



MARCH 25, 2024

**TESTIMONY OF
ARTHUR STEWART**

**PRESIDENT, CAMERON ENERGY COMPANY &
SECRETARY, PENNSYLVANIA GRADE CRUDE OIL COALITION (PGCC)**

BEFORE THE

**PENNSYLVANIA HOUSE OF REPRESENTATIVES
ENVIRONMENTAL RESOURCES AND ENERGY COMMITTEE**



TESTIMONY:

Thank you Chairman Vitali and Chairman Causer.

Today I will correct false information put before you by the Sierra Club, DEP and others. The erroneous information has been used to defile the conventional oil and gas industry's hard-working men and women, and that defilement is an injustice to an industry that provides life-sustaining products. As a member of that industry, I am grateful for this opportunity to testify.

In March 2023 we heard the Sierra Club and other witnesses testify that Pennsylvania's conventional well operators are abandoning oil and gas wells in droves—some called it an epidemic. They provided data they alleged supported their case. And with that alleged data they urged you to believe that Pennsylvania's hundreds of thousands of unplugged wells are the fault of today's conventional oil and gas industry. The witnesses told you that to cure the problem you must increase well bonding beyond the increase the legislature already enacted in 2022.

In March 2023 I testified there is no epidemic and that Pennsylvania's huge inventory of unplugged wells are wells drilled and abandoned ages ago, before there were plugging and bonding laws. In fact, I gave you a statistic that more than 93% of Pennsylvania's unplugged wells were drilled and abandoned prior to 1985. 1985 is key, because that is the year Pennsylvania's plugging and bonding law went into effect. The hundreds of thousands of wells drilled and abandoned prior to 1985 can never be subject to a bonding requirement because the drillers are long dead. I then gave you a simple logical conclusion: if the vast majority of Pennsylvania's unplugged wells are not subject to bonding, and can NEVER be subject to bonding, then increasing well bonding is not going to have any impact on the vast majority of Pennsylvania's unplugged wells.

The conflicting testimony created quite a mess. To clear up that mess Chairman Vitali hosted a meeting on June 14, 2023, consisting of legislators, the DEP, conventional oil and gas producers, and the Sierra Club. To support its claim that the conventional industry is abandoning wells in epidemic proportions, the Sierra Club displayed a graph of conventional oil and gas producers who allegedly "abandoned" over 20,000 wells in 2022 by not producing them. The Sierra Club graph is attached to my testimony.

The conventional oil and gas producers in the room immediately recognized that the Sierra Club data was totally, completely, and utterly false. My company is third on the Sierra Club graph, and the Sierra Club's graph would have you believe my company abandoned 1,648 wells in 2022. In fact, my company produced every one of those 1,648 wells and reported that production to DEP. Such discrepancies hold true for the other conventional producers on the Sierra Club graph. Remember, the incorrect graph is what the Sierra Club utilized to allege that conventional oil and gas producers are abandoning wells at an epidemic pace.

The next day, the Sierra Club apologized. The Sierra Club trouble-shot its false chart and discovered that **the DEP data the Sierra Club had relied upon, was wrong;** DEP's database failed to show the 2022 production reported by the conventional producers, and that led to the false Sierra Club chart. In the apologetic words of the Sierra Club: "Weird".

Conventional oil and gas producers have long known that the DEP database of unplugged wells is filled with errors and oversights. For example, my company routinely finds, reports and plugs orphan wells. Orphan wells are ancient well for which there is no responsible party. In the last 10 years my company has duly reported over 400 found orphan wells to the DEP, yet the DEP has NOT added most of the wells to the orphan list, even though our company has repeatedly reminded the DEP about the wells. In fact,

the DEP wrongfully assigned some of the wells to my company's database, tarnishing my company's reputation by making it appear to the Sierra Club, to Chairman Vitalia, and to all the world, that my company is guilty of abandoning wells. That accusation is false; that data is false.

In May of last year, at the PA Grade Crude Development Advisory Council meeting (CDAC), conventional oil and gas producers representing three trade groups (PGCC, PIOGA and PIPP) challenged the DEP to correct its flawed database. The conventional oil and gas producers submitted a list of eight questions to DEP to clarify and correct the oversights and errors that populate the DEP's unplugged well database. Those eight questions are attached to my testimony.

The DEP attempted to answer the questions at that meeting, but the DEP representative was unable to do so. He promised to provide answers in the future. I presented the same list of questions at the June 14, 2023 meeting hosted by Chairman Vitali. Again, the DEP representatives present at that meeting promised to answer the questions, but have not yet done so. At the subsequent CDAC meeting on October 12, 2023 the DEP promised to provide the answers, but has not yet done so.

In sum, the DEP has dodged answering the questions for ten months. The reason for the DEP dodge is simple. The DEP knows full well there is not an epidemic of well abandonment. Last year the DEP told you that over the last 5 years the DEP added 3000 conventional wells to its abandoned list. Representative Vitali, the Sierra Club and others have used that statistic to assert that the conventional industry is abandoning wells at the rate of 500 wells per year. But what the DEP failed to report is that the **DEP DOES NOT KNOW WHEN THOSE THREE THOUSAND WELLS WERE ABANDONED**. The DEP has admitted those wells may have been abandoned 20, 30 or 40 years ago. In other words, the DEP data does not establish the alleged rate of 500 abandoned wells per year.

More important, the DEP has not answered the eight questions because the DEP knows that the true "epidemic" of unplugged wells in PA are orphan wells, not abandoned wells. Orphan wells are wells with no responsible party. The DEP knows that of the several hundred thousand unplugged wells in Pennsylvania, nearly all of them are orphan wells that were abandoned prior to 1985 when the bonding rules went into effect. There are many DEP documents that discuss the hundreds of thousands of "unlocated" unplugged wells in Pennsylvania (and I have attached a sample to my testimony). The DEP documents refer to the orphan wells as "unlocated" **PRECISELY BECAUSE THE WELLS WERE ABANDONED PRIOR TO 1985 WHEN ALL WELLS HAD TO BE LOCATED AND BONDED**.

I cannot emphasize this point strongly enough: **THE DEP KNOWS THAT THE VAST MAJORITY OF PENNSYLVANIA'S UNPLUGGED WELLS WERE DRILLED AND ABANDONED PRIOR TO 1985; THE DEP KNOWS THAT THE VAST MAJORITY OF UNPLUGGED WELLS WILL NEVER BE SUBJECT TO BONDING; AND THE DEP KNOWS THAT A BONDING INCREASE WILL NOT HAVE ANY IMPACT, WHATSOEVER, ON THAT VAST MAJORITY OF PENNSYLVANIA'S UNPLUGGED WELLS.**

It is shameful that DEP allowed its database to be corrupted. It is shameful that the Sierra Club gave false information based on that corrupted DEP database, and that DEP has not publicly apologized to those it hurt. And it is shameful that for 10 months the DEP has broken its promise to answer the 8 questions.

One simple question to the DEP will get this committee to the truth and to a proper focus: DEP, is it true that the vast majority of Pennsylvania's unplugged wells were drilled and abandoned prior to 1985 and that the vast majority of Pennsylvania's wells are not subject to well bonding? I hope this simple question is answered soon, because a truthful answer will lead to sensible policy.

The conventional industry desires sensible policy. There are not many oil and gas scofflaws—certainly not the outrageous numbers the corrupted DEP database suggests. But scofflaws who abandon wells or otherwise cut corners are bad for the environment and bad for the conventional oil and gas industry. **This committee, the conventional industry, the Sierra Club, and all citizens of the Commonwealth, need an accurate database that truly identifies both the source of the real problem as well as the scofflaws that add to that problem. Instead, what we have are 10 months of broken promises and a corrupted database that unfairly maligns a huge segment of the conventional oil and gas industry.**

Before closing I want to address the cost of plugging orphan wells. Under the federal program the DEP is in the process of plugging 200 wells at an average cost of \$100,000 each. Prior to the federal program the DEP's average cost per well was less than \$20,000. My company has plugged over 200 wells in the past ten years and I can testify, from first-hand experience, that the average cost of plugging is, and should be, far less than \$100,000 per well.

One cause of the high cost is the large size of the bid packages assembled by DEP. Another cause is the high cost of the bonds required to even bid on the projects. These causes discouraged small businesses and sole proprietors from bidding.

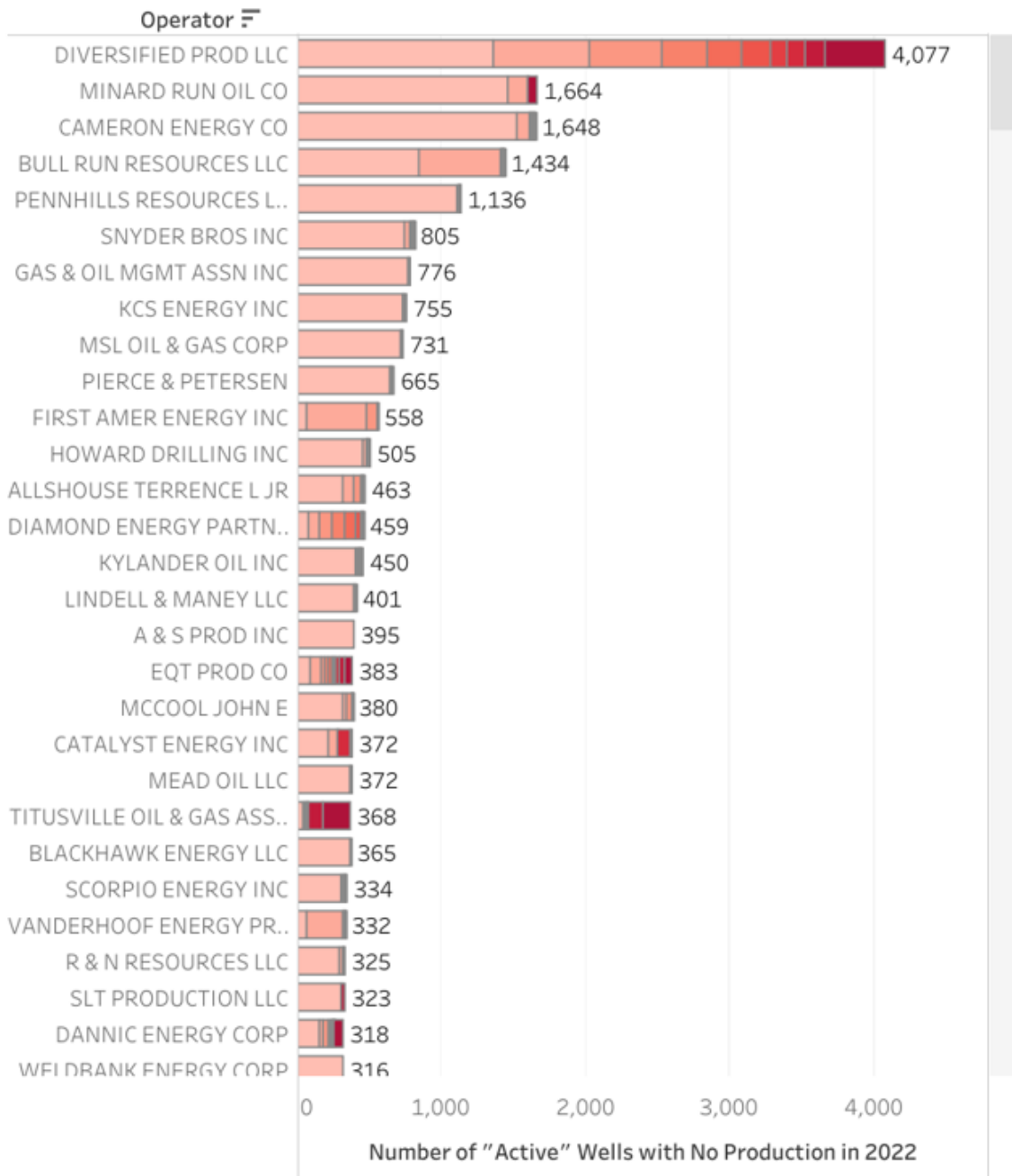
One way to reduce cost is to implement the grant program created by legislature under Act 96. Under the grant program volunteers who plug wells, in accordance with DEP standards, are entitled to reimbursement up to \$40,000 per plugged well. This innovative legislation does away with bidding packages and bidding bonds. When the DEP implements the grant program you will see many orphan wells plugged for less than \$40,000. The DEP failed to implement the grant program in the first tranche of federal funding, and I urge the DEP to implement the grant program sooner than later so that at least some of Pennsylvania's orphan wells are plugged at costs far less than the outrageous sum of \$100,000 each.

The three trade groups representing the conventional industry, PIOGA, PIPP, and PGCC, have all reviewed my testimony; they endorse this testimony and join with me in the expression of hope that this Committee will refrain from laying blame for Pennsylvania's unplugged well problem at the feet of today's conventional oil and gas industry.

GRAPH PREPARED BY THE SIERRA CLUB

Years of No Production

(All) ▼



QUESTIONS SUBMITTED TO DEP on 3-25-23, 6-14-23, and 10-12-23

DEP Oil and Gas Operator Well Inventory

1. What is difference between a well with “Well Status” of “Abandoned” versus Well Status of “DEP Abandoned List”?
2. How many wells with DEP “Well Status” of “Abandoned” are “**active**” wells (meaning either drilled under permit or registered with DEP) and how many are not active?
 - a. How can the public know the difference using the DEP website?
3. How many wells with DEP “Well Status” of “DEP Abandoned List” are “**active**” wells (as defined above) and how many are not active?
 - a. How can the public know the difference using the DEP website?
4. Are any wells with “Well Status” of “Abandoned” wells which might meet the statutory definition of “Orphan Well”?
 - a. If “yes” which wells meet the definition of “Orphan Well” or is that unknowable without further investigation?
 - b. Does that further investigation entail anything beyond ascertaining whether the well was abandoned prior to April 19, 1985 and whether any present owner, operator or lessee has received any economic benefit?
5. Are any wells with “Well Status” of “DEP Abandoned List” wells which might meet the statutory definition of “Orphan Well” if further investigation were performed?
 - a. If “yes” which wells meet the definition of “Orphan Well” or is that unknowable without further investigation?
 - b. Does that further investigation entail anything beyond ascertaining whether the well was abandoned prior to April 19, 1985 and whether any present owner, operator or lessee has received any economic benefit?
6. To which “Well Status” category does DEP assign wells which are abandoned (meaning hasn’t been used to inject or extract gas or liquid in 12 months, production equipment is removed, or is considered dry) and:
 - a. which well is “active” (meaning either drilled under permit or registered with DEP)?
 - b. which well is not “active”?
7. For the ~3000 wells recently added by DEP to either the “Abandoned” or “DEP Abandoned List” and, for which wells DEP issued NOV’s for abandonment, and about which 3000 wells advocates like David Hess are asserting that PA’s conventional industry is abandoning an average of over 500 wells per year:
 - a. Is it correct that the information available to the public on the DEP website is not adequate to inform the public when those wells were abandoned?
 - b. Will the DEP run the comparison discussed by Kurt Klapkowski at the 5-25-23 CDAC meeting, namely, comparing each NOV’d well to the date when that well was last inspected and regarded as not abandoned?
8. For wells with “Well Status” of “DEP Orphan List”:
 - a. Did DEP ascertain whether the well was abandoned prior to April 19, 1985 and whether any present owner, operator or lessee has received any economic benefit?

- b. What records or other data and information were routinely examined for that ascertainment?
- c. Is there a document repository for those reviewed records, data and information?
- d. Are any wells with "Well Status" of "DEP Orphan List" wells which were at one time "active" either through well permit or, if drilled prior to April 19, 1985 via registration with DEP?

EXCERPTS FROM DEP POWER POINTS

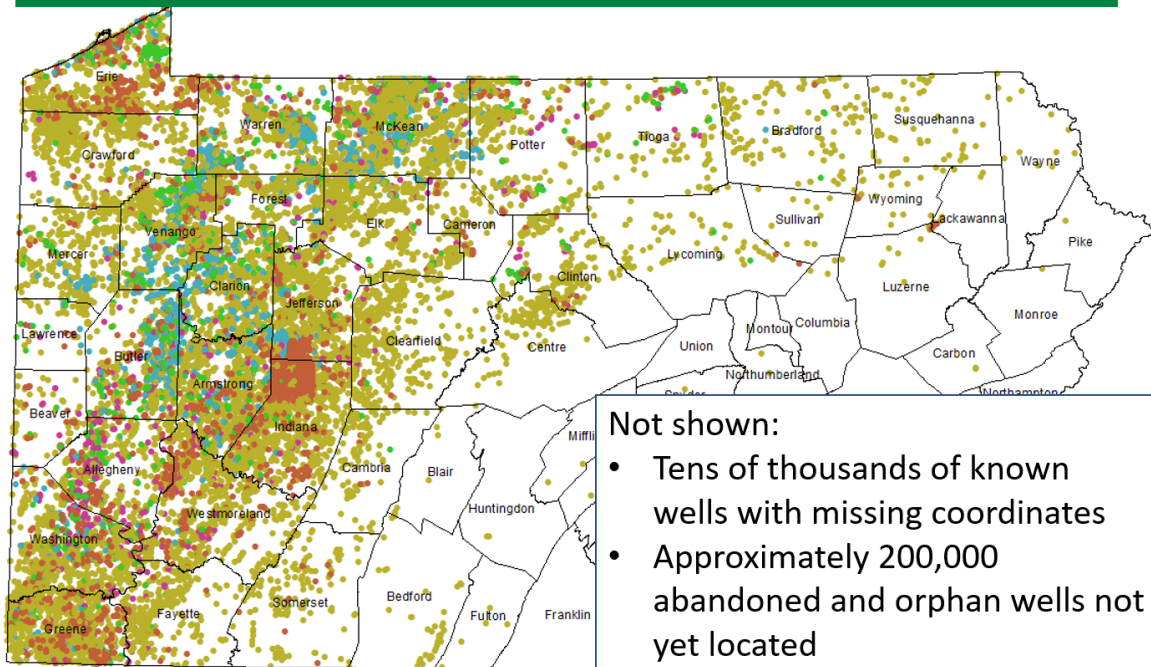


DEP Legacy Well Emissions Study

June 21, 2016

Citizens Advisory Council Meeting
Presentation

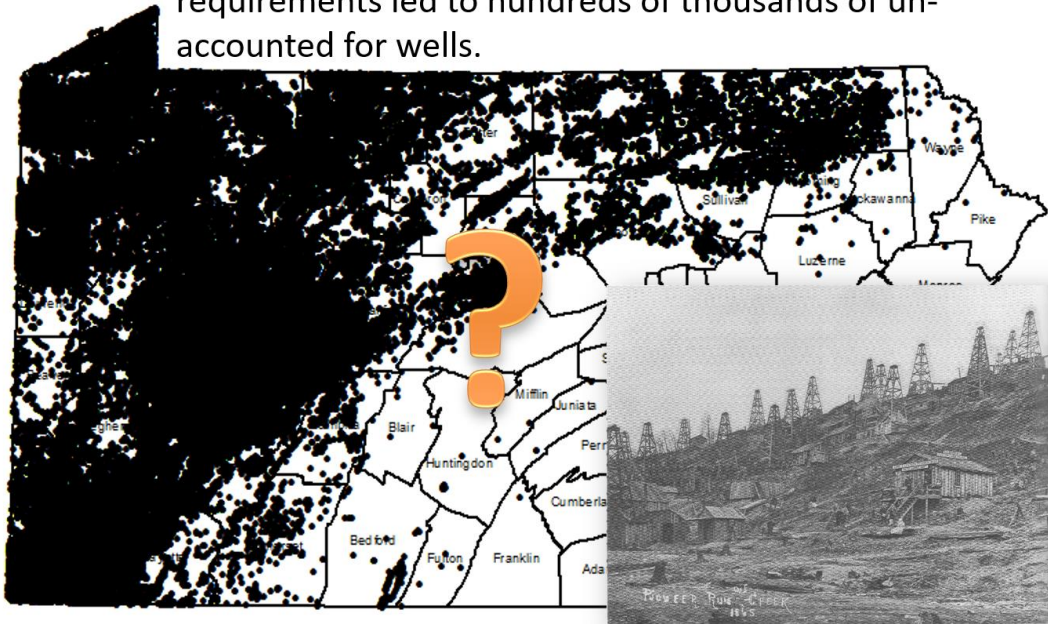
Legacy Oil and Gas Wells



- Abandoned (2,451)
- DEP Orphan List (5,946)
- Plugged OG Well (23,760)
- DEP Abandoned List (2,291)
- DEP Plugged (3,274)

Legacy Oil and Gas Wells

Nearly 100 yrs of development prior to permitting requirements led to hundreds of thousands of unaccounted for wells.



Abandoned and Orphan Wells

Abandoned Well: Act 13 of 2012, Section 3203:

- (1) A well:
 - (i) that has not been used to produce, extract or inject any gas, petroleum or other liquid within the preceding 12 months;
 - (ii) for which equipment necessary for production, extraction or injection has been removed; or
 - (iii) considered dry and not equipped for production within 60 days after drilling, redrilling or deepening.
- (2) The term does not include wells granted inactive status.

Orphan Well (Act 13, Sections 3203 and 3220(a)):

- "A well abandoned prior to April 18, 1985, that has not been affected or operated by the present owner or operator and from which the present owner, operator or lessee has received no economic benefit other than as a landowner or recipient of a royalty interest from the well."
- "If the department determines that a prior owner or operator received economic benefit, other than economic benefit derived only as a landowner or from a royalty interest, after April 18, 1979, from an orphan well or an unregistered well, the owner or operator shall be responsible for plugging the well."



Regulatory History of Well Plugging

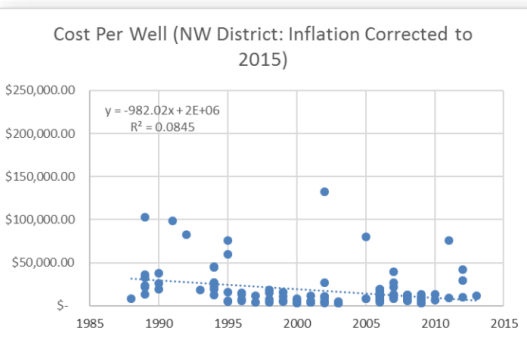
- **1859** – First well drilled, “Drake well”, Titusville, PA
- **1878** – Wells first required to be plugged with wood and sediment
- **1881** – Plugging requirements updated: Fill well with sand or rock sediment and wooden plugs above third producing sand
- **1921** – Plugging requirements updated
 - Fill with sand or rock sediment and each producing strata plugged with wood plug
 - Requires venting of wells through coal layers
- **1952** – API standards for cement and well plugging published
- **1956** – Well permitting begins; modern plugging requirements
- **1984** – Modern environmentally-minded plugging requirements
- **1989** – First well plugged in DEP plugging program



DEP Well Plugging Program: Cost Modeling

What Influences Plugging Costs?

- To a certain extent...location, location, location!
- DEP’s Northwest District (n=117 contracts)



NW District Summary Statistics (1988-2013)	
Mean	\$17,584.25
Standard Error	\$2,043.24
Median	\$9,941.18
Mode	\$3,225.00
Standard Deviation	\$22,101.01
Sample Variance	\$488,454,824.30
Kurtosis	9.543667051
Skewness	2.956478522
Range	\$129,197.38
Minimum	\$3,225.00
Maximum	\$132,422.38
Sum	\$2,057,357.13
Count (Contracts)	117
Largest(1)	\$132,422.38
Smallest(1)	\$3,225.00
Confidence Level(95.0%)	\$4,046.89
95% UCL	\$21,631.14

DEP Oil and Gas Well Inventory, Status = Abandoned, DEP Orphan List, & DEP Abandoned List

