

# NATURAL GAS



APRIL 18, 2017

## Prior Day's NYMEX May-17 Contract (CT)



## NYMEX NG Futures

| Month     | Close | Change  |
|-----------|-------|---------|
| May-17    | 3.163 | (0.064) |
| Jun-17    | 3.251 | (0.056) |
| Jul-17    | 3.327 | (0.049) |
| Aug-17    | 3.359 | (0.047) |
| Sep-17    | 3.352 | (0.047) |
| Oct-17    | 3.370 | (0.044) |
| Nov-17    | 3.424 | (0.041) |
| Dec-17    | 3.555 | (0.040) |
| Jan-18    | 3.627 | (0.037) |
| Feb-18    | 3.589 | (0.033) |
| Mar-18    | 3.492 | (0.027) |
| Apr-18    | 2.951 | (0.001) |
| May-18    | 2.882 | 0.001   |
| Jun-18    | 2.901 | 0.002   |
| Jul-18    | 2.924 | 0.002   |
| Aug-18    | 2.931 | 0.003   |
| Sep-18    | 2.907 | 0.002   |
| Oct-18    | 2.925 | 0.001   |
| Nov-18    | 2.974 | 0.002   |
| Dec-18    | 3.109 | 0.002   |
| Jan-19    | 3.212 | 0.002   |
| Feb-19    | 3.187 | 0.002   |
| Mar-19    | 3.110 | 0.002   |
| Apr-19    | 2.713 | (0.005) |
| 1YR Strip | 3.372 | (0.041) |
| 2017      | 3.350 | (0.049) |
| 5YR Strip | 2.990 | (0.009) |

## IN THE NEWS

**First Battery-Natural Gas Power Plant Unveiled in California** — Bloomberg reports: Edison International's utility unit said it has completed the first-of-its kind battery storage and natural gas power systems in Southern California that will help the region backstop increasing amounts of renewable energy and cope with

- **First Battery-Natural Gas Power Plant Unveiled in California**
- **Natural Gas Prices Reverse to the Downside**

potential shortages after a historic gas leak. Southern California Edison, General Electric Co. and Wellhead Power Solutions partnered to install 10-megawatt lithium-ion batteries at two of the utility's gas generators, Rosemead, California-based Edison said Monday in a statement. The plants are designed to fire up during periods of peak demand. The batteries, which can provide instant power while gas turbines ramp up, are expected to reduce fuel use and lead to emission reductions of at least 60 percent, Edison said. "The new system will help SCE better utilize the resources on the grid, provide enhanced reliability, reduce environmental impact, and reduce cost for our operations and for our customers," Southern California Edison President Ron Nichols said in an emailed statement. For more visit bloomberg.com or click the following link <https://bloom.bg/2px0M9C>

**Natural Gas Prices Reverse to the Downside** — Economic Calendar reports: Natural gas prices started off the week off the week with a move to the downside, with the contract for May delivery on the New York Mercantile Exchange falling more than 2% with a drop to \$3.17/MMBtu. According to [natgasweather.com](http://natgasweather.com), weather patterns are expected to be rather bearish through Thursday due to mostly mild/warm temperatures of 60's to 80's dominating much of the country beside the far northern US near the Canadian border where weather systems will provide chilly conditions. Friday through Saturday, a weather system will track over the southern and eastern US, to then be followed by a colder one across the north-central and northeastern US. As a result, natural gas demand will be low through Thursday, then moderate Friday-Sunday. For more on this story visit [economiccalendar.com](http://economiccalendar.com) or click the following link <http://bit.ly/2oIeaYN>

## 12 MONTH CANDLESTICK (WEEKLY)



## Prompt Natural Gas (NG) Daily Sentiment

**BEARISH**



RESISTANCE  
3.22 & 3.28  
SUPPORT  
3.10 & 3.03

## Trading Summary

### NATURAL GAS

| Futures   | Close     | Change  |
|-----------|-----------|---------|
| NG        | 3.163     | (0.064) |
| Volume    | 267,968   | 64,428  |
| Open Int. | 1,056,814 | 23,432  |

### CRUDE AND GASOLINE

| Futures  | Close  | Change   |
|----------|--------|----------|
| Crude    | 52.65  | (0.53)   |
| RBOB     | 1.7196 | (0.0153) |
| Crude/NG | 16.65  | 0.17     |

### METALS

| Futures | Close    | Change |
|---------|----------|--------|
| Gold    | 1,289.40 | (4.40) |

### EQUITIES

| Exchange | Close     | Change  |
|----------|-----------|---------|
| DOW      | 20,636.92 | 183.67  |
| S&P 500  | 2,294.62  | (34.33) |

### CURRENCY

| Currency | Close  | Change |
|----------|--------|--------|
| EUR/USD  | 1.0675 | 0.0021 |
| USD/CND  | 1.3354 | 0.0036 |

## Contact Us



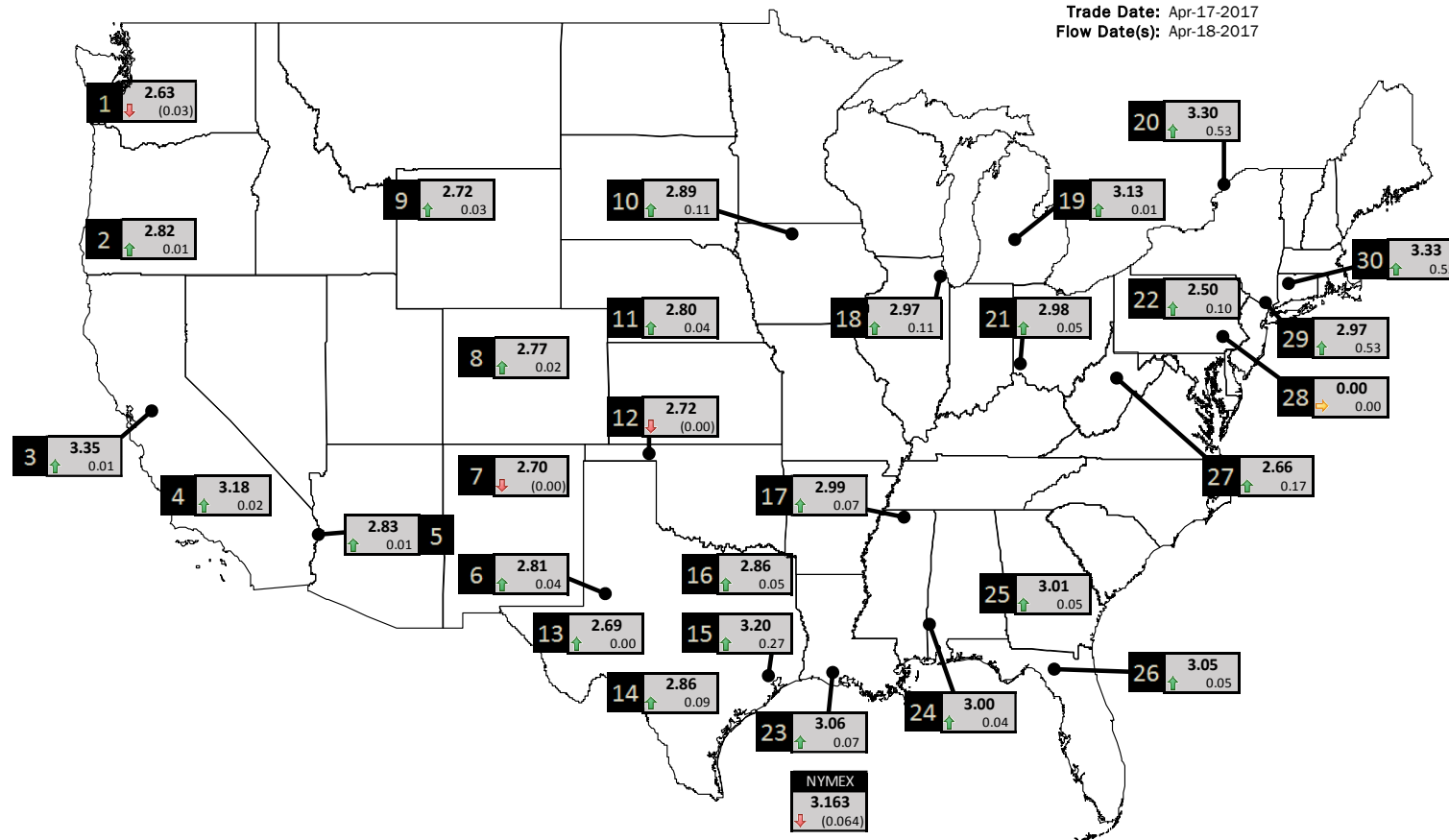
**Mansfield Energy Corp**  
1025 Airport Pkwy  
Gainesville, GA 30501  
  
www.mansfield.energy  
info@mansfieldoil.com

Phone: (800) 695-6626



# NATURAL GAS NEWS

## PHYSICAL SPOT NATURAL GAS PRICE MAP



| ID | DAILY INDEX         | PRICE | CHANGE |
|----|---------------------|-------|--------|
| 1  | Stanfield           | 2.63  | (0.03) |
| 2  | Malin               | 2.82  | 0.01   |
| 3  | PG&E - Citygate     | 3.35  | 0.01   |
| 4  | Socal-Citygate      | 3.18  | 0.02   |
| 5  | SoCal Border        | 2.83  | 0.01   |
| 6  | Waha                | 2.81  | 0.04   |
| 7  | EPSJ Blanco Pool    | 2.70  | (0.00) |
| 8  | Opal Plant Tailgate | 2.77  | 0.02   |
| 9  | NWP-Wyoming         | 2.72  | 0.03   |
| 10 | Ventura             | 2.89  | 0.11   |

| ID | DAILY INDEX          | PRICE | CHANGE |
|----|----------------------|-------|--------|
| 11 | NGPL-Midcont Pool    | 2.80  | 0.04   |
| 12 | Panhandle            | 2.72  | (0.00) |
| 13 | EP-Permian           | 2.69  | 0.00   |
| 14 | TGP-ZO               | 2.86  | 0.09   |
| 15 | Houston Ship Channel | 3.20  | 0.27   |
| 16 | NGPL-TXOK            | 2.86  | 0.05   |
| 17 | TETCO-M1 30          | 2.99  | 0.07   |
| 18 | Chicago Citygates    | 2.97  | 0.11   |
| 19 | Michcon              | 3.13  | 0.01   |
| 20 | Iroquois (into)      | 3.30  | 0.53   |

| ID | DAILY INDEX         | PRICE | CHANGE |
|----|---------------------|-------|--------|
| 21 | REX E-ANR           | 2.98  | 0.05   |
| 22 | Leidy-Transco       | 2.50  | 0.10   |
| 23 | Henry               | 3.06  | 0.07   |
| 24 | Transco-85          | 3.00  | 0.04   |
| 25 | Sonat-ZO South      | 3.01  | 0.05   |
| 26 | FGT-Z3              | 3.05  | 0.05   |
| 27 | Dominion-South      | 2.66  | 0.17   |
| 28 | Transco-Z6 (non-NY) | 0.00  | 0.00   |
| 29 | Transco-Z6 (NY)     | 2.97  | 0.53   |
| 30 | Iroquois-Z2         | 3.33  | 0.55   |

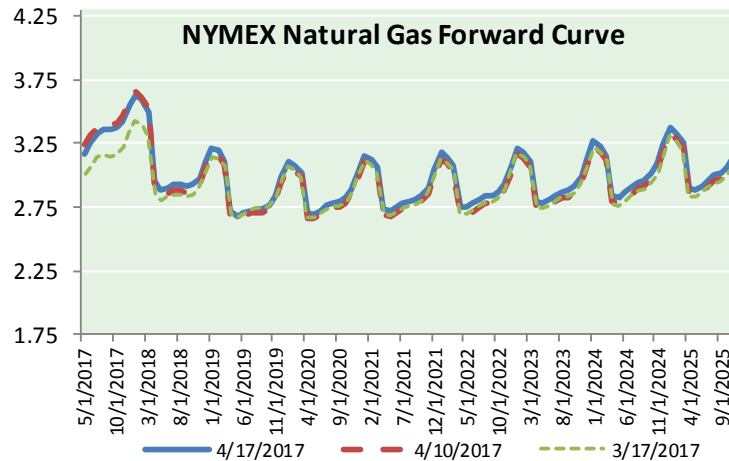
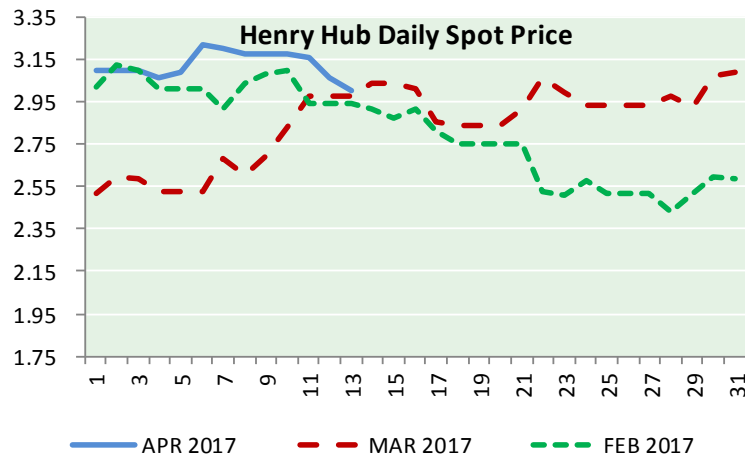
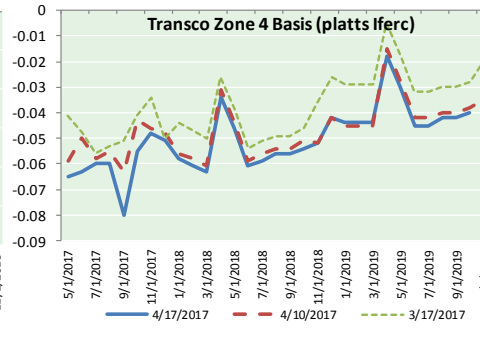
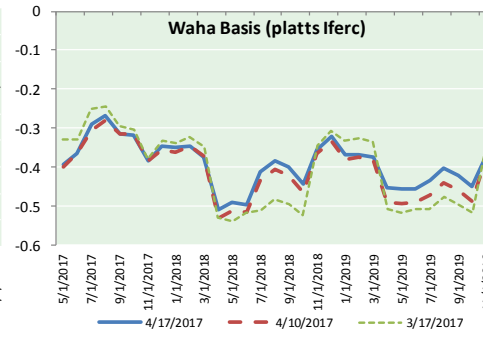
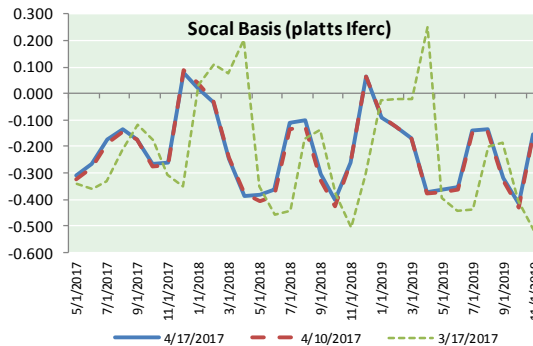
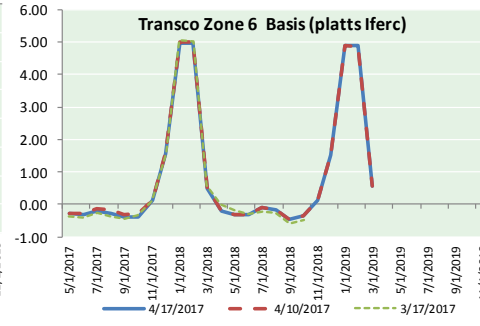
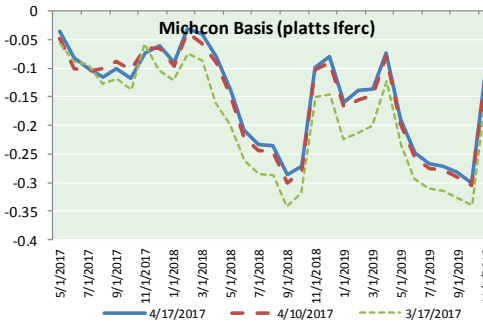
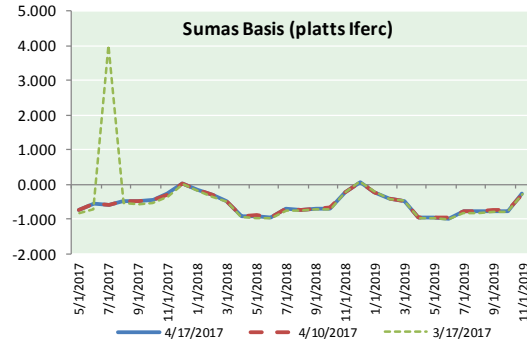


DISCLAIMER: The content herein is privileged and confidential. Content is presented for informational purposes and is a reflection of the market opinions of its authors subject to change without notice. Content is derived from sources believed to be accurate at the time of release but carries no guarantee 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 NEWS

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



### CME NG Option Prices

#### ATM Call

| Month  | Strike | Close | Imp Vol |
|--------|--------|-------|---------|
| May-17 | 3.150  | 0.076 | 45.0    |
| Jun-17 | 3.250  | 0.148 | 37.5    |
| Jul-17 | 3.300  | 0.213 | 35.6    |
| Aug-17 | 3.350  | 0.233 | 33.7    |
| Sep-17 | 3.350  | 0.262 | 33.7    |
| Oct-17 | 3.350  | 0.304 | 33.7    |
| Nov-17 | 3.400  | 0.339 | 33.7    |
| Dec-17 |        |       |         |
| Jan-18 |        |       |         |
| Feb-18 |        |       |         |
| Mar-18 |        |       |         |
| Apr-18 |        |       |         |
| May-18 |        |       |         |
| Jun-18 |        |       |         |
| Jul-18 |        |       |         |
| Aug-18 |        |       |         |
| Sep-18 |        |       |         |

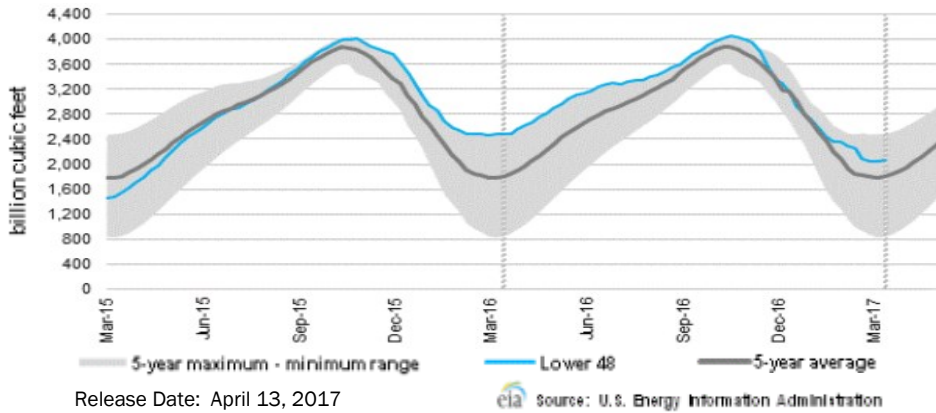
### CME NG Option Prices

#### ATM Put

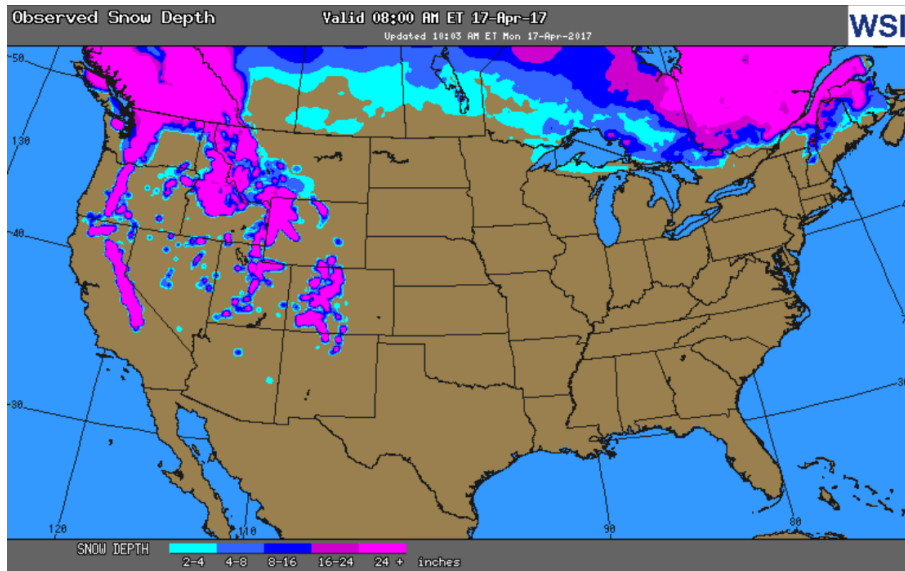
| Month  | Strike | Close | Imp Vol |
|--------|--------|-------|---------|
| May-17 | 3.150  | 0.062 | 33.7    |
| Jun-17 | 3.250  | 0.148 | 33.7    |
| Jul-17 | 3.300  | 0.180 | 31.9    |
| Aug-17 | 3.350  |       |         |
| Sep-17 | 3.350  |       |         |
| Oct-17 | 3.350  |       |         |
| Nov-17 | 3.400  | 0.319 | 32.8    |
| Dec-17 |        |       |         |
| Jan-18 |        |       |         |
| Feb-18 |        |       |         |
| Mar-18 |        |       |         |
| Apr-18 |        |       |         |
| May-18 |        |       |         |
| Jun-18 |        |       |         |
| Jul-18 |        |       |         |
| Aug-18 |        |       |         |
| Sep-18 |        |       |         |

# NATURAL GAS NEWS

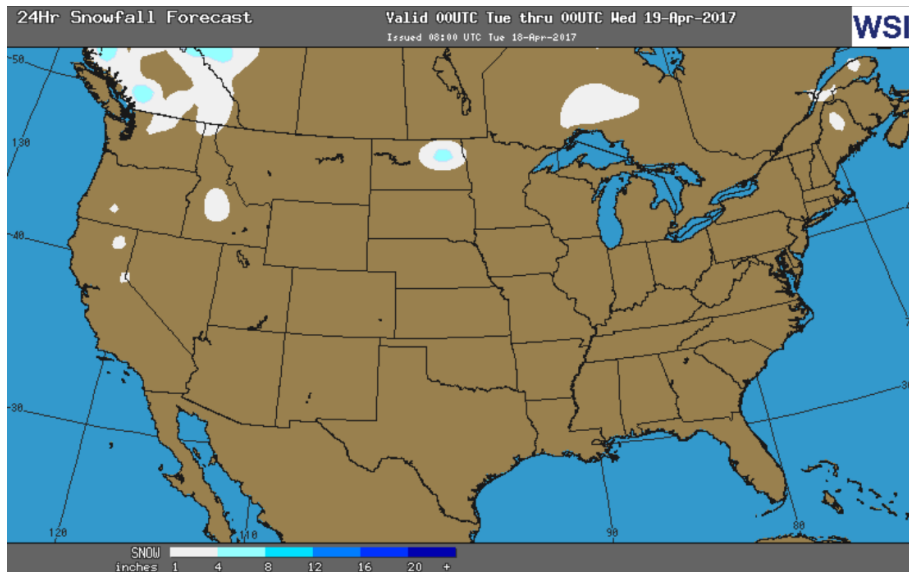
## WEEKLY GAS IN UNDERGROUND STORAGE WITH 5-YR RANGE



## OBSERVED SNOW DEPTH



## 24 HOUR SNOWFALL FORECAST



## Rig Count

Report Date: April 13, 2017

|      | Total | Change |
|------|-------|--------|
| US - | 847   | +8     |
| CN - | 118   | (14)   |

## EIA Storage History for 15th Week of Year

(Due to Report Apr 20)

| Year | Week Ending  | BCF |
|------|--------------|-----|
| 2013 | Apr 12, 2013 | +31 |
| 2014 | Apr 11, 2014 | +23 |
| 2015 | Apr 10, 2015 | +63 |
| 2016 | Apr 09, 2016 | (3) |

ESTIMATE — TBD

## Total Working Gas In Storage

**2,061 BCF**

- +10 BCF (LAST WEEK)
- (416) BCF (LAST YEAR)
- +263 BCF (5-YR AVG)

## U.S. Natural Gas Supply Gas Week 4/6– 4/12

Average daily values (BCF/D):

Last Year (BCF/d)

Dry Production — +72.6

Total Supply — +78.7

Last Week (BCF/d)

Dry Production — +69.8

Total Supply — +75.4

[NEXT REPORT ON APR 20]

## U.S. Natural Gas Demand Gas Week 4/6– 4/12

Average daily values (BCF/D):

Last Year (BCF/d)

Power — +23.0

Total Demand — +80.4

Last Week (BCF/d)

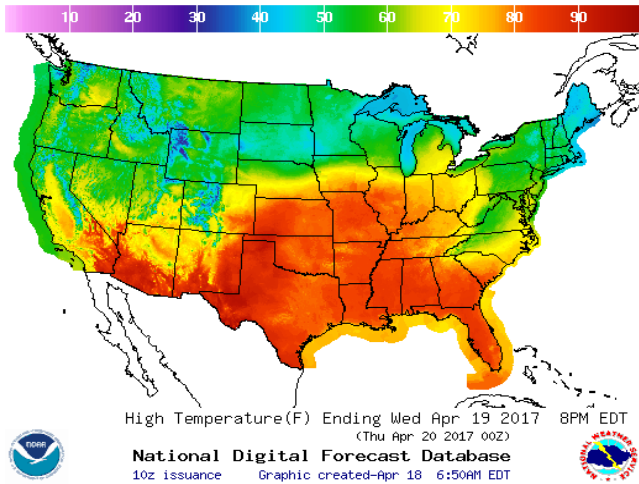
Power — +22.9

Total Demand — +74.5

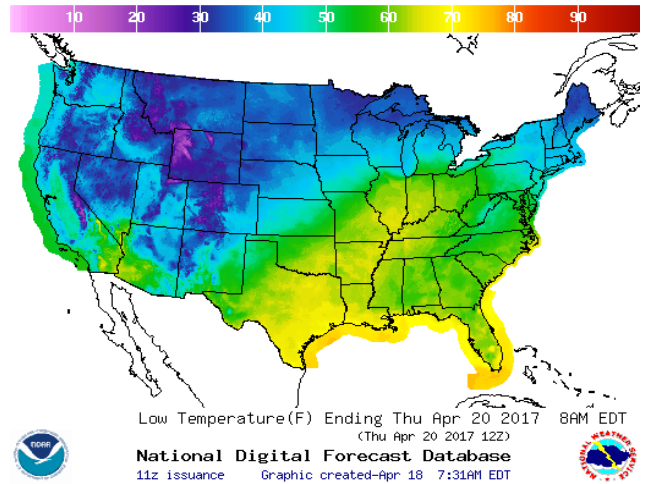
[NEXT REPORT ON APR 20]

WEATHER – HIGH / LOW TEMPERATURE TOMORROW

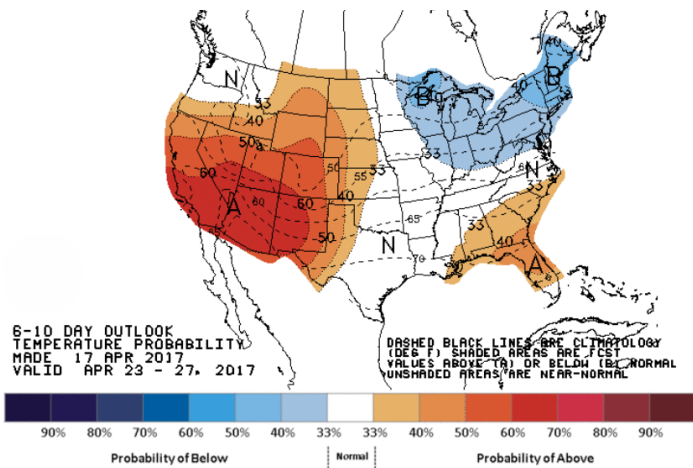
HIGH Temperature



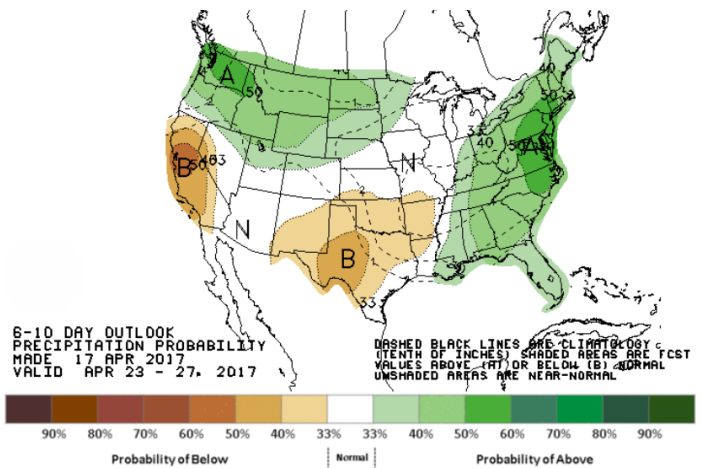
LOW Temperature



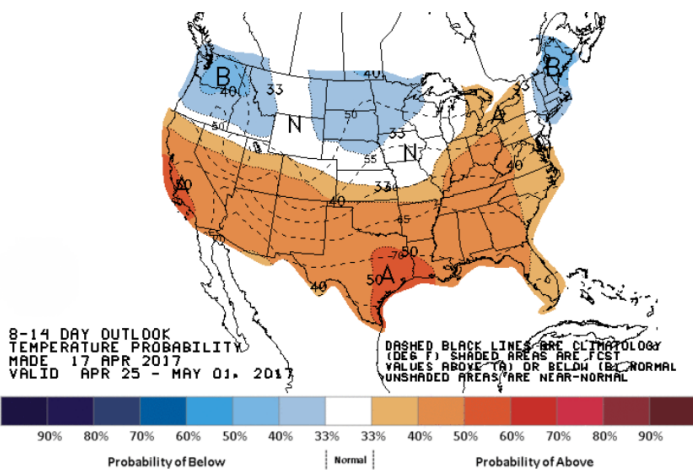
WEATHER – 6 TO 10 DAY OUTLOOK – NOAA  
Temperature



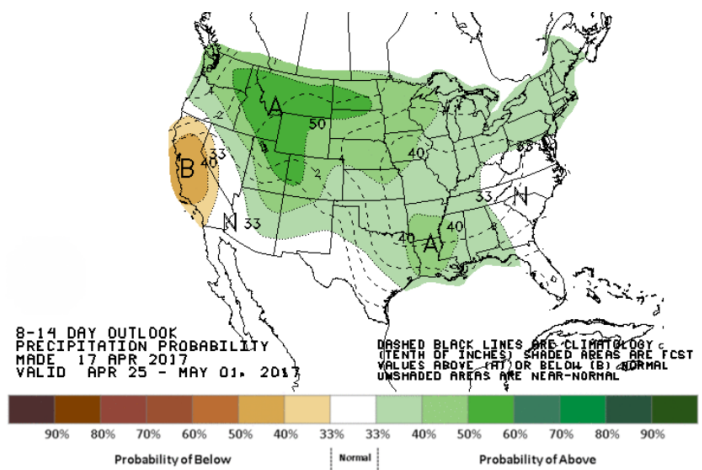
Precipitation



WEATHER – 8 TO 14 DAY OUTLOOK – NOAA  
Temperature

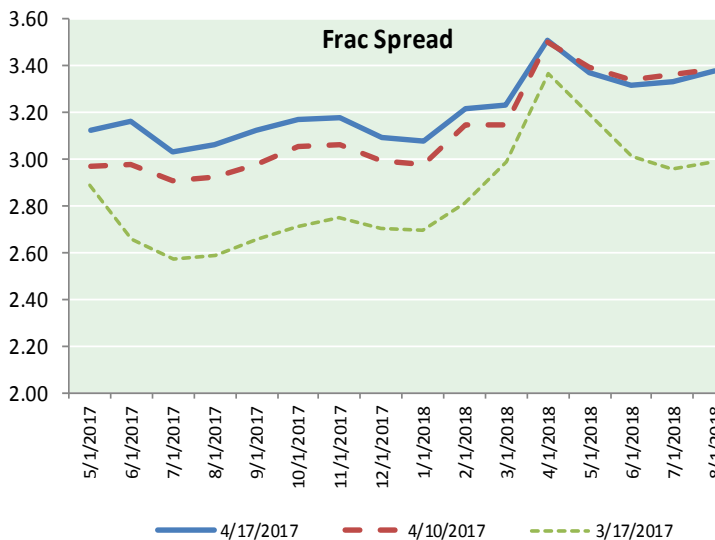
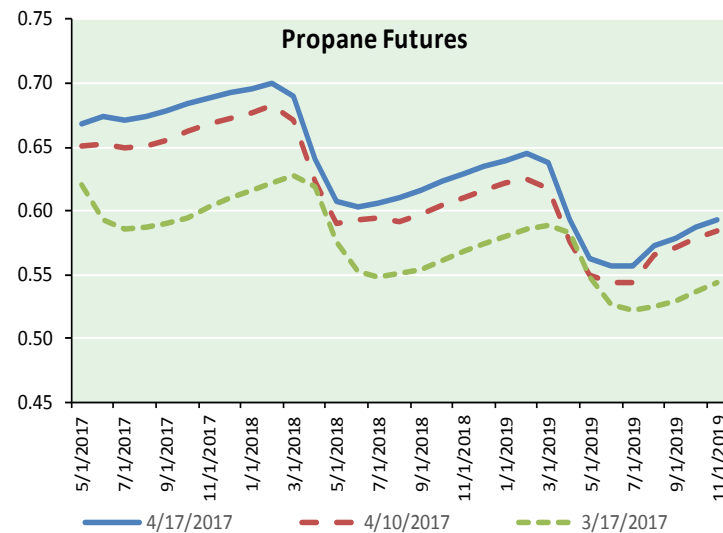
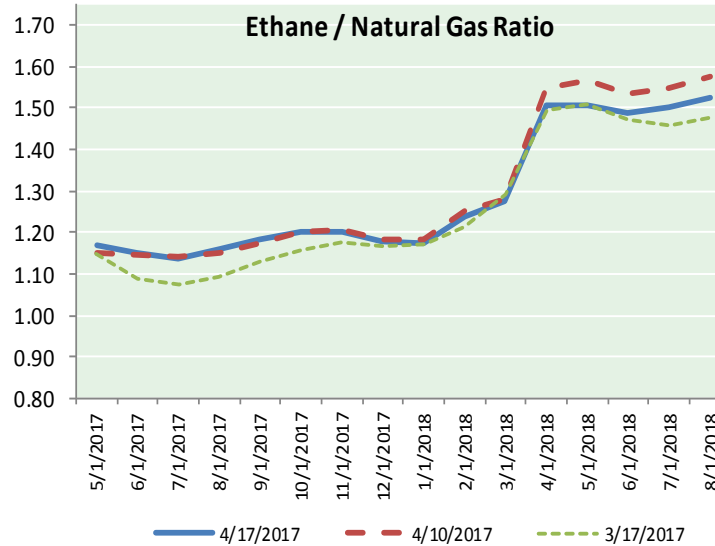
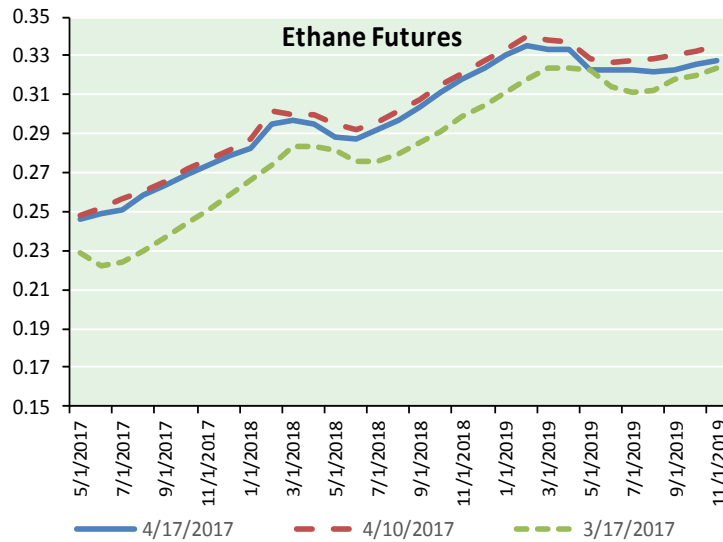


Precipitation





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



CME Future Prices

Ethane (C2)

Non-LDH— Mont Belvieu

| Month  | Close | Change  |
|--------|-------|---------|
| May-17 | 0.246 | (0.003) |
| Jun-17 | 0.249 | (0.006) |
| Jul-17 | 0.251 | (0.008) |
| Aug-17 | 0.259 | (0.004) |
| Sep-17 | 0.264 | (0.004) |
| Oct-17 | 0.269 | (0.004) |
| Nov-17 | 0.274 | (0.002) |
| Dec-17 | 0.279 | (0.001) |
| Jan-18 | 0.283 | (0.001) |
| Feb-18 | 0.295 | 0.001   |
| Mar-18 | 0.296 | (0.005) |
| Apr-18 | 0.295 | (0.006) |

1YR Strip 0.272 (0.004)

CME Future Prices

Propane (C3)

Non-LDH— Mont Belvieu

| Month  | Close | Change  |
|--------|-------|---------|
| May-17 | 0.668 | (0.001) |
| Jun-17 | 0.674 | (0.002) |
| Jul-17 | 0.671 | (0.002) |
| Aug-17 | 0.674 | (0.002) |
| Sep-17 | 0.678 | (0.002) |
| Oct-17 | 0.684 | (0.002) |
| Nov-17 | 0.689 | (0.002) |
| Dec-17 | 0.693 | (0.002) |
| Jan-18 | 0.696 | (0.003) |
| Feb-18 | 0.700 | (0.003) |
| Mar-18 | 0.690 | (0.003) |
| Apr-18 | 0.641 | (0.001) |

1YR Strip 0.680 (0.002)

# NATURAL GAS NEWS



## Prompt WTI (CL) Crude

### Daily Sentiment

**BEARISH**



RESISTANCE

52.65 & 53.06

SUPPORT

52.14 & 51.41

### FOLLOW US ON TWITTER:



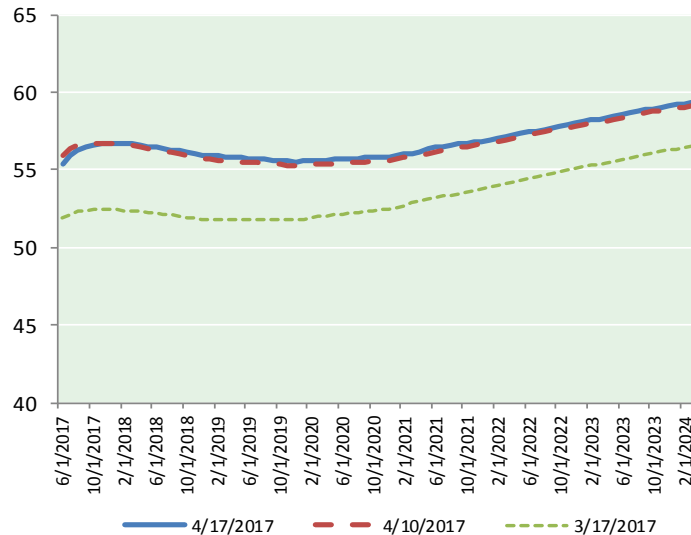
@MPG\_NatGasNews

## NYMEX Brent (BZ)

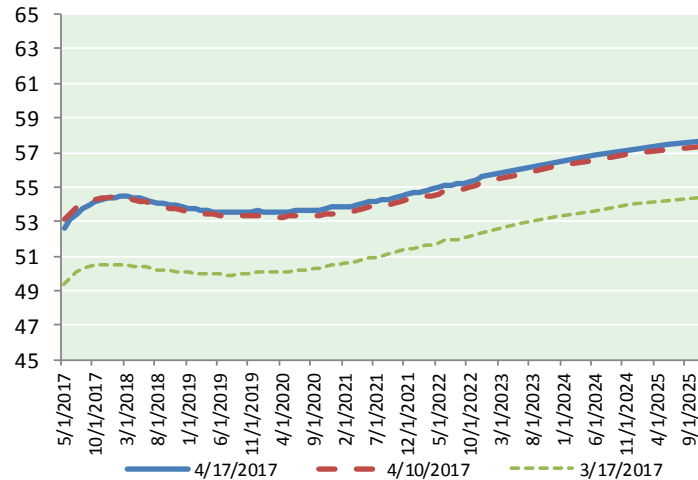
### Futures

| Month     | Close | Change |
|-----------|-------|--------|
| Jun-17    | 55.36 | (0.53) |
| Jul-17    | 55.88 | (0.49) |
| Aug-17    | 56.23 | (0.46) |
| Sep-17    | 56.44 | (0.44) |
| Oct-17    | 56.59 | (0.41) |
| Nov-17    | 56.67 | (0.39) |
| Dec-17    | 56.70 | (0.37) |
| Jan-18    | 56.71 | (0.36) |
| Feb-18    | 56.70 | (0.34) |
| Mar-18    | 56.65 | (0.34) |
| Apr-18    | 56.59 | (0.33) |
| May-18    | 56.52 | (0.32) |
| Jun-18    | 56.43 | (0.31) |
| Jul-18    | 56.36 | (0.30) |
| Aug-18    | 56.30 | (0.28) |
| Sep-18    | 56.21 | (0.27) |
| Oct-18    | 56.11 | (0.27) |
| Nov-18    | 56.02 | (0.26) |
| Dec-18    | 55.96 | (0.24) |
| Jan-19    | 55.92 | (0.24) |
| Feb-19    | 55.88 | (0.24) |
| Mar-19    | 55.85 | (0.23) |
| Apr-19    | 55.82 | (0.22) |
| May-19    | 55.77 | (0.22) |
| 1YR Strip | 56.42 | (0.40) |
| 2017      | 56.27 | (0.44) |
| 5YR Strip | 56.18 | (0.25) |

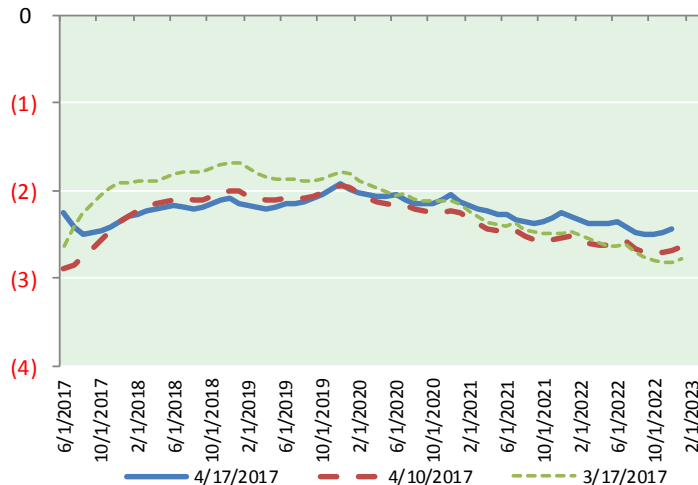
## BRENT CRUDE FORWARD CURVE



## 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

### (\$/gallon)

|              | May-17 | Close | Change  |
|--------------|--------|-------|---------|
| Butane       |        | 0.824 | (0.003) |
| Iso-Butane   |        | 0.804 | (0.009) |
| Nat Gasoline |        | 1.155 | (0.002) |

## NYMEX WTI (CL) Futures

| Month     | Close | Change |
|-----------|-------|--------|
| May-17    | 52.65 | (0.53) |
| Jun-17    | 53.11 | (0.49) |
| Jul-17    | 53.47 | (0.46) |
| Aug-17    | 53.74 | (0.44) |
| Sep-17    | 53.96 | (0.43) |
| Oct-17    | 54.13 | (0.42) |
| Nov-17    | 54.26 | (0.41) |
| Dec-17    | 54.35 | (0.40) |
| Jan-18    | 54.41 | (0.39) |
| Feb-18    | 54.43 | (0.37) |
| Mar-18    | 54.42 | (0.35) |
| Apr-18    | 54.39 | (0.33) |
| May-18    | 54.34 | (0.32) |
| Jun-18    | 54.27 | (0.31) |
| Jul-18    | 54.18 | (0.31) |
| Aug-18    | 54.10 | (0.30) |
| Sep-18    | 54.02 | (0.30) |
| Oct-18    | 53.96 | (0.30) |
| Nov-18    | 53.91 | (0.30) |
| Dec-18    | 53.87 | (0.30) |
| Jan-19    | 53.78 | (0.30) |
| Feb-19    | 53.71 | (0.30) |
| Mar-19    | 53.66 | (0.29) |
| Apr-19    | 53.62 | (0.28) |
| 1YR Strip | 53.94 | (0.42) |
| 2017      | 53.71 | (0.45) |
| 5YR Strip | 53.95 | (0.28) |