RILEY PERMIAN

1Q23 Results Update

May 2023



Forward-Looking Statements

Forward-Looking Statements

This presentation contains projections and other forward-looking statements within the meaning of federal securities laws. These projections and statements reflect Riley Exploration Permian, Inc.'s ("Riley Permian") current views with respect to future events and financial performance. No assurances can be given, however, that these events will occur or that these projections will be achieved, and actual results could differ materially from those projected as a result of certain factors. A discussion of these factors is included in Riley Permian's periodic reports filed with the U.S. Securities and Exchange Commission ("SEC").

All statements, other than historical facts, that address activities that Riley Permian assumes, plans, expects, believes, intends or anticipates (and other similar expressions) will, should or may occur in the future are forward-looking statements. The forward-looking statements are based on management's current beliefs, based on currently available information, as to the outcome and timing of future events, including the volatility of oil, natural gas and NGL prices; regional supply and demand factors, any delays, curtailment delays or interruptions of production, and any governmental order, rule or regulation that may impose production limits; cost and availability of gathering, pipeline, refining, transportation and other midstream and downstream activities; severe weather and other risks that lead to a lack of any available markets; our ability to successfully complete mergers, acquisitions and divestitures; the inability or failure of the Company to successfully integrate the acquired assets into its operations and development activities; the potential delays in the development, construction or start-up of planned projects; the risk that the Company's EOR project may not perform as expected or produce the anticipated benefits; risks relating to our operations, including development drilling and testing results and performance of acquired properties and newly drilled wells; any reduction in our borrowing base on our revolving credit facility from time to time and our ability to repay any excess borrowings as a result of such reduction; the impact of our derivative strategy and the results of future settlement; our ability to comply with the financial covenants contained in our credit agreement; conditions in the capital, financial and credit markets and our ability to obtain capital needed for development and exploration operations on favorable terms or at all; the loss of certain tax deductions; risks associated with executing our business strategy, including any changes in our strategy; inability to prove up undeveloped acreage and maintain production on leases; risks associated with concentration of operations in one major geographic area; legislative or regulatory changes, including initiatives related to hydraulic fracturing, emissions, and disposal of produced water, which may be negatively impacted by regulation or legislation; the ability to receive drilling and other permits or approvals and rights-of-way in a timely manner (or at all), which may be restricted by governmental regulation and legislation; restrictions on the use of water, including limits on the use of produced water and a moratorium on new produced water well permits recently imposed by the RRC in an effort to control induced seismicity in the Permian Basin; changes in government environmental policies and other environmental risks; the availability of drilling equipment and the timing of production; tax consequences of business transactions; public health crisis, such as pandemics and epidemics, and any related government policies and actions and the effects of such public health crises on the oil and natural gas industry, pricing and demand for oil and natural gas and supply chain logistics; general domestic and international economic, market and political conditions, including the military conflict between Russia and Ukraine and the global response to such conflict; risks related to litigation; and cybersecurity threats, technology system failures and data security issues. These forward-looking statements involve certain risks and uncertainties that could cause the results to differ materially from those expected by the management of Riley Permian.

These forward-looking statements involve significant risks and uncertainties that could cause actual results to differ materially from those anticipated, including, but not limited to, the risk that Riley Permian may reduce, suspend or totally eliminate dividend payments in the future, whether variable or fixed, due to insufficient liquidity or other factors, potential adverse reactions or changes to the business or operations of Riley Permian resulting from the recently completed merger, including Riley Permian's future financial condition, results of operations, strategy and plans; changes in capital markets and the ability of Riley Permian to finance operations in the manner expected; the risk that the Company's EOR and CCUS projects may not perform as expected or produce the anticipated benefits; the risks of oil and gas activities; and the fact that operating costs and business disruption may be greater than expected following the consummation of the merger.

Riley Permian encourages readers to consider the risks and uncertainties associated with projections and other forward-looking statements. In addition, Riley Permian assumes no obligation to publicly revise or update any forward-looking statements based on future events or circumstances.

For additional discussion of the factors that may cause us not to achieve our financial projections and/or production estimates, see Riley Permian's filings with the SEC, including its forms 10-K, 10-Q and 8-K and any amendments thereto. We do not undertake any obligation to release publicly the results of any future revisions we may make to this prospective data or to update this prospective data to reflect events or circumstances after the date of this presentation. Therefore, you are cautioned not to place undue reliance on this information.

None of the information contained in this presentation has been audited by any independent auditor. This presentation is prepared as a convenience for securities analysts and investors and may be useful as a reference tool. Riley Permian may elect to modify the format or discontinue publication at any time, without notice to securities analysts or investors.

Use of non-GAAP Financial Information

This presentation includes certain financial measures that are not calculated in accordance with U.S. generally accepted accounting principles ("GAAP"). These measures include (i) Adjusted Net Income, (ii) Adjusted EBITDAX, (iii) Cash Margins, (iv) Free Cash Flow and (v) PV-10. These non-GAAP financial measures are not measures of financial performance prepared or presented in accordance with GAAP and may exclude items that are significant in understanding and assessing our financial results. Therefore, these measures should not be considered in isolation, and users of any such information should not place undue reliance thereon. See the Company's website, www.rileypermian.com, for the descriptions and reconciliations of non-GAAP measures presented in this presentation to the most directly comparable financial measures calculated in accordance with GAAP.

Oil & Gas Reserves

The SEC generally permits oil and natural gas companies, in filings made with the SEC, to disclose proved reserves, which are reserve estimates that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions, and certain probable and possible reserves that meet the SEC's definitions for such terms. In this presentation, Riley Permian may use the terms "resource potential," "resource play," "estimated ultimate recovery," or "EURs," "type curve" and "standardized measure," each of which the SEC guidelines restrict from being included in filings with the SEC without strict compliance with SEC definitions. These terms refer to Riley Permian's internal estimates of unbooked hydrocarbon quantities that may be potentially discovered through exploratory drilling or recovered with additional drilling or recovery techniques. "Resource potential" is used by Riley Permian to refer to the estimated quantities of hydrocarbons that may be added to proved reserves, largely from a specified resource play potentially supporting numerous drilling locations. A "resource play" is a term used by Riley Permian to describe an accumulation of hydrocarbons known to exist over a large areal expanse and/or thick vertical section potentially supporting numerous drilling locations, which, when compared to a conventional play, typically has a lower geological and/or commercial development risk. "EURs" are based on Riley Permian's previous operating experience in a given area and publicly available information relating to the operations of producers who are conducting operations in these areas. Unbooked resource potential or "EURs" do not constitute reserves within the meaning of the Society of Petroleum Engineer's Petroleum Resource Management System or SEC rules and do not include any proved reserves. Actual quantities of reserves that may be ultimately recovered from Riley Permian's interests may differ substantially from those presented herein. Factors affecting ultimate recovery include the scope of Riley Permian's ongoing drilling program, which will be directly affected by the availability of capital, decreases in oil, natural gas liquids and natural gas prices, well spacing, drilling and production costs, availability and cost of drilling services and equipment, lease expirations, transportation constraints, regulatory approvals, negative revisions to reserve estimates and other factors, as well as actual drilling results, including geological and mechanical factors affecting recovery rates. "EURs" from reserves may change significantly as development of Riley Permian's core assets provides additional data. In addition, Riley Permian's production forecasts and expectations for future periods are dependent upon many assumptions, including estimates of production decline rates from existing wells and the undertaking and outcome of future drilling activity, which may be affected by significant commodity price declines or drilling cost increases. "Type curve" refers to a production profile of a well, or a particular category of wells, for a specific play and/or area.

1Q23 Select Highlights

1	Production was within guidance ranges despite lower activity and some midstream constraints; capex and LOE were favorable to guidance ranges
2	Averaged oil production of 9.9 MBbls/d, representing an increase of 32% as compared year-over-year 1Q22, driven solely by organic growth
3	Generated $44MM of Adjusted EBITDAX(1) and $33MM of operating cash flow
4	Formed a joint venture to build a new power infrastructure for onsite generation using produced natural gas
5	Announced a transformative $330MM acquisition of oil and natural gas assets in New Mexico, which subsequently closed in April

(1) A non-GAAP financial measure as defined in the supplemental financial tables available on the Company's website at www.rileypermian.com.

1Q23 Performance vs. Prior Guidance

Activity and Investing Guidance

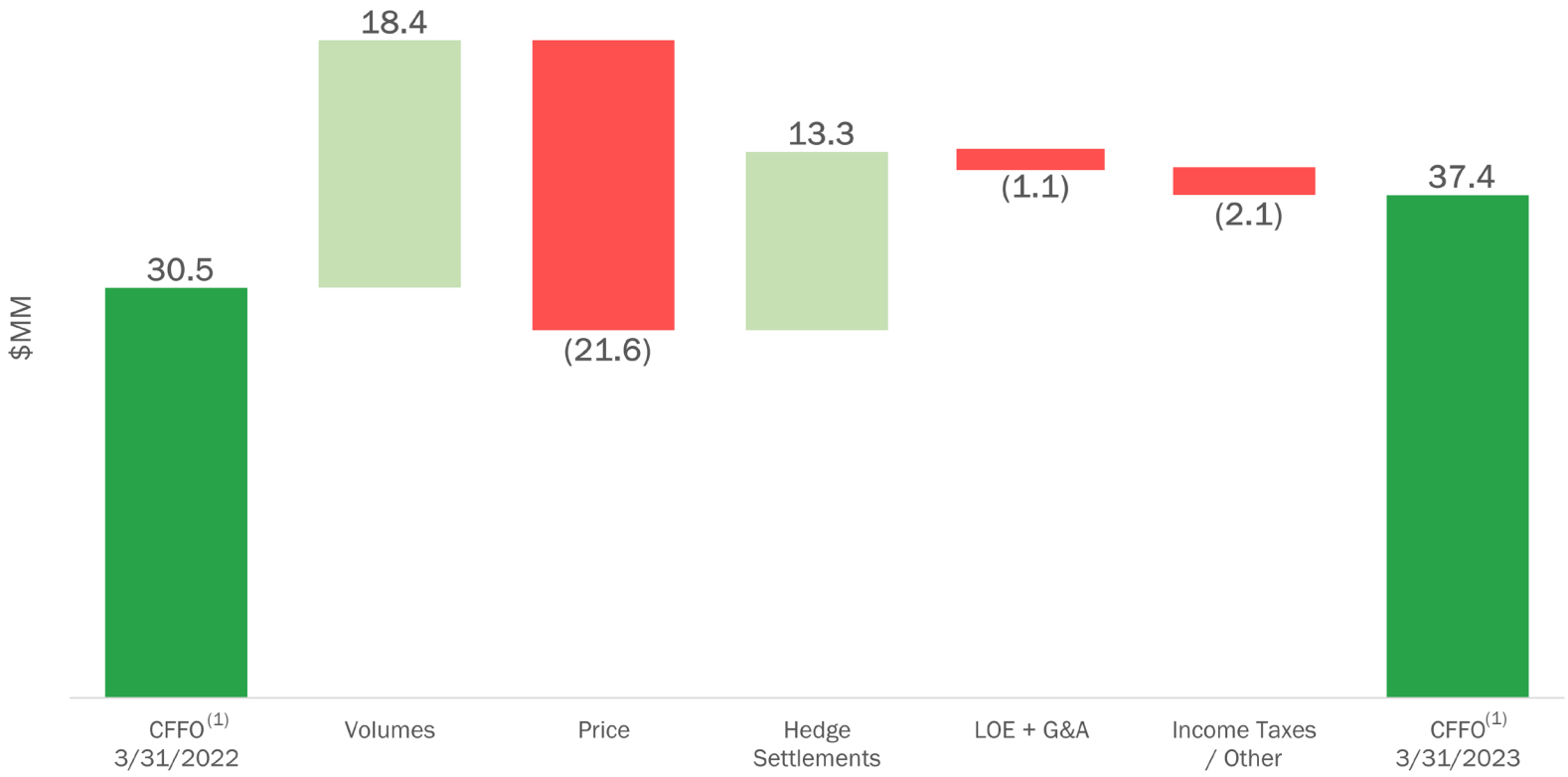
		Midpoint Guidance	Actual	Actual vs Mid Guidance	
Texas Activity					
Gross Operated Wells Drilled	#	8	6	(2)	-25%
Avg. WI on Gross Oper. Wells Drilled	%	99.5%	100.0%	0.5%	0.5%
New Mexico Activity					
Gross Wells Drilled	#	-	-	-	NA
Avg. WI on Gross Oper. Wells Drilled	%	NA	NA	NA	NA
Investing Expenditures by Category (Accrual)[1]					
Capex, Leasehold and Cap. Interest	$MM	47.0	41.9	(5.1)	-11%
Power JV Investment[2]	$MM	3.5	1.8	(1.7)	-48%
Total Investments	$MM	50.5	43.8	(6.7)	-13%
E&P Capital Expenditures by Region (Accrual)[1]					
Texas	%	100.0%	100.0%	0.0%	0.0%
New Mexico	%	0.0%	0.0%	0.0%	0.0%

Production, Realizations and Cost Guidance

		Midpoint Guidance	Actual	Actual vs Mid Guidance	
Net Production					
Total	MBoe/d	13.5	13.2	(0.3)	-3%
Oil	MBbls/d	10.0	9.9	(0.1)	-1%
% Oil	%	74.5%	75.4%	0.9%	0.9%
% Natural Gas	%	15.0%	13.3%	-1.7%	-1.7%
% NGL	%	10.5%	11.3%	0.8%	0.8%
Basis Differentials and Fees					
Oil	$/Bbl	(3.40)	(3.30)	0.10	-3%
Natural Gas	$/Mcf	(2.70)	(2.11)	0.59	-22%
NGL as a % of WTI	% of WTI	11%	9%	-2%	-2%
Operating and Corporate Costs					
LOE & Workover Expense (WOE)	$/Boe	8.50	7.49	(1.01)	-12%
Severance & Ad Valorem Tax	% of revenue	7.0%	6.1%	-1%	-1%
Cash G&A[3]	$/Boe	4.10	4.20	0.10	2%
Cash Payments for Income Taxes	$MM	0.25	-	(0.25)	-100%

(1) Activity-based investing expenditures before acquisitions.
(2) Includes $1.8MM of cash invested in 1Q23; excludes $2.3MM of assets that were contributed to the JV from Riley Permian during 1Q23 at closing, and which represented a cash investment by Riley Permian during 4Q22.
(3) A non-GAAP financial measure as defined and reconciled in the supplemental financial tables available on the Company's website at www.rileypermian.com.

Y/Y Drivers of Change in Cash Flow from Operations (CFFO)[(1)]



- *CFFO[(1)] increased by $6.9MM or 23% Y/Y primarily driven by higher production volumes and despite significantly lower prices*
- *Lower hedge settlements Y/Y offset ~60% of pricing declines*
- *Operating costs were essentially flat Y/Y on a unit basis, despite inflationary pressures*

(1) Cash Flow From Operations before the impact of changes in working capital.

Q/Q Drivers of Change in Cash Flow from Operations (CFFO)[1]



- *CFFO[1] decreased by $6.9MM or 16% Q/Q*
- *Modestly lower volumes and higher opex contributed to $2.6MM of the decrease*
- *The impact of lower pricing was mostly offset by reduced negative hedge settlements*
- *Interest expense was higher Q/Q primarily due to the Company having interest income in 4Q22 on account of a derivative settlement*
- *Certain transaction costs related to the New Mexico Acquisition were incurred in 1Q23*

(1) Cash Flow From Operations before the impact of changes in working capital.

2023 Plan Guidance

Activity and Investing Guidance

		2Q23	2023 Reporting[1]
Texas Activity			
Gross Operated Wells Drilled	#	2 - 4	13 - 15
Avg. WI on Gross Oper. Wells Drilled	%	98% - 100%	98% - 99%
New Mexico Activity			
Gross Wells Drilled	#	3 - 4	7 - 9
Avg. WI on Gross Oper. Wells Drilled	%	86% - 90%	90% - 97%
Investing Expenditures by Category (Accrual)[2]			
Capex, Leasehold and Cap. Interest	$MM	47 - 56	150 - 165
Power JV Investment	$MM	3 - 4	10 - 15
Total Investments	$MM	50 - 60	160 - 180
E&P Capital Expenditures by Region (Accrual)[2]			
Texas	%	54% - 64%	65% - 75%
New Mexico	%	46% - 36%	35% - 25%

Assumed year-over-year inflation on service costs: 15-20%

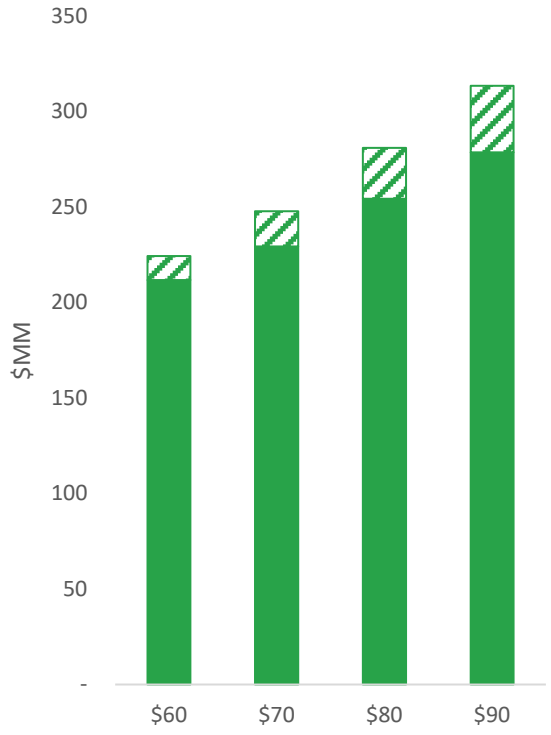
Production, Realizations and Cost Guidance

		2Q23	Full-Year 2023[1]
Net Production			
Total	MBoe/d	20.0 - 21.0	18.4 - 19.2
Oil	MBbls/d	14.0 - 15.0	12.8 - 13.4
% Oil	%	70% - 71%	70% - 71%
% Natural Gas	%	16% - 14%	16% - 15%
% NGL	%	14% - 15%	14% - 14%
Basis Differentials and Fees			
Oil	$/Bbl	(3.90) - (2.90)	(3.90) - (2.90)
Natural Gas	$/Mcf	(2.70) - (2.10)	(2.70) - (2.10)
NGL as a % of WTI	% of WTI	10% - 14%	10% - 14%
Operating and Corporate Costs			
LOE & Workover Expense (WOE)	$/Boe	8.00 - 9.00	8.00 - 9.00
Severance & Ad Valorem Tax	% of revenue	6.0% - 8.0%	6.0% - 8.0%
Cash G&A[3]	$/Boe	3.00 - 3.50	3.00 - 3.50
Cash Payments for Income Taxes	$MM	3.0 - 4.0	6.0 - 8.0

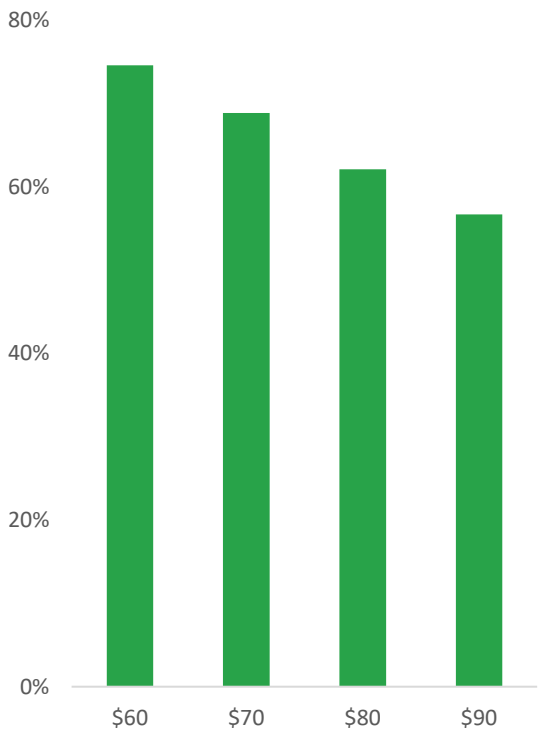
(1) Full year 2023 guidance information here reflects the impact of the New Mexico Acquisition for the second, third and fourth quarters of 2023.
(2) Activity-based investing expenditures before acquisitions.
(3) A non-GAAP financial measure as defined and reconciled in the supplemental financial tables available on the Company's website at www.rileypermian.com.

2023 Plan Forecasts Sensitizing Oil Price[1]

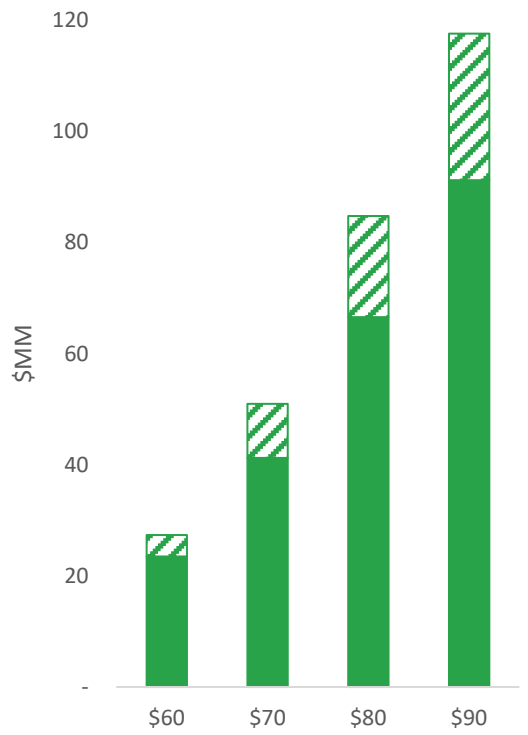
Adjusted EBITDAX[2]



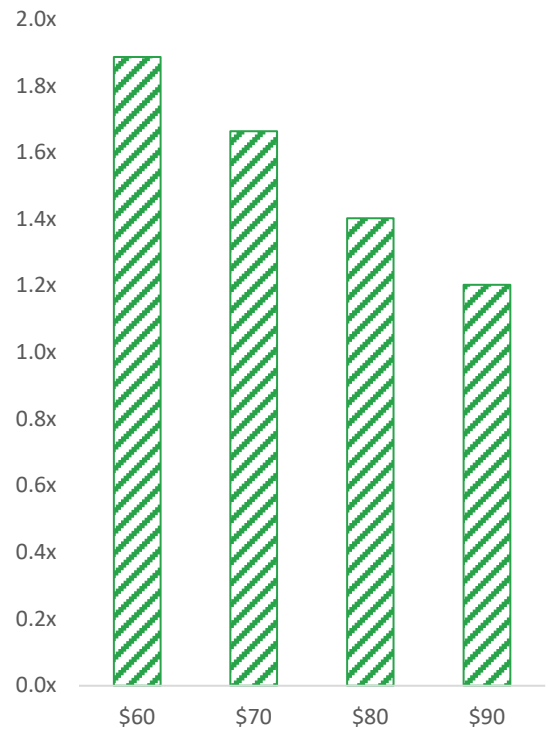
E&P Reinvestment Rate[3] vs. EBITDAX[2]



E&P FCF[2][4]



YE23 Leverage[5]



75% As Reported 100% Pro Forma

(1) Based on management estimates and midpoint guidance. Price sensitivity uses actual prices through 4/30/2023 and flat price case thereafter; each case uses $2.54 for Henry Hub natural gas index price. "75% As Reported" metrics reflect the impact of the New Mexico Acquisition for the second, third and fourth quarters of 2023. "100% Pro Forma" metrics represent illustrative, run-rate metrics as if the New Mexico Acquisition closed on January 1, 2023.
(2) A non-GAAP financial measure as defined in the supplemental financial tables available on the company's website at www.rileypermian.com.
(3) E&P Reinvestment Rate defined as accrual-based capital expenditures associated with E&P activity (excluding Power JV Investment), divided by Adjusted EBITDAX.
(4) E&P FCF is defined as EBITDAX less interest expense and midpoint E&P accrual capex. Excludes Power JV investment.
(5) YE23 Leverage based on forecasted debt balance as of 12/31/23 divided by Adjusted EBITDAX, which is a non-GAAP financial measure as defined in the supplemental financial tables available on the company's website at www.rileypermian.com.



Appendix

Hedging Positions as of 5/5/23

Calendar Quarters	2023 2Q	2023 3Q	2023 4Q	2024 1Q	2024 2Q	2024 3Q	2024 4Q	2025 1Q
CRUDE OIL								
Fixed Swap - Volume, Bbls/Qtr	498,000	407,000	347,000	105,000	105,000	105,000	105,000	-
Weighted Average Price, $/Bbl	$67.32	$67.97	$67.68	$71.77	$71.77	$71.77	$71.77	$0.00
Collars - Volume, Bbls/Qtr	300,000	330,000	330,000	520,000	390,000	366,000	345,000	423,000
Weighted Average Floor Price, $/Bbl	$71.50	$68.64	$68.64	$61.41	$61.08	$61.00	$60.87	$60.00
Weighted Average Ceiling Price, $/Bbl	$88.98	$88.85	$88.85	$84.00	$85.76	$83.61	$84.26	$77.23
Total Oil Price Hedges, Bbls/Qtr	798,000	737,000	677,000	625,000	495,000	471,000	450,000	423,000
Downside Weighted Average Price, $/Bbl	$68.89	$68.27	$68.15	$63.15	$63.35	$63.40	$63.41	$60.00
CRUDE OIL BASIS								
Mid/Cush Basis Swaps - Volume, Bbls/Qtr	360,000	360,000	360,000	240,000	240,000	240,000	240,000	-
Weighted Average Price, $/Bbl	$1.28	$1.28	$1.28	$0.87	$0.87	$0.87	$0.87	$0.00
NATURAL GAS								
Swaps - Volume, MMBtu/Qtr	450,000	450,000	400,000	375,000	375,000	375,000	375,000	375,000
Weighted Average Price, $/MMBtu	$2.60	$2.60	$3.23	$3.61	$3.17	$3.17	$3.75	$4.05
Collars - Volume, MMBtu/Qtr	300,000	300,000	300,000	300,000	255,000	255,000	255,000	255,000
Weighted Average Floor Price, $/MMBtu	$2.55	$2.55	$3.12	$3.40	$2.95	$2.95	$3.42	$3.65
Weighted Average Ceiling Price, $/MMBtu	$3.20	$3.20	$4.07	$4.50	$3.72	$3.72	$4.54	$4.95
Total NG Price Hedges, MMBtu/Qtr	750,000	750,000	700,000	675,000	630,000	630,000	630,000	630,000
Downside Weighted Average Price, $/MMBtu	$2.58	$2.58	$3.18	$3.52	$3.08	$3.08	$3.62	$3.89
INTEREST RATE								
Swaps - Notional Volume (000's)	$ -	$ -	$ -	$ -	$ 80,000	$ 80,000	$ 80,000	$ 80,000
1-Month Term SOFR	0%	0%	0%	0%	3.09%	3.09%	3.09%	3.09%

- Company added derivative positions in conjunction with the New Mexico Acquisition
- 58% of 2Q-4Q 2023 forecasted oil production is hedged based on midpoint guidance level
- 42% of 2Q-4Q 2023 forecasted natural gas production is hedged based on midpoint guidance level

Note: Q2 2023 derivative positions shown include all contracts that have settled as of 5/5/23

Equity Ownership and Research Analyst Coverage

Equity Ownership

> 5% Holders and Insiders as of 5/1/23[1]	Shares (MM)	Ownership %
Yorktown Energy Partners[2]	5.51	27.2%
Bluescape Energy Partners	5.22	25.9%
Balmon Investments[2]	2.02	10.0%
VandenBrink Estate[2]	1.97	9.8%
Riley Permian Management	0.78	3.9%
Board of Directors	0.06	0.3%
Estimated Public Float	4.62	22.9%
Total	**20.18**	**100.0%**
Total Insider Ownership	**6.35**	**31.4%**

Total shares inclusive of unvested restricted stock awards

Research Analyst Coverage

	Firm	Analyst	Access
1	Roth	John White	Public Link
2	Truist	Neal Dingmann	Contact firm
3	Water Tower	Jeff Robertson	Public Link
4	Energy Prospectus Group	Daniel Steffens	Contact firm
5	Tuohy Brothers	Noel Parks	Contact firm

(1) Source: SEC Filings. Insiders include Yorktown, management and the board of directors.
(2) Includes affiliated entity holdings aggregated from Form 4 filings.

Debt Summary

Facility	Borrowing Base / Beginning Principal for Notes	Annual Interest Rate	Maturity	Amortization
Sr. Secured Credit Facility ("RBL")	$225MM borrowing base with $89MM outstanding as of 3/31/23 Borrowing base was increased to $325MM with the closing of the New Mexico Acquisition, and amounts were drawn to partially fund the purchase price and associated fees and expenses	Term SOFR + 2.85% - 3.85%	April 2026	None; Company intends to periodically pay down balance with excess cash flow
Sr. Unsecured Notes	$200MM beginning principal amount in April 2023	10.5%	April 2028	$5MM/quarter

Additional Information

Company

www.rileypermian.com

29 E. Reno Ave., Ste 500
Oklahoma City, OK 73104

Investor Relations

Direct: 405-415-8699
ir@rileypermian.com

