



February 11, 2019

Covering the Week of February 1 to February 7, 2019

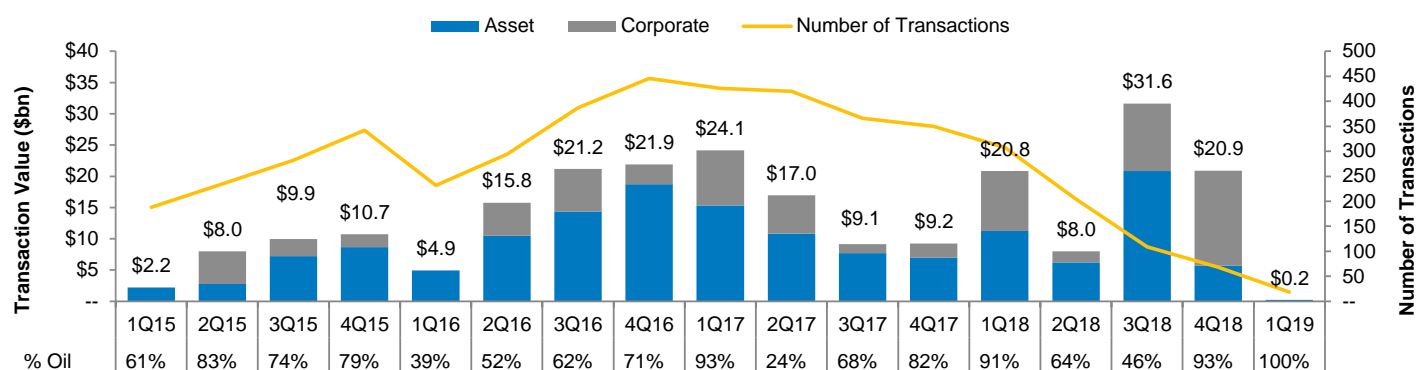
Week in Review

- WPX Energy signed agreements to divest its 20% equity interest in WhiteWater Midstream's Agua Blanca natural gas pipeline and non-core Nine Mile Draw E&P assets in southern Reeves County, Texas for a total of more than \$200 million
- Kimbell Royalty Partners agreed to acquire certain oil and gas mineral and royalty interests from EnCap Investments L.P. for approximately \$151.3 million in equity
- The February issue of BMO Calgary's A&D (Canadian) Market Monitor went live last week – read more [here](#)

Key Industry Indicators

Indicator	Current Value	Week's Change	% Change	Direction
Prompt Oil Price (\$/bbl)	\$52.64	(\$1.15)	(2.1%)	↓
Prompt Gas Price (\$/mmbtu)	\$2.55	(\$0.26)	(9.3%)	↓
Wkly Trans. Value (\$mm)	\$151	\$143	nmf	↑
Wkly Trans. Count	2	--	--	—
US Rig Count	1,049	4	0.4%	↑
US Oil Prod'n (mmbbl/d)	11.9	--	--	—
US Gas Prod'n (bcf/d) ⁽¹⁾	107.4	--	--	—
US Oil Storage (mmbbl)	447.2	1.3	0.3%	↑
US Gas Storage (tcf)	2.0	(0.2)	(10.8%)	↓

Quarterly Deal Activity



All references to last week in the comments below are through Thursday

Commodities

- Oil ended last week down. There was uncertainty regarding a trade deal between China and the U.S. President Trump will not be meeting with President Xi Jinping ahead of the tariff escalation deadline. Legislation is currently moving forward in Congress that would make it possible for the U.S. government to pursue antitrust action against OPEC member countries for price fixing. Tensions in Venezuela continued. Reports indicated that shipments to U.S. oil refiners that were booked before the new sanctions won't be loading since those payments can't go to PDVSA. The near-term contract closed down \$1.15, or 2.1%, at \$52.64
- Natural gas ended last week down. Bearish weather changes overnight combined with technical momentum affected the market. If weather stays anywhere close to normal for the foreseeable future, there will need to be a headline or other catalyst to cause any significant rally in the market. The near-term contract closed down \$0.26, or 9.3%, at \$2.55

Equity Markets

- S&P E&P⁽²⁾ underperformed last week (5.7)% vs. SPX⁽²⁾ 0.1%
- The major U.S. equity indexes finished mixed last week
- Consumer discretionary, financials, health care, and materials were down. Consumer staples, industrials, real estate, and tech were up

Debt Markets

- Eight issuers priced 13 tranches for \$9.0 billion in proceeds
- Year-to-date U.S. volume is down 8% year-on-year
- U.S. high yield funds reported an inflow of \$3.86 billion
- ETFs reported an inflow of \$1.75 billion, while mutual funds reported an inflow of \$2.11 billion
- High yield index yield was 6.87%; high yield energy index yield was 8.11%

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 November 2018.

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

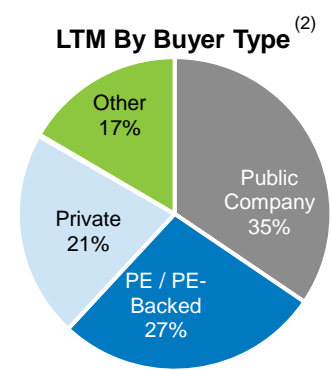
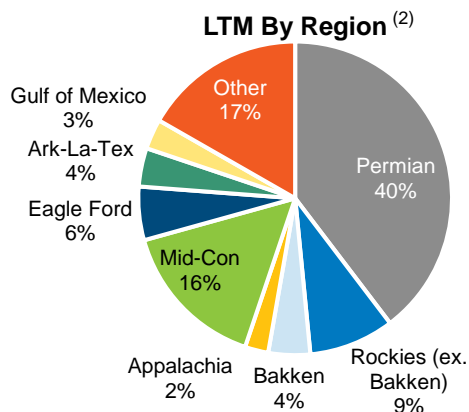
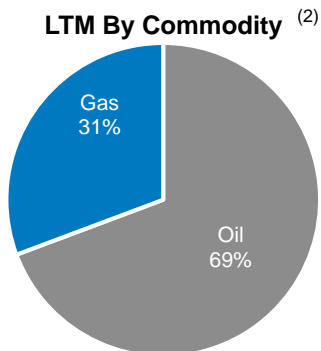


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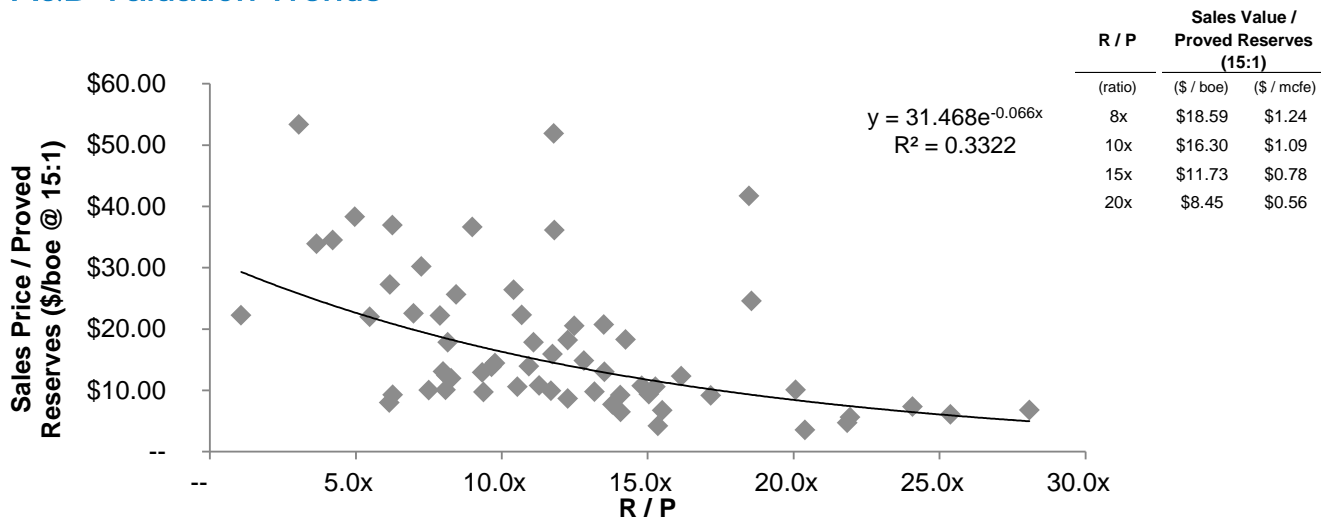
The 10 Most Recent Asset Transactions Over \$20 Million

Ann'd Date	Buyer	Seller	Area	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre)
07-Feb-19	Kimbell Royalty Partners	EnCap Investments LP	Multi-Region	12,200 net royalty acres across the U.S.	\$151	n.a.	\$94,563	nmf
16-Jan-19	Talos Energy Inc	Samson Energy Co LLC	Gulf of Mexico	Non-op Gulf of Mexico working interest	\$30	\$13.45	\$17,939	n.a.
08-Jan-19	Undisclosed Buyer	MCM Energy Partners LLC	Permian	Midland Basin assets	\$20	n.a.	n.a.	n.a.
21-Dec-18	Pantheon Resources Plc	Great Bear Petroleum LLC	Alaska	250,000 leased acres in the North Slope	\$49	n.a.	n.a.	\$196
19-Dec-18	Comstock	Shelby Shale LLC	Ark-La-Tex	6,023 net acres in Haynesville	\$21	n.a.	n.a.	\$3,404
17-Dec-18	Alliance Resource Partners	Dale Operating Co	Multi-Region	42,000 net royalty acres	\$176	n.a.	n.a.	nmf
11-Dec-18	Undisclosed Buyer	Riviera Resources Inc	Mid-Continent	37,000 net acres in the Arkoma Basin	\$68	n.a.	\$17,000	\$1,838
21-Nov-18	Kimbell Royalty Partners	Undisclosed Seller	Multi-Region	16,700 net royalty acres	\$108	n.a.	\$90,588	nmf
19-Nov-18	Lonestar Resources Inc	Sabine Oil & Gas Corp	Eagle Ford	2,706 net acres in Eagle Ford	\$39	\$2.98	\$48,375	\$14,302
19-Nov-18	Aethon III	QEP Resources Inc	Ark-La-Tex	49,700 net acres in Haynesville	\$735	\$4.60	\$14,848	\$14,789

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⁾



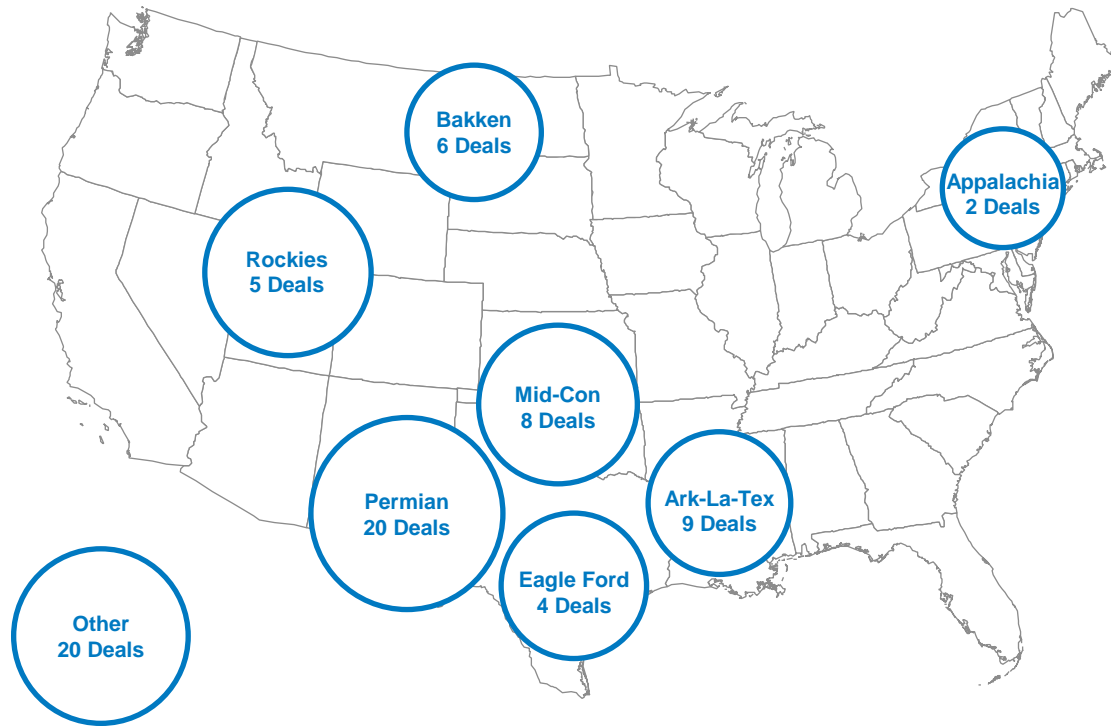
2 Source: BMO Transaction Database, Baker Hughes, BMO Commodity Products Group, Bloomberg, PLS

1. Represents total enterprise value.
2. Calculated as percentage of total LTM transaction count (number of transactions, not dollar value).
3. 62 transactions from January 2015 to 2019 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

- [WPX Energy Signs Sales Worth More Than \\$200 Million](#)
- [Kimbell Royalty Partners Announces \\$151.3 Million Mineral and Royalty Acquisition from EnCap Investments L.P. in an All-Equity Transaction](#)
- [Blackstone Energy Partners Announces Its Partnership with Waterfield Midstream – a Permian Basin Oil & Gas Water Management Platform](#)

Industry Headlines

- [How a 'Monster' Texas Oil Field Made the U.S. a Star in the World Market](#)
- [Senate Panel Gets Look at Bill That Would Ban New Oil and Gas Pipelines](#)
- [Texas-Size Glut of Frac Sand Accumulating as Demand Weakens](#)
- [OPEC's Oil Exports to U.S. Fell to Five-Year Low in January](#)
- [U.S. Challenges Court Ruling that Blocked Keystone XL Pipeline](#)
- [After Years of Simmering Tug-Of-War, Colorado Dems Eye Action On Oil And Gas](#)
- [Venezuelan Oil Sanctions Won't Choke U.S. Refinery Runs](#)

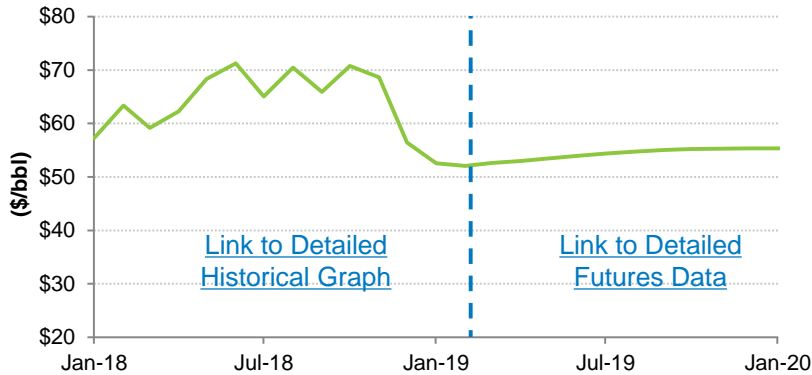
(Click headline to link to the full article)



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Commodity Prices

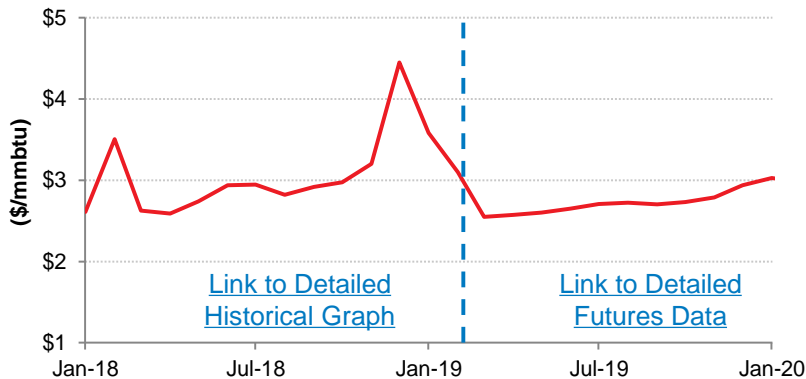
WTI OIL (HISTORICAL / FORECAST)



NYMEX WTI Futures as of 07-Feb-19 Close (\$/bbl)

Period ⁽¹⁾	Current	Last Wk.	6 Mo. Ago	1 Yr. Ago
12 Mo. Strip	\$54.48	\$54.70	\$66.86	\$55.25
2019	\$54.30	\$54.69	\$65.54	\$55.75
2020	\$54.99	\$54.27	\$62.07	\$52.68
2021	\$53.84	\$53.40	\$59.43	\$50.83
2022	\$53.01	\$52.96	\$57.57	\$49.94
2023	\$52.82	\$52.92	\$56.41	\$49.83

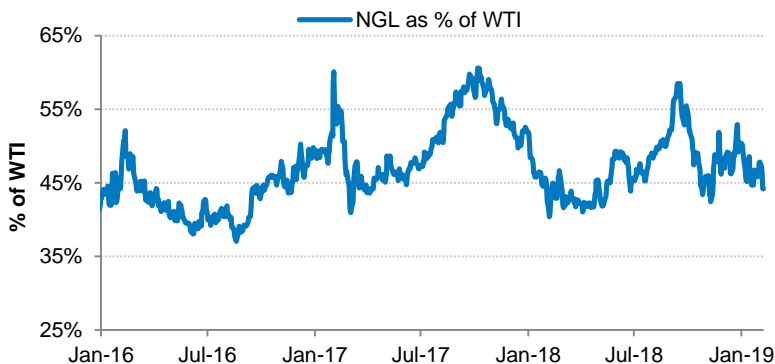
HENRY HUB NATURAL GAS (HISTORICAL / FORECAST)



NYMEX Gas Futures as of 07-Feb-19 Close (\$/mmbtu)

Period ⁽¹⁾	Current	Last Wk.	6 Mo. Ago	1 Yr. Ago
12 Mo. Strip	\$2.75	\$2.90	\$2.85	\$2.83
2019	\$2.70	\$2.86	\$2.78	\$2.81
2020	\$2.70	\$2.72	\$2.62	\$2.81
2021	\$2.63	\$2.61	\$2.57	\$2.85
2022	\$2.81	\$2.79	\$2.71	\$2.98
2023	\$2.81	\$2.79	\$2.71	\$2.98

NGL PRICING⁽²⁾



Historical Prices as of 07-Feb-19 Close (\$/gal)

NGLs	Current	Last Wk.	6 Mo. Ago	1 Yr. Ago
Ethane	\$0.30	\$0.35	\$0.38	\$0.24
Propane	\$0.62	\$0.69	\$0.99	\$0.75
Butane	\$0.71	\$0.71	\$1.03	\$0.71
Iso-butane	\$0.78	\$0.88	\$1.16	\$0.90
Pentane+	\$1.07	\$1.11	\$1.56	\$1.33

Source: BMO Commodity Products Group, Bloomberg, FactSet

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

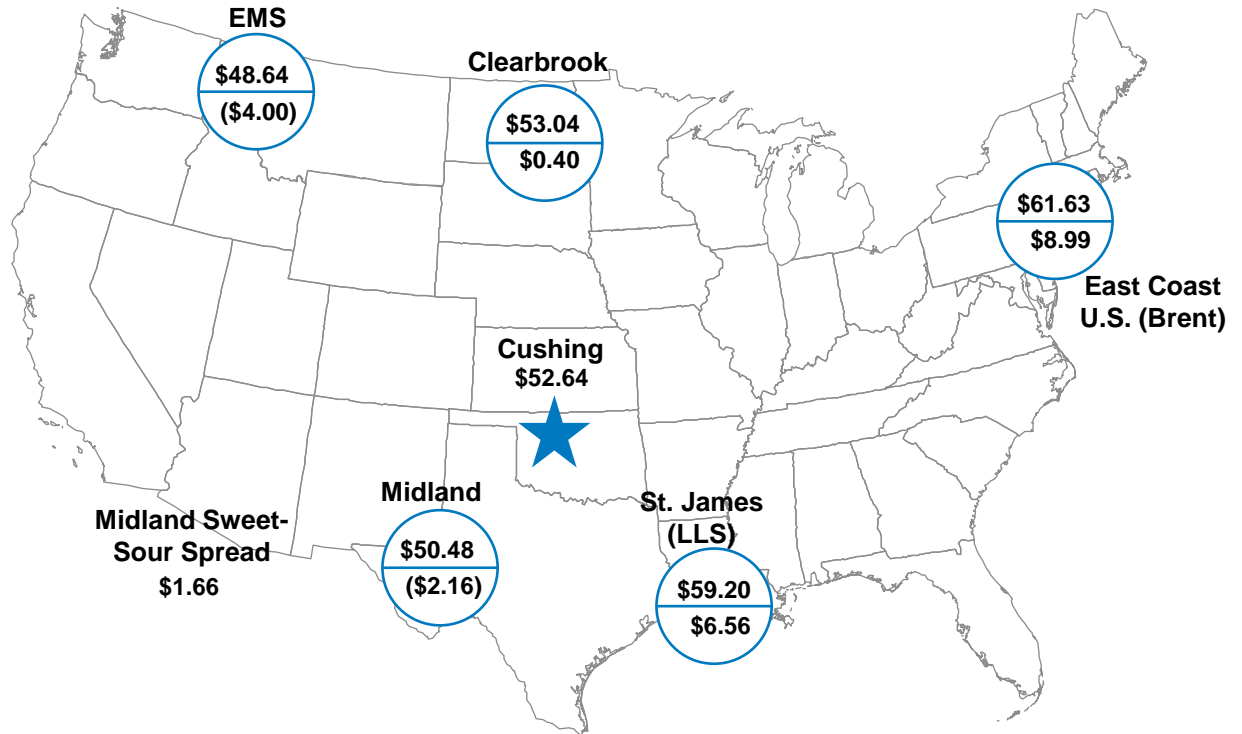


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Commodity Prices (cont'd)

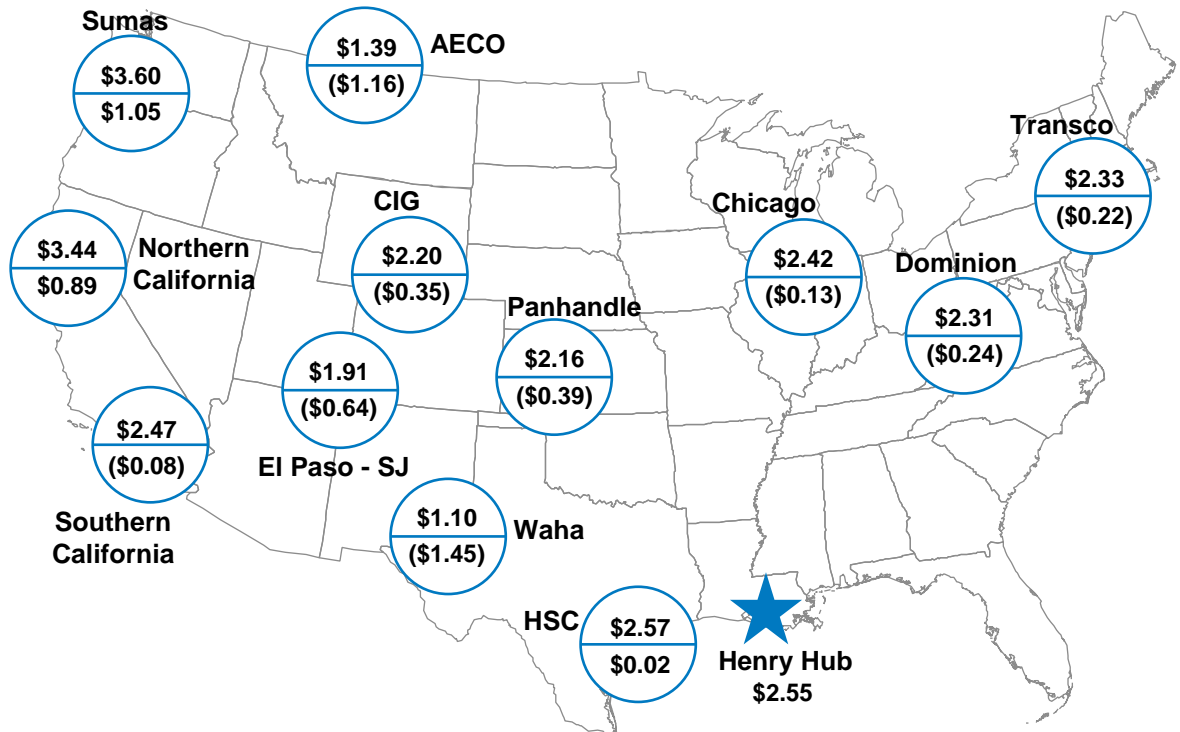
OIL PRICING & DIFFERENTIALS TO CUSHING WTI (\$ / BBL) – AS OF 07-FEB-19

Legend



NATURAL GAS PRICING & DIFFERENTIALS TO HENRY HUB (\$ / MMBTU) – AS OF 07-FEB-19

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.

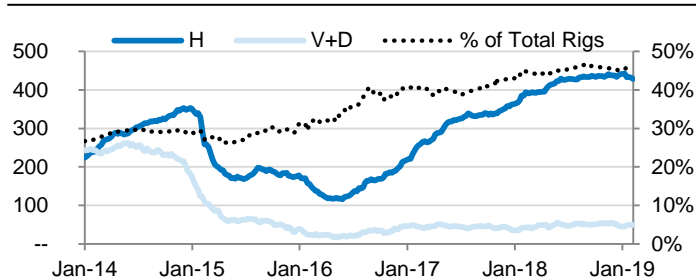


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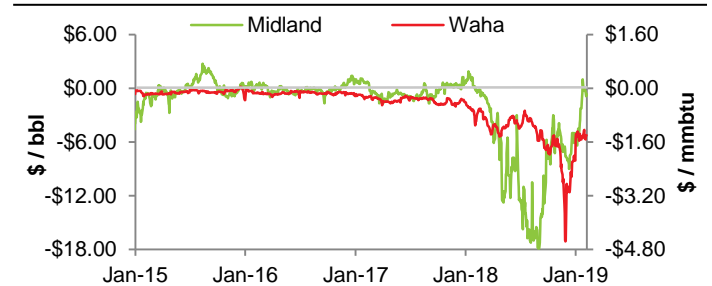
Permian Snapshot

Item	Value	Wkly Change	Last Week	Item	Value	Wkly Change	Last Week
Rig Count	478	↓ (3)	481	Oil Differential	(\$0.60)	↓ (\$0.55)	(\$0.05)
Permitting Activity	262	↓ (93)	355	Gas Differential	(\$1.41)	↓ (\$0.14)	(\$1.27)

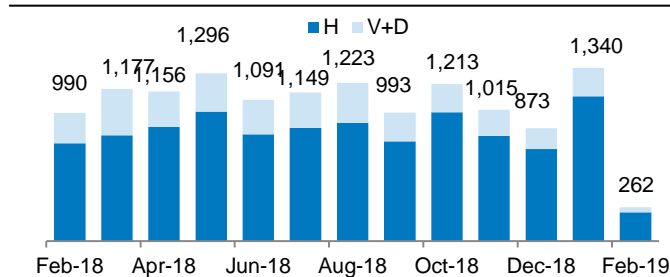
RIG COUNT



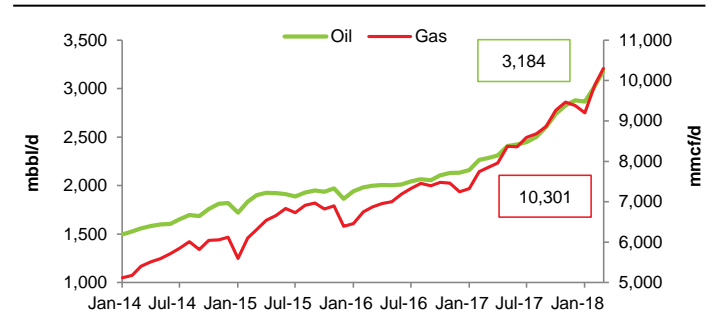
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

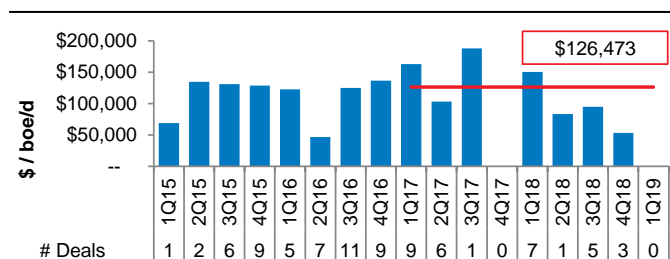


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

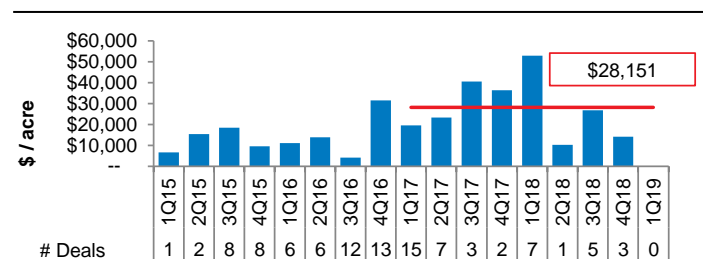
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
08-Jan-19	Undisclosed Buyer	MCM Energy Partners LLC	Midland Basin assets	\$20	n.a.	n.a.	n.a.
06-Nov-18	Diamondback Energy	ExL Pet.; EnergyQuest	3,646 net acres in Midland 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
30-Sep-18	Energen	Undisclosed Seller	1,700 net acres in Delaware Basin	\$38	n.a.	n.a.	\$22,235
			Mean	\$113	n.a.	\$115,476	\$38,500
			Median	\$38	n.a.	\$115,476	\$26,971

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

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- \$/acre multiple not adjusted for value associated with production.
- Red line denotes average since 01-Jan-17. 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 & 2019.



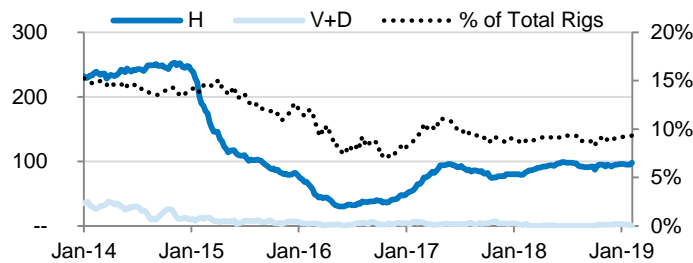
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Eagle Ford Snapshot

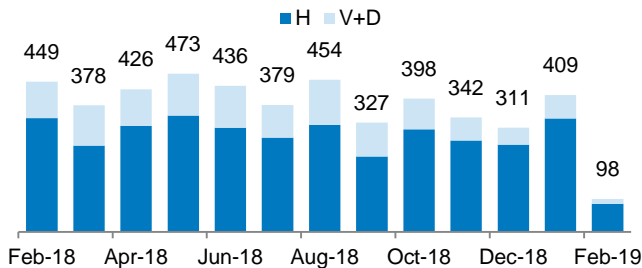
Item	Value	Wkly Change	Last Week
Rig Count	98	↑	97
Permitting Activity	98	↓ (13)	111

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.00	↑ \$2.30	\$5.70
Gas Differential	\$0.02	↓ (\$0.11)	\$0.13

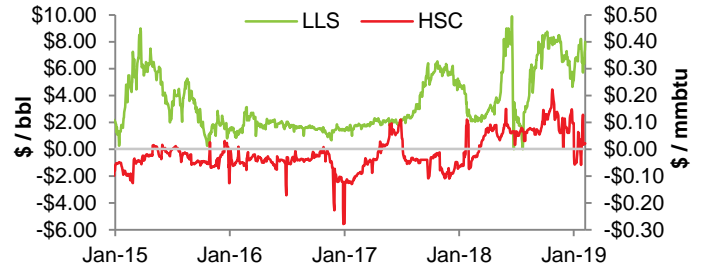
RIG COUNT



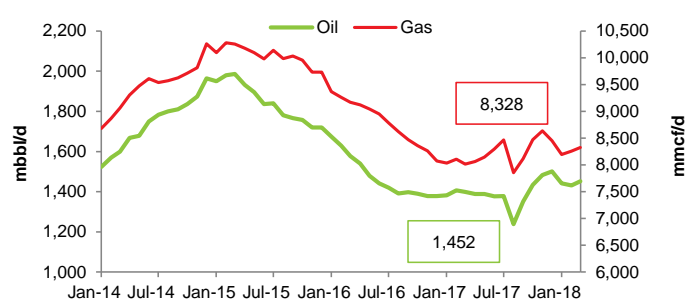
PERMITTING ACTIVITY BY MONTH



DIFFERENTIALS



GROSS PRODUCTION

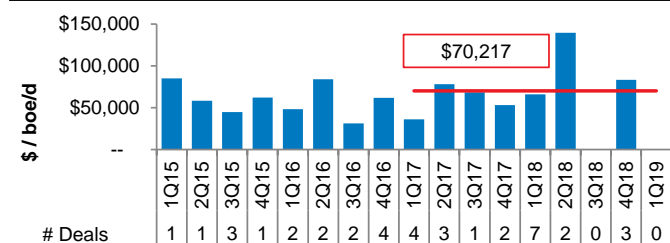


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

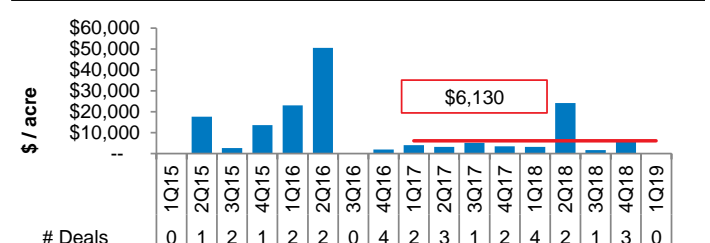
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
19-Nov-18	Lonestar Resources Inc	Sabine Oil & Gas Corp	2,706 net acres in Eagle Ford	\$39	\$2.98	\$48,375	\$14,302
20-Sep-18	WildHorse	Undisclosed Seller	20,305 net Eagle 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
31-Jul-18	EP Energy Corp	Undisclosed Seller	Additional working interests in Eagle Ford	\$31	n.a.	n.a.	n.a.
26-Jul-18	BP	BHP Billiton	Permian, Eagle Ford, and Haynesville	\$10,500	n.a.	n.a.	n.a.
			Mean	\$2,127	\$2.98	\$48,375	\$8,022
			Median	\$35	\$2.98	\$48,375	\$8,022

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TRANSACTION PRODUCTION MULTIPLES⁽³⁾



TRANSACTION ADJUSTED NET ACRE MULTIPLES^(3,4)



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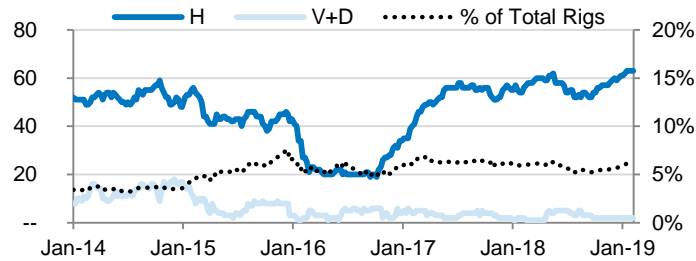
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Ark-La-Tex Snapshot

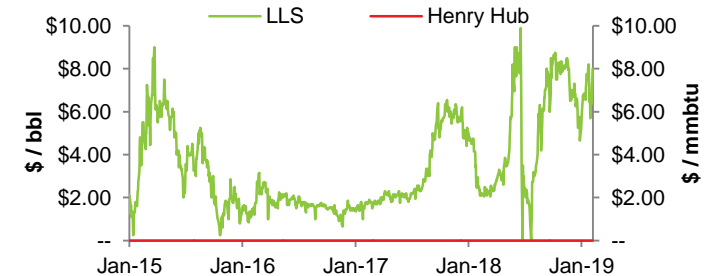
Item	Value	Wkly Change	Last Week
Rig Count	65	█ --	65
Permitting Activity	19	█ ↑ 4	15

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.00	█ ↑ \$2.30	\$5.70
Gas Differential	--	█ --	--

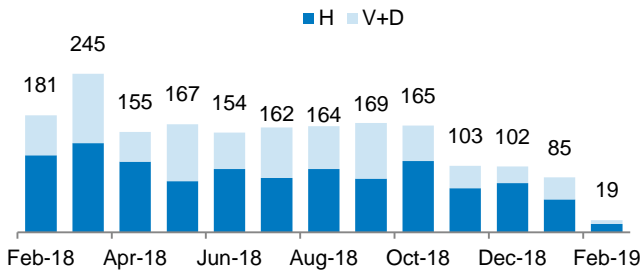
RIG COUNT



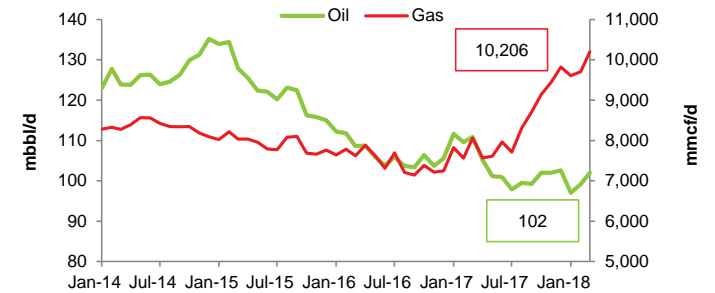
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

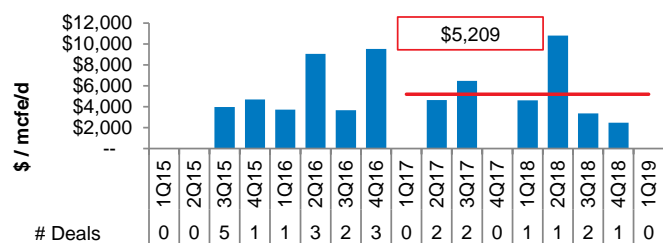


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

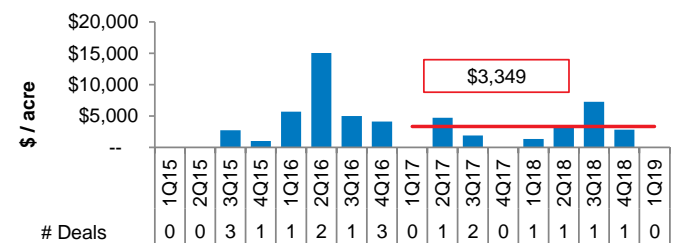
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19-Nov-18	Aethon III	QEP Resources Inc	49,700 net acres in Haynesville	\$735	\$0.77	\$2,475	\$14,789
05-Sep-18	Viking Energy Group	Multiple Sellers	Texas and Louisiana assets	\$100	n.a.	n.a.	n.a.
05-Sep-18	Equinor	Texegy LLC	60,000 net acres in Austin 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
			Mean	\$210	\$1.23	\$4,487	\$7,488
			Median	\$100	\$1.23	\$4,487	\$6,957

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TRANSACTION PRODUCTION MULTIPLES⁽³⁾



TRANSACTION ADJUSTED NET ACRE MULTIPLES^(3,4)



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- Production valued at \$3,000/mcfepd in 2014, and \$2,000/mcfepd in 2015, 2016, 2017, 2018, and 2019.



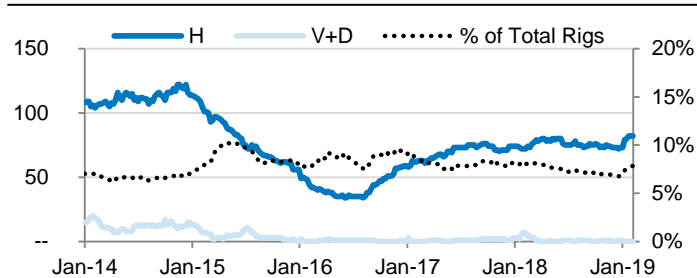
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Appalachia Snapshot

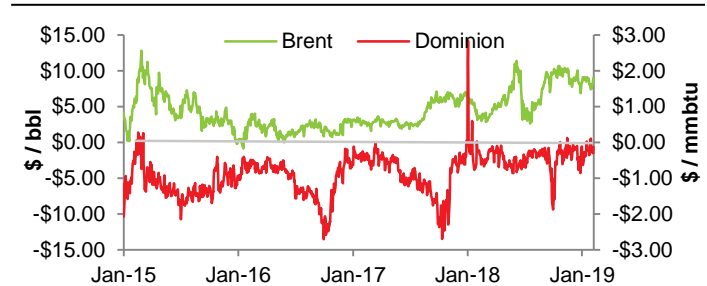
Item	Value	Wkly Change	Last Week
Rig Count	82	█ --	82
Permitting Activity	47	↓ (20)	67

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.99	↑ \$0.89	\$8.10
Gas Differential	(\$0.13)	↓ (\$0.07)	(\$0.06)

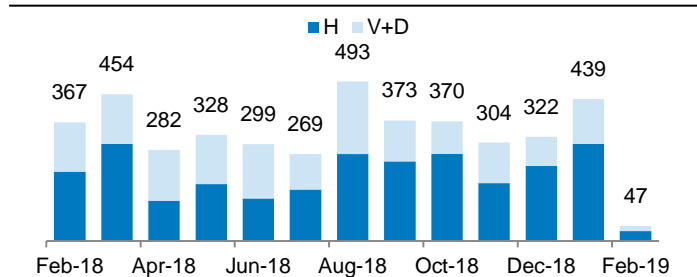
RIG COUNT



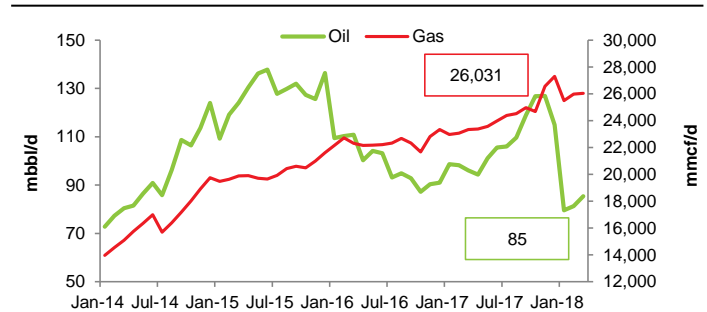
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

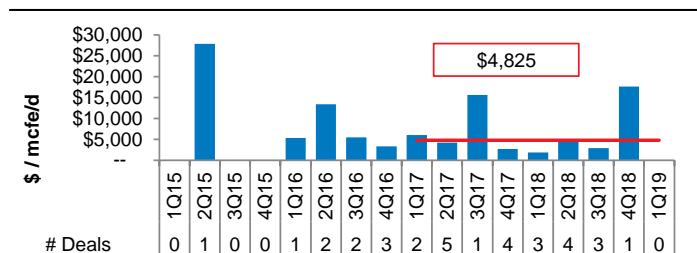


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

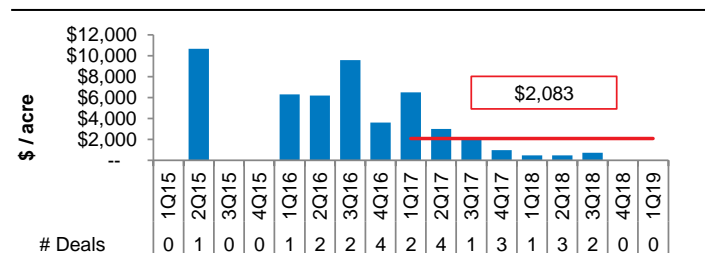
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾	Proved Multiple	Prod. Multiple	Net Acres	
				(\$mm)	(\$/mcf)	(\$/mcf/d)	(\$/acre) ⁽²⁾	
15-Oct-18	Undisclosed Buyer	Range Resources Corp	Overriding royalty interests in Appalachia	\$300	n.a.	\$17,649	n/mf	
27-Aug-18	PennEnergy Resources	Rex Energy Corp	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.

- 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 01-Jan-17. 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, 2018, and 2019.



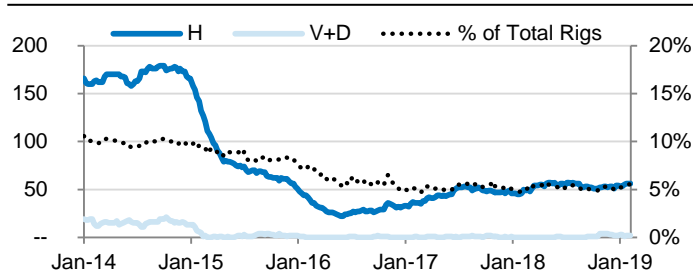
February 11, 2019

Bakken Snapshot

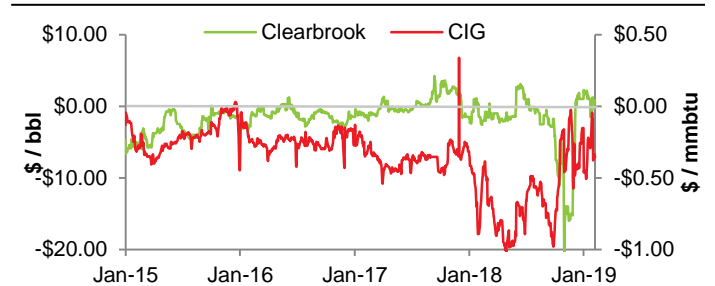
Item	Value	Wkly Change	Last Week
Rig Count	58	█ --	58
Permitting Activity	22	↓ (3)	25

Item	Value	Wkly Change	Last Week
Oil Differential	\$0.40	↓ (\$0.85)	\$1.25
Gas Differential	(\$0.36)	↓ (\$0.27)	(\$0.09)

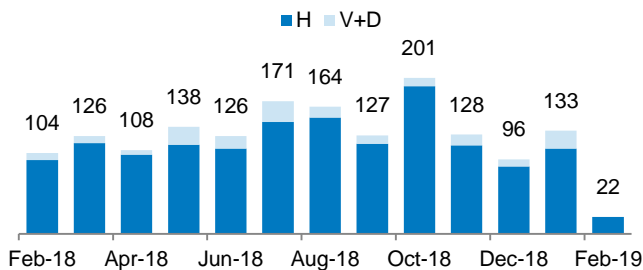
RIG COUNT



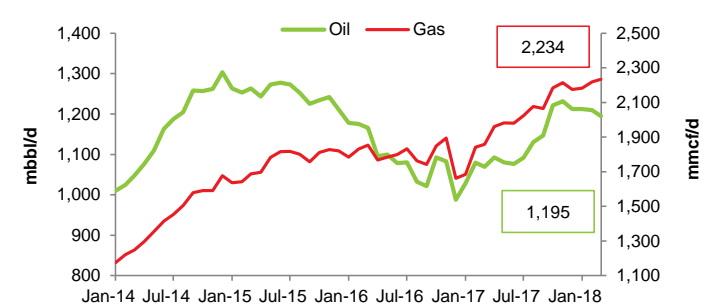
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

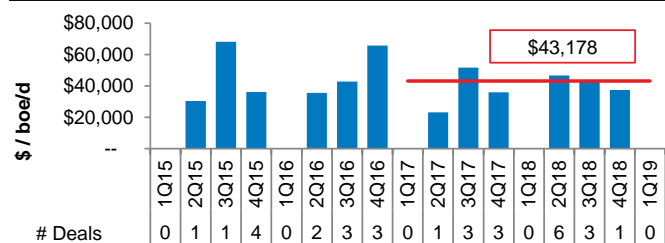


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

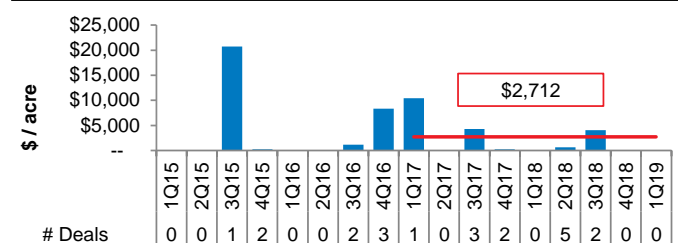
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
07-Nov-18	Vantage Energy Acq. Corp	QEP Resources Inc	102,800 net acres in Williston Basin	\$1,725	n.a.	\$37,500	\$16,780
31-Jul-18	Northern Oil and Gas	W Energy Partners	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	\$23,913
			Median	\$152	\$6.04	\$40,104	\$27,196

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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.

- 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 01-Jan-17. 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 & 2019.



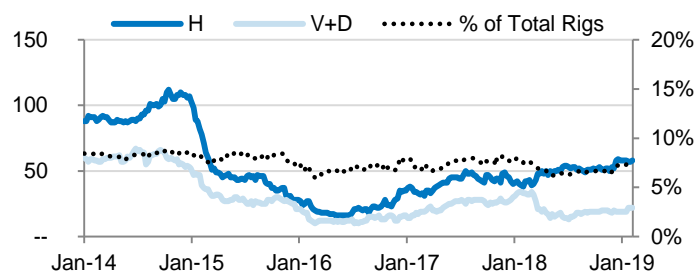
February 11, 2019

Rockies (excl. Bakken) Snapshot

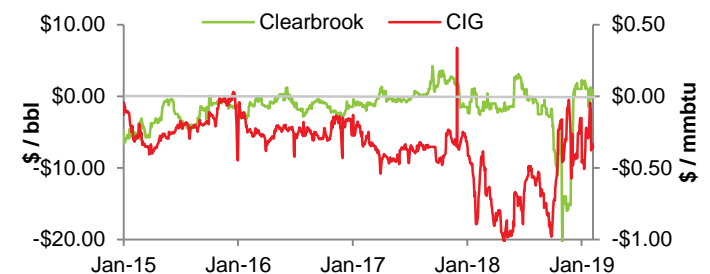
Item	Value	Wkly Change	Last Week
Rig Count	80	↑	79
Permitting Activity	54	↓ (57)	111

Item	Value	Wkly Change	Last Week
Oil Differential	\$0.40	↓ (\$0.85)	\$1.25
Gas Differential	(\$0.36)	↓ (\$0.27)	(\$0.09)

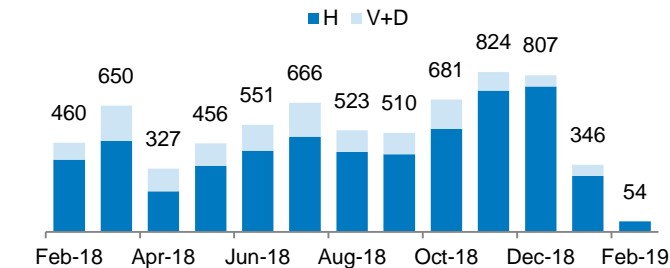
RIG COUNT



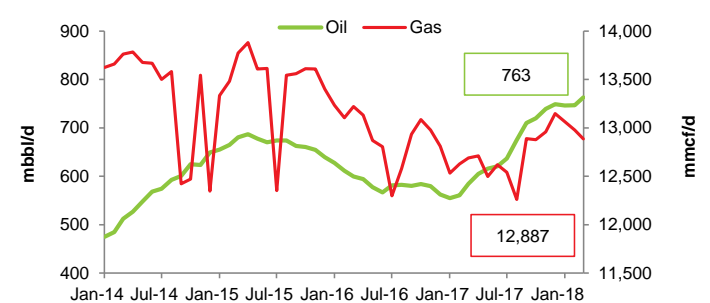
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

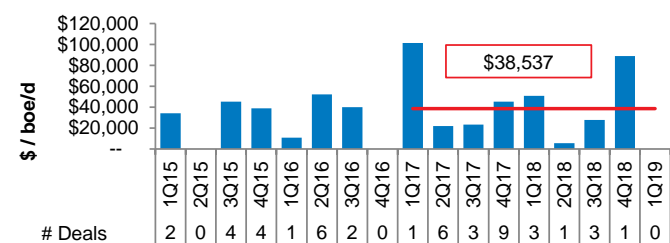


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

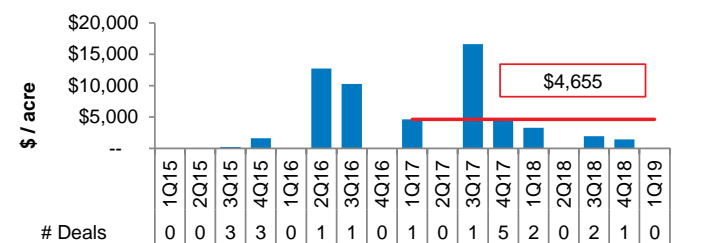
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾	Proved Multiple	Prod. Multiple	Net Acres	
				(\$mm)	(\$/boe)	(\$/boe/d)	(\$/acre) ⁽²⁾	
01-Oct-18	DJR Energy LLC	EnCana	182,000 net acres in San Juan Basin	\$480	n.a.	\$88,889	\$2,637	
28-Aug-18	Vermilion Energy Inc	Massif Oil & Gas LLC	55,000 acres 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
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-17. Calculated as the weighted average of each quarter's transactions.
4. 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 & 2019.



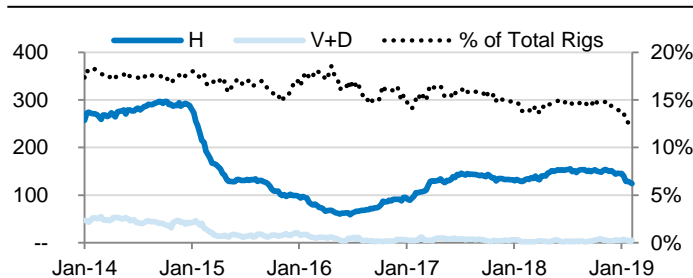
February 11, 2019

Mid-Continent Snapshot

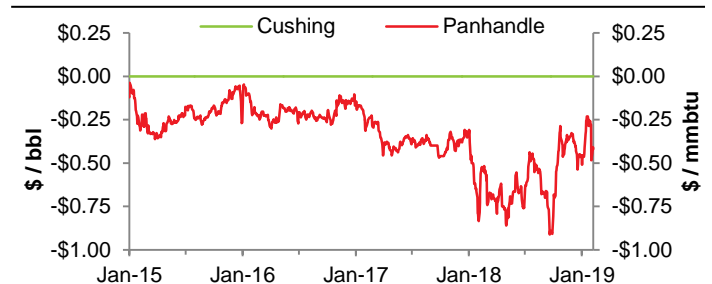
Item	Value	Wkly Change	Last Week
Rig Count	129	█	--
Permitting Activity	66	↓	(5)

Item	Value	Wkly Change	Last Week
Oil Differential	--	█	--
Gas Differential	(\$0.42)	↓	(\$0.15)

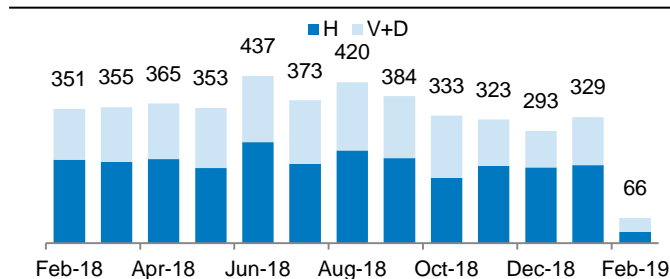
RIG COUNT



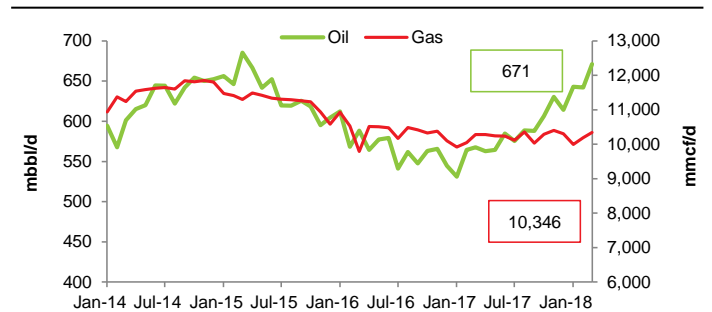
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

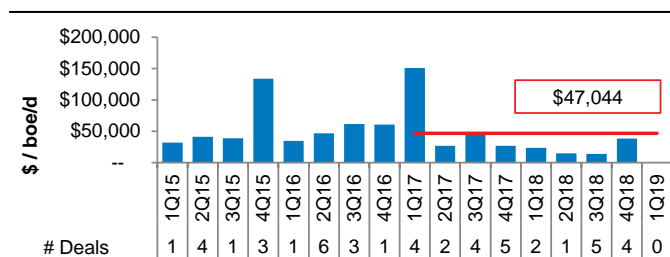


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

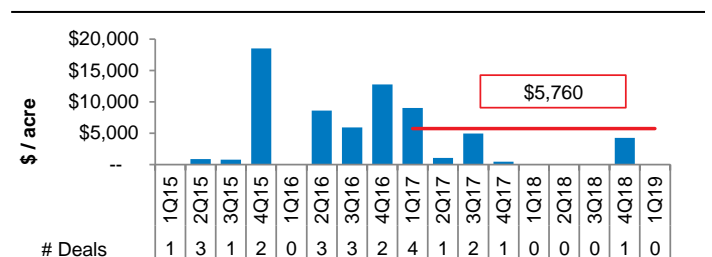
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾	
11-Dec-18	Undisclosed Buyer	Riviera Resources Inc	37,000 net acres in the Arkoma Basin	\$68	n.a.	\$17,000	1,838	
02-Nov-18	SandRidge Energy	Undisclosed Seller	Mississippi Lime and NW STACK assets	\$25	n.a.	\$6,649	n.a.	
31-Oct-18	Casillas Petroleum Corp	Sheridan Production Partners	29,600 net acres in SCOOP assets	\$260	n.a.	\$78,078	\$8,784	
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	
				Mean	\$488	\$3.04	\$29,339	\$4,220
				Median	\$220	\$3.04	\$16,314	\$2,038

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.

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-17. Calculated as the weighted average of each quarter's transactions.
4. 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 & 2019.



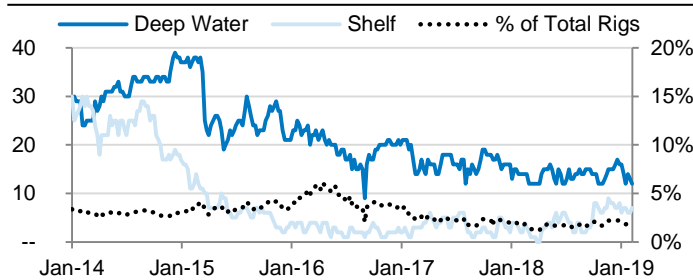
February 11, 2019

Gulf of Mexico Snapshot

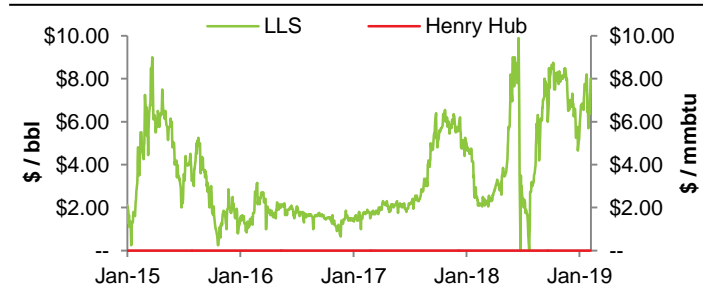
Item	Value	Wkly Change	Last Week
Rig Count	19	█ --	19
Permitting Activity	6	█ ↓ (3)	9

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.00	█ ↑ \$2.30	\$5.70
Gas Differential	--	█ --	--

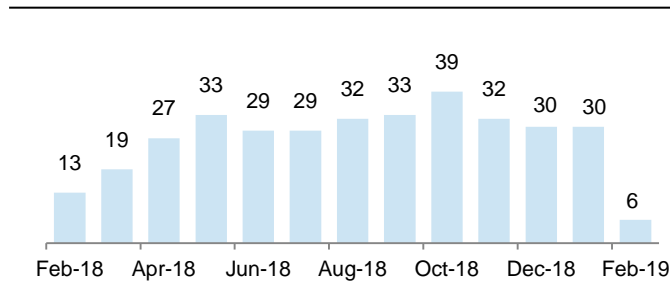
RIG COUNT



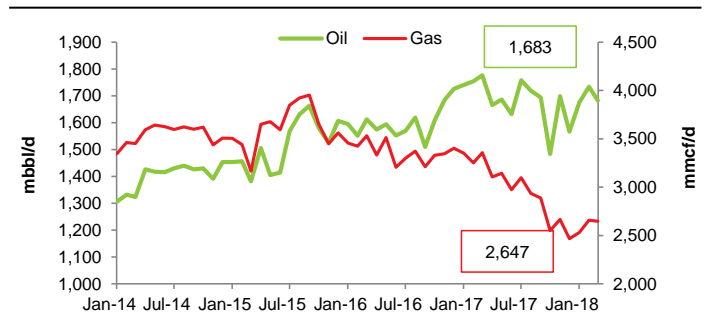
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH⁽¹⁾



GROSS PRODUCTION

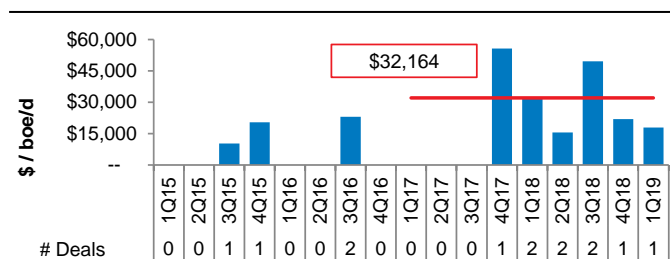


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

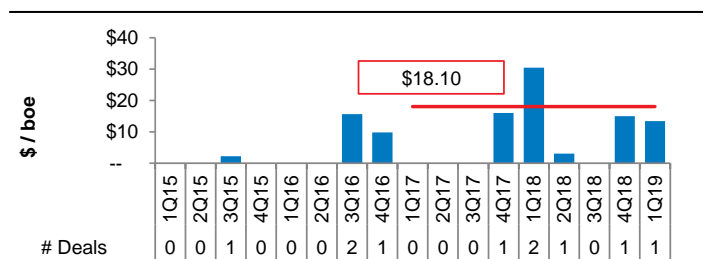
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽²⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽³⁾	
16-Jan-19	Talos Energy Inc	Samson Energy Co LLC	Non-op Gulf of Mexico working interest	\$30	\$13.45	\$17,939	n.a.	
10-Oct-18	Murphy	Petrobras	Gulf of Mexico joint venture	\$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.	
				Mean	\$257	\$17.46	\$29,653	n.a.
				Median	\$91	\$15.00	\$21,951	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.
- 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 01-Jan-17. Calculated as the weighted average of each quarter's transactions.



February 11, 2019

[Click event to open](#)

Upcoming Industry Events

February 2019

Feb 11-15	NAPE Summit Week
Feb 12	Women in Energy Luncheon
Feb 15	ADAM-Houston Monthly Luncheon
Feb 19	Houston Producers Forum Luncheon
Feb 19-20	DUG Haynesville (Shreveport)

March 2019

Mar 5	Energy Capital Conference
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	DUG Sand (Fort Worth)
Apr 15	DUG Water (Fort Worth)
Apr 15-17	DUG Permian (Fort Worth)
Apr 16	Houston Producers Forum Luncheon
Apr 19	ADAM-Houston Monthly Luncheon

May 2019

May 6-9	Offshore Technology Conference
May 10	Petroleum Resources Economics Conference
May 13-17	SPE Electric Submersible Pumps Symposium
May 14-15	DUG Rockies (Denver)
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 (Pittsburgh)
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 (San Antonio)
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 2019

Nov 4-6	Executive Oil Conference & Exhibition
Nov 15	ADAM-Houston Monthly Luncheon
Nov 19	IPAA Oil & Gas for Newcomers
Nov 19	Houston Producers Forum Luncheon
Nov 19-21	DUG Midcontinent (Oklahoma City)

December 2019

Dec 17	Houston Producers Forum Luncheon
Dec 20	ADAM-Houston Monthly Luncheon

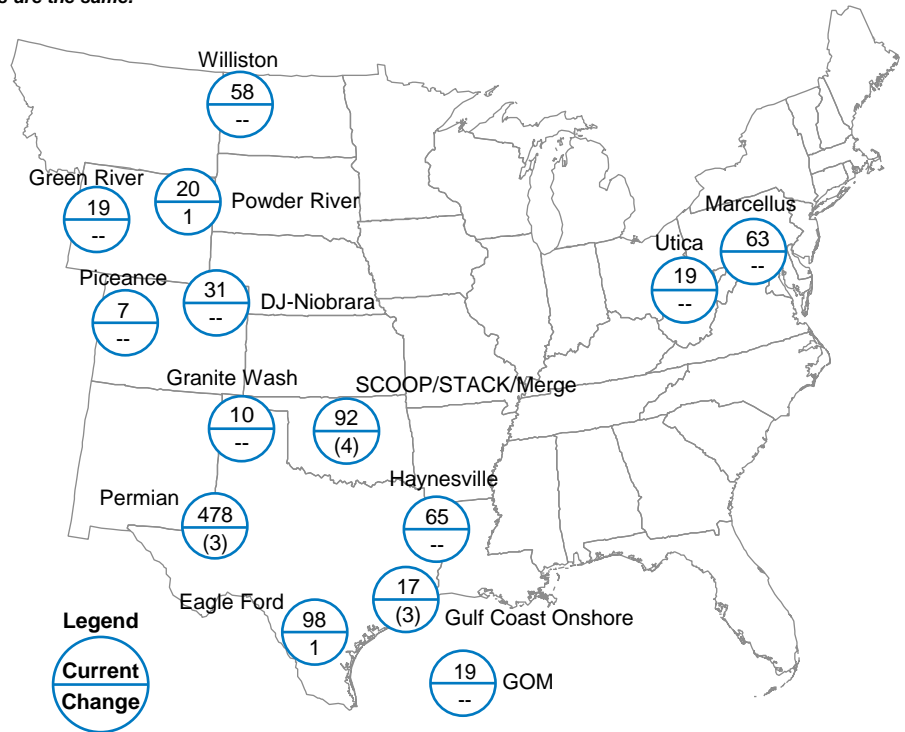


February 11, 2019

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	1,049	4	1,045	975
Oil	854	7	847	791
Gas	195	(3)	198	184
Miscellaneous	--	--	--	--
Directional	58	1	57	73
Horizontal	923	(2)	925	832
Vertical	68	5	63	70
Basin				
Permian	478	(3)	481	437
SCOOP/STACK/Merge	92	(4)	96	99
Granite Wash	10	--	10	17
Eagle Ford	98	1	97	85
Haynesville	65	--	65	58
Marcellus	63	--	63	55
Utica	19	--	19	24
Williston	58	--	58	50
DJ-Niobrara	31	--	31	26
Green River	19	--	19	20
Powder River	20	1	19	16
Piceance	7	--	7	8
Gulf Coast Onshore	17	(3)	20	19
GOM	19	--	19	16
Alaska	11	4	7	5
Other	42	8	34	40
Mid-Con	27	4	23	18
Rockies	3	--	3	5
Western	10	4	6	14
Eastern	2	--	2	3



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Source of rig count stats: Baker Hughes