

Market Update

PRODUCTS	11/12/18	11/13/18	11/14/18	11/15/18	11/16/18
WTI Crude Oil	59.85	55.63	56.25	56.46	56.46
Brent Crude Oil	69.81	65.45	66.12	66.62	66.76
Natural Gas	3.96	4.10	4.84	4.04	4.27

- [CME Group](#)

Headlines

North Dakota

- **North Dakota oil industry sees upturn. [West Dakota Fox](#)**
 - After a tough couple of years in the oil fields, production and prices are turning around. While rig counts and the price of a barrel of oil aren't near the record highs set in the last 10 years, there is a lot to be optimistic about. Six years ago, there were 218 oil rigs in North Dakota. Now, the number is fluctuating between 60 and 70. But with the technological advancements over the last several years, those rigs are now doing more than double the work of the old ones. There may be less rigs, wells, pads, and pumps dotting the landscape of western North Dakota compared to five years ago, but it's not hard to see the stronghold oil has on the state. "We've come through this downturn better, faster, stronger, more economic," North Dakota Petroleum Council President Ron Ness said. The slump of 2014 forced companies to become creative. Ness says now, the technology of the oil industry is miles ahead of where it used to be, and is continuing to improve. "Productivity of the individual wells is substantially getting better month over month, year over year," Ness said. Continental Resources drilling superintendent Steve Fontenot says one of the biggest improvements is to the MDWs, the measurement while drilling tools. And when those are working properly with the motor and the bit, drilling a well, which used to take 15 or more days, is now down to under 100 hours. "As long as everything cooperates, we can make one run and actually drill that two miles to three miles lateral in about three and a half days," Fontenot said. Ness says with rigs operating at two and a half times what they did a few years ago, he doesn't expect there to be over 200 in the state again. "We don't need to get there and that means fewer impacts, fewer issues for these communities but we can do more with less and get better and better at it," Ness said.
- **State says permit for refinery near national park justified. [Bismarck Tribune](#)**
 - North Dakota's Health Department did not improperly discount its own concerns about pollution from a proposed oil refinery near Theodore Roosevelt National Park when it permitted the project earlier this year, attorneys for the agency and for the developer argue. The department and Meridian Energy Group are asking a state judge to reject a challenge by environmental groups to an air quality permit that allowed the company to begin construction during the summer at the Davis Refinery site about 3 miles (5 kilometers) from the state's top tourist attraction. The department's decision to issue the permit in June essentially concluded that the refinery will be a minor source of pollution and won't negatively impact the park. Assistant Attorney General Margaret Olson in court documents filed Nov. 5 said the decision "was not made in haste," but after a two-year review that involved more than 1,000 hours of department staff time and more than 10,000 comments from the public. "Because of the public interest in the Davis Refinery and its proximity to Theodore Roosevelt National Park, the department conducted a more in-depth review than typically required," she wrote. Meridian maintains the Davis Refinery will be built with modern technology and will be the "the cleanest refinery on the planet." The company began site work in July. Opponents worry about

pollution in the 30,000-acre (12,000-hectare) park that draws more than 700,000 visitors annually. The National Parks Conservation Association, the Environmental Law and Policy Center and the Dakota Resource Council sued in July. The groups argue the Health Department initially had concerns about the amount of harmful pollutants the refinery might generate and assert that the agency didn't adequately explain its eventual conclusion that the refinery wouldn't be a major source of pollution. "The result here is that Meridian will be allowed to build a new petroleum refinery under unrealistic and unproven air pollution limits that Meridian will very likely not meet," plaintiffs' attorneys Derrick Braaten and Scott Strand wrote. The groups want state District Judge Dann Greenwood to vacate the permit and order the Health Department to either adequately explain its rationale or to launch a permit process for a major polluting refinery. The state maintains its review process was more than adequate, and it also says Meridian provided information that eased initial concerns about refinery pollution. Once built, the plant will need to prove it can meet state and federal air quality standards, and compliance will be continually monitored.

Domestic

- **Oil edges up in volatile session but falls for sixth straight week. Reuters**
 - Oil ended slightly firmer after volatile trading on Friday, supported by expectations that the Organization of the Petroleum Exporting Countries would agree to cut output next month, though prices fell for the sixth straight week amid global oversupply concerns. OPEC kingpin Saudi Arabia is keen for the major producers to cut output by about 1.4 million barrels per day, around 1.5 percent of global supply, to support the market, sources told Reuters this week. But other producers, including Russia, have been reluctant to agree to a cut. Brent settled up 14 cents, or 0.2 percent, at \$66.76 a barrel. The global benchmark fell 4.6 percent in the week, the sixth consecutive decline. U.S. crude settled unchanged at \$56.46 a barrel after trading between \$55.89 and \$57.96. The contract, which had its steepest one-day loss in more than three years on Tuesday, fell 5.6 percent in the week, also its sixth straight weekly decline. After Tuesday's sharp fall, the market was due for a slight correction, and was now stabilizing, said Tariq Zahir, managing member at Tyche Capital Advisors in New York. "A relief rally was in the cards," said Bob Yawger, director of energy futures at Mizuho in New York. OPEC is likely to be spurred to action as U.S. production continues to climb, he said. Still, the day's gains were likely to be limited as traders were cautious going into the weekend, he said. "It would take a brave soul to go home really long this weekend considering the slaughter we've had in the past eight weeks." OPEC ministers meet on Dec. 6 in Vienna to decide on production policy for the next six months amid a growing surplus in world markets. U.S. crude production reached another record last week, at 11.7 million barrels per day, government data showed. The record output contributed to the biggest weekly build in U.S. crude stockpiles in nearly two years. U.S. drillers added two oil rigs this week, bringing the total count to 888, still the highest level since March 2015, General Electric Co's Baker Hughes energy services firm said in its closely followed report. The rig count is seen as an indicator of future production growth. The United States imposed sanctions on Iranian oil exports this month and Iranian crude exports have fallen sharply in recent months, although Washington cushioned the blow by granting some temporary exemptions. Other oil producers have more than compensated for the lost Iranian oil and most analysts now see a significant supply surplus with inventories building, putting pressure on prices. Fearing a repeat of the 2014 price rout, OPEC is widely expected to start trimming output soon. This could produce a swift price rebound, some analysts say, especially if production falls further in Venezuela and Libya. "We are likely from December onwards to have at least 1 million barrels per day (bpd) less of (Iranian) crude exports," Harry Tchilinguirian, global head of commodity markets strategy at BNP Paribas, told Reuters Global Oil Forum. Tchilinguirian said he would not be surprised if Brent recovered to \$80 this year. Also supporting prices, Iraq resumed exporting oil from its northern Kirkuk oilfields on Friday, pumping 50,000-100,000 bpd, an oil ministry spokesman said. Some analysts had expected the volumes to be much higher, at closer to 300,000 bpd. Hedge funds and other money managers cut their bullish wagers on U.S. crude futures and options in New York and London during the week ended Nov. 13 by 8,259 contracts to 165,121, the lowest since June 27, 2017, the U.S. Commodity Futures Trading Commission (CFTC) said. Brent speculators on the Intercontinental Exchange (ICE) cut net longs by 45,216 contracts to 214,832 in the week, also the lowest since June 27, 2017.

Oil and Gas Analysis

o Rotary Rig Count Summary

Location	Date	Week	+/-	Week Ago	+/-	Year Ago
United States	9-Nov-18	1081	14	1067	174	907
	16-Nov-18	1082	1	1081	167	915
North Dakota	9-Nov-18	55	1	54	8	47
	16-Nov-18	55	0	55	9	46
Canada	9-Nov-18	196	-2	198	-7	203
	16-Nov-18	197	1	196	-11	208
International	Oct-18	1017	13	1004	66	951

- Baker Hughes

o Weekly Petroleum Status Report

Stocks (Million Barrels)			
	Four Weeks Ending		
	11/9/2018	11/2/2018	11/10/2017
Crude Oil (Excluding SPR)	442.1	431.8	459.0
Motor Gasoline	226.6	228.0	210.4
Distillate Fuel Oil	119.3	122.9	124.8
All Other Oils	464.1	470.8	465.6
Crude Oil in SPR	653.3	654.7	669.2
Total	1,905.4	1,908.1	1,929.0

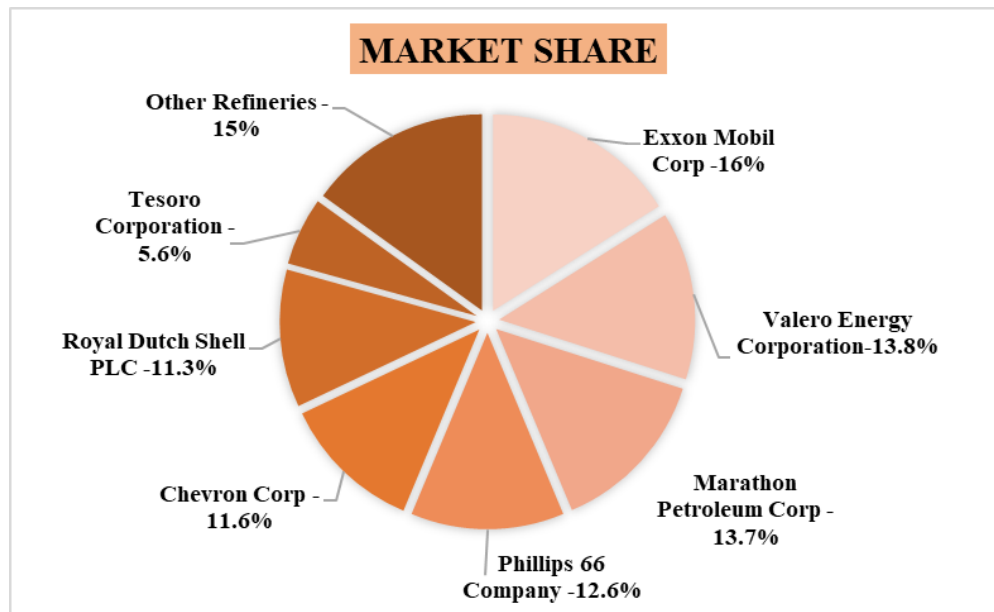
Products Supplied (Thousand Barrels per Day)			
	Four Weeks Ending		
	11/9/2018	11/2/2018	11/10/2017
Motor Gasoline	9,219	9,217	9,361
Distillate Fuel Oil	4,346	4,136	4,038
All Other Products	7,751	7,356	6,665
Total	21,315	20,709	20,063

Refinery Activity (Thousand Barrels per Day)			
	Four Weeks Ending		
	11/9/2018	11/2/2018	11/10/2017
Crude Oil Input to Refineries	16,381	16,352	16,246
Refinery Capacity Utilization	89.7	89.3	89.1
Motor Gasoline Production	10,040	10,134	10,035
Distillate Fuel Oil Production	4,975	4,930	5,065

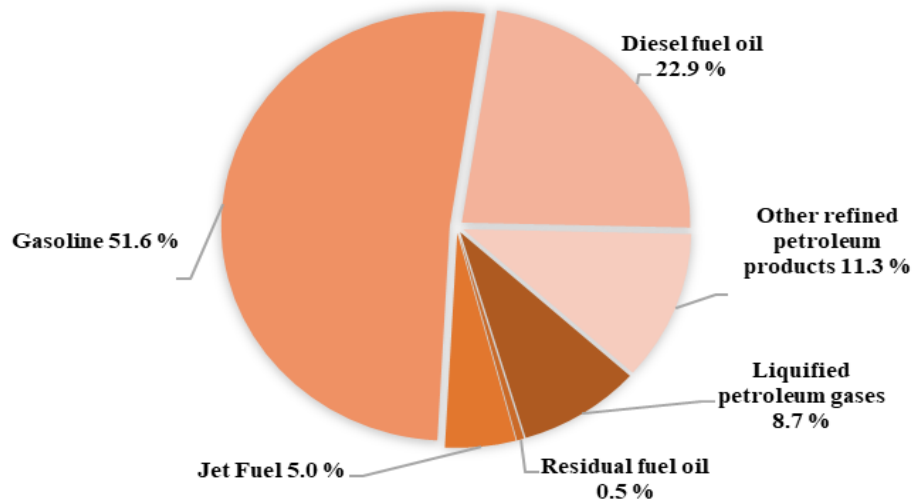
Net Imports (Thousand Barrels per Day)			
	Four Weeks Ending		
	11/9/2018	11/2/2018	11/10/2017
Crude Oil	5,223	5,331	6,229
Petroleum Products	-3,273	-3,498	-3,318
Total	1,951	1,834	2,911

- [EIA](#)

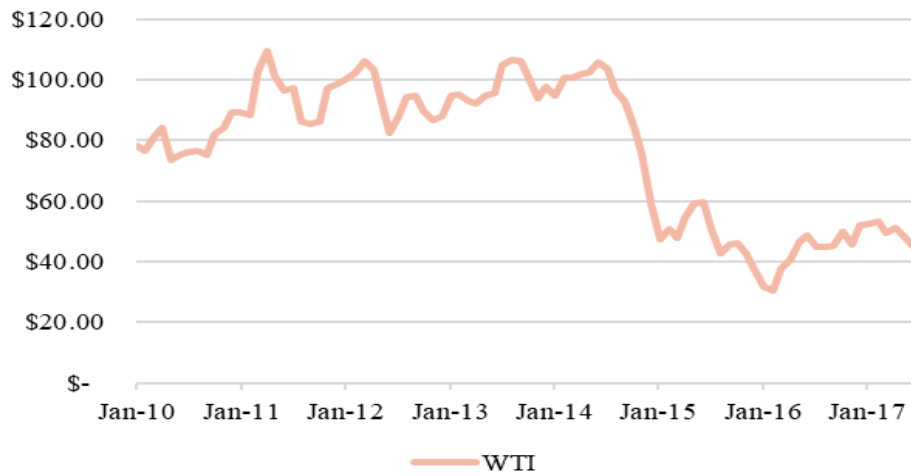
- **US Petroleum Refining at a Glance**



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-behavioryuuui>