MERCER CAPITAL
BUSINESS VALUATION &
FINANCIAL ADVISORY SERVICES

VALUE FOCUS

Exploration & Production

Second Quarter 2018 // Region Focus: Permian Basin

Executive Summary

Domestic oil production has increased significantly over the last few years primarily due to the shale boom in the Permian Basin. The increase in crude oil production in the U.S. has offset some of the declines globally due to production cuts by OPEC and outages in Libya, Iran, and Venezuela. Thus, there has been little pressure recently on global oil prices.

Oil prices rose steadily over the last twelve months, reaching over $70 per barrel in May for the first time since 2014. Prices finished the first half of 2018 around $74 per barrel, but WTI futures prices are in backwardation as **global inventory levels are expected to increase**. As of late, there has been some pressure on price of WTI due to a need for more infrastructure to take crude out of the Permian Basin.

Natural gas prices, on the other hand, declined in the beginning of 2018, but finished the first half of 2018 around the same price it began the year ($2.95 per mcf). As covered **in a post** on our blog *Energy Valuation Insights*, natural gas prices have been negatively impacted by the oil boom in the Permian because dry natural gas is a byproduct of oil production.

2018

Q1: Eagle Ford

Q2: Permian Basin

Q3: Bakken Shale

Q4: Marcellus and Utica

MERCER CAPITAL

Oil and Gas Industry Services

Mercer Capital provides business valuation and financial advisory services to companies in the energy industry.

Services Provided

- Valuation of energy companies
- Transaction advisory for acquisitions and divestitures
- Valuations for purchase accounting and impairment testing
- Fairness and solvency opinions
- Litigation support for economic damages and valuation and shareholder disputes

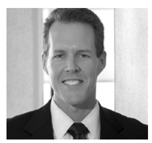
Industry Segments

Mercer Capital serves the following industry segments:

- Exploration & Production
- Oil Field Services
- Midstream Operations
- Alternative Energy

Contact Us

Bryce Erickson, ASA, MRICS
214.468.8400
ericksonb@mercercapital.com



Grant M. Farrell, ASA, CPA, ABV, CFF
214.468.8400
farrellg@mercercapital.com

Don Erickson, ASA
214.468.8400
ericksond@mercercapital.com

Taryn E. Burgess
901.322.9757
burgesst@mercercapital.com

David W. R. Harkins
901.322.9783
harkinsd@mercercapital.com

In This Issue

Learn More about Mercer Capital & our Oil and Gas Services at **mercercapital.com**

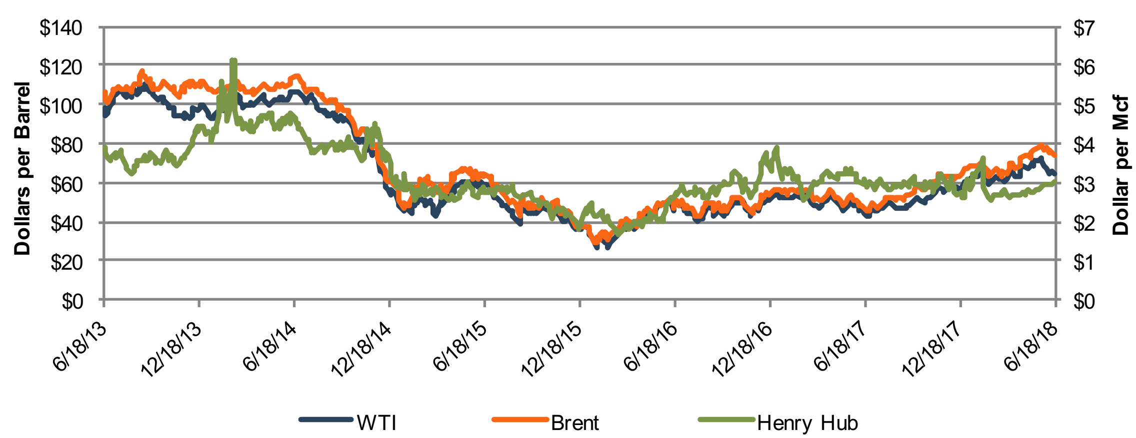
E&P Industry

Oil and Gas Commodity Prices: Outlook for the Rest of 2018

As is always the case for the industry, the price of oil and gas is central to determining how the rest of the year plays out. It seems unlikely that the recent increase to above $70 per barrel is sustainable, and futures curves indicate this may drop into the low $50's per barrel in a few years.

At their meeting on June 22, OPEC voted to raise production caps, increasing output by 1 million barrels per day, in an effort to reduce prices that have increased significantly. Such a change is not as easy as flipping a switch and producing more oil. Increasing production caps allows countries to produce more, but only if the countries have spare capacity. Additionally, this spare capacity typically acts to smooth the volatility of the energy market, but if production increases, prices will be more susceptible to spikes when countries experience outages due to a decrease in the cushion.

Crude Oil and Natural Gas Prices



Source: Bloomberg

E&P Industry

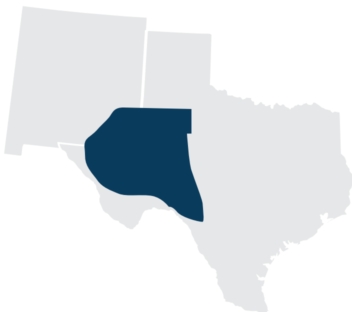
Oil and Gas Commodity Prices: Outlook for the Rest of 2018

According to the EIA, the United States is forecasted to be the world's largest producer of crude oil for the first time in 40 years. Last year, Russia produced 10.3 million barrels per day, while Saudi Arabia produced a little less than 10 million, and the U.S. was just below 9.4 million. The U.S. has not pumped more than 9.6 million barrels per day on average since 1970, but it is forecasted to produce 10.8 million barrels a day for all of 2018 and 11.8 million in 2019. Transportation will play a critical role, particularly in the Permian, where E&P companies are faced with capacity constraints due to an inability to transport their oil out of West Texas. This has recently created a larger spread between the price of WTI and Brent crude.

The Tax Cuts and Jobs Act signed into law in the tail end of 2017 will continue to have wide ranging effects on the oil and gas market and overall economy. A lower tax rate results in higher after-tax earnings which companies may use to update equipment due to the accelerated depreciation of qualifying capital equipment purchases. Modernizing equipment would increase production capacity and efficiency. Additionally, a lower tax rate allows companies to increase hiring; however, a tight labor market has put upward pressure on wages, especially for oil and gas related jobs in the Permian Basin.

Permian Basin

Overview



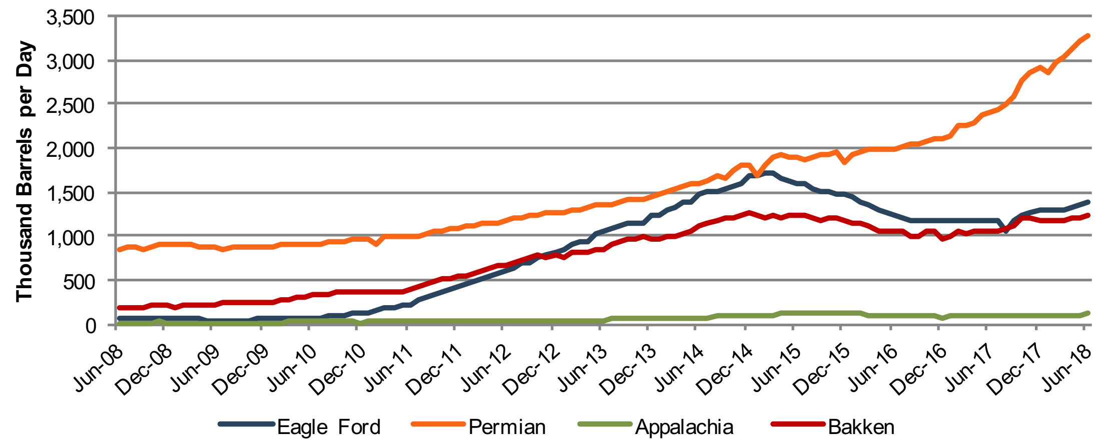
The economics of oil and gas production vary by region. Mercer Capital focuses on trends in the Eagle Ford, Permian, Bakken, and Marcellus and Utica plays. The cost of producing oil and gas depends on the geological makeup of the reserve, depth of reserve, and cost to transport the raw crude to market. We can observe different costs in different regions depending on these factors. This quarter we take a closer look at the Permian Basin.

Production has increased significantly in the Permian Basin. Despite being discovered in the 1920s, the region's true potential was realized in 2007 when hydraulic fracturing techniques were used to access the tight sand layers of the play. In recent years, the industry has really focused on the Permian, with operators and investors alike prioritizing the region. The Permian has been receiving the most attention given its low-cost economics and large well potential. **According to Baker Hughes**, there are virtually no active gas-directed rigs, but significant gas production is still occurring in the region because natural gas is a byproduct from the oil rigs. As we discussed in a recent post "**The Permian Boom Causing a Natural Gas Bust**," this is having a negative effect on natural gas prices and producers outside of the Permian. Companies in the Permian have an advantage because they do not have to choose between oil and gas, and production is more efficient.

Permian Basin

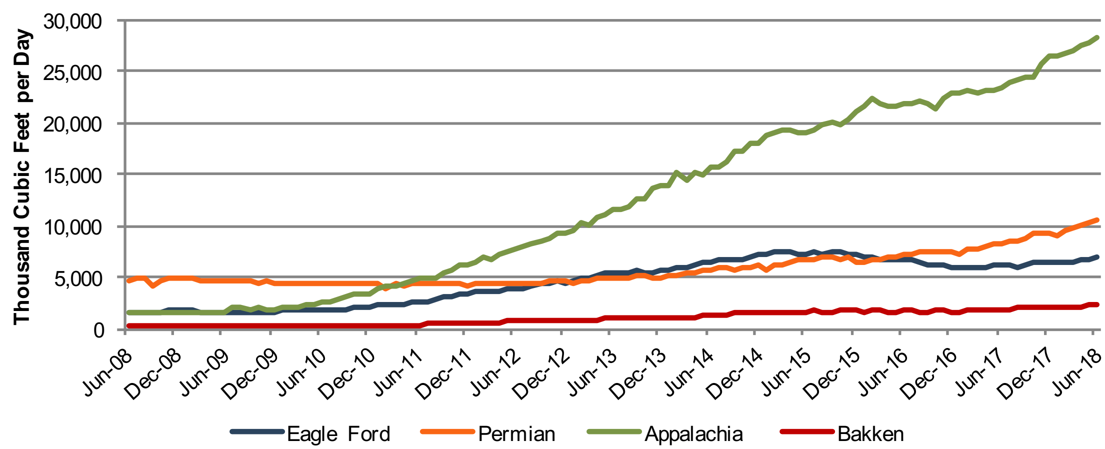
Production

Daily Production of Crude Oil



Source: EIA

Daily Production of Natural Gas



Source: EIA

Permian Basin

Production

The Permian is the largest producer of oil and the second largest producer of gas, after the Marcellus. According to the EIA, production of oil and natural gas in the Permian Basin increased at a compound annual rate of 25.0% and 21.1%, respectively over the last five years. In the past year alone, production of oil increased 35.6%, and production of gas increased 26.5%. Currently over 45% of the U.S.' crude oil and 15% of the country's natural gas is coming from the Permian Basin.[1] A concerted effort has been made to increase efficiency, which has led to a rise in production per well. Oil production per rig in the Permian increased more than 36% in the last year, which, when combined with the rise in rig count, further emphasizes the focus on the region.

With many producers clamoring for a piece of the action in the basin, the number of rigs in the Permian has consistently grown at a faster rate than total rig counts in the country. As a result, the Permian has increased its share of total rig counts. In June 2015, the Permian accounted for 26.8% of all rigs, but that number steadily increased to 45.2% as of June 2018. The number of rigs in the Permian has grown 32% in the past year, compared to 16% nationally.

However, this focus on the region has begun to see **growing pains** as a bottleneck has emerged. The unintended consequence of this has been that some operators have been growing oil production too fast for pipeline and infrastructure to keep up. A pricing differential as arisen in the region due to the supply glut, and there has been concurrent stagnation in valuations.

[1] Calculations based on monthly crude oil and gas production and EIA drilling report by region

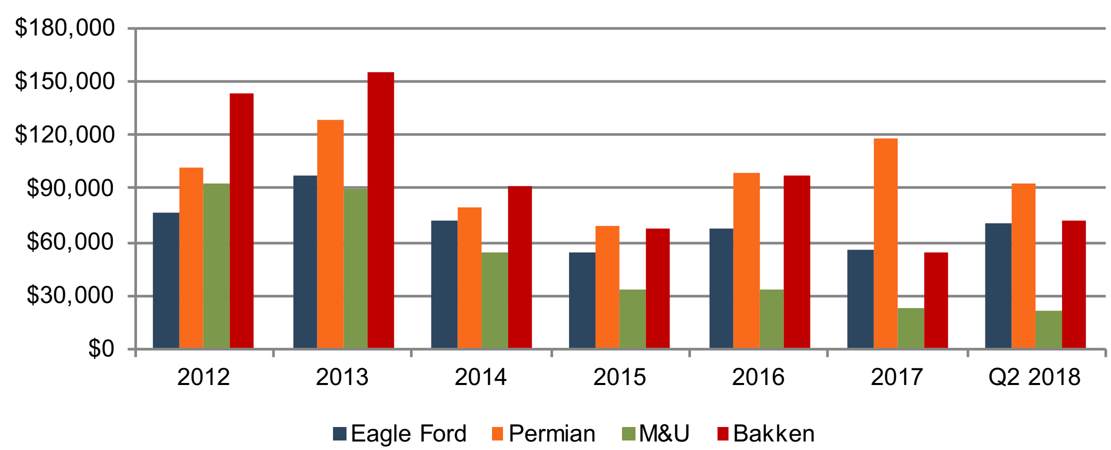
Permian Basin

Valuation Implications

In the graph below, we examine valuation multiples for E&P companies, including the price per flowing barrel.[2] On average, multiples remain highest in the Permian Basin, even though they declined 21% from year-end 2017. Meanwhile, multiples in the Bakken and Eagle Ford have started resembling multiples seen in the Permian, increasing 34% and 25%, respectively since the beginning of the year. Companies operating in the Marcellus and Utica continue to have the lowest valuation multiples and declined by 2% in 2018. Valuations in the Marcellus and Utica are not expected to increase in the near future due to the low price environment for natural gas.

Companies in the Permian are generally more profitable than companies in other regions as explained by their lower breakeven prices. According to Bloomberg Intelligence, recent breakeven prices in the Permian were $38 in both the Delaware and Midland Basins. This represents a 6% decline in breakeven prices for the Delaware Basin since June 2017, compared to a 28% decline in breakeven price for the Midland Basin.[3] These breakeven prices compare favorably to $40 in the Bakken and approximately $44 in the Eagle Ford.

Price per Flowing Barrel



Source: Bloomberg

[2] Price per Flowing Barrel = Enterprise Value/Production per Day (boe/d)

[3] Bloomberg Intelligence; County Level Estimate

Permian Basin

Market Valuations & Transaction Activity

When oil prices crashed in mid-2014, companies were forced to become more efficient in order to survive. It became clear that location meant more than ever, and companies could no longer justify operating in regions, such as the Bakken and the Eagle Ford, where breakeven prices were higher than they were in the Permian. Thus, in order to stay in business, companies flocked to the Permian. The trend towards the Permian Basin was somewhat slow to begin as the uncertainty that accompanied the price collapse led to a standstill in activity. While some investors were quick to move to the Permian when acreage was still relatively cheap, most were slow to sell their acreage in other Basins as the low oil price environment pushed down the price of acreage. Now that the Permian has become the clear leader in production, M&A activity in the region has picked up and multiples for Permian acreage have increased due to high demand. Although it was three to four years ago that the Permian emerged as the cost leader, companies are still moving to the Permian with haste. The table on the following page provides transaction details.

Transactions in the Permian Basin

Announced Date	Buyer	Seller	Deal Value ($MM)	$ / Acre	$ / Boepd
5/24/18	Callon Petroleum Co.	Cimarex Energy Co.	$570	$30,119	$83,443
5/21/18	Matador Resources Company	Undisclosed Seller	$133	$12,487	nm
4/26/18	Undisclosed Buyer	EQT Corp	$64	$914	$64,000
4/4/18	Petro-Hunt LLC	SM Energy Company	$292	$2,342	$41,025
3/27/18	Energy Hunter Resources	Lubbock Energy Partners	$18	$2,087	nm
2/26/18	Undisclosed Buyer	Centennial Resources Development	$141	$16,360	$562,800
2/26/18	Centennial Resources Development	OneEnergy Partners, LLC	$95	$23,750	nm
2/20/18	Colgate Energy LLC ,Luxe Energy II LLC	Concho Resources, Inc.	$280	$14,000	nm
2/14/18	Undisclosed Buyer	Linn Energy, Inc	$120	$4,268	$18,968
2/6/18	Halcon Resources Corp	Royal Dutch Shell	$200	$19,004	$181,818
2/6/18	Halcon Resources Corp	Undisclosed Seller	$104	$23,567	$462,222
1/31/18	Lilis Energy Inc.	OneEnergy Partners, LLC	$70	$25,018	$164,706
1/31/18	Abraxas Petroleum Corp.	Undisclosed Seller	$14	$15,778	nm
1/29/18	Undisclosed Buyer	Parsley Energy Inc.	$57	$5,700	$95,000
12/22/17	Rosehill Resources Inc.	Undisclosed Seller	$39	$20,103	nm
12/11/17	Oasis Petroleum Inc.	Forge Energy LLC	$946	$46,601	$270,286
10/31/17	Rosehill Resources Inc.	Undisclosed Seller	$78	$17,087	$1,950,000

Transactions in the Permian Basin

Announced Date	Buyer	Seller	Deal Value ($MM)	$ / Acre	$ / Boepd
10/5/17	Matador Resources Company	Undisclosed Seller	$50	$6,000	nm
10/4/17	Lilis Energy Inc.	Undisclosed Seller	$46	$11,400	nm
9/28/17	ExxonMobil	Undisclosed Seller	$500	$22,727	nm
8/7/17	RSP Permian Inc.	Undisclosed Seller	$228	$38,000	$456,000
8/3/17	Concho Resources, Inc.	Apache Corp	$600	$48,387	$200,000
7/27/17	QEP Resources, Inc.	Jm Cox Resources Lp	$732	$53,043	$1,152,756
7/24/17	Undisclosed Buyer	Fieldpoint Petroleum Corp.	$1	$2,993	nm
7/14/17	Abraxas Petroleum Corp.	Undisclosed Seller	$8	$8,886	$58,308
Median			**$104**	**$16,360**	**$181,818**
Average			**$215**	**$18,825**	**$384,089**

Source: Shale Experts

* Does not include every transaction in the Permian Basin for the last twelve months ended 6/30/2018

Permian Basin

Pioneer Moves to the Permian

The higher multiples observed in the Permian Basin is especially apparent as it relates to Pioneer Natural Resources' recent acquisition activity. Pioneer announced early this year that it would shift its focus to become a pure-play Permian producer, with plans to spend its entire **$2.9 billion capex budget in the Permian Basin**.

Since the announcement **Pioneer sold Eagle Ford assets for $102 million** and **southeastern Colorado assets for $79 million**, as summarized below. It appears that Pioneer was willing to take a loss in order to redeploy capital to the Permian Basin.

In March 2018 Pioneer sold its assets in the Eagle Ford for $10,000/acre and $92,727 per flowing barrel. The price Pioneer received was in line, or even above, industry averages which are more along the line of $4,200/acre and $98,000 per flowing barrel.

However, this month, Pioneer announced the sale of its Raton assets for only $79 million, a multiple of $5,600 per flowing barrel. Multiples for acreage in southeastern Colorado are not expected to be at the same level as in the Eagle Ford. *BusinessWire* **reported that this sale** "is expected to result in a pretax noncash loss of $65 million to $75 million."

Pioneer's Recent Acreage Sales

	Eagle Ford Assets	Raton Assets
Sale Date	Mar-18	Jun-18
Sale Price	$102,000,000	$79,000,000
Acreage	10,200	na
Production (Boe/d)	1,100	14,000
$/Acre	$10,000	na
$/Boe/d	$92,727	$5,643

Permian Basin

Pioneer Moves to the Permian

What Kind of Deal Did They Get?

Pioneer's recent transaction activity shows the urgency with which companies are now shifting their focus to the Permian. Pioneer's acceptance of a large loss for its Raton assets is symptomatic of the recent dominance of the Permian to all other U.S. shale plays. While Pioneer accepted a loss in order to sell its acreage at meager multiples of $5,600 per flowing barrel, it will now likely use that cash to pay for Permian acreage at multiples over $100,000 per flowing barrel.

Part of the reason for paying the premium multiple can be explained by the existence of more proved undeveloped (PUD) reserves in the Permian Basin as compared to other regions. Many transactions in the Permian are motivated by the existence of future drilling potential over current production. Thus, current production multiples in the Permian are inflated compared to transactions in regions that have more current production but less potential for the development of PUD reserves. The difference is mainly due to the obvious benefits of operating in the Permian Basin compared to other unconventional shale plays, including low breakeven prices, efficiencies generated by multiple stacked plays, and lower costs from shorter transportation distances to refineries. However, it is worth noting that increased drilling activity in the Permian Basin is beginning to strain the existing infrastructure in the Permian, creating transportation bottlenecks (or as our oil & gas team leader **Bryce Erickson** likes to call it, a hydrocarbon traffic jam).

Appendix A

Selected Public Company Information

Mercer Capital tracks the performance of Exploration and Production companies across different mineral reserves in order to understand how the current pricing environment affects operators in each region. We created an index of seven groups to better understand performance trends across reserves and the industry. The current pricing multiples of each company in the index is summarized below.

					as of 6/30/2018		
Company Name	**Ticker**	**6/30/2018 Enterprise Value**	**YOY % Change in EV**	**EBITDAX Margin**	**EV/ EBITDAX**	**Daily Production (mboe/d)**	**Price per Flowing Barrel***
Global Integrated							
Exxon Mobil Corp	XOM	$393,473	1.77%	14.4%	10.4x	3,855	$102,068
Royal Dutch Shell PLC	RDS/A	$365,593	44.15%	14.3%	7.4x	3,681	$99,310
Chevron Corp	CVX	$276,054	16.51%	19.1%	10.1x	2,930	$94,232
Occidental Petroleum Corp	OXY	$72,783	36.34%	45.9%	11.9x	637	$114,318
BP PLC	BP	$193,611	24.83%	11.1%	6.4x	3,608	$53,662
Group Median			**24.83%**	**14.4%**	**10.1x**	**3,608**	**$99,310**
Global E&P							
Marathon Oil Corp	MRO	$21,680	47.27%	60.0%	6.6x	415	$52,185
Hess Corp	HES	$24,824	23.74%	-32.7%	-12.8x	264	$93,989
ConocoPhillips	COP	$93,406	37.77%	39.5%	7.4x	1,210	$77,172
Anadarko Petroleum Corp	APC	$53,788	41.32%	52.1%	8.9x	683	$78,802
Noble Energy Inc	NBL	$24,106	15.42%	77.0%	7.0x	349	$69,106
Apache Corp	APA	$26,492	0.30%	68.3%	6.0x	472	$56,143
Murphy Oil Corp	MUR	$7,823	24.97%	62.3%	6.0x	168	$46,500
Group Median			**24.36%**	**57.2%**	**6.5x**	**410**	**$73,139**

Source: Bloomberg L.P.

- Price per Flowing Barrel is EV/ daily production ($/boe/d)
- Companies included in the Guideline Group were selected from a broader guideline group, detailed **here**. The selected companies' market caps exceed $1 billion and revenues exceed $500 million.
- Statoil (Norway's government owned oil company) changed its name to Equinor signaling its emergence as a broad energy company, not one just focused on oil. We have removed Statoil from our guideline group as its expansion into the broader energy market makes it less comparable to traditional E&P companies.

Appendix A

Selected Public Company Information

Company Name	Ticker	6/30/2018 Enterprise Value	YOY % Change in EV	EBITDAX Margin	EV/ EBITDAX	Daily Production (mboe/d)	Price per Flowing Barrel*
					as of 6/30/2018		
North American E&P							
Ultra Petroleum Corp	UPL	$2,554	-31.22%	61.9%	4.5x	133	$19,233
Encana Corp	ECA	$16,393	32.15%	34.9%	10.9x	381	$42,987
Devon Energy Corp	DVN	$36,387	23.65%	19.5%	14.1x	547	$66,579
Enerplus Corp	ERF	$3,312	50.34%	62.4%	7.0x	89	$37,060
QEP Resources Inc	QEP	$5,372	25.72%	32.3%	9.9x	146	$36,770
WPX Energy Inc	WPX	$9,332	39.83%	41.9%	15.1x	128	$72,628
EQT Corp	EQT	$27,044	66.75%	7.1%	94.4x	709	$38,144
Chesapeake Energy Corp	CHK	$15,945	-2.05%	24.8%	6.6x	537	$29,711
Newfield Exploration Co	NFX	$8,280	10.07%	59.9%	6.6x	187	$44,296
Group Median			**28.94%**	**33.6%**	**10.4x**	**284**	**$40,565**
Bakken							
Continental Resources Inc/OK	CLR	$30,420	62.94%	73.1%	10.2x	302	$100,827
Whiting Petroleum Corp	WLL	$7,625	45.23%	-9.5%	-45.7x	129	$59,223
Oasis Petroleum Inc	OAS	$6,797	59.58%	31.5%	14.0x	83	$81,986
Crescent Point Energy Corp	CPG	$7,450	2.50%	62.0%	4.7x	183	$40,791
Group Median			**45.23%**	**31.5%**	**4.7x**	**129**	**$59,223**

Source: Bloomberg L.P.

- Price per Flowing Barrel is EV/ daily production ($/boe/d)
- Companies included in the Guideline Group were selected from a broader guideline group, detailed **here**. The selected companies' market caps exceed $1 billion and revenues exceed $500 million.
- Statoil (Norway's government owned oil company) changed its name to Equinor signaling its emergence as a broad energy company, not one just focused on oil. We have removed Statoil from our guideline group as its expansion into the broader energy market makes it less comparable to traditional E&P companies.

Appendix A

Selected Public Company Information

					as of 6/30/2018		
Company Name	Ticker	6/30/2018 Enterprise Value	YOY % Change in EV	EBITDAX Margin	EV/ EBITDAX	Daily Production (mboe/d)	Price per Flowing Barrel*
Marcellus & Utica							
Range Resources Corp	RRC	$8,251	-13.92%	23.3%	12.9x	373	$22,097
Cabot Oil & Gas Corp	COG	$11,303	-10.86%	27.7%	23.6x	362	$31,219
Antero Resources Corp	AR	$12,363	-2.73%	29.4%	11.0x	470	$26,284
Gulfport Energy Corp	GPOR	$4,304	-1.79%	60.3%	5.4x	225	$19,111
Southwestern Energy Co	SWN	$6,545	-16.22%	38.0%	5.2x	433	$15,125
Group Median			**-6.80%**	**33.7%**	**8.2x**	**397**	**$22,697**
Permian Basin							
Concho Resources Inc	CXO	$23,066	14.66%	91.2%	8.2x	253	$91,201
Parsley Energy Inc	PE	$11,276	16.07%	72.4%	11.5x	110	$102,122
Diamondback Energy Inc	FANG	$14,922	44.61%	78.2%	13.4x	110	$136,160
RSP Permian Inc	RSPP	$8,564	36.47%	67.5%	13.6x	72	$118,305
Halcon Resources Corp	HK	$934	-47.22%	221.0%	1.7x	19	$50,312
Laredo Petroleum Inc	LPI	$3,054	-21.83%	48.5%	6.0x	66	$46,605
Pioneer Natural Resources Co	PXD	$33,267	20.18%	28.9%	14.6x	328	$101,479
Cimarex Energy Co	XEC	$10,733	8.33%	61.6%	8.2x	216	$49,783
Energen Corp	EGN	$7,850	43.41%	64.0%	9.7x	96	$82,134
Group Median			**18.13%**	**65.7%**	**10.6x**	**103**	**$91,806**

Source: Bloomberg L.P.

- Price per Flowing Barrel is EV/ daily production ($/boe/d)
- Companies included in the Guideline Group were selected from a broader guideline group, detailed **here**. The selected companies' market caps exceed $1 billion and revenues exceed $500 million.
- Statoil (Norway's government owned oil company) changed its name to Equinor signaling its emergence as a broad energy company, not one just focused on oil. We have removed Statoil from our guideline group as its expansion into the broader energy market makes it less comparable to traditional E&P companies.

Appendix A

Selected Public Company Information

Company Name	Ticker	6/30/2018 Enterprise Value	YOY % Change in EV	EBITDAX Margin	EV/ EBITDAX (as of 6/30/2018)	Daily Production (mboe/d) (as of 6/30/2018)	Price per Flowing Barrel* (as of 6/30/2018)
Eagle Ford							
Carrizo Oil & Gas Inc	CRZO	$3,896	32.58%	68.6%	6.4x	63	$61,785
SM Energy Co	SM	$5,138	22.88%	65.6%	5.5x	123	$41,606
EOG Resources Inc	EOG	$77,646	34.82%	43.1%	12.5x	729	$106,553
Group Median			**28.85%**	**54.4%**	**9.0x**	**426**	**$74,080**
Overall Median			**23.70%**	**42.5%**	**8.6x**	**296**	**$57,683**

Source: Bloomberg L.P.

- Price per Flowing Barrel is EV/ daily production ($/boe/d)
- Companies included in the Guideline Group were selected from a broader guideline group, detailed **here**. The selected companies' market caps exceed $1 billion and revenues exceed $500 million.
- Statoil (Norway's government owned oil company) changed its name to Equinor signaling its emergence as a broad energy company, not one just focused on oil. We have removed Statoil from our guideline group as its expansion into the broader energy market makes it less comparable to traditional E&P companies.

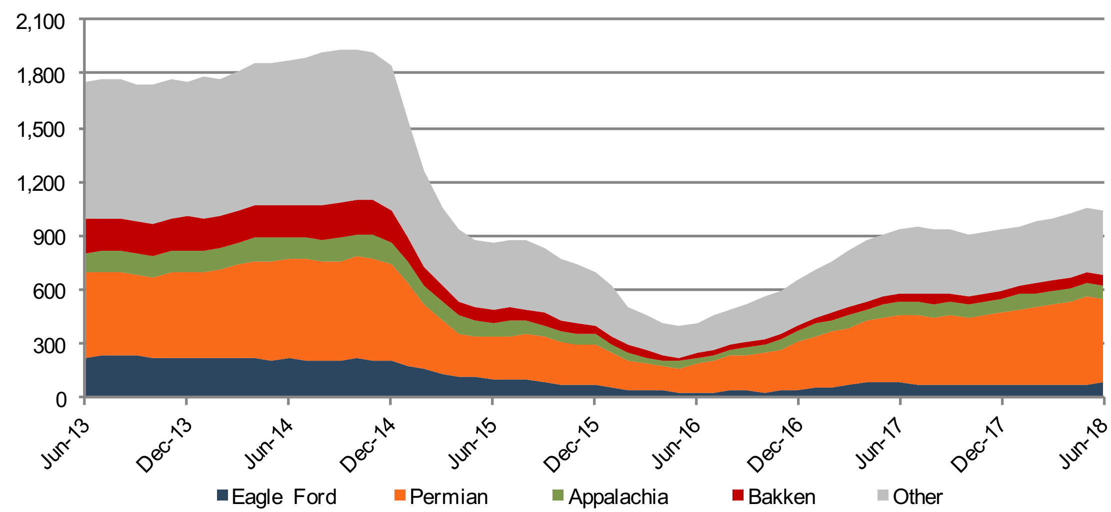
Appendix B

Rig Count

Baker Hughes collects and publishes information regarding active drilling rigs in the United States and internationally. The number of active rigs is a key indicator of demand for oilfield services & equipment. Factors influencing rig counts include energy prices, investment climate, technological changes, regulatory activity, weather, and seasonality.

The number of active rigs in the United States as of June 29, 2018, stood at 1047, a 11.4% increase from June 30, 2017. The increase reflects a pickup in drilling activity from the increase of oil prices to over $70/bbl, enabling companies to increase drilling activities. Activity increased in the Permian Basin with the number of active rigs rising 28.1% to 474 rigs in June 2018.

Rig Count by Region

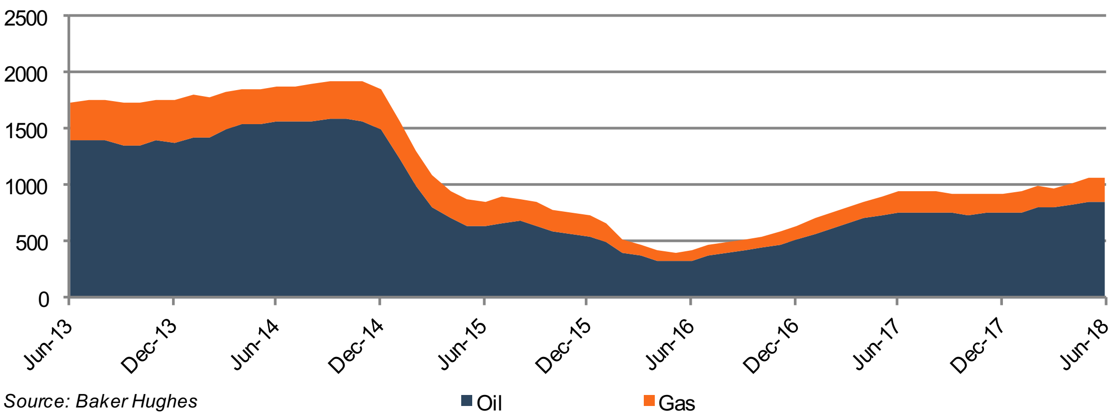


Source: Baker Hughes

Appendix B

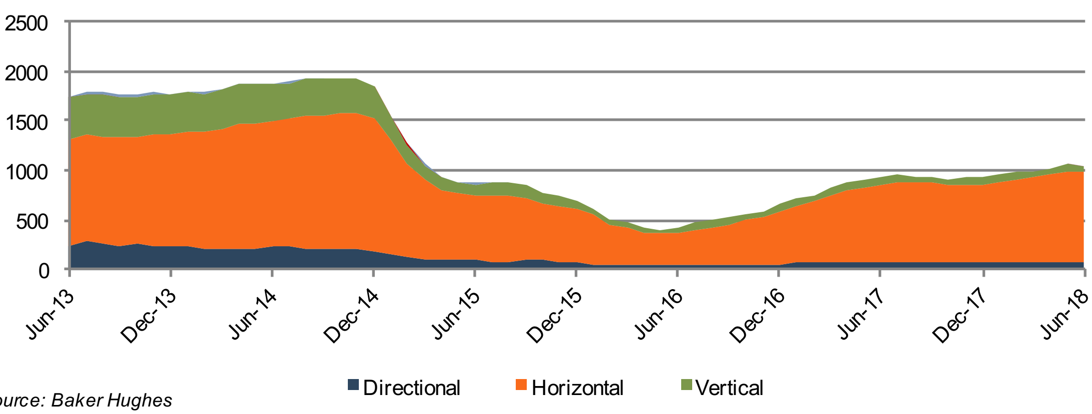
Rig Count

U.S. Rig Count by Oil vs. Natural Gas



Source: Baker Hughes

U.S. Rig Count by Trajectory

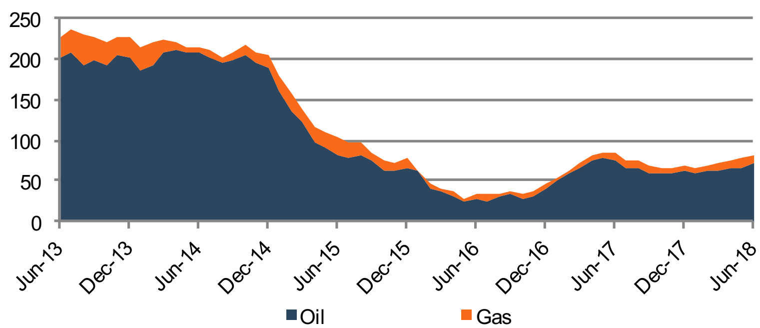


Source: Baker Hughes

Appendix B

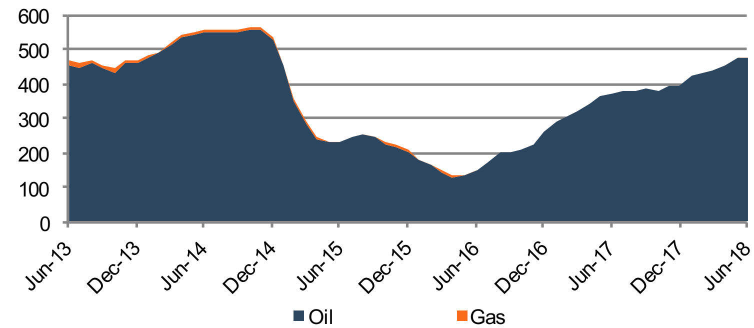
Rig Count // Oil vs. Natural Gas

Eagle Ford Rig Count by Oil vs. Natural Gas



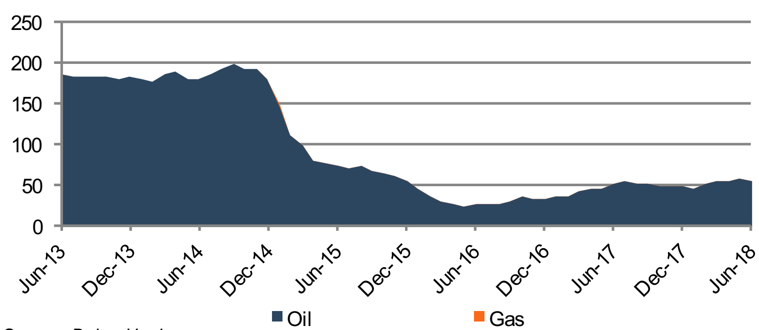
Source: Baker Hughes

Permian Rig Count by Oil vs. Natural Gas



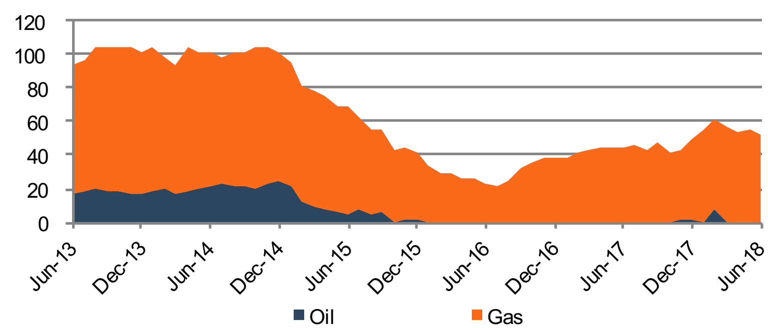
Source: Baker Hughes

Bakken Rig Count by Oil vs. Natural Gas



Source: Baker Hughes

Marcellus & Utica Rig Count by Oil vs. Natural Gas

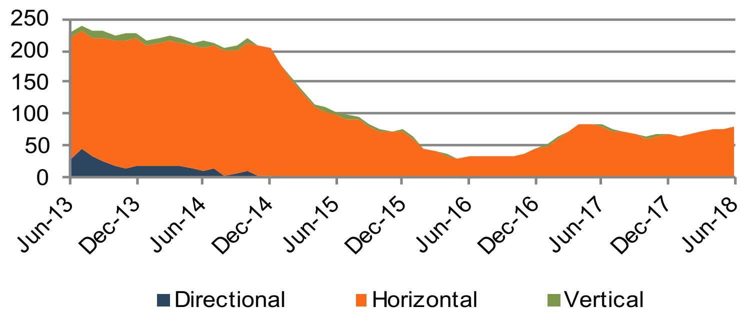


Source: Baker Hughes

Appendix B

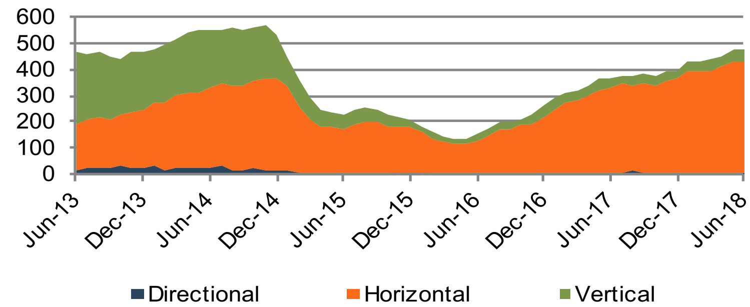
Rig Count // Trajectory

Eagle Ford Rig Count by Trajectory



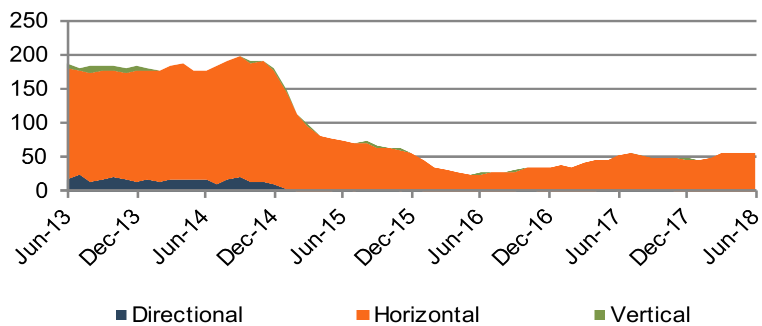
Source: Baker Hughes

Permian Rig Count by Trajectory



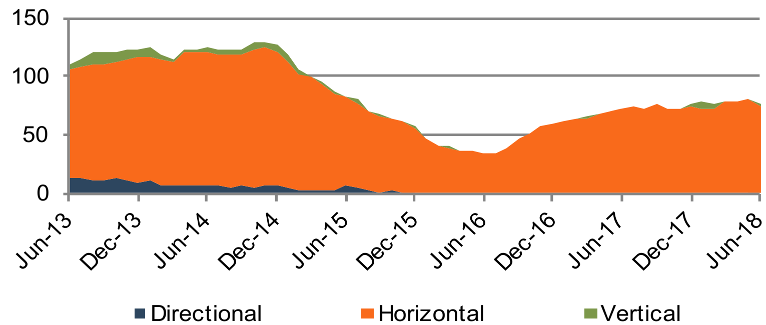
Source: Baker Hughes

Bakken Rig Count by Trajectory



Source: Baker Hughes

Marcellus & Utica Rig Count by Trajectory



Source: Baker Hughes

Mercer Capital

Memphis | Dallas | Nashville

www.mercercapital.com

MERCER CAPITAL