

Weekly Fundamental Market Report

June 25-29, 2018

Market Update

PRODUCTS	6/25/18	6/26/18	6/27/18	6/28/18	6/29/18
WTI Crude Oil	68.08	70.53	72.76	73.45	74.15
Brent Crude Oil	74.73	76.31	77.62	77.85	79.44
Natural Gas	2.92	2.94	2.99	2.94	2.92

- [CME Group](#)

Headlines

Local North Dakota

- **After first year, oil industry praises Dakota Access Pipeline.** [Dickinson Press](#)
 - The Dakota Access pipeline began life mired in controversy, but has nonetheless proven to be a game changer for the Bakken, oil industry leaders and state regulators say. Energy Transfer Partners CEO Kelcy Warren in a recent radio interview said the pipeline is already running near its capacity of 570,000 barrels of crude oil per day. He also said it has been providing the Bakken with a competitive edge over the Permian — for now anyway — as that play faces constrained pipeline capacity similar to what the Bakken experienced before Dakota Access. "It's wonderful to see the rig counts pick up and to see the barrels produced increase," Warren said, referring Dakota Access' operation. "Everything we believed would happen has in fact happened." Tessa Sandstrom, spokesperson for the North Dakota Petroleum Council, agreed that the pipeline has helped the oil industry tremendously, with substantially improved logistics. "The more pipelines you have, the better price you can fetch per barrel," she said. "That's good for mineral owners and the state, and it helps reduce truck and rail traffic. If we don't have the pipeline capacity in place, we'll have to rely on truck and rail again." Dakota Access began operating on June 1, 2017. Before that, the Bakken's weighted average price or discount was \$7.41, according to the state's Pipeline Authority Justin Kringstad. After it began operations, the average shifted to \$4.66. "That's just over \$3.05 price improvement per barrel post DAPL on average," Kringstad said. "And that is just June (of 2017) through April of 2018 or so." Kringstad's calculations show an additional \$111 million in state tax revenues that would not have been collected under the old discount. "That doesn't include the royalty price impact, or the industry price impact," Kringstad said. "The state only gets roughly 10 percent of the revenue. The remaining 90 percent is for industry and royalty owners, so a tremendous amount of revenue is going back or staying with the royalty owners and producers." The pipeline transports the equivalent of 500 to 740 rail cars worth of oil every day, or 250-plus oil tanker trucks. That has helped to reduce oil train and truck traffic — although lately, market conditions are favoring voluntary oil train transport. "The indicator that I typically watch, the Brent Oil price minus the WTI price, that spread was just over \$10," Kringstad said. "When that price is higher than \$5 per barrel, historically the industry tends to pull barrels off the pipeline systems and put them on the rail network to take advantage of that market situation." Rail transport hit a low last summer of around 120,000 barrels per day, Kringstad said, but was back up to 260,000 barrels per day in March as market conditions shifted to favor east and west coast crude by rail markets. Some of that shift is a result of oversupply in Cushing, Oklahoma, Kringstad said. Permian oil is congesting that market hub, lowering prices. Oil that can go to east and west coast refineries is thus finding better prices there. In addition to lower transportation costs, the industry found new and better ways to complete its wells during the downturn, lowering Bakken breakeven. Now, with market prices improving, the oil and gas sector is set to take off. The takeoff is still being substantially constrained by lack of labor, with more than 13,000 job openings statewide — a new Jamestown, if they were all filled. Bakken oil production surged ahead in April, according to state

production figures, nearly exceeding the state's all-time high of 1.23 million barrels per day in spite of the labor crunch. Dakota Access has helped meet pent-up demand for crude oil takeaway, but if production continues to grow as expected, Kringstad said it will begin to exceed capacity again by early 2019. It is not yet known whether that will mean another large transmission pipeline is in the offing. "Right now, that's the billion-dollar question that the industry and myself are trying to assess," Kringstad said. "What are the long-term transportation needs? What options are available?" Warren seemed doubtful about that in his recent radio interview, suggesting that there are other things that could be done first, such as bumping up capacity to Patoka. Long-term forecasts for North Dakota oil production by the mid-2030s is for between 2 and 2.4 million barrels of oil per day, about double of what it is now, Kringstad said. "When we look at the takeaway capacity options, it's right around 1.4 million bpd with what is now in service or slated to come online in the next several years, so there is potentially a 600,000 to one million barrel per day potential shortfall long term," he said.

Domestic U.S.

- **U.S. oil prices hit three-and-a-half-year high on concern over Iran sanctions. Reuters**
 - Oil prices climbed on Thursday, with U.S. crude hitting a three-and-a-half year high, bolstered by supply concerns due to U.S. sanctions that could cause a large drop in crude exports from Iran. West Texas Intermediate (WTI) crude CLc1 futures rose 69 cents, nearly 1 percent, to settle at \$73.45 a barrel. It reached \$74.03 earlier in the session, the highest since Nov. 26, 2014. Brent crude LCOc1 futures rose 23 cents to settle at \$77.85 a barrel. The United States this week demanded countries halt imports of Iranian oil from November, a headline position the Trump administration hopes will cut off funding to Tehran. On Thursday, officials said they would work with countries on a case-by-case basis. China, the biggest importer of Iran's oil, has not committed to the U.S. position. "The sanctions are trying to isolate Iran a bit more, and that potentially cuts more oil off from the overall global arena as a whole," said Mark Watkins, a regional investment strategist at U.S. Bank Wealth Management. "If you're having Iran's oil taken off the market, then you have a decrease in supply and by all means, that's going to put more pressure on the price of oil to move up." The U.S. demands follow a decision by the Organization of the Petroleum Exporting Countries last week to increase production to try to moderate oil prices that have rallied more than 40 percent over the last year. Oil prices have rallied for much of 2018 on tightening market conditions due to record demand and voluntary supply cuts led by OPEC and other producers including Russia. Unplanned supply disruptions from Canada to Libya and Venezuela also have supported prices. U.S. crude futures extended gains after data showed inventories at the Cushing, Oklahoma, delivery hub fell by 3.1 million barrels in the week through June 26, traders said, citing data from market intelligence firm Genscape. Front-month WTI's premium to the second month CLc1-CLc2 surged after the data and hit a session high of \$1.81, while U.S. crude's discount to Brent WTCLc1-LCOc1 narrowed to the smallest in three months at \$3.92 a barrel. "You look at the front spreads for crude oil, and it's been the front-month contracts that have blown out, almost like this is a knee-jerk reaction to a headline versus a long-term structural uptrend that is still intact," said Brian LaRose, senior technical analyst at ICAP-TA. Not all indicators point toward an ever-tightening market. U.S. crude production C-OUT-T-EIA is approaching 11 million barrels per day (bpd), and Saudi Arabia expects to match that in coming months as well. But analysts say the market has little spare capacity to deal with further disruptions. "With inventories still declining and spare capacity uncomfortably low, there is very little cushion for any supply disruption caused by rising geopolitical risks," ANZ bank said.

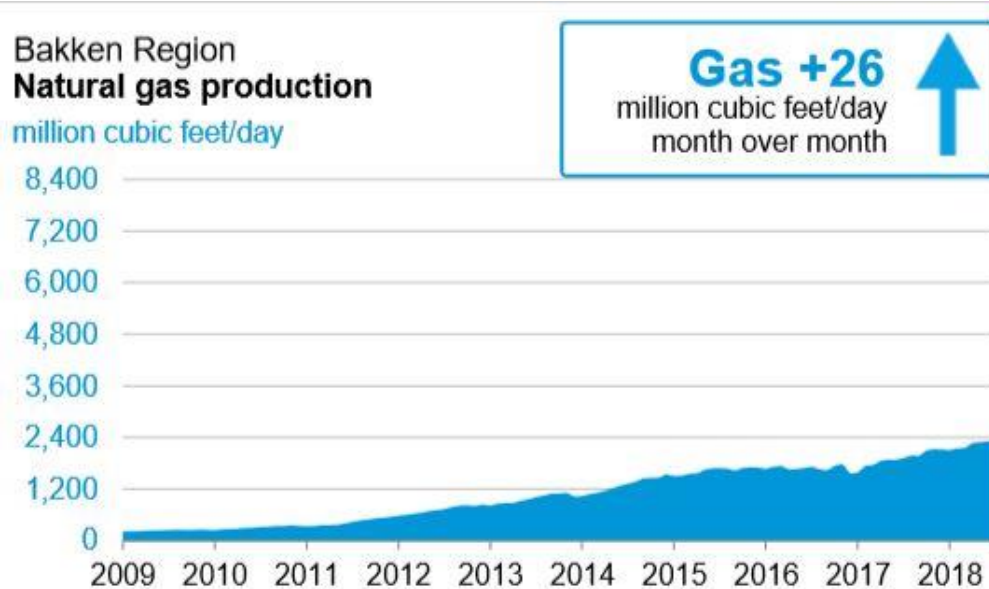
Oil and Gas Analysis

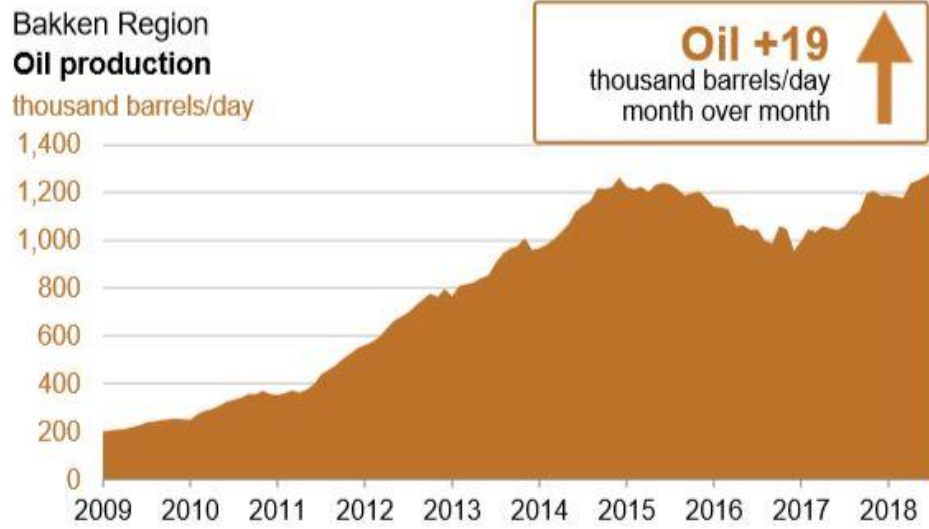
o Rotary Rig Count Summary

Location	Date	Week	+/-	Week Ago	+/-	Year Ago
United States	22-Jun-18	1052	-7	1059	111	941
	29-Jun-18	1047	-5	1052	107	940
North Dakota	22-Jun-18	56	-1	57	4	52
	29-Jun-18	54	-2	56	2	52
Canada	22-Jun-18	160	21	139	-10	170
	29-Jun-18	172	12	160	-17	189
International	May-18	967	-11	978	10	957

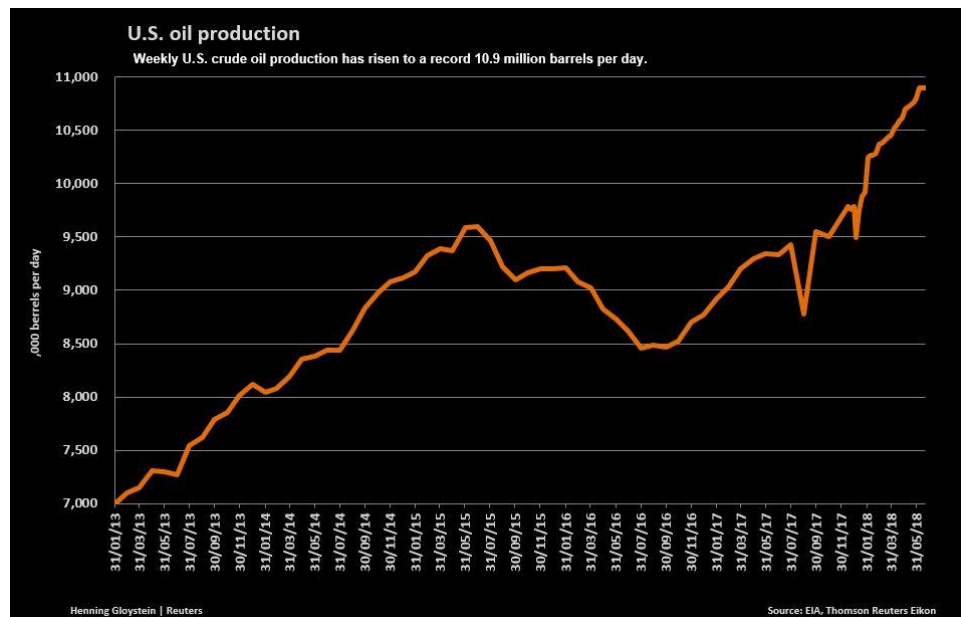
- Baker Hughes

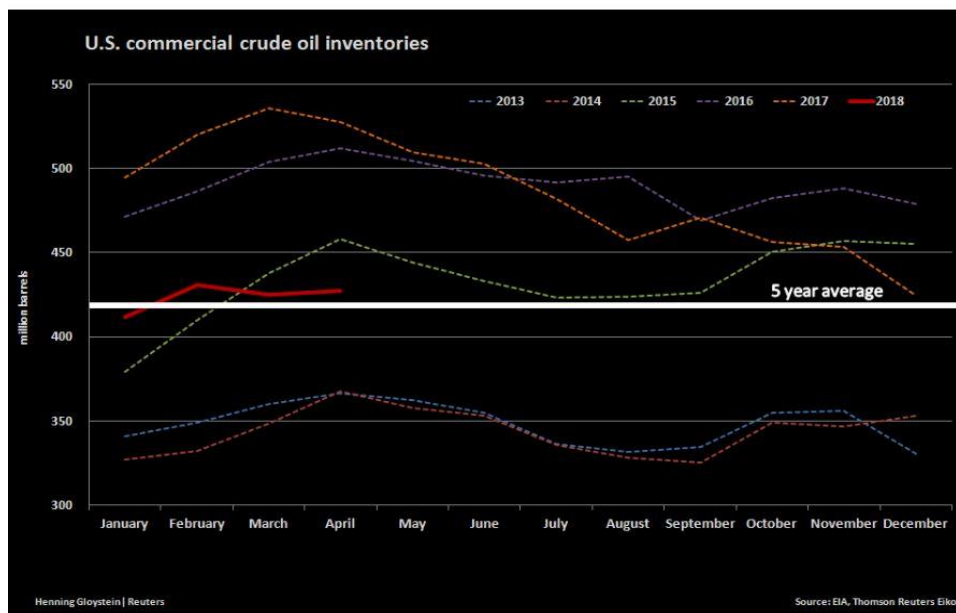
o Bakken Productivity Report





o US Production





o Weekly Petroleum Status Report

Stocks (Million Barrels)			
	Four Weeks Ending		
	6/22/2018	6/15/2018	6/23/2017
Crude Oil (Excluding SPR)	416.6	426.5	509.2
Motor Gasoline	241.2	240.0	241.0
Distillate Fuel Oil	117.4	117.4	152.3
All Other Oils	428.3	424.2	449.7
Crude Oil in SPR	660.0	660.0	682.4
Total	1,863.6	1,868.2	2,034.6

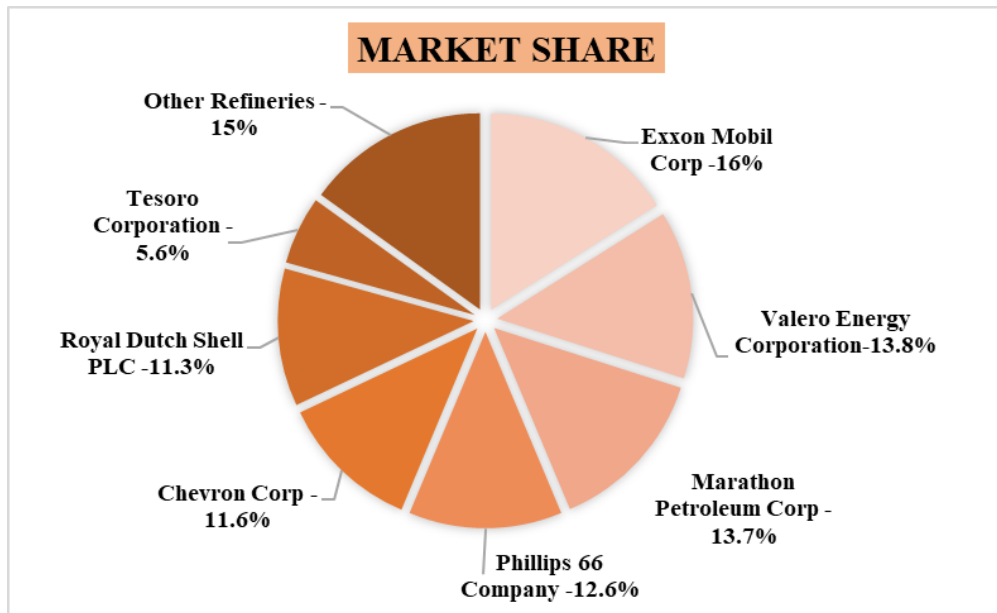
Products Supplied (Thousand Barrels per Day)			
	Four Weeks Ending		
	6/22/2018	6/15/2018	6/23/2017
Motor Gasoline	9,478	9,468	9,485
Distillate Fuel Oil	3,836	4,013	3,934
All Other Products	6,881	6,863	6,473
Total	20,195	20,343	19,892

Refinery Activity (Thousand Barrels per Day)			
	Four Weeks Ending		
	6/22/2018	6/15/2018	6/23/2017
Crude Oil Input to Refineries	17,598	17,433	17,131
Refinery Capacity Utilization	96.3	95.4	93.7
Motor Gasoline Production	1,008	10,160	10,069
Distillate Fuel Oil Production	5,325	5,300	5,229

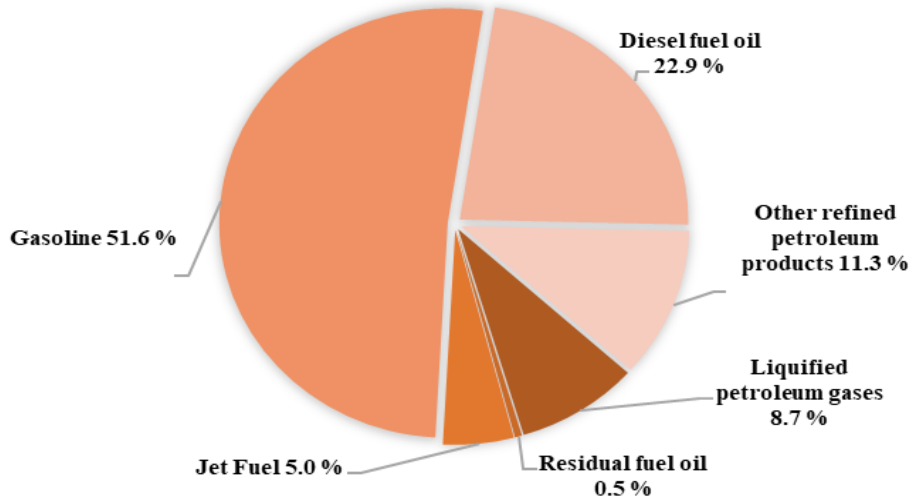
Net Imports (Thousand Barrels per Day)			
	Four Weeks Ending		
	6/22/2018	6/15/2018	6/23/2017
Crude Oil	5,981	6,005	7,484
Petroleum Products	-3,088	-2,709	-2,574
Total	2,894	3,297	4,910

- [EIA](#)

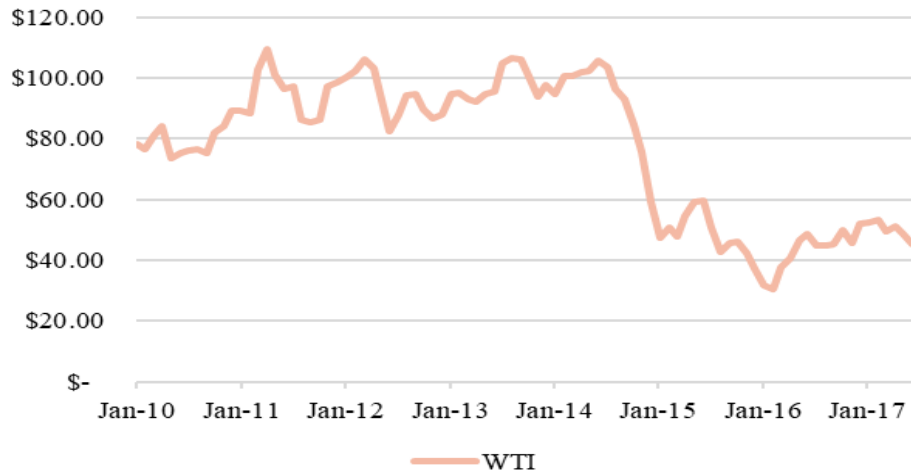
- **US Petroleum Refining at a Glance**



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>