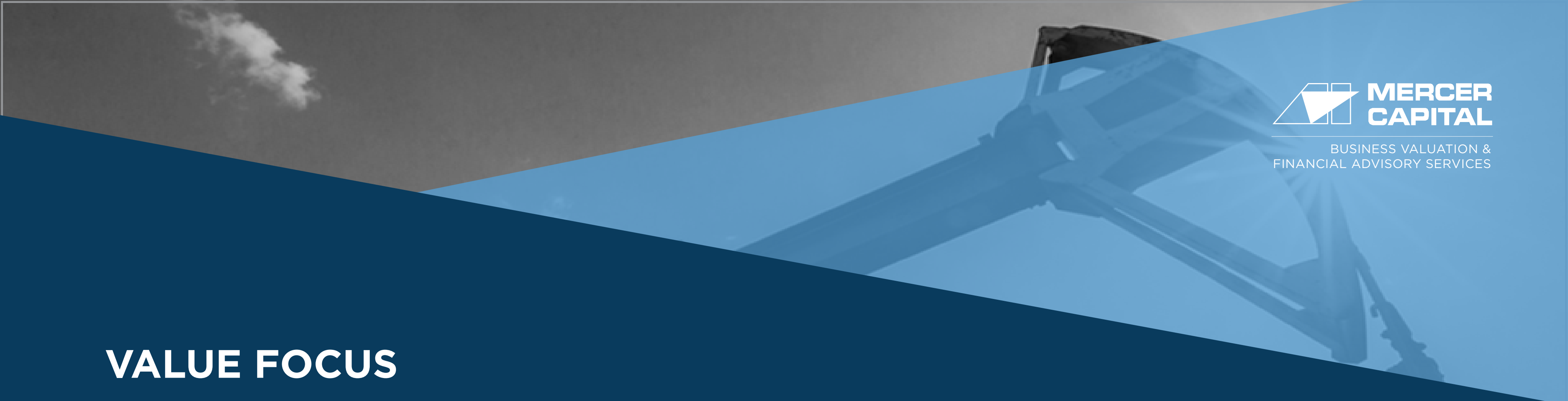

MERCER CAPITAL

BUSINESS VALUATION & FINANCIAL ADVISORY SERVICES

VALUE FOCUS

Exploration & Production

Second Quarter 2022 // Region Focus: Permian

EXECUTIVE SUMMARY

Both oil and gas commodity prices rose in the second quarter of 2022, with WTI and Henry Hub front-month futures prices floating around $121/bbl and $9/mmbtu in mid-June, as Russia launched its invasion of Ukraine in late February. Issues with financing and insurance and the exit of Western oil companies and oilfield service providers from Russia resulted in a substantial decline in oil exports from the country. With no indications of any near-term resolution of the Russian-Ukraine war and a continued outlook of relatively flat production in the U.S., global energy prices have no foreseeable inflection point at the moment.

MERCER CAPITAL

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

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Mercer Capital serves the following industry segments:

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

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In This Issue

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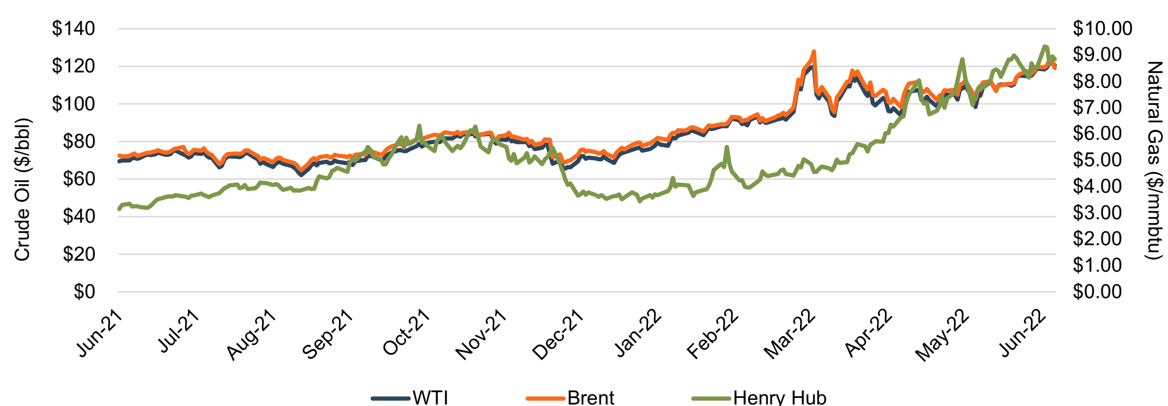
Oil and Gas Commodity Prices

Oil prices generally rose through the second half of 2021, although they started to decline in mid-Q4. The shale revolution had largely put geopolitics in the back seat as the key driver of commodity prices. However, geopolitics once again came front and center as Russia launched its invasion of Ukraine in late February. Western nations responded with a series of economic sanctions against Russia. Although the sanctions generally included **carve-outs** for energy exports, issues with financing and insurance, and the **exit of Western oil companies** and oilfield service providers from Russia resulted in a **substantial decline** in oil exports from the country. The exclusion of oil from Russia, the **third largest producer** of petroleum and other liquids in 2020 according to the *U.S. Energy Information Administration,* from global markets led to a high degree of volatility in oil prices. WTI front-month futures prices began the latest quarter at ~$99/bbl and were floating around $121/bbl as of mid-June. With **no indications** of any near-term resolution of the Russian-Ukraine war, and a **continued outlook** of relatively flat production in the U.S., the upward trajectory of global energy prices has no foreseeable inflection point at the moment.

Natural gas prices fluctuated over the past year, albeit with slightly less volatility than oil prices, and have exhibited the same upward trend over the past quarter. Natural gas is becoming more globalized as Europe grapples with replacing imports of Russian gas. In late March, President Biden pledged to **boost LNG exports** to Europe, which may re-invigorate the advancement of **U.S. LNG export terminal projects.**

Commodity Futures Prices



Source: Capital IQ

Macro Update

Cash Flow Remains King

Second quarter earnings for publicly traded upstream producers are trickling in, and profitability has returned to the energy sector. In the meantime, government officials have been sending mixed messages to the upstream sector, desiring temporary supply relief in the aim of lowering prices whilst remaining bearish on fossil fuels overall. The industry response: thanks, but no thanks (a polite way of putting it). Producers have largely been holding the course set years ago towards returns and deleveraging, snubbing pressure from the Biden administration. It has been tempting for producers to ramp up production amid $100+ oil prices and gas prices the highest they have been since 2008. However, with supply chain issues and labor shortages, the appeal has been dampened.

According to the latest *Dallas Fed Energy Survey*, business conditions remain the highest in the history of the survey. Concurrently, profits continue to rise. Analysts are pleased and management teams are eagerly talking about free cash flow, debt management, and stock buybacks. By the way, an interesting factoid from Antero's investor presentation: most oil and gas companies are now much less levered than their S&P 500 counterparts. When it comes to Net Debt to EBITDAX multiples, the majors average about 0.9x while the S&P 500 averages 2.8x. Most independents that we reviewed were aiming towards around 1x leverage.

The industry should be able to keep it up. Last year around this time, we questioned how long this might be able to continue. We noted drilled but uncompleted well ("DUC") counts as an inexpensive proxy for profitable well locations. However, at today's prices, DUCs matter less than they did from an investment decision standpoint.

We sampled current investment presentations of six upstream companies (randomly chosen) and read them to discern key themes that they are communicating to investors. Adding new rigs to the mix was not on any of their agendas. Not one has announced a revision to their capex plans from early in the year even amid the changes in the past five months.

There have been some companies accelerating plans, but not many. This quote from the Fed Energy Survey was representative of sentiment in this area:

> "Government animosity toward our industry makes us reluctant to pursue new projects."

Macro Update
(cont.)

Company	Current Management	2022 Capex Revisions
Southwestern	• $1B stock buy back • Debt reduction	No
Centennial/Colgate	• Accertive merger economics • Lower debt ration • Free cash flow	No
Anteri	• Free cash flow • Debt reduction • Balance sheet enhancements	No
Comstock Resources	• Deleveraging • Low cost structure • Showcase drilling inventory	No
Pioneer	• Strong balance sheet • 80% of free cash flow to dividends • Share repurchases	No
Range Resources	• $130 MM share repurchase • Lower leverage ratio to 1x • Operational Efficiency	No

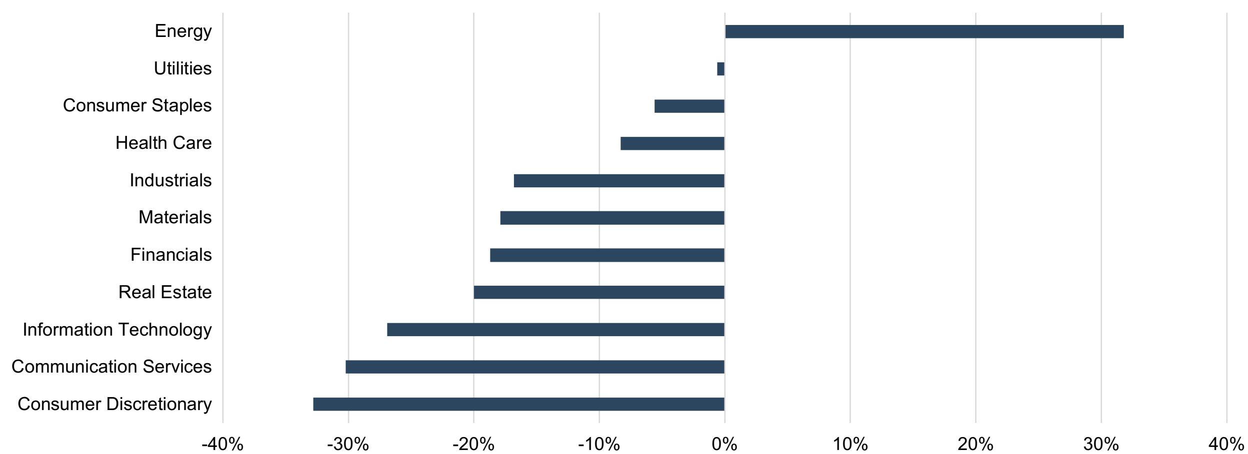
There are 752 rigs in the U.S. currently, according to Shaleexperts.com. In early March, the week before the pandemic wreaked its industry havoc — there were 792. Yes - we still have not reached pre-pandemic rig counts. To boot, rigs are relatively less productive on a per rig basis, primarily because most new drilling locations are less attractive and productive than the ones already drilled. The capex calvary is not coming to the rescue either. Capex at the world's top 50 producers is set to be just over $300 billion this year, as compared to $600 billion in 2013 according to Raymond James. 2013 was the last year oil prices were over $100 a barrel for the year. As has been said before, production should grow, but not at a particularly rapid pace.

Macro Update (cont.)

Energy Valuations: A Bright Spot

These industry and commodity forces have contributed to the energy sector having an outstanding year from a stock price and valuation perspective as well. Returns have outpaced all other sectors, and Permian operators have performed at the top of the sector. While the U.S. suffered its second quarter of GDP decline in a row, and the stock market has officially become a bear but energy returns stand out.

S&P 500 Sectors: Year to Date Price Returns



Some investors appear to be changing their tune towards the energy sector amid these kinds of results, and the valuations are reflecting this. There are some indicators that suggest we could be entering into a long "super cycle" for the energy sector whereby the industry could outperform for years to come. It bears out that to fruition the sentiment we quoted last year as well from the *Dallas Fed's Survey:*

> *"We have relationships with approximately 400 institutional investors and close relationships with 100. Approximately one is willing to give new capital to oil and gas investment…This underinvestment coupled with steep shale declines will cause prices to rocket in the next two to three years. I don't think anyone is prepared for it, but U.S. producers cannot increase capital expenditures: the OPEC+ sword of Damocles still threatens another oil price collapse the instant that large publics announce capital expenditure increases."*

That prophecy has come true.

Macro Update (cont.)

Supply Chain Woes

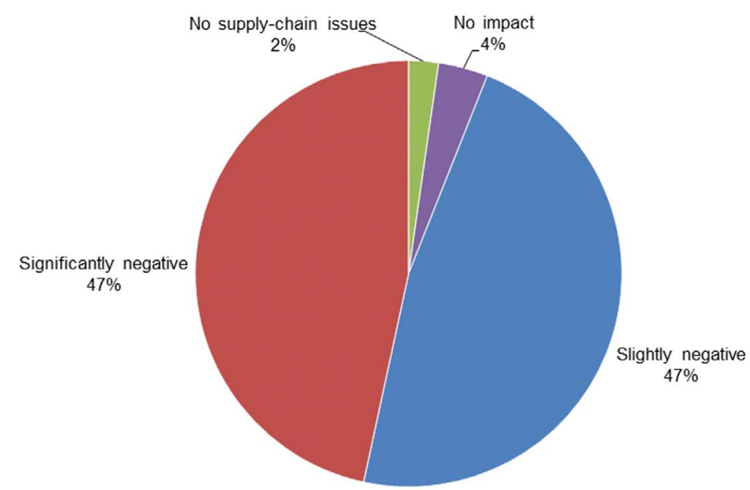
The challenge for producers may be less about growth and more about maintenance. 94% of Dallas Fed Survey Respondents had either a slightly or significantly negative impact from supply-chain issues at their firm. Major concerns about labor, truck drivers, drill pipe and casing supplies, equipment, and sand are hampering the execution of existing drilling plans, to say nothing about expansion.

> *"Supply chain and labor-shortage issues persist. Certain materials are difficult to access, which is hampering our ability to plan, absent a willingness to depart from certain historical practices relating to quality standards."* – Dallas Fed Respondent

Nonetheless, global inventories continue to decline. The *U.S. Energy Information Administration's* short-term energy outlook expects production to catch up, but it appears harder to envision that now and nobody exactly knows what that will look like in the U.S. The EIA acknowledged that pricing thresholds at which significantly more rigs are deployed are a key uncertainty in their forecasts.

Who knows how much longer upstream companies will continue to tune out the administration or finally try to rev up their growth plans in response to commodity prices? The December 2026 NYMEX futures strip is over $70 right now. There are a lot of potentially profitable wells to be drilled out there at $70 oil. However, management teams know all too well that prices can change quickly. We shall see.

How would you rate the impact of supply-chain issues on your firm?



Note: Executives from 133 oil and gas firms answered this question during the survey collection period, June8-16, 2022. Source Federal Reserve Bank of Dallas.

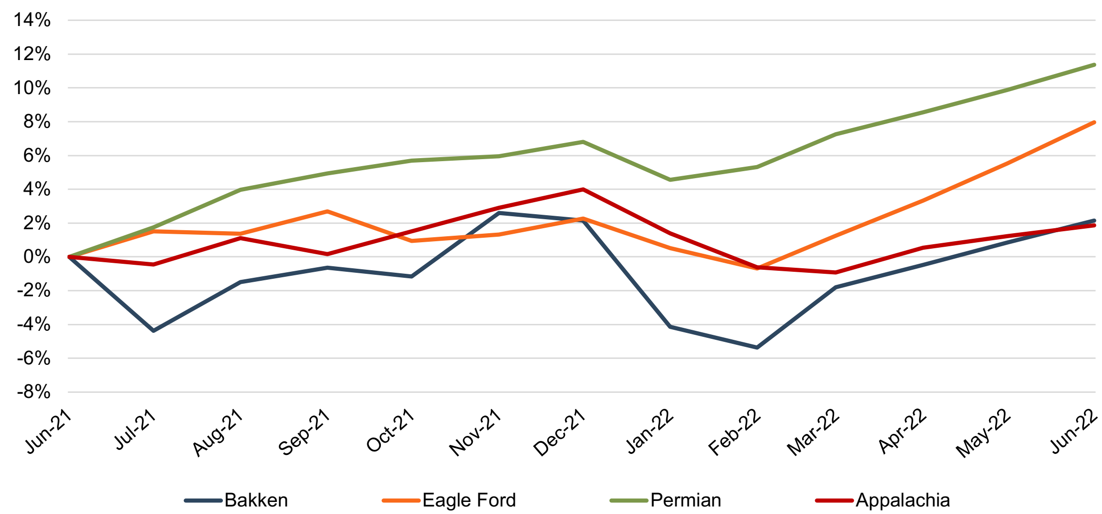
Permian

Production and Activity Levels

The economics of oil and gas production varies by region. Mercer Capital focuses on trends in the Eagle Ford, Permian, Bakken, 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 Permian.

Estimated Permian production (on a barrels of oil equivalent, or "boe," basis) increased 11.4% year-over-year through June. This is notably greater than the production increases seen in the Eagle Ford, Bakken and Appalachia (8.0%, 2.2% and 1.9%, respectively).

1-Year Change in Production



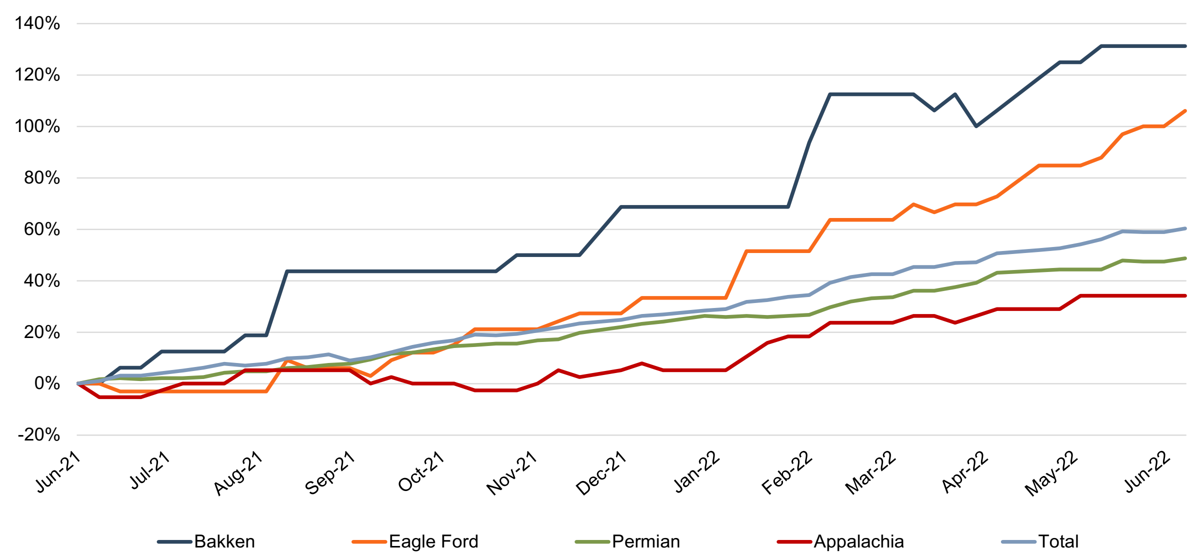
Source: Energy Information Administration

Production and Activity Levels (cont.)

There were 345 rigs in the Permian as of June 10, up 49% from June 4, 2021. The Bakken, Eagle Ford, and Appalachia rig counts were up 131%, 106%, and 34%, respectively, over the same period.

In terms of production growth, the Permian has far exceeded the other basins, and Permian production is expected to continue increasing over the next several months based on anticipated increases in the rig count and new-well production per rig.

1-Year Change in Rig Count

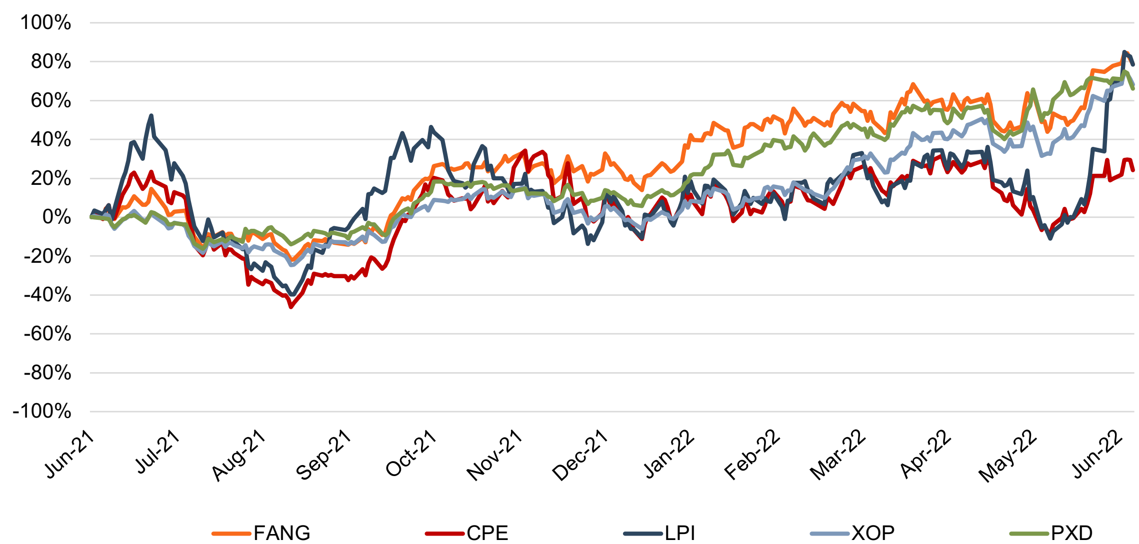


Source: Baker Hughes

Financial Performance

The Permian public comp group saw moderately positive stock price performance over the past year (through June 10). The prices of Diamondback Energy and Laredo Petroleum rose 79% and 78%, respectively, and more than the broader E&P sector (as proxied by XOP, which rose 68% during the same period). Pioneer Natural Resources' stock price rose 66% over the period, and Callon Petroleum rose a relatively tepid 24%.

1-Year Change in Stock Price

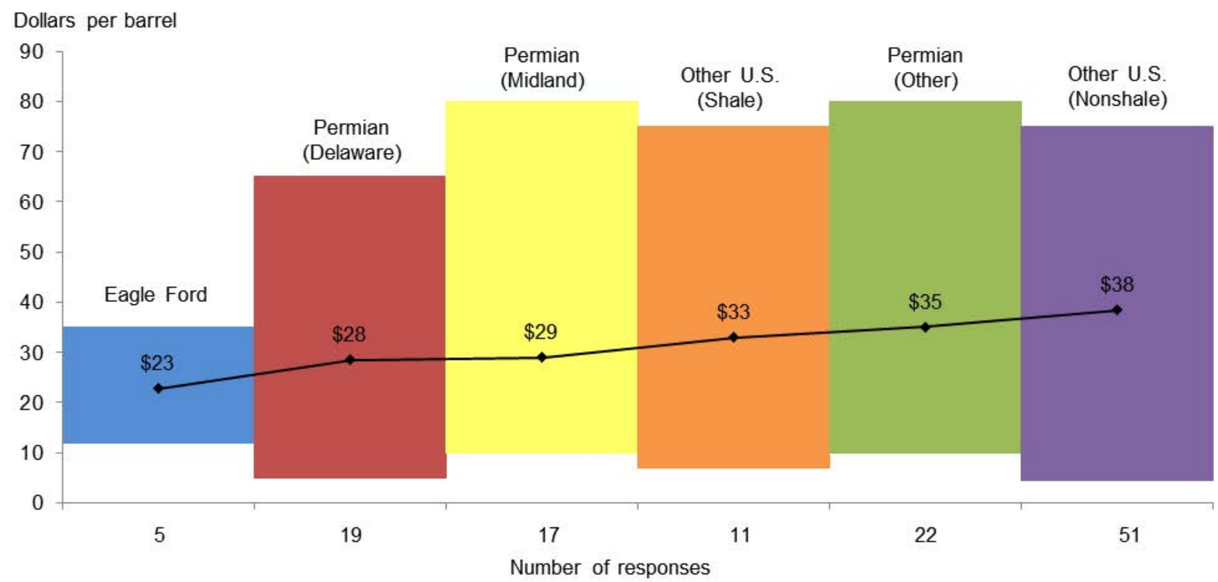


Source: S&P Capital IQ Pro

Survey Says Eagle Ford Wells Among Most Economic

According to participants of the First Quarter **2022 Dallas Fed Energy Survey,** (the latest available as of mid-June), wells in the core plays of the Permian are positioned as some of the most economical in the nation.

In the top two areas in which your firm is active: What West Texas Intermediate (WTI) oil price does your firm need to cover operating expenses for existing wells?

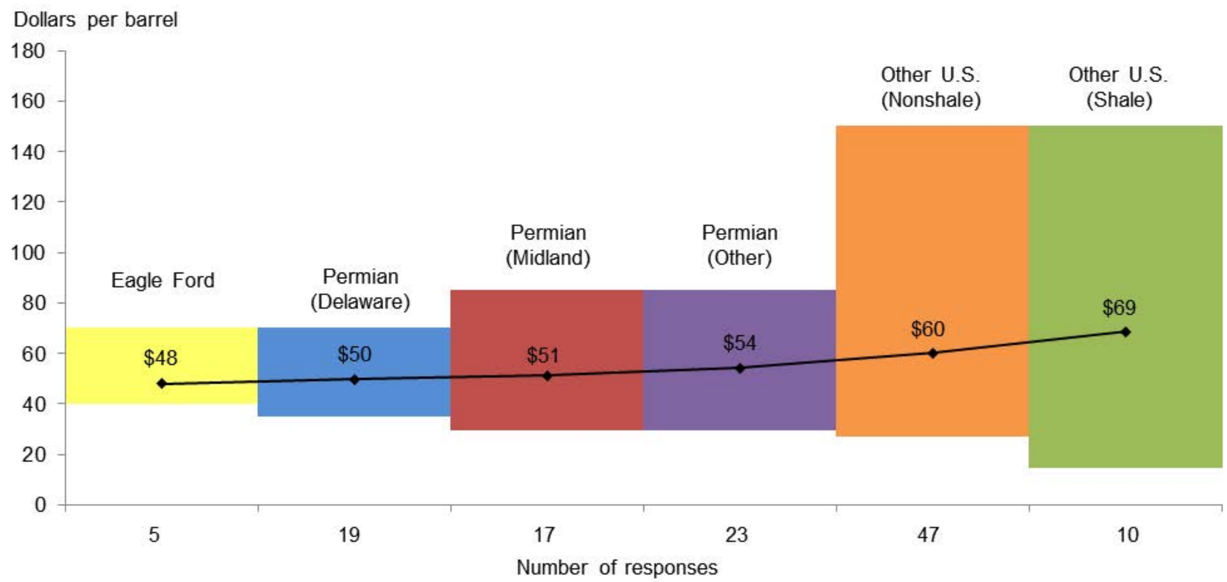


NOTES: Lines show the average, and bars show the range of responses. Executives from 84 exploration and production firms answered this question during the survey collection period, March 9–17, 2022.
SOURCE: Federal Reserve Bank of Dallas.

Survey Says Eagle Ford Wells Among Most Economic (cont.)

Survey respondents indicated that the average WTI price needed to break even on existing wells in the primary Permian plays was $28/bbl to $29/bbl. This exceeds the average breakeven in the Eagle Ford ($23/bbl), but is still lower than other parts of the U.S. (over $30/bbl). The average breakeven price for new development in the Permian is in the middle of the pack at $50/bbl to $51/bbl, greater than the Eagle Ford's breakeven ($48/bbl), but notably lower than in other parts of the country ($60/bbl to $69/bbl).

In the top two areas in which your firm is active: What WTI oil price does your firm need to profitably drill a new well?



NOTES: Lines show the average, and bars show the range of responses. Executives from 83 exploration and production firms answered this question during the survey collection period, March 9–17, 2022.
SOURCE: Federal Reserve Bank of Dallas.

Market Valuations & Transaction History

Acquisitions Slow as Valuations Grow

Transaction activity in the Permian Basin cooled off this past year, with the transaction count decreasing to 21 deals over the past 12 months, a decline of 6 transactions, or 22%, from the 27 deals that occurred over the prior 12-month period. This level is in line with the 22 transactions that occurred in the 12-month period ended mid June 2020. It is difficult to interpret the significance with any certainty. On one hand, it could indicate increased trepidation regarding production prospects in the basin. On the other hand, it could simply be a sign that regional E&P operators have started to "right-size" their inventories in the West Texas and Southeast New Mexico basin. Based on the evolving economics of the region, as we will examine further below, the latter case may be closer to the truth.

A table detailing E&P transaction activity in the Permian over the last twelve months is shown on the next page. Relative to 2020-2021, the median deal size nearly was $387 million, just 4% lower than the median deal size of $405 million in the prior 12-month period. However, the median acreage purchased over the past year was 21,000 net acres, about 42% lower than the 36,250 acres among the deals in the previous year. Given the concurrent decrease in acquired acreage and relatively unchanged median transaction price, the median price per net acre was up 16% period-over-period. Looking at acquired production, the median production among transactions over the past year was 5,500 barrel-oil-equivalent per day ("Boepd"), a 39% decrease from the 8,950 Boepd metric from the prior year. Given the relatively unchanged level in the median transaction value in conjunction with a lower median production level, the median transaction value per Boepd, unsurprisingly, jumped 54% from $31,886 in the prior 12-month period to $49,143 in the latest 12-month period. This willingness to pay over 50% more per acre and/or per Boepd clearly suggests that the underlying economics of these targets have been, and remain, supportive. However, the marginal costs of these acquisitions may be approaching the perceived marginal returns projected for these properties, as evidenced by the decrease in the transaction count relative to last year.

Market Valuations & Transaction History

Acquisitions Slow as Valuations Grow

Announced Date	Buyer	Seller	Deal Value ($MM)	$ / Acre	$ / Boepd
5/19/22	Centennial Resource Development	Colgate Energy Partners III LLC	$3,900	$30,000	$55,714
5/18/22	Granite Ridge Resources Inc., et al	Grey Rock Investment Partners	1,300	39,712	63,415
4/28/22	HighPeak Energy	Hannathon Petroleum Llc	368	19,806	73,680
2/11/22	Brigham Minerals Inc.	Undisclosed Seller	33	18,111	nm
1/31/22	Earthstone Energy Inc.	Bighorn Permian Resources LLC	715	6,465	16,863
1/28/22	Maverick Natural Resources LLC	Undisclosed Seller	440	3,045	40,000
1/12/22	Desert Peak Minerals	Falcon Minerals	1,900	56,427	422,222
12/30/21	Firebird Energy LLC	Chevron Corp	Undisclosed	nm	nm
11/17/21	Northern Oil and Gas, Inc.	Veritas Energy Llc	407	67,750	35,348
11/10/21	Kimbell Royalty Partners LP	Undisclosed Seller	57	nm	81,429
11/8/21	Colgate Energy Partners III LLC	Undisclosed Seller	190	8,636	nm
11/5/21	Continental Resources, Inc.	Pioneer Natural Resources Co.	3,100	33,696	563,636
11/3/21	Henry Resources LLC, et al	Centennial Resource Development	101	16,290	63,125
10/4/21	Earthstone Energy Inc.	Foreland Investments Lp	73	7,320	16,636
9/20/21	ConocoPhillips	Shell plc	8,600	38,222	49,143
9/20/21	Laredo Petroleum Inc.	Pioneer Natural Resources Co.	230	11,500	52,273
8/16/21	Moss Creek Resources, LLC, et al	Apache Corp	38	9,375	46,875
8/9/21	Viper Energy Partners Lp	Swallowtail Royalties	225	97,741	nm
8/9/21	Callon Petroleum Co.	Primexx Energy Partners	788	22,514	43,778
7/28/21	Lime Rock Resources	Rosehill Resources Inc.	508	nm	33,522
6/16/21	Northern Oil and Gas, Inc.	Undisclosed Seller	102	35,241	46,455
Median - All Transactions		**Count: 21**	**$387**	**$21,160**	**$49,143**
Average - All Transactions			**$1,154**	**$28,992**	**$100,242**

The approach to the marginal "equilibrium" appears to have been a pretty short runway to land on. Of the 21 transactions completed, 14 occurred from June to December, with the remaining 7 occurring within the period of January 2022 through June 2022. One metric we analyzed, based on the deal value per production (annualized) per acre, indicates a sharp decline in the "bang for the buck" exhibited by the transactions before and after year-end 2021. As presented below, the median cost per production-acre for the 14 transactions from June to December 2021 was $1.072; whereas the median metric for the 7 transactions from January to June 2022 was $10.762, indicating a 10.0x increase in the cost per production-acre. A deeper dive into the details of each transaction would be needed to discern any common causes for this movement, but this could indicate a shift in focus from proven reserves towards unproven acreages. In other words, acquirers may be putting increased value on the potential optionality for greater (but unproven) production presented by these targets.

Market Valuations & Transaction History

Acquisitions Slow as Valuations Grow (cont.)

Announced Date	Buyer	Seller	Deal Value ($MM)	Production (MBoepa)	Acreage	Deal Value / (Prod. / Acre) ($)
5/19/22	Centennial Resource Development	Colgate Energy Partners III LLC	$3,900	25,550	130,000	$19.843
5/18/22	Granite Ridge Resources Inc., et al	Grey Rock Investment Partners	1,300	7,483	32,736	5.688
4/28/22	HighPeak Energy	Hannathon Petroleum Llc	368	1,825	18,600	3.755
2/11/22	Brigham Minerals Inc.	Undisclosed Seller	33	na	1,800	na
1/31/22	Earthstone Energy Inc.	Bighorn Permian Resources LLC	715	15,476	110,600	5.110
1/28/22	Maverick Natural Resources LLC	Undisclosed Seller	440	4,015	144,500	15.836
1/12/22	Desert Peak Minerals	Falcon Minerals	1,900	1,643	33,672	38.951
12/30/21	Firebird Energy LLC	Chevron Corp	Undisclosed	na	21,000	na
11/17/21	Northern Oil and Gas, Inc.	Veritas Energy Llc	407	4,198	6,000	0.581
11/10/21	Kimbell Royalty Partners LP	Undisclosed Seller	57	256	Undisclosed	na
11/8/21	Colgate Energy Partners III LLC	Undisclosed Seller	190	na	22,000	na
11/5/21	Continental Resources, Inc.	Pioneer Natural Resources Co.	3,100	2,008	92,000	142.067
11/3/21	Henry Resources LLC, et al	Centennial Resource Development	101	584	6,200	1.072
10/4/21	Earthstone Energy Inc.	Foreland Investments Lp	73	1,606	10,000	0.456
9/20/21	ConocoPhillips	Shell plc	8,600	63,875	225,000	30.294
9/20/21	Laredo Petroleum Inc.	Pioneer Natural Resources Co.	230	1,606	20,000	2.864
8/16/21	Moss Creek Resources, LLC, et al	Apache Corp	38	292	4,000	0.514
8/9/21	Viper Energy Partners Lp	Swallowtail Royalties	225	na	2,302	na
8/9/21	Callon Petroleum Co.	Primexx Energy Partners	788	6,570	35,000	4.198
7/28/21	Lime Rock Resources	Rosehill Resources Inc.	508	5,534	Undisclosed	na
6/16/21	Northern Oil and Gas, Inc.	Undisclosed Seller	102	803	2,900	0.369
Median - 2022 (Jan-June) Transactions		**Count: 7**	**$715**	**5,749**	**33,672**	**$10.762**
Average - 2022 (Jan-June) Transactions			**$1,237**	**9,332**	**67,415**	**$14.864**
Median - 2021 (June-Dec) Transactions		**Count: 14**	**$225**	**1,606**	**15,000**	**$1.072**
Average - 2021 (June-Dec) Transactions			**$1,109**	**7,939**	**37,200**	**$20.268**
Median - All Transactions		**Count: 21**	**$387**	**2,008**	**21,000**	**$4.198**
Average - All Transactions			**$1,154**	**8,431**	**48,332**	**$18.106**

Despite the upward trend in energy prices over the past year, what we are seeing is a likely slowdown in M&A activity in what is generally considered to be the most economical oil and gas basin in the U.S. If the Permian is a bellwether of U.S. production in general, are we likely to see a slowdown in M&A activity in other basins soon? We would venture to say "yes."

Market Valuations & Transaction History

Earthstone Energy Acquires Bighorn's Permian Portfolio

In late January 2022, Earthstone Energy announced its agreement with Bighorn Permian Resources to acquire its Midland Basin assets for a total consideration of $639 million in cash and 5.7 million shares of Earthstone's Class A common stock (the "Bighorn Acquisition"). The effective date of the Bighorn Acquisition was January 1, 2022, and the deal closed on April 18, 2022. The Bighorn Acquisition included 110,600 net acres (98% operated, 93% WI, 99% HBP), primarily in Reagan and Irion counties, with an estimated production of 42,400 Boepd (57% liquids, 25% oil), and proved reserves of 106 MMBoe (20% oil, 34% NGL, 46% natural gas). Robert Anderson, President and CEO of Earthstone Energy, commented:

> *"The transformation of Earthstone continues with the announcement of the significant and highly-accretive Bighorn Acquisition. Combining the Bighorn Acquisition with the four acquisitions completed in 2021 and the pending Chisholm Acquisition, we will have more than quadrupled our daily production rate, greatly expanded our Permian Basin acreage footprint and increased our Free Cash Flow generating capacity by many multiples since year-end 2020. The proximity of the Bighorn assets to existing Earthstone operations positions us to create further value by applying our proven operating approach to these assets, primarily in the form of reducing operating costs. The addition of the high cash flow producing assets from Bighorn to the strong drilling inventory of Earthstone, including the Chisholm Acquisition, furthers Earthstone's transformation into a larger scaled, low-cost producer with lower reinvestment in order to maintain combined production levels."*

Market Valuations & Transaction History

Earthstone Energy Acquires Midland Basin Assets from Foreland Investments

In early November 2021, Earthstone Energy, announced the completion of its acquisition of privately held operated assets located in the Midland Basin from Foreland Investments LP ("Foreland") and from BCC-Foreland LLC, which held well-bore interests in certain of the producing wells operated by Foreland (collectively, the "Foreland Acquisition"). The aggregate purchase price of the Foreland Acquisition was $73.2 million at signing, consisting of $49.2 million in cash and 2.6 million shares of Earthstone's Class A common stock valued at $24.0 million based on a closing share price of $9.20 on September 30, 2021. The Foreland Acquisition included approximately 10,000 net acres with estimated production of 4,400 Boepd (26% oil, 52% liquids), and PDP reserves of approximately 13.3 MMBoe (11% oil, 31% NGL, 58% natural gas). Mr. Robert Anderson, President and CEO of Earthstone, commented:

> *"This transaction will be our fourth acquisition this year as we continue to advance our consolidation strategy and enhance our Midland Basin footprint with additional scale. The acquisition of these low operating cost, high margin, producing assets at an attractive valuation is a nice addition to our production and cash flow base. The Bolt-On Acquisition also includes approximately ~10,000 net acres (100% operated; 67% held by production) in Irion County. We expect to benefit from additional operating synergies when production operations are combined with other assets in the area. As we have done in prior acquisitions, we look forward to applying our operating approach to these assets in order to reduce costs, and maximize production and cash flows."*

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 6/31/2022		
Company Name	Ticker	6/31/2022 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	$404,593	35.8%	23.6%	4.7x	3,741	$108,150
Shell PLC	SHEL	238,054	29.8%	22.2%	3.3	3,021	78,790
Chevron Corp	CVX	302,976	38.2%	27.1%	5.4	3,036	99,808
BP PLC	BP.	135,986	8.5%	21.2%	3.1	2,225	61,114
Equinor ASA	EQNR	101,865	64.0%	55.3%	1.4	2,083	48,906
Group Median			**35.8%**	**23.6%**	**3.3x**	**3,021**	**$78,790**
Global E&P							
Marathon Oil Corporation	MRO	$19,381	65.1%	75.0%	3.5x	328	$59,017
Hess Corporation	HES	40,797	21.3%	55.6%	8.0	334	121,972
ConocoPhillips	COP	125,575	47.5%	46.0%	4.0	1,764	71,198
Occidental Petroleum Corporation	OXY	90,731	88.3%	60.3%	4.3	1,155	78,573
APA Corporation	APA	18,577	61.3%	63.9%	2.5	523	35,529
Murphy Oil Corporation	MUR	7,775	29.7%	64.7%	3.3	160	48,523
Group Median			**54.4%**	**62.1%**	**3.8x**	**429**	**$65,107**

Source: Bloomberg L.P.

- Price per Flowing Barrel is EV/ daily production ($/boe/d)
- Companies included in the Guideline Group are not meant to be an exhaustive list. The selected companies' market caps exceed $1 billion and/or revenues exceed $500 million.
- 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.
- As of July 1, 2022, Oasis Petroleum (OAS) closed the acquisition of Whiting Petroleum (WLL), forming Chord Energy Corp (CHRD). We have decided not to incorporate the related market data given the proximity in time to the close date of this transaction.

Appendix A

Selected Public Company Information

Company Name	Ticker	6/31/2022 Enterprise Value	YoY % Change in Stock Price	EBITDAX Margin	as of 6/31/2022 EV/ EBITDAX	Daily Production (mboe/d)	Price per Flowing Barrel*
Bakken							
Continental Resources, Inc.	CLR	$30,310	71.8%	82.2%	4.8x	394	$76,876
Chord Energy Corp*	CHRD	Non-meaningful	Non-meaningful	Non-meaningful	Non-meaningful	Non-meaningful	Non-meaningful
Group Median			**71.8%**	**82.24%**	**4.8x**	**394**	**$76,876**
Appalachia							
Range Resources Corporation	RRC	$8,654	47.7%	27.3%	6.5x	356	$24,334
EQT Corporation	EQT	17,763	54.5%	15.7%	10.9	916	19,391
Coterra Energy Inc	CTRA	22,829	47.7%	70.7%	4.5	624	36,576
Antero Resources Corporation	AR	15,035	103.9%	48.3%	3.8	694	21,655
Southwestern Energy Company	SWN	12,037	10.2%	3.2%	32.6	786	15,323
Group Median			**47.7%**	**27.3%**	**6.5x**	**694**	**$21,655**

Source: Bloomberg L.P.

- Price per Flowing Barrel is EV/ daily production ($/boe/d)
- Companies included in the Guideline Group are not meant to be an exhaustive list. The selected companies' market caps exceed $1 billion and/or revenues exceed $500 million.
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Appendix A

Selected Public Company Information

Company Name	Ticker	6/31/2022 Enterprise Value	YoY % Change in Stock Price	EBITDAX Margin	as of 6/31/2022 EV/ EBITDAX	as of 6/31/2022 Daily Production (mboe/d)	as of 6/31/2022 Price per Flowing Barrel*
Permian Basin							
Diamondback Energy, Inc.	FANG	$28,174	29.0%	76.7%	4.2x	377	$74,806
Centennial Resource Development, Inc.	CDEV	2,471	-11.8%	60.3%	2.7	76	32,419
Callon Petroleum Company	CPE	5,037	-32.1%	50.3%	3.3	104	48,338
Laredo Petroleum, Inc.	LPI	2,518	-25.7%	48.3%	2.5	85	29,472
Pioneer Natural Resources Company	PXD	56,745	37.3%	50.6%	4.7	643	88,282
Group Median			**-11.8%**	**50.6%**	**3.3x**	**104**	**$48,338**
Eagle Ford							
EOG Resources, Inc.	EOG	$65,999	32.4%	45.5%	5.5x	775	$85,191
Magnolia Oil & Gas Corporation	MGY	4,239	34.3%	80.2%	3.4	74	57,258
SilverBow Resources, Inc.	SBOW	912	22.1%	42.2%	5.0	46	19,749
Ranger Oil Corporation	ROCC	1,550	39.2%	58.9%	3.1	40	38,628
Group Median			**33.3%**	**52.2%**	**4.2x**	**60**	**$47,943**
OVERALL MEDIAN			**36.5%**	**50.5%**	**4.1x**	**574**	**$53,082**

Source: Bloomberg L.P.

- Price per Flowing Barrel is EV/ daily production ($/boe/d)
- Companies included in the Guideline Group are not meant to be an exhaustive list. The selected companies' market caps exceed $1 billion and/or revenues exceed $500 million.
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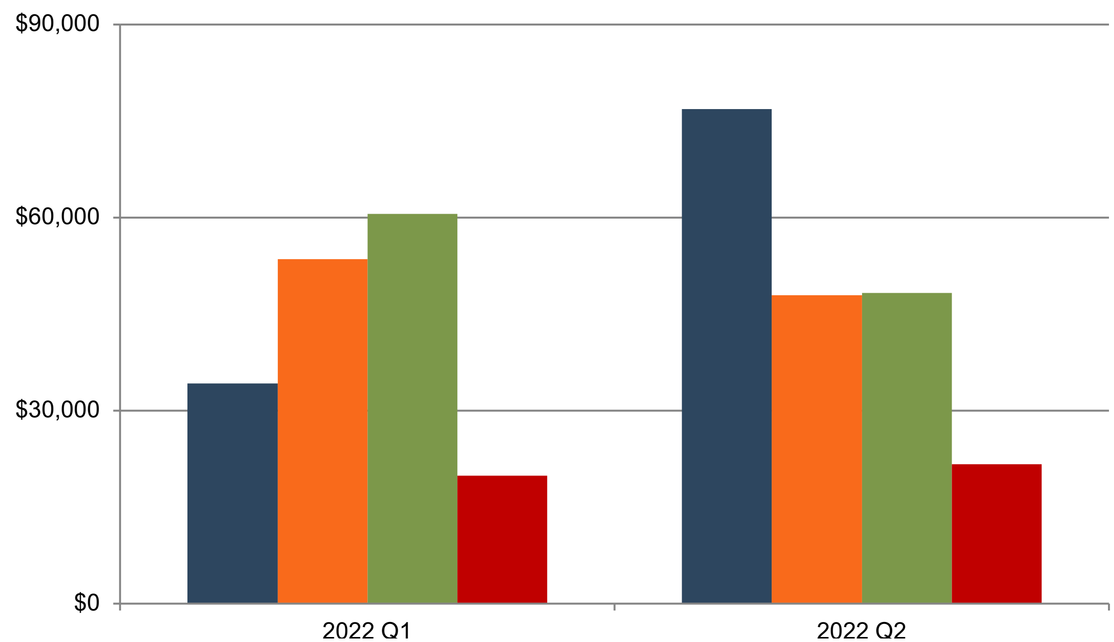
Appendix A

Selected Public Company Information

The following graph depicts the median of EV/production multiples, also known as price per flowing barrel, for Q2 2022, as compared to the median multiples for Q1 2022.

Price per Flowing Barrel



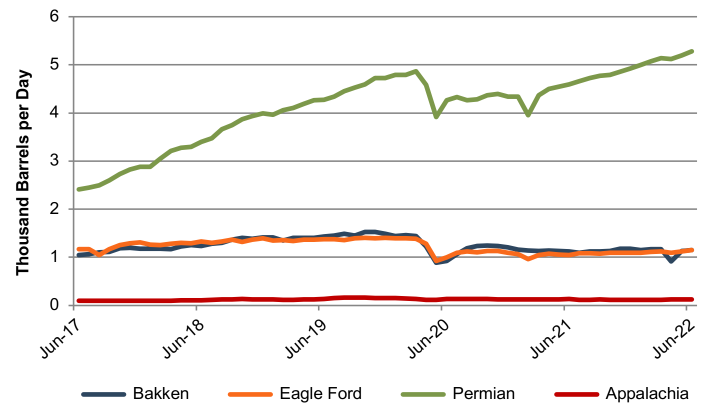
- Price per Flowing Barrel is EV/ daily production ($/boe/d)
- This is simply a graphic depiction of median figures of our selected public companies for each region. This should be interpreted solely in the context of relative valuation between the various basins over time. Bloomberg aggregates this 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

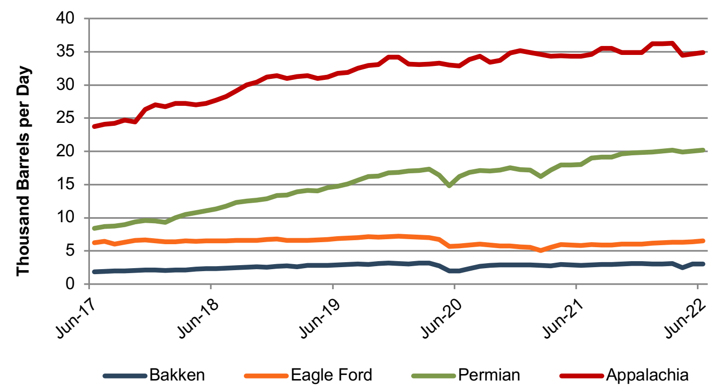
Oil production in the Bakken, Eagle Ford, and Permian increased over the last year by 2.9%, 9.7%, 15.0%. While the Permian and Eagle Ford groups have experienced a significant rise in oil production over the last year and the Bakken with slight growth, Appalachia oil production has decreased by 2.1%.



Source: EIA

Daily Production of Natural Gas

Natural gas production in the Bakken, Eagle Ford, Permian, and Appalachia increased over the last year by 7.2%, 11.5%, 12.4%, and 1.6%, respectively.



rce: EIA

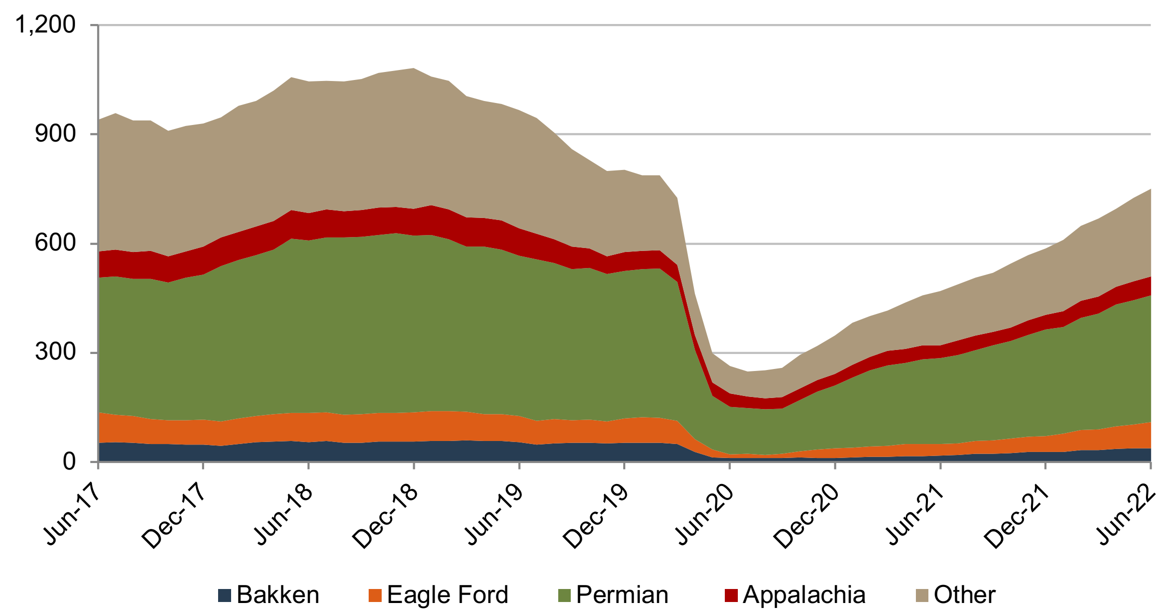
Appendix C

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. as of June 30, 2022 stood at 751, 59.8% higher than the 470 count as of June 30, 2021, and 12.4% greater than the count in March 2022. The rig count in the Permian increased by 47.9% year-over-year, from 236 to 349 rigs.

Rig Count by Region



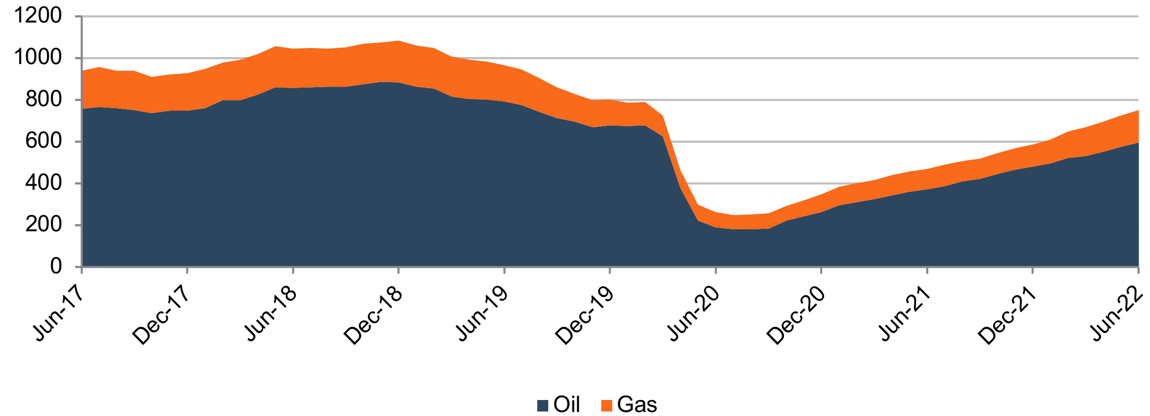
Source: Baker Hughes

[1] Calculations based on monthly crude oil and gas production and EIA drilling report by region.

Appendix C

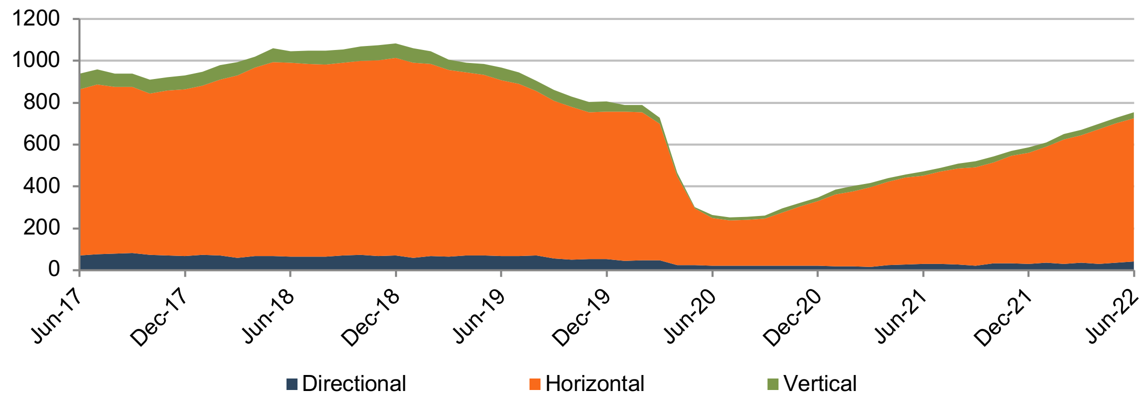
Rig Count

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



Source: Baker Hughes

U.S. Rig Count by Trajectory



Source: Baker Hughes

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