



The 2016 Deep Readers Reading List

by Deep Drilling Insights

Each year at DDI we receive requests from clients, subscribers, and partners who want book recommendations to help them “get up to speed” on the E&P sector. Happily, to satisfy this demand, we create and share our annual Deep Readers Reading List. Each book on the list is evaluated for the uniqueness and relevance of its insights and perspectives. Only those that illuminate the E&P sector in a unique and non-duplicative way make the final cut.

But first, before diving into this year’s list, we must make an important point regarding the proper mindset for getting the most out of these books: Like all books, these books are not perfect. Each has its own flaws. Some might be too wordy or disorganized. Others might lack in style. Nonetheless, each book has something unique and valuable to offer. Therefore, it is best to approach these books with the mindset of a prospector digging for gold. Don’t expect to find gold on every page. Rather, form the resolve that, if you read attentively page after page, you will find nuggets of gold dispersed throughout the ore of the book. If you can hold on to that mindset, you will find that these books, despite their flaws, contain a particularly “rich” ore.

The List

Oil 101
by Morgan Downey

The Domino Effect
by Rusty Brazier

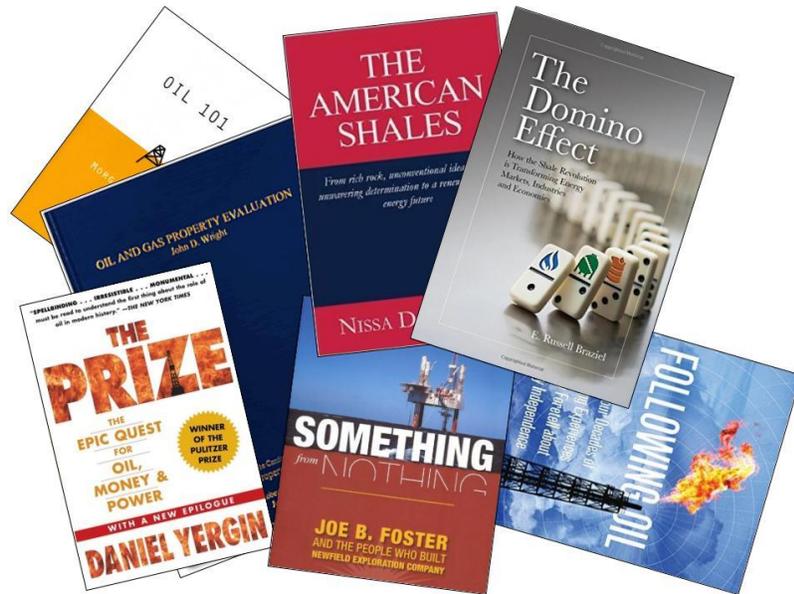
The American Shales
by Nissa Darbonne

The Prize
by Daniel Yergin

Following Oil
by Thomas Petrie

Something From Nothing
by Arthur L. Smith

Oil and Gas Property Evaluation (2015 edition)
by John D. Wright

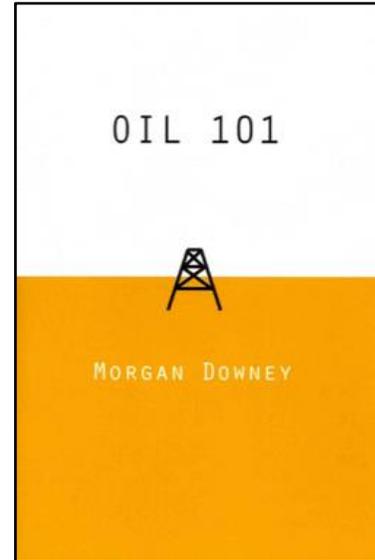




Oil 101

Morgan Downey's *Oil 101* provides the most thorough and concise overview of the oil and gas industry around. Written by a former oil trader, the style is clear and direct. You feel as though you've just walked into Downey's office to become his apprentice and he's telling you everything he thinks you need to know. We highly recommend it.

The only drawback is that it was written in 2009, before the significance of the shale revolution was fully appreciated. As a result, the book at times takes a "peak oil" perspective that has not materialized. This, however, does not detract from the quality and clarity of the book overall. Just keep this in mind as you read.

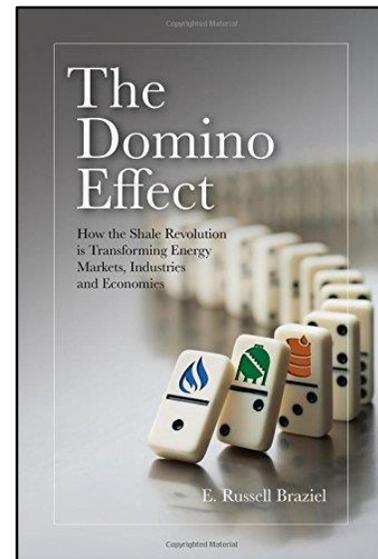


The Domino Effect

I first heard about Rusty Braziel, the author of *The Domino Effect*, from Ron Denhardt, an expert on natural gas basis modeling. I already had good reasons to trust Ron, so when he told me that Rusty Braziel and his team at RBN Energy (his consulting company) were the only guys with a track record for successful predicting the major price movements in oil and natural gas, I took notice.

Before starting RBN Energy, Rusty Braziel spent much of his career helping to build Bentek Energy into the major oil, gas, and NGL market analytics firm that it is today.

In *The Domino Effect*, he shares everything he has learned over the years about how to think about oil, natural gas, and NGL markets, and also how their interrelationships have changed as a result of the shale revolution. The book is very current (released in January 2016) and easy to read. I highly recommend it.





The American Shales

The American Shales is the most in-depth account of the shale revolution available today. This level of depth is not so surprising once you realize it was written by Nissa Darbonne, editor-at-large for Hart Energy's Oil and Gas Investor publishing group. Nissa's experience as a journalist makes the text easy to read. And, with her position at Hart Energy, she had access to the key players to ask them fresh questions as wells as a database of historical interviews to see what people were actually saying as the events unfolded.

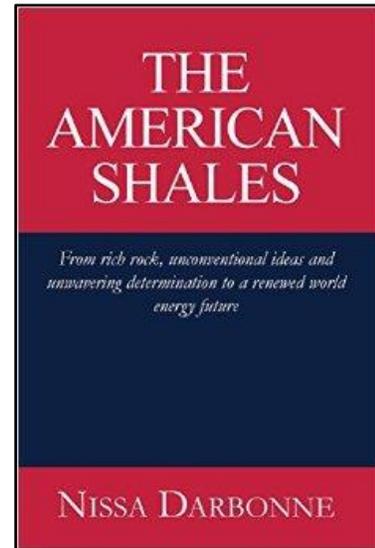
There is so much in this book--that is missing from the other books on the shale revolution--that I wouldn't even know where to begin. It is filled to the brim with quotes and discussions from those who were directly behind the shale revolution. And not from the popular characters we all know too well (like Aubrey McClendon, Harold Hamm, and George P. Mitchell) but from the geologists, engineers, field managers, and land men that pushed these shale initiatives forward.

There is one aspect of this book that some might see as a drawback. This is the fact that many of the quotes and discussions drawn from the interviews have similar or repetitive things to say about the paradigm shifts that were required and the nature of the discovery and development processes that were required. While some people might find this irritating, I actually feel that it adds value to this book by providing additional insight and by making it an even more timeless chronicle of the events leading up the shale revolution.

The apparent repetition from the commentators is insightful because it reveals just how pervasive and essential were the mindsets and processes that led to the "unlocking" of each of the shale plays. Where these mindsets and processes were present, new shale plays were "unlocked"; in places where they have not yet been brought to bear, the shale resources remain dormant.

To sum it all up, I don't think you can really "get" the shale revolution deep down in your bones if you haven't read this book--even if, for some people, it might feel like you are slogging through it.

(If you're like me, you might want the Kindle version for its search feature. I often find myself looking up the name of some geologist or engineer mentioned in an article to see if he was one of the ones involved in some of the earlier projects mentioned in Nissa's book.)





The Prize

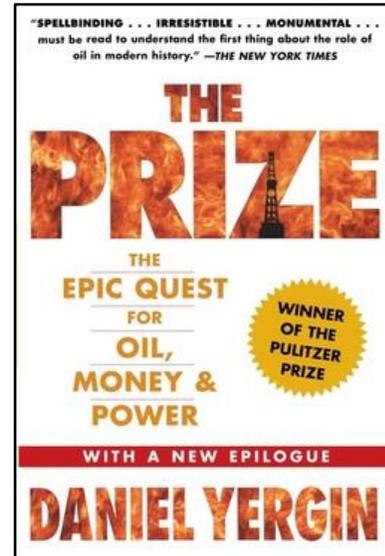
Daniel Yergin's book, *The Prize*, is still the single most popular book among oil and gas professionals today, despite being published over two decades ago in 1994. So well written and researched, it won a Pulitzer Prize and quickly became a *de facto* reading requirement for new hires at E&P companies.

The Prize presents the most important events in the industry's history in way that is both engaging and illuminating. As a history book, some will still find it boring, but the important point is that there are no *less* boring books out there that will give you the same information and perspective. So, you can either read *The Prize*, or remain ignorant of the various patterns and dynamics that have influenced the industry in the past, continue to influence it today, and that may re-emerge in the future.

For investors, *The Prize* is important because it will provide a mental database of these dynamics and their concrete manifestations in the past. In turn, these will help investors identify similar patterns in the present.

For example, when oil prices fell from \$100/bbl to \$80/bbl in December 2014 (before ultimately falling below \$40/bbl), an investor who took a moment to re-read the chapters in *The Prize* that cover the 1986 oil price collapse would have been reminded of just how hard it can be for OPEC to coordinate among its members to reduce production, and how production levels can often sustain themselves at surprisingly high levels after a prices collapse (as was the case with North Sea production after 1986).

For those who prefer movies, *The Prize* was made into an eight-part PBS series currently available for free on YouTube.

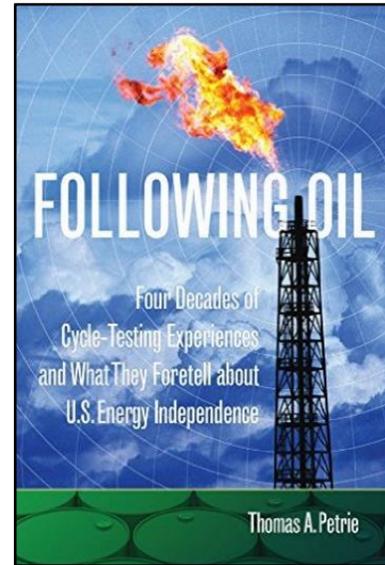




Following Oil

Thomas Petrie's *Following Oil* reads like a memoir, which makes it easy to read. But don't let that fool you into thinking it has little value. On the contrary. It was written by a man who spent a four-decade long career following oil as an equity analyst and later as an investment banker. He even played a role in the heady leveraged buyout days of the late 1980s. As a result, the authors insights come from a unique perspective and his stories are indeed interesting.

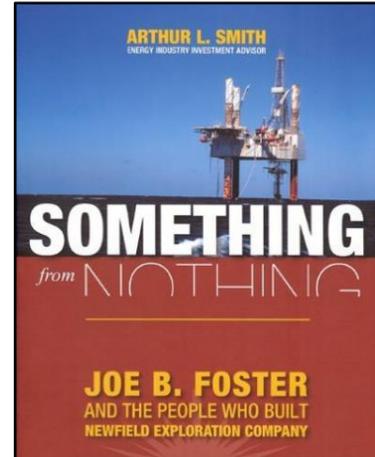
One of the big takeaways for me, personally, was learning about the consolidation and fragmentation cycles that the E&P industry goes through, starting with many publicly listed companies, then consolidating to just a handful, then reexpanding again to the original number of listings.





Something From Nothing

I must admit that I have a personal fondness for Arthur L. Smith's book *Something From Nothing*. It tells the remarkable story of Newfield Exploration, an audacious venture begun by former Tenneco oil executive Joe Foster after his prized E&P division was sold out from under him. At first he tried to buy the Tenneco E&P division for himself, through a leveraged buyout, but was outgunned by the majors seeking to scoop up the division's assets. This left him with two choices: walk away and retire . . . or . . . start from scratch and build a new company, this time on his own terms. He chose the latter.



Aside from being an exciting story, this book is also the only in-depth book I am aware of that focuses on a single, modern E&P company. And, because it is important to have a wealth of concrete examples when trying to understand an industry, this book makes the list as a perspective-enhancing read. Think of it as a detailed dissection of one of the creatures in the E&P ecosystem. While other E&P companies might be different, by dissecting at least one you will still get a better sense and intuition for how they operate, the character of their employees, and the make-or-break moments in their survival.

My only caveat is that this book is broken into sections that read more like a coffee table book. So it is not so much a thoroughly integrated work driving towards a thesis, but rather a collage of anecdotes and asides that, when taken together, create a sense of what the company was like during its period of phenomenal success under Joe Foster's leadership. One of my own personal takeaways was that there is a remarkable similarity between the culture that dominated Newfield during its meteoric rise and the culture that Amazon tries so hard to instill in its own workforce. Even though Newfield and Amazon are in dramatically different industries, it seems their founders, Joe Foster and Jeff Bezos, would have a lot that they agree on about the fundamentals of running a good business.





Oil and Gas Property Evaluation 2015 Edition

This is the only textbook we decided to include on the list. We recommend it because of its comprehensive treatment of the issues relevant to E&P project evaluation (which can easily be extended to the perspective of an investor).

This is for investors who really want to dig into the details, or who wants a reference text that will allow them to do so on an issue-by-issue basis. For example, it has an entire chapter dedicated to U.S. federal taxation for oil and gas activities. So, if you are hung up specifically on some taxation issue, you can open up that chapter and make some progress. Also, considering it was updated in 2015, it is as current as can be expected for a textbook.

Further support for this book comes from the fact that it is currently used by Professor W. John Lee to teach his courses on reservoir engineering at Texas A&M University. Lee served as an Academic Engineering Fellow at the SEC from 2007-2008 as part of a modernization effort that drafted new reserve reporting rules that were ultimately adopted and took effect in 2009. As described by the Society of Professional Engineers, Prof. Lee was “the principal architect” behind this effort.

The 2015 edition of *Oil and Gas Property Evaluation* is nearly impossible to find online. If you search on Amazon, you will only find used copies of the 1985 edition, which would be of little use today. Instead, go directly to the publisher’s website (www.thompson-wright.com) to order a copy. As of this writing, the book costs \$150 + shipping, but if you want to dig into the details of oil and gas evaluation it’s well worth it.

