



DISCLAIMER



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," "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 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 cactual events and results will not be materially different than the anticipated results described in the forward-looking statements. See "Risk Factors," "Business," "Management's

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.

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.

DISCLAIMER CONTINUED



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 expenses, and production taxes, on a per-Boe basis. HighPeak defines cash margin as realized price less lease operating expenses, and production taxes, on a per-Boe basis. HighPeak defines cash margin as realized 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.

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



Overview and Key Statistics

Production and Profitability:

- 1Q22 average (~83% oil, 93% liquids)⁽¹⁾⁽²⁾ ~12.1 Mboe/d
- HighPeak last 7-day average ~25.0 Mboe/d
- HPK + Hannathon pro forma last 7-day average >28.0 Mboe/d
- Additional 36 gross (30.5 net) horizontal wells in various stages of drilling and completion at March 31, 2022
- Industry-leading all-in-cost and full cycle economics with Q1/22 unhedged cash operating margin of \$71.71/Boe ⁽³⁾

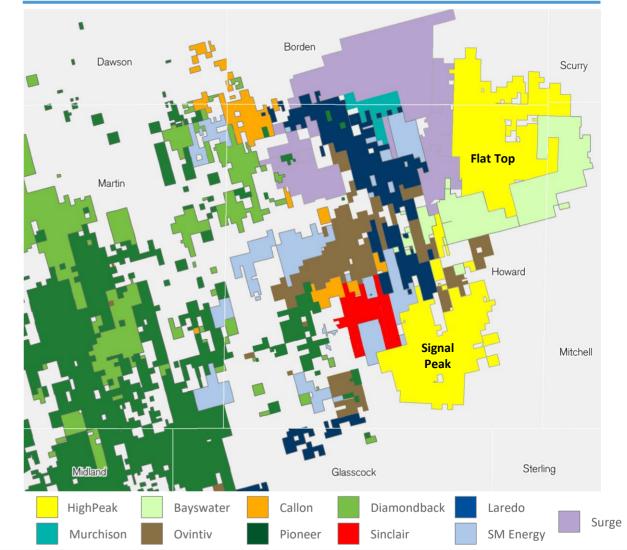
Acreage:

- Pro forma acreage > 91,000 net acres; an increase of ~45% compared to 63,000 net acres at year-end 2021
- ~43,000 in Flat Top and ~48,000 in Signal Peak

Hannathon Acquisition:

- Entered an agreement to acquire Howard County assets for total consideration of \$255 million cash and ~ 3.78 million shares of HighPeak common stock
- Acquired production and ~150 net locations for ~3x multiple on 2022E EBITDAX
- Shared infrastructure & acreage overlap expected to provide ~\$70 million of present value synergies

Pro Forma Acreage Position and Selected Offset Operators



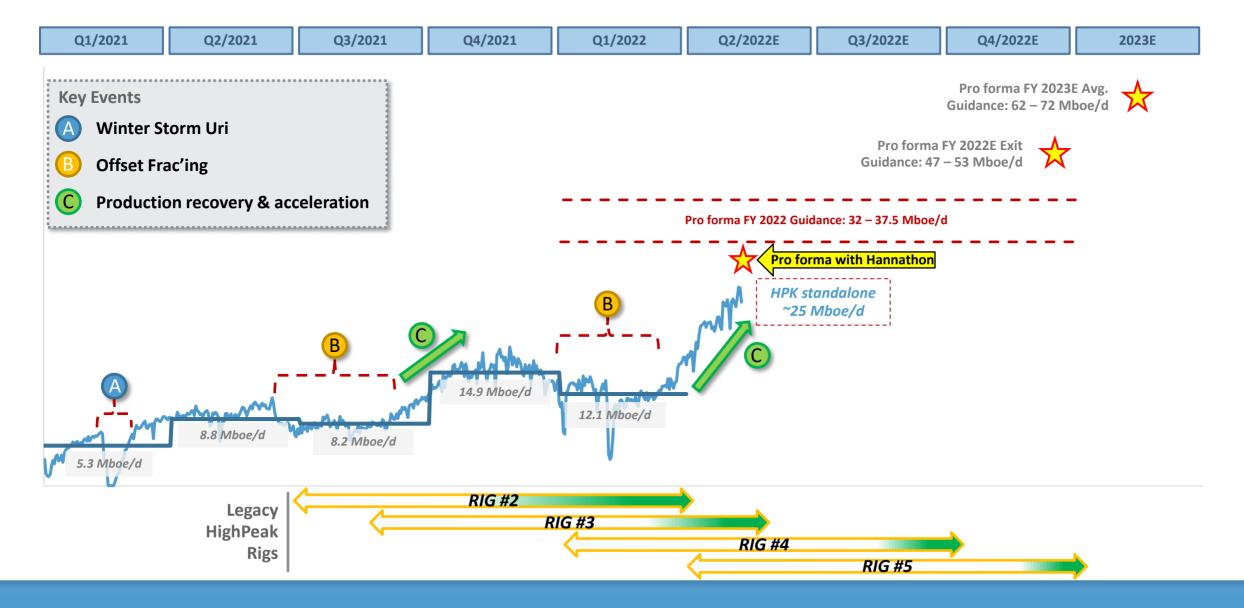
Source: Acreage map per Enverus and company reports.

- (1) Production average not inclusive of Hannathon Q1 volumes
- (2) Production average only includes ~6 days of Q1 Flat Top acquisition production volumes

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

PRO FORMA PRODUCTION GROWTH









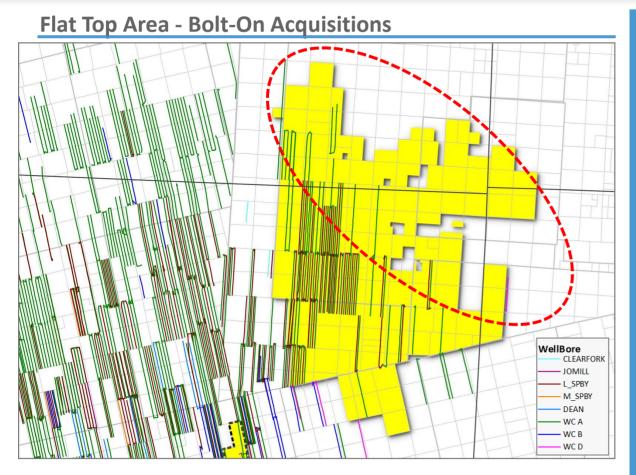
Average Production (MBOE/d)	~9.3	32 – 37.5	62 - 72
Exit Production Rate (MBOE/d)	~14.8	47 - 53	75 - 85
Annualized EBITDA (\$MM) ⁽¹⁾	\$164	\$750 - \$860	\$1,500 - \$1,800
Exit Rate EBITDA (\$MM) ⁽¹⁾		\$1,100 – \$1,300	\$1,850 — \$2,200
Capex excl. Acquisitions (\$MM)	\$236	\$825 – \$900	
Rigs Running	1-3	~5 rigs + Hannathon 1 rig	6
Gross Op. Wells TIL per year	25 ⁽²⁾	95 – 115	150 – 175

(1) Reflects EBITDAX margins applied to midpoint of production guidance and midpoint of 2022 cash costs of \$11.125/Boe assuming \$85 - \$100 oil and flat \$5.00 gas.

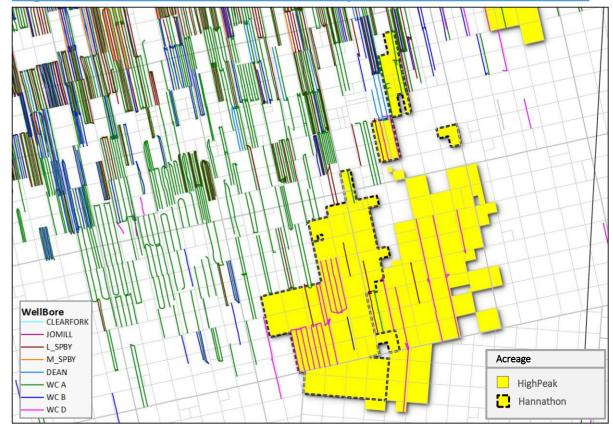
(2) Includes 1 Salt-Water Disposal well

2022 ACQUISTIONS – ADDING CASH FLOW, SCALE AND DEVELOPMENT RUNWAY "Checked All the Boxes"





- ☑ Added > 10,000 net acres; Currently drilling on acquired acreage
- ☑ 2022E acquired production to average ~ 2.5 MBoe/d
- ☑ Saltwater disposal system
- ☑ Significant local non-potable water sourcing capacity
- ☑ Infield crude oil gathering pipelines



- ☑ ~ 18,600 net acres
- ☑ 2022E avg. production ~5 MBoe/d; YE22E exit production ~7.5 MBoe/d
- ☑ 2022E EBITDAX⁽¹⁾ ~\$117 million
- $\ensuremath{\boxtimes}$ ~150 net locations with NPV-10 of ~\$15-20mm/well $^{(2)}$
- ☑ Integrated infrastructure synergies provide ~\$70 million of present value

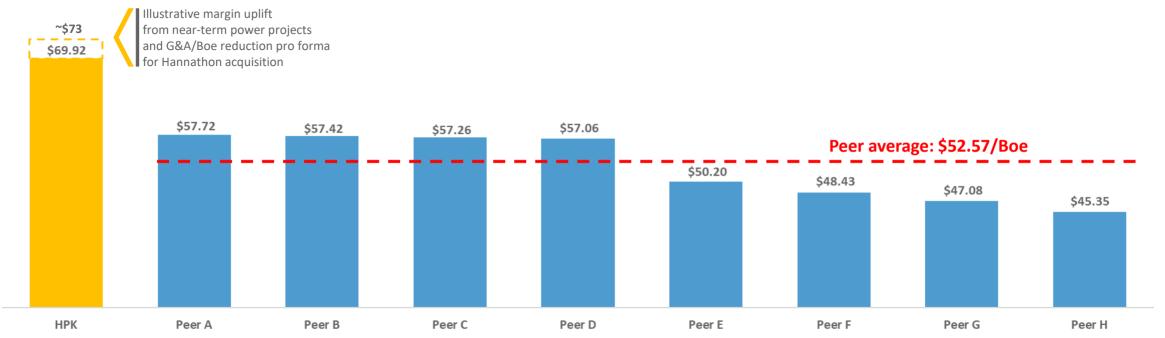
Q1/2022 MARGINS



Unhedged EBITDA margins for the 3 months ended 3/31/22 (\$/Boe)⁽¹⁾

Strong oil-weighted margins

Positioned to accelerate margin growth with LOE reduction initiatives and dilution of fixed costs



All BOEs are <u>not</u> created equal

Q1/2022 margins are 21% above nearest peer with continued expansion expected as production scales

- Further near-term margin improvements expected with energization of 60 MW substation and 13 MW solar farm
- HPK pro forma adjusted margin (~\$73/Boe) is ~39% higher vs. Q1/2022 peer average
 - On a peer-equivalent EBITDA margin basis, HPK's pro forma production is equivalent to ~39 Mboe/d⁽²⁾
- Source: Public filings

(1) EBITDA and production for the 3 months ended 3/31/22 based on Q1/22 figures as filed. Peers include CDEV, CPE, ESTE, FANG, LPI, MTDR, PXD and SM. EBITDA calculation for peers reflects Adjusted EBITDAX for the 3M ended period as calculated and presented by each respective company and not further adjusted by HighPeak.

(2) Based on HPK + Hannathon current pro forma production and peer average unhedged EBITDA margin of \$52.57/Boe

FLAT TOP ACTIVITY



Summary

Drilling

- Average ~4 rigs during remainder of 2022
- Primary focus of co-developing LS/WCA

Completions

- Avg. ~1-2 frac crews for remainder of 2022
- Greater than 70% of Flat Top stimulation fluid was recycled produced water in Q1

Infrastructure

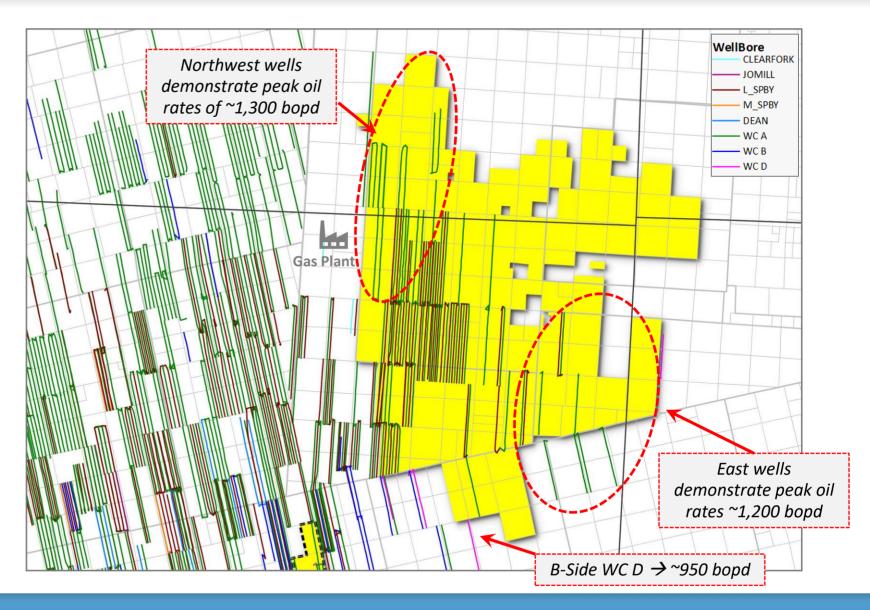
- 60 MW Substation commissioned
 - Removal of rental generators
 - Ability to run drilling rigs on electrical power
- 13 MW Solar farm
 - Estimated completion in Q3/2022

- Local sand mine

- Operations starting in ~ June 2022
- Potential savings of ~ \$300k/well
- Water Infrastructure
 - Currently servicing 100% stim fluid needs for two frac crews

- Gathering

- Crude oil in-field gathering system initial segment online
- Low-pressure gas system is operational





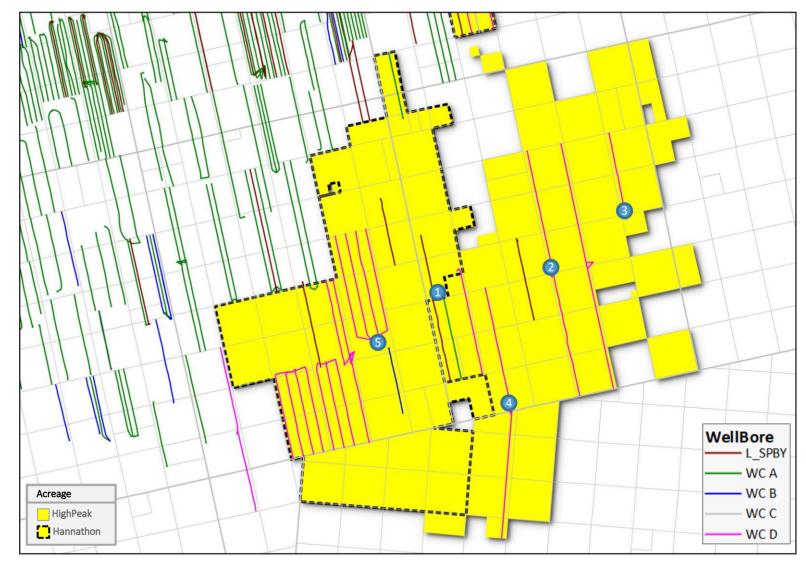
Summary

Remaining 2022 Outlook

- Average ~ 1 rig on legacy HighPeak acreage
- Continuation of 1 rig drilling program on Hannathon acquired acreage
- Delineation across position in progress
 - New LS, WA & WD well results meeting or exceeding management's expectations
 - New WD well results in the area continue to be positive

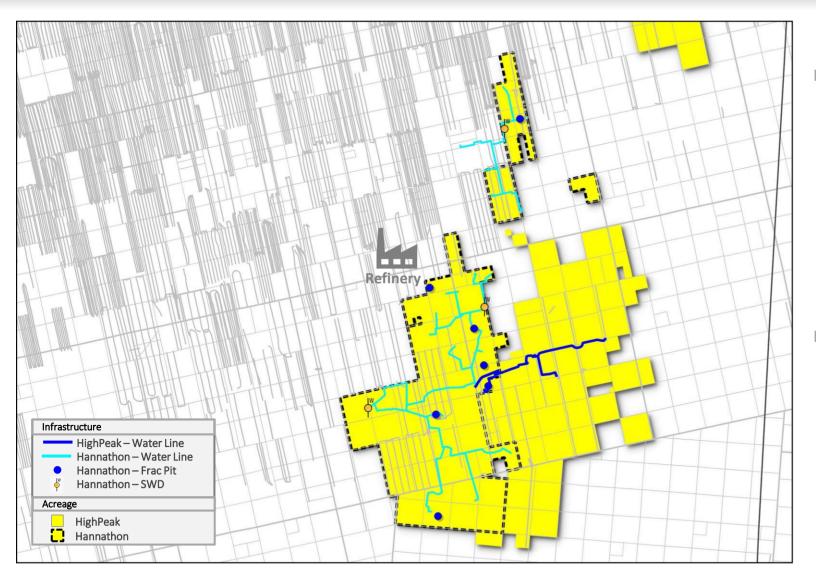
Current Operations

- 10,000' WA / 10,000' LS
 - Online in Feb/22 & Apr/22
 - Rates still inclining with current production
 1,000 bopd / ~ 800 bopd
- 2 Partee 15,000' WD / Powell 15,000' WD
 - Online April 2nd & 4th
 - Current rates ~ 800 900 bopd
 - Successful test of ~ 30,000 lateral feet of WD reservoir across center of acreage position
- 3 Powell 10,000' WD
 - Online April 23rd
 - Ramping up, currently ~500 bopd
- 4 Partee 15,000' WD / Partee 15,000' WD
 - Estimated online in June
- Recycling produced fluid on current frac
- 5 MCC Unit 4 well pad, 12,500' WD laterals
 - Estimated online in Sept.



SIGNAL PEAK INFRASTRUCTURE DEVELOPMENT





HighPeak System

- Infrastructure design and implementation in progress
- Continue buildout of HighPeak's water system to provide for increased recycling capabilities
- Drill one saltwater disposal well on legacy HighPeak acreage

Hannathon system

- -3 existing SWDs and in-field gathering pipelines covering the core of their acreage position
- -7 frac pits with ~ 2 million barrels of water storage capacity

SIGNAL PEAK WOLFCAMP D ECONOMICS⁽¹⁾



\$110/hbl



Base Capital Economics \$90/bbl \$100/bbl

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D,C,E&F Capital (\$mm)		\$10.73	
Gross IP365 (Boe/d)		731	
% Oil		75%	
Oil EUR (Mbo)		660	
Gas EUR (Mmcf)		1,999	
Total EUR (Mboe)		993	
Reserves (% oil / % liquid)		57% / 83%	
F&D (\$/Boe)		\$12.39	
NPV10 (\$mm)	\$19	\$22	\$26
IRR	>160%	>200%	>200%
Recycle Ratio ²	5.4x	6.2x	7.1x
Payout (years) ³	0.6	0.5	0.4

Single well economics deliver quick payout & high NPV10 Low break-even oil price of ~\$34/bbl

Single well economics based on type curves from year-end 2021 reserve report for Wolfcamp D for 15,000' laterals
 Recycle Ratio calculated using 1Q22 differentials & costs excluding G&A & hedging expenses

3. From first production.

ESG AND SUSTAINABILITY STRATEGY

Great for the environment and for the Company's bottom line







Substation removes ~50 rental generators
 Drilling with solar power in ~Q3



✓ Local sand mine will reduce total trucked miles
 ✓ Utilization of wet sand will reduce combustion emissions

 ✓ Gathering systems reduce trucking and emissions
 ✓ Flat Top oil gathering system will result in removal of ~ 160 trucks/day⁽¹⁾

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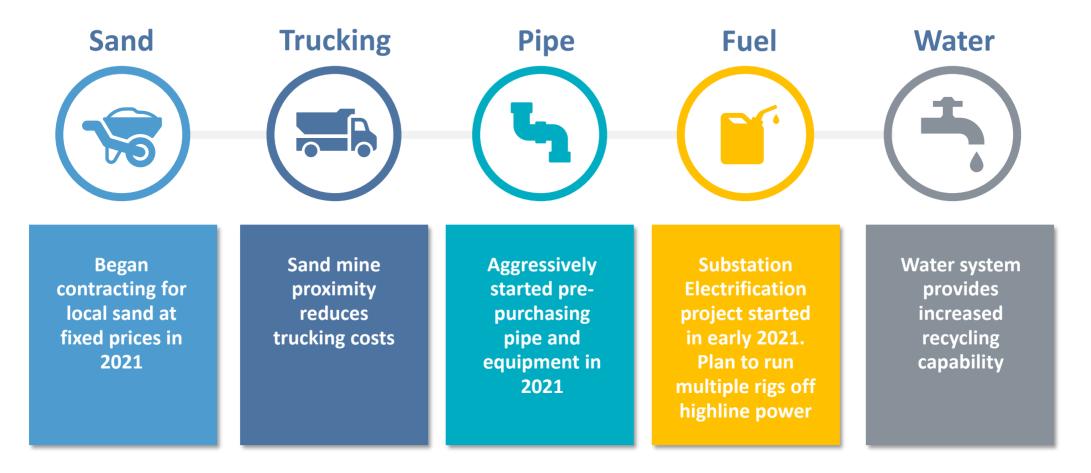
- Zero employee safety incidents
- ✓ Diverse workforce and Board of Directors

Due to HighPeak's unique position, our ESG initiatives are both environmentally and fiscally rewarding to all stakeholders



MITIGATING CAPITAL COST ESCALATION



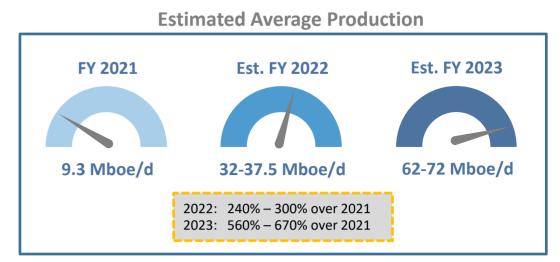


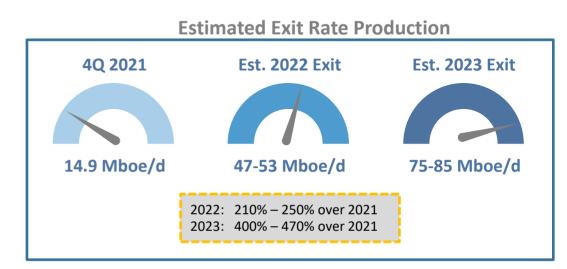
Due to preemptively looking ahead to combat rising inflation & supply chain pressures, HighPeak expects to stay within budgeted capex guidance

UPDATED PRO FORMA OUTLOOK

Updated Pro Forma Outlook

	2022	2		2023	3
Low		High	Low		High
32,000	-	37,500	62,000	-	72,000
47,000	-	53,000	75,000	-	85,000
\$790	-	\$860			
\$35	-	\$40			
\$825	-	\$900			
\$5.00	-	\$5.50			
\$4.25	-	\$5.00			
\$1.00	-	\$1.50			
\$10.25	-	\$12.00			
95	-	115	150	-	175
60%	-	75%			
25%	-	40%			
Pct		Diff			
81%	-	-\$0.40 WTI			
8%		25% HH			
11%		50% WTI			
	Low 32,000 47,000 \$790 \$35 \$825 \$825 \$5.00 \$4.25 \$1.00 \$10.25 60% 25% Pct 81% 8%	Low	Low High 32,000 - 37,500 47,000 - 53,000 \$790 - \$860 \$35 - \$40 \$825 - \$900 \$5.00 - \$5.50 \$4.25 - \$5.00 \$1.00 - \$1.50 \$1.00 - \$1.50 \$1.00 - \$1.50 \$25% - 40% Pct Diff 81% -\$0.40 WTI 8% 25% HH	LowHighLow32,000 47,000-37,500 53,00062,000 75,000\$790 \$35-\$3,00075,000\$790 \$35-\$860 \$40 \$900-\$5.00 \$4.25-\$900\$5.00 \$4.25-\$5.00 \$1.00\$1.00 \$1.00-\$1.50 \$1.50 \$10.25\$0% \$100-\$150 \$12.00\$1-150 \$100\$100 \$100-\$150 \$12.00\$100 \$100-\$150 \$12.00\$100 \$100-\$150 \$12.00\$100 \$100-\$150 \$100\$100 \$100-\$150 \$100\$100 \$100-\$150 \$100\$100 \$100-\$150 \$100\$115 \$100-\$150 \$100\$115 \$100-\$150 \$100\$115 \$100-\$150 \$100\$115 \$100-\$150 \$100\$115 \$100-\$150 \$100\$115 \$100-\$150 \$100\$115 \$100-\$150 \$100\$115 \$100-\$150 	Low High Low 32,000 - 37,500 62,000 - 47,000 - 53,000 75,000 - \$790 - \$860 - - \$790 - \$860 - - \$825 - \$40 - - \$5.00 - \$900 - - \$5.00 - \$5.50 - - \$1.00 - \$1.50 - - \$1.00 - \$12.00 - - 95 - 150 - - 60% - 75% - 40% Pct Diff - - - 81% -\$0.40 WTI -\$0.40 WTI - - 8% 25% HH - - -





(1) Total Capital Expenditures excluding acquisitions.

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

GHDEAK







HIGHPEAK ENERGY, INC.

Contact Information

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Ryan Hightower, Vice President - Business Development (817) 850-9204 IR@highpeakenergy.com



Appendix

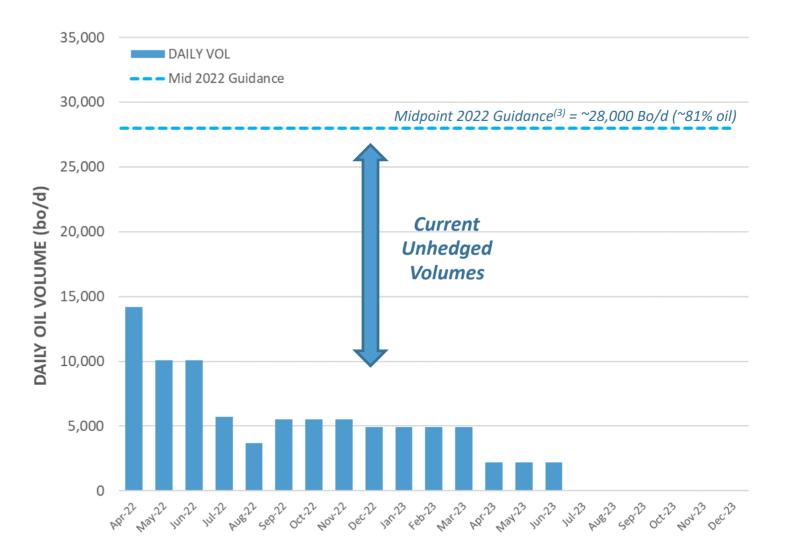
HEDGES⁽¹⁾



Summary

- Average volumes of ~7,213 Bo/d hedged for remainder of 2022 at average price of \$72.25/bbl⁽²⁾
- Hedged volumes reflect ~ 25% of remaining projected 2022 oil volumes⁽³⁾

	VOL (MBbl)	Price
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



- 2) Remaining average volumes calculated from 2Q22 through YE22
- (3) Reflects updated guidance following Hannathon Acquisition



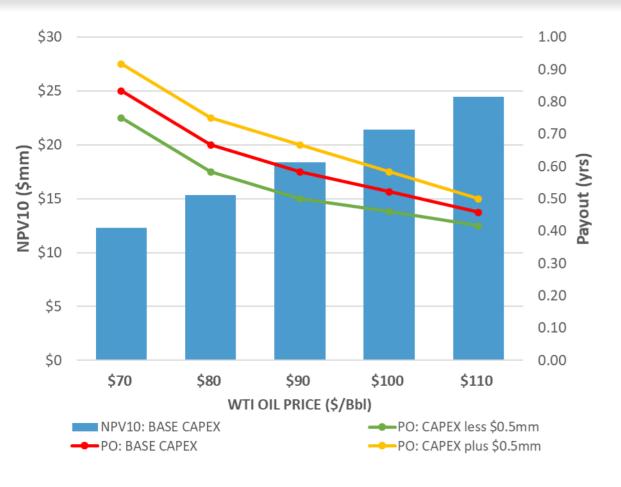
Reconciliation of Net Income to EBITDAX

(in thousands)		Three Months Ended		
	31-Mar-22			
Net loss	\$	(16,664)		
Interest expense	5,252			
Income tax benefit	(158)			
Depletion, depreciation and amortization	17,024			
Accretion of discount	54			
Exploration and abandonment expense	ense 209			
ock based compensation 3,9				
Derivative-related noncash activity	activity 41,633			
Other income		(250)		
EBITDAX	\$	51,076		
Hedge settlements (gain)/loss		24,761		
Unhedged EBITDAX	\$	75,837		

Unhedged Cash Operating Margin Reconciliation

(in thousands)	Three Months Ended		
	31-Mar-22		
Oil, NGL and natural gas sales (including deducts)	\$	92,229	
Less: lease operating expenses		(9,446)	
Less: production & ad valorem taxes		(5,006)	
Cash Operating Margin	\$	77,777	
Divided by: Production (Mboe)		1,084.7	
Cash Operating Margin per Boe, excluding effects of derivatives	ç	5 71.71	

FLAT TOP DEVELOPMENT DELIVERS TOP TIER ECONOMICS⁽¹⁾



Base Capital Economics			
	\$90/bbl \$100/bbl		\$110/bbl
D,C,E&F Capital (\$mm)		\$7.25	
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)		\$11.56	
NPV10 (\$mm)	\$18	\$21	\$24
IRR	>190%	>200%	>200%
Recycle Ratio ²	5.8x	6.7x	7.6x
Payout (years) ³	0.6	0.5	0.5

Single well economics deliver quick payout & high NPV10 Low break-even oil price of ~\$29/bbl

Single well economics based on average type curves from year-end 2021 reserve report for Lower Spraberry & Wolfcamp A for 12,500' laterals
 Recycle Ratio calculated using Q1/22 differentials & costs excluding G&A & hedging expenses

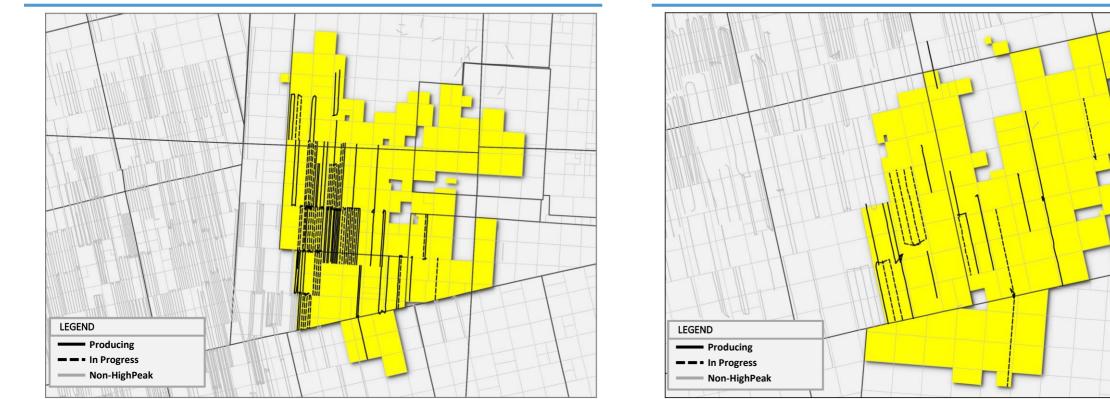
3. From first production.

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HIGHPEAK WELL ACTIVITY As of March 31, 2022



FLAT TOP



	Rig Released Wells				Turned In Line			In Progress ⁽¹⁾		
	1Q22		2022 YTD 1Q22 2		2022	YTD	As of March 31, 2022			
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
OP	22	19.7	22	19.7	20	16.0	20	16.0	32	29.7
NONOP	3	0.4	3	0.4	0	0.0	0	0.0	4	0.7
TOTAL	25	20.1	25	20.1	20	16.0	20	16.0	36	30.5
SWD	1	1.0	1	1.0					0	0.0

SIGNAL PEAK