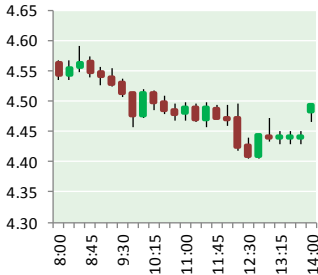


NATURAL GAS



DECEMBER 6, 2018

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



NYMEX NG Futures

Month	Close	Change
Jan-19	4.469	0.012
Feb-19	4.330	0.025
Mar-19	4.006	0.069
Apr-19	2.981	0.024
May-19	2.851	0.012
Jun-19	2.866	0.013
Jul-19	2.888	0.012
Aug-19	2.882	0.011
Sep-19	2.856	0.011
Oct-19	2.876	0.010
Nov-19	2.914	0.011
Dec-19	3.066	0.007
Jan-20	3.182	0.005
Feb-20	3.122	0.008
Mar-20	2.900	0.021
Apr-20	2.508	0.009
May-20	2.459	0.009
Jun-20	2.503	0.005
Jul-20	2.555	0.002
Aug-20	2.555	0.002
Sep-20	2.529	0.002
Oct-20	2.540	0.002
Nov-20	2.605	0.002
Dec-20	2.788	0.002
1YR Strip	3.249	0.018
2018 #DIV/O!	#DIV/O!	#DIV/O!
5YR Strip	2.760	0.003

IN THE NEWS

2018 U.S. Natural Gas Pipeline Report: Natural Gas Demand to Drive New Pipeline Construction Until 2035— NA Pipelines reported: A study released in June found that the United States and Canada will require annual average natural gas, oil and natural gas liquids midstream infrastructure investment of about \$44 billion per year, from 2018 through 2035. The report, "North

- **2018 U.S. Natural Gas Pipeline Report: Natural Gas Demand to Drive New Pipeline Construction Until 2035**
- **EPA, New Mexico Announce New Resource For Oil and Gas**

American Midstream Infrastructure through 2035: Significant Development Continues," conducted by ICF on behalf of the INGAA Foundation, updates a 2016 infrastructure report to reflect the changes in the natural gas, NGL and oil industry in recent years. "While we now are in the midst of a remarkable expansion of the pipeline network, this report confirms that there will remain a need for new pipeline infrastructure," said INGAA Foundation President Don Santa. For more on this story visit napielines.com or click <https://bit.ly/2BTkd4S>

EPA, New Mexico Announce New Resource For Oil and Gas Wastewater, Recycling and Reuse— Waterworld reported: The State of New Mexico and the U.S. Environmental Protection Agency (EPA) have released a draft white paper which addresses state and federal regulatory management of produced water, along with opportunities to treat and reuse the water to help alleviate water scarcity issues across the state. The white paper is now available for public review and input. In July 2018, the New Mexico Energy, Minerals and Natural Resources Department (EMNRD); Environment Department; and the Office of the State Engineer entered a Memorandum of Understanding (MOU) with the EPA. The purpose of the MOU is to assess and clarify the existing regulatory landscape related to the way produced water from oil and gas extraction activities may be reused, or as appropriate treated and made available for non-oil and gas applications in New Mexico. For more on this story visit waterworld.com or click <https://bit.ly/2L1dR6a>

Prompt Natural Gas (NG) Daily Sentiment

BULLISH



RESISTANCE
4.60 & 4.73
SUPPORT
4.37 & 4.28

Trading Summary

NATURAL GAS

Futures	Close	Change
NG	4.469	0.012
Volume	393,486	(107,596)
Open Int.	1,277,468	8,303

CRUDE AND GASOLINE

Futures	Close	Change
Crude	52.89	(0.36)
RBOB	1.4456	0.0022
Crude/NG	11.83	(0.11)

METALS

Futures	Close	Change
Gold	1,237.10	(0.90)

EQUITIES

Exchange	Close	Change
DOW	25,027.07	(799.36)
S&P 500	-1,094.31	(90.31)

CURRENCY

Currency	Close	Change
EUR/USD	1.1361	0.0017
USD/CND	1.2405	0.0067

12 MONTH CANDLESTICK (WEEKLY)



Contact Us



Mansfield Energy Corp
1025 Airport Pkwy
Gainesville, GA 30501

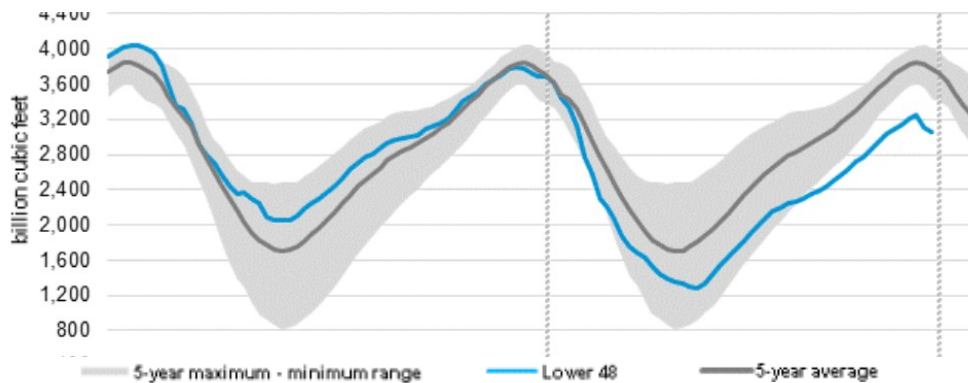
www.mansfield.energy
info@mansfieldoil.com

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 conditions warrant.

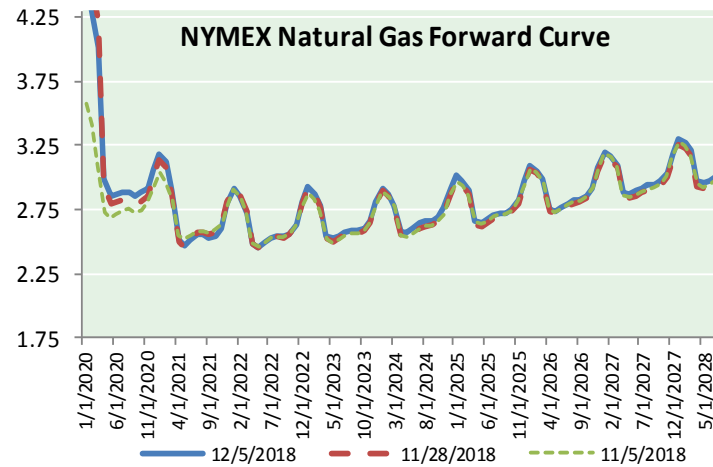
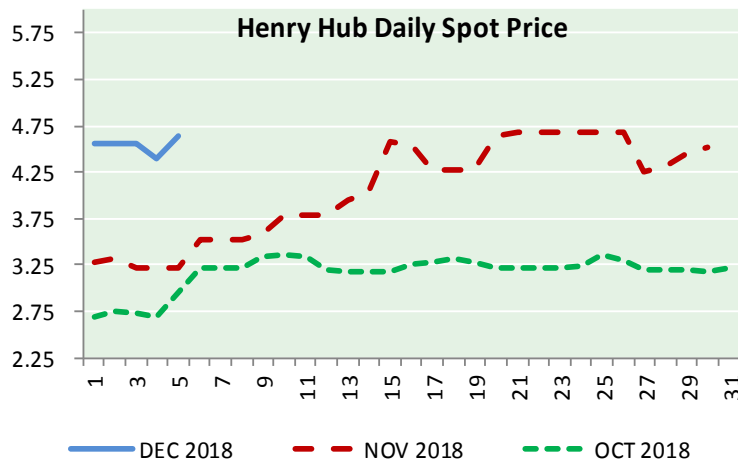
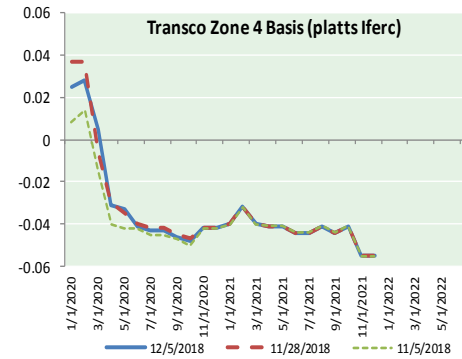
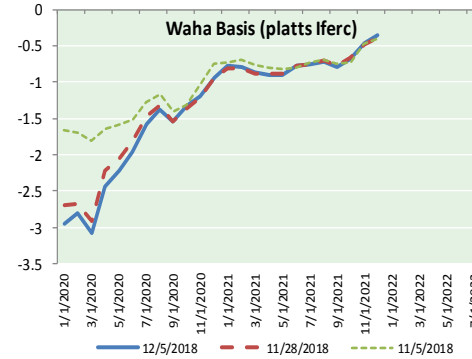
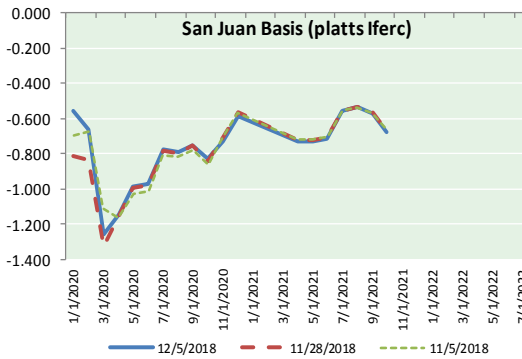
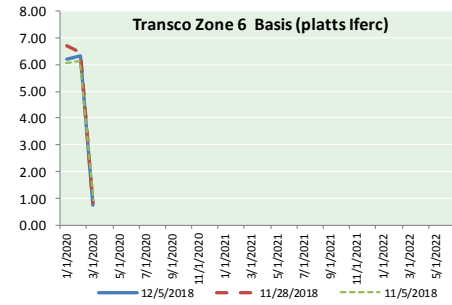
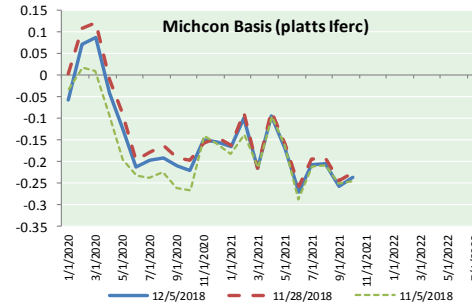
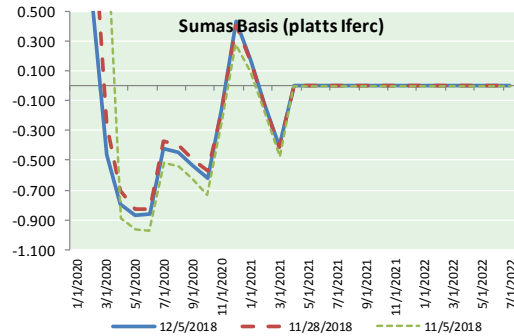
For the North Atlantic...Caribbean Sea and the Gulf of Mexico:

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

Average (Dec) 53.0300
(through 12/05/2018)

Average (Nov) 56.6933

Average (Oct) 70.7578

CME NG Option Prices

ATM Call

Month	Strike	Close	Imp Vol
Feb-19			
Mar-19	4.200	0.622	96.5
Apr-19			
May-19			
Jun-19			

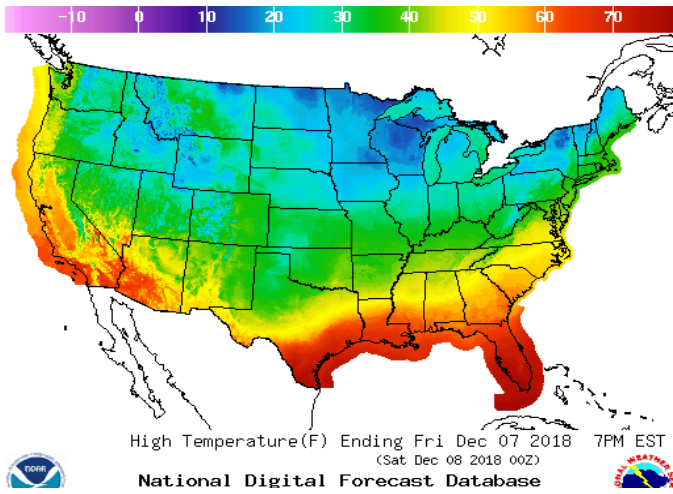
CME NG Option Prices

ATM Put

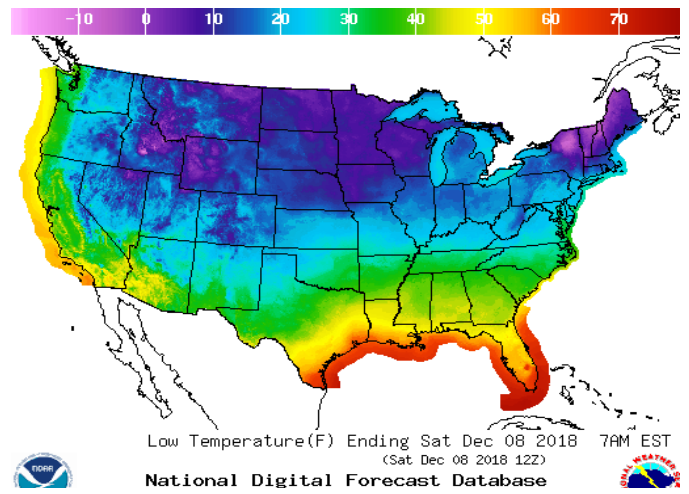
Month	Strike	Close	Imp Vol
Feb-19			
Mar-19	4.200	0.489	76.9
Apr-19			
May-19			
Jun-19			

WEATHER – HIGH / LOW TEMPERATURE TOMORROW

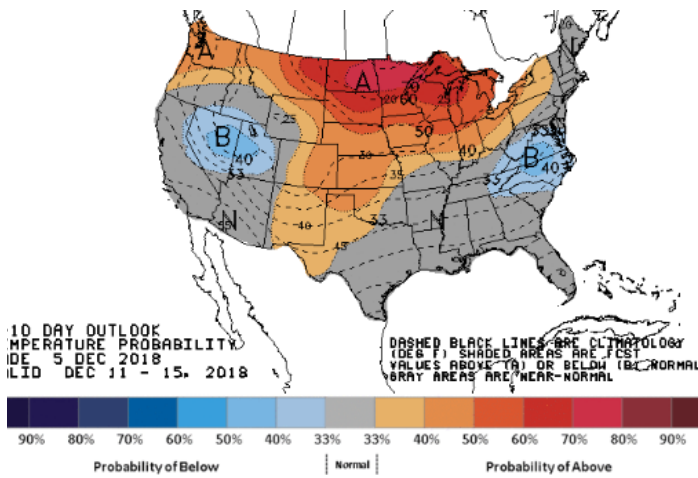
HIGH Temperature



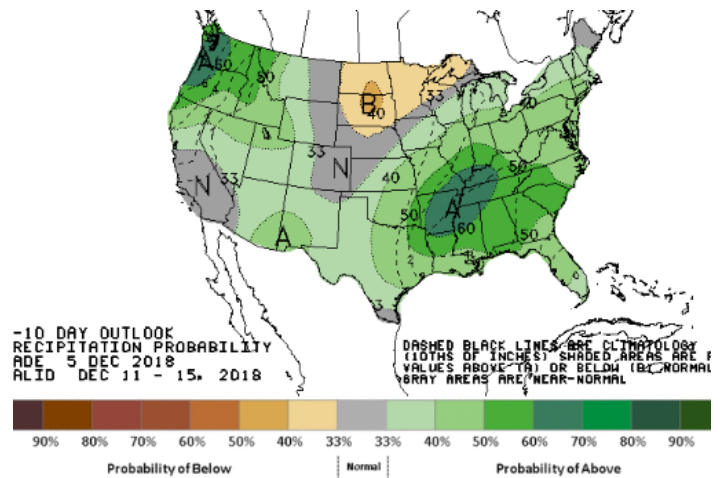
LOW Temperature



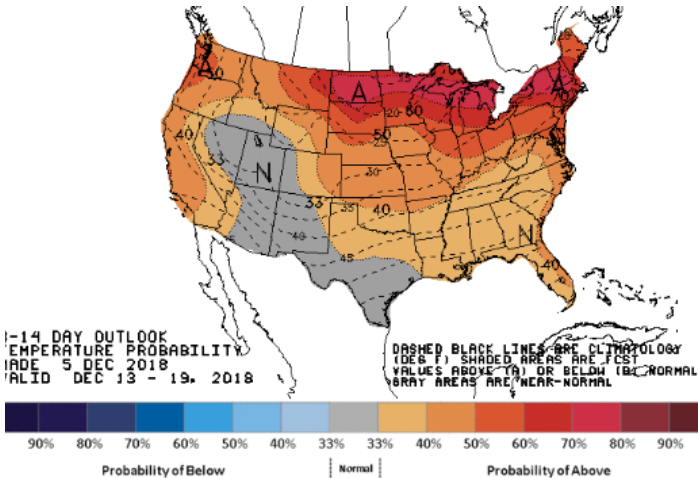
WEATHER – 6 TO 10 DAY OUTLOOK – NOAA
Temperature



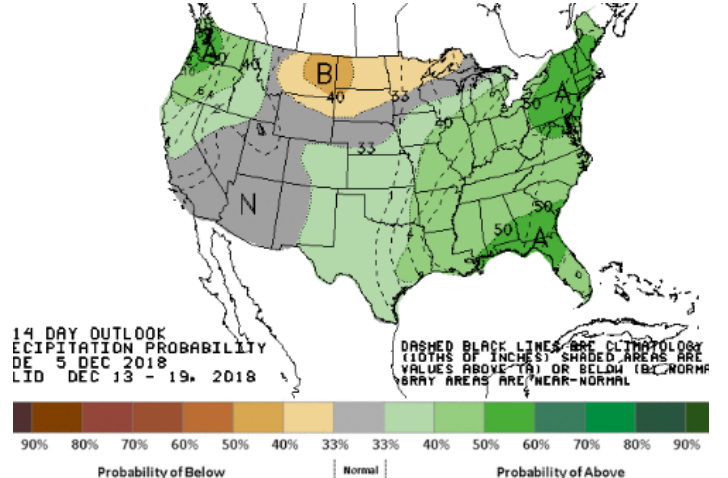
Precipitation



WEATHER – 8 TO 14 DAY OUTLOOK – NOAA
Temperature



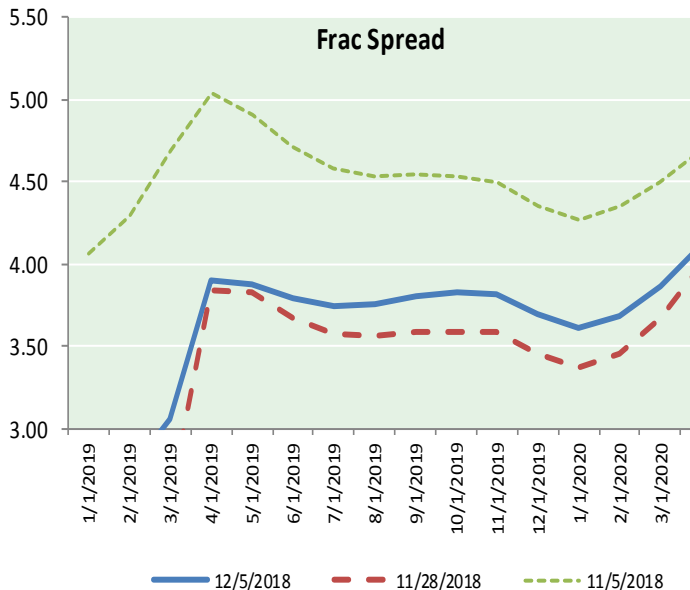
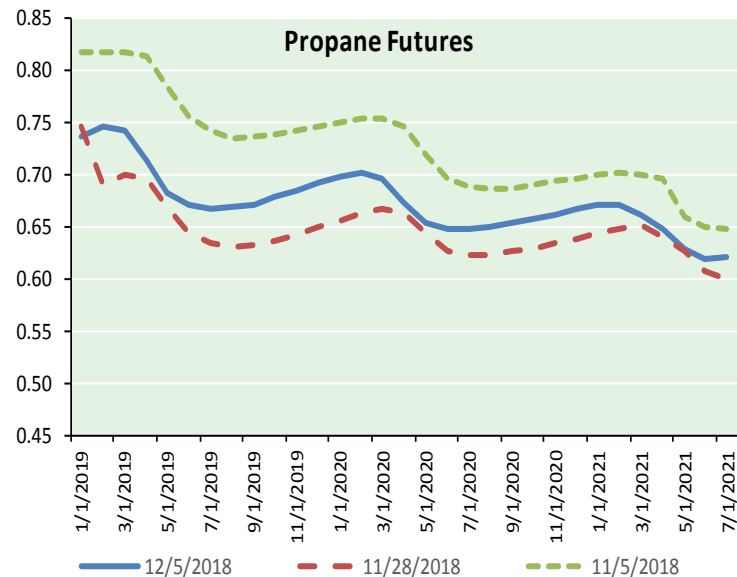
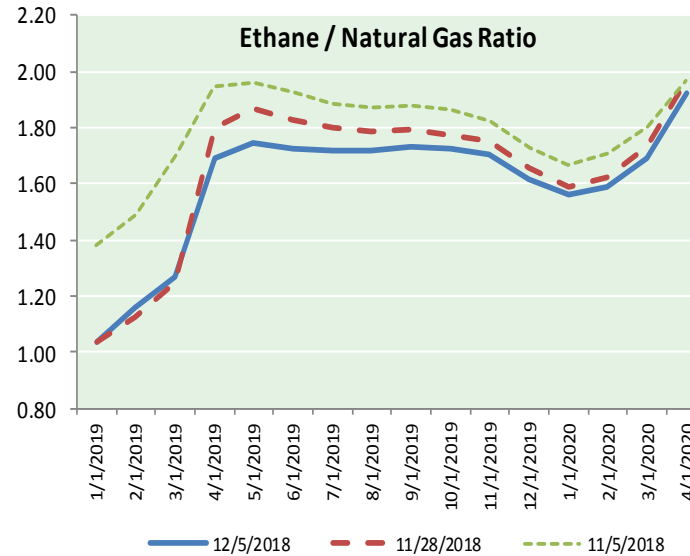
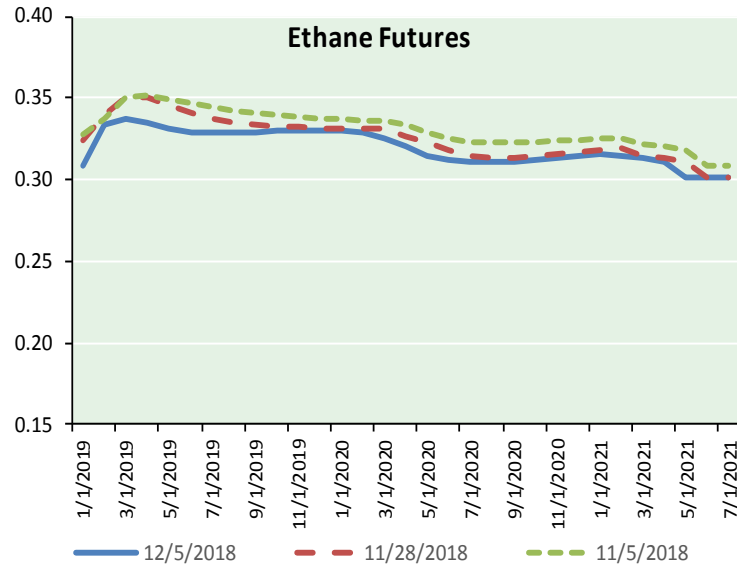
Precipitation



NATURAL GAS NEWS



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



CME Future Prices

Month	Close	Change
Jan-19	0.308	(0.006)
Feb-19	0.333	(0.004)
Mar-19	0.338	(0.004)
Apr-19	0.335	(0.004)
May-19	0.331	(0.004)
Jun-19	0.329	(0.004)
Jul-19	0.329	(0.004)
Aug-19	0.329	(0.004)
Sep-19	0.329	(0.004)
Oct-19	0.330	(0.004)
Nov-19	0.330	(0.004)
Dec-19	0.330	(0.004)
1YR Strip	0.329	(0.004)

CME Future Prices

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

Month	Close	Change
Jan-19	0.737	(0.001)
Feb-19	0.748	0.000
Mar-19	0.743	(0.001)
Apr-19	0.713	(0.002)
May-19	0.684	(0.006)
Jun-19	0.672	(0.007)
Jul-19	0.668	(0.007)
Aug-19	0.669	(0.008)
Sep-19	0.672	(0.007)
Oct-19	0.679	(0.008)
Nov-19	0.686	(0.008)
Dec-19	0.692	(0.008)
1YR Strip	0.697	(0.005)

NATURAL GAS NEWS



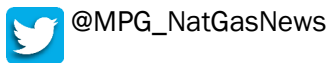
Prompt WTI (CL) Crude
Daily Sentiment

BEARISH



RESISTANCE
54.17 & 55.44
SUPPORT
51.89 & 50.88

FOLLOW US ON TWITTER:

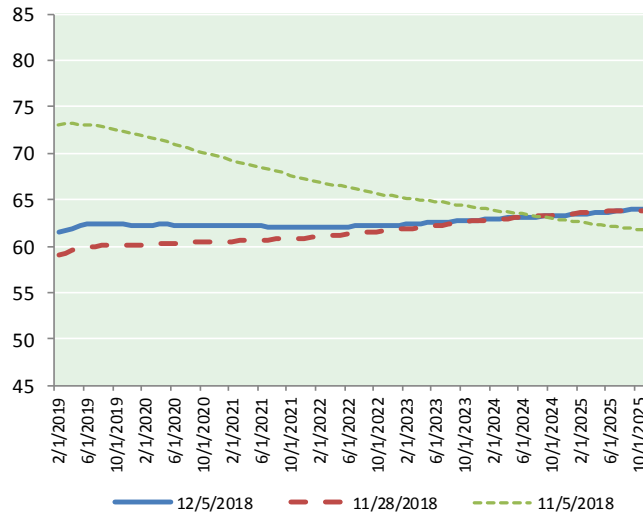


NYMEX Brent (BZ)

Futures

Month	Close	Change
Jan-19	52.89	(0.36)
Feb-19	53.12	(0.34)
Mar-19	53.36	(0.31)
Apr-19	53.61	(0.29)
May-19	53.86	(0.27)
Jun-19	54.06	(0.26)
Jul-19	54.22	(0.24)
Aug-19	54.32	(0.23)
Sep-19	54.40	(0.21)
Oct-19	54.44	(0.20)
Nov-19	54.47	(0.20)
Dec-19	54.49	(0.21)
Jan-20	54.47	(0.21)
Feb-20	54.45	(0.22)
Mar-20	54.46	(0.22)
Apr-20	54.46	(0.22)
May-20	54.48	(0.21)
Jun-20	54.50	(0.20)
Jul-20	54.46	(0.20)
Aug-20	54.44	(0.20)
Sep-20	54.43	(0.21)
Oct-20	54.43	(0.20)
Nov-20	54.44	(0.18)
Dec-20	54.46	(0.17)
1YR Strip 2018	53.94	(0.26)
	#DIV/O!	#DIV/O!
5YR Strip	54.04	(0.24)

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

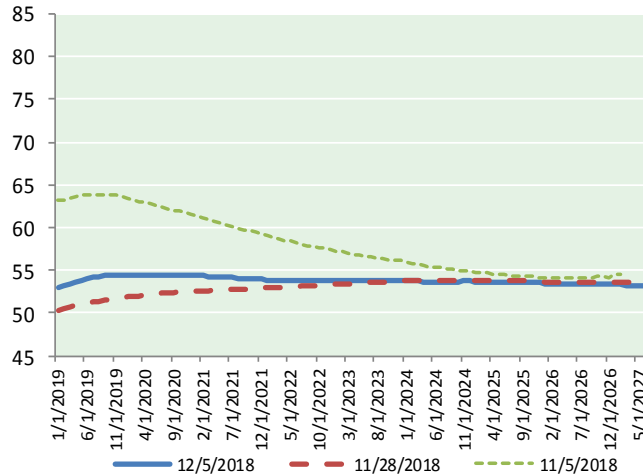
Prompt NGL Futures

	Jan-19	Close	Change
Butane	0.864	0.028	
Iso-Butane	0.895	0.029	
Nat Gasoline	1.043	(0.008)	

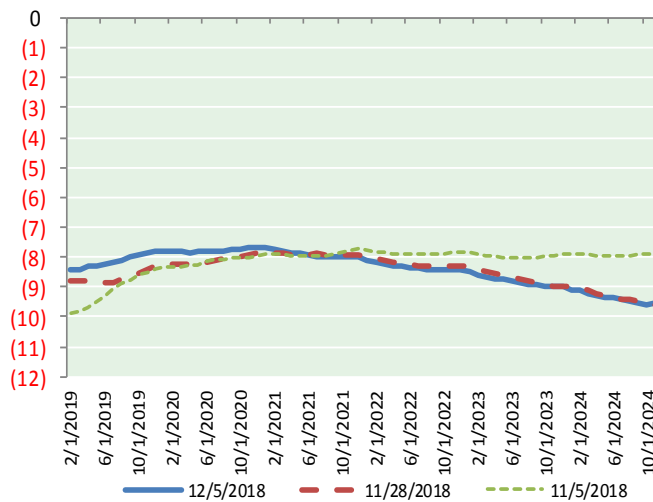
NYMEX WTI (CL) Futures

Month	Close	Change
Feb-19	61.56	(0.52)
Mar-19	61.76	(0.46)
Apr-19	61.94	(0.42)
May-19	62.15	(0.39)
Jun-19	62.32	(0.37)
Jul-19	62.40	(0.36)
Aug-19	62.43	(0.35)
Sep-19	62.39	(0.35)
Oct-19	62.36	(0.34)
Nov-19	62.34	(0.34)
Dec-19	62.29	(0.35)
Jan-20	62.29	(0.35)
Feb-20	62.28	(0.35)
Mar-20	62.29	(0.35)
Apr-20	62.30	(0.35)
May-20	62.30	(0.35)
Jun-20	62.29	(0.35)
Jul-20	62.26	(0.34)
Aug-20	62.23	(0.33)
Sep-20	62.20	(0.34)
Oct-20	62.17	(0.33)
Nov-20	62.15	(0.33)
Dec-20	62.14	(0.33)
Jan-21	62.12	(0.34)

WTI CRUDE FORWARD CURVE



WTI-BRENT SPREAD



1YR Strip	62.19	(0.38)
2018	#DIV/O!	#DIV/O!
5YR Strip	62.26	(0.38)