

## Market Update

PRODUCTS	3/19/18	3/20/18	3/21/18	3/22/18	3/23/18
WTI Crude Oil	62.06	63.40	65.17	64.30	65.88
Brent Crude Oil	66.05	67.42	69.47	69.47	70.45
Natural Gas	2.65	2.68	2.64	2.62	2.59

- [CME Group](#)

## Headlines

### Local North Dakota

- **N.D. oil, gas production jumps in January. [Kallanish Energy](#)**
  - North Dakota oil and natural gas production in January jumped significantly from one year ago, despite harsh winds, subzero temperatures and power outages. Crude production jumped more than 20%, to 1.18 million barrels per day (MMBPD), from 980,294 BPD in January 2017, Kallanish Energy calculates. North Dakota is projected to break its oil production record of 1.2 MMBPD in May or June, according to Lynn Helms, North Dakota director of Mineral Resources. Regulators have seen an uptick in applications for drilling permits, indicating the oil industry is planning to increase activity this spring and summer. Natural gas production during January averaged 2.07 million cubic feet per day (MMcf/d), up a whopping 32.9% increase from January 2017's 1.56 MMcf/d average production. Companies flared 310 MMcf/d in January, or roughly 15% of gas produced statewide. The figures show an increase in flaring since December but fall within the gas capture targets set by the North Dakota Industrial Commission. North Dakota saw an increase in rail transportation of crude oil in January, up 5 percentage points, to 14%.

### Domestic U.S.

- **Oil rises as Saudi backs extending output cuts into 2019. [Reuters](#)**
  - Crude prices rose on Friday, hitting their highest since late January after the Saudi energy minister said OPEC and allied producers would need to keep coordinating supply cuts into 2019, and as concerns grew over the future of Iranian crude exports. Brent crude futures LCOc1 hit a session high of \$70.22 a barrel before retreating to \$70.13 by 10:27 a.m. EDT (1427 GMT), up \$1.22 or 1.77 percent. For the week, Brent was up about 5.9 percent, its strongest weekly rise since July. U.S. West Texas Intermediate (WTI) crude futures CLc1 were at \$65.34 a barrel, up \$1.04, or 1.6 percent. On the week, WTI was up about 4.4 percent. "There are a number of bullish things to hang the hat of the rally on this week; be it the inventory report ... or the tariff news, or the heightened tensions between Saudi and Iran," said Matt Smith, director of commodity research at Clipper Data in Louisville, Kentucky. President Donald Trump's decision to replace national security adviser H.R. McMaster with John Bolton, who is seen as more hawkish on Iran, also supported prices, Smith said. Oil's rise defied a slump in global stock markets, which fell in response to worries about a trade stand-off between the United States and China. Gold XAU=, seen as a safe haven, hit a two-week high. Since January 2017, the Organization of the Petroleum Exporting Countries as well as a group of non-members, have curbed output by 1.8 million barrels per day. Saudi Energy Minister Khalid al-Falih told Reuters that such curbs would need to continue into 2019 to reduce global oil inventories. "As the Saudi guessing game for the new rebalancing target begins, Brent seems well positioned to have another crack at the \$70 (a barrel) level," PVM said in a note. Although analysts said the stand-off between the United States and China could hit oil markets, for now most said demand looked healthy. "Geopolitical tensions are coming to the front. But global balances are relatively tight at the moment. That's enough to amplify relatively small factors," said Andrew Wilson, head of energy research at BRS Brokers. Morgan Stanley also cited an expected pick-up in seasonal demand in the coming months. "We are only three-four weeks away from peak refinery maintenance, after which crude and product demand should accelerate ... Global inventories are already at the bottom end of the five-year range," the U.S. bank said. "There are sufficient reasons to expect oil prices to strengthen further from here, and we stick with our (Brent) \$75 per

barrel call for Q3,” Morgan Stanley said. Goldman Sachs said in a note this week that demand, and OPEC cuts pushed its Brent spot price expectations to \$82.50 a barrel by mid-year.

○ **Crude Oil at The Top End of Its Range. Seeking Alpha**

- The oil market has traded in a range from just over \$58 to the ominous \$66.66 so far in 2018 on the active month NYMEX WTI crude oil futures contract. The price of the energy commodity has been in bullish mode since trading to lows of \$26.05 in February 2016. In late 2017, NYMEX crude surpassed the \$60 per barrel mark for the first time since June 2016 and for the most part, it has remained north of \$60 this year. After reaching the high, we have had one test on the downside in early February that took the price to a low of \$58.07, and the price quickly bounced back to over \$64. The market ran out of bullish steam which led to a higher low at \$59.95 in early March. Now, crude oil appears to be heading for another test of the upside technical resistance at the year’s peak. Above that level, there is lots of blue sky on the upside on longer-term charts. The price of crude oil is both a reflection of the commodity’s supply and demand fundamentals and of the geopolitical landscape, particularly in the Middle East. While I believe that the energy commodity is likely to remain within its trading range, there are reasons why a higher high could be in the cards for the price of oil in the coming weeks. Lows fail which leads to a test of the highs NYMEX crude oil has spent the majority of time in 2018 above the \$60 level. However, we have seen two trips below over the first quarter of the year. As the daily chart of May NYMEX oil futures shows, the energy commodity traded to a low of \$57.60 on February 9, and after a recovery, it returned for a test to the downside at \$59.99 on March 2, and \$59.91 on March 8. Since then, the upward trajectory returned as the lows failed and the energy commodity headed for its high and technical resistance on the continuous contract at the \$66.66 level, the January 25 high. On a technical basis, momentum on the daily chart has risen to overbought territory, and historical volatility has increased in the futures market. At the same time, open interest increased from 2.376 million contracts on March 19 to 2.436 million on March 21. The increase in the metric that measures the total number of open long and short positions in the NYMEX crude oil market is typically a bullish sign for a futures market. While price momentum has reached a level where the odds of a correction have increased, the medium and longer-term charts are still positive. The quarterly chart continues to display bullish price momentum for crude oil with rising open interest supporting the ascent of the energy commodity. There are bullish and bearish factors at play in the oil market these days, but market structure continues to provide a case for a test of the January peak and perhaps a new high that could reach the \$70 per barrel level or higher in the coming weeks and months. Economic growth in the U.S. and around the world have been supportive of oil prices. Even though the number of oil rigs in operation in the U.S. has increased to 800 as of March 16, 169 higher than last year at this time, inventories have been declining over recent weeks. The American Petroleum Institute reported that crude oil stocks fell by 2.74 million barrels for the week ending on March 16 and the Energy Information Administration reported a decline of 2.60 million barrels for the same period. While crude oil stockpiles dropped, the inventory levels in gasoline and distillate fuels also headed lower over the period. The API reported a decline of 1.06 million barrels of gasoline and the EIA said they moved 1.7 million barrels lower. When it comes the distillates the two agencies saw decreases of 1.93 million and 2.0 million barrels respectively. The inventory data turned out to be highly supportive of the price of the energy commodity which rallied within 92 cents of the January 25 highs on Thursday, March 22. Meanwhile, geopolitics also were bullish for the price of oil last week. The meeting between the Crown Prince of Saudi Arabia and President Trump at the White House likely centered around strategies surrounding the Iran nuclear nonproliferation agreement. The President was highly critical of the agreement on the campaign trail, and the Saudis are arch-enemies with the theocracy in Iran. The time is coming when the U.S. will need to decide if it recertifies the agreement that the Obama administration negotiated with the participation of other nations around the world. Complicating matters, Iran’s closest ally is Russia and U.S. relations with the Putin government remain tenuous, at best. When it comes to political risk in the Middle East, the Brent WTI spread offers clues about the political temperature in the region.

# Oil and Gas Analysis

## o Rotary Rig Count Summary

Location	Date	Week	+/-	Week Ago	+/-	Year Ago
United States	16-Mar-18	990	6	984	201	789
	23-Mar-18	995	5	990	186	809
North Dakota	16-Mar-18	53	3	50	11	42
	23-Mar-18	53	0	53	10	43
Canada	16-Mar-18	219	-54	273	-57	276
	23-Mar-18	161	-58	219	-84	245
International	Feb-18	979	19	960	38	941

- [Baker Hughes](#)

## o WTI & Bakken Spot Price

March 2018 Daily Spot Prices					
	Mon	Tue	Wed	Thu	Fri
<b>Bakken (FH)</b>					
2018 February-27 to March-2	58.33	58.33	58.33	58.33	55.5
2018 March-5 to March-9	56.83	56.83	56.83	54.83	54.85
2018 March-12 to March-16	55.54	55.54	55.82	55.82	55.82
2018 March-19 to March-23	56.23	56.23	56.72	57.11	57.11
<b>WTI</b>					
2018 February-27 to March-2	63.81	62.94	61.43	60.98	61.19
2018 March-5 to March-9	62.49	62.54	61.09	60.13	62.02
2018 March-12 to March-16	61.35	60.69	60.89	61.16	62.29
2018 March-19 to March-23	62.01				
<b>Differentials</b>					
2018 February-27 to March-2	5.48	4.61	3.1	2.65	5.69
2018 March-5 to March-9	5.66	7	5.27	4.31	6.2
2018 March-12 to March-16	5.81	5.15	5.07	5.34	6.47
2018 March-19 to March-23	5.78				

- [Flint Hills Resource](#)
- [EIA](#)

**o Weekly Petroleum Status Report**

<b>Stocks (Million Barrels)</b>			
	<b>Four Weeks Ending</b>		
	<b>3/16/2018</b>	<b>3/9/2018</b>	<b>3/17/2017</b>
Crude Oil (Excluding SPR)	428.3	430.9	533.1
Motor Gasoline	243.1	244.8	243.5
Distillate Fuel Oil	131.0	133.1	155.4
All Other Oils	388.7	389.3	408.4
Crude Oil in SPR	665.5	665.5	693.4
<b>Total</b>	<b>1,856.6</b>	<b>1,863.5</b>	<b>2,033.7</b>

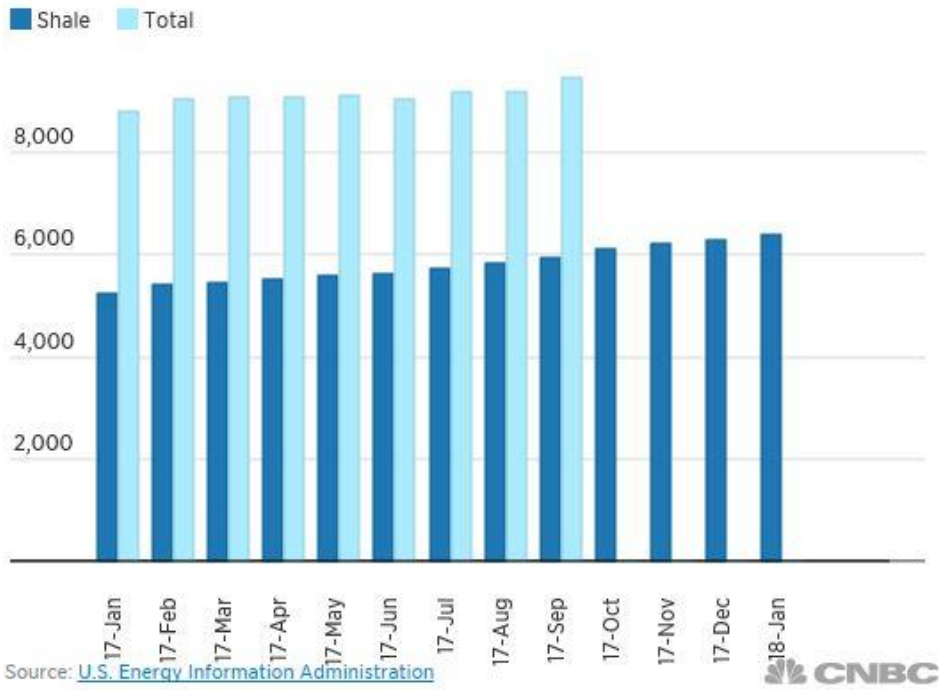
<b>Products Supplied (Thousand Barrels per Day)</b>			
	<b>Four Weeks Ending</b>		
	<b>3/16/2018</b>	<b>3/9/2018</b>	<b>3/17/2017</b>
Motor Gasoline	9,276	9,195	102
Distillate Fuel Oil	3,899	3,976	4,081
All Other Products	7,313	7,261	6,345
<b>Total</b>	<b>20,487</b>	<b>20,432</b>	<b>19,529</b>

<b>Refinery Activity (Thousand Barrels per Day)</b>			
	<b>Four Weeks Ending</b>		
	<b>3/16/2018</b>	<b>3/9/2018</b>	<b>3/17/2017</b>
Crude Oil Input to Refineries	16,240	16,004	15,607
Refinery Capacity Utilization	89.3	88.5	86.1
Motor Gasoline Production	9,882	9,925	9,653
Distillate Fuel Oil Production	4,512	4,508	4,762

<b>Net Imports (Thousand Barrels per Day)</b>			
	<b>Four Weeks Ending</b>		
	<b>3/16/2018</b>	<b>3/9/2018</b>	<b>3/17/2017</b>
Crude Oil	5,986	5,854	7,142
Petroleum Products	-2,756	-2,670	-2,736
<b>Total</b>	<b>3,230</b>	<b>3,185</b>	<b>4,405</b>

- [EIA](#)

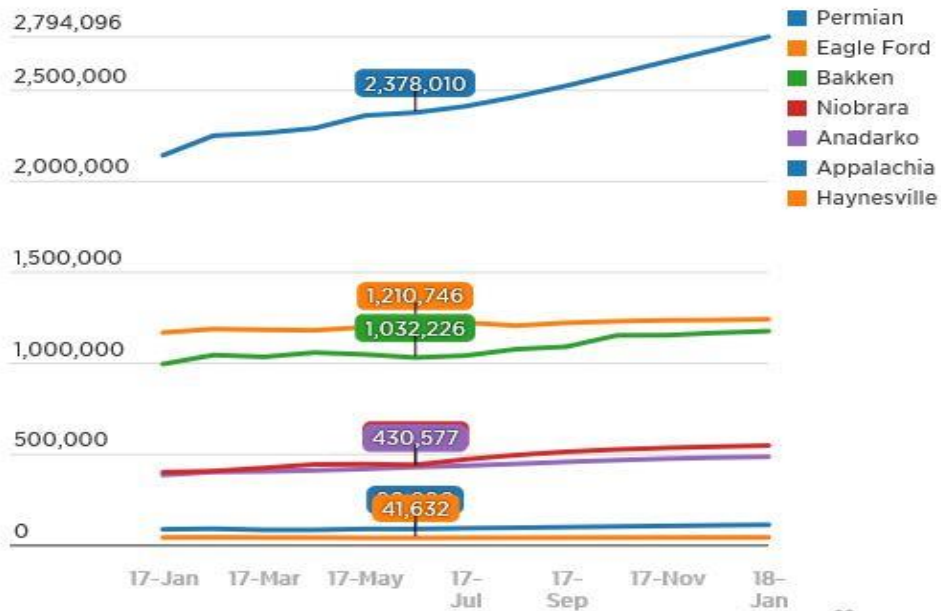
## o US Oil Production



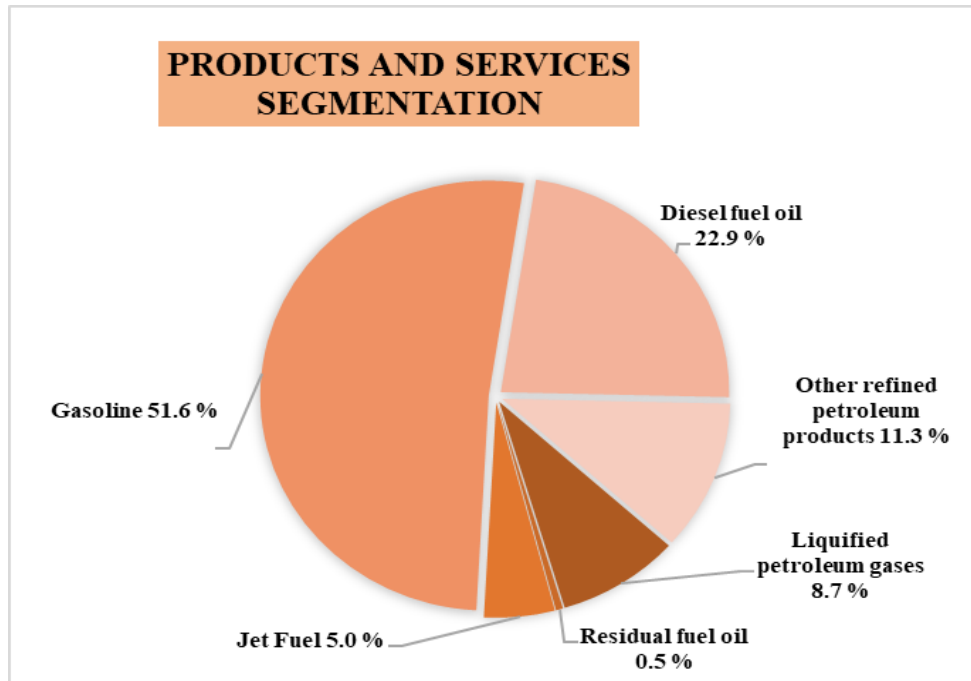
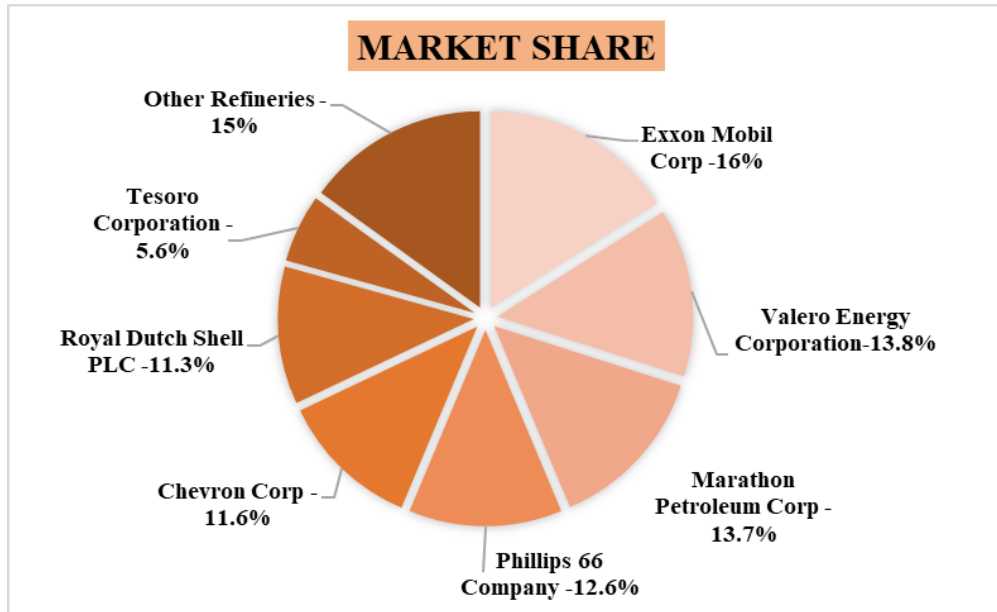
## o Americas Shale Basins

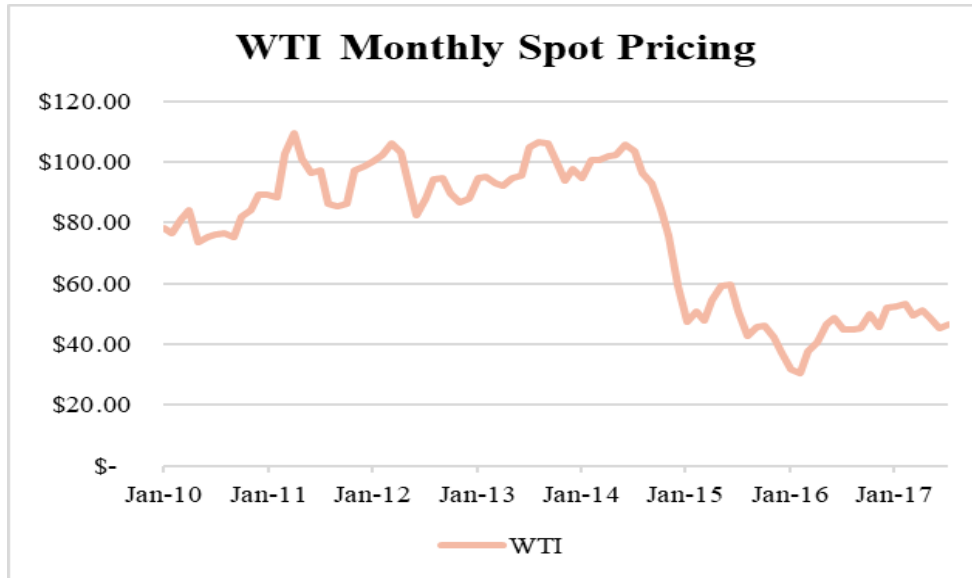
### America's shale basins

Oil production by basin. More recent data are subject to revision.



## o US Petroleum Refining at a Glance





- [EIA](#)

## o Key External Drivers

- o **World price of crude oil**
  - <http://markets.businessinsider.com/commodities/oil-price?type=wti>
- o **Demand from gasoline and petroleum bulk stations**
  - <https://www.reuters.com/article/us-usa-natgas-kemp/u-s-natural-gas-prices-rise-as-winter-stocks-look-tight-kemp-idUSKCN1BU1RK>
- o **GDP of mainland China**
  - <https://tradingeconomics.com/china/gdp>
- o **Trade-weighted index**
  - <https://www.investing.com/news/economy-news/top-5-things-to-know-in-the-market-on-friday-541066>
- o **Total vehicle miles**
  - <https://www.advisorperspectives.com/dshort/updates/2017/08/31/vehicle-miles-traveled-another-look-at-our-evolving-behavior>