



Weekly E&P Update

October 17, 2023

Vol. 41

Oil Price Outlook

By Steve Hendrickson
President of Ralph E. Davis Associates



In our "Industry Headlines" this week are a couple of articles that argue oil prices may be moving in two different directions. Here are a few of my observations and thoughts on the topic.

Supply - On the supply side, we see some factors that suggest increasingly tight crude oil supplies. For example, in the US (which is the world's largest producer), the rig count has been declining since the beginning of the year, and the oil-directed rig count is about 20% lower than it was a year ago: even the Permian Basin has seen an approximate 15% decline in active rigs. Nevertheless, this reduction in activity appears to be offset by longer lateral lengths and bigger frac jobs, and oil production continues to increase. Sanctions will likely continue to force Russia to export to those countries that aren't part of the sanctions regime (China and India, primarily), which will make crude slightly cheaper for them but shouldn't affect the rest of the market. Also on the plus side is [Saudi Arabia's recent decision](#) to reduce production by 1 million barrels per day.

Looking further out, the consolidation of shale operators raises the prospect of slower development than would be experienced if the assets remained fragmented, but it's hard to bank on that. In my experience, acquirers must often accelerate development to monetize the undeveloped assets they often paid a premium for. The largest companies may have a low enough cost of capital that they could pay a premium price and still make the acquisition work with a slower development pace. Still, I would also expect them to be in a better position to achieve economies of scale and high-grade their prospects to achieve their production targets.

Demand - On the demand side, the big hope for increased global demand was the resumption of imports by China after they ended their "zero-Covid" policy. However, the expectation that the reopening of their economy would increase their appetite for crude oil to pre-pandemic levels was only partially true. While they did increase imports, they only did so to take advantage of low prices and build their stockpiles in anticipation of increased economic activity later this year and in 2024. They are now facing a worsening economic situation with severe distress in their real estate market. Expectations for GDP growth are falling, their population is declining, and there are real questions about [whether they will ever achieve a "western" standard](#) of consumption and wealth.

On balance, I think there's a bit of downward pressure on oil prices in the medium term due to increasing supply (partially offset by OPEC cuts) and reduced demand, which could both become greater if Venezuela increases production in the wake of an agreement with the US or if high-interest rates nudge the economy toward recession.

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](#)

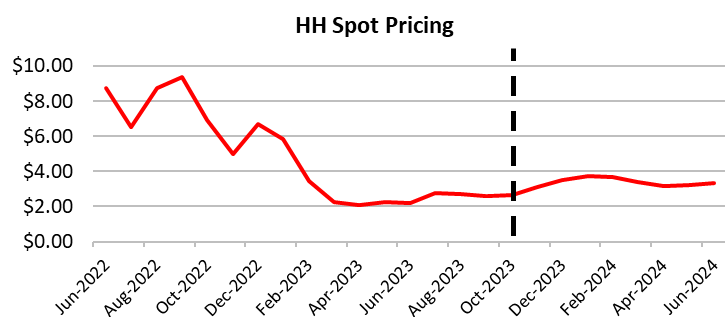
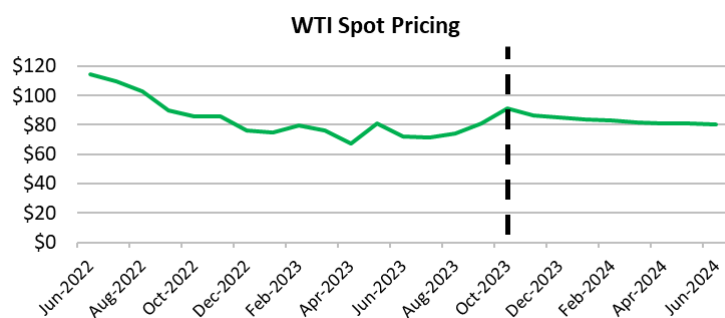
[Historical Production of US Shale Regions](#)

[Upcoming Events](#)

[About Us/Key Contacts](#)



NYMEX FUTURE PRICING



MONDAY'S MARKET CLOSE

NYMEX WTI CRUDE OIL FUTURES as of October 16, 2023 Close (\$/bbl)

Period	Current	WoW Change	Last Week	1 Yr Ago
2023	\$85.96	\$0.47	\$85.49	\$78.24
2024	\$80.18	\$1.86	\$78.32	\$71.05
2025	\$75.04	\$2.48	\$72.56	\$66.54
2026	\$71.42	\$2.68	\$68.74	\$63.32
2027	\$68.60	\$2.84	\$65.76	\$60.71

NYMEX HH NATURAL GAS FUTURES as of October 16, 2023 Close (\$/MMBtu)

Period	Current	WoW Change	Last Week	1 Yr Ago
2023	\$3.29	(\$0.21)	\$3.50	\$5.60
2024	\$3.55	(\$0.04)	\$3.59	\$4.76
2025	\$4.06	\$0.02	\$4.04	\$4.54
2026	\$4.06	\$0.02	\$4.04	\$4.47
2027	\$3.99	\$0.04	\$3.95	\$4.39

INDUSTRY METRICS—QUICK SNAPSHOT

	Current	Last Week	WoW Change	%Change
Crude Oil Near-Month Price (\$/bbl)	\$87.06	\$86.43	\$0.63	0.7%
Natural Gas Near-Month Price (\$/MMBtu)	\$3.12	\$3.37	(\$0.25)	(7%)
Weekly Upstream-Deal Transaction Value (\$MM)	\$64,500.00	\$2,113.63	\$62,386.37	2,952%
Weekly Number of Upstream-Deal Transactions	3	2	1	50%
Current Total US Rig Count	622	619	3	0.5%
US Field Crude Oil Production (MMbbl/day)	13.2	12.9	0.3	2%
US Field Dry Natural Gas Production (Bcf/day)	106.9	106.0	0.9	0.8%
Commercial Crude Oil Stocks-Excluding SPR (MMbbl)	424	414	10	3%
Natural Gas Stocks-Working Gas Underground Storage (Bcf)	3,529	3,445	84	2%
Total Drilled But Uncompleted Wells (DUC-Last Month)	4,749	4,749	0	-

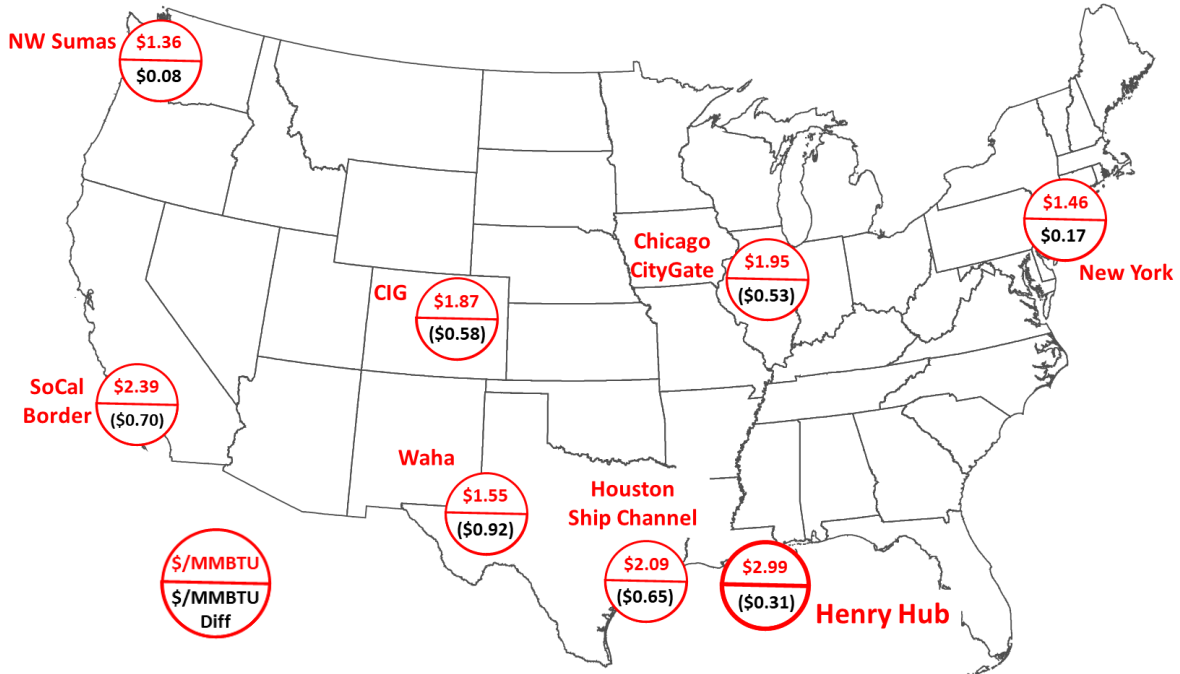
*Source—Energy Information Administration, United States (EIA)

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

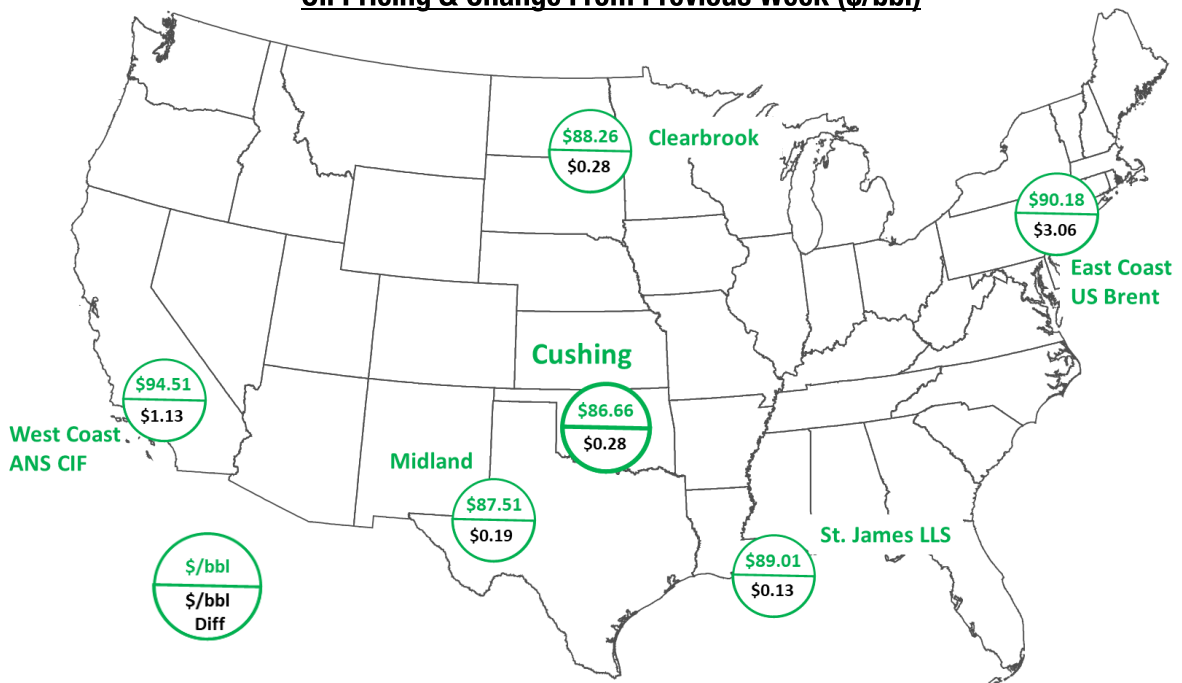


US COMMODITY PRICES CONTINUED

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



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



*Source—Bloomberg LP



SELECTED INDUSTRY HEADLINES

OPEC's Greatest Opponent Is Disappearing, Shale CEO Warns

The independent shale drillers that undermined OPEC's decades-long grip on global oil markets soon will be a thing of the past as international giants swallow them up, according to one of the industry's founding members.

U.S. Crude Oil Production Surges to Record High in Q3 2023, EIA Reports (LOGIN CREDENTIALS REQUIRED)

U.S. crude oil production surged to a record during the third quarter and is expected to climb further above 13 MMbpd as the nation increasingly plays a vital role in supplying global markets.

U.S. Oil Drillers to Pivot From Shale to Offshore Projects, EIA Reports

The latest evidence of a pivot by oil operators from U.S. shale to offshore appeared recently as the U.S. Energy Information Administration warned that a drop in onshore production is accelerating into November.

Oil Falls Below \$90 a Barrel on Reports of US-Venezuela Deal

Oil futures fell on reports the U.S. could soon reach a deal to ease sanctions on Venezuela if a presidential election date is set in that country, while traders see the Israel-Hamas conflict not affecting crude supplies in the short term.

Oil Surges on US Sanctions, Tight Stockpile Forecasts

Oil prices leapt more than \$3 on Friday, with Brent on track for its highest weekly gain since April, after the U.S. tightened its sanctions program against Russian crude exports, raising supply concerns in an already tight market.

Oil Prices Rally As The U.S. Enforces Sanctions On Russian Exports

Oil prices jumped by nearly 4% early on Friday after the United States took a tougher stance on the Western sanctions against Russia, adding to growing concerns about supply amid fears of escalation in the Hamas-Israel war.

New Golden Era for US Natural Gas Storage Looms as Demand, Rates Rise

Growing intermittent demand for natural gas along the US Gulf Coast is fueling something of a renaissance in the salt dome storage market as LNG exporters, power generators and pipeline operators bid up prices for the South Central region's most flexible storage injection and withdrawal capacity.

Natural Gas Futures Fail to Sustain Bullish Momentum Early Despite Another Tight EIA Print (LOGIN CREDENTIALS REQUIRED)

Natural gas futures continued to retreat early Friday as a generally supportive result from the latest government inventory data was failing to sustain bullish momentum from the week-earlier period.

New York Refuses To Give Big Oil More Money For Offshore Wind Projects

The New York state authorities have rejected a request by Orsted, BP, and Equinor for raising the price of electricity in future power purchase contracts featuring offshore wind energy.

Biden Announces Regional Hydrogen Hubs in Hopes of Sparking a Clean-Energy Revolution

President Joe Biden on Friday announced the locations of seven regional hubs to manufacture hydrogen – a fuel cleaner than fossil fuels like oil, gas and coal – but one which can be derived from renewable energy, nuclear power or planet-warming methane gas.

Having Committed to Carbon Capture, Industry Grapples with Complications Outside the Fence Line

After the initial flurry of projects by both producers and midstream operators in carbon capture, utilization and sequestration (CCUS), and then the flush of energy transition incentives in the federal Inflation Reduction Act, the industry is at an inflection point.



SELECTED RECENT TRANSACTIONS

Exxon Mobil Agrees to Buy Pioneer Natural Resources for Nearly \$60 Billion in All-Stock Merger

Exxon Mobil said Wednesday it agreed to buy shale rival Pioneer Natural Resources for \$59.5 billion in an all-stock deal, or \$253 per share.

Kimmeridge Signs Deals for Eagle Ford Assets, Gas Transport

Kimmeridge Texas Gas (KTG), an affiliate of investment firm Kimmeridge, has signed a definitive agreement to acquire certain upstream assets from an undisclosed private seller in a bid to expand its footprint in the Eagle Ford shale play.

Vitesse Energy Acquires \$50 Million in Oil, Gas Interests in North Dakota's Williston Basin

Vitesse Energy has acquired additional oil and gas interests in the Williston basin of North Dakota that will result in approximately \$50 million of acquisition and related development capital expenditures, primarily in the third and fourth quarters of 2023, the company said on Oct. 9.

Civitas Resources to Buy Permian Assets For About \$2.1 bln

Civitas Resources will buy acreage in the oil-rich Permian Basin from global energy trader Vitol's U.S. upstream venture for about \$2.1 billion in cash and stock, the U.S. oil and gas producer said recently.

1979 Royalties, LP Announces Northern Midland Basin Minerals & Royalty Acquisition From Peacemaker Royalties

1979 Royalties, LP a subsidiary of Endeavor Energy Resources, announced it has closed the acquisition of oil & gas mineral and royalty interests from Peacemaker Royalties, a portfolio company of EnCap Investments, in the Midland Basin for \$61 million in cash.

W&T Offshore Acquires Eight Oil, Gas Producing Assets in Gulf of Mexico

W&T Offshore, Inc. has completed the acquisition of working interests in eight shallow water oil and gas producing assets in the central and eastern shelf region of the Gulf of Mexico from an undisclosed private seller.

Santos to Divest Half of Working Interest in 148 Leases at Alaska North Slope

Australian oil and gas major Santos said recently it would divest half of its working interest in 148 exploration leases in the Langiappe area on the Alaska North Slope in a farm-down agreement with two U.S.-based companies.

Momentum Minerals Operating II, LP Closes Permian Basin Mineral and Royalty Acquisition

Momentum Minerals has closed the acquisition of a Permian Basin mineral and royalty package from Post Oak Crown Minerals, LLC and Post Oak Legacy Assets I, LLC, both of which are affiliates of Post Oak Energy Capital, LP

Vital Energy acquires Permian Basin Assets from Henry, Maple and Tall City

Vital Energy has signed agreements valued at about \$1.17 billion to expand its acreage in the Permian Basin, where dealmaking is gathering pace as drillers tap the largest U.S. oil patch to quickly replenish their depleting reserves.

Magnolia Oil & Gas Announces Bolt-On Asset Acquisition in Giddings

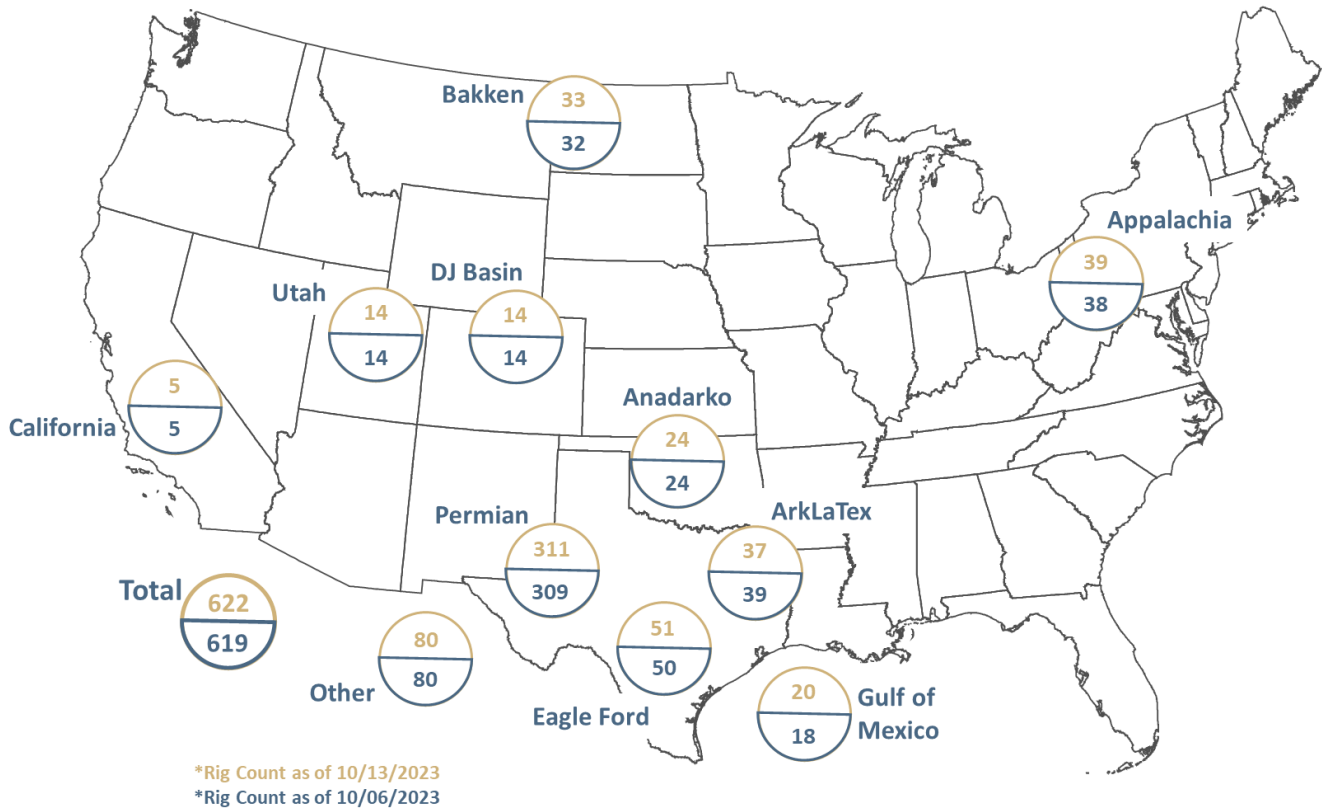
Magnolia Oil & Gas Corporation announced recently that the Company has entered into a definitive purchase agreement to acquire certain oil and gas producing properties including leasehold and mineral interests in Giddings for \$300 million, subject to customary purchase price adjustments.

Viper Energy Partners LP, A Subsidiary Of Diamondback Energy, Inc., Announces Acquisition

Viper Energy Partners LP, recently announced it has entered into a definitive purchase and sale agreement to acquire certain mineral and royalty interests from affiliates of Warwick Capital Partners and GRP Energy Capital in exchange for approximately 9.02 million Viper common units and \$750 million of cash, subject to customary adjustments.



RIG ACTIVITY BY US REGION

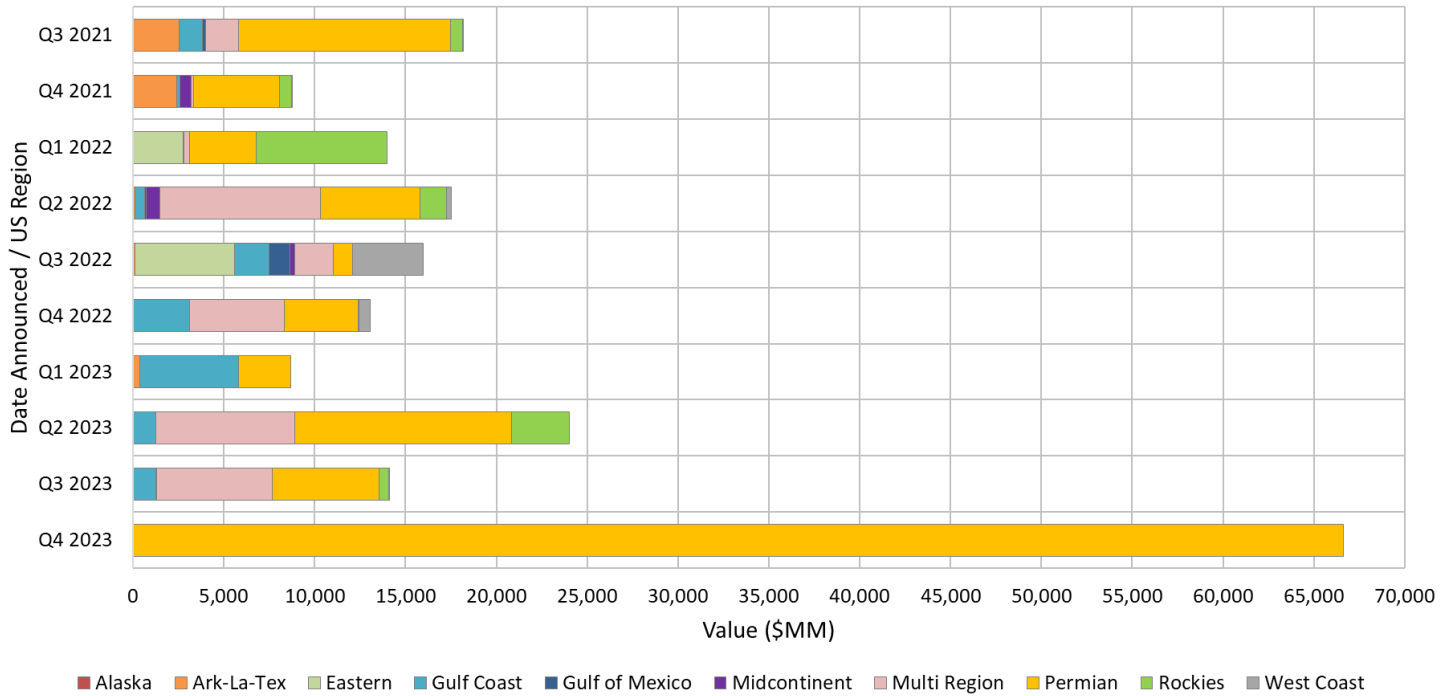


	Week Ending 10/13/2023			Week Ending 10/06/2023		Week Ending 10/14/2022
U.S. Rig Breakouts	Count	+/-	Count	+/-	Count	
Oil	501	4	497	(109)	610	
Gas	117	(1)	118	(40)	157	
Not Specified	4	0	4	2	2	
Directional	51	(2)	53	10	41	
Horizontal	554	1	553	(151)	705	
Vertical	17	4	13	(6)	23	
Land (Inc Others)	598	2	596	(154)	752	
Inland Waters	2	(1)	3	(1)	3	
Offshore	22	2	20	8	14	
US Total	622	3	619	(147)	769	

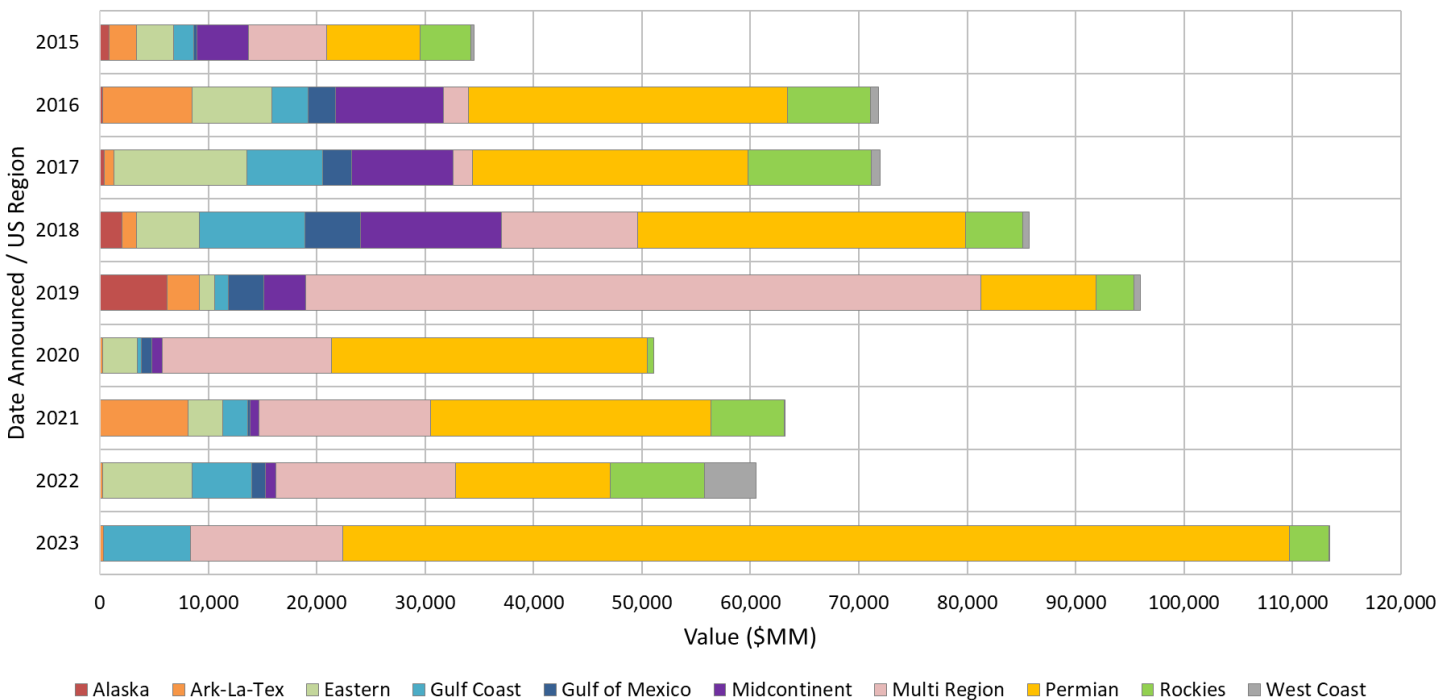
*Source—Baker Hughes Weekly Rig Counts



DEAL VALUE BY US REGION (BY QUARTER)



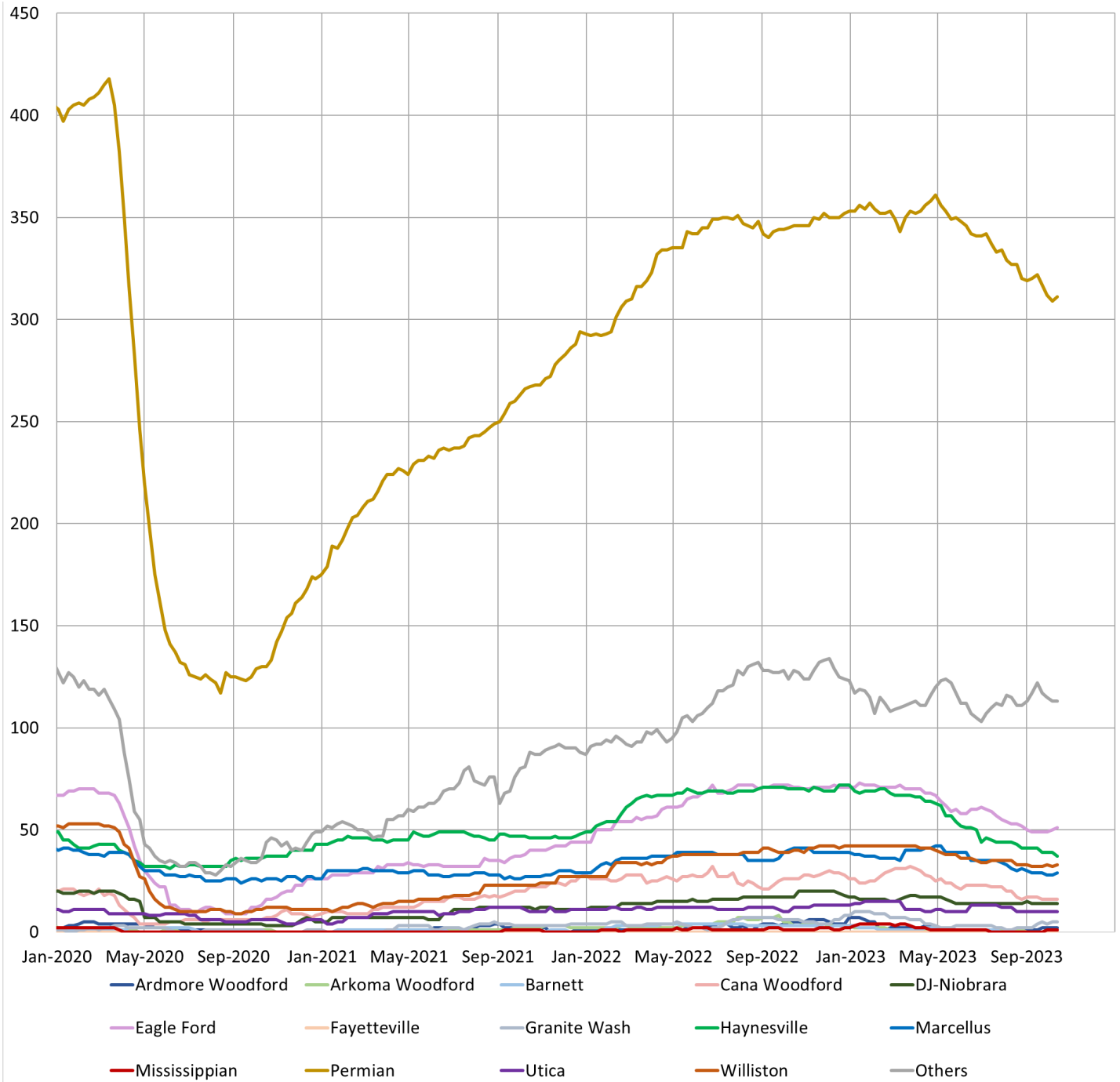
DEAL VALUE BY US REGION (BY YEAR)



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



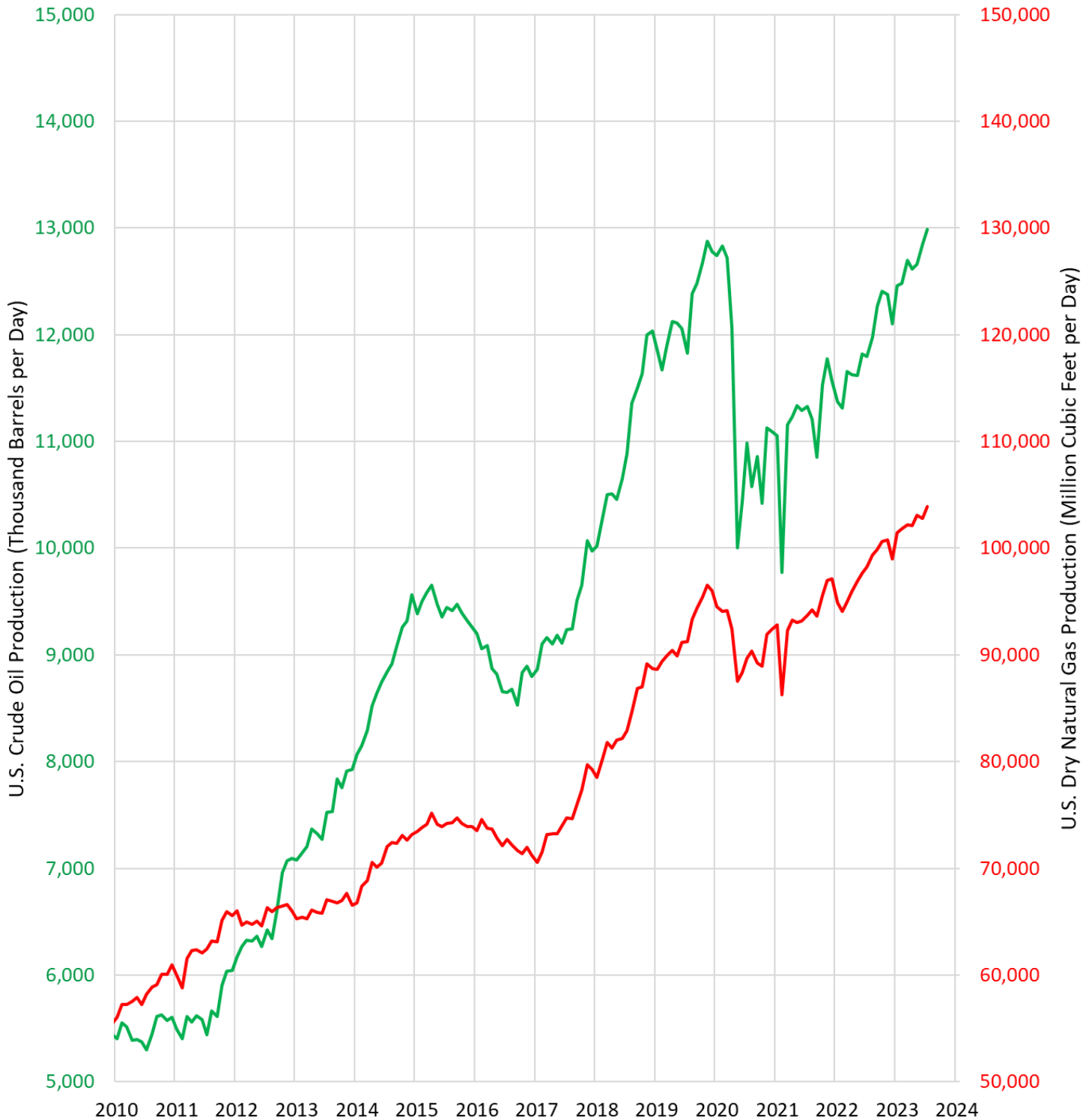
RIG ACTIVITY BY US REGION



*Source—Baker Hughes Weekly Rig Counts



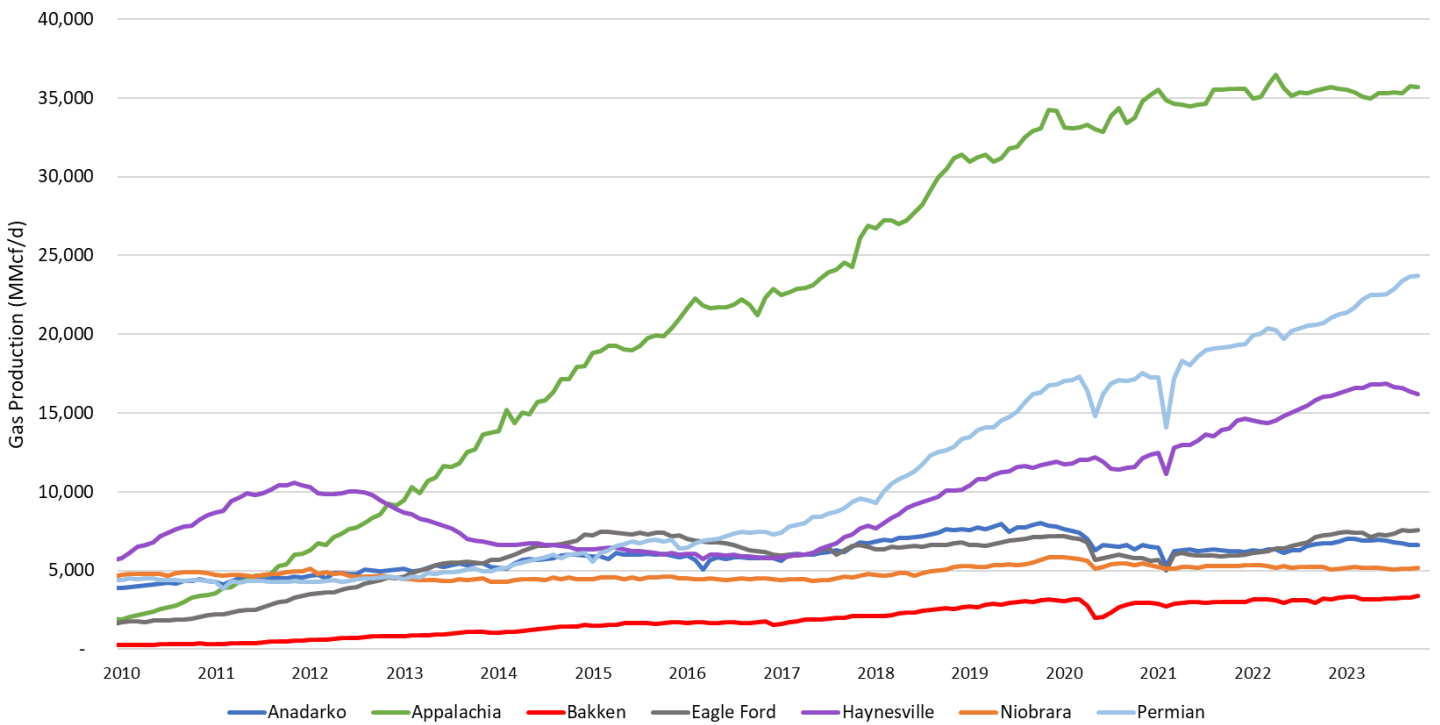
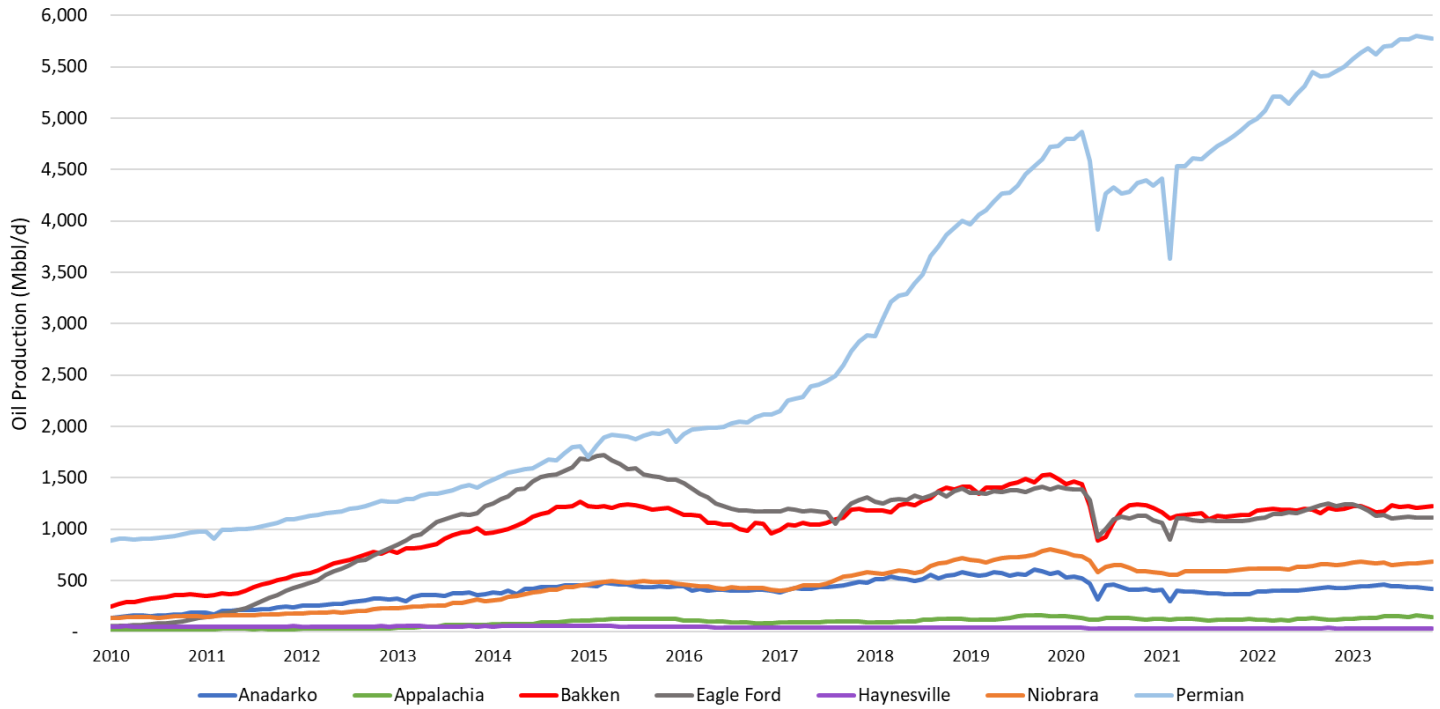
US DAILY CRUDE (MMbbl) & DRY NATURAL GAS PRODUCTION (MMcf)



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



HISTORICAL PRODUCTION OF SELECTED US SHALE REGIONS



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



UPCOMING EVENTS

October 2023

[Tulsa Octoberfest](#)

October 19-22

Tulsa, OK

[Small Steps Golf Classic](#)

October 30

Houston, TX

[Digital Wildcatters—FUZE](#)

October 30-31

Houston, TX

November 2023

[IPAA Annual Meeting](#)

November 6-8

San Antonio, TX

[AICPA Oil & Gas Conference](#)

November 8-10

Las Vegas, NV

[Accounting and Financial Reporting Conference](#)

November 16

Tulsa, OK

[OSU Oil and Gas Accounting Conference](#)

November 17

Tulsa, OK

[Boys & Girls Club 8th Annual Sporting Clays Tournament](#)

November 17

Houston, TX

[IPAA Texas Hold'Em Tournament](#)

November 30

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.

