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Yaw Bill Ensuring Royalty Transparency for Leaseholders Signed by Governor

Sources for below article: Pennsylvania Oil & Gas Landowner Alliance (POGLA) Post - November 6, 2022, Senator Yaw Press Release dated 11/7/22, and 'Pennsylvania General Assembly Enacts Senate Bill to Amend Oil and Gas Lease Act' alert by Babst Calland published on 11.8.22

Legislation aimed at ensuring landowners are afforded a clear and distinct assessment of royalties paid to them through lease agreements with oil and natural gas operators has been signed by Governor Tom Wolf.

On November 3, 2022, the Pennsylvania General Assembly enacted Senate Bill 806, which amends the Oil and Gas Lease Act of 1979 (P.L. 183, No. 60). The new act seeks to increase transparency around the payment of royalties from oil and natural gas operators to landowners pursuant to their lease agreements.

Senator Gene Yaw (R-23) believes the act will address recent concerns among landowners regarding the way in which royalties are being calculated, described and ultimately paid.

"Concerns have been expressed by land and mineral owners for some time now centered on the lack of transparency that can come with deductions from their royalty payments," Yaw said. "In some cases, general deductions with little to no description are subtracted from landowner's checks, leaving them with a fraction of what was promised. "My legislation would not impact lease agreements, but it would require entities making payments to landowners to provide more description, clarity and uniformity on their royalty check statements, something I've heard a great deal about from leaseholders across our region," Yaw said. "This proposal is designed to help ensure all parties feel their lease agreements are executed as intended, and it will help mitigate concerns that have developed in recent years."

Senate Bill 806, now Act 153 of 2022, was supported by various agencies and organizations, including the Pennsylvania Farm Bureau, the Pennsylvania Oil and Gas Landowner Alliance, the Marcellus Shale Coalition, Bounty Minerals, the Pennsylvania Independent Oil & Gas Association and the Pennsylvania Grade Crude Oil Coalition.

"Pennsylvania Farm Bureau thanks Sen. Yaw for his diligent and persuasive advocacy on an issue of long-standing importance to our members," said Rick Ebert, Pennsylvania Farm Bureau President. "Senate Bill 806 would provide much-needed clarity and certainty to Pennsylvania farmers about the royalties paid to them through lease agreements with oil and natural gas operators. We also thank the other stakeholders for their critical work throughout this process."

"The Pennsylvania Oil and Gas Landowner Alliance thanks Senator Yaw for sponsoring SB 806, which will provide check stub consistency and transparency for royalty owners," said Robert Sher, POGLA president. "The Senator persistently sought input from all interested parties and advocated on behalf of the bill. Our organization is grateful for his efforts. "

"Senator Yaw has always been a tireless proponent for his constituents and all of the land and mineral

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owners of the Commonwealth," said Bounty Minerals Director of Business Development Valerie M. Antonette. "Bounty Minerals was proud to partner with him to get SB 806 over the finish line after an eight-year campaign to bring more transparency to royalty statements. Ultimately, it was a cooperative effort between all stakeholders working together."

Oil and natural gas operators should be aware of the following provisions of the act, which will take effect on Friday, March 3, 2023:

Definitional Changes

Section 1 of the act clarifies the scope of ownership interests by replacing the 1979 act's original, broadly defined "interest owner" term with a more precise "royalty owner" term. The act defines a "royalty owner" as "any owner of oil or gas in place or oil or gas rights, subject to a lease covering such oil or gas in place or oil or gas rights." This includes owners who: (1) are entitled to share in the production of the oil or gas under their leasing agreements; or (2) have an interest in oil or gas in place or oil and gas rights but who have not entered into a lease (provided that such owner is not an "operator" under 58 Pa.C.S. §3203).

Expanded Check Stub Requirements

Section 2 of the act increases payors' informational responsibilities for the check stubs they provide to royalty owners and differentiates these requirements for production of oil, natural gas and natural gas liquids from conventional and unconventional formations.

<u>For conventional wells, these requirements include specifying:</u>

• A name, number or combination of name/number that identifies the lease, property, unit or well(s) for which payment is being made; and the county in which the lease, property or well is located.

• Month and year of oil, gas or natural gas liquids production for which payment is being made.

• Total barrels of crude oil or number of Mcf of gas or volume of natural gas liquids sold.

• Price received per barrel, Mcf/gallon.

• Total amount of severance and other production taxes and other deductions permitted under the lease, with the exception of windfall profit tax.

• Net value of total sales from the property less taxes and deductions from paragraph (5).

• Royalty owner's interest, expressed as a decimal or fraction, in production from paragraph (1).

• Royalty owner's share of the total value of sales prior to deduction of taxes and deductions from paragraph (5).

• [Interest] Royalty owner's share of the sales value less the royalty owner's share of taxes and deductions from paragraph (5).

• Contact information, including an address and telephone number.

<u>For unconventional wells, these requirements include specifying:</u>

• Total barrels of crude oil or number of Mcf/MMBtu of gas and volume of natural gas liquids produced and sold from each well.

• The price received by the payor per unit of oil, natural gas and natural gas liquids produced and sold.

• Aggregate amounts for each category of deductions for each well incurred by the payor which reduces the royalty owner's payment, including all severance and production taxes.

• The net and gross value of the payor's total sales of oil, gas and natural gas liquids from each well (minus any deductions).

• The relevant royalty owner's legal and contractual interest in the payor's share, along with the royalty owner's share of: (1) the gross value of the payor's total sales before any deductions; and (2) the sales value minus the royalty owner's share of taxes and any deductions.

Upon the mutual consent of the parties, the act requires payors to furnish royalty owners with summary statements setting forth each of the prescribed informational requirements. Once a royalty owner makes a written request for summary statements under the act, the payor must provide such statements from the month of the notice and each month thereafter, as well as for any prior period requested by the royalty owner.

If a payor fails to provide the payment information required by the act, a royalty owner may make a written request for the same. If a payor fails to respond within 60 days after receiving said request, the act gives royalty owners a cause of action for enforcing the provisions of the act and a right to recover attorneys' fees and court costs.

The act permits payors to provide the required payment information electronically if a royalty owner has historically received such information electronically or upon mutual written consent by the parties.

Timing of Payments

Unless a lease specifies otherwise, payors of royalties from production from unconventional formations must make payments to royalty owners: (1) no later than 120 days from the date of the first sale of oil, gas or natural gas liquids; and (2) for all subsequent sales, within 60 days after the end of the month when the production is sold. A payor's failure to make timely payments in accordance with the act shall incur interest (unless otherwise provided for in the applicable lease).

For payors of royalties from production from conventional formations, the timing of payments continues to be governed by the leases. ■

PIOGA Member Spotlight - Dan Billman

The aim of science is to build true and accurate knowledge about how the world works. For one PIOGA member, targeting scientific truths has been a focus in his life. Dan Billman, has made it a life and career goal to inform the public on the truths of the oil and gas industry, spreading knowledge where he can.

"If I can, in any way, help educate the public and provide a better understanding of science, then I have succeeded," Billman said. "If people were a little more science-minded they might better understand the oil and gas industry"

Recently, Dan Billman, President of Billman Geologic and PIOGA Board Member, took time out of his busy schedule to meet virtually for an interview. Sporting his favorite gray t-shirt and a friendly smile; Billman sitting in a chair dedicated to his alma mater, West Virginia University, took time to dig into his life and career achievements.

Growing up in Huron, Ohio, Billman has always looked at the world with a scientific lens. 'I have always been a science-minded individual. Even as a child – always questioning – how does the world work? Why is this rock where it is? Why is this river flowing here? That has always been my look at the world," Billman said.

True to his nature, Billman received his undergraduate in Geology from the University of Toledo (Ohio) and his masters in Geology from West Virginia University. After graduating, in 1989, Billman landed his first geology job in the oil and gas industry with Mark Resources in Pittsburgh. After his time at Mark Resources, he worked as a development geologist for Eastern States Exploration Company until 1993.

In 1993, Billman started his consulting firm, Billman Geologic. Billman was in his twenty's when he started his consulting firm and didn't foresee his business being his lifetime career.

"I was still in my 20's and thought, 'I'll just consult for a while', here we are almost 30-years later, and I still haven't found a real job yet," Billman joked. "I guess this is my real job."

At the start of his consulting career, Billman did a lot of field work. He worked mainly with conventional operators and a majority were smaller 'mom and pop' oil and gas companies.

"A couple of things changed over time," Billman explained. "I started very strictly as a consultant. The client had a project and I completed it – that was standard consulting practice. As years went by, I started developing and selling my own oil and gas prospects – selling them to companies that might not have had their own geologic staff."

The Marcellus Shale boom in the 2000's, changed the geological game for Billman and his consulting business. From a predominately vertical (conventional) industry to an unconventional shale well. The Marcellus, in every aspect, was a game changer of the oil and gas industry.

During this transformative time, Billman was unsure if there was a place for him in the industry as a geologist. Billman, faced with adversity, took the change in stride, and created a new geological consulting playbook. "As a geologist, I started looking at different rock types, drilling techniques – everything was different. My client-base changed, no longer was I working with the 'mom and pop' smaller companies. I was now working with larger national and international companies and start-ups," Billman explained.

"As a geologist, you are not charged with getting the well drilled but the aspects of that process – and that is where geology matters. What rocks are you drilling through and how are you drilling them?"

Billman summarized the transition by the old saying "It was a little bit of teaching an old dog new tricks." "Prior, I was not someone who was involved in horizontal drilling. I was not involved with large-scale hydraulic fracture treatments. It took some time to learn what this new industry meant for a geologist. It was a time of learning – it was a time of wondering if there was a place for me in this industry."

The Marcellus boom deemed to be a turning point for Billman Geologic, as new oil and gas companies started coming and investing in the Appalachian basin, Billman found himself back in the game.

"Once the new to the basin companies started chasing the Marcellus Shale, my business took off. I was working with a lot of larger companies and start-ups."

Billman Geologic has now been a successful endeavor for 30-years and served as a joint venture for Billman and his wife, Pam. Pam Billman, also a geologist, started with the firm about 15 years ago.

Billman's consulting firm now does a lot of work for financial planners, accountants, lawyers and landowners. "A lot of the job now is working with those who might have a land-owner client. We work a lot with property, mineral rights valuations, geologic storage, and saltwater disposal. There is still work with the traditional oil and gas companies, but the work has grown outside of the industry as well."

Spreading Knowledge and Encouraging Science Mindfulness

Billman has dedicated a lot of his time to promoting the oil and gas industry, providing geology education, and serving as a vehicle of facts for the oil and gas industry.

Billman joined PIOGA in 2004– he now sits on the PIOGA Board and is a strong advocate for the industry.

"All of us interact everyday with non-oil and gas folks – whether it be your neighbor or its just someone you run into at the grocery store," Billman said. "We (those in the industry) need to remind people that there is not a secret handshake – that we do not have a secret code at the gasoline pump to get a discount. All of the things happening in the world, in regard to oil and gas, impact me (those in the industry) just like they do everyone else. We need to let the populace know we are not evil – we are trying to do the right things. The public needs to understand we are trying to find and produce the oil and gas that we need as a nation."

Adding to his work with PIOGA, Billman serves as an advisory board member with the Carnegie Museum of Natural History. Billman's involvement with the museum started with family trips to the museum when his daughter was young (now 26 years old) and grew to his current role as a member on the advisory board. Billman has built a strong relationship with the museum and has been able to advocate for the oil and gas industry, as well as educating the public.

"My involvement with the museum started over 20 years ago. My wife and I would take our daughter there on a regular basis. We became friends with the paleontologists and my wife, and I did some joint work with them. We put together a flyer on 'What is the Marcellus Shale?' – aiming to educate the public on the facts of unconventional drilling in southwestern PA. We would help with various research projects and would serve as a working geologist source of information."

Billman's dedication to his science and his proclivity to assist in research percolated up the ladder of the museum system and eventually he was asked to be on the advisory board of the natural history museum.

"My involvement with the museum has been in part because of my science-minded nature – I enjoy learning about natural history and helping to provide education to the public."

Billman's role at the museum has allowed for him to advocate for the oil and gas industry and science mindfulness.

"There is a lot of misinformation out there about our industry – what we do, what we produce, how we do it. If people were more science-minded, in general, they might understand better what we do as oil and gas professionals, geologists, engineers, etc. If the public understood better 'what does a rock look like that holds natural gas,' then they may be a little less skeptical of the process," Billman said. "If I can, in any way, help with the better understanding of science – then maybe as an industry we will have less blowback as we try to do what we do."

Billman's aim is to be a means to an end of an educational divide. A simple equation – helping the public make informed decisions and be science-minded equates to the world being a better place. Billman strongly believes this is what the Carnegie Museum system is aiming to do, and he wants to be part of the equation.

Beyond the museum, Billman has been an advocate

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PIOGA Member Spotlight - Dan Billman

of the sciences through various presentations at schools, civic organizations, and educational groups. "I have presented on geology at elementary schools, high schools, and colleges. There is a focus on the oil and gas industry and the different jobs within the industry – from geology to the trades."

A Science Based Life

Outside of his business and work engagements, Billman still lives a life full of science and nature. From golfing, fishing and bird watching to attending seminars on southern hemisphere dinosaurs (which he and Pam had done the night before the interview), Billman's happiness revolves around his love of science.

"I enjoy doing things in nature and learning about the earth," Billman said.

As for his time left working – Billman is unsure of his future career plans. "I am at a point in my career where I could cash in my chips and retire but then I realize I am not ready for that. So, I don't know what the future holds," Billman said. "You would like to think as an individual you can make a difference. There is a saying that 'when you go on a hike you don't leave the woods any worse than you found them.' Well, maybe I didn't make the industry any worse but maybe a little better than I found it."

Prior to ending the virtual meeting, Billman closed his interview with his parting thoughts on the industry and the future of oil and gas.

"As we move to electrification of the world, we need natural gas …. It's that simple. Natural gas is a low emission, reliable and affordable energy source to make electricity. I am not anti solar or wind – but reality is the wind does not always blow and the sun does not always shine. You need a reliable energy source-to allow for a stable grid. Natural gas is not going anywhere, we will need natural gas for quite some time. As much as there are pressures on our industry, I do not see our industry going way. We need that reliability, we need affordability." ■

3 Factors Increasing Risk Exposures
And a Possible Solution

Authored by James Debenport and Seth Michaelson, Vice Presidents of NFP's Energy & Marine Team.

In the current inflationary times and era of nuclear jury judgments, there are a lot of factors and influences that are posing new and unique risks. While some brokers fail to consider the real impact of these driving factors, midstream and oil and gas operators might be more exposed to risk than they think.

Here is a look inside key trends driving the industry that could be increasing risk exposures in oil and gas.

Employment Issues

The oil price crash of 2020 triggered the fastest layoffs in the history of the oil and gas industry in the United States. Prices have nearly doubled since then, but only about 50% of lost jobs have come back. The cyclical hiring and laying off of employees is adversely affecting the industry's reputation as a reliable employer, and a tenured, aging workforce is reducing the available talent pool.

While the pandemic reduced the overall demand for oil and gas, over the past two years, many skilled workers left the industry. Now that demand has increased again, the preexisting shortage of workers is now a problem tenfold. Losing large numbers of highly experienced workers and hiring smaller numbers of less experienced workers may increase the risk of accidents, and thereby increase exposures.

In addition, the Ukrainian/Russian war and the recent announcement from OPEC to cut production has driven commodity prices back up. Now, the race is on to hire and retain qualified workers, putting an even bigger strain on a reliable workforce and increasing the window for costly and dangerous mistakes.

Nuclear Verdicts & Social Inflation

During the past decade, a major rise in automobile accident settlements has happened across various sectors, including oil and gas. Plaintiff's attorneys continue to succeed in persuading juries on claims of company negligence. Cases often involve evidence of drivers who became fatigued after long hours on the road or drivers who became distracted while using mobile phones.

Verdicts of this nature ten years ago used to yield \$2–10 million in settlements, but these same types of cases are now settling for ten times the amount. Such so-called "nuclear verdicts" can result in huge payouts and increased liability.

Additionally, social inflation, or the recent growth in liability risk and costs due to several trends and developments, is driving increased risk within the oil and gas industry. Such trends include litigation funding, the proliferation of class action lawsuits, an increase in juries' sympathy toward plaintiffs, and the negative public sentiment toward the oil and gas industry.

Environmental, Social & Governance

Geopolitical pressures that drive environmental, social and governance (ESG) initiatives have been front and center for all energy-related companies, and the approach to insuring the sector has experienced a major shift.

Oil and gas companies need to have a robust and detailed plan surrounding their emissions to achieve any success with their insurance renewal. These same geopolitical pressures are also pushing global insurers to walk away from the oil and gas sector altogether.

A Potential Solution — Captives

A lack of insurance capacity and rising rates might force insureds to investigate captives. Captive insurance is insurance provided through an in-house entity created to provide coverage exclusively to its owners. Since the insurance provider is owned by the insured, it may provide opportunities for insureds to save significantly on insurance premiums they would normally pay to third-party providers. Further, a captive enables insureds to customize coverage to their individual needs, rather than purchasing coverage that may not fully meet their requirements.

Of course, this must be balanced with the cost of operating the captive, which functions as an independent business.

Captive insurance can benefit entities that may have difficulty obtaining insurance through more traditional channels. Companies with high loss frequency are not good candidates and should hopefully incentivize

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companies to make loss control front and center if they would like to pursue the captive route. Insureds should not jump into captives unless they have completely vetted the pros and cons.

A captive is not a simple solution, and it requires an intricate understanding of the practice of retention analysis and an understanding of the intent of what is being insured.

Organizations that successfully implement a captive or another tailored solution will be those who align with experts who have a real understanding of the oil and gas industry, its trends and potential exposures, and, most importantly, the right solutions to meet

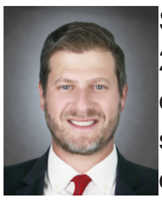
unique problems.

About the Authors

James Debenport – Vice President, Energy & Marine.

James Debenport joined NFP in June of 2022 and brings more than 20 years of energy industry experience. He is committed to listening to clients, understanding markets and cultivating long-term relationships. In his role, he enhances NFP's ability to deliver strategic risk management counsel and solutions that empower better outcomes and provide meaningful value to clients.

Seth Michaelson – Vice President, Energy & Marine.



Seth Michaelson joined NFP in July of 2022 and brings specialized insurance expertise across the upstream and midstream energy sector with over 13 years of industry experience. As risk management in the energy industry becomes increasingly more challenging, Michaelson is committed to providing clients with a variety of skilled resources to enable better decision-making.

About NFP

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Safety Committee Corner

Lithium-ion Battery Energy Storage Systems Safety

Lithium-ion (Li-ion) batteries are rechargeable and used worldwide to power a wide range of devices from cellphones and laptops to handheld tools. Larger Li-ion batteries are used in energy storage systems, hospital equipment, and electric vehicles. The rapid growth of Li-ion technology and its prolific use around the world has quickly outpaced the knowledge around storing and protecting this sought-after and very expensive commodity. While a lot of consumer research has been done on the safety of these batteries in individual devices while in use, little has been done on the potential fire hazards of these batteries when stored or used in large quantities. Li-ion batteries may come with a higher risk of a fire or an explosion due to battery failure than other batteries. The electrolyte in other batteries, including Nickel cadmium, Nickel metal hydride and Lead acid, is not ignitable. The electrolyte in Li-ion batteries is ignitable. The major cause for a Li-ion battery fire is thermal runaway. If unmitigated, a thermal runaway can lead to cell rupture and the venting of toxic and highly flammable gases. Those flammable gases can cause a fire or explosion if ignited.

Fortunately, Li-ion batteries are much safer than they were 10 to 20 years ago, and fires are a rare occurrence. However, limited research has been done to understand the potential hazard associated with the storage and use of Li-ion batteries, and how to adequately mitigate against property loss as a result of this hazard. Li-ion batteries burn at temperatures between 900-1500 °C (1652-2732 °F). The Occupational Safety and Health Administration reports that the U.S. Consumer Product Safety Commission identified over 25,000 overheating or fire incidents involving more than 400 types of lithium-battery-powered consumer products over a 5-year period.

The major cause for catastrophic failure of Li-ion batteries is thermal runaway that occurs when heat generated from exothermic reactions inside the battery outpaces heat dissipated from the battery leading to a rapid increase in temperature and pressure that further increases the reaction rate. If unmitigated, this self-accelerating process will lead to cell rupture and the venting of toxic and highly flammable gases, and the release of heat. Popping or white smoke may be an indication of thermal runaway. An explosion scenario can be more severe for a large battery, where heat generated by one failed cell can heat up neighboring cells and lead to a thermal cascade throughout the battery.

Thermal runaway of Li-ion batteries can be caused by a variety of situations such as mechanical damage to the cell that can lead to internal shorts and heat generation, exposure to excessive temperatures, internal shorts due to cell defects, faulty wiring causing external shorts, or a surge in the charging or discharging current.

Fires involving lithium-ion batteries are also known to reignite long after they have been damaged in a fire – sometimes up to a week later. After a fire, there is often stranded energy which requires the batteries to be removed from the area. Stranded energy is any scenario where electrical energy remains in a battery without an effective means to remove it.

There is a growing trend to replace lead acid batteries, which need replaced every 3-4 years at a significant cost, with Li-ion batteries which need replacing every 20 years. Anywhere there is a critical power need such as utilities storing solar energy, data and telecommunication centers, hospital imaging equipment (CT scanners and X-ray machines), control systems for manufacturing and building systems (networking and phone systems), to electric vehicles the switch is being made to Li-ion batteries. For equipment with a critical power need, Li-ion battery pack size can range from about the size of a microwave to a 40-foot ISO shipping container.

Li-ion battery failure is characterized by four stages: initial abuse, off-gas generation, smoke generation, and fire propagation.

Stage 1 – Initial abuse – can be thermal, electrical, or mechanical abuse such as physical battery damage, overcharging, overheating, and manufacturing defects

Stage 2 – Off-gas generation – an opportunity window of time in which fire or explosion can be prevented

Stage 3 – Smoke generation – at this point, thermal runaway has occurred, and a catastrophic event is imminent

Stage 4 – Fire generation – propagation occurrence takes place

The initial battery abuse and off-gas generation stages are where protection mechanisms utilized during these two stages is essential to help prevent battery failure. Many current protection systems provide hazard detection at Stage 3, which occurs after battery failure is imminent. A UL Firefighter Safety Research Institute report makes recommendations regarding monitoring for Li-ion battery failure that includes:

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Safety Committee Corner

- Li-ion battery ESS (Energy Storage Systems) should incorporate gas monitoring that can be monitored remotely.
- Li-ion battery ESS should incorporate robust communications systems to ensure remote access to data from the Battery Management System, sensors throughout the ESS, and the fire alarm control panel remains uninterrupted.
- Li-ion battery ESS should incorporate adequate explosion prevention protection (i.e., detection and mitigative action) as required in NFPA 855 or IFC (International Fire Code) Chapter 12, where applicable, in coordination with the emergency action plan.

NFPA 855 for Energy Storage Systems focuses on ways to mitigate the risk associated with Li-ion battery failures by specifying mandatory requirements for the overall management of ESS and for hazard mitigation analysis. Besides mandating detection capabilities, the standard focuses on battery installations, which are typically an arrangement of tightly packed cells placed in modules that are stacked vertically in racks. Since these systems often consist of multiple racks, a main objective of the standard is to make sure, if a fire occurs, that it is contained to a single rack. Whenever possible, staging Li-ion batteries at a distance of at least 3 feet from other Li-ion batteries and walls can prevent cascading thermal runaway reaction to adjacent cells or objects. Properly designed sprinkler protection with sufficient water supply is also key. If adequate sprinkler protection is not provided, it is expected that significant battery involvement will occur, which may result in thermal runaway which can propagate to adjacent cells. If the fire propagates from one rack to the next, it could last for a considerable length of time, potentially overwhelming the sprinkler system or taxing the water supply resulting in an uncontrolled fire.

For the occupational safety and health (OSH) professional, the future is now. Li-ion batteries are being increasingly deployed in energy storage systems. These battery energy storage systems may be a risk that is currently unidentified in an organization. OSH professionals need to recognize where these Li-ion batteries and ESS are in our manufacturing facilities, warehouses, hospitals, shipping containers, and production sites, just to name a few, and take the necessary actions to manage the risk to life and property.

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ESG for small to mid-size oil and gas industry segments

Authored by Joseph Baran - Bertison George, LLC

What is ESG?

It is important to establish definitions — both to clarify that ESG is about more than the environment and to identify the range of ESG initiatives that oil, and gas leaders will want to consider. Entities in this industry may have heard of ESG but not fully understand what it is and how it can be used to avoid higher costs and to gain advantages in the marketplace.

A comprehensive oil and gas industry ESG program would include:

E = Environmental stewardship, or the energy and resources an organization takes in and the waste it discharges (e.g., climate change, carbon capture and carbon emissions reduction, energy portfolio diversification, operational energy efficiency, resource conservation, and waste disposal)

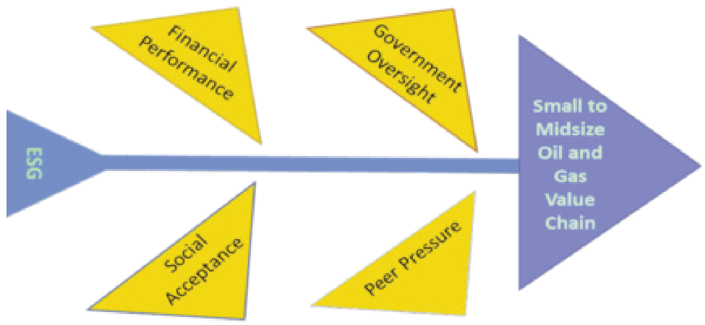
S = Social responsibility or the relationships an organization has with the communities where it operates (e.g., diversity, equity, and inclusion, labor issues and supply chain relationships)

G = Governance factors, or the internal system of practices, controls, and procedures an organization uses to govern itself and meet the needs of external stakeholders (e.g., ethics, disclosure, transparency, leadership diversity, executive compensation, and shareholder rights)

An ESG score is a measure of how a company is performing in terms of its environmental, social and governance responsibilities. These responsibilities might be relevant to the company, or of importance to the company's stakeholders for reasons that are not financial. Company ESG scores exist so that both the organization itself, as well as external bodies, can evaluate and understand how well the company is perceived to be performing.

It is worth noting that there is a difference between perception and reality, and the ESG rating is calculated based only on how the company is perceived to be performing. A business might be putting some positive practices in place, but if this information is not in the public domain, it won't make any difference to their ESG score.

Companies in general have four forces that are



pushing ESG onto the small to midsize oil and gas companies and their supply chain.

Financial Performance

A reason for ESG's popularity with large publicly traded companies is its relation to financial and operational performance. Studies have consistently linked ESG and financial performance. For example, 58% of corporate studies show a positive interconnection between ESG and financial performance, with only 8% showing a negative correlation.

A study by McKinsey & Co. showed that ESG creates value through top-line growth, cost reductions, reduced regulatory and legal interventions, employee product uplift, and investment and asset optimization.

Government Oversight

The current administration has created a new Special Presidential Envoy for Climate to elevate the issue of climate change and underscore the commitment towards addressing it. As part of their responsibilities, the Envoy for Climate will coordinate the policy-making process with respect to domestic climate-policy issues, and monitor the implementation of the President's domestic climate-policy agenda. In addition, many states have Greenhouse Gas (GHG) and Environmental Justice (EJ) regulations and policies. States that do not have statewide legislation have implemented individual department EJ policies.

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EPA Publishes Proposed Rule Requiring All Major Stationary Sources to Account for Fugitive Emissions in NSR Permitting

Article/Alert written by Babst Calland on October 17, 2022. Authored by Gary E. Steinbauer, Gina N. Falaschi, and Christina M. Puhnaty

On October 14, 2022, the U.S. Environmental Protection Agency published a proposed rule that would require all emission sources subject to the Agency's major New Source Review (NSR) permitting program to consider fugitive emissions when evaluating whether a new source or physical or operational change triggers the stringent major NSR permitting requirements. 87 Fed. Reg. 62,322 (Oct. 14, 2022) (Proposed Rule). The treatment of fugitive emissions, i.e., those "which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening," under the major NSR permitting program has been controversial for decades. While EPA predicts that the Proposed Rule will have limited impact on the regulatory community, EPA and state air permitting authorities may now place even greater pressure on industry to predict and quantify "fugitive emissions" from physical or operational changes to their facilities.

The major NSR permitting program is the Clean Air Act's permit program that applies to the construction of new "major sources" and "major modifications" (i.e., qualifying physical or operational changes) to existing "major sources." Applicability determinations under the major NSR program often rely heavily on predicted emissions from a new source or planned physical or operational changes to an existing source. When the new or existing source is located in an area that is in attainment with the Clean Air Act's national ambient air quality standards (NAAQS), the major NSR program's Prevention of Significant Deterioration (PSD) requirements apply. More stringent requirements, known as non-attainment NSR requirements, apply when the source will be or is located in an area that is not meeting one or more of the NAAQS. The Proposed Rule would impact all "major stationary sources," regardless of whether they are located in areas that are meeting or not meeting the NAAQS.

The Proposed Rule would formally repeal EPA's "2008 Fugitive Emissions Rule," which provides that only "listed" industrial source categories are required to consider fugitive emissions when determining whether a physical or operation change is subject to major NSR permitting requirements. See 73 Fed. Reg. 77,881 (Dec. 19, 2008). The 28 "listed" industrial source categories referenced in the 2008 Fugitive Emissions Rule include, among others, iron and steel mills, Portland cement plants, petroleum refineries, coke oven batteries, certain fossil-fuel-fired power plants, and certain petroleum storage and transfer units. Effectively, the 2008 Fugitive Emissions Rule allowed non-listed industrial source categories to consider only non-fugitive emissions when evaluating major NSR permitting applicability.

Shortly after the 2008 Fugitive Emissions Rule went into effect in early 2009, environmental groups submitted a petition for reconsideration, after which EPA issued and extended multiple stays of the 2008 Fugitive Emissions Rule. As a result, since late-2009, the 2008 Fugitive Emissions Rule has been stayed and the regulations predating it have remained in effect.

In addition to proposing to formally repeal the 2008 Fugitive Emissions Rule, EPA is seeking to remove a regulatory exemption that has been on the books since 1980. This "1980 exemption" provides that a physical or operational change is not considered a "major modification" subject to NSR permitting requirements if the physical or operational change is considered "major" solely due to fugitive emissions and the change is occurring at a facility within a non-listed industrial source category. In the Proposed Rule, EPA states that the 1980 exemption was inadvertently retained between 1989 and 2008, despite other EPA interpretations providing that all "major" sources are to account for fugitive emissions when evaluating major NSR permitting applicability. EPA acknowledges that the 1980 exemption "has created significant uncertainty about the EPA's treatment of fugitive emissions in the major modification context." 87 Fed. Reg. at 62,328.

The Proposed Rule may be part of an emerging trend of EPA revisiting decades-long controversies related to fundamental aspects of the Clean Air Act permitting programs. In a late-September 2022 presentation to the Association of Air Pollution Control Agencies, EPA discussed the Proposed Rule, along with a spate of several other planned regulatory actions and guidance updates related to the major and minor NSR permitting program and its Title V permitting program.

EPA will accept comments on the Proposed Rule until December 13, 2022, on the Federal e-rulemaking portal (www.regulations.gov).

If you have any questions about the Proposed Rule or submission of comments to EPA, please contact Gary E. Steinbauer at (412) 394-6590 or gsteinbauer@babstcalland.com, Gina N. Falaschi at (202) 853-3483 or gfalaschi@babstcalland.com, or Christina Puhnaty at (412) 394-6514 or cpuhnaty@babstcalland.com. ■

JUST THE FACTS

The Facts on Winter, Ukraine and Infrastructure Bottlenecks Roil Global Natural Gas Markets

Our Just the Facts for November highights the unpredictability of global energy production.

As the heating season starts in earnest across the northern hemisphere, the volatility of global energy production, transportation and utilization – especially natural gas - has never been more apparent.

A combination of factors, including European instability, global pandemic recovery and national politics – to name just a few – have collided to make for a more volatile and expensive winter heating season this year. They again point to the need for common-sense and forward-thinking policies in the U.S. that recognize the vital role oil and natural gas play in providing reliable and affordable domestic energy.

The current supply and price situation in Pennsylvaniaand surrounding states is better compared to most locations around the world due to current production levels and existing infrastructure, but the larger picture and long-term outlook point to the benefits that would come from a more cohesive global energy strategy.

To read more from this month's Just the Facts – and to share it with friends and colleagues – visit the Latest News and Blog section at pioga.org.

PIOGA October Events

PIOGA would like to extend a sincere Thank You to all who joined us at our October Events: Marcellus to Market, PIOGATech-Water & Waste Management Training, and Birds & BBQ Clay Shoot. Check out the photos below and visit our website to see all the photos!

(https://pioga.org/about/photo-galleries/)

Marcellus to Market

October 19, 2022

PIOGATech

PIOGA's Technical Seminar Series

October 26, 2022

Sponsor and Planning Partners

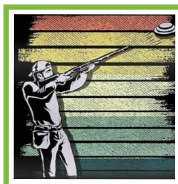
DIVERSIFIED energy

TD Connections, Inc.

Providing Government, Regulatory and Public Relations

PIOGA Birds & BBQ

October 27, 2022



PIOGA Member Profile: *Share Your Story!*

Welcome to PIOGA! We would like to offer you the opportunity to introduce yourself to other members via our monthly newsletter, *The PIOGA Press.* The PIOGA Profile section of the newsletter gives members a chance to share information about their company and the products and services they offer to others in Pennsylvania's oil and natural gas industry. We encouage you to take advantage of this free member service.

PIOGA Profile submission guidelines

- Include a brief history of your company. When and where was the company founded, and by whom? Is the company new to the oil and gas industry in general or to Pennsylvania?
- Describe the products and services you offer specifically for the oil and gas industry. Do you have a product in particular that sets your company apart from the competition, or a new product you would like to highlight?
- If applicable, tell how the business has been positively impacted by Pennsylvania's oil and gas industry? Have you expanded, added employees or opened new locations?
- Include a website address and/or phone for readers to use.
- Your submission may be a maximum of 400-450 words and should be provided as a Word document. Please use minimal formatting—bold and italic fonts are fine, as are bulleted or numbered lists. Your submission is subject to editing for length, clarity and appropriateness.
- Include your company logo or a photo. Images should be high-resolution (300 dots/pixels per inch or higher) and in any common graphics format. Please include identifications for any people or products in a photo. Send image files separately, not embedded in your document.
- All material should be emailed to **Meghan Keely, PIOGA Director of Internal Communications, at meghan@pioga.org.** Your submission will be confirmed on receipt, and we will use submissions in the order in which they are received. This is a free service to our member companies and publishing dates are at the discretion of PIOGA. If you have questions or want to follow up on a submission, email Meghan or call 814-671-2484.

Interested in submitting articles, news releases or advertising for *The PIOGA Press?* Contact Meghan Keely at the email address or phone number shown above.

The Federal Energy Regulatory Commission (FERC) has recently issued policy statements that include implementing an EJ review for current or new pipeline applications. FERC is also building out its Office of Public Participation so that affected community members can take part in the agency's notoriously complex process. FERC's decisions directly affect people's lives, public health, and private property. In taking these steps, FERC is trying to make public access to their process more transparent and available.

Social Acceptance

Social Acceptance assesses the impact a business has on society and the relationships it has with its stakeholders including employees, consumers, suppliers, and the communities in which they operate. Social will similarly include the societal impacts associated with the full life cycle of a business's product or service delivery. Social should include an assessment of:

- respect for and observance of human rights
- working conditions and fair labor practices – including those of suppliers and the supply chain
- hiring practices, employee engagement, equal opportunity, gender, diversity, and inclusion
- occupational health and safety management
- community relations, initiatives, and engagement
- customer satisfaction
- social risks and how well they are managed
- social license to operate (SLO) and meeting the expectations placed on a business for societal acceptance

Labor issues also fall under the social aspect of sustainable ESG investing. Sometimes the impact of labor disputes or challenges on a business are obvious, such as striking auto workers. In other cases, however, these factors can be the indirect result of broader economic trends.

Peer Pressure

A reason for ESG's popularity with large publicly traded companies is its relation to financial and operational performance. Companies are being driven to address climate change by a variety of factors. One survey of more than 2,000 C-suite executives in 21 countries including the United States was conducted in 2021 and found that pressures to act include regulators/government (77%), Board members/management (75%), consumers/clients (75%), civil society (72%), shareholders/investors (71%), competitors/peers (66%), employees (65%), and banks/lenders (55%).

Increased scrutiny of the upstream carbon intensity associated with the production of fossil fuels (oil and gas) has prompted investors, consumers, and producers to seek new and innovative ways to reduce their carbon footprint and methane intensity. Oil and gas operators want to collaborate with suppliers that share their corporate values and commitment to ESG principles, according to the results of the Daily Oil Bulletin's survey of executives and ESG professionals completed late in 2020.

Over 35% of survey respondents said their organization often or always considers ESG performance when selecting suppliers or partners. Another 35% said they sometimes integrate ESG performance into their procurement process. Lastly, a little below 30% said ESG performance is seldom or never part of their procurement considerations.

Bringing the supply chain on board is key to oil and gas operators meeting their ESG goals as their service and supply partners are in the field doing the physical work and interacting with local communities. These ongoing discussions provide an opportunity to bring ESG issues to the table.

The environmental and social challenges of our time will not get solved unless executives and supply chain leaders meet the challenge head on. Though supply chain management professionals are aware of their responsibility, few feel equipped and supported to take actionable steps. A 2021 survey of third-party logistics providers showed that 83% included ESG in their supply chain and growth strategies. However, the same study revealed only 43% had executive sponsorship, and only 30% had structured ESG goals and plans.

Summary

ESG is not a passing fad. Nor is it something that small to mid-size oil, gas, and service companies should fear. If done correctly, developing an ESG strategy can:

• Set a service provider apart from your competition as large producers/pipeline companies start to focus on Scope 2 and 3 protocols.

• Be proactive in collaborating with their stakeholders.

• Be utilized for continued growth.

ESG should be looked at as an investment, not a cost. Developing an ESG strategy does not need to be daunting. Progress can be made through a high-level assessment and developed over time. Every strategy is company specific. All companies regardless of size, need to evaluate their operations against the ESG framework. Those who do not may get left behind. ■

(1) See "ESG and Financial Performance: Uncovering the Relationship by Aggregating Evidence from 1,000 Plus Studies Published Between 2015-2020, by Tensie Whelan, Ulrich Atz, Tracy Van Holt, and Casey Clark, CFA, Rockefeller Asset Management and NYU Stern Center for Sustainable Business, accessible at https://www.stern.nyu.edu/sites/default/files/assets/documents/ESG%20Paper%20Aug%202021.pdf.

(2) 10 See "Five Ways that ESG Creates Value," by Witold Henisz, Tim Koller, and Robin Nuttall, McKinsey Quarterly, November 2019, accessible at https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/Five%20ways%20that%20ESG%20creates%20value/Five-ways-that-ESG-creates-value.ashx.

(3) See Deloitte 2022 CxO Sustainability Report, accessible at https://www2.deloitte.com/content/dam/Deloitte/global/Documents/2022-deloitte-global-cxo-sustainability-report.pdf.

(4) See Daily Oil Bulletin - ESG Becoming Integrated Into Oil And Gas Supply Chains

(5) See Daily Oil Bulletin - https://www.dailyoilbulletin.com/article/2021/2/1/esg-slowly-seeping-into-oil-and-gas-corporate-stru/

ShalePro Energy Services Finalizes Acquisition of Tight Line Services

The deal closed on October 10, 2022 and is the fifth acquisition for the company.

ShalePro Energy Services announced recently that it has completed the acquisition of Tight Line Services. Tight Line joins ShalePro as the fifth operating companies that has been acquired by ShalePro, combining to provide turn-key production and midstream services for the natural gas and oil industry in the Pennsylvania, West Virginia, Ohio, and across the Appalachian Basin.

Headquartered in Hickory, PA, Tight Line has been providing exceptional civil construction services to the natural gas industry for more than 10 years, including pad build, slip repairs, and building and repairing lease roads across the region. With the addition of Tight Line, ShalePro has nearly 300 employees operating out of five offices covering seven states.

Along with their seven full-time employees, former Tight Line owner Ron Romanetti is staying on and will be joining the ShalePro management team as the Director of Civil Construction. ShalePro President and CEO John Snedden said, “We are excited to add Ron and his team to the ShalePro family as we look to continue to build our services into the premier, turn-key, production, midstream, and construction services firm in the region.”

ShalePro is devoted to servicing natural gas and oil producers by assisting in the production and transportation of natural gas and associated liquids with a focus on operations in Pennsylvania, West Virginia, and Ohio. ShalePro continually seeks to expand its service offering, geographic presence and customer base through organic growth as well as through strategic acquisitions.

About ShalePro Energy Services

ShalePro Energy Services (formerly Basin Energy Group) is headquartered in the metro- Pittsburgh area, heart of the Marcellus/Utica Shale Basin and is proud to provide best-inclass services to the production and midstream sectors of the oil and natural gas industry.

The company was formed with the backing of Turning Basin Capital through a series of acquisitions and mergers. Through those integrations, we evolved into a single brand, ShalePro Energy Services. This began in 2014 with ProActive Services. Starett Energy Services was added in 2015, followed by Appalachian Production Services in 2016, and Katko in 2017. In 2020, ShalePro, added I&E to our suite of services. That same year, the company launched HelicalPro, a new helical pile installation services division which leverages the 90+ year experience of Chance helical piles. ShalePro now has more than 300 employees serving the industry across the Appalachian Basin and in shale plays across the country.

ShalePro has a combined history of operating in the industry for nearly 3 decades and we are continuing that service of excellence today as one combined, stronger brand.

To learn more about ShalePro Energy Services visit www.shalepro.com.

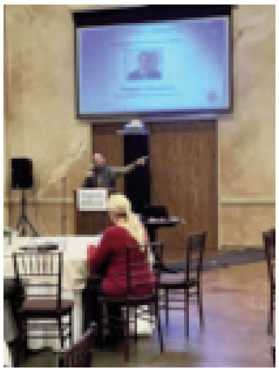
For more information, contact: Dani DeVito - ddevito@shalepro.com

October's PIOGATech on Water and Waste Management Update

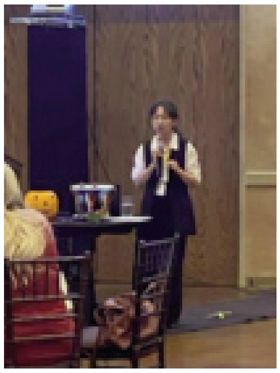
The Environmental Committee hosted its annual Water and Waste Management PIOGATech on October 26th and it was another very valuable training on the management of water, wastewater and solids in the oil and gas industry for conventional and unconventional operators.

A crowd of 50 attendees started the day's training hearing from Dave Yoxtheimer from Penn State's Marcellus Center for Outreach and Research on the current trend in shale energy fluids management. In addition, industry experts shared their expertise on drill cutting management, spill response, new trends on RAD plans and radioactivity monitoring, legal updates and they finished the day with legislative and regulatory updates in the industry.

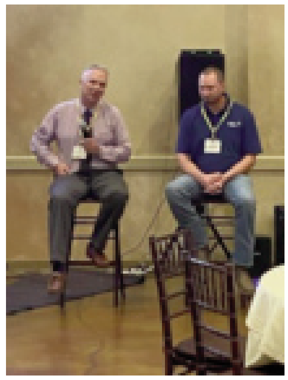
Our special thanks go out to all the presenters Dave Yoxtheimer from Penn State; Lisa Bruderly, Marley Kimelman and Matt Wood from Babst Calland; Matt Ciprich from Equitrans Midstream; Mengling Stuckman from NELT, DOE; Mark Miller from Moody & Associates; Todd Kunselman from Snyder Brothers; Alex Lopez from Perma-Fix Environmental Services and Teresa Irvin McCurdy from TD Connections for leading this event. We would also like to thank our two exhibitors for the day, Mark Sommer from Sommer Technologies, and Dan Mulligan from Mobile Air Services.



Angelo Albanese, Diversified Energy Company kicking off the day's training.



Mengling Stuckman, NETL, DOE explaining drill cutting management and CM recovery.



Mark Miller from Moody & Associates (L) and Todd Kunselman from Snyder Brothers (R) having a spill discovery discussion with the audience.

PIOGA's Online Buyers' Guide is LIVE!

PIOGA is pleased to announce that the 2022 edition of PIOGA Buyers' Guide, the premier resource of relevant products and services for oil & gas professionals, is now available via the PIOGA website or directly at www.paoilgasbuyersguide.com

The 2022 version of the Buyers' Guide features updated and expanded company and product listings, in addition to other valuable information relating to the oil & gas industry. PIOGA members and other industry professionals now have an easy way to browse for goods and services.

"For the past 7 years, the PIOGA Buyers' Guide has become a great online purchasing resource and is a “one-stop-shop” for our members looking for products and services needed for oil and gas operations," said Dan Weaver, PIOGA's President and Executive Director. “We encourage you to look for the PIOGA logo on the listings and use the products and services of our PIOGA members. They support us and we should support them!”

Our long partnership with Strategic Value Media (SVM) has allowed PIOGA to provide more options to our members to advertise their products and services.

The Buyers' Guide provides users with an efficient way to browse for goods and services and offers oil & gas suppliers and companies exceptional visibility by showcasing their products and services to a targeted, industry-specific buyer group.

PIOGA Profits too!

A portion of the proceeds from the Buyers' Guide comes back to PIOGA to help sustain our association. An investment in the Buyers' Guide is not only an investment for your company, but an investment in PIOGA too. We thank you!

America's Energy Leadership
Tell Congress: No Ban on Fuel Exports

The below excerpt is from The Energy Citizens Team. It is a campaign to tell Congress "No Ban on Fuel Exports". This is an effort lead by American Petroleum Institute. (Use the link to support the campaign)

America is a leader in the global energy market—but President Biden is considering restrictions or a ban on exports that could spell the end our international energy dominance.

According to third party experts, President Biden's plan to end exports of refined petroleum products - like gasoline, diesel, and jet fuel - wouldn't help control the price you pay at the pump or reduce inflation. In fact, up to two-thirds of US consumers could end up paying higher prices for their fuel should a ban go into effect.

That's because the energy market is global, and American exports help meet demand far beyond our borders. One estimate determined that an export ban could shutter 7% of U.S. refining capacity. If our products are taken off the market, then costs for everyone could go up.

This plan would also be a major blow to our allies overseas that are relying on American energy to maintain their independence against hostile nations. We shouldn't be considering cutting off a vital supply line to trusted allies when they are relying on us.

America's energy producers have worked hard to establish a strong presence in the global market. Being a net exporter of fuels benefits our country every day. Ending our energy exports would erase that hard work almost overnight and surrender our influence on countries hostile to our national interests.

We need you to let Congress know: President Biden's plan to take American energy off the market is bad for America, bad for consumers, and bad for our allies. We should be focused on increasing energy production and cutting red tape, not giving up a leading role in the global market.

Link to Campaign/Submit Support Letter: National Energy Citizens | Don't Let President Biden Surrender America's Energy Leadership (https://actions.energycitizens.org/campaign/42960/)

PIOGA Members in the Community

PIOGA is looking for more Members in the Community feature stories! If you are a PIGOA member and have a positive community story to share - please reach out to meghan@pioga.org.

We are looking for stories of community impact - education programs, volunteering, positive industry outreach, donations, etc.

It is time to showcase all the good in our industry and shed light on the positives! These feature stories/articles will be used in PIGOA's social media and future marketing materials!

If you have any questions or suggestions for articles - please reach out! Together we can educate and promote the Oil & Gas industry!

Mix, Mingle & Jingle networking event

'Tis the season to get your mingle and jingle on!

Join us on Thursday, December 15, from 4 to 7 p.m. at The Chadwick in Wexford. In addition to the great food, beverages and company, the following smaller events will also be available during this festive occasion:

- Food donations will be accepted on behalf of the North Hills Food Bank. It's the season of giving, so please bring what you can and receive an extra drink ticket for your donation.
- Buy tickets for a chance to win one of many great prizes in the Basket Auction! All proceeds collected will be donated to the Dollar Energy Fund that helps households experiencing hardships by providing utility assistance and other services that lead to self-sufficiency.

You can also help spread the cheer—and get some additional recognition for your company—by becoming a sponsor at one of three levels. Be sure to register before December 9!

PIOGATech

Air Quality Compliance Seminar

PIOGA's annual air quality compliance PIOGATech is coming up December 15 at The Chadwick in Wexford.

The training will include:

- Overview of Air Issues Affecting the Oil & Gas Industry
- Incident Response and Air monitoring considerations
- Inflation Reduction Act, EPA Reporting and Financial impact on operators
- OOOO a, b and c
- CleanAir Engineering Demo
- Federal Updates

Registration for the event is open!

Check on PIOGA Events webpage for more information and updates!

https://pioga.org/events/pioga-events

For any additional information or questions contact, Deana McMahan - deana@pioga.org

PIOGA's Market Development Committee

Elevator Speech Challenge

PIOGA's Market Development Committee is challenging members of the committee to create and present their own elevator speech!

Over the next couple of months, members of the committee will have time at each meeting to present their elevator speeches. Each person who presents a 30-second speech will get a gift.

At each monthly meeting, 2-3 volunteers will be allowed time to present. The challenge is only for those present at the meeting!

To join the Market Development Committee, please contact Deana McMahan at deana@pioga.org

PIOGA®
Pennsylvania Independent Oil & Gas Association

How the region's shale industry is finding new workers

Article was published by the Pittsburgh Business Times - article focuses on a panel discussion during PIOGA's Marcellus to Market Conference. Authored by Paul J. Gough - published October 19, 2022.

The region's natural gas industry will need to embrace new ways to recruit and retain employees — including expanding on CNX Resources Corp.'s pioneering mentorship initiative — amid what will continue to be a tight labor market, a shale industry group was told October 19.

The region's manufacturing and skilled trades have had the same challenges as every other sector in the current labor shortage. And it's not likely to get any easier any time soon. Traditionally staffing has been solved by plucking an employee from a competitor. But Michael Parker, president and CEO of energy staffing firm BlackRock Resources, said that is changing with the increase in onshoring manufacturing jobs in the tri-state area over the next several years, including chip manufacturing plants that are moving to Ohio.

Soon, Parker told a panel Wednesday at the Pennsylvania Independent Oil and Gas Association Marcellus to Market conference in Washington County, the competition for the best candidates will be well beyond the energy industry.

"We have to make sure we are thinking and planning and being proactive about how we're going to recruit and staff the next generation," Parker said.

Charlie Schliebs, managing director of Pittsburgh-based Stone Pier Capital Advisors and chairman of the Energy Innovation Center Institute, said the stakes were high.

"If we don't attract and retain absolutely first-class talent throughout the entire chain, from exploration and production all the way through ... we're going to lose out on a huge opportunity," Schliebs said.

Schliebs said that the industry should make a priority to expand mentorship opportunities, whether it's helping early-career employees inside a company, working with mentors who are outside a company or working with high school students and young adults.

"These are all critically important," Schliebs said.

CNX Resources Corp. and its CEO, Nicholas DeIuliis, are in the second year of a pioneering initiative called the CNX Foundation Mentorship Academy that is pairing mentors from industry with high school students to introduce them to energy and manufacturing careers that don't require college.

The program this fall began its second year with 60 new students from urban and rural areas of the Pittsburgh region, whether it's the city of Pittsburgh or in underserved areas within CNX's operational footprint of Washington, Greene and Westmoreland counties. It graduated about 30 students last year in its first year after being founded by DeIuliis, who is helping to fund the initiative from his own CNX paycheck.

The CNX Foundation Mentorship Academy has leveraged the power of CNX (NYSE: CNX) and its partners to open the hearts and minds of local youth as a major way to recruit new employees, said Audric Dodds, CNX director of community relations and strategic partnerships. He said that CNX considers it a centerpiece to its company and is invested from the top to the bottom of the company, beginning with DeIuliis himself who is heavily involved.

"This is part of our human capital strategy. This is not lip service," Dodds said. "This is how the future works at CNX. We're going to attract young folks from our region, local young people, get them into our company, train them, get them credentialed. We think we'll stay with us longer (term)."

CNX has already put this into practice. The company has hired six of the mentorship students at various roles in the company, including as an external affairs associate.

"We want to have a young person, a mentorship academy graduate, in every department of our company," he said.

Tracy Sorco, director of data and analytics at CNX, is also a mentor in the program and said that it has been rewarding for both mentors and mentees. She said that the mentors, and the company all the way up to DeIuliis himself, are fully committed to the youth and helping them succeed. The mentorship academy provides them the experiences with CNX and other companies in the region including Eaton and Deep Well Services that they can later use to choose a career pathway. And they have a wide range of skills, including resume and a LinkedIn profile and experience in interviews that will help them immeasurably in their career.

"What high school student has a full-blown resume with Nick DeIuliis down as a reference? Not too many," she said.

Schliebs said the CNX program is incredibly valuable and should be emulated, either with participation from other companies in the CNX Foundation Mentorship Academy or starting their own mentorship efforts.

BlackRock Resources' Parker agreed.

"It's these type of programs ... that are really going to make a big impact on the industry," he said.

Click link for another Marcellus to Market Article

(https://www.bizjournals.com/pittsburgh/news/2022/10/19/cnx-mentorship-academy-oil-gas-pittsburgh.html)

Heating Your Home Will Hurt This Winter As Natural Gas Prices Climb

Dan Weaver, PIOGA President/Executive Director, was quoted in the below article. Article by Tyler Durden, authored by Beth Brelje via the Epoch Times, published in August.

It will take more than an extra sweater to stay warm this winter; anyone heating with natural gas will require extra money to burn the furnace. Natural gas is sharply higher than it was last year. This week, natural gas was $8.20 an mcf—the volume of 1,000 cubic feet. This is the price paid to gas producers, set by Henry Hub. It is the highest price in 14 years.

A year ago, in August 2021, natural gas was half the cost at just $4.07 an mcf, and in 2019, when Donald Trump was president, natural gas was $2.22 per mcf.

“Because of what’s going on globally, and because of the policies in certain areas, [producers] are not able to produce as much [gas] and it drives the price up,” Dan Weaver, president and executive director at Pennsylvania Independent Oil and Gas Association, told The Epoch Times.

They are not drilling a lot of new wells, he said of producers, but with higher prices, they are recovering from when prices were soft. “Traditionally, under Democratic administrations, prices are higher. Under Republican administrations prices are lower, but Republicans are more welcoming, so there is more activity because permits get through in a more timely manner.”

Consumer Prices

When you add costs like transportation, marketing, and pipeline maintenance, the consumer price is higher.

Natural gas prices depend on demand, weather temperatures, economic conditions, and petroleum prices, according to the U.S. Energy Information Administration. While cold weather increases demand for heating, hot weather calls for air conditioning and that puts more demand on electric power plants which use natural gas. It means demand for natural gas is highest in summer, and that is when consumer prices are highest. But consumers may notice the gas price more in the winter when their homes are using it directly for heating.

Consumer natural gas prices tend to peak in July or August and are lowest in November, December, and January according to data from the U.S. Energy Information Administration (EIA).

The residential price for natural gas was projected to be $23 per mcf by August 2022, according to the EIA, but the most recent price listed was $17.55 in May.

A year ago, it was $20.99 and in August 2019 it was $18.37.

Looking at the lowest rates of the year, which happen in the winter months when electric companies are not powering scores of air conditioners, the price was steady for a few years: January 2016 stood at $8.26 per mcf, January 2017 was at $9.32, January 2018 was at $8.90, January 2019 was at $9.30, January 2020 was at $9.43, and January 2021 stood at $9.31.

The residential price went up noticeably in 2022 to $12.04 in January, and the projection for winter 2023 is projected at $14.77.

Using a quick math formula, we can see how this will affect the average home.

Across the industry, it is said that an average home using natural gas for heating, cooking and a clothes dryer, consumes an average of 196 cubic feet a day. Multiply that by 365 days and a home uses an average of 71,540 cubic feet of natural gas a year, or 5,962 cubic feet a month. Divide that by 1,000 and it is 5.96 mcf per month. Let’s round it to 6 mcf a month. The January 2019 price for natural gas was $9.30 per mcf x 6 mcf a month, the average household use a month = a consumer bill of $55.80.

The projected price in 2023 is $14.77 x 6 mcf = a consumer bill of $88.62 a month.

The green agenda has curtailed growth and certainty in the gas industry, Weaver indicated.

“It’s the constant push from the current [Biden] administration—they’re shutting down certain areas for drilling, they’re restricting federal leasing,” Weaver said.

“The other thing that’s driving it is what’s going on In Russia. A fair amount of gas is being shipped overseas, to help offset the Russian gas [shortfall] in Europe. So that’s driving the price. It’s a global commodity. This is no longer just here; It’s global.”

“It’s going to take somebody’s grandma getting very, very cold in the middle of winter for these people to wake up to realize that elections have consequences,” Weaver said.

“If you want this green agenda, you are going to be paying more.”

PIOGA Royalty Membership Seeking Help from our Producers

Hey Producers! Help PIOGA grow their Royalty Membership

There's great potential to grow our membership and supporters if PIOGA can get Producer members to help! PIOGA is looking for Producers willing to send out recruitment letters –encouraging PIOGA membership – to all your Royalty Owners.

Don't Worry Producers –
We have made the recruitment process easy!

If you are a producer and are willing to send PIOGA recruitment mailings to your Royalty Owners – we have simplified the process! PIOGA has produced a mailing template that can be sent out to Royalty Owners.

Simply click on the following link and use the mailing template: https://tinyurl.com/2cru7x9t

The template includes a recruitment letter on the front and the membership application on the back. The letter includes bullet points of key reasons why the Royalty Owners should join and testimonials from other Royalty Owners.

Reach out to PIOGA if you are able to do a mailing – we can be of any assistance to help!

Kriebel Company Mailing Success!

PIOGA would like to highlight and thank Jim Kriebel and Kriebel Companies for doing a mailing to all their Royalty Owners. The company sent the letters out in July and have already brought in 10 new royalty owners and the membership applications continue to come in daily!

The Kriebel Companies have proven that this recruitment process can work and benefit all members of PIOGA!

What is a Royalty Member?

Individuals, business entities and associations whose sole relationship to oil and natural gas exploration and production is through leasehold or similar property interests.

PIOGA Pitch and Key Benefits for Royalty Members

PIOGA represents nearly 360 members, including producers, oil and natural gas royalty owners, drilling contractors, service companies, manufacturers, distributors, professional firms and consultants, pipelines, end users, and others with interests in the success of Pennsylvania's oil and gas industry. PIOGA has been fighting on behalf of the industry for over a century.

Oil and Gas Producers (Individuals and businesses engaged in the exploration and production of natural gas and/or crude oil) and Royalty Owners have a unique partnership. The Royalty Owners has extended the right to develop his/her/their resource to the producer. In turn, the producer shared a portion of its financial rewards in the form of royalties. Anything PIOGA and the association can do to increase wellhead prices or maintain year-round, uncurtailed production benefits both sides of the Producer/Royalty Owner partnership.

PIOGA's work in the legislative and regulatory arenas helps Producers control costs and extend the economic life of their wells, again benefitting Producers and Royalty owners.

PIOGA and its current membership encourages Royalty Owners to be part of the association to better understand the production side of our business and to help us better understand the issues and concerns of Royalty Owners.

Choose how you get your news

If you now receive a printed copy of The PIOGA Press in the mail each month but prefer to read it online only, please email Deana McMahan at deana@pioga.org to opt out of the hard-copy version.
Current and past issues are always available by clicking on the News & Resources tab at pioga.org.

Thanks to our 2022 PIOGA Partners

Keystone Partners

American Refining Group, Inc.

Ergon

Meetings Partners

Babst Calland

Steptoe & Johnson PLLC

T&F Exploration

Committee Partners

Moody and Associates, Inc.

Utilities Employees Credit Union

Engineer Partners

Gmerek Government Relations, Inc.

Greylock Energy

Executive Partners

Huntley & Huntley

Kriebel Companies

Snyder Brothers Inc.

Penneco Environmental Solutions, LLC

Golf Partners

Billman Geologic

Pipeliners Union 798

Energy Transfer

Clay Shoot Partner

CEC Civil & Environmental Consultants, Inc.

Driller Partner

Aqua-Clear

Learn about the PIOGA Partners program:
pioga.org/publication_file/2022_PIOGA_Partners_flyer.pdf

Oil & Gas Dashboard

Penn Grade Crude Oil Prices

Sources

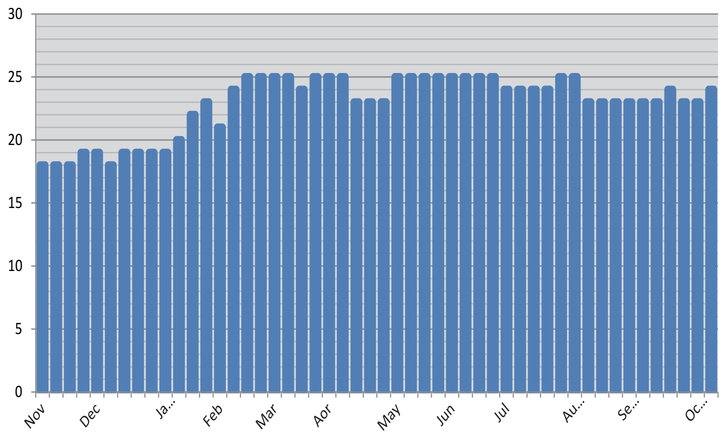
American Refining Group: www.amref.com/Crude-Prices-New.aspx
Ergon Oil Purchasing: www.ergon.com/crudeoil
Gas futures: quotes.ino.com/exchanges/?r=NYMEX_NG
Baker Hughes rig count: bakerhughesrig-count.gcs-web.com/na-rig-count
NYMEX strip chart: Mid American Natural Resources
Basis futures values: BHE Eastern Energy Field Services

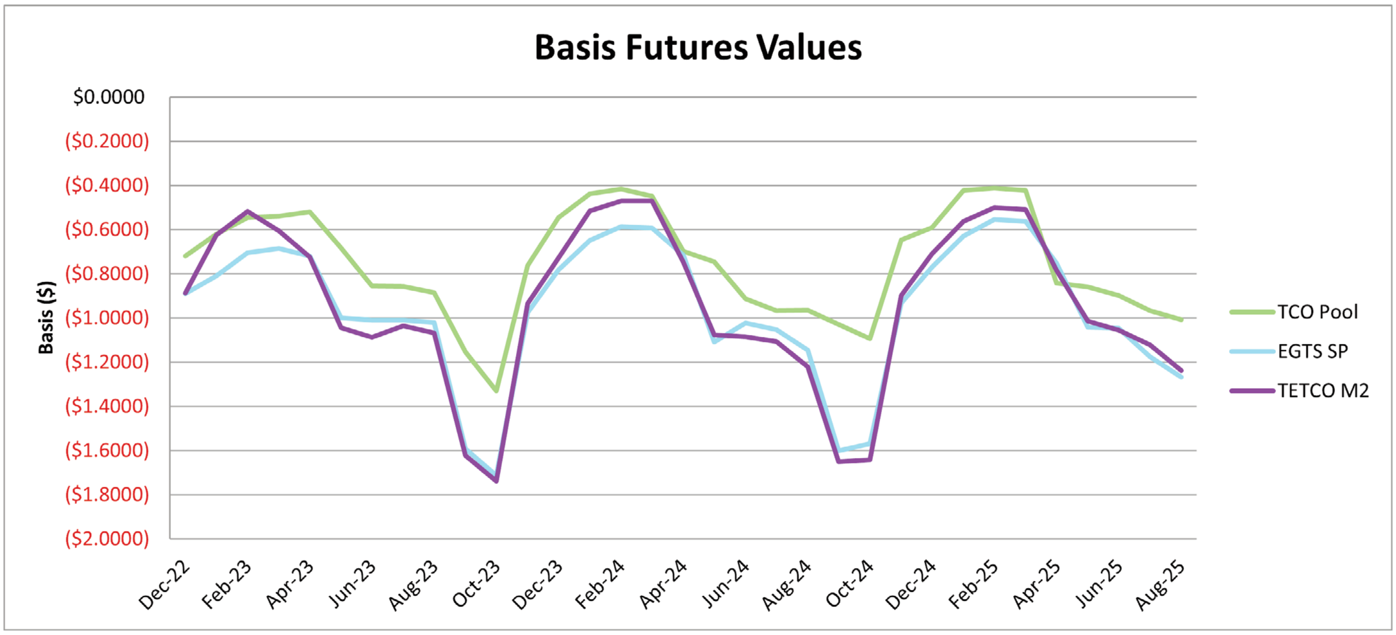
Natural Gas Futures Closing Prices

December	6.190
January 2023	6.596
February	6.342
March	5.572
April	4.834
May	4.797
June	4.869
July	4.942
August	4.951
September	4.865
October	4.921
November	5.052

Prices as of November 9

Pennsylvania Rig Count





Northeast Pricing Report — October 2022

Transportation Value Market Indicator

Provided by Bertison-George, LLC
www.bertison-george.com

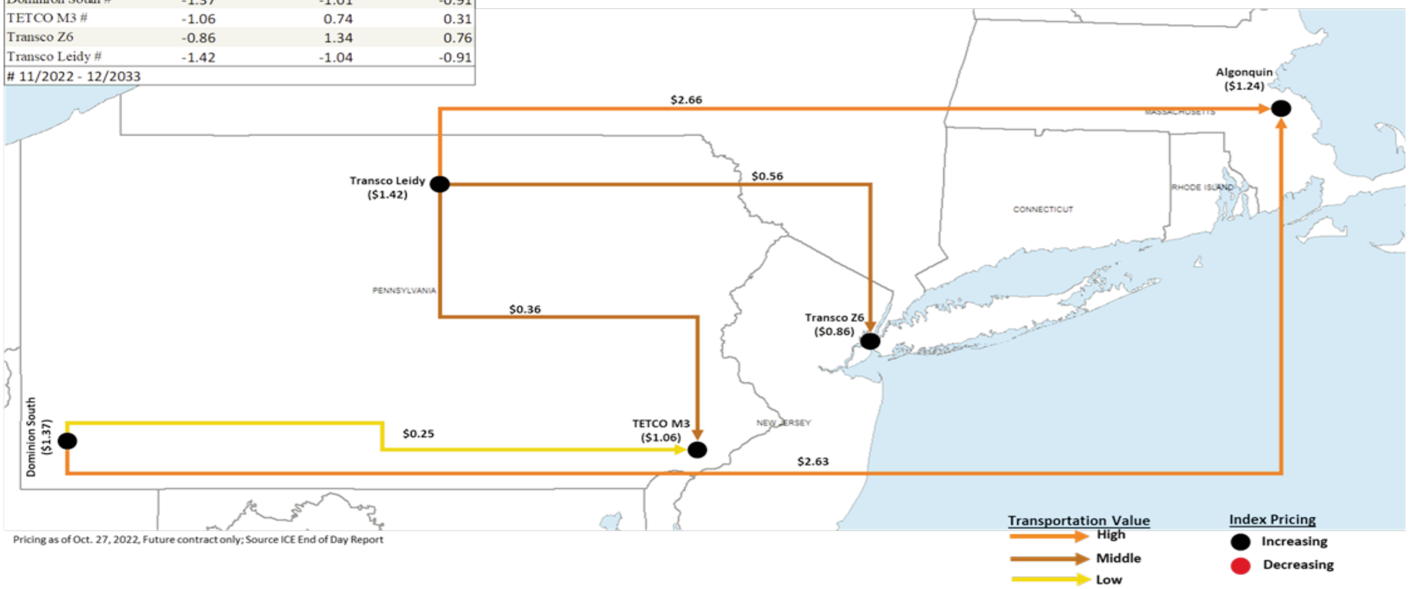
While the Henry Hub November contract lost 25% of its value over October, the Northeast basis values more than made up for the drop. Algonquin's basis market increased by $3.04 per MMBtu or 169% to $1.24 per MMBtu. Not surprisingly, Transco Z6 grew $1.32 per MMBtu or 61% to ($0.86) per MMBtu. TETCO M3 also had a significant boost of $1.21 per MMBtu to ($1.06) per MMBtu. Dominion South and Transco Leidy had the lowest increases of $0.96 and $0.97 per MMBtu, respectively. The rolling 12-month prices saw no significant changes outside of Algonquin which lost $1.57 per MMBtu from the October settle. The same goes for the full term trading term. Algonquin dropped $0.41 per MMBtu while Transco Z6 had the largest increase of $0.04 per MMBtu. TETCO M3 to Transco Z6 increased by $0.12 per MMBtu, being the only route, which improved last month. Transco Leidy to Algonquin and Dominion to Algonquin fell the most at $0.15 and $0.14 per MMBtu, while Transco Leidy to Algonquin declined $0.13 per MMBtu. Transco Leidy to Transco Z6 decreased only $0.01 per MMBtu.

The two routes to Algonquin had the greatest surge in pricing at $2.08 and $2.07 from Dominion South and Transco Leidy, respectively. While Transco Leidy to Transco Z6 increased $0.35 per MMBtu, Dominion South to TETCO M3 improved $0.25 per MMBtu. Transco Leidy to TETCO M3 increased $0.24 per MMBtu and Transco Leidy to Transco Z6 grew $0.35 per MMBtu. TETCO M3 to Transco Z6 increased the least by $0.11 per MMBtu.

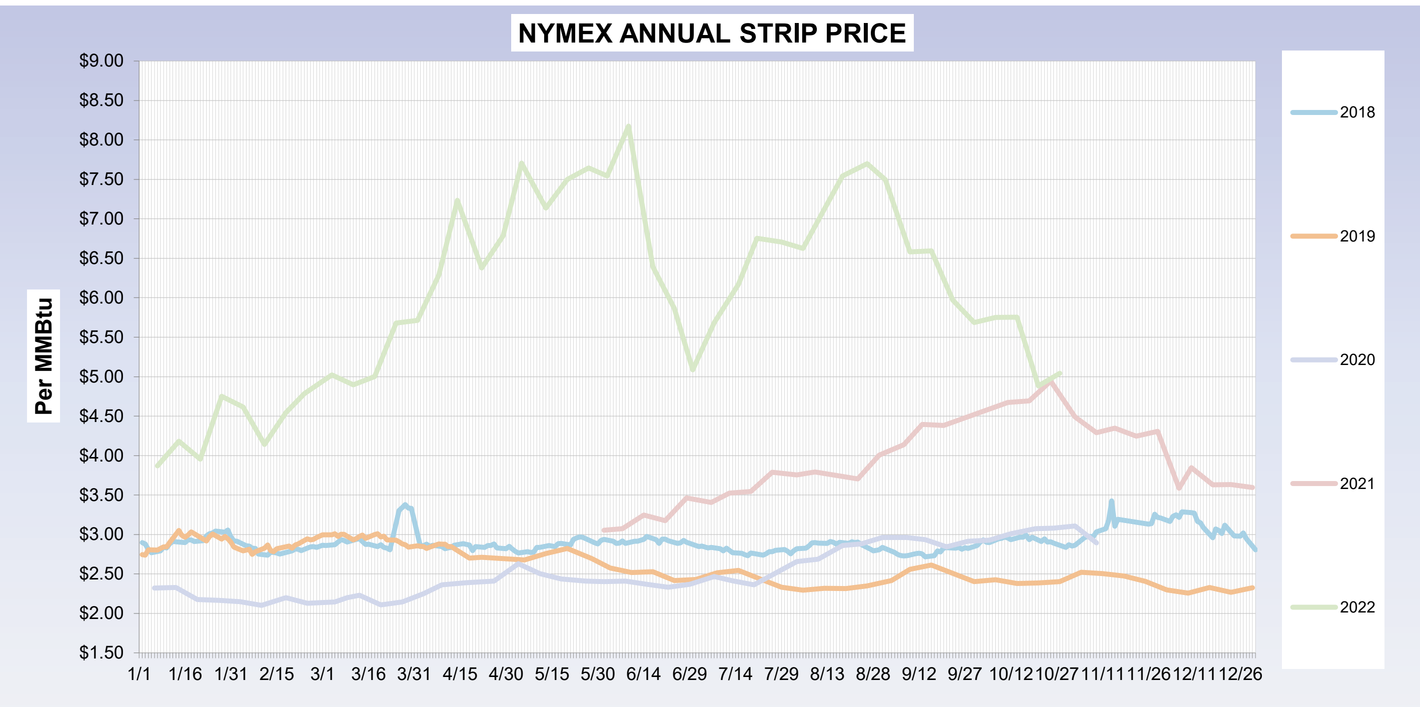
Natural Gas Basis Future Pricing

Location	Pricing Term 11/2022	11/2022-10/2023	11/2022-12/2027
Algonquin	1.24	5.41	4.43
Dominion South #	-1.37	-1.01	-0.91
TETCO M3 #	-1.06	0.74	0.31
Transco Z6	-0.86	1.34	0.76
Transco Leidy #	-1.42	-1.04	-0.91

\# 11/2022 - 12/2033



Pricing as of Oct. 27, 2022, Future contract only; Source ICE End of Day Report



Spud Report: October

The data show below comes from the Department of Environmental Protection. A variety of interactive reports are available by going to the Office of Oil and Gas Management page at www.dep.pa.gov and choosing Report from the menu. The table is sorted by operator and lists the total wells reported as drilled last month. **Spud** is the date drilling began at a well site. The **API number** is the drilling permit number issued to the well operator. An asterisk (*) after the API number indicates a conventional well.

OPERATOR	WELLS	SPUD	API #	COUNTY	MUNICIPALITY
Anderson Energy SVC LLC *	2	10/14/22	123-48670	Warren	Pleasant Twp
		10/31/22	123-48682	Warren	Pleasant Twp
Bull Run Resources LLC *	2	10/19/22	123-48693	Warren	Cherry Grove
		10/24/22	123-48694	Warren	Cherry Grove
Chesapeake LLC	9	10/24/22	015-23773	Bradford	Wilmot Twp
		10/24/22	015-23772	Bradford	Wilmot Twp
		10/24/22	015-23775	Bradford	Wilmot Twp
		10/24/22	015-23774	Bradford	Wilmot Twp
		11/1/22	015-23754	Bradford	Terry Twp
		11/1/22	015-23753	Bradford	Terry Twp
		11/1/22	015-23755	Bradford	Terry Twp
		10/5/22	115-23017	Susquehanna	Auburn Twp
		10/5/22	115-23018	Susquehanna	Auburn Twp
CNX Gas Co LLC	2	10/4/22	059-28205	Greene	Richhill Twp
		10/4/22	059-28204	Greene	Richhill Twp
Coterra Energy Inc	11	10/17/22	115-23004	Susquehanna	Springville
		10/17/22	115-23005	Susquehanna	Springville
		10/17/22	115-23006	Susquehanna	Springville
		10/17/22	115-23007	Susquehanna	Springville
		10/17/22	115-23008	Susquehanna	Springville
		10/17/22	115-23009	Susquehanna	Springville
		10/17/22	115-23010	Susquehanna	Springville
		10/27/22	115-23035	Susquehanna	Lathrop Twp
		10/27/22	115-23036	Susquehanna	Lathrop Twp
		10/27/22	115-23037	Susquehanna	Lathrop Twp
		10/27/22	115-23038	Susquehanna	Lathrop Twp
Daniel P Hornburg *	1	10/13/22	123-48742	Warren	Sheffield Twp
EQT ARO LLC	1	10/10/22	081-21943	Lycoming	Plunketts Crk
EQT Prod CO	9	11/3/22	059-27949	Greene	Morris Twp
		11/3/22	059-27961	Greene	Morris Twp
		11/3/22	059-27962	Greene	Morris Twp
		11/3/22	059-27963	Greene	Morris Twp
		11/3/22	059-27964	Greene	Morris Twp
		11/3/22	059-27957	Greene	Morris Twp
		11/3/22	059-27958	Greene	Morris Twp
		11/3/22	059-27959	Greene	Morris Twp
		11/3/22	059-27960	Greene	Morris Twp
Feikls Oil & Gas Inc. *	1	10/25/22	047-25134	Elk	Jones Twp
First Amer Energy Inc.	1	11/2/22	083-57548	McKean	Lafayette Twp
Howard Drilling Inc. *	1	11/3/22	083-57363	McKean	Wetmore Twp
Johnsons Well SVC LLC *	2	10/24/22	123-48586	Warren	Mead Twp
		10/31/22	123-48582	Warren	Mead Twp
Minard Run Oil Co	4	10/4/22	053-31001	Forest	Kingsley Twp
		10/10/22	053-31005	Forest	Kingsley Twp
		10/14/22	053-31006	Forest	Kingsley Twp
		10/21/22	053-31004	Forest	Kingsley Twp
MSL Oil & Gas Corp *	2	10/3/22	083-57371	McKean	Hamilton Twp
		10/6/22	083-57374	McKean	Hamilton Twp
Olympus Energy LLC	5	10/24/22	129-29156	Westmoreland	Upper Burrell
		10/24/22	129-29159	Westmoreland	Upper Burrell
		10/24/22	129-29158	Westmoreland	Upper Burrell
		10/25/22	129-29160	Westmoreland	Upper Burrell
		10/25/22	129-29157	Westmoreland	Upper Burrell
Pennhills Resources LLC *	1	10/26/22	053-30967	Forest	Howe Twp
Pierce & Petersen	2	10/5/22	123-48668	Warren	Mead Twp
		10/10/22	123-48665	Warren	Mead Twp
PPG Oper LLC	3	10/26/22	033-27265	Clearfield	Girard Twp
		10/26/22	033-27264	Clearfield	Girard Twp
		10/26/22	033-27266	Clearfield	Girard Twp
Range Resources	3	10/3/22	125-28997	Washington	Buffalo Twp
		10/3/22	125-28998	Washington	Buffalo Twp
		10/4/22	125-28996	Washington	Buffalo Twp
Seneca Resources LLC	8	10/3/22	047-25142	Elk	Jones Twp
		10/3/22	047-25138	Elk	Jones Twp
		10/4/22	047-25135	Elk	Jones Twp
		10/4/22	047-25141	Elk	Jones Twp
		10/4/22	047-25137	Elk	Jones Twp
		10/5/22	047-25136	Elk	Jones Twp
		10/5/22	047-25140	Elk	Jones Twp
		10/6/22	047-25139	Elk	Jones Twp
Snyder Brothers Inc.	3	10/5/22	005-31447	Armstrong	Washington
		10/11/22	083-57412	McKean	Hamilton Twp
		10/17/22	083-57411	McKean	Hamilton Twp

	Oct.	Sept.	Aug	July	June	May
Total wells	**73**	**58**	**91**	**96**	**62**	**65**
Unconventional Gas	52	34	60	73	44	40
Conventional Gas	0	0	0	0	0	0
Oil	14	19	22	20	17	17
Combination Oil/Gas	7	5	9	3	1	8

New PIOGA members — *welcome!*

Farmers National Bank
Melinda White
20581 Route 19 Cranberry Township, Pa 16066
Allies & Providers

Jacqueline Root
1871 Collum Road Lawrenceville, Pa 16929
Royalty Member

George Miller
402 Marney Drive Moon Township, Pa 15108
Royalty Member

Calendar

PIOGA events

Information: www.pioga.org > PIOGA Events

Annual Oil & Gas Tax and Accounting Seminar

November 15, virtual event

PIOGATech: Air Quality Compliance

December 15, The Chadwick, Wexford

Mix, Mingle & Jingle Holiday Party

December 15, The Chadwick, Wexford

Other events

Marcellus Shale Coalition - Oil & Gas Spill Remediation Training

November 17, Penn Stater Hotel and Conference Center - State College, Pa.

Registration information visit - https://marcelluscoalition.org/

2nd Annual Western PA Legislative Reception

November 17, CNX Resources World Headquarters

Registration information visit - https://pioga.org/event/2nd-annual-western-pennsylvania-annual-legislative-reception-wplr/

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814-671-2484

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