

# NATURAL GAS



NEWS

DECEMBER 10, 2018

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



## NYMEX NG Futures

Month	Close	Change
Jan-19	4.488	0.161
Feb-19	4.378	0.161
Mar-19	4.155	0.231
Apr-19	2.991	0.031
May-19	2.877	0.033
Jun-19	2.892	0.033
Jul-19	2.916	0.034
Aug-19	2.911	0.033
Sep-19	2.885	0.032
Oct-19	2.907	0.033
Nov-19	2.949	0.036
Dec-19	3.099	0.034
Jan-20	3.213	0.030
Feb-20	3.154	0.031
Mar-20	2.938	0.035
Apr-20	2.535	0.022
May-20	2.483	0.018
Jun-20	2.523	0.015
Jul-20	2.573	0.013
Aug-20	2.575	0.011
Sep-20	2.551	0.013
Oct-20	2.564	0.012
Nov-20	2.624	0.008
Dec-20	2.806	0.007
1YR Strip	3.287	0.071
2018 #DIV/O!	#DIV/O!	#DIV/O!
5YR Strip	2.781	0.019

## IN THE NEWS

China increases natural gas imports to avoid winter shortage— World Oil reported: China has gone all out to avoid a repeat of last winter's crippling natural gas shortages. The early verdict: so far, so good. China's gas needs peak for its so-called winter heating season. It's a time of surging demand and firmer prices as the nation seeks to curb its reliance on dirty coal. The difference

- China increases natural gas imports to avoid winter shortage
- Oil, Natural Gas Reserves at Record Highs

so far this year -- none of the widespread shortages that froze northern cities as early as November, and forced the government to allow some parts to revert to coal. Milder weather is surely helping. But so has better preparation, smarter policy and improved infrastructure. Demonstrating reliable supply of the cleaner-burning fuel would be a victory for Beijing, which is trying to quell complaints about urban air pollution without the embarrassing criticisms of last winter's effort. For more on this story visit [worldoil.com](https://bit.ly/2PuwhwV) or click <https://bit.ly/2PuwhwV>

Oil, Natural Gas Reserves at Record Highs— Thomas Net reported: A recent report from the Energy Information Administration indicates that a combination of higher prices, shale development, and tight resources drove U.S. crude oil and natural gas reserves to new records in 2017. Proved reserves of U.S. crude oil increased 19.5%, reaching 39.2 billion barrels. The previous peak level was 39 billion barrels, in 1970. Proved reserves of natural gas increased 36.1% to reach 464.3 trillion cubic feet (Tcf). The previous high was reached in 2014, with 388.8 Tcf. "Proved reserves" refers the volumes that geological and engineering data demonstrate to be recoverable years down the line from known reservoirs under current operating and economic conditions. Changes in proved reserves from year to year reflect new discoveries or adjustments to previous reserve estimates, along with reductions from annual production. For more on this story visit [news.thomasnet.com](https://bit.ly/2ru4xig) or click <https://bit.ly/2ru4xig>

## Prompt Natural Gas (NG) Daily Sentiment

**BULLISH**



RESISTANCE

4.63 & 4.77

SUPPORT

4.29 & 4.09

## Trading Summary

### NATURAL GAS

Futures	Close	Change
NG	4.488	0.161
Volume	468,164	(386,879)
Open Int.	1,287,037	12,816

### CRUDE AND GASOLINE

Futures	Close	Change
Crude	52.61	1.12
RBOB	1.4858	0.0524
Crude/NG	11.72	(0.18)

### METALS

Futures	Close	Change
Gold	1,246.80	(1.90)

### EQUITIES

Exchange	Close	Change
DOW	24,388.95	(558.72)
S&P 500	-456.19	(62.87)

### CURRENCY

Currency	Close	Change
EUR/USD	1.1409	0.0030
USD/CND	1.2405	0.0037

## 12 MONTH CANDLESTICK (WEEKLY)



## Contact Us



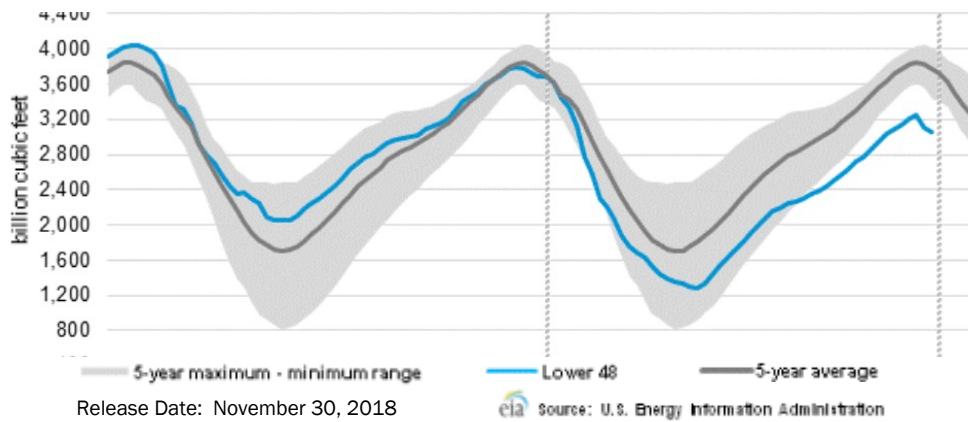
**Mansfield Energy Corp**  
1025 Airport Pkwy  
Gainesville, GA 30501  
  
www.mansfield.energy  
info@mansfieldoil.com

Phone: (800) 695-6626



# NATURAL GAS NEWS

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



## Rig Count

Report Date: December 7, 2018

	Total	Change
US -	1,075	(1)
CN -	186	(13)

## EIA Weekly NG Storage Actual and Surveys for December 7, 2018

Released December 6, 2018  
 Range — +101 to +54  
 PIRA— +57  
 PointLogic — +62  
 Citi Futures — +64

EIA ACTUAL — +63

## Total Working Gas In Storage

**2,991 BCF**

- (63) BCF (LAST WEEK)
- (704) BCF (LAST YEAR)
- (725) BCF (5-YR AVG)

## U.S. Natural Gas Supply Gas Week 11/29 – 12/5

**Average daily values (BCF/D):**  
Last Year (BCF/d)  
 Dry Production — +78.4  
 Total Supply — +83.7  
Last Week (BCF/d)  
 Dry Production — +88.5  
 Total Supply — +92.5

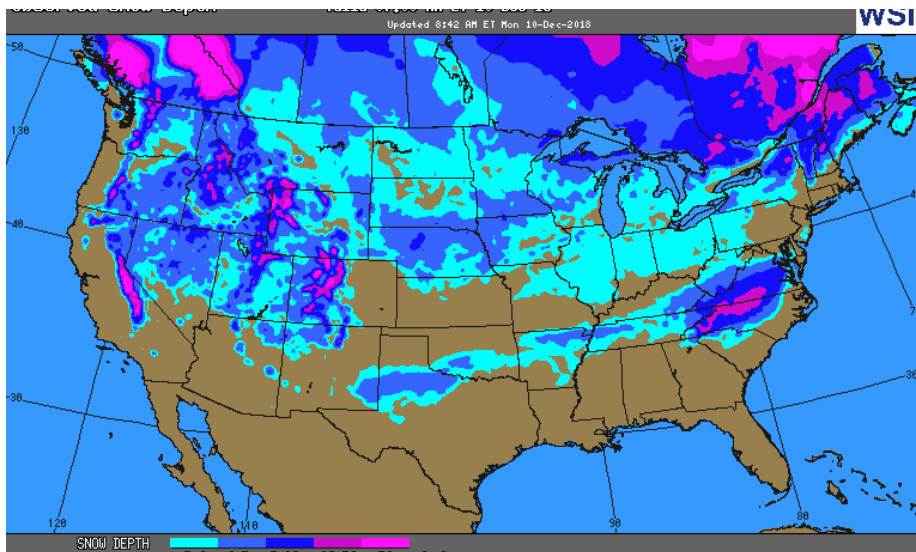
[NEXT REPORT ON Dec 14]

## U.S. Natural Gas Demand Gas Week 11/29 – 12/5

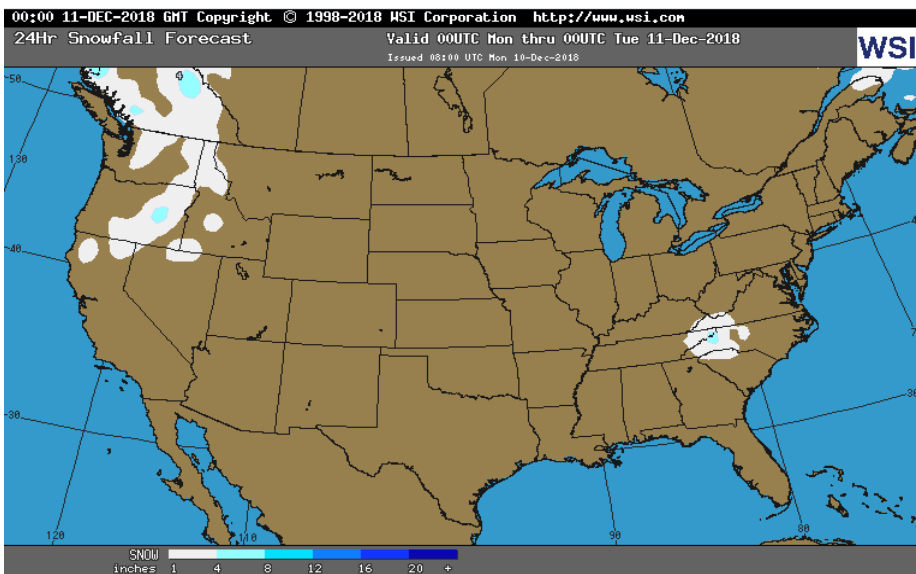
**Average daily values (BCF/D):**  
Last Year (BCF/d)  
 Power — +22.0  
 Total Demand — +84.4  
Last Week (BCF/d)  
 Power — +22.6  
 Total Demand — +101.1

[NEXT REPORT ON Dec 14]

## OBSERVED SNOW DEPTH

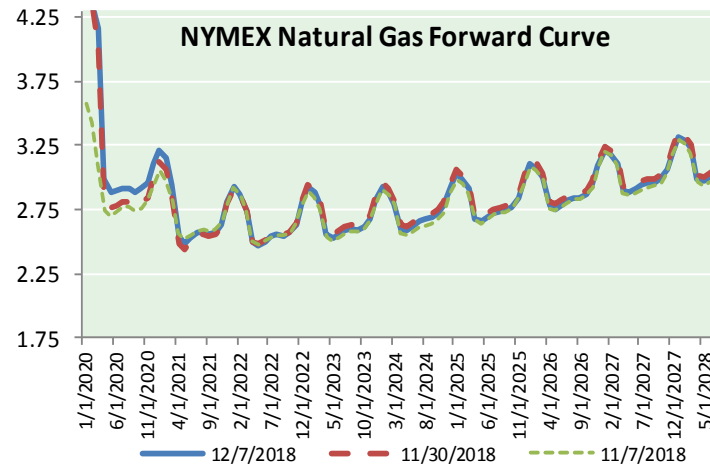
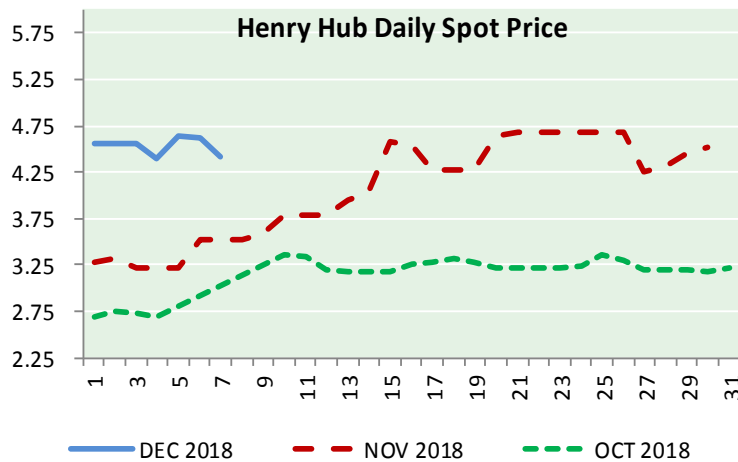
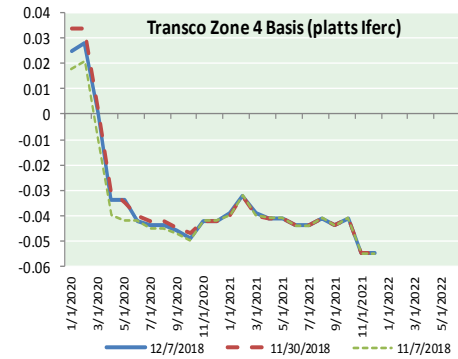
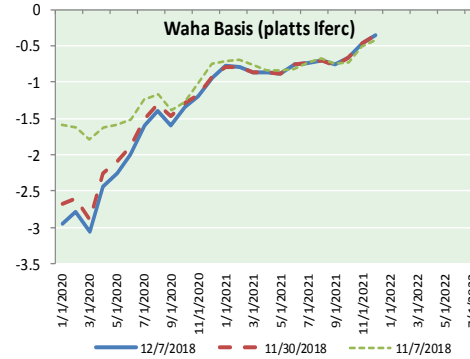
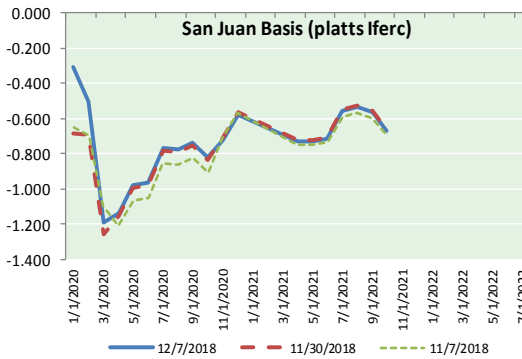
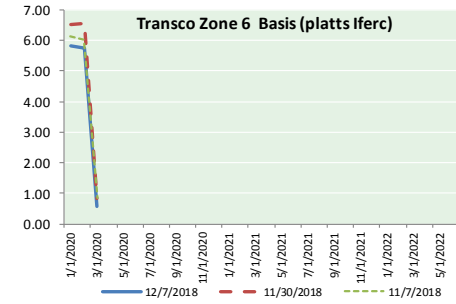
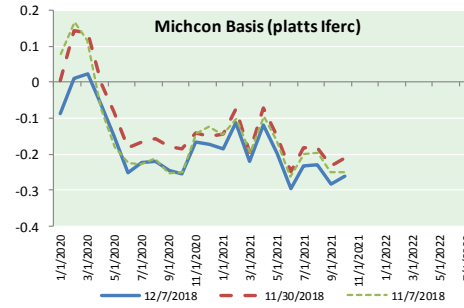
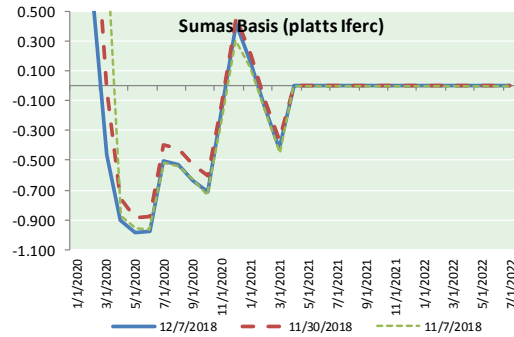


## 24 HOUR SNOWFALL FORECAST





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	53.25	19	
5	52.89	20	
6	51.49	21	
7	52.61	22	
8		23	
9		24	
10		25	
11		26	
12		27	
13		28	
14		29	
15		30	
		31	

Average (Dec) 52.6380  
(through 12/07/2018)

Average (Nov) 56.6933

Average (Oct) 70.7578

**CME NG Option Prices**

**ATM Call**

Month	Strike	Close	Imp Vol
Feb-19			
Mar-19	4.350	0.593	90.9
Apr-19			
May-19			
Jun-19			

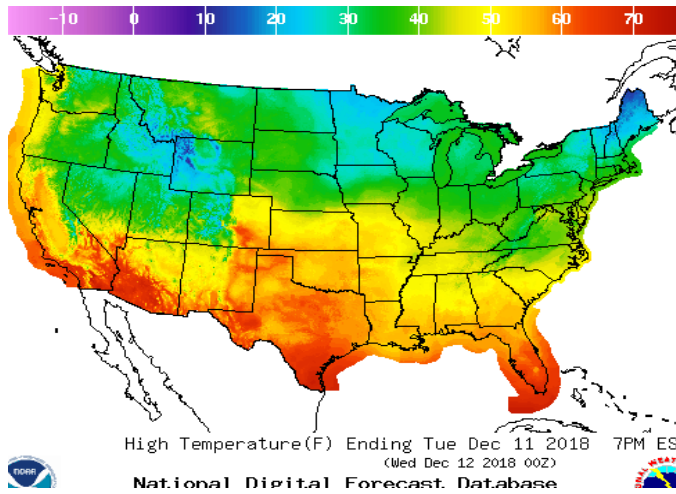
**CME NG Option Prices**

**ATM Put**

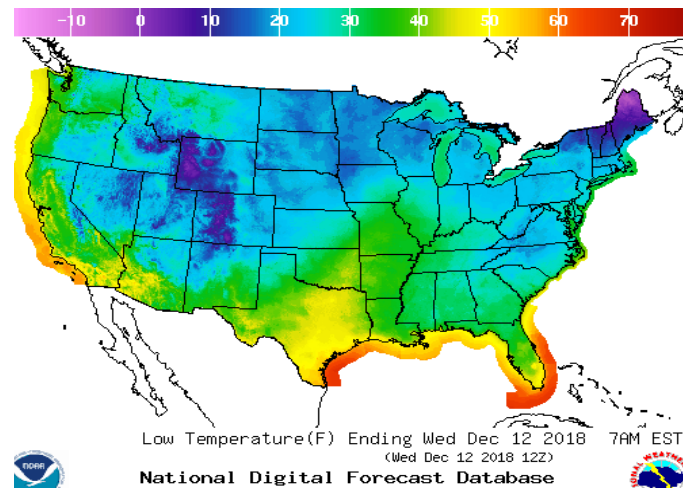
Month	Strike	Close	Imp Vol
Feb-19			
Mar-19	4.350	0.563	90.0
Apr-19			
May-19			
Jun-19			

WEATHER – HIGH / LOW TEMPERATURE TOMORROW

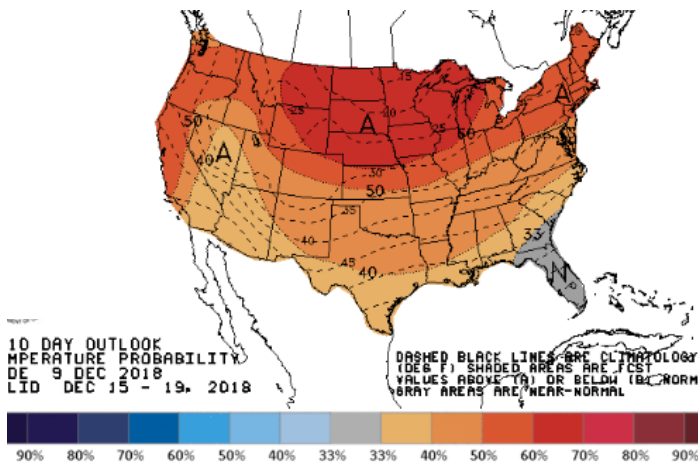
HIGH Temperature



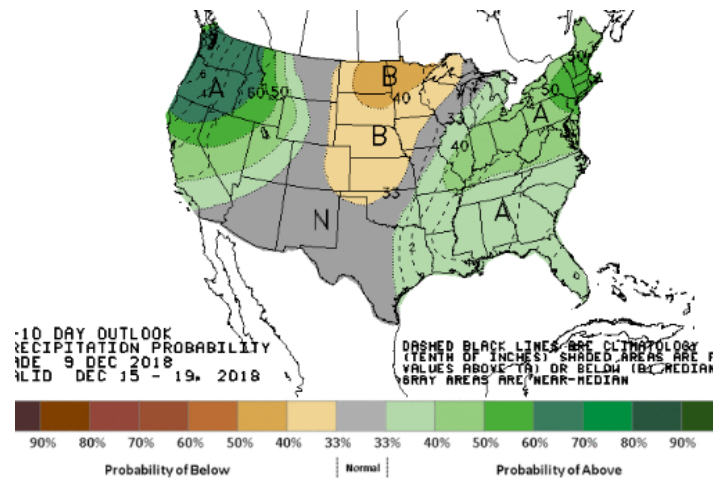
LOW Temperature



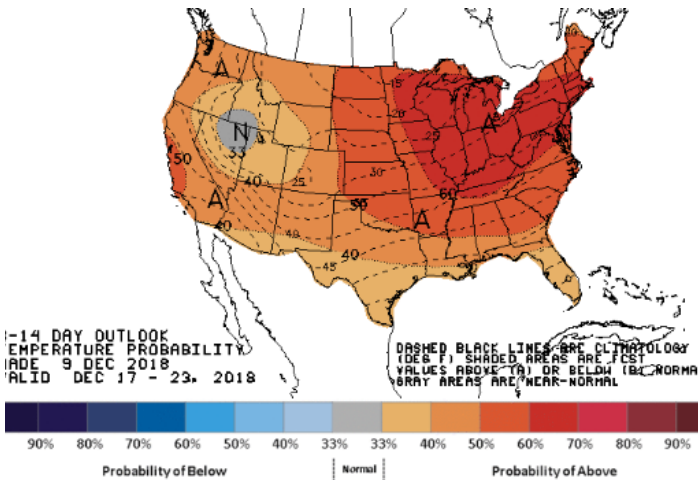
WEATHER – 6 TO 10 DAY OUTLOOK – NOAA  
Temperature



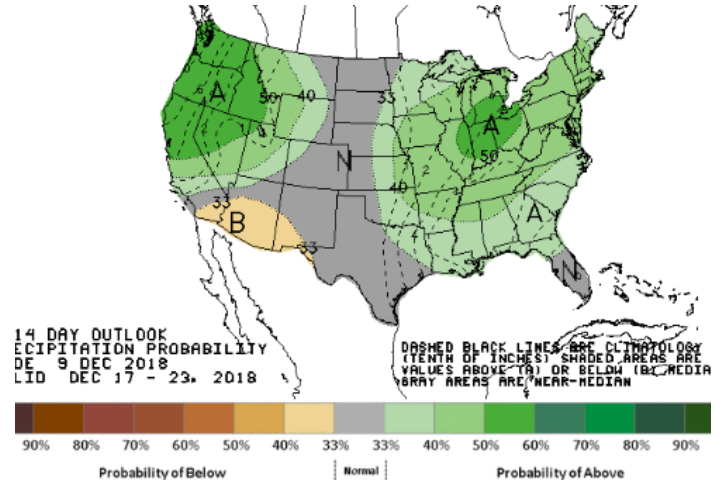
Precipitation



WEATHER – 8 TO 14 DAY OUTLOOK – NOAA  
Temperature

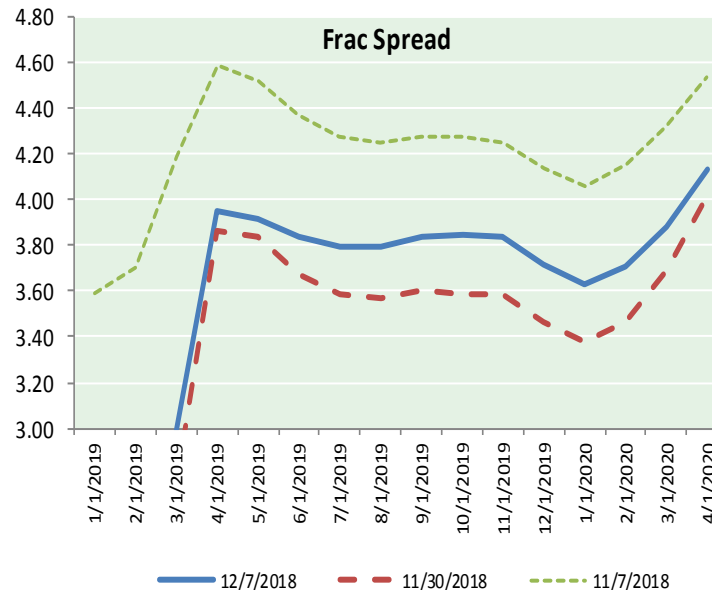
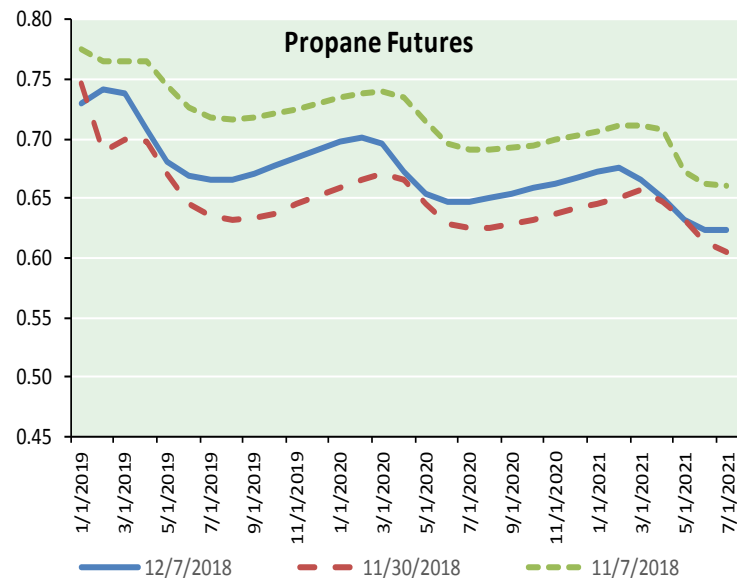
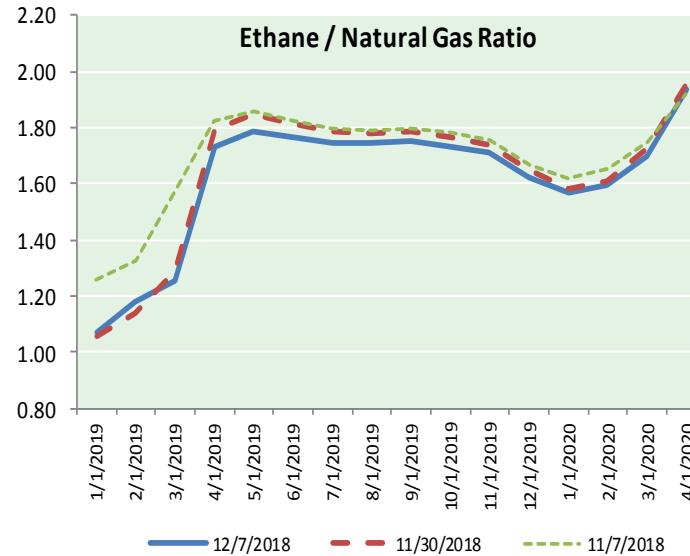
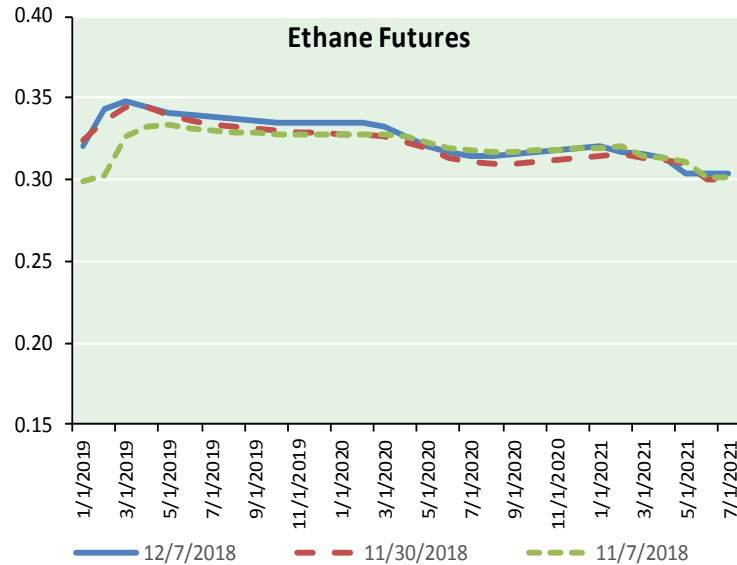


Precipitation





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



CME Future Prices

Month	Close	Change
Jan-19	0.320	0.011
Feb-19	0.343	0.011
Mar-19	0.348	0.010
Apr-19	0.344	0.009
May-19	0.341	0.009
Jun-19	0.339	0.009
Jul-19	0.338	0.008
Aug-19	0.338	0.007
Sep-19	0.336	0.006
Oct-19	0.335	0.004
Nov-19	0.335	0.004
Dec-19	0.335	0.004
1YR Strip	0.338	0.007

CME Future Prices

**Propane (C3)  
Non-LDH— Mont Belvieu**

Month	Close	Change
Jan-19	0.730	0.011
Feb-19	0.741	0.014
Mar-19	0.739	0.014
Apr-19	0.709	0.014
May-19	0.681	0.013
Jun-19	0.669	0.013
Jul-19	0.666	0.013
Aug-19	0.666	0.013
Sep-19	0.671	0.013
Oct-19	0.678	0.013
Nov-19	0.685	0.013
Dec-19	0.691	0.012
1YR Strip	0.694	0.013

# NATURAL GAS NEWS



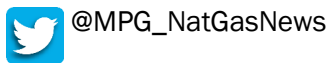
**Prompt WTI (CL) Crude**  
Daily Sentiment

**BEARISH**



RESISTANCE  
54.35 & 56.10  
SUPPORT  
50.73 & 48.86

**FOLLOW US ON TWITTER:**

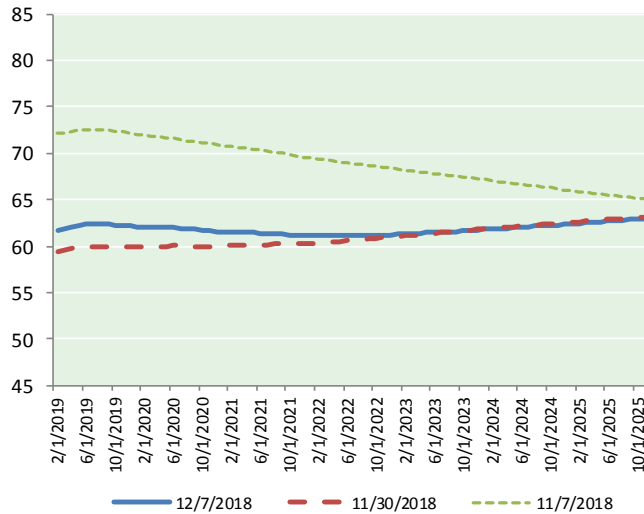


**NYMEX Brent (BZ)**

Futures

Month	Close	Change
Jan-19	52.61	1.12
Feb-19	52.81	1.11
Mar-19	53.05	1.10
Apr-19	53.31	1.07
May-19	53.58	1.04
Jun-19	53.82	1.04
Jul-19	54.00	1.03
Aug-19	54.13	1.02
Sep-19	54.23	1.00
Oct-19	54.28	0.97
Nov-19	54.31	0.94
Dec-19	54.33	0.90
Jan-20	54.31	0.87
Feb-20	54.28	0.84
Mar-20	54.25	0.79
Apr-20	54.22	0.74
May-20	54.20	0.69
Jun-20	54.19	0.66
Jul-20	54.12	0.61
Aug-20	54.07	0.57
Sep-20	54.03	0.53
Oct-20	54.01	0.50
Nov-20	53.98	0.46
Dec-20	53.97	0.43
1YR Strip 2018	53.71	1.03
5YR Strip	53.43	0.26

**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

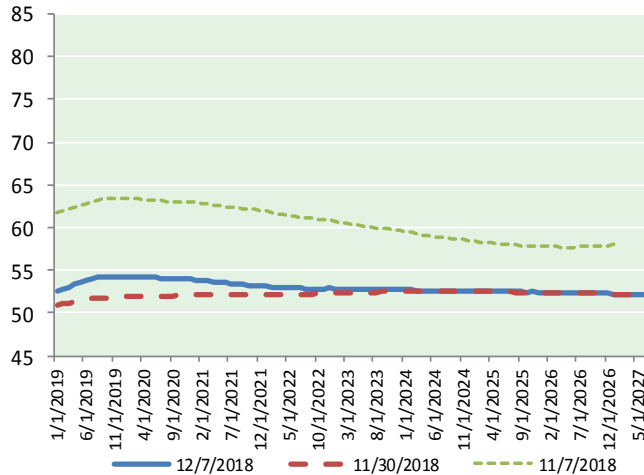
**Prompt NGL Futures**

	Jan-19	Close	Change
Butane		0.868	0.020
Iso-Butane		0.953	0.066
Nat Gasoline		1.059	0.029

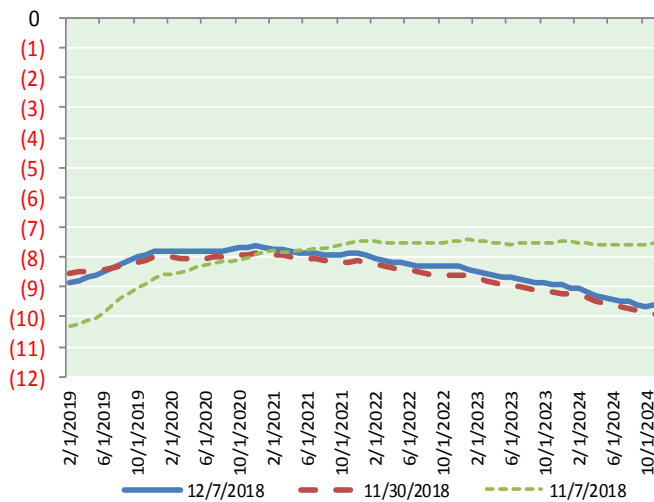
**NYMEX WTI (CL) Futures**

Month	Close	Change
Feb-19	61.67	1.61
Mar-19	61.85	1.52
Apr-19	62.00	1.45
May-19	62.18	1.39
Jun-19	62.32	1.33
Jul-19	62.39	1.29
Aug-19	62.39	1.24
Sep-19	62.32	1.19
Oct-19	62.26	1.15
Nov-19	62.22	1.12
Dec-19	62.14	1.08
Jan-20	62.11	1.04
Feb-20	62.08	1.00
Mar-20	62.06	0.97
Apr-20	62.05	0.94
May-20	62.02	0.90
Jun-20	61.98	0.84
Jul-20	61.92	0.80
Aug-20	61.86	0.76
Sep-20	61.79	0.72
Oct-20	61.72	0.67
Nov-20	61.65	0.62
Dec-20	61.59	0.57
Jan-21	61.56	0.54

**WTI CRUDE FORWARD CURVE**



**WTI-BRENT SPREAD**



1YR Strip	62.15	1.28
2018	#DIV/O!	#DIV/O!
5YR Strip	61.60	0.37