



SOHN INVESTMENT CONFERENCE

DAVID EINHORN

May 4, 2015



I always look forward to Sohn. I am amazed by what it's turned into over 20 years. Lance, Doug, Mitch and Dan: Congrats! You have a lot to be proud of!

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The information contained within the body of this presentation is supplemented by endnotes which identify Greenlight's sources, assumptions, estimates, and calculations. This information contained herein should be reviewed in conjunction with the endnotes.

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I'd like to remind everyone that the information within this presentation is supplemented by notes that cover important details such as our sources, assumptions, estimates, and calculations, which will be posted online on our website later on today.

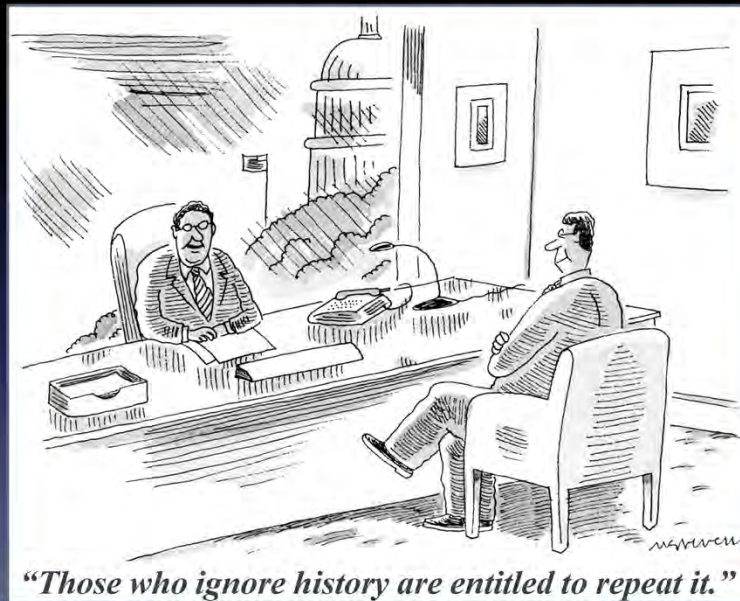


I'm not going to talk about St. Joe. But I do want to draw parallels between St. Joe and today's idea.

During the last housing boom, St. Joe, a Florida-based real estate company, invested heavily in land development but destroyed value. It had a million acres - practically an infinite supply - that aside from a few premium spots on the beach could not be developed profitably.

What is an infinite supply of negative return investment opportunities worth? Not much. By 2007, St. Joe's best option was to halt development and gradually liquidate its land. And that's what it did. By ceasing investment, the company avoided bankruptcy.

History repeats



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Today I'm going to describe a similar situation with certain energy companies. These companies have negative development economics, meaning that aside from a few choice locations, they don't earn a positive return on capital, but have a nearly infinite supply of negative return opportunities.

What should such a supply be worth? Not much. Yet, the share prices are very high and we believe are poised for a fall.

Meet the Frackers



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Meet the Frackers.

Not our wheelhouse



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Whether oil fracking uses immense amounts of scarce water, contaminates the groundwater, emits carcinogenic chemicals, or causes earthquakes is beyond the scope of this presentation.

This is Wall Street



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This is an investment conference, so we're going to stick to the matters at hand.



Profits and losses. We object to oil fracking because the investment can contaminate portfolio returns.

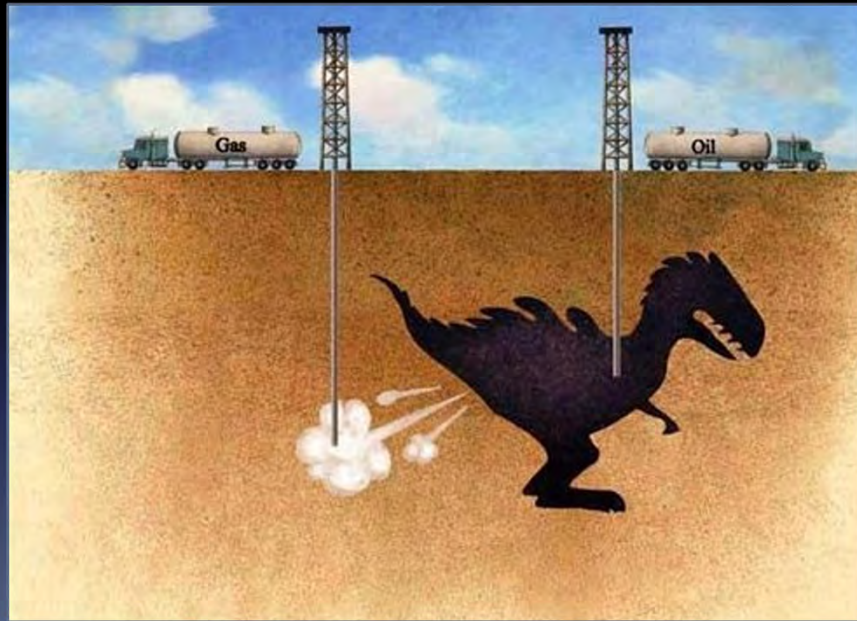
A brief history of oil



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First, a brief history of oil.

Source: Airplane 2- Classics Part Two at <https://www.youtube.com/watch?v=8dapalh7BjM&t=21s>



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It's a simple business.

Oil and gas companies acquire land that they believe has energy locked away beneath it.

Then they drill holes, install wells, extract the energy, and get it to market.

You can get rich in the oil business



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If they can sell the energy for more than they spend on the land and getting it out of the ground, they make a healthy living.

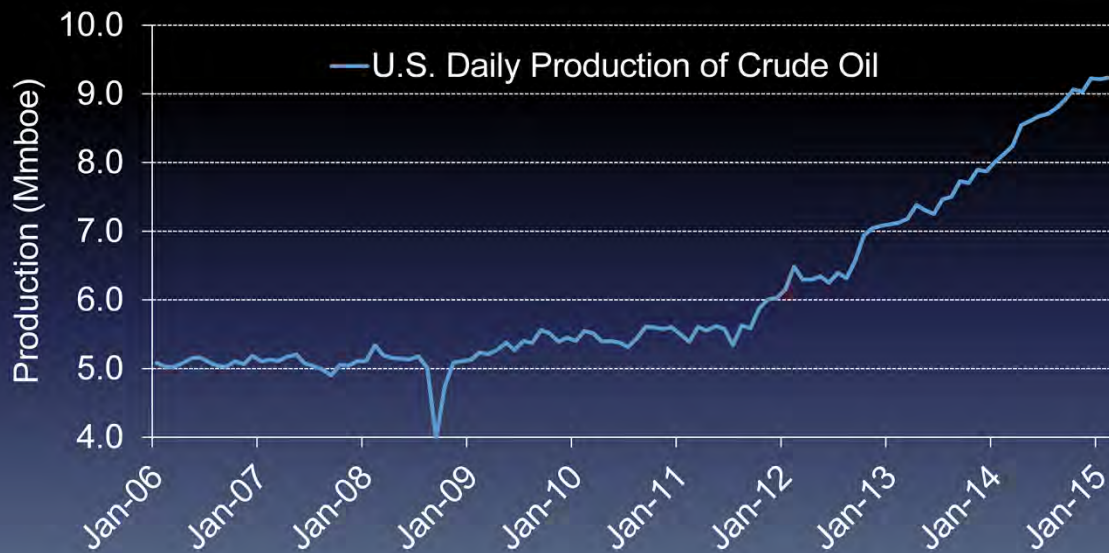
Staying rich is another matter



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But it's a boom and bust industry. And in the 80s, it busted.

U.S. oil production



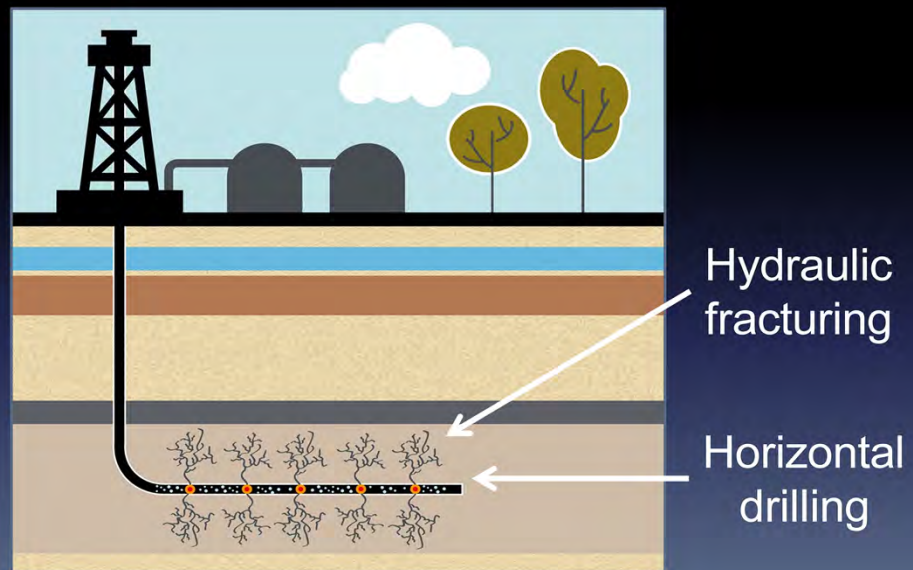
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Enter the frackers.

Over the last few years, they've led a production boom that has made our country more energy independent and, more recently helped cause oil prices to fall due to oversupply.

Source: U.S. Energy Information Administration, retrieved May 2015.

Fracking 101



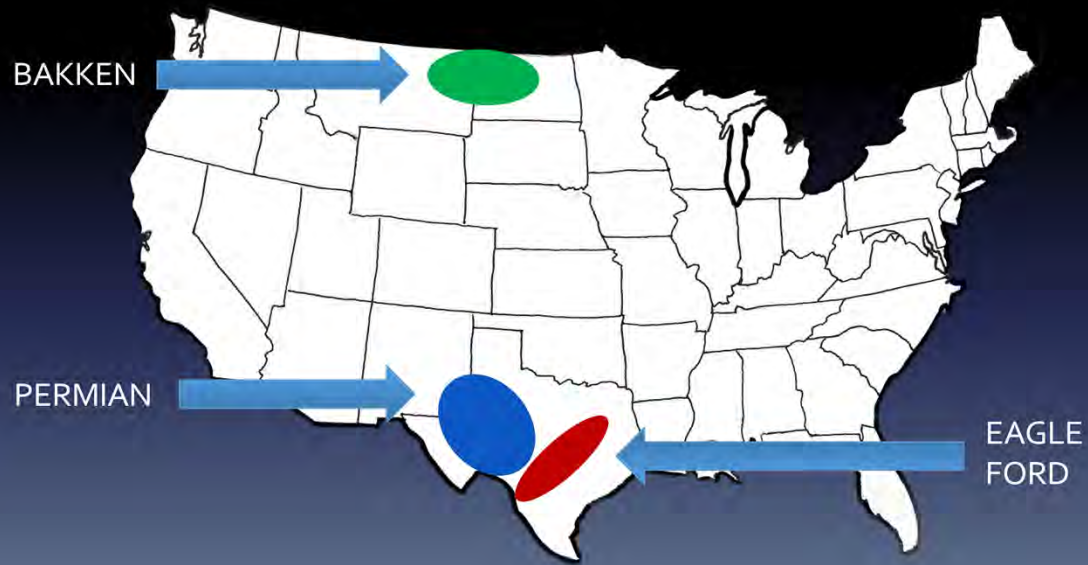
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Conventional drilling involves making a hole in the ground and sucking out pools of energy. But sometimes, the energy is stuck in the rocks.

Hydraulic fracturing, or fracking, pushes a bunch of water, chemicals and sand into the rocks, breaking them apart to release the trapped energy.

The best results come from combining fracking with horizontal drilling, where the well turns horizontally underground to better penetrate the energy bearing rock.

Major U.S. shale oil basins



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In some places, the rocks hold oil. Lots and lots of oil.

The frackers have found significant amounts in 3 major basins: the Bakken in North Dakota, the Eagle Ford in South Texas, and the Permian in West Texas.

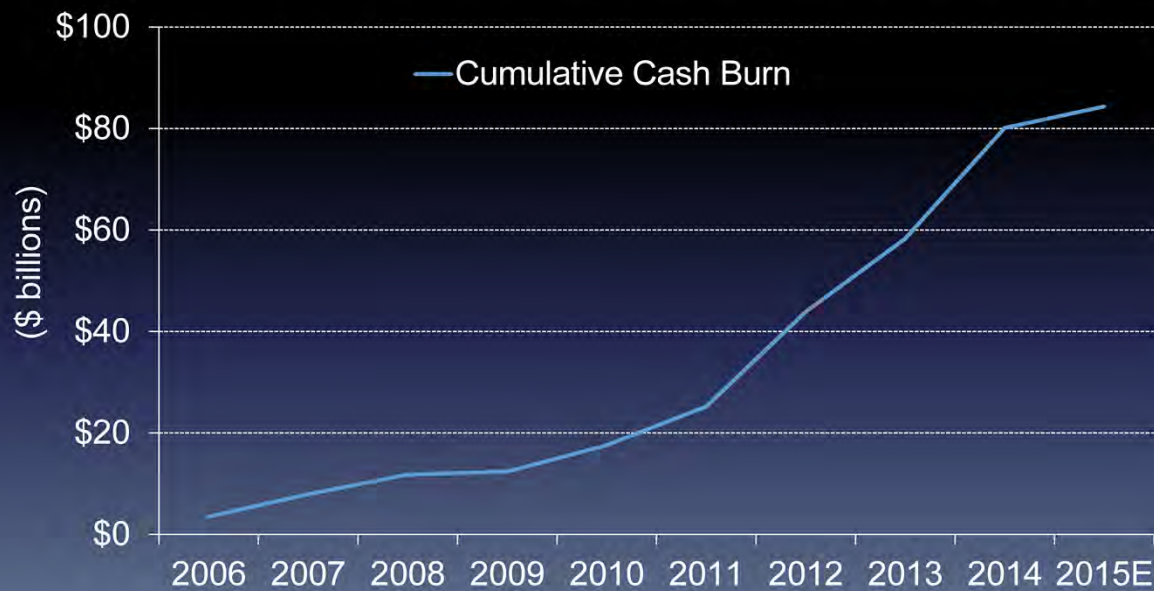


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Fracking is expensive. Buying the land, setting up infrastructure and drilling the holes costs money. Lots and lots of money.

So the frackers took their story to Wall Street, explaining how fracking is a new way to get rich in oil.

Billions and billions of dollars



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The large oil frackers have spent \$80 billion more than they have received from selling oil. Wall Street greased those skids by underwriting debt and equity securities that allowed them to garner billions in fees.

The banks are clearly incentivized to enable the frack addicts. What's less obvious is whether investors are furnished a clear analysis of the returns these companies actually generate.

Source: Greenlight calculations and estimates based upon historical and anticipated capital expenditures and cash from operations, retrieved April 2015 from Bloomberg L.P., for a basket of 16 publicly-traded exploration and production companies, selected in the sole discretion of Greenlight.

If you give a driller a dollar...

“I don’t mean to offend any Texans in the room, but if you ever met anybody from Texas, those guys know how to gamble, and if you let them stick a hole in the ground with your money, they’re going to do it.”

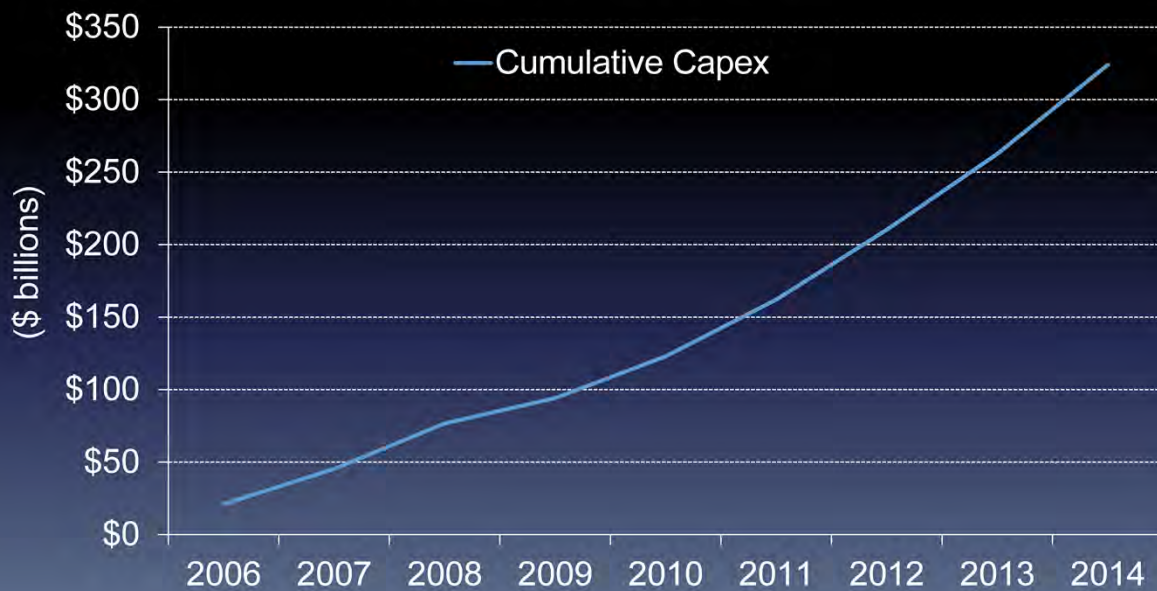
— Stanley Druckenmiller, Jan. 18, 2015

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Behind me is a quote from an investor I always listen to: Stan Druckenmiller. He said it better than I could. If you give a driller a dollar, he’s going to drill a hole.

Source: Source: <http://www.bloomberg.com/news/articles/2015-04-10/druckenmiller-recounting-soros-experiences-blasts-fed-policies>.

...he'll drill a hole



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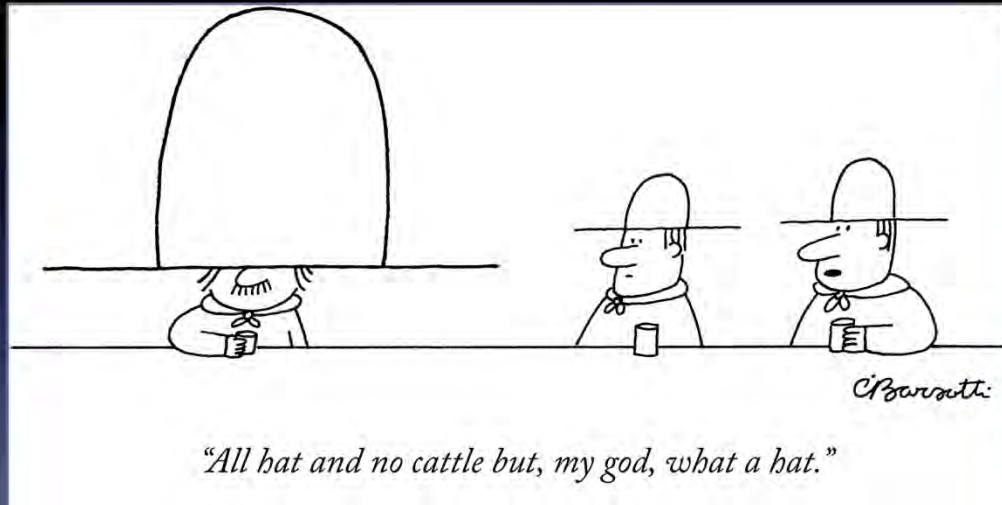
True to form, the frackers drilled holes.

In fact, all the capital these companies generated internally, plus proceeds from asset sales, plus financing from investors, went to drilling holes.

The top 16 oil frackers alone drilled a third of a trillion dollars' worth of holes.

Source: Greenlight calculations based upon historical capital expenditures, retrieved April 2015 from Bloomberg L.P., for a basket of 16 publicly-traded exploration and production companies, selected in the sole discretion of Greenlight.

All hat and no cattle

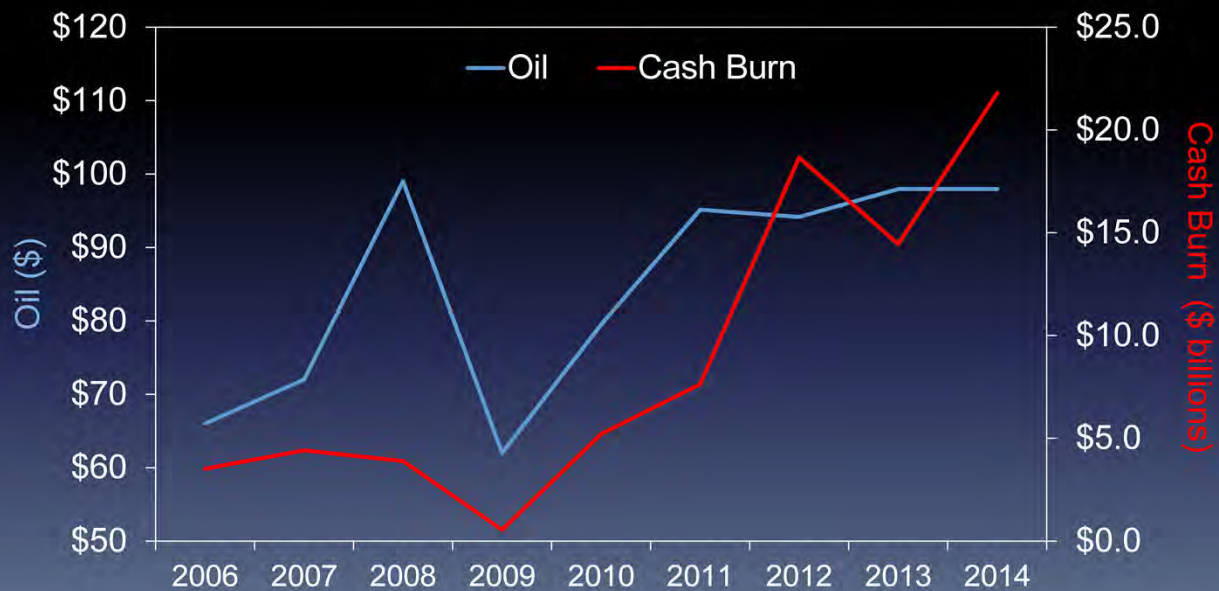


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As oil prices rose, it seemed like the frackers should have been drowning in cash.

But none of them generated excess cash flow, not even when oil was at \$100 a barrel. In fact, the opposite was true.

Addicted to frack



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They responded to higher oil prices with even more aggressive capital spending, financed ever more cheaply by Wall Street. The result was that higher oil prices led to even greater cash burn. Last year, with \$100 oil, the group burned \$20 billion.

Source: Historical oil prices from Bloomberg L.P. Cash burn figures are Greenlight calculations of historical capital expenditures and historical cash from operations, retrieved April 2015 from Bloomberg L.P., for a basket of 16 publicly-traded exploration and production companies, selected in the sole discretion of Greenlight.

Investing for “growth”



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The frackers insist they are “investing for growth”, which leads investors to ignore the GAAP financials in favor of non-traditional metrics like EBITDAX.

EBITDAX: Earnings before a lot of stuff



DILBERT © 2004 Scott Adams. Used By permission of UNIVERSAL UCLICK. All rights reserved.

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EBITDAX, in case you're wondering, basically stands for earnings before a lot of stuff. It's not an SEC-reported measure.

The capital spending for an oil producing well is done up front, but the oil comes out over many years. As the oil gets sold, companies expense the corresponding part of the prior capital spending. This is called Depletion, which is what the D in EBITDAX stands for.

Source: DILBERT © 2004 Scott Adams. Used by permission of UNIVERSAL UCLICK. All rights reserved.

Depleting asset



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But investing for growth is a fiction.

Unlike many businesses where investment spending works toward building a durable asset, a franchise value, and a recurring revenue stream, here the Capex goes toward reducing the assets one barrel at a time.

Once you extract the oil from the ground... that's it. Poof! It's gone.

The mantra from the frackers and the bankers that profiteer from funding them is that energy investors don't look at GAAP earnings: Depletion gets ignored because it's not a cash item, and Capex gets ignored because it's funding future growth.

Pay no attention to the man...



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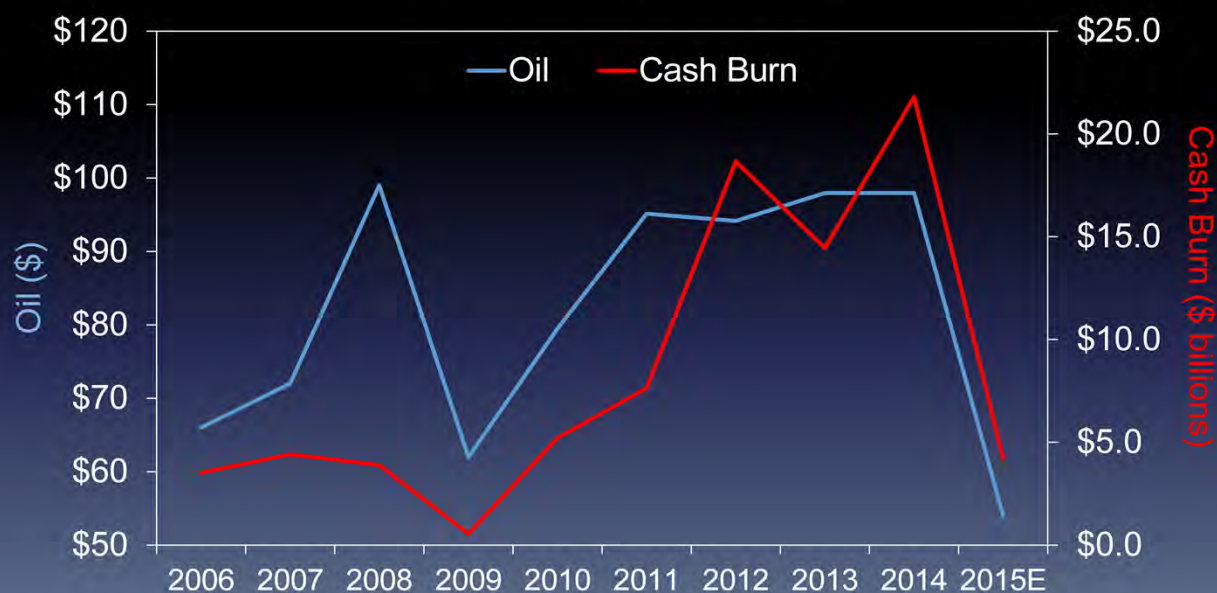
In truth, both get ignored because these metrics don't support the story they want to tell.

One useful rule of thumb: when someone doesn't want you to look at traditional metrics, it's a good time to look at traditional metrics.

In frack country, Capex has averaged 75% of revenues over the past 8 years. Depletion is a real expense.

By asking investors to ignore the Capex when it's spent, and the depletion when the oil is produced, the industry wants us to look only at the cash that comes out of the business while completely ignoring the cash that goes into it.

Burning cash



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Recently, oil prices have declined. Because the frackers have less revenue, they've been forced to cut Capex. Though they will continue to spend more dollars than they take in, production is no longer growing. A business that burns cash and doesn't grow isn't worth anything.

Source: Historical oil prices from Bloomberg L.P. Estimated oil price for 2015 based upon current price curve. Cash burn figures through 2014 are Greenlight calculations based upon historical capital expenditures and historical cash from operations, retrieved April 2015 from Bloomberg L.P., for a basket of 16 publicly-traded exploration and production companies, selected in the sole discretion of Greenlight. Cash burn figure for 2015 is Greenlight's estimate of anticipated capital expenditures and anticipated cash from operations based upon 2015 analyst estimates for the same company subset, retrieved April 2015 from Bloomberg L.P.

(Some of) the oil frackers



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The numbers I'm walking through today generally apply to the large publicly listed shale oil companies such as those shown here. Notably, I am *not* talking about the natural gas frackers, which are globally competitive, low-cost energy producers with attractive economics.

Let's drill down deeper into one of the biggest oil frackers in the business. It is well loved, well located, and well run.

The MotherFracker



Ticker: PXD

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We call it the Mother-Fracker, but everyone else will know it as Pioneer Natural Resources, ticker PXD.

Pioneer plays



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Pioneer owns assets primarily in the Permian Basin, America's biggest shale oil field. It also has some assets in Eagle Ford.

Source: Extract from Pioneer investor presentation on April 6, 2015 available at <http://investors.pxd.com/phoenix.zhtml?c=90959&p=irol-presentations>.



Price	\$171.56
Shares Outstanding	149.4M
Market Capitalization	\$25.6B
Net Debt	\$1.6B
Enterprise Value	\$27.3B
2014 P/E	36x
2015 P/E (est.)	226x
2016 P/E (est.)	118x
2014 Free Cash Flow	-\$0.3B

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It is the second largest pure play shale oil producer behind EOG, which I guess would be the Father-Fracker. Pioneer closed Friday at about \$172 a share, giving it a \$26 billion market cap, and an enterprise value of \$27 billion. It trades at a fancy multiple of last year's earnings, before oil prices fell.

Aided by its profitable hedges, Pioneer will barely avoid reporting a loss this year. Next year, prices are expected to recover enough for Pioneer to earn about a buck and a half a share.

Source: Bloomberg L.P.; Pioneer Schedule 14A dated April 9, 2015 available at <http://investors.pxd.com/phoenix.zhtml?c=90959&p=irol-sec>; and Greenlight calculations. Greenlight calculations reflect adjustments to exclude mark-to-market derivatives, discontinued operations, and other unusual items.

Once you frack you never go back



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Since 2006, Pioneer has spent close to \$19 billion in gross capex. That was funded by \$12 billion in cash from operations, \$5 billion of asset sales, and \$2 billion of equity raises.

Oh...*that* two billion dollars.

Source: Greenlight calculations based upon Pioneer Forms 10-K for years 2006-2014, inclusive, available at <http://investors.pxd.com/phoenix.zhtml?c=90959&p=irol-sec>.



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We think that in the current environment Pioneer earns a negative economic return on its Capex. Let's do the math.

Proved reserves

[T]hose quantities of oil and gas, which ... can be estimated with reasonable certainty to be economically producible ... under existing economic conditions [...]

[E]conomically producible ... a resource which generates revenue that exceeds, or is reasonably expected to exceed, the costs of the operation.

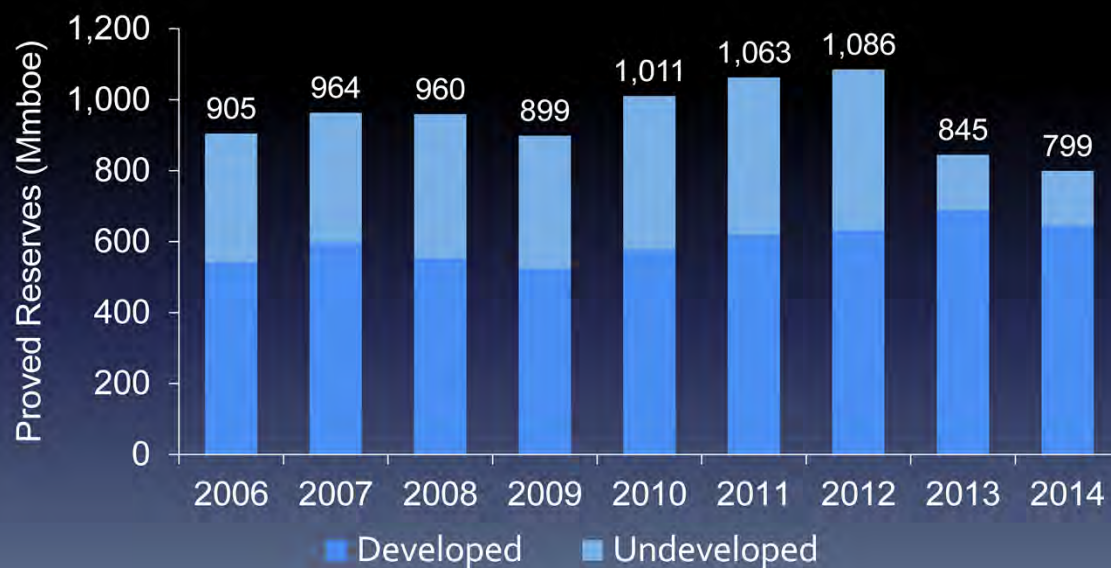
33

First, some terminology:

A 'proved reserve' is an SEC term which is, in essence, a promise of future oil or gas.

Reserves are expressed in Barrels of Oil Equivalent, or BOE, which is a combination of barrels of oil, natural gas liquids (or NGLs), and cubic feet of natural gas.

Proving...what exactly?



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So, how fast have Pioneer's reserves grown from all that spending? They really haven't grown at all.

Even based on last year's very high commodity prices, Pioneer's proved reserves have been flat to down.

Source: Pioneer Forms 10-K for the relevant time periods available at <http://investors.pxd.com/phoenix.zhtml?c=90959&p=irol-sec>.

Proved developed vs. undeveloped



DEVELOPED RESERVE:

Completed well, costs all-in

UNDEVELOPED RESERVE:

Undrilled land or existing well with major expenses required

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Proved reserves come in two designations: developed and undeveloped.

A developed reserve has no more capital costs associated with it. The hole's been drilled, and the well has been completed and hooked into the transport system. The energy is either being sold or is ready to be sold.

Undeveloped reserves usually involve wells in progress or soon to be drilled. In other words, they still have major future costs associated with them.

The big capital spending comes from creating developed reserves.

Money poured into the ground

(all reserve numbers in millions of BOEs)

2014 developed reserves	645
2005 developed reserves	- 615
Change in developed reserves	30
Production	+ 472
BOEs developed	502
Net Capex	\$13.8B
Net Capex / BOE developed	\$28

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How much does it cost for Pioneer to create a developed reserve?

This chart looks at Pioneer cumulatively over the past 9 years. It has grown its developed reserves by about 30 million BOE and taken about 470 million out of the ground. So, it has developed about 500 million BOE.

Capex net of asset sales during that same period has been \$14 billion, meaning reserves have cost \$28 per BOE to develop.

Source: Greenlight calculations based upon Pioneer Forms 10-K for years 2006-2014, inclusive, available at <http://investors.pxd.com/phoenix.zhtml?c=90959&p=irol-sec>.

Fracker Barrel



BOE Equiv.	Last Price (\$)	% of BOE	Value (\$)
WTI Oil	59.15	50%	29.6
Natural Gas	16.68	29%	4.8
NGL	23.06	21%	4.9
Transport			-3.4
Rev. / BOE			35.9

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Just about half of what Pioneer produces is oil. A bit over a quarter is natural gas, and the rest are NGLs. Despite energy equivalence, gas and NGLs sell at big discounts to crude oil.

While WTI trades at about \$59 per barrel, natural gas trades at the equivalent of \$17 per barrel, and NGLs at only \$23 per barrel.

After paying for transport costs, at spot commodity prices, Pioneer's revenues average \$36 per BOE – compared to the \$59 headline price for crude.

Source: Bloomberg L.P. pricing as of April 30 and May 1, 2015. For the purpose of comparison on an energy equivalents basis in the "% of BOE" and "Value \$" columns, the natural gas spot price and volume has been multiplied by six. Greenlight estimates based upon Pioneer Q4 2014 financial and operating results available at <http://investors.pxd.com/phoenix.zhtml?c=90959&p=irol-newsArticle&ID=2015419>.

Make it up in volume?

Revenues / BOE	\$36
Oil & Gas production	-11
Production taxes	-2
Cash exploration	-1
SG&A	-5
Corp / other	-1
Capex	-28
Return	-\$12



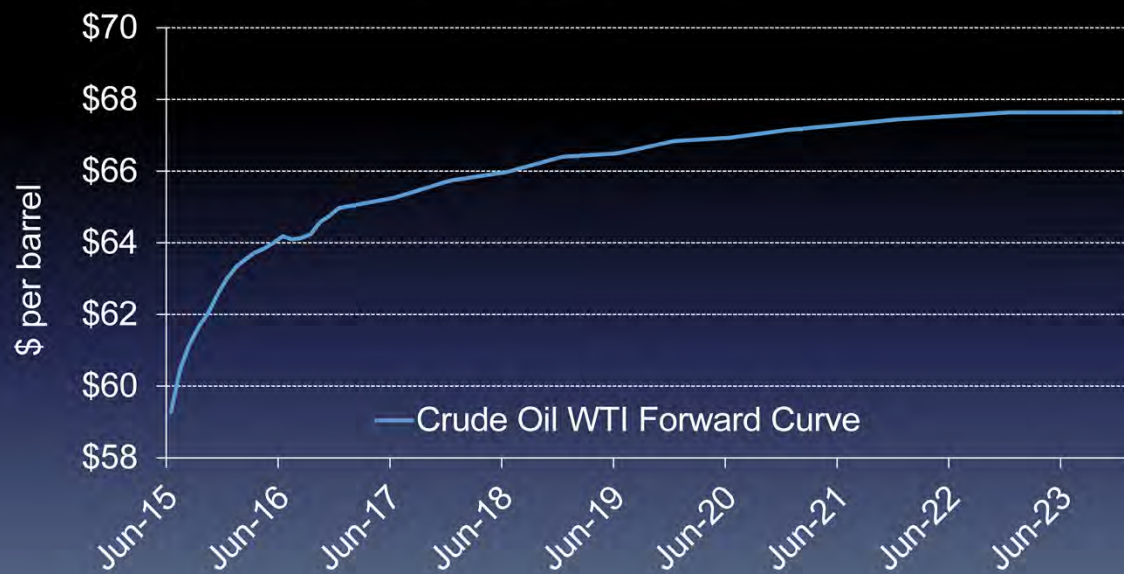
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On the \$36 of revenues per BOE, Pioneer spends about \$14 on field operating expenses and another \$6 on corporate expenses. Subtract the historical \$28 of Capex, and Pioneer loses \$12 for every BOE it develops.

That's like using \$50 bills to counterfeit \$20s.

Source: Greenlight estimates based upon revenue calculations in slide 37 and Pioneer costs from Pioneer Q4 2014 financial and operating results available at <http://investors.pxd.com/phoenix.zhtml?c=90959&p=irol-newsArticle&ID=2015419>.

Oil futures



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Of course oil prices aren't expected to stay at \$59. This is what the current forward curve, or strip, for WTI looks like. You can see that prices are expected to recover to about \$64 next year and \$68 in the long-term.

Source: Bloomberg L.P. as of May 1, 2015.

Positive margin, but...

	Spot	Strip	Adjustment
Revenue / BOE	\$36	\$47	WTI \$67.64, Gas \$4.16
Oil & Gas production	-11	-8	20% cost cuts
Production taxes	-2	-3	% of revenue
Cash exploration	-1	-1	
SG&A	-5	-4	20% cost cuts
Corp / other	-2	-1	20% cuts, efficiencies
Gross cash flow	\$15	\$30	

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Lower commodity prices are forcing the industry to cut costs. Here we adjust the revenue to the future strip price, and cut expenses by 20%. On that basis, gross cash flow is \$30 per BOE and Pioneer earns a positive margin. But, it's not positive value.

Source: Greenlight spot estimates based upon revenue calculations in slide 37 and cost estimate in slide 38. Greenlight strip estimates based upon anticipated 2023 WTI and natural gas pricing retrieved from Bloomberg L.P. on May 1, 2015. NGL prices based upon Greenlight estimated pricing relationship to oil prices. Pioneer estimated % of BOE mix from WTI, Natural Gas, and NGL based on resource basin estimates from Wood Mackenzie. Pioneer cost estimates adjusted to anticipate successful 20% variable cash cost reductions by management.

Return on capital at strip with cost cuts

Gross cash flow	\$30
WACC	8.4%
PV of cash flow	\$16
Capital investment	-\$21
Value destruction	-\$4

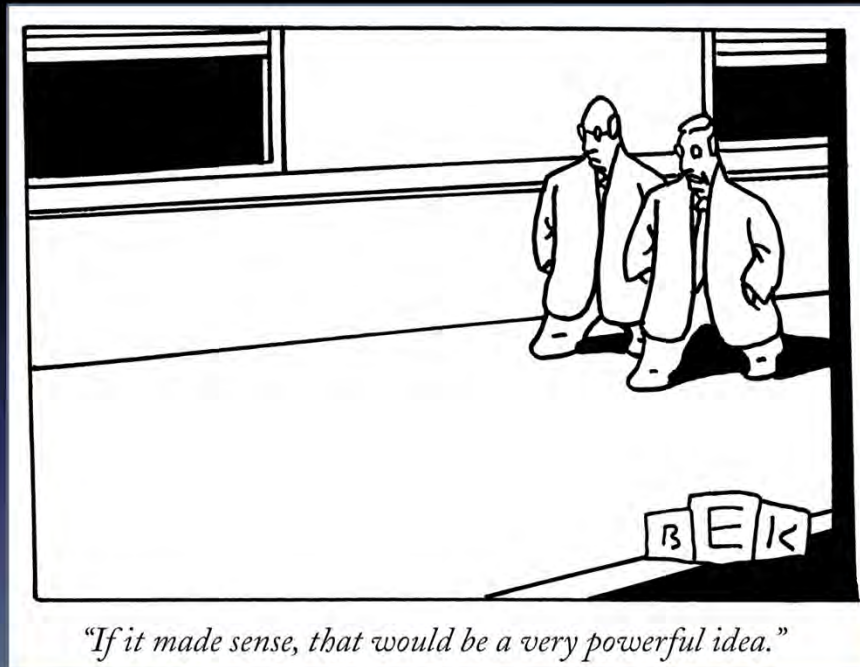


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You have to take the time value of money into account. The well is paid for upfront, but the oil – and hence the revenue – comes over 50 years.

Pioneer has an 8.4% weighted average cost of capital. When you take that into account, the present value of the cash flows falls to \$16 per BOE, which doesn't cover the upfront capital investment. It's fair to say that Pioneer is losing about 20 cents of present value for every dollar it invests.

Source: Greenlight calculation based upon gross cash flow estimate from slide 40 and Greenlight capital expenditure estimate in slide 55. Greenlight estimated cost of capital for Pioneer based on figures in Pioneer Form 10-K, pricing data from Bloomberg L.P., and equity risk premium estimated by Goldman Sachs. Present value calculation based on Permian Midland horizontal type curve from Wood Mackenzie, adjusted to terminal decline rate and economic life variables provided by Pioneer.



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We can see this quite clearly in company guidance. For its \$1.85 billion of budgeted Capex, production from the end of last year to the end of this year is expected to be flat, while the "overspend" (their euphemism for cash burn) will be \$200 million.

SEC-onomics

Proved Reserves (Mmboe)	799
Oil price used	\$95
Natural gas price used	\$4.35
Opex / BOE	\$23
Standardized Measure	\$7.8B
Value / BOE	\$10
Equity value / share	\$41

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What if Pioneer stops spending and just milks the 800 million barrels of proved reserves?

Pioneer files a valuation report with the SEC called a Standardized Measure. You might think of it as a discounted cash flow. We call it SEC-onomics.

Last year, using \$95 for oil, Pioneer's reserves were worth \$7.8 billion, which translates to \$41 per share or \$10 per BOE.

Source: Greenlight summary based upon Pioneer Standardized Measure of Discounted Future Net Cash Flows from Pioneer Form 10-K for December 31, 2014 available at <http://investors.pxd.com/phoenix.zhtml?c=90959&p=irol-sec>.

Lower oil = lower value

Proved Reserves (Mmboe)	799	799
Oil price used	\$95	\$68
Natural gas price used	\$4.35	\$4.16
Opex / BOE	\$23	\$23
Standardized Measure	\$7.8B	\$3.0B
Value / BOE	\$10	\$4
Equity value / share	\$41	\$9

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But oil isn't \$95 anymore; it's lower. We ran a sensitivity case on the new pricing.

Proved reserves need to be economic, so a big drop in prices usually means a downward revision in the amount of reserves.

While that's likely to be the case here, we generously assumed no write downs. Just by changing the prices, the reserves are worth only \$9 per share.

Source: Greenlight estimates based upon Pioneer Standardized Measure of Discounted Future Net Cash Flows from slide 43 adjusted for future natural gas and WTI pricing retrieved from Bloomberg L.P. on May 1, 2015. Table reflects long term pricing estimates for 2023 and following years.

Cost cuts aren't enough

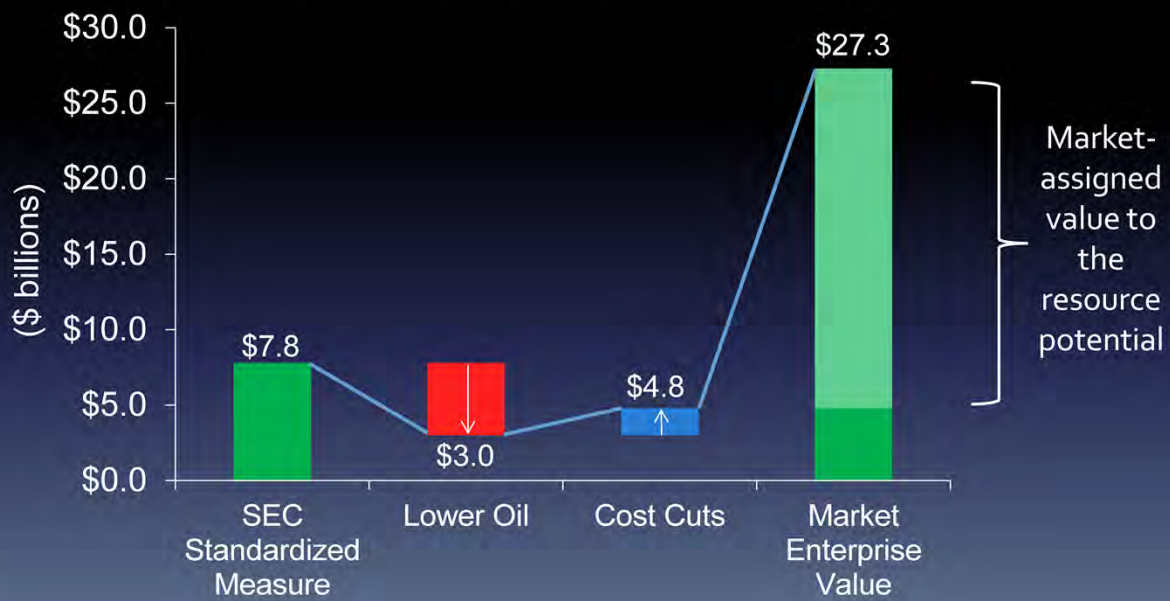
Proved Reserves (Mmboe)	799	799	799
Oil price used	\$95	\$68	\$68
Natural gas price used	\$4.35	\$4.16	\$4.16
Opex / BOE	\$23	\$23	\$18
Standardized Measure	\$7.8B	\$3.0B	\$4.8B
Value / BOE	\$10	\$4	\$6
Equity value / share	\$41	\$9	\$21

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Again, while generously assuming no lost reserves, and now allowing for the company to respond to lower prices with 20% cuts in its key cost areas such as rig day rates, horsepower for fracking, and raw materials, we estimate Pioneer's existing reserves to be worth less than \$22 per share.

Source: Greenlight estimates based upon adjusted Standardized Measure of Discounted Future Net Cash Flows from slide 44 and for anticipated cost cuts from slide 40.

The other \$20 billion



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Pioneer burns cash and isn't growing. If the existing reserves are worth somewhere between \$3 billion and \$7.8 billion, why is the market paying \$27 billion for this company?

Source: Greenlight summary of preceding estimates, Enterprise Value from slide 28, and Greenlight estimate for market-assigned value.

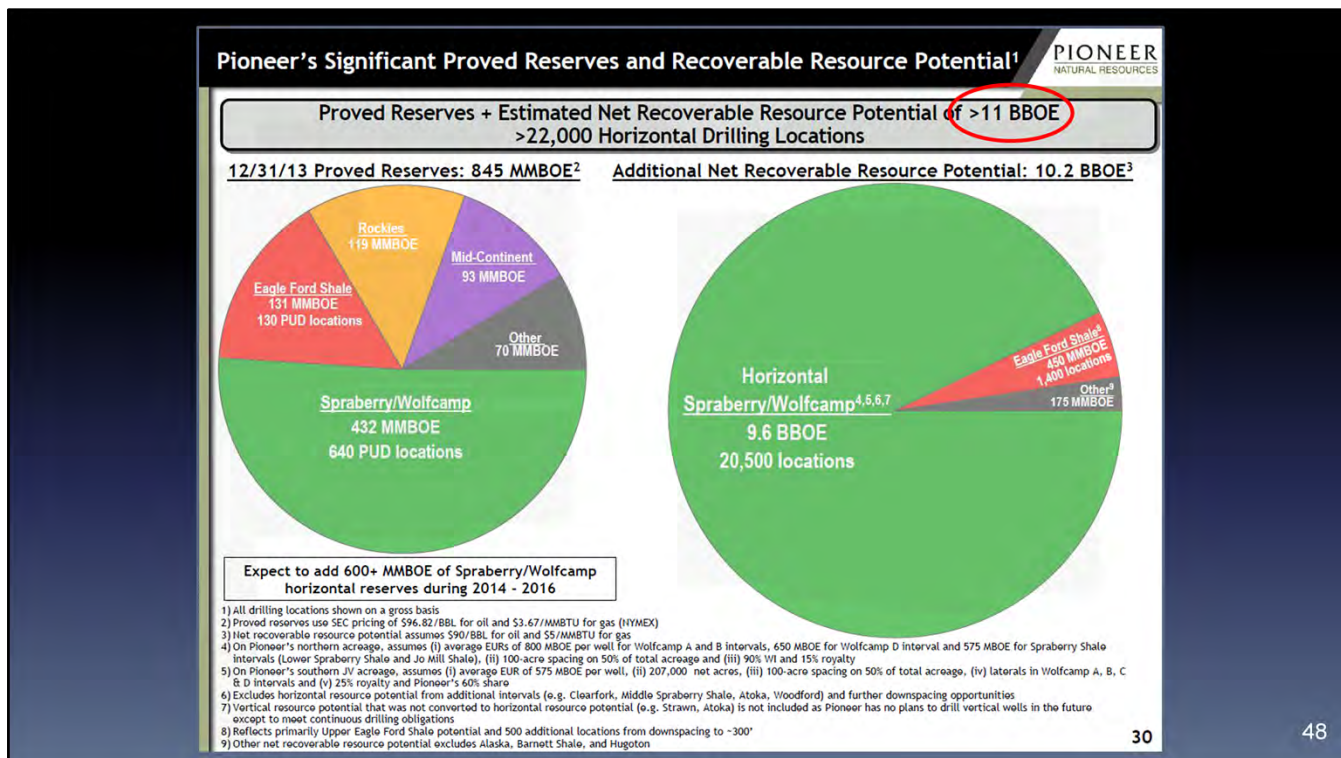
Investor Deck-onomics



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Pioneer has an exciting investment story that shows up in its presentations. This story bears no resemblance to its filings, or SEC-onomics.

We call it "Investor Deck-onomics".



Here, Pioneer claims it has about 22,000 horizontal drilling opportunities, where its net share of resources is over 11 billion BOE. To be clear, these are referred to as resources, not proved reserves.

Source: Extract from Pioneer investor presentation from December 2014 available at http://media.corporate-ir.net/media_files/IROL/90/90959/2014-12-04_December_Investor_Presentation.pdf.

Pioneer's disclaimer

“U.S. investors are cautioned not to assume that Pioneer's estimates of resource potential of mineral deposits reflect economically recoverable quantities.”

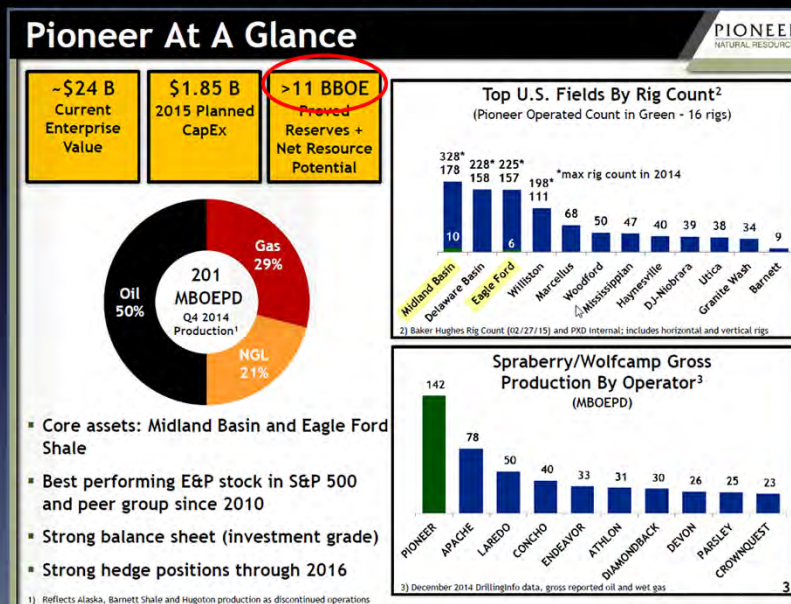
Pioneer Investor Presentation, Dec. 2014

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In Pioneer's slide deck it acknowledges that its resource estimates are not necessarily limited to economically recoverable quantities.

Source: Extract from Pioneer investor presentation from December 2014 available at http://media.corporate-ir.net/media_files/IROL/90/90959/2014-12-04_December_Investor_Presentation.pdf.

Foot(note)loose

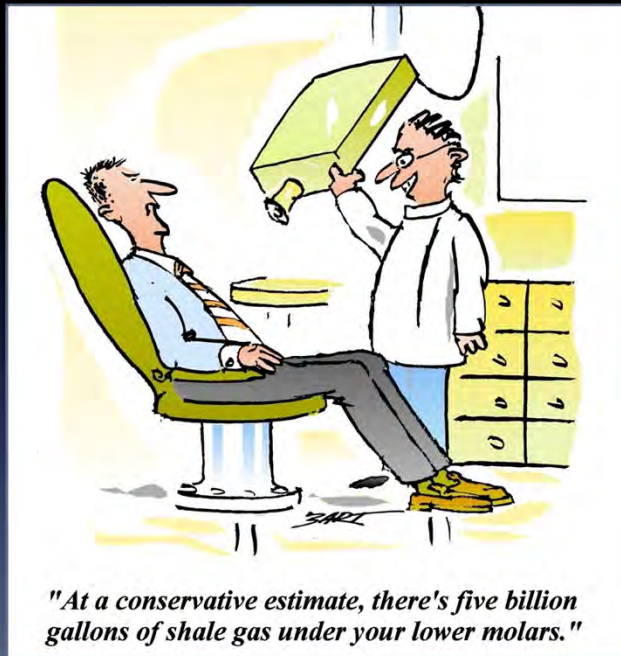


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In its most recent April investor presentation, despite the lower commodity price environment, none of the estimated resources have disappeared. What *has* disappeared is the slide with the footnotes disclosing the price assumptions.

It would seem that Pioneer has not adjusted its resource estimates for lower prices. Surely, some opportunities that were economic before are not economic now.

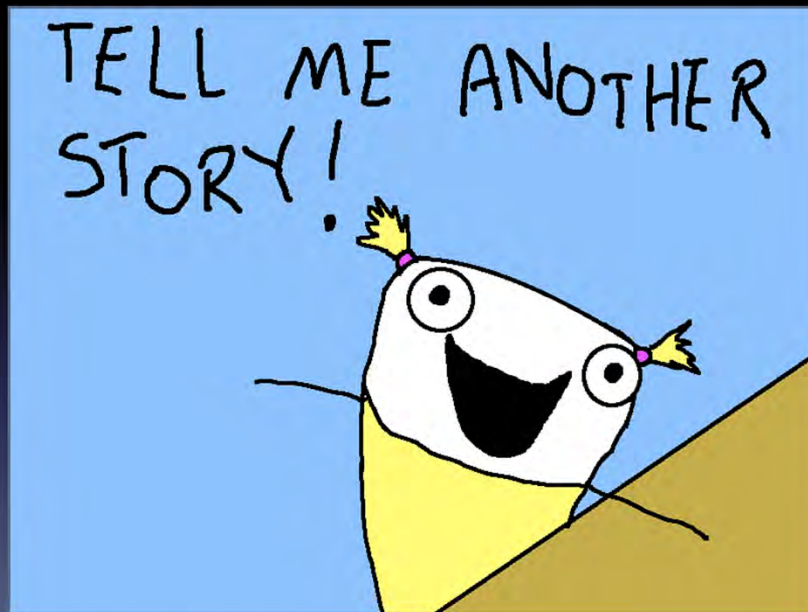
Source: Extract from Pioneer investor presentation on April 6, 2015 available at <http://investors.pdx.com/phoenix.zhtml?c=90959&p=irol-presentations>.



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Promoting unproved resources while assuming oil and gas are one-and-a-half to two times the price requires a lot of nerve. Many businesses would undoubtedly do great if they could sell their wares at above market prices.

Seriously, Pioneer ought to stop touting estimates based on stale pricing, or at least provide a useful sensitivity analysis.



Copyright 2009-2013 by Allie Brosh; from <http://hyperboleandahalf.blogspot.com/2011/02/scariest-story.html>

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Bulls counter that well economics are improving over time, and that Pioneer's newer technology and more extensive experience makes any analysis of its historical performance irrelevant. The future is in horizontal drilling, where its reported Capex per BOE was just \$15.51 last year.

Source: Pioneer capital expenditure per BOE for horizontal drilling is from Pioneer's report on year-end proved reserves and finding costs available at <http://investors.pxd.com/phoenix.zhtml?c=90959&p=irol-newsArticle&ID=2015435>.

Image: Copyright 2009-2013 by Allie Brosh; from <http://hyperboleandahalf.blogspot.com/2011/02/scariest-story.html>.

Horizontal only...but accurately

Reported cost per BOE		\$ 15.51
BOE developed	X	157 M
Reported Capex		\$ 2,435 M
Sinochem subsidy	+	\$ 485 M
Actual Capex		\$ 2,920 M
Actual cost per BOE		\$ 18.60

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However, Pioneer sold a 40% interest in part of its acreage to Sinochem in 2013. For a portion of the purchase price, Sinochem pays 75% of Pioneer's share of the capital spending on those acres for the next couple years. Last year, that payment was \$485 million, which reduced Pioneer's Capex and flattered Pioneer's claimed cost per BOE by more than \$3.

Source: Greenlight calculations and estimates utilizing Pioneer public filings, press releases and management statements.

Counting all the spending

Actual Horizontal Capex / BOE \$ 18.60 (90%)

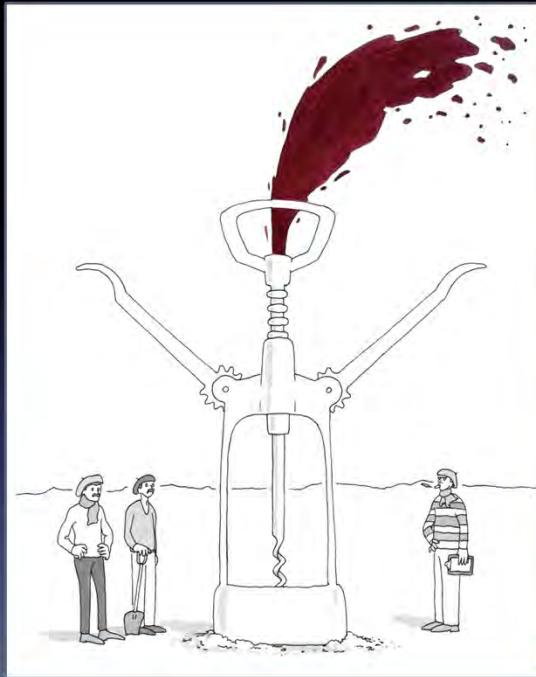
Non-drilling Capex / BOE \$ 2.06 (10%)

Adjusted Capex / BOE \$ 20.66

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Further, Pioneer spends about 10-15% of its Capex budget on non-drilling items that include things like buildings, vehicles and other equipment. When we allocate this, the adjusted Capex for the horizontal drilling program works out to \$20.66 per BOE.

Source: Greenlight calculations and estimates utilizing Pioneer public filings, press releases and management statements.



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Part of the improved economics comes from cherry picking. In the current low price environment, Pioneer and others are drilling their best, lowest-cost prospects first. The industry calls this “high grading”. The result should be an initial burst of apparent productivity improvement.

When the chocolate is gone



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The problem with exploiting your best prospects is that you are left with your *other* prospects. Longer-term capital efficiency may actually deteriorate.

Sell side well economics...

	Analyst
Oil strip	\$85
Gas strip	\$4.50
Capex / BOE	-13
Opex / BOE	-10
Production tax	2%
SG&A / other	n/a
Well life	30 yr.
IRR	30.7%
Value creation per \$ spent	\$0.74

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Management and bullish sell-side analysts like to tout the so-called “well economics” which show great IRRs. Here’s one from an April analyst model.

Source: UBS analyst model, provided to Greenlight in May 2015.

...compared to reality

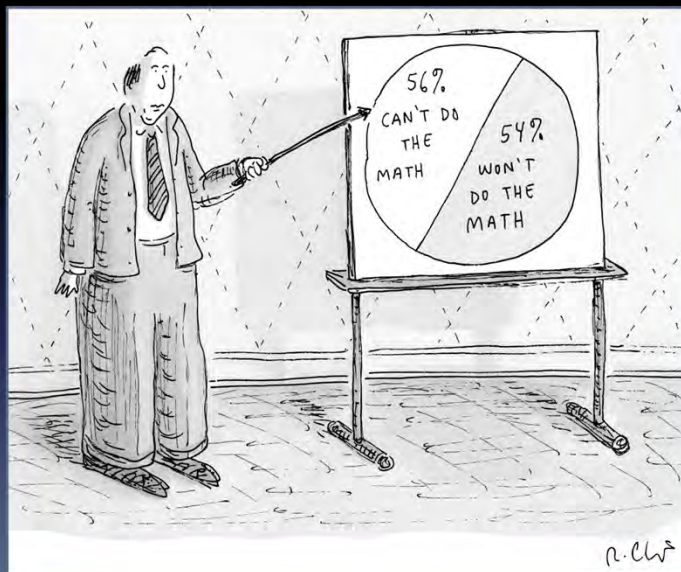
	Analyst	Greenlight
Oil strip	\$85	\$68
Gas strip	\$4.50	\$4.16
Capex / BOE	-13	-21
Opex / BOE	-10	-9
Production tax	2%	6%
SG&A / other	n/a	-5
Well life	30 yr.	50 yr.
IRR	30.7%	2.1%
Value creation per \$ spent	\$0.74	-\$0.23

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These analyses make the drilling programs look great. But, when we consider current prices and fully loaded costs, a different picture emerges.

Source: UBS analyst model, provided to Greenlight in May 2015. Greenlight summary of Greenlight estimates previously detailed.

Those fracking analysts



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Most analysts value Pioneer through shorthand methods like a multiple of EBITDAX. We think the proper valuation is a long-term discounted cash flow of the resource opportunity. So we built one.

DCF assumptions

- 11B BOE developed over 40 years; 50-year well life
- All cost cuts retained
- Capex of \$20.66 / BOE (horizontal program)
- Prices follow current long-term curve; then flat
- Corporate WACC of 8.4%

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For the sake of our analysis, we generously assume that all 11 billion BOE exist, even though that figure assumed \$90 oil and \$5 gas. We assume development is over 40 years with Capex ramping for the first 20 and then plateauing for the next 20.

We assume the wells produce for 50 years, the company retains the recent 20% cost cuts, and long-term Capex per barrel does not deteriorate due to high grading. We use the current commodity strip, which flattens in the out-years at \$68 per barrel. We discount the whole 90-year stream of cash flows at the company's weighted average cost of capital.



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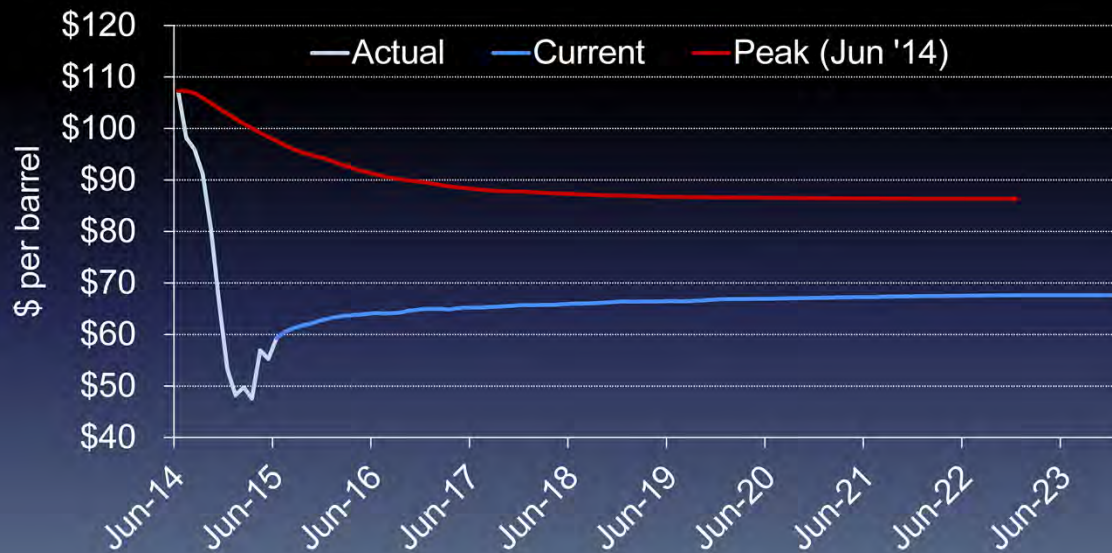
I can't show you all the math right here, but we have posted the analysis as an appendix to this presentation on our website.

The answer isn't surprising: Current development economics don't cover the company's cost of capital, so the discounted cash flow spits out a negative number.

The company's equity has nothing more than option value. Some have suggested that Pioneer could generate more value by drilling faster. Actually, that would make it worse, as faster drilling brings forward the value destruction.

Source: Greenlight calculations and estimates utilizing assumptions stated on slide 61. Please refer to accompanying discounted cash flow for details.

The benefit of stale pricing



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As a sensitivity, we looked at the price curve from when spot crude peaked last June. It's interesting that while short-term oil prices fell more than half, longer-term prices were much more stable, and fell less than \$20 per barrel.

Source: Bloomberg L.P. Peak line represents the June 20, 2014 price curve, retrieved April 2015.

Upside DCF Sensitivity

- Commodities follow the PRIOR PEAK curve; then flat
- ALL cost saves achieved in the current low-price environment RETAINED
- Discounted Cash Flow Value = **\$78 per share**

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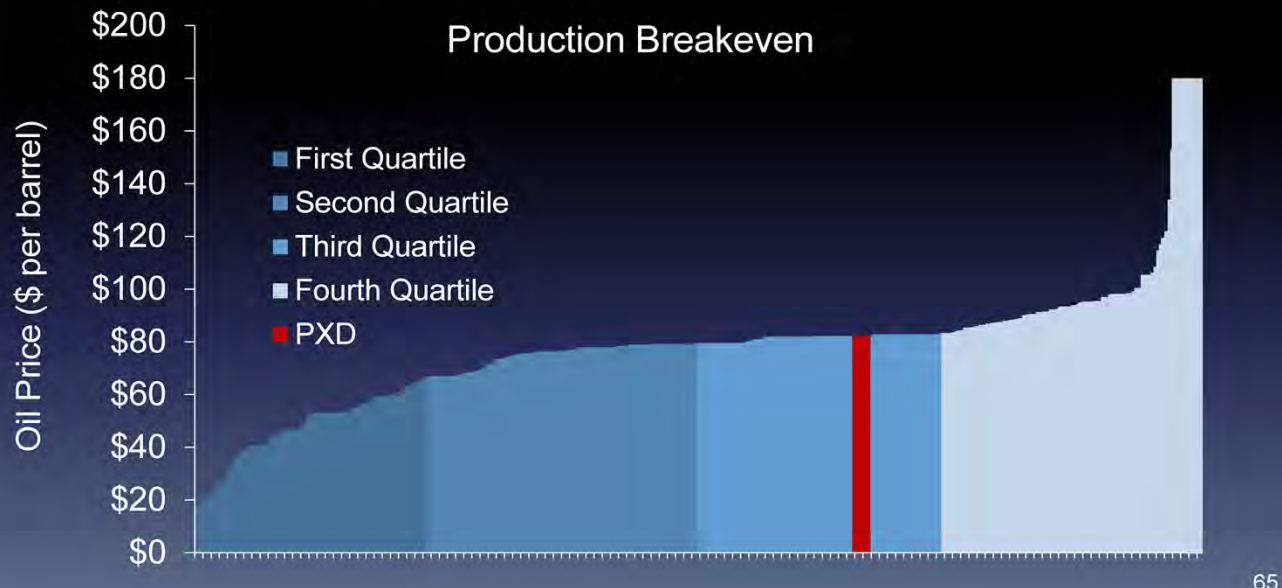
We ran a high case using last June's commodity curve and otherwise held our assumptions the same, including the cost cuts that are available in today's low price environment. The result is a value of \$78 per share, less than half of the \$172 where the stock trades.

Pioneer is dramatically over-valued even if you assume it has 11 billion barrels of resources and we see a return to prior peak prices.

The problem is that oil fracking is high cost.

Source: Greenlight calculations and estimates. Please refer to accompanying discounted cash flow for details.

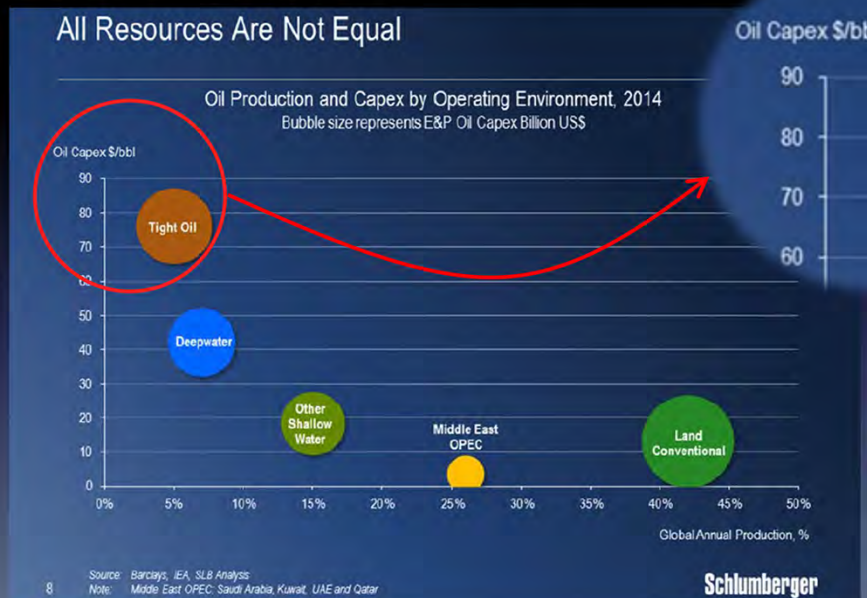
Analysts agree



Analysts agree. Here's data from Goldman Sachs showing the economic break evens for various global oil fields, with Pioneer's Permian field highlighted in red.

Source: Greenlight estimates utilizing, in part, 2014 commercial breakeven estimates from Goldman Sachs Global Investment Research, provided to Greenlight in April 2015.

Industry agrees



And the industry agrees. This is from Schlumberger, showing oil capex per barrel on the left. In aggregate, capital intensity for tight oil, which is what they call the frackers, exceeds every other major source of supply.

It isn't just Pioneer. We ran similar discounted cash flow analyses on Continental and Concho using current strip prices, and they also come out with negative values.

Source: Schlumberger investor presentation on March 23, 2015 available at <http://investorcenter.slb.com/phoenix.zhtml?c=97513&p=irol-presentations>.



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I think many people are buying the frackers, because they want to bet on higher oil prices.

It seems to me that if you want to make that bet, there's a much easier way.

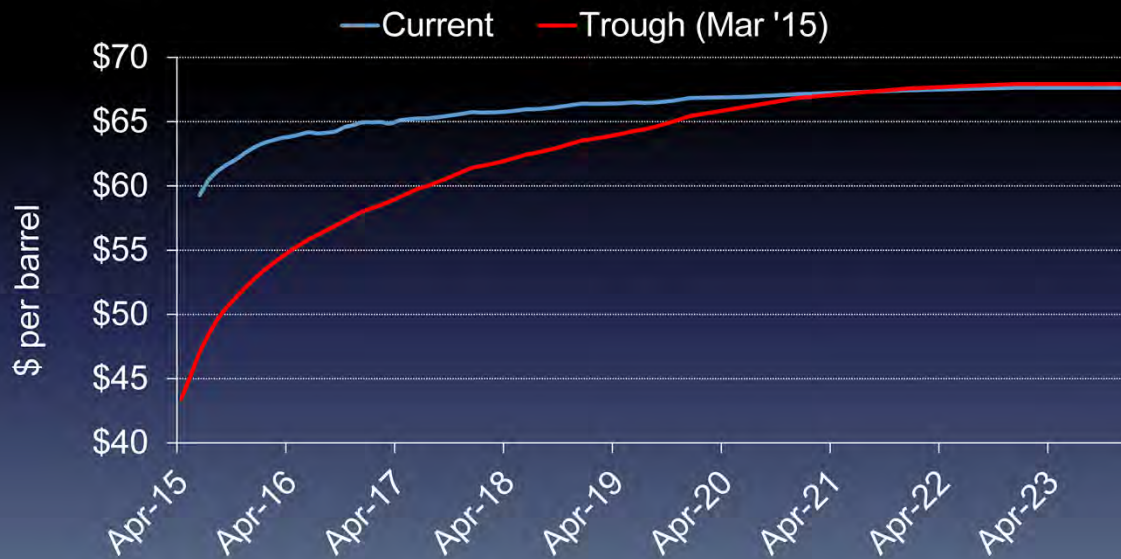
Buy oil



68

Buy oil.

The recent bounce in oil



69

While nearby oil has recently bounced from its lows, the value of the frackers depends mostly on the long end of the curve, which hasn't bounced at all.

Source: Bloomberg L.P. Trough line represents the March 17, 2015 price curve, retrieved April 2015.



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The frackers' Wall Street story demands that they keep spending in a desperate effort to grow or at least maintain reserves and production, even though that spending destroys value. Their alternative, like St. Joe did after the housing boom ended, is to stop spending, which would end the charade.

Either way, the Frackers are...

Appendices

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There are several appendices attached to this presentation:

- A – Greenlight's Pioneer DCF base case
- B – Greenlight's Pioneer DCF upside case
- C – DCF sensitivity tables

Pioneer Natural Resources

Discounted Cash Flow Key Assumptions & Statistics

Base Case

PV of cash flows (\$B)	\$0.3
Net debt (\$B)	\$1.6
Equity value (\$B)	-\$1.4
Shares outstanding (M)	149.4
Value / share	-\$9

Capital Spending Inputs

Capex growth rate	7.1%
Capex growth period	20 years
Peak capex period	20 years
Well production period	50 years
Capex / BOE	-\$20.66

Development Data (B)

Starting capex	\$1.85
Peak capex	\$6.8
Peak net debt	\$20.4
Total BOE developed	10.4
Total BOE produced	11.0

Cost of Capital

Equity risk premium	5.4%
Adjusted beta	1.23
Risk-free rate	2.1%
Equity cost of capital	8.8%
Debt cost of capital	2.1%
Equity as % of EV	<u>94%</u>
WACC	8.4%

Commodity Assumptions

<u>Current curve strip prices</u>	
Oil	\$68
Natural gas	\$4.16
NGL	\$27
<u>Production as % of BOE</u>	
Oil	58.7%
Natural gas	24.1%
NGL	17.2%

Opex / BOE

Oil & gas production	\$8.3
Production taxes	6.2%
SG&A	\$3.9
Cash exploration	\$1.1
Other	\$1.1
Cash tax rate	37%

Notes:

Estimated % of BOE mix from WTI, Natural Gas, and NGL based on resource basin estimates from Wood Mackenzie

Permian Midland horizontal type curve from Wood Mackenzie, adjusted to terminal decline rate and economic life variables provided by Pioneer.

Cash tax calculation based on current & future estimated net operating loss carryforwards

Pioneer Natural Resources
Discounted Cash Flow
Base Case

(\$M unless otherwise noted)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capex	-1,850	-1,982	-2,123	-2,275	-2,437	-2,611	-2,797	-2,996	-3,210	-3,439
Reserves Developed (Mboe)	91	96	103	110	118	126	135	145	155	166
Proved Developed Reserves (Mboe)	663	682	705	735	770	810	857	909	967	1,030
Production (Mboe)	74	77	79	80	83	86	89	93	97	103
Revenues / BOE (\$)	43.78	45.83	43.93	45.04	45.52	46.06	46.47	46.85	47.15	47.15
Revenues	3,236	3,532	3,482	3,616	3,768	3,957	4,137	4,355	4,594	4,847
Cash opex / BOE (\$)	19.65	16.97	17.11	17.18	17.21	17.25	17.27	17.30	17.31	17.31
Opex	1,452	1,308	1,357	1,380	1,425	1,482	1,538	1,608	1,687	1,780
EBITDA	1,783	2,224	2,126	2,237	2,343	2,475	2,599	2,748	2,907	3,067
Capex	-1,850	-1,982	-2,123	-2,275	-2,437	-2,611	-2,797	-2,996	-3,210	-3,439
Cash flow	-67	242	2	-38	-93	-135	-197	-249	-303	-372
Cash tax	0	0	0	0	0	0	0	0	0	0
Sale of EFS	1,000									
After tax cash flow	933	242	2	-38	-93	-135	-197	-249	-303	-372

Pioneer Natural Resources
Discounted Cash Flow
Base Case

(\$M unless otherwise noted)

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capex	-3,684	-3,947	-4,228	-4,530	-4,853	-5,199	-5,570	-5,967	-6,392	-6,848
Reserves Developed (Mboe)	178	191	205	219	235	252	270	289	309	331
Proved Developed Reserves (Mboe)	1,100	1,177	1,260	1,350	1,447	1,552	1,665	1,786	1,916	2,056
Production (Mboe)	108	115	122	130	138	147	157	168	179	192
Revenues / BOE (\$)	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15
Revenues	5,102	5,402	5,732	6,112	6,490	6,921	7,389	7,916	8,439	9,029
Cash opex / BOE (\$)	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31
Opex	1,874	1,984	2,105	2,244	2,383	2,542	2,713	2,907	3,099	3,316
EBITDA	3,228	3,418	3,627	3,867	4,106	4,379	4,675	5,009	5,340	5,713
Capex	-3,684	-3,947	-4,228	-4,530	-4,853	-5,199	-5,570	-5,967	-6,392	-6,848
Cash flow	-456	-529	-601	-662	-746	-820	-894	-958	-1,053	-1,135
Cash tax	0	0	0	0	0	0	0	0	0	0
Sale of EFS										
After tax cash flow	-456	-529	-601	-662	-746	-820	-894	-958	-1,053	-1,135

Pioneer Natural Resources
Discounted Cash Flow
Base Case

(\$M unless otherwise noted)

	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Capex	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848
Reserves Developed (Mboe)	331	331	331	331	331	331	331	331	331	331
Proved Developed Reserves (Mboe)	2,184	2,303	2,414	2,517	2,613	2,703	2,787	2,865	2,938	3,006
Production (Mboe)	203	213	221	228	235	242	247	253	258	264
Revenues / BOE (\$)	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15
Revenues	9,569	10,041	10,402	10,757	11,083	11,417	11,665	11,929	12,178	12,447
Cash opex / BOE (\$)	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31
Opex	3,514	3,687	3,820	3,950	4,070	4,193	4,284	4,381	4,472	4,571
EBITDA	6,055	6,353	6,582	6,807	7,013	7,224	7,381	7,549	7,706	7,876
Capex	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848
Cash flow	-793	-495	-266	-42	165	376	533	700	858	1,028
Cash tax	0	0	0	0	0	0	0	0	0	0
Sale of EFS										
After tax cash flow	-793	-495	-266	-42	165	376	533	700	858	1,028

Pioneer Natural Resources
Discounted Cash Flow
Base Case

(\$M unless otherwise noted)

	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Capex	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848
Reserves Developed (Mboe)	331	331	331	331	331	331	331	331	331	331
Proved Developed Reserves (Mboe)	3,069	3,129	3,183	3,234	3,281	3,325	3,365	3,402	3,436	3,468
Production (Mboe)	268	272	277	281	284	288	291	295	297	300
Revenues / BOE (\$)	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15
Revenues	12,631	12,840	13,037	13,259	13,395	13,561	13,717	13,903	14,001	14,133
Cash opex / BOE (\$)	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31
Opex	4,638	4,715	4,788	4,869	4,919	4,980	5,038	5,106	5,142	5,190
EBITDA	7,992	8,124	8,249	8,390	8,476	8,581	8,680	8,797	8,860	8,943
Capex	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848
Cash flow	1,144	1,276	1,401	1,541	1,628	1,733	1,832	1,949	2,011	2,095
Cash tax	0	0	0	0	0	-332	-678	-721	-744	-775
Sale of EFS										
After tax cash flow	1,144	1,276	1,401	1,541	1,628	1,401	1,154	1,228	1,267	1,320

Pioneer Natural Resources
Discounted Cash Flow
Base Case

(\$M unless otherwise noted)

	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	3,211	2,981	2,772	2,579	2,399	2,231	2,073	1,924	1,785	1,653
Production (Mboe)	257	230	209	193	180	169	158	148	140	132
Revenues / BOE (\$)	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15
Revenues	12,137	10,824	9,851	9,105	8,477	7,952	7,440	6,997	6,588	6,225
Cash opex / BOE (\$)	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31
Opex	4,457	3,975	3,618	3,344	3,113	2,920	2,732	2,569	2,419	2,286
EBITDA	7,680	6,849	6,233	5,761	5,364	5,032	4,708	4,427	4,169	3,939
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	7,680	6,849	6,233	5,761	5,364	5,032	4,708	4,427	4,169	3,939
Cash tax	-2,841	-2,534	-2,306	-2,132	-1,985	-1,862	-1,742	-1,638	-1,542	-1,457
Sale of EFS										
After tax cash flow	4,838	4,315	3,927	3,630	3,379	3,170	2,966	2,789	2,626	2,482

Pioneer Natural Resources
Discounted Cash Flow
Base Case

(\$M unless otherwise noted)

	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	1,529	1,413	1,304	1,202	1,105	1,015	930	851	776	706
Production (Mboe)	123	116	109	103	96	90	85	80	74	70
Revenues / BOE (\$)	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15
Revenues	5,812	5,467	5,140	4,843	4,536	4,259	3,996	3,758	3,510	3,286
Cash opex / BOE (\$)	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31
Opex	2,134	2,008	1,887	1,779	1,666	1,564	1,468	1,380	1,289	1,207
EBITDA	3,678	3,459	3,252	3,065	2,870	2,695	2,529	2,378	2,221	2,079
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	3,678	3,459	3,252	3,065	2,870	2,695	2,529	2,378	2,221	2,079
Cash tax	-1,361	-1,280	-1,203	-1,134	-1,062	-997	-936	-880	-822	-769
Sale of EFS										
After tax cash flow	2,317	2,179	2,049	1,931	1,808	1,698	1,593	1,498	1,399	1,310

Pioneer Natural Resources
Discounted Cash Flow
Base Case

(\$M unless otherwise noted)

	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	641	580	524	471	421	376	334	295	259	226
Production (Mboe)	65	61	57	53	49	46	42	39	36	33
Revenues / BOE (\$)	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15
Revenues	3,073	2,871	2,678	2,494	2,319	2,152	1,992	1,839	1,692	1,550
Cash opex / BOE (\$)	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31
Opex	1,129	1,054	983	916	852	790	731	675	621	569
EBITDA	1,944	1,816	1,694	1,578	1,467	1,362	1,260	1,163	1,070	981
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	1,944	1,816	1,694	1,578	1,467	1,362	1,260	1,163	1,070	981
Cash tax	-719	-672	-627	-584	-543	-504	-466	-430	-396	-363
Sale of EFS										
After tax cash flow	1,225	1,144	1,067	994	924	858	794	733	674	618

Pioneer Natural Resources
Discounted Cash Flow
Base Case

(\$M unless otherwise noted)

	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	196	168	144	121	102	84	68	54	41	30
Production (Mboe)	30	27	25	22	19	18	16	14	13	11
Revenues / BOE (\$)	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15
Revenues	1,416	1,289	1,169	1,056	892	861	766	676	591	511
Cash opex / BOE (\$)	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31
Opex	520	473	429	388	327	316	281	248	217	188
EBITDA	896	815	740	669	564	545	484	428	374	323
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	896	815	740	669	564	545	484	428	374	323
Cash tax	-331	-302	-274	-247	-209	-202	-179	-158	-138	-120
Sale of EFS										
After tax cash flow	564	514	466	421	355	343	305	269	236	204

Pioneer Natural Resources
Discounted Cash Flow
Base Case

(\$M unless otherwise noted)

	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	27	24	21	18	15	12	9	6	3	0
Production (Mboe)	3	3	3	3	3	3	3	3	3	3
Revenues / BOE (\$)	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15	47.15
Revenues	142	142	142	142	142	142	142	142	142	142
Cash opex / BOE (\$)	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31	17.31
Opex	52	52	52	52	52	52	52	52	52	52
EBITDA	90	90	90	90	90	90	90	90	90	90
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	90	90	90	90	90	90	90	90	90	90
Cash tax	-33	-33	-33	-33	-33	-33	-33	-33	-33	-33
Sale of EFS										
After tax cash flow	57	57	57	57	57	57	57	57	57	57

Pioneer Natural Resources
Discounted Cash Flow Key Assumptions & Statistics
Upside Sensitivity Case

PV of cash flows (\$B)	\$13.3
Net debt (\$B)	\$1.6
Equity value (\$B)	\$11.6
Shares outstanding (M)	149.4
Value / share	\$78

Capital Spending Inputs	
Capex growth rate	7.1%
Capex growth period	20 years
Peak capex period	20 years
Well production period	50 years
Capex / BOE	-\$20.66

Development Data (B)	
Starting capex	\$1.85
Peak capex	\$6.8
Peak net debt	\$0.6
Total BOE developed	10.4
Total BOE produced	11.0

Cost of Capital	
Equity risk premium	5.4%
Adjusted beta	1.23
Risk-free rate	2.1%
Equity cost of capital	8.8%
Debt cost of capital	2.1%
Equity as % of EV	<u>94%</u>
WACC	8.4%

Commodity Assumptions	
<u>Strip prices from the 20-Jun-14 curve</u>	
Oil	\$86
Natural gas	\$5.29
NGL	\$35
<u>Production as % of BOE</u>	
Oil	58.7%
Natural gas	24.1%
NGL	17.2%

Opex / BOE	
Oil & gas production	\$8.3
Production taxes	6.2%
SG&A	\$3.9
Cash exploration	\$1.1
Other	\$1.1
Cash tax rate	37%

Notes:

Estimated % of BOE mix from WTI, Natural Gas, and NGL based on resource basin estimates from Wood Mackenzie
Permian Midland horizontal type curve from Wood Mackenzie, adjusted to terminal decline rate and economic life variables provided by Pioneer.
Cash tax calculation based on current & future estimated net operating loss carryforwards

Pioneer Natural Resources
Discounted Cash Flow
Upside Sensitivity Case

(\$M unless otherwise noted)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capex	-1,850	-1,982	-2,123	-2,275	-2,437	-2,611	-2,797	-2,996	-3,210	-3,439
Reserves Developed (Mboe)	91	96	103	110	118	126	135	145	155	166
Proved Developed Reserves (Mboe)	663	682	705	735	770	810	857	909	967	1,030
Production (Mboe)	74	77	79	80	83	86	89	93	97	103
Revenues / BOE (\$)	49.00	58.37	60.36	60.70	60.64	60.89	60.95	61.05	61.05	61.05
Revenues	3,621	4,498	4,784	4,874	5,020	5,232	5,427	5,675	5,950	6,277
Cash opex / BOE (\$)	20.81	18.13	18.13	18.15	18.15	18.17	18.17	18.18	18.18	18.18
Opex	1,538	1,397	1,437	1,458	1,503	1,561	1,618	1,690	1,771	1,869
EBITDA	2,083	3,101	3,347	3,416	3,517	3,671	3,809	3,986	4,178	4,409
Capex	-1,850	-1,982	-2,123	-2,275	-2,437	-2,611	-2,797	-2,996	-3,210	-3,439
Cash flow	233	1,119	1,224	1,142	1,080	1,060	1,012	990	968	970
Cash tax	-86	-414	-453	-422	-400	-392	-374	-366	-358	-359
Sale of EFS	1,000									
After tax cash flow	1,147	705	771	719	681	668	638	623	610	611

Pioneer Natural Resources
Discounted Cash Flow
Upside Sensitivity Case

(\$M unless otherwise noted)

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capex	-3,684	-3,947	-4,228	-4,530	-4,853	-5,199	-5,570	-5,967	-6,392	-6,848
Reserves Developed (Mboe)	178	191	205	219	235	252	270	289	309	331
Proved Developed Reserves (Mboe)	1,100	1,177	1,260	1,350	1,447	1,552	1,665	1,786	1,916	2,056
Production (Mboe)	108	115	122	130	138	147	157	168	179	192
Revenues / BOE (\$)	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05
Revenues	6,607	6,995	7,423	7,915	8,404	8,963	9,568	10,252	10,929	11,692
Cash opex / BOE (\$)	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
Opex	1,967	2,082	2,210	2,356	2,502	2,668	2,848	3,052	3,253	3,481
EBITDA	4,640	4,913	5,213	5,559	5,902	6,294	6,720	7,200	7,675	8,211
Capex	-3,684	-3,947	-4,228	-4,530	-4,853	-5,199	-5,570	-5,967	-6,392	-6,848
Cash flow	956	966	985	1,029	1,049	1,095	1,150	1,233	1,283	1,363
Cash tax	-354	-357	-365	-381	-388	-405	-426	-456	-475	-504
Sale of EFS										
After tax cash flow	602	608	621	648	661	690	725	777	808	859

Pioneer Natural Resources
Discounted Cash Flow
Upside Sensitivity Case

(\$M unless otherwise noted)

	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Capex	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848
Reserves Developed (Mboe)	331	331	331	331	331	331	331	331	331	331
Proved Developed Reserves (Mboe)	2,184	2,303	2,414	2,517	2,613	2,703	2,787	2,865	2,938	3,006
Production (Mboe)	203	213	221	228	235	242	247	253	258	264
Revenues / BOE (\$)	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05
Revenues	12,392	13,003	13,471	13,931	14,353	14,785	15,106	15,449	15,771	16,119
Cash opex / BOE (\$)	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
Opex	3,689	3,871	4,010	4,147	4,273	4,401	4,497	4,599	4,695	4,799
EBITDA	8,703	9,132	9,461	9,784	10,080	10,383	10,609	10,850	11,076	11,320
Capex	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848
Cash flow	1,855	2,284	2,612	2,935	3,232	3,535	3,761	4,001	4,228	4,472
Cash tax	-686	-845	-967	-1,086	-1,196	-1,308	-1,391	-1,481	-1,564	-1,655
Sale of EFS										
After tax cash flow	1,169	1,439	1,646	1,849	2,036	2,227	2,369	2,521	2,664	2,817

Pioneer Natural Resources
Discounted Cash Flow
Upside Sensitivity Case

(\$M unless otherwise noted)

	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Capex	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848
Reserves Developed (Mboe)	331	331	331	331	331	331	331	331	331	331
Proved Developed Reserves (Mboe)	3,069	3,129	3,183	3,234	3,281	3,325	3,365	3,402	3,436	3,468
Production (Mboe)	268	272	277	281	284	288	291	295	297	300
Revenues / BOE (\$)	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05
Revenues	16,357	16,627	16,883	17,170	17,347	17,561	17,764	18,005	18,132	18,303
Cash opex / BOE (\$)	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
Opex	4,869	4,950	5,026	5,112	5,164	5,228	5,288	5,360	5,398	5,449
EBITDA	11,488	11,677	11,857	12,059	12,182	12,333	12,476	12,645	12,734	12,854
Capex	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848	-6,848
Cash flow	4,639	4,829	5,008	5,210	5,334	5,485	5,628	5,797	5,886	6,006
Cash tax	-1,717	-1,787	-1,853	-1,928	-1,974	-2,029	-2,082	-2,145	-2,178	-2,222
Sale of EFS										
After tax cash flow	2,923	3,042	3,155	3,283	3,361	3,456	3,545	3,652	3,708	3,784

Pioneer Natural Resources
Discounted Cash Flow
Upside Sensitivity Case

(\$M unless otherwise noted)

	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	3,211	2,981	2,772	2,579	2,399	2,231	2,073	1,924	1,785	1,653
Production (Mboe)	257	230	209	193	180	169	158	148	140	132
Revenues / BOE (\$)	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05
Revenues	15,717	14,017	12,757	11,791	10,978	10,298	9,636	9,061	8,532	8,062
Cash opex / BOE (\$)	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
Opex	4,679	4,173	3,798	3,510	3,268	3,066	2,868	2,697	2,540	2,400
EBITDA	11,038	9,844	8,959	8,281	7,710	7,232	6,767	6,363	5,992	5,662
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	11,038	9,844	8,959	8,281	7,710	7,232	6,767	6,363	5,992	5,662
Cash tax	-4,084	-3,642	-3,315	-3,064	-2,853	-2,676	-2,504	-2,354	-2,217	-2,095
Sale of EFS										
After tax cash flow	6,954	6,202	5,644	5,217	4,857	4,556	4,263	4,009	3,775	3,567

Pioneer Natural Resources
Discounted Cash Flow
Upside Sensitivity Case

(\$M unless otherwise noted)

	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	1,529	1,413	1,304	1,202	1,105	1,015	930	851	776	706
Production (Mboe)	123	116	109	103	96	90	85	80	74	70
Revenues / BOE (\$)	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05
Revenues	7,527	7,079	6,656	6,272	5,875	5,516	5,175	4,866	4,546	4,255
Cash opex / BOE (\$)	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
Opex	2,241	2,108	1,981	1,867	1,749	1,642	1,541	1,449	1,353	1,267
EBITDA	5,286	4,972	4,674	4,405	4,126	3,874	3,635	3,417	3,192	2,989
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	5,286	4,972	4,674	4,405	4,126	3,874	3,635	3,417	3,192	2,989
Cash tax	-1,956	-1,840	-1,730	-1,630	-1,527	-1,433	-1,345	-1,264	-1,181	-1,106
Sale of EFS										
After tax cash flow	3,330	3,132	2,945	2,775	2,599	2,440	2,290	2,153	2,011	1,883

Pioneer Natural Resources
Discounted Cash Flow
Upside Sensitivity Case

(\$M unless otherwise noted)

	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	641	580	524	471	421	376	334	295	259	226
Production (Mboe)	65	61	57	53	49	46	42	39	36	33
Revenues / BOE (\$)	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05
Revenues	3,980	3,717	3,468	3,230	3,003	2,787	2,579	2,381	2,191	2,008
Cash opex / BOE (\$)	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
Opex	1,185	1,107	1,032	962	894	830	768	709	652	598
EBITDA	2,795	2,611	2,435	2,268	2,109	1,957	1,812	1,672	1,538	1,410
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	2,795	2,611	2,435	2,268	2,109	1,957	1,812	1,672	1,538	1,410
Cash tax	-1,034	-966	-901	-839	-780	-724	-670	-619	-569	-522
Sale of EFS										
After tax cash flow	1,761	1,645	1,534	1,429	1,329	1,233	1,141	1,053	969	888

Pioneer Natural Resources
Discounted Cash Flow
Upside Sensitivity Case

(\$M unless otherwise noted)

	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	196	168	144	121	102	84	68	54	41	30
Production (Mboe)	30	27	25	22	19	18	16	14	13	11
Revenues / BOE (\$)	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05
Revenues	1,833	1,669	1,514	1,368	1,155	1,115	991	875	765	662
Cash opex / BOE (\$)	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
Opex	546	497	451	407	344	332	295	261	228	197
EBITDA	1,287	1,172	1,063	961	811	783	696	615	538	465
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	1,287	1,172	1,063	961	811	783	696	615	538	465
Cash tax	-476	-434	-393	-356	-300	-290	-258	-227	-199	-172
Sale of EFS										
After tax cash flow	811	738	670	605	511	493	439	387	339	293

Pioneer Natural Resources
Discounted Cash Flow
Upside Sensitivity Case

(\$M unless otherwise noted)

	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104
Capex	0	0	0	0	0	0	0	0	0	0
Reserves Developed (Mboe)	0	0	0	0	0	0	0	0	0	0
Proved Developed Reserves (Mboe)	27	24	21	18	15	12	9	6	3	0
Production (Mboe)	3	3	3	3	3	3	3	3	3	3
Revenues / BOE (\$)	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05	61.05
Revenues	184	184	184	184	184	184	184	184	184	184
Cash opex / BOE (\$)	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
Opex	55	55	55	55	55	55	55	55	55	55
EBITDA	129	129	129	129	129	129	129	129	129	129
Capex	0	0	0	0	0	0	0	0	0	0
Cash flow	129	129	129	129	129	129	129	129	129	129
Cash tax	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48
Sale of EFS										
After tax cash flow	81	81	81	81	81	81	81	81	81	81

Pioneer Natural Resources
Sensitivity tables: Per Share Equity Value

		Capex Per BOE						
		-\$25	-\$23	-\$21	-\$20.66	-\$19	-\$17	-\$15
Oil Price	\$90	44	59	77	80	99	125	159
	\$80	11	26	42	45	60	83	112
	\$70	-33	-18	0	3	19	39	63
	\$68	-44	-30	-12	-9	7	28	52
	\$60	-82	-69	-54	-51	-36	-14	11
	\$50	-134	-123	-111	-109	-96	-79	-57

		Opex Saves				
		0%	10%	20%	30%	40%
Oil Price	\$90	58	69	80	91	102
	\$80	22	34	45	55	66
	\$70	-28	-12	3	17	29
	\$68	-41	-25	-9	6	19
	\$60	-84	-67	-51	-35	-19
	\$50	-143	-126	-109	-91	-75

		Capex Per BOE						
		-\$25	-\$23	-\$21	-\$20.66	-\$19	-\$17	-\$15
WACC	7.0%	-47	-28	-6	-2	18	45	76
	8.0%	-45	-30	-11	-8	10	32	57
	8.4%	-44	-30	-12	-9	7	28	52
	9.0%	-42	-29	-14	-11	4	23	44
	10.0%	-39	-28	-15	-12	0	17	34

		Oil Price					
		\$90	\$80	\$70	\$68	\$60	\$50
WACC	7.0%	110	64	12	-2	-54	-126
	8.0%	87	49	5	-8	-52	-113
	8.4%	80	45	3	-9	-51	-109
	9.0%	70	38	0	-11	-49	-102
	10.0%	58	30	-2	-12	-46	-91