

# World Oil<sup>®</sup>

## UPSTREAM PRACTICES

General Bond Log Interpreter performs automated interpretation;  
Eliminating vibrations downhole to drill faster; Maintenance and reliability impact ROI;  
Automation, advanced robotics enhance rig floor

### E-DRILLING & RIGS

Decarbonizing drilling and lowering costs by using electrical utility power

### GLOBAL MID-YEAR FORECAST

International and offshore activity prosper; U.S. remains flat

### U.S. RESERVES & PRODUCTION / ESG

Consolidation continues while ESG reporting increases further



Gulf Energy<sup>i</sup>

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## ABOUT THE COVER

Representing this month's Upstream Practices theme, the artwork shows the system architecture of the General Bond Log Interpreter (GBLI) developed by the Texas Institute of Science. The GBLI is capable of interfacing with all cement bond logging tools and performing automated interpretation at >90% accuracy. It completes interpretation, based on standardized rules and data formats. For more details, please turn to the feature article on the GBLI in the lead section of this issue. Image: Texas Institute of Science.

# U.S. drilling decreases on shale consolidation, technical advancements following record production

After a year of upstream growth and success in 2023, operators are reducing costs, rig activity and drilling time in an effort to boost domestic energy security while returning cash to shareholders.

**Bethany Fischer**, Digital Editor, *World Oil*

During first-half 2024, U.S. oil and gas production surged on drilling increases, particularly in the Permian basin. This fact was highlighted in the widely watched Presidential debate between current Vice President Kamala Harris and former President Donald Trump.

Domestic oil production hit a record under President Joe Biden's administration, a surprising but well-received revelation considering the Democratic party's known aversion to fossil fuel development. According to the U.S. Energy Information Administration, output averaged 12.9 MMbpd in 2023, breaking the record high achieved in 2019. And production has increased further, through the first eight months of 2024. It is no small testimonial to the technical innovations and efficiencies generated by the U.S. upstream industry.

In a threat to OPEC's efforts to control prices, multiple companies increased their 2024 production forecasts in the first half of the year on surprise production gains derived from more efficient drilling, **Fig. 1**. Examples include EOG Resources, Coterra Energy, Civitas Resources, Orintiv and Matador Resources.





**Fig. 1.** In this image taken with a drone on the night of Aug. 21, 2024, Latshaw Drilling Rig 19 works for Double Eagle Energy Holdings IV, LLC, in the Permian basin. The 1,500-hp rig was working on its first pad for that operator and had walked 120 ft out from its original well. Image: Latshaw Drilling.

That trend may be slowing, as high-quality drilling locations dwindle, consolidations acquire remaining acreage, and technological improvements increase operational efficiencies. Still, analysts from BloombergNEF predict that U.S. oil production will grow 600,000 bpd in 2025, thanks to higher well productivity

Major oil field service providers reported a drop in North American sales, as companies optimize their U.S. assets and focus on international exploration, including competitors Halliburton and SLB.

According to Barclays, total North American producer spending is forecast to drop 1% in 2024. Additionally, the U.S. EIA reported in April that shale operators drilled more wells than were fraced, in the industry's first back-to-back months of increased drilled-but-uncompleted wells since 2022.

## U.S. MARKET FACTORS

**2024 presidential election.** Oil and gas have been a major talking point for both presidential candidates for the upcoming U.S. presidential election. The Democratic nominee, Vice President Kamala Harris, has changed her stance on fracing, in an effort to secure votes in important swing states like Pennsylvania, **Fig. 2.** The Republican nominee, former President Donald Trump, has been a steady supporter of fracing, going all the way back to his first Presidential campaign in 2016, **Fig. 2.**