

Investor Presentation

November 2021



Disclaimer

FORWARD-LOOKING STATEMENTS

This document contains forward-looking statements that involve a number of assumptions, risks and uncertainties that could cause actual results to differ materially from those contained in the forward-looking statements. Falcon cautions readers not to place any undue reliance on these forward-looking statements as forward-looking information is not a guarantee of future performance. Such forward-looking statements include, but are not limited to, statements about future financial and operating results, future dividends paid, the tax treatment of dividends paid, Falcon's plans, initiatives, objectives, expectations and intentions and other statements that are not historical facts. Risks, assumptions and uncertainties that could cause actual results to materially differ from the forward-looking statements include, but are not limited to, those associated with general economic and business conditions; the COVID-19 pandemic and its impact on Falcon and on the oil and gas industry as a whole; Falcon's ability to realize the anticipated benefits of its acquisitions; changes in commodity prices; uncertainties about estimates of reserves and resource potential; inability to obtain capital needed for operations; Falcon's ability to meet financial covenants under its credit agreement or its ability to obtain amendments or waivers to effect such compliance; changes in government environmental policies and other environmental risks; the availability of drilling equipment and the timing of production in Falcon's regions; tax consequences of business transactions; and other risks, assumptions and uncertainties detailed from time to time in Falcon's reports filed with the U.S. Securities and Exchange Commission, including under the heading "Risk Factors" in Falcon's most recent annual report on Form 10-K as well as any subsequently filed quarterly reports on Form 10-Q and current reports on Form 8-K. Forward-looking statements speak only as of the date hereof, and Falcon assumes no obligation to update such statements, except as may be required by applicable law.

RESERVE INFORMATION

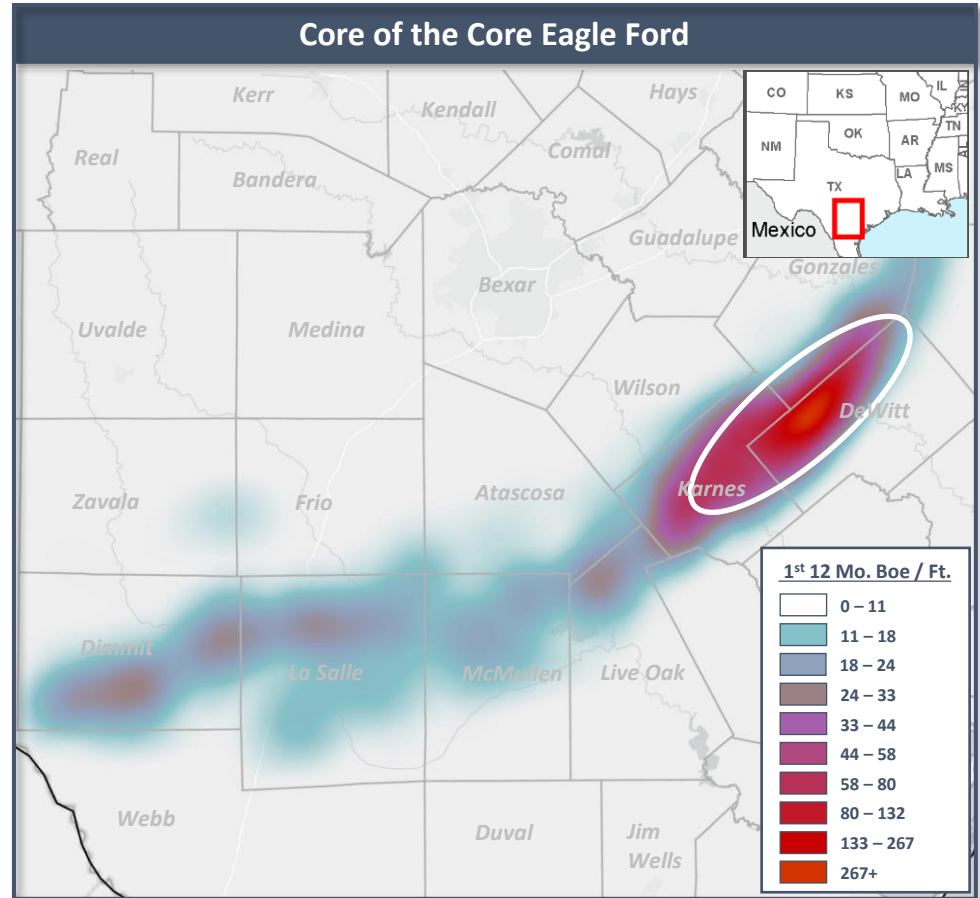
Reserve engineering is a process of estimating underground accumulations of hydrocarbons that cannot be measured in an exact way. The accuracy of any reserve estimate depends on the quality of available data, the interpretation of such data and price and cost assumptions made by reserve engineers. In addition, the results of drilling, testing and production activities may justify revisions of estimates that were made previously. If significant, such revisions could impact Falcon's strategy and change the schedule of any further production and development drilling. Accordingly, reserve estimates may differ significantly from the quantities of oil and natural gas that are ultimately recovered. Estimated Ultimate Recoveries, or "EURs," refers to estimates of the sum of total gross remaining proved reserves per well as of a given date and cumulative production prior to such given date for developed wells. These quantities do not necessarily constitute or represent reserves as defined by the SEC and are not intended to be representative of all anticipated future well results.

World Class Assets Being Developed by World Class Operators

Falcon's primary assets are located in the core of the Eagle Ford Shale under premier operators

Market Overview	
NASDAQ Ticker	FLMN
Market Capitalization ^(1,2)	\$510mm
Net Debt (9/30/21)	\$32.9mm
Total Enterprise Value	\$543mm

Asset Overview	
Key Eagle Ford Operators	COP, BP/DVN, EOG
Gross Unit Acres	EF: ~256,000 Marcellus: ~80,000
Net Acres (8/8ths) ⁽³⁾	EF: ~2,700 Marcellus: ~1,530
Producing Wells	EF: ~2,225 Marcellus: ~450



1. Assumes share price as of November 3, 2021. Inclusive of Class C Shares.

2. 86,376,740 shares reflect fully-diluted or as-converted shares outstanding, inclusive of 40,000,000 Class C shares. Excludes unvested RSAs. As of September 30, 2021.

3. Represents 100% ownership equivalent; not normalized to 1/8th.

Falcon Investment Highlights

Falcon Minerals offers exposure to world class oil and natural gas reservoirs in the Eagle Ford Shale and the Marcellus and Utica in the Northeast



Flagship assets in the Karnes Trough

*The Karnes Trough in the Eagle Ford Shale is among the lowest breakeven reservoirs in the U.S.
Compelling operator economics hold rigs in the basin*



World class operators prosecuting decade long development plans

*Averaged 4 rigs on Falcon's Eagle Ford assets during Q3'21
COP, EOG, and BP/DVN have substantial Karnes Trough activity with ~12 rigs running*



High exposure to oil prices through industry leading payout ratio

*Inception to date average payout ratio of ~95% with cumulative dividends of \$1.490 per share
Announced \$0.155 per share dividend for Q3'21 (\$0.620 annualized) → 97% Q3'21 payout ratio*



Conservative balance sheet

*Net leverage of 0.74x on an LTM basis as of September 30, 2021
Falcon remains unhedged on crude oil in 2022*



Strong margins with exposure to both crude oil and natural gas

73% EBITDA margins in Q3'21 → high free cash flow margins allows for dividends even in low commodity price environments

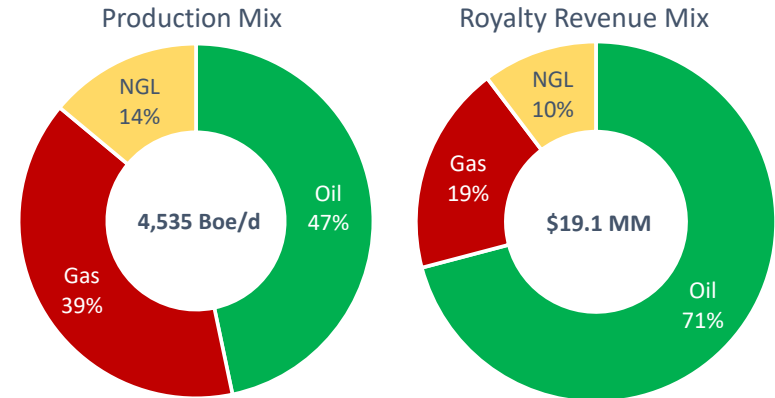
Falcon
Minerals

Q3'21 Financial Overview

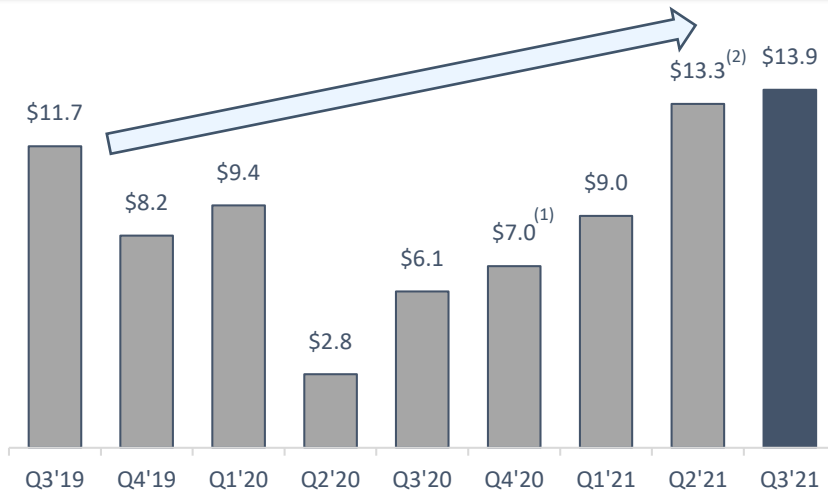
Highlights

- ❑ Production of 4,535 Boe/d (47% oil by volume)
- ❑ EBITDA of \$14.7 million
 - EBITDA margins of \$35.32/Boe (73% of total revenue)
- ❑ \$1.1 million of lease bonus revenue
- ❑ **Q3'21 Pro-forma Free Cash Flow of \$13.9 million (\$0.160 / share)**

Q3'21 Results

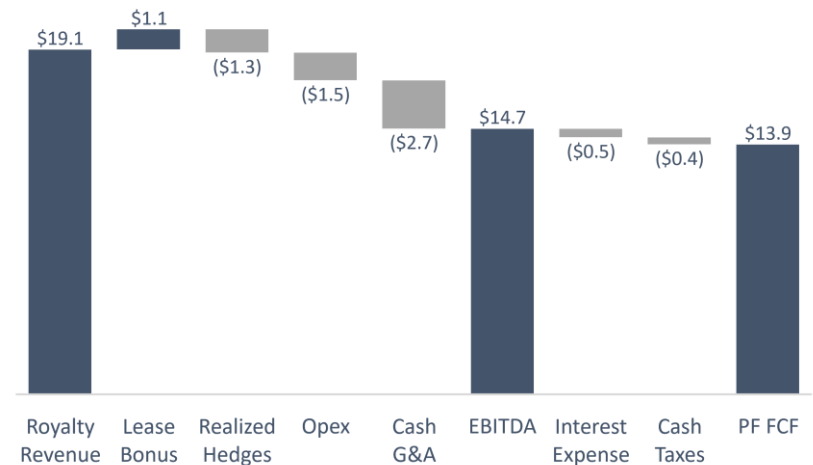


Historical Pro-forma Free Cash Flow (\$MM)



1. Excludes expenses associated with the strategic review in 2020.
2. Excludes expenses associated with the executive transition in June 2021.

Q3'21 Pro-forma Free Cash Flow (\$MM)

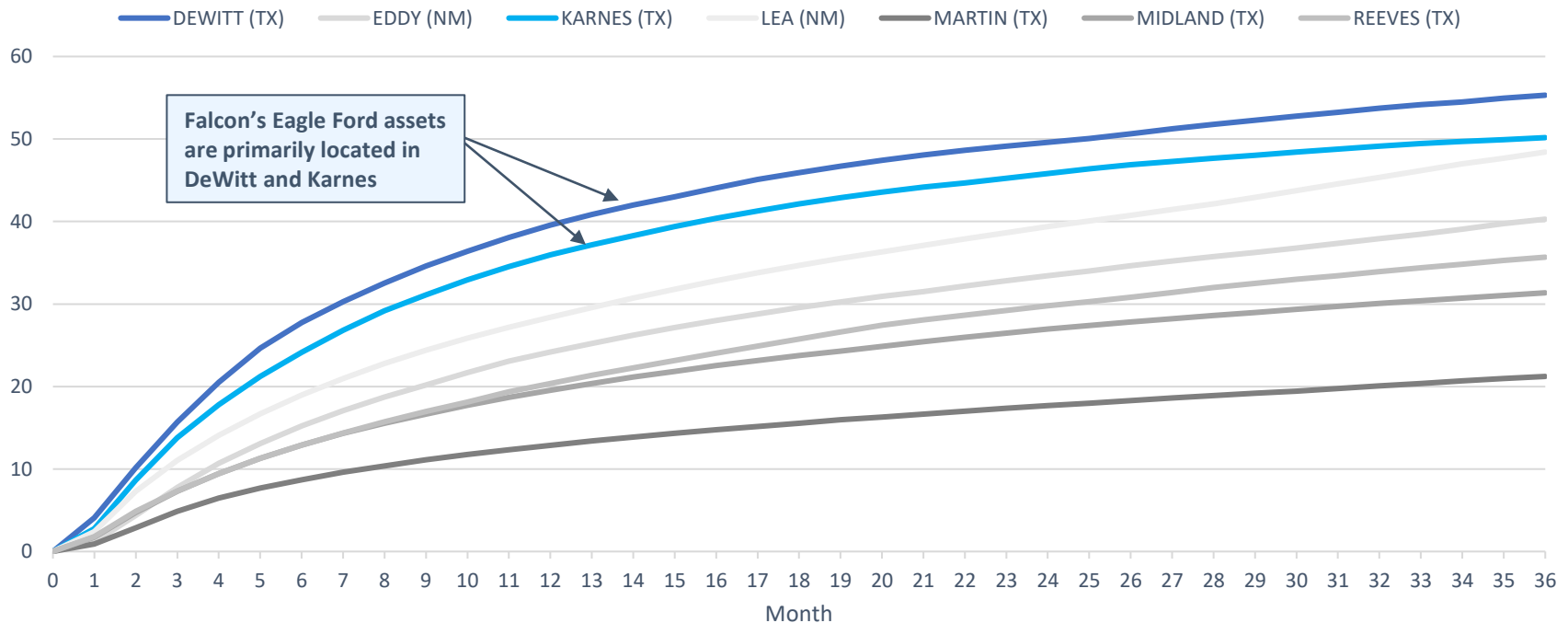


Exposure to Extraordinary Reservoirs

Well economics in the Karnes Trough are supported by the rapid delivery of oil volumes

- ❑ Prolific production profile supports operator economics
- ❑ Cumulative oil recoveries of 50 BO/ft. in the first three years exceed the EURs of many other horizontal plays in the U.S.
- ❑ Thick, hydrocarbon rich reservoir allows for dense well spacing with a decade of proof
- ❑ High oil recoveries and tight spacing are ideal for mineral owners seeking to maximize revenue potential

Cumulative Oil Production per Lateral Foot ⁽¹⁾



1. Source: Enverus. All COP operated horizontal wells with first production on or after January 1, 2018, grouped by county.

Development Activity

Highlights

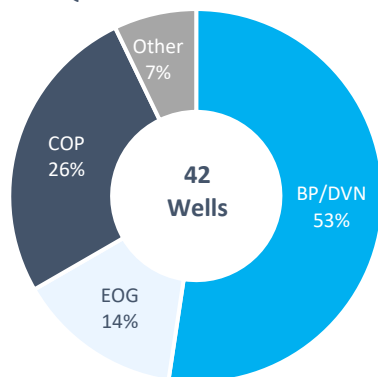
- ❑ Averaged 4 rigs on Falcon's Eagle Ford assets in Q3'21
- ❑ 62 gross wells (0.31 net wells) TIL in Q3'21
- ❑ 140 gross Eagle Ford line-of-sight wells (1.57 net wells) permitted and in active development
 - 67 gross wells and 0.65 net wells waiting on completion or connection

2021 YTD Development

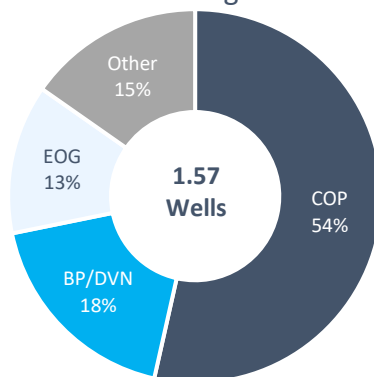
	Active Rigs	Gross TIL	Average NRI	Net TIL
Q1'21	5	60	~2.04%	1.23
Q2'21	4	55	~0.93%	0.51
Q3'21	4	62	~0.51%	0.31
YTD	~4	177	~1.16%	2.05

Falcon Eagle Ford Wells by Operator

Q3'21 Gross Wells TIL







Net Line-of-Sight Wells



Eagle Ford Line-of-Sight Development (November 2021)

	Gross Wells	Average NRI	Net Wells
Permitted	73	1.27%	0.93
Waiting on Completion	63	1.00%	0.63
Waiting on Connection	4	0.47%	0.02
Total	140	1.12%	1.57

Recent Operator Commentary

Key Operators		
	 	
<ul style="list-style-type: none"> <input type="checkbox"/> Eagle Ford Outlook – 10-year commitment to Eagle Ford <input type="checkbox"/> 4 rigs in the Karnes Trough <input type="checkbox"/> ConocoPhillips (“COP”) stated during Q3’21 earnings call that Eagle Ford activity is increasing <input type="checkbox"/> COP stated during June that the Eagle Ford remains one of the company’s lowest cost of supply areas <input type="checkbox"/> Plan to drill ~1,600 operated new wells over 10-year plan <input type="checkbox"/> ~3,800 top-tier locations remaining <input type="checkbox"/> Average cost of supply in Lower 48 below ~\$30 / Bbl (10% IRR threshold) <input type="checkbox"/> Upside – ~300 refracs in 10-year plan, ~75% EUR increase from mechanical isolation refracs 	<ul style="list-style-type: none"> <input type="checkbox"/> Eagle Ford Outlook – 10+ years of inventory life in the Eagle Ford <input type="checkbox"/> 2 rigs in the Karnes Trough <input type="checkbox"/> Q3’21 production increased 15% to 42,000 Boe/d <input type="checkbox"/> Brought 40 new wells online YTD <input type="checkbox"/> Expect to maintain production profile with 2 rigs in Q4’21 <input type="checkbox"/> Successful redevelopment appraisal program during 1H’20 confirms resource upside and additional highly economic inventory <input type="checkbox"/> Upside – ~700+ potential refrac locations along with additional redevelopment / infill inventory 	<ul style="list-style-type: none"> <input type="checkbox"/> Eagle Ford Outlook – 10+ years of inventory remaining <input type="checkbox"/> 6 rigs currently running in the Karnes Trough <input type="checkbox"/> ~145 net Eagle Ford wells expected to TIL in 2021 <input type="checkbox"/> ~1,900 net undrilled premium locations in the Eagle Ford <input type="checkbox"/> ~6% reduction in Eagle Ford well costs expected in 2021 compared to 2020 levels <input type="checkbox"/> Upside – targeting Enhanced Oil Recovery (EOR) program with over 200 wells identified

10-year commitment to the Eagle Ford across key operators

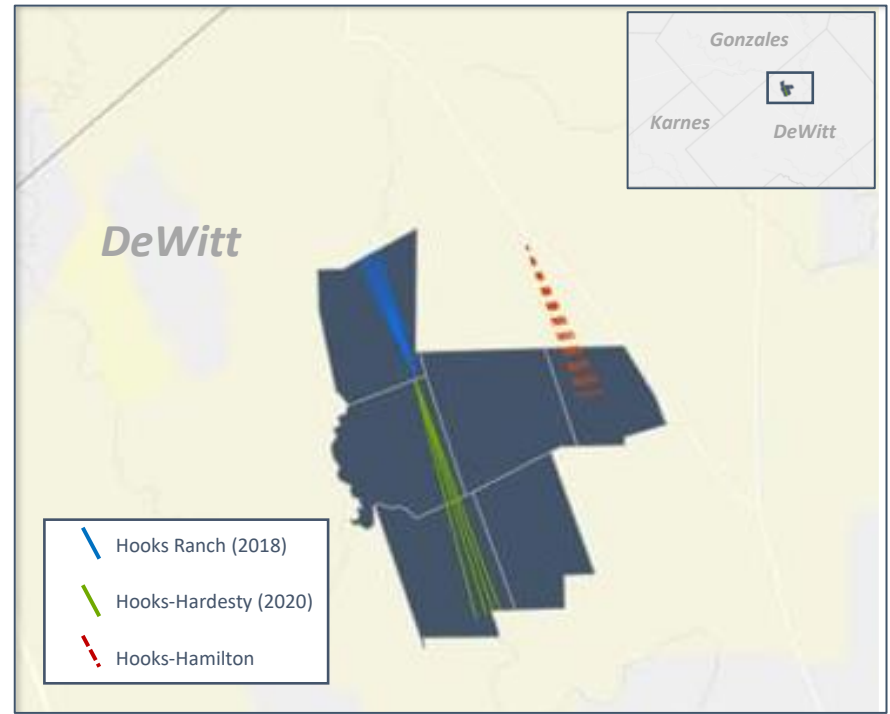
Hooks Ranch Update

Falcon Minerals has a 22.5% royalty interest in ConocoPhillips' Hooks Ranch position

- ❑ ~75% undeveloped → 100% HBP and operated by ConocoPhillips
- ❑ ConocoPhillips permitted 6 new wells during September 2020
 - 4 Lower Eagle Ford / 2 Upper Eagle Ford
 - Wells will have laterals from adjacent Hamilton properties into the Hooks unit

Historical results at Hooks have been outstanding

- ❑ Four long-lateral Hooks Ranch wells TIL on February 7, 2020
 - 12-month production outperformed average COP well in the Karnes Trough by over ~30% ⁽¹⁾
- ❑ February 2018 Hooks 6-well pad (4 Lower, 2 Upper) performed in top decile of performance in basin
- ❑ 2018/2020 Hooks Lower Eagle Ford wells produced >50 BO/ft. in less than their first 18 months on production



1. Data from Enverus.

Financial Overview

Falcon maintains a conservative balance sheet and is lightly hedged

- ❑ Low leverage profile → net debt of \$32.9 million at Q3'21
- ❑ Net leverage well below 1.0x
- ❑ Hedged 150,000 MMbtu/month for November – March winter gas sales at attractive pricing
 - Collars set a floor at \$4.20/MMbtu while retaining significant upside exposure

Capitalization as of September 30, 2021

Cash	\$3.6mm
Revolving Credit Facility Borrowing	\$36.5mm
Net Debt	\$32.9mm
Borrowing Base	\$70.0mm
Net Debt to LTM EBITDA ⁽¹⁾	0.74x

Crude Oil Swaps (Magellan East Houston)

Date	Swap Volumes (Bbls/d)	Swap Price (\$ / Bbl)
Q4'21	836	\$54.85

Natural Gas Collars (NYMEX)

Date	Collar Volumes (MMbtu / month)	Collar Prices
Nov '21 – March '22	150,000	\$4.20 x \$5.52

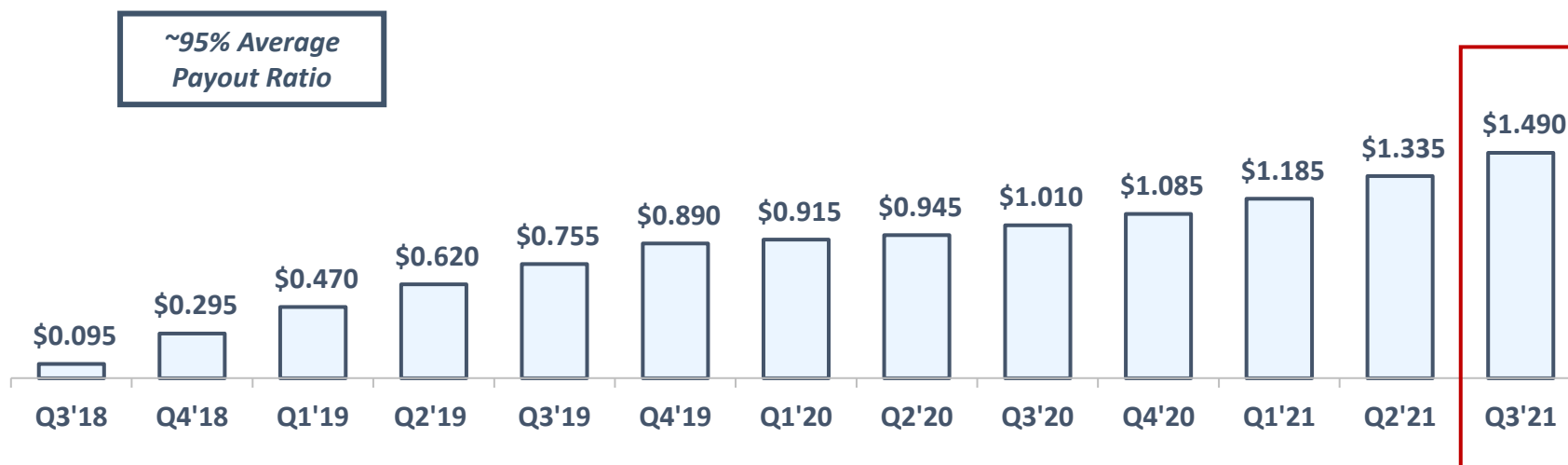
1. Calculated by dividing the sum of total debt outstanding less total cash on hand as of September 30, 2021 by Adjusted EBITDA for the trailing 12 month period.

Dividend Payouts

Favorable Tax Treatment of Dividends

- ❑ Falcon announced third quarter 2021 dividend of \$0.155 per share → \$1.490 of cumulative dividends since inception
- ❑ Falcon expects that greater than 50% of the dividends paid to Class A shareholders during 2021 will be classified as non-dividend distributions in 2021 and therefore represent a reduction of basis rather than ordinary income
 - Non-dividend distributions are treated as a reduction of basis until such time that the investors' basis is fully recovered
 - Falcon generates non-dividend distributions due to the Company's high payout ratio coupled with the step up in the tax basis of Falcon's minerals interests that was received as a part of the transaction with Royal Resources in 2018

Cumulative Dividends Per Share

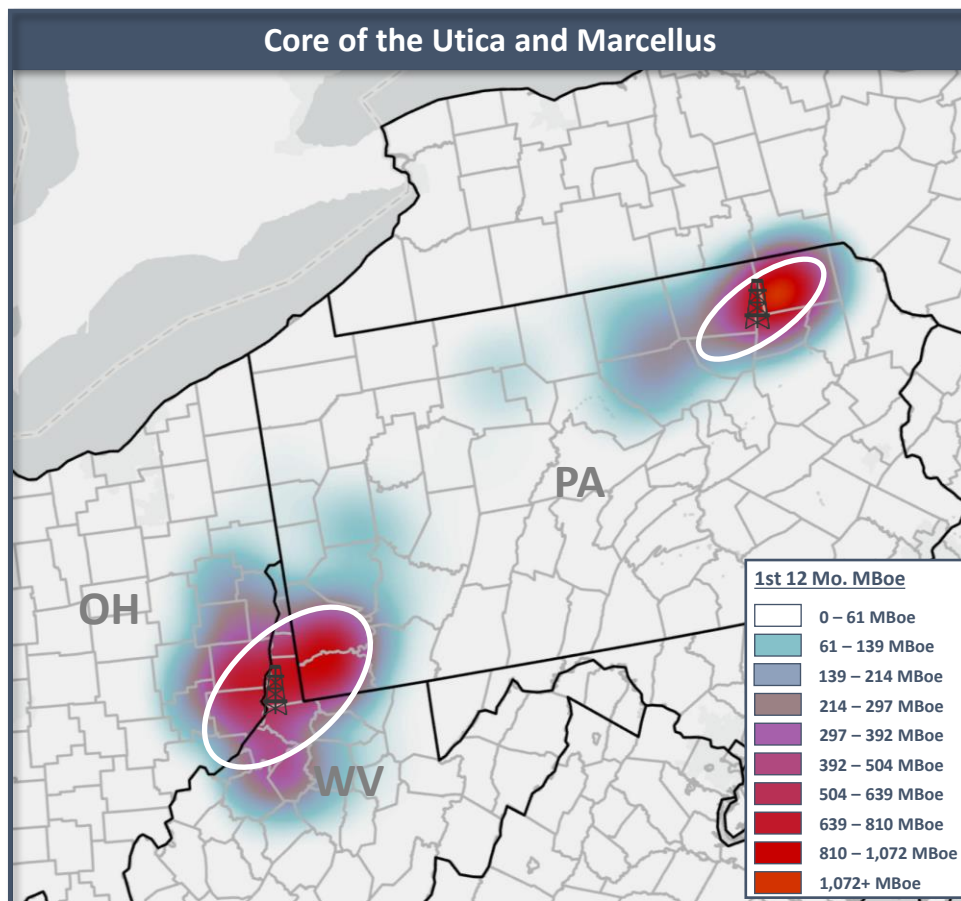


Note: This expected favorable tax treatment is the result of certain non-cash expenses (principally depletion) substantially offsetting Falcon's taxable income and tax "earnings and profit." Our estimates of the tax treatment of Falcon's earnings and dividends are based upon assumptions regarding the capital structure and earnings of Falcon Minerals Operating Company LP ("OpCo"), the capital structure of Falcon and the amount of the earnings OpCo allocates to Falcon. Many factors may impact these estimates, including changes in drilling and production activity, commodity prices, future acquisitions, or changes in the business, economic, regulatory, legislative, competitive or political environment in which Falcon operates. These estimates are based on current tax law and tax reporting positions that we have adopted and with which the Internal Revenue Service could disagree. These estimates are not fact and should not be relied upon as being necessarily indicative of future results, and no assurances can be made regarding these estimates. Investors are encouraged to consult with their tax advisor on this matter.

Appalachia Asset Overview

Falcon's Appalachia assets are located in the core of the Utica and Marcellus under premier operators

Asset Overview	
Gross Unit Acres	~80,000 acres
Net Royalty Acres ⁽¹⁾	~1,530 acres (~1.6% NRI)
Producing Wells	~450 wells
Key Operators	COG, EQT, CHK, SWN, Tug Hill
Rig Count	2 rigs
Waiting on Connection ⁽²⁾	7 gross / 0.01 net
Waiting on Completion ⁽²⁾	22 gross / 0.06 net
Permits ⁽²⁾	25 gross / 0.08 net



Appalachia assets provide additional upside to improved gas prices

1. Net royalty acres include unleased acreage. NRI based on DSU averages.
2. Marcellus line-of-sight not included in line-of-sight numbers on page 7.