



## Navigating a Credit Department Through Industry Transition

Presented by the Credit Interchange Division  
and Carl Doré, Jr.



# What should we cover today?

- Takeaways from the PESA Annual Meeting in April
- What does the future hold for us?
- Who is our competition, and what are they doing today?
- Concerns of our customer base:
  - Current CAPEX projections
  - Compare to current production cash flow
- Leaner for longer? Do analysts agree?
- Some thoughts about collection efforts
- Contrast to historical credit “Rules of Thumb”
- What worked, and did not work, in the recent bankruptcy cycle?

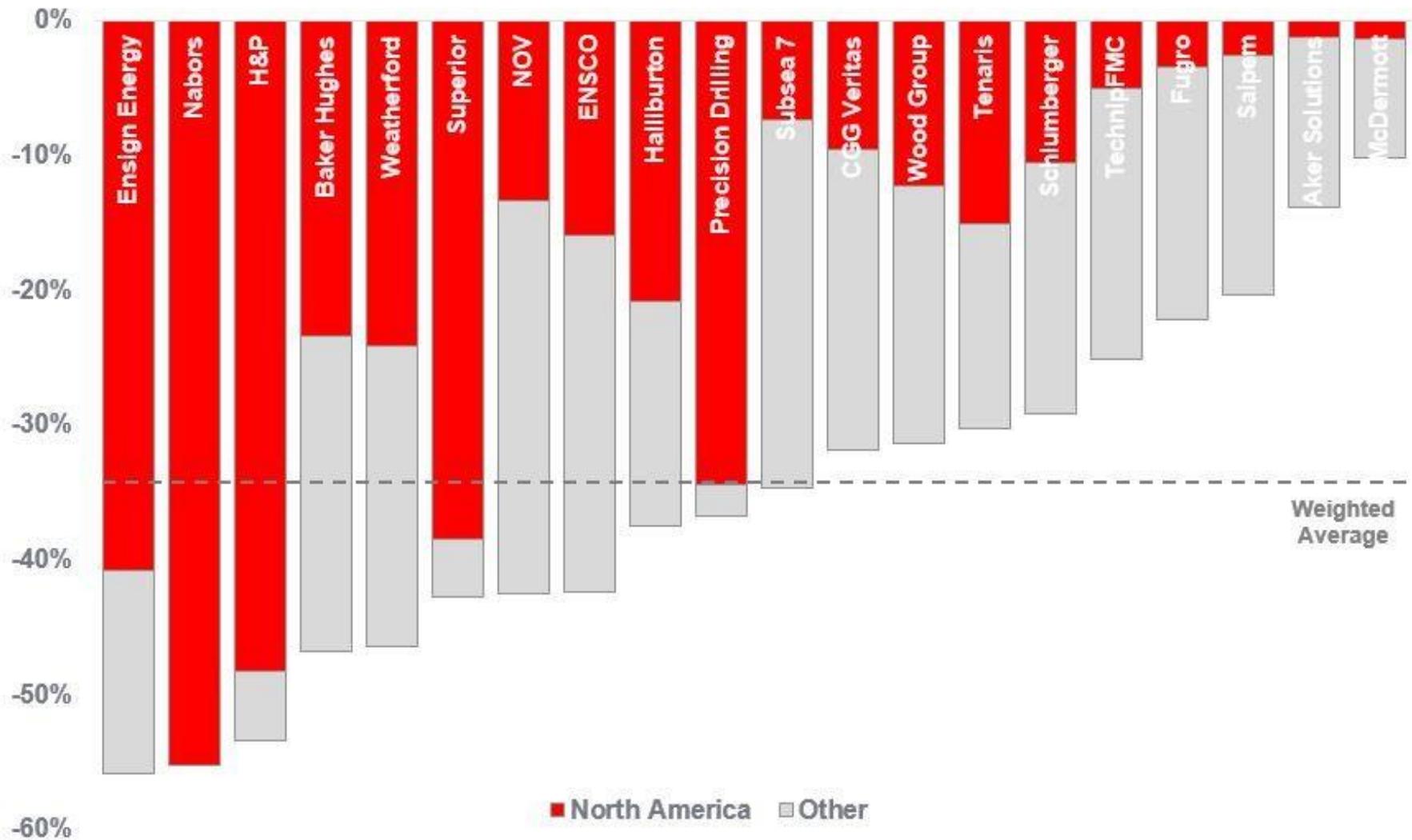
# The Main Topic

## **How to Navigate Your Credit Department through the Current Industry Transition**

*A CID Breakfast Discussion*

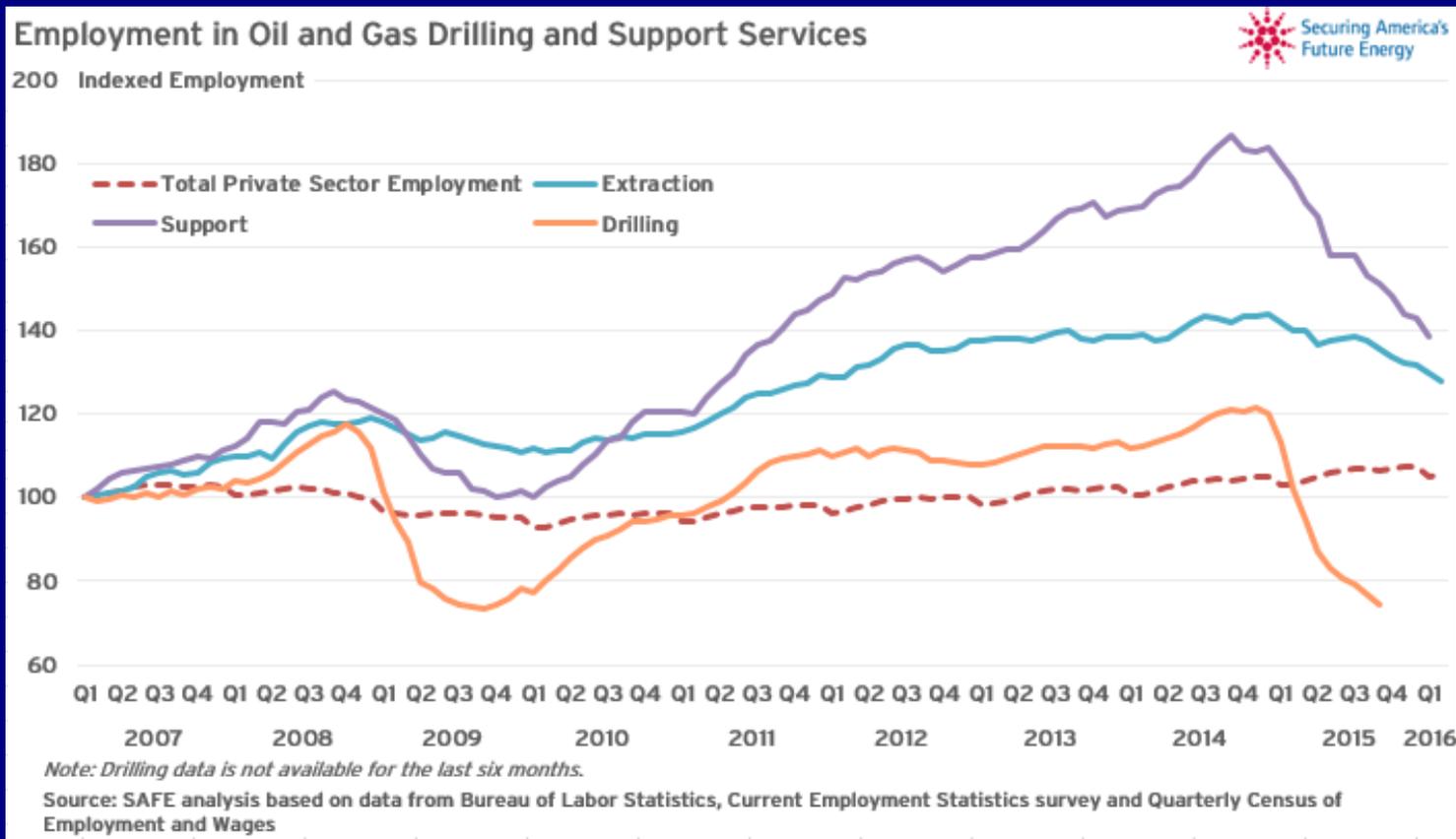
# Workforce reduction in 2014-2016, %

Split by revenue source in 2014



Source: Rystad Energy SCube, Rystad Energy Research

# Oil Sector Job Losses



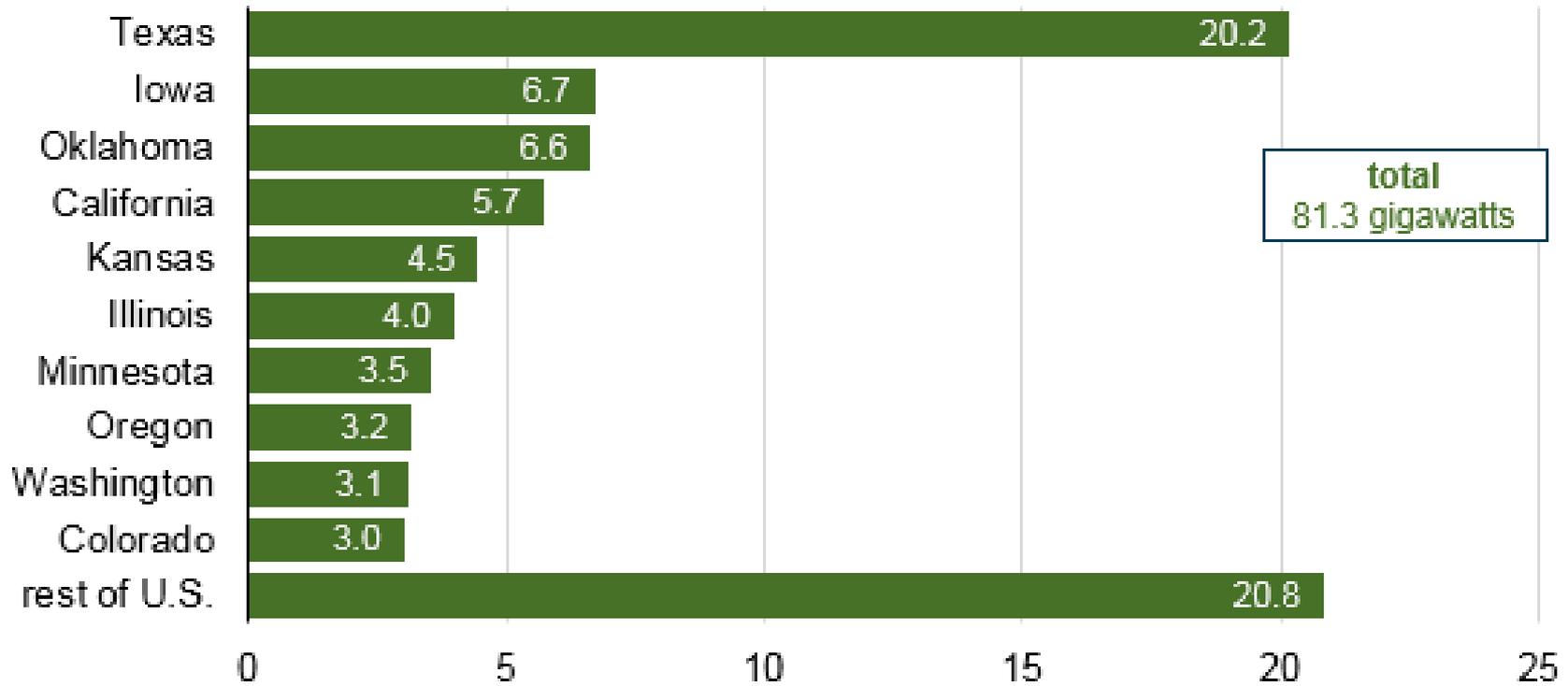
Among the hardest hit industries, 81,000 jobs were lost in the oil and gas support services sector between October 2014 and January 2016, a 48 percent decline. (March 25, 2016)

“Perhaps when you are flying into Midland you will catch a glimpse of the massive wind farms and the new solar projects that are being installed. This is the future competition for everyone in the oil and gas industry.”

Neil Mackintosh; guest columnist for  
**INFILL THINKING**; March 10, 2017

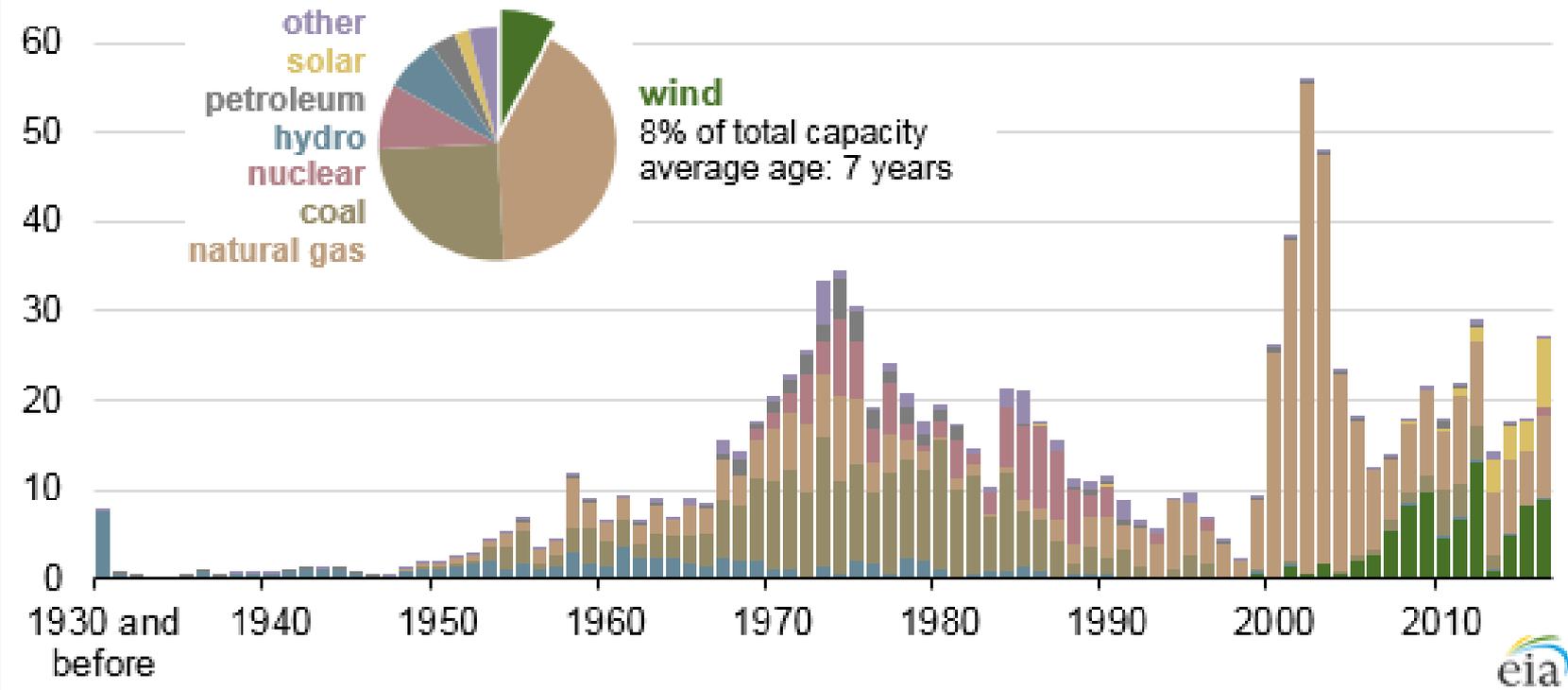
# Wind, by State

Operating wind generating capacity by state (as of Dec 2016)  
gigawatts



Texas alone accounts for almost a quarter of total U.S. wind capacity, and electricity generated by these turbines made up 13% of Texas's total electricity output in 2016.

## U.S. utility-scale electric generating capacity by initial operating year (as of Dec 2016) gigawatts

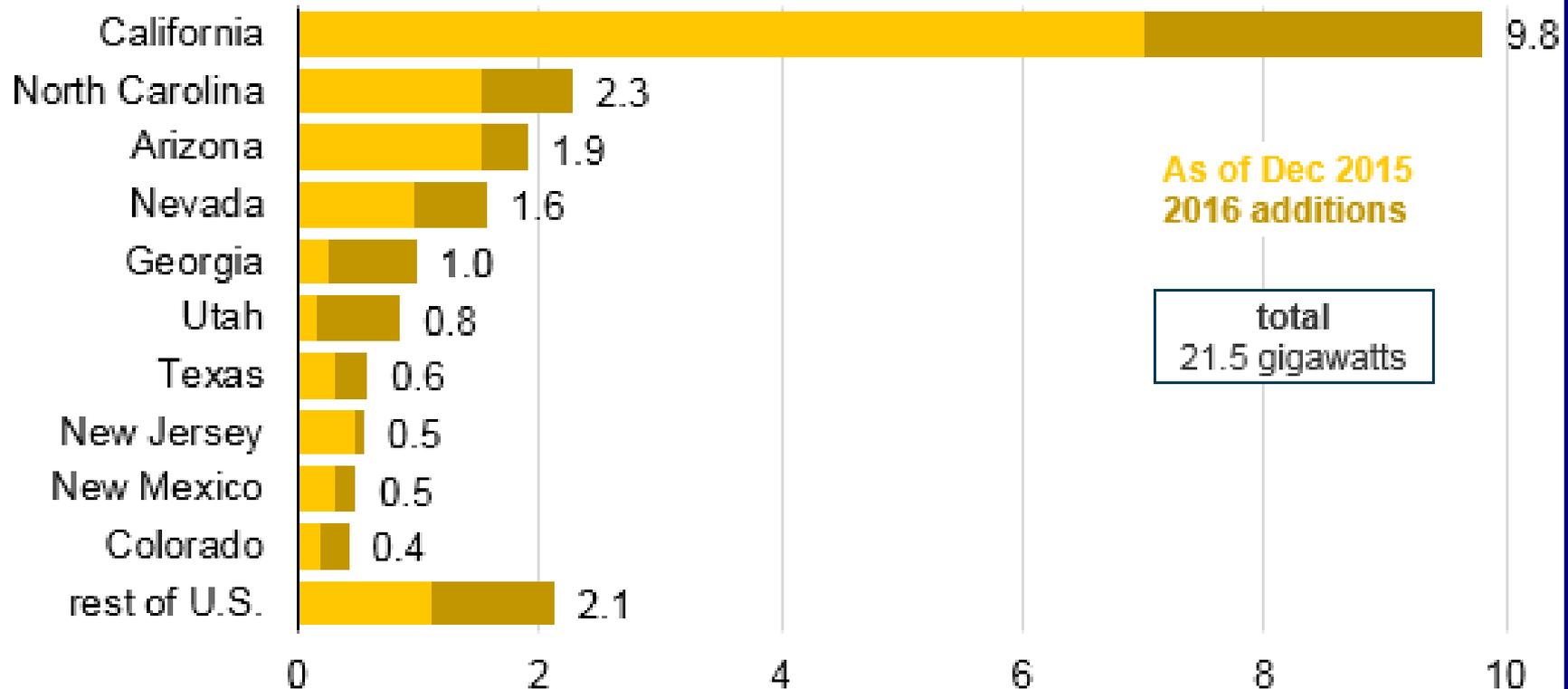


Wind generators accounted for **8% of the operating electric generating capacity** in the United States in 2016

- More than any other renewable technology, including hydroelectricity
- More than **one-third** of the nearly 200 gigawatts (GW) of utility-scale electricity generating capacity added since 2007.

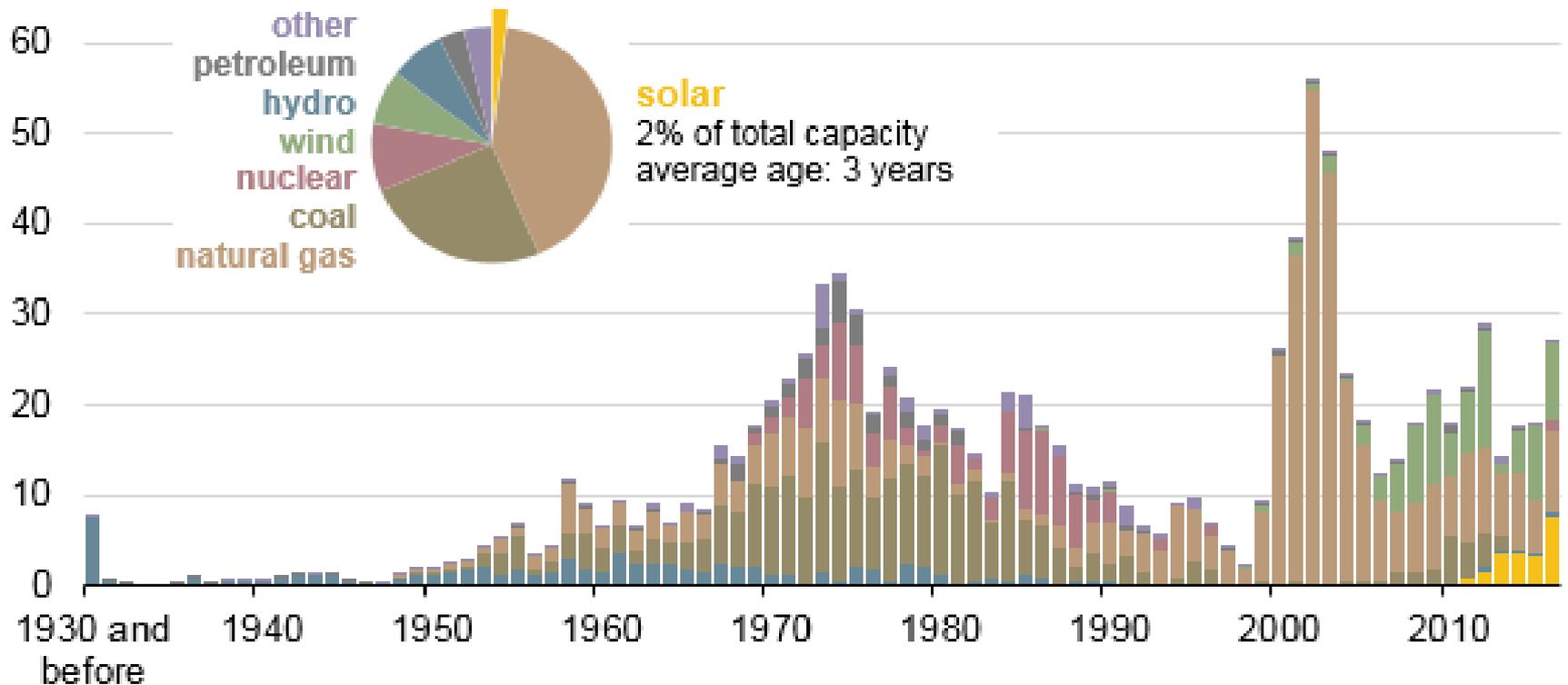
# Solar, by State

Operating solar generating capacity by state, as of December 2016  
gigawatts



Most solar generators are considered an intermittent or non-dispatchable resource

## U.S. utility-scale electric generating capacity by initial operating year (as of Dec 2016) gigawatts



Utility-scale solar installations—including both photovoltaic (PV) and thermal technologies— **grew at an average rate of 72% per year** between 2010 and 2016, faster than any other generating technologies. Utility-scale solar generation now makes up about **2%** of all utility-scale electric generation.

# The DeLoitte View

- Mindset shift toward shorter-cycle projects
- \$620 billion of projects through 2020 are estimated to have been deferred or canceled
- I'd characterize 2017 as “the slow road back.”
- Most outlooks call for supply and demand equilibrium by early 2017.
- US production could begin to ramp back up following the rig count upturn.
- Long-term thinking and investment horizons will likely be needed; we just don't know how long is long. 20 years? 40 years? 100 years?

From John England, Vice Chairman, US  
Energy & Resources Leader

# The Conway McKenzie 2017 View

- Since 2<sup>nd</sup> Qtr 2014, dramatic drop in E&P Reserve Values
  - Resulted in heavy over-advancements in loan facilities
  - Resulting in the March 2016 issuance of new Reserve-Based Lending practices and loan classifications
- 
- Now, a bank's increased carrying costs are passed to borrowers
  - This add'l cost-of-capital does not apply to non-bank lenders
  - The Outcome:
    - New leverage covenants
    - Requirements of 3.5x total funded debt to EBITDA thresholds
    - Tighter controls by lenders on liquidity

Paul Jansen; Managing Director  
May 2017 Oil & Gas Financial Journal

# The Opportune 2017 View

- Roughly 300 upstream companies filed for bankruptcy in 2016
- No energy sector is spared from “**lower for longer.**”
- Upstream companies are adjusting to the new normal of oil prices at or about \$50/bbl
- There is expected improvement in 2017 with an increase in rig count and upstream capital spending; however, OFS companies will be under pressure from producers to limit price increases for equipment and services.
- Overall, 2017 will continue to be a challenge for OFS companies, however, there is hope for improvement.

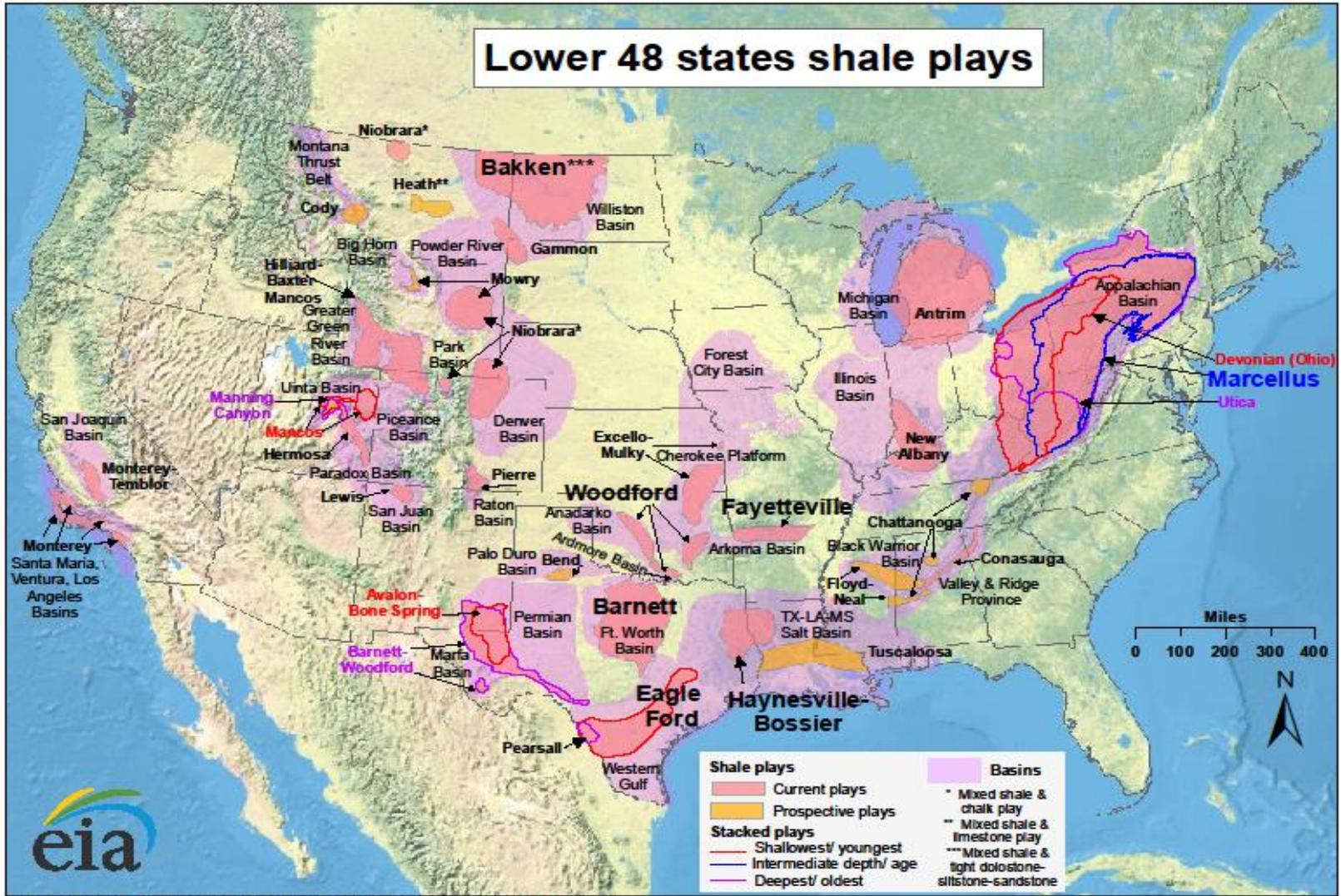
# Where are Oil & Gas Operations Today?

Permian Basin

Eagle Ford Shale

Domestically, that's about it.

# Lower 48 states shale plays

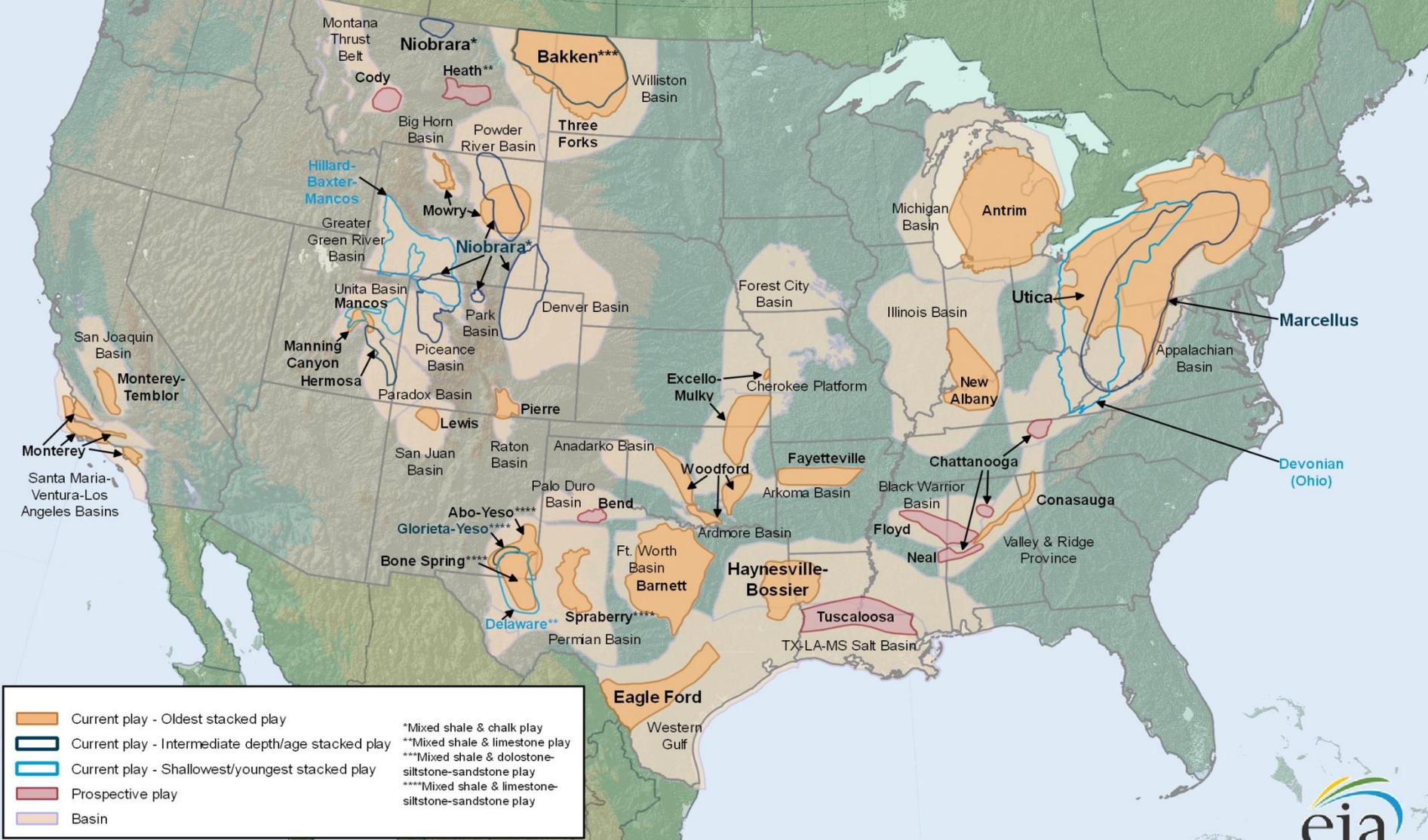


Source: Energy Information Administration based on data from various published studies.  
 Updated: May 9, 2011

The 2011 Version Map



# Lower 48 states shale plays

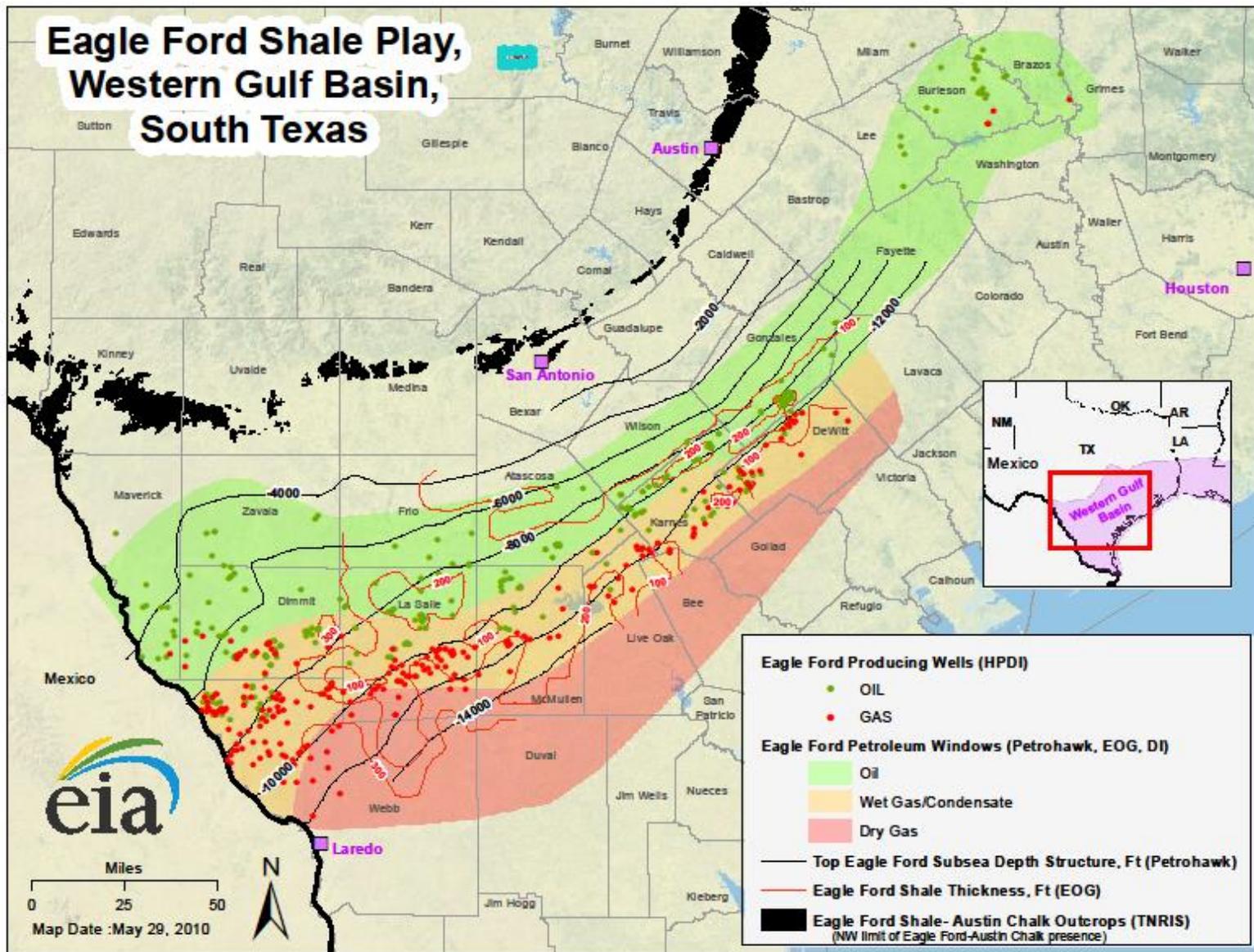


	Current play - Oldest stacked play	*Mixed shale & chalk play
	Current play - Intermediate depth/age stacked play	**Mixed shale & limestone play
	Current play - Shallowest/youngest stacked play	***Mixed shale & dolostone-siltstone-sandstone play
	Prospective play	****Mixed shale & limestone-siltstone-sandstone play
	Basin	

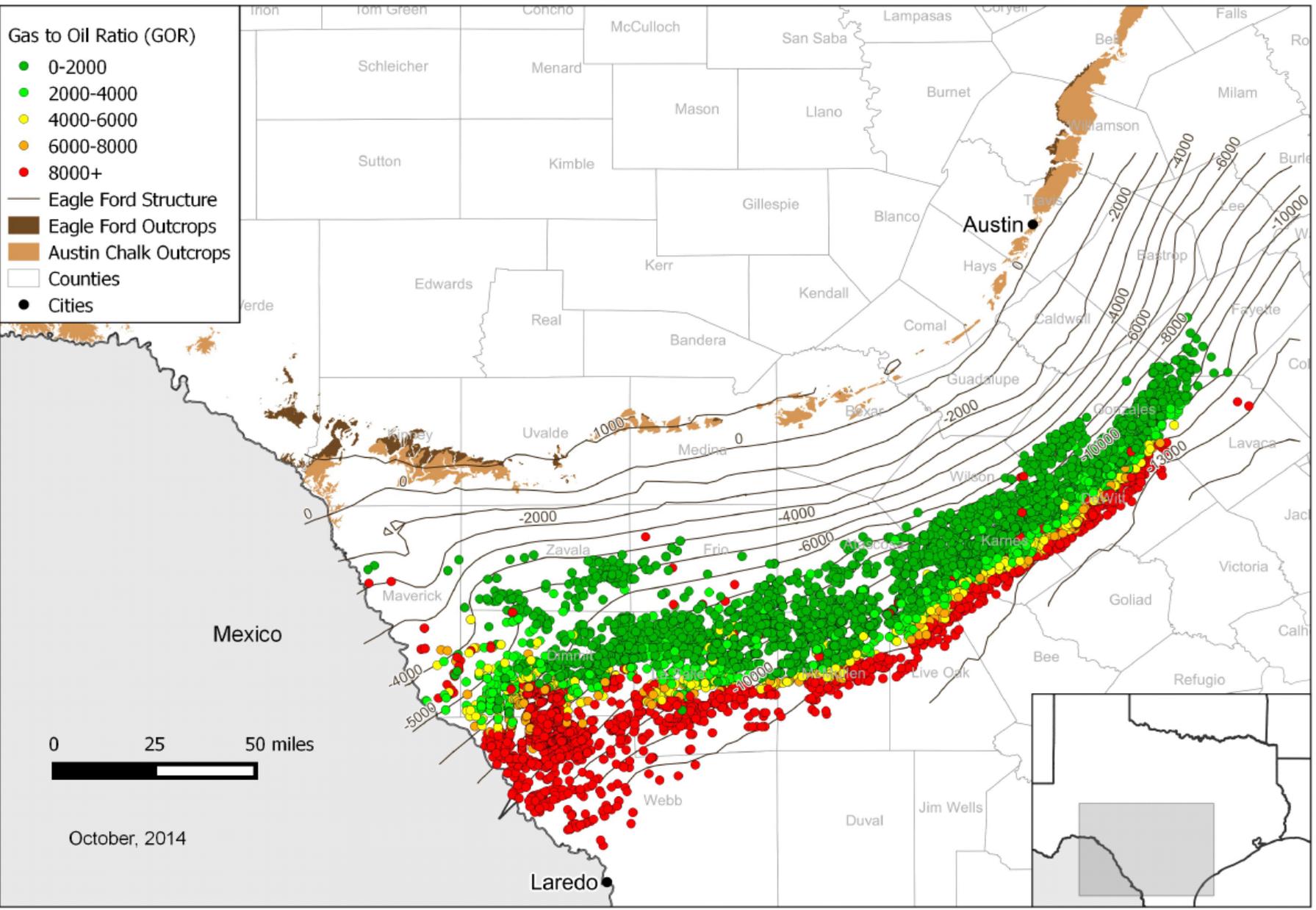
Source: U.S. Energy Information Administration based on data from various published studies.  
 Updated: April 13, 2015



# Eagle Ford Shale Play, Western Gulf Basin, South Texas



The 2010 Version Map

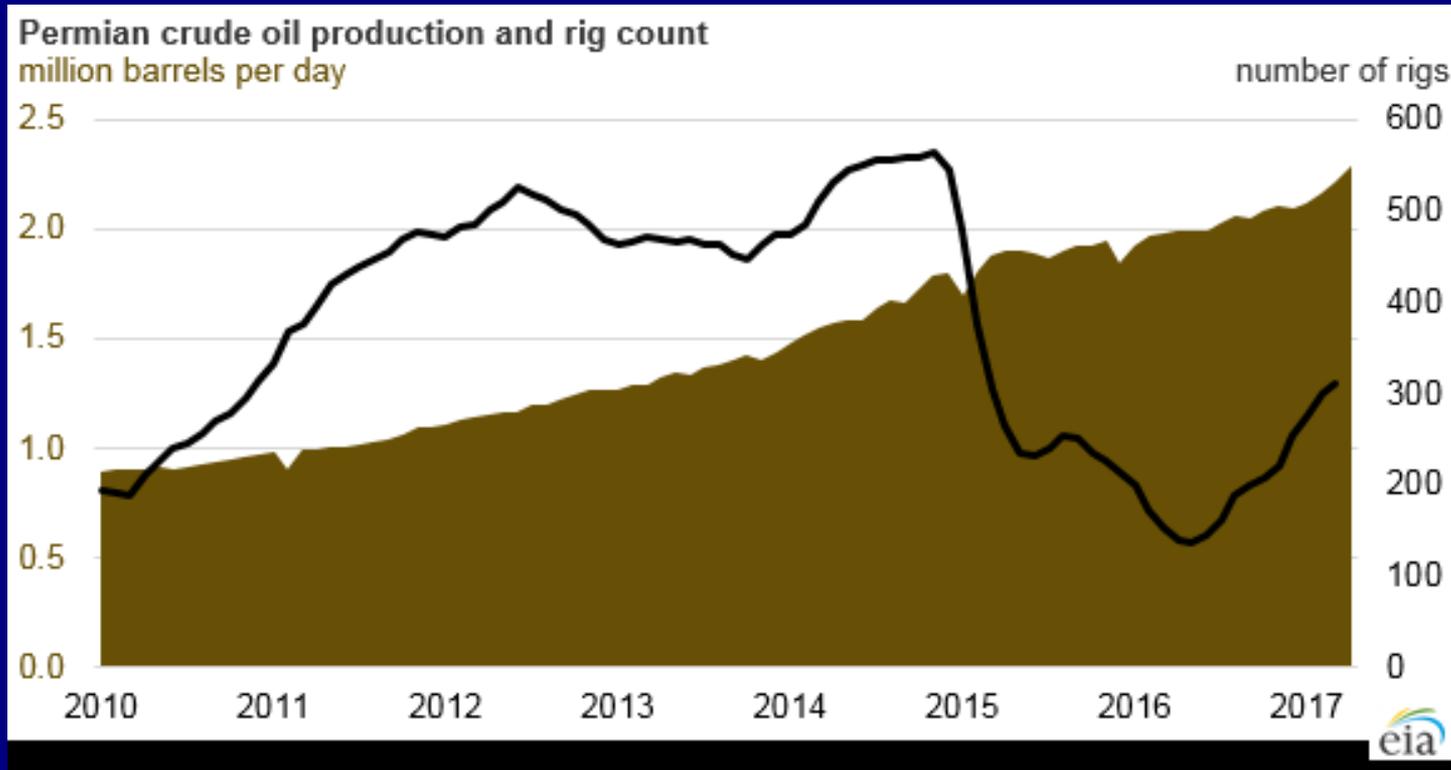


# Visualizing US Shale Oil Production

<https://shaleprofile.com/index.php/2017/05/02/eagle-ford-update-through-january-2017/>

- Interactive presentation, through Jan 2017
- First production in 2010 illustrates the historical decline
- Steep decline from March 2015, after frac completions slow
- Illustrates production by operator

# Permian Production v. Rig Count



- Three pipeline expansions add 340,000 Bopd capacity this year
- New 2017 Enterprise line from Midland to Houston, for 450,000 Bopd
- Corpus Christi becoming the new international market for access

# Outspend & Leverage Forecast: Cash Flow vs. Capex (Ex-A&D)

Ticker	2016					2017E					2018E				
	DCF (\$MM)	Capex (\$MM)	Outspend (\$MM)	DCF Δ	Capex Δ	DCF (\$MM)	Capex (\$MM)	Outspend (\$MM)	DCF Δ	Capex Δ	DCF (\$MM)	Capex (\$MM)	Outspend (\$MM)	DCF Δ	Capex Δ
<b>Large-Cap</b>															
APA	\$2,626	\$1,892	\$734	4%	(49%)	\$2,191	\$2,200	(89)	22%	69%	\$2,643	\$2,400	\$243	14%	6%
APC	2,832	3,437	(605)	(37%)	(42%)	4,573	5,550	(977)	61%	61%	5,480	6,000	(520)	20%	8%
CHK	447	1,680	(1,233)	(80%)	(50%)	1,711	3,260	(549)	283%	35%	2,429	2,860	(431)	42%	27%
CLR	1,464	1,103	361	(28%)	(64%)	1,965	2,030	(65)	34%	84%	2,547	2,975	(428)	30%	47%
DVN	1,754	2,062	(308)	(69%)	(61%)	3,177	3,175	2	81%	54%	3,473	3,900	(427)	9%	23%
EOG	2,749	2,583	166	(27%)	(48%)	4,758	4,463	276	73%	74%	5,891	6,160	(269)	24%	37%
NBL	1,264	1,576	(312)	(42%)	(47%)	2,238	2,600	(362)	77%	65%	2,661	3,400	(739)	19%	21%
PXD	1,740	2,099	(359)	12%	(9%)	2,174	2,846	(672)	25%	36%	2,873	3,530	(656)	32%	24%
<b>Mid-Cap</b>															
AR	\$1,274	\$1,873	(\$600)	30%	(12%)	\$1,368	\$2,025	(\$657)	7%	8%	\$1,791	\$2,300	(\$509)	21%	14%
COG	461	420	41	(34%)	(48%)	1,129	723	406	145%	72%	1,408	875	533	25%	21%
XEC	592	784	(192)	(20%)	(11%)	1,145	1,260	(115)	93%	61%	1,381	1,660	(279)	21%	32%
CXO	1,384	1,152	232	30%	(36%)	1,745	1,760	(15)	26%	53%	2,081	2,200	(119)	19%	25%
ECR	29	183	(154)	(16%)	(62%)	132	300	(168)	356%	64%	183	320	(137)	26%	7%
EPE	738	488	250	(44%)	(60%)	373	679	(306)	(49%)	39%	341	737	(395)	(9%)	8%
EQT	827	1,539	(712)	(4%)	(37%)	1,377	2,030	(653)	67%	32%	1,372	3,020	(1,649)	(0%)	49%
FANG	348	363	(15)	(17%)	(11%)	758	845	(86)	118%	133%	1,130	1,258	(127)	49%	49%
GPOR	367	518	(152)	8%	(31%)	635	1,073	(438)	73%	107%	900	1,174	(274)	42%	9%
LPI	348	377	(29)	(2%)	(45%)	376	530	(154)	8%	41%	400	570	(170)	6%	8%
NFX	833	749	84	(29%)	(50%)	977	1,120	(143)	17%	50%	1,187	1,400	(213)	22%	25%
OAS	300	400	(100)	(1%)	(51%)	597	655	(58)	99%	64%	806	970	(164)	35%	48%
QEP	703	519	185	(36%)	(50%)	778	940	(162)	11%	81%	1,033	1,200	(167)	33%	28%
RRC	541	572	(31)	(23%)	(45%)	1,066	1,155	(89)	97%	102%	1,218	1,480	(262)	14%	28%
RICE	509	672	(163)	42%	(23%)	817	1,258	(441)	61%	87%	937	1,325	(388)	15%	6%
RSPP	208	294	(87)	(11%)	(25%)	516	685	(170)	149%	136%	743	907	(164)	44%	21%
SH	574	687	(113)	(37%)	(54%)	423	905	(482)	(26%)	32%	613	1,310	(697)	45%	45%
SWN	597	623	(26)	(59%)	(65%)	1,285	1,475	(190)	115%	137%	1,460	1,450	10	14%	(2%)
WLL	567	537	30	(43%)	(78%)	748	1,128	(380)	32%	110%	965	1,210	(245)	29%	7%
<b>Small-Cap</b>															
AREX	\$28	\$20	\$8	(72%)	(87%)	\$50	\$58	(\$8)	92%	102%	\$80	\$80	(\$0)	27%	28%
BBG	126	99	28	(35%)	122%	96	265	(169)	(24%)	169%	160	300	(140)	67%	13%
CRZO	327	432	(105)	(14%)	(36%)	350	570	(220)	7%	32%	457	664	(207)	21%	16%
GST	14	59	(46)	(66%)	(55%)	1	84	(83)	(96%)	42%	7	83	(76)	1,066%	(2%)
JAG	30	161	(131)	(15%)	67%	193	548	(355)	533%	240%	419	563	(144)	117%	3%
JONE	11	105	(94)	(79%)	(66%)	108	279	(171)	887%	165%	154	295	(141)	42%	6%
MTDR	132	318	(185)	(34%)	(27%)	235	470	(235)	78%	48%	314	489	(175)	33%	4%
POCE	428	400	28	2%	(28%)	608	775	(167)	42%	94%	903	1,035	(132)	48%	34%
PE	281	496	(215)	61%	24%	549	1,260	(711)	95%	154%	937	1,560	(623)	71%	24%
REN	56	137	(82)	(26%)	98%	155	280	(125)	179%	104%	288	360	(72)	85%	29%
REOX	0	141	(141)	(99%)	(16%)	54	80	(26)	20,573%	(43%)	53	40	13	(2%)	(50%)
SRCI	65	130	(65)	(28%)	(28%)	159	340	(181)	144%	162%	287	390	(103)	81%	15%
WRD	66	121	(54)	30%	(48%)	219	539	(320)	231%	347%	448	606	(158)	105%	12%
XOG	116	371	(255)	(38%)	(5%)	329	920	(591)	183%	148%	692	1,005	(313)	111%	9%
<b>Large-Cap</b>	<b>\$14,876</b>	<b>\$16,432</b>	<b>(\$1,556)</b>			<b>\$23,788</b>	<b>\$26,144</b>	<b>(\$2,356)</b>			<b>\$28,997</b>	<b>\$32,225</b>	<b>(\$3,227)</b>		
<b>Δ %</b>	<b>(29%)</b>	<b>(43%)</b>				<b>60%</b>	<b>59%</b>				<b>22%</b>	<b>23%</b>			
<b>Mid-Cap</b>	<b>\$11,199</b>	<b>\$12,751</b>	<b>(\$1,552)</b>			<b>\$16,246</b>	<b>\$20,555</b>	<b>(\$4,309)</b>			<b>\$19,950</b>	<b>\$25,375</b>	<b>(\$5,425)</b>		
<b>Δ %</b>	<b>(23%)</b>	<b>(48%)</b>				<b>48%</b>	<b>61%</b>				<b>23%</b>	<b>23%</b>			
<b>Small-Cap</b>	<b>\$1,679</b>	<b>\$2,989</b>	<b>(\$1,311)</b>			<b>\$3,105</b>	<b>\$6,469</b>	<b>(\$3,364)</b>			<b>\$5,178</b>	<b>\$7,469</b>	<b>(\$2,291)</b>		
<b>Δ %</b>	<b>(1%)</b>	<b>(2%)</b>				<b>89%</b>	<b>116%</b>				<b>67%</b>	<b>15%</b>			
<b>Total</b>	<b>\$27,753</b>	<b>\$32,172</b>	<b>(\$4,419)</b>			<b>\$43,138</b>	<b>\$53,168</b>	<b>(\$10,029)</b>			<b>\$54,123</b>	<b>\$68,009</b>	<b>(\$13,886)</b>		
<b>Δ %</b>	<b>(21%)</b>	<b>(41%)</b>				<b>55%</b>	<b>65%</b>				<b>25%</b>	<b>22%</b>			

Source: Wells Fargo Securities, LLC estimates and company filings.

# 2013 Trend of E&P Cash Flow

- Pattern here of severe deterioration
- CAPEX has exploded during recent period of time
- Indicates that companies have spent enormous sums of money drilling wells that are not providing enough cash to continue drilling operations on their own.
- Not even close.
- For instance, Continental's CAPEX grew from \$1.0B to \$4.1B.
- Devon's CAPEX grew from \$6.4B to \$8.2B.

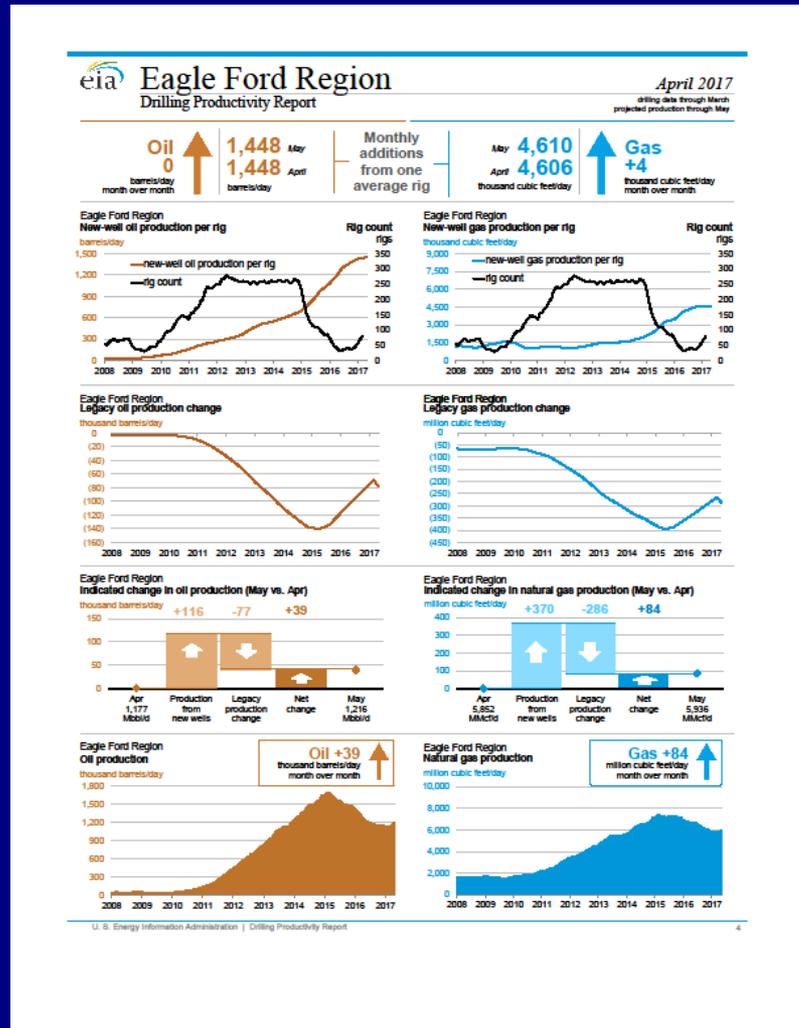
*“[I]f a company cannot generate cash from operations then it has to go outside and get the monies through borrowings or equity offerings. In other words, debt or dilution for investors”.*

# The Key Energy Outlook

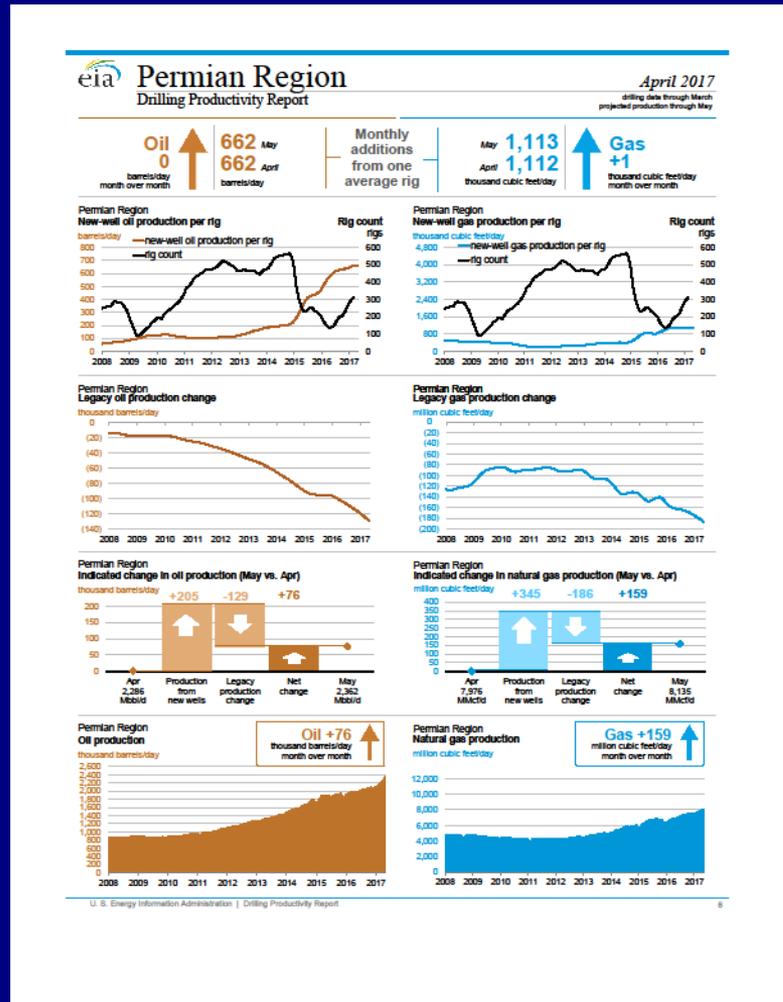
“As the market recovery continues and our customers increase spending, the limiting factor on activity growth will be labor, not equipment. Crew availability is already tightening and most service companies will likely have to bid workers back into an industry that just went through a dramatic two-year period of layoffs and workforce reductions. **Therefore service pricing must increase from the recent multi-year lows.**”

Robert Drummond, CEO, Key Energy Services

# <https://www.eia.gov/petroleum/drilling/#tabs-summary-3>



# https://www.eia.gov/petroleum/drilling/#tabs-summary-3



# The Apache 2017 Investor Presentation

## 1Q 2017 OPERATING CASH MARGINS



(1) Operating cash margins calculated as price realizations less lease operating expenses, gathering and transportation costs and taxes other than income.

# The Apache 2017 Investor Presentation

## OIL AND GAS CAPITAL INVESTMENT

	<u>1Q17<sup>(1)</sup></u>
	<i>(In millions)</i>
E&P and GTP Investment:	
Permian .....	\$ 440
MidCon / Gulf Coast .....	17
Gulf of Mexico .....	6
Canada .....	<u>38</u>
North America .....	501
Egypt (Apache's interest only) <sup>(2)</sup> .....	56
North Sea .....	75
Other .....	<u>14</u>
Total	<u>\$ 646</u>

- (1) First quarter 2017 adjustments to total Costs Incurred and GTP Capital Investments:
- Includes cash plug and abandonment of \$13 million.
  - Excludes non-cash plug and abandonment of \$15 million.
  - Excludes exploration expense, other than dry hole expense and unproved leasehold impairments, of \$25 million.
- (2) First quarter 2017 excludes noncontrolling interest in Egypt of \$31 million.

For a reconciliation of cost incurred and GTP capital investments to Oil and Gas Capital Investment please refer to the appendix.

# Some Thoughts about Collection Efforts

- Stay on Top of A/R and Start Early
- Send the demand letter with proper language
  - Include trapping language
  - Include allegation of Prompt Pay Act
- Do the research for a valid, perfect lien
  - Include non-operating WI owners
  - Ensure valid real property description
- Use your legal team as an extension of your department
- **What are your issues? Concerns? Thoughts?**

# Contrast to Historical Rules of Thumb

- Thoughts from the Olden Days:
  - Is there a D&B in your file?
  - Is this new customer located on Turtle Creek Blvd?
  - Animals, Indians & Insects
- What sources of information exist for historical trade data?
- Check the name of the principal when you get a new credit application
- Other Ideas?
- How can CID help to keep your credit dept as a value-add to your company?

# What Did We Learn in the Recent Round of Bankruptcies?

- 1. The one main thing: File Perfect Liens!**
- 2. Avoid the Unsecured Hot Seat**
- 3. Plan Ahead for Preference Claims**

# Trends & Traps #1

## Issue: The Newly Designated Operator

- All invoices go solely to the new operator
- But, New Operator has no assets, no value
  - Option #1: Live with the consequences
  - Option #2: Require a Corporate Guarantee
  - Option #3: Request a Personal Guarantee (unlikely)

# Trends & Traps #2

## Issue: The New Bankruptcy Model

- Corporate Entity files for Bankruptcy
- Suspicion of fraud, deceit, etc.
- What to do?
  - Create a creditor group
  - Immediately raise issues at the 341 mtg of creditors
  - Use Rule 4001 wisely to take deposition inquiry

# Trends & Traps #3

## Issue: Some Recent Collection Trends

- Customer Efforts to set up monthly payments
- Customer Efforts to blame Non-Op WIPs (not really new!)
- Customers reluctance or inability to raise adequate funds for shale completion
- What is your experience?

**Thanks PESA-CID for  
the Opportunity to  
Lead this Discussion,  
and Good Luck!**

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