

Early this year, Scott Sheffield realized he had a problem. Investors were cooling on [Pioneer Natural Resources](#) Co. [PXD 2.21%](#), the company he built into one of the leaders of the American fracking boom.

Like many shale companies, Pioneer was pumping a lot but making little. It was spending hundreds of millions more than budgeted as it strained to meet a goal Mr. Sheffield set years back—producing a million barrels of oil and gas a day within a decade, enough to rival OPEC nations such as Libya.

So in February, the company's board [replaced Chief Executive Timothy Dove](#), who had presided over the cost overruns, with Mr. Sheffield, who had retired as CEO in 2016, and asked him to engineer a turnaround.

Mr. Sheffield has since embarked on an extreme belt-tightening regimen at the Irving, Texas-based producer. Pioneer is cutting more than one-quarter of its workforce, including a cadre of senior executives, in part through layoffs and buyouts. Among those who are leaving is Mr. Sheffield's own brother, Thomas Sheffield, the company's vice president of health, safety and environment.

The million-barrel-a-day goal? It's on ice as Mr. Sheffield tries to convince skeptics that Pioneer is a shale company that can live within its means.

"We lost the growth investors," he said in a recent interview. "Now we've got to attract a whole other set of investors."

Shale drillers transformed the U.S. into the world's largest oil producer, churning out roughly 12 million barrels a day, according to the Energy Information Administration. But after years of losing money, they are [coming under intense pressure from investors and Wall Street financiers to boost returns](#). How they respond will shape America's heady pursuit of "energy independence" and its burgeoning status as a geopolitical oil player.

Spending Problem Pioneer is slashing spending under pressure from investors. Overhead spending per barrel of oil and gas Source: FactSet
Pioneer Natural Resources Shale company median 2014'15'16'17'18 012345\$6

Companies long valued on growth prospects [are seeing new capital dry up](#) as many find it more expensive than anticipated to meet lofty production goals. Under pressure to generate positive cash flows, executives are slashing overhead and dialing back drilling plans.

As the frenzy slows, the pace of U.S. production growth is set to moderate this year. Many older wells are falling short of expectations, and some operators acknowledge that they have [fewer future drilling locations than they once predicted](#).

Over the past 10 years, 40 of the largest independent oil and gas producers collectively spent roughly \$200 billion more than they took in from operations, according to a Wall Street Journal analysis of data from financial-information firm FactSet. During that time, a broad index of U.S. oil-and-gas companies fell roughly 10%, while the S&P 500 index nearly tripled.

“It’s time to be smarter about being responsible stewards of capital,” said John Groton, director of equity research for Thrivent Asset Management, a Pioneer investor with about \$19 billion under management.

At Pioneer, some employees were concerned about the feasibility of meeting the million-barrel-a-day target set by senior executives, former employees said in interviews with the Journal. Some also raised questions about whether Pioneer’s production forecasts were too optimistic and would lead investors to overvalue the company, former employees said.

Pioneer said in a written statement the target was achievable and designed to challenge employees, noting that [Exxon Mobil](#) Corp. and [Chevron](#) Corp. [recently announced similar goals](#). Pioneer added that it encourages employees to debate the assumptions used to make decisions. “To date, our well results have, on average, been consistent with our expectations,” Pioneer said.

Mr. Sheffield said the company had become overly focused on growth. “I just don’t think the discipline was there on the capital side,” he said. Mr. Dove, the former CEO, didn’t respond to requests for comment.

Shale wells produce a lot of oil and gas early on, but taper off quickly, meaning drillers must continuously plow money back into the ground to maintain output. The Journal previously reported that thousands of wells drilled in the last five years [are producing less oil and gas than companies forecast to investors](#). Pioneer is among the companies whose wells in some areas are on track to fall short of expectations, according to the Journal’s analysis. The company disputes the findings, saying its methodology for estimating well productivity differs from the Journal’s. Pioneer was formed in 1997 after Mr. Sheffield merged his family’s company, Parker & Parsley Petroleum Co., with wildcatter T. Boone Pickens’s Mesa Inc. At the time, the Permian Basin of Texas and New Mexico, once a powerhouse oil field that helped the Allied campaign in World War II, had turned into a sleepy province of smaller, low-margin companies.

In one deal after another, Mr. Sheffield, a Dallas native and petroleum engineer trained at the University of Texas, steered Pioneer toward international prospects. He always kept his eye on

the Permian Basin, associates say, refusing to sell its holdings there because he valued the predictable returns.

About a decade ago, Pioneer and other smaller operators in West Texas came to understand that new hydraulic fracturing and horizontal drilling technologies could be applied to the Permian's oil-soaked layers of rock. The innovations led to a [renaissance for the Permian](#), which [has since become the chief engine of the American shale boom](#).

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As "Permania" took off, Mr. Sheffield emerged as its central pitchman. He made frequent television and conference appearances to talk up the basin's abundance of oil. He developed a knack for using figures that forecast the scale of the coming boom, frequently comparing the Permian to prolific areas of Saudi Arabia.

Mr. Sheffield began laying out an ambitious vision for Pioneer's future. In 2014, he said the company had an inventory of wells to last as many as 150 years. That year he [told Forbes](#) he believed Pioneer could increase its output to one million barrels a day by 2024, from about 200,000 barrels.

Infusions of money from Wall Street, eager for a piece of the fracking action, fueled growth at Pioneer and other shale companies. Frackers tapped investors for more than \$176 billion in financing from 2015 to 2018, using debt and sales of new shares to continue increasing production. Pioneer financed its expansion during that time with \$3.57 billion in bond and equity deals, according to Dealogic.

"It wasn't how much money you were making. It was, 'How many locations do you have?' " said Jon Brumley, a former chairman of Pioneer's board.

Mr. Sheffield spoke optimistically about returns on the company's wells, but that didn't always translate to overall profits.

In August 2015, Mr. Sheffield said Pioneer's wells were expected to yield 45% to 60% returns on investment at the oil prices at that time, excluding costs such as administrative expenses and taxes. The company lost \$218 million in the second quarter of that year.

The company acknowledged that capital spending exceeded operating cash flow in 2015, but said it is focused on changing that in 2019 and beyond.

In late 2016, Mr. Sheffield pushed back the timeline of the million-barrel goal by two years, to 2026. He [stepped down as CEO at the end of that year](#) and retired to the Santa Fe, N.M., area, where he had bought a 2,300-acre ranch from actress Jane Fonda.

That left his handpicked successor, Mr. Dove, to complete Pioneer's transformation. Mr. Dove, a graduate of the Massachusetts Institute of Technology, sought to make the million-barrel goal part of the company's strategic plan.

In early 2017, he gathered employees at a Dallas opera house to formally unveil the goal, a move that took some employees by surprise. He later told investors that Pioneer would reach that target by increasing output by at least 15% annually. He also said the company would bring spending in line with cash flow by 2018, assuming a \$55 oil price.

Some employees were less confident. Several times in recent years, technical staffers raised concerns to management that Pioneer was being too aggressive with how it talked up its prospects to investors and potential business partners, according to people familiar with the matter.

In one of those instances, the company eventually walked back internal production forecasts for some of its wells in the Permian, according to one of the people. In other instances, Pioneer continued to use what some of the people said were overly optimistic estimates.

Pioneer now says its oil output has been consistent with expectations, and that it has produced more natural gas and natural-gas liquids than expected. It says well productivity has become more predictable as it has drilled more wells and gathered additional data.

Pioneer ran into operational difficulties trying to produce as much oil as it had forecast. In a rocky conference call in August 2017, Mr. Dove disclosed it had drilled a series of "train-wreck wells" and said it would be lowering its oil production target for the year. The company's stock fell 11% on the news.

Under pressure to meet quarterly output targets, Pioneer began what employees called "the production push," according to one former employee. It drilled two West Texas wells to horizontal distances of 6,200 and 6,400 feet, according to data from energy consulting firm Wood Mackenzie—barely half the 12,100 feet the company had permits to drill.

That allowed the wells to be finished faster and contribute sooner to quarterly results, the person said, but at the cost of reducing their total long-term production. After 16 months, the wells generated about 125,000 and 160,000 barrels of oil, respectively, according to ShaleProfile, an

industry analytics platform. Pioneer's average Permian well from 2017 generated about 212,000 barrels of oil in that time, ShaleProfile data show.

Pioneer said it didn't drill shorter wells to accelerate production. "It is not unusual to drill shorter lateral wells for a variety of reasons, including to reduce the risk of operational challenges associated with longer lateral lengths," the company said.



Hydraulic fracturing and horizontal drilling technologies led to a renaissance for the Permian Basin, which includes this area on the outskirts of Odessa, Texas. PHOTO: WILLIAM WIDMER FOR THE WALL STREET JOURNAL

Last year, Pioneer's board grew more concerned about exceeding the budget, chairman J. Kenneth Thompson said in an interview. Shareholders were ratcheting up pressure to moderate growth and spending. Pioneer spent \$549 million more than it took in from operations in 2018, according to FactSet, even though U.S. benchmark crude prices rose to an average of \$65 a barrel. Many competitors also overshot their budgets, few by as much as Pioneer.

Pioneer's board approved a \$500 million increase in the company's capital budget, to between \$3.3 billion and \$3.4 billion, in the middle of last year, but was surprised to learn in January about additional overspending of about \$350 million, Mr. Sheffield said.

By late February, Pioneer's shares had declined about 40% from their 2014 peak. The board, with Mr. Sheffield as chairman, reached a "strong consensus" that major cost reductions were necessary, and Mr. Dove elected to retire, the company said.

Mr. Thompson, the current chairman, said the board wanted to cut overhead to \$2.25 per barrel of oil and gas produced, from \$3.26, and that Mr. Dove had opposed such moves, which would require layoffs.

In his first year back as CEO, Mr. Sheffield wants to generate roughly \$800 million in excess cash, which would demonstrate that Pioneer can meet investor demands for profits, cash flow and growth. In addition to the job cuts, it sold acreage in South Texas and is looking to shed assets used to process natural gas.

Pioneer's shares [temporarily surged after](#) Chevron sought to buy [Anadarko Petroleum](#) Corp. Mr. Sheffield made clear he isn't interested in selling Pioneer. He also isn't quite letting go of his million-barrel goal.

"I can't guarantee we're going to grow 15% a year if I don't know what the oil price is," he said, explaining it could take as long as 15 years if the industry experiences more downturns. "But my point is the rock will produce over one million barrels a day," he said.

Based on its existing well production and drilling practices, Pioneer would need as many as 90 rigs—about four times its current total—to reach one million barrels a day by 2026, estimates Tom Loughrey, president of oil-and-gas consulting firm Friezo Loughrey Oil Well Partners LLC. "This is really outside the realm of possibility," he said.

Pioneer has told investors it would take 60 to 70 rigs to produce one million barrels a day by 2026. It said it hoped drilling advances would allow it to reach the target with fewer rigs.

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