



February 25, 2019

Covering the Week of February 15 to February 21, 2019

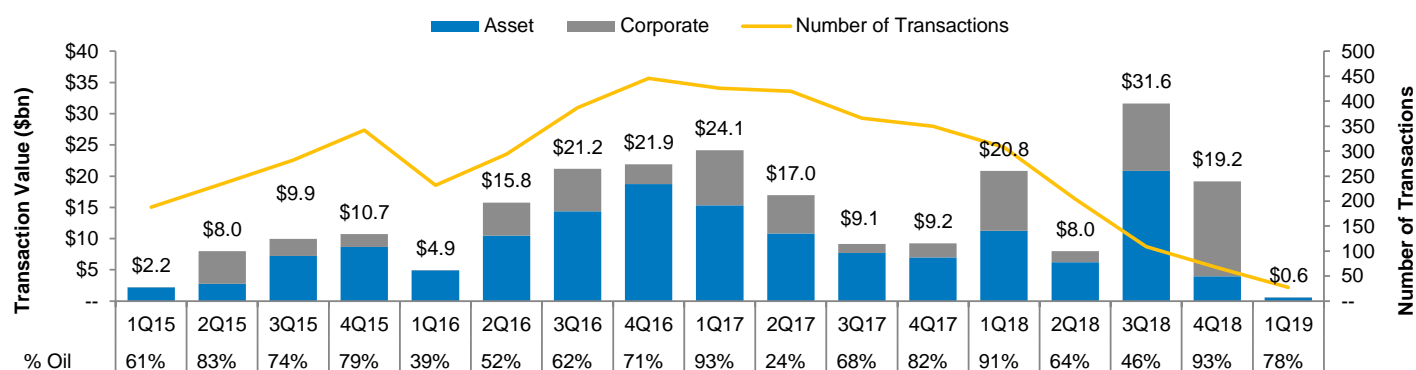
Week in Review

- Mid-Con Energy Partners sold substantially all of its Texas properties for \$60 million to Scout Energy Group IV
- Scout Energy Management sold producing properties in Caddo, Grady, and Osage counties, OK for \$27.5 million to Mid-Con Energy Partners
- QEP Resources announced a review of strategic alternatives. **BMO and Evercore are acting as financial advisors**
- BMO is marketing Juno's divestiture of Permian Basin assets in Crosby and Lubbock counties, TX (see page 4)
- BMO is also marketing Rio Oil & Gas' divestiture of Midland Basin assets in Glasscock County, TX (see page 5)

Key Industry Indicators

Indicator	Current Value	Week's Change	% Change	Direction
Prompt Oil Price (\$/bbl)	\$56.96	\$2.55	4.7%	↑
Prompt Gas Price (\$/mmbtu)	\$2.70	\$0.13	4.9%	↑
Wkly Trans. Value (\$mm)	\$283	\$272	nmf	↑
Wkly Trans. Count	4	3	300%	↑
US Rig Count	1,047	(4)	(0.4%)	↓
US Oil Prod'n (mmbbl/d)	12.0	0.1	0.8%	↑
US Gas Prod'n (bcf/d) ⁽¹⁾	107.4	--	--	—
US Oil Storage (mmbbl)	454.5	3.7	0.8%	↑
US Gas Storage (tcf)	1.7	(0.2)	(9.4%)	↓

Quarterly Deal Activity



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

Commodities

- Oil ended last week up. TransCanada restarted the Nebraska-Illinois portion of Keystone that started leaking in early February. No indication yet of when full flow rates will be able to resume. Alberta announced its crude-by-rail ("CBR") plan, whereby Alberta plans to lease 4,400 rail cars and reach 120kbpd of CBR capacity in roughly three years. Crude oil imports and exports increased. The near-term contract closed up \$2.55, or 4.7%, at \$56.96
- Natural gas ended last week up. Western basis was extremely volatile as the market traded around recent headlines for summer maintenance on Westcoast pipeline, which drove basis higher. Additionally, warmer weather is expected in the summer for the West Coast. Weather forecasts for early March were more bullish than expectations. The near-term contract closed up \$0.13, or 4.9%, at \$2.70

Equity Markets

- S&P E&P⁽²⁾ underperformed last week 0.4% vs. SPX⁽²⁾ 1.1%
- The major U.S. equity indexes finished higher last week. Consumer discretionary, consumer staples, financials, health care, industrials, materials, real estate, and tech finished higher. Materials performed the best, up 3.3%

Debt Markets

- Five issuers priced five tranches for \$3.9 billion in proceeds
- Year-to-date U.S. volume is down 7% year-on-year
- U.S. high yield funds reported an inflow of \$284 million
- ETFs reported an inflow of \$55.1 million, while mutual funds reported an inflow of \$228.8 million
- High yield index yield was 6.67%; high yield energy index yield was 7.90%

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.

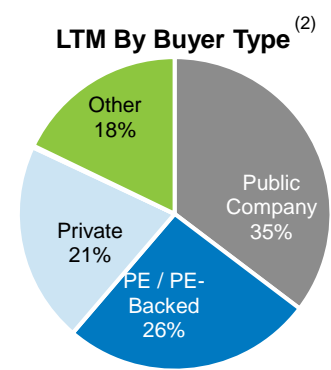
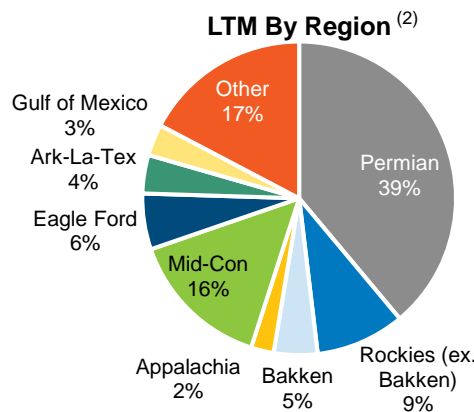
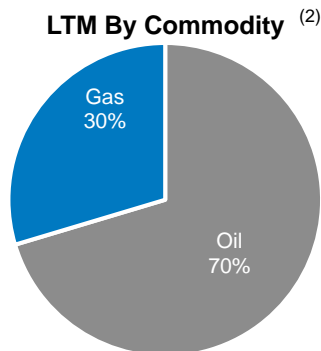


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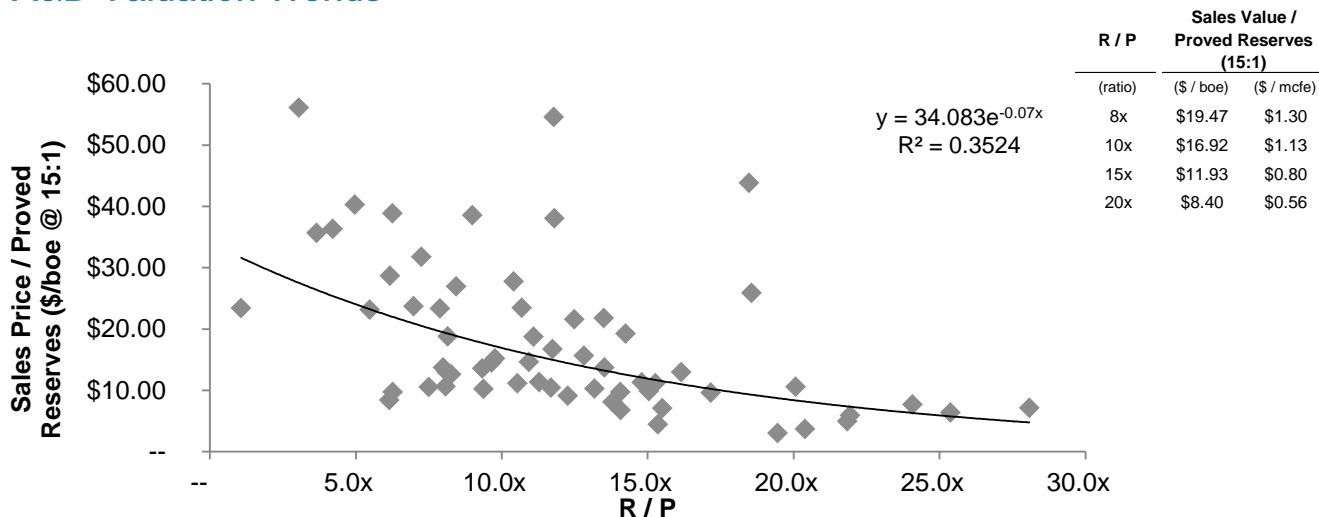
The 10 Most Recent Asset Transactions Over \$20 Million

Ann'd Date	Buyer	Seller	Area	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre)
19-Feb-19	Scout Energy Partners	Mid-Con Energy Partners	Other	North Texas assets	\$60	\$8.22	n.a.	n.a.
19-Feb-19	Mid-Con Energy Partners	Scout Energy Partners	Mid-Continent	Caddo, Grady, and Osage cos., OK	\$28	n.a.	\$20,960	n.a.
19-Feb-19	Undisclosed Buyer	Noble Energy	Permian	Non-core acreage in the Delaware Basin	\$63	n.a.	n.a.	n.a.
19-Feb-19	Undisclosed Buyer	Noble Energy	Permian	13,000 net acres in Reeves Co., TX	\$132	n.a.	n.a.	\$10,154
14-Feb-19	Undisclosed Buyer	Harvest Oil & Gas Corp	Other Rockies	San Juan Basin assets	\$43	\$1.57	\$10,835	n.a.
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

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⁾



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

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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

- [Mid-Con Energy Partners, LP Announces Strategic Transaction Strengthening Balance Sheet](#)
- [QEP Resources Announces Review of Strategic Alternatives](#)
- [Devon Energy Announces Final Step to Complete Transformation to U.S. Oil Growth Company](#)

Industry Headlines

- [As Westchester Clamors For Gas, ConEd Wants Others to Cut Back](#)
- [Natural Gas Moratoriums Around State Due to Lack of Pipelines](#)
- [U.S. Shale Boom Keeps Rolling Even as Wildcatters Save Cash](#)
- [California's Dirty Oil Gets Pricey Amid Venezuela Sanctions](#)
- [The OPEC+ Oil Deal Is Standing on One Wobbly Leg](#)
- [Permian-Fueled Shale Boom Shows Little Sign of Abating, Even With Capital Spending Cuts](#)
- [Official Says Northern Access Pipeline Progress Would Mean Local Jobs](#)
- [Oil And Gas Investors Tell Producers to Focus on Returns, Not Endless Growth](#)

(Click headline to link to the full article)



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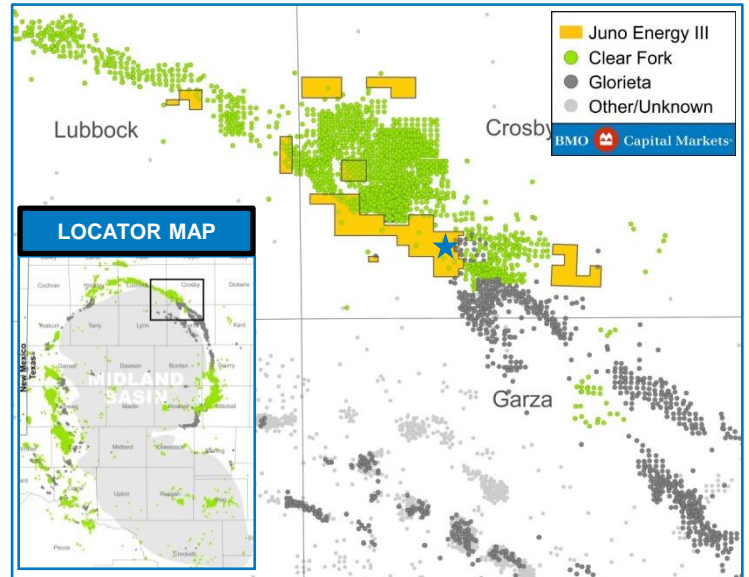
Currently on the Market from BMO: Juno Permian Divestiture

ASSET OVERVIEW

- Long-life, shallow decline oil assets located in the prolific Clear Fork Trend of the Permian Basin
- Largely contiguous 10,250 net acre position located in the Hoople Field in Crosby and Lubbock counties, Texas
 - 100% operated with high WI (100%) and NRI (>75%)
 - Favorable leasehold position with little-to-no drilling obligations until 2021; >50% of acreage position under two leases from one landowner
- Current production of ~300 net bopd (100% oil) with significant remaining drilling inventory consisting of ~200+ low-risk Clear Fork locations
- Asset provides substantial, economic running room for organic and acquisitive growth
 - Existing Clear Fork acreage only ~15% developed based on 10-acre development plan
 - Additional upside through 5-acre development, secondary recovery and Glorieta development as demonstrated in offsetting acreage; CO₂ and Wolfcamp potential
 - Multiple bolt-on acquisition opportunities and new leasing opportunities
- Acreage position largely delineated through existing and offset development; full-scale development plan in place with drill-ready infrastructure

PROCESS OVERVIEW

- VDR available late February
- Contact Chelsea Neville at juno.permian@bmo.com or 713-546-9703 for a Confidentiality Agreement, access to the VDR, and/or to request a data room presentation



ASSET HIGHLIGHTS

- | | |
|--|---|
| Large, Contiguous Acreage Position in the Prolific Clear Fork Oil Trend | <ul style="list-style-type: none"> • High quality anchor asset in the heart of the Midland Basin's Eastern Shelf with multiple stacked pay potential <ul style="list-style-type: none"> ■ Acreage situated in the Hoople Field, one of the most active Clear Fork development areas with >1,000 Clear Fork producers drilled in the last 10 years ■ Majority of Juno's acreage is situated in the core of the field with vertical offset Clear Fork EURs of ~60 MBo • Primary recovery economics provide attractive IRRs with low development costs <ul style="list-style-type: none"> ■ Secondary recovery provides an incremental increase of 150% of primary EUR based on analog fields • Clear Fork A STOOIP of up to 13 mmbo per section based on core and log analysis |
| Increased Oil Cuts and Improved Economics from Enhanced Completions | <ul style="list-style-type: none"> • Targeted, optimized fracs providing robust EURs and lower WOR vs. offset results <ul style="list-style-type: none"> ■ Fracture growth limited to ~40 feet from perf ■ Oil cuts have improved by three-fold using selective completions • Prior generation completions took the entirety of the pay zone and pumped excessive volumes, thereby increasing communication with higher WOR sand bodies |
| Asset Ready for Full-Scale Development | <ul style="list-style-type: none"> • Significant inventory of 200+ economic Clear Fork locations remaining (at 10-acre spacing) • Fast cycle times (~4-5 days spud-to-spud) and favorable land position provides the ability to accelerate development within the first year <ul style="list-style-type: none"> ■ Juno's predecessor in the Hoople Field grew production by over 25x in less than 3 years • Inexpensive access to water sources and disposal provides for low-cost waterflood and frac'ing operations • Significant investments in infrastructure, including electrical, roads, pipelines, and facilities • No deferred maintenance or P&A issues |
| Substantial Unquantified Upside | <ul style="list-style-type: none"> • Near-term development potential by exploiting the Glorieta across Juno's acreage position <ul style="list-style-type: none"> ■ Acreage position on trend with offset Glorieta development ■ Potential development opportunity to co-mingle Clear Fork and Glorieta production, yielding twice the reserves with little incremental D&C capex • Additional reserve recovery from waterflood operations and 5-acre development; future tertiary recovery • Offset operator testing horizontal Wolfcamp potential in the area |

Source: Juno Permian Divestiture announcement



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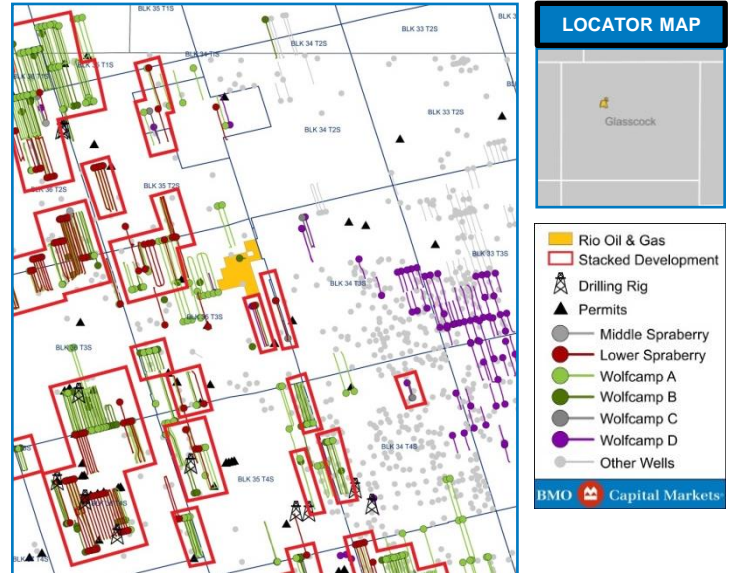
Currently on the Market from BMO: Rio Oil & Gas II Glasscock County Divestiture

ASSET OVERVIEW

- Opportunity to acquire highly economic and contiguous 1,064 net acre (1,645 gross acre) position in the Midland Basin located in west-central Glasscock County, Texas
 - Assets provide high degree of operational control with 98% operated, 74% HBP, and 67% average WI
- Current net production of ~54 boe/d from ten active vertical wells holds the majority of acreage
- Proven development opportunities targeting the Lower Spraberry, Wolfcamp A, and Wolfcamp D formations
- Active development by Parsley, Oxy, Diamondback, and others highlights robust returns and de-risked drilling locations
- Continued improvement in well performance driven by completion optimization

PROCESS OVERVIEW

- VDR available late February / early March 2019
- Contact Chelsea Neville (rio.glasscock@bmo.com or 713-546-9703) for a Confidentiality Agreement, access to the VDR, and/or to request a data room presentation



ASSET HIGHLIGHTS

Active Development By Offset Operators Producing Robust Returns

- Outstanding position in one of the most active basins in the U.S. with 181 rigs in the Midland Basin and 14 in Glasscock County
- ~3,500 feet of porous, brittle, hydrocarbon rich pay available from the top of the Spraberry to the base of the Wolfcamp
- Active offsetting development in the Lower Spraberry, Wolfcamp A, Wolfcamp B, and Wolfcamp D by Parsley, OXY, Crownquest, Cinnabar, Encana, SM, Callon, Diamondback, Hunt, and others
 - Parsley is actively developing with strong results its directly offsetting Calverley assets in the LS, WCA, and WCB
 - Parsley brought 17 wells online in 2018; outperformed historical with peak rates up to 2,000 boepd (84% oil)
 - Parsley acquired Calverley position through BTA acquisition (\$40,000+/net acre)
 - OXY recently completed five wells (west of Rio) targeting the WCA and has two additional permits
- IP and EURs continue to increase through optimization of completion techniques: predominantly slickwater fracs with proppant loading at ~1,900 lbs/ft
- Over 30 potential stacked locations with additional unquantified upside in the Wolfcamp D

Operated Asset Set Up For Efficient, Stacked-Pay, Long Lateral Development

- Contiguous 1,064 net acres in west-central Glasscock County
- 75% effective (8/8ths) net revenue interest
- 74% of net acres HBP from vertical producers with remaining acreage in primary term with 2+ years remaining
- Leasehold primed for efficient cube development with 100% of locations expected to support 7,500'+ laterals; 100% of acreage owns Spraberry through WCA rights and select ownership of WCD
- No long term oil and gas sales dedications offer the purchaser marketing flexibility

Full Area Exit

- Full area exit for Rio
- Rio's investments have been focused on assembling the position, perfecting subsurface interpretation, and readying the asset for full-field development

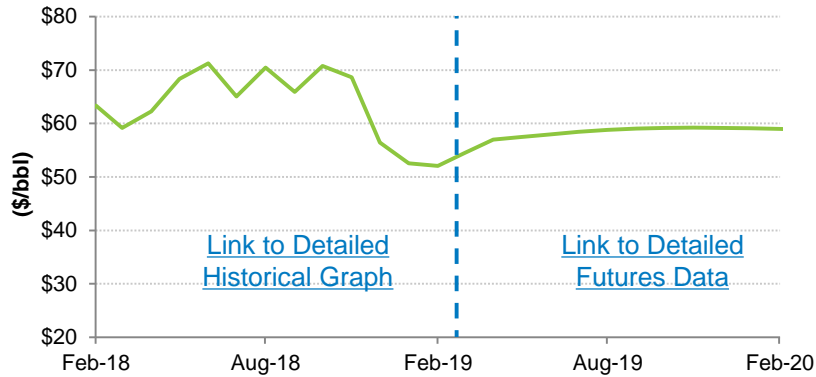
Source: Rio Oil and Gas II Glasscock County Divestiture announcement



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Commodity Prices

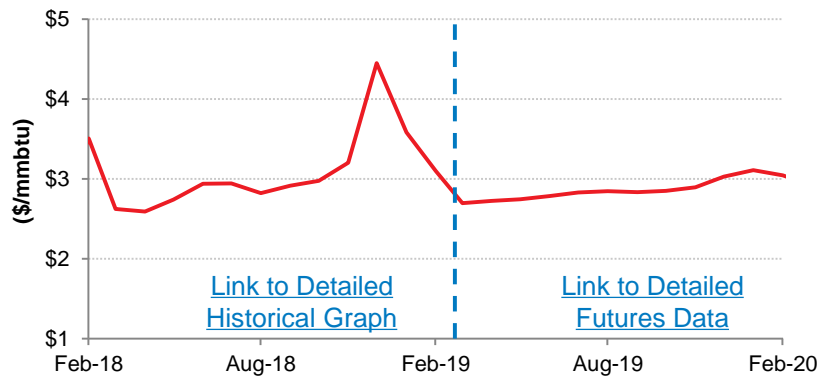
WTI OIL (HISTORICAL / FORECAST)



NYMEX WTI Futures as of 21-Feb-19 Close (\$/bbl)

Period ⁽¹⁾	Current	Last Wk.	6 Mo. Ago	1 Yr. Ago
12 Mo. Strip	\$58.60	\$56.33	\$64.67	\$59.19
2019	\$58.48	\$56.19	\$63.51	\$56.31
2020	\$58.31	\$56.50	\$60.47	\$53.55
2021	\$56.62	\$55.12	\$58.05	\$51.91
2022	\$55.35	\$54.17	\$56.46	\$51.24
2023	\$54.74	\$53.78	\$55.57	\$51.13

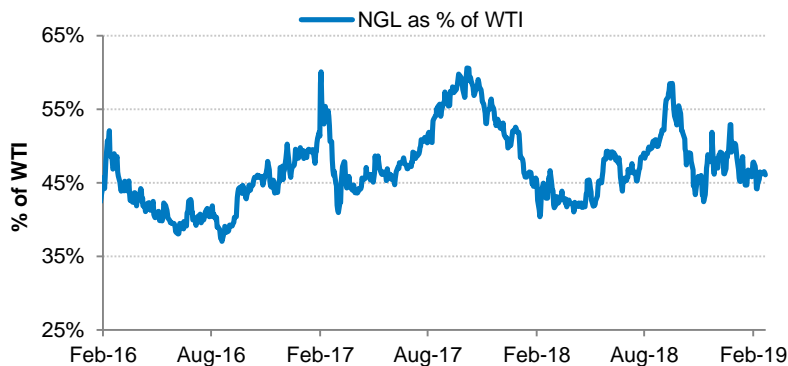
HENRY HUB NATURAL GAS (HISTORICAL / FORECAST)



NYMEX Gas Futures as of 21-Feb-19 Close (\$/mmbtu)

Period ⁽¹⁾	Current	Last Wk.	6 Mo. Ago	1 Yr. Ago
12 Mo. Strip	\$2.87	\$2.78	\$2.91	\$2.82
2019	\$2.82	\$2.73	\$2.83	\$2.78
2020	\$2.73	\$2.73	\$2.66	\$2.78
2021	\$2.63	\$2.65	\$2.59	\$2.83
2022	\$2.81	\$2.84	\$2.73	\$2.97
2023	\$2.81	\$2.84	\$2.73	\$2.97

NGL PRICING⁽²⁾



Historical Prices as of 21-Feb-19 Close (\$/gal)

NGLs	Current	Last Wk.	6 Mo. Ago	1 Yr. Ago
Ethane	\$0.31	\$0.30	\$0.40	\$0.24
Propane	\$0.72	\$0.66	\$0.97	\$0.83
Butane	\$0.82	\$0.80	\$1.02	\$0.90
Iso-butane	\$0.91	\$0.92	\$1.16	\$1.13
Pentane+	\$1.19	\$1.16	\$1.49	\$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.

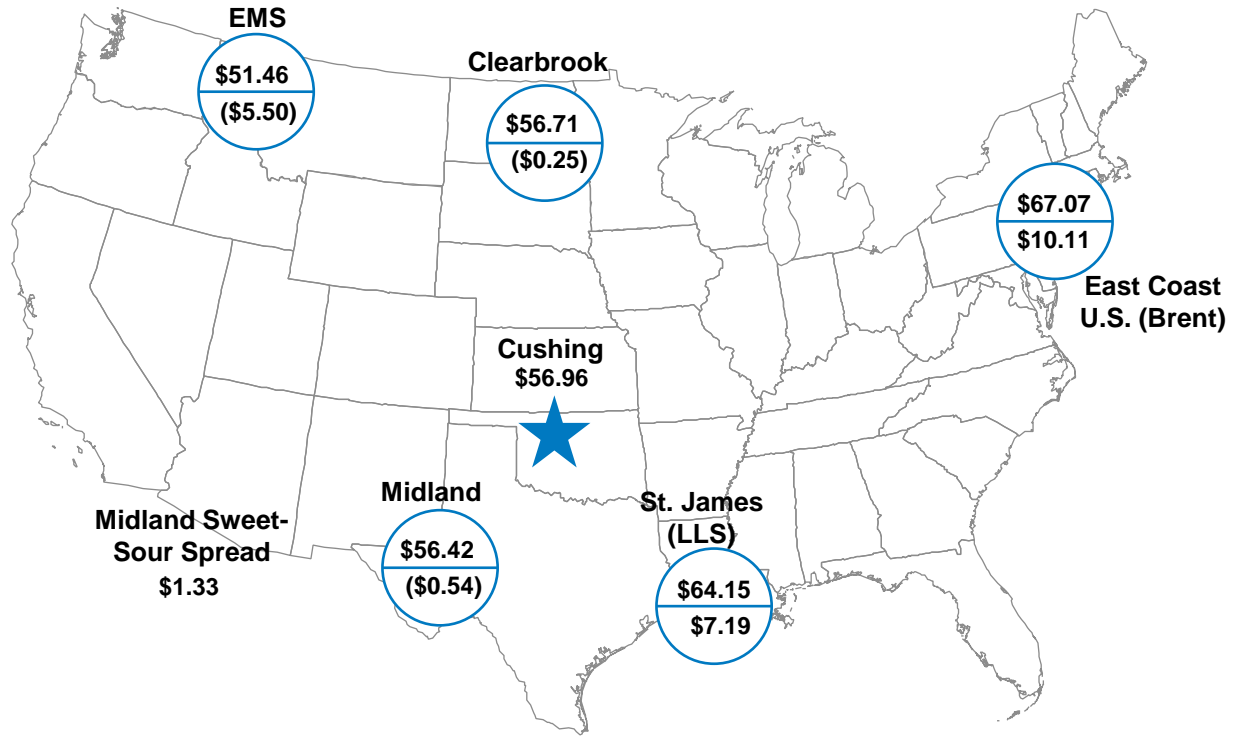


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Commodity Prices (cont'd)

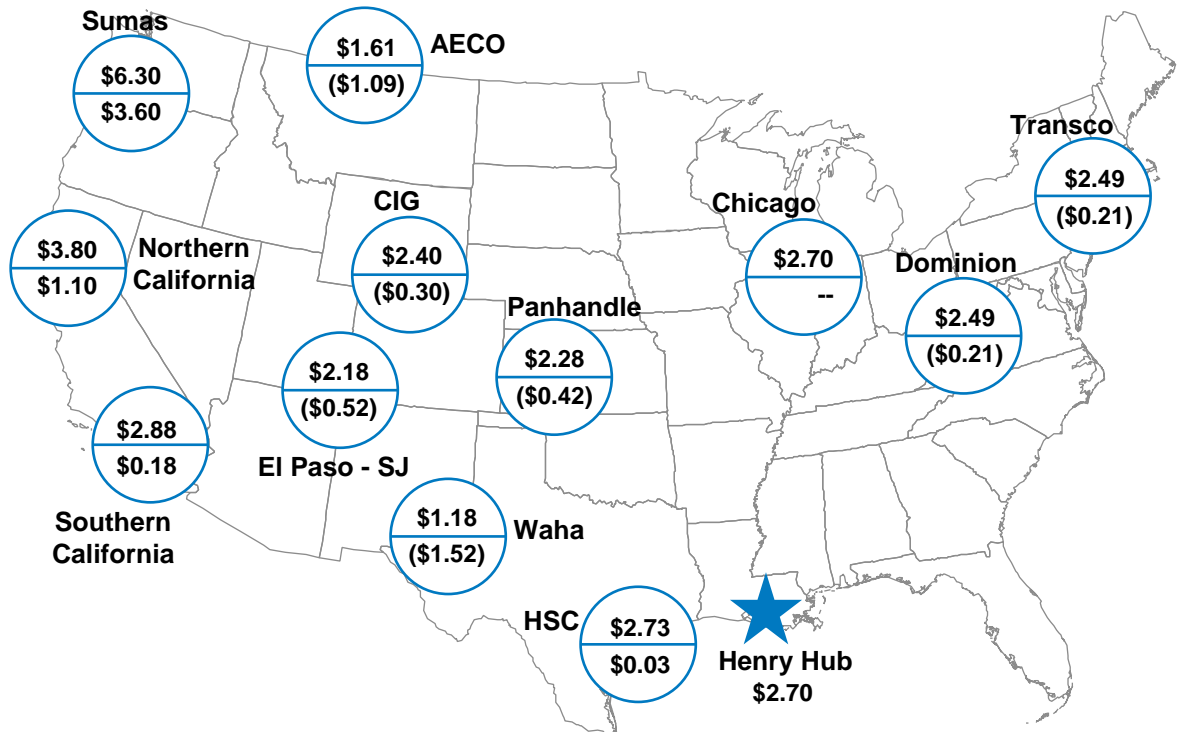
OIL PRICING & DIFFERENTIALS TO CUSHING WTI (\$ / BBL) – AS OF 21-FEB-19

Legend



NATURAL GAS PRICING & DIFFERENTIALS TO HENRY HUB (\$ / MMBTU) – AS OF 21-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.



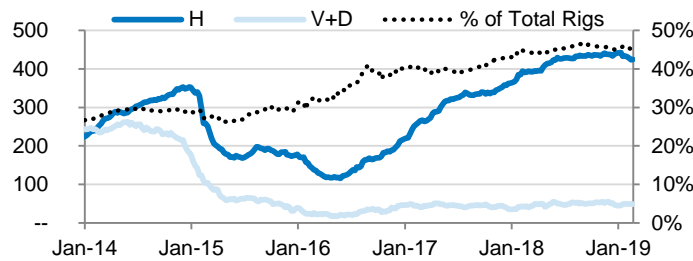
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Permian Snapshot

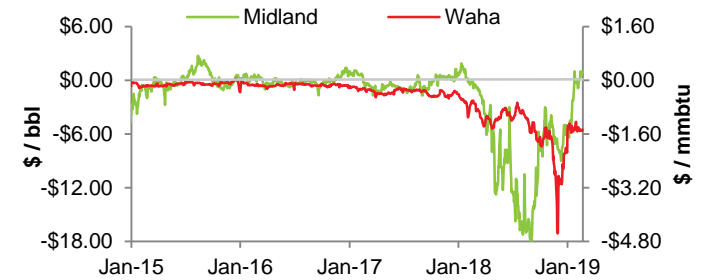
Item	Value	Wkly Change	Last Week
Rig Count	473	█ --	473
Permitting Activity	148	↓ (176)	324

Item	Value	Wkly Change	Last Week
Oil Differential	\$0.90	↓ (\$0.10)	\$1.000
Gas Differential	(\$1.47)	↑ \$0.01	(\$1.48)

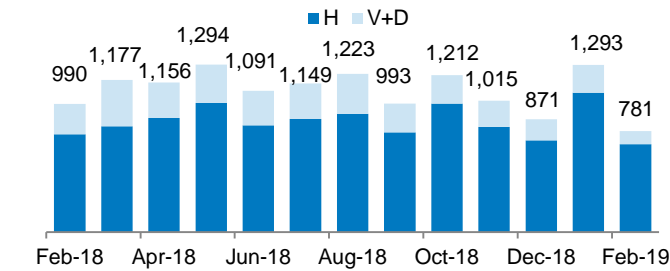
RIG COUNT



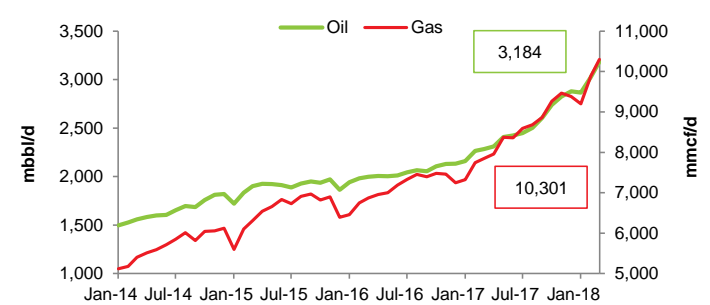
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

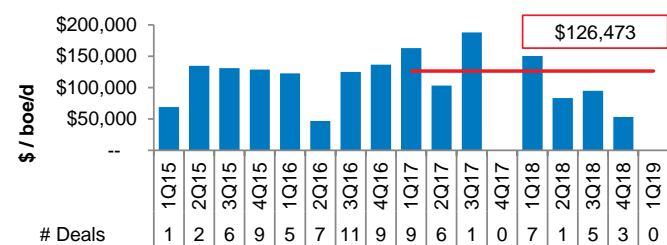


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

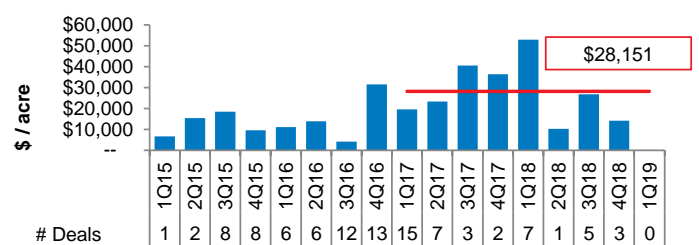
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
19-Feb-19	Undisclosed Buyer	Noble Energy	Non-core acreage in the Delaware Basin	\$63	n.a.	n.a.	n.a.
19-Feb-19	Undisclosed Buyer	Noble Energy	13,000 net acres in Reeves Co., TX	\$132	n.a.	n.a.	\$10,154
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
				Mean	n.a.	\$89,286	\$42,524
				Median	\$63	\$89,286	\$31,707

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 \$45,000/boepd in 2014, \$30,000/boepd in 2015, \$35,000/boepd in 2016 & 2017, and \$40,000/boepd in 2018 & 2019.



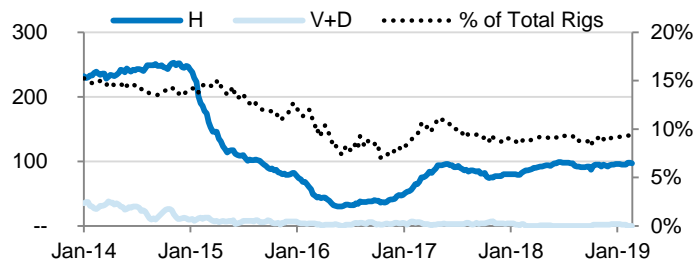
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Eagle Ford Snapshot

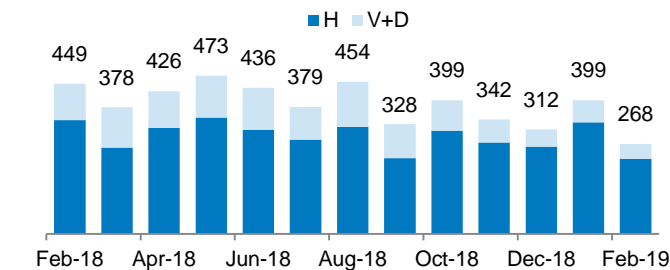
Item	Value	Wkly Change	Last Week
Rig Count	97	↓ (1)	98
Permitting Activity	56	↓ (66)	122

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.50	↓ (\$0.60)	\$9.10
Gas Differential	\$0.02	↑ \$0.02	\$0.00

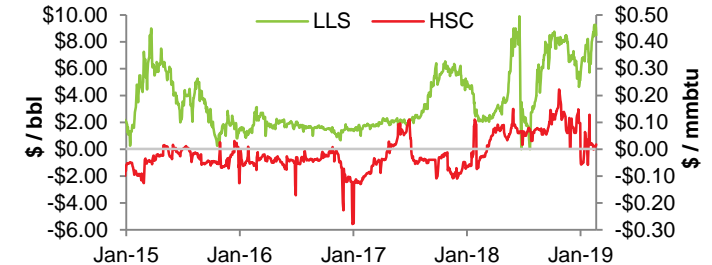
RIG COUNT



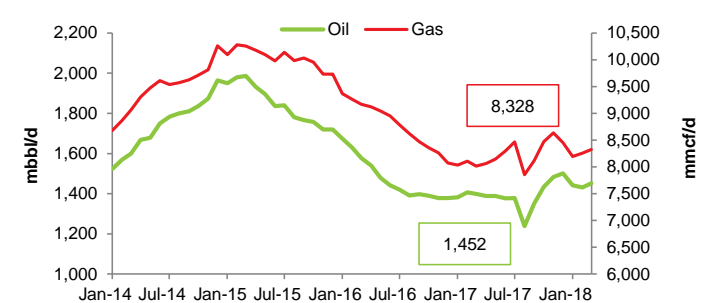
PERMITTING ACTIVITY BY MONTH



DIFFERENTIALS



GROSS PRODUCTION

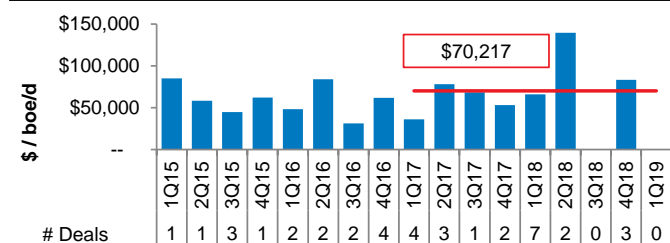


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

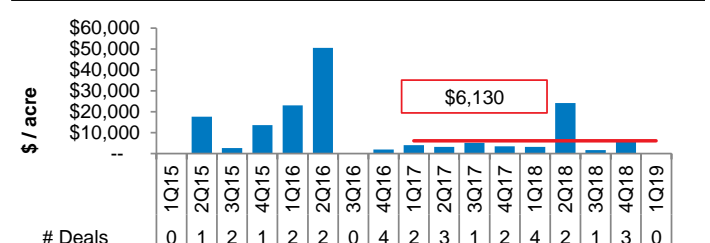
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
19-Nov-18	Lonestar Resources Inc	Sabine Oil & Gas Corp	2,706 net acres in Eagle Ford	\$39	\$2.98	\$48,375	\$14,302
20-Sep-18	WildHorse	Undisclosed Seller	20,305 net Eagle 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

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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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.



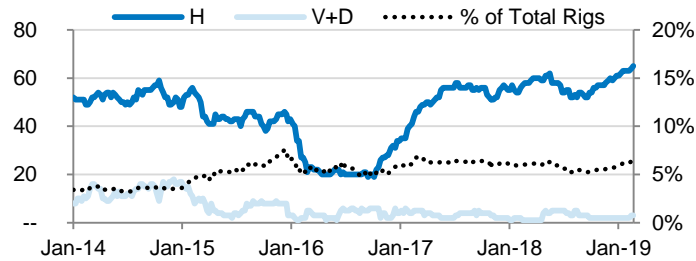
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Ark-La-Tex Snapshot

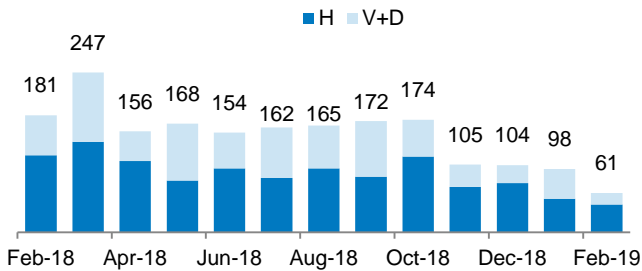
Item	Value	Wkly Change	Last Week
Rig Count	68	↑	67
Permitting Activity	17	↓ (10)	27

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.50	↓ (\$0.60)	\$9.10
Gas Differential	--	--	--

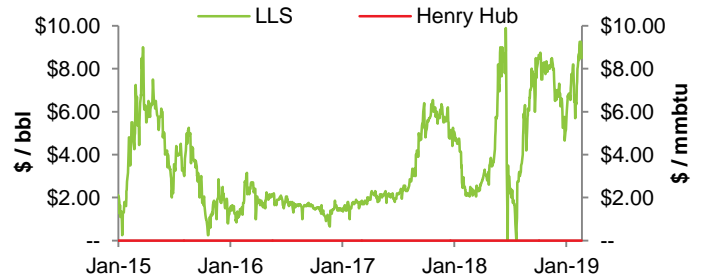
RIG COUNT



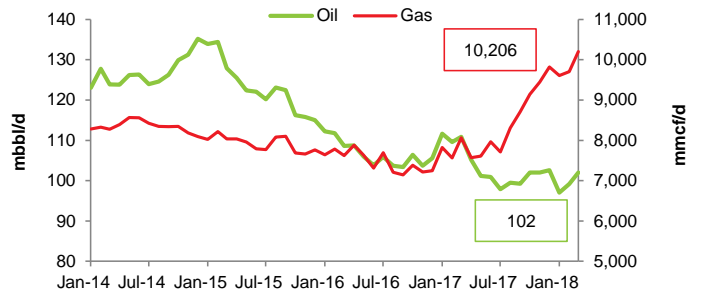
PERMITTING ACTIVITY BY MONTH



DIFFERENTIALS



GROSS PRODUCTION

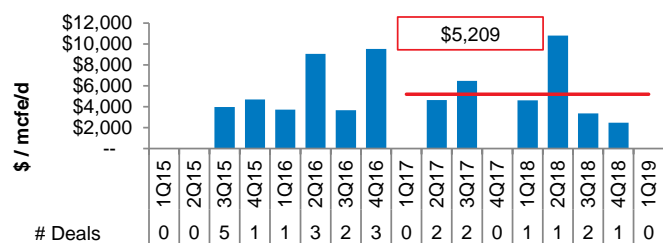


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

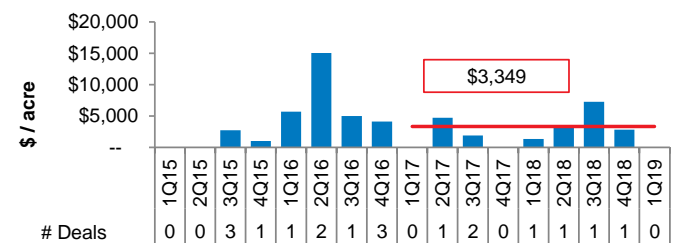
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/mcf)	Prod. Multiple (\$/mcf/d)	Net Acres (\$/acre) ⁽²⁾
19-Dec-18	Comstock	Shelby Shale LLC	6,023 net acres in Haynesville	\$21	n.a.	n.a.	\$3,404
19-Nov-18	Aethon III	QEP Resources Inc	49,700 net acres in Haynesville	\$735	\$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

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.



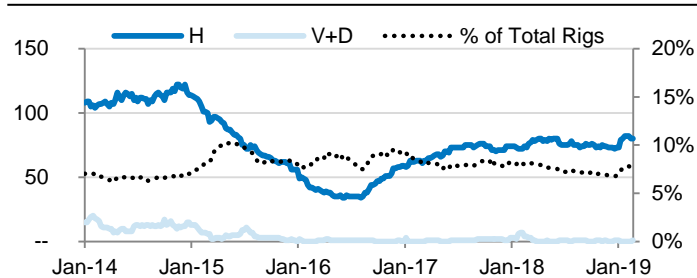
February 25, 2019

Appalachia Snapshot

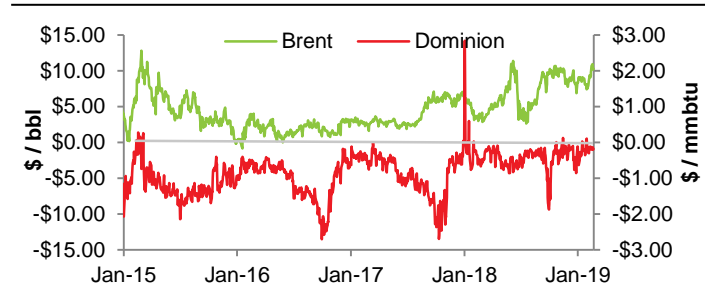
Item	Value	Wkly Change	Last Week
Rig Count	81	↑ 1	80
Permitting Activity	27	↓ (41)	68

Item	Value	Wkly Change	Last Week
Oil Differential	\$10.32	↑ \$0.16	\$10.16
Gas Differential	(\$0.19)	↑ \$0.01	(\$0.19)

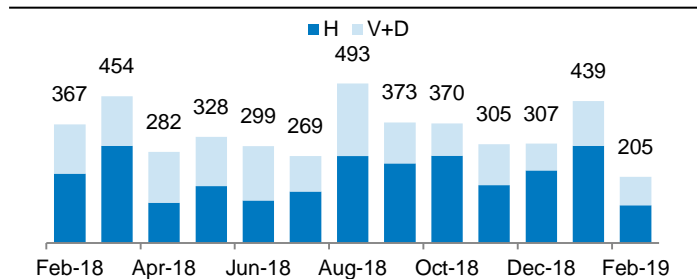
RIG COUNT



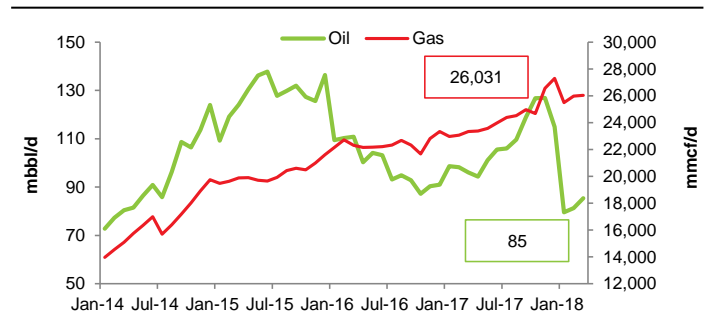
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

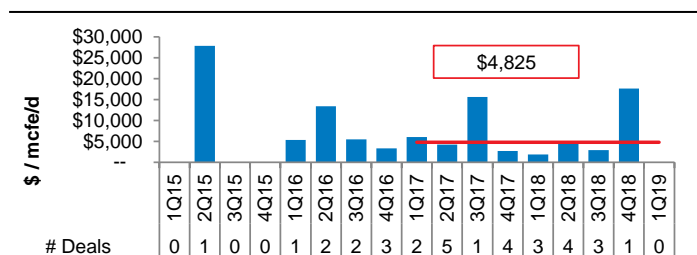


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

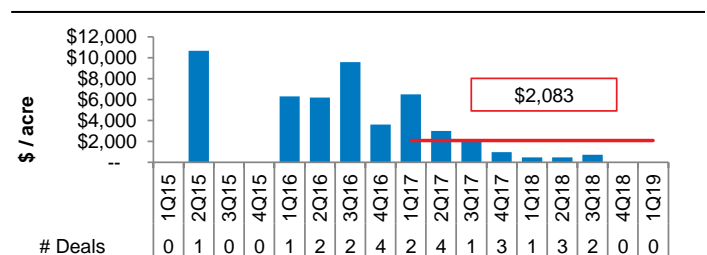
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾	Proved Multiple	Prod. Multiple	Net Acres	
				(\$mm)	(\$/mcf)	(\$/mcf/d)	(\$/acre) ⁽²⁾	
15-Oct-18	Undisclosed Buyer	Range Resources Corp	Overriding royalty interests in Appalachia	\$300	n.a.	\$17,649	n/m	
27-Aug-18	PennEnergy Resources	Rex Energy Corp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

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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.

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



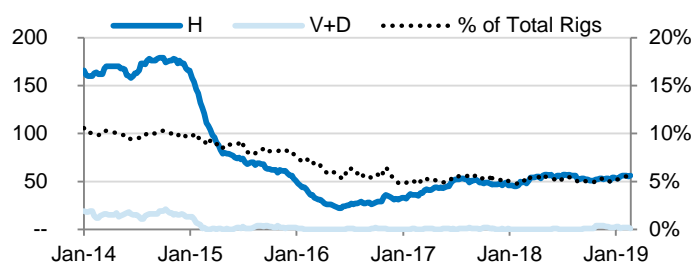
February 25, 2019

Bakken Snapshot

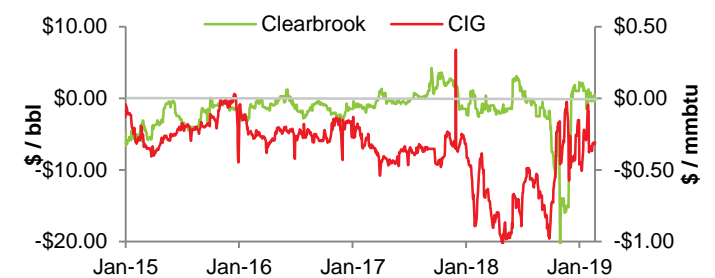
Item	Value	Wkly Change	Last Week
Rig Count	57	█ --	57
Permitting Activity	18	↓ (19)	37

Item	Value	Wkly Change	Last Week
Oil Differential	(\$0.25)	↓ (\$0.50)	\$0.25
Gas Differential	(\$0.31)	█ --	(\$0.31)

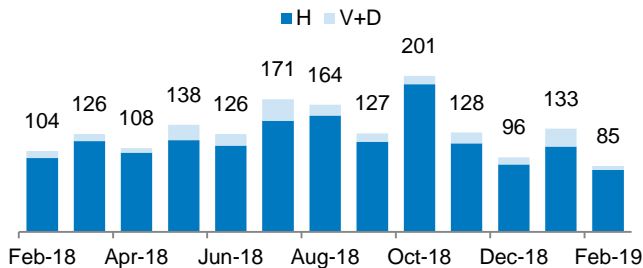
RIG COUNT



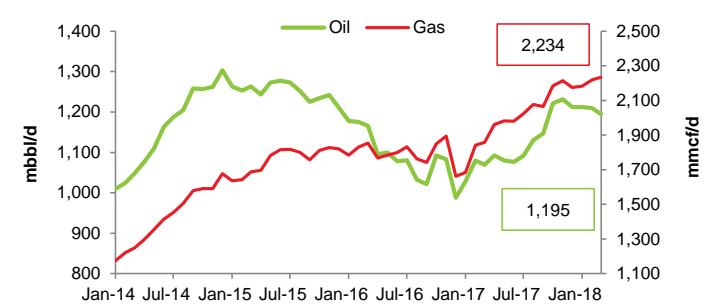
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

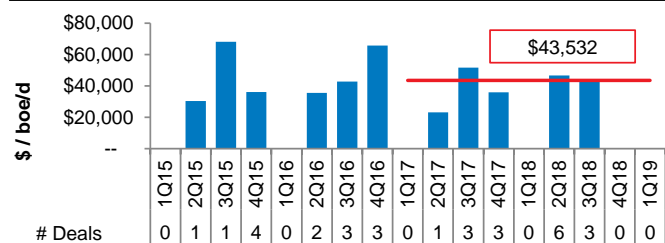


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

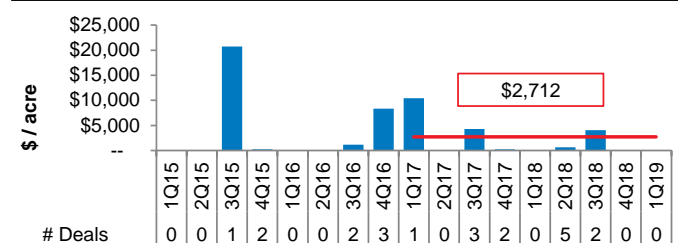
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾
31-Jul-18	Northern Oil and Gas	W Energy Partners	10,600 net acres in Williston Basin	\$288	n.a.	\$42,708	\$27,196
18-Jul-18	Northern Oil and Gas	Pivotal Petroleum Partners 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.
25-Jun-18	Riverbend Oil & Gas LLC	Oasis Petroleum	10,167 net acres in Williston Basin	\$153	n.a.	\$49,196	\$15,049
				Mean	\$146	\$6.04	\$57,234
				Median	\$152	\$6.04	\$45,952

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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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- 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.

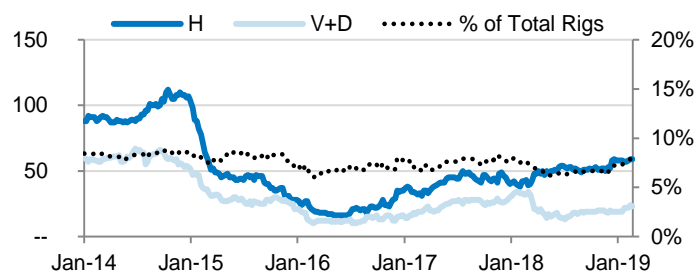


February 25, 2019

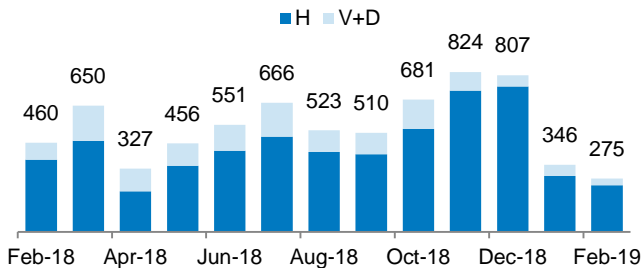
Rockies (excl. Bakken) Snapshot

Item	Value	Wkly Change	Last Week	Item	Value	Wkly Change	Last Week	
Rig Count	82	↓	(1)	83	Oil Differential	(\$0.25)	↓ (\$0.50)	\$0.25
Permitting Activity	21	↓	(160)	181	Gas Differential	(\$0.31)	█ --	(\$0.31)

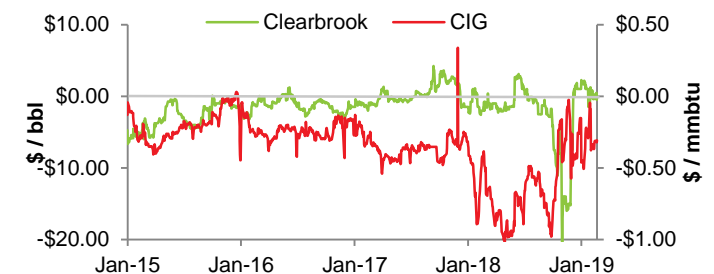
RIG COUNT



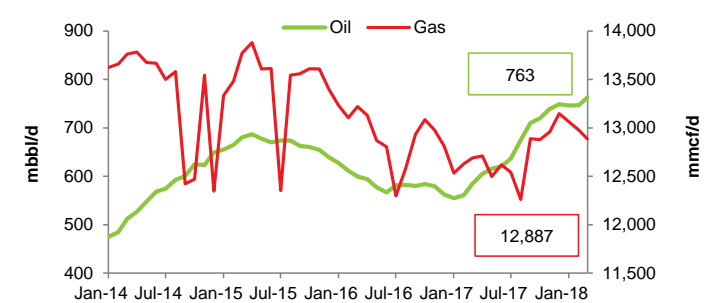
PERMITTING ACTIVITY BY MONTH



DIFFERENTIALS



GROSS PRODUCTION

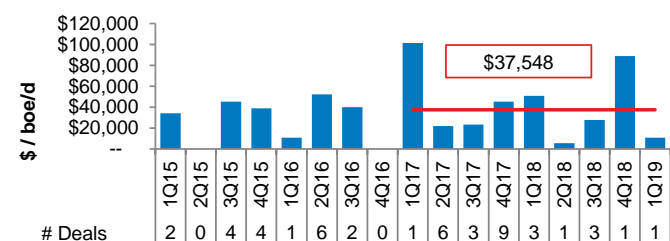


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

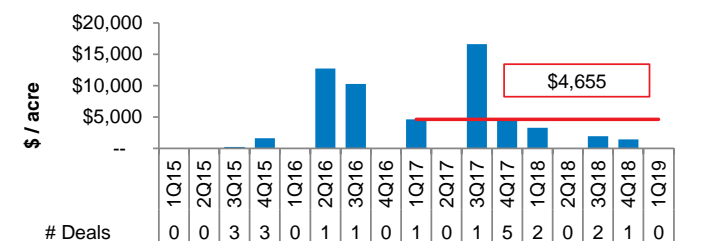
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾	Proved Multiple	Prod. Multiple	Net Acres	
				(\$mm)	(\$/boe)	(\$/boe/d)	(\$/acre) ⁽²⁾	
14-Feb-19	Undisclosed Buyer	Harvest Oil & Gas Corp	San Juan Basin assets	\$43	\$1.57	\$10,835	n.a.	
01-Oct-18	DJR Energy LLC	Encana	182,000 net acres in San Juan 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	
				Mean	\$170	\$1.57	\$48,457	\$5,001
				Median	\$100	\$1.57	\$47,052	\$3,995

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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 & 2019.



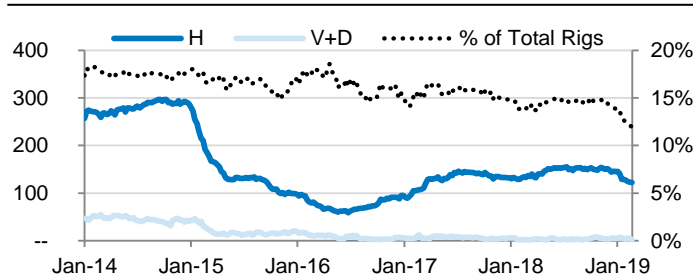
February 25, 2019

Mid-Continent Snapshot

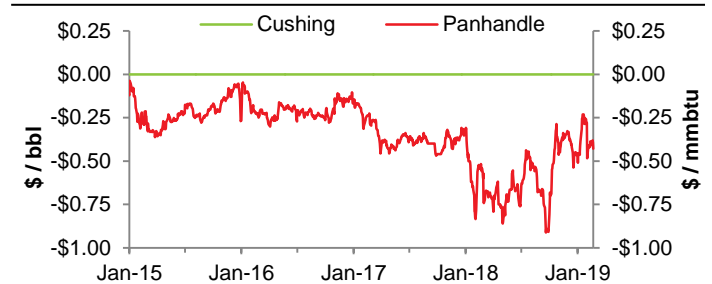
Item	Value	Wkly Change	Last Week
Rig Count	124	↓ (4)	128
Permitting Activity	46	↓ (25)	71

Item	Value	Wkly Change	Last Week
Oil Differential	--	█	--
Gas Differential	(\$0.43)	↓ (\$0.03)	(\$0.40)

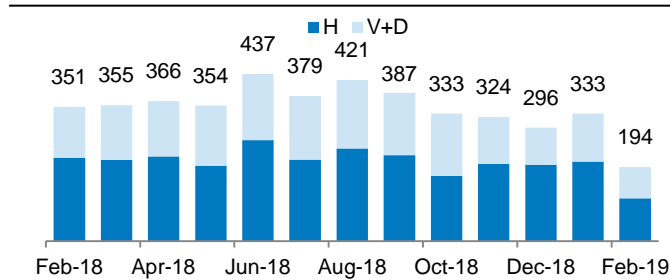
RIG COUNT



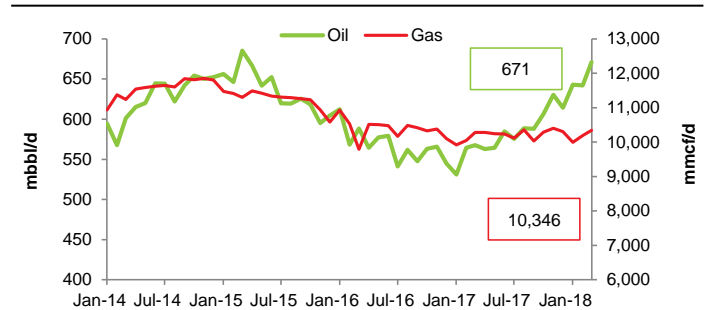
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH



GROSS PRODUCTION

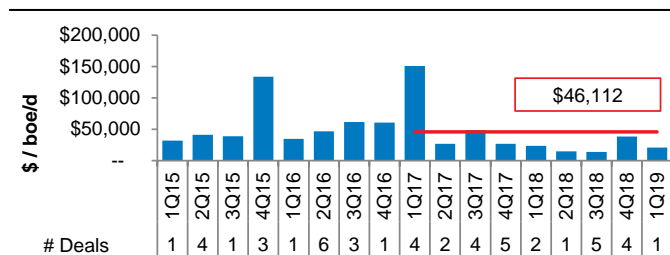


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

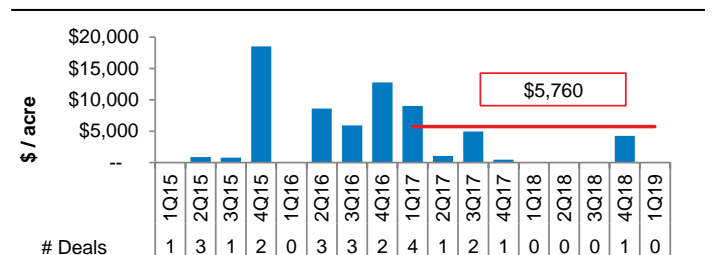
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽¹⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽²⁾	
19-Feb-19	Mid-Con Energy Partners	Scout Energy Partners	Caddo, Grady, and Osage cos., OK	\$28	n.a.	\$20,960	n.a.	
11-Dec-18	Undisclosed Buyer	Riviera Resources Inc	37,000 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	
				Mean	\$449	\$3.04	\$27,663	\$4,220
				Median	\$68	\$3.04	\$17,000	\$2,038

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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

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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 & 2019.



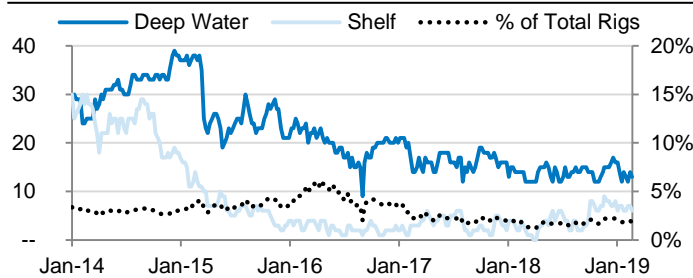
February 25, 2019

Gulf of Mexico Snapshot

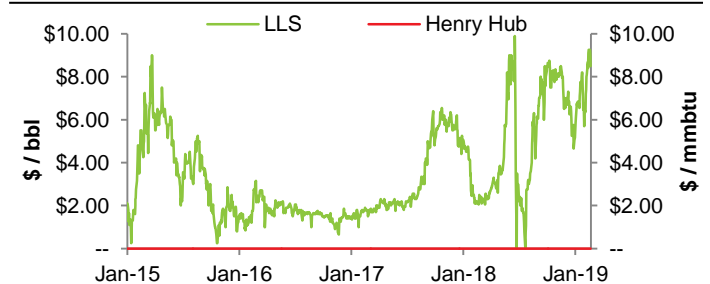
Item	Value	Wkly Change	Last Week
Rig Count	19	↓ (2)	21
Permitting Activity	6	↓ (1)	7

Item	Value	Wkly Change	Last Week
Oil Differential	\$8.50	↓ (\$0.60)	\$9.10
Gas Differential	--	█ --	--

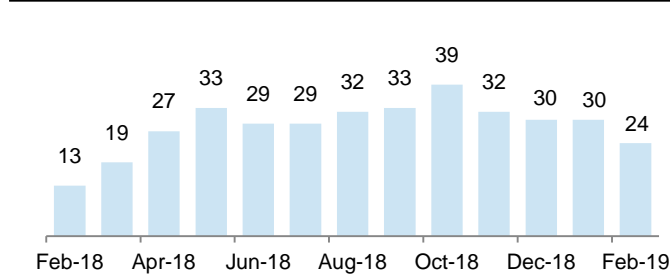
RIG COUNT



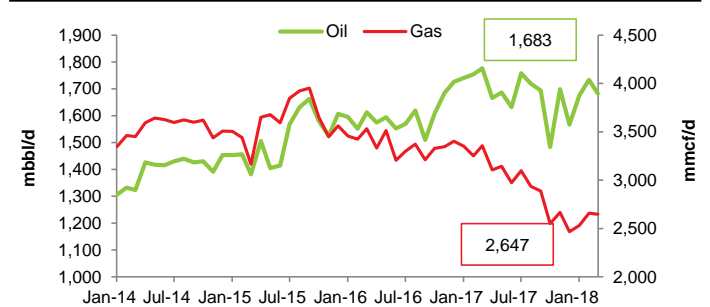
DIFFERENTIALS



PERMITTING ACTIVITY BY MONTH⁽¹⁾



GROSS PRODUCTION

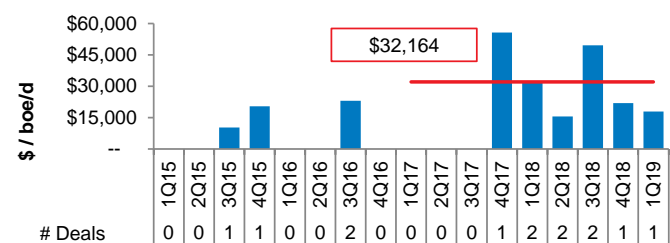


TRANSACTION ACTIVITY (EXCLUDES CORPORATE DEALS)

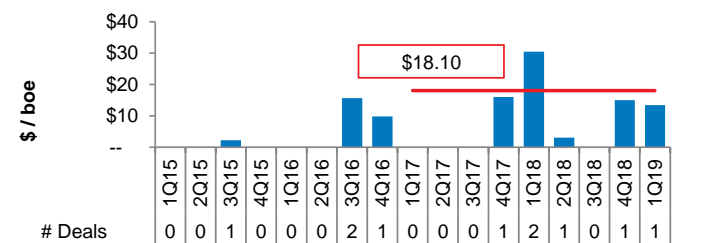
Ann'd Date	Buyer	Seller	Asset Description	Value ⁽²⁾ (\$mm)	Proved Multiple (\$/boe)	Prod. Multiple (\$/boe/d)	Net Acres (\$/acre) ⁽³⁾	
16-Jan-19	Talos Energy Inc	Samson Energy Co LLC	Non-op Gulf of Mexico working interest	\$30	\$13.45	\$17,939	n.a.	
10-Oct-18	Murphy	Petrobras	Gulf of Mexico joint venture	\$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.

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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 25, 2019

[Click event to open](#)

Upcoming Industry Events

March 2019

Mar 5	Hart's 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 8-9	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 17	176th OPEC Meeting
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

January 2020

Jan 23	IPAA Private Capital Conference
Jan 17	ADAM-Houston Monthly Luncheon
Jan 21	Houston Producers Forum Luncheon

February 2020

Feb 19	Houston Producers Forum Luncheon
Feb 25-26	DUG Haynesville (Shreveport)

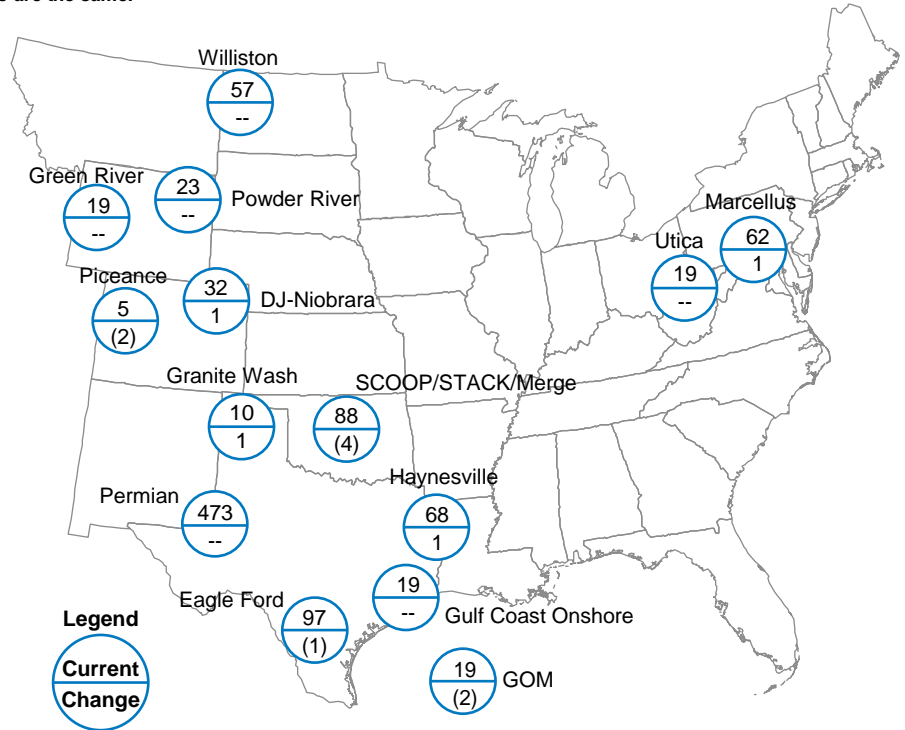


February 25, 2019

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	1,047	(4)	1,051	978
Oil	853	(4)	857	799
Gas	194	--	194	179
Miscellaneous	--	--	--	--
Directional	68	(2)	70	69
Horizontal	916	1	915	842
Vertical	63	(3)	66	67
Basin				
Permian	473	--	473	435
SCOOP/STACK/Merge	88	(4)	92	101
Granite Wash	10	1	9	18
Eagle Ford	97	(1)	98	86
Haynesville	68	1	67	59
Marcellus	62	1	61	54
Utica	19	--	19	23
Williston	57	--	57	50
DJ-Niobrara	32	1	31	26
Green River	19	--	19	20
Powder River	23	--	23	17
Piceance	5	(2)	7	7
Gulf Coast Onshore	19	--	19	18
GOM	19	(2)	21	17
Alaska	13	1	12	9
Other	43	--	43	38
Mid-Con	26	(1)	27	16
Rockies	3	--	3	5
Western	12	1	11	14
Eastern	2	--	2	3



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