



November 19, 2018

Covering the Week of November 9 to November 15, 2018

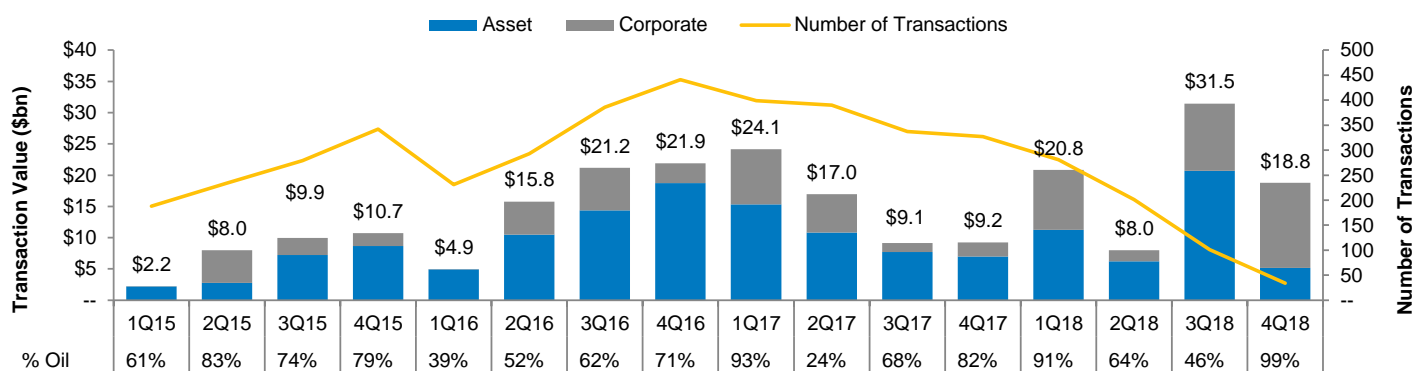
Week in Review

- Standard Exploration announced that it entered into a definitive agreement to acquire Gulf Pine Energy Partners for \$24.4 million
- Flat Creek Resources announced that it secured a \$400 million equity commitment from Encap Investments; Flat Creek will focus in the Permian Basin
- Pioneer Natural Resources announced that it sold its pressure pumping business to ProPetro Holding Corp. for \$400 million

Key Industry Indicators

Indicator	Current Value	Week's Change	% Change	Direction
Prompt Oil Price (\$/bbl)	\$56.46	(\$4.21)	(6.9%)	↓
Prompt Gas Price (\$/mmbtu)	\$4.04	\$0.50	14.1%	↑
Wkly Trans. Value (\$mm)	\$24	(\$2,123)	(99%)	↓
Wkly Trans. Count	1	(8)	(89%)	↓
US Rig Count	1,082	1	0.1%	↑
US Oil Prod'n (mmbbl/d)	11.7	0.1	0.9%	↑
US Gas Prod'n (bcf/d) ⁽¹⁾	102.5	--	--	—
US Oil Storage (mmbbl)	442.1	10.3	2.4%	↑
US Gas Storage (tcf)	3.2	0.0	1.2%	↑

Quarterly Deal Activity



Commodities

- Oil ended last week down as WTI dipped below \$60 signaling a bear market. Crude oil inventories had a massive overall gain of 10.3 million barrels. OPEC's upward revision in the supply forecast for 2019, led by growth in the U.S., was not supportive of prices. Saudi Arabia indicated OPEC would likely reverse some of the supply increases they pushed over the last few months. The near-term contract closed down \$4.21, or 6.9%, at \$56.46
- Natural gas ended last week up with the largest gain in eight years and highest price since the polar vortex. Extreme volatility in the front end of the market continued on colder weather. In addition, Cheniere announced that it started up the first train at its \$15 billion Corpus Christi LNG facility. The near-term contract closed up \$0.50, or 14.1%, at \$4.04

Equity Markets

- S&P E&P⁽²⁾ underperformed last week (4.5)% vs. SPX⁽²⁾ (2.7)%
- The major U.S. equity indexes finished down last week. Consumer discretionary, consumer staples, financials, health care, industrials, materials, real estate, and tech were all down

Debt Markets

- Four issuers priced six tranches for \$3.2 billion in proceeds
- Year-to-date U.S. volume is down 34% year-on-year
- U.S. high yield funds reported an inflow of \$487 million
- ETFs reported an outflow of \$53 million, while mutual funds reported an inflow of \$540 million
- High yield index yield was 7.14%; high yield energy index yield was 8.12%

Source: BMO Transaction Database, Baker Hughes, BMO Commodity Products Group, Bloomberg, EIA, PLS

Note: Current quarter's data is through the week covered by this issue.

1. EIA U.S. natural gas gross withdrawals and production reported monthly as of August 2018.

2. S&P E&P = S&P Oil & Gas E&P Select Industry, SPX = S&P 500 Index.

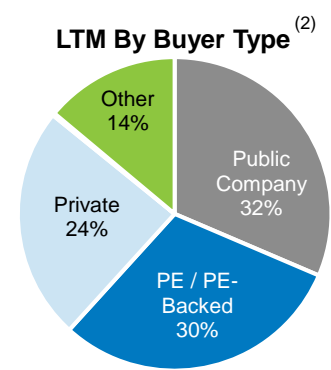
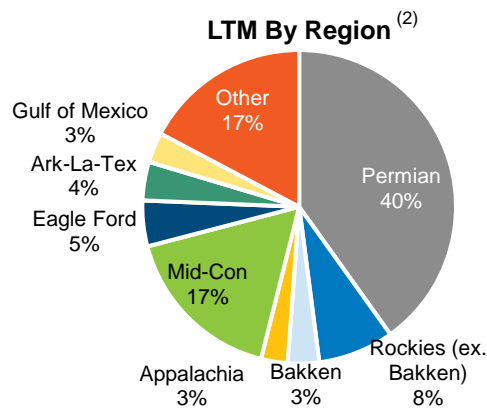
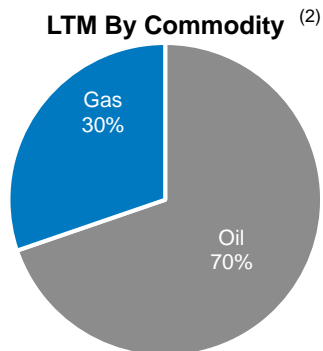


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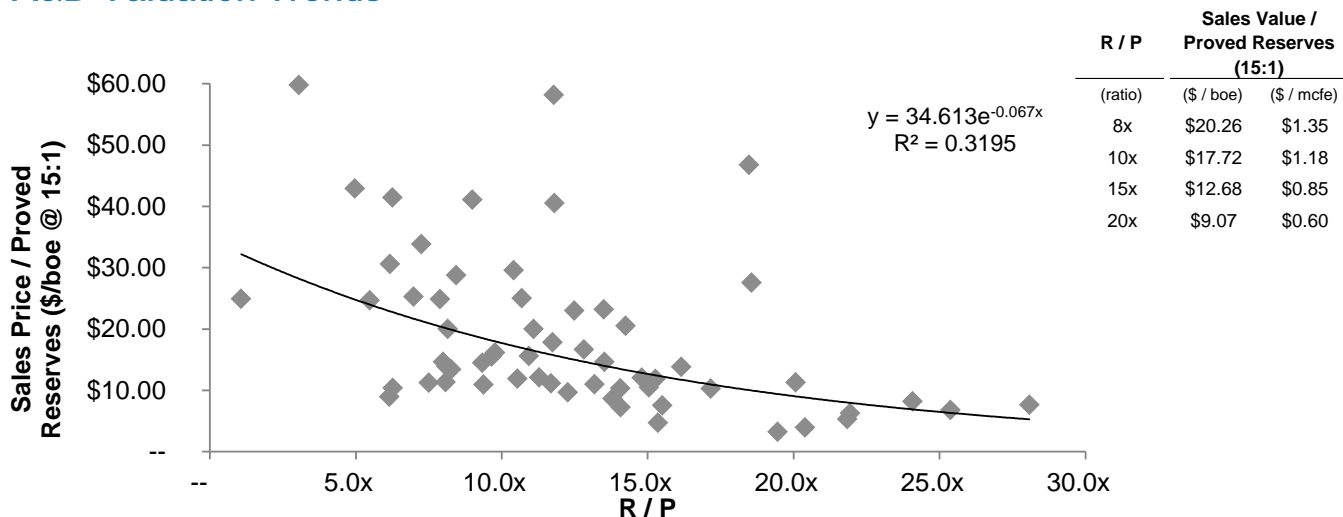
The 10 Most Recent Asset Transactions Over \$20 Million

Ann'd Date	Buyer	Seller	Area	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre)
07-Nov-18	Vantage Energy Acq. Corp	QEP Resources Inc	Bakken	102,800 net acres in Williston Basin	\$1,725	n.a.	\$37,500	\$16,780
07-Nov-18	Undisclosed Buyer	Devon Energy	Barnett	100,000 net acres in Barnett Shale	\$50	n.a.	\$12,500	\$500
06-Nov-18	Diamondback Energy	ExL Pet.; EnergyQuest	Permian	3,646 net acres in Midland Basin	\$313	n.a.	\$89,286	\$85,710
05-Nov-18	Centennial Resource Dev.	Undisclosed Seller	Permian	820 net acres in Delaware Basin	\$26	n.a.	n.a.	\$31,707
02-Nov-18	SandRidge Energy	Undisclosed Seller	Mid-Continent	Mississippi Lime and NW STACK assets	\$25	n.a.	\$6,649	n.a.
01-Nov-18	Undisclosed Buyer	Parsley Energy LP	Permian	11,850 net acres in Midland Basin	\$170	n.a.	\$141,667	\$14,346
31-Oct-18	Undisclosed Buyer	Newpek	Other	725 net acres in Live Oak Co., TX	\$33	n.a.	\$42,581	\$45,517
31-Oct-18	Undisclosed Buyer	Pioneer	Other	2,900 net acres in Live Oak Co., TX	\$132	n.a.	\$42,581	\$45,517
17-Oct-18	Earthstone Energy Inc	Sabalo Energy	Permian	20,800 net acres in Midland Basin	\$976	\$10.73	\$87,143	\$46,923
15-Oct-18	Undisclosed Buyer	Range Resources Corp	Marcellus/Utica	Overriding royalty interests in Appalachia	\$300	n.a.	\$105,895	nmf

Blue = BMO provided transaction advisory services Green = BMO provided acquisition financing or related services
Purple = BMO provided both transaction advisory services and acquisition financing or related services



A&D Valuation Trends⁽³⁾



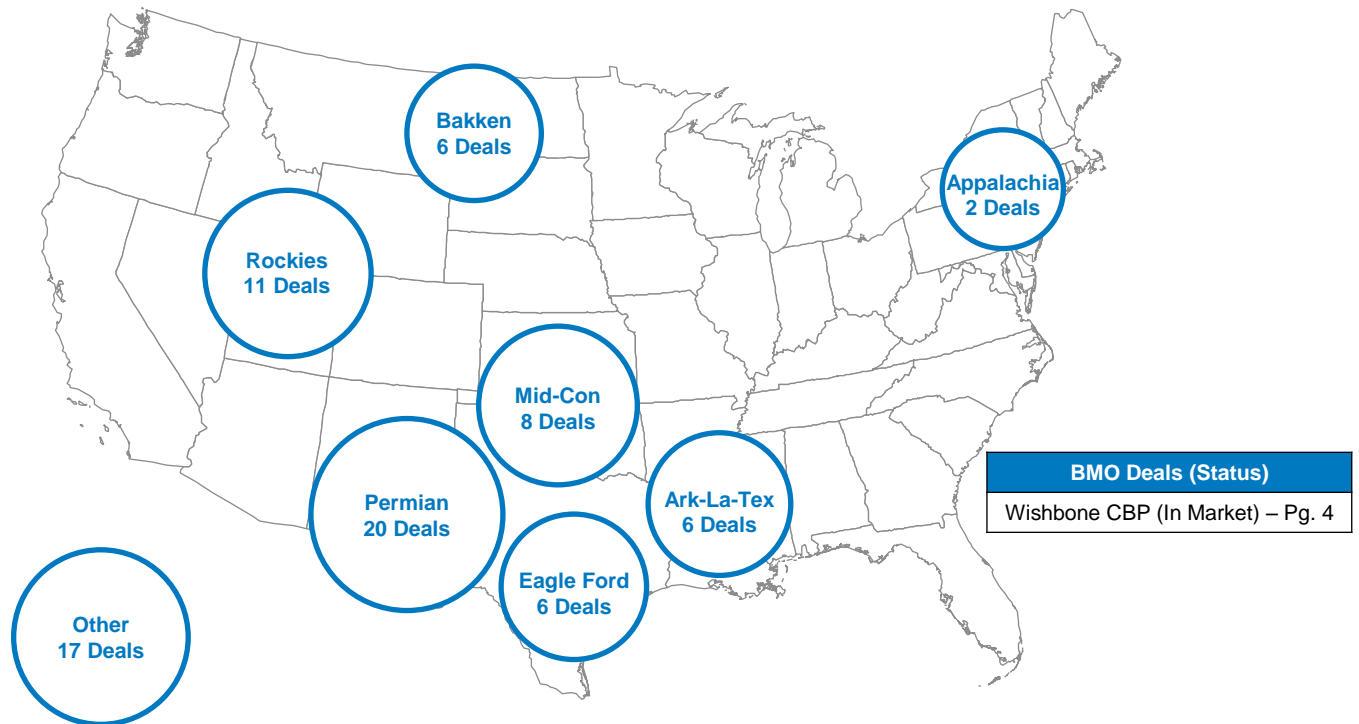
2 Source: BMO Transaction Database, Baker Hughes, BMO Commodity Products Group, Bloomberg, PLS

1. Represents total enterprise value.
2. Calculated as percentage of total LTM transaction count (number of transactions, not dollar value).
3. 60 transactions from January 2015 to 2018YTD with transaction value >\$20mm. Adjusted for changes in price outlooks. Recalculated boe reserves are on a 15:1 (gas:oil) basis. Acreage transactions excluded by using deals with PDP of >= 40% of total proved.



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Select Significant Deals on the Market



A&D Headlines

- [Chevron, Exxon Mobil Weigh Bids for Endeavor Energy](#)
- [Standard Exploration Ltd. Announces Recapitalization Financing, New Management Team and Board of Directors and Gulf Coast States Strategic Acquisition](#)
- [Flat Creek Resources Announces \\$400 Million Equity Commitment from EnCap Investments L.P. and Management](#)
- [Pioneer \(PXD\) Divests Pumping Assets, Inks Long-Term Deal](#)

Industry Headlines

- [OPEC Will Cut Output as Required to Stabilize Market](#)
- [Natural Gas Jumps to 4-year High in Panicky Trading as Snow, Cold Push Across U.S.](#)
- [Is The Natural Gas Price Spike Sustainable?](#)
- [U.S. Could Become Single Largest Oil, Gas Producer: IEA](#)
- [U.S. to Be Net Exporter of Petroleum by 2020s](#)
- [Impact of U.S. Court Ruling on Keystone XL Timing Unclear](#)
- [Adams County Ends Temporary Halt on Oil and Gas Permit Applications](#)
- [Interior Credits Increased Fossil Fuel Production for Jump in Revenue From Federal Lands](#)

(Click headline to link to the full article)



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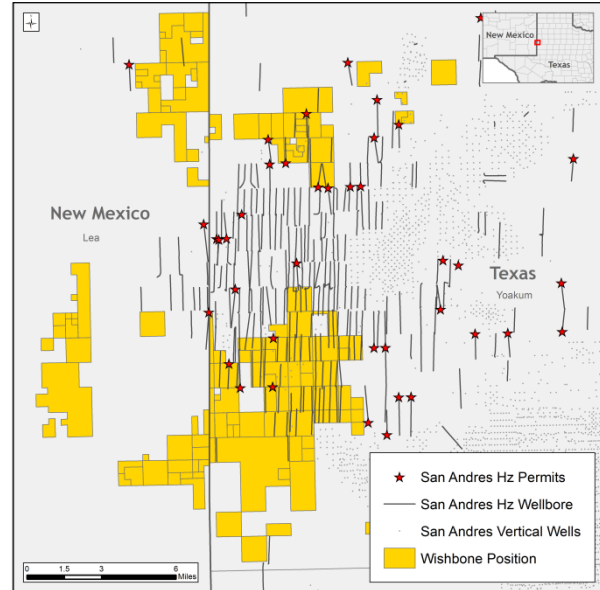
Currently on the Market from CIBC and BMO: Wishbone CBP Divestiture

ASSET OVERVIEW

- Opportunity to acquire ~37,206 net contiguous acres in the core of the San Andres horizontal play in Northern Central Basin Platform
 - Operated average WI/NRI of 77%/58%
 - Approaching 50% HBP with minimal annual drilling commitments
 - 96% operated by production
- Net production of ~8,100 boe/d (November 2018E)
 - 80% oil, 13% NGL
- 100%+ ROR oil play in the highly coveted Permian Basin
 - Future drilling opportunities have reserve models of 385 to 700 Mboe (80% oil)
- Position has largely been de-risked through active development by Wishbone and offset operators
- Extensive inventory of high return drilling remains with over 344 San Andres horizontal drilling locations
 - 5,000' laterals – 323 locations
 - 7,500' laterals – 21 locations
- Controlled surface lands/water infrastructure creates high margins and empowers the buyer to be a play consolidator
- WTS barrels and crude pipeline infrastructure in place with no takeaway issues

PROCESS OVERVIEW

- VDR available now
- Contact Mark Nelson at mark.nelson@cibc.com or 713-452-1595 to request a Confidentiality Agreement, access to the VDR, and/or a data room presentation



ASSET HIGHLIGHTS

- | | |
|---|---|
| Improved Horizontal San Andres Performance | <ul style="list-style-type: none"> • Highly oil-saturated, oil-wet, dolomite reservoir located in the core area of very active development in the horizontal San Andres play • Over the last four years, operators have developed a significant understanding of the reservoir and operational characteristics defining the play • Recent drilling activity has yielded improved well performance <ul style="list-style-type: none"> ■ Time to peak production is less than 60 days ■ Initial peak 30-day rates of 400-700 bo/d • Operators continue to commit significant capital to the play with multiple active drilling rigs and 54 horizontal San Andres permits |
| Wishbone's Premier Position | <ul style="list-style-type: none"> • Contiguous leasehold, adjacent to the prolific Wasson and Brahaney fields offering the best combination of reservoir quality, quantity, and oil saturations in the core of the horizontal San Andres play • Position has largely been de-risked through active development by Wishbone and offset operators • Most recent quarter (2Q18) annualized cash flow of \$60 MM can easily support a one rig drilling program • Acreage is approaching 50% HBP with minimal annual drilling commitments |
| High Return Inventory | <ul style="list-style-type: none"> • Extensive inventory of high return drilling remains with over 344 San Andres horizontal drilling locations • Well economics of greater than 100% ROR compete with other top Permian plays • Future drilling opportunities have reserve models of 385 to 700 Mboe (80% oil) • Spacing of 4 to 8 wells per section supported by volumetrics with a recovery factor of 12-15% of OOIP; further supported by an independent Von Gonten report • Stacked potential in San Andres could add additional drilling locations • Successful step-out completion helps prove play continuity in northern area |
| Integrated Water Infrastructure | <ul style="list-style-type: none"> • Owned and operated SWD system and fresh water source wells keep operating expenses low and enhance well economics • Water infrastructure generates additional income • Infrastructure provides flow assurance for disposal and source water • 1,385 acres of owned surface acreage allows buyer to expand system • Ample existing disposal capacity of 178,000 bw/d with excess available for third-party or commercialization |

Source: Wishbone CBP Divestiture announcement

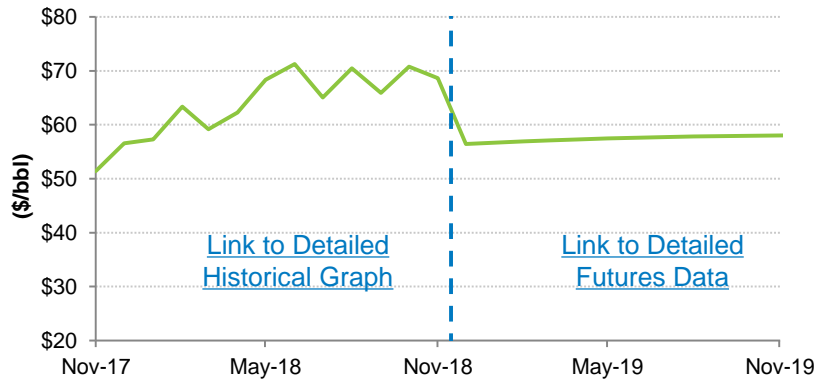




November 19, 2018

Commodity Prices

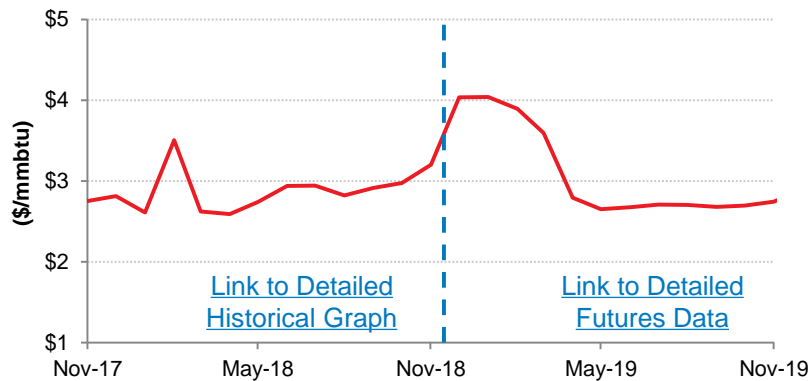
WTI OIL (HISTORICAL / FORECAST)



NYMEX WTI Futures as of 15-Nov-18 Close (\$/bbl)

Period ⁽¹⁾	Current	Last Wk.	6 Mo. Ago	1 Yr. Ago
12 Mo. Strip	\$57.41	\$61.77	\$69.36	\$55.33
2018	\$56.46	\$60.67	\$70.56	\$55.33
2019	\$57.54	\$61.93	\$65.76	\$52.83
2020	\$57.87	\$62.32	\$60.51	\$51.34
2021	\$57.49	\$61.68	\$57.20	\$50.70
2022	\$57.08	\$60.81	\$55.12	\$50.68

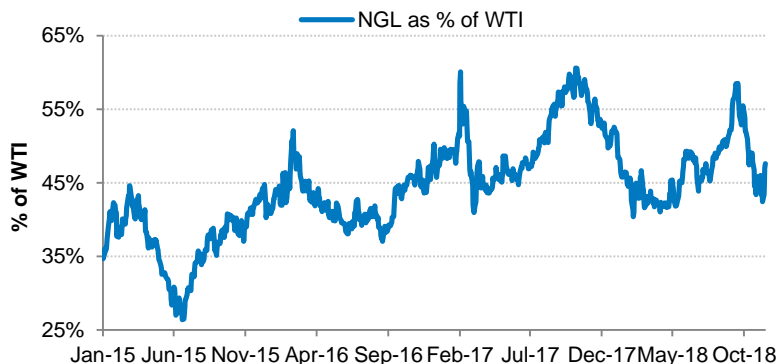
HENRY HUB NATURAL GAS (HISTORICAL / FORECAST)



NYMEX Gas Futures as of 15-Nov-18 Close (\$/mmbtu)

Period ⁽¹⁾	Current	Last Wk.	6 Mo. Ago	1 Yr. Ago
12 Mo. Strip	\$3.10	\$2.98	\$2.86	\$3.04
2018	\$4.04	\$3.54	\$2.88	\$3.04
2019	\$3.01	\$2.93	\$2.72	\$2.91
2020	\$2.67	\$2.70	\$2.66	\$2.87
2021	\$2.63	\$2.64	\$2.66	\$2.87
2022	\$2.78	\$2.78	\$2.82	\$3.03

NGL PRICING⁽²⁾



Historical Prices as of 15-Nov-18 Close (\$/gal)

NGLs	Current	Last Wk.	6 Mo. Ago	1 Yr. Ago
Ethane	\$0.34	\$0.31	\$0.24	\$0.26
Propane	\$0.77	\$0.75	\$0.93	\$0.99
Butane	\$0.79	\$0.82	\$0.93	\$1.04
Iso-butane	\$0.89	\$0.88	\$1.40	\$1.06
Pentane+	\$1.11	\$1.16	\$1.61	\$1.35

Source: BMO Commodity Products Group, Bloomberg, FactSet

1. Future prices are calendar year average unless stated otherwise.
2. Assumes typical Gulf Coast barrel composition.

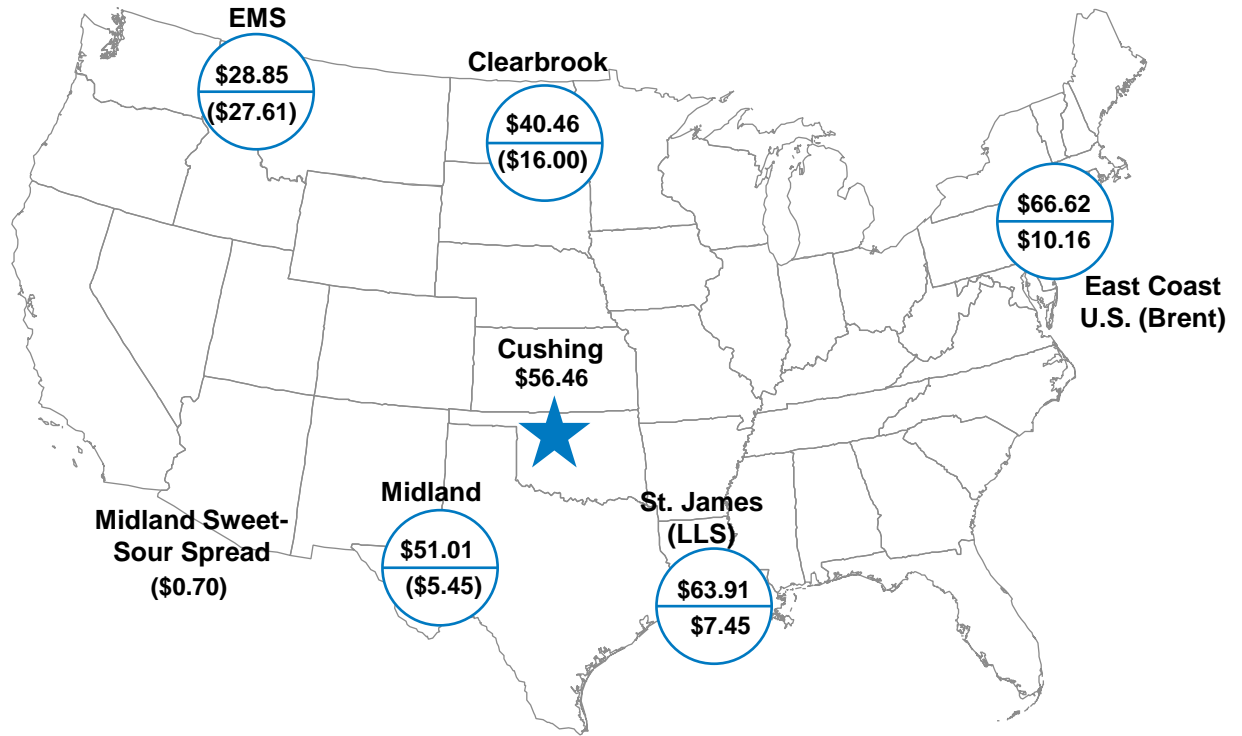


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Commodity Prices (cont'd)

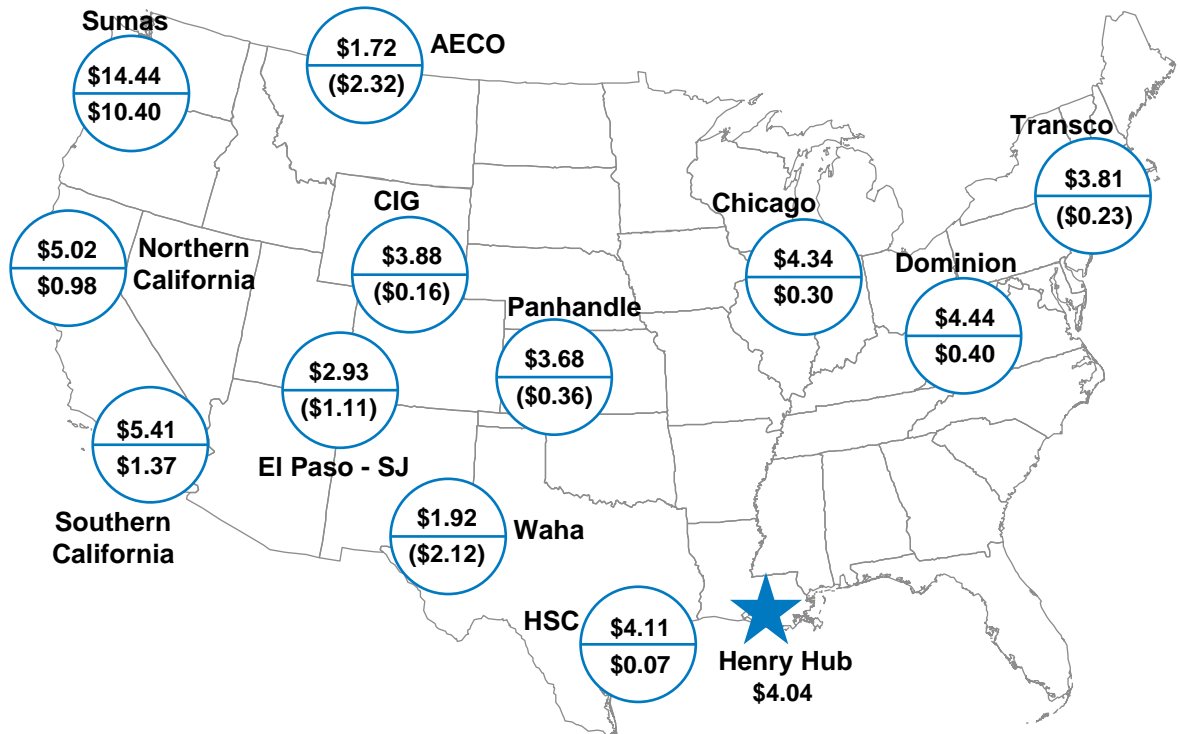
OIL PRICING & DIFFERENTIALS TO CUSHING WTI (\$ / BBL) – AS OF 15-NOV-18

Legend



NATURAL GAS PRICING & DIFFERENTIALS TO HENRY HUB (\$ / MMBTU) – AS OF 15-NOV-18

Legend



Source: BMO Commodity Products Group, Bloomberg

Note: Prices and differentials are for prompt month futures except for Clearbrook which is based on spot prices.



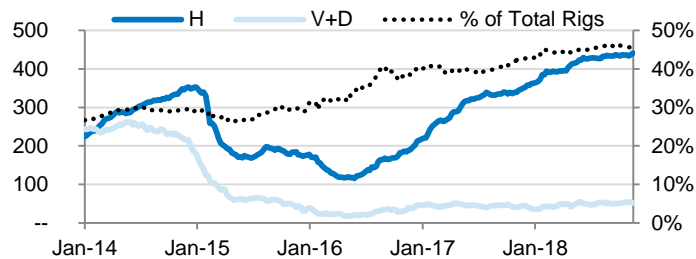
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Permian Snapshot

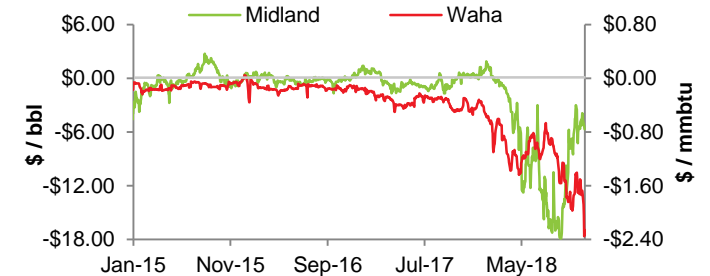
Item	Value	Wkly Change	Last Week
Rig Count	493	↑	492
Permitting Activity	182	↓ (66)	248

Item	Value	Wkly Change	Last Week
Oil Differential	(\$5.70)	↓ (\$1.80)	(\$3.90)
Gas Differential	(\$2.26)	↓ (\$0.58)	(\$1.68)

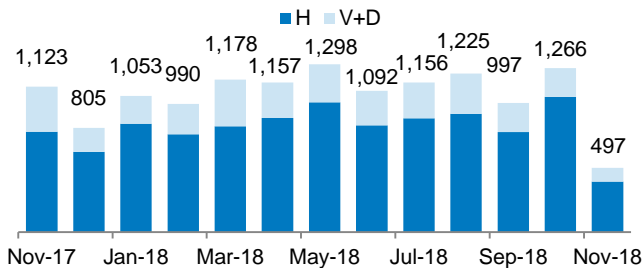
RIG COUNT



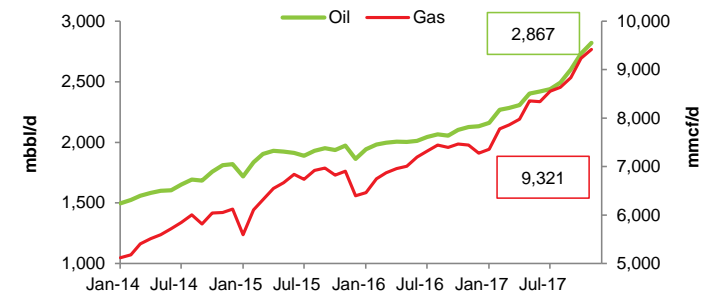
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

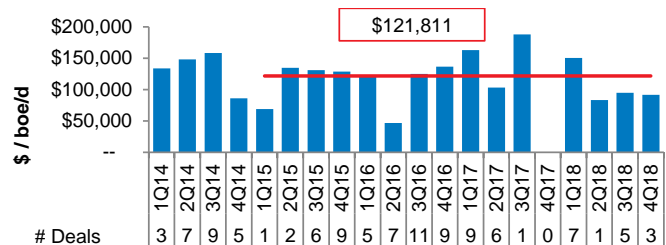


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

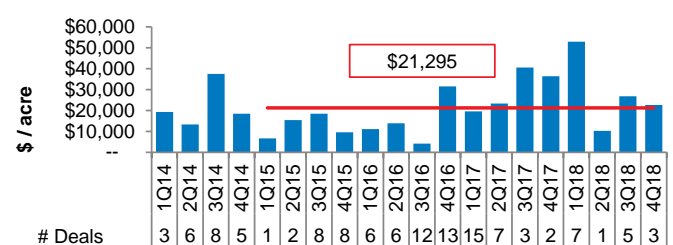
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
06-Nov-18	Diamondback Energy	ExL Pet.; EnergyQuest	3,646 net acres in Midland Basin	\$313	n.a.	\$89,286	\$85,710
05-Nov-18	Centennial Resource Dev.	Undisclosed Seller	820 net acres in Delaware Basin	\$26	n.a.	n.a.	\$31,707
01-Nov-18	Undisclosed Buyer	Parsley Energy LP	11,850 net acres in Midland Basin	\$170	n.a.	\$141,667	\$14,346
17-Oct-18	Earthstone Energy Inc	Sabalo Energy	20,800 net acres in Midland Basin	\$976	\$10.73	\$87,143	\$46,923
25-Sep-18	Undisclosed Buyer	W&T Offshore	Royalty interests in 25,493 net acres	\$57	n.a.	n.a.	nmf
				Mean	\$308	\$10.73	\$106,032
				Median	\$170	\$10.73	\$89,286

Blue = BMO provided transaction advisory services Green = BMO provided acquisition financing or related services
Purple = BMO provided both transaction advisory services and acquisition financing or related services

TRANSACTION PRODUCTION MULTIPLES⁽³⁾



TRANSACTION ADJUSTED NET ACRE MULTIPLES^(3,4)



Source: BMO Transaction Database, Baker Hughes, BMO Commodity Products Group, Bloomberg, Drilling Info, PLS

Note: Current quarter's data is through the week covered by this issue.

- Represents total enterprise value. Excludes transactions with deal value <\$20 million.
- \$/acre multiple not adjusted for value associated with production.
- Red line denotes average since 10-Jan-15. Calculated as the weighted average of each quarter's transactions.
- Production valued at \$45,000/boepd in 2014, \$30,000/boepd in 2015, \$35,000/boepd in 2016 & 2017, and \$40,000/boepd in 2018.



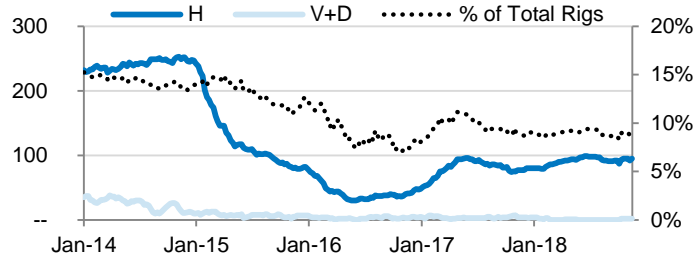
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Eagle Ford Snapshot

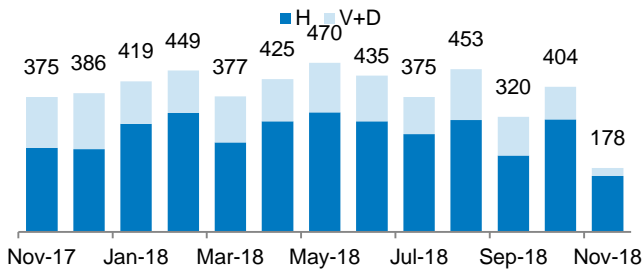
Item	Value	Wkly Change	Last Week
Rig Count	97	↑ 3	94
Permitting Activity	86	↑ 9	77

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.25	↑ \$0.10	\$8.15
Gas Differential	\$0.09	↓ (\$0.05)	\$0.14

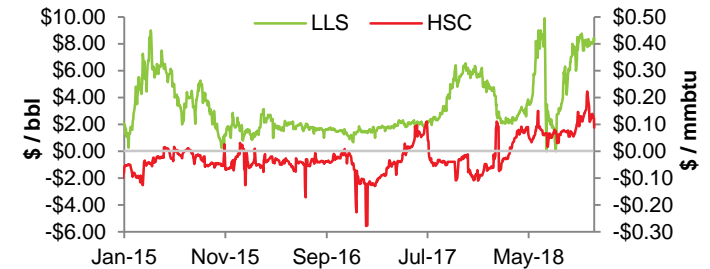
RIG COUNT



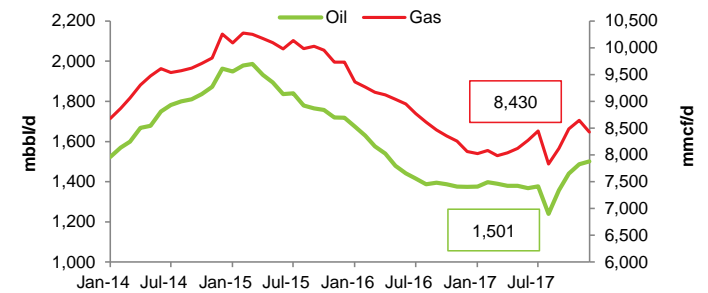
PERMITTING ACTIVITY BY MONTH



DIFFERENTIALS



GROSS PRODUCTION

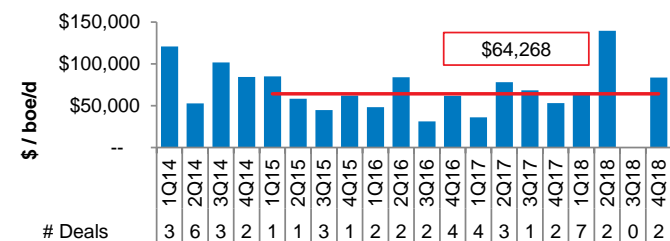


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

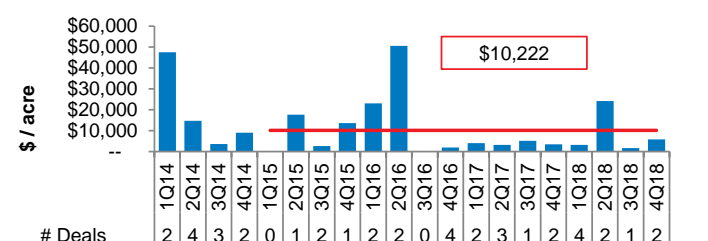
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
20-Sep-18	WildHorse	Undisclosed Seller	20,305 net Eagle Ford/Austin Chalk acres	\$35	n.a.	n.a.	\$1,743
07-Sep-18	Undisclosed Buyer	Viking Minerals LLC	1,191 net royalty acres in Eagle Ford	\$28	n.a.	n.a.	nmf
26-Jul-18	BP	BHP Billiton	Permian, Eagle Ford, and Haynesville	\$10,500	n.a.	n.a.	n.a.
03-May-18	Apollo Global Management	EP Energy Corp	Eagle Ford JV in La Salle County, TX	\$38	n.a.	n.a.	n.a.
02-Apr-18	NextEra Energy Inc	Comstock	9,900 net acres in South TX Eagle Ford	\$125	\$14.12	\$49,466	\$12,626
				Mean	\$2,145	\$14.12	\$49,466
				Median	\$38	\$14.12	\$49,466

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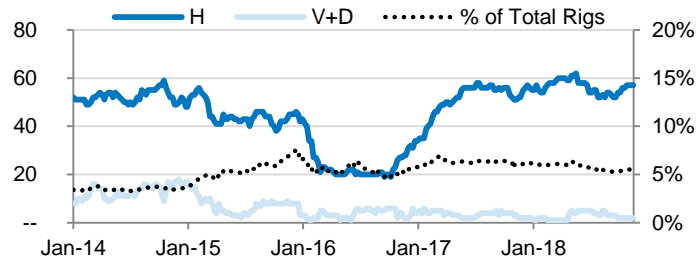
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Ark-La-Tex Snapshot

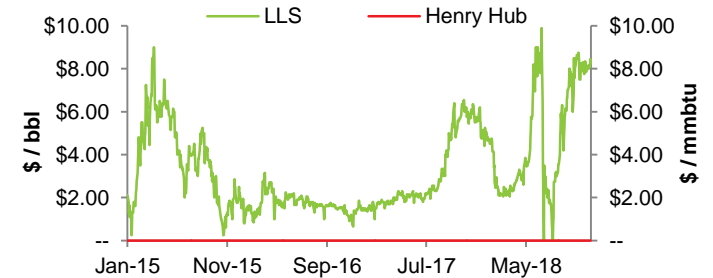
Item	Value	Wkly Change	Last Week
Rig Count	59	█ --	59
Permitting Activity	22	█ ↓ (6)	28

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.25	█ ↑ \$0.10	\$8.15
Gas Differential	--	█ --	--

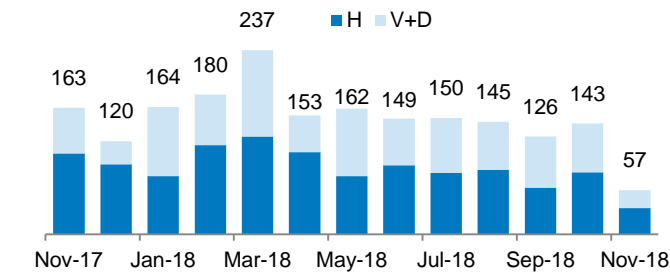
RIG COUNT



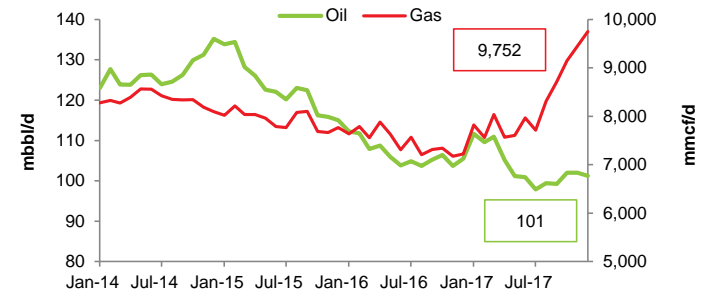
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

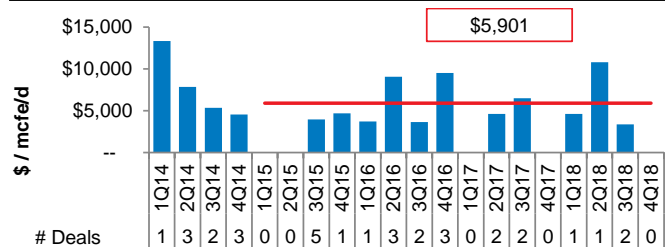


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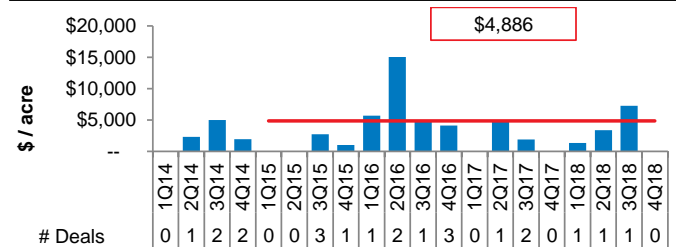
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05-Sep-18	Viking Energy Group	Multiple Sellers	Texas and Louisiana assets	\$100	n.a.	n.a.	n.a.
05-Sep-18	Equinor	Texegy LLC	60,000 net acres in Austin Chalk	\$75	n.a.	n.a.	\$1,250
06-Aug-18	Mission Creek Resources	Bonanza Creek Energy Inc	11,132 net acres in the Cotton Valley	\$117	\$1.69	\$6,500	\$10,510
26-Jul-18	BP	BHP Billiton	Permian, Eagle Ford, and Haynesville	\$10,500	n.a.	n.a.	n.a.
19-Jul-18	Comstock	Enduro Resource Partners	9,900 net acres in North Louisiana	\$31	\$0.11	\$1,192	\$3,131
				Mean	\$2,165	\$0.90	\$3,846
				Median	\$100	\$0.90	\$3,846

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- \$/acre multiple not adjusted for value associated with production.
- Red line denotes average since 01-Jan-15. Calculated as the weighted average of each quarter's transactions.
- Production valued at \$3,000/mcfepd in 2014, and \$2,000/mcfepd in 2015, 2016, 2017, and 2018.



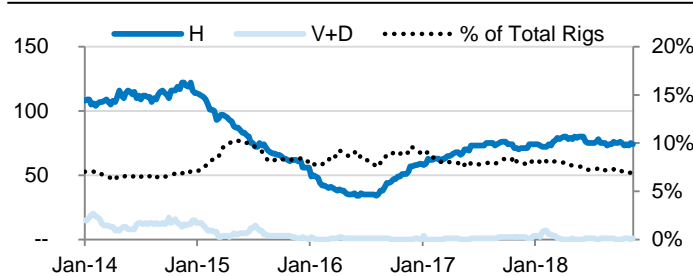
November 19, 2018

Appalachia Snapshot

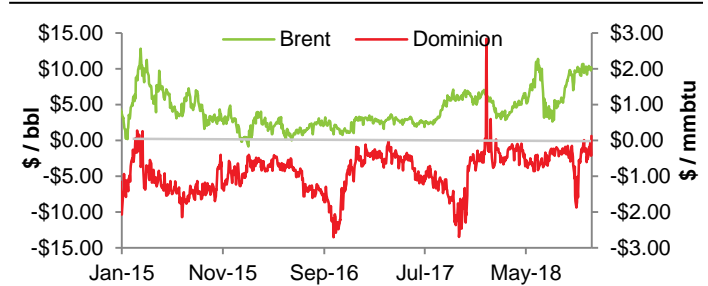
Item	Value	Wkly Change	Last Week
Rig Count	75	█ --	75
Permitting Activity	18	█ (47)	65

Item	Value	Wkly Change	Last Week
Oil Differential	\$10.16	↑ \$0.18	\$9.98
Gas Differential	\$0.12	↑ \$0.32	(\$0.19)

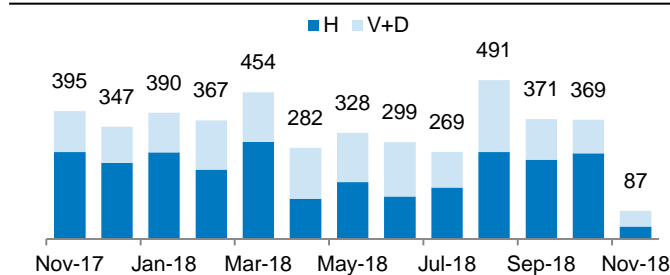
RIG COUNT



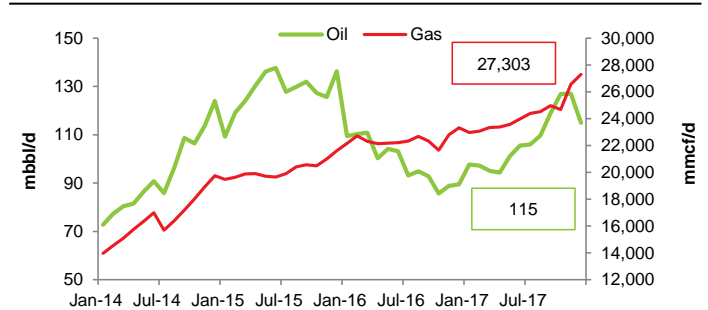
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

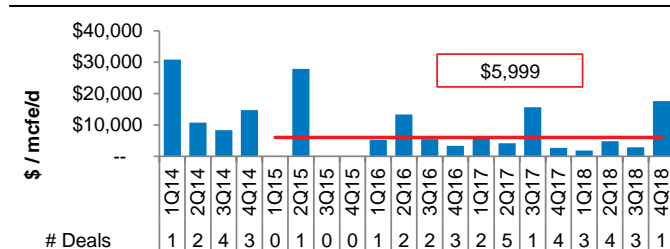


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

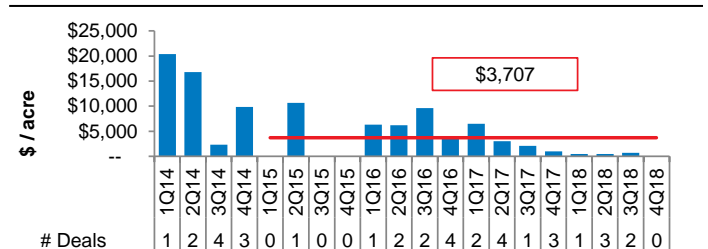
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾	Proved Multiple	Prod. Multiple	Net Acres	
				(\$mm)	(\$/mcf)	(\$/mcf/d)	(\$/acre) ⁽²⁾	
15-Oct-18	Undisclosed Buyer	Range Resources Corp	Overriding royalty interests in Appalachia	\$300	n.a.	\$17,649	n/mf	
27-Aug-18	PennEnergy Resources	Rex Energy Corp	141,026 net acres in PA and OH	\$601	\$0.58	\$2,781	\$4,258	
26-Jul-18	Encino Acquisition Partners	Chesapeake	938,000 net acres in the Utica	\$1,900	\$0.66	\$2,960	\$2,026	
29-Jun-18	Ascent Resources LLC	Utica Minerals; Undisclosed	35,400 acres in the Utica	\$700	n.a.	\$15,217	\$19,774	
29-Jun-18	Ascent Resources LLC	CNX Resources; Hess	78,000 acres in the Utica	\$800	n.a.	\$4,762	\$10,256	
				Mean	\$860	\$0.62	\$8,674	\$9,079
				Median	\$700	\$0.62	\$4,762	\$7,257

Blue = BMO provided transaction advisory services Green = BMO provided acquisition financing or related services
Purple = BMO provided both transaction advisory services and acquisition financing or related services

TRANSACTION PRODUCTION MULTIPLES⁽³⁾



TRANSACTION ADJUSTED NET ACRE MULTIPLES^(3,4)



Source: BMO Transaction Database, Baker Hughes, BMO Commodity Products Group, Bloomberg, Drilling Info, PLS

Note: Current quarter's data is through the week covered by this issue.

1. Represents total enterprise value. Excludes transactions with deal value <\$20 million.
2. \$/acre multiple not adjusted for value associated with production.
3. Red line denotes average since 01-Jan-15. Calculated as the weighted average of each quarter's transactions.
4. Production valued at \$3,000/mcfepd in 2014, and \$2,000/mcfepd in 2015, 2016, 2017, and 2018.



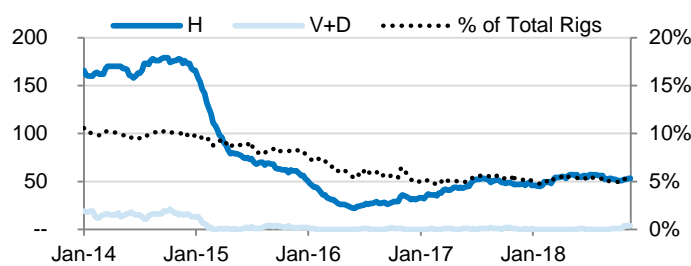
November 19, 2018

Bakken Snapshot

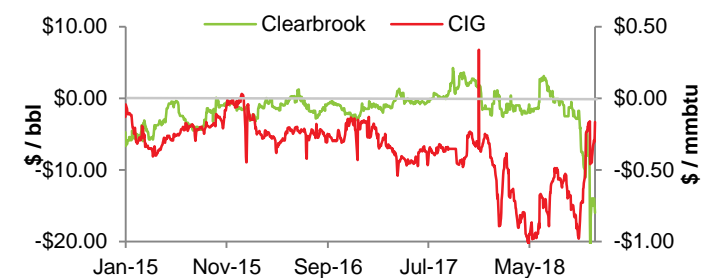
Item	Value	Wkly Change	Last Week
Rig Count	57	█ --	57
Permitting Activity	9	↓ (28)	37

Item	Value	Wkly Change	Last Week
Oil Differential	(\$16.00)	↓ (\$1.75)	(\$14.25)
Gas Differential	(\$0.17)	↑ \$0.19	(\$0.35)

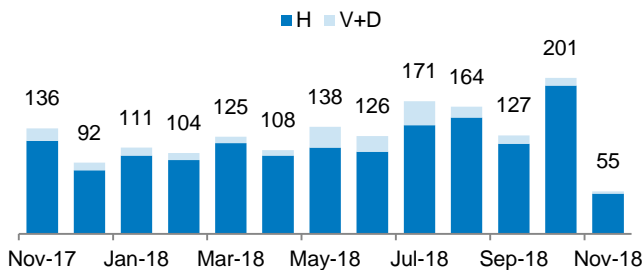
RIG COUNT



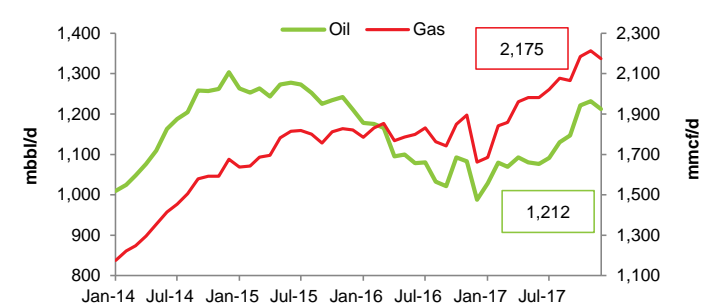
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

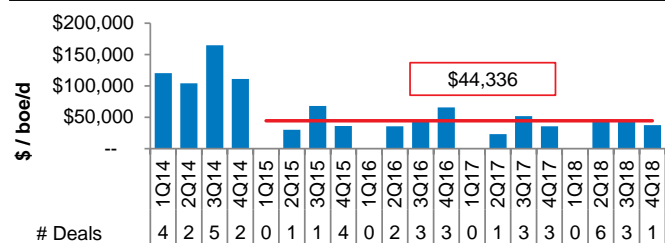


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

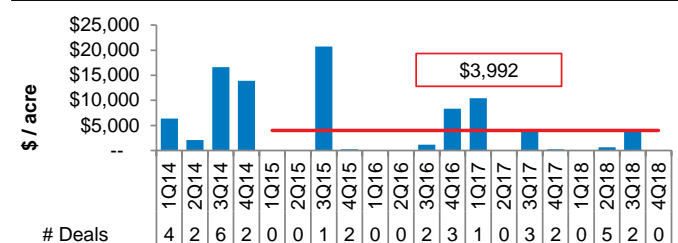
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
07-Nov-18	Vantage Energy Acq. Corp	QEP Resources Inc	102,800 net acres in Williston Basin	\$1,725	n.a.	\$37,500	\$16,780
31-Jul-18	Northern Oil and Gas	W Energy Partners	10,600 net acres in Williston Basin	\$288	n.a.	\$42,708	\$27,196
18-Jul-18	Northern Oil and Gas	Pivotal Petroleum Partners LP	Producing assets in Williston Basin	\$152	n.a.	\$37,032	n.a.
12-Jul-18	PetroShale Inc	Slawson Exploration Co	1,981 net acres in Williston Basin	\$55	\$6.04	\$100,000	\$27,764
06-Jul-18	Energy Resources 12 LP	Bruin E&P Partners LLC	2.8% non-operated WI in Bakken assets	\$83	n.a.	n.a.	n.a.
				Mean	\$461	\$6.04	\$54,310
				Median	\$152	\$6.04	\$40,104

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Purple = BMO provided both transaction advisory services and acquisition financing or related services

TRANSACTION PRODUCTION MULTIPLES⁽³⁾



TRANSACTION ADJUSTED NET ACRE MULTIPLES^(3,4)



Source: BMO Transaction Database, Baker Hughes, BMO Commodity Products Group, Bloomberg, Drilling Info, PLS

Note: Current quarter's data is through the week covered by this issue.

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- \$/acre multiple not adjusted for value associated with production.
- Red line denotes average since 01-Jan-15. Calculated as the weighted average of each quarter's transactions.
- Production valued at \$45,000/boepd in 2014, \$30,000/boepd in 2015, \$35,000/boepd in 2016 & 2017, and \$40,000/boepd in 2018.



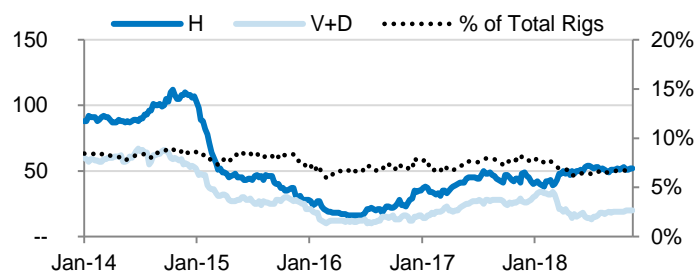
November 19, 2018

Rockies (excl. Bakken) Snapshot

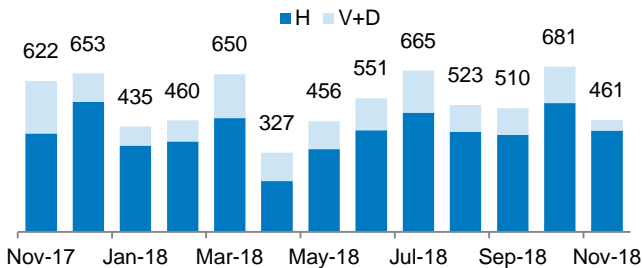
Item	Value	Wkly Change	Last Week
Rig Count	72	█ --	72
Permitting Activity	157	↓ (114)	271

Item	Value	Wkly Change	Last Week
Oil Differential	(\$16.00)	↓ (\$1.75)	(\$14.25)
Gas Differential	(\$0.17)	↑ \$0.19	(\$0.35)

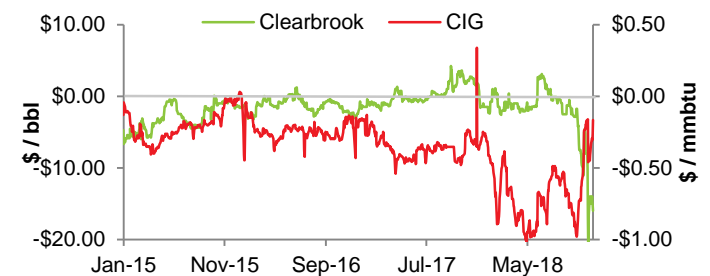
RIG COUNT



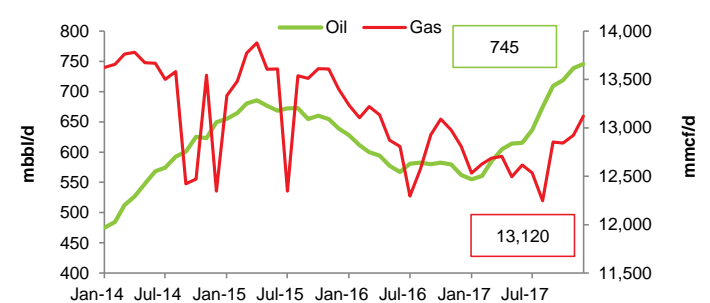
PERMITTING ACTIVITY BY MONTH



DIFFERENTIALS



GROSS PRODUCTION

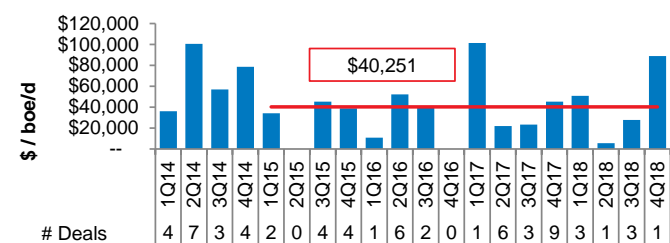


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
01-Oct-18	DJR Energy LLC	EnCana	182,000 net acres in San Juan Basin	\$480	n.a.	\$88,889	\$2,637
28-Aug-18	Vermilion Energy Inc	Massif Oil & Gas LLC	55,000 acres in Powder River Basin	\$150	n.a.	\$56,604	\$2,727
28-Aug-18	Rebellion Energy II LLC	Liberty Resources II LLC	19,000 net acres in Powder River Basin	\$100	n.a.	n.a.	\$5,263
09-Aug-18	Undisclosed Buyer	Ultra Petroleum	~8,000 net acres in the Uinta	\$75	n.a.	\$37,500	\$9,375
10-Jul-18	Middle Fork Energy Part.	QEP Resources Inc	~230,000 net acres in the Uinta	\$155	\$1.54	\$17,222	\$674
			Mean	\$192	\$1.54	\$50,054	\$4,135
			Median	\$150	\$1.54	\$47,052	\$2,727

Blue = BMO provided transaction advisory services Green = BMO provided acquisition financing or related services
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TRANSACTION PRODUCTION MULTIPLES⁽³⁾



TRANSACTION ADJUSTED NET ACRE MULTIPLES^(3,4)



Source: BMO Transaction Database, Baker Hughes, BMO Commodity Products Group, Bloomberg, Drilling Info, PLS

Note: Current quarter's data is through the week covered by this issue.

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- Production valued at \$45,000/boepd in 2014, \$30,000/boepd in 2015, \$35,000/boepd in 2016 & 2017, and \$40,000/boepd in 2018.



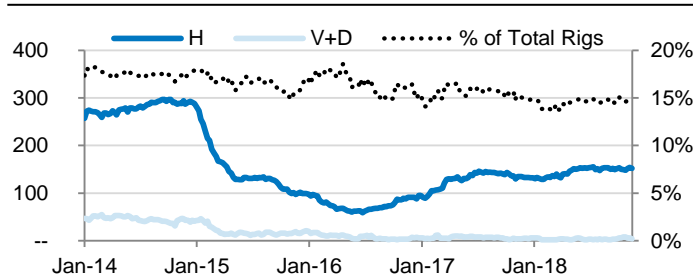
November 19, 2018

Mid-Continent Snapshot

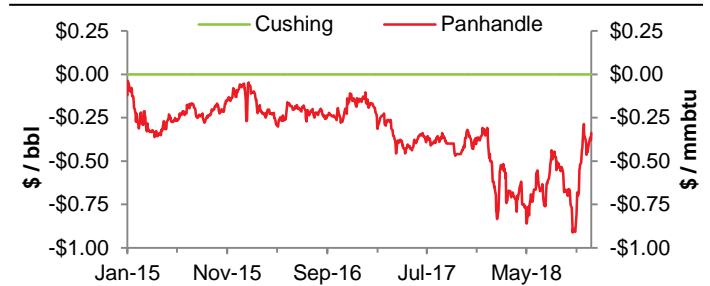
Item	Value	Wkly Change	Last Week
Rig Count	156	↓ (4)	160
Permitting Activity	27	↓ (64)	91

Item	Value	Wkly Change	Last Week
Oil Differential	--	█	--
Gas Differential	(\$0.34)	↑ \$0.06	(\$0.40)

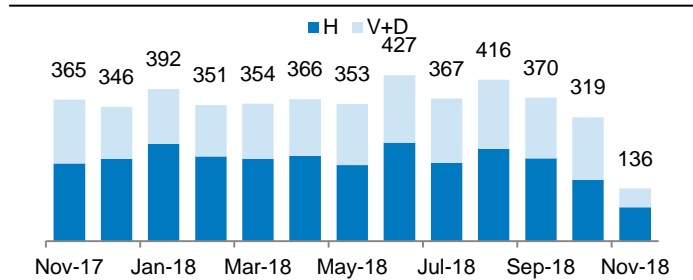
RIG COUNT



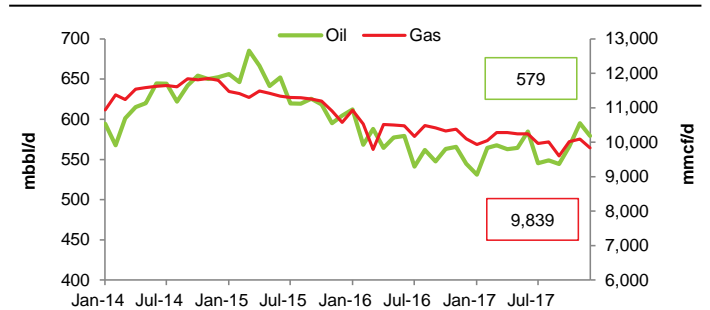
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

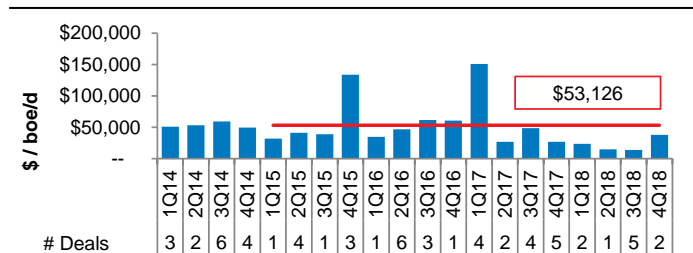


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

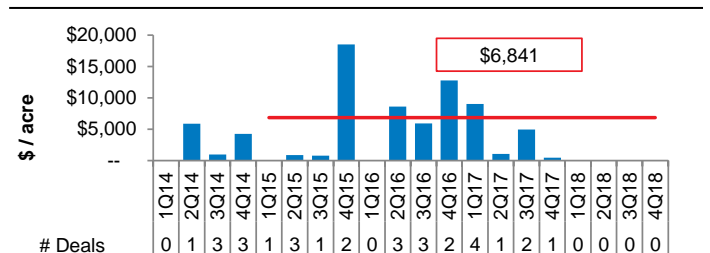
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾	
02-Nov-18	SandRidge Energy	Undisclosed Seller	Mississippi Lime and NW STACK assets	\$25	n.a.	\$6,649	n.a.	
04-Sep-18	Flywheel Energy LLC	Southwestern Energy	915,000 net acres in Fayetteville Shale	\$1,865	\$3.04	\$15,629	\$2,038	
06-Aug-18	Franco Nevada Corp	Continental Resources Inc	Mineral rights JV in the SCOOP/STACK	\$220	n.a.	n.a.	nmf	
02-Aug-18	Sanguine Gas Exploration	Vanguard Natural Res.	9,530 net acres in the Arkoma Basin	\$23	\$4.79	\$24,981	\$2,403	
31-Jul-18	Undisclosed Buyer	Chaparral Energy	Non-core assets in TX and OK	\$27	n.a.	\$19,536	n.a.	
				Mean	\$432	\$3.91	\$16,699	\$2,221
				Median	\$27	\$3.91	\$17,582	\$2,221

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TRANSACTION PRODUCTION MULTIPLES⁽³⁾



TRANSACTION ADJUSTED NET ACRE MULTIPLES^(3,4)



Source: BMO Transaction Database, Baker Hughes, BMO Commodity Products Group, Bloomberg, Drilling Info, PLS

Note: Current quarter's data is through the week covered by this issue.

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- \$/acre multiple not adjusted for value associated with production.
- Red line denotes average since 01-Jan-15. Calculated as the weighted average of each quarter's transactions.
- Production valued at \$45,000/boepd in 2014, \$30,000/boepd in 2015, \$35,000/boepd in 2016 & 2017, and \$40,000/boepd in 2018.



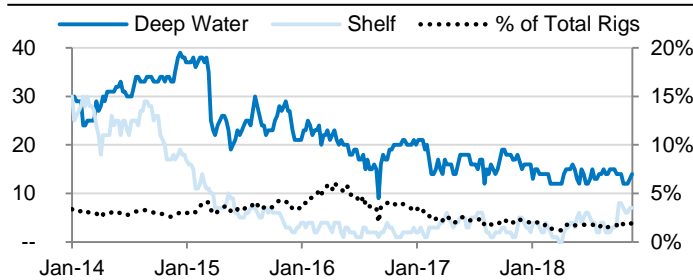
November 19, 2018

Gulf of Mexico Snapshot

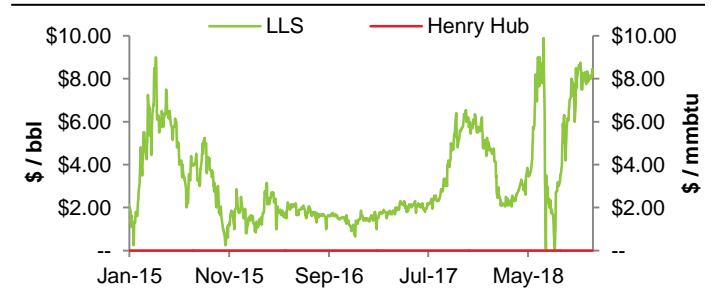
Item	Value	Wkly Change	Last Week
Rig Count	21	↑	20
Permitting Activity	0	—	0

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.25	↑	\$8.15
Gas Differential	--	—	--

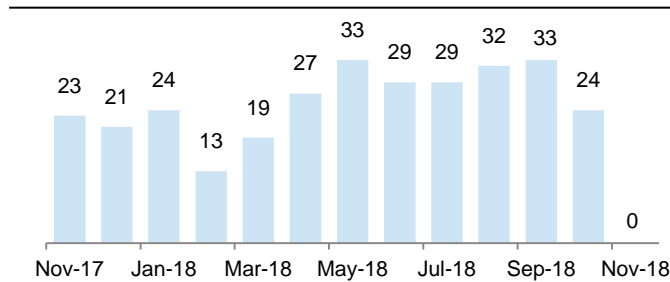
RIG COUNT



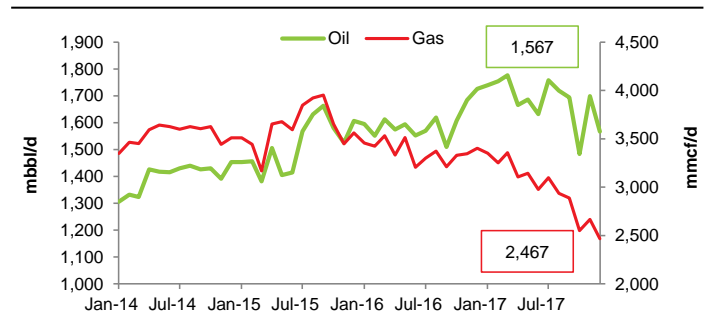
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH⁽¹⁾



GROSS PRODUCTION

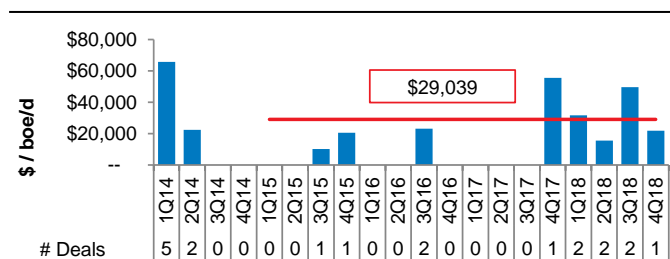


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

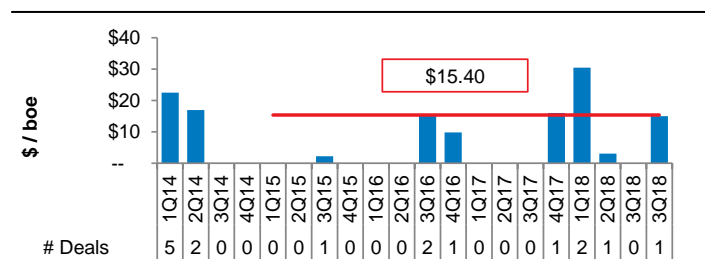
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽²⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽³⁾	
10-Oct-18	Murphy	Petrobras	Gulf of Mexico joint venture	\$900	\$15.00	\$21,951	n.a.	
04-Sep-18	Talos Energy Inc	Whistler Energy II LLC	Leases in Green Canyon federal waters	\$91	n.a.	\$60,667	n.a.	
27-Apr-18	Stone Energy	Shell; ExxonMobil; Anadarko	GOM Ram Powell assets	\$234	n.a.	\$38,361	n.a.	
28-Mar-18	W&T Offshore	Cobalt International Energy	9.375% non-op WI in the Heidelberg unit	\$31	\$23.92	\$9,345	n.a.	
12-Mar-18	Total	Cobalt International Energy	Non-op interest in 13 blocks	\$25	n.a.	n.a.	n.a.	
				Mean	\$256	\$19.46	\$32,581	n.a.
				Median	\$91	\$19.46	\$30,156	n.a.

Blue = BMO provided transaction advisory services Green = BMO provided acquisition financing or related services
Purple = BMO provided both transaction advisory services and acquisition financing or related services

TRANSACTION PRODUCTION MULTIPLES⁽⁴⁾



TRANSACTION PROVED RESERVE MULTIPLES⁽⁴⁾



Source: BMO Transaction Database, Baker Hughes, BMO Commodity Products Group, Bloomberg, Drilling Info, PLS

Note: Current quarter's data is through the week covered by this issue.

- Permits include directional and unidentified drilling permits.
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- Red line denotes average since 01-Jan-15. Calculated as the weighted average of each quarter's transactions.



November 19, 2018

[Click event to open](#)

Upcoming Industry Events

November 2018

[Nov 28](#) [Houston Producers Forum Luncheon](#)

December 2018

[Dec 12](#) [IPAA Leaders in Industry Luncheon](#)
[Dec 18](#) [Houston Producers Forum Luncheon](#)
[Dec 21](#) [ADAM-Houston Monthly Luncheon](#)

January 2019

[Jan 15](#) [Houston Producers Forum Luncheon](#)
[Jan 18](#) [ADAM-Houston Monthly Luncheon](#)
[Jan 24](#) [IPAA Private Capital Conference](#)
[Jan 31](#) [SPE A&D Symposium](#)

February 2019

[Feb 5-7](#) [SPE Hydraulic Fracturing Technology Conference](#)
[Feb 11-15](#) [NAPE Summit Week](#)
[Feb 15](#) [ADAM-Houston Monthly Luncheon](#)
[Feb 19](#) [Houston Producers Forum Luncheon](#)
[Feb 19-20](#) [DUG Haynesville](#)

March 2019

[Mar 5-7](#) [IADC/SPE Drilling Conference](#)
[Mar 15](#) [ADAM-Houston Monthly Luncheon](#)
[Mar 19](#) [Houston Producers Forum Luncheon](#)
[Mar 26-28](#) [International Petroleum Technology Conference](#)

April 2019

[Apr 8-10](#) [IPAA Oil & Gas Investment Symposium](#)
[Apr 15-17](#) [DUG Permian](#)
[Apr 16](#) [Houston Producers Forum Luncheon](#)
[Apr 19](#) [ADAM-Houston Monthly Luncheon](#)

May 2019

[May 6-9](#) [Offshore Technology Conference](#)
[May 13-17](#) [SPE Electric Submersible Pumps Symposium](#)
[May 14-15](#) [DUG Rockies](#)
[May 14](#) [Houston Producers Forum Luncheon](#)
[May 16](#) [IADC Drilling Onshore Conference & Exhibition](#)
[May 17](#) [ADAM-Houston Monthly Luncheon](#)

June 2019

[Jun 5-6](#) [Midstream Texas Conference & Exhibition](#)
[Jun 18](#) [Houston Producers Forum Luncheon](#)
[Jun 18-20](#) [DUG East](#)
[Jun 19-20](#) [IADC World Drilling Conference & Exhibition](#)
[Jun 21](#) [ADAM-Houston Monthly Luncheon](#)
[Jun 24-26](#) [IPAA Midyear Meeting](#)

July 2019

[Jul 16](#) [Houston Producers Forum Luncheon](#)
[Jul 19](#) [ADAM-Houston Monthly Luncheon](#)

August 2019

[Aug 16](#) [ADAM-Houston Monthly Luncheon](#)
[Aug 20](#) [IPAA Oil & Gas Overview Course](#)
[Aug 20](#) [Houston Producers Forum Luncheon](#)
[Aug 21-22](#) [Summer NAPE](#)

September 2019

[Sep 17](#) [Houston Producers Forum Luncheon](#)
[Sep 20](#) [ADAM-Houston Monthly Luncheon](#)
[Sep 24-26](#) [DUG Eagle Ford](#)
[Sep 30-Oct 2](#) [SPE Annual Technical Conference and Exhibition](#)

October 2019

[Oct 9](#) [IPAA Leaders in Industry Luncheon](#)
[Oct 15](#) [Houston Producers Forum Luncheon](#)
[Oct 18](#) [ADAM-Houston Monthly Luncheon](#)
[Oct 22-23](#) [A&D Strategies and Opportunities Conference](#)

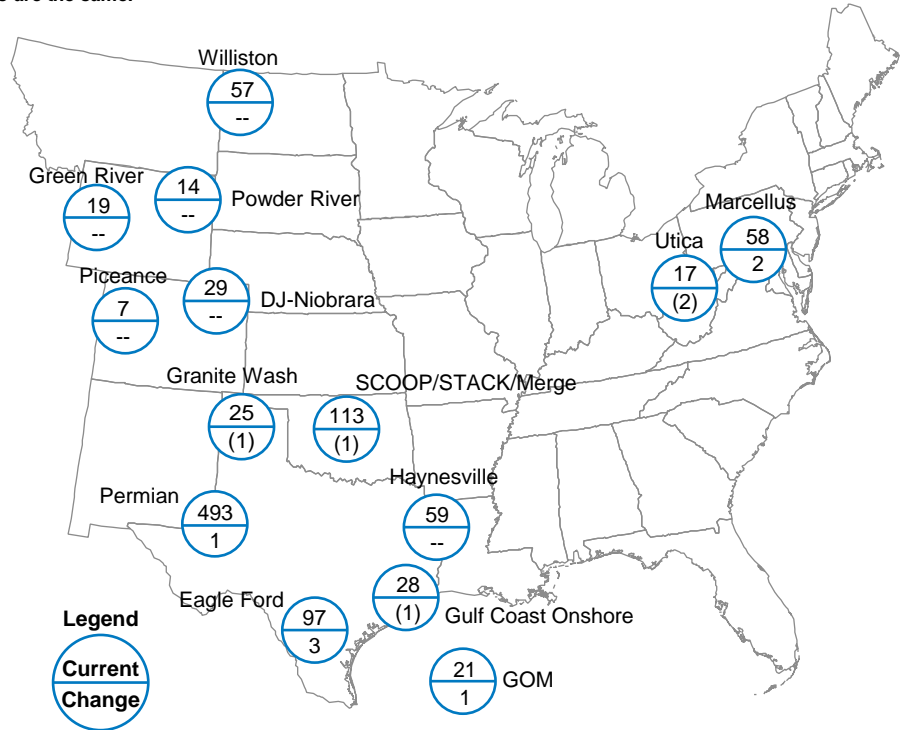


November 19, 2018

Rig Count Summary

BMO uses updated basin outlines, and the resulting rig counts, to more accurately represent current basin knowledge. The data below reflect these changes and is different than those shown by Baker Hughes. The totals are the same.

	This Week	Change	Last Week	Last Year
Total Rigs	1,082	1	1,081	915
Oil	888	2	886	738
Gas	194	(1)	195	177
Miscellaneous	--	--	--	--
Directional	71	(3)	74	76
Horizontal	939	4	935	776
Vertical	72	--	72	63
Basin				
Permian	493	1	492	391
SCOOP/STACK/Merge	113	(1)	114	100
Granite Wash	25	(1)	26	16
Eagle Ford	97	3	94	81
Haynesville	59	--	59	54
Marcellus	58	2	56	42
Utica	17	(2)	19	31
Williston	57	--	57	47
DJ-Niobrara	29	--	29	25
Green River	19	--	19	24
Powder River	14	--	14	7
Piceance	7	--	7	8
Gulf Coast Onshore	28	(1)	29	17
GOM	21	1	20	21
Alaska	6	--	6	5
Other	39	(1)	40	46
Mid-Con	18	(2)	20	23
Rockies	3	--	3	6
Western	15	--	15	14
Eastern	3	1	2	3



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Transactions Coordinator

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Source of rig count stats: Baker Hughes