

Energy Pipeline: Industry Insights — Outlook 2018: Growth returns to the DJ but at a slower pace

Dan Larson For Energy Pipeline

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Across the DJ Basin, oilfield activity has returned although not to the frenetic levels seen five years ago.

Facing increased competition for its share of huge but oversupplied market, the DJ will likely maintain its position as the 7th largest oil production field onshore US, according to the Energy Information Administration.

As prices stabilized in 2017, rig counts rose and production levels inched higher.

"The companies with the best acreage will be fine," said Bernadette Johnson, vice president of market intelligence at DrillingInfo, of Littleton. "They have the high-quality rock, the infrastructure and access to markets and workers. The higher cost wells, however, likely will wait on higher prices."

PRODUCTION RETURNS

Since Weld County blew past the 100-million-barrel mark in 2015, it has continued to account for nine of every 10 barrels of oil produced in Colorado, reports the Colorado Oil and Gas Conservation Commission. And, according to the EIA, in the 10 years from 2005 to 2015, oil production in Colorado more than quadrupled and natural gas sold increased by half.

However, the sustained oil price collapse now entering its third year continues to be felt across the basin.

The slowdown in drilling still shows in Weld County production figures, according to the COGCC. After posting a 5 percent decline in production in 2016 from the previous year's record 109 million barrels, Weld County producers were on track to pump about 105 million barrels in 2017, an increase of about 1 percent from 2016.

Johnson forecasts a modest increase next year in oil production for the DJ Basin, which generally includes all or parts of seven northern Colorado counties. "Production will grow in the DJ next year," Johnson said. "It won't be like the growth we saw five years ago; it will be slow and steady."

DrillingInfo forecasts crude production across the DJ Basin will grow by about 45,000 barrels per day next year, she said. "We see 2017 totals at 315,000 b/d by the end of this year growing to 316,000 b/d in 2018."

Johnson advised that continued development in the Permian Basin and improved efficiencies for operators there will push Permian break-even rates down and production up. "The DJ competes with all those other fields for share of a market that remains oversupplied," she said. "If they (Permian) continue to get better at producing at lower costs, they could take our spot in line."

When it comes to which basins across the country will see the most investment in new drilling, break-evens are the key, Johnson said.

"Near term, there are many areas where producers can make money below \$50 a barrel," Johnson said. "But we see \$60 as a strong ceiling. If prices were to extend to \$70 a barrel, there would be a rapid increase in oil supply; as much as 1 million barrels per day year over year. And that would cause prices to swing the other way."

BTU Analytics, an energy advisory service based in Lakewood, reported this summer that its analysis

of remaining resources, oil still in the ground, in the DJ shows the drilling upswing that kicked off in the second half of 2016 will continue but that activity could taper off in seven years.

If prices stay mostly flat and assuming companies drill the best wells first, "all wells that break-even below \$50 per barrel will be drilled by 2024," the company reported.

WEATHER OR NOT

On the natural gas side, prices could be under pressure if the country sees a mild winter, Johnson noted. Likewise, an increase in oil prices that resulted in greater production would mean additional associated natural gas produced that would be "out there looking for a market and driving the gas price down," she said.

On the plus side for natural gas producers, a frigid winter would hike demand, especially in the residential and commercial markets, Johnson noted. A cold winter could be worth an additional gas demand of 5.8 billion cubic feet per day with an extended cold-weather season drawing an additional 700 to 800 billion cubic feet from storage.

"On the other hand, a mild winter could reduce demand by 4.6 billion," Johnson said.

Overall, natural gas demand is expected to grow, Johnson said, although not enough to pull down excess supply and drive up prices.

"Increased demand for gas has been years in the making," Johnson said. "These new power plants and ethane crackers take years to construct and they are just now coming on line. If all these new facilities run at capacity, it could mean another 1.2 billion in demand."

Natural gas production in the U.S. averages about 78 billion cubic feet per day, EIA reports. Currently, U.S. production of dry gas met more than 97 percent of domestic gas demand while exports of liquefied natural gas increased fivefold in 2016.

Johnson noted that supplies of LNG exported to Mexico are a significant driver of demand for US production, Johnson said. "Exports of LNG to Mexico are a big part of the reason natural gas stayed in the \$2.85 to 3.15 range, as opposed to dropping to the low-\$2s," she said.

SLOW RECOVERY

Johnson said the benchmark WTI price should level out next year at \$52 per barrel and the price for natural gas at Henry Hub would average \$2.85 a cubic foot..

"That's a level where U.S. production can grow by about 750,000 barrels per day, year over year and not push storage into overhang," she said.

She added that incremental growth in demand for oil starting in the second quarter has helped draw down some of the excess supply that was keeping prices from exceeding \$50 for long.

"If that balance between supply and demand can stay close to equilibrium for the next few quarters, we could see prices rise to the \$60 range by 2019," Johnson concluded.

That forecast aligns with the periodic "Short-Term Energy Outlook" report published by EIA. According to federal forecasters, the WTI price will be \$50.5 bbl for the early part of next year.

Others, such as Alan Bannister, of S&P Global Platts, an energy market analysis firm, warned that a decrease in oil exploration spending due to the downturn could result in a supply shortage of 3 to 4 percent per year starting next year.

"We have not seen the effect of that yet because the projects put in place three years ago are just now coming online," Bannister said in an interview with CNBC earlier this year. Reduced investments in exploration and sharp decline curves for most new horizontal wells "sows the seeds for a potential super bull run in the next two to three years."

Naysayers, on the other hand, say demand for oil is nearing a peak as electric vehicles are sold in greater numbers.

One tech-focused think tank said demand for oil will peak in 2020-21, driving oil prices down to \$25 per barrel within a decade.

Finally, the mainstream commodity trading firms tend to agree that U.S. shale production now sets a ceiling on prices and that producers, and the investors backing them, can turn a profit at \$50 per barrel.

When prognosticators are asked to look further into the future, their crystal balls turn cloudy.

It seems now that oil producers have the key to unlocking vast amounts of oil trapped in shale and other formations previously considered non-economic, automakers are moving toward more electric and fuel-efficient hybrids and all that oil may not be needed.

Dan Larson is a Colorado journalist and PR pro. He has three decades experience in the oil and gas industry as a communications specialist. Working industry segments upstream and down, Dan led marketing programs, neighbor discussions, community development and contribution programs, and crisis response efforts. Lately, he is writing for Energy Pipeline, online news services and trade magazines serving the energy and automotive industries. Visit Dan's website at <http://www.larson-comms.com> (<http://www.larson-comms.com>)

Oil & Gas Rig Counts

<i>State</i>	<i>Oct. 20, 2017</i>	<i>July 21, 2017</i>	<i>Oct. 21, 2016</i>
<i>Colorado</i>	34	37	20
<i>New Mexico</i>	68	57	34
<i>North Dakota</i>	51	54	30
<i>Texas</i>	436	463	254
<i>Wyoming</i>	21	25	16
<i>Total US</i>	913	950	553

Source: Baker Hughes

Colorado Oil Production

<i>County</i>	<i>Monthly Average 2016</i>	<i>Total 2016</i>	<i>Total to Sept. 2017</i>
<i>Adams</i>	65,259	799,096	357,845
<i>Arapahoe</i>	68,340	847,702	533,726
<i>Boulder</i>	8,812	105,408	65,686
<i>Broomfield</i>	4,361	52,541	27,465
<i>Larimer</i>	59,803	751,424	461,709
<i>Morgan</i>	6,651	81,897	35,738
<i>Weld</i>	8,683,673	104,204,071	69,006,428
<i>Total Colorado</i>	9,271,899	116,662,793	76,638,014

Source: COGCC