



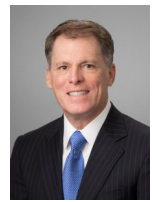
Weekly E&P Update

January 30, 2024

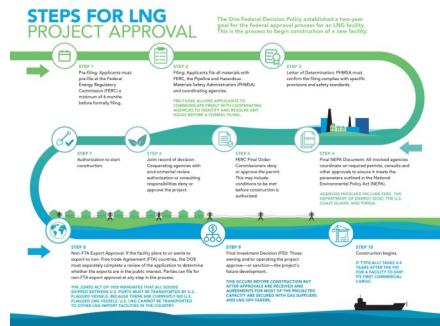
Vol. 5

LNG Permitting Pause Introduces Uncertainty Into Future Export Capacity

By Steve Hendrickson
President of Ralph E. Davis Associates



Last week, the Biden administration made a significant [announcement](#) regarding the export of Liquefied Natural Gas (LNG) to non-Free Trade Agreement (non-FTA) countries, temporarily stopping pending decisions in this area. The reaction to this announcement has been mixed, with some expressing disappointment and others celebrating it. To me, it seems like another attempt to strike a political middle ground, aiming to address the challenges posed by climate change while avoiding any actions that might lead to higher energy prices for consumers in the United States. This pause introduces uncertainty for project developers and our future export capacity, but its near-term impact on our ability to export natural gas to global markets is limited.



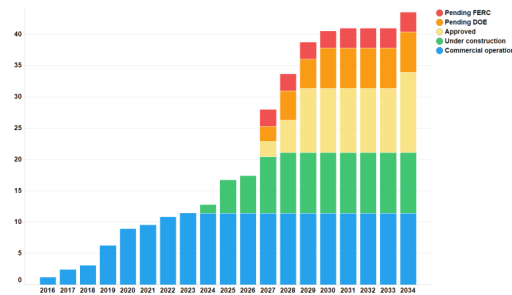
CLICK TO ENLARGE
(Source: Center for LNG)

LNG export terminals represent massive investments and involve lengthy permitting, design, and construction processes. The federal government has set a goal of completing the permitting process within two years. [The Center for LNG](#) has provided a simplified depiction of the permitting process, with "Step 8" representing the Department of Energy's approval for exporting to non-FTA countries—this is the step that is currently on hold.

[According to Reuters](#), this decision affects four projects immediately: Commonwealth LNG's Cameron, Sempra's Port Arthur 3 and 4, Energy Transfer's Lake Charles, and Glenfarne's Magnolia. Additionally, two other projects, Venture Global's Calcasieu Pass 2 and Cheniere's Midscale Trains 8 and 9, may also be impacted. These

two projects are still awaiting approval from the Federal Energy Regulatory Commission (Step 5), a prerequisite before the Department of Energy considers their non-FTA export permits.

Based on data from the [Energy Information Agency](#) (EIA) and [Global Energy Monitor](#) websites, I have prepared a graphic illustrating the estimated cumulative export capacity (billion cubic feet per day, bcf/day) of existing and planned US LNG facilities.



CLICK TO ENLARGE
(Source: EIA, Global Energy Monitor, company websites)

Currently, of our approximately 100 bcf/day of domestic natural gas production, the United States exports [approximately 12 bcf/day](#) as LNG, and our export capacity is projected to increase to 21 bcf/day by 2028, solely considering projects already under construction. If we factor in the already approved projects, our export potential could exceed 30 bcf/day by 2029. However, the fate of projects in the permitting process remains to be determined due to the recent pause in Department of Energy approvals. While this could begin limiting our export capacity by 2027, it remains to be seen if production levels and export markets will grow enough to require additional capacity.

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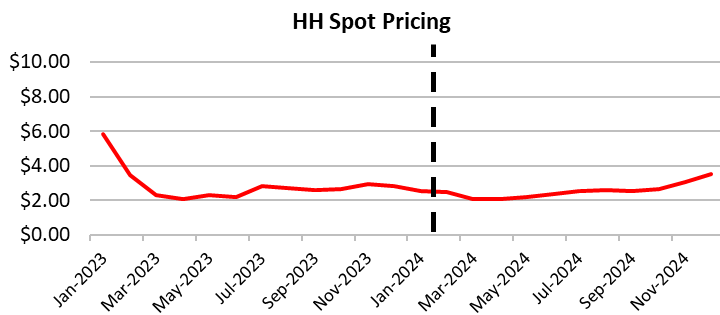
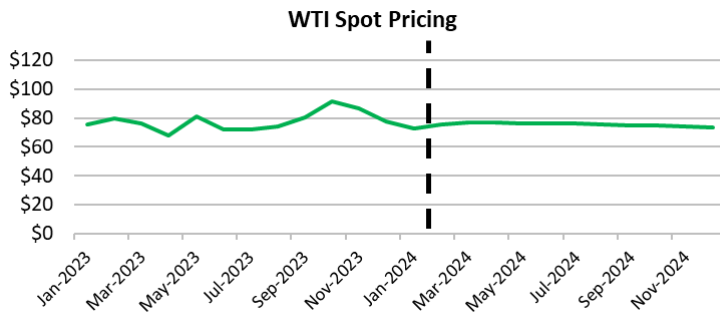
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NYMEX FUTURE PRICING



MONDAY'S MARKET CLOSE

NYMEX WTI CRUDE OIL FUTURES as of January 29, 2024 Close (\$/bbl)

Period	Current	WoW Change	Last Week	1 Yr Ago
2024	\$75.52	\$1.66	\$73.86	\$73.87
2025	\$71.16	\$1.09	\$70.07	\$69.11
2026	\$67.84	\$0.84	\$67.00	\$65.26
2027	\$65.68	\$0.71	\$64.97	\$62.01
2028	\$64.45	\$0.65	\$63.80	\$59.11

NYMEX HH NATURAL GAS FUTURES as of January 29, 2024 Close (\$/MMBtu)

Period	Current	WoW Change	Last Week	1 Yr Ago
2024	\$2.55	(\$0.02)	\$2.57	\$3.84
2025	\$3.43	(\$0.02)	\$3.45	\$4.15
2026	\$3.74	(\$0.05)	\$3.79	\$4.21
2027	\$3.75	(\$0.10)	\$3.85	\$4.28
2028	\$3.71	(\$0.02)	\$3.73	\$4.35

INDUSTRY METRICS—QUICK SNAPSHOT

	Current	Last Week	WoW Change	%Change
Crude Oil Near-Month Price (\$/bbl)	\$78.90	\$74.68	\$4.22	6%
Natural Gas Near-Month Price (\$/MMBtu)	\$2.68	\$2.44	\$0.24	10%
Weekly Upstream-Deal Transaction Value (\$MM)	\$0.00	\$1,362.00	(\$1,362.00)	(100%)
Weekly Number of Upstream-Deal Transactions	0	4	(4)	(100%)
Current Total US Rig Count	621	620	1	0.2%
US Field Crude Oil Production (MMbbl/day)	12.3	13.3	(1)	(8%)
US Field Dry Natural Gas Production (Bcf/day)	108.1	103.6	5	4%
Commercial Crude Oil Stocks-Excluding SPR (MMbbl)	421	430	(9)	(2%)
Natural Gas Stocks-Working Gas Underground Storage (Bcf)	2,856	3,182	(326)	(10%)
Total Drilled But Uncompleted Wells (DUC-Last Month)	4,374	4,498	(124)	(3%)

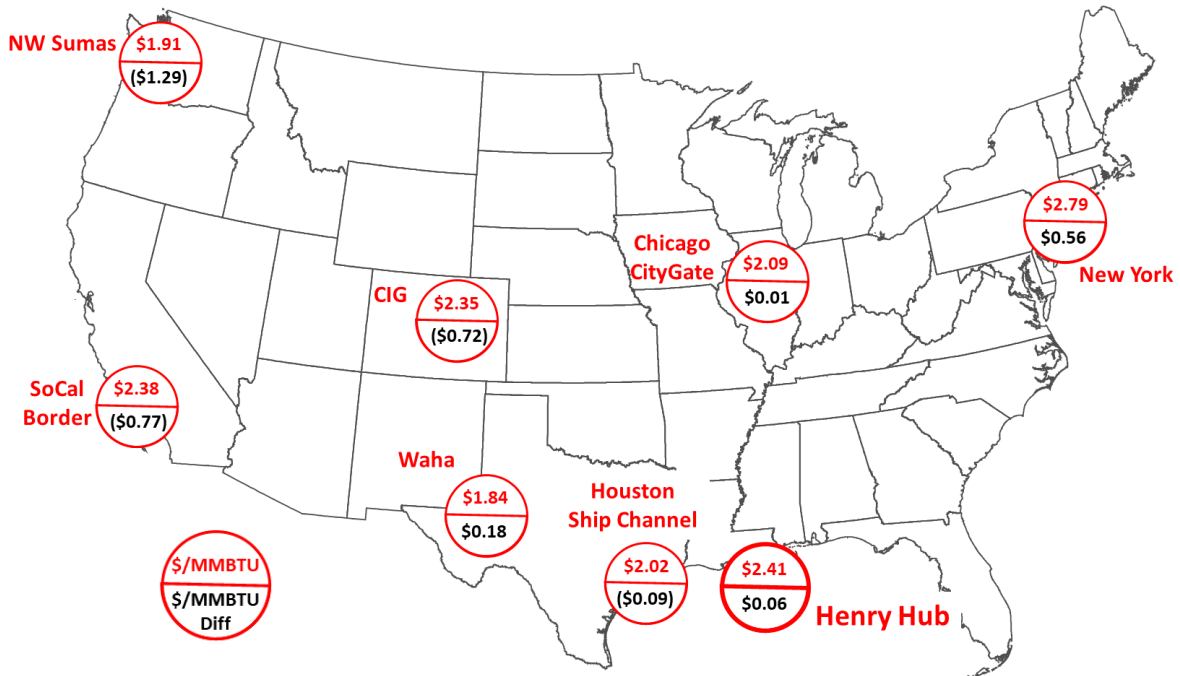
*Source—Energy Information Administration, United States (EIA)

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

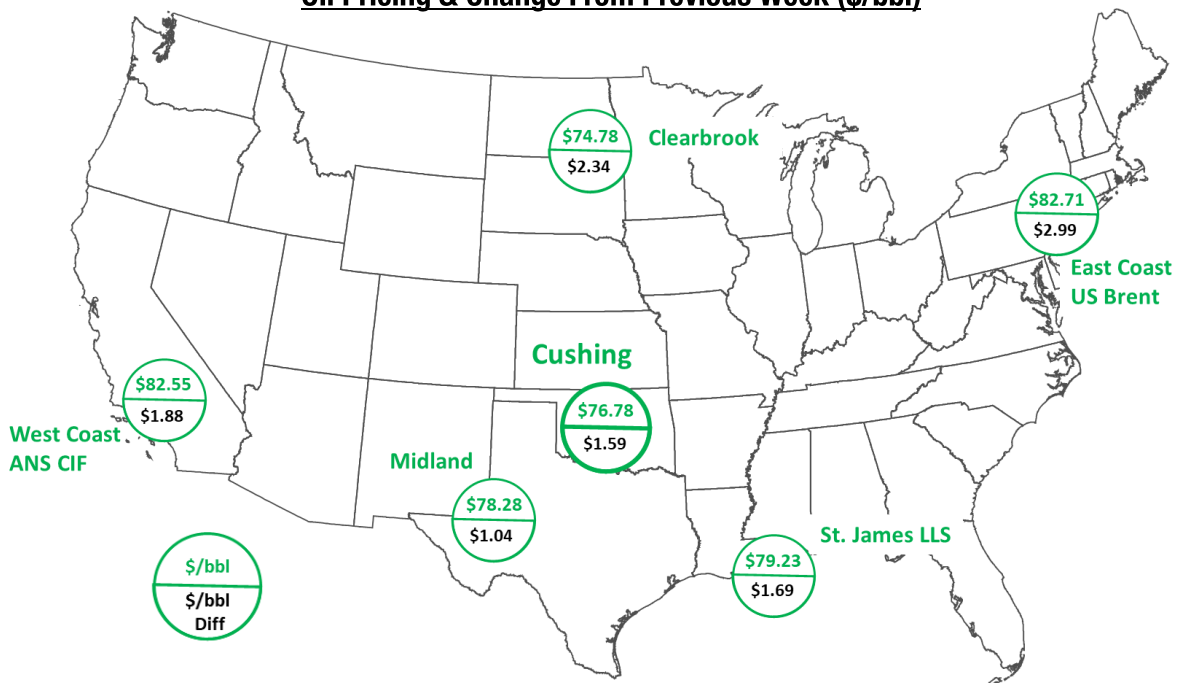


US COMMODITY PRICES CONTINUED

Natural Gas Pricing & Change From Previous Week (\$/MMBtu)



Oil Pricing & Change From Previous Week (\$/bbl)



*Source—Bloomberg LP



SELECTED INDUSTRY HEADLINES

Rise in Relatively Denser Crude Oil Production Drives U.S. Growth

Crude oil production in the United States reached a record high in August 2023, led primarily by more production in Texas.

U.S. Oil Industry Sets Record With \$144 Billion of M&A Deals in Q4

The U.S. upstream oil and gas industry booked its biggest-ever quarter for mergers and acquisitions in the fourth quarter of 2023, with a total of \$144 billion worth of deals

Dallas Fed: E&P Activity Essentially Unchanged; Optimism Wanes as Uncertainty Jumps

Activity in the upstream oil and gas sector was essentially unchanged during fourth-quarter 2023, according to oil and gas executives responding to the Dallas Fed Energy Survey.

Crude Settles Above \$75 as US Inventories Decline

West Texas Intermediate advanced 1% to settle above \$75 a barrel, after earlier jumping as much as 2% to the highest intraday price this year.

Oil Dips in Choppy Trade Amid China Economic Concerns, Middle East Tensions

Oil prices dipped on Monday in choppy trade as China's ailing property sector sparked demand worries, while rising tensions over the weekend in the Middle East intensified oil supply concerns.

US Drew New No. 3 Record 326 Bcf From Storage in Winter Storm Heather (LOGIN CREDENTIALS REQUIRED)

U.S. natural gas consumers drew a new No. 3 record 326 Bcf from storage in last week's deep freeze that blanketed the Lower 48 to the southernmost tip of the Texas-Mexico border.

Global Gas Demand to Grow by 2.5% in 2024, But Supply Still Tight: IEA

Global gas demand is set to grow by 2.5% year on year in 2024 to about 4.19 Tcm, the International Energy Agency said Jan. 26, with lower prices expected to contribute to recovery in consumption.

U.S. Monthly Dry Natural Gas Production Set a New Record in December 2023

U.S. dry natural gas production in the Lower 48 states reached an all-time monthly high of 105.5 billion cubic feet per day in December 2023, according to data from S&P Global Commodity Insights.

Volatile February Natural Gas Plunges Early as Fundamental Outlook Seen Bearish (LOGIN CREDENTIALS REQUIRED)

Warm mid-February temperatures and recovering production volumes helped sink natural gas futures in early trading Monday. Other energy sources

Report of White House Pause on Venture Global CP2 LNG Project Decision Sparks Cheers, Outcry

The White House is delaying a key permitting decision for Venture Global's CP2 LNG export project in Louisiana and directing the US Department of Energy to expand its review of the project, the New York Times reported Jan. 24, citing unnamed sources familiar with the matter.

Biden's Gas Export Pause Could Ripple Through LNG Lawsuits

The Biden administration's decision to halt new liquefied natural gas exports may bolster pending lawsuits against the government's approvals of proposed LNG facilities — and could face its own hurdles in court.

U.S. Oil Drillers Are Going Electric—if They Can Get the Electricity (LOGIN CREDENTIALS REQUIRED)

In the country's busiest oil field, frackers are devouring nearly as much electricity as four Seattles every day—and they are clamoring for more.



SELECTED RECENT TRANSACTIONS

W&T Offshore to Increase Oil and Gas Production With \$72 Million U.S. Gulf of Mexico Acquisitions

W&T Offshore, Inc. has completed the accretive acquisition of six fields in shallow waters of the U.S. Gulf of Mexico.

Talos Energy to Acquire QuarterNorth Energy For \$1.29 Billion

Oil and gas company Talos Energy, said it will acquire privately held QuarterNorth Energy in a \$1.29 billion cash-and-stock deal to bolster its presence in the Gulf of Mexico.

Prairie Operating Expands With \$94.5 Million Asset Acquisition

Prairie Operating Co., an oil and gas company, has announced a definitive agreement to acquire the assets of Nickel Road Operating LLC for a total consideration of \$94.5 million.

Chesapeake Energy Merges With Southwestern For \$7.4 Billion—Becomes Largest Natural Gas Producer In U.S.

Chesapeake Energy will merge with Southwestern Energy in an all-stock deal valued at \$7.4 billion, both companies announced Thursday, the latest transaction in the energy industry that would make Chesapeake the largest natural gas producer in the U.S.

U.S. Energy Corp. Announces Completion of Asset Divestitures and Provides Liquidity Update

U.S. Energy Corp, a growth-focused energy company engaged in the operation of high-quality producing oil and natural gas assets, today announced it had completed a series of non-core asset divestitures.

Evolution Petroleum Announces Acquisition of Non-operated Oil and Gas Assets

Evolution Petroleum Corporation announced that it has entered into definitive agreements to acquire non-operated oil and natural gas assets in the SCOOP and STACK plays in central Oklahoma for \$43.5 million in cash.

Trio Petroleum Announces an Option to Acquire a 20% Interest in the Asphalt Ridge Development Project in Utah

Trio Petroleum Corp, a California-based oil and gas company, announced that it has secured an option to acquire a 20% interest in a sweet, heavy-oil development project at Asphalt Ridge, located near the town of Vernal in Uinta County in northeastern Utah.

APA Corp to Buy Callon Petroleum in \$4.5 Billion All-Stock Deal

Callon Petroleum +6% pre-market recently after APA Corp. agreed to acquire the company in an all-stock deal valued at ~\$4.5B including debt, boosting its presence in the Permian Basin.

Ellipsis U.S. Onshore Acquires Oil, Gas Assets in U.S. Permian, DJ, Salt Basins

Ellipsis U.S. Onshore Holdings LLC has acquired additional assets located in multiple basins onshore the U.S.

Vital Energy Makes \$55 Million of Acquisitions in Permian Basin

Tulsa's Vital Energy Inc. is expanding its Permian Basin holdings with a \$55 million acquisition of additional working interests from Permian Basin operator Henry Energy LP, Moriah Henry Partners LLC and Henry Resources LLC.

Westlawn Group Announces Company Formation and the Closing of Multiple Investments in the Gulf of Mexico

Westlawn Group announced the successful launch of Westlawn Americas Offshore following the acquisition of multiple assets across deepwater Gulf of Mexico with current production in excess of 10,000 BOEPD and multiple near-term growth opportunities.

Tokyo Gas To Acquire Rockcliff Energy for \$2.7 Billion

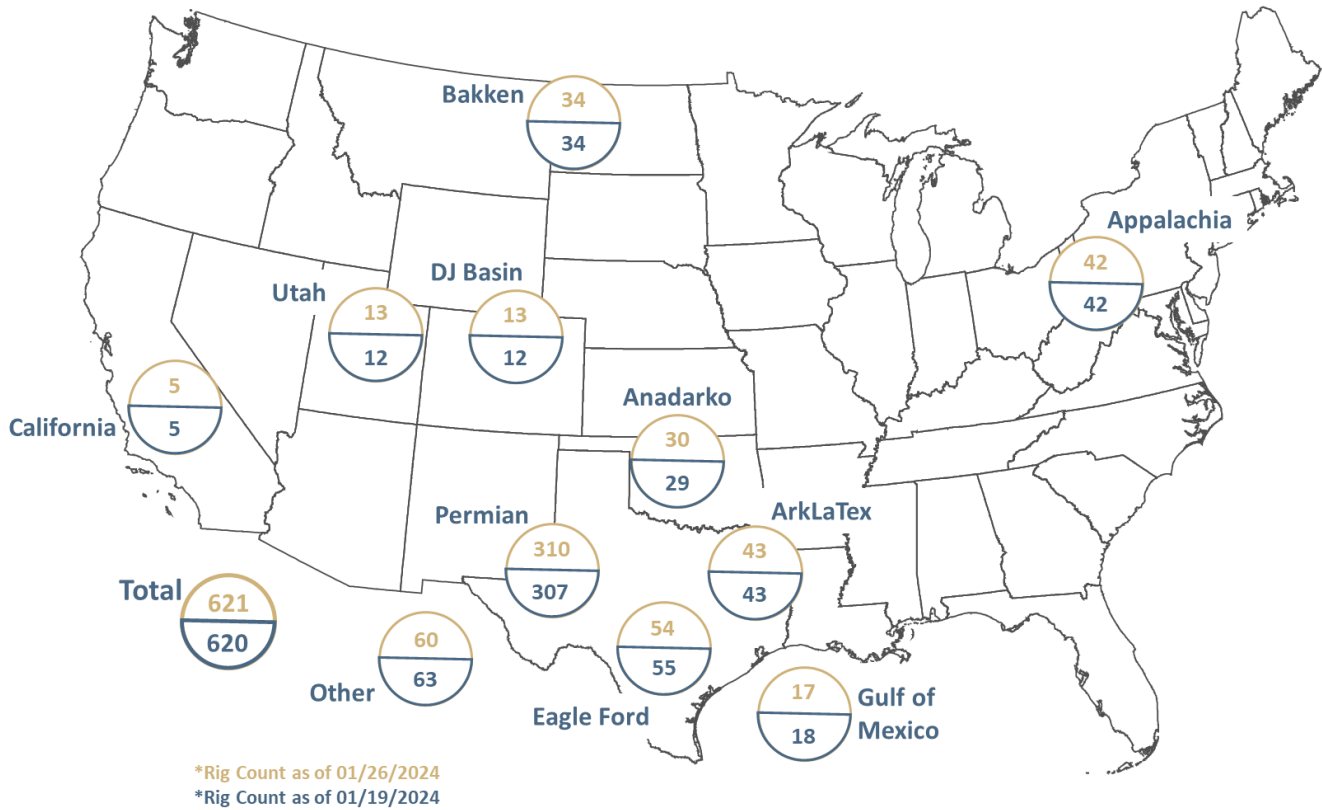
A unit of Tokyo Gas is buying private equity funded Rockcliff Energy II for \$2.7 billion in a bid to expand its overseas exposure to natural gas markets.

Fury Resources to Acquire Delaware Basin Operator Battalion Oil

Privately held Fury Resources Inc. agreed to acquire Delaware basin-operator Battalion Oil Corp., Houston, for \$9.80/share, a deal valued at \$450 million.



RIG ACTIVITY BY US REGION

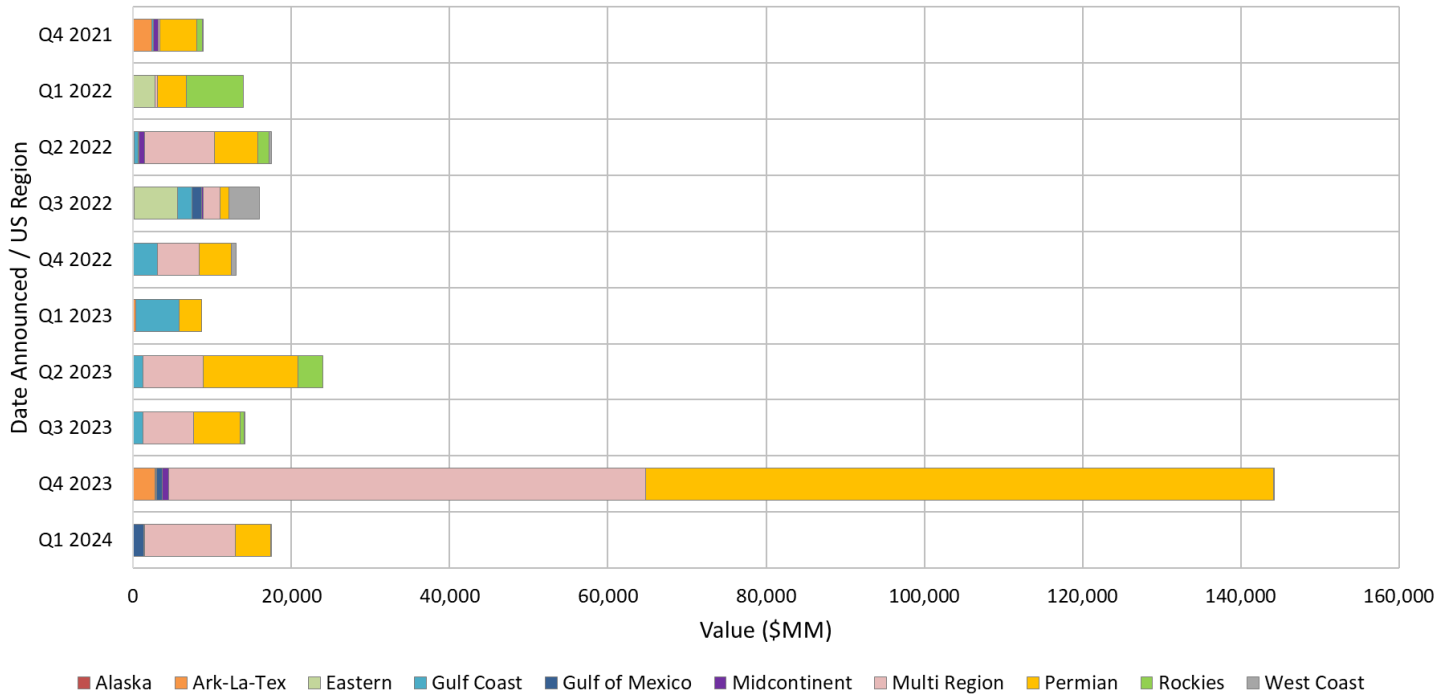


	Week Ending 01/26/2024			Week Ending 01/19/2024		Week Ending 01/27/2023
U.S. Rig Breakouts	Count	+/-	Count	+/-	Count	
Oil	499	2	497	(110)	609	
Gas	119	(1)	120	(41)	160	
Not Specified	3	0	3	1	2	
Directional	49	1	48	4	45	
Horizontal	559	(1)	560	(146)	705	
Vertical	13	1	12	(8)	21	
Land (Inc Others)	602	2	600	(154)	756	
Inland Waters	0	0	0	(2)	2	
Offshore	19	(1)	20	6	13	
US Total	621	1	620	(150)	771	

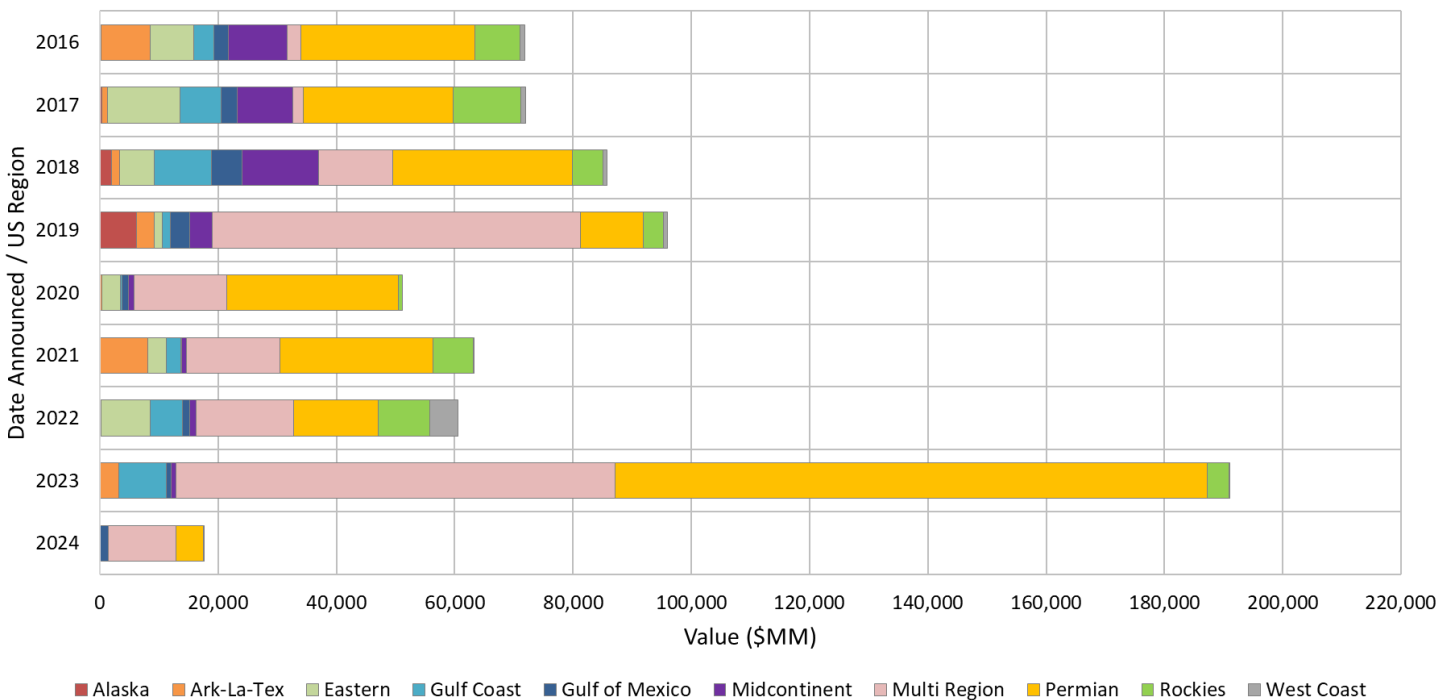
*Source—Baker Hughes Weekly Rig Counts



DEAL VALUE BY US REGION (BY QUARTER)



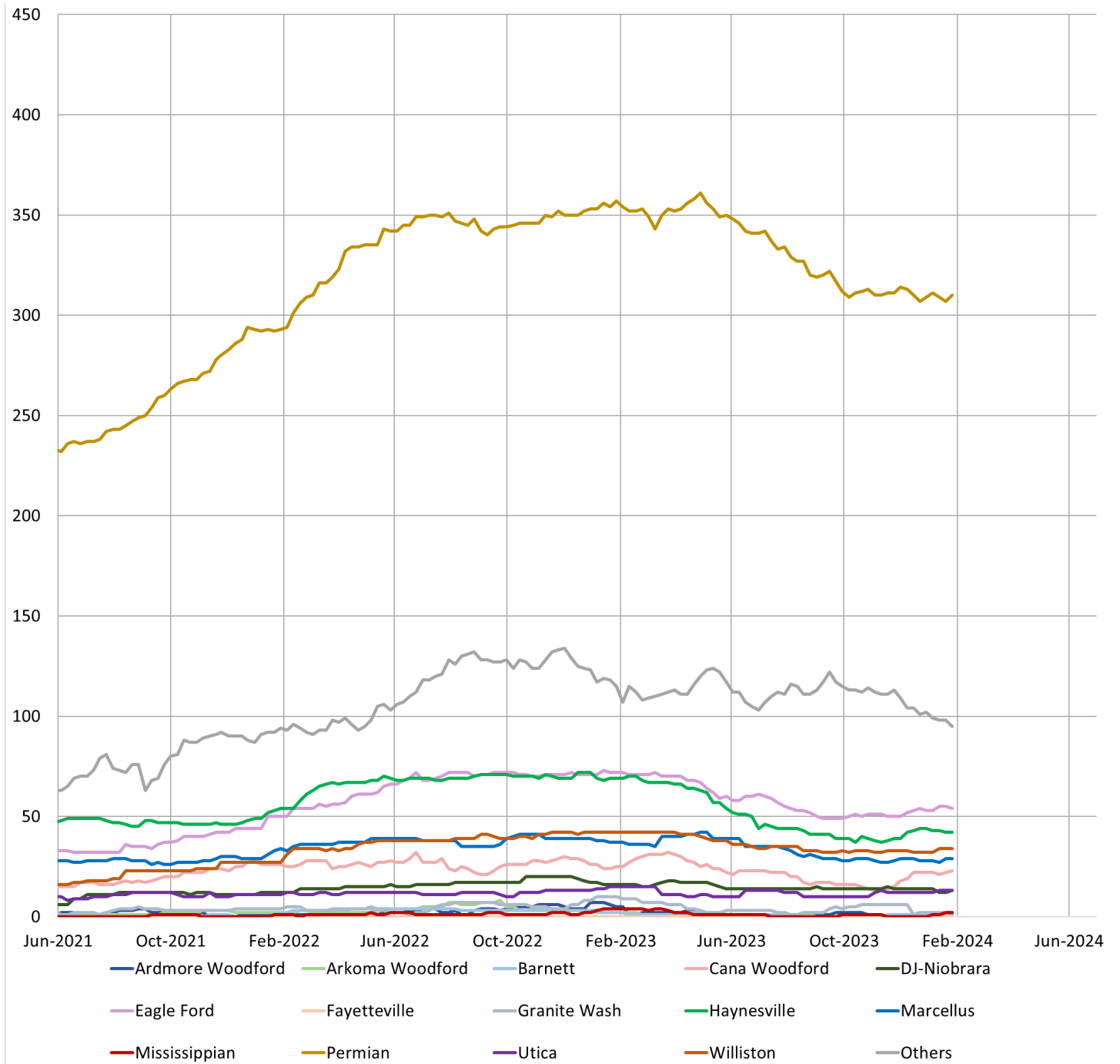
DEAL VALUE BY US REGION (BY YEAR)



*Source—PLS M&A Database (Charts exclude terminated deals)



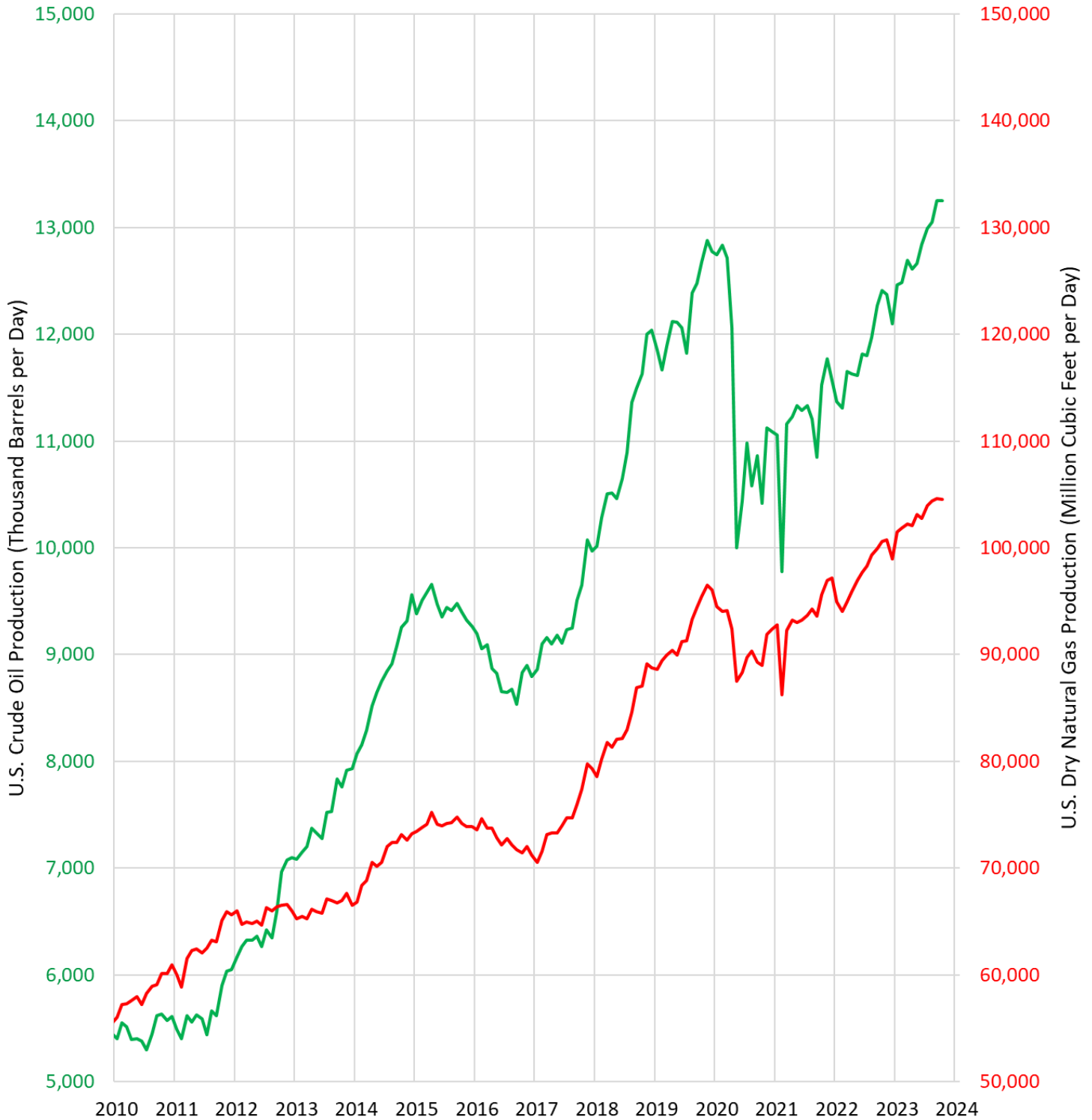
RIG ACTIVITY BY US REGION



*Source—Baker Hughes Weekly Rig Counts



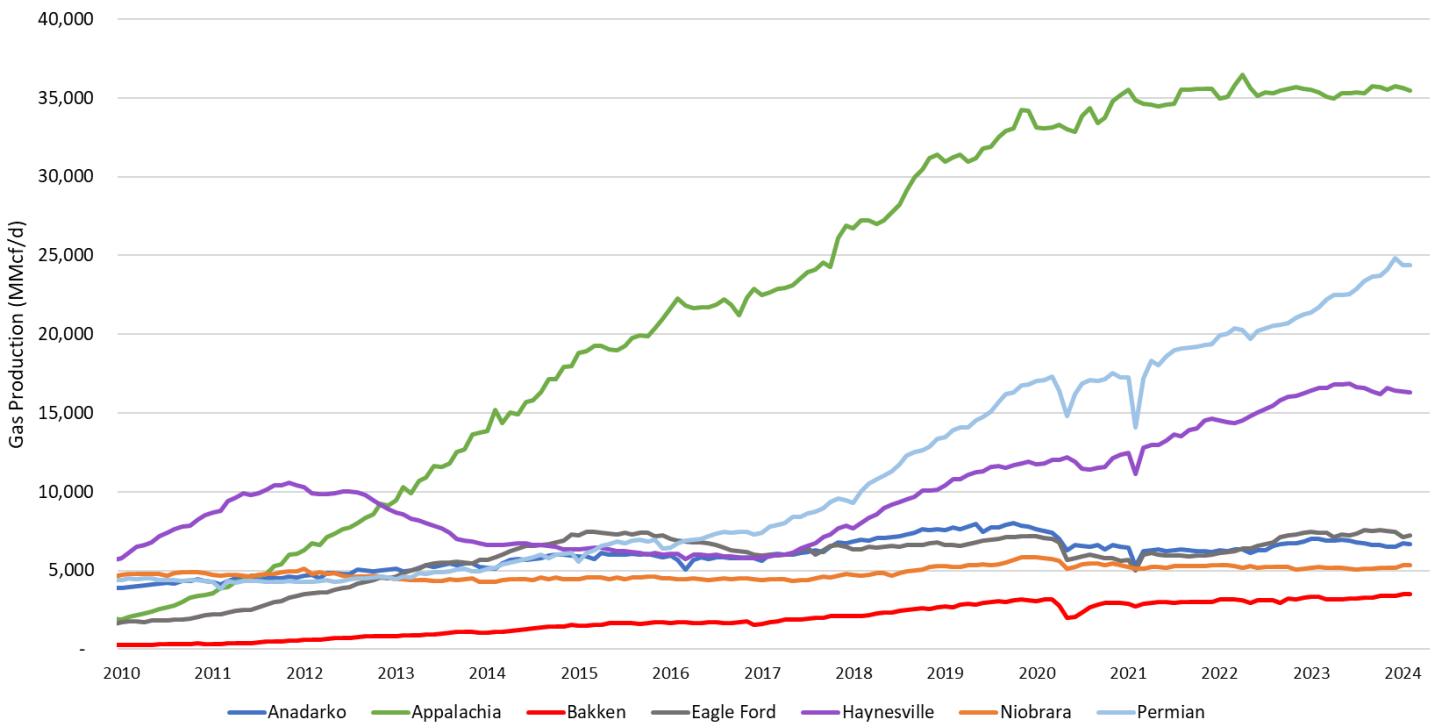
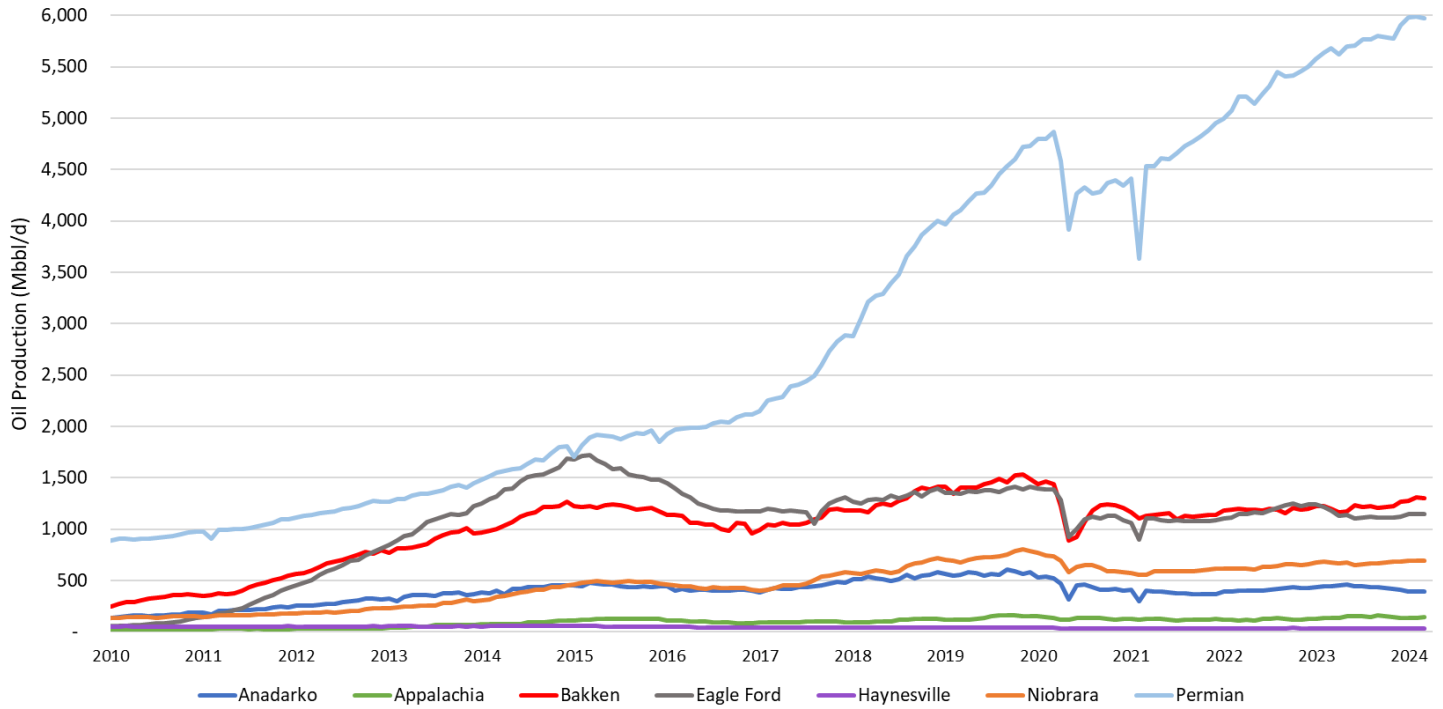
US DAILY CRUDE (MMbbl) & DRY NATURAL GAS PRODUCTION (MMcf)



*Source—Energy Information Administration, United States (EIA)



HISTORICAL PRODUCTION OF SELECTED US SHALE REGIONS



*Source—Energy Information Administration, United States (EIA)



UPCOMING EVENTS

February 2024

<u>NAPE Summit</u>	February 7-9	Houston, TX
<u>SPE Business Development A&D Symposium</u>	February 28	Houston, TX

March 2024

Big Energy! Gala 2024	March 2	Houston, TX
<u>5th Circuit Bankruptcy Bench-Bar Conference</u>	March 6-8	New Orleans, LA
<u>Tulsa Irish Festival</u>	March 8-10	Tulsa, OK
<u>ROCC US Men's Clay Court Championship</u>	March 30 - April 7	Houston, TX

April 2024

<u>World Oilman's Poker Tournament (WOPT)</u>	April 3-5	Las Vegas, NV
<u>The Leukemia & Lymphoma Society (LLS) Big Climb</u>	April 6	Houston, TX
<u>HBA & HPF Spring Social</u>	April 11	Houston, TX
<u>World Oilman's Mineral & Royalty Conference (MARC)</u>	April 15-16	Houston, TX
<u>Quorum Qnections Conference</u>	April 23-25	Las Vegas, NV
<u>World Oilman's Tennis Tournament (WOTT)</u>	April 24-27	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).



Yvonne Trujillo is a Senior Petroleum Engineer at Ralph E. Davis Associates, an Opportune LLP company. Yvonne has over 25 years experience in the oil and gas industry with extensive expertise in reserves engineering, SEC and PRMS/SPE reporting and economics and asset evaluation in conventional and unconventional reservoirs in the U.S. Lower 48. Yvonne earned a B.S. in Mechanical Engineering at Simon Bolivar University in Caracas, Venezuela and an M.S. in Petroleum Engineering at the University of Houston.



David Edwards is a Petroleum Engineer at Ralph E. Davis Associates, an Opportune LLP company. David has over three 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.

