

Pandemic Accelerates Dismal Financial Performance of U.S. Fracking Companies

Quarterly Negative Free Cash Flow Tops \$3 Billion

- Slashed Capex Budgets Too Little, Too Late to Stop Flow of Red Ink from Pandemic Demand Shock and Price Collapse
- Negative Free Cash Flows Top \$3 Billion During Difficult Second Quarter
- Companies Have Spilled \$29 Billion Red Ink Since 2017
- Bankruptcies Accelerate During Quarter

Summary

U.S. shale producers slashed capex spending in the second quarter in response to a dramatic downturn spurred by the coronavirus pandemic. The cuts were insufficient. The shale oil and gas sector suffered through its worst financial performance in years during the second quarter of 2020, according to a new IEEFA analysis of 34 North American oil and gas producers. These fracking-focused firms spent \$3.3 billion more on drilling and other capital projects during the quarter than they generated by selling oil and gas—results that followed a decade of negative free cash flows for the industry.

The second quarter saw the full effect of the pandemic: Gas prices fell to their lowest levels in decades,¹ while U.S. oil prices briefly turned negative for the first time ever.² Shale producers responded by slashing production, and the combination of low prices and falling output reduced quarterly revenues by a jaw-dropping 64% from the prior quarter.

Shale oil and gas producers responded by trimming capital spending by 45% yearon-year (See Table I). CNX, which operates in Appalachia, cut its capex 59%. EOG, which has significant operations in the Permian Basin, cut its capex 70% from the previous year.

Despite these cuts, sharp revenue declines pushed companies into the red. Of the 34 companies in IEEFA's sample, 27 companies spilled red ink during the quarter. EOG's free cash flow of negative \$360 million topped the list, with Continental Resources not far behind, spending \$334 million more in the quarter than it generated. Negative cash flows of three other producers (Noble Energy, Marathon

¹ Energy Information Administration. Henry Hub Natural Gas Spot Price.

² Energy Information Administration. Cushing, OK WTI Spot Price FOB.

Oil, and Hess Corporation) exceeded \$300 million.

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 force companies to fund their operations by dipping into cash reserves, selling assets, or raising new money from capital markets.

Collectively, the companies in IEEFA's sample racked up negative free cash flows every single year from 2010 to 2019. This dismal financial performance came despite rapid growth in production of both oil and gas. The "shale revolution" had propelled the U.S. into globe's most prolific oil producer, but in financial terms, the production boom was an epic financial bust.

Negative cash flows have been widespread across the sector, with only six companies in IEEFA's sample reporting cumulative positive free cash flows since 2017, even after oil prices rebounded from the rout of 2014 through 2016. Collectively, the producers generated \$29 billion in negative free cash flows since 2017, and a total of \$189 billion in negative free cash flows from 2010 through the end of last quarter.

Key Findings

• A cross-section of North American fracking-focused oil and gas companies reported \$3.3 billion in negative free cash flow in the second quarter of 2020.

• The 34 companies in IEEFA's sample slashed their quarterly capex by 45%, year on year, cutting investments to levels not seen since the oil price collapse of 2016.

• This trend follows the decade-long practice of producing negative free cash flows every year, totaling \$189 billion from 2010 to 2019,

• Collectively, producers have lost \$29 billion since 2017.

• Even before the recent market forces, disappointing cash flows have soured investors on the sector, constraining the oil and gas industry's ability to tap debt and equity markets.

Analysis

International oil markets have erupted in turmoil over the past months, as efforts to contain the coronavirus have sharply reduced global oil and gas demand. Yet the industry's dismal financial performance began long before the advent of the coronavirus or the OPEC-Russia oil price war. The S&P energy sector—which includes oil and gas companies but excludes renewable energy—was far and away the worst performer in the S&P 500 since 2010, placing dead last among all sectors for stock price returns in both 2018 and 2019 and losing 37% through the first half of the year compared to a 4% decline in the overall stock market.³

The bleak results stemmed from mounting financial pressures and a deteriorating

³ Yardeni. Performance 2020 S&P 500 Sectors & Industry.

outlook for the oil and gas sector. Cash flow losses were just one of many signs of distress in the shale industry:

- **Mounting bankruptcies.** Almost \$50 billion in additional debt will need to be restructured, just based on bankruptcy filings among producers in the first half of the year, according to Haynes & Boone. The law firm has tracked more 240 exploration and production companies that have filed for bankruptcy over the past five years, involving \$171 billion of debt.
- **Falling revenue.** Among this cross-section of companies, revenues fell by a jaw-dropping \$21.3 billion year-over-year, from \$33 billion to \$11.7 billion.

Persistent financial underperformance has soured investors on the shale industry, making it harder for shale oil and gas producers to raise new money from debt and equity markets. As the U.S. Energy Information Agency recently remarked: "The oil and natural gas industry was already headed toward relying on capital from cash flow instead of debt and equity, and it was capital constrained even before the current market turbulence. The current economic downturn has accelerated and exacerbated this trend, leaving producers much more dependent on internal sources of capital because outside sources are less available or may require higher rates of return."⁴

In terms of output, fracking has succeeded beyond expectations. Yet investors now realize that it has failed as a financial endeavor: It consistently burns through more cash than it produces. And while investors may once have held out hope that the industry would eventually turn the corner, recent market turmoil suggests that the hoped-for corner has consistently moved beyond financial reach. Even if global oil and gas markets stabilize, IEEFA expects that cautious investors will continue to view fracking companies as high-risk enterprises with a terrible track record, weak financial fundamentals, and an unproven, speculative business model.

Data and Methods

This report tracks the financial performance of 34 oil and gas exploration and production companies that operate principally in North America. As of June 2020, 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 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 initial public offering within 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;

⁴ Energy Information Administration. Trends and Expectations Surrounding the Outlook for Energy Markets. August 2020, p. 12.

- Derived much of their revenues from midstream (transportation) operations, downstream (refining and petrochemicals) operations, drilling and oilfield services, or from exploration and production operations outside North America; or
- 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 compiled from quarterly and annual financial filings, supplemented and cross-checked with revenue data from Reuters and Morningstar.

The list of companies included in this report may not match 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, and similar events.

Free Cash Flow: 2016-1H 2020, in Millions

Company Name	Eikon ticker	Mstar ticker	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20
US CURRENCY																				
Antero Resources Corporation	AR	AR	(170)	(197)	(655)	(232)	(122)	(426)	524	(186)	(4)	(266)	(146)	287	67	(124)	(94)	(168)	(111)	(148)
Apache Corporation	APA	APA	(326)	266	211	330	(58)	40	(219)	(95)	(262)	96	64	(25)	(265)	53	(47)	165	(29)	(251)
Cabot Oil & Gas Corporation	COG	COG	(25)	18	20	10	61	76	(4)	1	117	43	(18)	69	390	101	72	95	56	(46)
Callon Petroleum Company	CPE	CPE	(35)	(1)	(2)	(31)	(13)	(37)	(67)	(72)	(19)	(79)	(41)	(7)	(119)	(16)	(30)	0	(33)	(108)
Chesapeake Energy	СНК	СНК	(763)	(623)	(127)	(811)	(432)	(826)	(304)	(185)	148	(232)	(57)	(126)	(74)	(178)	(264)	(124)	(121)	27
Cimarex Energy Co.	XEC	XEC	(100)	(25)	57	(28)	(70)	(25)	(82)	(4)	41	(43)	(66)	(50)	(100)	13	13	96	16	(19)
CNX Resources	CNX	CNX	52	58	99	83	108	(57)	32	(67)	27	(73)	(58)	(127)	10	(77)	(31)	(114)	115	9
Concho Resources Inc.	СХО	схо	(19)	28	63	(1,146)	(52)	(36)	(719)	(31)	(5)	124	(85)	(198)	(315)	(37)	(82)	30	241	343
Continental Resources	CLR	CLR	(82)	(50)	112	(18)	75	(46)	(140)	237	258	11	98	175	(32)	(21)	25	284	(44)	(334)
Devon Energy	DVN	DVN	(2,211)	(155)	303	(125)	329	290	228	404	236	(48)	286	59	(122)	124	(40)	168	(31)	(201)
Diamondback Energy Inc.	FANG.o	FANG	(34)	(24)	(699)	(103)	(1,722)	(178)	(302)	(162)	(147)	(192)	(172)	(1,407)	(411)	(147)	(402)	(8)	(51)	(257)
EOG Resources Inc.	EOG	EOG	(282)	(112)	106	64	(49)	51	(133)	271	111	258	540	783	(393)	1,124	571	439	896	(360)
EQT Corporation	EQT	EQT	(113)	(215)	(510)	(688)	(466)	(217)	(78)	448	175	(327)	(252)	(351)	500	49	(173)	(127)	244	191
Gulfport Energy Corporation	GPOR.o	GPOR	(73)	(55)	(88)	(204)	(1,384)	(140)	(130)	(99)	(80)	(95)	22	33	(5)	(107)	79	33	17	(45)
Hess Corporation	HES	HES	(680)	(418)	(197)	(161)	(41)	(315)	(425)	(211)	(190)	(68)	(117)	217	(433)	51	(266)	(539)	(373)	(313)
HighPoint Resources	HPR	HPR	(23)	(17)	61	(8)	(20)	(46)	1	(53)	(35)	(118)	(11)	(60)	(54)	(109)	(21)	32	37	(88)
Laredo Petroleum Inc.	LPI	LPI	(51)	(11)	(89)	10	(50)	(34)	(40)	(55)	(56)	(50)	(37)	(25)	(78)	45	20	(116)	(50)	(48)
Marathon Oil Corporation	MRO	MRO	(372)	(89)	38	358	218	(70)	34	(38)	(13)	129	194	171	(100)	150	65	84	81	(317)
Matador Resources Company	MTDR.K	MTDR	(83)	(77)	(89)	(71)	(164)	(85)	(126)	(146)	(84)	(162)	(562)	(107)	(157)	(65)	(86)	(66)	(139)	(111)
National Fuel Gas	NFG	NFG	26	24	29	39	105	93	(2)	(45)	72	87	(83)	(73)	27	29	(78)	(31)	26	77
Noble Energy Inc.	NBL	NBL	(245)	(127)	262	(80)	(51)	(287)	(200)	(160)	(204)	(499)	(110)	(130)	(235)	(78)	(156)	(57)	3	(327)
Northern Oil and Gas	NOG	NOG	35	(15)	11	(22)	9	(22)	3	(36)	(12)	(84)	(88)	(47)	21	(13)	(155)	(81)	(4)	16
Oasis Petroleum Inc.	OAS	OAS	(149)	10	(77)	(763)	12	(54)	(102)	(56)	(547)	18	(130)	(75)	(63)	(80)	60	85	(40)	(171)
Ovintiv	ovv	ονν	(203)	(133)	(86)	(295)	(339)	(199)	(118)	(144)	(129)	(120)	347	210	(229)	137	165	157	(241)	(136)
Parsley Energy Inc. Class A	PE	PE	(315)	(442)	(339)	(559)	(719)	(1,423)	(262)	(241)	(240)	(227)	(157)	(175)	(165)	(9)	(28)	40	95	(141)
PDC Energy Inc.	PDCE.o	PDCE	(22)	(16)	(55)	(935)	15	(74)	(68)	(34)	(174)	(62)	(58)	45	(90)	(25)		101	(65)	(96)
Penn Virginia Corporation	PVAC.o	PVAC	15	17	(13)	22	(9)	1	(10)	(16)	(39)	(42)	(49)	(28)	(17)	(4)	(26)	5	10	6
Pioneer Natural Resources Company	PXD	PXD	(440)	<mark>(</mark> 138)	(6)	20	(155)	(248)	(251)	46	(314)	64	(104)	(187)	(209)	(43)	(25)	172	143	(101)
QEP Resources Inc.	QEP	QEP	(119)	8	162	(593)	(96)	(163)	(169)	(947)	(247)	(186)	27	(78)	(87)	(36)	(4)	128	(16)	(10)
Range Resources Corporation	RRC	RRC	(36)	(56)	(72)	39	9	(108)	(123)	(174)	36	(115)	20	26	46	(14)	(74)	(25)	(17)	(50)
SM Energy Company	SM	SM	(73)	(33)	7	(2,161)	(95)	(118)	(129)	(121)	(161)	(275)	(80)	(100)	(131)	(67)	(12)	7	79	(57)
Southwestern Energy Company	SWN	SWN	(104)	28	22	(41)	(28)	(13)	(113)	(17)	62	(82)	(17)	(30)	184	(227)	(95)	3	(68)	(150)
Whiting Petroleum Corporation	WLL	WLL	(217)	59	71	129	(54)	(94)	(200)	69	55	99	(67)	48	(47)	(9)	(61)	67	(110)	(47)
WPX Energy Inc.	WPX	WPX	(166)	(36)	(124)	16	(215)	(185)	(227)	(27)	(176)	(56)	(129)	(232)	(179)	39	(44)	79	(58)	(29)
			(7,403)	(2,551)	(1,594)	(7,957)	(5,461)	(4,977)	(3,922)	(1,947)	(1,801)	(2,571)	(1,094)	(1,516)	(2,865)	427	(1,243)	815	460	(3,291)
CANADIAN CURRENCY				, ,	() 1	, , /			,1	1	, ,	, ,	, <i>i</i> 4	, ,1			, ,			, ,
Arc Resources Ltd	ARX.TO	AETUF	79	(63)	4	(17)	(69)	(28)	(108)	(52)	(15)	44	61	93	(84)	21	(11)	27	15	57
Crescent Point Energy Corp	CPG	CPG	(11)	324	(23)	(162)	(264)	(20)	(104)	(57)	(300)	128	49	39	20	348	28	25	(4)	(16)
Enerplus Corp	ERF	ERF	23	13	41	(151)	31	(19)	(14)	5	45	(9)	5	75	(6)	67	(86)	88	(9)	(17)
Tourmaline Oil Corp	TOU.TO	TRMLF	(257)	94	(39)	(1,083)	(61)	85	(199)	(53)	53	91	(96)	(66)	(3)	100	(179)	(39)	24	26
Whitecap Resources Inc	WCP.TO	SPGYF	34	(519)	55	(1,000)	(13)	80	(15)	(869)	(26)	158	53	67	11	172	(8)	64	22	38

Source: Company reports.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. 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.

Tom Sanzillo

Tom Sanzillo, director of finance for IEEFA, is the author of numerous studies on the oil, gas, petrochemical and coal sectors in the U.S. and internationally, including company and credit analyses, facility development, oil and gas reserves, stock and commodity market analysis and public and private financial structures. Sanzillo has experience in public policy and has testified as an expert witness, taught energy industry finance and is quoted frequently in the media. He has 17 years of experience with the City and the State of New York in senior financial and policy management positions. As the first deputy comptroller for the State of New York Sanzillo oversaw the finances of 1,300 units of local government, the annual management of 44,000 government contracts, and over \$200 billion in state and local municipal bond programs as well as a \$156 billion global pension fund.

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