

OPEC Output Cuts Point to Higher Internal Rates of Return for U.S. Shale: S&P Global Platts

Platts Well Economic Analyzer Forecasts 23%-40% IRR for Permian Delaware; 20%-35% for Permian Midland
- Platts Analytics Forecasts WTI at \$50-\$65/barrel in Wake of OPEC/Global Oil Production Cuts -

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NEW YORK

NEW YORK, Dec. 7, 2016 [PRNewswire/](http://photos.prnewswire.com/prnvar/20160510/365785LOGO) -- Oil producers in key U.S. shale producing regions could see returns in excess of 40% in the wake of production cuts recently announced by the Organization of Petroleum Exporting Countries (OPEC) and other nations and the expected rise in oil prices, according to the *Platts Well Economics Analyzer* (WEA) analysis. The analysis was released to coincide with the December 8 Platts Global Energy Outlook Forum in New York City, which will include a presentation by former OPEC Secretary General Abdalla Salem El-Badri.

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Despite somewhat contradictory sentiment regarding the magnitude of pending global oil production cuts, growing optimism for a balanced market in 2017 begs the question, *what do higher prices mean for the U.S. producer with respect to production volumes and returns?*

Given the infancy and fluidity of the situation, Platts Analytics, the forecasting and analytics unit of S&P Global Platts, chose \$50/b and \$65/b West Texas Intermediate (WTI) prices as a range at which to run its proprietary forecasting models. Running these prices through the newly launched *Platts Well Economic Analyzer*, it is clear *U.S. shale producers have incentive to up step production*.

"If, throughout this downturn, producers have learned anything, it's that improved efficiencies and cost reductions are the primary keys to survival," said *Taylor Cavey, Platts Well Economics Analyzer energy analyst, Platts Analytics* "Producers will carry forward these newly acquired skill sets, and to a certain extent cost reductions, as oil prices are expected to improve and allow for a meaningful supply response. However, not all plays are created equal and those areas with the best well economics will flourish."

Significant Upside Potential For Returns Following OPEC Agreement

Play	IRR current (Nov. 2016 @\$48/b WTI)	\$50/b forecast	\$65/b forecast
Permian Delaware	21.1%	23.2%	40.2%
Permian Midland	18.0%	19.8%	35.1%
Eagle Ford Oil	16.5%	18.6%	36.2%
SCOOP	15.9%	17.5%	31.1%
Bakken	15.8%	18.1%	37.3%
Denver-Julesburg	15.8%	17.9%	35.9%

Source: Platts Well Economic Analyzer, Platts Analytics

PERMIAN BASINS SEE BEST RETURNS

It is no surprise that the Delaware and Midland basins in the Permian are generating some of the best returns in the country. According to *Platts Well Economics Analyzer*, the IRR for a typical well in the Permian Delaware is currently at the top of the observed stack at 21%. The chart above represents the potential returns for each play given \$50/b and \$65/b WTI prices while holding regional price differentials constant, compared to the November 2016 results at \$48/b.

Well economics in the Delaware surpass those of competing plays with a robust oil initial production (IP) rate of 550 b/d, \$6.6 million estimated drilling and completion (D&C) cost and a production mix that is heavily weighted towards oil at 76%. The Delaware's proximity to demand centers in the U.S. Gulf coast and the overall quality of the barrel also set it apart from the rest of the sheep herd. *Assuming WTI responds to the order of \$50/b or \$65/b, the average well will generate 23% and 40% returns, respectively.*

In the neighboring Midland basin, returns are currently 18% with average oil IP rates that are roughly 150 b/d below those in the Delaware. However, on average, the play enjoys a D&C cost of \$5.5 million, over \$1 million less than the Delaware.

PRODUCTION GAINS SEEN FOR PERMIAN

Platts Analytics estimates that total Permian oil production will average a little less than 2 million barrels per day (MMb/d) in 2016. *Given the \$50/b to \$65/b WTI scenarios, production has the capability of growing 75 thousand barrels per day (Mb/d) and 120 MB/d in 2017, respectively, with further upside potential stemming from continued efficiency gains and/or an acceleration in completing drilled but uncompleted (DUC) wells.*

Aside from the Permian, the only other area where, under these scenarios, production is forecast to grow in 2017 is the Denver-Julesburg, albeit only slightly.

In 2016, Platts Analytics estimates production will average 307 Mb/d in the Denver-Julesburg and increase 9 Mb/d and 13 Mb/d, respectively, under the WTI scenarios. According to the *Platts Well Economics Analyzer*, returns in the Denver-Julesburg are currently 16%; however, producers enjoy breakeven prices of \$32/barrel. Under the \$50 scenario, IRRs in the DJ are forecast to be 18%, whereas under the \$65 scenario they could reach as high as a 36%.

While returns across the oil-rich plays improve considerably with higher WTI prices, drilling activity needs to ramp up considerably in order to reverse the downward production trend in most plays, Cavey said.

EAGLE FORD PRODUCTION SEEN SUPPRESSED

Production in the Eagle Ford has undergone significant pressure since the downturn. Since peaking in early 2015, oil production in the region has declined over 500 Mb/d to 1.1 MMb/d in November 2016. Currently, *a typical well in the Eagle Ford earns a 16.5 % IRR and under the \$50 and \$65 scenarios will generate IRRs of 19% and 36%, respectively.* Although similar on a return basis to the Denver-Julesburg, the breakeven price for a typical well in the Eagle Ford is over \$36/barrel. Production volumes in both price scenarios are forecast to remain suppressed and decline slightly into early 2017, at which point its downward trajectory has the potential to reverse and begin to grow again. However, on average in 2017, Eagle Ford production is expected to decline 60 Mb/d and 30 Mb/d year over year, respectively, for both scenarios.

Additional perspective on OPEC production cuts and the likely impact of those cuts will be provided at the *Thursday Platts Global Energy Outlook Forum*, which is expected to gather several hundred energy and financial executives, analysts and industry representatives.

The *Platts Well Economic Analyzer* is a North American-focused tool that allows the user to understand what a change in oil price, among other adjustable variables, means for various oil and gas plays and the well-by-well operating characteristics needed to earn a specific internal rate of return (IRR).

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