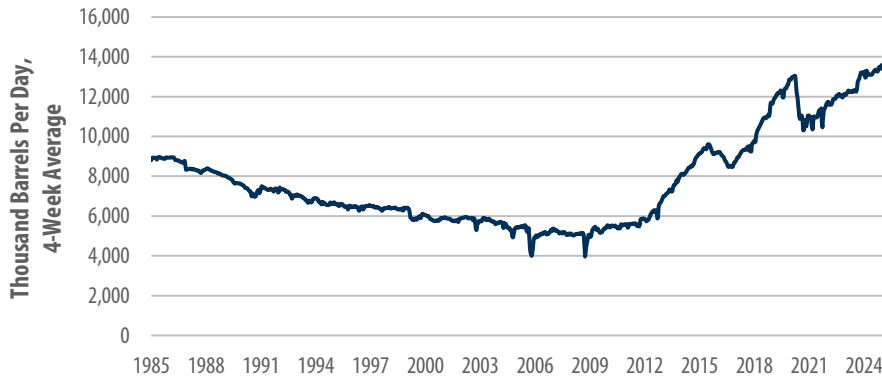


High Output, Low Prices: Can U.S. Shale Stay Profitable?

Oil markets are once again gripped by volatility as OPEC+ proceeds with its third production hike in as many months—adding 411,000 barrels per day in July—while prices linger near \$65 per barrel. The move reflects an effort to reassert control in the face of rising global inventories and sluggish demand growth. At the same time, U.S. output remains near record highs, holding steady at an average of 13.4 million barrels per day through the week ending May 23. But how long can it last? In this week's Three on Thursday, we examine the economics of U.S. shale, focusing on the price levels needed to keep existing wells running and justify new drilling. Each quarter, the Dallas Fed Energy Survey offers key insights from oil and gas firms across the 11th Federal Reserve District*—take a look at the three charts below to see what the latest data reveals.

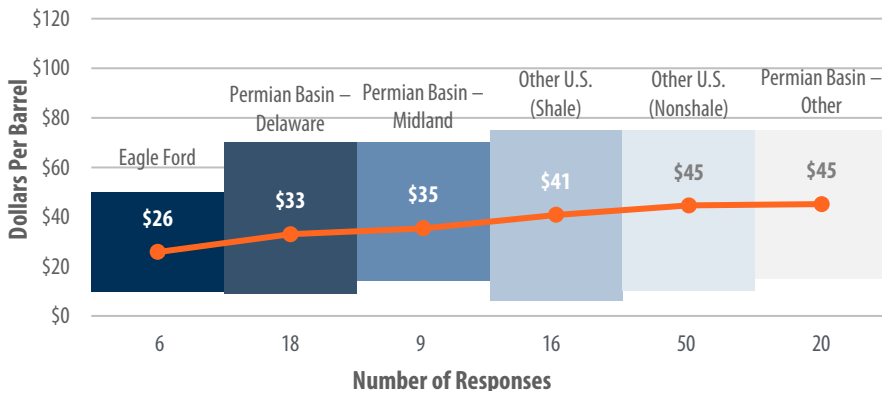
U.S. Field Production of Crude Oil



Sources: U.S. Energy Information Administration, First Trust Advisors. Weekly data 1/4/1985 – 5/23/2025.

U.S. oil production reached a record four-week average of 13.6 million barrels per day on December 27, 2024, when West Texas Intermediate (WTI) crude oil averaged in the low \$70s. As of May 23, 2025, production remains near that peak at 13.4 million barrels per day—even as prices have slipped into the low \$60s. Despite the pullback from record levels, output is still up 2.2% year-over-year, defying a nearly 21% drop in average WTI crude oil prices over that same time period.

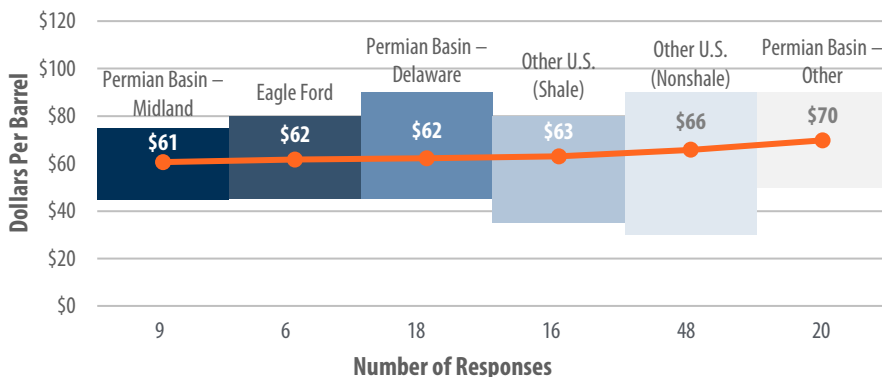
WTI Oil Price Needed to Cover Operating Expenses for Existing Wells



Sources: Federal Reserve Bank of Dallas, First Trust Advisors. Lines show the mean and bars show the range of responses. Survey collection period: March 12-20, 2025.

In the latest Dallas Fed Energy Survey, executives from 83 exploration and production firms were asked what WTI oil price is needed to cover operating expenses for existing wells in their top two active areas. On average, firms reported a break-even price of \$41 per barrel—up slightly from \$39 last year. Large producers (those with output of 10,000 barrels per day or more as of Q4 2024) reported needing just \$31 per barrel to break even, while smaller firms (producing fewer than 10,000 barrels per day) require a much higher \$44.

WTI Oil Price Needed to Profitably Drill a New Well



Sources: Federal Reserve Bank of Dallas, First Trust Advisors. Lines show the mean and bars show the range of responses. Survey collection period: March 12-20, 2025.

The Dallas Fed Energy Survey also asked executives what WTI oil price is needed to profitably drill a new well. Responses from executives of 81 exploration and production firms showed an average price of \$65 per barrel to turn a profit. Large producers (those producing 10,000 barrels per day or more as of Q4 2024) reported needing \$61 per barrel on average, while smaller firms (with production below 10,000 barrels per day) require \$66 to turn a profit on new drilling.

*The 11th Federal Reserve District includes Texas, northern Louisiana, and southern New Mexico. This report was prepared by First Trust Advisors L.P., and reflects the current opinion of the authors. It is based upon sources and data believed to be accurate and reliable. Opinions and forward looking statements expressed are subject to change without notice. This information does not constitute a solicitation or an offer to buy or sell any security.