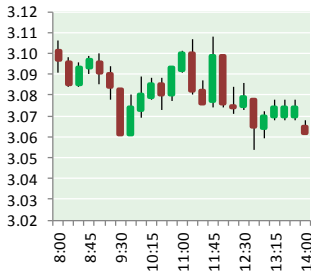


NATURAL GAS



DECEMBER 4, 2017

Prior Day's NYMEX Jan-18 Contract (CT)



NYMEX NG Futures

Month	Close	Change
Jan-18	3.061	0.036
Feb-18	3.063	0.031
Mar-18	3.025	0.026
Apr-18	2.878	0.011
May-18	2.869	0.008
Jun-18	2.898	0.006
Jul-18	2.931	0.005
Aug-18	2.936	0.005
Sep-18	2.919	0.005
Oct-18	2.943	0.005
Nov-18	2.997	0.004
Dec-18	3.129	(0.001)
Jan-19	3.218	0.001
Feb-19	3.187	0.000
Mar-19	3.113	(0.002)
Apr-19	2.750	(0.015)
May-19	2.705	(0.015)
Jun-19	2.727	(0.016)
Jul-19	2.752	(0.016)
Aug-19	2.752	(0.016)
Sep-19	2.735	(0.016)
Oct-19	2.758	(0.017)
Nov-19	2.813	(0.018)
Dec-19	2.962	(0.021)
1YR Strip	2.971	0.012
2018	2.971	0.012
5YR Strip	2.883	(0.006)

IN THE NEWS

Egypt Takes Giant Step Towards Energy Independence — The Oxford Business Group reported: The first flow of gas from the offshore Zohr gas field, located 200 km north of Port Said, is expected in December, according to government officials. Speaking in October, Tarek El Molla, minister of petroleum and mineral resources, said development of the field was 91 percent complete.

- **Egypt Takes Giant Step Towards Energy Independence**
- **U.S. Vastly Overstates Oil Output Forecasts, MIT Study Suggests**

Initial production is forecast at around 500m-1bn cu feet per day (cfpd), with output projected to rise to 2.7bn in 2019 once all seven fields are operational. Discovered by Italian energy company Eni in 2015, the Zohr field has 30trn cu feet of estimated reserves, making it one of the largest finds to be developed in recent years. The project has generated significant investment interest, with Russian energy giant Rosneft buying a \$1.1bn stake in the field from Eni in October. The Italian firm will hold 60 percent of the development, with Rosneft taking 30 percent and BP 10 percent. Less than a month after this announcement came the news that a second large-scale gas development is scheduled to come on-line before the end of the year. For more visit oilprice.com or click <http://bit.ly/2A2bHkN>

U.S. Vastly Overstates Oil Output Forecasts, MIT Study Suggests — Bloomberg reported: Researchers at MIT have uncovered a flaw in the Energy Department's official forecast which may overstate oil and gas production in the years to come. The culprit, they say, lies in the Energy Information Administration's premise that better technology has been behind nearly all the recent output gains, and will continue to boost production for the foreseeable future. Instead, the research suggests increases have been largely due to low energy prices, which led drillers to focus on sweet spots where oil and gas are easiest to extract. Justin B. Montgomery, a researcher at the Massachusetts Institute of Technology and one of the study's authors said "This compounds year after year, like interest, so the further out in the future the wells are drilled, the more that they are being overestimated." For more visit bloomberg.com or click <https://bloom.bg/2zNPDWZ>

12 MONTH CANDLESTICK (WEEKLY)



Prompt Natural Gas (NG) Daily Sentiment

BEARISH



RESISTANCE
3.10 & 3.15
SUPPORT
3.02 & 2.98

Trading Summary

NATURAL GAS

Futures	Close	Change
NG	3.061	0.036
Volume	627,060	(179,588)
Open Int.	1,447,093	19,756

CRUDE AND GASOLINE

Futures	Close	Change
Crude	58.36	0.96
RBOB	1.7416	0.0116
Crude/NG	19.07	0.09

METALS

Futures	Close	Change
Gold	1,278.80	(5.80)

EQUITIES

Exchange	Close	Change
DOW	24,231.59	(40.76)
S&P 500	2,642.22	(5.36)

CURRENCY

Currency	Close	Change
EUR/USD	1.1896	(0.0008)
USD/CND	1.2671	(0.0011)

Contact Us



Mansfield Energy Corp
1025 Airport Pkwy
Gainesville, GA 30501

www.mansfield.energy
info@mansfieldoil.com

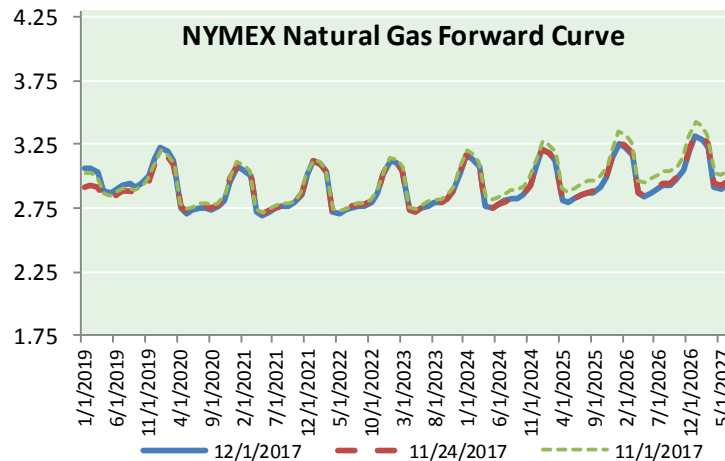
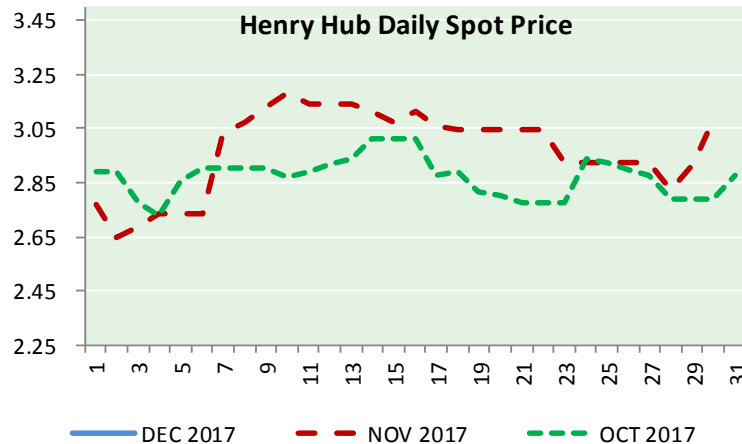
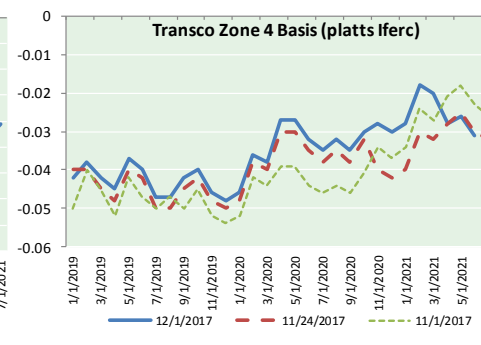
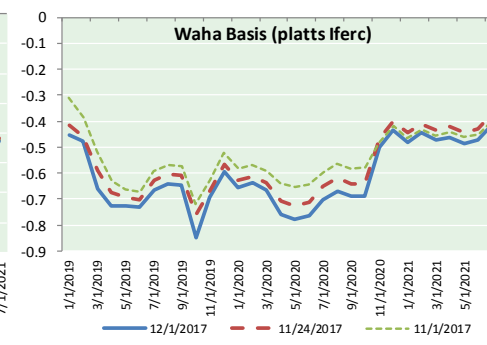
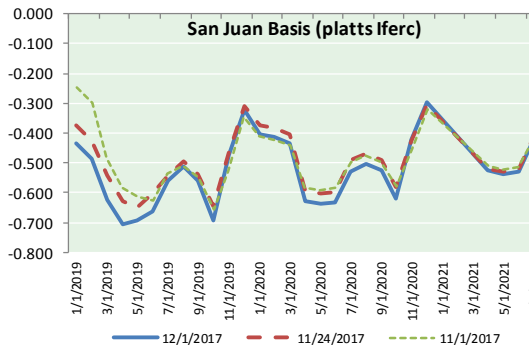
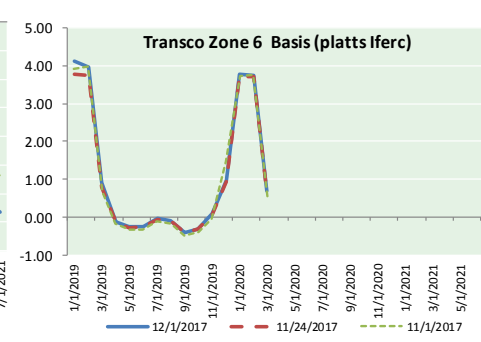
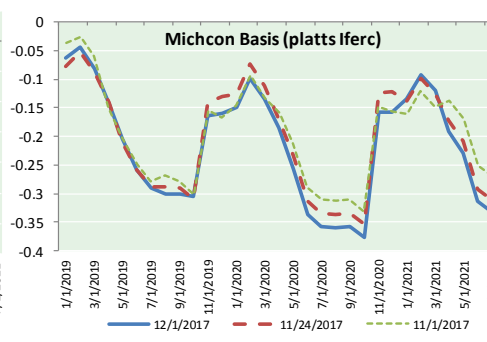
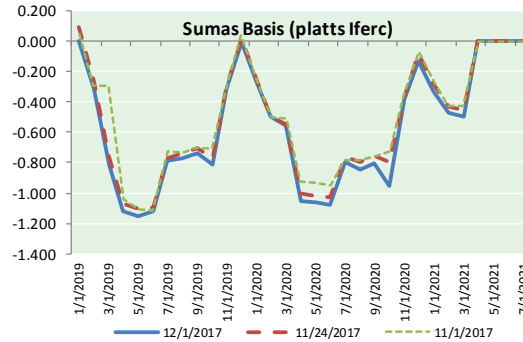
Phone: (800) 695-6626



NATURAL GAS NEWS



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



NYMEX WTI Delivery

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

Month: December 2017

Day	Price	Day	Price
1	58.36	16	
2		17	
3		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)	58.3600
(through 12/01/2017)	
Average (Nov)	56.6629
Average (Oct)	51.5945

CME NG Option Prices

ATM Call

Month	Strike	Close	Imp Vol
Jan-18	3.100	0.155	50.6
Feb-18	3.100	0.202	43.1
Mar-18	3.050	0.252	43.1
Apr-18	2.900	0.187	30.0
May-18	2.850	0.214	28.1

CME NG Option Prices

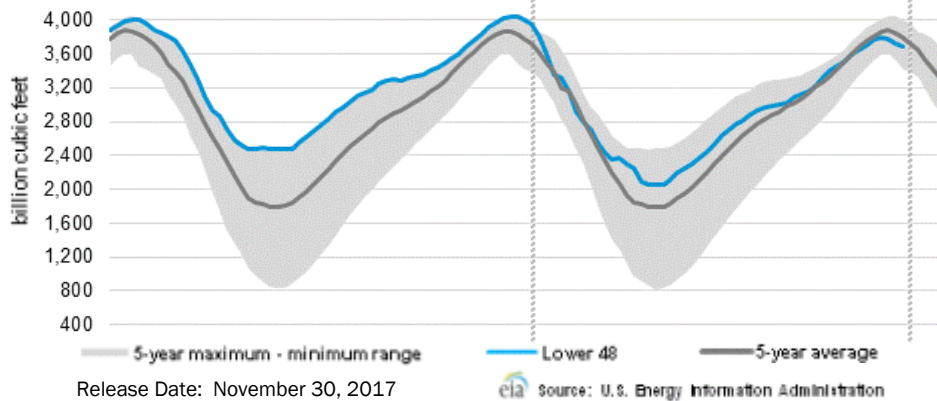
ATM Put

Month	Strike	Close	Imp Vol
Jan-18	3.100	0.138	45.0
Feb-18	3.100	0.242	50.6
Mar-18	3.050	0.278	48.7
Apr-18	2.900	0.211	31.9
May-18	2.850	0.190	28.1



NATURAL GAS NEWS

WEEKLY GAS IN UNDERGROUND STORAGE WITH 5-YR RANGE



Rig Count

Report Date: December 1, 2017

	Total	Change
US -	929	+6
CN -	222	+7

EIA Weekly NG Storage Actual and Surveys for November 23, 2017

Released November 30, 2017

- PIRA— (32)
- SMC— (37)
- Reuters— (37)

EIA ACTUAL — (33)

Total Working Gas In Storage

3,693 BCF

- (33) BCF (LAST WEEK)
- (309) BCF (LAST YEAR)
- (107) BCF (5-YR AVG)

U.S. Natural Gas Supply Gas Week 11/23- 11/29

Average daily values (BCF/D):

Last Year (BCF/d)

Dry Production — +79.6

Total Supply — +76.8

Last Week (BCF/d)

Dry Production — +75.8

Total Supply — +81.2

[NEXT REPORT ON Dec 7]

U.S. Natural Gas Demand Gas Week 11/23- 11/29

Average daily values (BCF/D):

Last Year (BCF/d)

Power — +20.7

Total Demand — +81.0

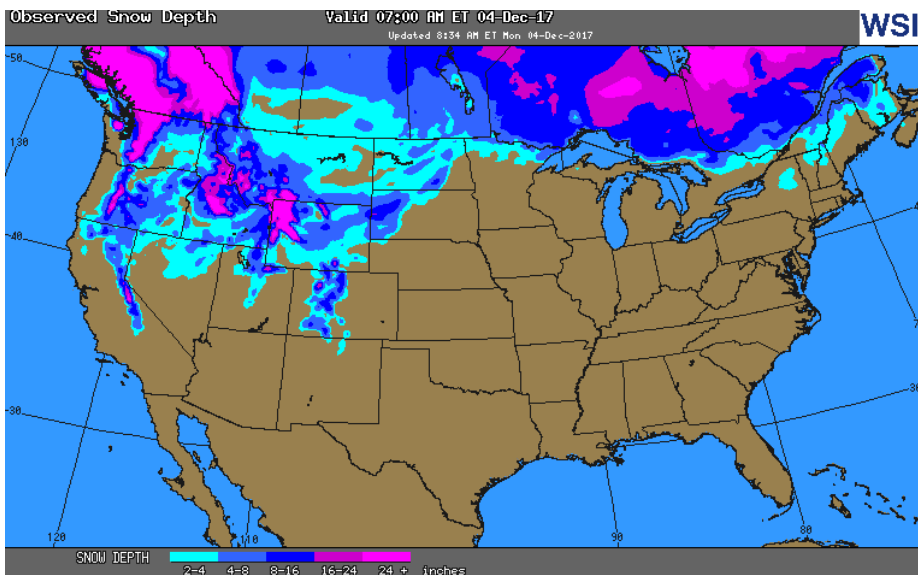
Last Week (BCF/d)

Power — +22.0

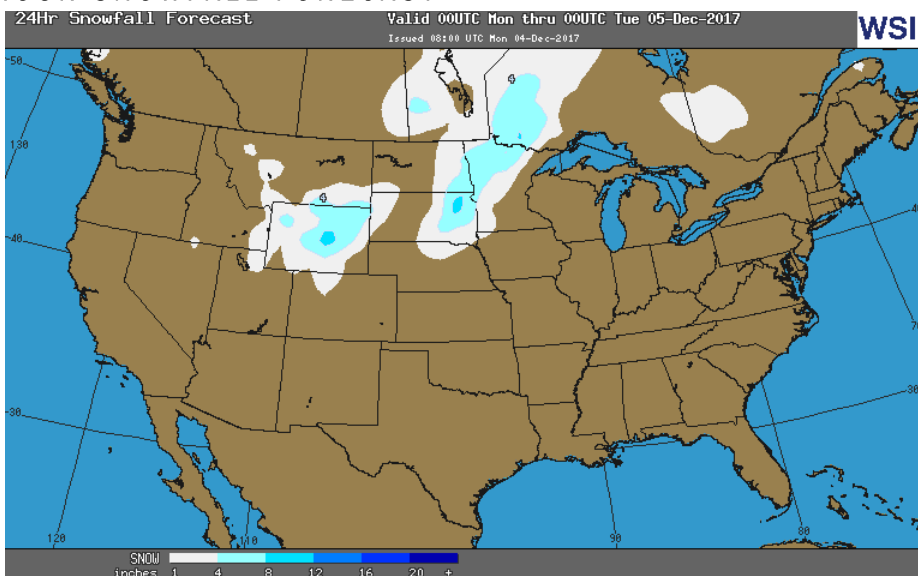
Total Demand — +85.4

[NEXT REPORT ON Nov 23]

OBSERVED SNOW DEPTH

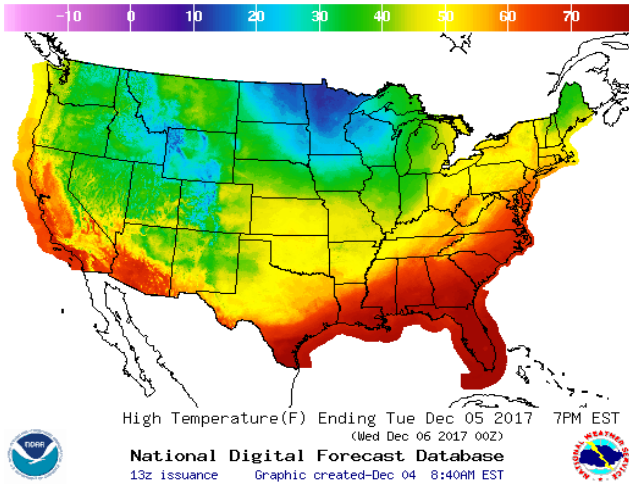


24 HOUR SNOWFALL FORECAST

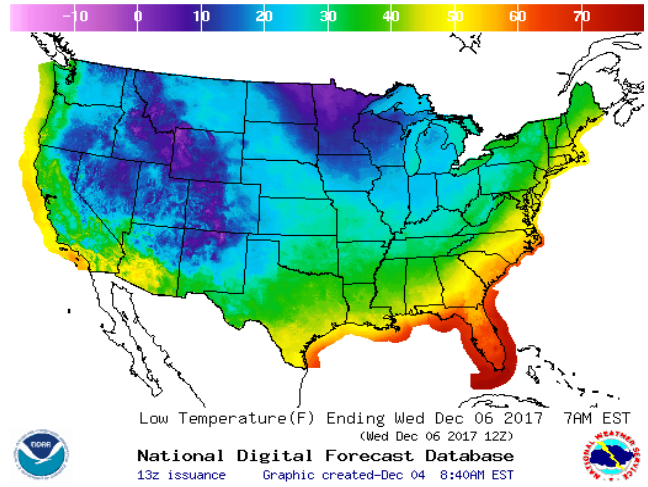


WEATHER – HIGH / LOW TEMPERATURE TOMORROW

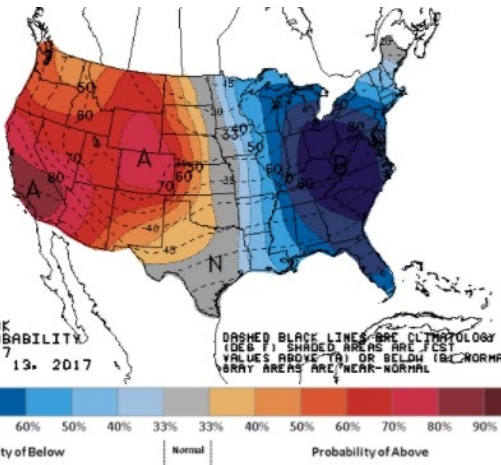
HIGH Temperature



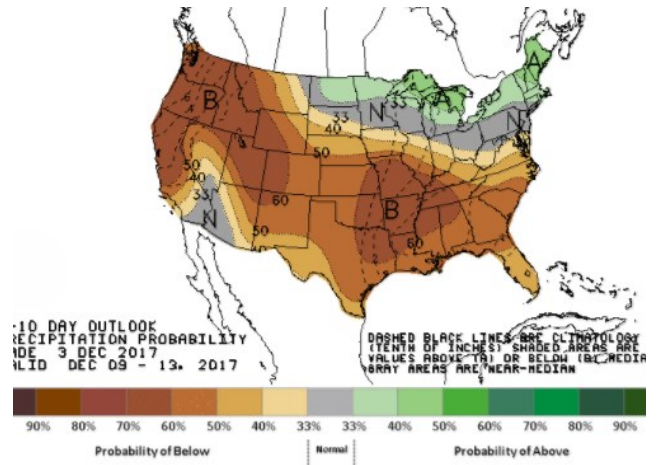
LOW Temperature



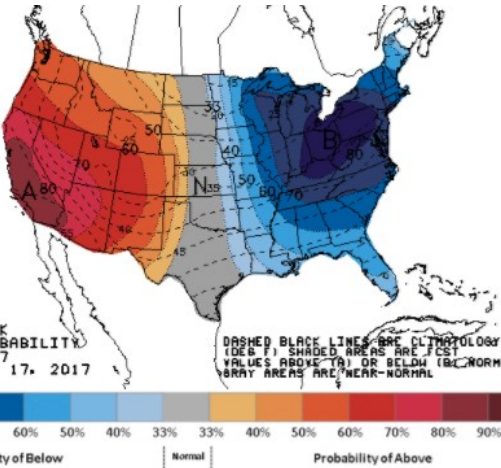
WEATHER – 6 TO 10 DAY OUTLOOK – NOAA
Temperature



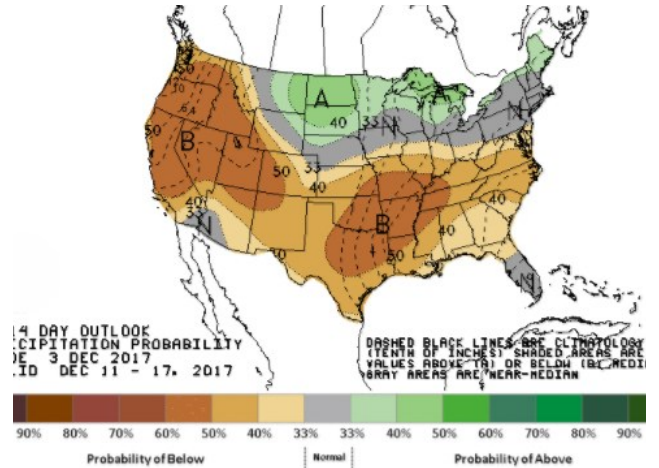
Precipitation



WEATHER – 8 TO 14 DAY OUTLOOK – NOAA
Temperature

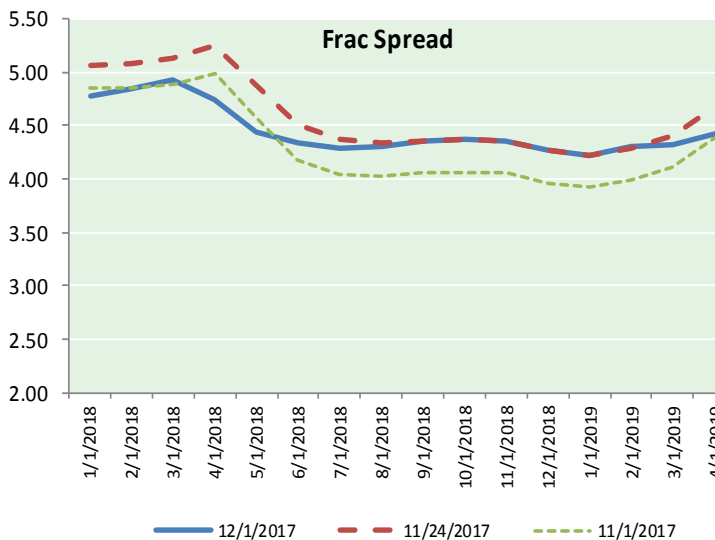
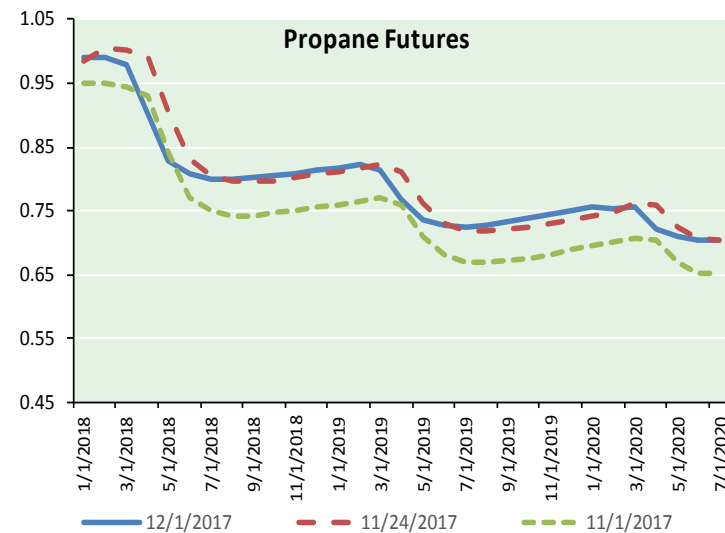
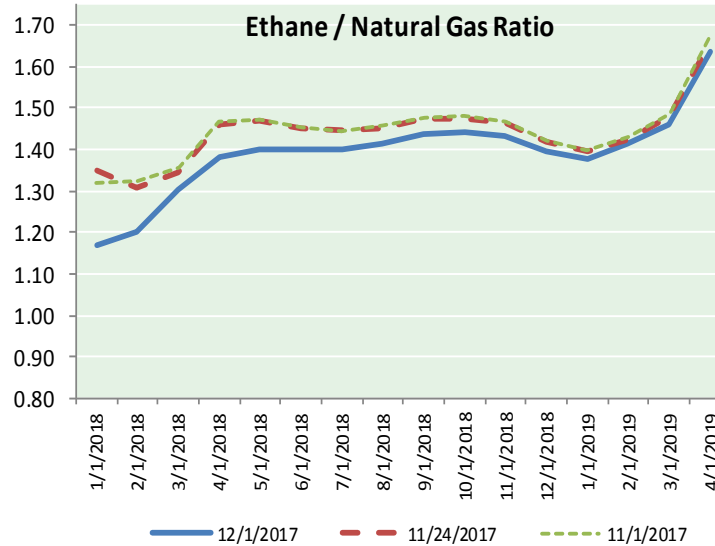
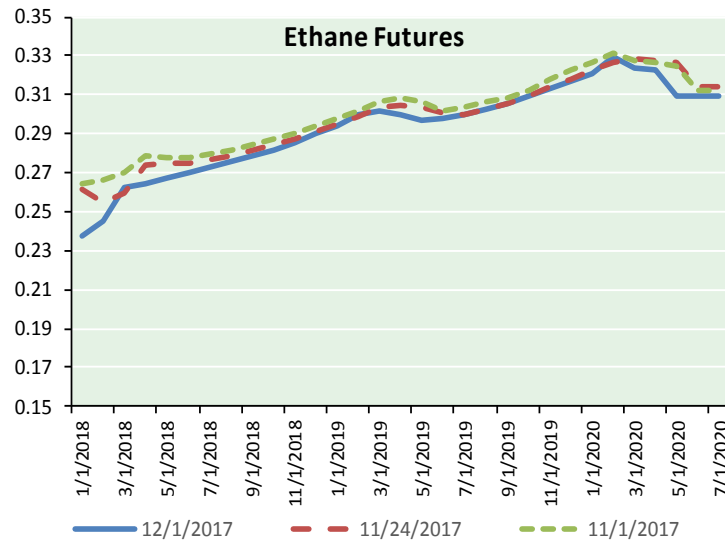


Precipitation





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



CME Future Prices

Ethane (C2)

Non-LDH— Mont Belvieu

Month	Close	Change
Jan-18	0.238	(0.024)
Feb-18	0.245	(0.005)
Mar-18	0.263	0.006
Apr-18	0.264	(0.008)
May-18	0.267	(0.007)
Jun-18	0.270	(0.006)
Jul-18	0.273	(0.004)
Aug-18	0.276	(0.004)
Sep-18	0.279	(0.004)
Oct-18	0.282	(0.004)
Nov-18	0.286	(0.003)
Dec-18	0.290	(0.003)

1YR Strip 0.269 (0.005)

CME Future Prices

Propane (C3)

Non-LDH— Mont Belvieu

Month	Close	Change
Jan-18	0.990	0.008
Feb-18	0.990	0.012
Mar-18	0.980	0.001
Apr-18	0.901	(0.068)
May-18	0.829	(0.061)
Jun-18	0.808	(0.013)
Jul-18	0.801	0.002
Aug-18	0.801	0.007
Sep-18	0.802	0.008
Oct-18	0.804	0.009
Nov-18	0.809	0.009
Dec-18	0.813	0.009

1YR Strip 0.861 (0.007)

NATURAL GAS NEWS



Prompt WTI (CL) Crude

Daily Sentiment

BULLISH



RESISTANCE

56.14 & 56.66

SUPPORT

54.98 & 54.34

FOLLOW US ON TWITTER:



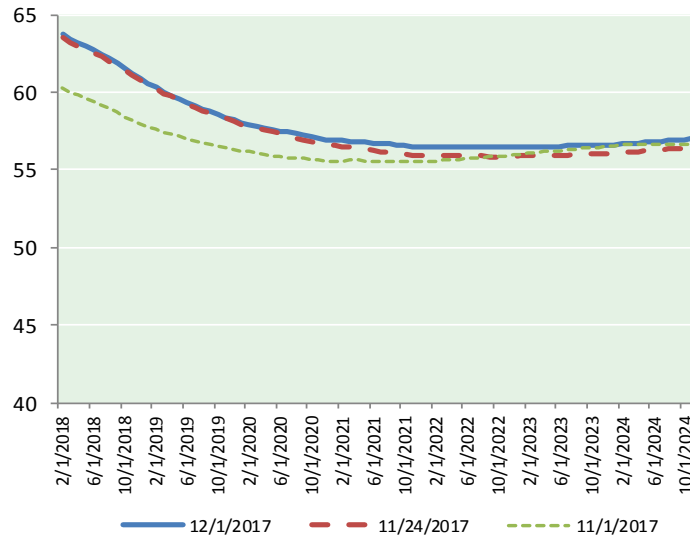
@MPG_NatGasNews

NYMEX Brent (BZ)

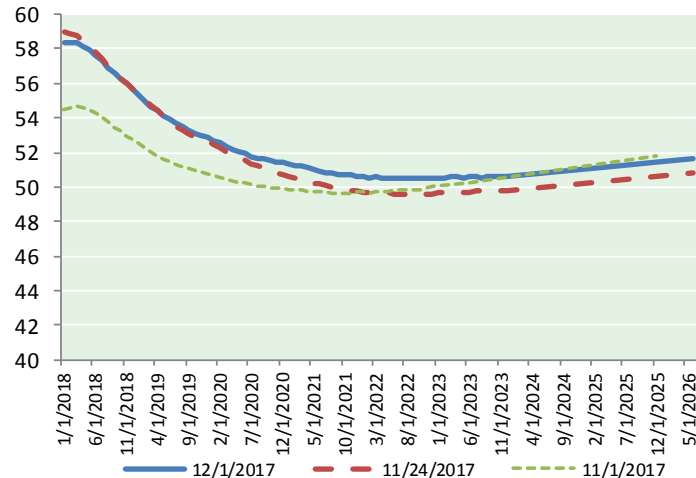
Futures

Month	Close	Change
Feb-18	63.73	1.10
Mar-18	63.46	1.12
Apr-18	63.19	1.12
May-18	62.94	1.10
Jun-18	62.71	1.08
Jul-18	62.45	1.05
Aug-18	62.15	1.03
Sep-18	61.83	1.01
Oct-18	61.50	0.98
Nov-18	61.18	0.96
Dec-18	60.85	0.92
Jan-19	60.56	0.88
Feb-19	60.31	0.84
Mar-19	60.03	0.79
Apr-19	59.81	0.75
May-19	59.57	0.71
Jun-19	59.31	0.67
Jul-19	59.14	0.62
Aug-19	58.94	0.59
Sep-19	58.75	0.55
Oct-19	58.60	0.53
Nov-19	58.40	0.50
Dec-19	58.20	0.47
Jan-20	58.05	0.45
1YR Strip 2018	62.21	1.03
2018	62.36	1.04
5YR Strip	58.27	0.45

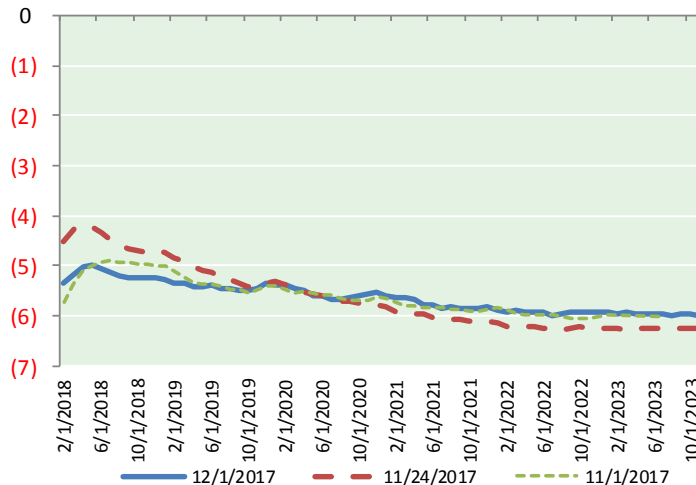
BRENT CRUDE FORWARD CURVE



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

(\$/gallon)

	Jan-18	Close	Change
Butane		1.048	0.008
Iso-Butane		1.052	0.013
Nat Gasoline		1.354	(0.004)

NYMEX WTI (CL) Futures

Month	Close	Change
Jan-18	58.36	0.96
Feb-18	58.38	0.93
Mar-18	58.31	0.91
Apr-18	58.17	0.89
May-18	57.95	0.86
Jun-18	57.66	0.84
Jul-18	57.32	0.82
Aug-18	56.96	0.79
Sep-18	56.60	0.74
Oct-18	56.26	0.71
Nov-18	55.93	0.68
Dec-18	55.62	0.62
Jan-19	55.29	0.57
Feb-19	54.97	0.52
Mar-19	54.67	0.48
Apr-19	54.40	0.43
May-19	54.15	0.40
Jun-19	53.93	0.37
Jul-19	53.69	0.34
Aug-19	53.47	0.30
Sep-19	53.27	0.25
Oct-19	53.11	0.21
Nov-19	52.96	0.16
Dec-19	52.85	0.13
1YR Strip 2018	57.29	0.81
2018	57.29	0.81
5YR Strip	52.83	0.19