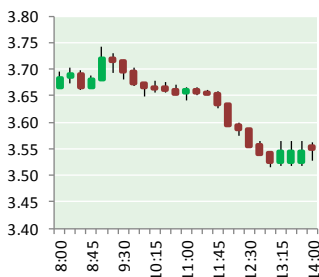


NATURAL GAS



DECEMBER 18, 2018

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



NYMEX NG Futures

Month	Close	Change
Jan-19	3.528	(0.299)
Feb-19	3.453	(0.300)
Mar-19	3.308	(0.298)
Apr-19	2.780	(0.114)
May-19	2.727	(0.080)
Jun-19	2.758	(0.073)
Jul-19	2.792	(0.069)
Aug-19	2.787	(0.070)
Sep-19	2.763	(0.067)
Oct-19	2.791	(0.064)
Nov-19	2.835	(0.061)
Dec-19	2.985	(0.059)
Jan-20	3.098	(0.059)
Feb-20	3.041	(0.052)
Mar-20	2.870	(0.040)
Apr-20	2.542	(0.008)
May-20	2.490	(0.010)
Jun-20	2.525	(0.015)
Jul-20	2.568	(0.019)
Aug-20	2.571	(0.019)
Sep-20	2.548	(0.015)
Oct-20	2.565	(0.012)
Nov-20	2.624	(0.013)
Dec-20	2.805	(0.015)
1YR Strip	2.959	(0.130)
2018 #DIV/O!	#DIV/O!	#DIV/O!
5YR Strip	2.709	(0.031)

IN THE NEWS

Gazprom Export sells further 30 million cu m of natural gas on electronic platform— S&P Global reported: Russia's Gazprom Export sold 30 million cu m of Russian gas on its Electronic Sales Platform (ESP) on Monday, with all the volumes sold for January delivery to the German Gaspool hub. The number of delivery points in Monday's auction had been reduced to just two --

- **Gazprom Export sells further 30 million cu m of natural gas on electronic platform**
- **Technically recoverable natural gas from future US shale wells on**

Gaspool and the Slovakian virtual trading point -- suggesting Gazprom Export was limiting its sales. Auctions last week also offered sales to a number of Austrian delivery points and the German NCG hub. Gazprom Export has not scheduled an auction for Tuesday, suggesting it may have wrapped up its sales for 2018. The company could not be reached for immediate comment Tuesday. For more on this story visit [spglobal.com](https://bit.ly/2USOeZQ) or click <https://bit.ly/2USOeZQ>

Technically recoverable natural gas from future US shale wells on rise— Oil & Gas Journal reported: A new analysis of the nation's major shale gas plays shows 20% more natural gas can be technically recovered from future wells compared with an estimate made 5 years ago. Researchers primarily attributed the increase to new drilling practices. The analysis by the University of Texas at Austin's Bureau of Economic Geology examined production capabilities and estimated total gas in the Barnett, Fayetteville, Haynesville, and Marcellus plays. The study updated 2011-13 findings. Svetlana Ikonnikova, the principal investigator of the study and a research scientist at the bureau, said that developments in drilling technologies, market conditions, cost structures, and improvement in geological characterization prompted the updated assessment. "Five years ago, we hardly thought of multilayer or stacked well drilling, or of quadrupling lateral well length," she said. The team used 3D modeling and advanced data analytics to enhance the understanding of --. For more on this story visit [ogj.com](https://bit.ly/2QJ2hmE) or click <https://bit.ly/2QJ2hmE>

12 MONTH CANDLESTICK (WEEKLY)



Prompt Natural Gas (NG) Daily Sentiment

BEARISH



RESISTANCE

3.68 & 3.82

SUPPORT

3.45 & 3.37

Trading Summary

NATURAL GAS

Futures	Close	Change
NG	3.528	(0.299)
Volume	444,133	(340,594)
Open Int.	1,283,754	(859)

CRUDE AND GASOLINE

Futures	Close	Change
Crude	49.88	(1.32)
RBOB	1.4104	(0.0239)
Crude/NG	14.14	0.76

METALS

Futures	Close	Change
Gold	1,247.40	(1.80)

EQUITIES

Exchange	Close	Change
DOW	23,878.37	285.39
S&P 500	54.39	23.63

CURRENCY

Currency	Close	Change
EUR/USD	1.1371	0.0023
USD/CND	1.2405	0.0006

Contact Us



Mansfield Energy Corp
1025 Airport Pkwy
Gainesville, GA 30501

www.mansfield.energy
info@mansfieldoil.com

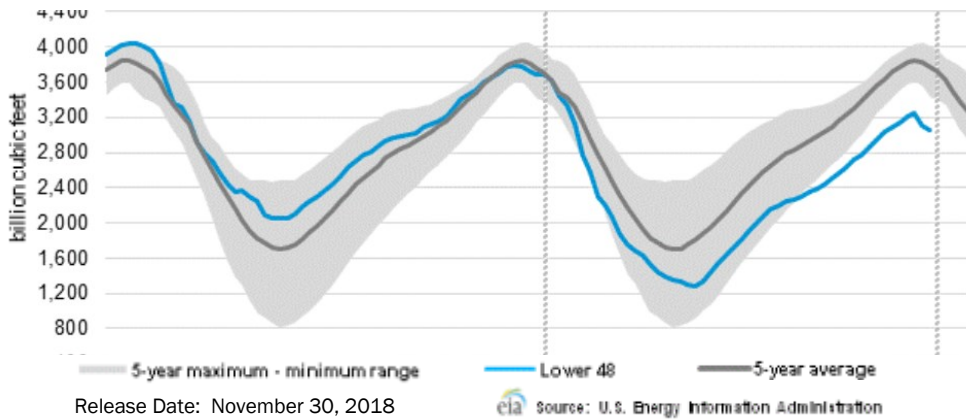
Phone: (800) 695-6626





NATURAL GAS NEWS

WEEKLY GAS IN UNDERGROUND STORAGE WITH 5-YR RANGE



Rig Count

Report Date: December 14, 2018

	Total	Change
US -	1,071	(4)
CN -	174	(12)

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

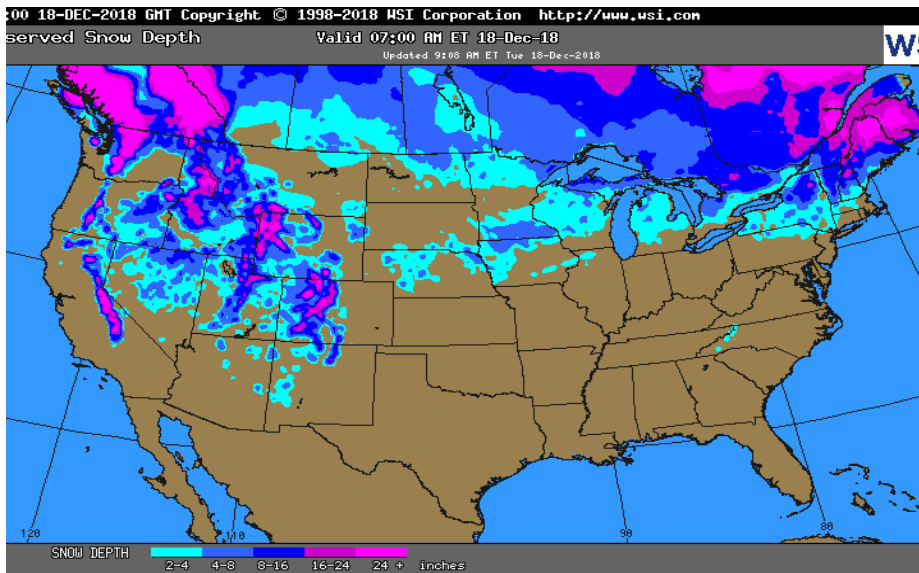
[NEXT REPORT ON Dec 21]

U.S. Natural Gas Demand Gas Week 12/06 — 12/12

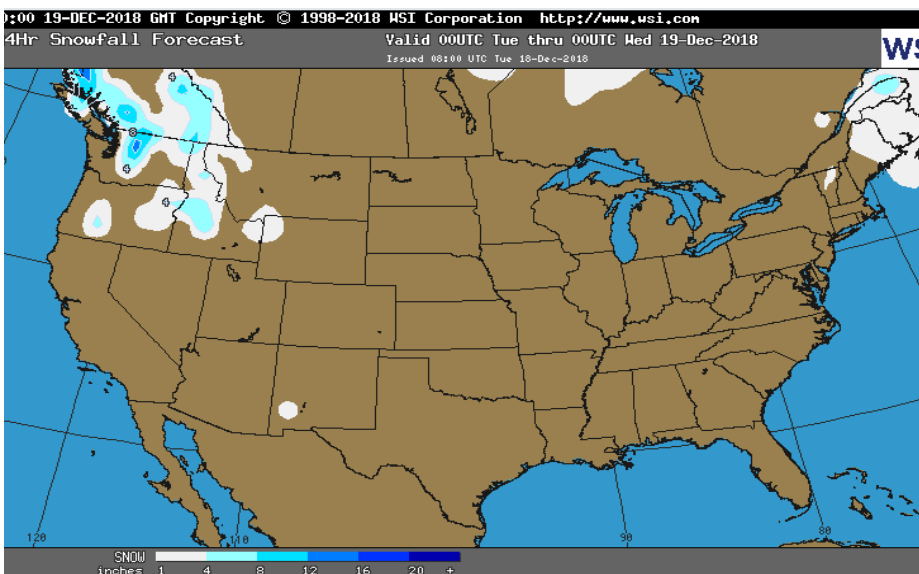
Average daily values (BCF/D):
Last Year (BCF/d)
 Power — +26.3
 Total Demand — +104.3
Last Week (BCF/d)
 Power — +26.3
 Total Demand — +99.4

[NEXT REPORT ON Dec 21]

OBSERVED SNOW DEPTH

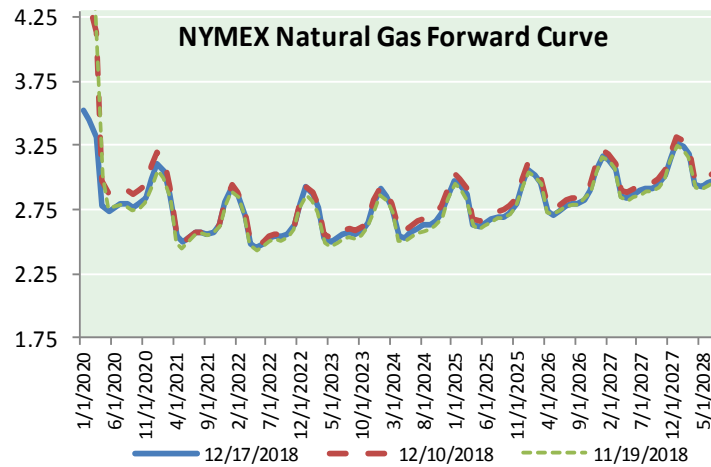
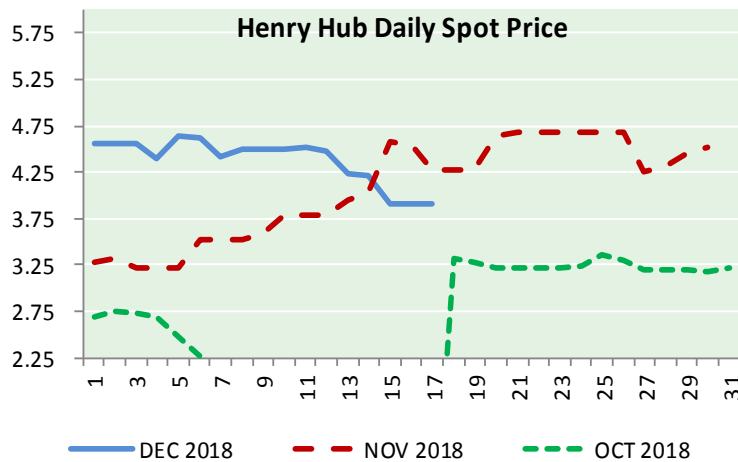
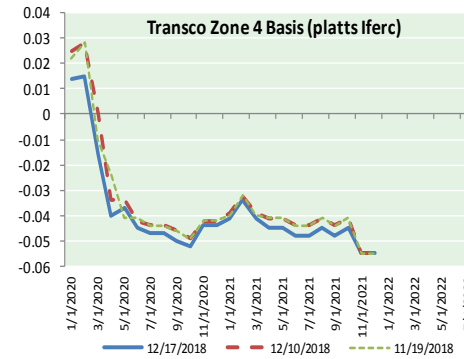
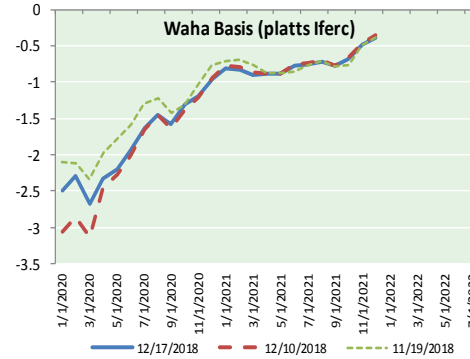
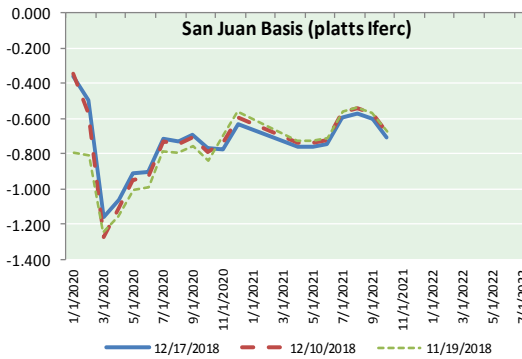
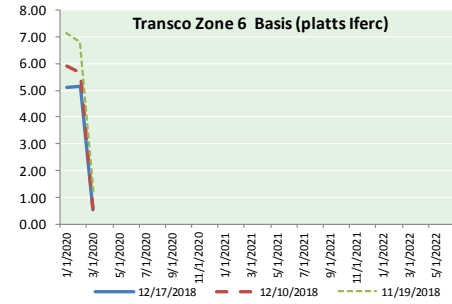
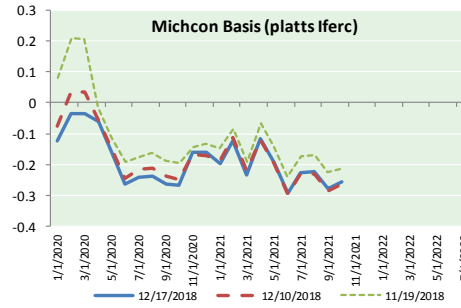
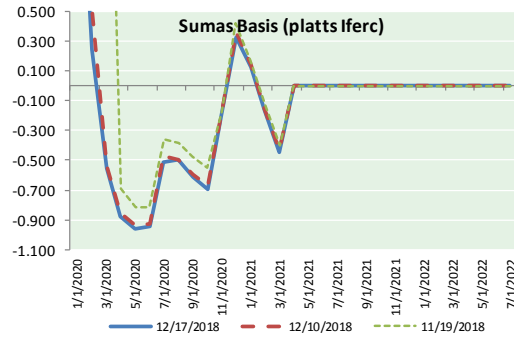


24 HOUR SNOWFALL FORECAST





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	49.88
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	51.20	29	
15		30	
		31	

Average (Dec) 51.8773
(through 12/17/2018)

Average (Nov) 56.6933

Average (Oct) 70.7578

CME NG Option Prices

ATM Call

Month	Strike	Close	Imp Vol
Feb-19			
Mar-19	3.650	0.265	54.3
Apr-19			
May-19			
Jun-19			

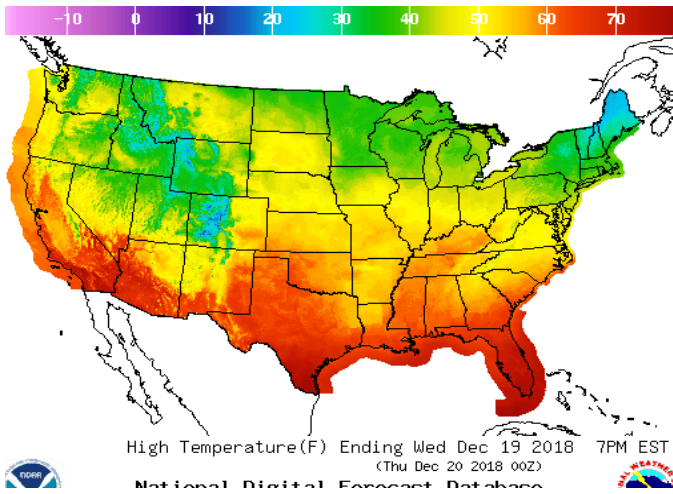
CME NG Option Prices

ATM Put

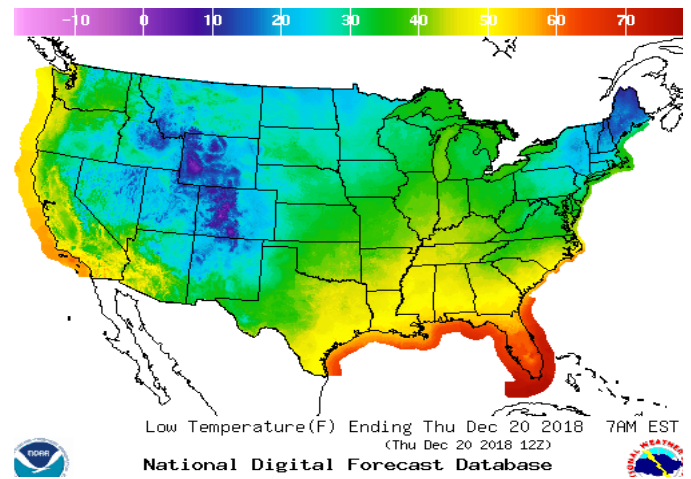
Month	Strike	Close	Imp Vol
Feb-19			
Mar-19	3.650	0.461	93.7
Apr-19			
May-19			
Jun-19			

WEATHER – HIGH / LOW TEMPERATURE TOMORROW

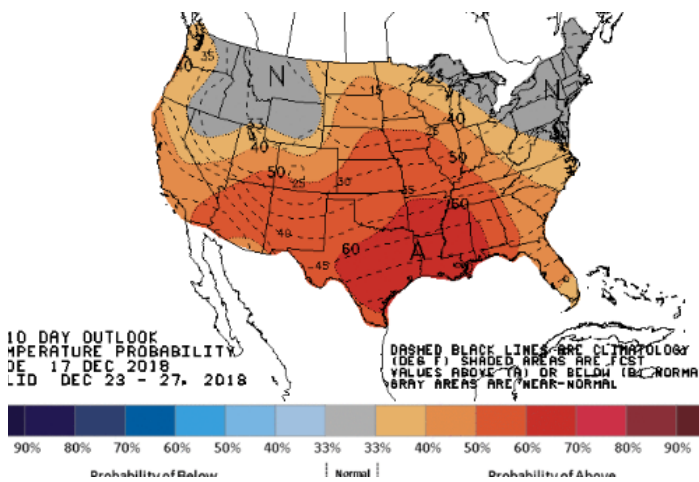
HIGH Temperature



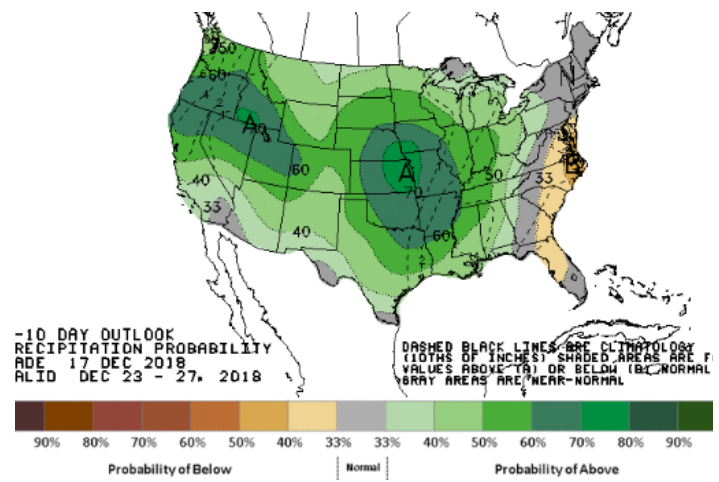
LOW Temperature



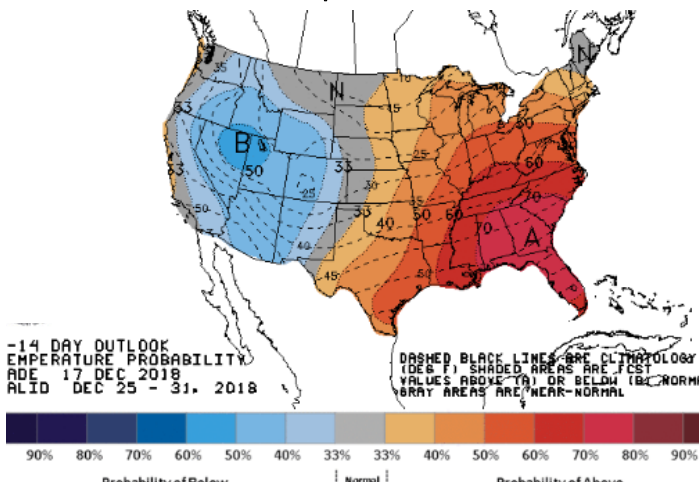
WEATHER – 6 TO 10 DAY OUTLOOK – NOAA
Temperature



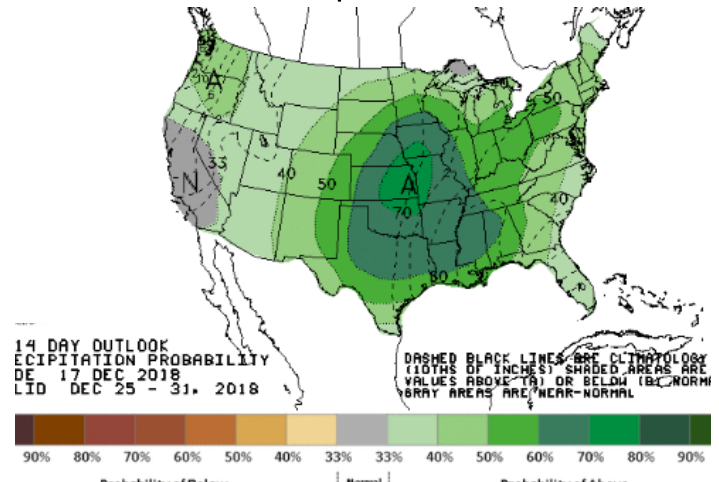
Precipitation



WEATHER – 8 TO 14 DAY OUTLOOK – NOAA
Temperature



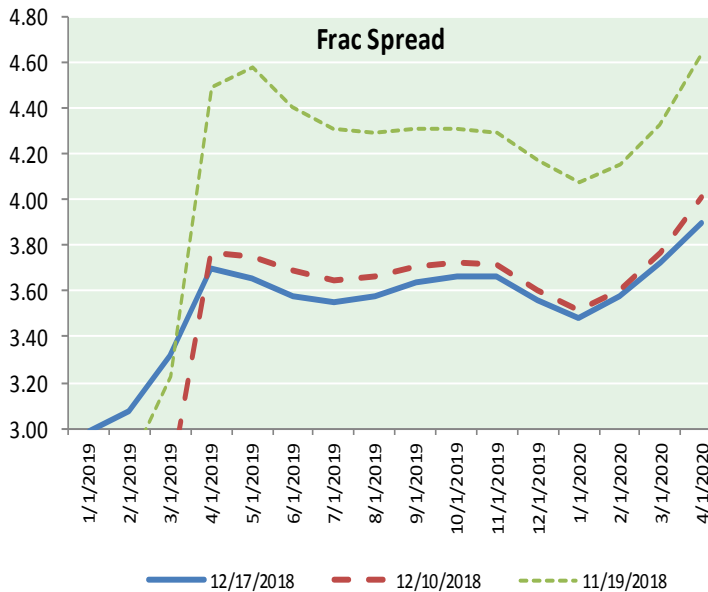
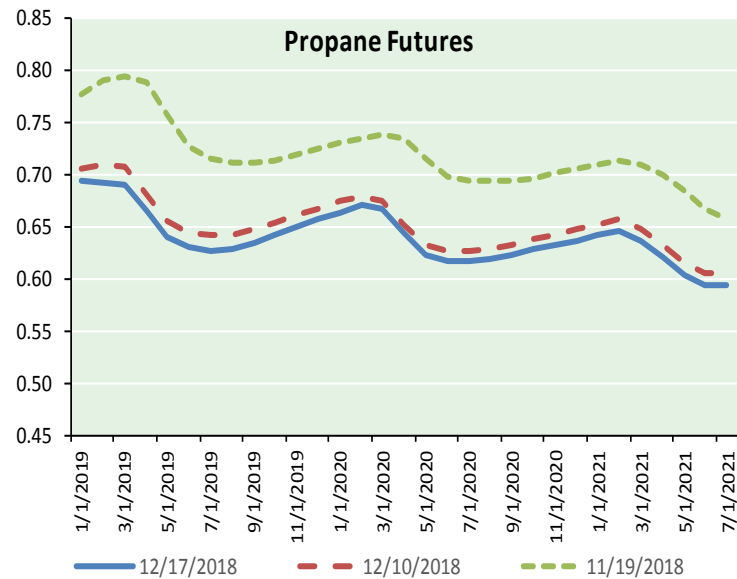
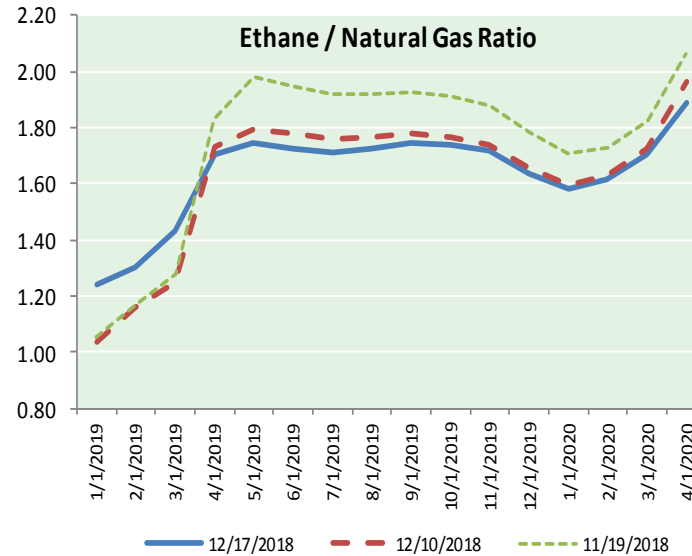
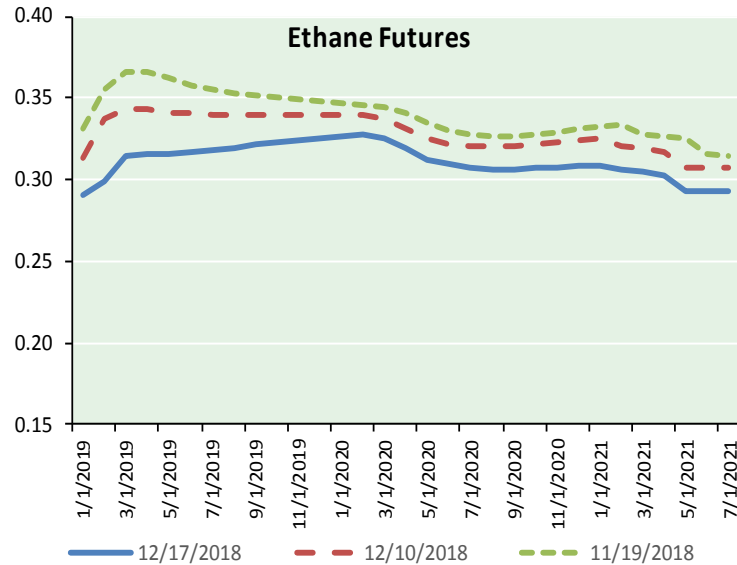
Precipitation



NATURAL GAS NEWS



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



CME Future Prices

Month	Close	Change
Jan-19	0.291	0.006
Feb-19	0.299	0.004
Mar-19	0.314	0.001
Apr-19	0.316	0.001
May-19	0.316	0.002
Jun-19	0.317	0.001
Jul-19	0.318	0.001
Aug-19	0.319	0.001
Sep-19	0.321	0.002
Oct-19	0.323	0.002
Nov-19	0.324	0.002
Dec-19	0.325	0.002
1YR Strip	0.315	0.002

CME Future Prices

Propane (C3)
Non-LDH— Mont Belvieu

Month	Close	Change
Jan-19	0.695	(0.007)
Feb-19	0.693	(0.010)
Mar-19	0.691	(0.010)
Apr-19	0.665	(0.010)
May-19	0.640	(0.010)
Jun-19	0.631	(0.010)
Jul-19	0.628	(0.011)
Aug-19	0.630	(0.011)
Sep-19	0.635	(0.010)
Oct-19	0.643	(0.009)
Nov-19	0.650	(0.009)
Dec-19	0.658	(0.009)
1YR Strip	0.655	(0.010)

NATURAL GAS NEWS



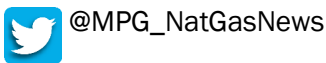
Prompt WTI (CL) Crude
Daily Sentiment

BEARISH



RESISTANCE
51.50 & 53.11
SUPPORT
48.64 & 47.39

FOLLOW US ON TWITTER:



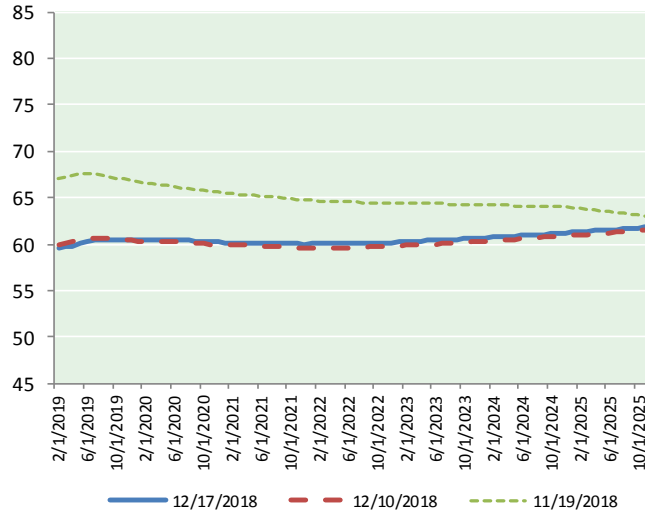
NYMEX Brent (BZ)

Futures

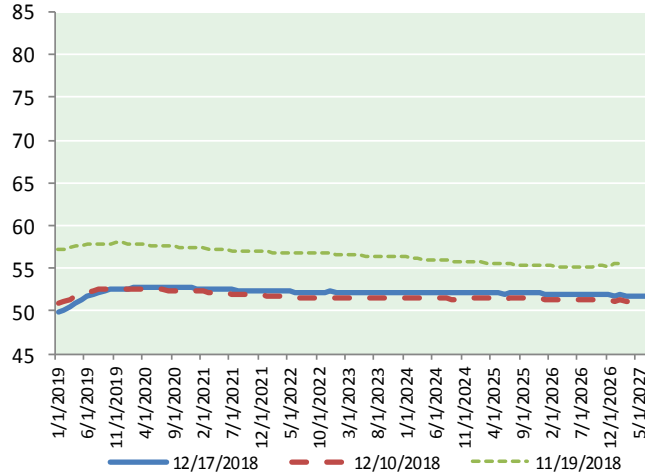
Month	Close	Change
Jan-19	49.88	(1.32)
Feb-19	50.20	(1.27)
Mar-19	50.55	(1.21)
Apr-19	50.91	(1.15)
May-19	51.29	(1.10)
Jun-19	51.65	(1.03)
Jul-19	51.96	(0.96)
Aug-19	52.21	(0.89)
Sep-19	52.39	(0.83)
Oct-19	52.49	(0.80)
Nov-19	52.59	(0.74)
Dec-19	52.64	(0.71)
Jan-20	52.68	(0.66)
Feb-20	52.71	(0.61)
Mar-20	52.74	(0.57)
Apr-20	52.76	(0.52)
May-20	52.77	(0.48)
Jun-20	52.78	(0.45)
Jul-20	52.75	(0.41)
Aug-20	52.73	(0.38)
Sep-20	52.73	(0.34)
Oct-20	52.74	(0.31)
Nov-20	52.75	(0.28)
Dec-20	52.74	(0.27)

1YR Strip	51.56	(1.00)
2018	#DIV/0!	#DIV/0!
5YR Strip	52.30	(0.25)

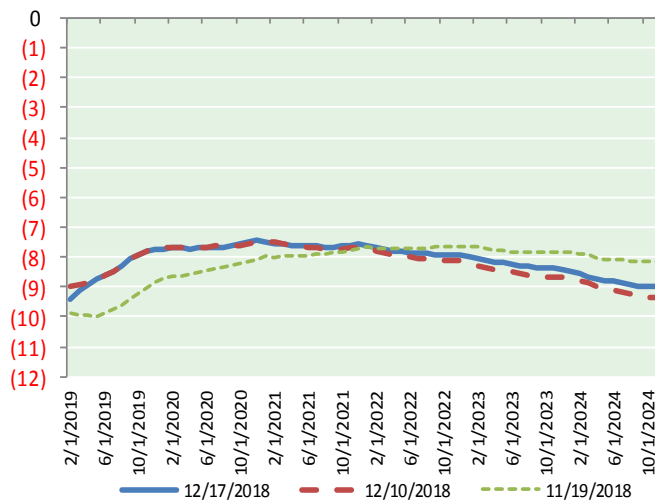
BRENT CRUDE FORWARD CURVE



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	0.793	(0.004)	
Iso-Butane	0.827	(0.006)	
Nat Gasoline	1.050	(0.010)	

NYMEX WTI (CL) Futures

Month	Close	Change
Feb-19	59.61	(0.67)
Mar-19	59.66	(0.74)
Apr-19	59.80	(0.76)
May-19	60.05	(0.74)
Jun-19	60.27	(0.71)
Jul-19	60.42	(0.69)
Aug-19	60.48	(0.66)
Sep-19	60.46	(0.63)
Oct-19	60.43	(0.61)
Nov-19	60.42	(0.58)
Dec-19	60.40	(0.55)
Jan-20	60.41	(0.52)
Feb-20	60.42	(0.48)
Mar-20	60.45	(0.44)
Apr-20	60.48	(0.40)
May-20	60.48	(0.36)
Jun-20	60.47	(0.34)
Jul-20	60.43	(0.33)
Aug-20	60.39	(0.31)
Sep-20	60.34	(0.29)
Oct-20	60.30	(0.26)
Nov-20	60.25	(0.25)
Dec-20	60.20	(0.23)
Jan-21	60.18	(0.21)

1YR Strip	60.20	(0.66)
2018	#DIV/0!	#DIV/0!
5YR Strip	60.26	(0.18)