

Rebound predicted for Weld crude oil production

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The number of barrels of oil produced from wells in Weld County and across the DJ Basin declined last year compared to the 2015 milestone, but the production drop was not steep and has since leveled off, according to recent figures from the state's database.

The forecast for this year indicates that steadying prices and increased efficiencies likely means recovering volumes and increased activity in the coming months, say industry analysts.

Among the leading companies in the area, most continue to post strong numbers and indicate continued interest in growth and development.

While production here does not face the headwinds some regions are seeing, oil produced from the Niobrara in the Denver-Julesburg Basin competes "at a slight disadvantage," with oil produced elsewhere, said Bernadette Johnson, vice president of market intelligence at Drilling Info in Littleton.

DJ Basin crude oil sells at a discount of \$2 to \$3 per barrel to benchmark West Texas Intermediate oil from the Permian Basin. "Companies here still need prices to go a bit higher before we will see a significant increase in activity," she said.

BY THE NUMBERS

The Colorado Oil and Gas Conservation Commission reports Weld County still leads the state in oil production by a wide margin. Through the first 10 months of 2016, production in Weld County stood at an average 8.64 million barrels of oil per month. Production from the state's other 63 counties combined was an average 1.023 barrels per month.

Weld County is on track to post another plus-100 million barrels in 2016 to complement its 2015 production milestone, though numbers won't final for a while, as state database lags a good 45 days to two months. Two years ago, oil production posted an average monthly volume of 9.14 million barrels and 109.7 million barrels for the year. That figure exceeded 2014 annual production of 81.6 million barrels and was a nearly eight-fold increase since 2011.

If production figures for November and December remain consistent with the first 10 months' average, 2016 production in Weld will total approximately 103.7 million barrels.

On the downside, Weld's state-leading production volume comes with front-runner status in both notices of rules violations and reported spills. One of every four violation notices issued by the COGCC last year went to operators in Weld as well as roughly half the reported spills.

CRUDE DISCOUNTS

Much of the oil produced from DJ Basin wells is classified as ultra light crude or condensate. In today's market, such light crude oil trades at a disadvantage to mid-grade crude such as produced in the Permian.

"Refiners want to produce more of what the market demands," Johnson noted. "These days, distillates are in greater demand than gasoline and lighter crudes tend to produce more gasoline, so DJ crude doesn't have the same value on the market as WTI."

She added that DJ producers also face space constraints on the pipelines that carry oil to the trading hubs at Cushing, Okla., and the Gulf Coast. Those lines, most of which originate in the Bakken, operate at or near capacity, adding to the cost shippers must pay to reach buyers.

Although permission to finish the controversial Dakota Access Pipeline is pending approval, once that line is completed, a significant portion of Bakken oil that now ships on lines traversing Colorado will shift to the DAPL, Johnson observed.

"Opening the DAPL will be a game-changer," Johnson said. "Bakken crude will compete with WTI to the disadvantage of DJ crude but producers here will see more space on the lines and lower shipping costs. It is a double-edged sword."

TOP PRODUCERS

Reflective of the overall decline in barrels pumped, the biggest producers in the DJ Basin saw some reduction in volumes in 2016. This year's list of top five producers includes two new names and two companies dropping off.

Leading producer, Anadarko, posted a 10 percent decline in daily volume in the 15 months between May 2015 and September 2016, according to data provided by Drilling Info. In second place, Noble saw its production increase by 10 percent over the same period.

PDC Energy moved up to third place, displacing Encana, which exited the DJ Basin and sold its assets to newly formed Crestone Peak Resources. PDC improved its acreage position last summer in a land swap with Noble and continues an active development program in Colorado and Texas. As a result, it expanded both proved reserves and production.

The other new name on the list of top five producers is Extraction Oil & Gas. In a year that saw the company issue an Initial Public Offering, Extraction's DJ production increased to 21,754 barrels per day by September.

Rounding out the top five was Bill Barrett Corp. which, according to Drilling Info, posted 11,069 barrels per day of oil production in September.

PROJECTING GROWTH

Domestic production is projected to grow 400,000 barrels per day over the next two years, according to a recent report from the U.S. Energy Information Administration. Most of those gains will come from the Permian and Eagle Ford basins in Texas, followed by growing production in Oklahoma and New Mexico.

"Our projections see a bit more growth than the EIA forecast," said Johnson. "However, both the DJ and the Bakken declined sharply in 2016 so they have a ways to come back."

The number of drilling rigs operating is seen as an indicator of growth and activity in the industry. In its weekly "Rig Count," published Feb. 3, Baker Hughes, an oilfield services company, notes there were 729 rigs running in the US, an increase of 17 from the prior week and up 158 rigs from a year earlier.

In the DJ Basin, the rig count has recovered from the slowdown, though not as dramatically as in the Permian, noted Johnson. "The DJ never shut completely down," she said. "The trough was 11 rigs last spring and now, it is back to 26 rigs running in Colorado with 21 of those in the DJ."

The DJ rig count peaked at 64 rigs in October, 2014, according to Baker Hughes.

FINDING MARKETS

The major oil producers and the trading companies they work through were reported in February to be shipping large cargoes of crude to Asia in response to a widening of the price differential between Brent crude and WTI.

One report indicated between 700,000 and 900,000 b/d of crude was being shipped to refiners in China, Japan and Singapore.

Much of the crude oil shipments were said to be originating in the Gulf of Mexico and through terminals along the coast.

How much more crude oil is being produced around the globe than is currently used is "the biggest question out there," Johnson said.

When OPEC announced last fall that its member countries would cut production, prices rallied from the mid-\$40 barrel doldrums, according to market reports. Johnson noted that it remains uncertain whether the cartel can sustain its reduction goal until its next meeting in July.

Even with reduced OPEC production, the U.S. is now in a position to become a long-term net exporter of crude oil and refined products. The U.S. is a net importer of crude oil and imports a minimal amount of refined products.

Demand for refined products in the US stands at about 13.5 million barrels per day, Johnson said. Domestic refineries produce 16.5 million barrels of gasoline, distillate and other materials.

"Refineries in the U.S. can produce more product faster and cheaper than overseas," Johnson observed. "As a result, we can easily export 3 million barrels per day of products and still have enough to meet domestic demand. This provides an energy security that this country did not have in the past and improves our trade balance."

Regarding prices, Drilling Info projects oil to stay in the low- to mid-\$50 range for most of this year, Johnson said.

"The market is still at a hair-trigger," she said. "An unexpected event, a dip in oil storage or a growth in demand could easily push prices up into the \$60s. And at that level, you will see an increase in oil field activity."