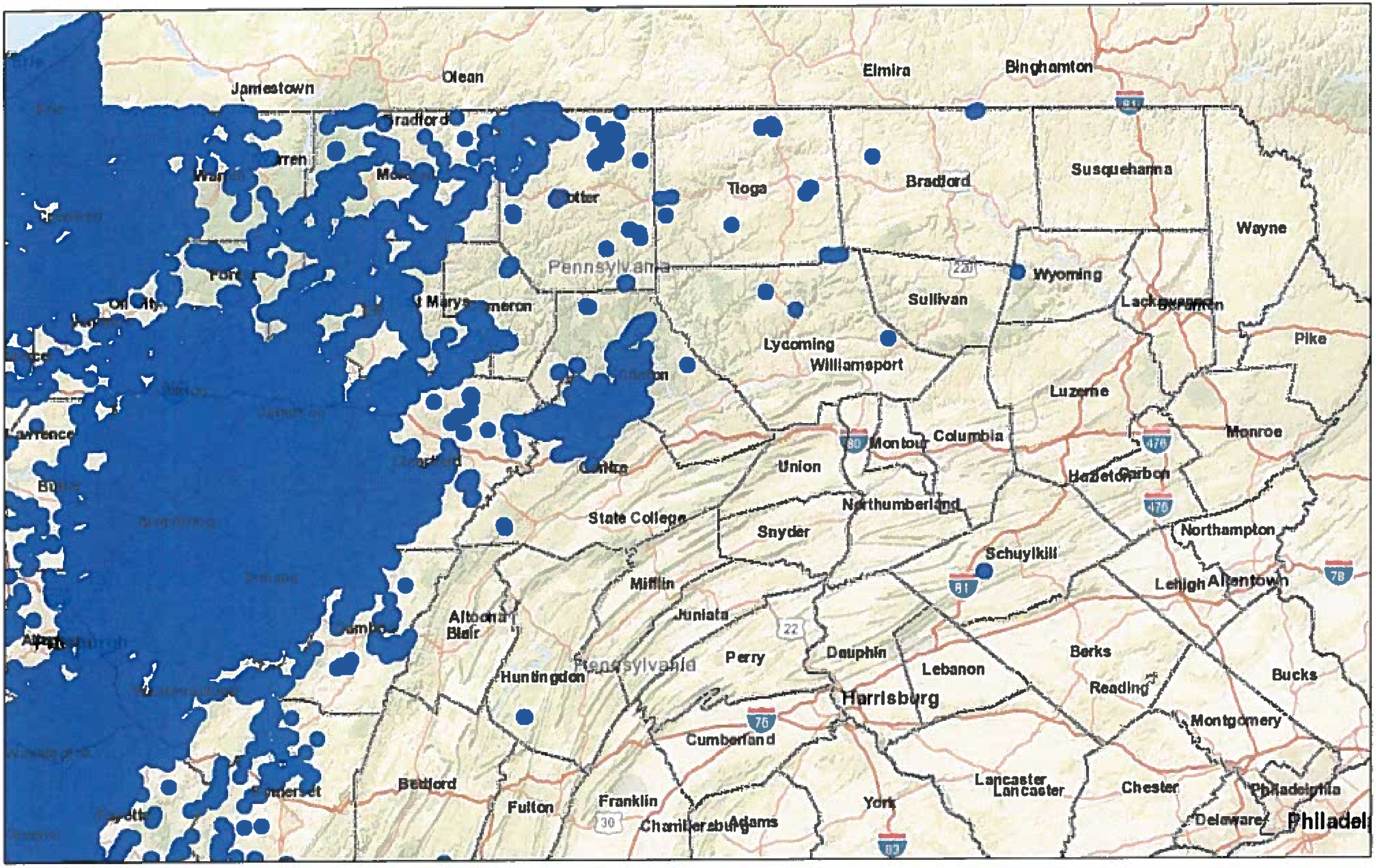
DEP - CONVENTIONAL WELLS



January 24, 2019

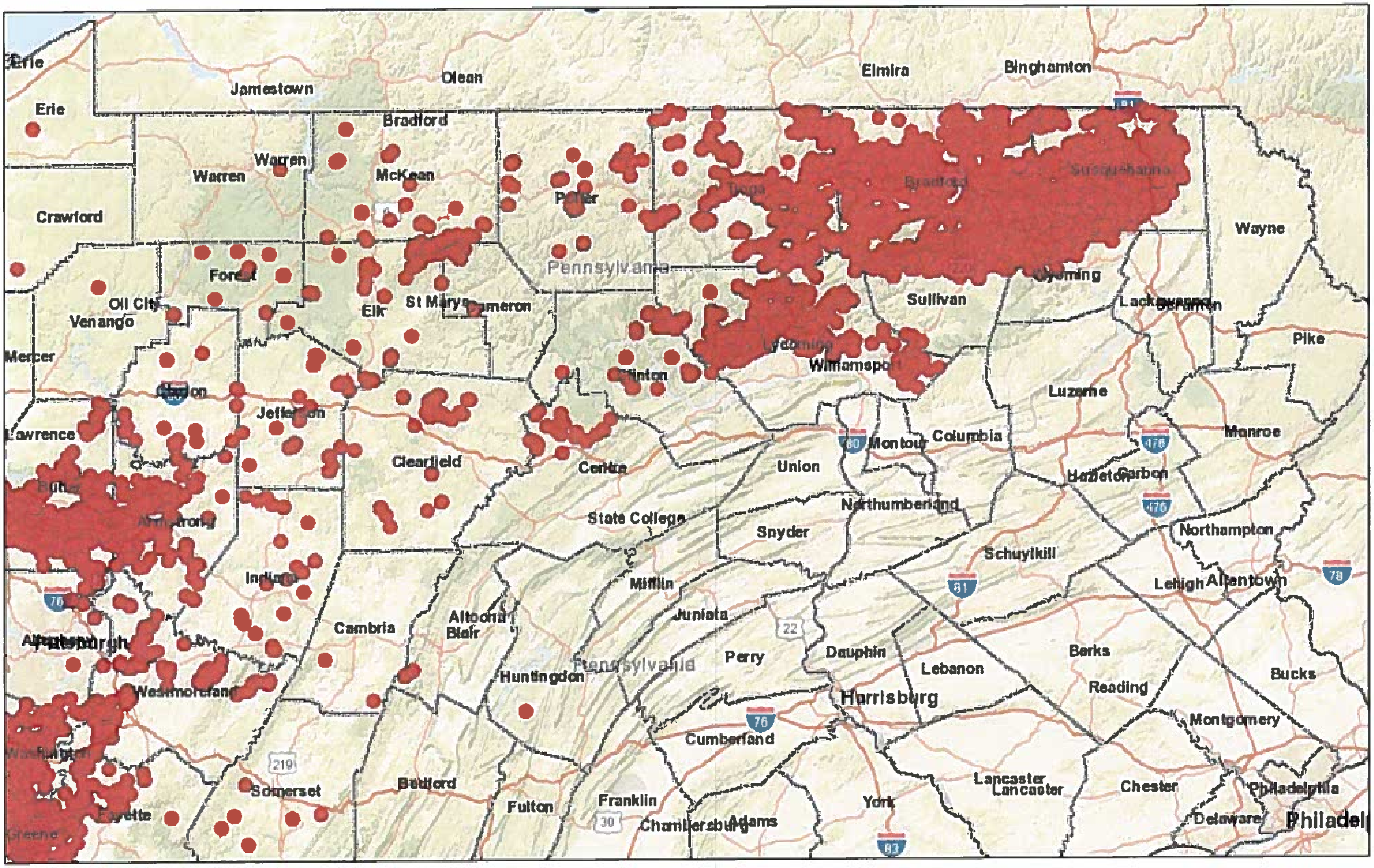
Location of
Location of ALL DEP permitted Conventional Wells

1:2,311,162

0 20 40 80 mi
0 30 60 120 km

Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA,

DEP - UNCONVENTIONAL WELLS



January 24, 2019

Location of ALL DEP permitted Unconventional (SHALE) Wells

1:2,311,162

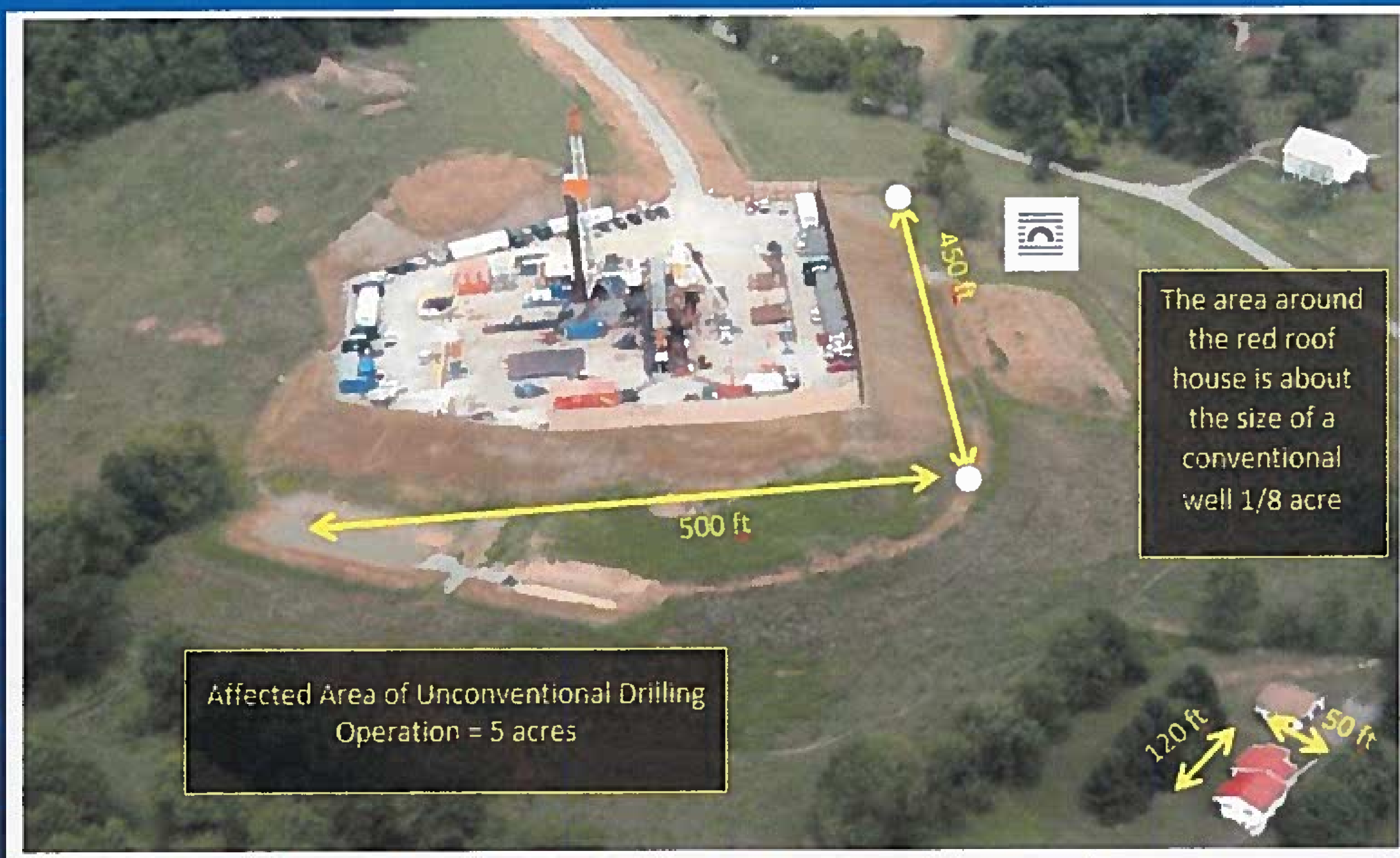
0 20 40 80 mi

0 30 60 120 km

Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA,

Conventional Oil & Gas Regulation

- Permitting




Conventional (vertical) Gas Well site
Kelley Ln
Washington Ave
Conventional (vertical) Gas Well Site
Unconventional (Shale) Producing Well Site
© 2015 Google
Google earth
Imagery Date: 6/14/2014 40°17'10.27" N 80°18'15.95" W elev 1170 ft eye alt 4524 ft

HIGHLITES OF THE ECONOMIC IMPACT STUDY OF THE CONVENTIONAL INDUSTRY IN PENNSYLVANIA

1) Estimated 648 million in annual gas revenue

2) 181 million in annual oil revenue

3) 1.4 billion in economic impact each year

4) 17 million in state taxes each year

5) 5,600 total jobs supported each year

6) Permit fees from conventional and unconventional are estimated to be 20 million of annual budget of DEP

7) Conventional operators also pay local taxes to support Governments where they are located

The Local Economic Impact of the Conventional Oil and Gas Industry in Western Pennsylvania

February 22, 2017

FINAL REPORT SUBMITTED TO:
Pennsylvania Grade Crude Oil Coalition

FINAL REPORT SUBMITTED BY:
Econsult Solutions
1435 Walnut Street
Philadelphia, PA 19102

ECONSULT SOLUTIONS
economics | policy | strategy

TABLE OF CONTENTS

EXECUTIVE SUMMARY

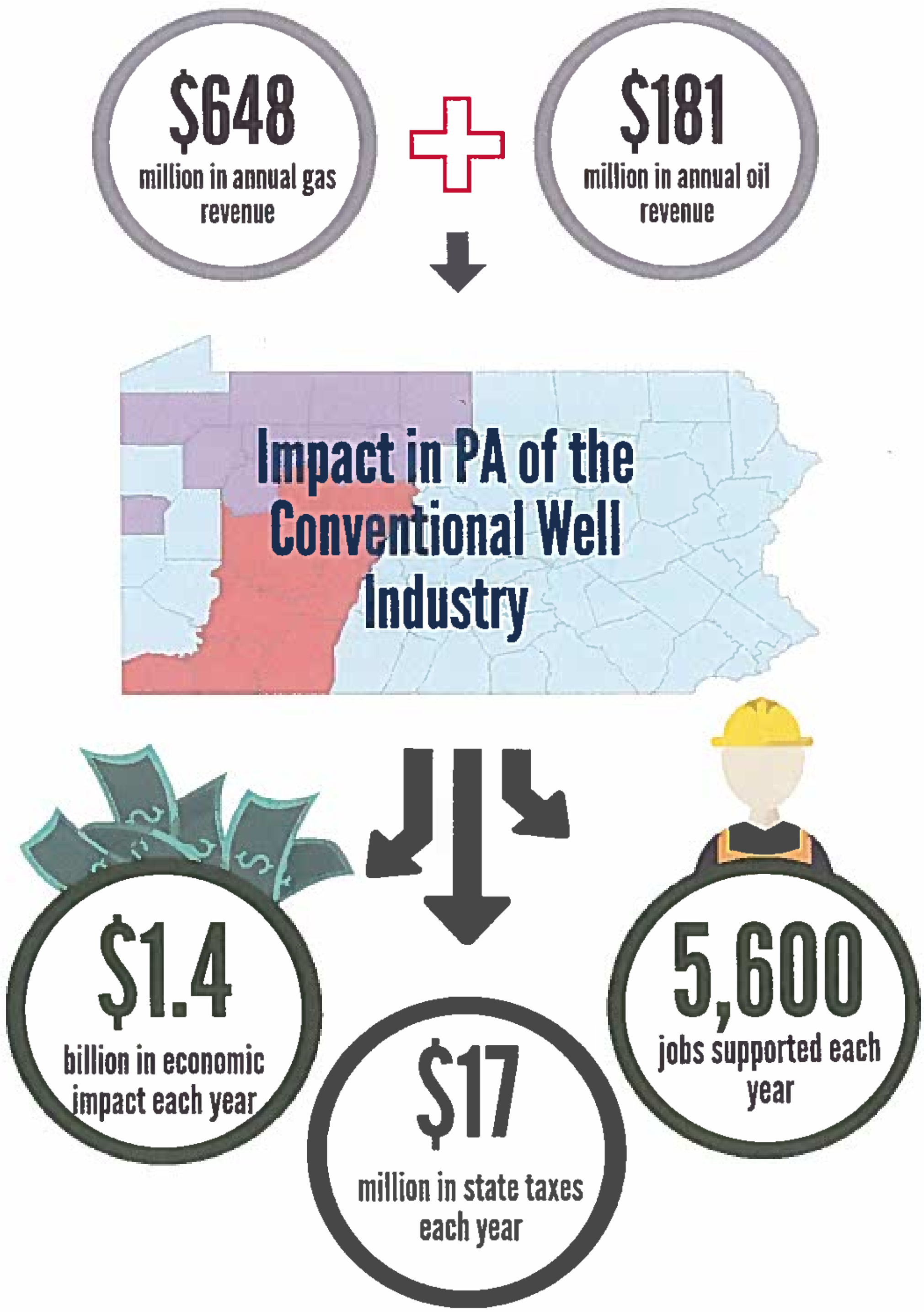
The conventional oil and gas industry has been a driving force in the Commonwealth of Pennsylvania ("Commonwealth") for over a century. For the vast majority of this time, drilling has been limited to conventional wells. However, over the past eight years, a boom in unconventional drilling, spurred by the focus in the Marcellus shale, has upended Pennsylvania's legacy oil and gas industry. The Pennsylvania Grade Crude Oil Coalition (PGCC) represents independent, conventional oil and gas producers and service providers in western Pennsylvania. Its mission is to advance local economies and energy independence by promoting conventional oil and gas production in a safe and environmentally sound manner.

Conventional oil and gas, while only a portion of the total gas and oil production in the Commonwealth, is a crucial driver of local economic and employment impact in the small communities in which it occurs. This report focuses on the operations of conventional oil and gas wells in 19 counties in western Pennsylvania ("19-County Region") where there is significant conventional drilling activity, generate substantial economic impacts throughout the Commonwealth by utilizing local vendors, employing residents, and paying wages to their workers. The economic impacts include the direct activity of the conventional oil and gas industry and the spillover economic activity, induced and indirect impacts, it supports.

- Within the Commonwealth, the operations of the conventional oil and gas wells in the 19-County Region generate an estimated $1.4 billion in total annual economic impact, of which $1.2 billion occurs within the 19-County Region.
- The activity of the conventional oil and gas industry supports an estimated 5,600 jobs with $241 million in earnings in the Commonwealth. Of that total employment impact, 4,700 jobs with $185 million in earnings are supported within the 19-County Region.
- Additionally, the operations support $17 million in annual tax revenues to the Commonwealth (see Figure ES.1).

The impacts of the conventional oil and gas industry are extremely important to the local economies in the 19-County Region. These counties and municipalities are less able to replace the income and employment generated by this industry with other jobs, making the health of the industry vital to their future.

ES.1 – Estimated Total Economic Impact of the Conventional Well Industry within the Commonwealth of Pennsylvania



Source: PA.gov (2015), Energy Information Administration (2015), ESI (2016), IMPLAN (2013)

In addition to the economic and fiscal impacts generated as a result of oil and gas revenues within the 19-County Region, conventional well operators make additional monetary contributions to the state.

- Conventional well operators pay permit fees to the Pennsylvania Department of Environmental Protection ("DEP") that range from $250 to $1,950 per well, depending on the well bore length. Permit fees from conventional and unconventional drillers support more than half of the approximately $20 million annual budget of DEP's Office of Oil and Gas Management.

- Conventional well operators also pay local taxes to the small municipal governments where they are located. These small municipalities rely on property taxes, income tax, and the local services tax for a large portion of their revenues.

The Bradford Refinery, located in McKean County, PA and operated by the American Refining Group ("ARG"), processes conventional oil and is the only Penn Grade crude refinery in the Commonwealth.

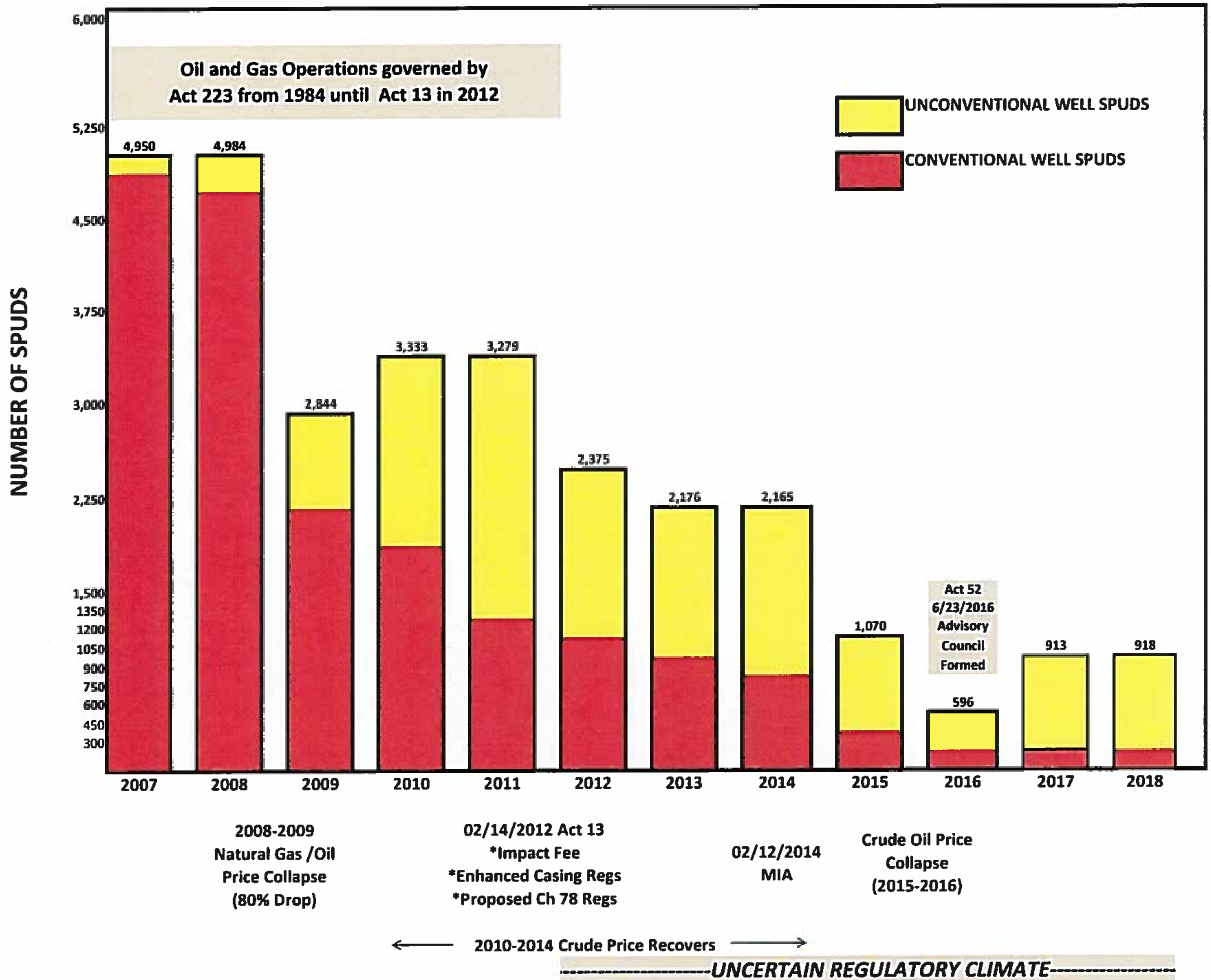
- Each year, the refinery generates an estimated $93 million of economic impact in McKean County and supports 350 direct and 100 indirect, and induced jobs, for a total of 450 jobs supported.

- Within the Commonwealth of Pennsylvania, ARG generates $173 million in economic impact and supports 540 jobs (350 of which are direct jobs) with $36 million in earnings.

This study is not the first to examine the economic impact of the conventional oil and gas industry in Pennsylvania. In 2008, the Pennsylvania Economy League of Southwestern Pennsylvania estimated the economic benefits of the oil and gas industry within the Commonwealth. The 2008 study includes both the conventional and unconventional industries and provides a great understanding of the magnitude of the importance of the overall industry to the state. The study brought to light that incredible economic impact the oil and gas industry was having at that time, a boom period for the industry.

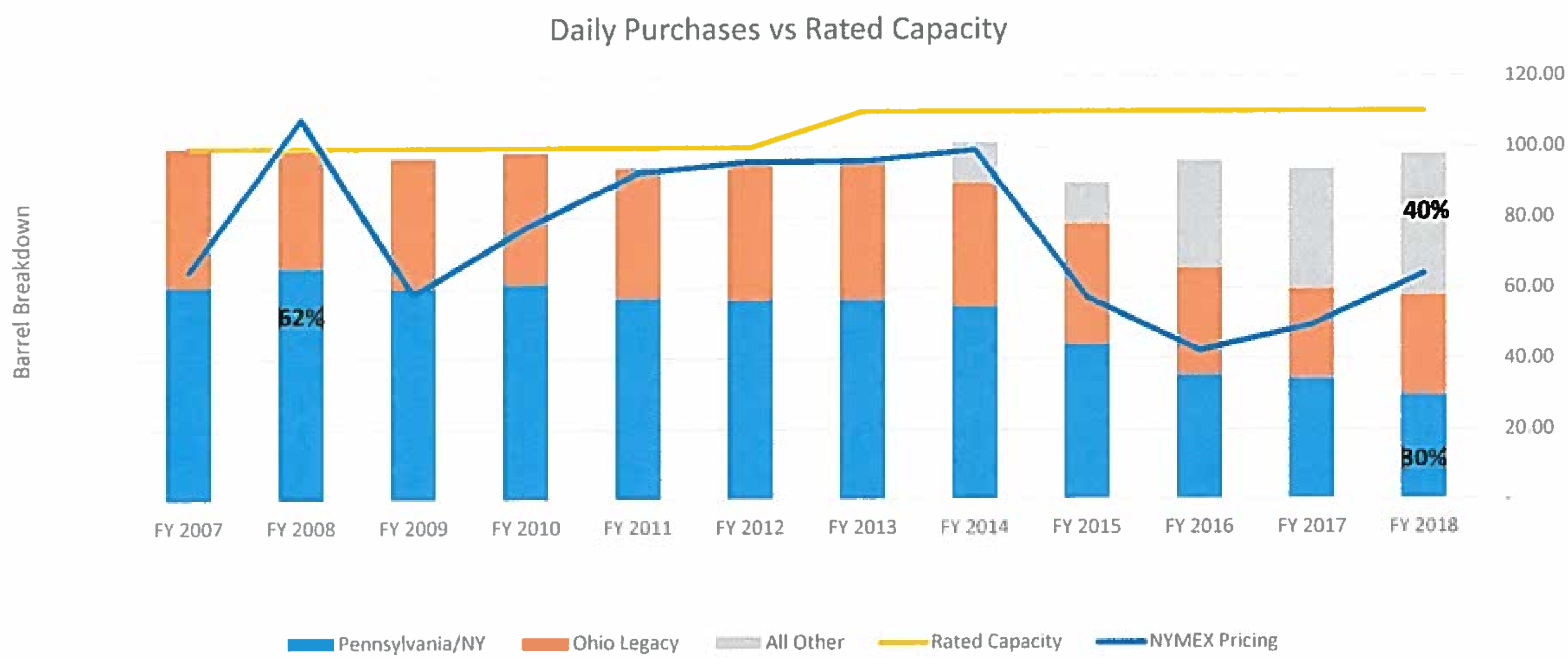
Our study is the first, to our knowledge, to focus on the importance of the economic impact of the conventional oil and gas industry to the counties and municipalities where it is located. The conventional oil and gas industry provides valuable jobs and tax revenue to these mostly rural areas and without it, will severely negatively impact the economies of these towns. As the industry ebbs and flows with changes in the world market, even during its current down years, it still plays a very important role in the economic and job base in these localities and will continue to play an important role in these municipalities in the future.

PA DEP YEARLY OIL AND GAS WELL SPUD DATA (CONVENTIONAL & UNCONVENTIONAL) 12-31-2018



A look back in history of ARG Refinery Crude Supply

Reprint permission granted by the ARG Refinery Group Inc.



"Other" barrels are sourced from Utica formation in Ohio, Michigan, Kentucky, New Mexico, Alabama and Ontario Canada

In the first two months of our FY 2019, the **"Other"** barrels has jumped to 45% from 40% in 2018

ARG is now bringing in 70% of our supply by rail, at a higher costs than local supply

Running **non-PA grade** crude effects the quality and yields of our products. Additionally these other crude can effect the reliability and operability of our equipment (e.g. fouling)

PUMP JACK
(Conventional Well)
Allegheny National Forest

Pennsylvania Grade Crude Oil Coalition
P.O. Box 149
Mt. Jewett, PA 16740
Phone: (814) 230-3033
Email: admin@pagcoc.org
www.pagcoc.org

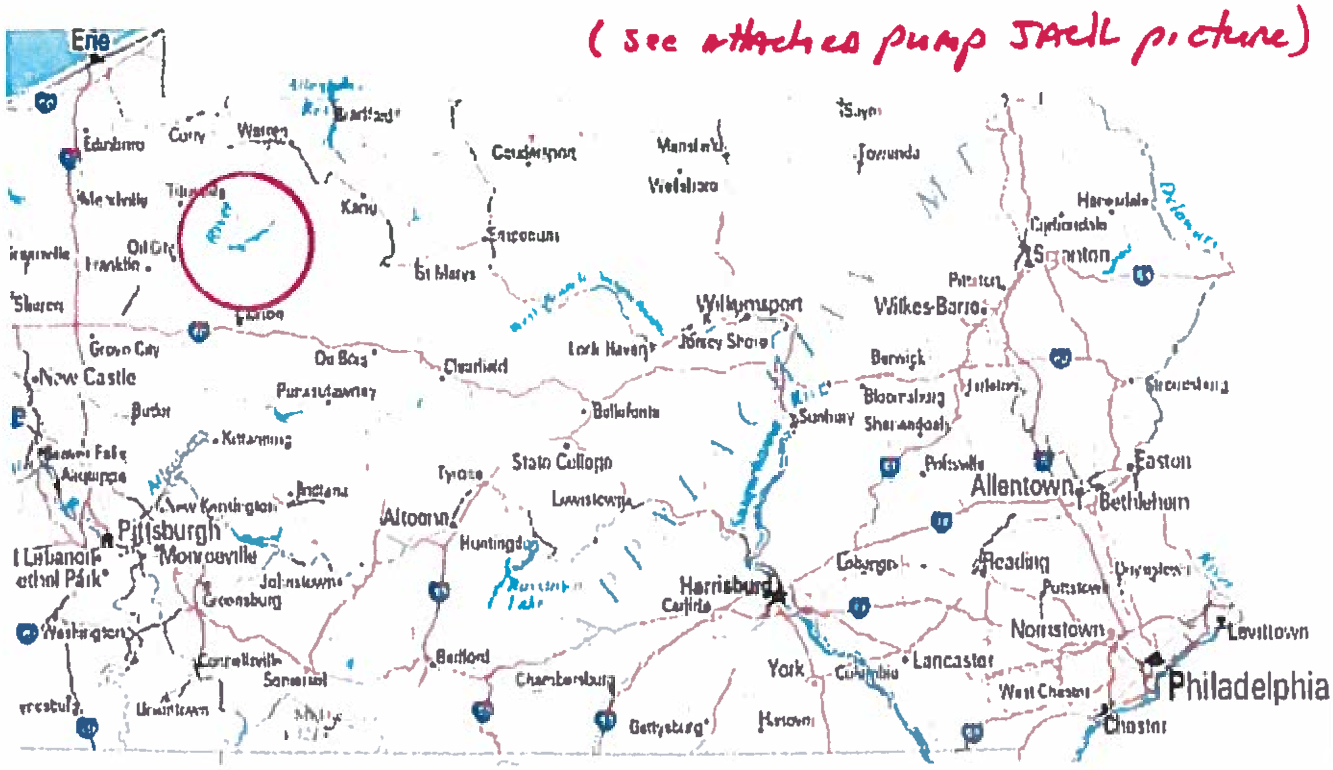
Environmental Impacts of Conventional Oil and Gas Well
Development on the Allegheny National Forest

The Allegheny National Forest (ANF) is located in the heart of Pennsylvania's conventional oil region. Of the State's 120,000 conventional oil and gas wells, over 12,000 are located within the ANF.

Of the 2,126 miles of mapped streams within the ANF proclamation boundary (an area of 720,000 acres) fully 72% are rated as **high quality** or **exceptional value** for water quality. Moreover, in its 2007 Environmental Impact Statement, the Forest Service characterized the water quality in the ANF as "among the highest in the state.

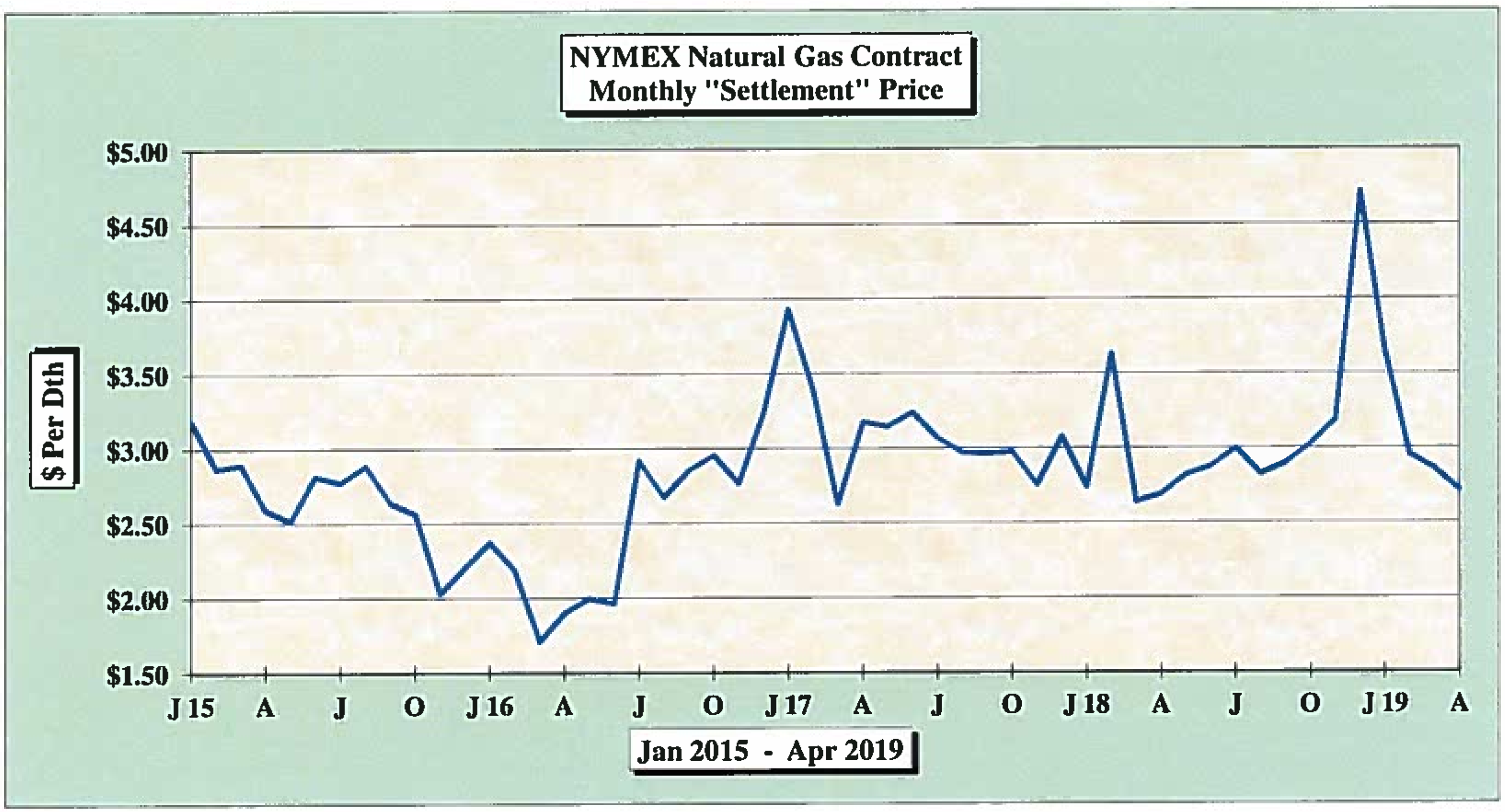
In November 2014 the US Forest released its five-year Monitoring and Evaluation Report for the ANF for the period from 2008 through 2013. It focuses on oil and gas development during that period. The 2014 ANF Monitoring Report concludes that "The majority of streams on the ANF are meeting state water quality standards. Impairments are most frequently related to acid deposition or acidity **from natural sources**." Of particular note is the Clarion University study undertaken to compare the results of oil and gas development on benthic macroinvertebrate communities in a high development watershed as compared to a very low to no-development watershed. The study reviewed detailed data from a 2010 survey as well as results of studies conducted in the early 1980's, 1990s, and 2008. The Report concluded that these macroinvertebrate studies "**...did not detect a negative impact to water quality** from this (oil and gas) development".

(see attached pump jack picture)



NYMEX - NATURAL GAS CONTRACT SETTLEMENT PRICE HISTORY

	Monthly Settlement Price												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YR AVG
2015	3.189	2.866	2.894	2.590	2.517	2.815	2.773	2.886	2.638	2.563	2.033	2.206	2.664
2016	2.372	2.189	1.711	1.903	1.995	1.963	2.917	2.672	2.853	2.952	2.764	3.232	2.460
2017	3.930	3.391	2.627	3.175	3.142	3.236	3.067	2.969	2.961	2.974	2.752	3.074	3.108
2018	2.738	3.631	2.639	2.691	2.821	2.875	2.996	2.822	2.895	3.021	3.185	4.715	3.086
2019	3.642	2.950	2.855	2.713									3.040



April, 2019

D = "A" minus "E"

Gas Pricing Information

Note: All amounts shown are on a DTH basis

Month/Year	A NYMEX Final Settle	B INSIDE FERC TCo Appal. Index	C TCo Basis	D INSIDE FERC DTI Appal. Index	E DTI Basis	F Index Difference TCo-DTI
Jan-19	$3.642	$3.400	($0.242)	$3.320	($0.322)	$0.080
Feb-19	$2.950	$2.740	($0.210)	$2.710	($0.240)	$0.030
Mar-19	$2.855	$2.650	($0.205)	$2.620	($0.235)	$0.030
Apr-19	$2.713	$2.480	($0.233)	$2.430	($0.283)	$0.050
May-19						
Jun-19						
Jul-19						
Aug-19						
Sep-19						
Oct-19						
Nov-19						
Dec-19						
2019 AVG	$3.040	$2.818	($0.223)	$2.770	($0.270)	$0.048
Jan-18	$2.738	$2.520	($0.218)	$2.290	($0.448)	$0.230
Feb-18	$3.631	$3.340	($0.291)	$2.890	($0.741)	$0.450
Mar-18	$2.639	$2.370	($0.269)	$2.100	($0.539)	$0.270
Apr-18	$2.691	$2.500	($0.191)	$2.240	($0.451)	$0.260
May-18	$2.821	$2.610	($0.211)	$2.320	($0.501)	$0.290
Jun-18	$2.875	$2.650	($0.225)	$2.220	($0.655)	$0.430
Jul-18	$2.996	$2.810	($0.186)	$2.340	($0.656)	$0.470
Aug-18	$2.822	$2.620	($0.202)	$2.400	($0.422)	$0.220
Sep-18	$2.895	$2.670	($0.225)	$2.480	($0.415)	$0.190
Oct-18	$3.021	$2.730	($0.291)	$2.430	($0.591)	$0.300
Nov-18	$3.185	$2.950	($0.235)	$2.780	($0.405)	$0.170
Dec-18	$4.715	$4.530	($0.185)	$4.320	($0.395)	$0.210
2018 AVG	$3.086	$2.858	($0.227)	$2.568	($0.518)	$0.291
Jan-17	$3.930	$3.730	($0.200)	$3.330	($0.600)	$0.400
Feb-17	$3.391	$3.160	($0.231)	$2.980	($0.411)	$0.180
Mar-17	$2.627	$2.380	($0.247)	$2.060	($0.567)	$0.320
Apr-17	$3.175	$2.990	($0.185)	$2.710	($0.465)	$0.280
May-17	$3.142	$2.970	($0.172)	$2.600	($0.542)	$0.370
Jun-17	$3.236	$3.060	($0.176)	$2.680	($0.556)	$0.380
Jul-17	$3.067	$2.870	($0.197)	$1.810	($1.257)	$1.060
Aug-17	$2.969	$2.780	($0.189)	$1.730	($1.239)	$1.050
Sep-17	$2.961	$2.780	($0.181)	$1.710	($1.251)	$1.070
Oct-17	$2.974	$2.760	($0.214)	$1.100	($1.874)	$1.660
Nov-17	$2.752	$2.440	($0.312)	$1.570	($1.182)	$0.870
Dec-17	$3.074	$2.910	($0.164)	$2.500	($0.574)	$0.410
2017 AVG	$3.108	$2.903	($0.206)	$2.232	($0.877)	$0.671
2016 AVG	$2.460	$2.321	($0.139)	$1.370	($1.090)	$0.951
2015 AVG	$2.664	$2.553	($0.111)	$1.444	($1.220)	$1.109
2014 AVG	$4.415	$4.365	($0.050)	$3.278	($1.137)	$1.088
2013 AVG	$3.652	$3.653	$0.000	$3.447	($0.206)	$0.206
2012 AVG	$2.789	$2.793	$0.004	$2.785	($0.004)	$0.008
2011 AVG	$4.042	$4.137	$0.095	$4.198	$0.157	($0.062)
2010 AVG	$4.393	$4.535	$0.143	$4.587	$0.194	($0.052)
2009 AVG	$3.986	$4.176	$0.190	$4.269	$0.283	($0.093)
2008 AVG	$9.035	$9.386	$0.351	$9.529	$0.494	($0.143)
2007 AVG	$6.860	$7.124	$0.264	$7.220	$0.360	($0.096)
2006 AVG	$7.226	$7.480	$0.254	$7.547	$0.320	($0.067)
2004 AVG	$6.138	$6.393	$0.255	$6.492	$0.354	($0.099)
2003 AVG	$5.388	$5.650	$0.262	$5.946	$0.558	($0.296)
2002 AVG	$3.221	$3.414	$0.193	$3.411	$0.190	$0.003
2001 AVG	$4.273	$4.493	$0.221	$4.566	$0.293	($0.073)

Note: All amounts shown are on a DTH basis

Note: Conventional Operators receive Column D (NYMEX Less: DTI Basis)

Appalachian Index = usual pricing for PA Gas (less any gathering costs)

NATURAL GAS PRICING UPDATE 03/29/19

Month	Settle		Seanson	Strip Avg.	Year	Strip Avg.	
May-19	2.662		May 19-Oct 19	2.758	Calendar 2020	2.737	*
Jun-19	2.713		Nov 19-Mar 20	2.981	Calendar 2021	2.653	
Jul-19	2.772		Apr 20-Oct 20	2.614	Calendar 2022	2.662	
Aug-19	2.797		Nov 20-Mar 21	2.825	Calendar 2023	2.751	
Sep-19	2.793		Apr 21-Oct 21	2.538	Calendar 2024	2.862	
Oct-19	2.813		Nov 21-Mar 22	2.818	Calendar 2025	2.967	
Nov-19	2.864		Apr 22-Oct 22	2.548	Calendar 2026	3.069	
Dec-19	3.005		Nov 22-Mar 22	2.839	Calendar 2027	3.170	
Jan-19	3.087		Apr 23-Oct 23	2.653	Calendar 2028	3.272	

Dominion-South Basis	3/29/2019	
May-19	-0.339	
Jun-19	-0.313	
Jul-19	-0.354	
May 19 - Apr 20 (1yr)	-0.364	
Calendar 2020	-0.408	*
Calendar 2021	-0.488	
Calendar 2022	-0.557	
Calendar 2023	-0.582	
Calendar 2024	-0.562	

Markets indicate Negative Basis to remain at high level

*EXAMPLE:

Conventional Gas Price = NYMEX Settle/Strip	$2.737
Less: Negative Basis	$ (0.408)
Less: Transport Price	$ (0.320)
	$ 2.009

BILL SUMMARY

		DATE:	4/19/18
COMMITTEE:	Environmental Resources & Energy	**BILL NO.:**	HB 2154
PRIME SPONSOR:	Causer	**PRINTER'S NO.:**	3187
PREPARED BY:	Leda J. Lipton, Esq.	**PHONE NO.:**	0-6169

A. SYNOPSIS:

Pennsylvania has uncounted hundreds of thousands of abandoned gas wells. DEP estimates range from 200,000 to 750,000 abandoned "conventional" wells that exist today from the era predating regulation. Last year, the state plugged 4 (four) wells.

During the past ten years, the number of "conventional" wells drilled has declined by 98%: from roughly 5,000 in 2008 to around 100 spuds expected in 2018.

This bill establishes the Conventional Oil and Gas Wells Act – an Act that relates to conventional wells and well sites only – and establishes a bounty program therein for plugging abandoned wells that will reduce methane emissions in the Commonwealth.

B. BILL SUMMARY:

HB 2154 establishes the Conventional Oil and Gas Wells Act. The bill relates to conventional wells and well sites only. The Pennsylvania Department of Environmental Protection ("department") is charged with administering this Act.

Chapter 1 – Preliminary Provisions:

The bill defines the following terms: abandoned well; alteration; anti-icing; bridge; building; casing; cement or cement grout; coal mine; coal operator; completion of a well; conventional well; council; de-icing; department; drilling; dust control; fresh groundwater; gas; inactivate; linear foot; noncoal area; notice; oil or petroleum; operating coal mine; operating well; orphan well; outside coal boundaries; owner; person; pillar; plat; prewetting; retreat mining; secretary; well; well operator or operator; well site; wetland; and workable coal seams.

Pennsylvania Independent Oil & Gas Association

Pennsylvania Independent Petroleum Producers

April 30, 2018

To: All Members of the House Environmental Resources and Energy Committee

Re: House Bill 2154—response to Secretary McDonnell letter

Dear Chairmen and Members of the Environmental Resources and Energy Committee,

On April 27, at 3:30 PM, DEP Secretary McDonnell delivered you a letter expressing his misgivings about HB 2154, the Conventional Oil and Gas Act. The letter says: "DEP welcomes a dialogue on how we can all work together on new Legislation..." and that "(DEP had) very little input" as to the HB 2154. Below are facts about the significant efforts made by industry and legislators to obtain input from the DEP on HB 2154:

1) First some background: The coming of the unconventional (Marcellus shale) industry to Pennsylvania brought new oil and gas laws (Act 13) and regulations. Too little, too late, it was realized that subjecting Pennsylvania's 160-year-old conventional industry to new laws, written to address the impact of the new Marcellus shale technologies, was a devastating mistake. In the last few years new conventional drilling has virtually stopped, conventional oil and gas production has dropped over 50%, and the mom and pops and small businesses that make up 100% of the conventional industry are on life support. Act 52 of 2016 created the PA Grade Crude Advisory Council (CDAC) with the purpose of developing a "regulatory scheme that provides for environmental oversight and enforcement **specifically applicable to the conventional oil and gas industry**." Members of the conventional industry, legislature, academia, **and DEP** sit on CDAC.
2) On September 30, 2017, CDAC's chairman provided a memo to all CDAC members, **which memo was pre-approved by the DEP,** advising that the conventional oil and gas act would be an agenda item at CDAC's November 16, 2017 meeting, and asking CDAC members to be prepared with input on a conventional oil and gas act.
3) At CDAC's November 16, 2017 meeting, CDAC discussed the details of a conventional oil and gas act. Senator Scott Hutchinson suggested that Act 223 of 1984 (the oil and gas act in place before Marcellus shale's advent in Pennsylvania) be the starting point for a new conventional act. All CDAC members brainstormed what changes might be made to the old Act 223 to improve it, **and 4 members of DEP staff** (Scott Perry, Kurt Klapowski, Joe Kelly and Seth Pelepko) were in attendance to discuss changes.
4) On January 18, 2018, Representative Martin Causer and Senator Scott Hutchinson provided, to all their fellow CDAC members (**including the DEP**), their draft of a conventional oil and gas act. As discussed, it was based on the old Act 223, and it included many, if not all, of the items discussed at CDAC on November 16, 2017.
5) On January 25 CDAC met all day, with the main agenda item being the discussion and revision of the conventional oil and gas act. Again, **a DEP team of 5 DEP employees gave input**, and the draft minutes of the discussion fill six pages! The meeting was very cordial; all members expressed satisfaction with the quality of the dialogue, and it was left that in one to two weeks

members of the industry **and the DEP** would submit suggested language for change based on that day's very productive discussions.

6) On January 26, the day after the CDAC meeting, the CDAC chairman sent to all CDAC members a spreadsheet containing every legislative topic discussed, and a summary of input from members, **including input from the DEP staff.** The email from the CDAC chairman confirms **the opportunity for subsequent input on the legislation,** noting that "next week" industry members will "provide revised language to Senator Hutchinson and Representative Causer on the particular points summarized on the spreadsheet," and that the chairman "...understand(s) **the DEP team will be undertaking a similar effort in the next few days."**
7) On the next day, January 27, **one of the DEP team members** wrote an email of thanks to the CDAC chairman; the **DEP staff member said this: "I certainly recognize that the industry members have given DEP an opportunity to comment before the draft is introduced..."**
8) A week later, industry members submitted their suggested language changes to CDAC members Senator Hutchinson and Representative Causer.
9) Despite the above history, **the DEP never submitted ANY suggested language changes to the CDAC members or anyone else.**
10) HB 2154 was circulated for sponsorship in March 2018 and was introduced March 19, 2018.
11) The week of March 19, 2018 the DEP contacted legislative leaders to seek delay of the Senate Committee's vote on the Bill.
12) The legislative leaders contacted by the DEP invited members **of the DEP** and industry to a meeting on March 26, 2018 to discuss DEP's concerns with the Bill. At that meeting **DEP Secretary McDonnell declined to state any specific concerns** saying the DEP had not had time to review the Bill.
13) Secretary McDonnell's April 27 letter arrived at the close of business, one work day before the Bill was scheduled for vote. Please note:
    a. the **absence of any specific suggested language from Secretary McDonnell;**
    b. the **very general and unspecific matters of complaint.**

As you can see, there has been a long and exhaustive dialogue that occurred prior to and after the introduction of the Conventional Oil and Gas Act at CDAC. As you can see, the DEP has been intimately involved in that dialogue since the inception in September 2017. As you can see, those efforts even earned the thanks of DEP staff. And as you can see, Secretary McDonnell's 11th hour letter, on Friday afternoon, is contrary to everything his staff has been involved in for over half a year.

As to the substance of the generalities cited in Secretary McDonnell's letter: in some cases, it is hard to guess what provisions the Secretary is referring to, and in the main, we rely on the substantive letter we sent to all House members last week, in which we cited to specific provisions of the Bill. However, there are a few remarkable items in the Secretary's letter upon which we are compelled to comment:

1) The Secretary tells you: "public health and safety is jeopardized by relaxing casing and cementing standards that protect coal miners..." That sounds frightening. In truth, the only revision in this Bill is to plugging methods is for an orphan well in a <u>noncoal area</u> – this can have no impact on miner safety. Moreover, the language in the Bill contains a compromise made by the industry **at the request of the DEP.** Industry's language stated that plugging from a shallower depth would be satisfactory; **the industry voluntarily changed their suggested language so that DEP now determines the depth from which plugging is satisfactory**. Section 310 (e)

2) The Secretary tells you: the Bill threatens "DEP's enforcement authority." That sounds frightening. **The Bill does not alter DEP's enforcement authority** or prohibit NOVs. It encourages (in non-binding language) the DEP to work cooperatively with operators to resolve harmless violations where compliance is achieved within 48 hours. It does require DEP to remove NOVs from the public record when they were issued **in error.** (Currently those erroneous NOV's never go away and are left on the DEP website where the public gains an unreasonable negative perception of industry members.) See Section 712

Please also be aware that the Bill contains several **suggestions made by the DEP** for improving environmental protection. Those include:

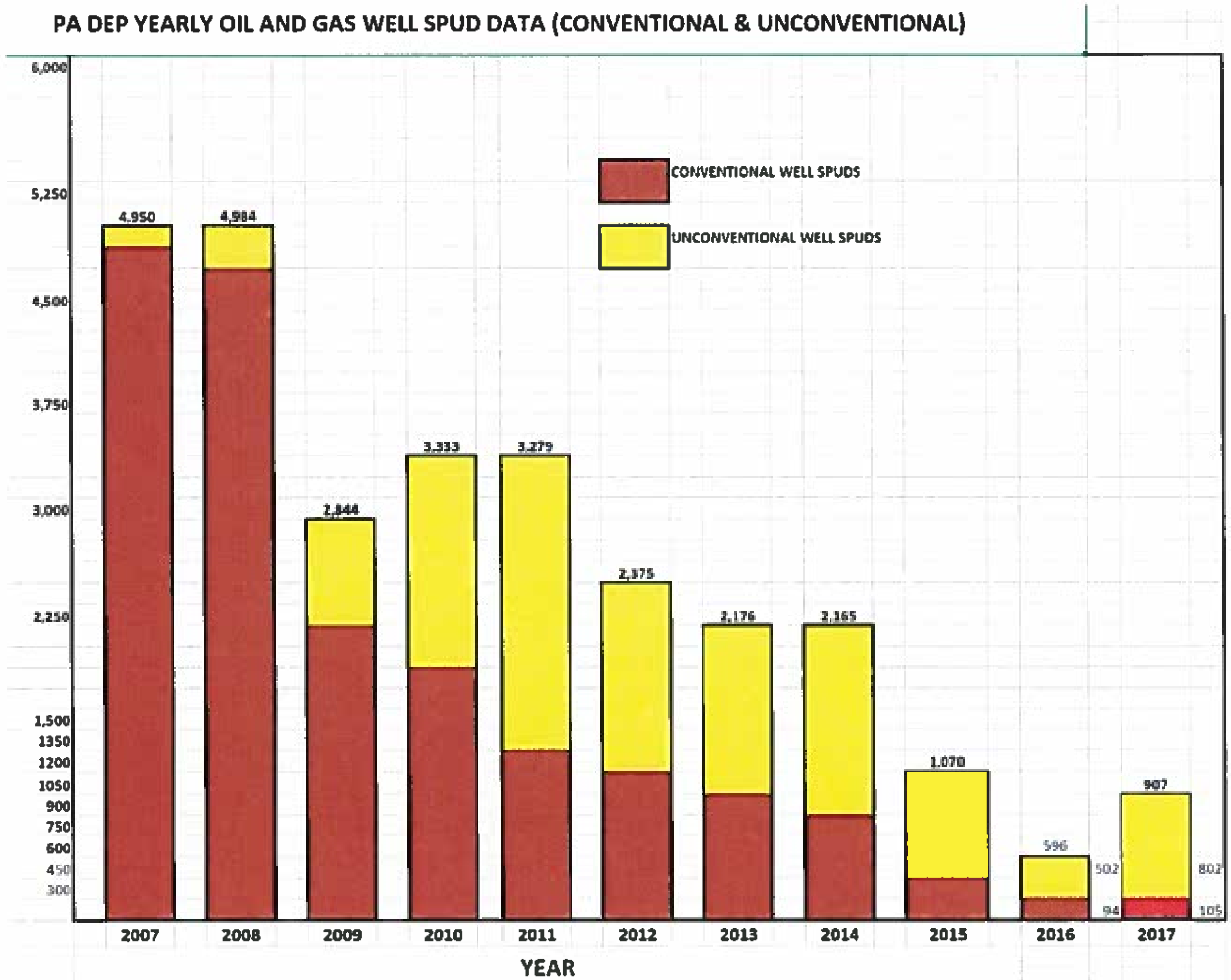
1. Extending the permit time for allowable activity from one to three years (a "best management practice" that allows locations to better stabilize before activity, thus reducing erosion and sedimentation);
2. Providing for an "area of review" for identifying and monitoring abandoned and orphan wells during hydraulic fracturing;
3. Streamlining the Good Samaritan provisions for application to well plugging to incentivize the industry operators to voluntarily plug orphan wells. The industry is wholly committed to plugging orphan wells, and **voluntary plugging by the conventional industry already yields more plugged orphan and abandoned wells than any other program in the state**, including DEP programs;
4. Options for orphan well adoption and permitting;
5. Grant funding or permit fee relief to a volunteer who plugs an orphan well;
6. Eliminates need for DEP to redundantly advance new conventional regulations through both the Technical Advisory Board and the CDAC.

For over a century our conventional industry has supplied heat (natural gas) to our local homes, hospitals and schools. In its heyday the Bradford oil field supplied the oil for the U.S. army in World War I. And still today, we produce Pennsylvania grade crude oil that supplies the world's oldest operating refinery, in Bradford, employing 350 Pennsylvanians. But our industry is in deep trouble. Production is down so greatly that, for the first time ever, that oldest refinery is paying to transport oil here from New Mexico and Canada.

We are much like PA's small family farms—multi-generational businesses that can't move out of the communities where we live and raise our families. Because we and our children live here we are committed to business practices that keep our streams and land clean. And our operations are low impact. Our wells produce a few gallons of oil or mcf of gas per day.

But these small producing wells cannot support a system of laws and regulations designed for a high-impact Marcellus shale industry. Over the last five years many of us have laid off a saddening number of employees, and small supply and service companies have gone out of business.

Below is a graph of the number of new conventional wells in Pennsylvania (since 2007) compared to the number of unconventional wells. As you can see, despite the new laws and regulations, the unconventional business is growing satisfactorily. The conventional industry has come to a virtual halt.



We ask you to support the Conventional Oil and Gas Act. It is a thoughtful piece of legislation, built with much opportunity for input. Indeed, at least in our experience, the DEP's opportunity for input and engagement on this bill was unprecedented.

An industry that still employs thousands across rural Pennsylvania is suffering the peril depicted on the chart. We desperately need a separate conventional oil and gas act. The conventional industry will meet at any hour—even the 11th hour—for meaningful dialogue on a bill that allows our industry to survive, and which carefully crafts the necessary protections for our environment, public health and safety. We invite the Secretary of the Department to join us in that effort.

Sincerely,

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Response to
Mr. Danowski Letter
Dated 6/5/2018

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June 7, 2018

Dear Members of the House of Representatives,

On June 5, 2018, William Danowski Jr., Secretary of Legislative Affairs for Governor Wolf, sent you a letter opposing HB 2154 (the Conventional Oil and Gas Act). Mr. Danowski's letter grossly misrepresents HB 2154, and even though HB 2154 has now passed, we believe it is important we provide you this letter.

Mr. Danowski asserts HB 2154 is "bad for the environment" because it allows for up to 210 gallons of crude oil and 630 gallons of brine to be spilled without reporting. Please know: 210 gallons of oil is the reporting threshold for crude oil in Texas (a state which produces roughly 1000 times more oil per day than Pennsylvania). As to brine: 630 gallons of brine contains just under 500 pounds of sodium chloride (salt). To put that in context: EPA's reporting threshold for sulfuric acid is 500 pounds; EPA's threshold for nitric acid is 1000 pounds. HB 2154's reporting requirement for brine is stricter than is the EPA's requirement for sulfuric and nitric acid! To provide further context: annually, PennDOT spreads 9.8 million gallons of brine PLUS 900,000 tons of salt (combined, the PennDOT brine and salt is roughly <u>3.5 MILLION TIMES</u> the 630 gallon reporting threshold).

Next Mr. Danowski asserts HB 2154 will encourage the proliferation of methane. This is a fantastic claim that ignores the steps HB 2154 takes toward plugging orphan wells. Orphan wells are left from generations ago and release methane because they are not properly capped. Members of the conventional industry have voluntarily plugged hundreds of orphan wells over the last several years, while the DEP has plugged less than two dozen. HB 2154 incentivizes increased orphan plugging by giving an operator who plugs an orphan well either: 1) credit against a new well permit fee; or 2) a $5,000 grant from CFA funds for every well plugged. HB 2154 also streamlines the Good Samaritan (liability) protections for operators who voluntarily plug orphan wells.

Mr. Danowski then asserts HB 2154 is "bad for landowners" because the bill only affords landowners 15 days to raise objections to a proposed well location. What Mr. Danowski failed to tell you is that <u>15 was always the number of days afforded a landowner to object under the Oil and Gas Act of 1984, and that 15 days is the current standard under Act 13</u>! Mr. Danowski also erroneously asserts that HB 2154 "would prevent local municipalities from making reasonable zoning decisions." Contrary to Mr. Danowski's assertion, section 902 of HB 2154 specifically authorizes local zoning decisions by allowing local ordinances adopted under the Pennsylvania Municipalities Planning Code. This language in HB 2154 is also the same provision contained in current law!

Almost without exception, the businesses that comprise the Conventional Industry are ALL small businesses as defined by federal code. Most importantly, these rural small business owners along with their employees who are struggling to stay afloat, have been waiting 2 years since the passage of Act 52 for our own Conventional Oil and Gas Act (HB2154) to be promulgated - this bill is it and should be supported.

We trust the facts contained in this letter will dispel myths being circulated about HB 2154.

Sincerely,

David Clark
PGCC President