The PIOGA Press

The monthly newsletter of the
Pennsylvania Independent Oil & Gas Association
April 2024 • Issue 168

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PIOGA Spring Meeting Kick-Off Happy Hour @ Voodoo

18TH
PIOGA Spring Meeting @ Rivers Casino

MAY

2ND
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Governor Shapiro Introduces Plan to Replace RGGI

Author: Teresa Irvin McCurdy, TD Connections Inc.

Last month Governor Shapiro announced a high-level plan that would replace the Regional Greenhouse Gas Initiative if it passed the House and Senate and is signed into Law. The plan is a two-prong approach. The first prong would establish the Pennsylvania Climate Emissions Reduction Act (PACER) to establish a Pennsylvania-specific cap-and-invest program that allows Pennsylvania to determine its own cap on carbon and invest directly in lowering consumers' electricity bills. The second prong establishes the Pennsylvania Reliable Energy Sustainability Standard (PRESS), which will attract federal investments in the Commonwealth and keep utility costs low in the long-term by building out the reliable, affordable fleet of power sources we will need for the decades to come.

Once again, a fee/carbon tax would be applied to carbon from fossil fuel power plants that emit carbon. To reduce carbon emissions, that means that these plants would have to go out of business or manage their carbon emissions. Although the plan calls for funds to be used to implement a carbon capture and storage (CCS) program, there are numerous issues that would have to be tackled before it could become a reality. For instance, will landowners give permission to store the carbon, would landowners want a tipping fee, if a substantial number of landowners resist CCS projects, the potential resort to eminent domain to override their objections raises ethical and legal dilemmas. Would the cost of CCS out-weigh the benefits?

The Governor's plan states that under PACER, 70% of the revenue will be directed back to Pennsylvania residents as a rebate on their electric bill. Why do residents need a rebate? Because power plants will include the carbon tax when bidding into the PJM Market thus resulting in higher electric prices. What about businesses? There was no mention about how businesses will afford the higher electric rates due to PACER.

Some of PACER's taxed revenue will be used to support projects that reduce air pollution in Pennsylvania such as solar and wind. According to the Governor's press release this will further "lower costs on energy bills for low-income Pennsylvanians; and invest in new job-creating clean energy projects – such as carbon capture and storage, geothermal deployment, and clean hydrogen – in energy communities that have hosted coal, oil, or gas infrastructure." However, by stating "that have hosted" essentially means that those communities will lose jobs due to not hosting coal, or and gas activities after PACER is implemented.

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2024 PIOGA Committee Schedule

Market Development and Environmental Committee (Market Development 9-10:30 am. Environmental 10:45 am - 12:30 pm.)

May 8 – Travel day TBD
June 12 – Virtual
July – Shell Cracker Plant Tour. Date TBA
August 14 – Virtual
September 11 – Travel day TBD
October 9 – Virtual
November 13 – Travel day TBD
December 11 – Virtual

Membership Committee (Meetings will be held from 2-3 pm the second Thursday of each month)

May 14
June 11
July 9
August 13
September 10
October 8
November 12
December 10

Legislative Committee (1:30 - 3 pm. All Legislative Committee Meetings are virtual/call-in only.) *May 1; June 6; July 11; August 1; Sept. 5; Oct. 3; Nov. 7; and Dec. 5.*

Diversity Committee (9-10 am. All Diversity Committee Meetings are virtual/call-in only.) *June 11; Sept. 3; and Dec. 3.*

PIOGA committee chairs and staff are hoping to see more people in-person in 2024! The committee meetings are more collaborative and valuable when our members are in the same room.

Please contact Deana McMahan at deana@pioga.org or 724-933-7306 ext. 23 if you are interested in joining a committee or have any questions about the schedule.

Committee meetings are for PIOGA members only and dates are subject to change. Go to www.pioga.org for up*dates.*

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RGGI *Continued from page 1*

PRESS is designed to incentivize a more reliable power generation fleet to combat the threats of extreme weather, cyberattacks, and other challenges that could impact individual sources of electricity. PRESS requires Pennsylvania to get 50% of its electricity from a diverse range of energy resources by 2035, including 35% from the clean energy sources of today and the future like solar, wind, small modular reactors, and fusion, 10% from sustainable sources like large hydropower and battery storage, and 5% from ultra-low emission forms of natural gas and other traditional fuels. According to the Governor, "by raising these targets for a diverse range of energy sources, PRESS will jump-start a new era of reliable and affordable energy development in Pennsylvania."

It is unclear if PRESS will replace or supplement the current Alternative Energy Portfolio Act (AEPS) which requires a certain percentage of electricity to be sourced from alternative energy sources like solar, wind, and a variety of other sources. PRESS will add nuclear power, next generation technologies such as fusion and clean forms of natural gas.

As the plan awaits legislative deliberation, its fate remains uncertain. While Democrats have shown strong support, Republicans have expressed limited to no endorsement. Nevertheless, in the dynamic landscape of election years and budget negotiations, compromises and advancements on certain aspects of the plan are plausible.

In conclusion, Governor Shapiro's proposal represents a high-level initiative with ambitious goals to address carbon emissions, enhance energy sustainability, and spur economic development in clean energy sectors. However, its success hinges on navigating various challenges and garnering bipartisan support in the legislative process. ■

Teresa is a PIOGA Board Member, Subcommittee Chair of the PIOGA's Environmental Committee, has served as the Vice Chair for two years of the MSC's Water Resources and Waste Management Committee, and plays an instrumental role in PIOGA Tech's Water and Waste Management Trainings.

Babst Calland provided a brief article on Gov. Shapiro's recent initiatives on PACER and PRESS - please read additional article starting in next column.

Governor's Proposed PACER and PRESS Legislation Seek to Lower GHG Emissions

Kevin J. Garber and Jessica L. Deyoe

On March 13, 2024, Governor Shapiro's office announced the Pennsylvania Climate Emissions Reduction Initiative (PACER) and the Pennsylvania Reliable Energy Sustainability Standard (PRESS) legislative proposals. Together, these two initiatives seek to lower greenhouse gas emissions and promote the use of alternative energy for the electric energy grid in Pennsylvania. We note that first, as of the date of this article, the language of the bills has not been made publicly available and second, these initiatives are not mutually exclusive, so it is possible the legislature may pass only one of them.

Pennsylvania Climate Emissions Reduction Initiative (PACER)

PACER is a Pennsylvania-specific-cap-and-invest program that, if passed, would set a declining cap on carbon emissions from Pennsylvania's fossil fuel-fired power plants and require them to purchase credits from the Commonwealth to offset emissions. It would also remove Pennsylvania from the Regional Greenhouse Gas Initiative (RGGI). PACER Credits would be tradeable emission credits, similar to RGGI credits; however, non-profit entities will not be allowed to purchase PACER credits to remove them from the market. This program would direct DEP to conduct a Pennsylvania-run auction similar to the RGGI program. DEP could be allowed to delegate the implementation of the auction to an agent but retain enforcement authority. If passed, DEP will be required to review the Pennsylvania Base Budget established under the currently enjoined RGGI regulation within 120 days to determine whether a new Base Budge should be established. The new regulation, if needed, would be promulgated by the streamlined Final Omit regulatory process.

Revenue from the sale of CO2 allowances under the PACER Program would fund the following recipients and programs: (1) consumers as an on-bill rebate by the Public Utility Commission; (2) a "Workforce Enhancement Account" for projects such as carbon capture and storage, new uses for legacy coal and natural gas sites such as modular reactor development and construction, geothermal deployment, battery storage facilities, retrofitting natural gas plants with carbon capture equipment, and advanced

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Eyes in the Sky: How UAV Magnetometers are Uncovering America's Forgotten Wells

Author: David L. Palmerton

The Bipartisan Infrastructure Law, enacted in 2022, earmarks substantial funds for plugging, capping and reclaiming orphaned oil and gas wells nationwide. The legislation specifically sets aside billions of dollars for the cleanup of these sites.

Across the United States, the U.S. Environmental Protection Agency estimates, there are around 3.7 million abandoned oil and natural gas wells. Although many of these wells have yet to be documented, that is changing with the growing interest in addressing them. Citing applications for funding to plug wells, the U.S. Department of Interior puts the number of documented orphaned or abandoned wells around 130,000. Half are in Appalachia.

Well Origins

There are several common ways through which wells become abandoned or improperly plugged. One of the primary ways is loss of ownership. According to regulations, the last entity to receive economic benefit from a well is responsible for plugging it. However, if the last entity cannot afford to plug the well, the responsibility may fall on the prior owner or operator. Orphan wells' ownership, in most cases, has been lost through death, bankruptcy or abandonment.

Inadequate plugging is another common issue. In the early days, oil and gas regulatory frameworks focused on protecting oil and gas resources more than the environment. Before the 1950s, many wells either were left unplugged or plugged inadequately. When wells were plugged, the process often involved throwing in tree stumps, brush, wood and rocks along with a sack of cement. World War II exacerbated the issue. Steel was in such short supply that people would pull and sell the surface casing from old wells.

Moreover, wells that were drilled using cable tools often did not cement in casings, leading to gas releases. It does not help that plugging a well can be daunting and expensive. The financial assurance that companies are required to meet often falls below plugging costs, which range from several thousand to hundreds of thousands of dollars for each well.

According to the Interstate Oil and Gas Compact Commission, the risk of a well becoming an orphan grows when it is transferred at an old age. Because wells' production declines over time, they tend to go to operators who have fewer resources than their previous owners. Sometimes the buyers lack the resources to properly operate or plug the wells and eventually abandon them.

Locating Abandoned and Orphan Wells

In unconventional plays, older wells that are inadequately plugged or not plugged across the production zone can provide a pathway for stray gas to migrate from the formation to other zones. Because the old wells can transmit gas to freshwater or even the surface, smart companies will evaluate the potential for abandoned wells before drilling new wells in an area that historically has had oil and gas operations.

Any search for abandoned wells should begin by looking at available records. The most useful tool is old maps found in company records, state agencies' archives, historical oil museums and institutions, and books on oil and gas development. Title offices' records can provide lease history and sometimes farm plats.

Locating old abandoned or orphaned conventional oil and gas wells involves a combination of historical research, field surveys, and sometimes advanced technology.

When I was investigating the possibility of old wells on a former refinery site, I found a map from the late 1800s at the Drake Oil Museum, that showed not only the well we unexpectedly uncovered during excavation operations, but also six others. These wells had wooden casing, a rare find.

In Pennsylvania, if a survey reveals one old well, tight historical spacing practices often mean others are nearby. In the 1940s, the Drake property near Bradford, Pa., had more than eight hundred wells on 1,200 acres. In several other fields, the spacing was two hundred feet, which means a single 100- acre property could contain one hundred wells. While most wells will be placed at regular intervals, expect to find a few scattered single wells drilled earlier.

The first step often involves digging through historical records, drilling logs, and permit documents available from state regulatory agencies, oil and gas companies, or historical societies. These documents can provide initial information on the well locations, ownership, and operational history.

Geographic Information System technology and databases containing information on known wells are used to map and analyze the spatial distribution of wells. This helps in planning field surveys and focusing efforts on areas with higher probabilities of finding orphaned wells.

Conducting UAV (Unmanned Aerial Vehicle) Magnetometer Surveys

A UAV, commonly known as a drone, can be used with geophysical methods like magnetometry. Drone magnetometer surveys are an advanced geophysical technique used to detect variations in the Earth's magnetic field caused by subsurface features, including abandoned or orphaned oil and gas wells. These surveys are conducted using drones equipped with magnetometers, which are sensitive instruments that measure magnetic anomalies.

One of the companies conducting drone magnetometer surveys is UAV Exploration Inc. which has completed over sixty projects in sixteen states. They use lightweight magnetic sensor technology on their highly specialized aerial platforms. Expert-level operators fly the drones to collect high resolution aeromagnetic data over the entire site.

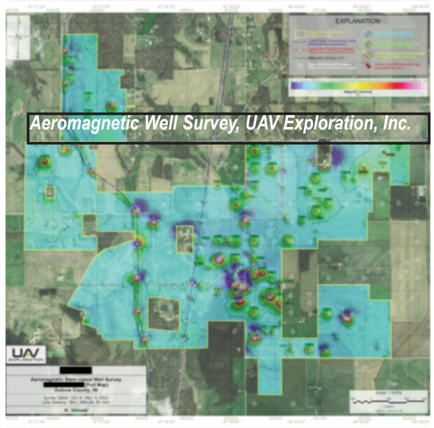
Before conducting a survey, a detailed plan is created that includes the survey area, flight paths, altitude, and data resolution required. This planning phase considers the size of the area, the expected types of targets, and any logistical challenges such as terrain or airspace restrictions. A typical survey takes about one hour per flight.

A magnetometer is towed beneath the drone to reduce magnetic interference from the drone itself. The system also includes GPS for precise location tracking, allowing the magnetometer data to be accurately mapped. The 1000 Hz sample rate atomic magnetometer system allows for high resolution not limited by the UAV velocity or 60 HZ AC interference (power lines).

The drone flies over the survey area along predetermined paths, maintaining a consistent altitude to ensure uniform data collection. The magnetometer continuously records the magnetic field intensity as the drone covers the area.

The magnetic data, along with GPS coordinates, are recorded and later processed using specialized software. This processing includes correcting for any diurnal variations (daily changes in the Earth's magnetic field) and removing the background magnetic field to highlight local anomalies.

The processed data is analyzed to identify magnetic anomalies that may indicate the presence of subsurface features such as metal well casings or other infrastructure associated with oil and gas wells. The data can reveal the location, depth, and sometimes the size of these features. Drone data alone reveals location, but ground-based methods are required to ascertain depth.


Aeromagnetic Well Survey, UAV Exploration, Inc.


UAV Exploration Inc. is a geophysical services provider specializing in Unmanned Aerial Magnetic Surveying

Once aerial data collection is complete, in-field data experts identify all well-like targets for further investigation. Their crews then conduct a comprehensive ground-based survey to verify targets of interest. Various ground-based methods are employed, up to and including excavation.

Besides wells, the surveys can detect other types of underground infrastructure related to oil and gas production, such as pipelines, tanks, and equipment.

In many cases, magnetometer surveys, especially those conducted with drones, can identify more wells than traditional field investigations alone. Drones can cover large areas much faster than ground-based field teams. This allows for the rapid assessment of extensive properties or remote regions that might be difficult, time-consuming, or even dangerous to access on foot.

Some wells may be buried deeper than others due to natural or human activities over time. For example, areas that have been strip mined typically have buried wells that are deep. Magnetometer surveys are effective at detecting deep subsurface anomalies, whereas field investigations using a hand-held magnetic locator might miss these deeper wells, especially if there are no surface indications.

Aeromagnetic Well Survey Results

- 56 total aerial well detections
- 7 of these wells were visible at the surface, 2 were excavated.
- One of the excavated wells was not in the state records (GC 03)
- 38 subsurface wells were ground located with high confidence
- 7 subsurface wells were ground located with lower positional confidence (multiple sources, buried debris, etc.)
- 2 deep wells were detected
- 3 individual unknown pipelines/flowlines partially detected in aerial survey were confirmed during ground investigation.
- One surface gas well had a significant leak that was subsequently repaired.

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Drone *Continued from page 5*

Drone magnetometer surveys offer a non-invasive, efficient, and cost-effective method for quickly gathering data with high spatial resolution and makes them an invaluable tool in environmental assessments, oil and gas exploration, and the reclamation of abandoned industrial sites.

Magnetometer surveys and field investigations often complement each other. While magnetometer surveys can efficiently locate anomalies indicating potential wells, field investigations are crucial for verifying these findings, assessing the condition of identified wells, and gathering detailed information on the ground. Combining both approaches typically yields the most accurate and comprehensive results in efforts to locate and manage orphaned or abandoned wells.

Combining these methods increases the chances of locating all the orphaned or abandoned wells in an area, especially since these wells can be over a century old and lack comprehensive records. Once identified, the wells can be assessed and prioritized for plugging and remediation to mitigate environmental and safety hazards.

While the upfront investment in technology and expertise may be significant, the overall cost of surveying vast areas with UAVs can be lower than conventional methods, especially considering the speed, extent of coverage, and reduced need for extensive ground teams.

Applying machine learning algorithms to the vast datasets generated by UAV surveys can improve the identification of anomalies and prediction of potential well sites. Over time, AI can learn from accumulated data to distinguish between diverse types of subsurface anomalies with greater accuracy, streamlining the identification process. Advancements in UAV autonomy could allow for more complex and extensive survey missions without direct human oversight, further increasing efficiency and safety.

Using UAV magnetometers to locate abandoned or orphaned oil and gas wells represents a leap forward in environmental and public safety efforts. The detailed data gathered can aid in meeting regulatory requirements for environmental protection and site reclamation, providing documented evidence of due diligence in managing legacy industrial impacts. ■

David L. Palmerton, Jr., PG, has more than 35 years of experience in environmental consulting in environmental liability assessment, investigation, remediation, due diligence, and construction quality control. Mr. Palmerton is a professional geologist in several states and a former Certified Hazardous Materials Manager.

PIOGA Member News

Team of Steptoe & Johnson Attorneys Counsel in Major Victory for Energy Clients in Eight-Day Jury Trial

West

Ferrell

Two Steptoe & Johnson PLLC attorneys were part of a defense team that secured a major victory in a high-stakes jury trial at the end of February. ***J. Kevin West*** and ***John Ferrell*** served as co-counsel for Pittsburgh-based EQT Corporation and Oklahoma City-based Gulfport Energy Corporation in the case, which asserted that the companies engaged in mineral trespassing in southeast Ohio.

The plaintiffs claimed that the Point Pleasant formation, located within the formation commonly known as the Utica Shale, was not included in their leases because it is a separate geological formation that lies below the Utica Shale. Seeking damages of $144 million for bad-faith trespass, the plaintiffs claimed the companies infringed on their property by drilling wells and converting natural gas without permission. In addition to bad-faith trespass claims, the plaintiffs sought punitive damages and attorneys' fees.

The defense argued that the Point Pleasant formation was included in what is commonly known as the Utica Shale because landowners, the media, the industry, and the general public were referring to Point Pleasant wells as "Utica Shale" wells at the time the leases were executed, continuing to the present day. West and Ferrell, along with co-counsel from Kirkland & Ellis LLP, showed the jury a multitude of newspaper articles, many of which the plaintiffs read at the time, using the term "Utica Shale" to refer to the Point Pleasant production.

The defense also elicited testimony from the lead negotiator for the landowner group who drafted the form, who testified that they always intended the leases to include the Point Pleasant formation.

The case was litigated in the U.S. District Court for the Southern District of Ohio, involving eight witnesses for the plaintiffs and seven for the defense. After approximately four hours of deliberation the eight-person jury returned a total defense "no liability" verdict in which they found the leases granted to EQT Corp. and Gulfport Energy Corp. the rights to Point Pleasant.

Methane Charge

Authors: Woodrow Morris, CPA - Schneider Downs & Co, Inc. and Don Nestor, CPA.

Methane emissions have emerged as a critical target for greenhouse gas reduction efforts by environmental groups in the United States. The Inflation Reduction Act (IRA) provided new authority, under the Clean Air Act, to the Environmental Protection Agency (EPA) to address methane emissions through the creation of the Methane Emissions Reduction Program. This approach is intended to incentivize companies to reduce methane emissions while simultaneously generating revenue to fund other environmental initiatives.

The program introduces a levy based on emissions from nine different petroleum and natural gas industry segments – including onshore/offshore production, processing, compression and storage. For purposes of this article, we will be discussing primarily the rules that are applicable to onshore natural gas production. This levy, commonly known as the methane emissions charge, is outlined in the EPA's "Waste Emissions Charge for Petroleum and Natural Gas Systems" regulation.

Who is impacted? - Not all companies will be impacted this charge. The charge only applies to emissions from applicable facilities from the previously mentioned petroleum and natural gas industry segments. Additionally, it does not apply to applicable facilities that emit fewer than 25,000 metric tons of CO2 equivalent (not just methane) per year. Applicable facilities under this threshold have no reporting obligation. Note that an applicable facility defined broadly – for example, all wells owned or operated by a person or entity in a single basin would be considered one applicable facility.

At first glance, it would seem that many producers would be exempt from the charge due to the 25,000 metric tons of CO2 equivalent threshold. However, under the current rule proposed by the EPA, companies would be required to aggregate their applicable facilities that are under common ownership or control for purposes of this test. This may require producers to group all their wells to see if this tax applies to them. PIOGA joined the IPAA and other associations in opposing this aggregation requirement.

Note that the reporting obligation is measured by metric tons of CO2 equivalent, while the charge is based on metric tons of methane. It is possible to have a reporting obligation without a charge being assessed.

Exemptions are also available in certain circumstances. These exemptions are available in circumstances related to permitting delays, emissions from permanently plugged wells, and lastly for the compliance of certain performance standards set by the government. Discussion of these exemptions are, however, beyond the scope of this article.

Understanding the Methane Charge - Simply put, the methane charge is a fixed fee based on the amount an applicable facility's methane emissions exceed certain statutory thresholds – known as the waste emissions threshold. The fee is $900 per excess metric ton in 2024, and increases to $1,200 and $1,500 in 2025 and 2026 respectively. Companies impacted by this fee will see their first payment become due in March 2025. These fees are reported as part of the excise tax reporting and payment process.

The waste emissions threshold differs depending on industry segment. For onshore natural gas producers, the threshold is 0.20% of natural gas sent to sale from the applicable facility. The natural question, however, becomes how to translate natural gas sales, typically measured in mcf, into a floor for methane gas emissions based on metric tons. The EPA's proposed rules provide a conversion ratio for companies to use, based on the density of methane – 0.0192 mt/mcf.

The EPA drafted a memorandum that provides a detailed set of examples illustrating the computations of the charge. Included is a hypothetical example of a gas producer that emits 3,000 metric tons of methane on 60,000,000 mcf of gas and pays a related emissions charge of $590,400. For a more detailed discussion regarding this computation please reach out to the PIOGA Tax Committee.

Summary - The costs and time of compliance in the natural gas industry continue to increase. The broad definitions the EPA included in its proposed rules allow for smaller groups of affiliated entities to be included in the methane charge regime. Updated guidance has been issued as recently as this past January. Stakeholders should review guidance as its issued, as the timing of the charge comes during a trough in gas pricing for the industry. ■

Our PIOGA Tax Committee will continue to monitor this issue and work with our PIOGA Board to minimize its impact to our members. If you have any questions concerning this topic, or if you have any other information to share, please contact the PIOGA Tax Committee or PIOGA's office.

PIOGA Member News

American Refining Group Appoints Ryan Krogmeier as President and Chief Operating Officer

Bradford, PA (April 2, 2024) – American Refining Group, Inc. (ARG), a leading specialty lubricants and waxes refiner, is pleased to announce the appointment of ***Ryan Krogmeier*** as its new President and Chief Operating Officer, effective April 1, 2024. Krogmeier will succeed Jon Giberson, a long-time industry executive who is retiring.

Ryan brings a wealth of experience and a proven track record of success in refining operations, sales, crude sourcing, and product development. With a distinguished career spanning over 30 years, Krogmeier has held senior leadership positions at Parkland Corporation and Chevron Corporation and has consistently demonstrated exceptional vision, strategic acumen, and a passion for operational excellence.

"We are thrilled to welcome Ryan as our new President and COO," said Neil Halloran, Chairman of the Board of ARG. "His outstanding leadership and expertise will be invaluable in guiding ARG through its next phase of growth and innovation."

Krogmeier expressed excitement about joining ARG and the opportunity to work with the company's passionate and talented employees. "I am honored to be chosen as the President and COO of ARG, a company with a remarkable history of delivering specialty refined solutions to its customers and making a positive impact in the Bradford community. Together we will build on this strong foundation, capitalize on new opportunities, and chart a path of sustained success."

Krogmeier has relocated to the Bradford area with his wife, Jiwon. Krogmeier is from a small town in Iowa and is looking forward to joining the Bradford community and enjoying the natural environment. Krogmeier holds a BBA from the University of Iowa and an MBA from the University of California, Berkeley, Haas School of Business.

Giberson, who has served as President and COO since February 2019, played a pivotal role in ARG's growth and achievements during his tenure, including providing critical leadership and

operational safety and stability during the COVID-19 pandemic. Jon will remain for some number of weeks as transition officer to introduce Krogmeier to ARG employees and the local community.

Halloran said: "Jon lead the company through an extraordinary period of unprecedented challenges and success. He showed particular leadership during the pandemic where he lead our employees in a collective effort to identify safe and effective ways to operate and continuously deliver product and solutions to our customers."

Total Rewards: Spotlight on Compensation, Well-Being and Benefits

Article provided by NFP: Megan Nail, VP, Total Rewards Practice & Casey Maschue, Senior Advisor, Corporate Benefits

How can we support a diverse workforce with varied needs? How do we make sure compensation planning aligns with organizational values? With a thoughtful total rewards approach, both are possible!

Total rewards is a philosophy that puts the employee experience at the center. We'll discuss it using our Total Rewards Halo™ framework, breaking down the components within the Halo then following up with action items for using the framework with a focus on compensation, benefits and well-being.

A Framework for Total Rewards

"Total rewards" is the full compensation picture: paycheck, bonus pay, profit sharing, health benefits, health spending accounts, paid time off, maternity leave, service opportunities, training, education funding and so much more.

The Halo imagines total rewards as a ring of key reward aspects encircling the employee experience. Employee communication and engagement connect the reward "slices" and employee experience, while vision, mission, and values along with external market factors influence the halo from the outside in. There is considerable overlap between the factors.

Compensation

Compensation strategy and philosophy forms the core of your compensation program and involves asking the right questions to tease out what is important to your employees and organizational goals.

In brief, here are the strategic questions to ask when considering your compensation philosophy:

1. Where do we want to compete?

2. How competitive do we need to be?

3. What do we want to reward? Tenure? Skill? Performance?

It's critical to have clarity and a shared viewpoint with leadership on:

o Pay in relation to the market median

o Plans for fixed versus variable pay

o Who your competition is for business and for talent

o The role of compensation in the total offering

o The level of communication/transparency expected

Once you have created your compensation strategy and philosophy, the next step is to create or review your pay structure. Pay range transparency is increasingly a legislative imperative; it's important to access credible data through third-party surveys, industry associations, the Bureau of Labor Statistics or consulting firms as you set your pay ranges.

Lastly, don't overlook variable pay. Bonuses, incentives and commissions can be a key motivator. If designed well, they can also be a "self-funding" win-win proposition based on results achieved and pose little financial risk or downside to your organization.

Benefits and Well-Being

If you feel well, you work well. Employers are taking a "whole person view" of well-being, which includes physical, mental and financial well-being and accounts for generational needs of the workforce. A few examples:

- ***Financial wellness benefits help younger employees with budgeting, saving and investing for the future.***
- ***Care benefits can help address concerns over caring for young children, elderly parents or even pets.***
- ***Early career employees value professional development while more tenured employees may be looking for retirement and Medicare education.***

Understanding the needs and core stressors of your workforce demographics is a great place to start to establish relevant benefits your employees will value.

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PACER & PRESS *Continued from page 3*

manufacturing and clean hydrogen development; 3) projects in the Commonwealth that reduce air pollution; and (4) a Low-Income Support Account used to reduce the energy bills of low-income consumers.

Pennsylvania Reliable Energy Sustainability Standard (PRESS)

PRESS aims to expand the Alternative Energy Portfolio Standards Act established in Pennsylvania 20 years ago, while adding nuclear power and next generation technologies such as fusion and clean forms of natural gas. To accomplish this, PRESS would promote energy build-out in Pennsylvania and create a broader mix of energy resources in Pennsylvania. PRESS emphasizes resilient forms of energy generation, including battery storage, natural gas, and nuclear power to promote reliability in the energy grid. It targets specific forms of energy development to build a more diverse, reliable grid. Reliability of the PJM grid will be a crucial challenge in the coming decades.

If passed, PRESS will raise the target for renewable energy in Tier I to 30% by 2035. Tier I includes biologically derived methane gas, solar photovoltaic and solar thermal energy, wind power, low-impact hydropower, geothermal energy, and biomass energy. Similarly, the target for renewable energy in Tier II will increase to 10% by 2035. Tier II includes Tier I reliable energy portfolio sources located within Pennsylvania, distributed generation systems, demand-side management, large-scale hydropower, fuel cells, coal mine methane, small modular reactors, and fusions technology. PRESS creates a new Tier III that includes waste coal, municipal solid waste, integrated combined coal gasification technology, generation of electricity utilizing by-products of the pulping process and wood manufacturing process, Tier I reliable energy portfolio sources located within Pennsylvania, and natural gas or coal using hydrogen (20%) co-fired blend or CCUS equivalent until 2033, requires CCUS or co-firing with 80% hydrogen blend by 2038. Tier III has a target of 10% by 2035. ■

For more information and insights on what PRESS and PACER may mean to the energy industry, tune in to Kevin Garber's presentation at PIOGA's Spring Meeting on April 18, 2024.

Have you discovered the many features of PIOGA's membership management system? Click on Members Only at the top right of our homepage to get started

www.pioga.org

NFP *Continued from page 11*

This year's NFP US Benefits Trend Report[1] highlighted the toll stress is taking on workers of all generations, noting that one in three employees feel distracted by non-work issues while at work. It is important to address well-being to:

- ***Improve morale***
- ***Increase productivity/lower absenteeism***
- ***Aid recruiting and retention***
- ***Change health behaviors***
- ***Become/retain best-in-class employer status***
- ***Improve economic competitiveness***

What do your employees need to feel and work well? Evaluate the solutions you have today. Then, set a baseline so you can measure the impact of your program over time. Here are a few solutions:

- ***Examine engagement surveys for stress-related responses.***
- ***Dig into utilization trends for EAPs and PTO, and examine absence/disability trends.***
- ***Assess additional resources, such as enhanced EAPs, telebehavioral health and on-site stress management and mindfulness programs.***
- ***Create organizational support through senior leadership advocacy and manager training.***

Bringing It All Together

A comprehensive approach to benefits and well-being can make a difference in all areas of employees' lives. Remember that in the Total Rewards Halo, employee communication encircles the employee experience. A reward that is unseen and unused is not a reward — it's a missed opportunity. Communicate rewards in a timely and personal way. Microsites, emails/text messages and webinars are just three examples of useful tools.

When your total rewards programs are integrated with your employees' needs and your organizational goals, you will create an unforgettable employee experience that will allow you to recruit, retain and engage top talent. ■

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1 https://www.nfp.com/benefits/annual-benefits-trend-report/

The Impact of the Baltimore Key Bridge Disaster on Supply Chain

Published by Schneider Downs - Author: Elizabeth Rhodes

How will the Baltimore Key Bridge collapse impact national and regional supply chain?

The recent tragic bridge collapse at the Francis Scott Key Bridge over the Port of Baltimore has triggered a scramble among companies to adapt their supply chains due to the port's closure.

With our headquarters in Pittsburgh, we recognize the vital role waterways and bridges play in the economy, facilitating the transportation of goods across and out of the country every single day.

The collapse of this critical bridge has widespread implications at both local and national levels, leading company leaders to assess supply chain risks and seek strategies for mitigation, asking: "What are the supply chain risks to my company, and how can we minimize them?"

What Effects Will the Key Bridge Disaster Impact Businesses and Customers?

As one of the largest ports in the nation, the port of Baltimore is a critical supply chain point for the auto, construction, machinery and coal industries. To put the importance into perspective, the port handled 52.3 million tons of foreign cargo worth an estimated $81 billion in 2023 and produced more than 15,000 jobs.

Many of those crucial industries have roots within the Pittsburgh, Philadelphia and Columbus regions, causing an impact to those region's companies and ports.

Companies can be affected on the inbound or outbound side of their supply chain. If the inbound side is impacted, a delay in receiving supplies could equate to a delay in manufacturing. If a delay is caused, manufacturing schedules will need to be adjusted to adapt to the shift in resources, and as a result the company can have a negative financial impact.

If the outbound side is impacted, the company may see a delay in customer's receiving their goods, causing a potential negative impact on their professional reputation. The delay could also affect shipping and receiving metrics and delivery standards for the company.

How Can Companies Mitigate Supply Chain and Logistics Risk?

There are a number of different ways that a company can mitigate their supply chain and logistical risk, including:

- Applying dynamic transport modes such as automated freight management or automated shipping processes.
- Conducting evaluations of the supply chain frequently. By completing these evaluations, which can be done using data collected manually or through the use of AI, the company can learn the viable pain points and vulnerabilities within the supply chain and determine where efficiencies can be gained.
- Developing a disaster recovery plan for their supply chain(s)
- Having visibility into suppliers' suppliers by having the ability to track and receive notification of shipping orders. This can be conducted by using RFID sensors within shipping packaging.
- Using standardized freight documentation, giving the company the ability to use different modes of transportation or different ports of entry.
- Utilizing vendor diversification through either multi-sourcing or nearshoring (using suppliers and distributors close to your operations or close to the critical points in your supply chain)
- Utilizing the PPRR Risk Management model, a population global supply chain risk management strategy.
  - o Prevention – precautionary measures to reduce supply chain risk
  - o Preparedness – develop and test the disaster recovery plans for those applicable supply chain risks
  - o Response – successful implementation of the disaster recovery plans
  - o Recovery – working to repair and restore all affected areas timely and in order of critical prioritization (this would be determined within the Preparedness and Response steps)

How Can Schneider Downs Help?

Schneider Downs can help organizations of all sizes and industries evaluate the company's risks, assist with improvement of the supply chain risk management for your company, consult on the adequacy of your disaster recovery plan, and assess if supply chain and logistics are an area of elevated concern given the changing infrastructure of today.

If you have any questions about supply chain risk, please contact our team directly at ***contactsd@schneiderdowns.com****.*

PIOGA Pennsylvania Independent Oil & Gas Association PARTNERS 2024

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Oil & Gas Dashboard

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

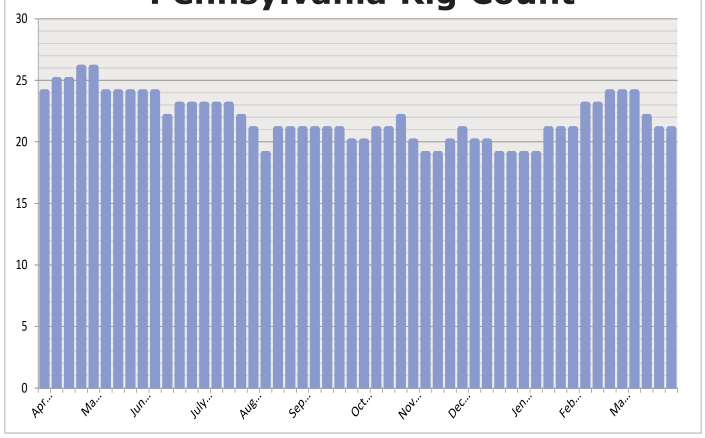
Penn Grade Crude Oil Prices

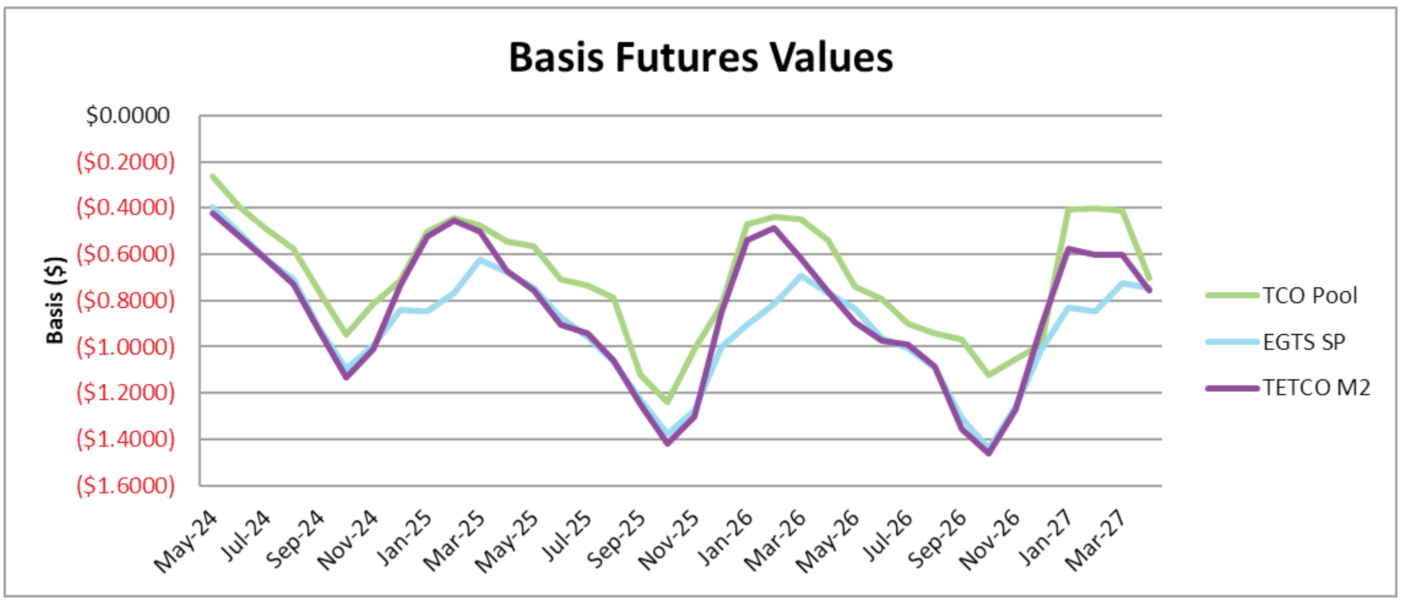
Natural Gas Futures Closing Prices

May 2024	1.844
June	2.051
July	2.390
August	2.493
September	2.483
October	2.571
November	2.948
December	3.464
January 2025	3.742
February	3.575

Prices as of April 9, 2024

Pennsylvania Rig Count

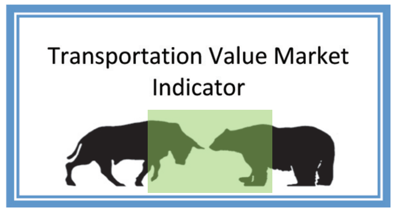




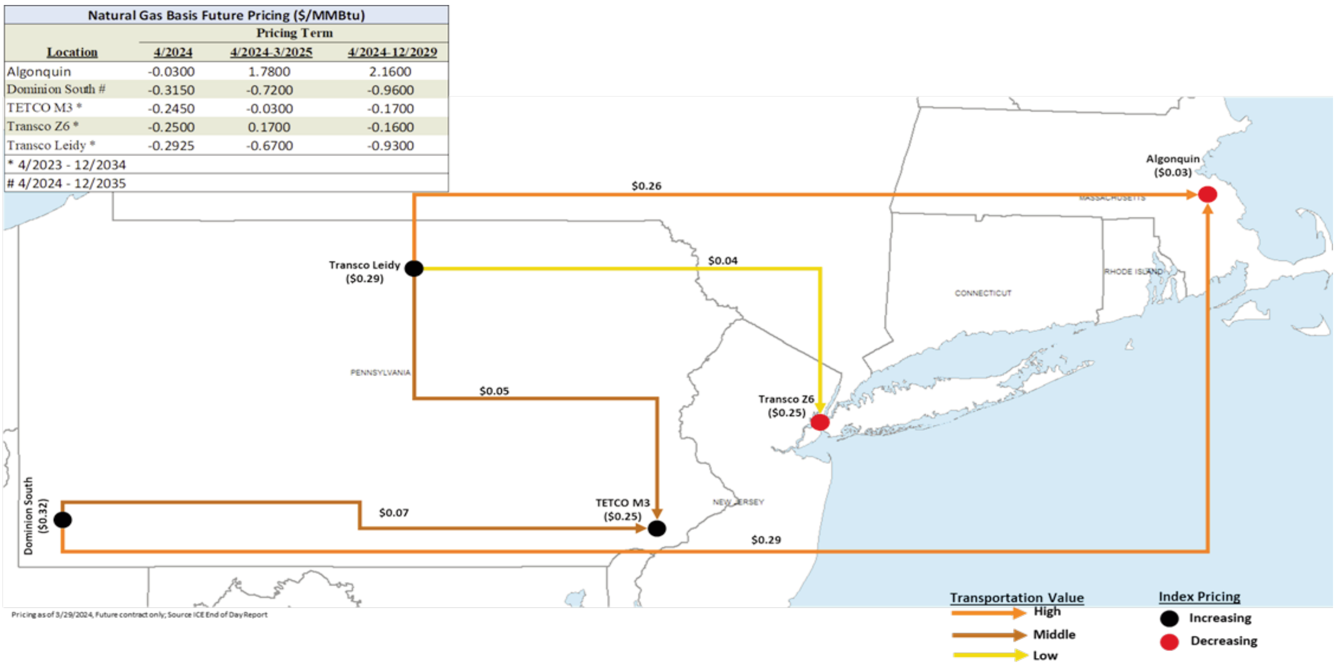
Northeast Pricing Report — April 2024

Natural gas prices traded within a narrow range in March, but a bullish monthly reversal could occur if the price trades above and stays above the monthly high of 2.00, confirming a bullish breakout. The mild winter and record production have led to a decline in natural gas production to 100 Bcf/d due to maintenance and planned curtailments. This, coupled with freezing temperatures and snow in some parts of the Rockies and the central and eastern United States, could result in a seasonally strong demand for heating early in the period. E&P companies have slowed output to balance the market, but demand has reduced from the Freeport LNG. Trains 1 and 2 were taken offline this month for further inspections after Train 3 was brought back online after months of repairs.

For the third month in a row, all transportation routes decreased. Dominion South to Algonquin dropped $0.28 per MMBtu while Transco Leidy to Algonquin dipped $0.49 per MMBtu. Transco Leidy to Transco Z6 and TETCO M3 to Transco Z6 lost value by $0.18 and $0.11 per MMBtu respectively.

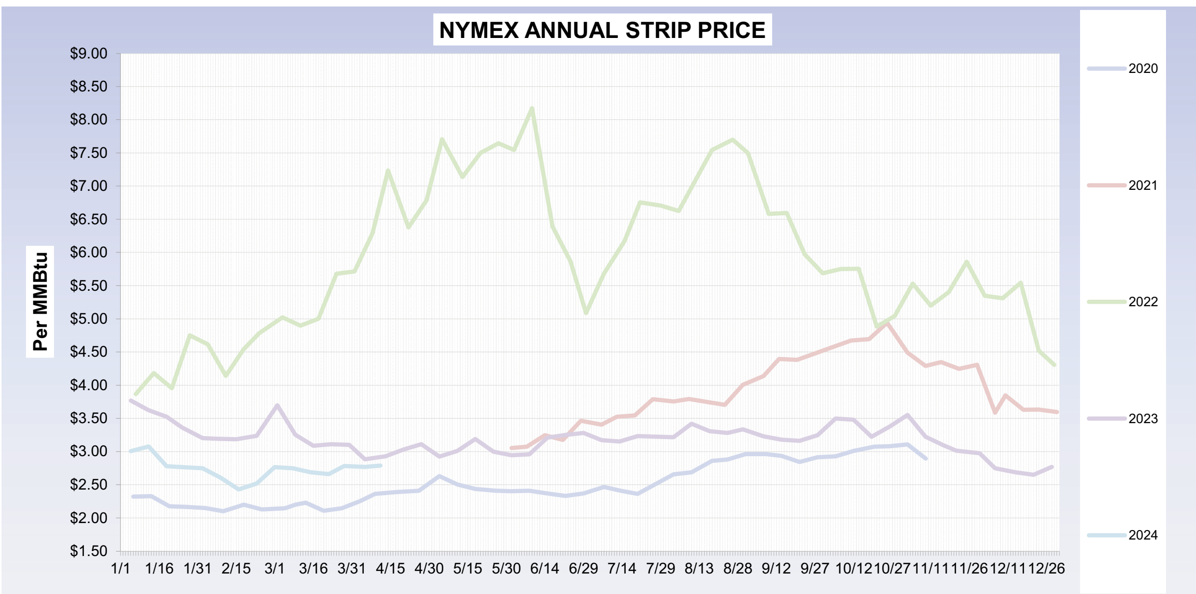


Provided by Bertison-George, LLC
www.bertison-george.com



Natural Gas Basis Future Pricing ($/MMBtu)

Location	4/2024	4/2024-3/2025	4/2024-12/2029
Algonquin	-0.0300	1.7800	2.1600
Dominion South #	-0.3150	-0.7200	-0.9600
TETCO M3 *	-0.2450	-0.0300	-0.1700
Transco Z6 *	-0.2500	0.1700	-0.1600
Transco Leidy *	-0.2925	-0.6700	-0.9300
* 4/2023 - 12/2034			
# 4/2024 - 12/2035			



The information in this report was obtained from reliable sources but is not guaranteed for accuracy.
The views and opinions set forth are solely those of the author(s), and are subject to change without notice.

Spud Report: March

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 Operator indicates a conventional well.

Operator	Wells	Date	API#	County	Municipality
APEX Energy (PA)	8	3/19/24	129-29259	Westmoreland	Sewickley
		3/11/24	129-29262	Westmoreland	Sewickley
		3/12/24	129-29257	Westmoreland	Sewickley
		3/15/24	129-29256	Westmoreland	Sewickley
		3/16/24	129-29238	Westmoreland	Sewickley
		3/18/24	129-29258	Westmoreland	Sewickley
		3/20/24	129-29260	Westmoreland	Sewickley
		3/22/24	129-29261	Westmoreland	Sewickley
BF Adventures LLC *		4/3/24	123-48889	Warren	Glade Twp
Cameron Energy Co *	4	3/13/24	123-48868	Warren	Sheffield Twp
		3/20/24	123-48869	Warren	Sheffield Twp
		4/1/24	123-48861	Warren	Sheffield Twp
		3/6/24	123-48866	Warren	Sheffield Twp
Chesapeake Appalachia	11	3/11/24	015-23903	Bradford	Tuscarora Twp
		3/11/24	015-23904	Bradford	Tuscarora Twp
		3/11/24	015-23901	Bradford	Tuscarora Twp
		4/1/24	015-23912	Bradford	Wysox Twp
		4/1/24	015-23913	Bradford	Wysox Twp
		4/1/24	015-23914	Bradford	Wysox Twp
		4/1/24	015-23911	Bradford	Wysox Twp
		3/18/24	115-23168	Susquehanna	Auburn Twp
		3/18/24	115-23169	Susquehanna	Auburn Twp
		3/18/24	115-23167	Susquehanna	Auburn Twp
		3/11/24	015-23902	Bradford	Tuscarora Twp
Gas & Oil Mgmt *	2	3/26/24	123-48871	Warren	Pleasant Twp
		3/6/24	123-48872	Warren	Pleasant Twp

Operator	Wells	Date	API#	County	Municipality
Howard Drilling Inc.*		4/2/24	083-57685	McKean	Wetmore Twp
Pierce & Petersen	3	3/11/24	123-48898	Warren	Mead Twp
		3/18/24	123-48899	Warren	Mead Twp
		3/25/24	123-48900	Warren	Mead Twp
R & N Resources *		4/1/24	123-48812	Warren	Sheffield Twp
Seneca Resources	3	3/5/24	117-22242	Tioga	Westfield Twp
		3/6/24	117-22240	Tioga	Westfield Twp
		3/6/24	117-22241	Tioga	Westfield Twp
Snyder Bros Inc.	9	3/6/24	005-31491	Armstrong	Manor Twp
		3/7/24	005-31492	Armstrong	Manor Twp
		3/7/24	005-31493	Armstrong	Manor Twp
		3/8/24	005-31494	Armstrong	Manor Twp
		3/15/24	005-31490	Armstrong	Manor Twp
		3/15/24	005-31483	Armstrong	Manor Twp
		3/18/24	005-31484	Armstrong	Manor Twp
		3/18/24	005-31450	Armstrong	Manor Twp
		3/26/24	005-31482	Armstrong	Manor Twp
SWN Prod Co	2	3/20/24	125-29103	Washington	Donegal Twp
		3/20/24	125-29104	Washington	Donegal Twp

	March	**Feb.**	**Jan.**	**Dec.**	**Nov.**
Total Wells	**37**	**40**	**48**	**46**	**38**
Unconventional Gas	29	34	37	41	29
Conventional Gas	0	0	1	0	1
Oil	5	4	1	7	7
Combination Oil/Gas	3	2	10	1	1

New PIOGA Membership Category - Gas Storage Operator

PIOGA has a new Membership Category - Gas Storage Operator!

If you are an individual or business entity engaged in the storage of natural gas with the Commonwealth of Pennsylvania - you can now join PIOGA!

Any current PIOGA members who know anyone in the gas storage operations sector, please share the news! Help PIOGA increase our membership and get more industry operators involved!

Storage members are entitled to vote.

For information on the new gas storage operator membership, dues and other memberships, visit: https://pioga.org/about/membership-and-benefits/

New PIOGA members Welcome!

ARX Consulting
Jeremie Ressler
78 Wall St. Addison, NY 1480
Allies & Providers

LA Oil & Gas, LLC
David Pearson
757 Mohawk Ave. Warren, Pa 16365
Producer

Strassburger, McKenna, Gutnick & Gefsky
Megan Harmon
444 Liberty Avenue, STE 2200 - Four Gateway Center
Pittsburgh, Pa 15222
Allies & Provider

TDF Fleet
Brian Gorman
23227 State HWY 249. Tomball, TX 77375
Allies & Providers

Calendar

PIOGA events

Information: www.pioga.org > PIOGA Events

PIOGA's Spring Meeting 2024 Happy Hour
April 17. Pittsburgh, Pa.

PIOGA's Spring Meeting 2024
April 18. Rivers Casino. Pittsburgh, Pa.

PIOGA's Clay Shoot
May 2. Promise Land Clay Shoot. Freeport, Pa.

PIOGATech: Pipeline Compliance
May 21. Ferrante's Lakeview. Greensburg, Pa.

PIOGA's Oil Patch Classic Golf Outing
June 4. Wanango Country Club

Other events

2024 Women's Energy Network Conference
April 28-30, 2024. Atlanta, GA
(https://pioga.org/event/2024-womens-energy-network-conference/)

Appalachian Basin GPA Midstream – Appalachia Regional Conference
April 30, 2024. Bella Sera - Canonsburg, Pa.
(https://pioga.org/event/appalachian-basin-gpa-midstream-appalachia-regional-conference/

Appalachian STEPS Network Quarterly Meeting (PIOGA Safety Committee)
May 9, 2024. CNX - Canonsburg, Pa.
(https://pioga.org/event/the-appalachian-steps-network-quarterly-meeting-piogas-safety-committee-meeting/)

GO-WV Science Teacher Workshop
June 5-6. Morgantown, WV
(https://pioga.org/event/go-wv-science-teacher-workshop/)

LDC Gas Forum Northeast
June 10-12. Boston, Mass.
(https://pioga.org/event/ldc-gas-forum-northeast/)

Full Calendar - PIOGA Event & Meeting Schedule -
https://pioga.org/event/pioga-event-and-meeting-schedule-2024/

PIOGA Members and Industry Partners - Please email meghan@pioga.org to advertise upcoming events.

Pennsylvania Independent Oil & Gas Association

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724-933-7306 • www.pioga.org

Harrisburg Office (Kevin Moody)
212 Locust Street, Suite 300, Harrisburg, PA 17101
717-234-8525

Oil Region Office (Meghan Keely)
304 East Bissell Ave., Oil City, PA 16301
814-671-2484

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