



# Weekly E&P Update

April 9, 2024

Vol. 15

## The Shifting Dynamics of Natural Gas Demand Amidst Renewable Energy Growth

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The United States has seen a significant increase in natural gas production due to advanced techniques like horizontal drilling and hydraulic fracturing. However, the trajectory of this growth is expected to level off based on various factors that could affect demand and prices in a well-supplied market.

Natural gas in the U.S. is primarily used domestically or exported, with direct consumption distributed across four main sectors as reported by the Energy Information Agency (EIA): residential, commercial, transportation, and industrial. Additionally, a substantial amount is utilized for electric power generation.

Transportation and processing use a minor portion of gas (about 10%), which is expected to stay the same. The vehicle transportation sector is even less significant, making up approximately 5% of consumption, and its impact on overall demand is minimal. Residential and commercial uses, which are similar in nature, are also projected to have a marginal effect on change in total demand due to the slow growth of the U.S. population and the inelastic nature of these consumption categories.

We are left with three primary demand categories: exports, industrial use, and electricity generation.

**Exports** - There's been a temporary halt in authorizing new LNG export projects, yet LNG exports are still expected to more than double in the next decade as current projects progress. The EIA estimates that LNG exports could represent over 25% of U.S. production by the mid-2030s. The shift in Europe away from Russian natural gas will likely persist, ensuring strong demand for U.S. exports. Additionally, pipeline exports to Mexico are anticipated to rise, with many serving future LNG terminals. Although timing is a factor, strong growth in this sector seems inevitable.

**Industrial** - Making up 26% of domestic consumption, industrial demand for natural gas (predominantly in fertilizer and petrochemicals) is forecasted by the EIA's 2023 Annual Energy Outlook to maintain steady growth. Economic growth remains the main variable affecting this projection, but all scenarios indicate an upward trend.

**Electricity** - The demand for natural gas in electricity generation is the most uncertain. The EIA suggests a possible decline in natural gas usage as renewable energy, especially solar, expands. However, the implementation of renewables is complex, often being situated far from consumption centers and dependent on aging and near-capacity U.S. electrical grid infrastructure. Due to regulatory and legal challenges, new transmission lines face lengthy and expensive delays. With [thousands of renewable projects pending grid connection approval](#), the future demand for natural gas in electricity generation depends largely on how the country will address the transmission bottleneck.

## Table Of Contents

[This Week in Oil & Gas](#)

[US Commodity Prices](#)

[Industry Headlines](#)

[Recent Transactions](#)

[Rig Activity by US Region](#)

[Deal Value by US Region](#)

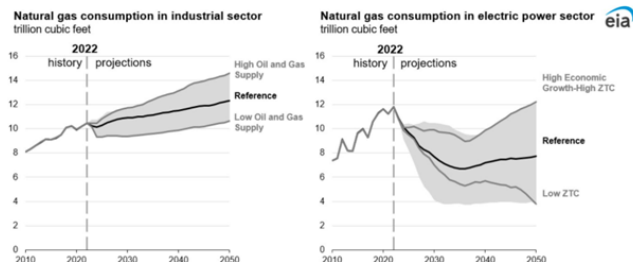
[Total US Rig Count by US Region](#)

[US Daily Crude & Dry Natural Gas Production](#)

[Historical Production of US Shale Regions](#)

[Upcoming Events](#)

[About Us/Key Contacts](#)

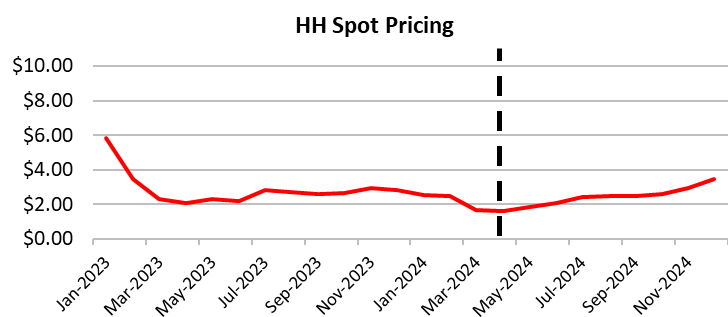
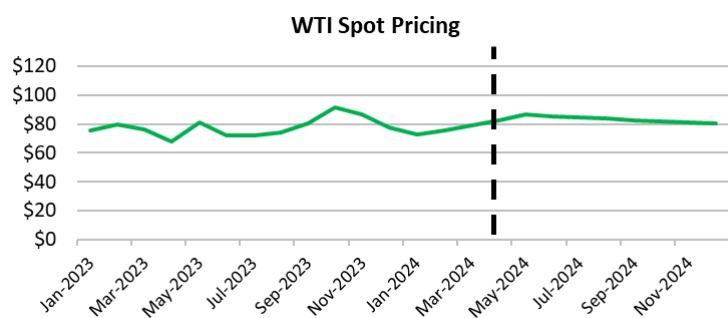


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(Source: Energy Information Agency 2023 Annual Energy Outlook)



## NYMEX FUTURE PRICING



## MONDAY'S MARKET CLOSE

### NYMEX WTI CRUDE OIL FUTURES as of April 8, 2024 Close (\$/bbl)

Period	Current	WoW Change	Last Week	1 Yr Ago
2024	\$83.25	\$2.52	\$80.73	\$73.35
2025	\$76.06	\$1.57	\$74.49	\$68.50
2026	\$70.96	\$0.78	\$70.18	\$64.83
2027	\$67.66	\$0.34	\$67.32	\$61.82
2028	\$65.55	\$0.09	\$65.46	\$59.29

### NYMEX HH NATURAL GAS FUTURES as of April 8, 2024 Close (\$/MMBtu)

Period	Current	WoW Change	Last Week	1 Yr Ago
2024	\$2.53	(\$0.02)	\$2.55	\$3.46
2025	\$3.46	(\$0.04)	\$3.50	\$4.09
2026	\$3.82	\$0.01	\$3.81	\$4.18
2027	\$3.86	\$0.02	\$3.84	\$4.17
2028	\$3.80	\$0.02	\$3.78	\$4.19

## INDUSTRY METRICS—QUICK SNAPSHOT

	Current	Last Week	WoW Change	%Change
Crude Oil Near-Month Price (\$/bbl)	\$86.10	\$84.04	\$2.06	3%
Natural Gas Near-Month Price (\$/MMBtu)	\$1.77	\$1.84	(\$0.07)	(4%)
Weekly Upstream-Deal Transaction Value (\$MM)	\$0.00	\$281.00	(\$281.00)	(100%)
Weekly Number of Upstream-Deal Transactions	11	6	5	83%
Current Total US Rig Count	620	621	(1)	(0.2%)
US Field Crude Oil Production (MMbbl/day)	13.1	13.1	0	-
US Field Dry Natural Gas Production (Bcf/day)	105.6	105.6	0	-
Commercial Crude Oil Stocks-Excluding SPR (MMbbl)	451	448	3	0.7%
Natural Gas Stocks-Working Gas Underground Storage (Bcf)	2,259	2,296	(37)	(2%)
Total Drilled But Uncompleted Wells (DUC-Last Month)	4,483	4,483	0	-

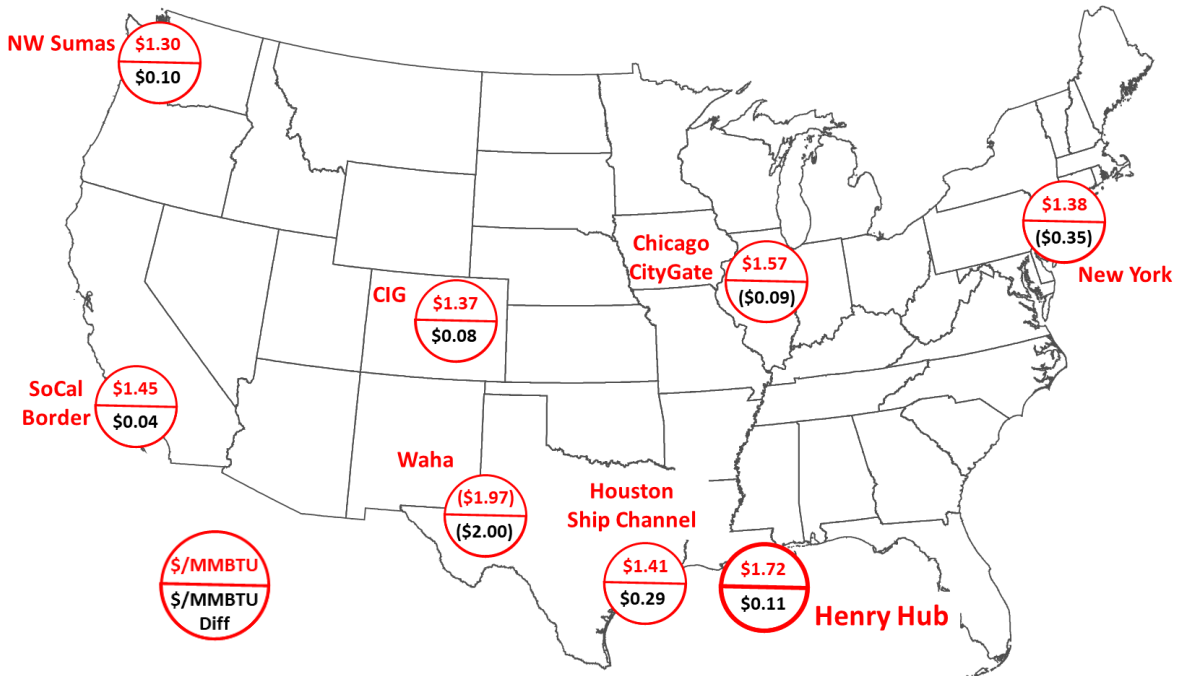
\*Source—Energy Information Administration, United States (EIA)

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

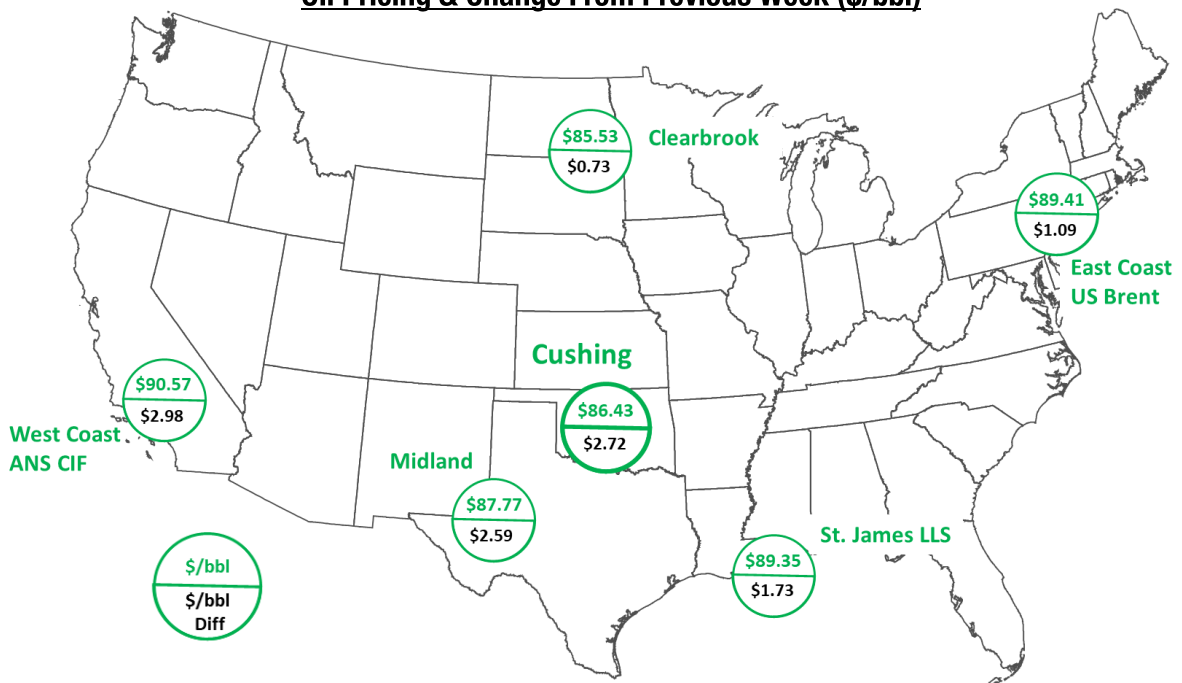


**US COMMODITY PRICES CONTINUED**

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



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



\*Source—Bloomberg LP



## **SELECTED INDUSTRY HEADLINES**

### **Oil's Under the Hood Signals Tell Tale of Very Bullish Market**

The global oil market has gone from languid to lively in the space of a few weeks, with Brent futures blowing past the key \$90-a-barrel threshold as critical gauges flash steadily more bullish signals.

### **Oil Prices Pull Back on Easing Worries Over Middle East**

Oil futures declined on Monday, pulling back after a gain of nearly 5% last week, as concerns eased over risks to crude supplies in the Middle East.

### **Despite \$90 Crude, US Oil Output Capped by Weak Natgas Prices**

U.S. crude oil prices last week climbed to their highest this year, but a weak natural gas market, steeper costs and a focus on shareholder returns over new production are keeping shale drillers from big output increases in the world's top oil and gas producer.

### **The Odds of \$100 Oil Are Rising as Supply Shocks Convulse the Market (LOGIN CREDENTIALS REQUIRED)**

When oil jumped above \$90 a barrel just days ago, military tensions between Israel and Iran were the immediate trigger.

### **North America Loses More Rigs**

The company's latest rotary rig count showed that the region dropped 16 rigs week on week, with one of those coming from the U.S. and 15 coming from Canada.

### **690-mile Greenfield Permian-to-Louisiana Natural Gas Pipeline Targets 2028 Start**

The developer of a 2 Bcf/d interstate pipeline project to transport "liquids-rich" Permian natural gas to the Louisiana Gulf Coast has requested to initiate the pre-filing review process with the US Federal Energy Regulatory Commission and is targeting a 2028 in-service date.

### **Gas Glut? Not for Long**

Abundant supply and lukewarm demand in the US and Europe have driven down natural gas prices.

### **DOE Urged to Widen Reviews of Gas Exports**

Dozens of environmental groups joined together Monday to push the Department of Energy to make sure climate change and domestic energy prices are major priorities in the agency's new analysis of liquefied natural gas exports.

### **'Overheated' Natural Gas Futures Setting Up for Possible Breakout (LOGIN CREDENTIALS REQUIRED)**

Prompt-month natural gas futures on the New York Mercantile Exchange (Nymex) tested key resistance but failed to push beyond the \$1.906/MMBtu high early last week.

### **API Gulf Coast Head Touts Global Emissions Benefits of US LNG (LOGIN CREDENTIALS REQUIRED)**

The U.S. and Louisiana have the ability to change global emissions through the export of LNG, although new applications have been frozen by the Biden administration.

### **How Monday's Total Solar Eclipse Affects US Grid Operators**

Electric grids across the U.S. are anticipating a rapid decline in solar generation during Monday's total solar eclipse, which will span multiple states.

### **Big Oil is Racing to Scale up Carbon Capture to Slash Emissions but the Challenges are Immense**

Chevron, Exxon, Baker Hughes and SLB are racing to scale up carbon capture and storage across the U.S. as the world races to reach net-zero emissions by 2050.





## **SELECTED RECENT TRANSACTIONS**

### **Riley Permian to Acquire New Mexico Acreage, Launches Stock Offering**

Riley Exploration Permian will offer 2.1 million shares to help pay for the purchase of 12,500 net acres in Eddy County, New Mexico.

### **Beacon Offshore Divests Non-op Gulf of Mexico Interests**

Beacon Offshore Energy said that with its non-op assets divested, it would turn all of its focus to its Shenandoah and Winterfell assets in the Gulf of Mexico.

### **Mesa III Reloads in Haynesville with Mineral, Royalty Acquisition**

After Mesa II sold its Haynesville Shale portfolio to Franco-Nevada for \$125 million late last year, Mesa Royalties III is jumping back into Louisiana and East Texas, as well as the Permian Basin.

### **Dorchester Minerals, L.P. Announces Acquisition of Mineral Interests**

Dorchester Minerals, L.P. announced it completed an acquisition of mineral interests totaling approximately 1,485 net royalty acres located in two counties in Colorado.

### **Elk Range Royalties Makes Entry in Appalachia with Three-state Deal**

NGP-backed Elk Range Royalties signed its first deal for mineral and royalty interests in Appalachia, including locations in Pennsylvania, Ohio and West Virginia.

### **TotalEnergies to Acquire Upstream Position in Eagle Ford Shale**

Global energy company TotalEnergies is expanding in the US shale patch with an upstream acquisition in the Eagle Ford of South Texas, chairman and CEO Patrick Pouyanné.

### **Diversified Energy Buys NatGas Assets in Runup to LNG Exports**

Diversified Energy will pay \$386 million to buy 100% interest in Oaktree Capital Management's assets in Oklahoma, East Texas and Louisiana.

### **Civitas, Prioritizing Permian, Jettisons Non-core Colorado Assets**

After plowing nearly \$7 billion into Permian Basin M&A last year, Civitas Resources is selling off non-core acreage from its legacy position in Colorado as part of a \$300 million divestiture goal.

### **Epsilon Energy Bolsters Permian Presence With Pradera Fuego Acquisition, Eyes Future Drilling**

Epsilon Energy's acquisition in Ector County, Texas, underscores its strategic focus on expanding crude oil production in the Permian Basin, positioning the company for growth and operational efficiencies.

### **Esperanza, Andros Capital Partners to Acquire ExxonMobil's Interests in Ursa, Princess Fields**

Esperanza Capital Partners and Andros Capital Partners LLC have announced the execution of a definitive purchase agreement to acquire Exxon Mobil Corporation's assets in the Ursa and Princess fields in the Gulf of Mexico.

### **Chord Energy, Canada's Enerplus to Combine Into \$11 Billion Company in North Dakota's Williston Basin**

Chord Energy Corp. and Canada's Enerplus Corp. said late Wednesday they have agreed to merge in an \$11 billion stock and cash deal with an eye toward establishing a "premier" position in North Dakota's Williston shale basin.

### **Benchmark Buys Revolution Resources' Anadarko Assets in \$145 Million Deal**

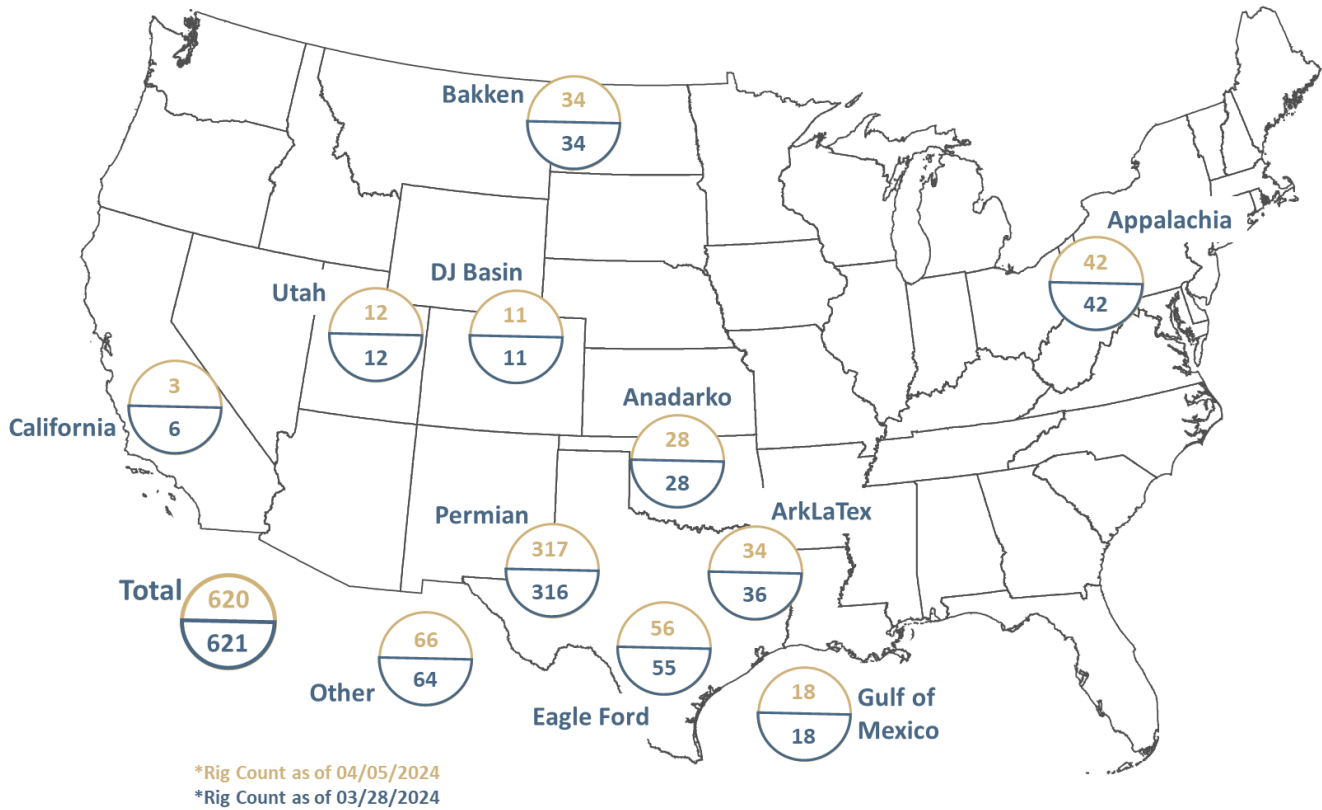
Benchmark Energy II is acquiring Revolution Resources just over four years after Revolution bought out Jones Energy Inc.'s Midcontinent portfolio.

### **Bayswater Acquires New Oil and Gas Production, Drilling Assets in DJ Basin**

Bayswater Exploration & Production, a Denver-based oil and natural gas development company, recently acquired assets that will continue to expand its operations in the Denver Julesburg Basin in Weld County, Colorado.



## RIG ACTIVITY BY US REGION

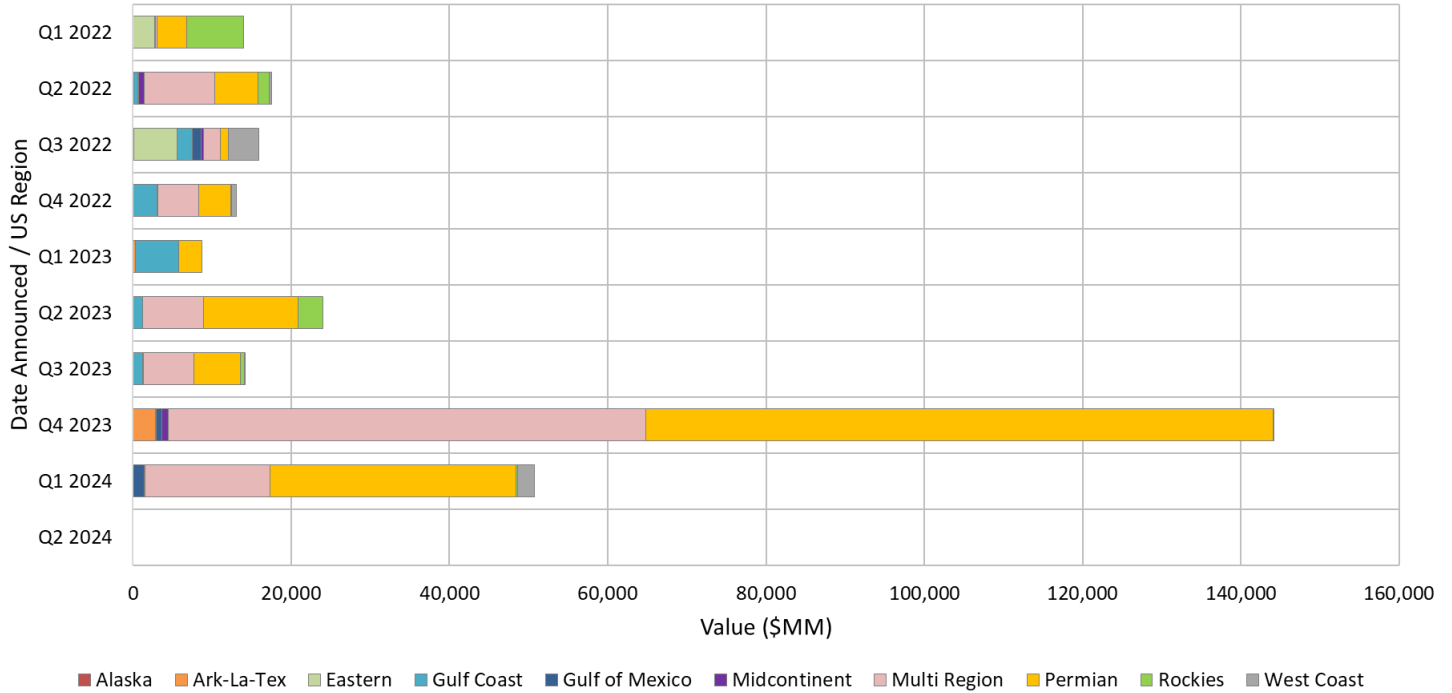


	Week Ending 04/05/2024			Week Ending 03/28/2024		Week Ending 04/07/2023
U.S. Rig Breakouts	Count	+/-	Count	+/-	Count	
Oil	508	2	506	(82)	590	
Gas	110	(2)	112	(48)	158	
Not Specified	2	(1)	3	(1)	3	
Directional	51	1	50	0	51	
Horizontal	557	(1)	558	(129)	686	
Vertical	12	(1)	13	(2)	14	
Land (Inc Others)	600	(1)	601	(133)	733	
Inland Waters	0	0	0	(1)	1	
Offshore	20	0	20	3	17	
<b>US Total</b>	<b>620</b>	<b>(1)</b>	<b>621</b>	<b>(131)</b>	<b>751</b>	

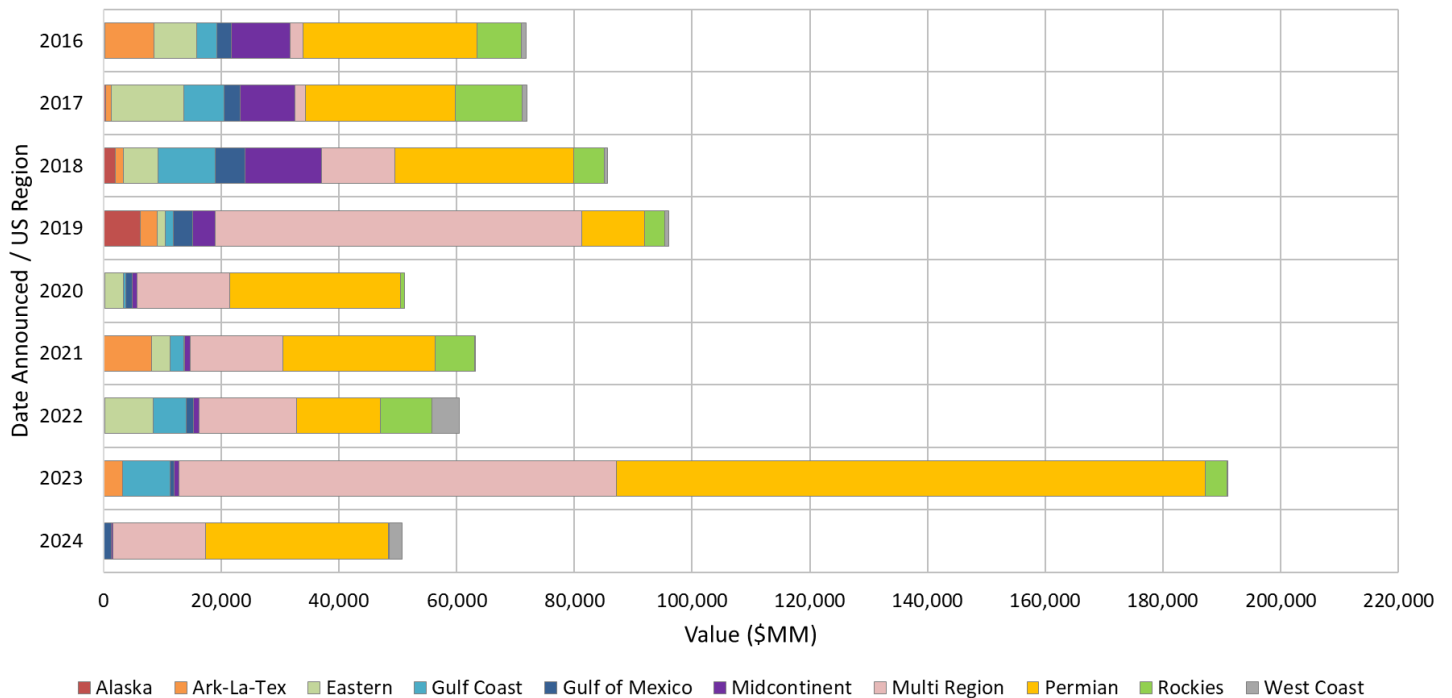
\*Source—Baker Hughes Weekly Rig Counts



## DEAL VALUE BY US REGION (BY QUARTER)



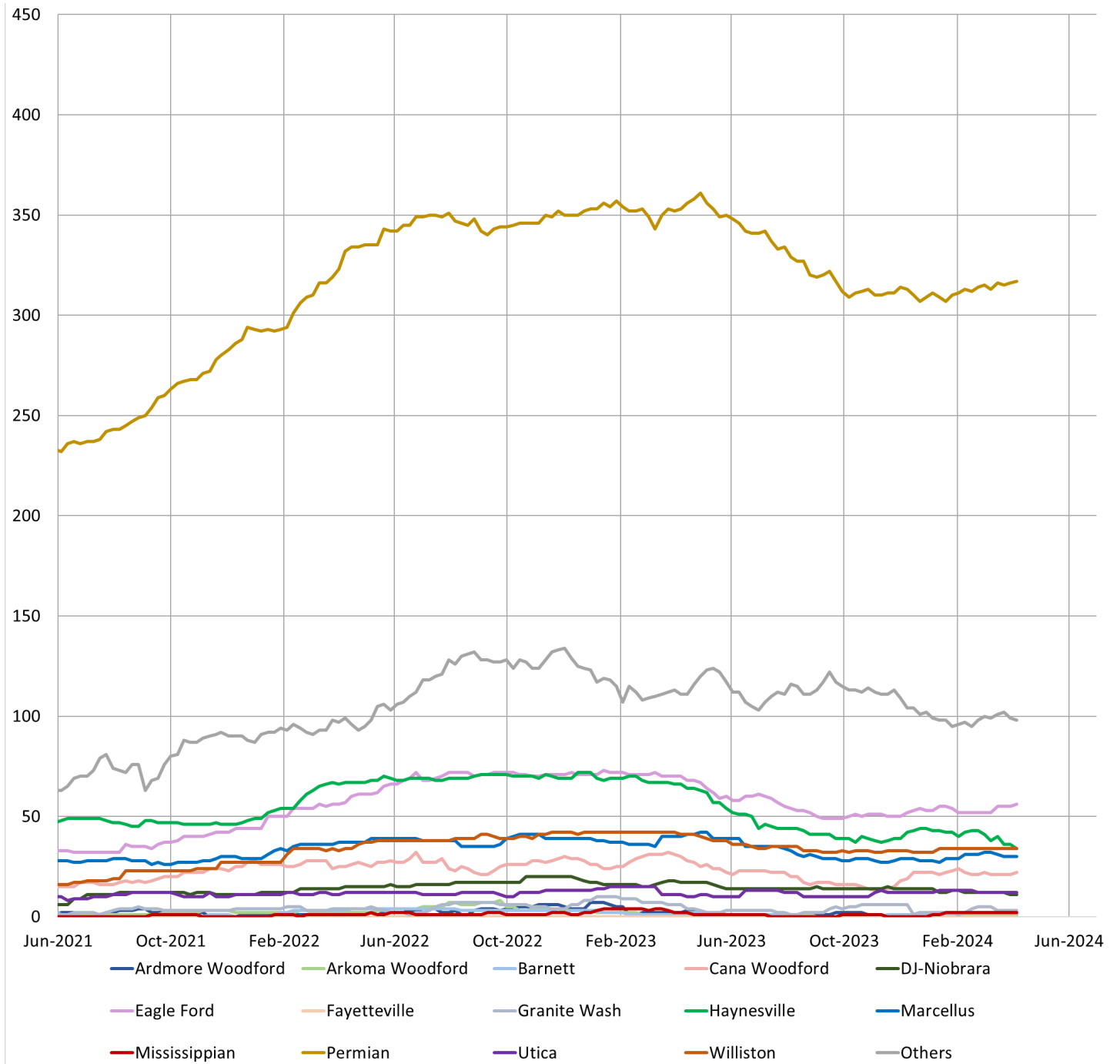
## DEAL VALUE BY US REGION (BY YEAR)



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



## RIG ACTIVITY BY US REGION

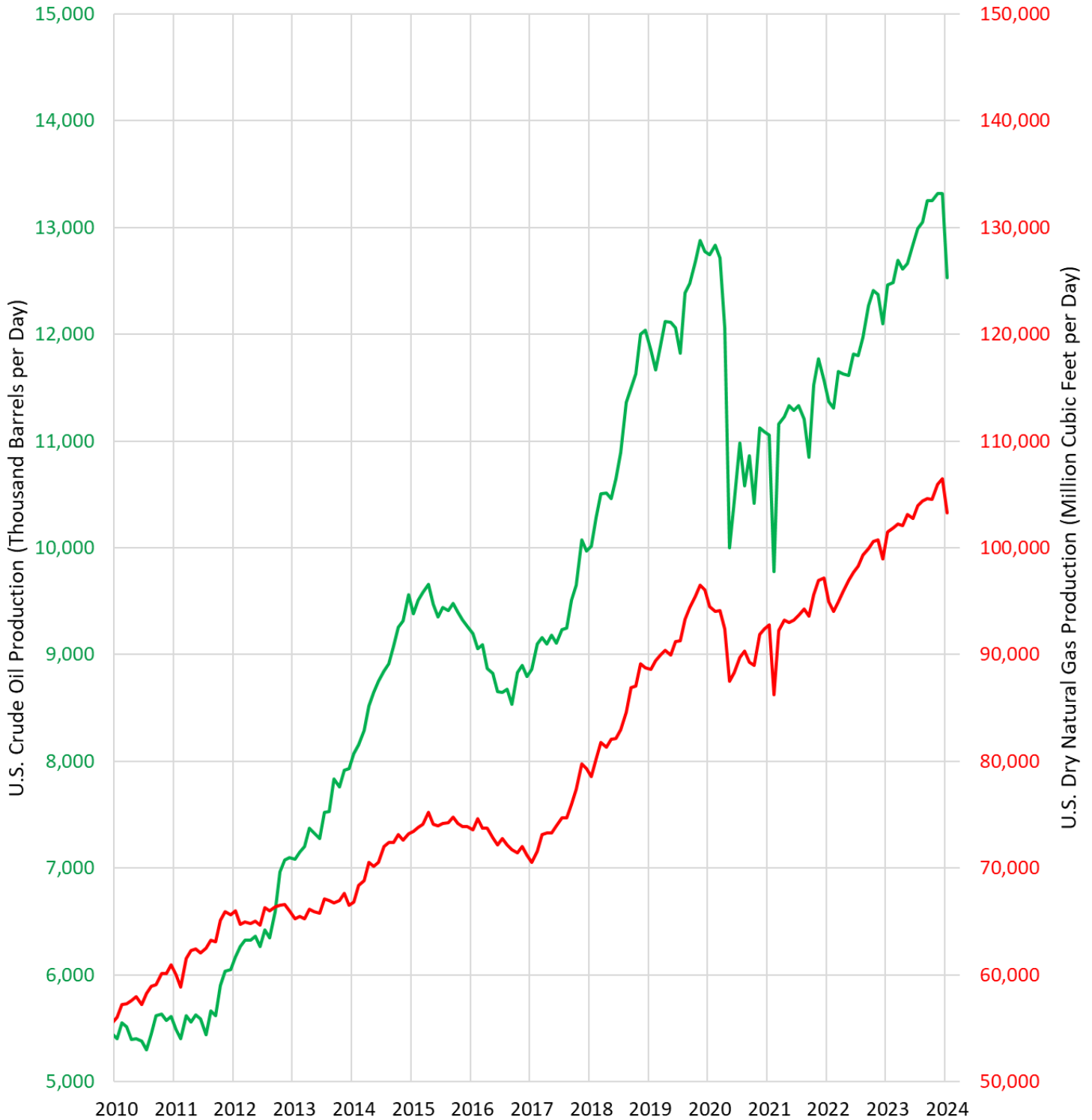


\*Source—Baker Hughes Weekly Rig Counts





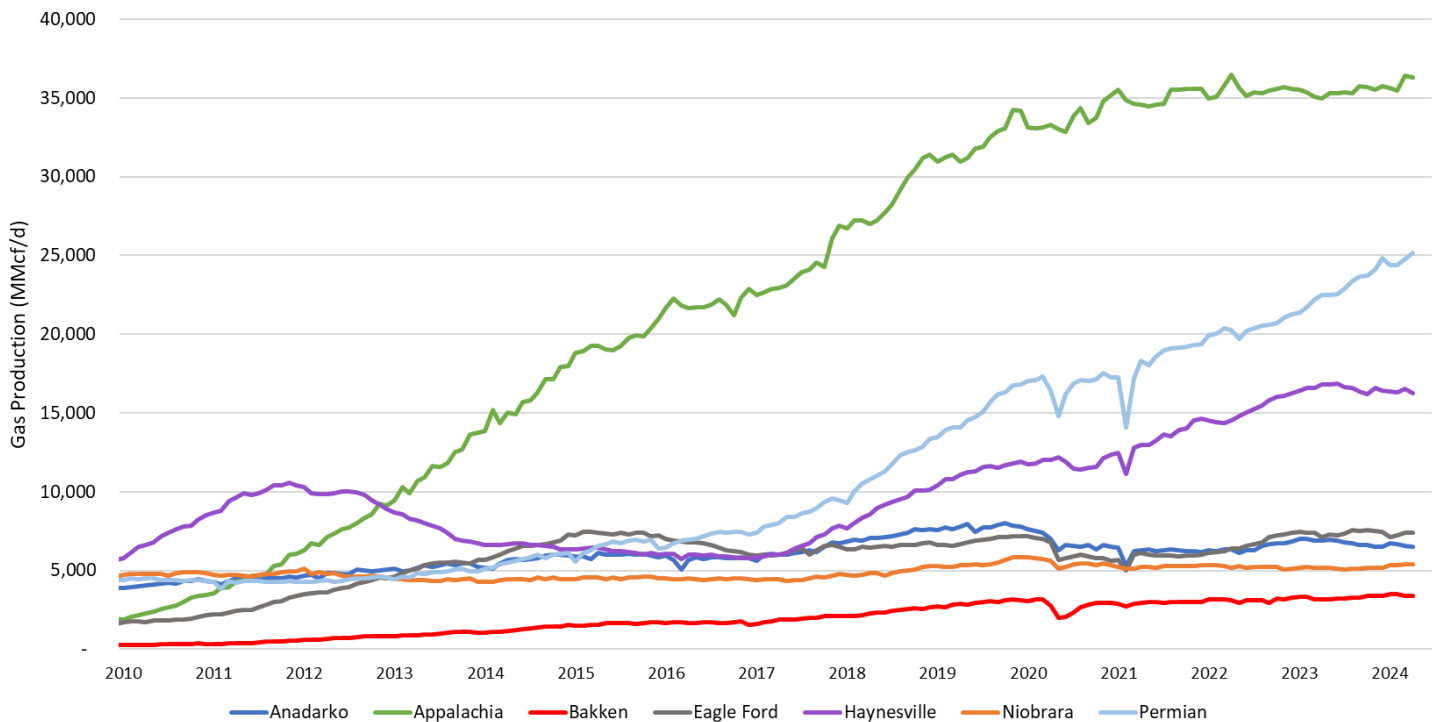
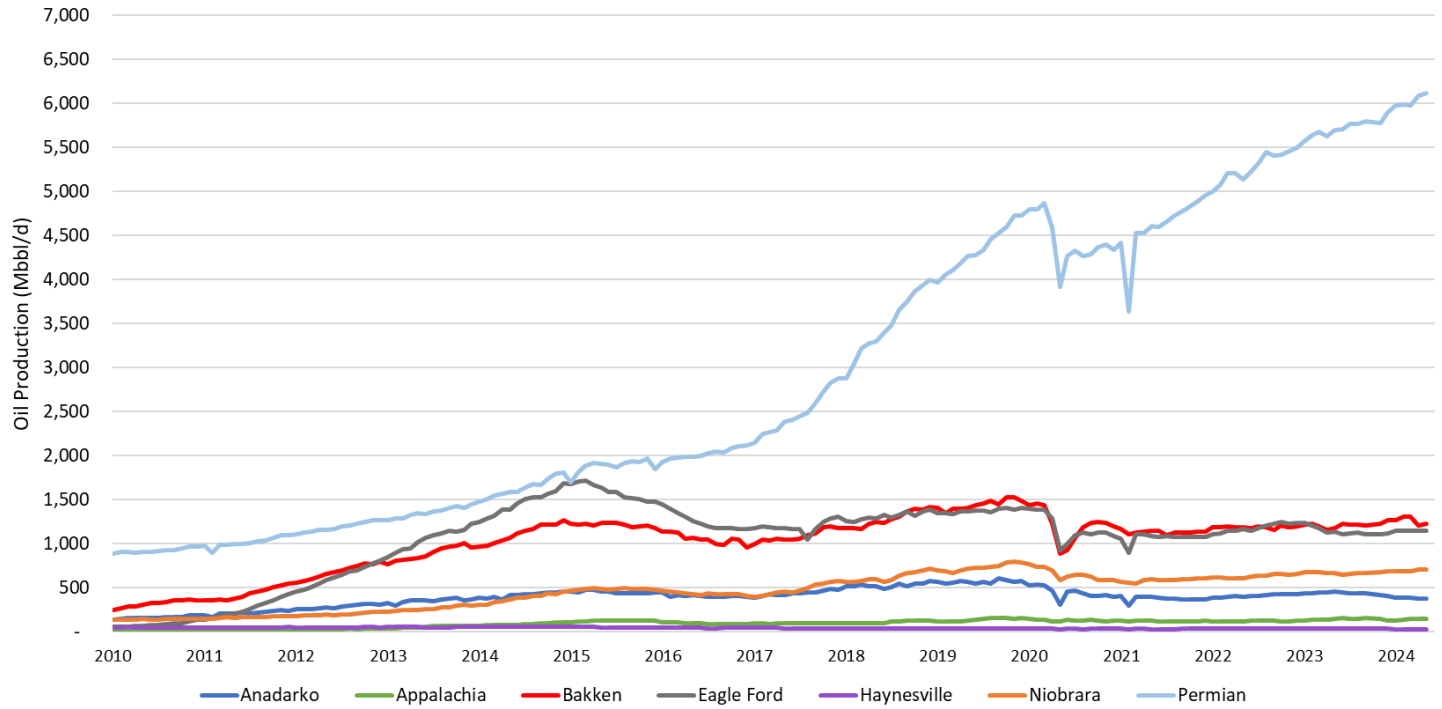
**US DAILY CRUDE (MMbbl) & DRY NATURAL GAS PRODUCTION (MMcf)**



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



## HISTORICAL PRODUCTION OF SELECTED US SHALE REGIONS



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



## **UPCOMING EVENTS**

### **April 2024**

<a href="#"><u>HBA &amp; HPF Spring Social</u></a>	April 11	Houston, TX
<a href="#"><u>World Oilman's Mineral &amp; Royalty Conference (MARC)</u></a>	April 15-16	Houston, TX
<a href="#"><u>SPE Business Development - Appalachia in Focus</u></a>	April 17	Houston, TX
<a href="#"><u>Quorum Qnections Conference</u></a>	April 23-25	Las Vegas, NV
<a href="#"><u>HPF/SPE Fifth Annual Crawfish Boil</u></a>	April 24	Houston, TX
<a href="#"><u>World Oilman's Tennis Tournament (WOTT)</u></a>	April 24-28	Houston, TX
<a href="#"><u>ADAM Energy Golf Tournament</u></a>	April 29	Frisco, TX

### **May 2024**

<a href="#"><u>Alteryx Inspire 24</u></a>	May 13-16	Las Vegas, NV
<a href="#"><u>North American Petroleum Accounting Conference</u></a>	May 16-17	Dallas, TX
<a href="#"><u>ASA Energy Valuation Conference</u></a>	May 16	Houston, TX
<a href="#"><u>Qnections 24   Barcelona</u></a>	May 28-30	Barcelona, Spain
<a href="#"><u>Texas Dreamin' 2024</u></a>	May 30-31	Austin, TX

### **June 2024**

<a href="#"><u>OKC Energy Industry Networking Event</u></a>	June 3	Oklahoma City, OK
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\*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 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.

