

,Inc.

Energy Market Update September 12, 2018 NYMEX Prices

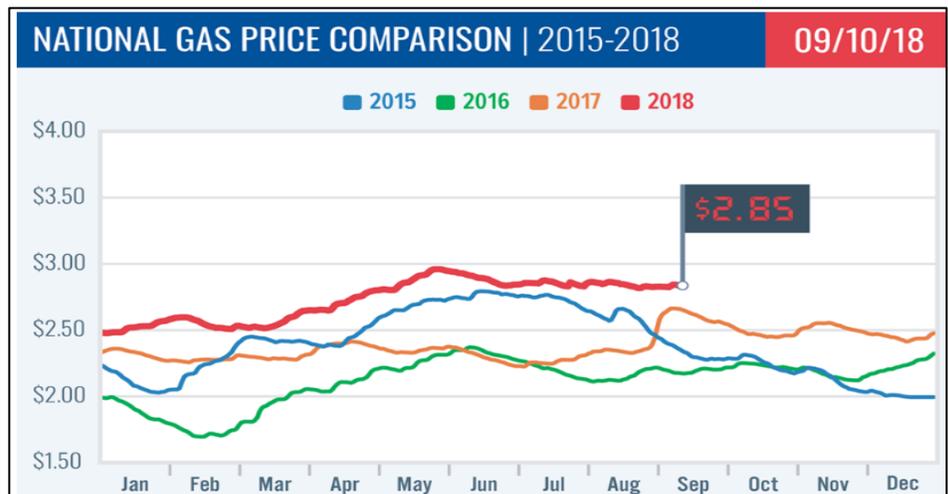
	Close	Wk. Change
Oct Crude Oil	\$70.37	+1.6
Oct Gasoline	\$2.0348	+0.0683
Oct Heating Oil	\$2.2577	+0.0216
Oct Natural Gas	\$2.829	+0.035

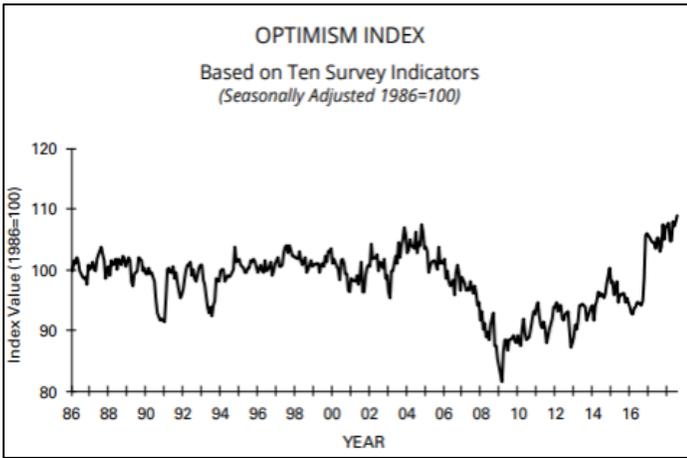
Market Comments: Oil prices were higher today, after a drop in U.S. crude inventories and as U.S. sanctions on Iran added to concerns over global oil supply. U.S. crude oil inventories decreased more than expected last week to below 400 million barrels, while gasoline and distillate inventories rose as refiners increased production, the EIA said on Wednesday. Crude inventories fell 5.3 million barrels last week to 396.2 million barrels, the lowest level since February 2015, and about 3 percent below the five year average for this time of year.

	Crude				Gasoline				Distillate Fuel			
	Change	Total	3Yr Avg.	5 Yr. Avg.	Change	Total	3Yr Avg.	5 Yr. Avg.	Change	Total	3Yr Avg.	5 Yr. Avg.
DOE	-5.3	396.2	443	431	1.3	235.9	217	218	+6.2	139.3	143	141
EST.	+2.016/-5.210				+1.847/-2.000				+2.413/+0.500			
Propane	Total +1.2 74.6				Midwest +0.2 25.9				Gulf +0.7 37.8			
API's	Crude -8.636 Cushing -1.165				Gasoline +2.122				Distillates +5.821			

U.S oil exports to South Korea and Japan will most likely rise to record highs this month as Asian refiners take advantage of the discounts American sellers are offering after losing Chinese customers due to the trade dispute between Washington and Beijing. Ship tracking data showed that oil exports from the United States to South Korea in September will rise to a record average of at least 230,000 barrels per day. U.S. shipments to Japan will also rise to a record average of at least 134,000 bpd, the data showed.

The national gas price average rose about a penny to \$2.85 per gallon. Prices remain relatively stable across the U.S. as gasoline demand has dipped slightly and gasoline inventories incrementally built according to the latest EIA reports. Gasoline prices are expected to decline this month as we approach September 15th, the date when gasoline is changed over to winter-blends.

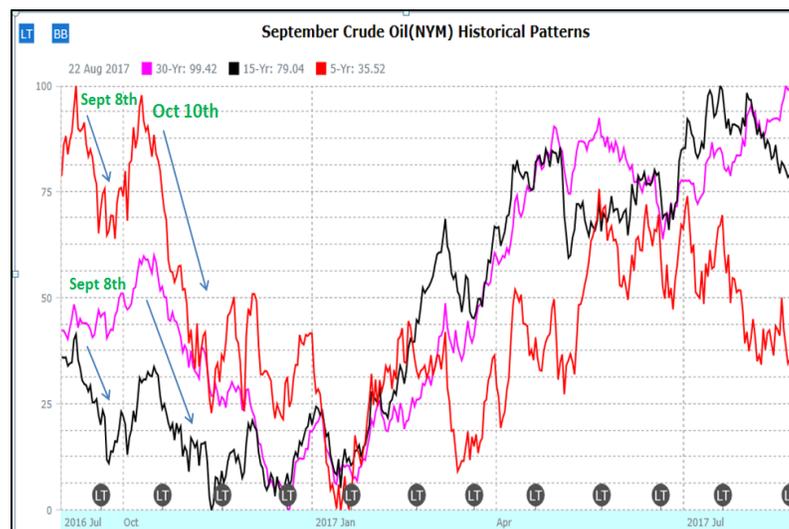
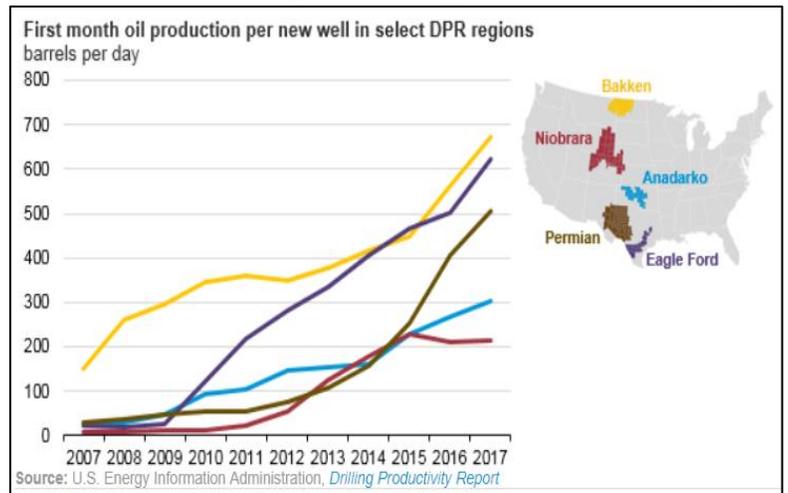




U.S. small business optimism surged to a record in August as tax cuts and deregulation led to more sales, hiring and investment, according to a survey by the National Federation of Independent Business. The Small Business Optimism Index jumped to 108.8 last month, the highest level ever recorded in the survey's 45 year history and above the previous record of 108 in 1983, set during the second year of Ronald Reagan's presidency. The August figure was up from a 107.9 reading in July. The

NFIB noted record readings for job creation plans and the amount of small business owners saying it was good time to expand. Capital spending plans were the highest since 2007.

The US has greatly improved the efficiency of drilling by hiring geologists that have helped find the best places to drill and also by embracing new technology such as 3D seismic imaging and measurement-while-drilling (MWD). MWD technology gives real-time readings to the operator, allowing them greater efficiency and reducing blowouts and tool failure. An average new well produces more oil than the same well a decade ago would have. US oil rig counts were reduced drastically in 2015/2016, and are now recovering, with oil production falling by about 1 million barrels/day during that time period. The first oil wells drilled in the Bakken, ND basin in 2007 yielded about 150 barrels/day; in 2017 the yield grew closer to 700 barrels/day, as illustrated in the chart below. The only exceptions below are the wells in Niobrara which quit showing an increase in mid-2015. Currently 749 rigs are deployed which is 46.6% less rigs than 4 years ago, but production has increased 23.9% in that same time period.



Seasonal patterns give us a potential road map where prices might be heading, but prices do not always follow past performance. Looking at the historical pattern of September Crude oil, it appears as if both the 15-year (black line) and the 5-year (red line) suggest after Sept 8th prices have a tendency to decline into the end of September. In addition, the seasonal pattern for the 5, 15 and 30 year all trace out a decline in prices after mid-October.