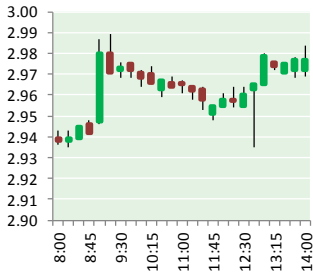


# NATURAL GAS



SEPTEMBER 28, 2017

**Prior Day's NYMEX  
Oct-17 Contract (CT)**



Oct-17 Settlement — \$2.974

**NYMEX NG Futures**

Month	Close	Change
Nov-17	3.061	0.061
Dec-17	3.218	0.059
Jan-18	3.329	0.058
Feb-18	3.334	0.055
Mar-18	3.287	0.051
Apr-18	2.956	0.026
May-18	2.921	0.021
Jun-18	2.946	0.020
Jul-18	2.971	0.020
Aug-18	2.973	0.020
Sep-18	2.952	0.020
Oct-18	2.975	0.020
Nov-18	3.025	0.020
Dec-18	3.156	0.020
Jan-19	3.240	0.021
Feb-19	3.219	0.020
Mar-19	3.152	0.020
Apr-19	2.767	0.005
May-19	2.733	0.003
Jun-19	2.759	0.005
Jul-19	2.785	0.007
Aug-19	2.791	0.008
Sep-19	2.777	0.008
Oct-19	2.801	0.008
1YR Strip	3.077	0.036
2017	3.140	0.060
5YR Strip	2.910	0.017

**IN THE NEWS**

'New Day' For Jordan Cove LNG, Says Colorado Producer Group

— Natural Gas Intelligence reports: Colorado's West Slope producer group is optimistic the new FERC application for the Jordan Cove liquefied natural gas (LNG) export project in Oregon and companion Pacific Connector transmission pipeline should open a

- 'New Day' For Jordan Cove LNG, Says Colorado Producer Group
- U.S. natural gas prices rise as winter stocks look tight

"new day" to complete the promise of a 1 Bcf/d export project on the U.S. West Coast. Jordan Cove in its application noted that it has secured some customers, altered the proposed onsite power plant and opened the right-of-way portfolio. Although it is still unclear from where Jordan Cove will secure all of its gas supply, a rough "back-of-a-napkin" calculation is to multiply 1 Bcf/d at the Opal Hub price to get a sense of the "broad value" of the export project to western Colorado. For more visit [naturalgasintel.com](http://naturalgasintel.com) or click <http://bit.ly/2yu7jpd>

U.S. natural gas prices rise as winter stocks look tight – U.S. natural gas stocks look somewhat tight after low prices this summer worked off the excess stocks that built up in the first half of the year. Current stocks are in line with the five-year seasonal average but that may not be enough given the increase in exports and the number of additional combined-cycle power plants that have become operational in 2017. The last two winters have been exceptionally mild; if this winter proves colder, which is likely simply on the basis of probabilities, inventories could come under pressure. Hurricanes Harvey and Irma caused extensive damage to electricity transmission and distribution networks in Texas and Florida. But the rise in stocks is likely to prove temporary as electrical connections are restored throughout the region and pet-chems plants return to normal operations. Now that excess stocks inherited from earlier this year have been worked down, the outlook for gas this winter appears somewhat tight and forward prices are rising as a result. For more on this story visit [reuters.com](http://reuters.com) or click <http://bit.ly/2yu7jpd>

**12 MONTH CANDLESTICK (WEEKLY)**



**Prompt Natural Gas  
(NG) Daily Sentiment**

**BEARISH**



RESISTANCE

3.10 & 3.15

SUPPORT

3.01 & 2.96

**Trading Summary**

**NATURAL GAS**

Futures	Close	Change
NG	3.061	0.061
Volume	418,284	(290,484)
Open Int.	1,311,842	1,750

**CRUDE AND GASOLINE**

Futures	Close	Change
Crude	49.91	0.26
RBOB	1.6540	(0.0448)
Crude/NG	16.31	(0.24)

**METALS**

Futures	Close	Change
Gold	1,284.10	(1.80)

**EQUITIES**

Exchange	Close	Change
DOW	22,340.71	56.39
S&P 500	2,507.04	10.20

**CURRENCY**

Currency	Close	Change
EUR/USD	1.1744	(0.0049)
USD/CND	1.2464	(0.0010)

**Contact Us**



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Gainesville, GA 30501

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[info@mansfieldoil.com](mailto:info@mansfieldoil.com)

Phone: (800) 695-6626

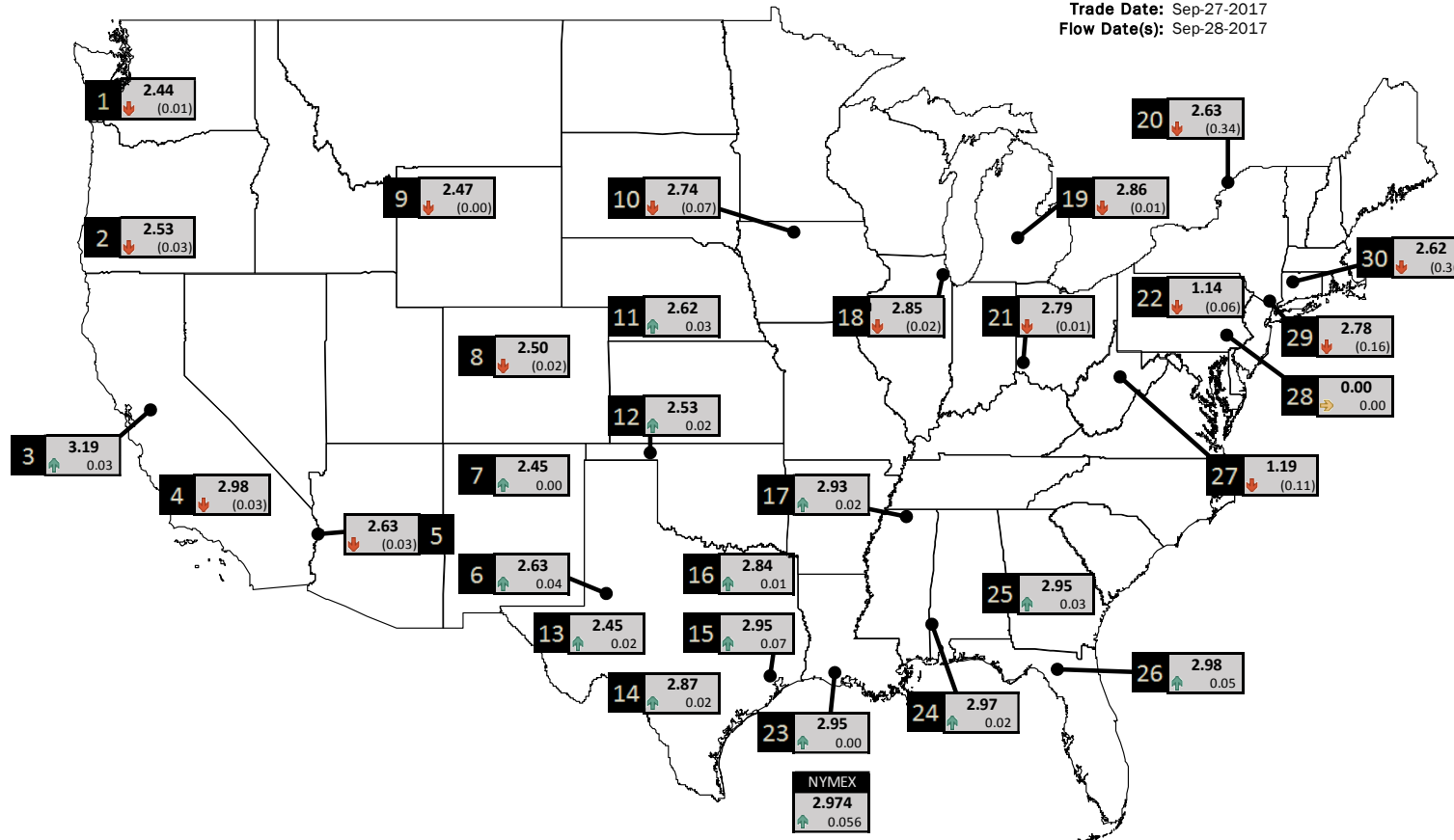


NATURAL GAS NEWS



PHYSICAL SPOT NATURAL GAS PRICE MAP

Trade Date: Sep-27-2017  
Flow Date(s): Sep-28-2017



ID	DAILY INDEX	PRICE	CHANGE
1	Stanfield	2.44	(0.01)
2	Malin	2.53	(0.03)
3	PG&E - Citygate	3.19	0.03
4	SoCal-Citygate	2.98	(0.03)
5	SoCal Border	2.63	(0.03)
6	Waha	2.63	0.04
7	EPSJ Blanco Pool	2.45	0.00
8	Opal Plant Tailgate	2.50	(0.02)
9	NWP-Wyoming	2.47	(0.00)
10	Ventura	2.74	(0.07)

ID	DAILY INDEX	PRICE	CHANGE
11	NGPL-Midcont Pool	2.62	0.03
12	Panhandle	2.53	0.02
13	EP-Permian	2.45	0.02
14	TGP-ZO	2.87	0.02
15	Houston Ship Channel	2.95	0.07
16	NGPL-TXOK	2.84	0.01
17	TETCO-M1 30	2.93	0.02
18	Chicago Citygates	2.85	(0.02)
19	Michcon	2.86	(0.01)
20	Iroquois (into)	2.63	(0.34)
	NYMEX	2.974	0.056

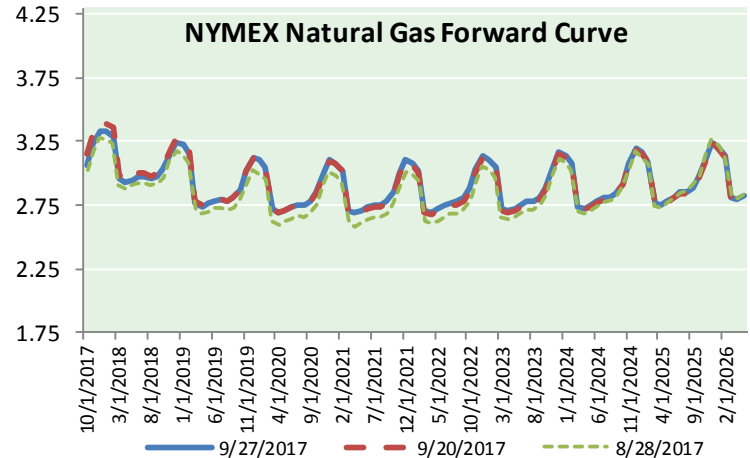
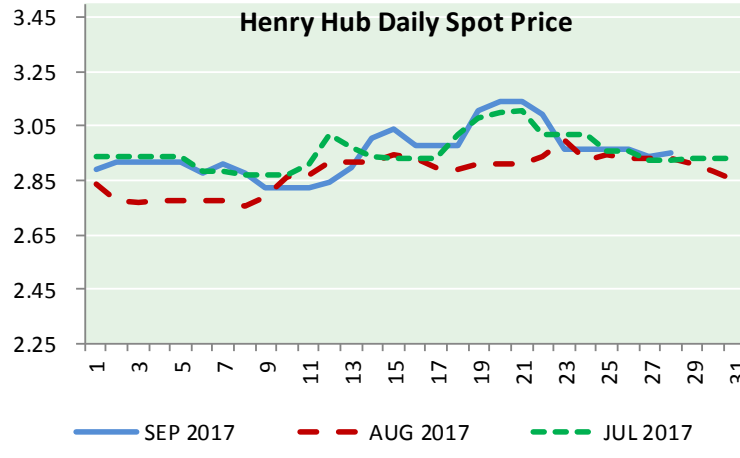
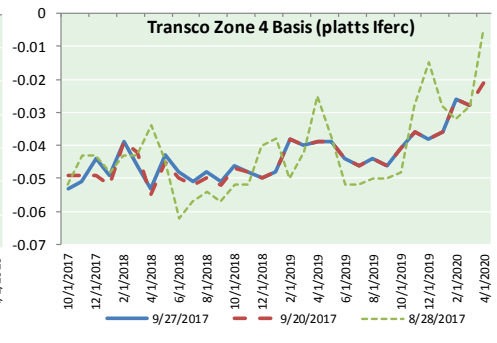
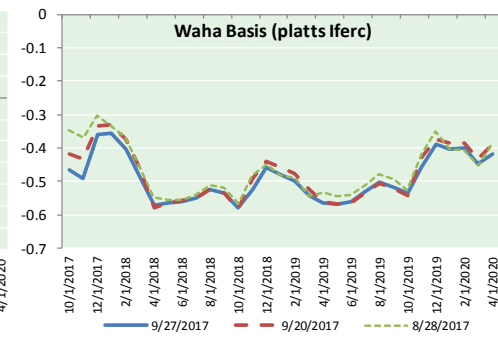
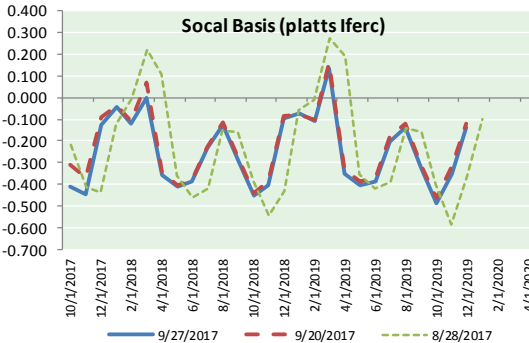
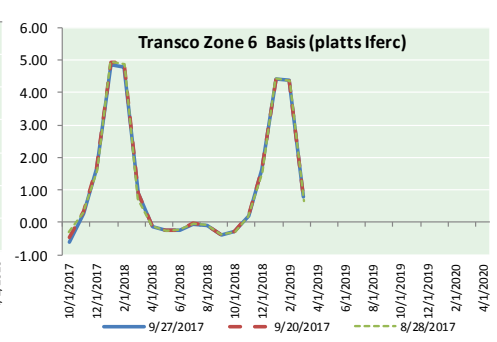
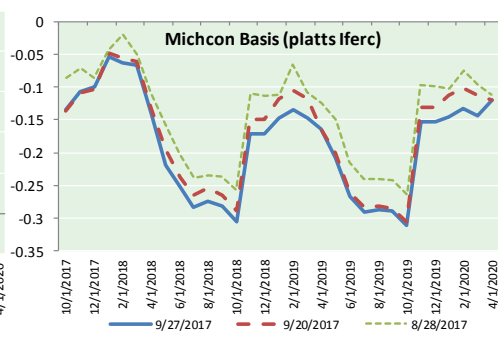
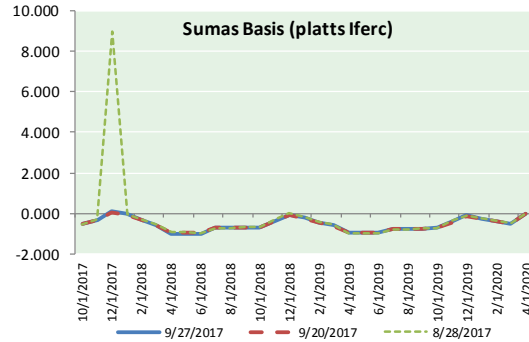
ID	DAILY INDEX	PRICE	CHANGE
21	REX E-ANR	2.79	(0.01)
22	Leidy-Transco	1.14	(0.06)
23	Henry	2.95	0.00
24	Transco-85	2.97	0.02
25	Sonat-ZO South	2.95	0.03
26	FGT-Z3	2.98	0.05
27	Dominion-South	1.19	(0.11)
28	Transco-Z6 (non-NY)	0.00	0.00
29	Transco-Z6 (NY)	2.78	(0.16)
30	Iroquois-Z2	2.62	(0.36)

DISCLAIMER: The content herein is privileged and confidential. Content is presented for informational purposes and is a reflection of the market opinions of its authors subject to change without notice. Content is derived from sources believed to be accurate at the time of release but carries no guarantee of accuracy or completeness. Mansfield Energy Corp and its clients may or may not take positions similar or opposite those discussed herein. The reader should realize that the trading of commodities involves risk, and the reader assumes all responsibility for the risk of financial losses.





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



CME NG Option Prices

ATM Call

Month	Strike	Close	Imp Vol
Nov-17	3.050	0.108	30.0
Dec-17	3.200	0.197	35.6
Jan-18	3.350	0.252	39.4
Feb-18	3.350	0.324	43.1
Mar-18	3.300	0.374	45.0
Apr-18			
May-18			
Jun-18			
Jul-18			
Aug-18			
Sep-18			
Oct-18			
Nov-18			
Dec-18			
Jan-19			
Feb-19			
Mar-19			

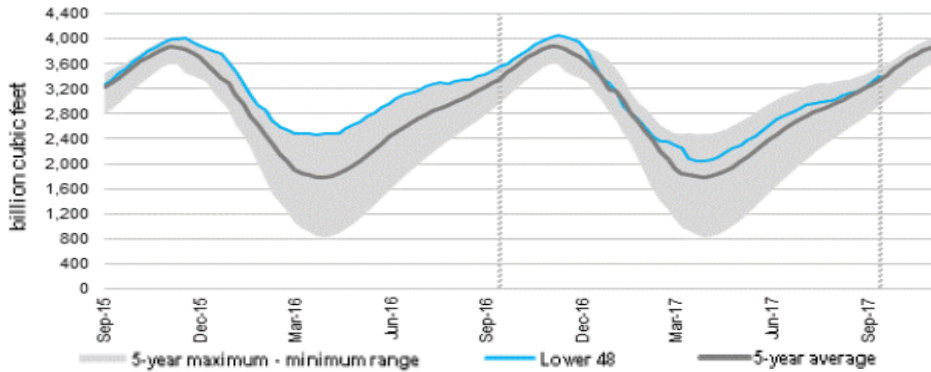
CME NG Option Prices

ATM Put

Month	Strike	Close	Imp Vol
Nov-17	3.050	0.115	35.6
Dec-17	3.200	0.176	35.6
Jan-18	3.350	0.269	39.4
Feb-18	3.350		
Mar-18	3.300	0.391	45.9
Apr-18			
May-18			
Jun-18			
Jul-18			
Aug-18			
Sep-18			
Oct-18			
Nov-18			
Dec-18			
Jan-19			
Feb-19			
Mar-19			



WEEKLY GAS IN UNDERGROUND STORAGE WITH 5-YR RANGE



Release Date: September 21, 2017

Source: U.S. Energy Information Administration

Rig Count

Report Date: September 22, 2017

	Total	Change
US -	935	(1)
CN -	220	+8

EIA Weekly NG Storage Actual and Surveys for September 21th, 2017

Released September 28, 2017

- PIRA — +59
- ARM — +65
- Reuters — +66

EIA ACTUAL — +58

Total Working Gas In Storage

**3,408 BCF**

- +97 BCF (LAST WEEK)
- (136) BCF (LAST YEAR)
- +67 BCF (5-YR AVG)

U.S. Natural Gas Supply Gas Week 9/14 - 9/20

Average daily values (BCF/D):

Last Year (BCF/d)

Dry Production — +70.0

Total Supply — +75.9

Last Week (BCF/d)

Dry Production — +73.9

Total Supply — +79.1

[NEXT REPORT ON SEP 28]

U.S. Natural Gas Demand Gas Week 9/14 - 9/20

Average daily values (BCF/D):

Last Year (BCF/d)

Power — +30.9

Total Demand — +67.9

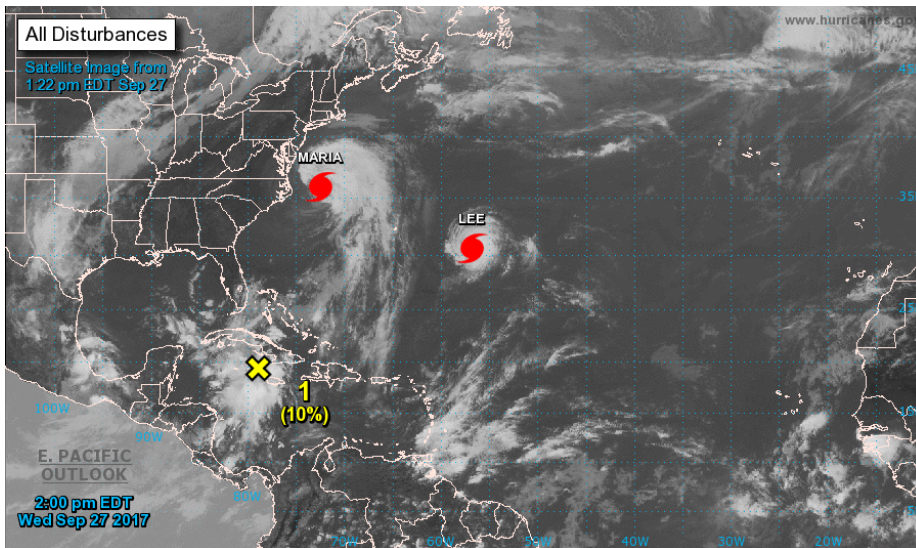
Last Week (BCF/d)

Power — +25.2

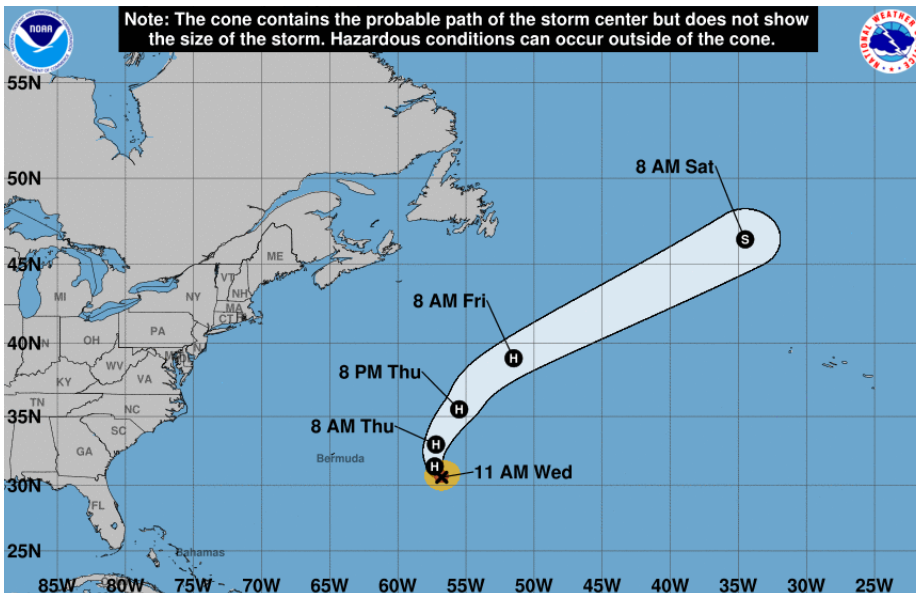
Total Demand — +63.9

[NEXT REPORT ON SEP 28]

TROPICAL STORM ACTIVITY— ATLANTIC



LEE

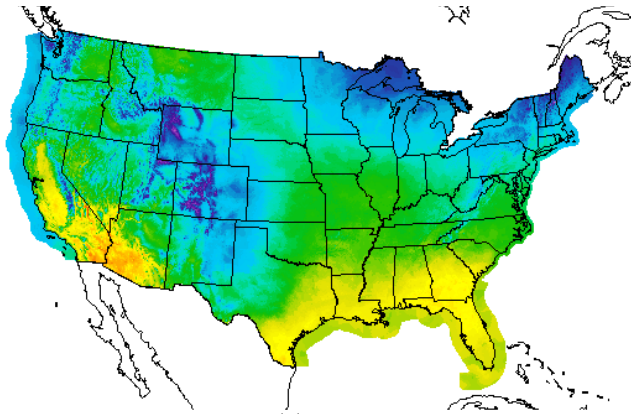


Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



WEATHER – HIGH / LOW TEMPERATURE TOMORROW

HIGH Temperature



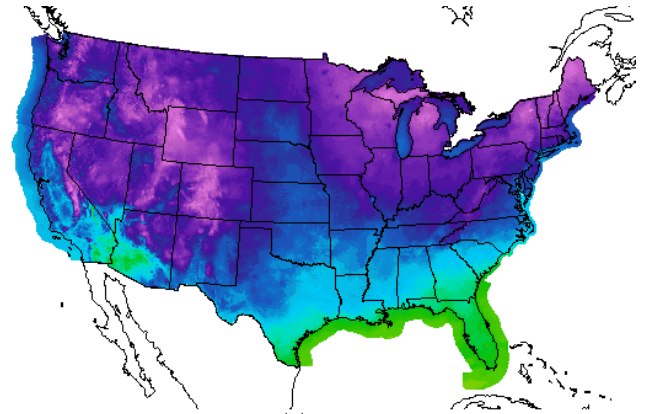
High Temperature(F) Ending Fri Sep 29 2017 8PM EDT  
(Sat Sep 30 2017 00Z)



National Digital Forecast Database  
19z issuance Graphic created-Sep 27 3:40PM EDT



LOW Temperature



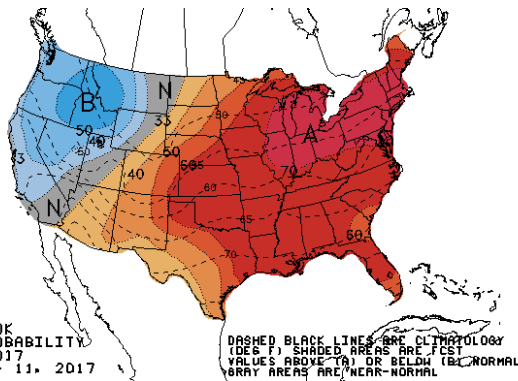
Low Temperature(F) Ending Sat Sep 30 2017 8AM EDT  
(Sat Sep 30 2017 12Z)



National Digital Forecast Database  
18z issuance Graphic created-Sep 27 2:41PM EDT

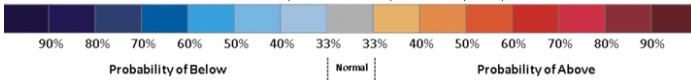


WEATHER – 6 TO 10 DAY OUTLOOK – NOAA  
Temperature

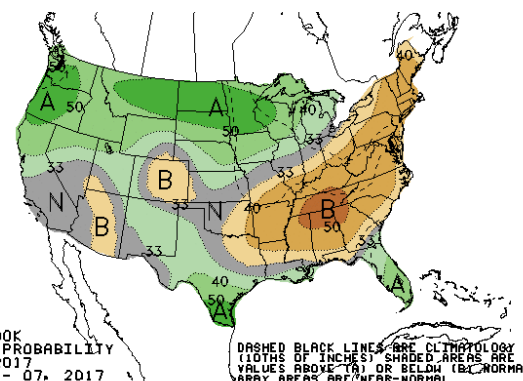


8-14 DAY OUTLOOK  
TEMPERATURE PROBABILITY  
MADE 27 SEP 2017  
VALID OCT 05 - 11, 2017

DASHED BLACK LINES ARE CLIMATOLOGY  
(DEG F) SHADED AREAS ARE FCST  
VALUES ABOVE (A) OR BELOW (B) NORMAL  
GRAY AREAS ARE NEAR-NORMAL

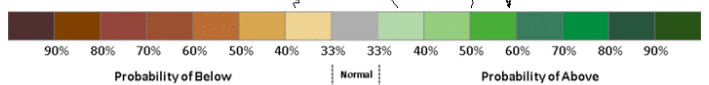


Precipitation

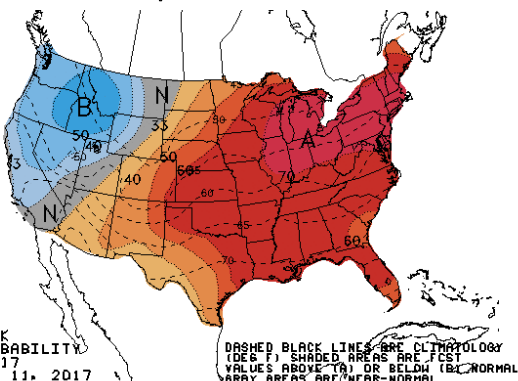


6-10 DAY OUTLOOK  
PRECIPITATION PROBABILITY  
MADE 27 SEP 2017  
VALID OCT 03 - 07, 2017

DASHED BLACK LINES ARE CLIMATOLOGY  
(10THS OF INCHES) SHADED AREAS ARE FCST  
VALUES ABOVE (A) OR BELOW (B) NORMAL  
GRAY AREAS ARE NEAR-NORMAL

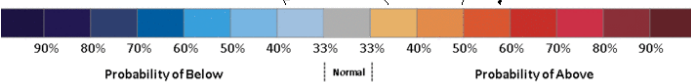


WEATHER – 8 TO 14 DAY OUTLOOK – NOAA  
Temperature

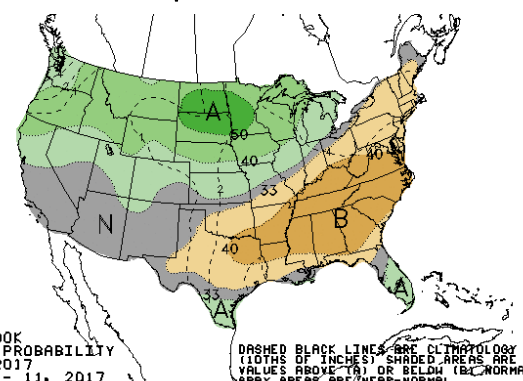


8-14 DAY OUTLOOK  
TEMPERATURE PROBABILITY  
MADE 27 SEP 2017  
VALID OCT 05 - 11, 2017

DASHED BLACK LINES ARE CLIMATOLOGY  
(DEG F) SHADED AREAS ARE FCST  
VALUES ABOVE (A) OR BELOW (B) NORMAL  
GRAY AREAS ARE NEAR-NORMAL

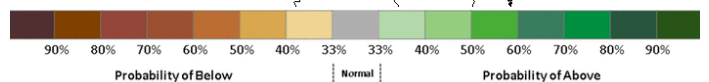


Precipitation



8-14 DAY OUTLOOK  
PRECIPITATION PROBABILITY  
MADE 27 SEP 2017  
VALID OCT 05 - 11, 2017

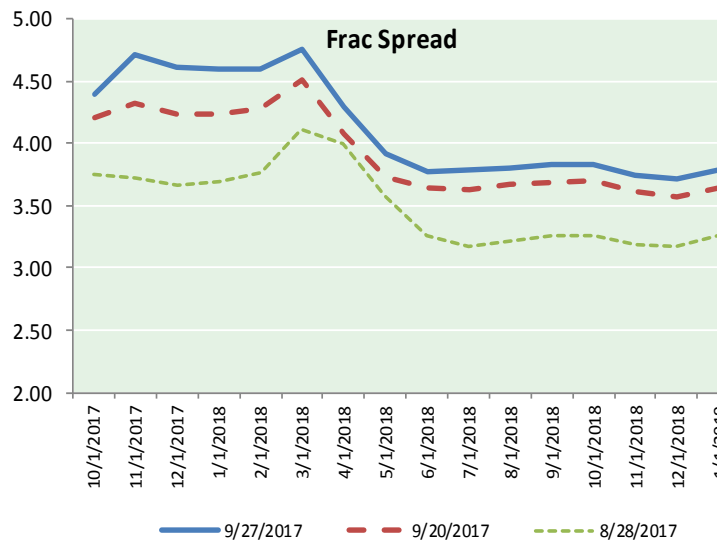
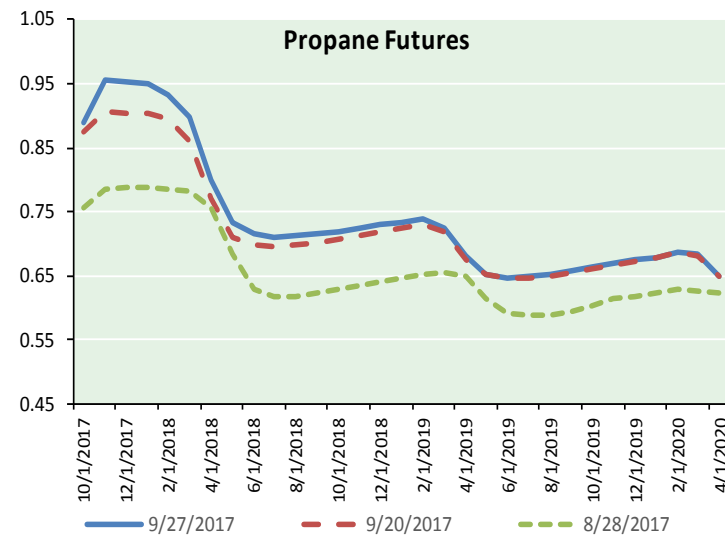
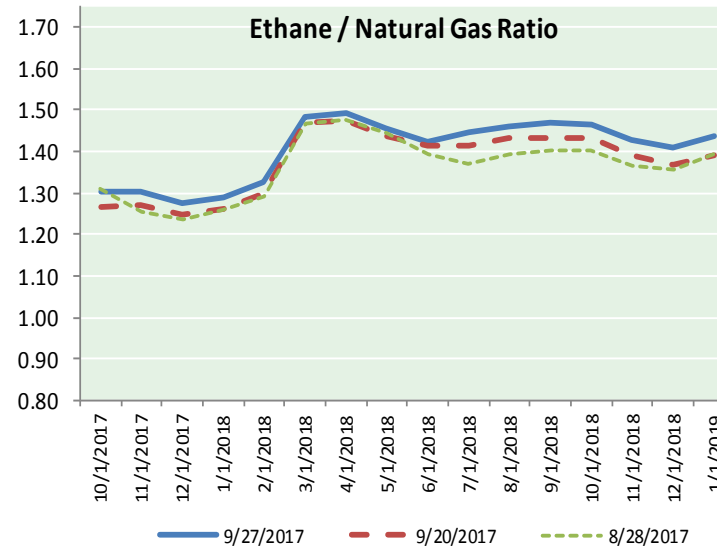
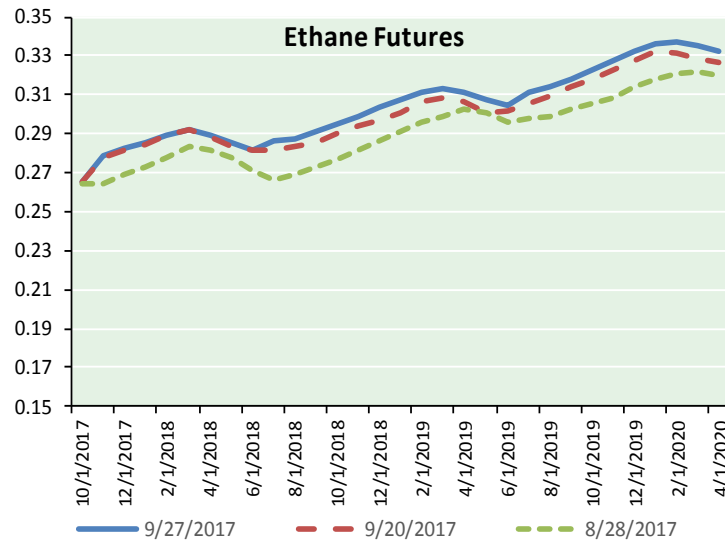
DASHED BLACK LINES ARE CLIMATOLOGY  
(10THS OF INCHES) SHADED AREAS ARE FCST  
VALUES ABOVE (A) OR BELOW (B) NORMAL  
GRAY AREAS ARE NEAR-NORMAL



# NATURAL GAS NEWS



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



### CME Future Prices

#### Ethane (C2)

##### Non-LDH— Mont Belvieu

Month	Close	Change
Oct-17	0.266	0.000
Nov-17	0.279	0.001
Dec-17	0.282	0.001
Jan-18	0.286	0.001
Feb-18	0.290	0.000
Mar-18	0.292	0.001
Apr-18	0.290	0.001
May-18	0.285	0.001
Jun-18	0.281	0.001
Jul-18	0.286	0.000
Aug-18	0.287	0.000
Sep-18	0.291	0.000

1YR Strip 0.284 0.001

### CME Future Prices

#### Propane (C3)

##### Non-LDH— Mont Belvieu

Month	Close	Change
Oct-17	0.889	(0.001)
Nov-17	0.956	(0.006)
Dec-17	0.954	(0.004)
Jan-18	0.949	(0.004)
Feb-18	0.933	(0.005)
Mar-18	0.898	(0.003)
Apr-18	0.799	(0.003)
May-18	0.734	(0.001)
Jun-18	0.715	(0.001)
Jul-18	0.711	(0.001)
Aug-18	0.712	(0.001)
Sep-18	0.716	0.000

1YR Strip 0.830 (0.003)

**NATURAL GAS NEWS**



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

**BULLISH**



RESISTANCE  
52.75 & 53.26  
SUPPORT  
51.73 & 51.33

**FOLLOW US ON TWITTER:**



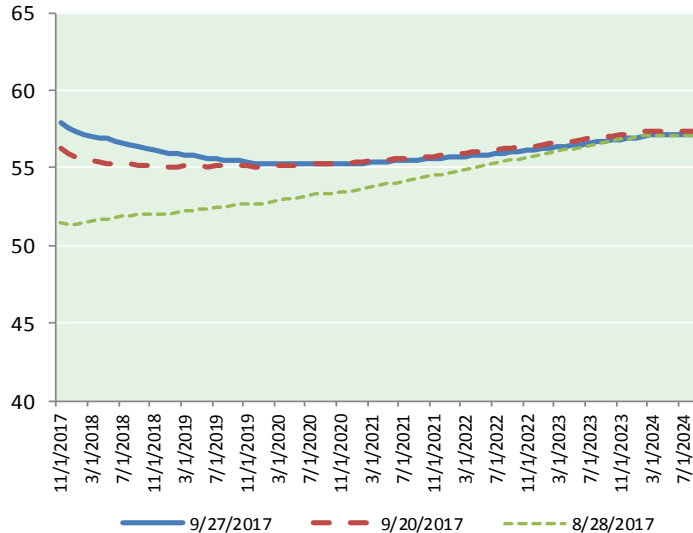
@MPG\_NatGasNews

**NYMEX Brent (BZ)**

**Futures**

Month	Close	Change
Nov-17	57.90	(0.54)
Dec-17	57.57	(0.35)
Jan-18	57.35	(0.27)
Feb-18	57.18	(0.22)
Mar-18	57.06	(0.18)
Apr-18	56.96	(0.15)
May-18	56.87	(0.12)
Jun-18	56.75	(0.10)
Jul-18	56.64	(0.09)
Aug-18	56.53	(0.07)
Sep-18	56.39	(0.05)
Oct-18	56.27	(0.03)
Nov-18	56.16	(0.01)
Dec-18	56.06	0.01
Jan-19	55.96	0.01
Feb-19	55.90	0.02
Mar-19	55.84	0.03
Apr-19	55.80	0.03
May-19	55.72	0.03
Jun-19	55.61	0.02
Jul-19	55.58	0.01
Aug-19	55.51	0.00
Sep-19	55.46	0.00
Oct-19	55.44	0.01
1YR Strip 2017	56.96	(0.18)
5YR Strip	57.74	(0.45)
	55.80	(0.10)

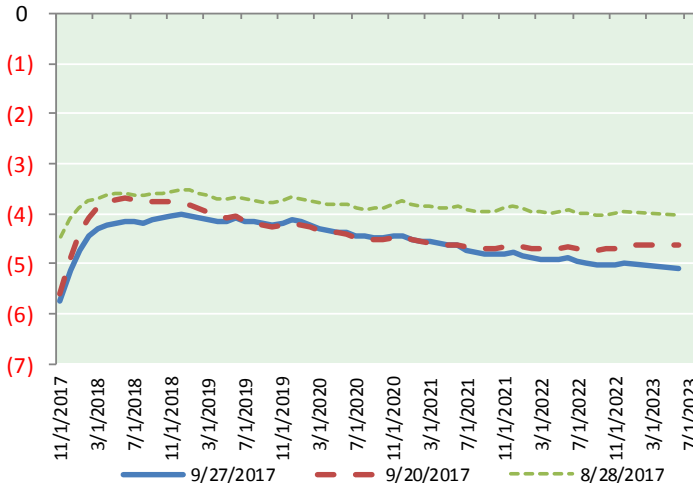
**BRENT CRUDE FORWARD CURVE**



**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)**

	Oct-17	Close	Change
Butane	1.022	0.000	
Iso-Butane	1.020	0.001	
Nat Gasoline	1.169	0.001	

**NYMEX WTI (CL) Futures**

Month	Close	Change
Nov-17	49.91	0.26
Dec-17	52.43	0.24
Jan-18	52.63	0.21
Feb-18	52.72	0.18
Mar-18	52.76	0.16
Apr-18	52.74	0.14
May-18	52.68	0.12
Jun-18	52.59	0.11
Jul-18	52.47	0.10
Aug-18	52.35	0.09
Sep-18	52.26	0.09
Oct-18	52.17	0.08
Nov-18	52.10	0.08
Dec-18	52.04	0.08
Jan-19	51.93	0.08
Feb-19	51.83	0.07
Mar-19	51.73	0.06
Apr-19	51.65	0.05
May-19	51.57	0.05
Jun-19	51.52	0.05
Jul-19	51.43	0.05
Aug-19	51.34	0.04
Sep-19	51.27	0.04
Oct-19	51.21	0.03
1YR Strip 2017	52.31	0.15
5YR Strip	51.17	0.25
	51.34	(0.03)