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PDC Energy Inc: (PDCE)

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Sector: Energy
Industry: Oil and Gas
Current Price: 50.25
Target Price: 55.25

PDC Energy (PDCE) Inc is an exploration company. The headquarters of PDCE Inc is located in Denver, Colorado. The company's operations are production, exploration and marketing crude oil, natural gas and natural gas liquid (NGLs). Operation of PDC Energy is located only in the United States: Wattenberg Field in Colorado, Delaware Basin in Texas and the Utica Shale in Ohio.

BUY

Current Price:	$50.25
Target Price:	$55.14
Market Cap:	3.6B
EBITDAX:	$608.3
EBITDAX Margin :	64.8%

Thesis:

This report will explain why we should buy the stock of PDCE because after analysis of the company, the stock PDCE is undervalued. To support this position, the report will discuss how companies in the energy sector are affected by the prices of oil and gas, especially the company PDC Energy Inc. This report will describe how the prices of oil and gas are linked to the profitability of PDC Energy Inc, as well as how the forecast of the production of the company will impact the revenue in the future along with the future of oil prices.

Catalysts:

- Short Term (within the year): The company just released the annual report of 2017.
- Mid Term (1-2 years): Oil price is going to increase. Thus, the growth profit is going to increase dramatically.
- Long Term: The company will expand its operation

Major development from previous years:

In 2016, the company increased its production by 44% to reach 22.2 barrels of oil equivalent (MMBoe) from the Wattenberg Field composed of 61 % crude oil and natural gas liquid, and 39 % natural gas. Furthermore, the Company has proved reserves of 341 million barrels of oil equivalent and owned an interest in 2,900 gross productive wells. According to the 10-K, at the end of December 2017, PDCE owned approximately 2,800 gross (2,300 net) productive Wells, and 32% of this acquisition are horizontal. The company produced 31.8 MMBoe in 2017. It means that the company increased its production by 44% compared to 2016. The average production in 2017 was 97 MBoe per day. It represents an increase of 33% compared to 2016. PDCE had 452.9 MMboe of proved reserves, and 32% are proved developed reserves. 58% of their reserves in 2017 were liquid, which includes crude oil and natural gas liquid. Indeed, their 452.9 MMBoe of their total proved reserves represented an increase of 111.5 MMBoe (33% compared to 2016).
At the beginning of 2018 (January 5), PDCE closed an acquisition in Wattenberg Field from Bayswater Exploration and Production, LLC. The cost of this acquisition was $186 million. In addition to this $186 million, PDCE invested $15 million during 2017 to complete drilled but uncompleted wells acquired in this acquisition.

Industry Outlook:

As shown by the chart below, the oil price at the beginning of 2015 was $53.45 and it collapsed to $34.73 at the end of the year. The drop off for the oil price during this period was a result of several factors. The price of the oil is determined by the supply and demand. Moreover, the demand is closely linked to the economic activity. Therefore, during this period the supply was much higher than the demand. The demand was low due to slowing global growth. Also, the American production increased thanks to unconventional hydrocarbon. Concerning the natural gas price in 2015 it followed the oil price for many reasons. First, the natural gas price is indexed by the oil price. This means if the oil price goes down the natural gas will go down and if the oil price goes up, the price of the natural gas will go up. However, oil price is not the only cause for the decrease of the natural gas. The natural gas price is linked by five other factors. First, the natural gas is driven by the outside temperature. Secondly, it is linked by electricity consumption. Thirdly, the price of natural gas is impacted by the supply. Fourthly, the natural gas follows the currency exchange rate of two currencies. Finally, the natural gas is driven by the global macro environment. As we can see from the chart, the natural gas went down in the same way as the oil price for the reasons listed below. So, in the past two years, the company saw a drop in its revenue especially due to the drops in the oil and natural gas prices. So, energy producers are confined to two risks. The first risk is the price risk, and second risk is the volume of production. Thus, energy producers have to focus on these two risks when they have to choose a coverage strategy. The price risk can be covered by the derivative assets, while the volume risk can be covered by weather derivatives.

Segment:

In Millions of USD except Per Share 12 Months Ending	2014 Y 12/31/2014		2015 Y 12/31/2015		2016 Y 12/31/2016		2017 Y 12/31/2017	
Revenue	545.9	100.0%	631.1	100.0%	716.8	100.0%	938.9	100.0%
Oil and Gas Exploration and Pr...	784.6	91.6%	584.4	98.2%	374.2	97.7%	913.1	97.3%
Commodity price risk manage...	–		–		–		13.3	1.4%
Well operations, pipeline incom...	–		–		–		12.5	1.3%

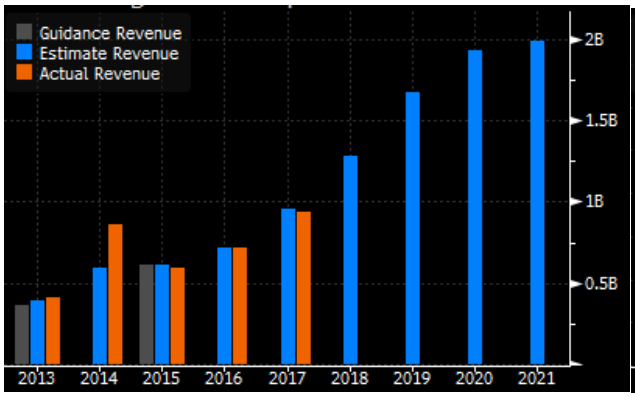
The main activity of PDC Energy is the oil and gas production and exploration. It represents 97.3 % of their revenue ($913.1 million). Secondly, the commodity price risk management represent 1.4% of their revenue, and well operation and pipeline income represent 1.3 % of the revenue. The crude oil represents $625 million (68.45%) of the revenue in 2017. The natural gas represents 17.34% ($158.3 million), and the natural gas liquid allowed the company to earn $129.9 million representing 14.21% of revenue.

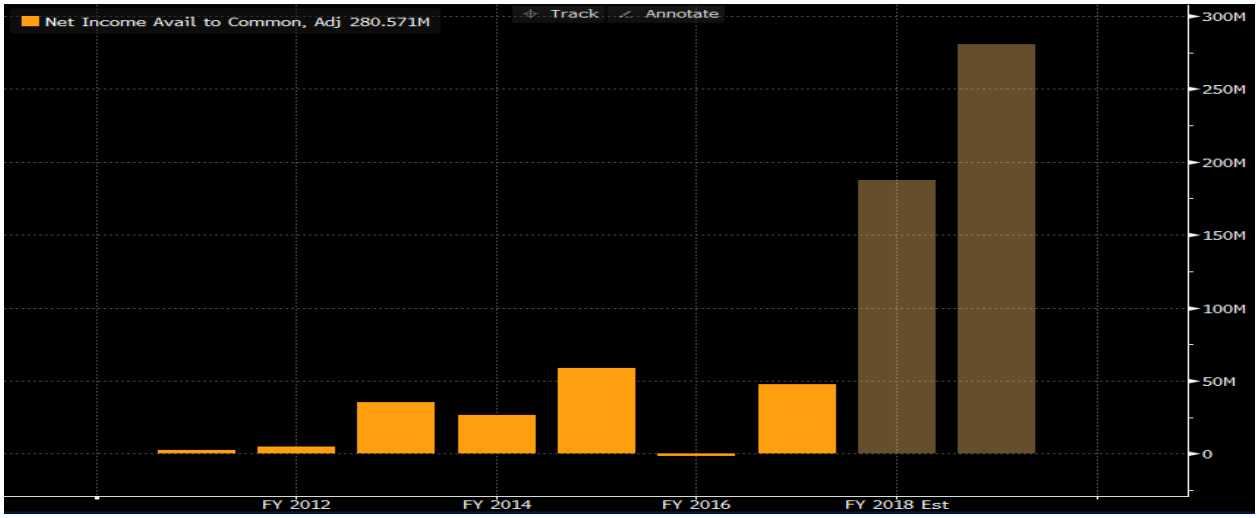
Earning Performance:

As I stated earlier, during 2015 and 2016 the oil and gas prices saw a decrease. This decrease has resulted in a negative impact to companies that are in the industry. However, as we can notice in the graph, PDCE has continued to increase its net income while other oil energy companies saw a huge decrease for their net income.

It means that PDCE is able to deal with volatile markets. However, the company saw a decrease in its net income in 2016 (-1.5 million). It was the first time in six years that the net income was negative. This negative net income was principally due to abnormal derivatives. The company lost $333.88 million because of abnormal derivatives. The abnormal derivatives were composed of a loss of $125,681,000 in commodity price risk management and a loss of $208,200,000 for the net settlement on commodity derivatives. Concerning the estimates net income for the next few years, analysts are optimistic. As we can see in the graph, the net income is going to increase to reach approximately $550 million in 2021.

PDCE's revenue saw its highest increase in 2014 due to the price of oil. However, in 2015 the revenue of the company saw a decrease due to the decrease of oil prices. Moreover, the revenue remained good compared to its competitors, because of their position in derivatives in 2015. In fact, in 2016, the revenue of PDCE increased compared to 2015 even if the oil prices did not increase. This increase is mostly due to their gain realized on derivatives. Concerning the estimate revenue for the next years, analysts are bullish about it. The revenue should increase to reach approximately $2 billion in 2021. This increase in revenue, will allow the company to increase its EBITDAX. EBITDAX forecast are very positive. The EBITDAX of the company should increase to reach $1.2 Billion in 2019 and $1.5 billion in 2021.





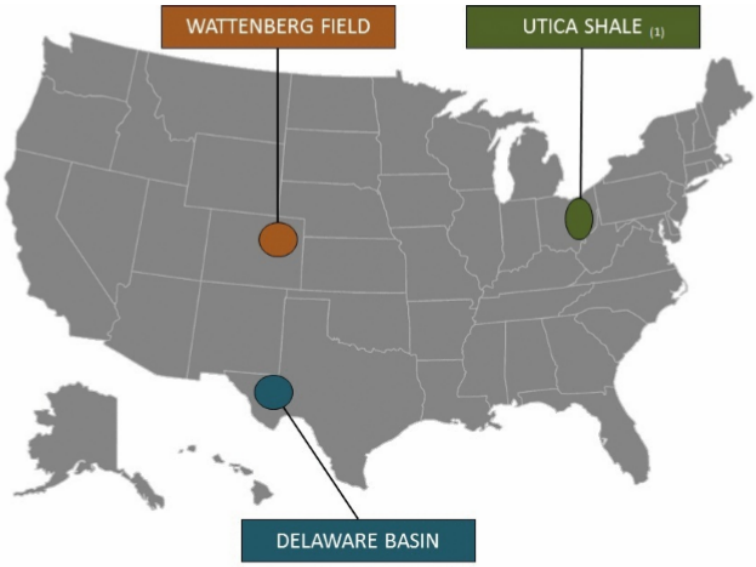
Potential Business Growth:

The long-term strategy of PDC Energy is focused on generating stockholder value. This strategy is possible through acquisitions, explorations, and development of crude oil and natural gas properties. The company is focused on the growth of their reserves, production, and their cash flow. Their activities are focused mainly in two areas: Wattenberg Field and the Delaware Basin.

Their inventory drilling locations support their planned growth over the next coming years.
According to the 10-K, the company is expecting thanks to this, to increase their proved reserves, production, and cash flows. Furthermore, PDCE believes they can extract more value from some acquisition thanks to optimization opportunities and improve in their working interests in their development drilling locations.
In 2017, the company completed two huge acreage exchanges in the Wattenberg Field, creating two development areas: Prairie and Plains.
When they closed the transaction, it received an aggregate of 15,900 acres in exchange of an aggregate of 16,200 net acres. In addition, according to the company and as it stated earlier, the company closed the Bayswater acquisition at the beginning of 2018. The company acquired 7,400 net acres or 24 operating horizontal wells. The strategic acquisitions of PDCE show their objectives to growth and to create value. Indeed, PDC Energy examines and evaluates acquisition opportunities that will allow them to growth. PDCE seek properties with large undeveloped drilling upside where it believes they can utilize complete small bolt on acquisitions to optimize their portfolio.

Development drilling

The following map presents the general locations of our development and production activities as of December 31, 2017:



(1) In February 2018, we entered into a PSA to sell the Utica Shale properties.

Strength of the company:

The company has an experienced team of management, engineering, geoscience and commercial professionals who identify and evaluate acquisition. The strengths of the company are numerous. First, they have multi-year project inventory in crude oil, natural gas and natural gas liquid plays. Second, the company has a strong liquidity position. Furthermore, they are going to increase their strong liquidity position through investment in projects

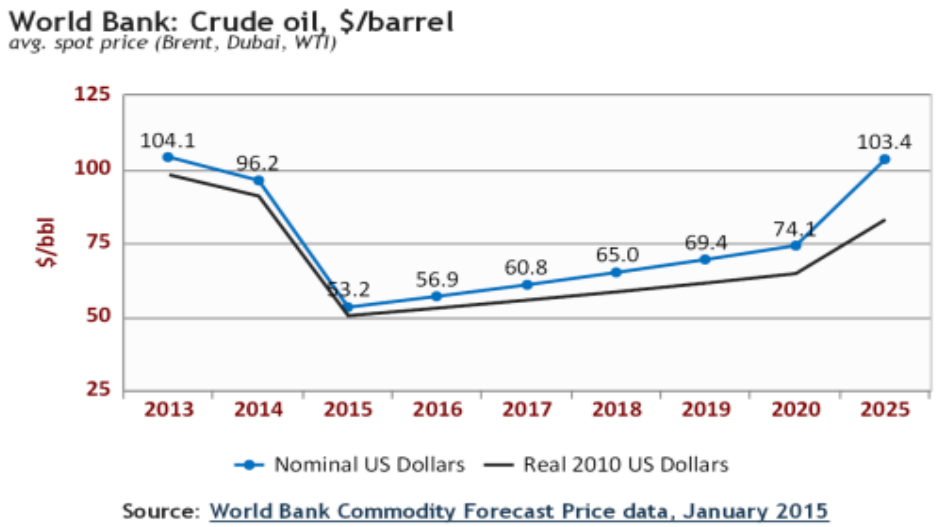
with attractive rate of return. Third, they are using highly competitive technology to focus on efficiency. This strength will allow the company to decrease their operating cost and to go in areas that are less risky for them. Finally, they have a commodity derivative program that allow them to protect their investment returns and cash flow. This program was very important particularly during the recent decrease in the oil price (2015-2016). The commodity program allows them to protect their cash flow, borrowing base, and liquidity during bad periods for the oil prices. For example, in 2017, this program allowed them to cover 11.9 MMBbls and 6.6 MMBbls of crude oil for 2018 and 2019.

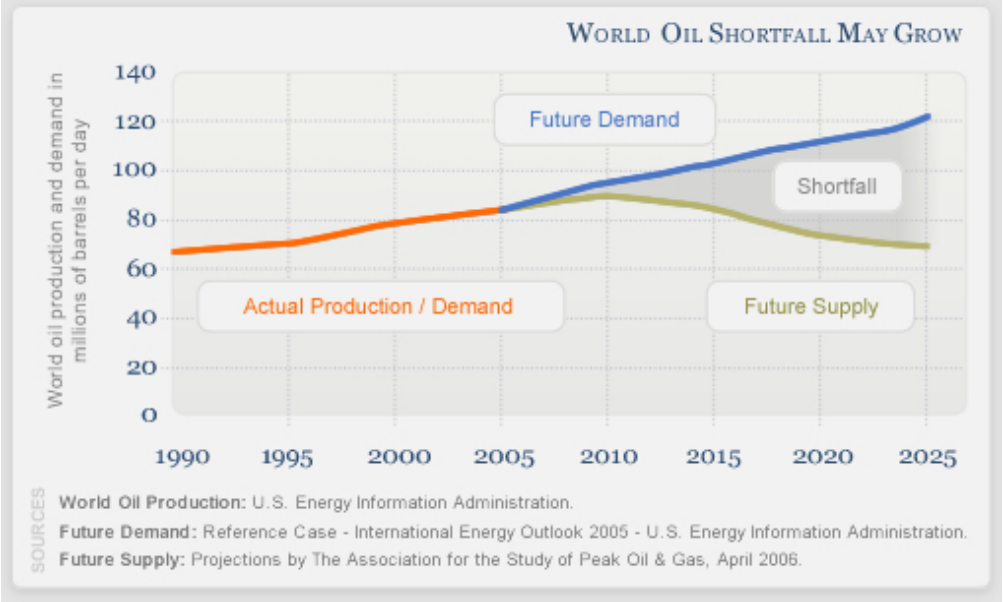
Profitability:

PDCE	2017	2018	2019	2020
EBITDAX MARGIN	0.74	0.74	0.74	0.79
Return on Invested capital	-3.00%	10.00%	11.00%	9.00%
WACC	8.42%	5.30%	5.36%	5.34%
Return on equity	-4.90%	13.10%	14.40%	10.70%
Capex	758,000	876,000	995,000	1,061,000
Revenue	745,848	974,791	1,083,447	1,203,584
Revenue/Capex	**0.98**	**1.11**	**1.09**	**1.13**

Total volume production in M	2018	2019	2020	2021
Crude oil	16,580.00	19,896.00	20,890.80	21,935.34
NGLs	7,805	9,366	9,834.30	10,326
Natural Gas	13,345	16,014	16,814.70	17,655
Average Realized prices	**2018**	**2019**	**2020**	**2021**
Crude oil Price	65	69.4	80	95
NGLs	20.37	20.37	20.37	20.37
Natural Gas	3.00	2.94	2.97	3.17
Total revenues in M	**1,276,723**	**1,618,649**	**1,921,528**	**2,350,253**

Based on my own model and my forecast thanks to the forecast of the oil price by the World Bank, I can predict that the company will create value for the next few years. Indeed, in 2017 the company PDC Energy destroyed value because the WACC was higher than the Return on Invested Capital (ROIC). However, we can notice from the next few years the ROIC will be higher than the WACC. This means PDCE will create value and so it will mean the company is growing.

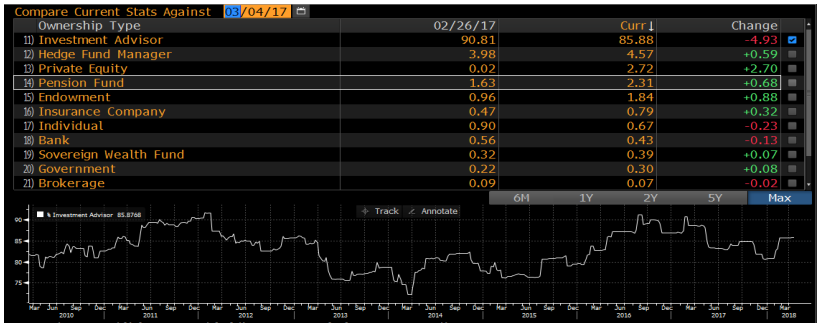




Furthermore, if we compare PDCE with its competitors we can notice PDCE has higher percentage growth. However, as it stated in the previous paragraph, PDCE will increase its return on capital and Return on Invested Capital in the next years. Currently, the ROIC and ROC of the company is lower than its competitors. Moreover, PDCE is above the average concerning some profitability ratios as it shows on the table. This means PDCE is better than its competitors in terms of profitability. The operating income margin is 3.71 pts higher than the average of its competitors, and the EBITDAX margin is also higher by 11.57 pts higher.

Name	Sales Growth (%)	EBITDA Growth (%)	EBITDA Margin	Operating Income Margin	Net Income Growth	Net Profit Margin	apex/Sales (%)	Return on Invested
Average	25.16%	46.02%	53.22%	11.12%	62.00%	3.94%	80.53%	3.16%
PDC ENERGY INC	30.99%	28.55%	64.79%	14.83%	48.15%	5.07%	80.73%	2.17%
DENBURY RESOURCES INC	2.23%	-8.16%	36.18%	16.73%	--	7.80%	33.37%	2.28%
SM ENERGY CO	6.78%	49.57%	46.28%	2.08%	69.39%	-8.47%	77.61%	0.22%
WHITING PETROLEUM CORP	11.16%	31.42%	56.74%	-6.96%	68.47%	-11.89%	57.50%	0.06%
MATADOR RESOURCES CO	74.62%	128.74%	62.12%	28.91%	--	27.18%	153.45%	11.06%

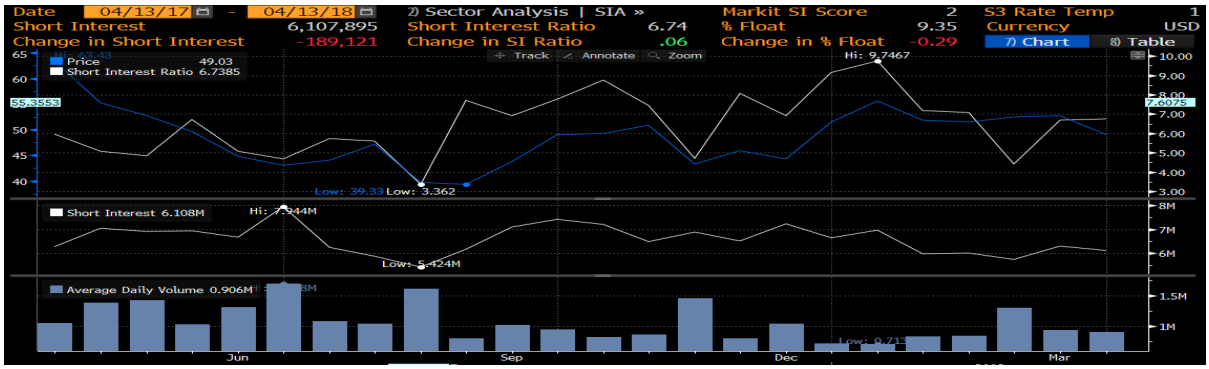
Ownerships:



Compare Current Stats Against 03/04/17

Ownership Type	02/26/17	Curr	Change
11) Investment Advisor	90.81	85.88	-4.93
12) Hedge Fund Manager	3.98	4.57	+0.59
13) Private Equity	0.02	2.72	+2.70
14) Pension Fund	1.63	2.31	+0.68
15) Endowment	0.96	1.84	+0.88
16) Insurance Company	0.47	0.79	+0.32
17) Individual	0.90	0.67	-0.23
18) Bank	0.56	0.43	-0.13
19) Sovereign Wealth Fund	0.32	0.39	+0.07
20) Government	0.22	0.30	+0.08
21) Brokerage	0.09	0.07	-0.02

As the chart shows us, 85.88% is owned by Investment Advisor and 4.57% by the hedge funds managers. In one year, the percentage owned by the hedge funds increased by 0.59%. It means that the hedge funds have an interest in buying the stock because they are optimistic for the future of the stock and in the company growth. Furthermore, the short interest of PDCE is 6.74 which is shows that investors are bullish concerning this stock.



Conclusion:

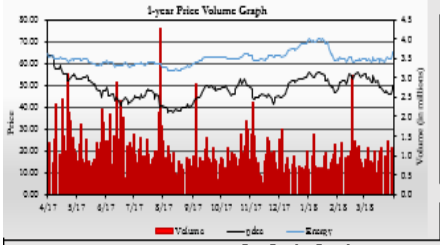
PDC Energy Inc is a company in the energy company specialized in the oil and gas production. As the paper demonstrated, the company is very sensitive to the price of the oil and gas. In 2015 and 2016, the revenue and the EBITDAX of the company decreased because of the drop off of the oil and gas prices. However, the forecasts of the production for the company and the forecast of the oil and gas prices should increase the revenue of PDCE and the EBITDAX should increase too in a mid-term range. As the write-up showed the stock of PDCE will increase thanks to the rise of the oil and gas prices in few years and thanks to the strategy of the company.

PDC Energy, Inc. (pdce)

CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by Al Capone	Current Price:	$51.25	Intrinsic Value	$50.91	Target 1 year Return: 7.59%
4/12/2018	Divident Yield:	0.0%	Target Price	$55.14	Probability of Price Increase: 57%



Description

PDC Energy, Inc., an independent exploration and production company, acquires, explores for, develops, and produces crude oil, natural gas, and natural gas liquids in the United States.

General Information

Sector	Energy
Industry	Oil, Gas and Consumable Fuels
Last Guidance	February 12, 2018
Next earnings date	May 3, 2018

Market Assumptions

Estimated Equity Risk Premium	5.00%
Effective Tax rate	21%

Market Data

Market Capitalization	$3,380.73
Daily volume (mil)	1.48
Shares outstanding (mil)	65.97
Diluted shares outstanding (mil)	65.84
% shares held by institutions	109%
% shares held by investment Managers	93%
% shares held by hedge funds	6%
% shares held by insiders	0.66%
Short interest	9.26%
Days to cover short interest	6.45
52 week high	$65.04
52-week low	$36.74
Volatility	42.57%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
12/31/2016	-16.62%	-41.16%
3/31/2017	6.63%	268.36%
6/30/2017	-0.61%	63.43%
9/30/2017	-1.91%	-40.76%
12/31/2017	5.63%	-33.51%
Mean	-1.3%	43.27%
Standard error	0.9%	4.4%

Market and Credit Scores

Recommendation (STARS) Value--5
Recommendation (STARS) Description--Strong
Quality Ranking Value--0
Quality Ranking Description--Lowest
Short Score--2
Market Signal Probability of Default % (Non-Ratings)--1.236%
CreditModel Score (Non-Ratings)--bb

Industry and Segment Information

LTM Revenues by Geographic Segments	LTM Revenues by Business Segments
United States--100%	Oil and Gas Exploration and Production--100%
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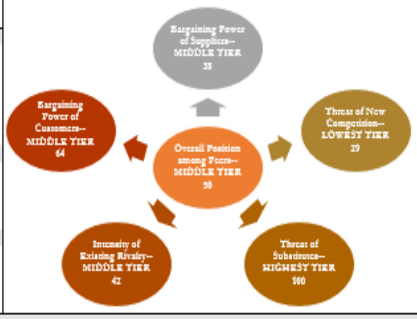
Peers

Parsley Energy, Inc.	Gulfport Energy Corporation
Energen Corporation	SM Energy Company
Diamondback Energy, Inc.	Cimarex Energy Co.
RSP Permian, Inc.	Oasis Petroleum Inc.
Carrizo Oil & Gas, Inc.	Whiting Petroleum Corporation

Management	Position	Total Compensation Growth	Stock Price Growth During Tenure
Brookman, Barton	CEO, President & Director	40.09% per annum over 5y	1.3% per annum over 5y
Meyers, R.	CFO & Chief Accounting Officer		0% per annum over 0y
Rosenner, Scott	Chief Operating Officer	44.63% per annum over 1y	35.97% per annum over 1y
Amidon, Daniel	Senior VP, General Counsel & Corporate Secre	13.67% per annum over 5y	1.3% per annum over 5y
Lauck, Lance	Executive Vice President of Corporate Develop	15.99% per annum over 5y	1.3% per annum over 5y
Lillis, James	Vice President Engineering & Technology		

Profitability	pdce (LTM)	pdce Historical	Peers' Median (LTM)
Return on Capital (GAAP)	2.7%	2.89%	6.48%
Operating Margin	13%	21.77%	59.54%
Revenue/Capital (GAAP)	0.21	0.13	0.11
ROE (GAAP)		7.6%	44.9%
Net margin		22.8%	19.9%
Revenue/Book Value (GAAP)	#VALUE!	0.33	2.25
Invested Funds	**pdce (LTM)**	**pdce Historical**	**Peers' Median (LTM)**
Cash/Capital	4.9%	2.7%	4.0%
NWC/Capital	-3.3%	-5.4%	-2.0%
Operating Assets/Capital	98.4%	102.4%	96.5%
Goodwill/Capital	0.0%	0.3%	1.5%
Capital Structure	**pdce (LTM)**	**pdce Historical**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.33	0.29	0.40
Cost of Debt	7.6%	8.3%	6.1%
CGFS Rating (F-score, Z-score, and default Probability)	B		
WACC	8.4%	11.3%	9.0%

Porter's 5 forces (Scores are percentiles)



Valuation

Forecast Assumptions	Explicit Period (6 years)	Continuing Period
Revenue Growth CAGR	5%	2%
Average Operating Margin	65%	63%
Average Net Margin	26%	15%
Growth in Capital CAGR	10%	2%
Growth in Claims CAGR	13%	2%
Average Return on Capital	6%	3%
Average Return on Equity	7%	4%
Average Cost of Capital	5%	5%
Average Cost of Equity Ke	8%	8%