

# Weekly Fundamental Market Report

September 17-21, 2018

## Market Update

PRODUCTS	9/17/18	9/18/18	9/19/18	9/20/18	9/21/18
WTI Crude Oil	68.91	69.85	71.12	70.80	70.78
Brent Crude Oil	78.05	79.03	79.40	78.70	78.80
Natural Gas	2.81	2.93	2.91	2.98	2.98

- [CME Group](#)

## Headlines

### North Dakota

- **Davis Refinery could serve as 'prototype' for future refineries.** [Grand Forks Herald](#)
  - In light of a pair of judges siding with Meridian Energy Group over environmental and regulatory challenges earlier this month, CEO Bill Prentice offered some insight via email into what the path forward for the Davis Refinery — and possibly the oil industry as a whole — will look like. "In designing and permitting Davis, Meridian became aware of just how far behind the rest of the refining industry had fallen in such areas as modern information and control technology, environmental compliance and monitoring, overall project design and construction execution and the production of clean fuels," Prentice said. "The Davis Refinery can be seen as a prototype of the modern refinery, and represents a substantial amount of intellectual property and knowhow that Meridian intends to translate into additional refineries in other areas." Controversy has hounded this refinery from the start due to its proximity to the borders of Theodore Roosevelt National Park — it is being built just three miles from the park's border. Despite challenges from multiple environmental groups, construction is already underway. Prentice did not discount the possibility of new lawsuits coming down the pipeline, though. "Litigation associated with permitting is the new normal in major energy projects such as the Davis Refinery," Prentice said. None of this has delayed the project's construction timeline, he added. The Public Service Commission had been told by judges that they do not have jurisdiction on the refinery because its output is not high enough to qualify them. Randy Christmann, chairman of the PSC, said that following that ruling, the commission held a public workshop meeting with environmental groups and Meridian representatives in attendance. "I thought that probably after that discussion we'd probably be at a point ... to make a decision on this," Christmann said in a phone interview. However, new claims being filed have given them pause. "So, the issue is brought up, these two environmental groups that have filed with us say it is more than 50,000 (barrels per day), so you should take this up," Christmann said. "Meridian responded that no, at one point we discussed going more than 50,000, but what we're building out there is less than (that)." Christmann said the PSC is going to give Meridian time to respond to these latest challenges before they make any firm decisions. PSC's regulatory authority considers "general concerns" Christmann said, which run the gamut and can include cultural impacts and broader environmental impacts. Looking beyond these challenges, Prentice said there will be many job opportunities in the near future, with preference given to locals and veterans. "Everyone forgets that Meridian was founded by the Davis Family Partners, a group composed of former North Dakota residents who had to leave North Dakota when they got out of school to find employment. Their objective was to create long-term, high-paying job opportunities for the residents of North Dakota so that other North Dakota families won't go through that experience," Prentice said. A challenge faced by the energy industry in North Dakota is finding enough people with the proper

training for the job. "Meridian will of course be looking for experienced people but is also assuming that substantial training will be required to get everyone ready for first oil," Prentice said. "Given a choice, Meridian would prefer to train up folks that have the right work ethic and are otherwise qualified rather than hire experienced personnel that bring the wrong kinds of industry traditions with them."

- **N.D. oil, gas production returns to record levels. Bismarck Tribune**
  - As North Dakota oil production returns to record levels, a new analysis shows the state has 20 to 60 more years of drilling activity in its future. The state produced an average of nearly 1.27 million barrels of oil per day in July, a new all-time high, according to preliminary figures released Friday by the Department of Mineral Resources. July oil production saw a 3.4 percent increase and exceeded the previous record of 1.25 million barrels per day set in May. Also Friday, the North Dakota Pipeline Authority presented new projections about how long the development of Bakken and Three Forks wells may last in North Dakota under current oil prices. "There's still somewhere between 20 and 60 years of drilling inventory in the state at today's price point," Director Justin Kringstad said. "That only gets larger as prices increase." Kringstad, who presented to the North Dakota Industrial Commission, said his findings are based on the industry continuing at a pace of adding 1,200 oil wells each year. The projections also consider current technology and don't include the potential for enhanced oil recovery. Factors that could limit North Dakota's oil production growth continue to be workforce shortages and natural gas flaring, said Director of Mineral Resources Lynn Helms. The state has 65 drilling rigs operating as of Friday, a number that could be closer to 70 if the industry could hire more hydraulic fracturing crews, Helms said. Natural gas production hit a record 2.4 billion cubic feet per day in July, a 4.3 percent increase. The volume of natural gas flared in July also hit a new high as operators flared about 436 million cubic feet per day due to inadequate processing and pipeline capacity. As a percentage, flaring statewide increased from 17 to 18 percent in July. For Bakken natural gas, which is what the Industrial Commission's gas capture targets are based on, the flaring percentage was 16 percent, missing the target for the third month in a row. The state's policy calls for operators to flare no more than 15 percent of Bakken natural gas, or capture 85 percent. "We're not meeting the commission's gas capture goals," Helms said. Helms attributed some of July's increase to significant downtime that month at the Andeavor Robinson Lake gas plant. Regulators have not completed an analysis of companies' flaring figures to determine if some operators will be required to restrict oil production for exceeding the state's flaring limits. "At these kinds of volumes, I would expect there to be restrictions," Helms said. However, in June there were 12 companies that flared more than 15 percent of Bakken natural gas and none received oil production restrictions under the current policy. Most of the flaring comes from wells that are connected to a pipeline but there is insufficient capacity or other infrastructure to capture all of the gas, Kringstad said. The state is seeing an uptick, however, in new wells that are not yet connected to a gas pipeline, he said. North Dakota now has 14,972 producing oil and gas wells, another record for the state.

## Domestic

- **Oil prices surge as Saudis, Russia won't open spigots. Reuters**
  - Global Benchmark Brent crude jumped more than 3 percent on Monday to a four-year high above \$80 a barrel after Saudi Arabia and Russia ruled out any immediate increase in production despite calls by U.S. President Donald Trump for action to raise global supply. The Organization of the Petroleum Exporting Countries and non-OPEC states, including top producer Russia, gathered in Algiers on Sunday for a meeting that ended with no formal recommendation for any additional supply boost to counter falling supply from Iran. "The market's still being driven by concerns about Iranian and Venezuelan supply," said Gene McGillian, director of market research at Tradition Energy in Stamford. "The failure of the producers to address that adequately this weekend is creating a buying opportunity." Brent crude LCOc1 hit its highest since November 2014 at \$81.39 per barrel, up \$2.59 or 3.3 percent, before easing to \$80.86. U.S. light crude CLc1 was \$1.30, or 1.7 percent, higher at \$72.08. OPEC leader Saudi Arabia and its biggest oil-producer ally outside the group, Russia, on Sunday effectively rebuffed Trump's demand for moves to cool the market. "I do not influence prices," Saudi Energy Minister Khalid al-Falih told reporters on Sunday. Trump said last week that OPEC "must get prices down now!", but Iranian Oil Minister Bijan Zanganeh said on Monday

OPEC had not responded positively to Trump's demands. "It is now increasingly evident, that in the face of producers reluctant to raise output, the market will be confronted with supply gaps in the next three-six months that it will need to resolve through higher oil prices," BNP Paribas oil strategist Harry Tchilinguirian told Reuters Global Oil Forum. Commodity traders Trafigura and Mercuria said Brent could rise to \$90 per barrel by Christmas and pass \$100 in early 2019, as markets tighten once U.S. sanctions against Iran are fully implemented from November. JPMorgan said U.S. sanctions on Iran could lead to a loss of 1.5 million barrels per day, while Mercuria warned that as much as 2 million bpd could be knocked out of the market. Concerns about production shortfalls are encouraging traders to place more long bets, boosting Brent prices, said Brian LaRose, a technical analyst at United-ICAP. "This is the seventh time over the last couple of months that we have challenged the highs," he said, referring to individual monthly contracts, rather than a continuation contract. If Brent prices climb past \$82 a barrel, he said prices up to \$90 would be a near-term possibility. A source familiar with OPEC discussions told Reuters on Friday that OPEC and other producers had been discussing the possibility of raising output by 500,000 bpd. The market has looked to softening demand from trade tensions between the U.S. and China to offset the production cuts from Iran. A horizontal drilling rig on a lease owned by Parsley Energy operates in the Permian Basin near Midland, Texas U.S. Absent signs that trade tensions have eroded Chinese demand, the market will continue to surge, Tradition's McGillian said. U.S. commercial crude oil inventories C-STK-T-EIA are at their lowest since early 2015. While U.S. oil production is near a record high of 11 million bpd, subdued U.S. drilling points toward a slowdown in output.

# Oil and Gas Analysis

## o Rotary Rig Count Summary

Location	Date	Week	+/-	Week Ago	+/-	Year Ago
United States	14-Sep-18	1055	7	1048	119	936
	21-Sep-18	1053	-2	1055	118	935
North Dakota	14-Sep-18	54	1	53	1	53
	21-Sep-18	53	-1	54	1	52
Canada	14-Sep-18	226	22	204	14	212
	21-Sep-18	197	-29	226	-23	220
International	Aug-18	1008	11	997	56	952

- Baker Hughes

## o Weekly Petroleum Status Report

Stocks (Million Barrels)			
	Four Weeks Ending		
	9/14/2018	9/7/2018	9/15/2017
Crude Oil (Excluding SPR)	394.1	396.2	472.8
Motor Gasoline	234.2	235.9	216.2
Distillate Fuel Oil	140.1	139.3	138.9
All Other Oils	467.9	465.4	477.7
Crude Oil in SPR	660.0	660.0	675.4
Total	1,896.3	1,896.7	1,981.0

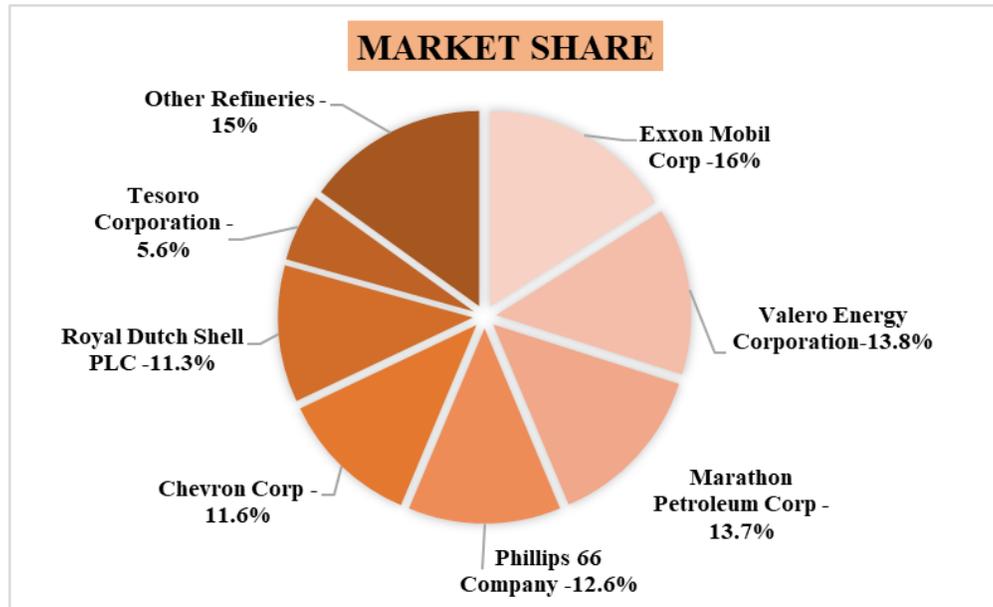
Products Supplied (Thousand Barrels per Day)			
	Four Weeks Ending		
	9/14/2018	9/7/2018	9/15/2017
Motor Gasoline	9,704	9,684	9,517
Distillate Fuel Oil	4,042	4,020	4,074
All Other Products	7,630	7,774	6,795
Total	21,376	21,478	20,386

<b>Refinery Activity (Thousand Barrels per Day)</b>			
	<b>Four Weeks Ending</b>		
	<b>9/14/2018</b>	<b>9/7/2018</b>	<b>9/15/2017</b>
Crude Oil Input to Refineries	17,621	17,741	15,362
Refinery Capacity Utilization	96.5	97.1	84.3
Motor Gasoline Production	10,276	10,247	9,950
Distillate Fuel Oil Production	5,403	5,395	4,516

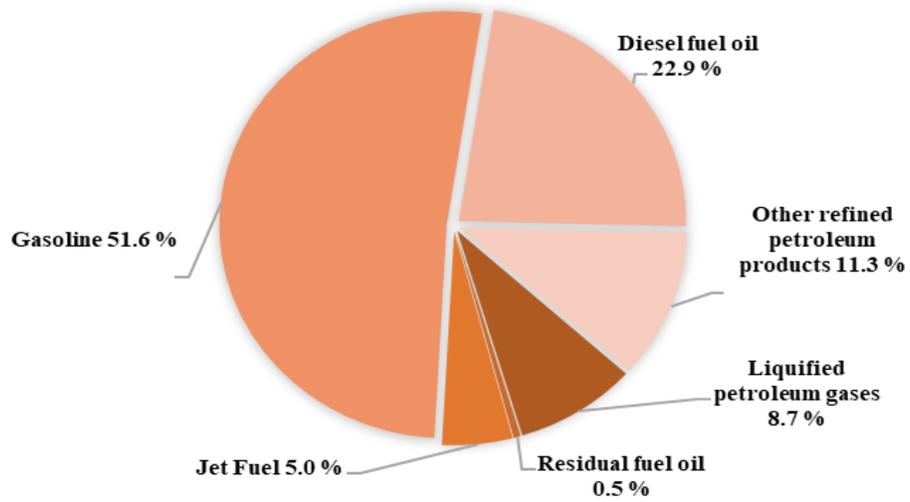
<b>Net Imports (Thousand Barrels per Day)</b>			
	<b>Four Weeks Ending</b>		
	<b>9/14/2018</b>	<b>9/7/2018</b>	<b>9/15/2017</b>
Crude Oil	5,833	6,010	6,520
Petroleum Products	-2,188	-2,157	-1,390
Total	3,645	3,853	5,130

- [EIA](#)

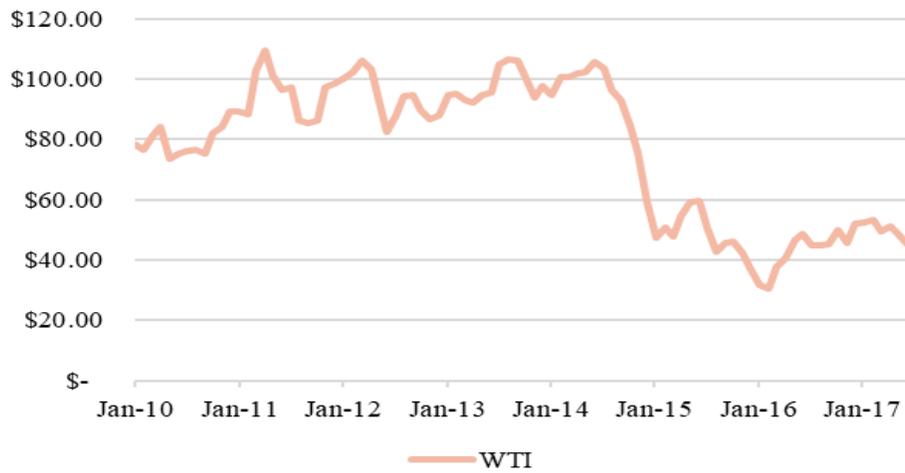
- **US Petroleum Refining at a Glance**



## PRODUCTS AND SERVICES SEGMENTATION



## WTI Monthly Spot Pricing



- [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>