Brent & WTI Crude Oil

NOTES: Latest prices are averages for the week ending 2/29/20.

Dashed lines are forward curves. WTI is West Texas Intermediate.

SOURCES: Bloomberg; Energy Information Administration.

Federal Reserve Bank of Dallas
NOTES: Latest prices are averages for the week ending 2/29/20. Dashed line is a forward curve. Marcellus price is an average of Dominion South, Transco Leidy Line, and Tennessee Zone 4 prices. SOURCES: Bloomberg; Wall Street Journal.
### Retail price per gallon

<table>
<thead>
<tr>
<th>PADD</th>
<th>Gasoline</th>
<th>Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$2.35</td>
<td>$2.90</td>
</tr>
<tr>
<td>1A</td>
<td>$2.44</td>
<td>$3.02</td>
</tr>
<tr>
<td>1B</td>
<td>$2.50</td>
<td>$3.08</td>
</tr>
<tr>
<td>1C</td>
<td>$2.23</td>
<td>$2.75</td>
</tr>
<tr>
<td>2</td>
<td>$2.30</td>
<td>$2.73</td>
</tr>
<tr>
<td>3</td>
<td>$2.11</td>
<td>$2.63</td>
</tr>
<tr>
<td>4</td>
<td>$2.42</td>
<td>$2.83</td>
</tr>
<tr>
<td>5</td>
<td>$3.13</td>
<td>$3.42</td>
</tr>
<tr>
<td>U.S.</td>
<td>$2.42</td>
<td>$2.85</td>
</tr>
</tbody>
</table>

NOTES: Prices are for 03/02/20. PADDs are “Petroleum Administration for Defense Districts.” Prices include all taxes.

SOURCE: Energy Information Administration.

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Federal Reserve Bank of Dallas
GLOBAL PETROLEUM
World Oil Supply & Demand

NOTE: Dashed lines represent forecasts.

SOURCE: Energy Information Administration.

Federal Reserve Bank of Dallas

Million barrels per day

World production

World consumption

Q4 2019
101.6

101.4

Q4 2020

Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4

Implied Change in World Oil Stocks

NOTE: Shaded bars represent forecasts.
SOURCE: Energy Information Administration.

Federal Reserve Bank of Dallas
OPEC Crude Oil Production

NOTES: OPEC is the Organization of the Petroleum Exporting Countries. Dashed line represents a forecast.
SOURCE: Energy Information Administration.
OECD Commercial Oil Inventories

Million barrels


NOTES: OECD is the Organization for Economic Cooperation and Development. Dashed line represents a forecast. SOURCE: Energy Information Administration.
World Oil Production Outages

Million barrels per day

- **OPEC**
- **Non-OPEC**

2014: 2.0
2015: 1.8
2016: 2.5
2017: 2.0
2018: 3.0
2019: 2.5
2020 (Jan): 3.20

NOTE: OPEC is the Organization of the Petroleum Exporting Countries. 
SOURCE: Energy Information Administration.
U.S. Oil & Gas Production

U.S. crude oil production
Million barrels per day

U.S. natural gas production
Billion cubic feet per day

NOTE: Natural gas series is marketed production.
SOURCE: Energy Information Administration.
U.S. Oil Production & Rig Count

U.S. crude oil production
Million barrels per day

U.S. oil rig count
Number of active rigs

NOTES: Dashed line shows the forecast as of 2/11/20. Rig count series shows the last weekly count each month.
SOURCES: Baker Hughes; Energy Information Administration.
U.S. Oil & Gas Employment

Number of jobs (thousands)


Support activities for oil and gas operations

Oil and gas extraction

Dec 2006: 158.4
Jan 2007: 249.6
Dec 2006: 158.4
Jan 2007: 249.6

NOTE: Series are seasonally adjusted.
Crude Oil & Product Inventories

NOTES: Square marks use latest weekly data as of 2/28/20.

SOURCE: Energy Information Administration.
NOTES: Square marks use latest weekly data as of 2/28/20.
SOURCE: Energy Information Administration.
Gasoline Inventories

NOTES: Square marks use latest weekly data as of 2/28/20.
SOURCE: Energy Information Administration.
Distillate Inventories

NOTES: Square marks use latest weekly data as of 2/28/20.
SOURCE: Energy Information Administration.
Vehicle Miles Traveled

NOTES: Series is seasonally adjusted. Data are estimates based on hourly traffic count data at approximately 5,000 locations nationwide.
SOURCE: Federal Highway Administration.
Gasoline Demand

NOTES: Square marks are based on averages of weekly data.

Gasoline consumption is estimated using product supplied.

SOURCE: Energy Information Administration.

Federal Reserve Bank of Dallas

NOTES: Square marks are based on averages of weekly data. Gasoline consumption is estimated using product supplied. SOURCE: Energy Information Administration.
Texas Oil & Gas Production

Texas crude oil production
Million barrels per day

Texas natural gas production
Billion cubic feet per day

NOTE: Natural gas series is marketed production.
SOURCE: Energy Information Administration.
Texas Oil Production & Rig Count

Texas crude oil production
Million barrels per day

Texas rig count
Number of active rigs

NOTE: Rig count series shows the last weekly count each month.
SOURCES: Baker Hughes; Energy Information Administration.
Texas Oil & Gas Employment

Number of jobs (thousands)

Support activities for mining

Oil and gas extraction

Drilled but Uncompleted Wells

U.S. basins excluding Permian Basin

Permian Basin

SOURCE: Energy Information Administration.
Well Completions by Basin

- Permian Basin
- Eagle Ford
- Niobrara
- Anadarko
- Appalachia
- Bakken
- Haynesville

Number of wells


SOURCE: Energy Information Administration.
12-Month Total Rig Change by County

Change in total rigs*

- +10 or more
- +5 to 9
- +1 to 4
- No change
- -1 to -4
- -5 or more

*Change in total rigs, from 02/22/2019 to 02/29/2020.
SOURCES: Baker Hughes; Federal Reserve Bank of Dallas.
3-Month Total Rig Change by County

*Change in total rigs, from 11/29/2019 to 02/29/2020.

SOURCES: Baker Hughes; Federal Reserve Bank of Dallas.
Crude Oil Production by State

NOTE: Data shown are monthly, for December 2019.
SOURCE: Energy Information Administration.

Federal Reserve Bank of Dallas
NOTES: Data shown are monthly, for December 2019. Series depicted is marketed natural gas production. SOURCE: Energy Information Administration.
Crude Oil Production by Region


“Other areas” include Haynesville and Marcellus.

SOURCE: Energy Information Administration.

Federal Reserve Bank of Dallas


“Other areas” include Haynesville and Marcellus.

SOURCE: Energy Information Administration.
Natural Gas Production by Region

NOTES: Series depict estimates after November 2019. “Other areas” include Niobrara and Bakken.
SOURCE: Energy Information Administration.
Energy Survey Business Activity

In the current quarter vs. the prior quarter: has your firm’s level of business activity increased, not changed or decreased?

NOTES: Index is the percentage of firms reporting an increase in activity since the prior quarter minus the percentage reporting a decrease. Positive values reflect expansion in oil and gas activity, negative values reflect contraction and zero reflects no change since last quarter.

SOURCE: Federal Reserve Bank of Dallas.
Breakeven Prices for New Wells

Dallas Fed Energy Survey—In the top two areas in which your firm is active: What WTI oil price does your firm need to profitably drill a new well?

NOTES: Line shows the mean, and bars show the range of responses. 82 E&P firms answered this question from March 13-21, 2019. SOURCE: Federal Reserve Bank of Dallas.
Shut-in Prices for Existing Wells

Dallas Fed Energy Survey—In the top two areas in which your firm is active: What WTI oil price does your firm need to cover operating expenses for existing wells?

Dollars per barrel

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of responses</th>
<th>Mean Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permian (Midland)</td>
<td>19</td>
<td>$27</td>
</tr>
<tr>
<td>Eagle Ford</td>
<td>11</td>
<td>$28</td>
</tr>
<tr>
<td>Other U.S. (Shale)</td>
<td>11</td>
<td>$28</td>
</tr>
<tr>
<td>SCOOP/STACK</td>
<td>5</td>
<td>$33</td>
</tr>
<tr>
<td>Permian (Delaware)</td>
<td>14</td>
<td>$35</td>
</tr>
<tr>
<td>Other U.S. (Non-shale)</td>
<td>49</td>
<td>$36</td>
</tr>
<tr>
<td>Permian (Other)</td>
<td>20</td>
<td>$37</td>
</tr>
</tbody>
</table>

NOTES: Line shows the mean, and bars show the range of responses. 87 E&P firms answered this question from March 13-21, 2019. SOURCE: Federal Reserve Bank of Dallas.
• **Energy Indicators**
  - A monthly web publication of key economic indicators that offers a snapshot of the energy sector

• **Dallas Fed Energy Survey**
  - A quarterly assessment of energy activity of about 200 oil and gas firms located in the Eleventh District

• **Energy in the 11th District**
  - Detailed info on four major regions: the Barnett Shale, Eagle Ford Shale, Haynesville Shale and Permian Basin

• **Other energy articles and research**