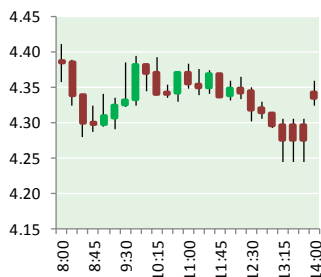


# NATURAL GAS



DECEMBER 4, 2018

## Prior Day's NYMEX Jan-19 Contract (CT)



## NYMEX NG Futures

Month	Close	Change
Jan-19	4.339	(0.273)
Feb-19	4.157	(0.262)
Mar-19	3.768	(0.246)
Apr-19	2.906	0.019
May-19	2.794	0.031
Jun-19	2.810	0.030
Jul-19	2.835	0.030
Aug-19	2.834	0.030
Sep-19	2.812	0.027
Oct-19	2.834	0.027
Nov-19	2.873	0.029
Dec-19	3.032	0.033
Jan-20	3.154	0.032
Feb-20	3.087	0.030
Mar-20	2.862	0.014
Apr-20	2.500	0.021
May-20	2.461	0.026
Jun-20	2.510	0.017
Jul-20	2.567	0.015
Aug-20	2.567	0.012
Sep-20	2.541	0.006
Oct-20	2.551	0.002
Nov-20	2.616	(0.001)
Dec-20	2.792	0.000
1YR Strip	3.166	(0.044)
2018 #DIV/O!	#DIV/O!	#DIV/O!
5YR Strip	2.753	(0.018)

## IN THE NEWS

Global Natural Gas Industry 2018 with BP, Gazprom, National Iranian Oil Company, ExxonMobil Dominating— Marketwatch reported: The year 2017 witnessed a significant increase in the production of natural gas worldwide. Globally, the production of natural gas increased by over 130 billion cubic meters (bcm) in 2017, or four percent - nearly double of the ten-year average

- Global Natural Gas Industry 2018 with BP, Gazprom, National Iranian Oil Company, ExxonMobil Dominating
- China-U.S. Ceasefire Paves Way For New LNG Projects

growth rate. In fact, this was the fastest growth the industry witnessed ever since the financial crisis of 2008-2009. Russia witnessed the largest growth, standing at 46 bcm or over eight percent. Iran followed with 21 bcm. Australia was at 17 bcm, followed by China at 11 bcm. The recent years have seen the natural gas markets undergo several transformations. With China entering the global natural gas scene, and the United States emerging as a big player in the global LNG market, the industry is poised to undergo major growth in the coming years as natural gas demand rises as never before. For more on this story visit [marketwatch.com](https://on.mktw.net/2rih8F8) or click <https://on.mktw.net/2rih8F8>

China-U.S. Ceasefire Paves Way For New LNG Projects— Oil Price reported: News broke on Saturday that the U.S. and China had reached a ceasefire in its ongoing trade war after President Trump met with Chinese President Xi Jinping at the G20 summit in Argentina. According to the White House, the U.S. will still keep in place \$200 billion of tariffs on Chinese imports but will not increase those tariffs from 10 percent to 25 percent after the start of the year as originally planned. The deal will also keep, at least for now, Trump from placing another \$267 billion worth of Chinese goods under tariffs. Both sides will immediately hold talks on structural changes concerning forced technology transfers made by Chinese firms on U.S. companies, intellectual property rights protection, non-tariff trade barriers, cyber intrusion concerns, cyber theft and agricultural, the White House added. For more on this story visit [oilprice.com](https://bit.ly/2Rwx3LB) or click <https://bit.ly/2Rwx3LB>

## Prompt Natural Gas (NG) Daily Sentiment

**BULLISH**



RESISTANCE

4.50 & 4.67

SUPPORT

4.21 & 4.08

## Trading Summary

### NATURAL GAS

Futures	Close	Change
NG	4.339	(0.273)
Volume	432,455	(356,969)
Open Int.	1,273,144	10,921

### CRUDE AND GASOLINE

Futures	Close	Change
Crude	52.95	2.02
RBOB	1.4314	0.0295
Crude/NG	12.20	1.16

### METALS

Futures	Close	Change
Gold	1,233.90	4.50

### EQUITIES

Exchange	Close	Change
DOW	25,826.43	287.97
S&P 500	-1,893.67	30.20

### CURRENCY

Currency	Close	Change
EUR/USD	1.1387	0.0033
USD/CND	1.2405	(0.0006)

## 12 MONTH CANDLESTICK (WEEKLY)



## Contact Us



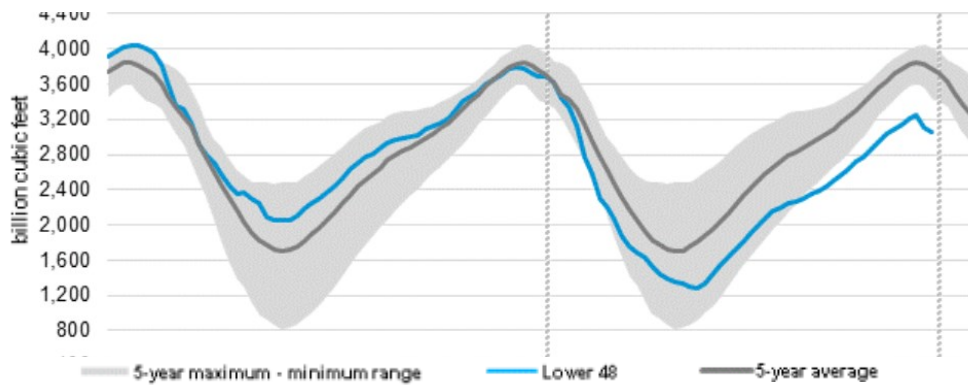
**Mansfield Energy Corp**  
1025 Airport Pkwy  
Gainesville, GA 30501  
  
www.mansfield.energy  
info@mansfieldoil.com

Phone: (800) 695-6626



**NATURAL GAS NEWS**

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



Release Date: November 30, 2018

Source: U.S. Energy Information Administration

**Rig Count**

Report Date: November 30, 2018

	Total	Change
US -	1,076	(3)
CN -	199	(5)

**EIA Weekly NG Storage Actual and Surveys for**

**November 30, 2018**

Released November 29, 2018

Range — +121 to +92

PIRA— +120

PointLogic — +108

Wells Fargo — +92

**EIA ACTUAL — +59**

**Total Working Gas In Storage**

**3,054 BCF**

(59) BCF (LAST WEEK)

(644) BCF (LAST YEAR)

(720) BCF (5-YR AVG)

**U.S. Natural Gas Supply Gas Week 11/22 — 11/28**

**Average daily values (BCF/D):**

Last Year (BCF/d)

Dry Production — +78.7

Total Supply — +84.1

Last Week (BCF/d)

Dry Production — +88.0

Total Supply — +92.4

[NEXT REPORT ON Dec 7]

**U.S. Natural Gas Demand Gas Week 11/22 — 11/28**

**Average daily values (BCF/D):**

Last Year (BCF/d)

Power — +21.1

Total Demand — +85.8

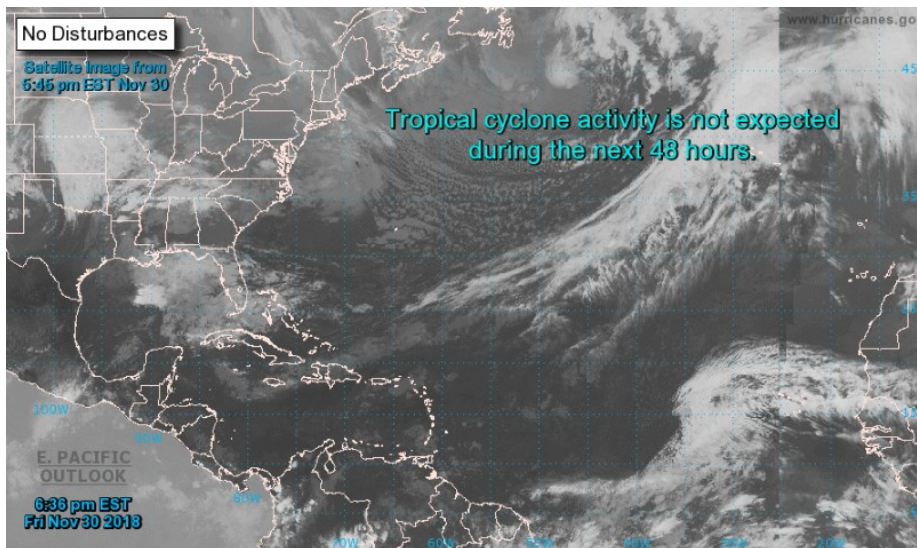
Last Week (BCF/d)

Power — +23.6

Total Demand — +100.8

[NEXT REPORT ON Dec 7]

**TROPICAL STORM ACTIVITY— ATLANTIC**



Tropical Weather Outlook on June 1, 2019. During the off-season, Special Tropical Weather Outlooks will be issued as warranted.

NWS National Hurricane Center Miami FL

700 PM EST Fri Nov 30 2018

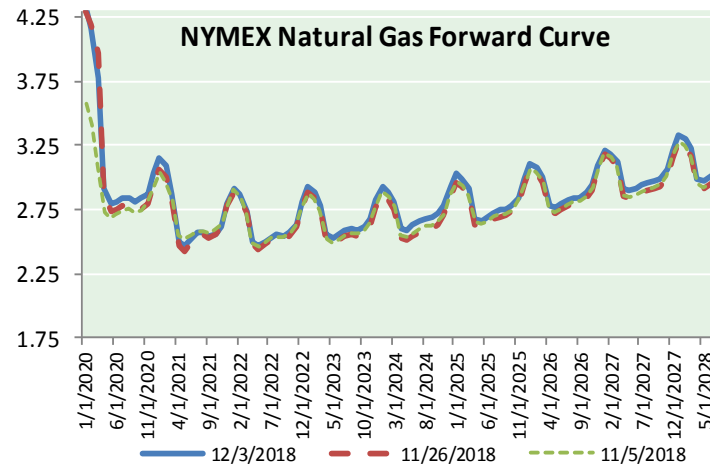
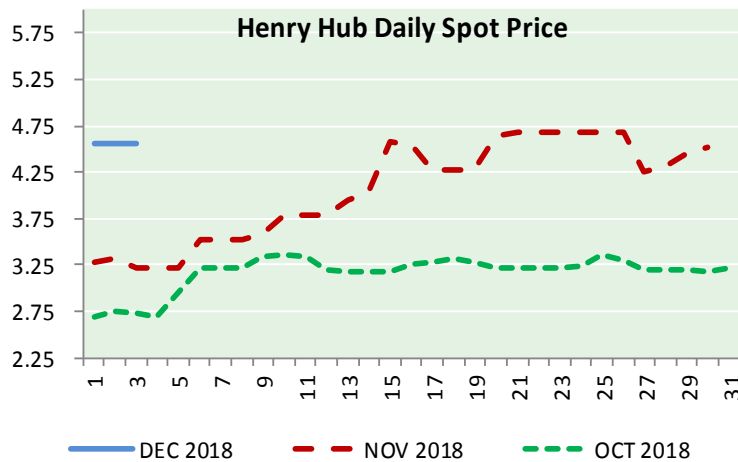
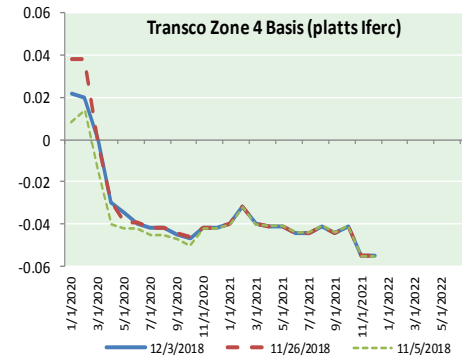
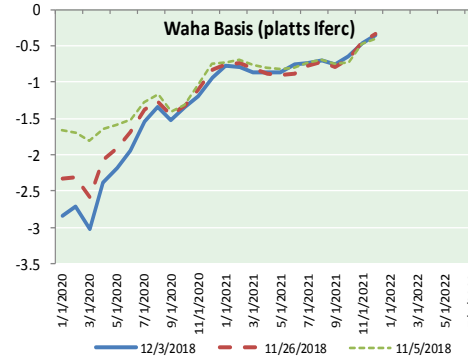
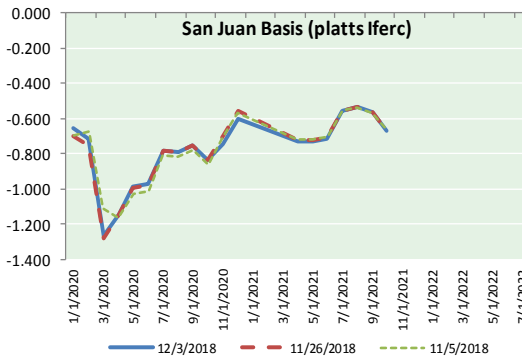
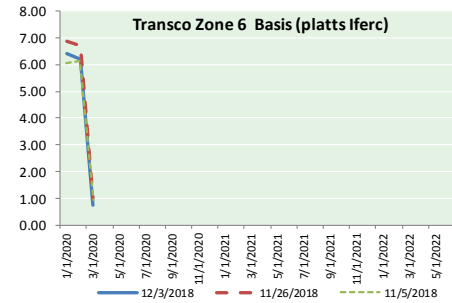
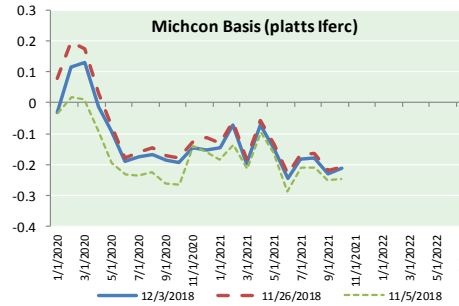
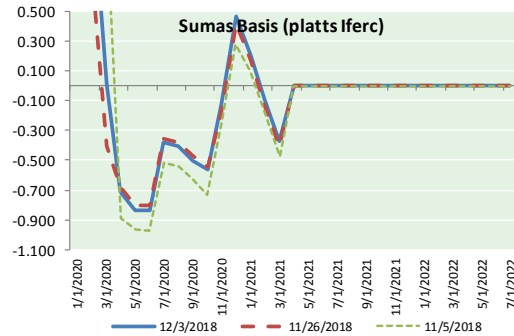
For the North Atlantic...Caribbean Sea and the Gulf of Mexico:

Tropical cyclone formation is not expected during the next 5 days.

This is the last regularly scheduled Tropical Weather Outlook of the 2018 Atlantic hurricane season. Routine issuance of the Tropical Weather Outlook will resume



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



NYMEX WTI Delivery  
Month Average (\$/bbl)  
(Excluding Weekends and Holidays)

Month: December 2018

Day	Price	Day	Price
1		16	
2		17	
3	52.95	18	
4		19	
5		20	
6		21	
7		22	
8		23	
9		24	
10		25	
11		26	
12		27	
13		28	
14		29	
15		30	
		31	

Average (Dec) 52.9500  
(through 12/03/2018)

Average (Nov) 56.6933

Average (Oct) 70.7578

CME NG Option Prices

ATM Call

Month	Strike	Close	Imp Vol
Feb-19			
Mar-19	4.400	0.458	67.5
Apr-19			
May-19			
Jun-19			

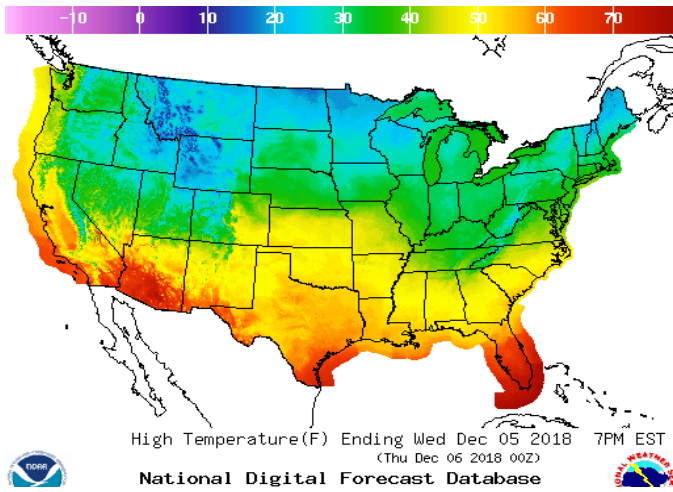
CME NG Option Prices

ATM Put

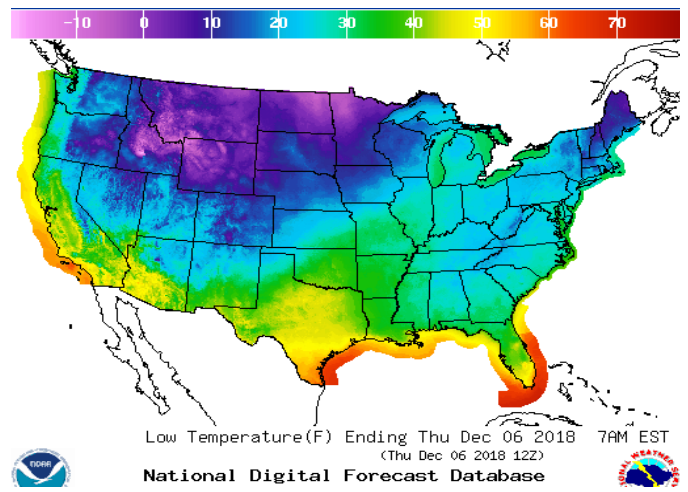
Feb-19	
Mar-19	4.400
Apr-19	
May-19	
Jun-19	

WEATHER – HIGH / LOW TEMPERATURE TOMORROW

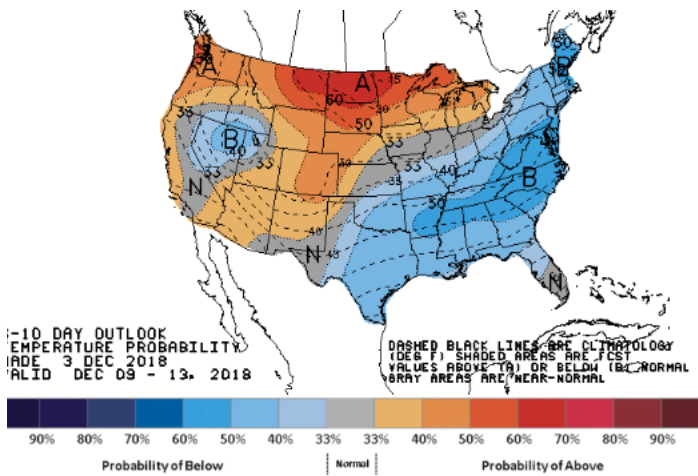
HIGH Temperature



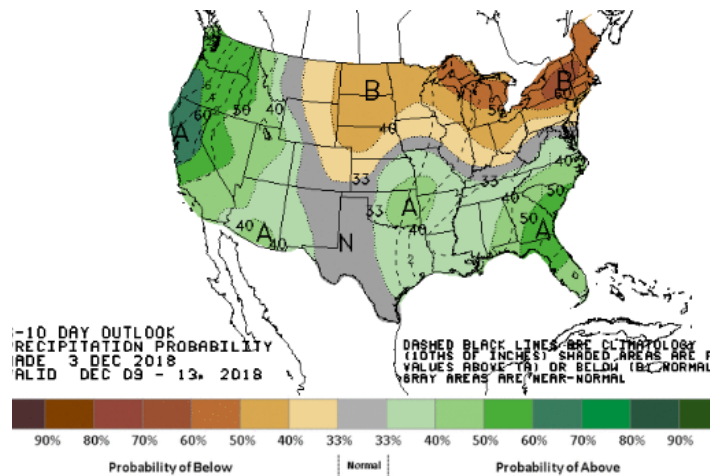
LOW Temperature



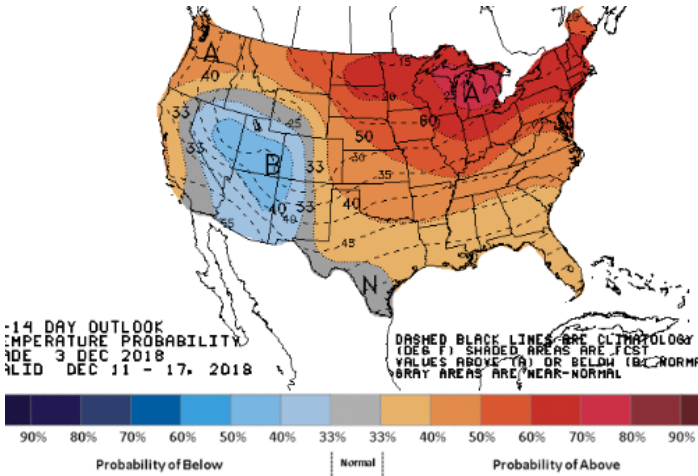
WEATHER – 6 TO 10 DAY OUTLOOK – NOAA  
Temperature



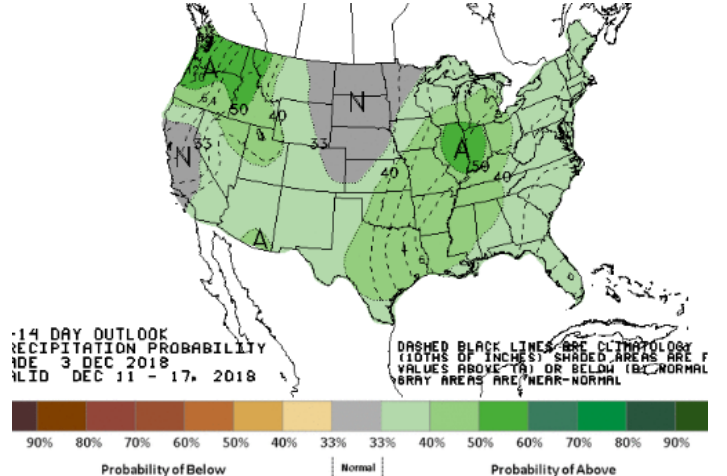
Precipitation



WEATHER – 8 TO 14 DAY OUTLOOK – NOAA  
Temperature



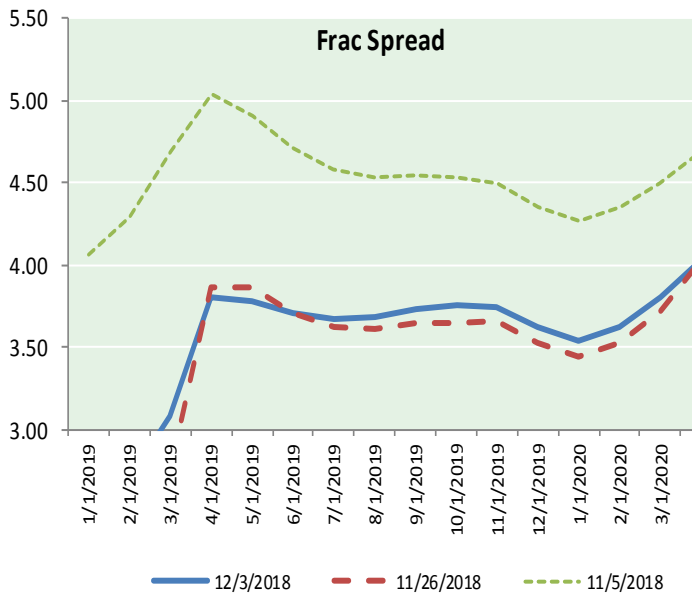
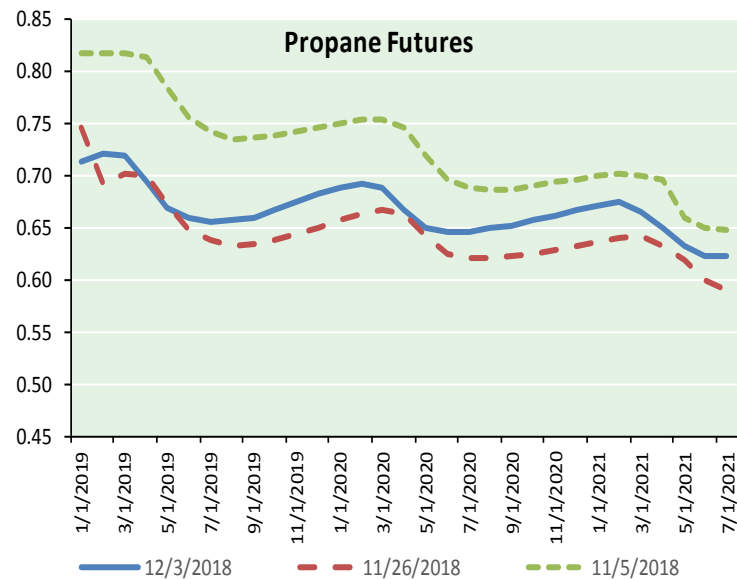
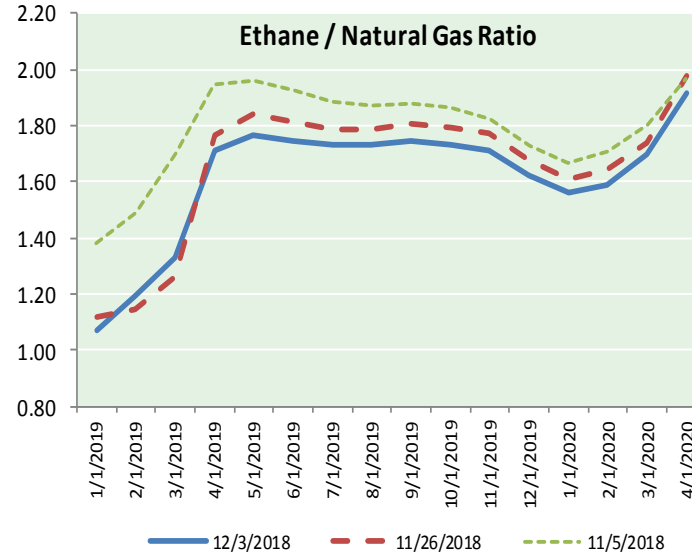
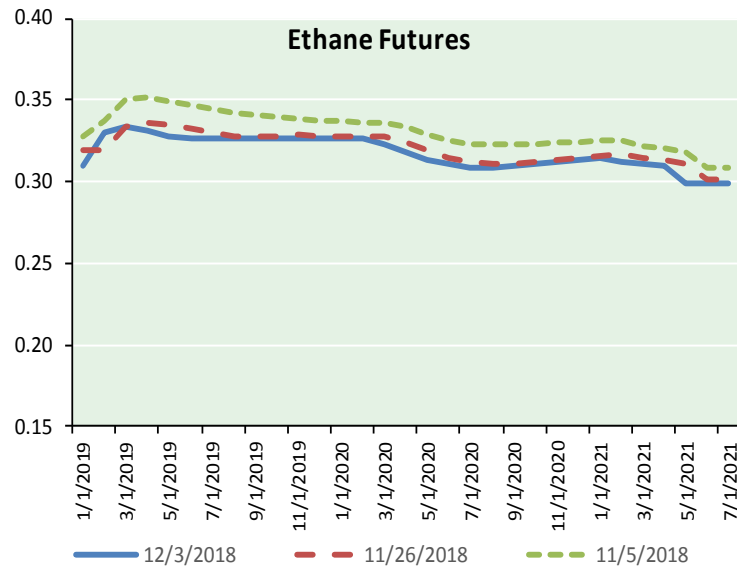
Precipitation



NATURAL GAS NEWS



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



CME Future Prices

Month	Close	Change
Jan-19	0.310	(0.015)
Feb-19	0.330	(0.006)
Mar-19	0.333	(0.011)
Apr-19	0.331	(0.014)
May-19	0.328	(0.013)
Jun-19	0.326	(0.009)
Jul-19	0.326	(0.007)
Aug-19	0.326	(0.006)
Sep-19	0.327	(0.004)
Oct-19	0.327	(0.003)
Nov-19	0.327	(0.002)
Dec-19	0.327	(0.002)
1YR Strip	0.326	(0.008)

CME Future Prices

Propane (C3)  
Non-LDH— Mont Belvieu

Month	Close	Change
Jan-19	0.714	(0.033)
Feb-19	0.722	0.033
Mar-19	0.719	0.019
Apr-19	0.694	(0.004)
May-19	0.669	(0.002)
Jun-19	0.659	0.014
Jul-19	0.656	0.021
Aug-19	0.658	0.025
Sep-19	0.661	0.027
Oct-19	0.668	0.031
Nov-19	0.676	0.031
Dec-19	0.683	0.030
1YR Strip	0.681	0.016

# NATURAL GAS NEWS



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

**BEARISH**



RESISTANCE  
53.86 & 54.76  
SUPPORT  
52.04 & 51.12

FOLLOW US ON TWITTER:



@MPG\_NatGasNews

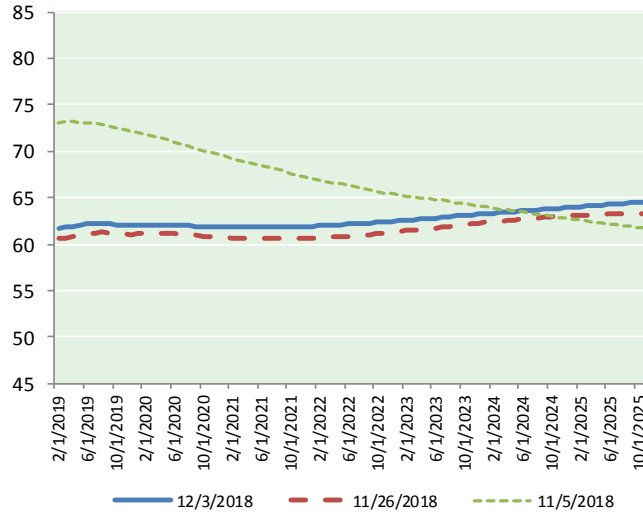
**NYMEX Brent (BZ)**

Futures

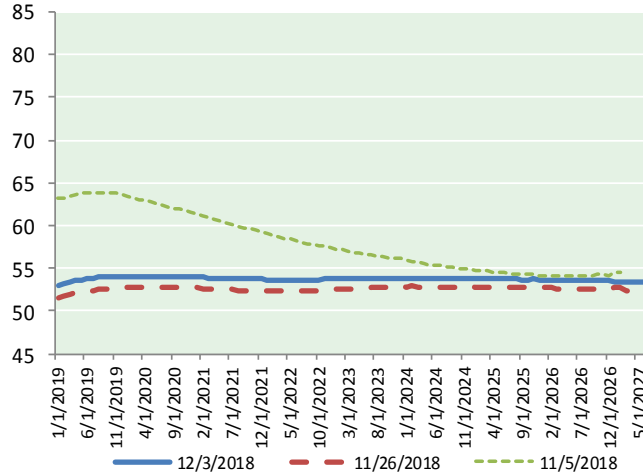
Month	Close	Change
Jan-19	52.95	2.02
Feb-19	53.14	2.05
Mar-19	53.33	2.10
Apr-19	53.52	2.16
May-19	53.70	2.20
Jun-19	53.83	2.23
Jul-19	53.92	2.26
Aug-19	53.98	2.27
Sep-19	54.03	2.27
Oct-19	54.05	2.25
Nov-19	54.07	2.23
Dec-19	54.09	2.20
Jan-20	54.07	2.19
Feb-20	54.05	2.18
Mar-20	54.04	2.15
Apr-20	54.03	2.12
May-20	54.03	2.09
Jun-20	54.05	2.06
Jul-20	54.01	2.02
Aug-20	54.00	1.99
Sep-20	53.99	1.94
Oct-20	54.00	1.91
Nov-20	54.00	1.88
Dec-20	54.05	1.88

1YR Strip	53.72	2.19
2018	#DIV/0!	#DIV/0!
5YR Strip	53.82	1.75

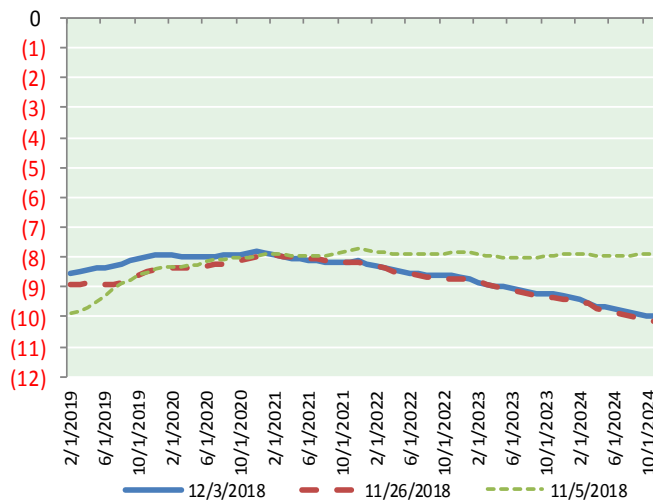
**BRENT CRUDE FORWARD CURVE**



**WTI CRUDE FORWARD CURVE**



**WTI-BRENT SPREAD**



**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**

	Jan-19	Close	Change
Butane	0.778	(0.063)	
Iso-Butane	0.868	(0.034)	
Nat Gasoline	1.041	(0.074)	

**NYMEX WTI (CL) Futures**

Month	Close	Change
Feb-19	61.69	2.23
Mar-19	61.82	2.24
Apr-19	61.93	2.24
May-19	62.07	2.24
Jun-19	62.17	2.23
Jul-19	62.21	2.22
Aug-19	62.19	2.20
Sep-19	62.13	2.19
Oct-19	62.08	2.17
Nov-19	62.05	2.16
Dec-19	62.01	2.16
Jan-20	62.01	2.14
Feb-20	62.01	2.12
Mar-20	62.03	2.11
Apr-20	62.04	2.08
May-20	62.04	2.04
Jun-20	62.03	2.01
Jul-20	62.00	1.99
Aug-20	61.96	1.96
Sep-20	61.94	1.95
Oct-20	61.90	1.92
Nov-20	61.89	1.90
Dec-20	61.88	1.88
Jan-21	61.90	1.88

1YR Strip	62.03	2.20
2018	#DIV/0!	#DIV/0!
5YR Strip	62.22	1.78