Development Corporation	Merit Energy	-	75	NA	900	8,300	NA	83,333	9,036	3,614	5,783
3/29/10	Linn Energy	Henry Resources	-	305	18	2,800	NA	16.94	108,929	NA	NA	NA
Median				\$183	15	1,600	23,000	\$16.99	\$135,558	\$12,077	\$8,519	\$12,665

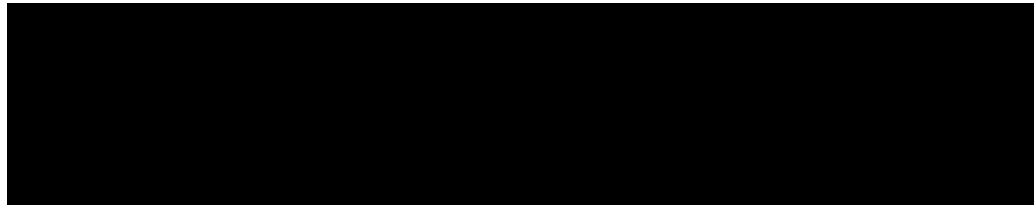
Source: IHS Herold.
Note: Adjusted TV Acre based on \$50,000/boe/d.

Resource Transaction Comparables

A	B	C	D	E	F	G	H	I	J	K	L	M
Date Announced	Buyer	Seller	Joint Venture Strategic/Financial	Transaction Value (\$MM)	Proved Reserves (MMBoe)	Production (Boe/d)	Net Acres	\$ / Proved Boe	\$/Boe/d	TV / Acres (\$/acre)	Adj. TV / (\$/acre)	Adj. TV / Undeveloped (\$/acre)
Rockies Resource												
5/1/13	SM Energy	QEP Resources	-	\$65	NA	NA	40,000	NA	NA	\$1,625	NA	\$2,529
5/12/11	Bill Barrett Corporation	Delek Energy Systems Ltd; Delek Group Ltd	-	120	5	750	20,155	\$24.00	\$160,000	5,954	\$4,093	NA
3/21/11	Newfield Exploration Company	Branta	-	93	NA	NA	24,000	NA	NA	3,875	NA	3,875
3/21/11	Newfield Exploration Company	Harvest Natural Resources Inc	-	215	NA	NA	47,600	NA	NA	4,517	NA	4,517
		Median		\$107	5	750	32,000	\$24.00	\$160,000	\$4,196	\$4,093	\$3,875
Woodbine												
2/27/14	Undisclosed company(ies)	Halcon Resources Corporation	-	450	16	3,800	83,000	27.61	118,421	5,422	3,133	NA
1/8/14	GE Energy Financial Services;Vess Oil	EnerVest, Ltd.	-	108	NA	NA	13,000	NA	NA	8,308	NA	8,308
7/15/13	Meidu Holding Co	Woodbine Acquisition	-	432	28	5,211	15,097	15.27	82,928	28,624	11,366	15,664
9/11/12	Energy & Exploration Partners	Chesapeake	-	125	NA	NA	57,257	NA	NA	2,183	NA	2,357
6/5/12	Halcon Resources	CH4 Energy II; Petromax Leon; others	-	527	12	2,800	20,628	42.68	188,136	25,537	18,750	NA
6/1/11	Woodbine Acquisition Corporation	PetroMax Op.; Petro Texas; CH4 Energy II	-	250	14	1,800	15,224	18.52	138,889	16,421	10,510	16,324
		Median		\$341	15	3,300	17,926	\$23.06	\$128,655	\$12,365	\$101347.65	\$72.53 Tm28

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Source: IHS Herold.
 Note: Adjusted TV based on \$50,000/boe/d for Rockies/Woodbine/Utica/Multi and \$18,000 (gassy) / \$50,000 (oily) for Woodford.



About The Firm

Tudor, Pickering, Holt & Co., LLC is an integrated energy investment and merchant bank, providing high quality advice and services to institutional and corporate clients. Through the company's two broker-dealer units, Tudor, Pickering, Holt & Co. Securities, Inc. (TPHCSI) and Tudor, Pickering, Holt & Co. Advisors, LLC (TPHCA), the company offers securities and investment banking services to the energy community. TPH Asset Management, LLC (TPHAM) is an SEC registered investment adviser that delivers a suite of energy investment strategies. TPH Partners Management, LLC is a relying advisor of TPHAM. Certain employees of TPHAM are also employees of TPHCSI.

The firm, headquartered in Houston, Texas, has approximately 150 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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