

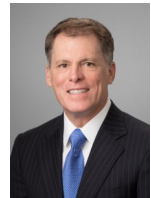
Weekly E&P Update

February 25, 2025

Vol. 8

From Exploration to Export: The Beetaloo Basin's Path Forward

By Steve Hendrickson
President of Ralph E. Davis Associates



Australia has built a global reputation as a major natural gas producer, largely on the back of offshore conventional gas and coal seam gas resources. These have supported a thriving LNG export industry and met domestic demand. However, as conventional reserves decline and new opportunities emerge, unconventional gas resources—particularly shale gas—are now in the spotlight.

To date, the Australian gas industry has been shaped by two dominant forces: Offshore conventional gas, primarily from the Northwest Shelf, Browse, and Bonaparte Basins. These fields have supported LNG exports for decades but are now seeing reserve declines.

Coal seam gas (CSG), centered in the eastern part of the country in Queensland's Bowen and Surat Basins, supplies both domestic markets and major LNG export projects.

While conventional gas remains the primary driver of LNG exports, and CSG continues to support east coast demand, new supply sources will be needed.

One of the most closely watched developments is the Beetaloo Sub-basin in the Northern Territory, a deep, thermogenic shale play that has drawn comparisons to some of the most prolific shale basins in North America. But while the geology is promising, the path to commercialization remains uncertain. Can this play be Australia's next major gas province, or will it remain an untapped resource?



Beetaloo's Geology

The Beetaloo Basin is a Proterozoic-aged sedimentary basin, part of the larger McArthur Basin, with thick, organic-rich shales that have been identified as key targets for shale gas production. The Mid-Velkerri B Shale is the primary focus, with excellent total organic carbon (TOC) levels, high pressure gradients (up to ~0.6 psi/ft), and strong gas shows across multiple horizontal wells.

Recent drilling activity has provided increasing confidence in the continuity and quality of the reservoir. The latest well completions have successfully geosteered horizontal sections over 10,000 feet, staying within a 65-foot target window with no observed faulting. Stimulation efforts have been optimized, incorporating higher proppant intensity and closer stage spacing, following the best practices of U.S. shale operations.

These geologic and engineering factors strongly suggest the Beetaloo has the potential to deliver commercial gas production, but a lack of infrastructure has prevented extended well tests to determine ultimate recovery, and scalability of the play remains in question. While the U.S. shale boom benefited from existing infrastructure and a well-established oilfield services sector, Beetaloo development requires new pipeline and export capacity construction, the expansion of the rig and frac fleet, and increased labor resources.

Progress Toward Commercialization

Recognizing the potential of Beetaloo, several key steps are being taken to transition from exploration to production:

1. Pilot Well Testing: Operators are targeting Initial Production (IP30) flow tests in 2025, with results expected to guide future drilling and completion strategies.
2. Pipeline Infrastructure Development: Agreements are in place to construct a 12-inch pipeline connecting the Beetaloo gas fields to existing infrastructure, enabling initial commercialization.
3. Potential LNG Integration: Technical studies are underway to evaluate the feasibility of sending Beetaloo gas to a Northern Territory LNG facility, providing a potential export pathway.
4. Alternative Markets – Data Centers: Given its proximity to fiber optic networks, Beetaloo gas is being considered as a power source for data centers, an emerging high-demand energy consumer.

Each of these steps moves Beetaloo closer to becoming a commercial gas province, though economic challenges remain.

Can Beetaloo Gas Compete in the Global LNG Market?

If Beetaloo gas reaches commercial production, it won't enter the market in isolation. Instead, it will have to compete with some of the most efficient and well-established LNG suppliers in the world. The U.S., with its low-cost shale gas, extensive pipeline network, and well-developed export terminals, sets a formidable benchmark. Its producers benefit from economies of scale and a mature service sector, keeping costs low and making American LNG highly competitive. Then there's Qatar, home to some of the world's largest conventional gas fields, where vast reserves and low extraction costs give it an edge over almost every other exporter. With ongoing expansion projects, Qatar is poised to flood the market with even more low-cost LNG, further reinforcing its dominant position.

Even within Australia, Beetaloo gas would need to find its place among the country's existing LNG projects, many of which are already locked into long-term supply agreements with Asian buyers. Integrating Beetaloo into this network would require new infrastructure and substantial investment, adding another layer of complexity to the commercial equation.

Despite these challenges, progress is being made. The next 12 to 24 months will be critical in determining whether Beetaloo's shale gas will become a transformative energy source for Australia—or remain a promising but unrealized potential.

Sources and Further Reading

1. Geoscience Australia. [Gas | Geoscience Australia](#). Australian Government, July 2024.
2. Tamboran Resources. [2Q FY25 Investor Presentation](#), February 2025.
3. Hart Energy. [Beetaloo Juice: US Shale Explores Down Under](#), June 2024.

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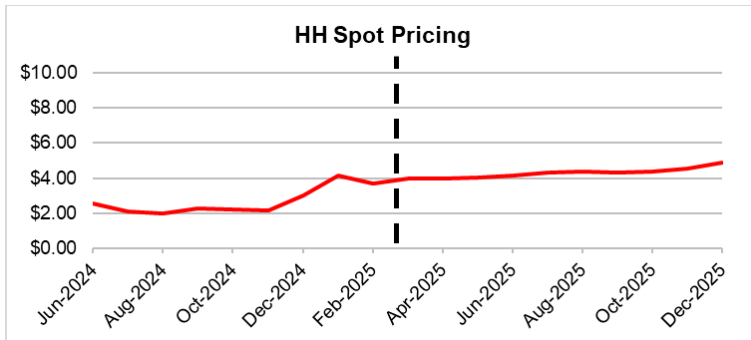
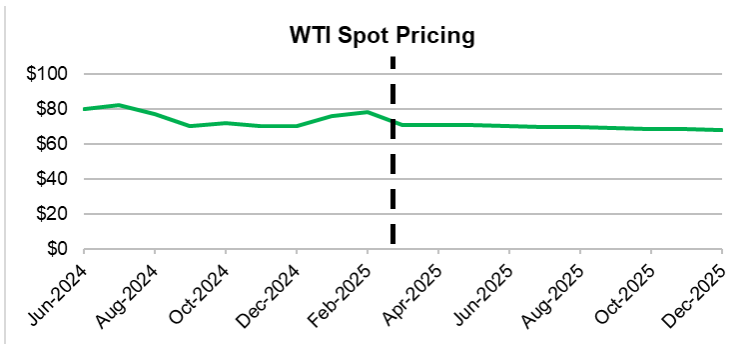
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NYMEX FUTURE PRICING



MONDAY'S MARKET CLOSE

NYMEX WTI CRUDE OIL FUTURES as of February 24, 2025 Close (\$/bbl)

Period	Current	WoW Change	Last Week	1 Yr Ago
2025	\$69.29	(\$0.39)	\$69.68	\$70.69
2026	\$66.29	(\$0.37)	\$66.66	\$67.31
2027	\$64.64	(\$0.24)	\$64.88	\$65.26
2028	\$63.70	(\$0.17)	\$63.87	\$64.22
2029	\$62.98	(\$0.19)	\$63.17	\$63.95

NYMEX HH NATURAL GAS FUTURES as of February 24, 2025 Close (\$/MMBtu)

Period	Current	WoW Change	Last Week	1 Yr Ago
2025	\$4.29	\$0.25	\$4.04	\$3.41
2026	\$4.17	\$0.03	\$4.14	\$3.75
2027	\$3.75	(\$0.14)	\$3.88	\$3.77
2028	\$3.58	(\$0.12)	\$3.70	\$3.71
2029	\$3.47	(\$0.12)	\$3.59	\$3.66

INDUSTRY METRICS—QUICK SNAPSHOT

	Current	Last Week	WoW Change	%Change
Crude Oil Near-Month Price (\$/bbl)	\$69.80	\$71.52	(\$1.72)	(2%)
Natural Gas Near-Month Price (\$/MMBtu)	\$4.07	\$3.65	\$0.42	11%
Weekly Upstream-Deal Transaction Value (\$MM)	\$6,148.23	\$307.00	\$5,841.23	>1,000%
Weekly Number of Upstream-Deal Transactions	6	1	5	500%
Current Total US Rig Count	592	588	4	0.7%
US Field Crude Oil Production (MMbbl/day)	13.5	13.5	0.0	0.0%
US Field Dry Natural Gas Production (Bcf/day)	111.5	112.5	(1)	(0.9%)
Commercial Crude Oil Stocks-Excluding SPR (MMbbl)	432	428	4	1%
Natural Gas Stocks-Working Gas Underground Storage (Bcf)	2,101	2,297	(196)	(9%)
All Basin Drilled But Uncompleted Wells (DUC-Last Quarter)	5,238	5,238	0	-

*Source—Energy Information Administration (EIA), Bloomberg LP

*Source—Baker Hughes North America Rotary Rig Count & Enverus M&A Database

COMMODITY FUTURES - MONDAY'S MARKET CLOSE

	Current	1-Month Change	3-Month Change	6-Month Change	Year Ago Change
WTI					
Prompt	\$70.70	-2.47 [-3.38%]	+1.76 [2.55%]	-6.72 [-8.68%]	-6.88 [-8.87%]
Bal25	\$69.29	-1.30 [-1.84%]	+1.57 [2.32%]	-6.98 [-9.15%]	-6.14 [-8.14%]
Cal26	\$66.29	-0.44 [-0.66%]	+0.75 [1.14%]	-6.13 [-8.47%]	-4.41 [-6.23%]
Cal27	\$64.64	-0.26 [-0.39%]	+0.40 [0.61%]	-4.38 [-6.35%]	-2.68 [-3.97%]
Cal28	\$63.70	-0.23 [-0.37%]	+0.15 [0.23%]	-3.06 [-4.58%]	-1.57 [-2.40%]
Cal29	\$62.98	-0.33 [-0.53%]	-0.07 [-0.11%]	-2.44 [-3.73%]	-1.24 [-1.94%]
Brent					
Prompt	\$74.78	-2.30 [-2.98%]	+1.77 [2.42%]	-6.65 [-8.17%]	-7.75 [-9.39%]
Bal25	\$73.10	-1.11 [-1.49%]	+1.54 [2.15%]	-7.33 [-9.11%]	-6.94 [-8.67%]
Cal26	\$70.15	-0.46 [-0.65%]	+0.49 [0.70%]	-6.86 [-8.91%]	-5.42 [-7.17%]
Cal27	\$68.71	-0.34 [-0.49%]	-0.03 [-0.04%]	-5.13 [-6.95%]	-3.83 [-5.28%]
Cal28	\$68.13	-0.22 [-0.32%]	-0.21 [-0.30%]	-3.68 [-5.12%]	-2.59 [-3.67%]
Cal29	\$67.77	-0.16 [-0.23%]	-0.42 [-0.62%]	-2.82 [-3.99%]	-2.10 [-3.01%]
Henry Hub					
Prompt	\$3.99	+0.30 [8.03%]	+0.63 [18.55%]	+2.04 [104.19%]	+2.34 [140.75%]
Bal25	\$4.29	+0.56 [15.15%]	+0.93 [27.47%]	+1.86 [76.40%]	+1.93 [81.87%]
Cal26	\$4.17	+0.20 [4.99%]	+0.81 [24.22%]	+0.94 [29.25%]	+0.77 [22.44%]
Cal27	\$3.75	-0.10 [-2.56%]	-0.05 [-1.35%]	+0.13 [3.72%]	-0.01 [-0.18%]
Cal28	\$3.58	-0.14 [-3.83%]	-0.21 [-5.57%]	-0.12 [-3.33%]	-0.19 [-4.98%]
Cal29	\$3.47	-0.11 [-3.03%]	-0.22 [-5.88%]	-0.19 [-5.21%]	-0.24 [-6.53%]
Heating Oil					
Prompt	\$2.44	-0.02 [-0.85%]	+0.01 [0.52%]	-0.27 [-11.79%]	-0.30 [-12.78%]
Bal25	\$2.30	-0.01 [-0.35%]	+0.13 [6.26%]	-0.02 [-1.01%]	-0.23 [-9.77%]
Cal26	\$2.22	-0.01 [-0.50%]	-0.04 [-1.89%]	-0.15 [-6.80%]	-0.13 [-6.13%]
Cal27	\$2.18	-0.01 [-0.27%]	+0.01 [0.47%]	-0.11 [-5.24%]	-0.10 [-5.09%]
Cal28	\$2.15	-0.01 [-0.26%]	+0.02 [1.11%]	-0.07 [-3.54%]	-0.07 [-3.24%]
RBOB					
Prompt	\$2.01	-0.02 [-0.98%]	+0.20 [8.97%]	+0.09 [3.74%]	-0.33 [-11.83%]
Bal25	\$2.13	-0.02 [-0.75%]	+0.07 [3.04%]	-0.07 [-2.87%]	-0.29 [-11.27%]
Cal26	\$1.99	-0.01 [-0.34%]	+0.01 [0.36%]	-0.14 [-5.85%]	-0.20 [-8.24%]
Cal27	\$1.96	0.00 [-0.03%]	-0.02 [-0.96%]	-0.14 [-5.91%]	-0.16 [-6.74%]
Cal28	\$1.95	0.00 [0.09%]	-0.01 [-0.65%]	-0.11 [-4.72%]	-0.14 [-5.97%]

*Source—Bloomberg LP

SELECTED INDUSTRY HEADLINES

US Oil and Gas Rig Count Hits Highest Since June, Says Baker Hughes

U.S. energy firms this week added oil and natural gas rigs for a fourth week in a row to the highest level since June, energy services firm Baker Hughes said in its closely followed report on Friday.

EIA Raises USA Crude Oil Production Forecasts

The U.S. Energy Information Administration (EIA) raised its U.S. crude oil production forecast for 2025 and 2026 in its latest short term energy outlook (STEO), which was released on February 11.

Oil Trade Group Pushes US for National Ethanol Policy After EPA Okays Midwest Expansion

The American Petroleum Institute trade group on Monday pressed for a nationwide policy on higher-ethanol blends of gasoline after the President Donald Trump's administration said on Friday it would move ahead with expanded sales of the product in certain Midwestern states.

Oil Markets Struggle to Navigate Supply News Onslaught (LOGIN REQUIRED)

The sudden burst of activity in US-Russia talks on Ukraine is a hot topic in the oil market, as traders assess whether more or less sanctions are in the offing.

Range-bound Oil Market Breaks Out to the Downside

After a bullish start to the holiday-shortened trading week, oil prices look to settle lower on market uncertainty as numerous conflicting factors played out.

US Gas E&Ps See Supply Mismatch Coming as LNG Production Climbs

US gas producers anticipate that rising demand in 2025 will outpace operators' capacity to respond with additional supply considering the industry's conservative approach to expanding drilling activity.

Natural Gas Prices Surged 160%—And They're Not Coming Down Soon

Natural gas prices have jumped in recent weeks in all major consuming markets, including in the United States, where prices have soared by more than 160% from this time last year.

Storage Deficits, LNG Demand Limit Bleeding for 'Overbought' Natural Gas Futures (LOGIN REQUIRED)

Natural gas futures found technical support just below the \$4.000/MMBtu level on Monday as widening storage deficits and surging LNG demand blunted the impact of forecasts trending milder over the weekend.

Why is the USA Natural Gas Price Dropping Today?

The price of U.S. natural gas is likely being driven by a combination of both technical and fundamental drivers.

Burqum Touts Trump's Focus on Meeting AI Power Demand

The Interior secretary told governors in a recent speech that the administration will rapidly build out energy production and transmission.

Trump Taps Fossil Fuel Insider to Run DOE's Renewable Office

Audrey Robertson sits on the board of Liberty Energy, the fracking services company founded by Energy Secretary Chris Wright.

Drilling the Deepest Hole in History: Unlocking Geothermal Energy

MIT spin-off Quaise is trying to use hijacked fusion technology to drill some of the deepest holes in history, unlocking clean, virtually limitless, supercritical geothermal energy that can re-power fossil-fueled power plants all over the world.

SELECTED RECENT TRANSACTIONS

Tokyo Gas Announces Sale of Eagle Ford Shale Gas Assets

Tokyo Gas Co. has announced that its wholly-owned subsidiary, Tokyo Gas America, through its subsidiary TG Eagle Ford Resources LP, signed Heads of Agreement with Shizuoka Gas Co, to sell its Eagle Ford shale gas assets.

ConocoPhillips to Sell Interests in Ursa and Europa Fields to Shell for \$735 Million

ConocoPhillips said on Friday it would sell its interests in the Ursa and Europa Fields to Shell for \$735 million, as part of the shale producer's plan to streamline its portfolio.

Diamondback Energy, Inc. Announces Midland Basin Acquisition

Diamondback Energy, Inc. today announced that it has entered into a definitive purchase agreement to acquire certain subsidiaries of Double Eagle IV Midco, LLC in exchange for approximately 6.9 million shares of Diamondback common stock and \$3 billion of cash, subject to customary adjustments.

Diamondback Energy to Expand in Permian Basin With \$4.08 Billion Deal

Diamondback Energy said on Tuesday it would buy certain units of EnCap Investments-backed energy producer Double Eagle for \$4.08 billion in cash and stock, expanding its presence in the oil-rich U.S. Permian basin.

Bayswater E&P to Sell DJ Basin Assets for \$603 Million

Bayswater Exploration and Production, a Denver-based oil and natural gas development company, has entered into an agreement to sell assets in the Denver Julesburg Basin to Prairie Operating Company in a cash and stock transaction valued at approximately \$603 million.

ConocoPhillips Sells \$600 Million in Noncore Permian Basin Assets

Following its \$22.5 billion deal to buy Marathon Oil, ConocoPhillips is targeting \$2 billion in asset sales—a goal a company executive said would largely be achieved this year.

Viper Buys \$330 Million Midland Interests in Shadow of \$4.5 Billion Dropdown

Viper Energy has entered into a definitive purchase agreement to buy mineral and royalty interests from Morita Ranches Minerals LLC in a cash-and-equity deal valued at about \$330 million.

Elk Range Acquires Permian, Eagle Ford Minerals and Royalties

Elk Range Royalties LP is acquiring Newton Financial Corp., Concord Oil Co. and Mission Oil Co., which together own mineral and royalty interests across the Permian Basin and Eagle Ford Shale, Dallas-based Elk said Jan. 29.

Diversified to Acquire Maverick, Enter Permian Basin in \$1.3 Billion Deal

Diversified Energy will acquire EIG's Maverick Natural Resources, adding acreage that offsets Diversified's core Western Anadarko position and Permian Basin assets in the northern Delaware.

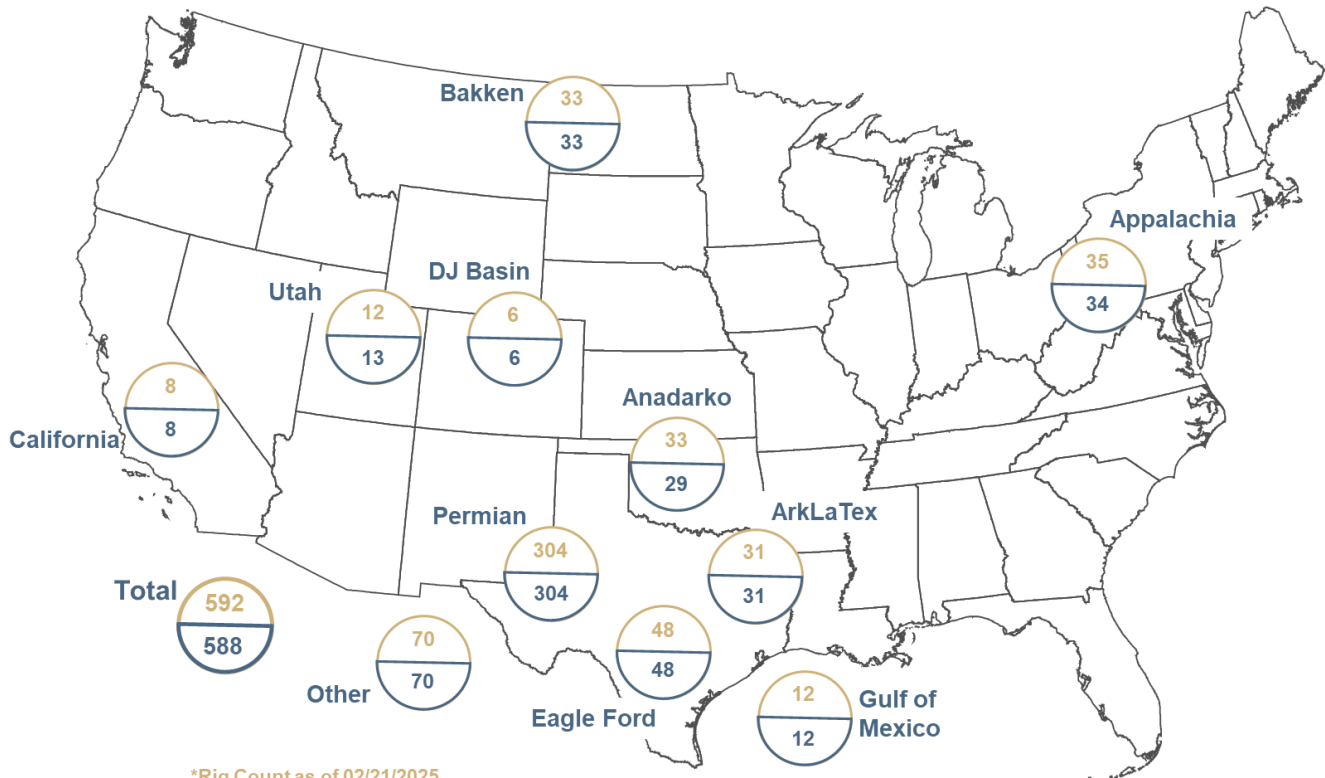
Amplify Energy to Merge With Juniper Capital's Upstream Rocky Mountain Companies

Amplify Energy has entered into a definitive merger agreement with privately held Juniper Capital to combine with certain Juniper portfolio companies which own substantial oil-weighted producing assets and significant leasehold interests in the DJ and Powder River Basins.

W&T Offshore Secures Settlement and Strategic Asset Sale

The company is making strategic moves by selling a non-core interest in Garden Banks Blocks 385 and 386 for \$12.3 million.

RIG ACTIVITY BY US REGION

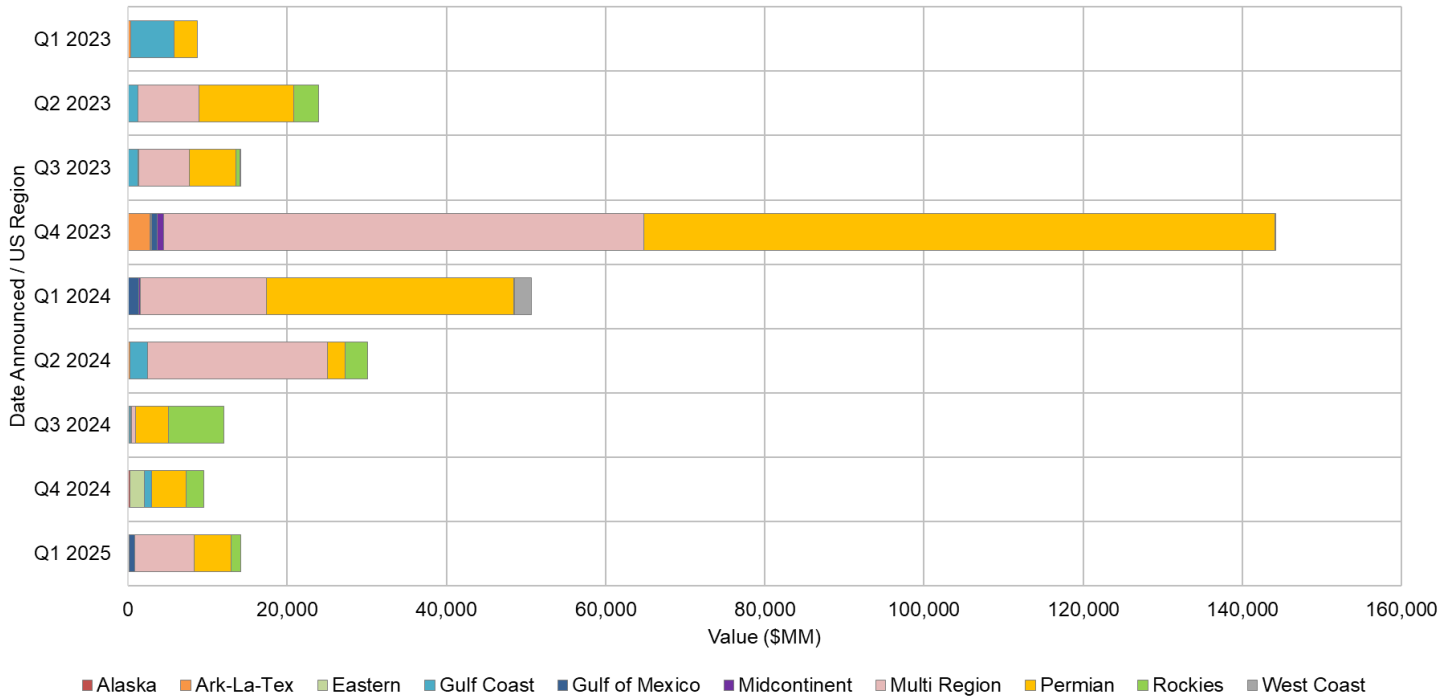


*Rig Count as of 02/21/2025
*Rig Count as of 02/14/2025

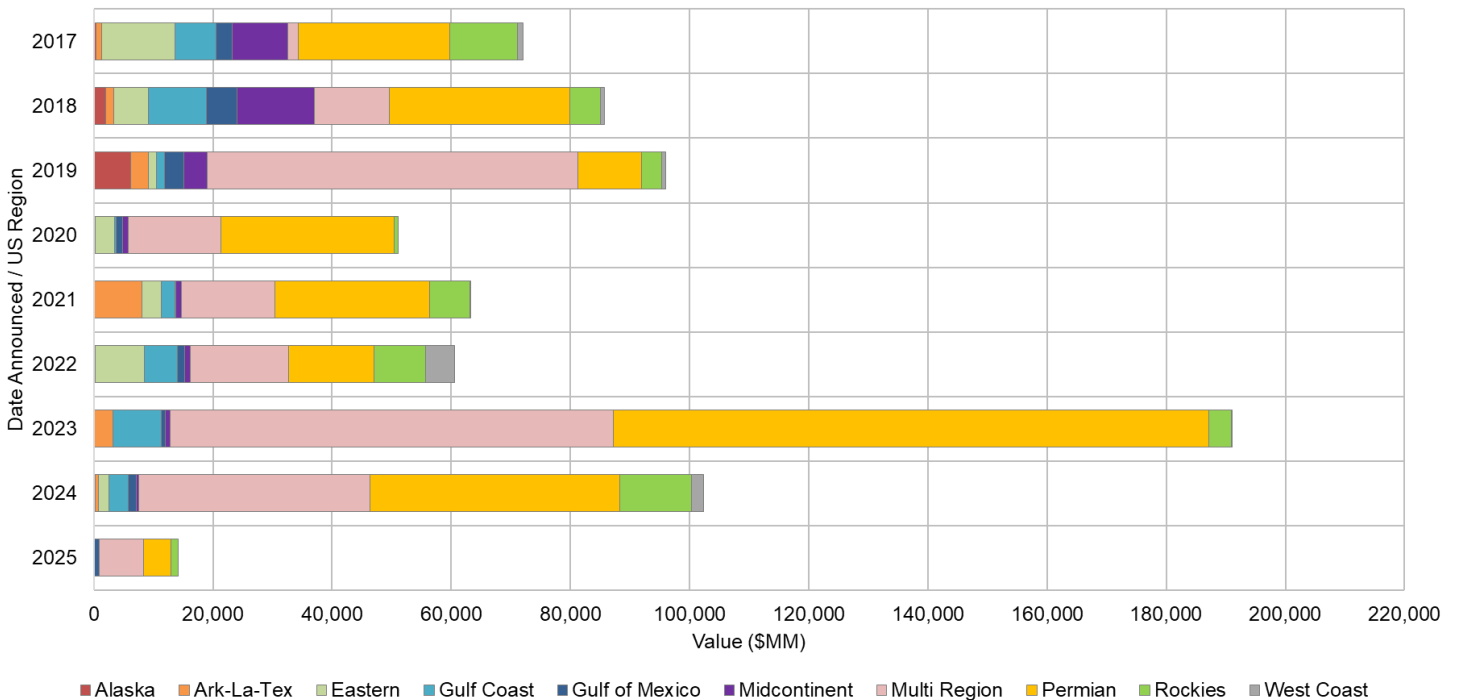
	Week Ending 02/21/2025		Week Ending 02/14/2025		Week Ending 02/23/2024
U.S. Rig Breakouts	Count	+/-	Count	+/-	Count
Oil	488	7	481	(15)	503
Gas	99	(2)	101	(21)	120
Not Specified	5	(1)	6	2	3
Directional	49	(2)	51	(1)	50
Horizontal	530	6	524	(30)	560
Vertical	13	0	13	(3)	16
Land (Inc Others)	576	4	572	(30)	606
Inland Waters	2	0	2	2	0
Offshore	14	0	14	(6)	20
US Total	592	4	588	(34)	626

*Source—Baker Hughes North America Rotary Rig Count

DEAL VALUE BY US REGION (BY QUARTER)

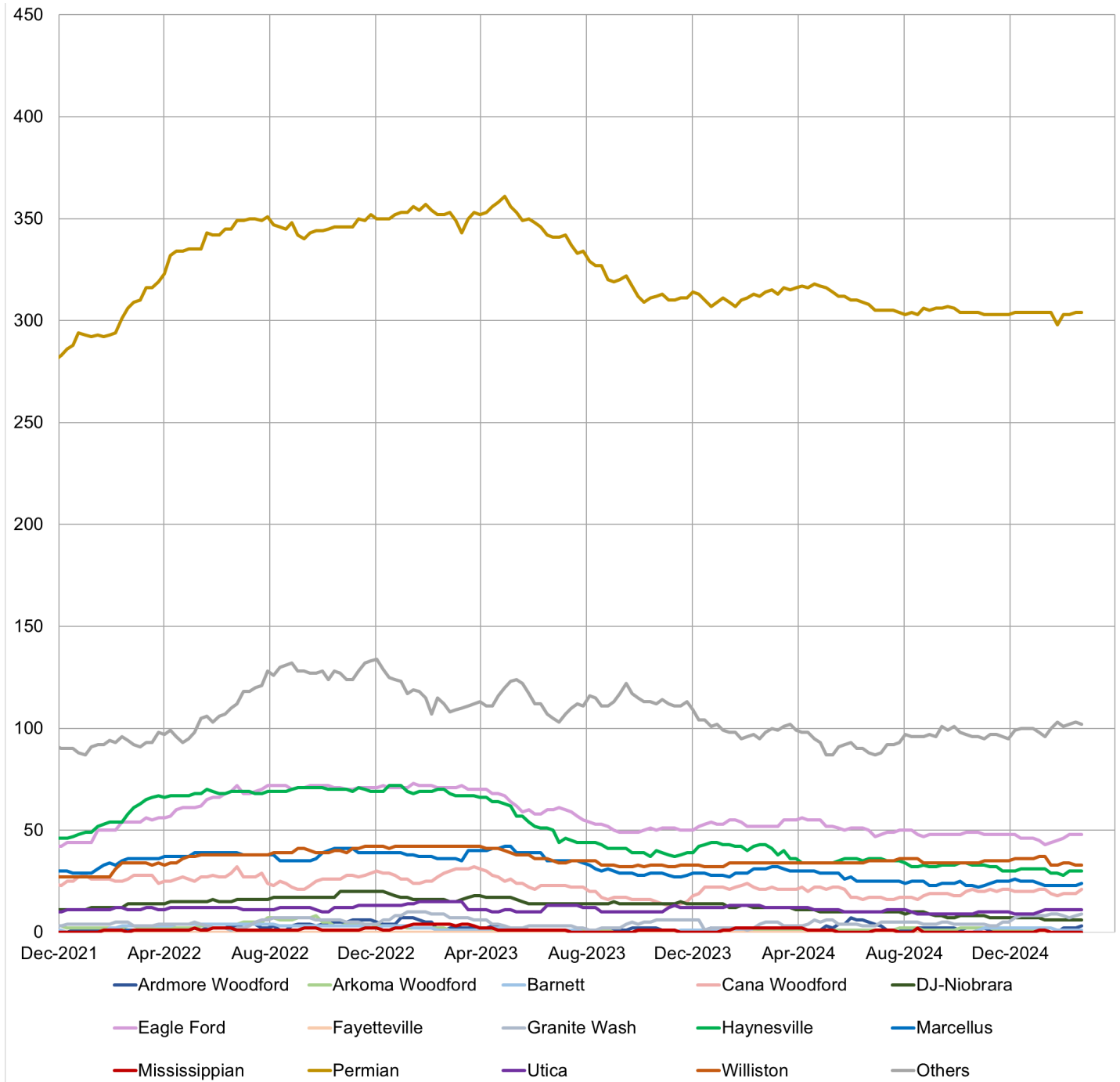


DEAL VALUE BY US REGION (BY YEAR)



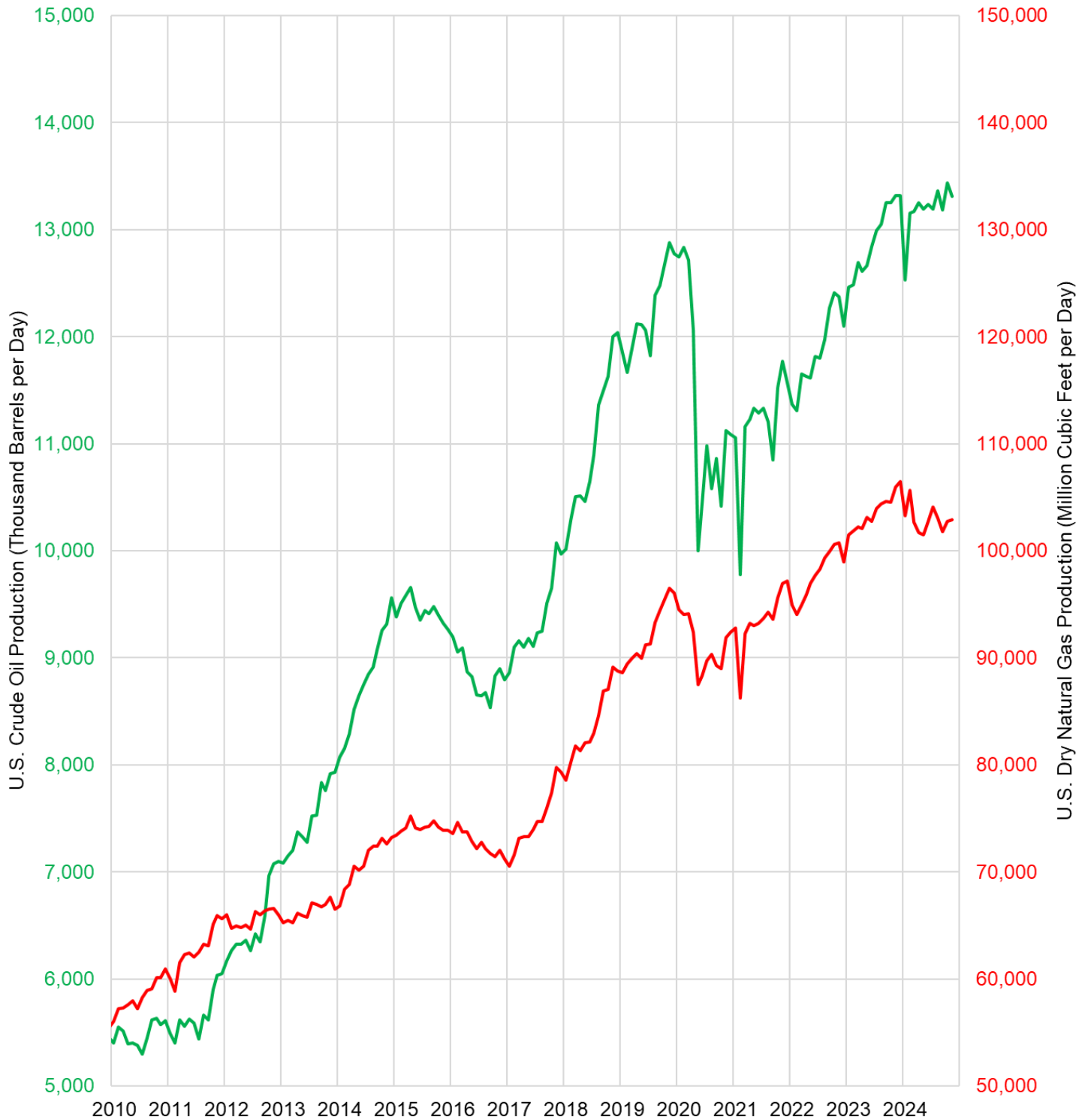
*Source—Enverus M&A Data- (Charts exclude terminated deals)

RIG ACTIVITY BY US REGION



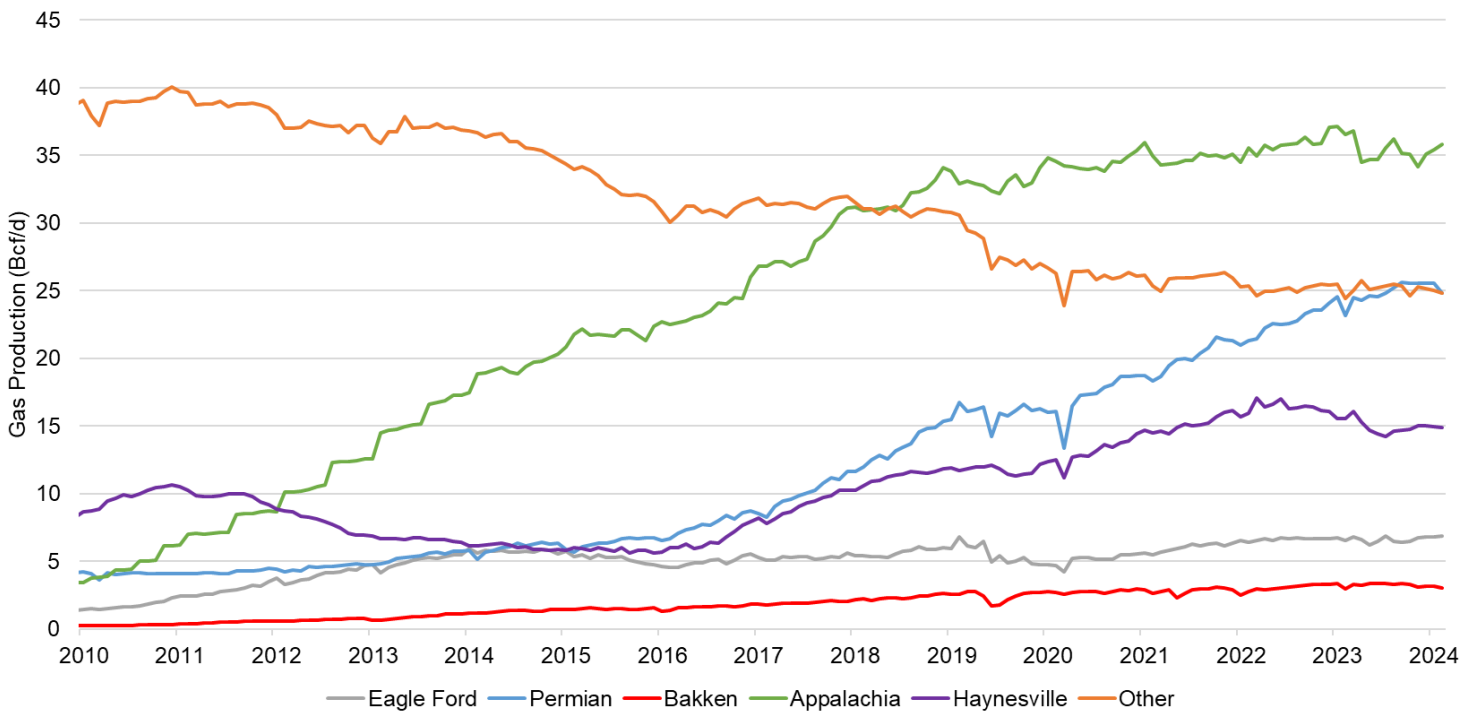
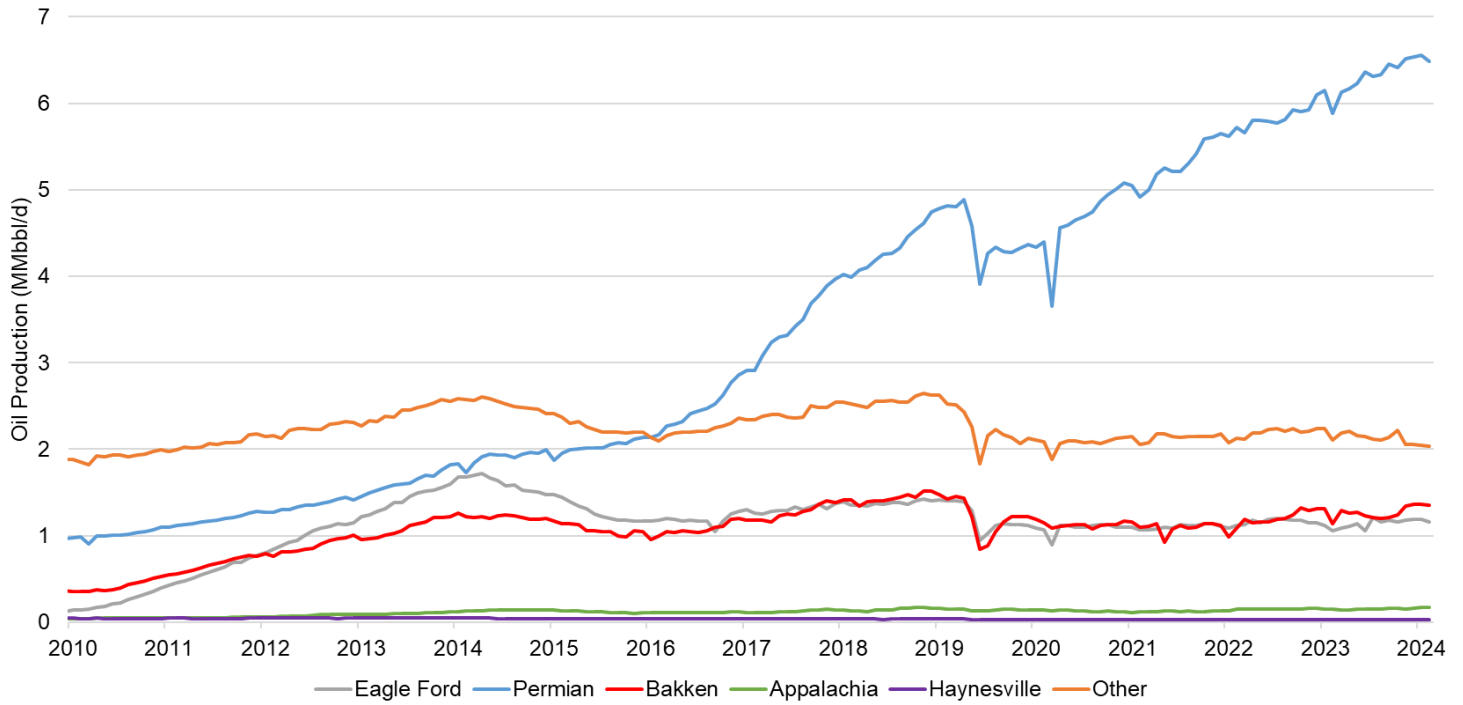
*Source—Baker Hughes North America Rotary Rig Count

US DAILY CRUDE (MMbbl) & DRY NATURAL GAS PRODUCTION (MMcf)



*Source—Energy Information Administration (EIA)

HISTORICAL PRODUCTION OF SELECTED US SHALE REGIONS



*Source—Energy Information Administration (EIA)

UPCOMING EVENTS

February 2025

SPE GCS - A&D Symposium	February 26	Houston, TX
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March 2025

U.S. Men's Clay Court Championship	March 29 - April 6	Houston, TX
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April 2025

Texas Bankruptcy Bench/Bar Conference	April 2	Houston, TX
Quorum Qnections 25	April 22-24	Las Vegas, NV
World Oilman's Poker Tournament	April 23-25	Las Vegas, NV
Hunger Free Golf Classic	April 25	Houston, TX
World Oilman's Tennis Tournament	April 30—May 3	Houston, TX

*Denotes an Opportune Sponsored Event

ABOUT RALPH E. DAVIS ASSOCIATES

Ralph E. Davis Associates LLC (RED) is an industry-leading petroleum engineering and geosciences firm committed to satisfying the individual needs of clients. We accomplish this by holding ourselves to the highest standards of integrity and professionalism to deliver honest, direct and actionable insights to help clients achieve their strategic objectives. We distinguish ourselves by combining reservoir engineering, geoscience evaluation techniques and advanced data analytics with economic analyses to provide our clients with individual, customized solutions.

Banks, bondholders, private equity firms, financial institutions and law firms around the world trust in RED's diverse services and unrivaled upstream oil and gas expertise to deliver comprehensive solutions that help clients make informed decisions. We add value to every engagement by employing a team approach, leveraging Opportune LLP's experienced bench of experts in transactional due diligence, tax advisory, investment banking, restructuring and valuation.

We offer technical and economic analyses to deliver our clients a complete, independent, accurate and detailed assessment of the value of their assets. We apply a robust set of technical capabilities to assist our clients. Our capabilities include:

- Reservoir engineering and geosciences
- Economic forecasting and reporting
- Data analytics and geospatial analysis

KEY CONTACTS



Steve Hendrickson is the President of Ralph E. Davis Associates, an Opportune LLP company. Steve has over 35 years of professional leadership experience in the energy industry with a proven track record of adding value through acquisitions, development and operations. Steve is a licensed professional engineer in the state of Texas, and holds an M.S. in Finance from the University of Houston and a B.S. in Chemical Engineering from The University of Texas at Austin. He recently served as a board member of the Society of Petroleum Evaluation Engineers (SPEE) and is a registered FINRA representative.



John Beaird is Vice President of Ralph E. Davis Associates, an Opportune LLP company. John has 39 years of oil and gas management, reservoir engineering, and petroleum economics evaluation experience. Recent relevant experience includes the Permian, Western Gulf, Tx-La-Miss Salt, Mid-Continent, Denver-Julesburg, Wind River, Williston Basin, and Appalachian Basins. John is a registered Petroleum Engineer in the State of Texas and holds a B.S. in Petroleum Engineering from Louisiana Tech University. He is also an active member of the Society of Petroleum Evaluation Engineers (SPEE).



David Edwards is a Petroleum Engineer at Ralph E. Davis Associates, an Opportune LLP company. David has over four years of reserves engineering experience in conventional and unconventional reservoirs. Before RED, David was a Petroleum Engineer at a lower middle market A&D advisory firm where he handled the technical processes for marketed assets. He began his career with an operator in Dallas, where he contributed to its engineering, operations, and A&D teams. David holds an M.B.A. from The University of Texas Permian Basin and a B.S. in Petroleum Engineering from The University of Oklahoma.

