The Telegraph

Permian shale boom in Texas is devastating for Opec

Texan oil is hurting Opec

By Ambrose Evans-Pritchard, West Texas
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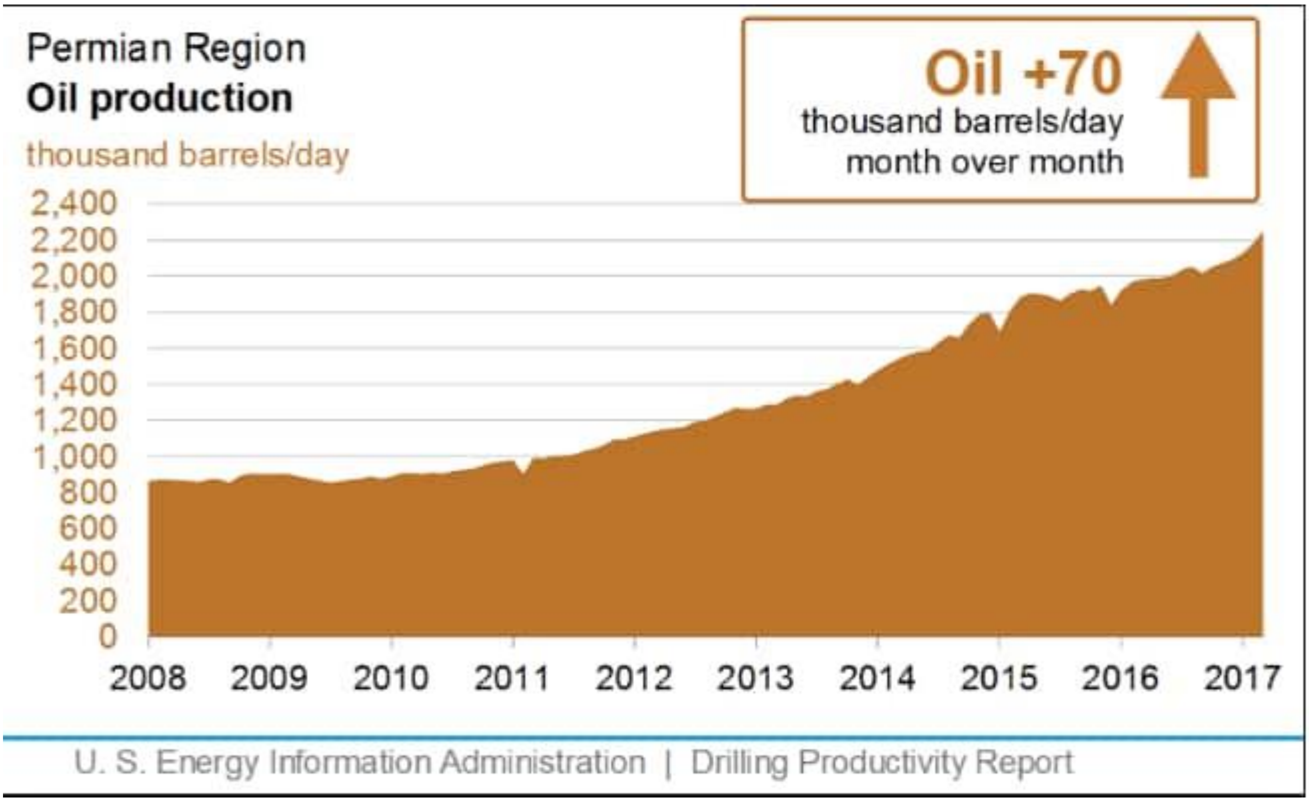
The Opec oil cartel is waking up to an unpleasant surprise. Shale output from the Permian Basin in Texas is expanding faster than the world thought humanly possible.

The scale threatens to neutralise output cuts agreed by Saudi Arabia and a Russian-led bloc last November, and ultimately threatens break their strategic lockhold on the global crude market for a generation.

"People just don't seem to realise how big the Permian is. It will eventually pass the Ghawar field in Saudi Arabia, and that is the biggest in the world," said Scott Sheffield, founder of Pioneer Natural Resources and acclaimed 'King of the Permian'.

"We think it could produce 8-10m barrels a day (b/d) within ten years. We're telling our investors that Pioneer could reach one million," he said. Roughly 70pc of this would be crude oil, and the rest in gas and liquids.



It is a bold claim. The Ghawar field produces 5m b/d. Saudi exports are currently around 7.1 m b/d.

Mr Sheffield said Saudi Arabia badly misjudged the resilience of the Permian zone when it tried to break the US shale industry by flooding the crude market in late 2014, leading to a peak to trough collapse in oil prices of 80pc.

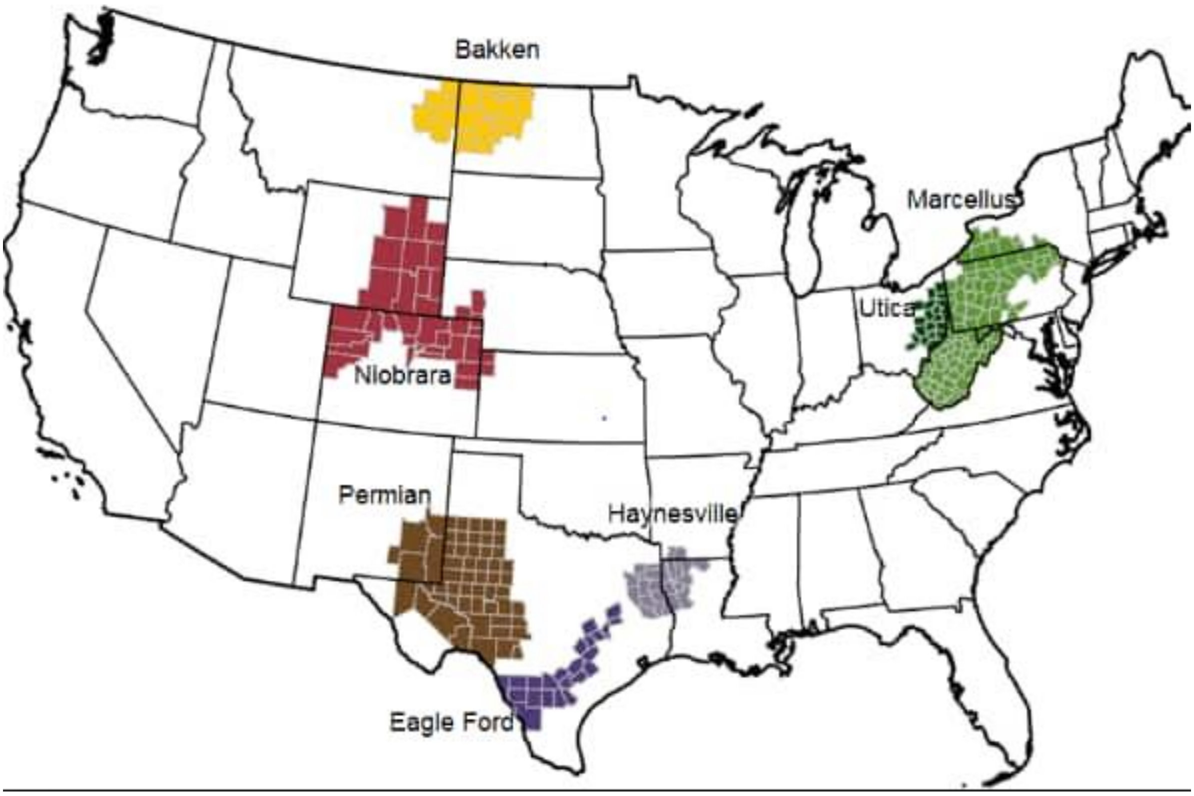
"The Permian never stopped growing and now it is going to add 300,000 to 500,000 (b/d) a year. As long crude prices are around $50 to $55, we're in the sweet spot. The rig count is going to take off," he told the Daily Telegraph.

"We have had such efficiency gains that break-even costs in the Permian are close to $25. It took us 40 days to drill a well in 2014. We're already down to 20 days," he said.

The cost of drilling and fracking a Pioneer well has dropped from $1,088 per lateral foot to $817 over the last six quarters. Production from each well has jumped by half as digital technology performs miracles. Frackers can now drill laterally for 10,000 feet, allowing thirty or more “stages” on a single bore.

The Permian story is not new. The Palaeozoic basin has been gushing for a century in the rattlesnake-infested expanse of West Texas and New Mexico. It powered the US armed forces through the Second World War.

What is new is the fracking revival that keeps astonishing forecasters. The region held steady at around 2m b/d through the two-year downturn, and is already accelerating again. The Baker Hughes rig count for the region reached 308 last week, from a low of 132 last May.



US shale basins CREDIT: US ENERGY ADMINSTRATION

Sceptics remain suspicious of "Permania". They warned that auction prices topping $50,000 an acre in core sites - up tenfold since 2012 - have progressed from a land rush into a dangerous bubble.

But they have been caught on the back foot before. The shale massacre predicted in 2015 never happened. Greenlight Capital's David Einhorn has not fared well shorting Pioneer, the "motherfracker" as he calls the company. It has turned into the proverbial pain trade.

Pioneer's production is 85pc hedged through to early 2018 on the derivatives markets with put options and 'triple collars', and these are constantly renewed. The frackers are often a step ahead of the shorters.

Fresh science broadly confirms the once-outlandish claims of Mr Sheffield and the veteran wild-catters. The US Geological Survey (USGS) reports that the Wolfcamp section of the Midland Basin alone contains at least 20bn barrels of "technically recoverable" oil and 16 trillion cubic feet of natural gas. "This is the largest estimate of continuous oil that USGS has ever assessed in the United States," it said

Consultants IHS have tripled their estimate of ultimate recoverable resources in the Permian to 104bn barrels, five times more than the remaining oil in the North Sea fields of the UK and Norway.

Mr Sheffield cut his teeth on the Permian in the 1970s and has spent decades mastering the super-basin, methodically buying up unfashionable acreage as the big oil companies pulled out. Those were the pre-fracking days, when the basin faced decline.

One of the sellers was Exxon and another Mobil, then embarking on grander ventures across the world. That was a mistake. ExxonMobil is now having to buy its way back at a mouth-watering premium to replenish withering global reserves.

Opec cut production last year to shore up the oil price CREDIT: AKOS STILLER/BLOOMBERG

It has just bought 225,000 acres from the cattle-ranching Bass family for $6.6bn as it returns to the US. It has earmarked a third of its investment for "short-cycle" drilling, mostly in Permian shale where it can make money at $40 crude prices.

ExxonMobil aims to quadruple shale output by 2025. Chevron has reached much the same conclusion, with the advantage that it is already sitting on 1.5m acres in the Permian that it never sold and is theoretically worth $50bn. Fracking is becoming de rigueur for the oil 'majors', a diversification from gargantuan ten-year projects in ultra-deep waters with break-even costs of $60 or $70.

What Mr Sheffield guessed before others - chiefly from studying the Barnett shale field in Texas - was that technology break-throughs in horizontal drilling and hydraulic fracturing could give the Permian an explosive new lease of life. He seized the moment.

"In 2006 we decided to divest all our international assets over a five year period and focus everything on the Permian. It was a big bet, and it turned out to be right," he said. Mr Sheffield handed over operations last year to his successor Tim Dove.

Mr Sheffield had learned a hard lesson in leverage from the late 1990s when a merger left him saddled with $1.6bn of debts going into a slump and had to sack 300 employees to survive. This time he was prepared when the global oil boom burst in 2014.

Today the company is lean, mean, and expanding on cash flow, with a net debt of $0.2bn against a market worth of $33bn. It is sitting on 800,000 acres of the choicest land in the Spraberry Basin.

The beauty of the Permian rock is that it has up to twelve layers "stacked" on top of each other down to a depth of 12,000 ft, offering multiple seams and perfectly suited to horizontal drilling.

The reservoirs are not cursed by saltwater zones. They hold 75pc oil, compared to 40-50pc in other fracking regions. A nexus of pipelines is already in place. Pioneer can send crude to the Gulf coast for $2.50 a barrel in transport costs.

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The Permian basin has many layers which boost extraction CREDIT:PIONEER NATURAL RESOURCES COMPANY

The march towards US energy independence has been interrupted but not stopped. The country's oil output has risen by 550,000 b/d since touching bottom at 8.3m in July last year. Mr Sheffield forecasts that it will roar back to 9.5m b/d this year and 10.5 b/d by the end of 2018.

That would overwhelm the 1.8m b/d cuts agreed by OPEC and Russia. A burst of late-cycle of economic growth in the US, China, and Europe may come to the rescue: if that fails to happen, they may have to cut deeper - and for longer than just six months - to clear the glut of inventories.

There is no longer any question that US shale has profoundly disrupted the global oil markets. Saudi Arabia's campaign to break the fracking industry has been a costly war of attrition, depleting a quarter trillion dollars of the Kingdom's foreign exchange reserves without halting the juggernaut.

OPEC members face a Permian headwind that may cap crude prices far below levels needed to balance their budgets. In the end, the 40pc collapse in worldwide oil and gas investment over the last two years will lead to a supply crunch. But oil bulls betting on a return to $80 may have to be patient.

Mr Sheffield said the strategic blunder made by the Saudis was to let prices rise so high for so long in the great China boom. It gave US shale the window to reach critical mass and critical technology.

"It was the $100 oil environment for four years that allowed us to do what we did. It they had kept oil down at $70 to $75, it would have been a helluva a lot slower," he said.