

# NATURAL GAS



DECEMBER 14, 2018

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



## NYMEX NG Futures

Month	Close	Change
Jan-19	4.124	(0.012)
Feb-19	4.027	(0.008)
Mar-19	3.856	0.003
Apr-19	2.905	(0.019)
May-19	2.798	(0.023)
Jun-19	2.817	(0.022)
Jul-19	2.844	(0.021)
Aug-19	2.841	(0.021)
Sep-19	2.815	(0.016)
Oct-19	2.840	(0.017)
Nov-19	2.883	(0.018)
Dec-19	3.034	(0.021)
Jan-20	3.148	(0.021)
Feb-20	3.088	(0.024)
Mar-20	2.904	(0.013)
Apr-20	2.539	0.000
May-20	2.487	(0.002)
Jun-20	2.525	(0.004)
Jul-20	2.572	(0.006)
Aug-20	2.575	(0.006)
Sep-20	2.548	(0.008)
Oct-20	2.561	(0.008)
Nov-20	2.621	(0.010)
Dec-20	2.804	(0.009)
1YR Strip	3.149	(0.016)
2018	#DIV/O!	#DIV/O!
5YR Strip	2.733	(0.017)

## IN THE NEWS

Closing Coal Plants Unlikely To Affect Natural Gas Prices, Expert Says— WBAA reported: As coal plants close around the country, the demand for natural gas is going up. But an expert says it likely won't have a big effect on Hoosier's heating bills in the long run. Doug Gotham is the director of the State Utility Forecasting Group at Purdue University. He says there are a number of rea-

- Closing Coal Plants Unlikely To Affect Natural Gas Prices, Expert Says
- Bulgaria plans first steps towards natural gas trading bourse

sons why natural gas prices are up right now. The weather has been colder. Oil prices are down, which means companies have less of an incentive to drill for both oil and gas. And U.S. markets put less natural gas into storage. But Gotham says little of it has to do with coal plants closing. "In the long term you'll see some gradual increases in natural gas prices, but the natural gas supply system has changed dramatically in the last 10 years," he says. For more on this story visit [wbaa.org](http://wbaa.org) or click <https://bit.ly/2BtAJar>

Bulgaria plans first steps towards natural gas trading bourse— Reuters reports: Bulgaria plans to set up a state-owned company by the end of the year to operate a natural gas bourse, with liquidity secured through an agreement with Austria's natural gas trading hub, its energy minister said on Friday. Temenuzhka Petkova said Sofia will sign a memorandum for cooperation with the Vienna-based Central European Gas Hub (CEGH) next week as it pushes forward with plans for a gas trading hub in the Black Sea city of Varna. CEGH is a trading platform for the central European Baumgarten hub, the arrival point for Russian gas flowing into Europe via Ukraine and through the Nord Stream pipeline across the Baltic Sea. The new company will be a unit of state-owned gas network operator Bulgartransgaz, Petkova told parliament. Lawmakers voted on Nov. 30 that the operator should take steps to set up a gas trading bourse. For more on this story visit [reuters.com](http://reuters.com) or click <https://bit.ly/2CeGkmp>

## Prompt Natural Gas (NG) Daily Sentiment

**NEUTRAL**



RESISTANCE  
4.27 & 4.42  
SUPPORT  
4.01 & 3.90

## Trading Summary

NATURAL GAS		
Futures	Close	Change
NG	4.124	(0.012)
Volume	504,100	(427,535)
Open Int.	1,291,121	2,875
CRUDE AND GASOLINE		
Futures	Close	Change
Crude	52.58	1.43
RBOB	1.4782	0.0578
Crude/NG	12.75	0.38
METALS		
Futures	Close	Change
Gold	1,242.70	(8.60)
EQUITIES		
Exchange	Close	Change
DOW	24,597.38	70.11
S&P 500	-664.62	(0.53)
CURRENCY		
Currency	Close	Change
EUR/USD	1.1272	(0.0089)
USD/CND	1.2405	0.0040

## 12 MONTH CANDLESTICK (WEEKLY)



## Contact Us



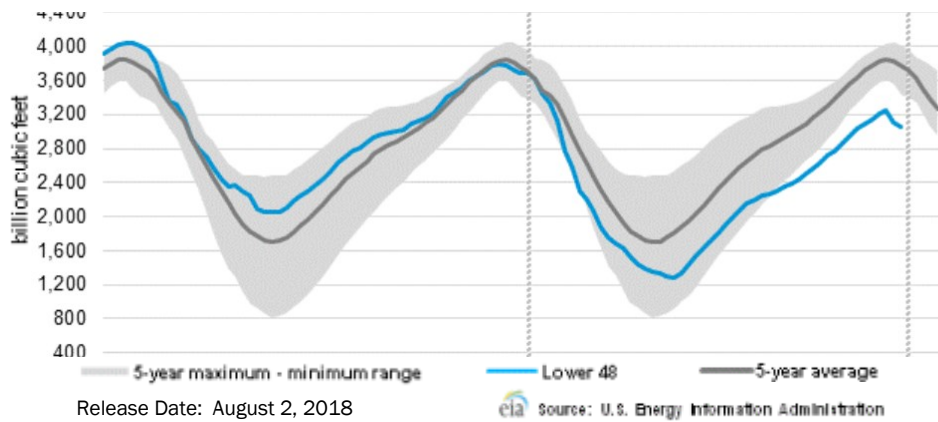
**Mansfield Energy Corp**  
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Gainesville, GA 30501  
  
[www.mansfield.energy](http://www.mansfield.energy)  
[info@mansfieldoil.com](mailto:info@mansfieldoil.com)

Phone: (800) 695-6626



**NATURAL GAS NEWS**

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



**Rig Count**

Report Date: December 7, 2018

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

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

Released December 13, 2018  
 Range — +148 to +88  
 PIRA— +102  
 PointLogic — +76  
 Citi Futures — +89

EIA ACTUAL — +77

**Total Working Gas In Storage**

**2,914 BCF**

(77) BCF (LAST WEEK)  
 (722) BCF (LAST YEAR)  
 (723) BCF (5-YR AVG)

**U.S. Natural Gas Supply Gas Week 12/06 – 12/12**

**Average daily values (BCF/d):**  
Last Year (BCF/d)  
 Dry Production — +87.2  
 Total Supply — +78.1  
Last Week (BCF/d)  
 Dry Production — +88.6  
 Total Supply — +92.4

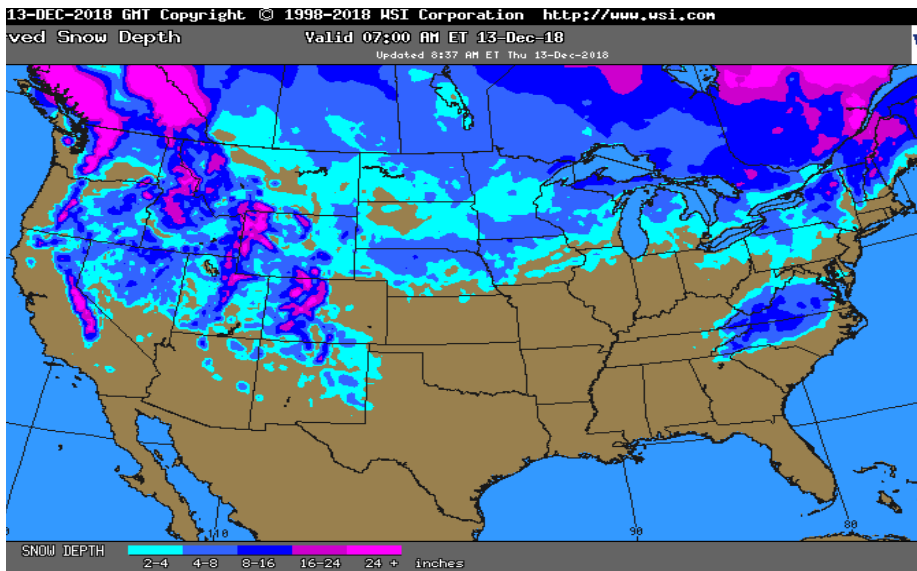
[NEXT REPORT ON Dec 21]

**U.S. Natural Gas Demand Gas Week 12/06 – 12/12**

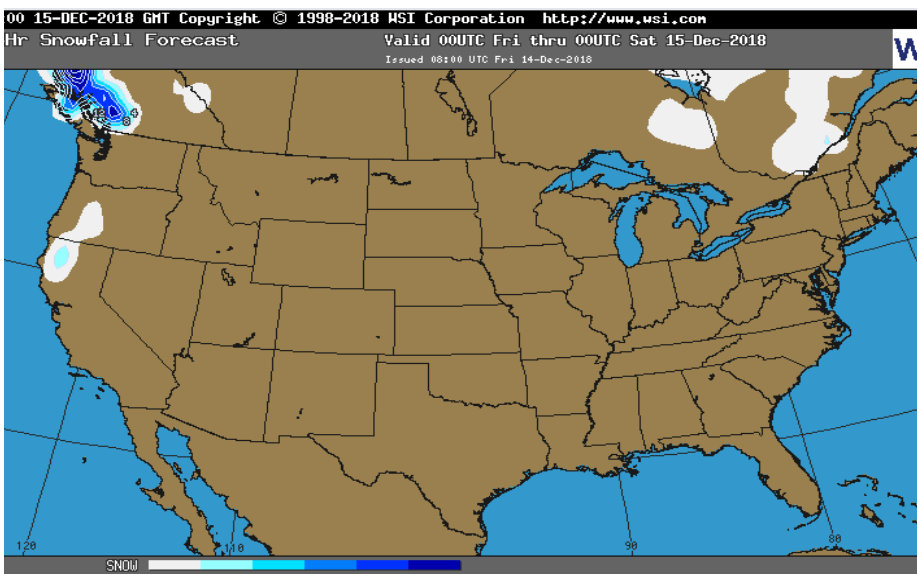
**Average daily values (BCF/d):**  
Last Year (BCF/d)  
 Power — +26.3  
 Total Demand — +104.3  
Last Week (BCF/d)  
 Power — +26.3  
 Total Demand — +99.4

[NEXT REPORT ON Dec 21]

**OBSERVED SNOW DEPTH**

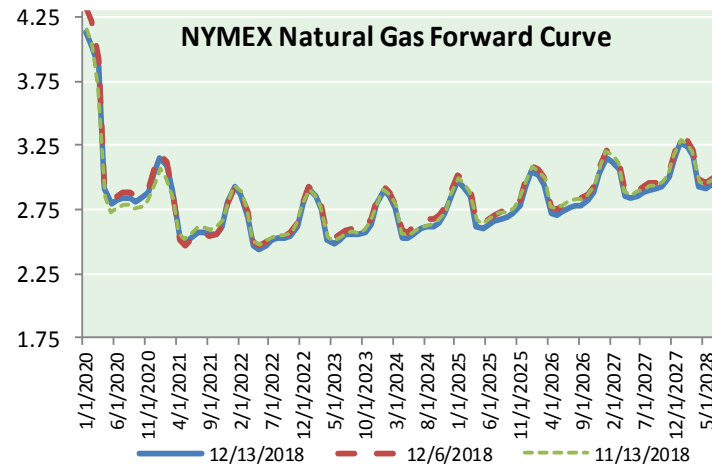
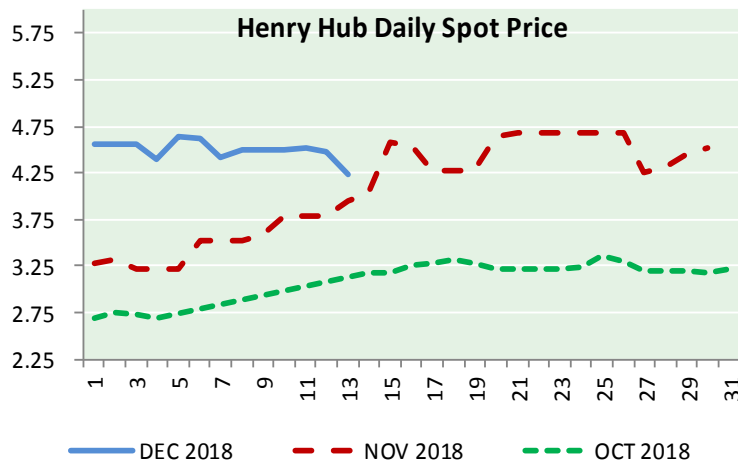
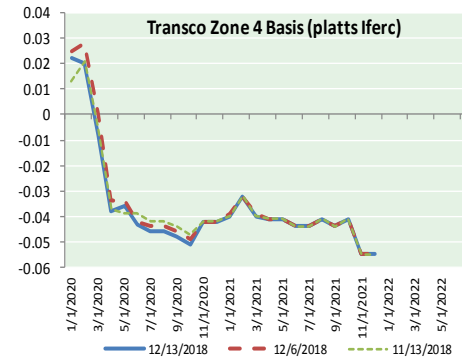
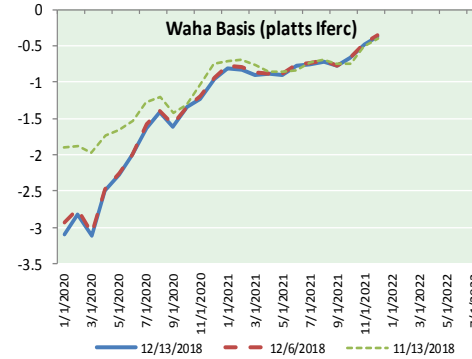
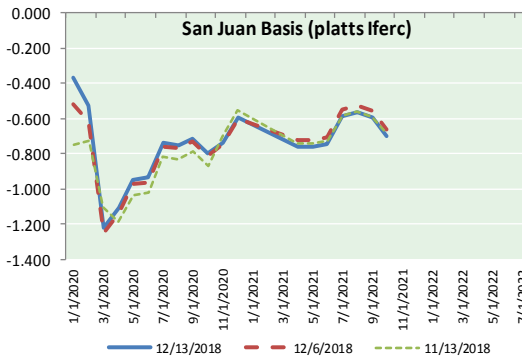
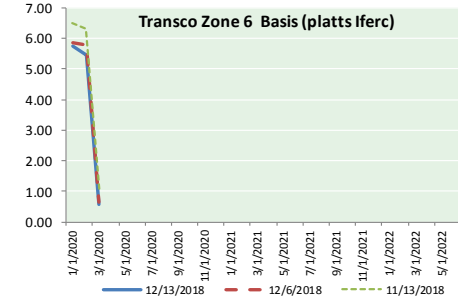
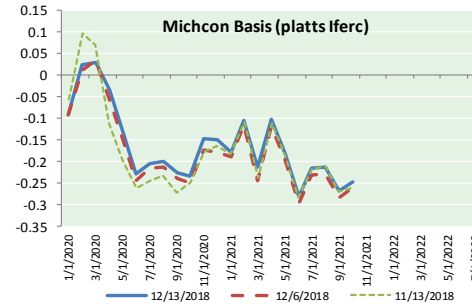
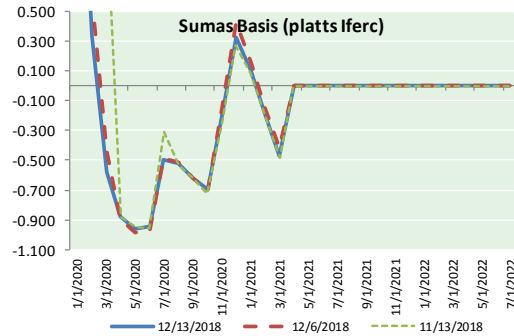


**24 HOUR SNOWFALL FORECAST**





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	51.00	25	
11	51.65	26	
12	51.15	27	
13	52.58	28	
14		29	
15		30	
		31	

Average (Dec) 52.1744  
(through 12/13/2018)

Average (Nov) 56.6933

Average (Oct) 70.7578

CME NG Option Prices

ATM Call

Month	Strike	Close	Imp Vol
Feb-19			
Mar-19	3.850	0.540	99.3
Apr-19			
May-19			
Jun-19			

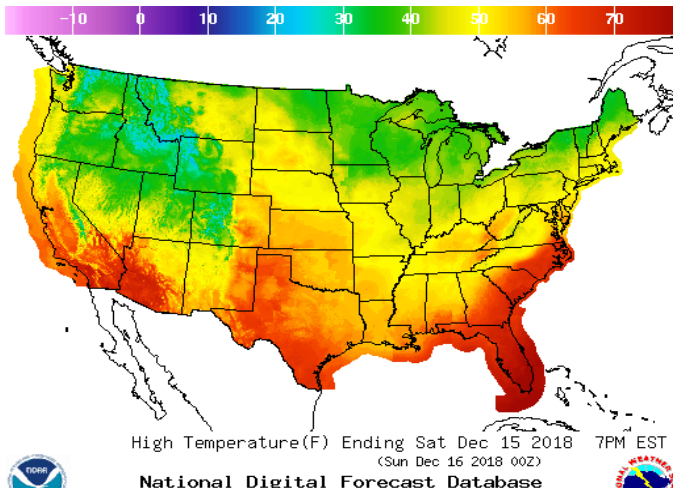
CME NG Option Prices

ATM Put

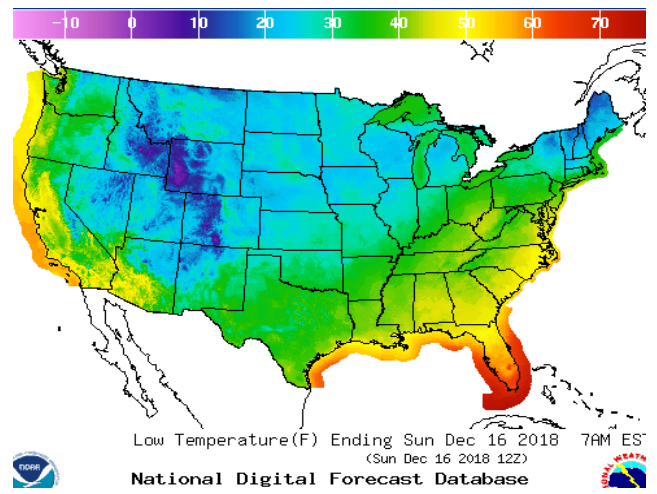
Month	Strike	Close	Imp Vol
Feb-19			
Mar-19	3.850	0.364	67.5
Apr-19			
May-19			
Jun-19			

WEATHER – HIGH / LOW TEMPERATURE SATURDAY

HIGH Temperature

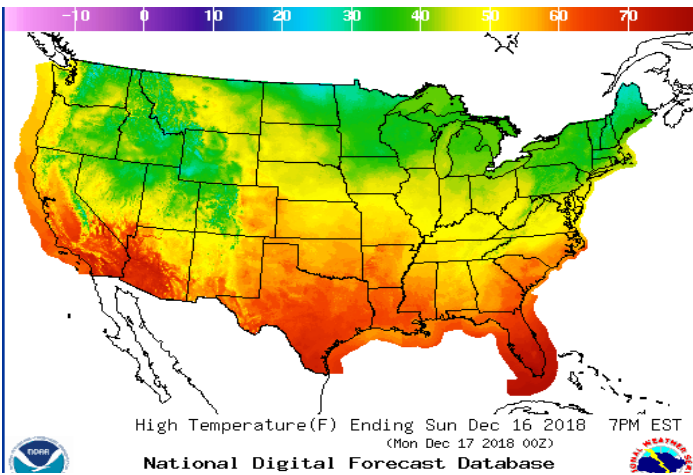


LOW Temperature

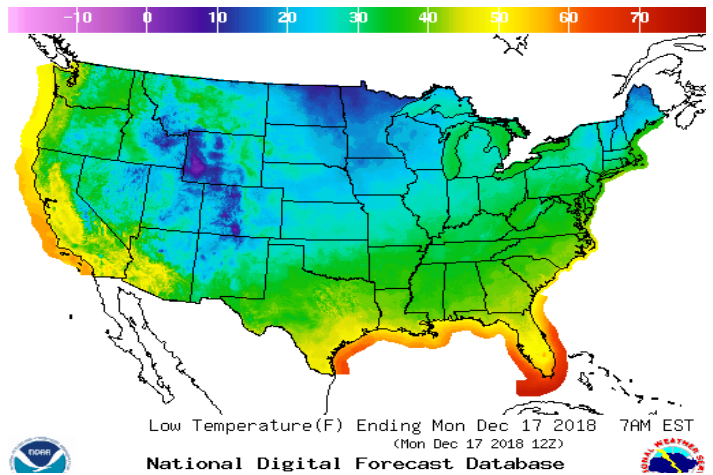


WEATHER – HIGH / LOW TEMPERATURE SUNDAY

Temperature

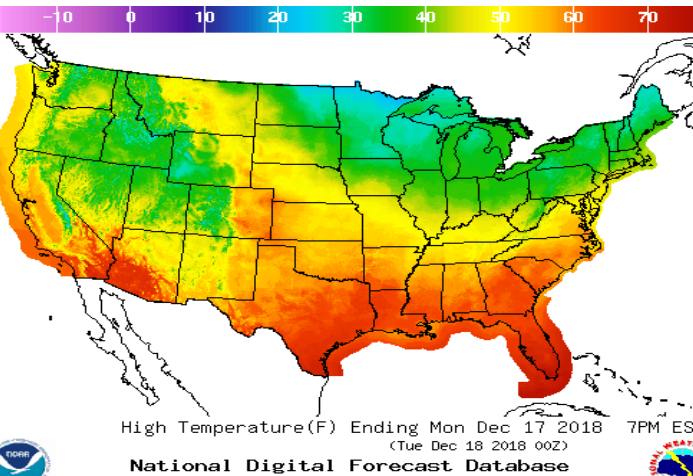


Precipitation

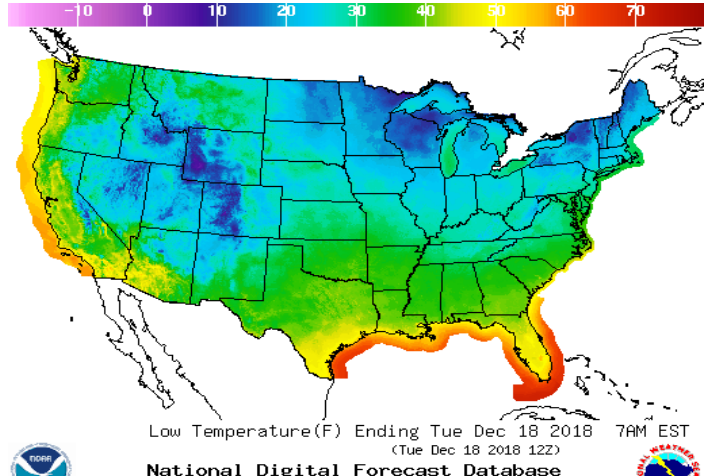


WEATHER – HIGH / LOW TEMPERATURE MONDAY

Temperature

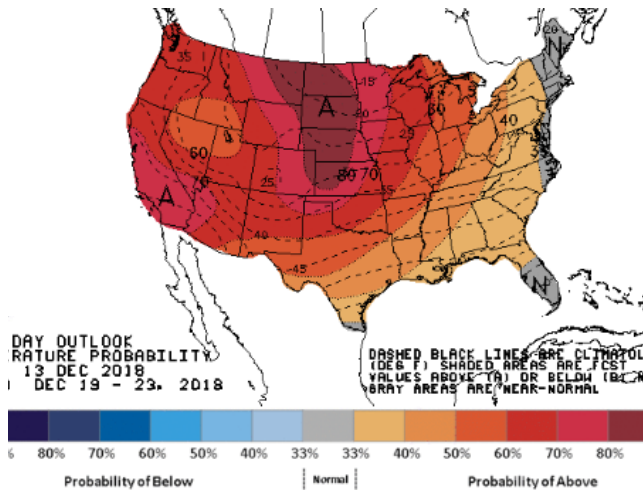


Precipitation

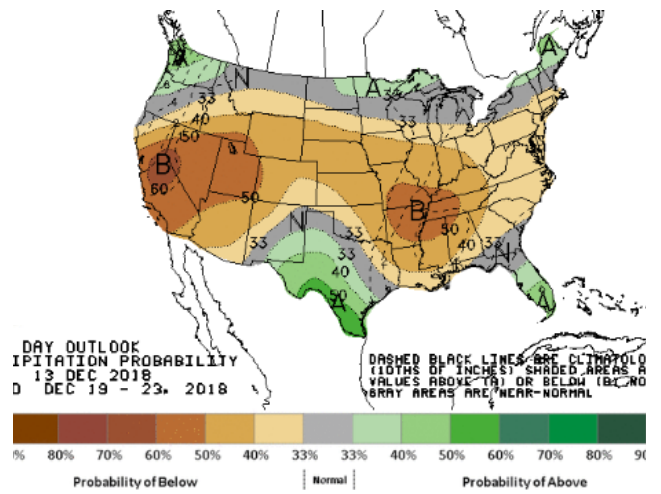


WEATHER – 6 TO 10 DAY OUTLOOK – NOAA

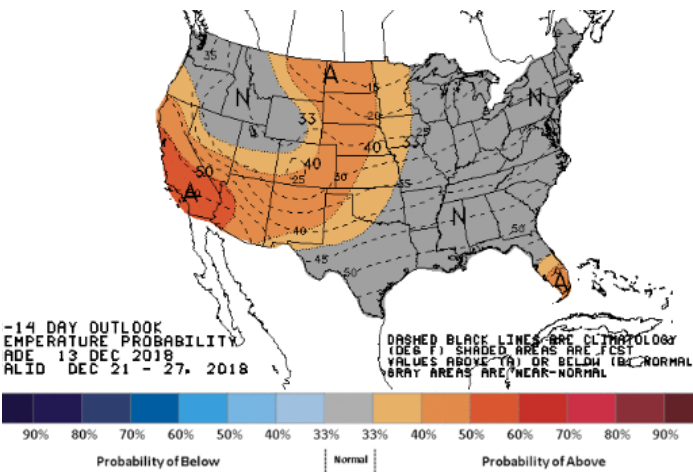
HIGH Temperature



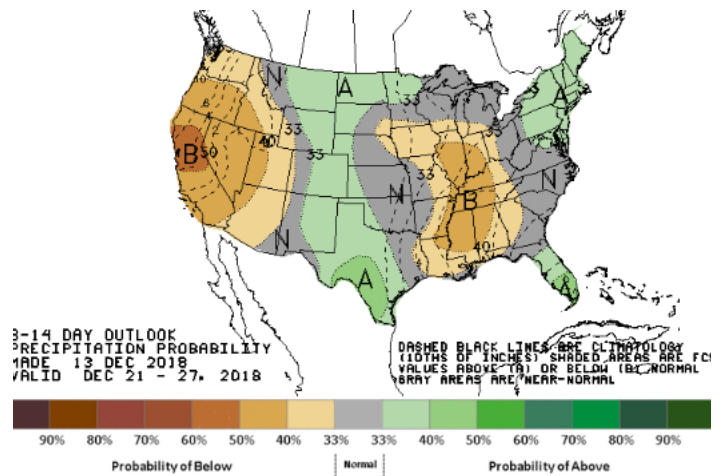
LOW Temperature



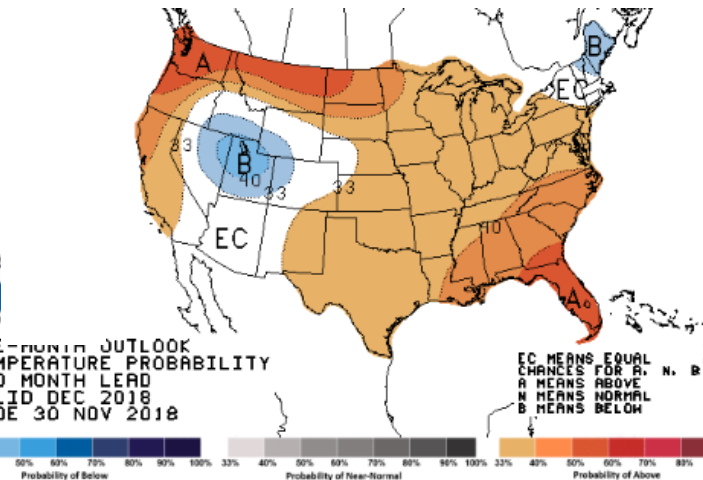
WEATHER – 8 TO 14 DAY OUTLOOK – NOAA  
Temperature



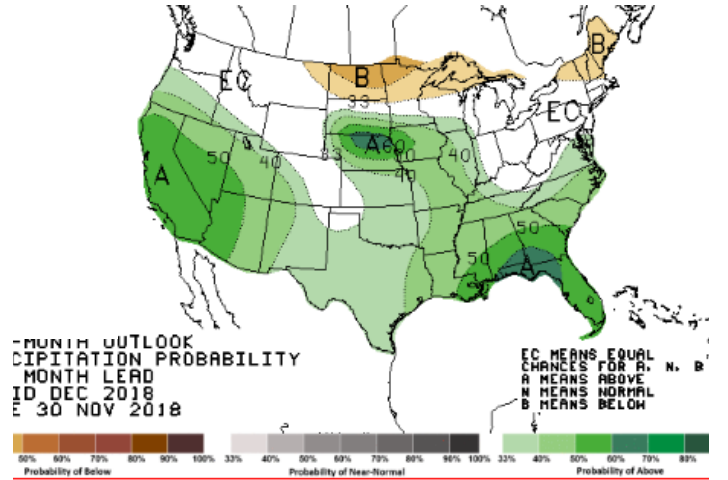
Precipitation



WEATHER – 30 DAY OUTLOOK – NOAA  
Temperature



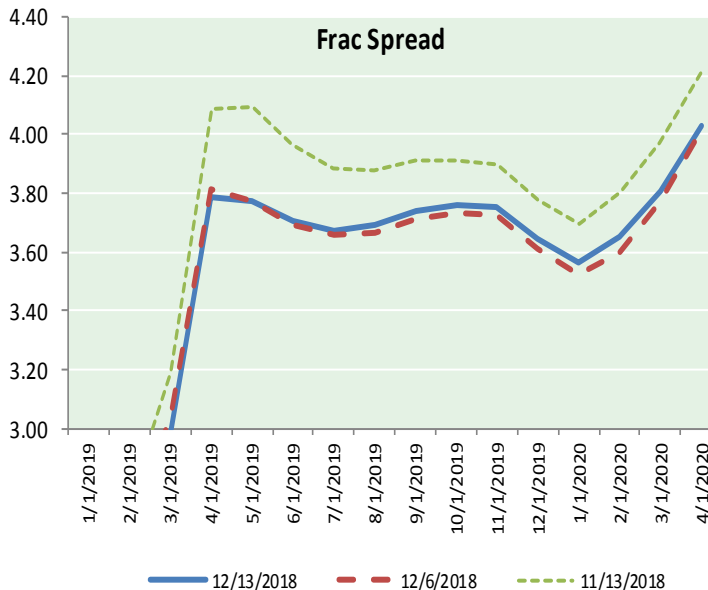
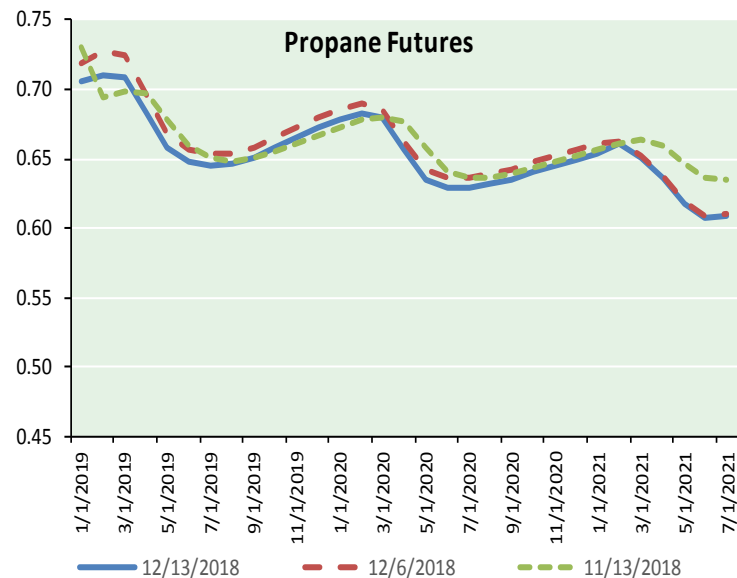
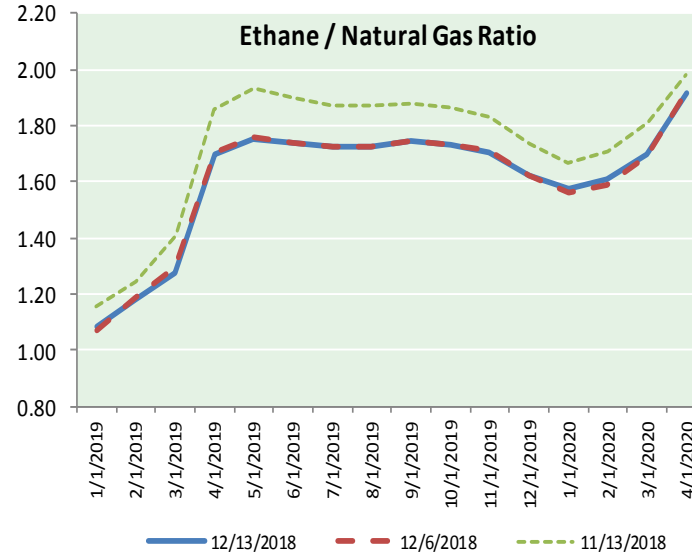
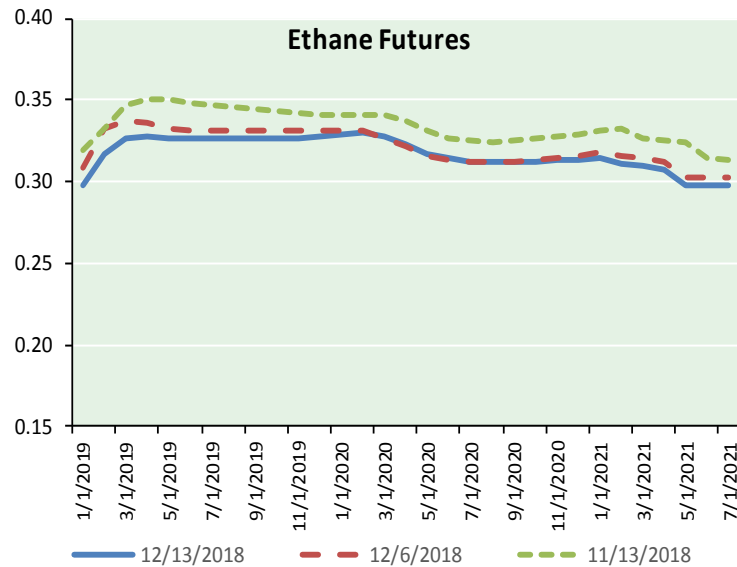
Precipitation



**NATURAL GAS NEWS**



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



**CME Future Prices**

Month	Close	Change
Jan-19	0.298	(0.004)
Feb-19	0.317	(0.006)
Mar-19	0.327	(0.005)
Apr-19	0.328	(0.005)
May-19	0.326	(0.004)
Jun-19	0.326	(0.003)
Jul-19	0.326	(0.003)
Aug-19	0.326	(0.003)
Sep-19	0.326	(0.003)
Oct-19	0.327	(0.004)
Nov-19	0.327	(0.004)
Dec-19	0.328	(0.004)
1YR Strip	0.324	(0.004)

**CME Future Prices**

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

Month	Close	Change
Jan-19	0.706	0.001
Feb-19	0.710	0.002
Mar-19	0.708	0.003
Apr-19	0.683	0.004
May-19	0.658	0.005
Jun-19	0.648	0.005
Jul-19	0.644	0.005
Aug-19	0.647	0.005
Sep-19	0.651	0.005
Oct-19	0.658	0.005
Nov-19	0.665	0.005
Dec-19	0.672	0.005
1YR Strip	0.671	0.004

# NATURAL GAS NEWS



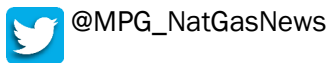
## Prompt WTI (CL) Crude Daily Sentiment

**BEARISH**



RESISTANCE  
53.78 & 54.99  
SUPPORT  
50.86 & 49.15

### FOLLOW US ON TWITTER:

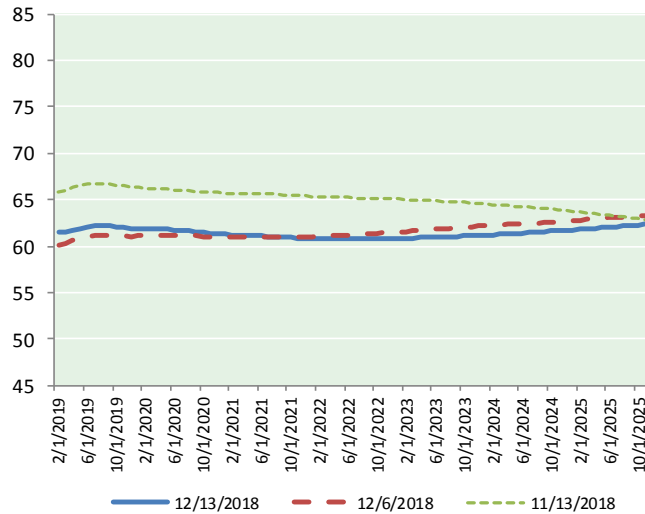


## NYMEX Brent (BZ)

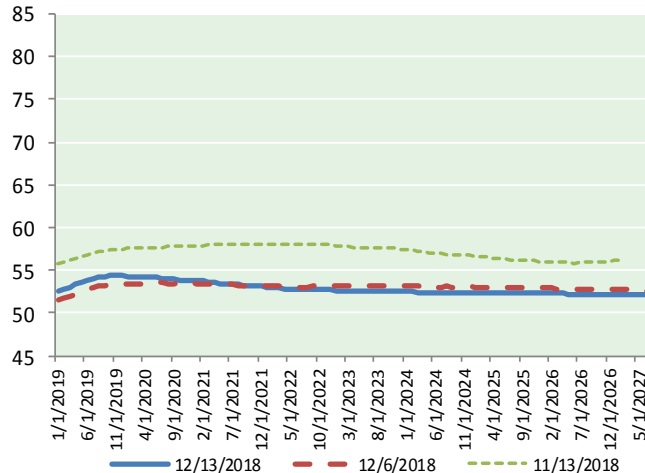
### Futures

Month	Close	Change
Jan-19	52.58	1.43
Feb-19	52.83	1.47
Mar-19	53.07	1.48
Apr-19	53.33	1.47
May-19	53.62	1.48
Jun-19	53.88	1.48
Jul-19	54.08	1.47
Aug-19	54.22	1.46
Sep-19	54.31	1.44
Oct-19	54.34	1.41
Nov-19	54.36	1.38
Dec-19	54.36	1.36
Jan-20	54.33	1.33
Feb-20	54.30	1.31
Mar-20	54.26	1.28
Apr-20	54.22	1.26
May-20	54.17	1.20
Jun-20	54.13	1.16
Jul-20	54.05	1.12
Aug-20	53.99	1.10
Sep-20	53.94	1.08
Oct-20	53.91	1.06
Nov-20	53.88	1.05
Dec-20	53.88	1.05
1YR Strip 2018	53.75	1.44
	#DIV/O!	#DIV/O!
5YR Strip	53.34	1.01

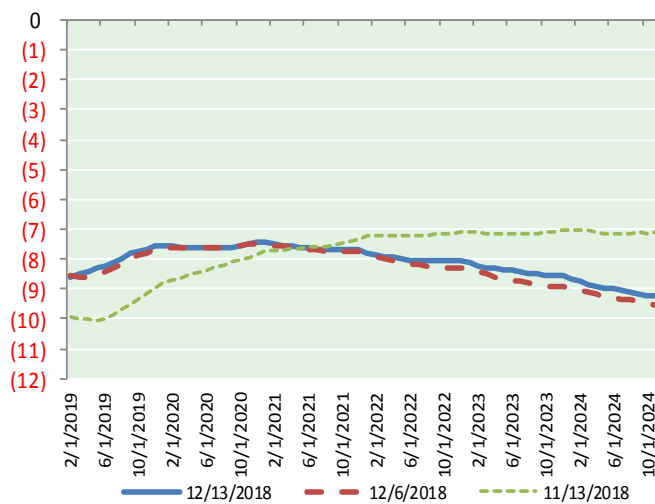
## BRENT CRUDE FORWARD CURVE



## 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	0.799	0.001	
Iso-Butane	0.823	(0.011)	
Nat Gasoline	1.078	0.004	

## NYMEX WTI (CL) Futures

Month	Close	Change
Feb-19	61.45	1.30
Mar-19	61.58	1.31
Apr-19	61.74	1.32
May-19	61.94	1.33
Jun-19	62.10	1.34
Jul-19	62.20	1.35
Aug-19	62.21	1.35
Sep-19	62.14	1.34
Oct-19	62.07	1.32
Nov-19	62.02	1.32
Dec-19	61.94	1.31
Jan-20	61.90	1.29
Feb-20	61.87	1.27
Mar-20	61.85	1.26
Apr-20	61.83	1.24
May-20	61.79	1.22
Jun-20	61.75	1.20
Jul-20	61.69	1.18
Aug-20	61.62	1.15
Sep-20	61.54	1.12
Oct-20	61.46	1.08
Nov-20	61.38	1.05
Dec-20	61.31	1.04
Jan-21	61.26	1.03

1YR Strip	61.94	1.32
2018	#DIV/O!	#DIV/O!
5YR Strip	61.27	0.97