



HIGHPEAK
E N E R G Y

4Q21 Presentation

March 2022



FORWARD-LOOKING STATEMENTS

The information in this presentation and in any oral statements made in connection herewith contains forward-looking statements that involve risks and uncertainties. When used in or in connection with this document, the words “believes,” “plans,” “expects,” “anticipates,” “forecasts,” “intends,” “continue,” “may,” “will,” “could,” “should,” “future,” “potential,” “estimate” or the negative of such terms and similar expressions as they relate to HighPeak Energy, Inc. (“HighPeak Energy” or the “Company”) are intended to identify forward-looking statements, which are generally not historical in nature. The forward-looking statements are based on the Company's current expectations, assumptions, estimates and projections about the Company and the industry in which the Company operates. Although the Company believes that the expectations and assumptions reflected in the forward-looking statements are reasonable as and when made, they involve risks and uncertainties that are difficult to predict and, in many cases, beyond the Company's control.

These risks and uncertainties include, among other things, volatility of commodity prices, product supply and demand, the impact of a widespread outbreak of an illness, such as the coronavirus disease 2019 (“COVID-19”) pandemic, on global and U.S. economic activity, competition, the ability to obtain environmental and other permits and the timing thereof, other government regulation or action, the ability to obtain approvals from third parties and negotiate agreements with third parties on mutually acceptable terms, litigation, the costs and results of drilling and operations, availability of equipment, services, resources and personnel required to perform the Company's drilling and operating activities, access to and availability of transportation, processing, fractionation, refining and storage facilities, HighPeak Energy's ability to replace reserves, implement its business plans or complete its development activities as scheduled, access to and cost of capital, the financial strength of counterparties to any credit facility and derivative contracts entered into by HighPeak Energy, if any, and purchasers of HighPeak Energy's oil, NGL and gas production, uncertainties about estimates of reserves, identification of drilling locations and the ability to add proved reserves in the future, the assumptions underlying forecasts, including forecasts of production, expenses, cash flow from sales of oil and gas and tax rates, quality of technical data, environmental and weather risks, including the possible impacts of climate change, cybersecurity risks and acts of war or terrorism. These and other risks are described in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission (the “SEC”) on March 7, 2022 (the “Annual Report”), and in its other filings with the SEC. In addition, the Company may be subject to currently unforeseen risks that may have a materially adverse effect on it. Accordingly, no assurances can be given that the actual events and results will not be materially different than the anticipated results described in the forward-looking statements. See “Risk Factors,” “Business,” “Management's Discussion and Analysis of Financial Condition and Results of Operations” and “Quantitative and Qualitative Disclosures About Market Risk” in the Registration Statement for a description of various factors that could materially affect the ability of HighPeak Energy to achieve the anticipated results described in the forward-looking statements. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof. The Company undertakes no duty to publicly update these statements except as required by 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. Reserves estimates included herein may not be indicative of the level of reserves or PV-10 value of oil and natural gas production in the future, as they are based on prices significantly higher than current commodity prices. 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 HighPeak'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.

Unless otherwise indicated, reserve estimates shown herein are based on a reserve report as of December 31, 2021 prepared by Cawley, Gillespie & Associates, Inc., the Company's independent reserve engineering firm, and were prepared in accordance with current SEC rules and regulations regarding reserve reporting, except that commodity prices were based on specified management parameters, referred to herein as “flat” pricing, rather than SEC pricing guidelines. The flat prices used in preparing the reserve report were \$72.00 per Bbl of oil and \$3.75 per MMBtu of natural gas, as compared to weighted average adjusted realized prices of \$66.56 per Bbl for oil and \$3.598 per MMBtu that would have been used if the reserve report had been prepared using SEC pricing guidelines. HighPeak believes that the use of flat pricing provides useful information about its reserves, as the flat prices reflect what management believes to be reasonable assumptions as to future commodity prices over the productive lives of its properties. However, HighPeak cautions you that the flat pricing used in preparing the reserve report is not necessarily a projection of future oil and natural gas prices, and should be carefully considered in addition to, and not as a substitute for, SEC prices, when considering HighPeak's oil, natural gas and NGL reserves.

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. Original oil in place, or “OOIP” refers to gross volumes of hydrocarbons without giving effect to recovery efficiency or the economic viability of production. Neither EURs nor OOIP constitute or represent reserves as defined by the SEC and neither is intended to be representative of anticipated future well results or aggregate production volumes. Each such metric is inherently more uncertain than proved reserve estimates prepared in accordance with SEC guidelines.

USE OF PROJECTIONS

This presentation contains projections for HighPeak, including with respect to its operating margin, capital expenditures, drilling pace, average lateral lengths, production, operating expenses and well results. HighPeak's independent auditors have not audited, reviewed, compiled, or performed any procedures with respect to the projections for the purpose of their inclusion in this presentation, and accordingly, have not expressed an opinion or provided any other form of assurance with respect thereto for the purpose of this presentation. These projections are for illustrative purposes only and should not be relied upon as being necessary indicative of future results. The assumptions and estimates underlying the projected information are inherently uncertain and are subject to a wide variety of significant business, economic and competitive risks and uncertainties that could cause actual results to differ materially from those contained in the projected information. Even if HighPeak's assumptions and estimates are correct, projections are inherently uncertain due to a number of factors outside its control. Accordingly, there can be no assurance that the projected results are indicative of HighPeak's future performance or that actual results will not differ materially from those presented in the projected information. Inclusion of the projected information in this presentation should not be regarded as a representation by any person that the results contained in the projected information will be achieved.

USE OF NON-GAAP FINANCIAL MEASURES

This presentation includes non-GAAP financial measures, including EBITDAX, operating margin and PV-10. HighPeak believes these non-GAAP measures are useful because they allow HighPeak to more effectively evaluate its operating performance and compare the results of its operations from period to period and against its peers without regard to financing methods, capital structure or tax status. HighPeak does not consider these non-GAAP measures in isolation or as alternatives to similar financial measures determined in accordance with GAAP. HighPeak's computations of these non-GAAP financial measures may not be comparable to other similarly titled measures of other companies.

HighPeak defines EBITDAX as net income before interest expense, income taxes, depreciation, depletion and amortization, exploration and other expenses, impairment and abandonment expenses, non-cash gains or losses on derivatives, stock-based compensation, gain on exchange of debt, gains and losses from the sale of assets, transaction costs and nonrecurring workforce reduction severance payments. HighPeak's management believes EBITDAX is useful as it allows them to more effectively evaluate HighPeak's operating performance and compare the results of its operations from period to period and against its peers without regard to financing methods or capital structure. HighPeak excludes the items listed above from net income in arriving at EBITDAX because these amounts can vary substantially from company to company within the industry depending upon accounting methods and book values of assets, capital structures and the method by which the assets were acquired. HighPeak also presented EBITDAX on an "annualized" basis, which represents EBITDAX for a fiscal quarter annualized for a 12-month period as if EBITDAX for each fiscal quarter in such period was equal to the quarter specified. HighPeak defines cash operating margin as realized price less lease operating expenses, gathering, processing and transportation expenses and production taxes, on a per-Boe basis. HighPeak defines cash margin as realized price less lease operating expense, gathering, processing and transportation expenses, cash general and administrative expenses and production taxes, on a per-Boe basis. HighPeak defines unhedged as excluding the effects of derivatives and hedged as including the effects of derivatives. HighPeak defines PV-10 as the present value of estimated future net revenues to be generated from the production of proved reserves, without giving effect to non-property related expenses, discounted at 10% per year before income taxes. For reconciliations of each such non-GAAP measure as presented herein to its most comparable measure prepared in accordance with GAAP, see the Appendix to this presentation.

INDUSTRY AND MARKET DATA

This presentation has been prepared by HighPeak and includes market data and other statistical information from sources believed by HighPeak to be reliable, including independent industry publications, governmental publications or other published independent sources. Some data is also based on HighPeak's good faith estimates, which are derived from its review of internal sources as well as the independent sources described above. Although HighPeak believes these sources are reliable, they have not independently verified the information and cannot guarantee its accuracy and completeness.

HIGHPEAK ENERGY: CORE MIDLAND PURE-PLAY

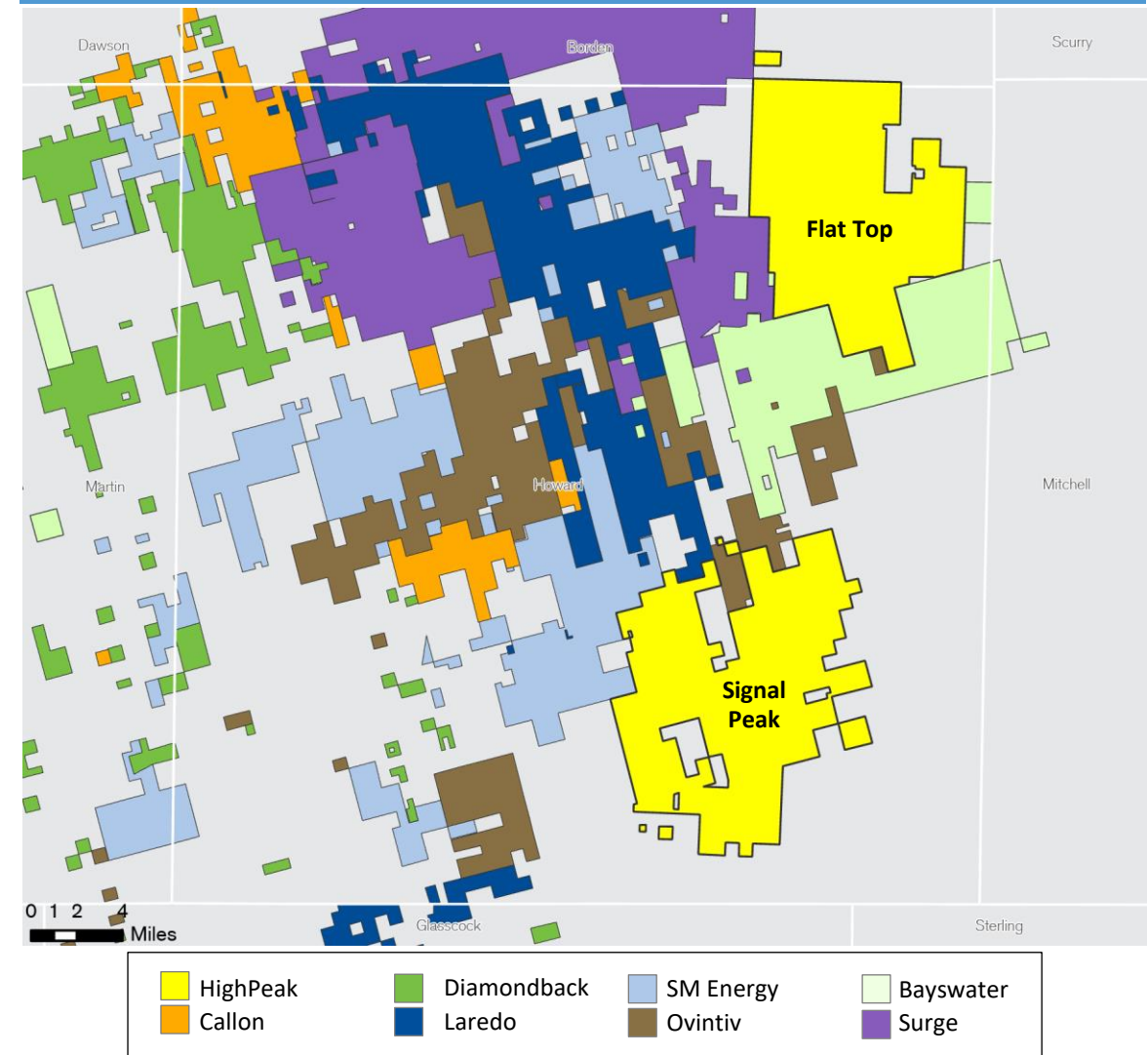
Northern Midland Basin Pure-Play Capitalized for Efficient Oil-Weighted Value Generation



Overview and Key Statistics

- **Production** 14.9 MBoe/d average in Q4/21
 - Oil cut of ~88% (95% liquids) in Q4/21
- **YE 21 Acreage** ~33,000 and ~30,000 net acres in Flat Top and Signal Peak areas located in the core of the Northern Midland Basin, respectively
 - ~90% operated with averaged operated unit WI of ~88%; ~75% GNRI
- **Acquisitions** – entered into multiple agreements to acquire various oil and gas properties contiguous to Flat Top for total consideration of up to 7.73mm shares and \$4mm in cash
 - ~9,500 net acres with production of ~2.5 MBoe/d and ~40 horizontal drilling locations
 - Acquired properties also include: 3 SWDs, infield produced fluid pipelines and rights to local non-potable water sourcing of ~35 MBbl/d
- **YE 21 Well count** 59 gross (47.4 net) producing horizontal wells
 - Additional 27 gross (23.0 net) horizontal wells⁽¹⁾ in various stages of drilling and completion that are expected to come online during the latter part of 1Q/22
- Industry-leading all-in-cost and full cycle economics with Q4/21 unhedged **cash operating margin** of \$60.26/Boe ⁽²⁾
- **Closed** on the previously announced private placement of \$225mm 10.0% senior unsecured notes due 2024. Upon closing of the notes, HighPeak fully repaid its revolving credit facility

Acreage Position and Selected Offset Operators



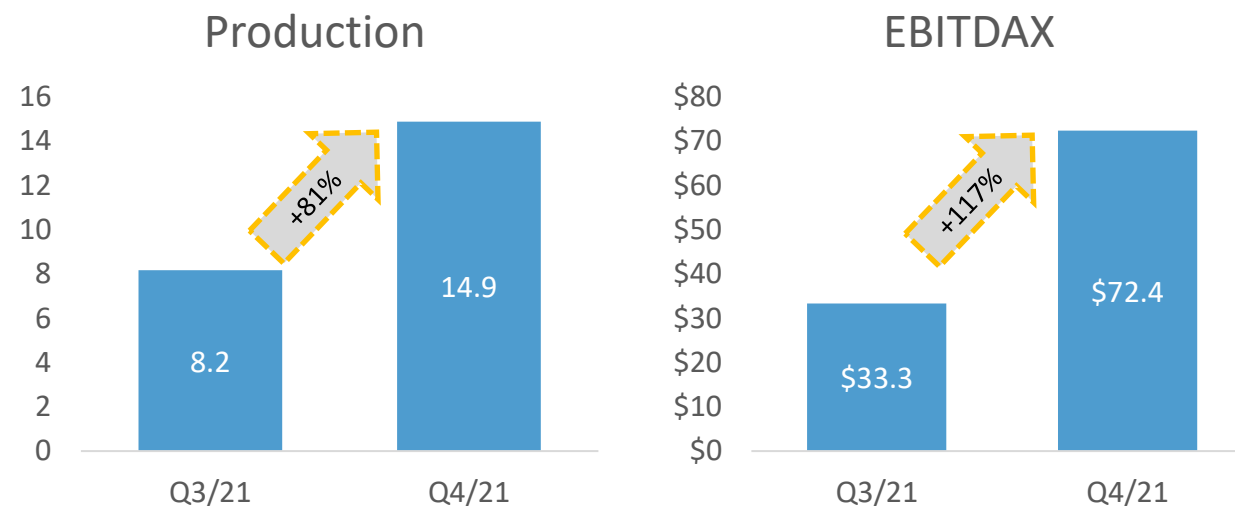
Source: Acreage map per Enverus.

(1) At December 31, 2021

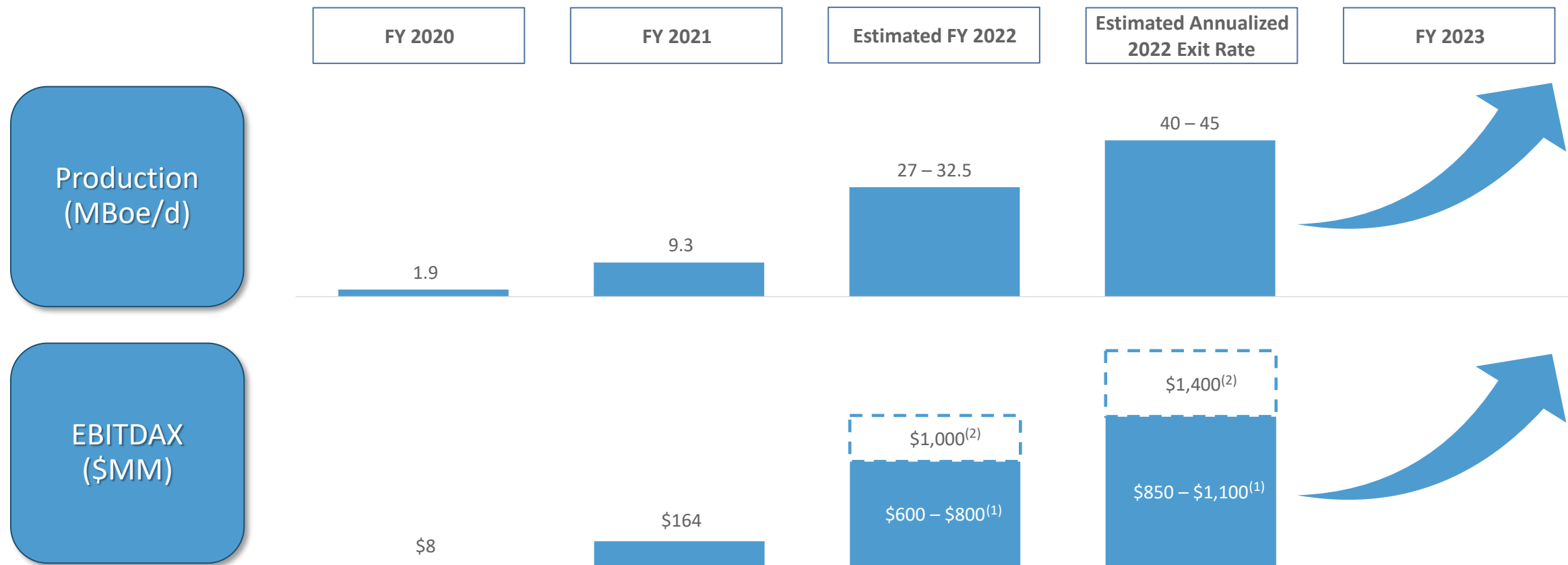
(2) Unhedged cash operating margin defined as unhedged realized prices less LOE, GP&T expenses and production and ad valorem taxes.

Production	Q4 2021
Total production (MBoe)	1,369.0
Total production (MBoe/d)	14.9
Oil percentage	88%
Liquids percentage	95%
Realized Pricing	
Oil per Bbl	\$77.45
NGL per Bbl	\$41.02
Gas per Mcf	\$5.05
Total per Boe	\$72.07
<i>Total per Boe (hedged)</i>	<i>\$67.50</i>
Costs (per Boe)	
LOE	\$8.34
Production & Ad Valorem taxes	\$3.47
G&A (Cash)	\$2.81
Total cash costs	\$14.62
Cash margin	\$57.45
<i>Cash margin (hedged)</i>	<i>\$52.88</i>

Earnings	Q4 2021
Net Income (\$MM)	\$37.0
<i>GAAP Earnings (per diluted share)</i>	<i>\$0.35</i>
EBITDAX (\$MM)	\$72.4
<i>EBITDAX (per diluted share)</i>	<i>\$0.68</i>
Other	
Capex (\$MM)	\$82.4
Rig Released / Turn in Line	15 / 3



TRACK RECORD OF DELIVERING CAPITAL EFFICIENT OIL-WEIGHTED GROWTH TO CONTINUE



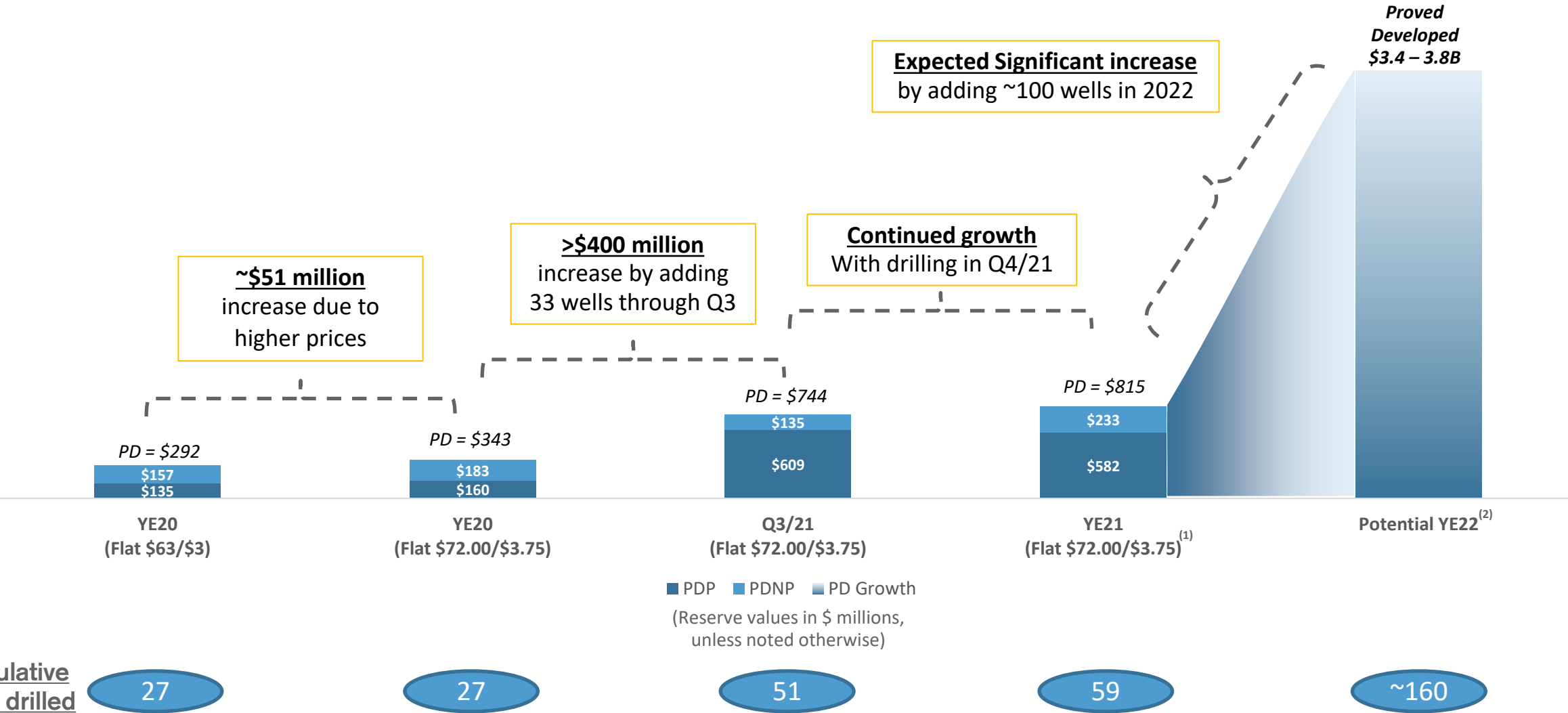
	FY 2020	FY 2021	Estimated FY 2022	Est. Ann. 2022 Exit Rate
Rigs Running	1	1 – 3	Minimum of 4	Minimum of 4
Gross Op. Wells TIL	17 ⁽³⁾	25 ⁽³⁾	80 – 110	80 – 110
Capex excl. Acquisitions (\$MM)	\$114	\$236	\$750 – \$800	\$750 – \$800

(1) Reflects EBITDAX margins applied to midpoint of production guidance and midpoint of 2022 LOE, production taxes and G&A expense guidance per BOE assuming \$70 – \$90 oil and flat \$3.75 gas.

(2) Based on midpoint of production guidance at \$110 oil and flat \$3.75 gas.

(3) Includes 1 Salt-Water Disposal well.

RAPID PROVED DEVELOPED RESERVES GROWTH

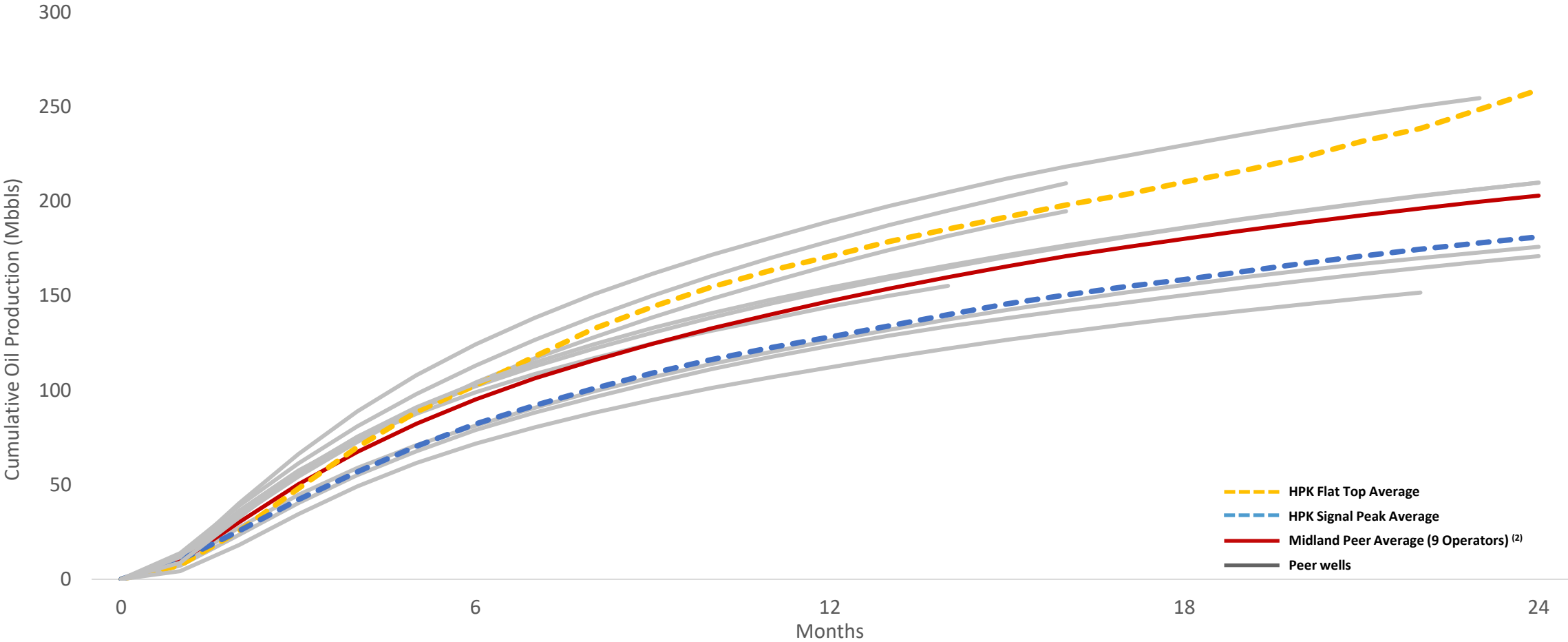


Cumulative wells drilled

(1) Based on year-end 2021 CGA reserve report.
(2) Based on HPK internal estimates using roll-forward of year-end 2021 reserves to Dec. 31, 2022 using current oil price of \$110/Bbl & gas price of \$3.75/MMBtu.

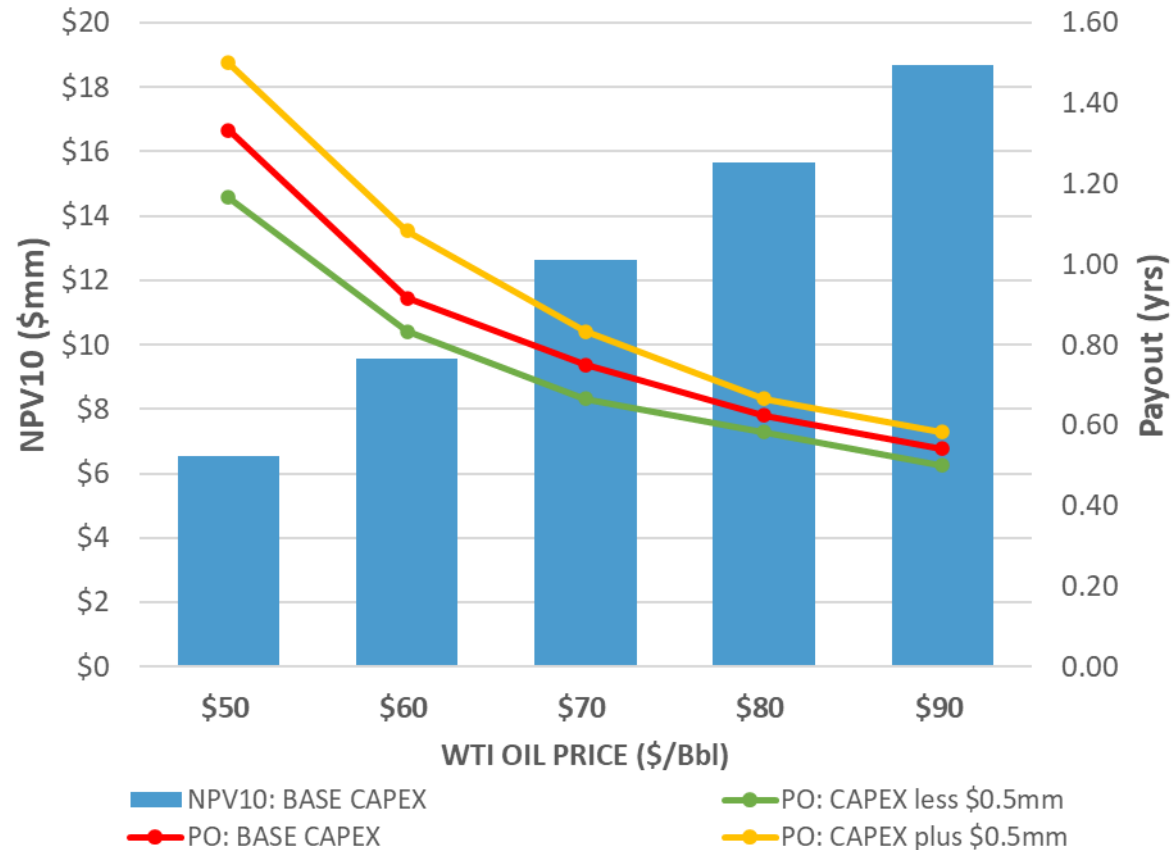
HighPeak well results outperform peers in the Midland Basin

HighPeak Well Performance ⁽¹⁾ vs. Midland Peers ⁽²⁾



Source: Enverus and company provided production data as of 11/1/21.
(1) Does not include the Cole Unit A2H, White 19-26 B Unit L5H, or the Mitchell 47-31 B Unit L6H due to mechanical issues.
(2) Dataset includes all Midland Basin Wolfcamp A and Lower Spraberry wells with first production after 1/1/2017. Peers include APA, CPE, CrownRock, FANG, Endeavor, PXD, LPI, OVV and SM.

FLAT TOP DEVELOPMENT DELIVERS TOP TIER ECONOMICS⁽¹⁾



Base Capital Economics

	\$70/bbl	\$80/bbl	\$90/bbl
D,C,E&F Capital (\$mm)	\$6.93		
Gross IP365 (Boe/d)	509		
% oil	92%		
Oil EUR (Mbo)	701		
Gas EUR (Mmcf)	569		
Total EUR (Mboe)	795		
Reserves (% oil / % liquid)	84% / 94%		
F&D (\$/Boe)	\$11.05		
NPV10 (\$mm)	\$13	\$16	\$19
IRR	>120%	>160%	>200%
Recycle Ratio ²	4.8x	5.7x	6.7x
Payout (years) ³	0.8	0.6	0.5

Single well economics deliver quick payout & high NPV10
Low break-even oil price of ~\$28/bbl

1. Single well economics based on average type curves from year-end 2021 reserve report for Lower Spraberry & Wolfcamp A for 12,500' laterals
 2. Recycle Ratio calculated using Q4/21 differentials & costs excluding G&A & hedging expenses

3. Payout is from first production.

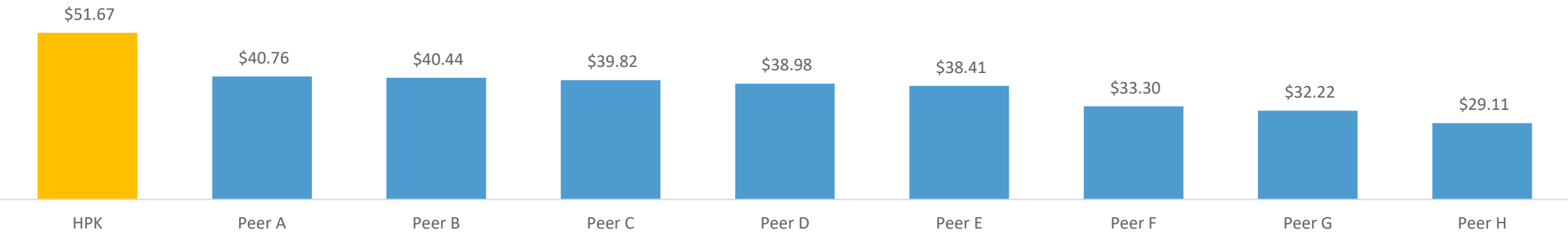
EBITDA margins for the 12 months ended 12/31/21 (\$/Boe)⁽¹⁾

- Strong oil-weighted margins
- Positioned to accelerate margin growth with LOE reduction initiatives and dilution of fixed costs

Hedged



Unhedged



Source: Public filings.
(1) EBITDA and production for the 12 months ended 12/31/21 based on 4Q21 figures as filed. Peers include CDEV, CPE, ESTE, FANG, LPI, MTDR, PXD and SM. EBITDA calculation for peers reflects Adjusted EBITDAX for the 12M ended period as calculated and presented by each respective company and not further adjusted by HighPeak. Hedging amounts reflect cash settlements paid or received for realized hedge settlements only. ESTE margins based on EBITDA and production for the 9 months ended 9/30/21.

Flat Top – Manufacturing mode



- **Co-development** of Wolfcamp A and Lower Spraberry utilizing multi well pads
- **Water infrastructure** servicing production and capital programs
- **Power infrastructure** substation fully constructed, anticipated to be commissioned in Q2
- **Crude oil takeaway** in-field gathering system is currently under construction
- **Natural gas takeaway** expansion of low-pressure system in progress; Phase 1 is operational

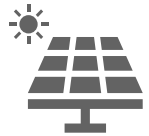
Signal Peak – Initial pad development



- **Delineation** across acreage in progress
 - Active drilling/completion program in 2022 will further define WC D, WC A and LS zones
 - New WC D well results in the area continue to be positive / exciting
- **Infrastructure** design and implementation commencing in 2022



- ✓ Q4 - Recycled 58% of Frac fluids
- ✓ Increasing access to local non-potable water
- ✓ 100% of stim fluid needs for one frac crew in Flat Top – recycled and non-potable



- ✓ Flat Top substation constructed – 2Q Est. commission
- ✓ 13 MW Solar farm project – estimated online 3Q



- ✓ Local sand mine partnership – operational Est. 3Q
 - Sand availability and reduced trucking



- ✓ Oil gathering and gas gathering systems under construction
 - Trucking and emissions reduction

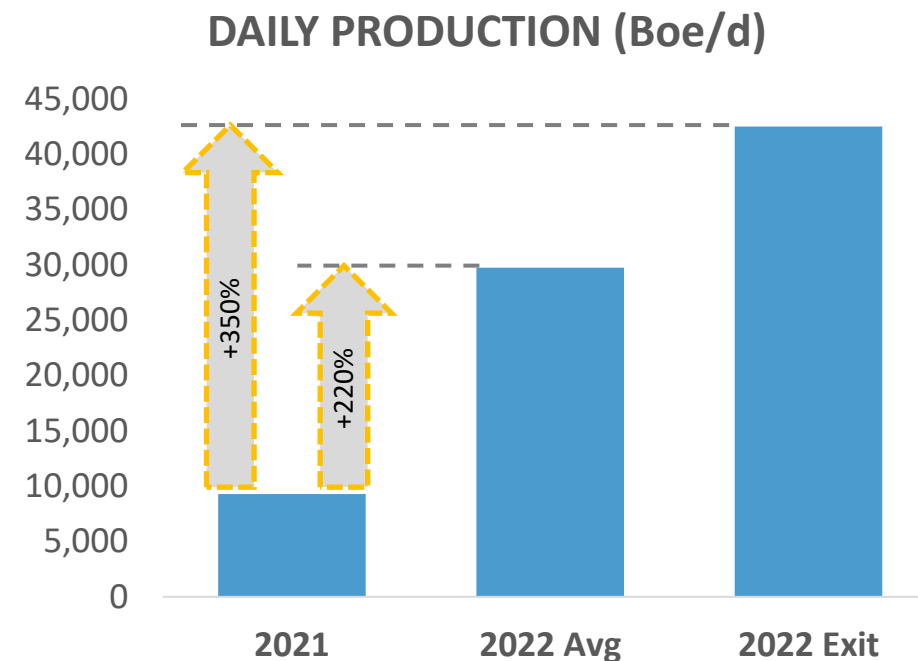


- ✓ Zero employee safety incidents



2022 4 Rig Outlook

	4-RIG	
	Low	High
Production		
Average Rate (Boe/d)	27,000	32,500
Exit Rate (Boe/d)	40,000	45,000
Capex (\$ millions)		
Capital Expenditures, D,C,E & F	\$715	\$760
Capital Expenditures, Land/Infra/Other	\$35	\$40
Capital Expenditures, Total	\$750	\$800
Unit Measures (\$/Boe)		
Lease Operating Expenses	\$5.00	\$5.50
Production Taxes	\$4.25	\$5.00
General & Administrative	\$1.00	\$1.50
Total Cash Costs	\$10.25	\$12.00
Gross Operated Wells -- Online		
Total (wells)	80	110
<i>Flat Top (%)</i>	60%	75%
<i>Signal Peak (%)</i>	25%	40%
Realized Pricing and Differentials⁽¹⁾	Pct	Diff
Oil	82%	-\$0.40 WTI
Gas	7%	25% HH
NGL	11%	50% WTI



(1) Gathering, Processing and Transportation deducts included in realized prices.

Overview

- Closed on the previously announced private placement of \$225mm 10.0% senior unsecured notes due 2024. Simultaneously with the closing the notes, HighPeak fully repaid its revolving credit facility
 - Substantial pro forma liquidity of \$225mm
- Subsequent to FY 2021 close, entered into a series of agreements to acquire various oil and gas properties contiguous to Flat Top for total consideration of up to 7.73mm shares and \$4mm in cash
- Target Net Debt:EBITDAX < 1.0x in go-forward development plan

Net Debt/EBITDAX⁽¹⁾
~0.2x

(\$MM)	As Reported 12/31/21
Cash and cash equivalents	\$35
Revolving credit facility due 2024	100
Total Debt	\$100
<i>Net Debt</i>	<i>\$65</i>
Market value of equity as of (3/3/22)	2,082
Enterprise Value	\$2,147
Liquidity (pro forma for Senior Notes)	\$225
Operating statistics:	
Q4/21 annualized EBITDAX	\$290
YE21 PDP PV-10 ⁽²⁾	\$582
YE21 1P PV-10 ⁽²⁾	1,498
Selected credit coverage statistics:	
Net Debt /	
Q4/21 annualized EBITDAX	0.2x
YE21 PDP PV-10 / Total Debt	5.8x
YE21 1P PV-10 / Total Debt	15.0
YE21 PDP PV-10 / Net Debt	8.9x
YE21 1P PV-10 / Net Debt	23.0

Ample debt coverage available

(1) Calculated as YE21 Net Debt divided by annualized Q4/21 EBITDAX. See slide 21 for calculation of Net Debt and EBITDAX.
 (2) Reserves per year-end 2021 CGA reserve report; assumes year-end 2021 effective date; based on flat \$72.00 oil / \$3.75 gas price deck.



Responsible Growth — Continuing efficient production growth. May increase rig count if market conditions warrant



Strong Balance Sheet — Increased liquidity from recent notes offering. Go forward development plan targets Net Debt:EBITDAX < 1.0x



Operational Excellence — Maintain focus on capital and operational efficiency



Attractive Product Mix — >90% liquids drive high margins



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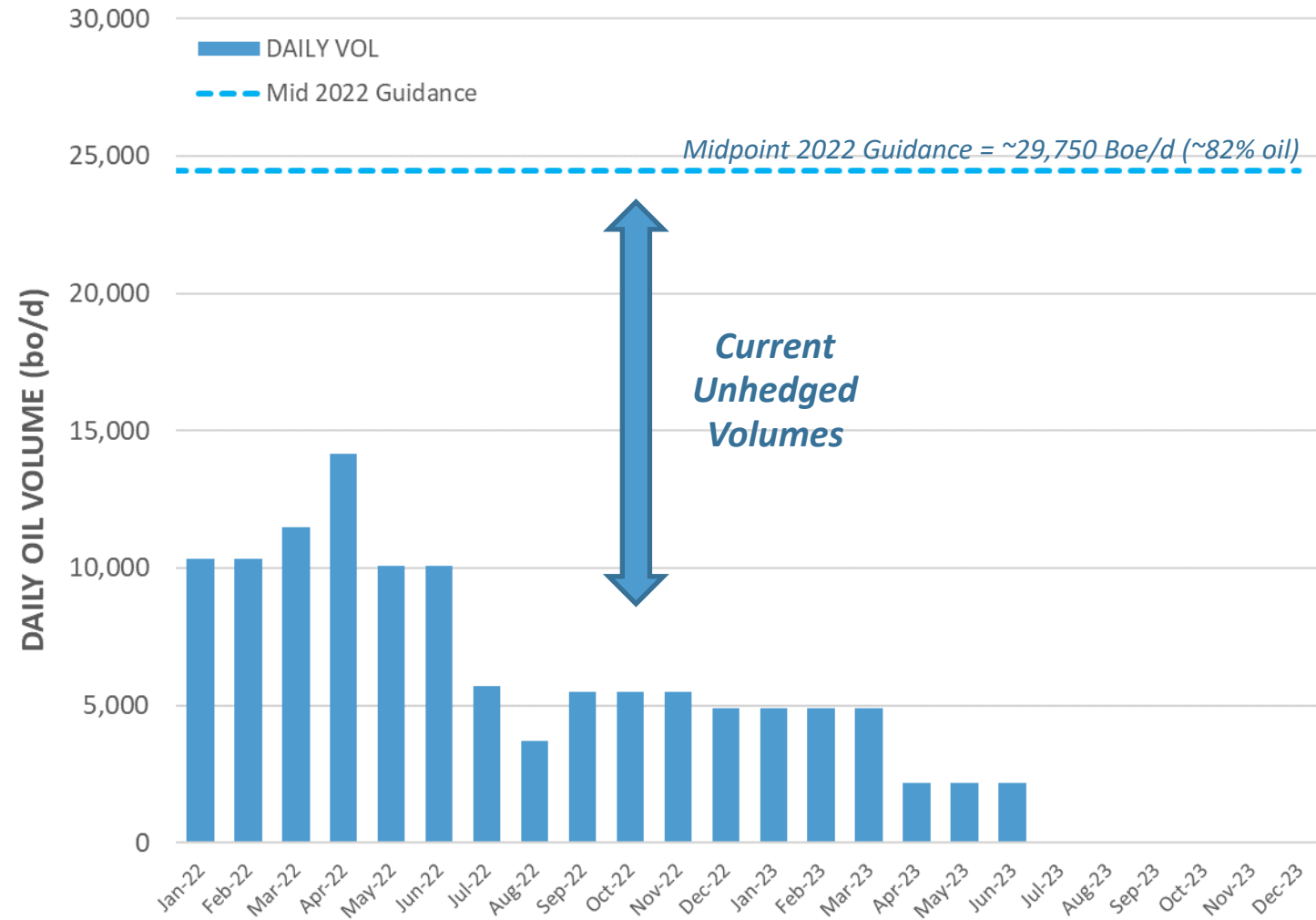


Appendix

Summary

- Average volumes of ~8,082 Bo/d hedged in 2022 at average price of \$71.27/bbl
- Hedged volumes reflect < 35% of projected 2022 oil volumes

	VOL (MBbl)	Price
2022-Q1	966.4	\$69.26
2022-Q2	1,039.8	\$71.96
2022-Q3	456.4	\$75.15
2022-Q4	487.4	\$70.14
2023-Q1	441.0	\$70.05
2023-Q2	200.2	\$57.22



(1) Current hedges as of March 7th, 2022.

HIGHPEAK YEAR-END 2021 PROVED RESERVES

Flat \$72.00 Oil / \$3.75 Gas – Year-End 2021 CGA Reserve Report

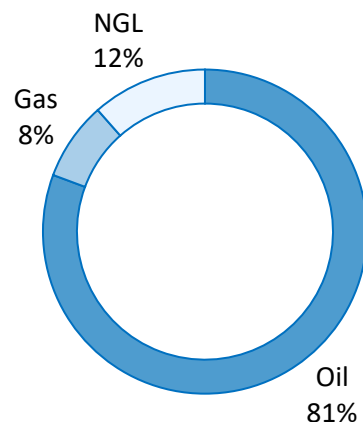


Year-End 2021 Proved Reserves

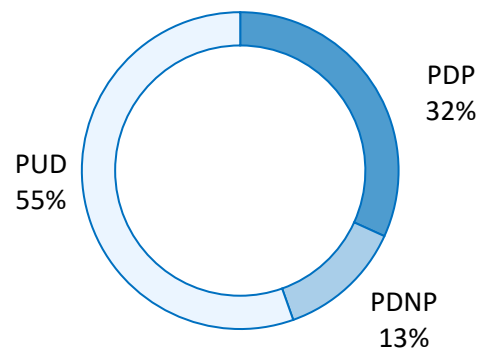
Reserve Category	Net Proved Reserves			% of Total	% Liquids	PV-10 (\$MM)
	Oil (MBbl)	Gas (MMcf)	NGL (MBbl)			
Proved Developed Producing (PDP)	15,819	11,500	2,773	32%	91%	\$582
Proved Developed Non-Producing (PDNP)	6,909	3,235	796	13%	93%	\$233
Total Proved Developed Reserves	22,728	14,735	3,569	45%	91%	\$815
Proved Undeveloped (PUD)	29,321	15,513	3,854	55%	93%	\$682
Total Proved Reserves	52,049	30,248	7,423	100%	92%	\$1,498

Category is wholly inclusive of operational⁽¹⁾ DUCs expected to be completed by Q1/22

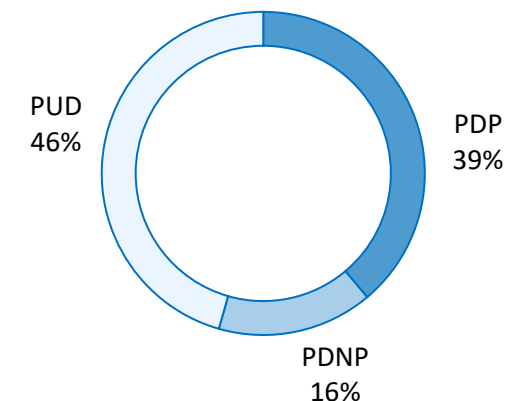
Proved Net Reserves by Commodity



Proved Net Reserves by Category



Proved PV-10 by Category



Note: Reserves per year-end 2021 CGA reserve report.
 (1) Operational DUCs are expected to be online within 6 months of being drilled.

SEC PRICING: CGA YEAR-END 2021 PROVED RESERVES⁽¹⁾

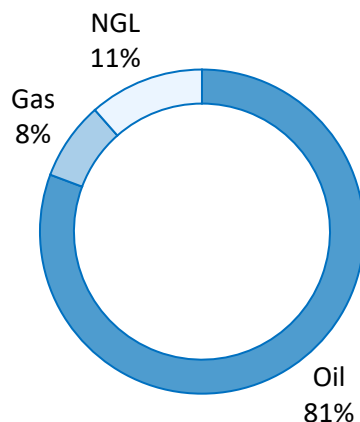


Year-End 2021 Proved Reserves

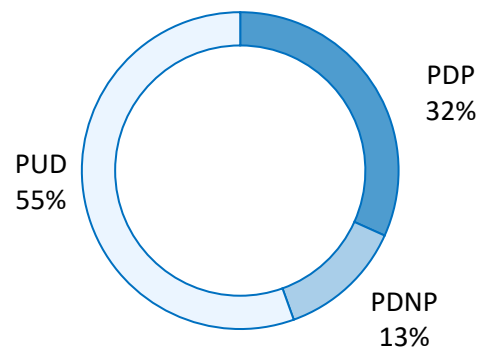
Reserve Category	Net Proved Reserves			% of Total	% Liquids	PV-10 (\$MM)
	Oil (MBbl)	Gas (MMcf)	NGL (MBbl)			
Proved Developed Producing (PDP)	15,726	11,389	2,747	32%	91%	\$531
Proved Developed Non-Producing (PDNP)	6,884	3,222	793	13%	93%	\$211
Total Proved Developed Reserves	22,610	14,611	3,540	45%	91%	\$742
Proved Undeveloped (PUD)	29,215	15,450	3,838	55%	93%	\$596
Total Proved Reserves	51,825	30,061	7,378	100%	92%	\$1,338

Category is wholly inclusive of operational⁽²⁾ DUCs expected to be completed by Q1/22

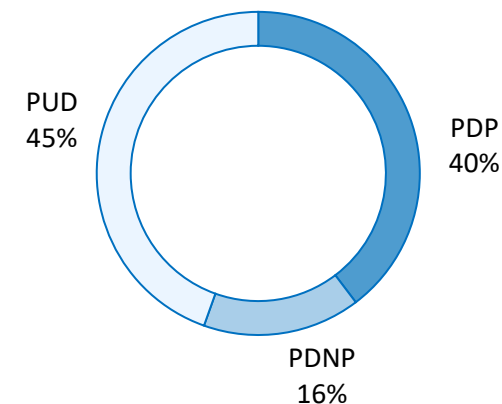
Proved Net Reserves by Commodity



Proved Net Reserves by Category



Proved PV-10 by Category



(1) Reserves per HighPeak's year-end 2021 third party reserve report prepared by Cawley Gillespie & Associates ("CGA"). Assumes effective date of January 2022; based on SEC pricing – average oil (\$/bbl): \$66.56 and average gas (\$/MMBtu): \$3.598.

(2) Operational DUCs are expected to be online within 6 months of being drilled.

Reconciliation of Net Income to EBITDAX

(in thousands)	Three Months Ended
	31-Dec-21
Net income	\$ 37,025
Interest expense	1,331
Income tax expense	12,224
Depletion, depreciation and amortization	21,464
Accretion on asset retirement obligation	51
Exploration and abandonment expense	407
Stock based compensation	3,782
Derivative-related noncash activity	(3,935)
Other expense	40
EBITDAX	\$ 72,389

Unhedged Cash Operating Margin Reconciliation

(in thousands)	Three Months Ended
	31-Dec-21
Oil, NGL and natural gas sales (including deducts)	\$ 98,665
Less: lease operating expenses	(11,424)
Less: production & ad valorem taxes	(4,756)
Cash Operating Margin	\$ 82,485
Divided by: Production (Mboe)	1,369.03
Cash Operating Margin per Boe, excluding effects of derivatives	\$ 60.26

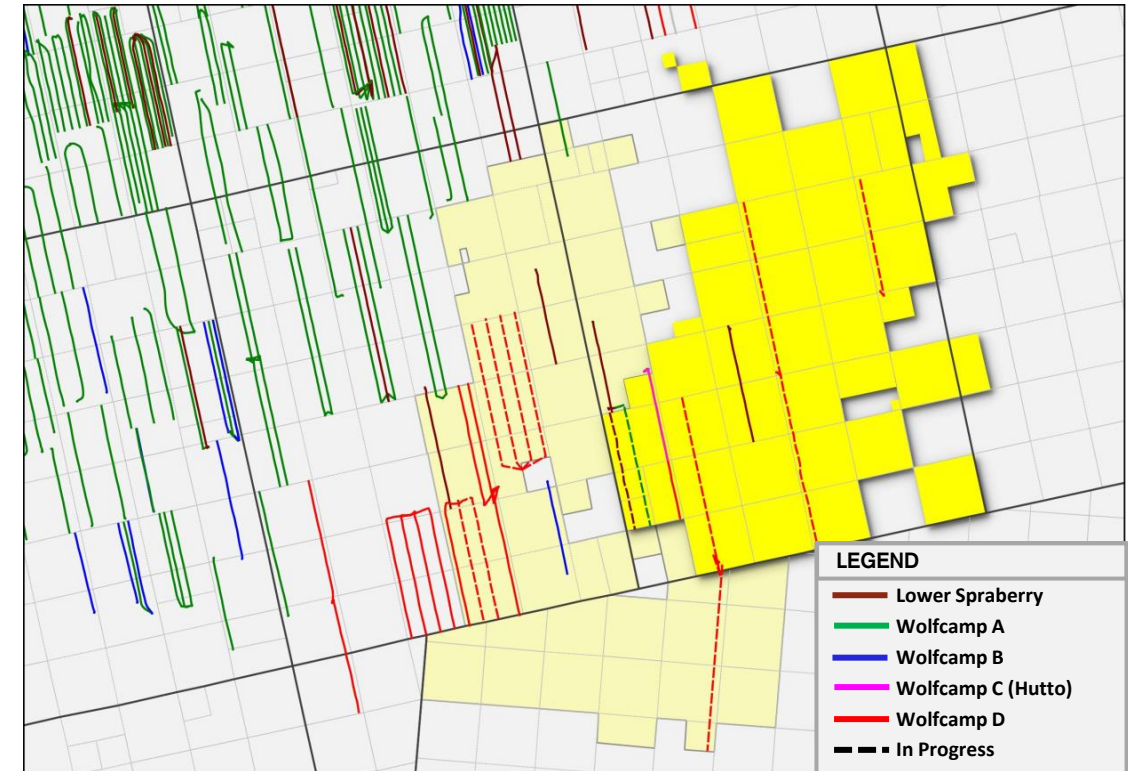
Calculation of Net Debt

(in millions)	As of	
	30-Sep-21	31-Dec-21
Total debt	\$ 95	\$ 100
Less: total cash on hand	(12)	(35)
Net Debt	\$ 83	\$ 65

FLAT TOP



SIGNAL PEAK



Rig Released Wells

	4Q21		FY2021	
	Gross	Net	Gross	Net
OP	15	14	39	34
NONOP	2	1	5	2
TOTAL	17	15	44	36
SWD	0	0	1	1

Turned In Line

	4Q21		FY2021	
	Gross	Net	Gross	Net
	3	2	24	23
	5	2	5	2
TOTAL	8	4	29	25

In Progress

As of December 31, 2021	
Gross	Net
27	23
0	0
27	23
1	1