

U.S. Fracking Sector Spills More Red Ink—Again

Cash Flow Remains Disappointing to Debt, Equity Investors

North American energy companies kept the oil and gas flowing last quarter, but once again failed to produce cash flows to match.

A cross-section of 38 publicly traded oil and gas companies at the center of the U.S. fracking boom reported negative free cash flows in the third quarter of 2019. Collectively, these companies spent \$1.3 billion more on new capital projects during the quarter than they realized from selling oil and gas.

The financial disappointment was widespread: 29 of the 38 companies—more than three-quarters of the sample—didn't generate enough cash to cover their capital expenses.

Key Findings

- U.S. fracking-focused oil and gas companies reported negative cash flows during the third quarter.
- A cross-section of small and mid-sized U.S. E&Ps reported negative \$1.2 billion free cash flows from June through September 2019.
- Disappointing cash flows have soured investors on the sector, constraining the oil and gas industry's ability to tap debt and equity markets.

Free Cash Flow at Shale-Focused Companies



Sources: Morningstar; company reports

Free cash flow—the amount of cash generated by a company's core business, minus its capital spending—is a crucial gauge of financial health. Positive free cash flows

enable firms to pay down debt and reward stockholders. Negative free cash flows, by contrast, force companies to fund their operations by dipping into cash reserves, selling assets, or raising new money from capital markets.

The third quarter's dismal results cap a decade of disappointments for shale investors, who have waited for years for the industry to generate cash to go along with the enormous volumes of oil and gas it produces. Over the preceding twelve months alone, our sample of companies hemorrhaged \$4.9 billion in negative cash flows. This consistent cash drain will make it difficult for these shale-focused companies to pay down the more than \$117 billion in long-term debt that they owe, let alone compensate equity investors with a robust and sustainable program of dividends or share buybacks.

Third quarter cash flow results represented a sharp downturn from the previous quarter—which, in retrospect, seems to have been a financial high-water mark for the struggling sector. From April through June, shale-focused companies succeeded in generating free cash flows for the first time in years. But a 6 percent dip in U.S. oil prices¹ and a 7 percent drop in natural gas prices during the third quarter trimmed revenues, even as capital spending in our sample remained roughly stable.² The result was a \$2.3 billion cash flow downturn between the second and third quarters of 2019.

The third quarter's results were buoyed by EOG Resources, the one company in our sample that regularly posts significant positive cash flows. EOG generated \$571 million in free cash flow in the third quarter, assisted by a \$72 million quarter-over-quarter decline in the company's capital spending. Without EOG's outperformance, our sample of frackers would have been even more cash-flow negative.

On the downside, marquee names in the fracking sector—including Diamondback Energy, Chesapeake Energy, and EQT, the nation's largest natural gas producer—disappointed investors with substantial cash flow drains. Chesapeake stock recently dropped to a 25-year low after it warned investors that it may face bankruptcy in the near future, due to the company's inability to service its heavy debt burden.³

In the early stages of the fracking boom, investors tolerated disappointing results from oil and gas producers, believing that the industry would eventually produce ample cash returns. But shale became a victim of its own success, with abundant oil and gas production keeping prices too low for the sector to achieve robust profits. U.S. benchmark natural gas prices stayed below \$2.50/MMBTU this summer, the lowest level in decades. With prices this low, shale gas producers faced severe challenges in generating enough revenue to cover their capital expenses.

Yet even when oil and gas prices were higher, shale-focused companies never produced enough cash to pay down debt or compensate stockholders. To the contrary, since the inception of the fracking boom, oil and gas companies have had

¹ U.S. Energy Information Agency (EIA). [Cushing, OK WTI Spot Price FOB](#). November 2019.

² EIA. [Henry Hub Natural Gas Spot Price](#). November 2019.

³ Marketwatch. [Chesapeake stock falls to lowest price in 25 years as 'going concern' warning weighs](#). November 16, 2019.

to return repeatedly to debt and equity markets for infusions of capital to keep their operations running and their oil and gas flowing. The high capital costs of horizontal drilling and hydraulic fracturing, coupled with rapid production declines from fracked wells, has kept the shale industry on a capital spending treadmill, forever pouring massive amounts of cash into new oil and gas wells.

After a decade of cash losses, Wall Street has lost faith in the shale industry.⁴ Since the beginning of the year, a leading stock fund for oil and gas producers has fallen more than 19 percent, compared to a 26 percent rise in the S&P 500 index.⁵ By the close of the third quarter, the energy sector's performance hit rock-bottom within the S&P 500, with drilling, exploration and production and equipment and services leading the decline.⁶

Surprisingly, the 38 companies in our sample represent relatively strong performers among shale-focused oil and gas companies, given that our sample screened out companies that had declared bankruptcy over the last decade. The larger universe of fracking companies has suffered even worse results over time, as a wave of corporate bankruptcies wiped away billions of additional dollars in debt and equity. From the beginning of 2015 through the end of the last quarter, 199 North American oil and gas producers had filed for bankruptcy protection, restructuring more than \$109 billion in debt, largely through write-offs.⁷

More bankruptcies among oil and gas producers seem all but certain. The oil and gas industry as a whole must repay or refinance nearly \$200 billion of maturing debt before 2022, according to S&P Global.⁸

Frackers' persistent inability to produce robust cash flows should be of grave concern to investors. A healthy industry would generate enough cash not only to sustain its own capital spending, but also to pay off debt and reward stockholders—all while maintaining or even increasing its output to support rising stock prices. Until fracking companies can demonstrate that they can produce cash as well as hydrocarbons, cautious investors would be wise to view the fracking sector as a speculative enterprise with a weak outlook and an unproven business model.

Data and Methods

This report tracks the financial performance of 38 oil and gas exploration and production companies that operate principally in North America. As of November 2019, all of the companies on this list were components of either the SPDR S&P Oil & Gas Exploration & Production ETF (ticker symbol XOP), the Van Eyk Vectors

⁴ Wall Street Journal. [Frackers Scrounge for Cash as Wall Street Closes Doors](#). June 7, 2019.

⁵ Market prices for the SPDR S&P Oil & Gas Exploration & Production ETF (XOP) vs. the S&P 500 Index.

⁶ Yardeni, [Performance 2019, S&P 500 Sectors and Industries](#), November 15, 2019.

⁷ Haynes and Boone, LLP. [Oil Patch Bankruptcy Monitor](#), September 30, 2019.

⁸ S&P Global Ratings. [Another brick in the wall for the U.S. oil and gas industry as debt maturities build through 2024](#). July 19, 2019.

Unconventional Oil & Gas ETF (ticker symbol FRAK), or both. The list of companies from those two ETFs was further narrowed by excluding firms that:

- Had an IPO date within the preceding 5 years;
- Declared bankruptcy at some point during the preceding 5 years;
- Engaged in a spin-off or de-merger that significantly changed the company's business model or revenue sources during the preceding 5 years;
- Derived much of their revenues from midstream (transportation) operations, downstream (refining and petrochemicals) operations, drilling and oilfield services, or from exploration and production (E&P) operations outside North America; and
- Do not make significant capital expenditures on "fracking," defined as horizontally drilling and hydraulically fracturing oil and gas wells within shale basins.

Cash flow and capex data were downloaded from Morningstar during November 2019, and supplemented with data from 10-Q filings and 10-K filings.

The list of companies included in this report does not match up with previous quarterly fracking reports in this IEEFA series. Each quarter, IEEFA adjusts the companies covered in its fracking analysis to account for mergers, acquisitions, bankruptcies, and similar events. For the first time in this series, this report includes results from companies based in Canada that report financial results denominated in Canadian dollars. Canadian currency was converted to U.S. dollars based on exchange rate data from the St. Louis Federal Reserve Bank and the Bank of Canada.

Appendix

Free Cash Flow, Selected Fracking Companies (\$US Millions)

Company	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	Total, 5 Quarters
Antero Resources Corporation	(146)	287	67	(124)	(94)	(10)
Apache Corporation	64	(25)	(265)	53	(47)	(220)
Arc Resources Ltd	47	68	(63)	17	(8)	61
Cabot Oil & Gas Corporation	(18)	69	390	101	72	614
Callon Petroleum Company	(41)	(4)	(119)	(16)	(30)	(210)
Carrizo Oil & Gas Inc.	(64)	(301)	(46)	(15)	(19)	(445)
Chesapeake Energy Corporation	(57)	(126)	(74)	(178)	(264)	(699)
Cimarex Energy Co.	(66)	(50)	(100)	13	13	(190)
Concho Resources Inc.	(85)	(198)	(282)	(97)	(55)	(717)
Continental Resources Inc.	98	175	(32)	(21)	25	245
Crescent Point Energy Corp	36	31	16	266	21	371
Devon Energy Corporation	286	(276)	(182)	116	(40)	(96)
Diamondback Energy Inc.	(172)	(1,407)	(411)	(154)	(395)	(2,539)
Encana Corp.	362	210	(207)	156	190	711
Enerplus Corp	4	54	(4)	51	(65)	40
EOG Resources Inc.	540	783	(393)	1,124	571	2,625
EQT Corporation	(252)	(351)	500	49	(173)	(227)
Gulfport Energy Corporation	22	33	(5)	(107)	79	22
Hess Corporation	(117)	217	(433)	51	(266)	(548)
HighPoint Resources	(11)	(60)	(54)	(109)	(21)	(255)
Laredo Petroleum Inc.	(37)	(25)	(78)	45	20	(75)
Marathon Oil Corporation	194	171	(100)	150	65	480
Matador Resources Company	(563)	(106)	(157)	(65)	(86)	(977)
Noble Energy Inc.	(110)	(130)	(235)	(78)	(156)	(709)
Northern Oil and Gas Inc.	(68)	(67)	21	17	(187)	(284)
Oasis Petroleum Inc.	(77)	(74)	(63)	(74)	62	(226)
Parsley Energy Inc. Class A	(157)	(175)	(165)	(9)	(28)	(534)
PDC Energy Inc.	(58)	45	(90)	(25)	(18)	(146)
Penn Virginia Corporation	(49)	(28)	(17)	(4)	(26)	(124)
Pioneer Natural Resources Company	(33)	(111)	(137)	20	24	(237)
QEP Resources Inc.	27	(78)	(87)	(36)	(4)	(178)
Range Resources Corporation	20	26	47	(14)	(74)	5
SM Energy Company	(80)	(100)	(131)	(67)	(12)	(390)
Southwestern Energy Company	(17)	(30)	184	(227)	(95)	(185)
Tourmaline Oil Corp	(55)	(39)	8	84	(128)	(129)
Whitecap Resources Inc	41	49	8	131	(6)	224
Whiting Petroleum Corporation	(67)	48	(47)	(9)	(61)	(136)
WPX Energy Inc.	(129)	(232)	(179)	39	(44)	(545)
Total, Selected E&Ps	(788)	(1,727)	(2,914)	1,054	(1,260)	(5,634)

Source: Morningstar and company financial reports. Figures for Arc, Crescent Point, Enerplus, Tourmaline, and Whitecap converted from Canadian dollars, using conversion factors from the St. Louis Federal Reserve Bank and the Bank of Canada.

About IEEFA

The Institute for Energy Economics and Financial Analysis conducts research and analyses on financial and economic issues related to energy and the environment. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

About the Authors

Clark Williams-Derry

IEEFA Energy Finance Analyst Clark Williams-Derry served as director of energy finance and research director for the Sightline Institute, a multi-issue sustainability think-tank based in Seattle for 18 years, where his research focused on U.S. and global energy markets. He was also a senior analyst for Environmental Working Group.

Kathy Hipple

Kathy Hipple, a financial analyst at IEEFA, teaches the finance sequence at Bard's MBA in Sustainability and is the founding partner of Noosphere Marketing. Hipple has written extensively about sustainable, responsible and impact finance and investing. As Vice President at Merrill Lynch for 10 years, she placed fixed income securities with international institutional clients, and advised international life insurance companies and pension funds. She later founded Ambassador Media, a local search firm in New York City, and served as its CEO. She has served on several boards, including the national Local Search Association and Bennington County's Meals on Wheels.

This report is for information and educational purposes only. The Institute for Energy Economics and Financial Analysis ("IEEFA") does not provide tax, legal, investment, financial product or accounting advice. This report is not intended to provide, and should not be relied on for, tax, legal, investment, financial product or accounting advice. Nothing in this report is intended as investment or financial product advice, as an offer or solicitation of an offer to buy or sell, or as a recommendation, opinion, endorsement, or sponsorship of any financial product, class of financial products, security, company, or fund. IEEFA is not responsible for any investment or other decision made by you. You are responsible for your own investment research and investment decisions. This report is not meant as a general guide to investing, nor as a source of any specific or general recommendation or opinion in relation to any financial products. Unless attributed to others, any opinions expressed are our current opinions only. Certain information presented may have been provided by third-parties. IEEFA believes that such third-party information is reliable, and has checked public records to verify it where possible, but does not guarantee its accuracy, timeliness or completeness; and it is subject to change without notice.