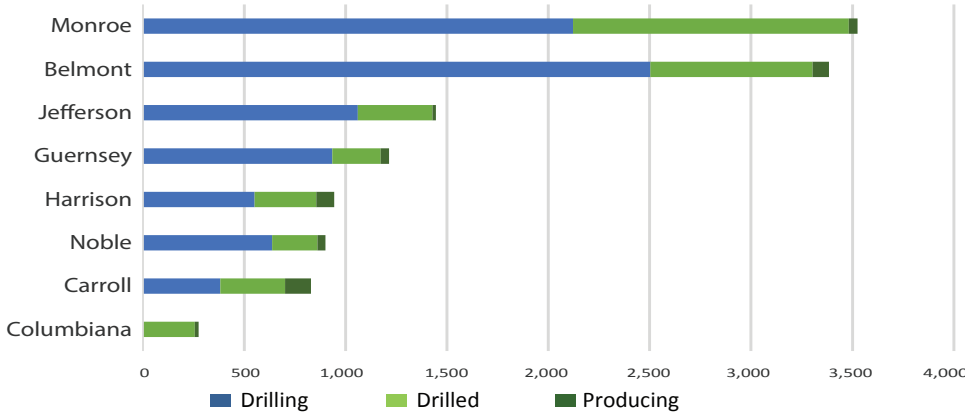


# Eastern Ohio Shale Dashboard

September 1st, 2017

## Potentially Created Jobs by County



Source: ODNR, CSU Center for Economic Development; as of August 5th, 2017  
 Note: Jobs are calculated with quarterly coefficients.

## Utica Upstream & Midstream Activities



Created September 1, 2017

0 5 10 20 Miles

### Downstream Facilities

- ⊗ Future Gas-Fired Plant
- \* Potential Gas Storage
- ⊕ Potential Ethane Cracker
- ⊙ Gas-Fired Power Plants

### Fractionation Plants

- ▲ Blueracer
- ▲ Markwest
- ▲ Utica East Ohio

### Cryogenic Processing Plants

- Blueracer
- Markwest
- Pennant
- Utica East Ohio

### Wells

- Drilling (194)
- Drilled (258)
- Producing (1,606)

### De-Ethanization Plants

- Markwest

### Gathering Pipelines

- Blueracer
- Antero
- Markwest
- Magnum Hunter
- Other

Well status as of August 5th, 2017

## Shale Indicators

Q4'16 - Q2'17    Quarter 2    Year Change\*

### New Well Count

Source: ODNR

▲ +7%    116    ▲ +73%

### Employment

Source: CSU

▲ +22%    12,515    ▲ +31%

### WTI Oil Price per Barrel

Source: EIA on June 30th, 2017

▼ -14%    \$46.02    ▲ +8%

### Sales Tax

Source: OH Department of Taxation

▲ +12.6%    \$17.7 M    ▲ +6%

## Shale Insights

- WTI price stabilizing near \$50 per barrel until reassessment of inventories and upcoming November OPEC meeting
- OPEC total crude output climbs 173,000 b/d in July 2017 despite plans to curb.
- Power generation continues shifting to natural gas; currently 10 gas-fired plant projects are under review or construction.
- Underground storage facility is seeking contracts and regulatory approval in Belmont County and expected to be built at the end of 2018
- Construction is underway for Shell ethane cracker plant in Beaver County, PA; operations expected to start after 2020
- PTT Global moves forward with potential ethane cracker development in Belmont County by acquiring 168 acre parcel along the Ohio River
- 28 drillings rigs in August '17, up from 21 in April '17, according to Baker Hughes

\*Note: Year changes are calculated from the current quarter to the same quarter the year before.

Source: ODNR, CSU Center for Economic Development

Belmont    Carroll    Columbiana    Guernsey    Harrison    Jefferson    Monroe    Noble