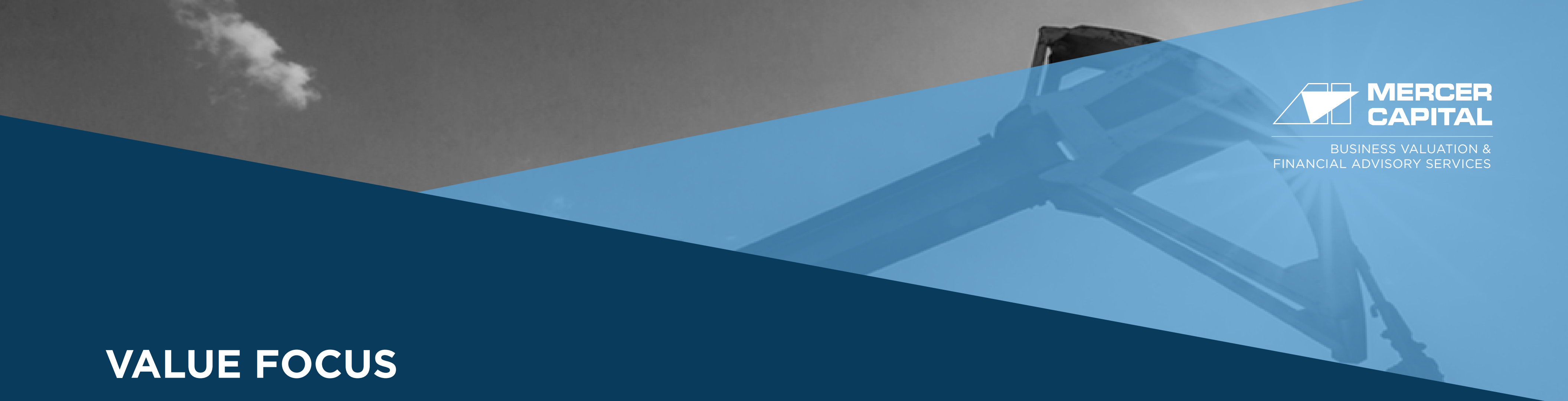


BUSINESS VALUATION & FINANCIAL ADVISORY SERVICES

VALUE FOCUS

Exploration & Production

First Quarter 2024 // Region Focus: Eagle Ford

EXECUTIVE SUMMARY

Despite significant rig-count declines, Eagle Ford production declined only modestly over the twelve months ended March 2024, aided by a significant number of DUCs going into production. Reasonably steady commodity prices helped offset the basin's production decline, allowing the region's comp group to post favorable price increases over the review period.

Although M&A activity in the Eagle Ford plummeted over the last twelve months with only two deals announced, Dani Von Bassenheim, with Enverus Intelligence Research, notes that the Eagle Ford shale is one of a few areas that can expect increased M&A activity in 2024 as the list of attractive targets in the Permian Basin has dwindled. Bassenheim further noted that "The core of the Eagle Ford is the gift that keeps giving for operators with the best acreage." Despite denser development, recoveries remain high in core areas.

Oil and Gas Industry Services

Mercer Capital provides business valuation and financial advisory services to companies in the energy industry.

Services Provided

- Valuation of oil & gas companies
- Transaction advisory for acquisitions and divestitures
- Valuations for purchase accounting and impairment testing
- Fairness and solvency opinions
- Litigation support for economic damages and valuation and shareholder disputes

Industry Segments

Mercer Capital serves the following industry segments:

- Exploration & Production
- Oil Field Services
- Midstream Operations
- Alternative Energy
- Downstream
- Retail

Contact Us

Bryce Erickson, ASA, MRICS
214.468.8400
ericksonb@mercercapital.com
Dallas Office

Don Erickson, ASA
214.468.8400
ericksond@mercercapital.com
Dallas Office

J. David Smith, ASA, CFA
713.239.1005
smithd@mercercapital.com
Houston Office

Andrew B. Frew, ASA, ABV
832.966.0345
frewa@mercercapital.com
Houston Office

Sebastian S. Elzein
214.468.8400
elzeins@mercercapital.com
Dallas Office

Thomas G. Kasierski
281.378.1510
kasierskit@mercercapital.com
Houston Office

Derek P. Smith
932.966.0307
derek.smith@mercercapital.com
Houston Office

In This Issue

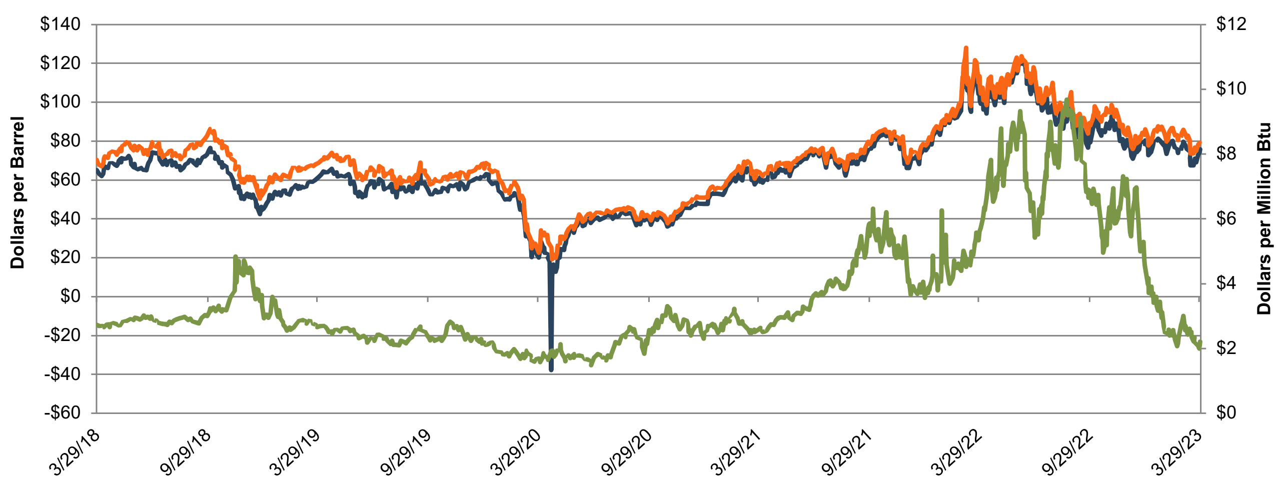
Learn More about Mercer Capital & our Oil and Gas Industry Services at **mer.cr/oilgas**

Oil and Gas Commodity Prices

As represented by the WTI and Brent indices, oil prices rose 21% and 17%, respectively, over the review period (twelve-month period ending March 20, 2024), albeit with several directional changes over the year. WTI began the period at $67.82, with a period low of $67.29 in June and a high of $93.68 in September. Brent naturally followed a similar path, beginning at $73.54, with a review period low of $71.82 in June and a high of $94.36 in September. Both indices saw early pricing increases through mid-April, reversed direction to return to March levels by early May, followed by a steady climb to review period highs in late September. During the latter half of the period, the indices initially declined through mid-December before a general increase through March 2024.

Natural gas prices, represented by the Henry Hub index, showed their typical greater volatility. After an early review period dip from $2.33 to $2.01 in mid-April, the index generally rose (albeit with multiple directional changes along the way) through early October to $2.84 before a spike to $3.88 in mid-October. During the latter half of the review period, the Henry Hub generally fell to end the first quarter at $1.76. Increased demand and stagnant production combined to push pricing upward through the 2023 summer months. However, late review period production increases and lower consumption in the residential and commercial sectors resulted in 11% higher inventories relative to the March 2023 level, pushing the index below its review period starting point for almost the entirety of 1Q2024.

Crude Oil and Natural Gas Prices



Source: Bloomberg

Macro Update

Oil & Gas Roadblocks: Prices, Production, And People Holding Sway

Reprint of Bryce Erickson's
***Forbes*.com column.**
Originally published April 1, 2024

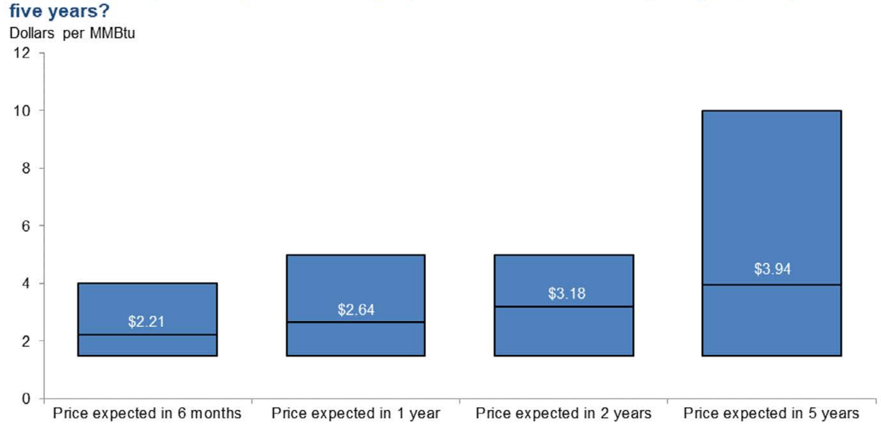
There are always going to be barriers to success in an industry. Barriers to entry, barriers to growth, barriers to profitability and barriers to progress can lurk to name a few. The upstream industry has its share. For gas, its own over supply and low prices are an issue. For oil, capital constraints are reining in investment. Both commodities also thirst for quality labor to fuel growth and longer-term underlying optimism, but that workforce does not exist right now and may take a while to develop.

Natural Gas Prices Low – But For How Much Longer?

Earlier this year, Mercer Capital's Bryce Erickson **wrote** that natural gas appears to be oversupplied. That sentiment has not changed, but what has changed is a view towards optimism – maybe not this year, but the industry continues to plan investment in LNG and key industry players believe it will be the fastest growing energy source to 2050. CERAWeek by S&P Global had several industry players remaining bullish on investing in this space. Even Saudi Aramco continues to eye **funding U.S. LNG projects.** This optimism comes amid the **"pause"** on approvals of LNG exports. For example, in March Jerry Jones doubled down on his investment in Comstock Resources as he bought $100 million of **additional stock** in the Haynesville producer.

The first quarter Fed Energy Survey came out this week and it posits an expectation for higher prices by the end of this year, partially as a result of the LNG export approval pause:

What do you expect Henry Hub natural gas prices to be in six months, one year, two years and five years?



NOTE: Executives from 128 oil and gas firms answered this question during the survey collection period, March 13–21, 2024. For reference, Henry Hub spot prices averaged $1.44 per MMBtu during the period. The middle line denotes the mean, and the bottom and top of the boxes denote the minimum and maximum responses.
SOURCE: Federal Reserve Bank of Dallas.

Macro Update

Oil & Gas Roadblocks: Prices, Production, And People Holding Sway

Reprint of Bryce Erickson's ***Forbes*.com column.**
Originally published April 1, 2024

(CONT.)

However, this also comes as one commenter in the survey mentioning that natural gas needs to be at $4.00 to attract exploration attention from their firm. (That's not true for all firms though.)

Oil Prices Rising – And May Keep Going

Speaking of breakeven prices, these are rising according to the Fed Energy Survey and as U.S. shale locations continue to drain, liquids supply could also come into a structural shortage position, with additional influence by OPEC restraint and limited investment for infrastructure and finding new reserves. Take for example, not only Jerry Jones' equity investment, but Matador Resources is working on a **stock offering** to fund acquisitions. This demonstrates a continuing trend that equity raises, as opposed to debt, are being more frequently seen. Debt sources remain relatively reticent to loan money to the upstream industry. This is harder for everyone, but particularly smaller firms who have higher breakeven prices to contend with ($67 per barrel for small firms vs. $58 for larger firms – as defined by the Fed Survey).

As a result of these trends, consolidation remains in focus for the industry as well. There was over $200 billion in merger and acquisition activity in 2023 and it continues in 2024. Diamondback bought Endeavor for $26 billion in the first quarter of the year, and Kimmeridge **remains in a battle** to buy Silverbow, which incidentally believes it is undervalued. Part of the overarching rationale for consolidation is for companies to accumulate high quality acreage with lower breakeven costs for future drilling. However, this may not be easy. Acreage exists, but quality acreage with low breakeven costs is not so easy to find..

Industry Classifieds: Capital And Construction Workers Wanted

Underscoring all this optimism is the need for more quality and talented people to execute on future growth. There has been a growing cry for more people to handle infrastructure and growth needs for the industry. The American Geoscience Institute **estimates** a shortage of 130,000 geoscientists by 2029. There are also construction needs on the Gulf Coast as well to push these LNG projects forward, yet there remains a perception issue with younger workers who do not see the attractiveness to their careers. This could pose a serious impediment if the people are not available, even if the prospects and projects are. That said, some believe that efficiency will take extra years as training new people in the field will take additional unwanted time and expense. Perhaps some of this will resolve after the election. According to the Fed Survey, many companies are watching to see what will happen and are in flux until then. Then again, some others believe it doesn't matter who gets elected president in November. Can markets wait to move until then?

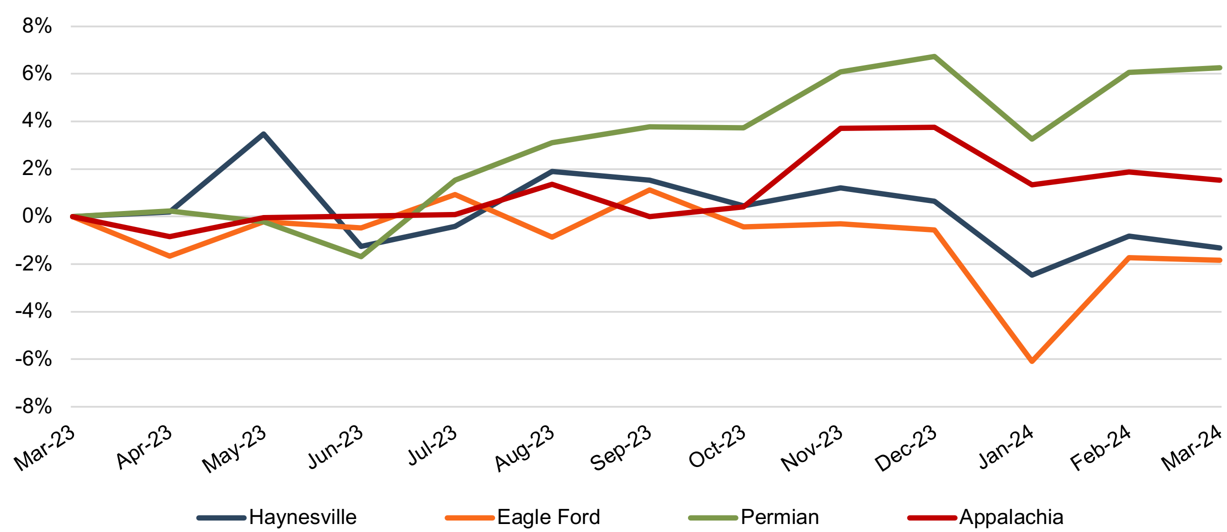
Eagle Ford

Production and Activity Levels

The economics of oil and gas production varies by region. Mercer Capital focuses on trends in the Eagle Ford, Permian, Haynesville, and Appalachia plays. The cost of producing oil and gas depends on the geological makeup of the reserve, depth of reserve, and cost to transport the raw crude to market. We can observe different costs in different regions depending on these factors. This quarter we take a closer look at the Eagle Ford.

Eagle Ford production (on a barrels of oil equivalent, or "boe" basis) decreased nearly 2% year-over-year through March. Haynesville joined the Eagle Ford in posting year-over-year (YoY) production declines, albeit with a slightly smaller decline of just over 1%. The Appalachian basin (the Marcellus and Utica plays) posted a modest 2% YoY increase, while the Permian basin achieved a more robust 6% increase. Production levels remained largely unchanged from March 2023 levels for the Eagle Ford, Permian, and Appalachian through July. Haynesville showed an unexpected jump in production in May (unexpected in light of operators' first-quarter indications of expected fracking activity reductions). However, review period production changes fell back in line with the other basins the following month. Beginning in July, Permian production steadily rose throughout the remaining review period. Eagle Ford, Haynesville, and Appalachian production generally continued along March 2023 levels through October.

1-Year Change in Production



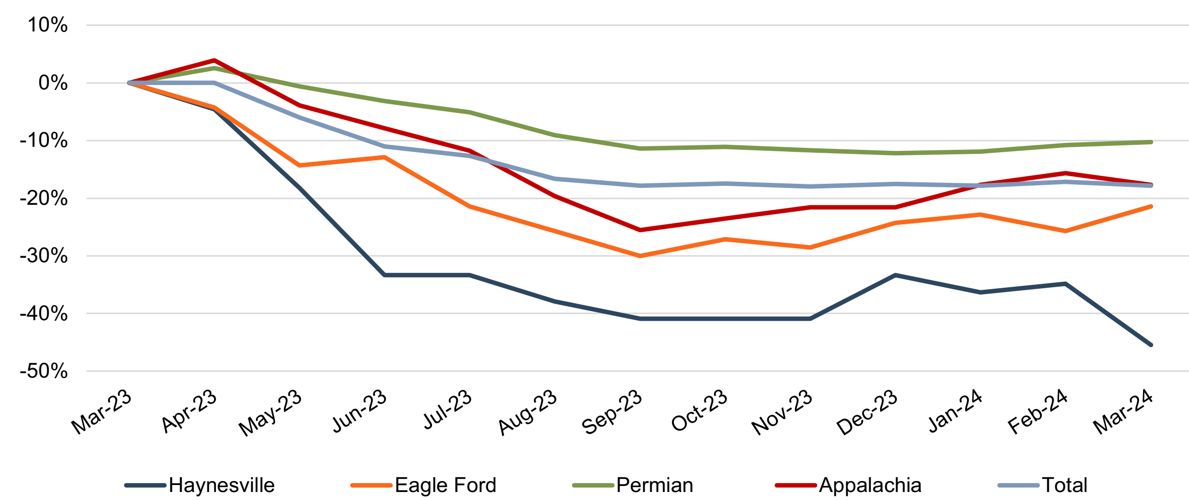
Source: Energy Information Administration

Production and Activity Levels (cont.)

Beginning in November, Appalachian production rose to 1% - 4% above the March 2023 level, while Eagle Ford and Haynesville production held steady near March 2023 levels through December. Production dipped in January across all the basins due to unseasonably cold weather but bounced back in February and March to end the quarter with only marginal declines. In volume, the Eagle Ford production began the review period at 2,428 mboe/d and generally declined throughout the twelve-month period to end at 2,383 mboe/d in March 2023.

In light of production growth for the Permian and Appalachia and only modest production declines for the Eagle Ford and Haynesville basins, it might seem counterintuitive that rig counts turned markedly downward during the first half of the twelve-month review period. YoY rig counts were down in all four basins — with a nearly 18% overall decline. The Eagle Ford posted a YoY decline of 21%, exceeded only by the Haynesville's 46% plunge. The Permian showed the smallest decline at 10%, with Appalachia following an 18% decline. The majority of the YoY declines were incurred by late August, with the Permian rig count remaining largely unchanged for the next six months. Eagle Ford and Appalachia saw modest rig count growth in the latter half of the review period, with increases of 11% to 12%. Haynesville ended the last two quarters of the review period with an additional 8% decline. For the Eagle Ford, rig counts numbered 67 in April of 2023 and trailed off to a period low of 49 rigs in September before a modest recovery to 55 rigs in March.

1-Year Change in Rig Count



Source: Baker Hughes

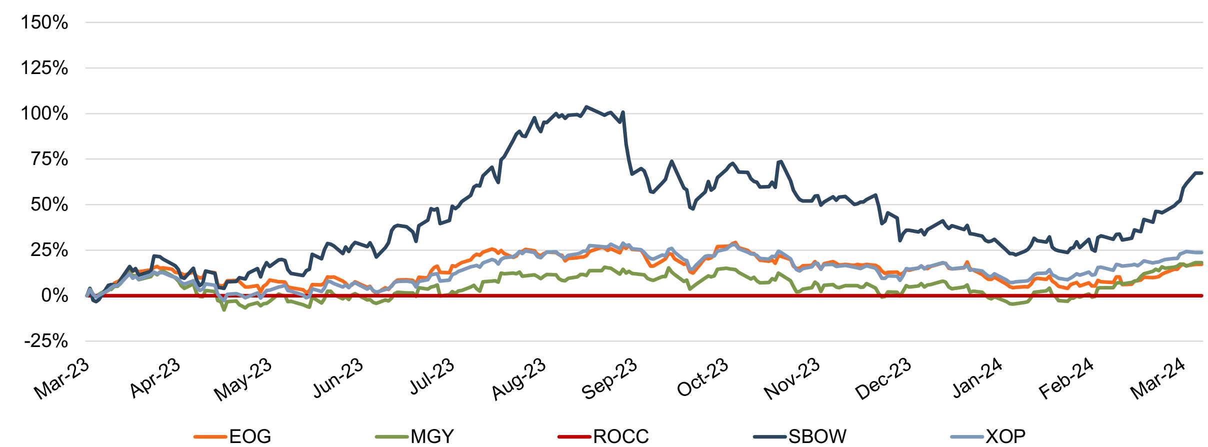
Production and Activity Levels (cont.)

So, how were production levels maintained despite notable rig count declines? The answer is twofold — DUCs (drilled but uncompleted wells) and technology improvements. DUC counts declined from 5,435 to 4,483 (a nearly 18% decrease) over the review period, marking 952 wells that entered production without the current use of drilling rigs. In addition, the continuation of production technology improvements contributed to upholding production levels with less new drilling activity.

Financial Performance

The public comp group for Eagle Ford showed stock price gains of 17% to 18%, excluding SBOWs 67% increase as a notable outlier. Review period share price increases for EOG and MGY ran as high as 29% and 18%, respectively, generally rising through September. Both companies' share prices declined through mid-January before turning upward during the last two months of the review period.

1-Year Change in Stock Price



Source: Capital IQ

Financial Performance (cont.)

SBOW's stock price ran a different course, including strong runs over the summer months and again during the last two months of the review period. However, a long slide from mid-September ($42.16) to mid-January ($25.70) pushed the 104% review period increase as of August down to 23% as of mid-January. Contributions to the share price's wild ride included (i) a late spring call by a major shareholder for a review of strategic options including a possible sale, (ii) an agreement for a $700 million acquisition of Chesapeake Energy's South Texas O&G assets in mid-summer, (iii) a public offering of three million shares in September, (iv) a shareholder push to re-vamp the company's board in November, (v) a secondary offering of common stock in December, (vi) a take-over offer from the top shareholder (Kimmeridge Energy) in February (abandoned later that month), and (vii) a revised offer from Kimmeridge in March.

Market Valuations & Transaction History

Transaction Activity Plummets Over Past 4 Quarters

Over the past twelve months, deal activity in the Eagle Ford has fallen off a cliff, with only two deals closing compared to 13 transactions closed in the prior twelve-month period. Significant volumes of wet gas, NGLs, and rich condensate combined with the proximity to the Port of Corpus Christi fueled deal momentum in the twelve months ended February 28, 2023. So why did this momentum come to a screeching halt during the remainder of 2023 and into the first two months of 2024? According to a report from Deloitte, M&A activity declined as E&P companies committed themselves to capital discipline. Free cash flows were diverted away from investing, acquiring for growth, and increasing market share, toward paying dividends and share buybacks. The old drivers of M&A activity seem to have been replaced by new drivers.

Recent Transactions in the Eagle Ford

During the twelve months ended February 29, 2024, Silverbow Resources purchased 42,000 acres from Chesapeake Energy for $700 million, while Crescent Energy purchased 75,000 acres from Mesquite Energy for $600 million. The total deal value between the two deals of $1.3 billion equals the median deal value of the 13 deals for the twelve months ended February 28, 2023. A table detailing these two transactions is shown below.

Announced Date	Buyer	Seller	Deal Value ($MM)	$ / Acre	$ / Boe/d
8/14/2023	Silverbow Resources	Chesapeake Energy Corp.	$700	$16,667	$21,875
5/3/2023	Crescent Energy Company	Mesquite Energy Inc.	600	8,000	30,000

Source: Shale Experts

Market Valuations & Transaction History

Transaction Activity Plummets Over Past 4 Quarters

(cont.)

Chesapeake's sale to Silverbow Resources is an extension of Chesapeake's sell-off during the twelve months ended February 28, 2023 (see table below), during which Chesapeake sold a combined 549,000 acres over two deals. On the flip side, Silverbow Resources has continued its buying binge with its purchase of assets from Chesapeake, adding to the four purchases it made during the twelve months ended February 28, 2023 (see table below). Silverbow Resources spent $547 million on these four purchases, adding 76,000 acres to its portfolio at $7,197/acre.

Announced Date	Buyer	Seller	Deal Value ($MM)	$ / Acre	$ / Boe/d
2/28/2023	Baytex Energy Corp.	Ranger Oil Corp.	$2,500	$15,432	$35,714
2/21/2023	Ineos Group	Chesapeake Energy Corp.	1,400	8,140	38,889
1/18/2023	WildFire Energy	Chesapeake Energy Corp.	1,425	3,780	nm
11/3/2022	Marathon Oil Corp.	Ensign Natural Resources LLC	3,000	23,077	44,776
10/3/2022	Silverbow Resources	Undisclosed Seller	87	34,800	34,800
9/15/2022	Silverbow Resources	Arkoma Leasing Operating, LLC	35	4,667	5,955
8/9/2022	Devon Energy Corp.	Validus Energy	1,800	42,857	51,429
5/18/2022	Executive Network Partnering Corporation, Granite Ridge Resources Inc.	Grey Rock Investment Partners	1,300	39,712	63,415
5/4/2022	Ranger Oil Corp.	Earthstone Energy Inc.	64	3,765	64,000
4/14/2022	Silverbow Resources	SandPoint Resources LLC	71	2,630	15,269
4/14/2022	Silverbow Resources	Sundance Energy Inc.	354	9,077	31,892
3/24/2022	WildFire Energy	MD America Energy LLC	Undisclosed	nm	nm
Median			**$1,300**	**$9,077**	**$37,302**
Average			**$1,094**	**$17,085**	**$38,614**

Sources:
Shale Experts
Financial Post

Market Valuations & Transaction History

Rock, Returns, and Runway: Why Chesapeake Is a Seller

Chesapeake **announced** the sale of its remaining Eagle Ford shale assets to Silverbow Resources on August 14, 2023. The sale of these assets affirmed Chesapeake's commitment to the Marcellus and Haynesville shales, noting that the Eagle Ford was no longer core to its strategy. Further, Chesapeake's activist investor Kimmeridge Energy Management, had urged a shift toward solely natural gas production. The Marcellus and Haynesville shales are both natural gas-rich formations. We note that the shift out of the Eagle Ford shale preceded Chesapeake's merger with Southwestern Energy announced on January 11, 2024.

As Chesapeake's CEO Nick Dell'Osso noted, the divestiture of the remaining Eagle Ford assets allows Chesapeake "to focus our capital and team on the premium rock, returns and runway" of its assets within the Marcellus and Haynesville shales.

Scale, Capital Efficiency, and Commodity Exposure: Why Silverbow Is Buying

While Chesapeake has completely exited the Eagle Ford, Silverbow Resources is the other side of the coin, as the acquisition of the Chesapeake assets has propelled the company into the largest public pure-play Eagle Ford operator.

Silverbow Resources CEO Sean Woolverton noted "We are excited to close the Chesapeake transaction, which materially increases our scale in South Texas…Our differentiated growth and acquisition strategy has positioned us with … a portfolio of locations across a single, geographically advantaged basin. The acquired Chesapeake assets further enhance our optionality to continue allocating capital to our highest return projects and will immediately compete for capital."

Appendix A

Selected Public Company Information

Mercer Capital tracks the performance of Exploration and Production companies across different mineral reserves in order to understand how the current pricing environment affects operators in each region. We created an index of seven groups to better understand performance trends across reserves and the industry. The current pricing multiples of each company in the index are summarized below.

					as of 3/31/2024		
Company Name	**Ticker**	**3/31/2023 Enterprise Value**	**YoY % Change in Stock Price**	**EBITDAX Margin**	**EV/ EBITDAX**	**Daily Production (mboe/d)**	**Price per Flowing Barrel***
Global Integrated							
Exxon Mobil Corp	XOM	$479,118	6.0%	22.1%	6.4x	3,803	$125,996
Shell PLC	SHEL	257,968	16.1%	16.1%	5.1	2,839	90,881
Chevron Corp	CVX	306,551	-3.3%	24.7%	6.4	3,323	92,259
BP PLC	BP.	136,060	-0.9%	21.7%	3.0	2,378	57,214
Equinor ASA	EQNR	70,255	-7.4%	42.2%	1.6	2,113	33,249
Group Median			**-0.9%**	**22.1%**	**5.1x**	**2,839**	**$90,881**
Global E&P							
Marathon Oil Corporation	MRO	$21,641	18.3%	69.8%	4.8x	387	$55,919
Hess Corporation	HES	54,450	15.3%	50.9%	10.4	441	123,357
ConocoPhillips	COP	162,064	28.3%	43.2%	6.5	1,907	85,004
Occidental Petroleum Corporation	OXY	84,309	4.1%	49.5%	6.0	1,195	70,540
APA Corporation	APA	16,504	-4.7%	64.0%	3.2	394	41,920
Murphy Oil Corporation	MUR	8,172	23.6%	58.6%	4.0	170	47,958
Group Median			**16.8%**	**54.8%**	**5.4x**	**418**	**$63,229**

Source: Capital IQ .

- Price per Flowing Barrel is EV/daily production ($/boe/d)
- We review 10-K's and annual reports from guideline companies to ensure companies continue to operate in the regions and groups we have identified.

Appendix A

Selected Public Company Information

Company Name	Ticker	3/31/2023 Enterprise Value	YoY % Change in Stock Price	EBITDAX Margin	EV/ EBITDAX (as of 3/31/2024)	Daily Production (mboe/d) (as of 3/31/2024)	Price per Flowing Barrel* (as of 3/31/2024)
Haynesville							
Southwestern Energy Company	SWN	$12,274	51.6%	94.8%	2.0x	726	$16,909
Chesapeake Energy Corporation	CHK	12,567	16.8%	62.1%	3.3	528	23,784
Comstock Resources, Inc.	CRK	5,360	-14.0%	53.4%	6.4	248	21,617
Group Median			**16.8%**	**62.10%**	**3.3x**	**528**	**$21,617**
Appalachia							
Range Resources Corporation	RRC	$9,915	30.1%	68.7%	5.7x	355	$27,915
EQT Corporation	EQT	22,059	16.2%	85.9%	5.2	957	23,046
Coterra Energy Inc.	CTRA	22,187	13.6%	67.1%	5.8	678	32,744
Antero Resources Corporation	AR	10,578	25.6%	29.8%	7.9	563	18,802
Group Median			**20.9%**	**67.9%**	**5.7x**	**620**	**$25,481**
Permian Basin							
Diamondback Energy, Inc.	FANG	$42,390	46.6%	77.1%	6.9x	462	$91,703
Permian Resources Corporation	PR	16,843	68.2%	75.8%	7.1	313	53,838
Vital Energy, Inc.	VTLE	3,438	15.4%	73.3%	3.0	121	28,402
Pioneer Natural Resources Company	PXD	66,284	28.5%	48.4%	7.1	741	89,485
Group Median			**37.6%**	**74.6%**	**7.0x**	**388**	**$71,662**

Source: Capital IQ .

- Price per Flowing Barrel is EV/daily production ($/boe/d)
- We review 10-K's and annual reports from guideline companies to ensure companies continue to operate in the regions and groups we have identified.

Appendix A

Selected Public Company Information

Company Name	Ticker	3/31/2023 Enterprise Value	YoY % Change in Stock Price	EBITDAX Margin	EV/ EBITDAX	Daily Production (mboe/d)	Price per Flowing Barrel*
					as of 3/31/2024		
Eagle Ford							
EOG Resources, Inc.	EOG	$72,668	11.5%	57.4%	5.4x	1,028	$70,665
Magnolia Oil & Gas Corporation	MGY	4,917	18.6%	72.1%	5.6	85	57,598
SilverBow Resources, Inc.	SBOW	2,069	49.4%	104.4%	3.0	91	22,700
Group Median			**18.6%**	**72.1%**	**5.4x**	**91**	**$57,598**
OVERALL MEDIAN			**16.2%**	**58.6%**	**5.6x**	**563**	**$53,838**

Source: Capital IQ .

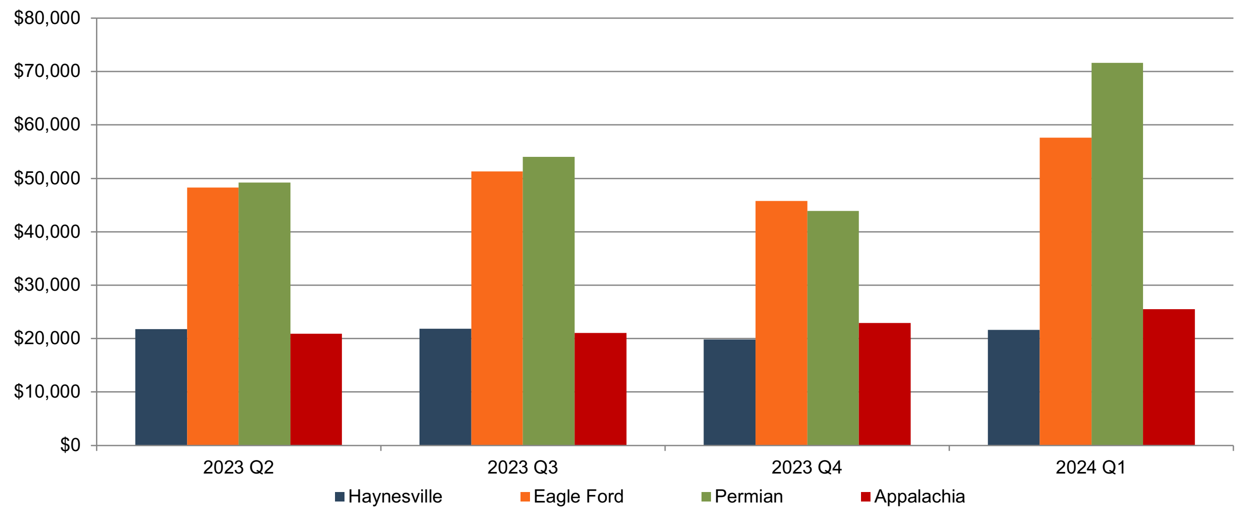
- Price per Flowing Barrel is EV/daily production ($/boe/d)
- We review 10-K's and annual reports from guideline companies to ensure companies continue to operate in the regions and groups we have identified.

Appendix A

Selected Public Company Information

The following graph depicts the median of EV/production multiples, also known as price per flowing barrel, from Q2 2023 through Q1 2024.

Price per Flowing Barrel



Source: Capital IQ

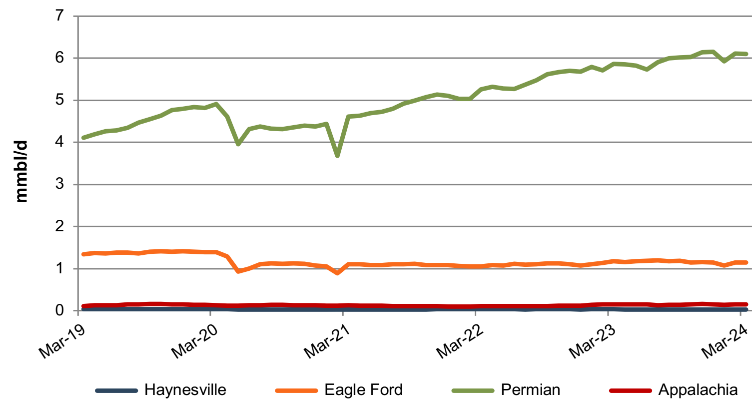
- Price per Flowing Barrel is EV/ daily production ($/boe/d)
- This is simply a graphic depiction of median figures of our selected public companies for each region. This should be interpreted solely in the context of relative valuation between the various basins over time. Bloomberg aggregates this raw data, and Mercer Capital does not represent or warrant these figures as indicative of valuation multiples attributable to E&P companies or other interests.

Appendix B

Production

Daily Production of Crude Oil

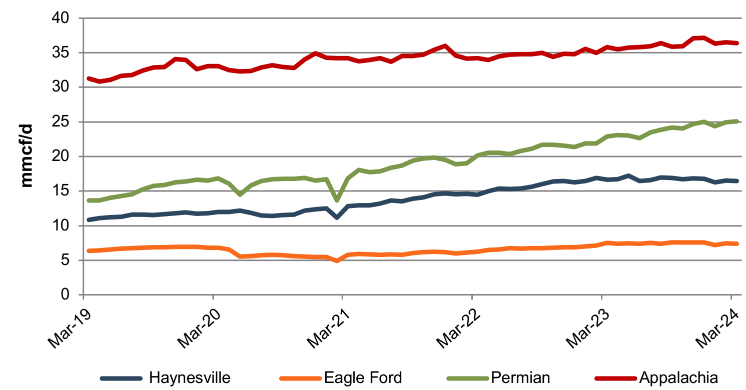
Oil production in the Eagle Ford decreased by 2.7% over the last year, and oil production in the gas-focused Appalachia and Haynesville regions declined 1.2% and 5.1%, respectively. The Permian was the only region experiencing a net increase in oil production in the last year, increasing by 4.2%.



Source: EIA

Daily Production of Natural Gas

The Permian also led the analyzed regions in natural gas production growth at 9.5% over the last year, followed by the Appalchian basins with growth of 1.6%. Gas production in the Eagle Ford and Haynesville fell by 1.1% and 1.6%, respectively.



Source: EIA

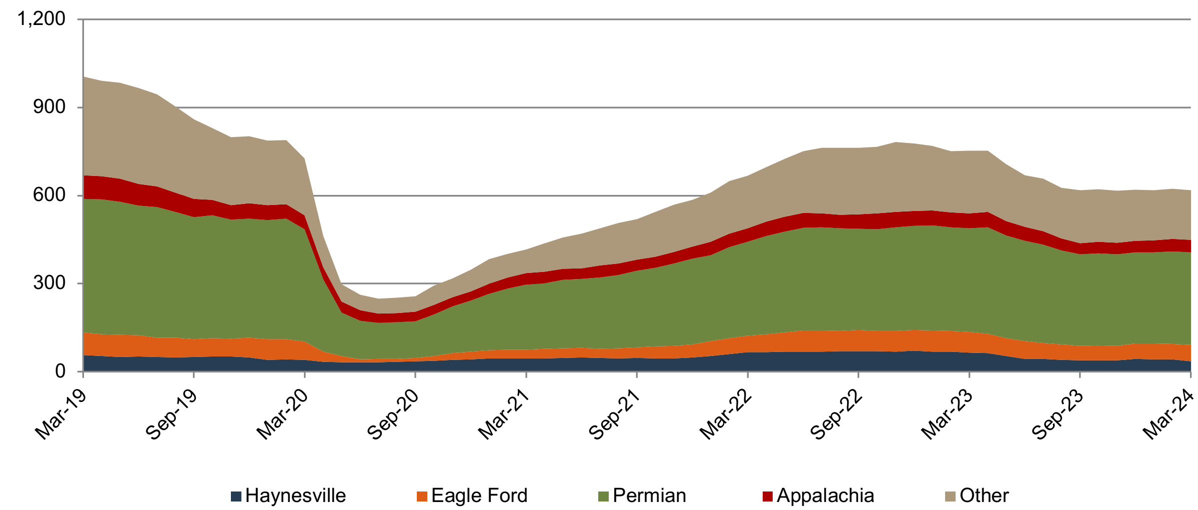
Appendix C

Rig Count

Baker Hughes collects and publishes information regarding active drilling rigs in the United States and internationally. The number of active rigs is a key indicator of demand for oilfield services & equipment. Factors influencing rig counts include energy prices, investment climate, technological changes, regulatory activity, weather, and seasonality.

The number of active rigs in the U.S. during March 2024 was 618, which represents a 17.9% decrease from 752 in March 2023. Year-over-year, the rig count in the Haynesville region experienced a decrease of 45.5%, from 66 to 36, representing the largest decline of the regions analyzed. Rig counts in the Eagle Ford, the Appalachian basins, and the Permian declined by 21.4%, 17.6%, and 10.2%, respectively.

Rig Count by Region

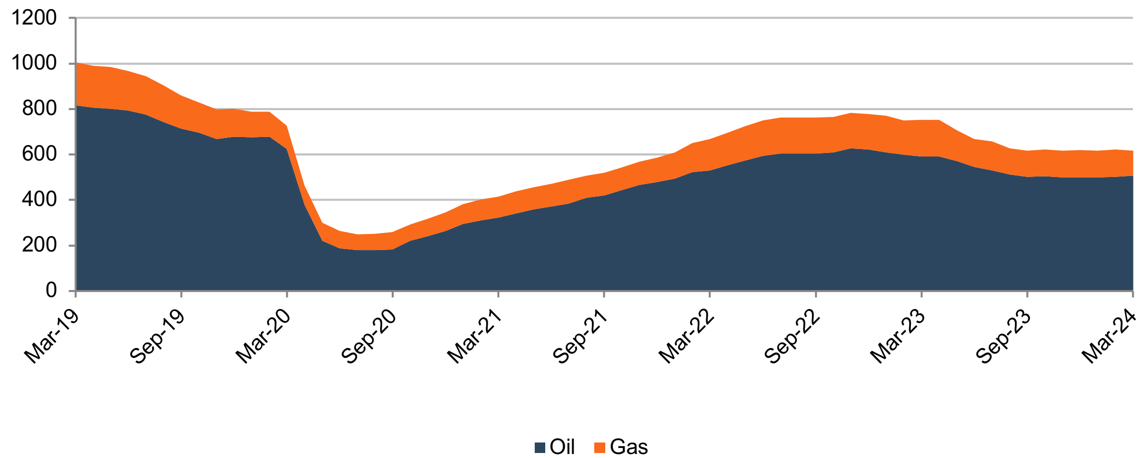


Source: Baker Hughes

Appendix C

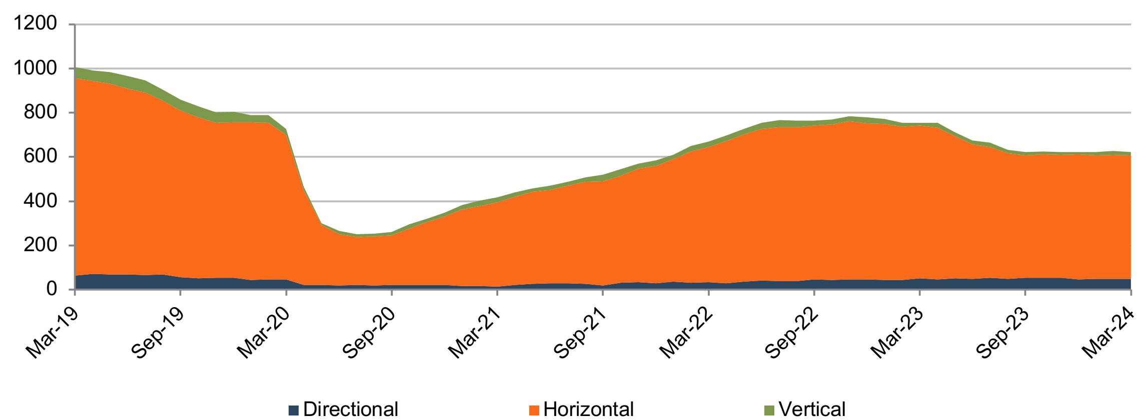
Rig Count

U.S. Rig Count by Oil vs. Natural Gas



Source: Baker Hughes

U.S. Rig Count by Trajectory



Source: Baker Hughes

Mercer Capital

www.mercercapital.com