The seven regions analyzed in this report accounted for 95% of domestic oil production growth and all domestic natural gas production growth during 2011-13.

Contents

Year-over-year summary 2
Bakken Region 3
Eagle Ford Region 4
Haynesville Region 5
Marcellus Region 6
Niobrara Region 7
Permian Region 8
Utica Region 9
Explanatory notes 10
Sources 11
### Bakken Region

#### Drilling Productivity Report

**Monthly additions from one average rig**

- **Oil**
  - May: 610 barrels/day
  - April: 592 barrels/day

- **Gas**
  - May: 608 thousand cubic feet/day
  - April: 595 thousand cubic feet/day

#### New-well oil production per rig

- **Bakken Region**
  - barrels/day
  - Rig count

#### Legacy oil production change

- **Bakken Region**
  - thousand barrels/day

#### Indicated change in oil production (May vs. Apr)

- **Bakken Region**
  - thousand barrels/day

#### New-well gas production per rig

- **Bakken Region**
  - thousand cubic feet/day
  - Rig count

#### Legacy gas production change

- **Bakken Region**
  - million cubic feet/day

#### Indicated change in natural gas production (May vs. Apr)

- **Bakken Region**
  - million cubic feet/day

#### Oil production

- **Bakken Region**
  - thousand barrels/day
  - Oil -23 thousand barrels/day month over month

#### Natural gas production

- **Bakken Region**
  - million cubic feet/day

**April 2015**

- Drilling data through March
- Projected production through May

**U.S. Energy Information Administration**

**Drilling Productivity Report**

**3**
**Eagle Ford Region**

**Drilling Productivity Report**

**April 2015**

**Projected Production through May**

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**Oil**

- New-well oil production per rig
  - **700 barrels/day**
  - Monthly additions from one average rig
  - **June 2015**

- Legacy oil production change
  - **(160)**
  - **(140)**
  - **(120)**
  - **(100)**
  - **(80)**
  - **(60)**
  - **(40)**
  - **(20)**

- Indicated change in oil production (May vs. Apr)
  - **+110**
  - **-143**
  - **-33**

- Oil production
  - **1,754 Mbbl/d**

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**Gas**

- New-well gas production per rig
  - **4,200 thousand cubic feet/day**

- Legacy gas production change
  - **(350)**
  - **(300)**
  - **(250)**
  - **(200)**
  - **(150)**
  - **(100)**
  - **(50)**

- Indicated change in natural gas production (May vs. Apr)
  - **+276**
  - **-321**
  - **-45**

- Natural gas production
  - **4,787 MMcf/d**

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**Rig Count**

- **Rig count**
  - **350 rigs**

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**Drilling Data through March**

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**Project Production through May**
Haynesville Region
Drilling Productivity Report

Haynesville Region
New-well oil production per rig (barrels/day)

Haynesville Region
New-well gas production per rig (thousand cubic feet/day)

Haynesville Region
Legacy oil production change (thousand barrels/day)

Haynesville Region
Legacy gas production change (million cubic feet/day)

Haynesville Region
Indicated change in oil production (May vs. Apr) (thousand barrels/day)

Haynesville Region
Indicated change in natural gas production (May vs. Apr) (million cubic feet/day)

Haynesville Region
Oil production (thousand barrels/day)

Haynesville Region
Natural gas production (million cubic feet/day)

Oil +1 month over month
Gas +88 thousand cubic feet/day month over month

27 May
26 April

May 5,964
April 5,876

Oil

Gas

U.S. Energy Information Administration | Drilling Productivity Report

April 2015
Niobrara Region
Drilling Productivity Report

April 2015

drilling data through March
projected production through May

Niobrara Region
New-well oil production per rig
barrels/day

Niobrara Region
New-well gas production per rig
thousand cubic feet/day

Niobrara Region
Legacy oil production change
thousand barrels/day

Niobrara Region
Legacy gas production change
million cubic feet/day

Niobrara Region
Indicated change in oil production (May vs. Apr)
thousand barrels/day

Niobrara Region
Indicated change in natural gas production (May vs. Apr)
million cubic feet/day

Niobrara Region
Oil production
thousand barrels/day

Niobrara Region
Natural gas production
million cubic feet/day

Oil +13 barrels/day month over month

468 May

455 April

Monthly additions from one average rig

May 1,865

April 1,846

Gas +19 thousand cubic feet/day month over month

New-well oil production per rig

New-well gas production per rig

Legacy oil production change

Legacy gas production change

Indicated change in oil production (May vs. Apr)

Indicated change in natural gas production (May vs. Apr)

Oil production

Natural gas production

U. S. Energy Information Administration | Drilling Productivity Report
Permian Region

Monthly additions from one average rig

Oil
+25 barrels/day month over month

Gas
+39 thousand cubic feet/day month over month

Permian Region
New-well oil production per rig
barrels/day

Rig count
rigs

Permian Region
New-well gas production per rig
thousand cubic feet/day

Rig count
rigs

Permian Region
Legacy oil production change
thousand barrels/day

Permian Region
Legacy gas production change
million cubic feet/day

Permian Region
Indicated change in oil production (May vs. Apr)
thousand barrels/day

Permian Region
Indicated change in natural gas production (May vs. Apr)
million cubic feet/day

Permian Region
Oil production
thousand barrels/day

Permian Region
Natural gas production
million cubic feet/day

April 2015
Drilling Productivity Report

Drilling data through March
projected production through May

U. S. Energy Information Administration | Drilling Productivity Report
Utica Region
Drilling Productivity Report

April 2015

Monthly additions from one average rig

Oil
243 May
234 April

Gas
+132 thousand cubic feet/day

month over month

new-well oil production per rig

barrels/day

new-well oil production per rig

rig count


0 5 10 15 20 25 30 35

Utica Region

Legacy oil production change

thousand barrels/day


(3)

(2)

(1)

Utica Region

Indicated change in oil production (May vs. Apr)

thousand barrels/day

+4

-2

+2

Utica Region

Natural gas production

million cubic feet/day

Oil
+2 thousand barrels/day

month over month

Gas
+35 million cubic feet/day

month over month

new-well gas production per rig

thousand cubic feet/day


0 5 10 15 20 25 30 35

new-well gas production per rig

rig count


0 5 10 15 20 25 30 35

new-well gas production per rig

rig count


0 5 10 15 20 25 30 35

March

projected production through May

new-well oil production per rig

barrels/day


0 200 400 600 800 1,000 1,200 1,400

new-well gas production per rig

thousand cubic feet/day


0 1,200 2,400 3,600 4,800

new-well gas production per rig

rig count


0 5 10 15 20 25 30 35

new-well oil production per rig

barrels/day


0 200 400 600 800 1,000 1,200 1,400

new-well oil production per rig

rig count


0 5 10 15 20 25 30 35

new-well gas production per rig

thousand cubic feet/day


0 1,200 2,400 3,600 4,800

new-well gas production per rig

rig count


0 5 10 15 20 25 30 35

U.S. Energy Information Administration | Drilling Productivity Report
The Drilling Productivity Report uses recent data on the total number of drilling rigs in operation along with estimates of drilling productivity and estimated changes in production from existing oil and natural gas wells to provide estimated changes in oil\(^1\) and natural gas\(^2\) production for seven key regions. EIA's approach does not distinguish between oil-directed rigs and gas-directed rigs because once a well is completed it may produce both oil and gas; more than half of the wells do that.

**Monthly additions from one average rig**

Monthly additions from one average rig represent EIA's estimate of an average rig's\(^3\) contribution to production of oil and natural gas from new wells.\(^4\) The estimation of new-well production per rig uses several months of recent historical data on total production from new wells for each field divided by the region's monthly rig count, lagged by two months.\(^5\) Current- and next-month values are listed on the top header. The month-over-month change is listed alongside, with +/- signs and color-coded arrows to highlight the growth or decline in oil (brown) or natural gas (blue).

**New-well oil/gas production per rig**

Charts present historical estimated monthly additions from one average rig coupled with the number of total drilling rigs as reported by Baker Hughes.

**Legacy oil and natural gas production change**

Charts present EIA's estimates of total oil and gas production changes from all the wells other than the new wells. The trend is dominated by the well depletion rates, but other circumstances can influence the direction of the change. For example, well freeze-offs or hurricanes can cause production to significantly decline in any given month, resulting in a production increase the next month when production simply returns to normal levels.

**Projected change in monthly oil/gas production**

Charts present the combined effects of new-well production and changes to legacy production. Total new-well production is offset by the anticipated change in legacy production to derive the net change in production. The estimated change in production does not reflect external circumstances that can affect the actual rates, such as infrastructure constraints, bad weather, or shut-ins based on environmental or economic issues.

**Oil/gas production**

Charts present all oil and natural gas production from both new and legacy wells since 2007. This production is based on all wells reported to the state oil and gas agencies. Where state data are not immediately available, EIA estimates the production based on estimated changes in new-well oil/gas production and the corresponding legacy change.

**Footnotes:**

1. Oil production represents both crude and condensate production from all formations in the region. Production is not limited to tight formations. The regions are defined by all selected counties, which include areas outside of tight oil formations.
2. Gas production represents gross (before processing) gas production from all formations in the region. Production is not limited to shale formations. The regions are defined by all selected counties, which include areas outside of shale formations.
3. The monthly average rig count used in this report is calculated from weekly data on total oil and gas rigs reported by Baker Hughes.
4. A new well is defined as one that began producing for the first time in the previous month. Each well belongs to the new-well category for only one month. Reworked and recompleted wells are excluded from the calculation.
5. Rig count data lag production data because EIA has observed that the best predictor of the number of new wells beginning production in a given month is the count of rigs in operation two months earlier.
The data used in the preparation of this report come from the following sources. EIA is solely responsible for the analysis, calculations, and conclusions.

**Drilling Info** ([http://www.drillinginfo.com](http://www.drillinginfo.com)) Source of production, permit, and spud data for counties associated with this report. Source of real-time rig location to estimate new wells spudded and completed throughout the United States.

**Baker Hughes** ([http://www.bakerhughes.com](http://www.bakerhughes.com)) Source of rig and well counts by county, state, and basin.

**North Dakota Oil and Gas Division** ([https://www.dmr.nd.gov/oilgas](https://www.dmr.nd.gov/oilgas)) Source of well production, permit, and completion data in the counties associated with this report in North Dakota.

**Railroad Commission of Texas** ([http://www.rrc.state.tx.us](http://www.rrc.state.tx.us)) Source of well production, permit, and completion data in the counties associated with this report in Texas.

**Pennsylvania Department of Environmental Protection** ([https://www.paoilandgasreporting.state.pa.us/publicreports/Modules/Welcome/Welcome.aspx](https://www.paoilandgasreporting.state.pa.us/publicreports/Modules/Welcome/Welcome.aspx)) Source of well production, permit, and completion data in the counties associated with this report in Pennsylvania.

**West Virginia Department of Environmental Protection** ([http://www.dep.wv.gov/oil-and-gas/Pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/Pages/default.aspx)) Source of well production, permit, and completion data in the counties associated with this report in West Virginia.

**Colorado Oil and Gas Conservation Commission** ([http://cogcc.state.co.us](http://cogcc.state.co.us)) Source of well production, permit, and completion data in the counties associated with this report in Colorado.

**Wyoming Oil and Conservation Commission** ([http://wogcc.state.wy.us](http://wogcc.state.wy.us)) Source of well production, permit, and completion data in the counties associated with this report in Wyoming.

**Louisiana Department of Natural Resources** ([http://dnr.louisiana.gov](http://dnr.louisiana.gov)) Source of well production, permit, and completion data in the counties associated with this report in Louisiana.

**Ohio Department of Natural Resources** ([http://oilandgas.ohiodnr.gov](http://oilandgas.ohiodnr.gov)) Source of well production, permit, and completion data in the counties associated with this report in Ohio.