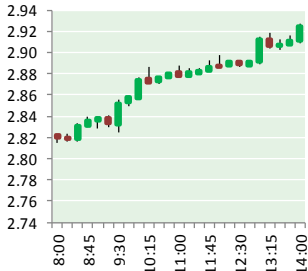


# NATURAL GAS



SEPTEMBER 18, 2018

## Prior Day's NYMEX Oct-18 Contract (CT)



## NYMEX NG Futures

Month	Close	Change
Oct-18	2.933	0.119
Nov-18	2.896	0.117
Dec-18	2.961	0.099
Jan-19	3.050	0.098
Feb-19	3.005	0.083
Mar-19	2.893	0.068
Apr-19	2.614	0.025
May-19	2.588	0.022
Jun-19	2.617	0.024
Jul-19	2.650	0.025
Aug-19	2.655	0.024
Sep-19	2.637	0.025
Oct-19	2.654	0.025
Nov-19	2.701	0.024
Dec-19	2.820	0.023
Jan-20	2.909	0.023
Feb-20	2.872	0.022
Mar-20	2.779	0.021
Apr-20	2.515	0.011
May-20	2.487	0.012
Jun-20	2.513	0.011
Jul-20	2.544	0.011
Aug-20	2.552	0.011
Sep-20	2.537	0.011
1YR Strip	2.792	0.061
2018	2.930	0.112
5YR Strip	2.652	0.018

## IN THE NEWS

**Senators: Natural gas pressure was 12 times normal level before Massachusetts explosions**—USA Today reported: The pressure in the natural gas pipelines under three Massachusetts communities spiked to 12 times their normal level last week, just before the explosions and fires that destroyed dozens of homes and killed an 18-year-old man, according to Sens. Ed Markey and

- **Senators: Natural gas pressure was 12 times normal level before Massachusetts explosions**
- **IEA says near-term natural gas export growth to be fueled by US, Australia and Russia**

Elizabeth Warren. The Massachusetts Democrats were briefed on the explosions in and around Lawrence by the National Transportation Safety Board, which is investigating. Markey and Warren are demanding answers from Columbia Gas and its parent company about the utility's response to the pressure readings. The NTSB says a Columbia Gas control room in Columbus, Ohio, registered pressures of 6 pounds per square inch last Thursday in pipelines that are intended to carry just 0.5 PSI, the senators wrote in a letter to Columbia Gas President Stephen Bryant. For more on this story visit [usatoday.com](http://usatoday.com) or click <https://usat.ly/2Ded4yO>

**IEA says near-term natural gas export growth to be fueled by US, Australia and Russia**—S&P Global reported: The International Energy Agency expects the US to account for 75% of the global growth in natural gas exports over the next five years, a bullish outlook for LNG developers facing challenges at home getting projects off the ground and abroad with tariffs affecting trade flows. During a presentation at Gastech in Spain on Wednesday, IEA senior natural gas analyst Jean-Baptiste Dubreuil said other countries contributing to the exports growth during that period will be Australia and Russia. Australia is a major LNG exporter, while Russia supplies significant amounts of pipeline gas to Europe. Besides its growing LNG exports efforts, the US is also a major exporter of pipeline gas to Mexico, which is heavily reliant on the supplies for power generation. For more on this story visit [spglobal.com](http://spglobal.com) or click <https://bit.ly/20Dekwm>

## 12 MONTH CANDLESTICK (WEEKLY)



## Prompt Natural Gas (NG) Daily Sentiment

**BULLISH**



RESISTANCE  
2.98 & 3.02  
SUPPORT  
2.85 & 2.77

## Trading Summary

### NATURAL GAS

Futures	Close	Change
NG	2.933	0.119
Volume	799,703	(661,007)
Open Int.	1,662,611	9,064

### CRUDE AND GASOLINE

Futures	Close	Change
Crude	69.85	0.94
RBOB	2.0049	0.0281
Crude/NG	23.82	(0.67)

### METALS

Futures	Close	Change
Gold	1,196.80	

### EQUITIES

Exchange	Close	Change
DOW	26,246.96	184.84
S&P 500	-2,314.20	15.51

### CURRENCY

Currency	Close	Change
EUR/USD	1.1669	0.0002
USD/CND	1.2405	(0.0019)

## Contact Us



**Mansfield Energy Corp**  
1025 Airport Pkwy  
Gainesville, GA 30501  
  
[www.mansfield.energy](http://www.mansfield.energy)  
  
[info@mansfieldoil.com](mailto:info@mansfieldoil.com)

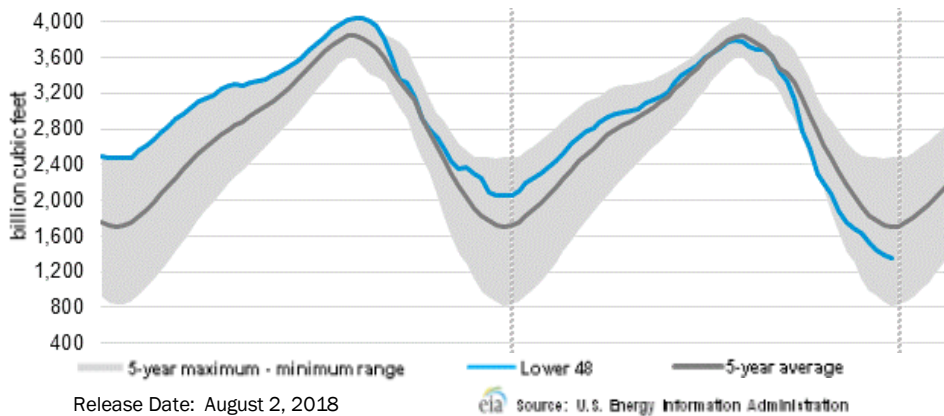
Phone: (800) 695-6626





**NATURAL GAS NEWS**

**WEEKLY GAS IN UNDERGROUND STORAGE WITH 5-YR RANGE**



**Rig Count**

Report Date: September 14, 2018

	Total	Change
US -	1,055	+7
CN -	226	22

**EIA Weekly NG Storage Actual and Surveys for September 14, 2018**

Released September 14, 2018  
 Range — +50 to +93  
 PIRA— +69  
 CITI — +69  
 Reuters — +69

**EIA ACTUAL — +69**

**Total Working Gas In Storage**

**2,636 BCF**

+69 BCF (LAST WEEK)  
 (662) BCF (LAST YEAR)  
 (596) BCF (5-YR AVG)

**U.S. Natural Gas Supply Gas Week 9/6 — 9/12**

**Average daily values (BCF/D):**  
 Last Year (BCF/d)  
 Dry Production — +72.9  
 Total Supply — +78.1  
 Last Week (BCF/d)  
 Dry Production — +82.9  
 Total Supply — +88.0

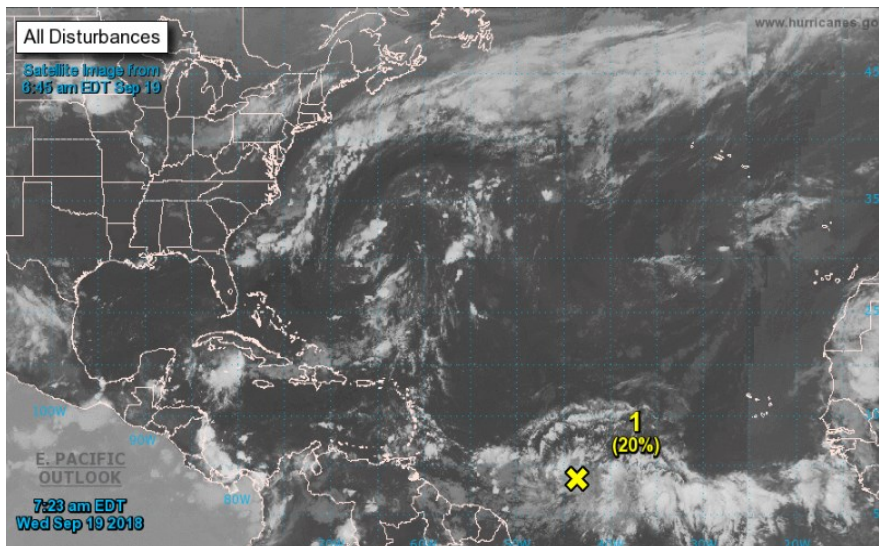
[NEXT REPORT ON Sept 21]

**U.S. Natural Gas Demand Gas Week 9/6 — 9/12**

**Average daily values (BCF/D):**  
 Last Year (BCF/d)  
 Power — +25.7  
 Total Demand — +65.5  
 Last Week (BCF/d)  
 Power — +34.0  
 Total Demand — +75.6

[NEXT REPORT ON Sept 21]

**TROPICAL STORM ACTIVITY— ATLANTIC**



Tropical Weather Outlook  
 NWS National Hurricane Center Miami FL  
 800 AM EDT Wed Sep 19 2018

For the North Atlantic...Caribbean Sea and the Gulf of Mexico:

1. A large area of disturbed weather located a little more than 1000 miles east of the Windward Islands is associated with a tropical wave moving westward about 10 to 15 mph. Some slight development is possible during the next day or two before the environment becomes unfavorable for tropical cyclone formation. days...low...20 percent.

\* Formation chance through 48 hours...low...20 percent.

\* Formation chance through 5 days...low...20 percent.

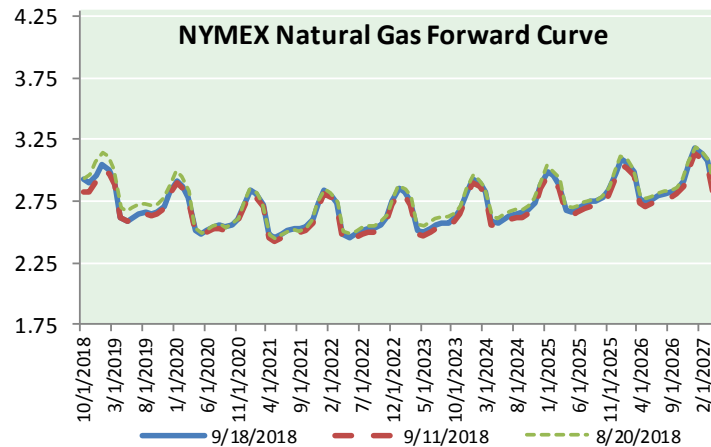
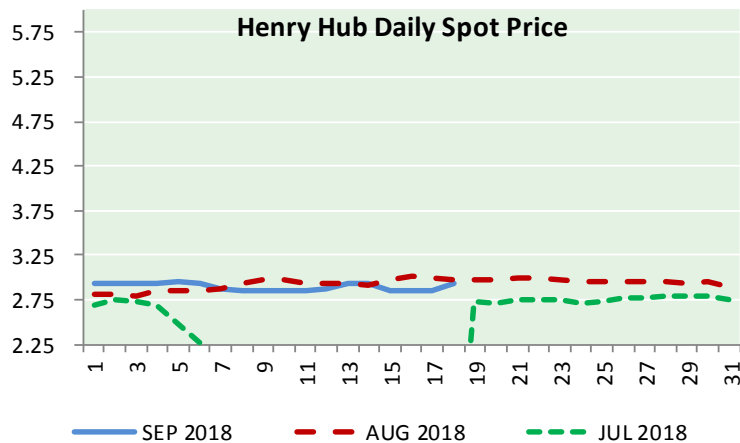
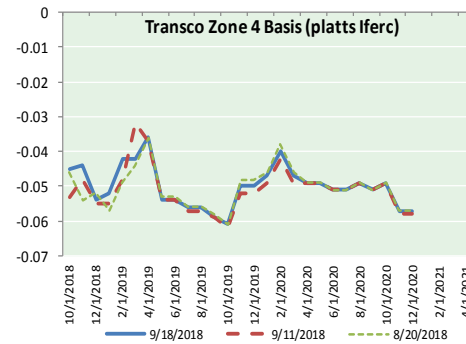
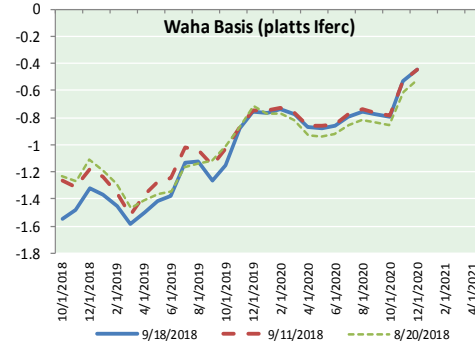
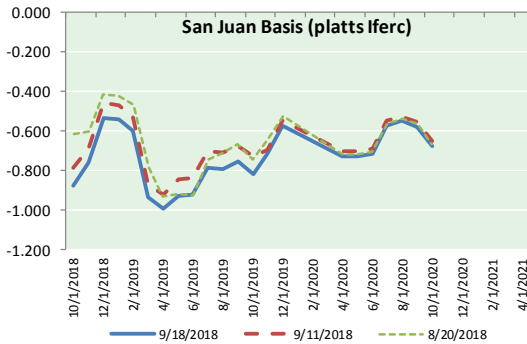
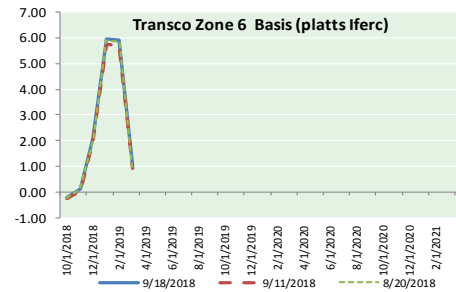
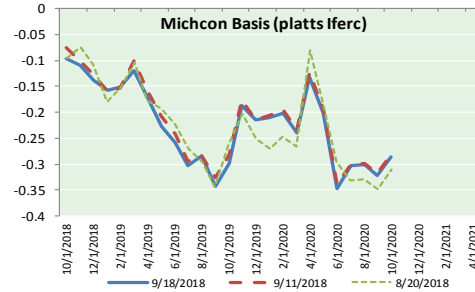
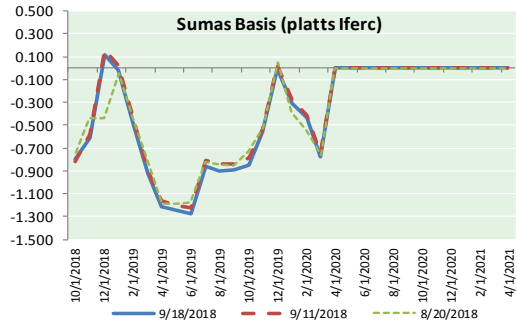
2. A non-tropical low is forecast to form this weekend between Bermuda and the Azores. After that time, conditions are expected to be favorable for subtropical or tropical cyclone formation while the low meanders over the north Atlantic.

\* Formation chance through 48 hours...low...near 0 percent.

\* Formation chance through 5



NATURAL GAS BASIS FUTURES, HENRY HUB SPOT PRICES, AND FORWARD CURVE



NYMEX WTI Delivery

Month Average (\$/bbl)

(Excluding Weekends and Holidays)

Month: September 2018

Day	Price	Day	Price
1		16	
2		17	68.91
3		18	69.85
4	69.87	19	
5	68.72	20	
6	67.77	21	
7	67.75	22	
8		23	
9		24	
10	67.54	25	
11	69.25	26	
12	70.37	27	
13	68.59	28	
14	68.99	29	
15		30	

Average (Sep) 68.8736  
(through 09/18/2018)

Average (Aug) 67.8452

Average (Jul) 70.5819

CME NG Option Prices

ATM Call

Month	Strike	Close	Imp	Vol
Nov-18				
Dec-18	2.900	0.092		26.2
Jan-19				
Feb-19				
Mar-19				

CME NG Option Prices

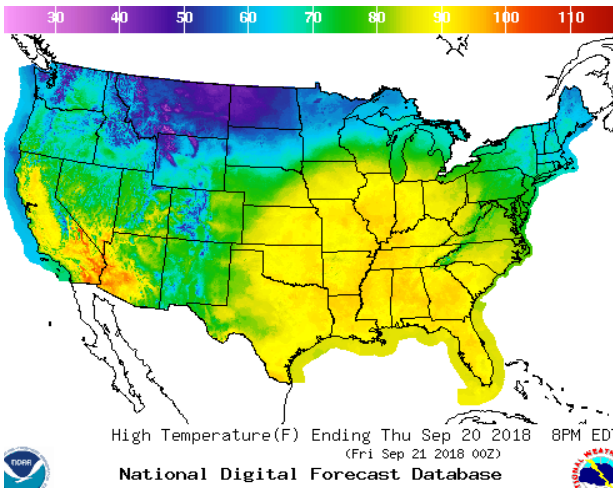
ATM Put

Month	Strike	Close	Imp	Vol
Nov-18				
Dec-18	2.900	0.089		22.5
Jan-19				
Feb-19				
Mar-19				

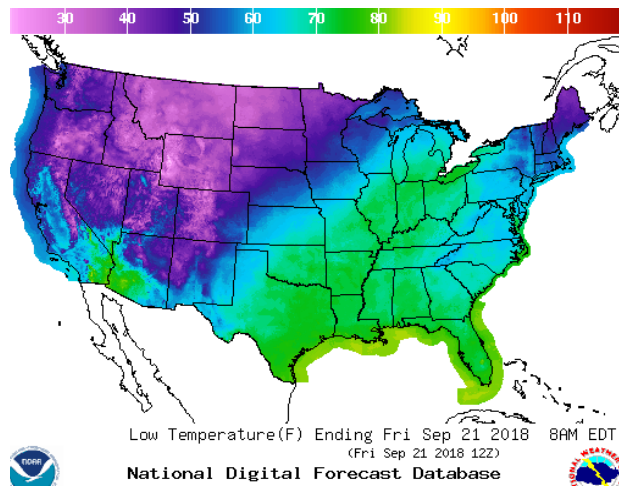


WEATHER – HIGH / LOW TEMPERATURE TOMORROW

HIGH Temperature

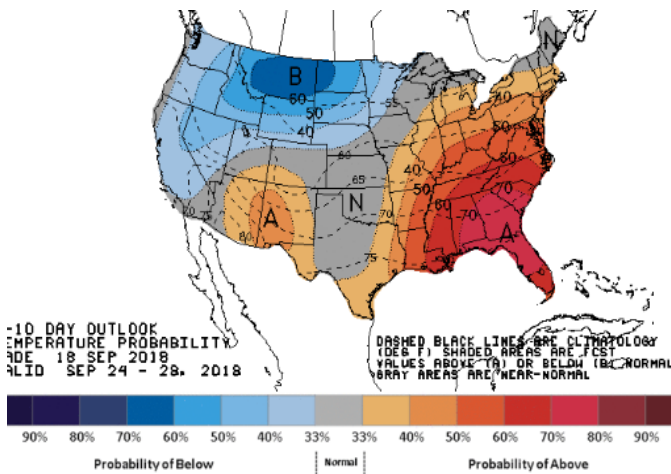


LOW Temperature

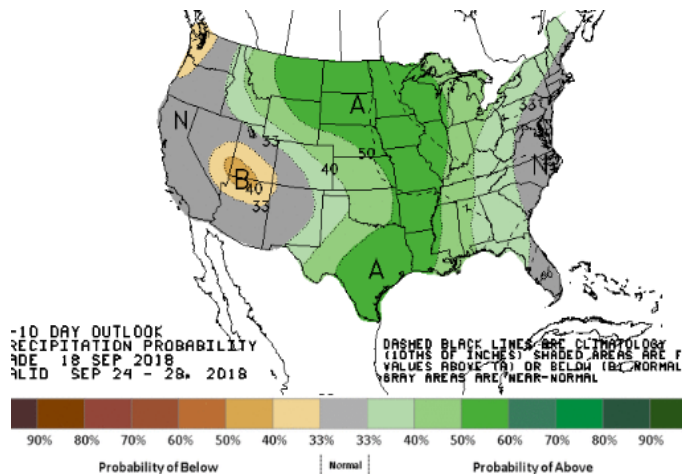


WEATHER – 6 TO 10 DAY OUTLOOK – NOAA

Temperature

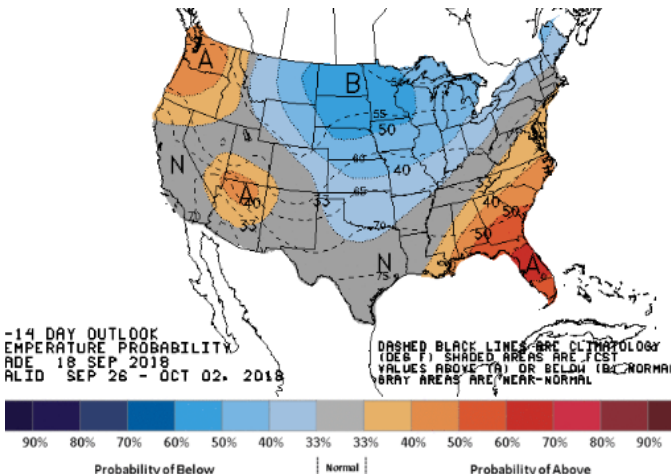


Precipitation

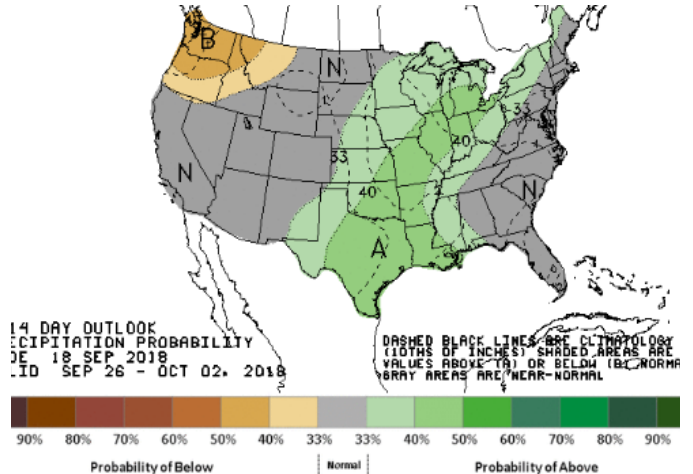


WEATHER – 8 TO 14 DAY OUTLOOK – NOAA

Temperature



Precipitation

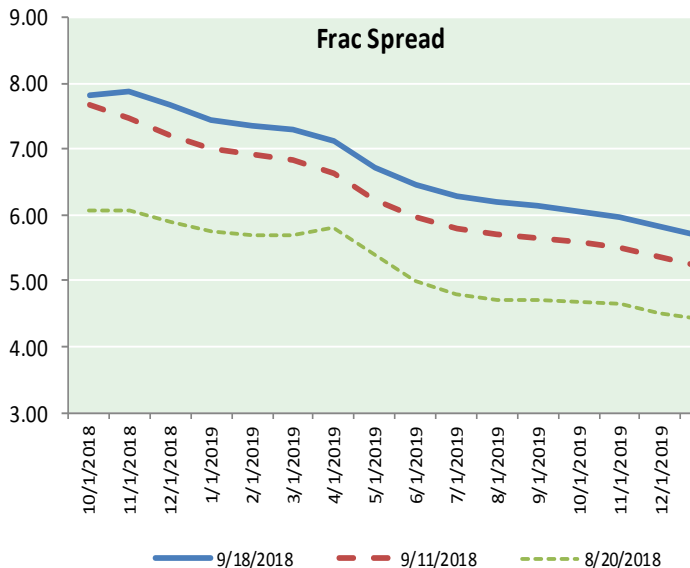
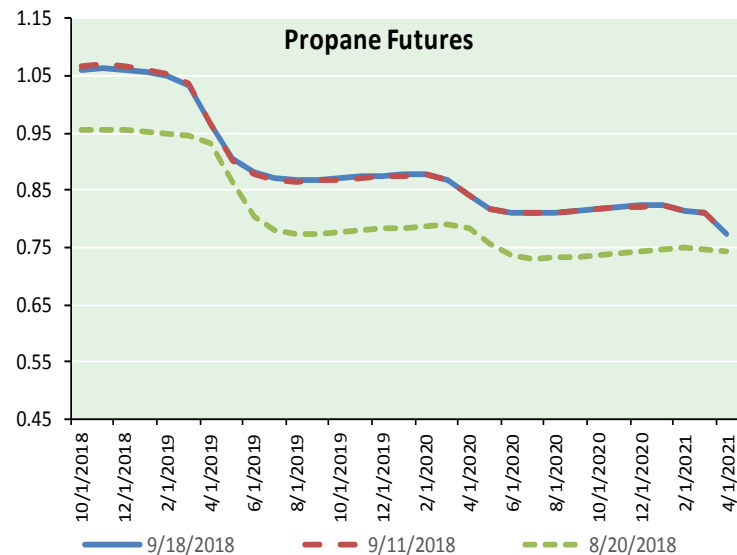
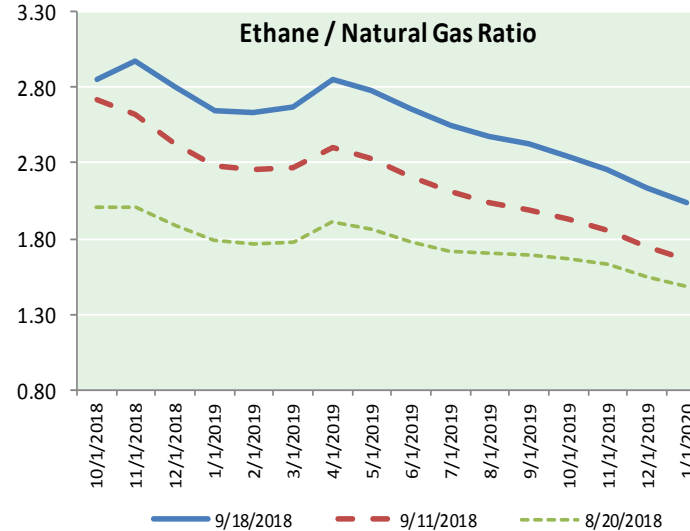
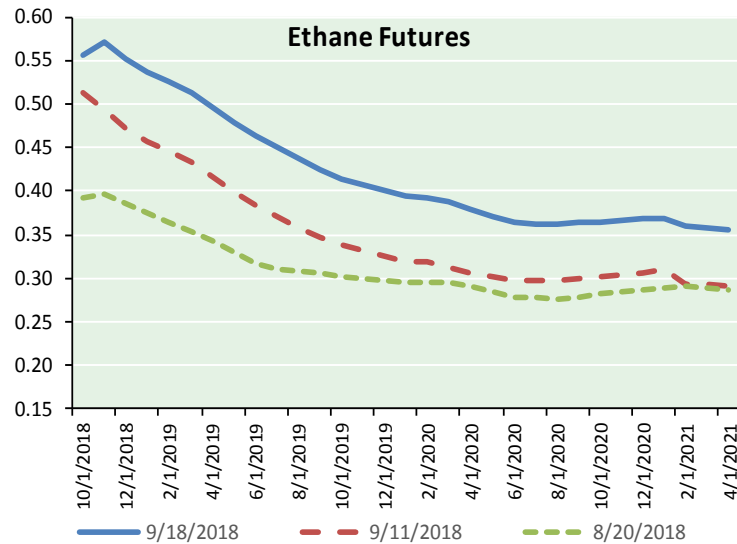


**NATURAL GAS NEWS**



**ETHANE FUTURES, NG/ETHANE RATIO, PROPANE FUTURES, AND THE FRAC SPREAD**

**CME Future Prices**



Month	Close	Change
Oct-18	0.555	0.005
Nov-18	0.572	0.007
Dec-18	0.552	0.007
Jan-19	0.537	0.012
Feb-19	0.526	0.013
Mar-19	0.514	0.014
Apr-19	0.496	0.014
May-19	0.478	0.015
Jun-19	0.464	0.016
Jul-19	0.450	0.014
Aug-19	0.437	0.013
Sep-19	0.425	0.013
1YR Strip	0.500	0.012

**CME Future Prices**  
**Propane (C3)**  
**Non-LDH— Mont Belvieu**

Month	Close	Change
Oct-18	1.062	0.002
Nov-18	1.063	0.005
Dec-18	1.061	0.005
Jan-19	1.056	0.006
Feb-19	1.049	0.006
Mar-19	1.035	0.006
Apr-19	0.967	0.007
May-19	0.904	0.009
Jun-19	0.880	0.009
Jul-19	0.870	0.008
Aug-19	0.869	0.008
Sep-19	0.870	0.008
1YR Strip	0.974	0.006

**NATURAL GAS NEWS**



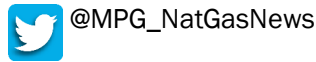
**Prompt WTI (CL) Crude  
Daily Sentiment**

**BULLISH**



RESISTANCE  
70.67 & 71.49  
SUPPORT  
68.78 & 67.71

**FOLLOW US ON TWITTER:**

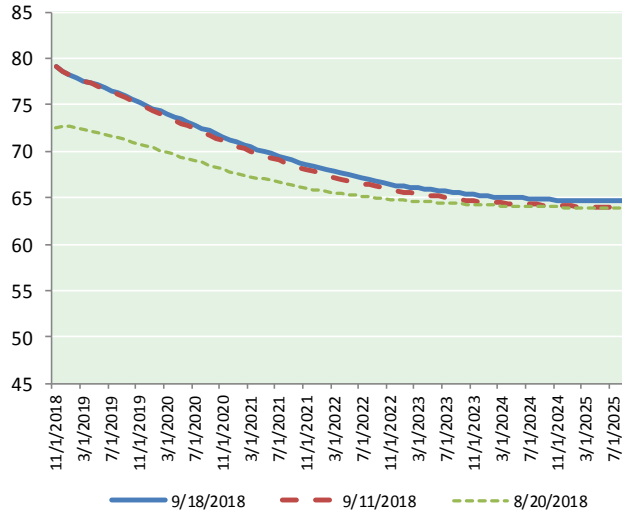


**NYMEX Brent (BZ)**

**Futures**

Month	Close	Change
Oct-18	69.85	0.94
Nov-18	69.59	0.91
Dec-18	69.45	0.86
Jan-19	69.30	0.83
Feb-19	69.12	0.80
Mar-19	68.94	0.79
Apr-19	68.73	0.76
May-19	68.53	0.75
Jun-19	68.30	0.73
Jul-19	68.02	0.70
Aug-19	67.73	0.69
Sep-19	67.45	0.67
Oct-19	67.18	0.65
Nov-19	66.90	0.63
Dec-19	66.62	0.61
Jan-20	66.29	0.60
Feb-20	65.97	0.58
Mar-20	65.66	0.57
Apr-20	65.38	0.56
May-20	65.11	0.53
Jun-20	64.84	0.50
Jul-20	64.53	0.49
Aug-20	64.24	0.48
Sep-20	63.97	0.48
1YR Strip 2018	68.75	0.79
5YR Strip	62.69	0.39

**BRENT CRUDE FORWARD CURVE**



**FRAC Spread**

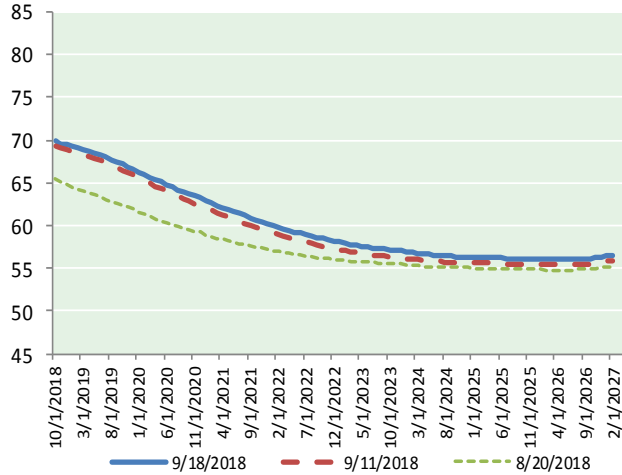
**Specifications**

Ethane :	42%	66,500 btu/g
Propane:	28%	90,830 btu/g
Butane: 11%	102,916 btu/g	
Iso-Butane: 6%	98,935 btu/g	
Natural Gasoline: 13%	115,021 btu/g	

**Prompt NGL Futures**

	Oct-18	Close	Change
Butane	1.244	0.001	
Iso-Butane	1.425	0.008	
Nat Gasoline	1.557	0.012	

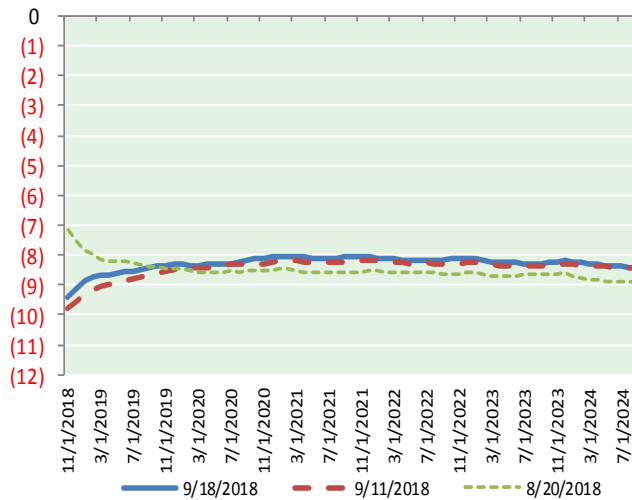
**WTI CRUDE FORWARD CURVE**



**NYMEX WTI (CL) Futures**

Month	Close	Change
Nov-18	79.03	0.98
Dec-18	78.53	0.94
Jan-19	78.15	0.92
Feb-19	77.85	0.89
Mar-19	77.61	0.87
Apr-19	77.38	0.85
May-19	77.14	0.83
Jun-19	76.84	0.78
Jul-19	76.55	0.75
Aug-19	76.24	0.73
Sep-19	75.90	0.71
Oct-19	75.56	0.69
Nov-19	75.25	0.67
Dec-19	74.90	0.66
Jan-20	74.60	0.65
Feb-20	74.31	0.64
Mar-20	74.02	0.63
Apr-20	73.70	0.61
May-20	73.40	0.59
Jun-20	73.11	0.59
Jul-20	72.80	0.58
Aug-20	72.48	0.56
Sep-20	72.16	0.54
Oct-20	71.84	0.51

**WTI-BRENT SPREAD**



1YR Strip	77.23	0.83
2018	78.78	0.96
5YR Strip	70.74	0.47