

## Market Update

PRODUCTS	11/26/18	11/27/18	11/28/18	11/29/18	11/30/18
WTI Crude Oil	51.46	51.56	50.29	51.45	50.93
Brent Crude Oil	59.70	60.21	58.76	59.51	58.71
Natural Gas	4.28	4.26	4.72	4.65	4.61

- [CME Group](#)

## Headlines

### North Dakota

- **Industrial Commission tweaks gas capture rules, giving industry 'flexibility'. [Prairie Public News](#)**
  - The North Dakota Industrial Commission has approved some amendments to its Guidance Policy on gas capture. The changes will give industry some flexibility, based on the availability of gas processing plants and pipeline technology. But for now, the Commission has not changed the gas capture goals' timing – pending further work. The Department of Mineral Resources had also suggested delaying the stated goals of 88 percent capture – which was set for this November First – and 91 percent capture in 2020 by two years. DMR director Lynn Helms told the Commission there are a number of reasons – including a workforce shortage that has delayed gas processing plant construction, as well as higher-pressure, more productive wells. "What we're hearing from operators and mid-stream people is, they are totally committed to getting to more than 90 percent capture," Helms told the Commission. "But they simply can't achieve it in the time frame that the current goals set. "But a recent announcement by the federal Bureau of Land Management to give the Mandan, Hidatsa and Arikara Nation at Fort Berthold regulatory power on trust lands weighed into that decision. That change takes effect next February. And Commission members want more information on how that will affect the gas capture numbers. "Do we think that if we added the flexibility here, and exclude MHA, we might find ourselves in compliance or near compliance?" asked Commission chairman Gov. Doug Burgum. "If we don't know the answer, I would suggest we do the math and come back to the Commission before we move the goal dates. "Burgum suggested having some meetings with the MHA Nation leadership on its plans for reducing flaring. But he said he fully supports giving the industry some flexibility. "I think the sum of the flexibility items you're recommending are such that this could help continue to incent much-needed significant capital we need to allow us to get the processing plants and value-added projects to capture what we need."
- **After Struggles, North Dakota Grows Into Its Ongoing Oil Boom. [NPR](#)**
  - The U.S. hit a milestone this year, producing more crude oil than any other country, and North Dakota is a big reason for that. After a lull when prices collapsed in 2014, the state is setting new production records and is the country's number two oil state, behind only Texas. Reaching this point has had its challenges. Five years ago, many in these rural oil fields were talking about rising crime, including prostitution and illegal drugs. Another complaint was traffic jams from all the pick-up and tanker trucks traveling back and forth to the thousands of new wells that were drilled. But visit Watford City now and the subject of crime doesn't really come up. The town feels less frantic. After years of growing pains, the region has spent a lot of money upgrading infrastructure to accommodate the influx of people drawn by the oil boom. A bypass around town has eased traffic on the main street. Residents still have mixed feelings, though, about how the oil industry has changed things. "I moved here to get away from people and they followed me," laughs Donna Rustad, a

brand inspector watching ranchers unload calves at the Watford City Livestock Association. Donna Rustad moved to Watford City before the first Bakken oil boom. She has mixed feelings about how much the town has grown, but says the oil business has helped a lot of people here. She moved here before the last boom. The town's population more than tripled in the past decade, from 1,790 to 6,523, according to the latest U.S. Census estimate. But like many of her neighbors Rustad concludes that, overall, the oil business helped Watford City at a time when many rural towns are hurting. "Our town is booming; our main street is full. You don't go through little towns and see every store front have a business in it. We do," she says. Before fracking and horizontal drilling revived North Dakota's oil business, Watford City mayor Phil Riely says his town was losing population and a top priority for policy-makers was to stop the out-migration. "It was scary almost at times. We were going to close a school and we were going to have to lay off teachers," says Riely. Now he says friends he grew up with are moving back for jobs. During the previous boom there were a lot of temporary workers coming from other states and living in RV parks, some in their cars and many in so-called man-camps. But this time is different, says Riely. Workers are bringing their families to settle down. Instead of closing a school, a brand new \$54 million-dollar high school was built on the edge of town. And the oil industry has influenced what's taught there. Down a gleaming hallway, past the lunch room that looks like a nice café, there's a truck-driving simulator that cost about \$20,000. Watford City High School senior Jake Lepell practices driving on the school district's \$20,000 truck driving simulator. The region's oil boom has created a demand for truck drivers. "It's basically like a video game," says Jake Lepell, a senior at Watford City High School. "You have three screens surrounding you. You're sitting in an actual truck seat [and] you've got every pedal that a truck regular would have." The simulator takes the high school driver through different scenarios, such as parallel parking, entering a freeway and navigating narrow roads. The goal is to encourage students to pursue truck driving as career. Another senior, Garrett Thorgramson says a representative from a local company told him pay for drivers in the oil fields is good. "Fresh out of high school you'll make about 80 grand, and if you're trucking for three more years you're making well over a hundred [thousand dollars]," he says. North Dakota's unemployment rate in October was a low two-point-eight percent, nearly a full point below the national figure. So, oil companies and others have trouble finding enough drivers. Agriculture education teacher Scott Wisness says it's great to have people moving to Watford City from all over the country for jobs. "But we don't want to export our students—or at least I don't—and neither do these companies. They want to keep people here who are going to stay here... Who are going to raise their families here," says Wisness. The hope is that will keep Watford City growing. The town has plans for more housing and businesses, and it has expanded the water and sewer systems. Local leaders are counting on the oil business continuing to expand, hopefully without the boom and bust cycles that have disrupted growth in the past. Companies used to need oil prices to be up around \$90 a barrel to make a profit drilling into the Bakken Shale formation deep underground, says North Dakota Petroleum Council President Ron Ness. But that's changed. "Throughout the downturn starting in, really, 2015 and 2016, the industry put the engineers to work, and the technology to work, and were able to increase the efficiency of each individual Bakken well substantially," says Ness. Now he says drillers can profit when prices are down around \$45 a barrel. Today North Dakota's oil companies are producing record amounts of oil with half as many drilling rigs. Ness says the industry is pumping about 1.3 million barrels of oil every day and he predicts that will increase. "We're really looking at potentially well over two-million barrels a day sometime over the next, maybe, four to seven years," he says. The controversial Dakota Access Pipeline is another reason drilling here is more economical. North Dakota produces more crude oil than it can use, and in the past a lot of it left the state by train, which is more expensive than a pipeline. The Dakota Access is moving more than a half-million barrels a day more cheaply. But its capacity is filling up quickly, and recently another big pipeline was proposed. The companies behind the Liberty Pipeline hope to have it built and operating in about two years. That would keep more oil moving, and keep these rural towns on the plains growing.

## Domestic

- **Oil drops; losses limited by hopes of OPEC, Russia output cut. [Reuters](#)**
  - Oil prices edged lower on Friday due to concerns of oversupply and a strong dollar, but losses were limited by expectations that the Organization of the Petroleum Exporting Countries (OPEC) and Russia would agree

some form of production cut next week. The two benchmarks, North Sea Brent LCOc1 and U.S. crude CLc1, still have had their weakest month in more than 10 years in November, losing more than 20 percent as global supply has outstripped demand. Front-month Brent futures fell 80 cents, or 1.3 percent, to settle at \$58.71 a barrel, ahead of expiry. The more active February Brent crude futures LCOG9 lost 45 cents to settle at \$59.46 a barrel. U.S. crude CLc1 dropped 52 cents, or 1 percent, to \$50.93 a barrel. Oil prices also came under pressure as the dollar rose against a basket of currencies. DXY as investors hoped that the United States and China would come to an agreement over trade talks. A stronger dollar makes greenback-denominated oil more expensive for holders of other currencies. Prices pared losses from session lows after Bloomberg reported OPEC's advisory committee suggested decreasing production by 1.3 million barrels per day from last month's levels, traders said. "Oil prices bounced back late in the day on Friday on reports that the OPEC committee had suggested a 1.3 million barrel per day cut from the October level," said Fawad Razaqada, market analyst at futures brokerage Forex.com. "The pressure has certainly been building as prices continued to fall amid ongoing concerns over excessive supply and lower demand growth ... If no action is taken, oil prices could certainly drop further, while a production cut should lead to a sizeable rebound for these severely oversold levels." Before the OPEC meeting in Vienna, the world's top three producers - the United States, Russia and Saudi Arabia - will be part of a meeting this weekend of the Group of 20 industrialized nations in Buenos Aires, Argentina. Russia's energy minister Alexander Novak will meet his Saudi counterpart at the G20 summit in Argentina and discuss an oil output reduction in 2019, RIA news agency cited Novak as saying. He was also reported to have said that Russia's 2019 oil output is expected at the same level as this year but could be adjusted, depending on a deal between OPEC and non-OPEC members. Surging oil production in the United States, Russia and by members of the Middle East-dominated OPEC has helped fill global inventories and create a glut in some markets. U.S. crude oil production rose about 129,000 barrels per day (bpd) in September to a fresh record of about 11.5 million bpd, the Energy Information Administration said in a monthly report. A slowdown in oil demand growth is compounding the emerging oversupply. "At the heart of the malaise are concerns that OPEC+ will not do enough to address the current oversupply," said Stephen Brennock, analyst at London brokerage PVM Oil. The weakness in sentiment is visible in the Brent forward price curve, which now has prices for future delivery above those for immediate dispatch, a structure known as "contango", which can make it attractive to put oil into storage. Brent crude speculators cut their net long positions to the lowest level since 2015 in the week through Tuesday. Brent net longs fell 14,057 contracts to 168,512 according to data from the Intercontinental Exchange (ICE). A monthly Reuters survey indicates that output in November from the 12 OPEC members with supply reduction targets under a previous production agreement fell 110,000 bpd from October, while total OPEC output decreased by 160,000 bpd. A CME group indicator suggested that expectations of a production cut were weakening. The tool, known as OpecWatch, uses West Texas Intermediate crude oil options markets to calculate the probabilities of certain outcomes of OPEC meetings. The market sentiment has shifted from a 70 percent expectation of a small production cut earlier this week to about a 56 percent chance on Friday, CME Group said. Oil inventories are rising fast in the United States, where crude stocks C-STK-T-EIA have risen for 10 straight weeks to 450.5 million barrels, the most in a year, as production remains at an all-time high of 11.7 million bpd, according to the Energy Information Administration (EIA). U.S. energy firms this week added oil rigs for a third week in four and increased the rig count for the fifth month in a row, General Electric Co's (GE.N) Baker Hughes energy services firm said in its closely followed report.

# Oil and Gas Analysis

## o Rotary Rig Count Summary

Location	Date	Week	+/-	Week Ago	+/-	Year Ago
United States	21-Nov-18	1079	-3	1082	156	923
	30-Nov-18	1076	-3	1079	147	929
North Dakota	21-Nov-18	52	-3	55	6	46
	30-Nov-18	52	0	52	6	46
Canada	21-Nov-18	204	7	197	-11	215
	30-Nov-18	199	-5	204	-23	222
International	Oct-18	1017	13	1004	66	951

- Baker Hughes

## o Weekly Petroleum Status Report

Stocks (Million Barrels)			
	Four Weeks Ending		
	11/23/2018	11/16/2018	11/24/2017
Crude Oil (Excluding SPR)	450.5	446.9	453.7
Motor Gasoline	224.6	225.3	214.1
Distillate Fuel Oil	121.8	119.2	127.8
All Other Oils	457.4	460.4	456.5
Crude Oil in SPR	650.6	652.6	665.1
Total	1,904.8	1,904.4	1,917.2

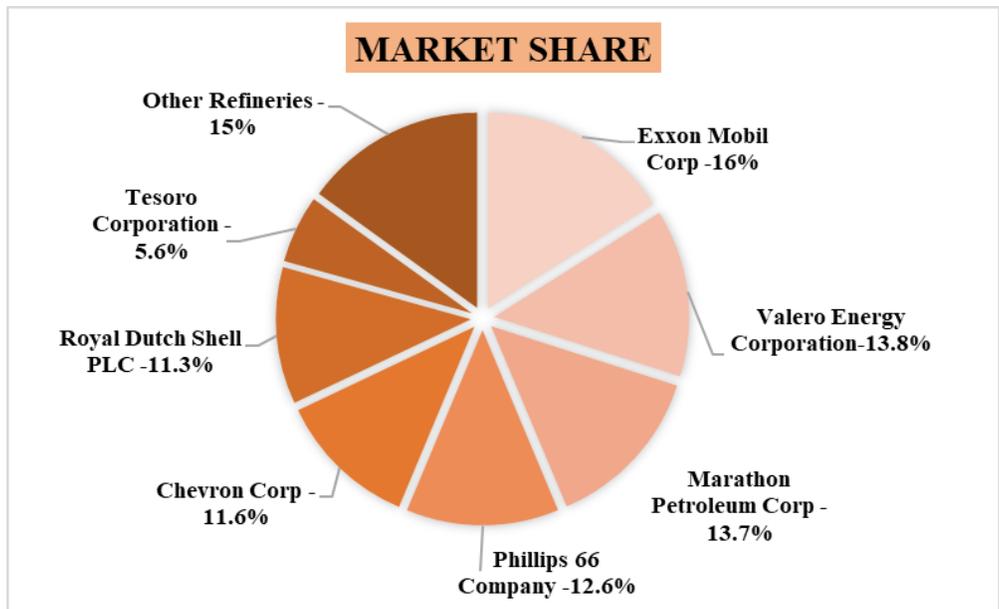
Products Supplied (Thousand Barrels per Day)			
	Four Weeks Ending		
	11/23/2018	11/16/2018	11/24/2017
Motor Gasoline	9,166	9,185	9,247
Distillate Fuel Oil	4,198	4,412	4,114
All Other Products	7,767	7,662	6,643
Total	21,131	21,259	20,002

<b>Refinery Activity (Thousand Barrels per Day)</b>			
	<b>Four Weeks Ending</b>		
	<b>11/23/2018</b>	<b>11/16/2018</b>	<b>11/24/2017</b>
Crude Oil Input to Refineries	16,812	16,528	16,696
Refinery Capacity Utilization	92.1	90.6	91.1
Motor Gasoline Production	9,994	10,042	10,168
Distillate Fuel Oil Production	5,157	5,035	5,262

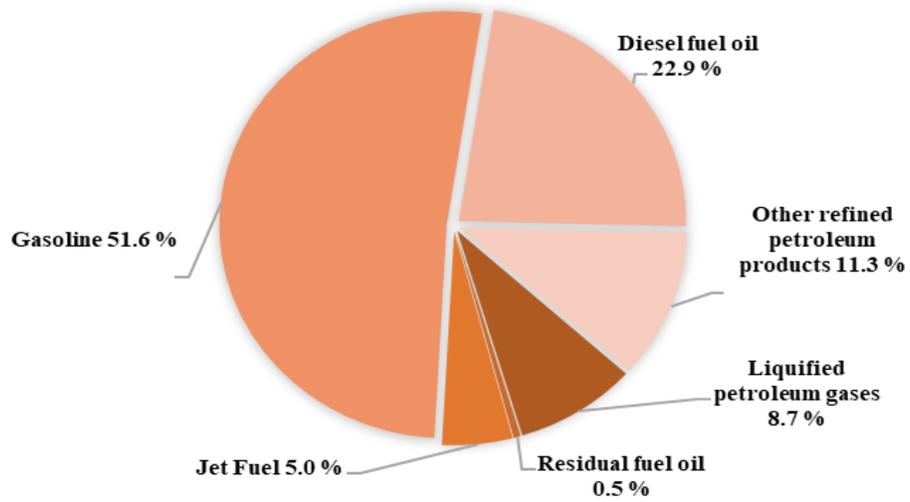
<b>Net Imports (Thousand Barrels per Day)</b>			
	<b>Four Weeks Ending</b>		
	<b>11/23/2018</b>	<b>11/16/2018</b>	<b>11/24/2017</b>
Crude Oil	5,460	5,245	6,369
Petroleum Products	-3,375	-3,204	-3,347
Total	2,085	2,041	3,023

- [EIA](#)

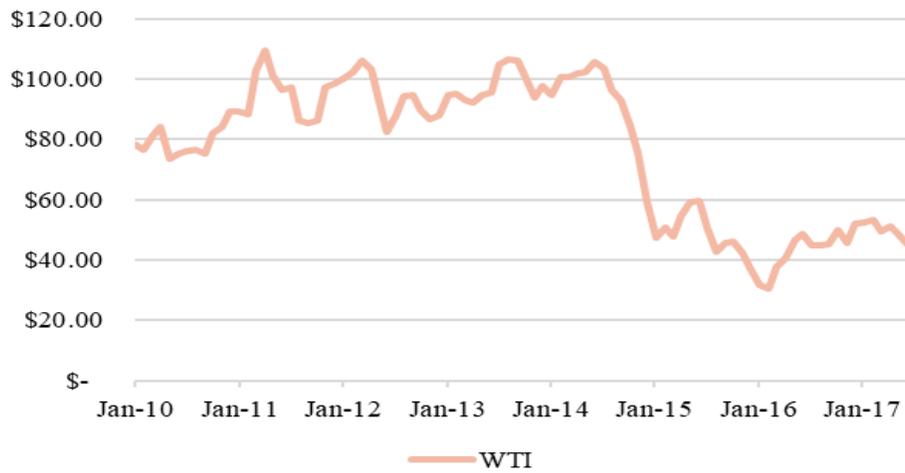
- **US Petroleum Refining at a Glance**



## 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>