

Weekly Fundamental Market Report October 30 - November 3, 2017

Market Update

PRODUCTS	10/30/17	10/31/17	11/1/17	11/2/17	11/3/17
WTI Crude Oil	54.15	54.38	54.30	54.54	55.64
Brent Crude Oil	60.9	61.37	61.29	60.62	62.07
Natural Gas	2.97	2.90	2.89	2.94	2.98

- [CME Group](#)

Headlines

Local North Dakota

- **Department of Minerals projects increase in oil price.** [Dickinson Press](#)
 - Lynn Helms, director of the North Dakota Department of Mineral Resources, forecasts black gold on the horizon. "Crude oil inventories in North Dakota are dropping very rapidly and by the first quarter of next year they should be back to average numbers," Helms said, addressing a group of lawmakers, lobbyists, industry leaders and school officials at the Western Dakota Energy Association's annual meeting in Dickinson on Thursday. "That's the time frame where we start to see the \$55 to \$60 (per barrel) oil, by the first quarter of next year." Helms offered an optimistic update on North Dakota's energy landscape, and provided oil production numbers on a county-by-county basis. He estimated that the oil and gas industry has contributed \$125 billion to the state's economy over the past 10 years. "To put that into context for you, that's \$8.1 million for every man, woman and child in the state of North Dakota," Helms said. After a bit of a lull in Bakken oil activity, he said there appears to be some indication that production will return—provided the market cooperates. "All the Organization of the Petroleum Exporting Countries (OPEC) nations, including Iran and Russia, want to extend their production cuts," Helms said. "They've been very disciplined with production cuts, they want to extend them through mid-2018. If that happens, I think we'll see oil markets respond in a very positive way." OPEC has been cutting oil production in an effort to bring the price of oil back to \$50 a barrel after it had dropped well below that, Helms said. The nuclear treaty signed by the U.S. with Iran has now seen 4 million barrels of oil added to the global marketplace per day, and adjusting to deal with that influx is another reason why OPEC may continue reducing its oil production, he said. Helms reported that oil production in North Dakota is higher than projected and could be up 11 percent from what was expected by the close of the biennium. There are 31,545 producing wells and oilfield jobs are projected to remain strong heading into the future. Helms said enhanced oil recovery could even better maximize the profit potential of Bakken oil. "This is a five-generation oil play," he said. "This has changed the state of North Dakota for generations. Our grandchildren's grandchildren will be affected by this. We want to take a very long view on how we approach this thing." Helms reported some ups and downs in individual counties: For Billings County, the number of production jobs is "expected to grow," he said. Bowman County is "waiting for CO2" due to a hang-up on a planned CO2 pipe way that's been delayed due to Bureau of Land Management regulations regarding sage grouse, a protected bird native to the western U.S. Dunn County is also seeing a ray of sunshine after some gloomy predictions a year ago. "Bear Creek is better than anyone dreamed," Helms said. "It opened the gates for people to trap and drill wells and capture the gas." Helms said Dunn could run into some trouble by early 2020 when it comes to gas capture, but between then and now "it looks very positive." Stark County is "back on a growth profile," he said. overall, the region continues to provide promise for profit and prosperity in the energy sector. "If you look at it strictly on a productivity level ... the Bakken area ranks right up there," Helms said. "The Bakken is fantastic." Helms said his staff is studying other potential source rock beds in the state, saying that there were 14 others (in addition to the two in the Bakken and one in Spearfish) that need to be

promoted. "We anticipate the United States Geological Survey is coming back in 2020. We want all of the data to put in front of them," Helms said. "We have 17 unconventional resources. Not one, not two—17."

Domestic U.S.

- **Oil edges up to near two-year highs as market tightens. Reuters**
 - Oil prices edged up on Thursday, steadying near two-year highs as the outlook remained upbeat as OPEC-led supply cuts have tightened the market and drained inventories. Brent crude LCOc1 settled up 13 cents, or 0.2 percent, at \$60.62 per barrel. The benchmark hit \$61.70 on Wednesday, its highest intraday level since July 2015. The contract is up by more than a third from its 2017-lows in June. U.S. crude CLc1 ended 24 cents, or 0.4 percent, higher at \$54.54, almost 30 percent above its 2017-lows in June. Confidence has been fueled by an effort this year led by the Organization of the Petroleum Exporting Countries and Russia to hold back about 1.8 million barrels per day (bpd) in oil production to tighten markets. Saudi Arabian Energy Minister Khalid al-Falih said supply and demand balances were tightening and oil inventories falling, while compliance with the OPEC-led pact to curb supplies had been "excellent". "Compliance as a whole for OPEC [ended] up being rather strong," said Mark Watkins, regional investment manager at U.S. Bank. "Now that we've flipped the calendar to November we have the OPEC meeting at the end of the month. There's expectation that there will be positive comments about extending the cuts past March." The pact to withhold supplies runs to March 2018, but there is growing consensus to extend the deal to cover all of next year. Iraq's oil minister said that OPEC's second-largest producer supports keeping curbs on global oil supply to bolster prices, adding \$60 per barrel would be an acceptable target price for his country. The energy ministers of Russia and Saudi Arabia, the world's top oil producers, were expected to travel to Tashkent, Uzbekistan, on Thursday night, two sources told Reuters. Both said the ministers were expected to give a briefing. Oil was also supported by falling U.S. commercial crude inventories despite rising output. U.S. crude oil inventories fell 2.4 million barrels last week despite a 46,000-bpd increase in production to 9.55 million bpd. Goldman Sachs said it expected year-on-year U.S. oil production growth of 0.8 million to 0.9 million bpd at year-end 2017. That would put end-2017 output at 9.6-9.7 million bpd, close to its highest for at least three decades. Traders said this was due to U.S. crude trading at a wide discount to Brent, making exports attractive. CL-LCO1=R U.S. independent oil producer Pioneer Natural Resources said it expected to export 2.3 million barrels of oil in the fourth quarter.
- **Oil near 2-year high; growing global demand supports market. Reuters**
 - Oil prices rose on Friday, nearing their highest levels in more than two years, supported by rising global demand and physical prices and continuing expectations that OPEC and other producing countries will extend a deal to cut output. Global benchmark Brent futures traded up 18 cents at \$60.79 a barrel at 11:17 a.m. EDT, after hitting a session high of \$61.15. Brent has risen around 38 percent since its low in 2017 reached in June. U.S. West Texas Intermediate (WTI) crude traded at \$54.57 a barrel, up 3 cents. WTI is around 30 percent above its 2017 low hit in June. Brent was on track for a weekly rise of 0.4 percent and U.S. crude was headed for a 1 percent weekly rise. "The market continues to find support from expectations that we're going to see the cut extended and from robust demand," said Gene McGillian, director of market research at Tradition Energy in Stamford. The Organization of the Petroleum Exporting Countries meets at the end of November to discuss further action after it agreed nearly a year ago with Russia and other producers to hold back 1.8 million barrels per day (bpd) of oil supply. Russia said on Thursday the deal, due to expire in March, could be extended but a decision was not imminent. China's roughly 9 million bpd of imports have surpassed those of the United States to top the world's crude importer list. "There's an idea that the global economy is looking pretty good," McGillian said, pointing to rising demand in other regions. "China's oil demand growth appears to be accelerating," investment bank Jefferies said. Physical oil prices are also rising. Saudi Aramco, the UAE's ADNOC and Qatar Petroleum have all raised their crude prices for Asian buyers, with Aramco's December premium over the average of the Oman and Dubai benchmarks now at the highest in three years. Energy services firm Baker Hughes is due to report the U.S. rig count data at 1 p.m. ET. Traders also eyed risks from ongoing financial troubles of OPEC-members Venezuela and its state oil company PDVSA. The government and PDVSA owe some \$1.6 billion in debt service and delayed interest payments by the end of the year, plus another \$9 billion in bond servicing in 2018. The next hard payment deadline for PDVSA is an \$81 million bond payment that was due on Oct. 12 but on which the company delayed payment under a 30-day grace period. Failing to pay that on time would trigger a default, investors say.

Oil and Gas Analysis

o Rotary Rig Count Summary

Location	Date	Week	+/-	Week Ago	+/-	Year Ago
United States	27-Oct-17	909	-4	913	352	557
	3-Nov-17	898	-11	909	329	569
North Dakota	27-Oct-17	49	-2	51	14	35
	3-Nov-17	47	-2	49	10	37
Canada	27-Oct-17	191	-11	202	38	153
	3-Nov-17	192	1	191	38	339
International	Sep-17	931	-21	952	-3	934

- [Baker Hughes](#)

o WTI & Bakken Spot Price

October 2017 Daily Spot Prices					
	Mon	Tue	Wed	Thu	Fri
Bakken (FH)					
2017 October-2 to October-6	44.06	45.04	45.04	44.59	45.24
2017 October-9 to October-13	43.98	44.17	45.23	45.4	44.92
2017 October-16 to October-20	45.53	45.66	45.66	45.46	45.56
2017 October-23 to October-27	45.45	45.56	45.51	45.45	45.81
2017 October-30 to November-3	46.25	46.04	49.24	49.24	
WTI					
2017 October-2 to October-6	50.59	50.44	50	50.79	49.34
2017 October-9 to October-13	49.58	50.93	51.3	50.61	51.43
2017 October-16 to October-20	51.86	51.87	52.05	51.29	51.63
2017 October-23 to October-27	51.91	52.32	51.97	52.41	53.92
2017 October-30 to November-3	54.11				
Differentials					
2017 October-2 to October-6	6.53	5.4	4.96	6.2	4.1
2017 October-9 to October-13	5.6	6.76	7.13	5.21	6.51
2017 October-16 to October-20	6.33	6.21	6.39	5.83	6.07
2017 October-23 to October-27	6.46	6.76	6.46	6.96	8.11
2017 October-30 to November-3	7.86				

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

o Weekly Petroleum Status Report

Stocks (Million Barrels)			
	Four Weeks Ending		
	10/27/2017	10/20/2017	10/28/2016
Crude Oil (Excluding SPR)	454.9	457.3	482.6
Motor Gasoline	212.8	216.9	223.8
Distillate Fuel Oil	128.9	129.2	150.6
All Other Oils	469.4	468.4	483.8
Crude Oil in SPR	670.6	671.4	695.1
Total	1,936.6	1,943.2	2,035.8

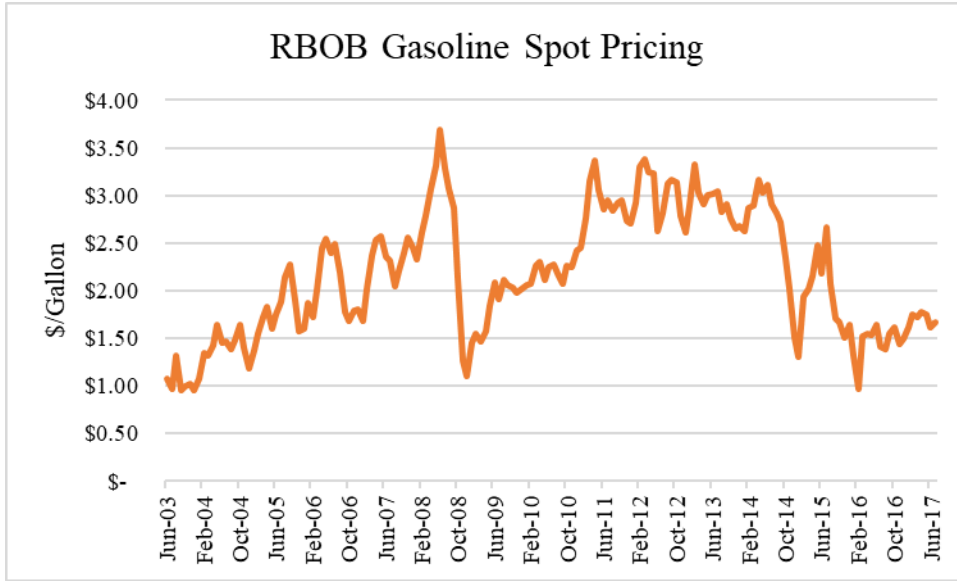
Products Supplied (Thousand Barrels per Day)			
	Four Weeks Ending		
	10/27/2017	10/20/2017	10/28/2016
Motor Gasoline	9,348	9,293	9,091
Distillate Fuel Oil	3,690	3,808	4,071
All Other Products	6,475	6,544	7,039
Total	19,513	19,646	20,201

Refinery Activity (Thousand Barrels per Day)			
	Four Weeks Ending		
	10/27/2017	10/20/2017	10/28/2016
Crude Oil Input to Refineries	15,934	15,938	15,481
Refinery Capacity Utilization	87.4	87.4	85.3
Motor Gasoline Production	9,974	9,890	9,774
Distillate Fuel Oil Production	4,895	4,868	4,573

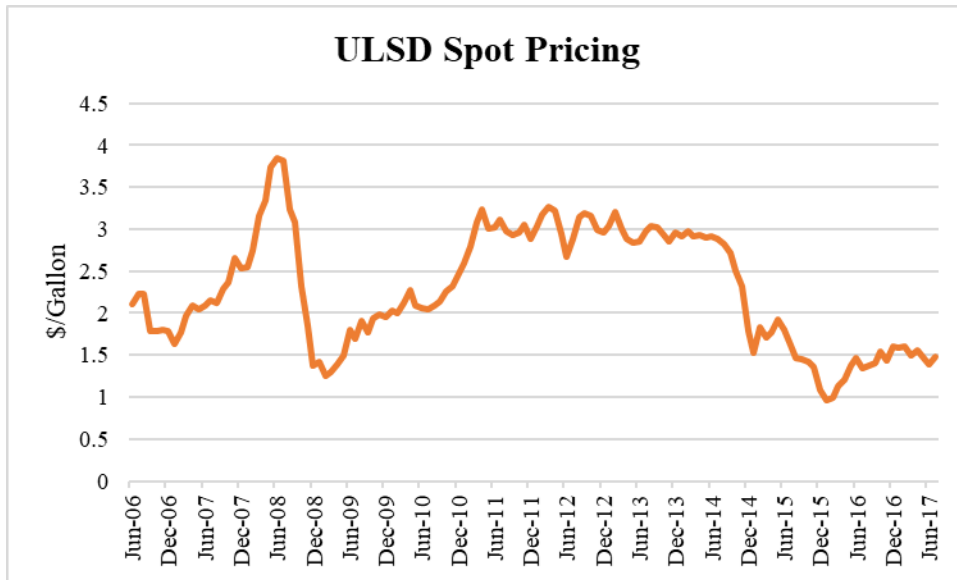
Net Imports (Thousand Barrels per Day)			
	Four Weeks Ending		
	10/27/2017	10/20/2017	10/28/2016
Crude Oil	5,917	5,865	7,260
Petroleum Products	-3,209	-2,957	-1,944
Total	2,708	2,908	5,316

- [EIA](#)

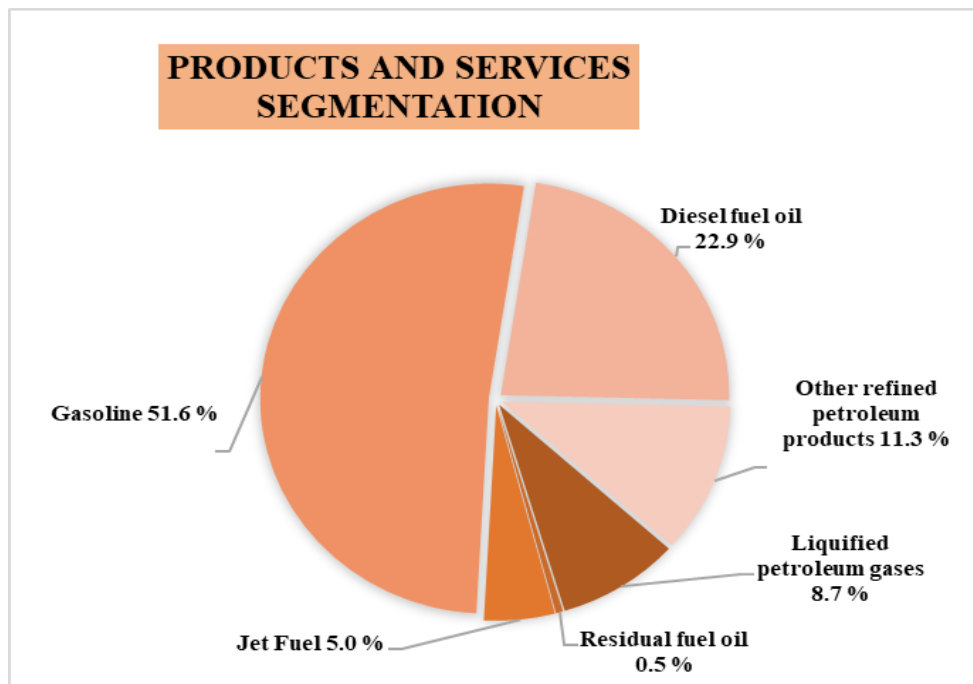
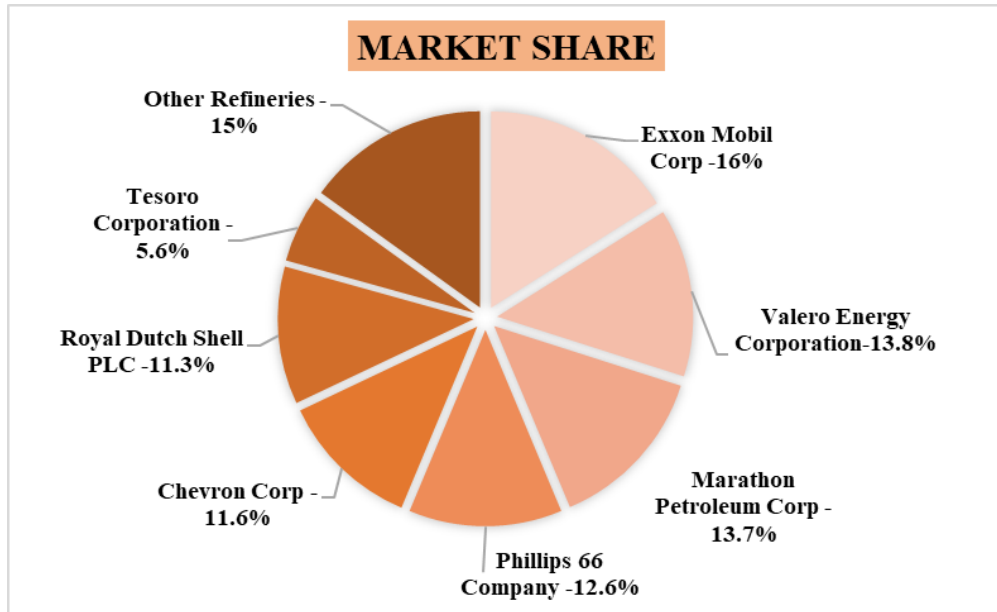
o **RBOB Gasoline**

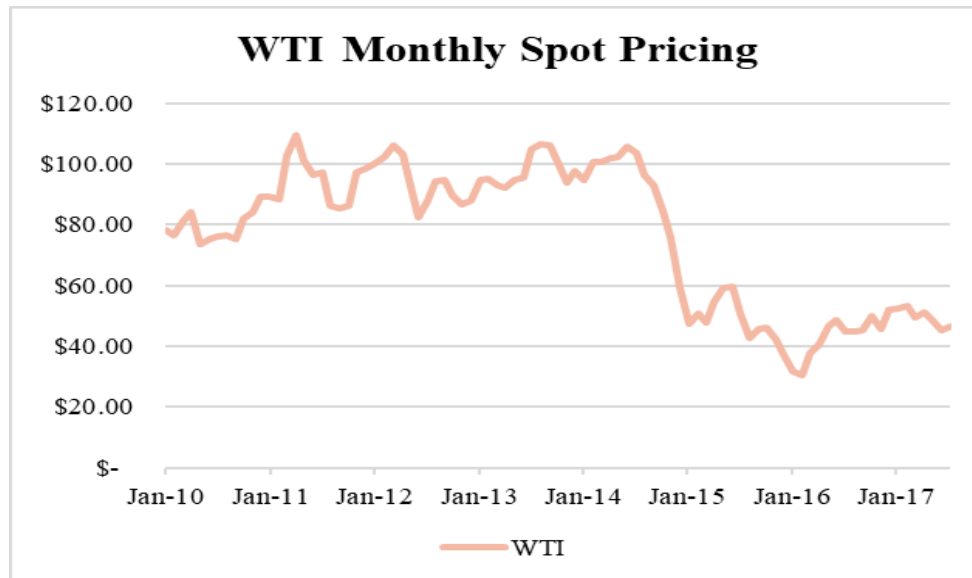


o **Ultra-Low Sulfur Diesel**



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>