Q4:20 EARNINGS PRESENTATION





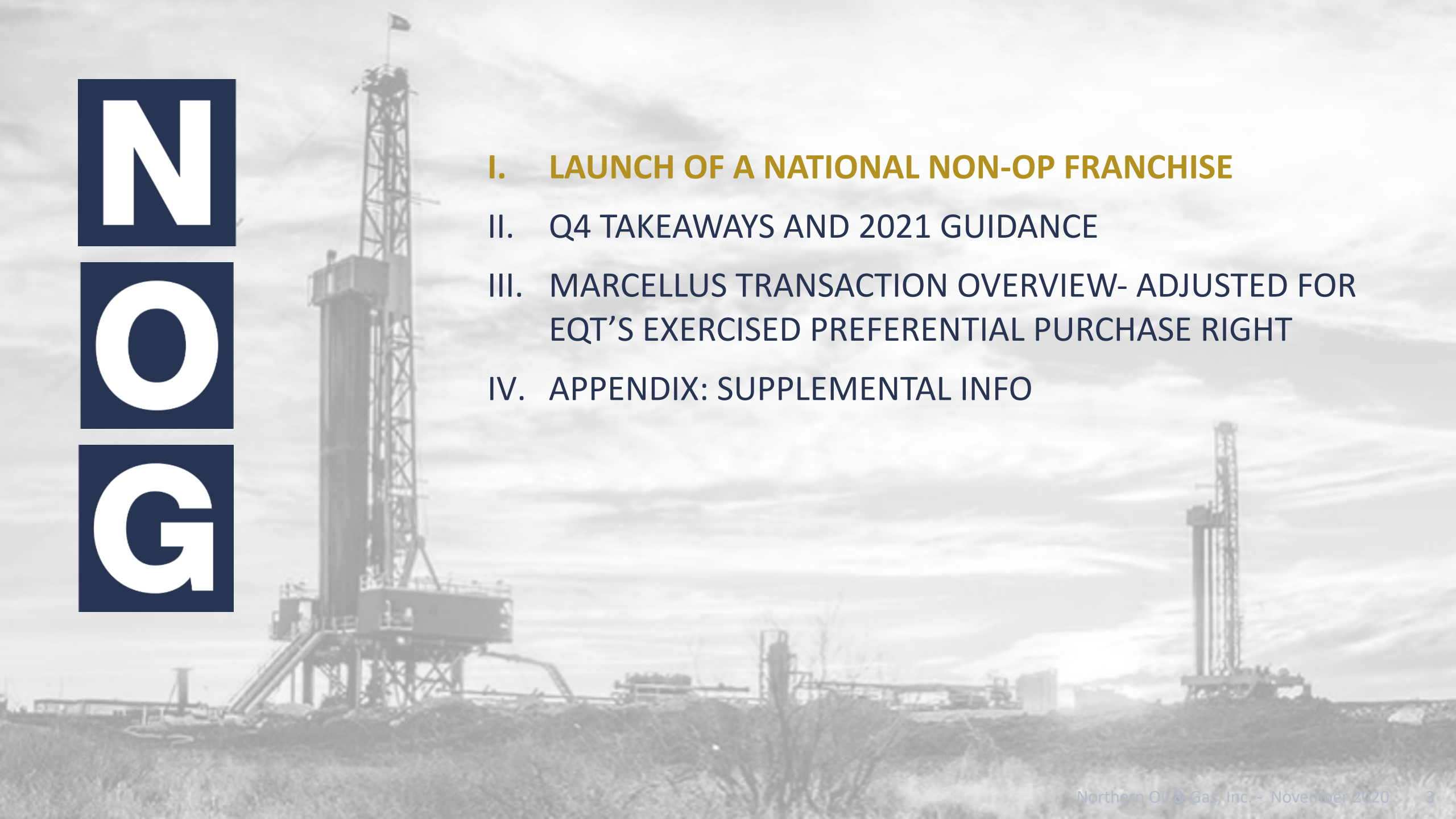

NYSE American: NOG

FORWARD LOOKING STATEMENTS

This presentation contains forward-looking statements regarding future events and future results that are subject to the safe harbors created under the Securities Act of 1933 (the "Securities Act") and the Securities Exchange Act of 1934 (the "Exchange Act"). All statements other than statements of historical facts included in this presentation, including without limitation statements regarding Northern's financial position and results, business strategy, plans and objectives of management for future operations, industry conditions, and indebtedness covenant compliance are forward-looking statements. When used in this presentation, forward-looking statements are generally accompanied by terms or phrases such as "estimate," "project," "predict," "believe," "expect," "continue," "anticipate," "target," "could," "plan," "intend," "seek," "goal," "will," "should," "may" or other words and similar expressions that convey the uncertainty of future events or outcomes. Items contemplating or making assumptions about actual or potential future sales, market size, collaborations, and trends or operating results also constitute such forward-looking statements.

Forward-looking statements involve inherent risks and uncertainties, and important factors (many of which are beyond our company's control) that could cause actual results to differ materially from those set forth in the forward-looking statements, including the following: changes in crude oil and natural gas prices; the pace of drilling and completions activity on Northern's properties and properties pending acquisition; Northern's ability to acquire additional development opportunities; potential or pending acquisition transactions, including the Reliance acquisition; Northern's ability to consummate pending acquisitions, including the Reliance acquisition, and the anticipated timing of such consummation; the projected capital efficiency savings and other operating efficiencies and synergies resulting from Northern's acquisition transactions; integration and benefits of property acquisitions, including the Reliance acquisition, or the effects of such acquisitions on Northern's cash position and levels of indebtedness; changes in Northern's reserves estimates or the value thereof; disruptions to Northern's business due to acquisitions and other significant transactions; infrastructure constraints and related factors affecting Northern's properties; ongoing legal disputes over and potential shutdown of the Dakota Access Pipeline; the COVID-19 pandemic and its related economic repercussions and effect on the oil and natural gas industry; general economic or industry conditions, nationally and/or in the communities in which Northern conducts business; changes in the interest rate environment, legislation or regulatory requirements; conditions of the securities markets; Northern's ability to raise or access capital; changes in accounting principles, policies or guidelines; and financial or political instability, health-related epidemics, acts of war or terrorism, and other economic, competitive, governmental, regulatory and technical factors affecting Northern's operations, products and prices. Additional information concerning potential factors that could affect future results is included in the section entitled "Item 1A. Risk Factors" and other sections of Northern's more recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q, as updated from time to time in amendments and subsequent reports filed with the SEC, which describe factors that could cause Northern's actual results to differ from those set forth in the forward looking statements.

Northern has based these forward-looking statements on its current expectations and assumptions about future events. While management considers these expectations and assumptions to be reasonable, they are inherently subject to significant business, economic, competitive, regulatory and other risks, contingencies and uncertainties, most of which are difficult to predict and many of which are beyond Northern's control. Northern does not undertake any duty to update or revise any forward-looking statements, except as may be required by the federal securities laws.



I. **LAUNCH OF A NATIONAL NON-OP FRANCHISE**

II. Q4 TAKEAWAYS AND 2021 GUIDANCE

III. MARCELLUS TRANSACTION OVERVIEW- ADJUSTED FOR EQT'S EXERCISED PREFERENTIAL PURCHASE RIGHT

IV. APPENDIX: SUPPLEMENTAL INFO

THE NORTHERN INVESTMENT PROPOSITION

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National non-op franchise – principled ROCE [1] leader (>23.5% in Q4:20) diversified by commodity and geography

Strong expected free cash flow[2]: >$125MM in 21 (15% yld); >$450MM through 2024 (>50% yld)

Attractive Marcellus entry point (PDP + WIP PV22) highlights highly accretive M&A opportunities

Simple balance sheet with leverage <2x Net Debt/EBITDA, targeting 1.0x

Compelling Valuation: 6.0x 2021 P/E Ratio[3]

The "Shale 3.0" beneficiary – the Golden Age for non-op is now

(1) See Slide 36 for definition and methodology. ROCE and free cash flow may be considered non-GAAP financial measures.

(2) Northern defines Free Cash Flow (FCF) as net cash provided by operating activities excluding changes in working capital, less D&C and ground game capital expenditures. FCF may be considered a non-GAAP financial metric. Northern is unable to present a reconciliation of forward-looking FCF because components of the calculation, including fluctuations in working capital accounts, are inherently unpredictable. Estimates using commodity strip prices as of 3/10/2021.

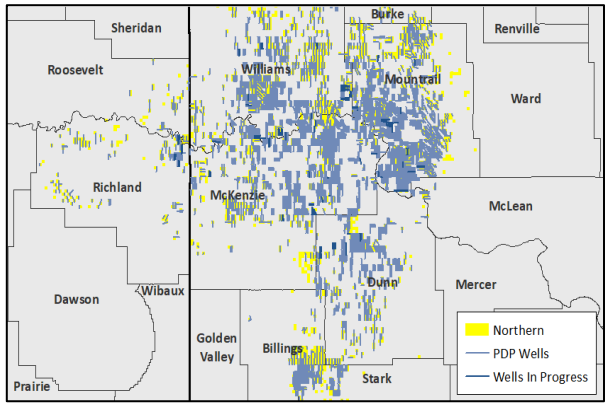
(3) As of 3/10/2020 based off Bloomberg consensus estimates for EPS and a NOG share price of $13.95

NEW NORTHERN: DIVERSIFIED HIGH RETURN NON-OP E&P FRANCHISE

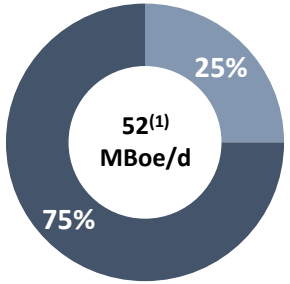
NYSE American: NOG

- *Northern's pending Marcellus acquisition will create a national non-op franchise, with a significantly larger base footprint and production diversified across three leading shale plays, high return reinvestment opportunities across all basins, and underpinned by a simpler and stronger balance sheet*
- *Positioned to capitalize on increased non-operated opportunities present in the "Shale 3.0" era*

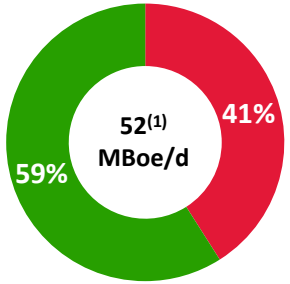
Williston Basin : ~183,000 Net Acres



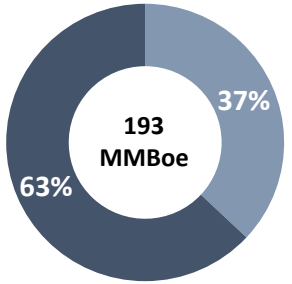
2021E Production (MBoe/d)



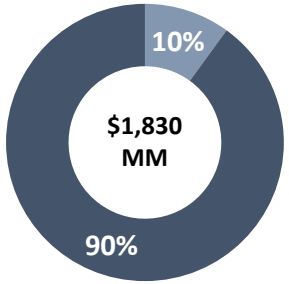
2021E Production % Liquids



Proved Reserves (MMBoe)(2)



3/05/21 Strip Proved PV-10 ($MM)



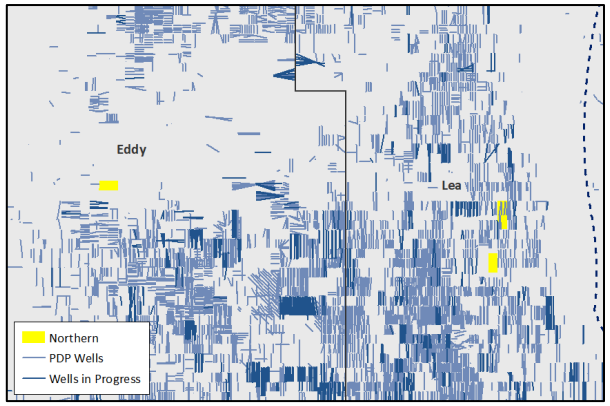
Region

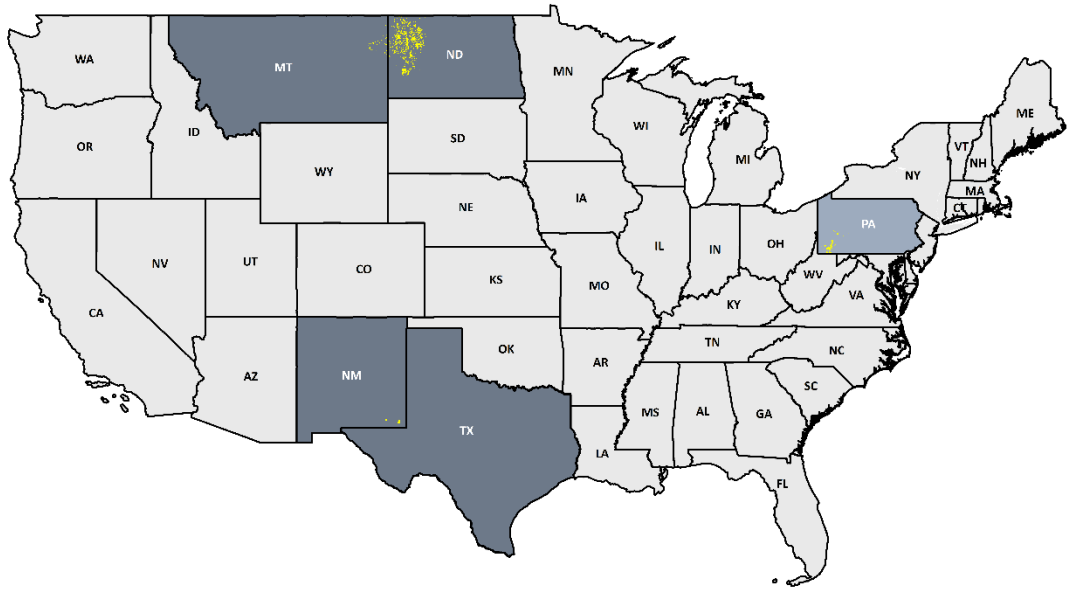
Williston & Permian — Appalachia

Commodity Type

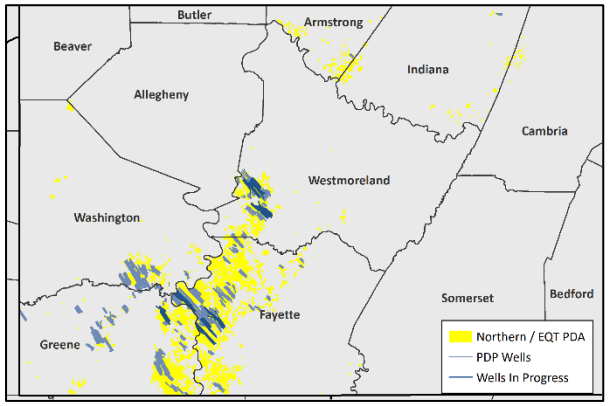
Liquids — Gas

Permian Basin: ~285 Net Acres





Appalachia Acres: ~62,000 Net Acres



(1) Includes pre-closing production volumes from Marcellus.
(2) Calculated based on SEC prices as of December 31, 2020.

THE NEW NORTHERN OIL AND GAS

NYSE American: NOG

➢ *Northern is the pre-eminent E&P with focus on non-operated model offering superior returns and free cash flow generation*

Diversified Asset Base With Exposure to Leading Operators

- ✓ Exposure to set of leading operators in Williston and Permian (~75% production) and Appalachia (~25% production)
- ✓ Shale 3.0 operator discipline providing a major increase in attractive non-operated deal flow
- ✓ Balanced and diversified portfolio by fuel and geography

Marcellus Entry: Attractive Purchase Price with Considerable Upside

- ✓ Attractive cash transaction multiple of ~$1,440 / Mcfe/d and ~2.9x 2021E unhedged cash flow from operations
- ✓ PV22 deal with identified upside of ~2.5x above the purchase price(1)

Strong Balance Sheet and Ample Liquidity

- ✓ Anticipated multi-year free cash flow generation with competitive FCF yield
  - ✓ >$125MM FCF expected in 2021(2); >15% FCF yield
- ✓ <2.0x Debt/EBITDA projected in 2021; Pro Forma revolver availability of $248MM

Strong Hedge Book and Hedging Strategy

- ✓ Northern began hedging expected PDP volumes from Marcellus acquisition commensurate with the signing of the transaction, including basis differentials, with a target of hedging up to 75% of volumes for approximately three years
- ✓ Corporate hedging target: 65%+ of production on a rolling 18 month basis
- ✓ 66% of oil production guidance (at midpoint) hedged in 2021 at a high ~$55 WTI price

Source: NOG Management projections.

(1) Based on strip pricing as of 1/20/21.

(2) Northern defines Free Cash Flow (FCF) as net cash provided by operating activities excluding changes in working capital, less D&C and ground game capital expenditures. FCF may be considered a non-GAAP financial metric. Northern is unable to present a reconciliation of forward-looking FCF because components of the calculation, including fluctuations in working capital accounts, are inherently unpredictable. Estimates using commodity strip prices as of 3/10/2021.

BENEFITS OF *NORTHERN'S* NON-OPERATOR MODEL

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HIGH RETURN WAY TO PLAY E&P SPACE

Peer leading cost structure & Corporate ROCE

Unit G&A costs >50% less than operating peers

Scalable Model: NOG has only 25 Employees

SHALE 3.0 BENIFICIARY

Northern is capitalizing on industry strategy shift has operators focusing on free cash flow generation instead of growth. This has led to record level non-op "Ground Game" opportunities

LEVERAGING EXPERIENCE

Proprietary database, built from participation in over 7,000 wells, including >40% of all wells drilled in the Williston

CAPITAL ALLOCATION FLEXIBILITY

Ability to "Cherry-Pick" from over 50 Operating Partners across 1MM+ gross acres in 3 basins

Absolute flexibility to manage capital allocation and to do so quickly

Costs limited to Drilling, Completion, and acreage

RETURNS METRICS CONTINUE TO LEAD THE PACK

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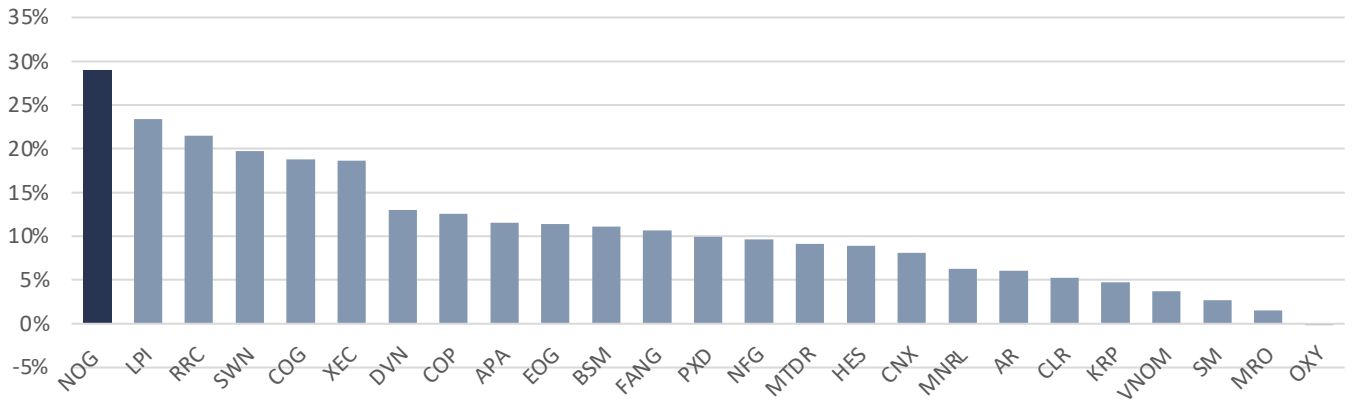
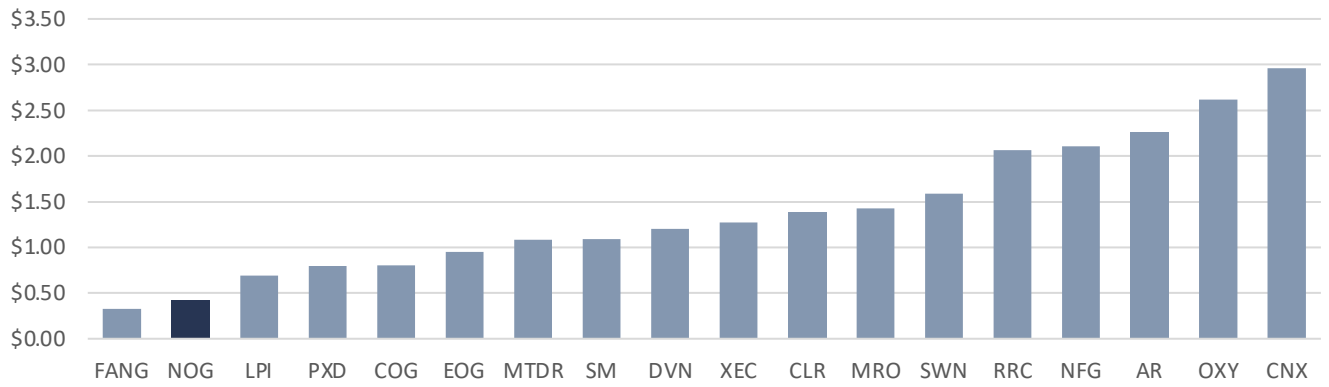
High Return Business Driven by Low G&A Burden

Peer-Leading ROCE (2021)… Raymond James E&P Research Coverage



Non-operator model allows us to run a lean cost structure and cash efficient business, generating industry-leading ROCE

….and low G&A ($MM) per completed well (2021)



Low overhead costs mean significantly lower SG&A expense per well drilled — especially versus SMid-cap peers

Source: Raymond James Research on ROCE and Cash G&A per well completed

“SHALE 3.0” PARADIGM IDEAL FOR ACTIVE NON-OP MODEL

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Capital Constrained E&P’s reassessing their Non-Op Positions

SHALE 3.0	**Operators commit to CAPEX levels no more than 70-80% of cash flow.**
BUT, WHY?	**A growth-driven shale strategy simply hasn’t worked. US production skyrocketed, but oil prices and E&P cash flows suffered. Investors have rightfully demanded that the focus shifts to free cash flow generation and returning that capital to shareholders, which keeps US supply in check.**
GOOD FOR NOG?	**100%**
BUT, WHY?	**Under a 70-80% cash flow reinvestment scenario, every dollar matters, and operated budgets take precedent over non-op budgets regardless of economics. With these dynamics, NOG’s pipeline of “drill-ready” non-op prospects stands at an all-time high. We target <3-year paybacks on these investments.**
IS THIS KNOWN?	**Definitely not 100%. We are the largest publicly traded non-op E&P and have one of the highest ROCE in the oily E&P space.**

2020 GROUND GAME ADVANTAGE – SHALE 3.0 CASE STUDY

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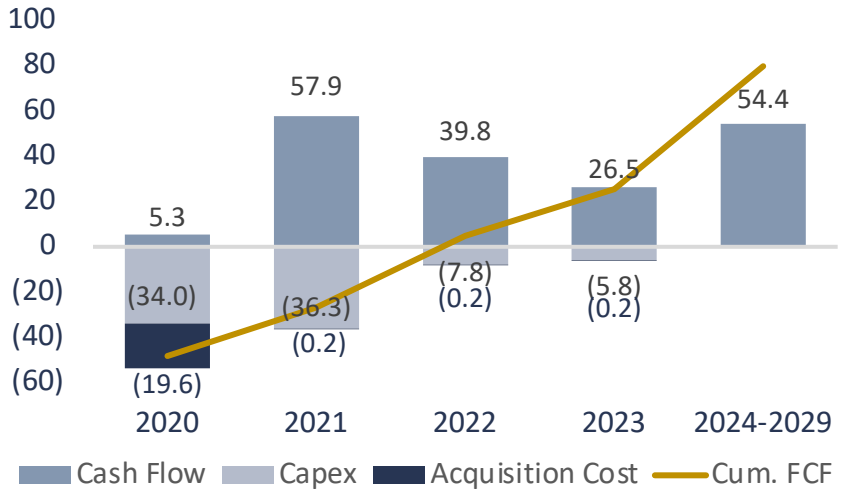
Highly Accretive Full Cycle Return Opportunities

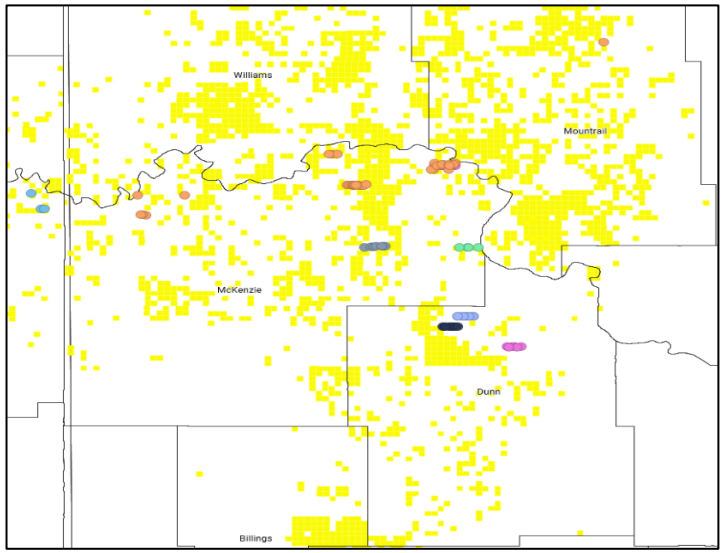
2020 Ground Game Wells in Process Acquisitions

	2020	2021	2022	2023
Net Wells Turned-in-Line	3.9	6.5	1.0	0.9
Forecasted Production (boe/d)	521	3,956	3,031	2,198
Cash Flow From Operation (millions)(1)	$5.3	$57.9	$39.8	$26.5
Development Capital Expenditures (millions)	$34.0	$36.3	$7.8	$5.8
Acquisition Cost (millions)	**$19.6**	**$0.2**	**$0.2**	**$0.2**
Expected ROCE(2)	5%	55%	41%	28%

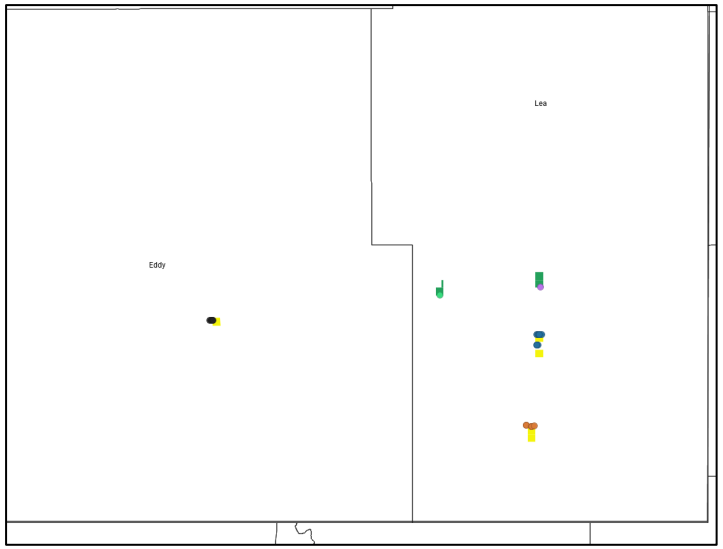
Free Cash Flow Derivation ($MM)



Williston Ground Game Map



Permian Ground Game Map



- **200+ ground game deals executed since 2018**
- **Only targeting deals that raise our already industry leading ROCE**
- **Ability to throttle activity levels up/down to fit with optimal capital allocation strategy**
- **Current environment is ripe for deals**

1) Oil/gas price assumptions were done at the 3/05/21 Strip.
2) Calculated at the asset level.

MAJOR BALANCE SHEET UPGRADE ACHIEVED

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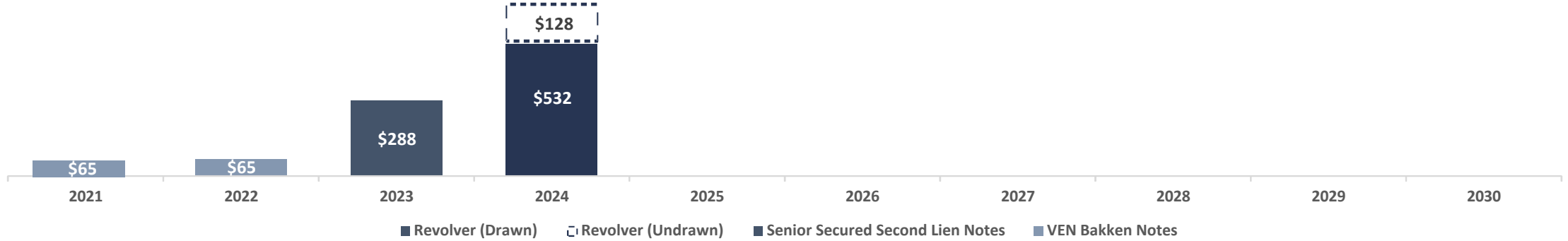
12/31/20

($ in millions)

$950 million of funded debt (100% of total) due by 2024



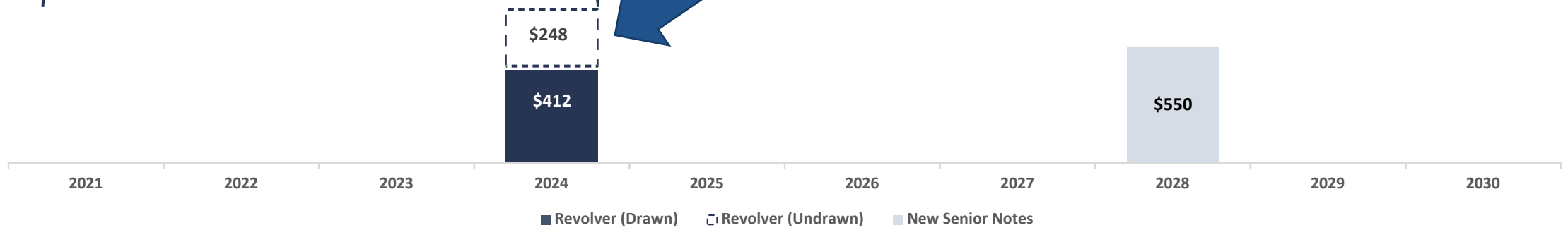
- **Weighted Avg. Maturity: 2.4 years**
- **Liquidity: $128 million**

3/11/21[(1)]

($ in millions)

$412 million of funded debt (52% of total) due by 2024

Current $660MM facility does not incorporate added reserves from the pending Marcellus acquisition



- ✓ **Weighted Avg. Maturity: 5.5 years**
- ✓ **Liquidity: $248 million**

(1) Proforma for the expected April close of Marcellus acquisition ($108.9MM) and the planned May retirement of the ~$15.7MM of remaining Senior Secured Notes due 2023

NOG COMMITTED TO GOOD GOVERNANCE

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ENVIRONMENTAL

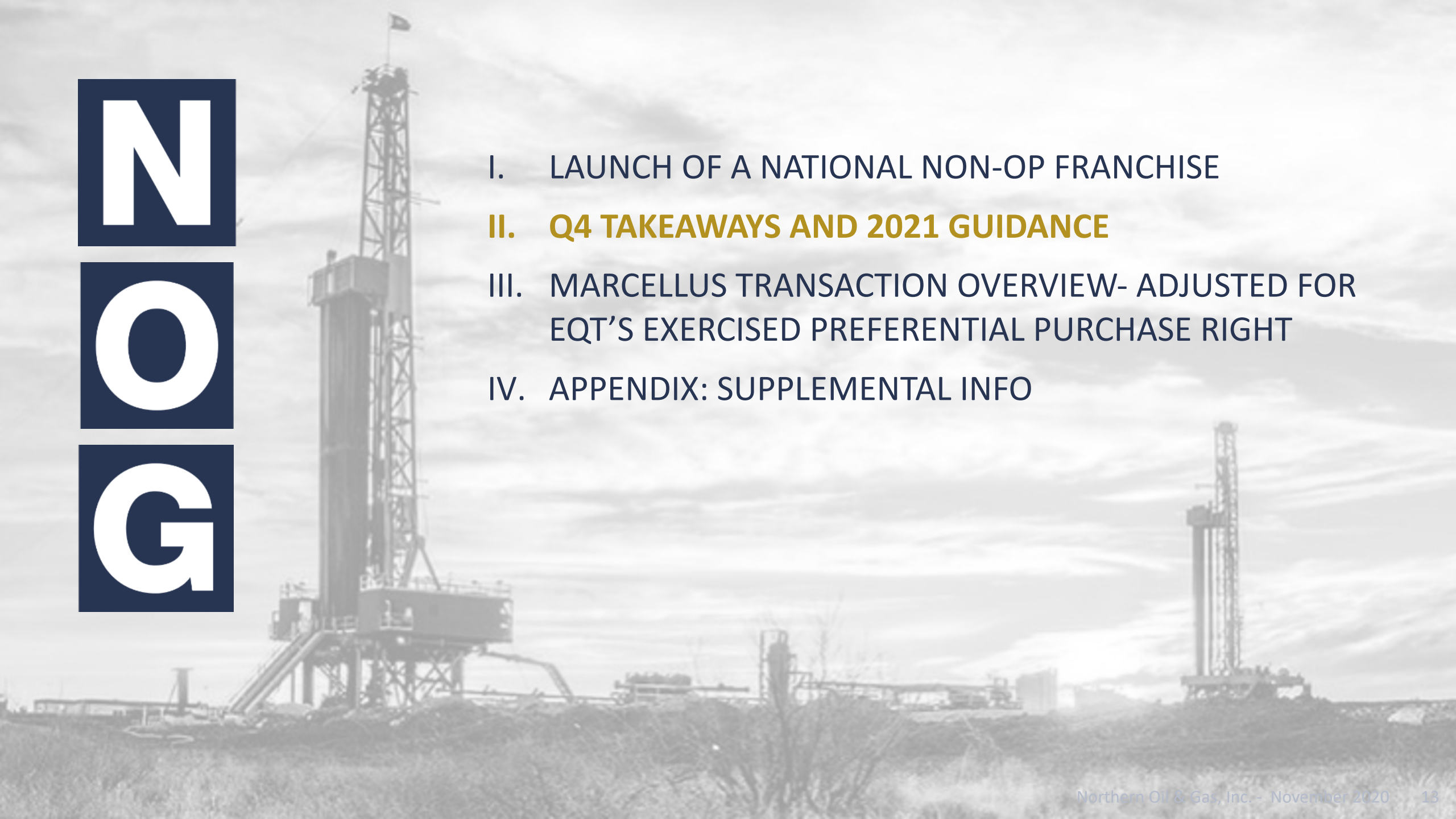
- Operators are selected for environmental and safety records
- North Dakota has been a leader in flaring management and gas capture
- In November, 93% of gas was captured in the Williston Basin, Northern properties average 94%

SOCIAL

- NOG employees provided free health care and paid family leave
- Northern donates to several local charities in its community
- Northern currently analyzing carbon offset projects

GOVERNANCE

- Separate CEO and Chairman roles
- Significant shareholder representation on Board (>20%)
- 95% of executive incentive compensation in stock
- NOG G&A per Boe is among the lowest in the industry



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Q4:20 FINANCIAL & OPERATING HIGHLIGHTS

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Q4 CFFO(1)

$81.8MM

> Q4 Capex of $48.9mm

Q4 Recycle Ratio(2)

2.87X

Cash Margin $28.69/boe ÷ DD&A $9.97/boe

Q4 Debt Retirement

-$39MM

$178mm Retired in 2020

Q4 ROCE(2)

23.5%

Top-Tier Across Industry

Q4 Production

35.7 Mboe/d

4 Mboe/d estimated reduction from curtailments and delays

Active Ground Game

$30.4 MM

High return Ground Game related Capex in Q4

Q4:20 Highlights

- **CFFO(1) increased 23% from Q3 and above CAPEX:** $81.8 million vs. capital expenditures of $48.9 million
- **Strong margins and returns(2):** NOG's recycle ratio (2.87x) and ROCE (23.5%) remain amongst the best in the industry
- **Further debt reduction:** $39.0 million of debt was retired during Q4
- **Seizing attractive Permian opportunities:** Following Northern's initial Permian acquisition announced on 9/10/20, the Company has transacted on 7 Permian Ground Game acquisitions in Q4:20 and Q1:21
- **Counter cyclical investing pays off:** 2020 Ground Game investments are projected to produce a 2021 ROCE of 55%

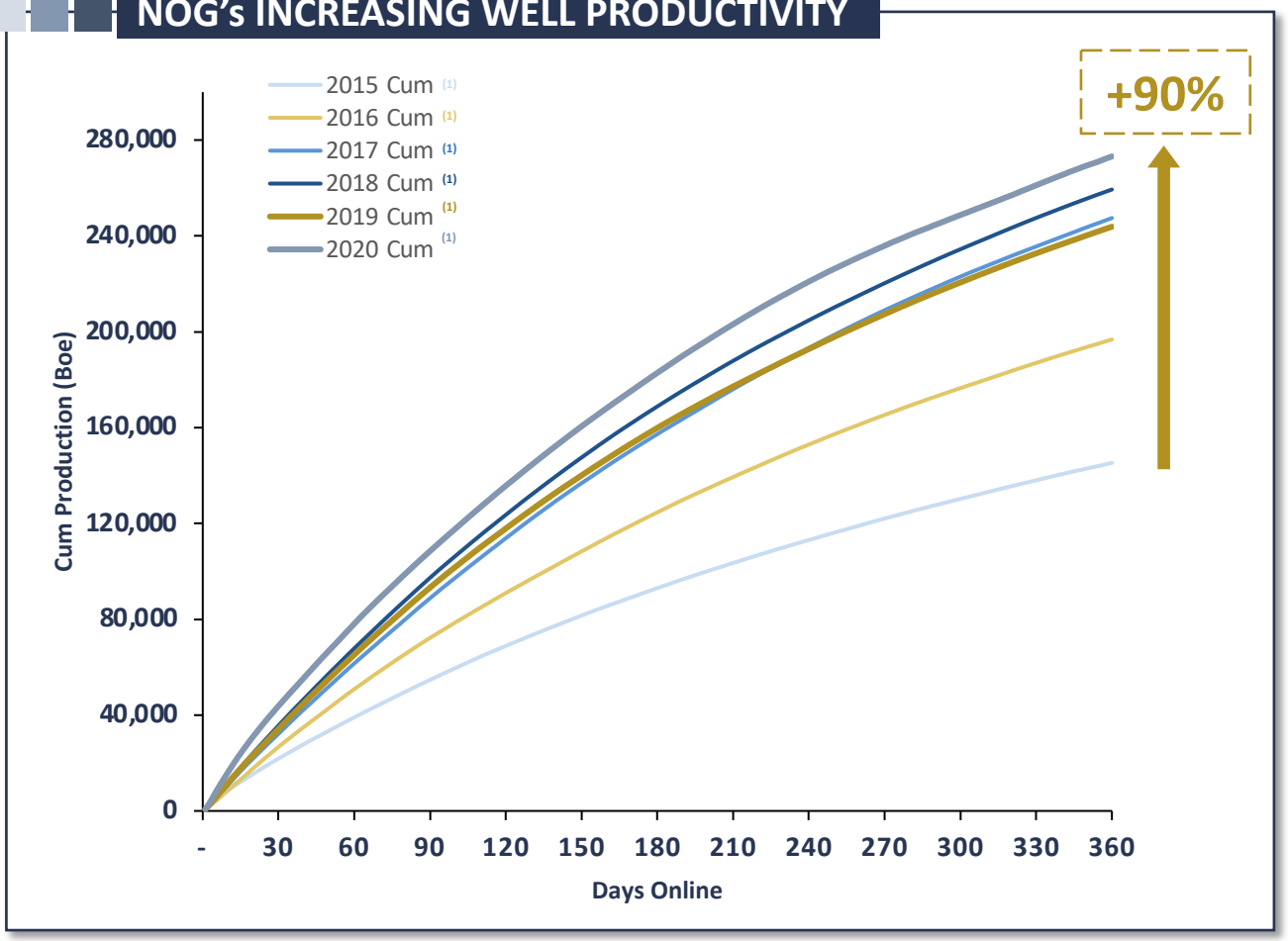
(1) Cash flow from operations, excluding $8.8 million spent to reduce net working capital during the third quarter
(2) See Slide 37 for definition and methodology. Recycle Ratio and ROCE may be considered non-GAAP financial measures.

2020 WELL PERFORMANCE SETTING RECORDS…

NYSE American: NOG

➢ *Completion technology and high-grading of well locations has led to improved well recovery across the basin*

NOG's INCREASING WELL PRODUCTIVITY



HIGHER RECOVERIES + STABLE COSTS = IMPROVED CAPITAL EFFICIENCY

Higher type-curves versus other US basins

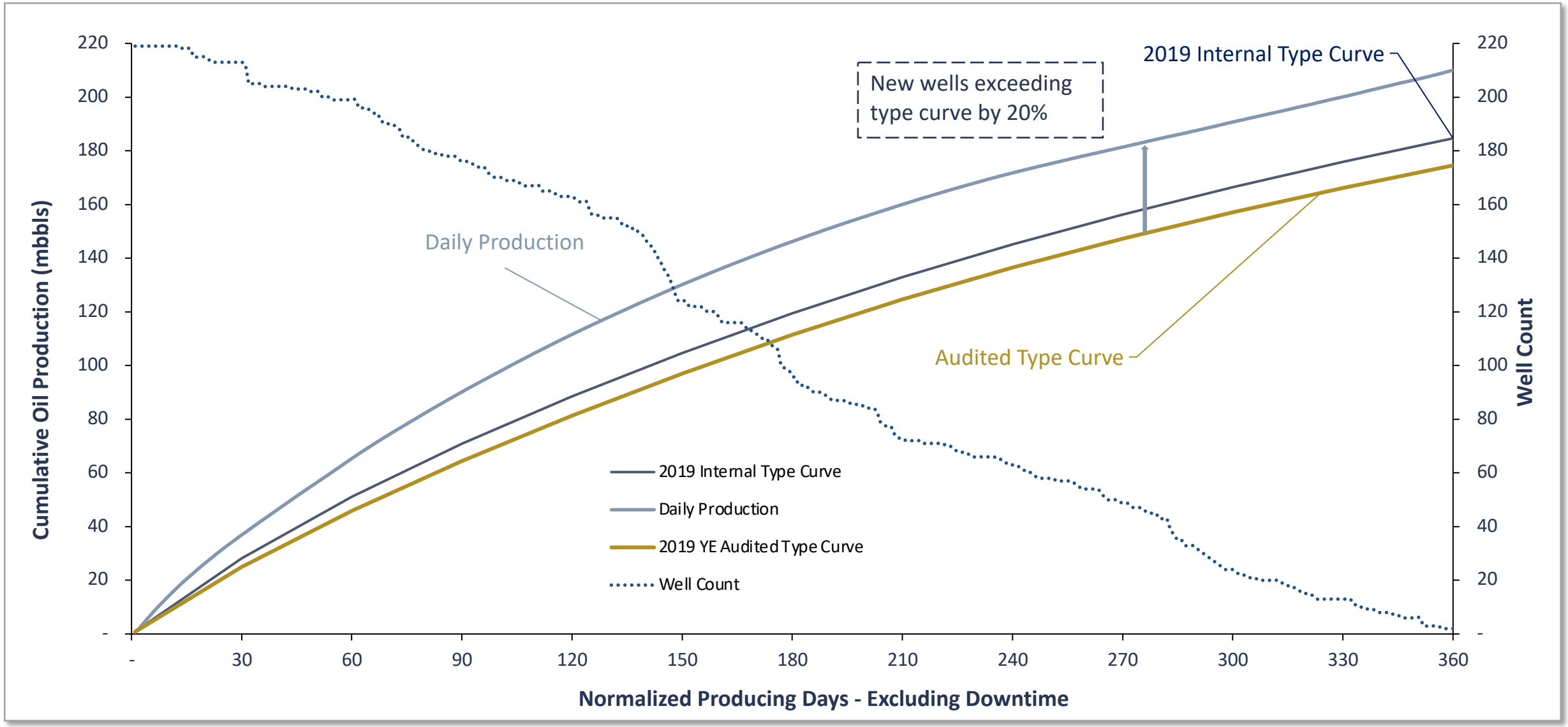
2019 wells in-line with 2018 results…

…despite more step-out wells in 2019

2020's program the strongest in company history

1. Wells assigned to years based on year in which they started producing. Cumulative type curves comprised of the following numbers of gross wells: 2015 – 296; 2016 – 162; 2017 – 291; 2018 – 479; 2019-460 ; 2020-266. Includes producing wells as of December 31, 2020.

…AND EXCEEDS RESERVE AUDITOR EXPECTATIONS



(1) Includes PDP wells as of December 31, 2020 classified as PDNP or PUD in yearend 2019 reserve report.

2021 GUIDANCE

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2021 Bakken/Permian Guidance

Annual Production (Boe per day)	37,750 - 42,750
Net Wells Added to Production	32 - 34
Total Capital Expenditures ($ in millions)	$180 - $225
Production Expenses (per Boe)	$8.75 - $9.75
Production Taxes	10% of Net Oil Revenues, $0.06 per Mcf for Natural Gas
Oil as a Percentage of Production Volumes	78 - 80%
Average Differential to NYMEX WTI	$6.50 - $8.50

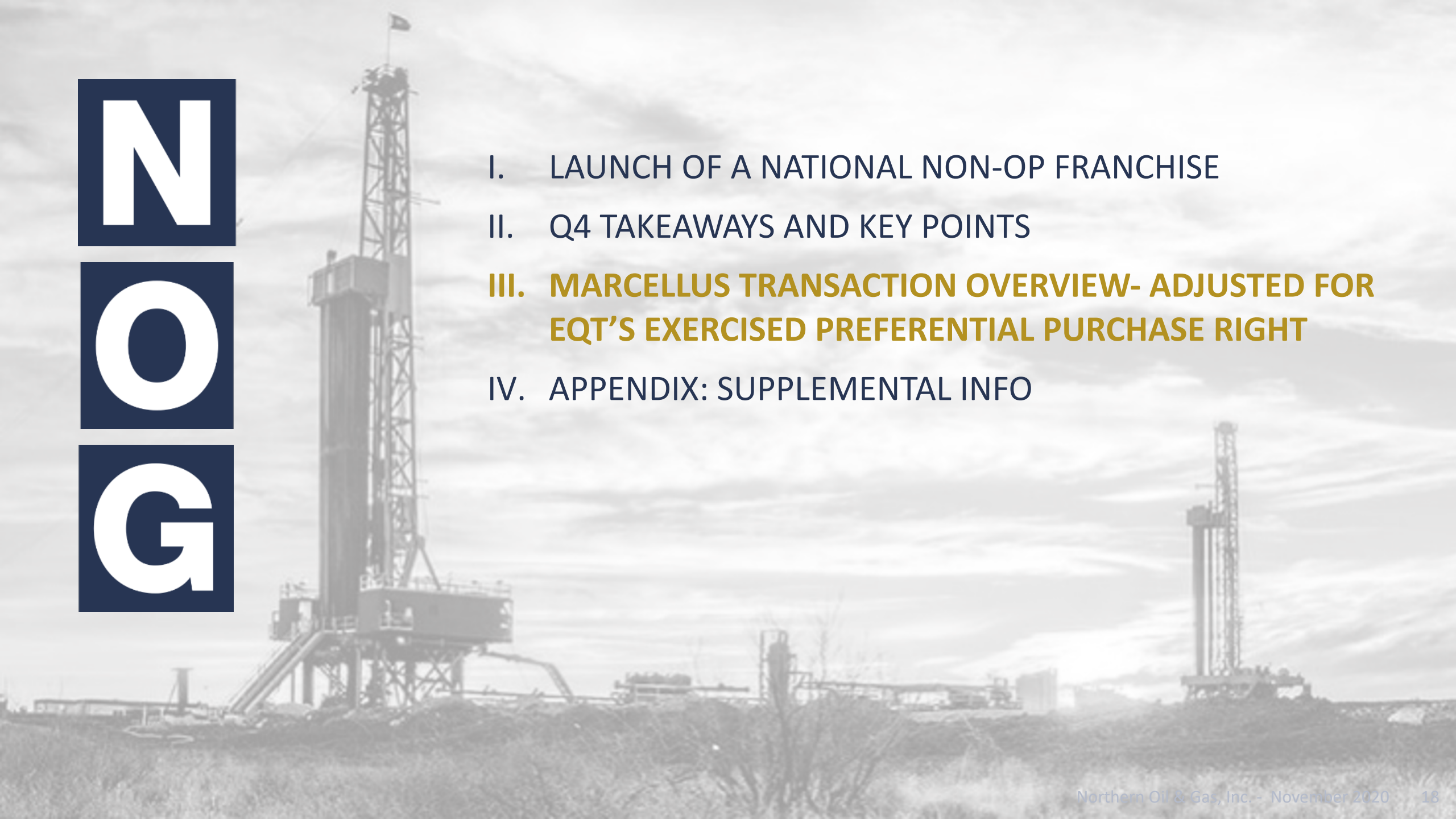
2021 Marcellus Guidance (full-year)

Annual Production (Mmcf per day)	75 - 85
Net Wells Added to Production	3.5 - 3.8
Total Capital Expenditures ($ in millions)	$20 - $25
Production, Asset G&A and Marketing Expenses (per Mcf)	$0.85 - $0.95
Average Differential to NYMEX Henry Hub (per Mcf)	$0.55 - $0.65

Corporate G&A Guidance (per Boe)

	Q1 Pre-RIL Close	Q2-Q4 Post-RIL Close
Cash (ex one-time transaction costs)	$1.10 – $1.20	$0.75-$0.85
Non-Cash	$0.30	$0.20

Source: Company disclosures.



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RELIANCE APPALACHIA TRANSACTION OVERVIEW

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Transaction Summary

- Northern agreed to acquire a non-operated interest in Appalachia natural gas assets from Reliance Marcellus, LLC ("Reliance") for an unadjusted cash purchase price of $126.4MM plus equity warrants issued to Reliance upon closing(1)
  - Effective date of July 1, 2020 with expected closing in April 2021; transaction subject to customary purchase price adjustment and satisfaction of customary closing conditions

Financing

- The transaction was funded through a $140MM equity raise and a $550MM debt offering

Rationale

- **Attractive valuation:** PDP + wells-in-process PV10 of $238MM vs. $126MM cash purchase, equates to a PV22 transaction. Implied multiples of ~$1,440 flowing Mcfe/d and ~2.9x expected 2021 unhedged cash flow from operations
- **Accretive on what matters:** Go-forward leverage, free cash flow, return on capital employed, EV/EBITDA, corporate decline rate, and sustaining capital requirements
- **Considerable free cash flow:** $95MM of free cash flow expected over the next four years, average free cash flow yield of >18% over that timeframe
- **Tangible upside identified with EQT taking over as operator:** >$200MM of potential upside value if EQT succeeds in lowering G&A costs, well costs, and improves well performance
- **Catalyst for a meaningful balance sheet improvement:** Line-of-sight to achieve leverage of <1.5x – a major step toward Northern's target of <1.0x Debt/EBITDA. Northern intends to refinance all near-term debt with this improved backdrop
- **Welcomed diversity of commodity mix and geography:** Transaction establishes Northern as a high-return national non-op franchise and accelerates the goal of becoming a best-in-class dividend paying E&P

(1) In addition to cash payment, Northern to issue Reliance 3,250,000 common share warrants with an exercise price of $14.00 (in each case, for a duration of seven years and subject to a 90 day lock-up period from and after the closing of the proposed transaction). Certain of the assets to be purchased in connection with the acquisition are subject to both preferential purchase and consent rights, which, if exercised or not obtained within the 45 days or three months after closing of the acquisition, respectively, would result in 5.6 net producing wells, 1.0 net wells in progress, ~1,915 net acres, and proved reserves of ~65 Bcf as of December 2020 being excluded from the acquisition.

ENTRY INTO ATTRACTIVE BASIN WITH A LEADING LOW COST OPERATOR – EQT

NYSE American: NOG

Asset Overview

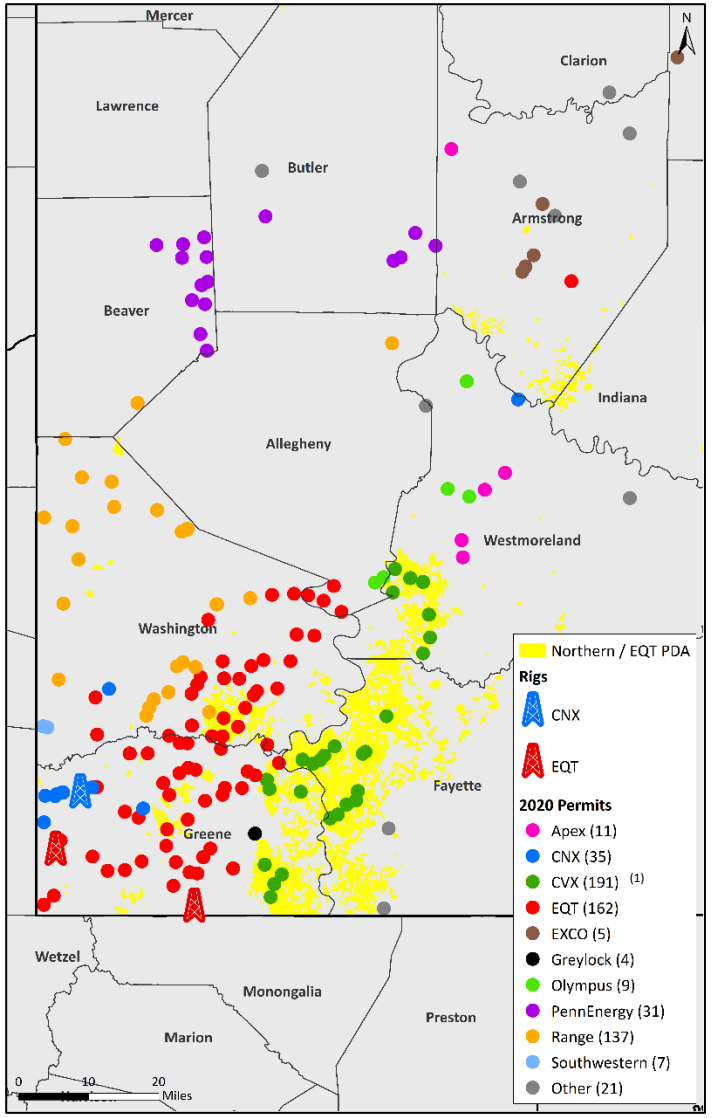
- Non-operated interests in the Reliance / EQT Participation and Development Agreement ("PDA")
  - Average, blended working interest of ~27%
- EQT announced its acquisition of Chevron's Appalachia interests in September 2020
- July 2020 production (net to Northern) of ~88 MMcfe/d, 95.1 net wells, and ~62,000 net acres
- Total unadjusted cash purchase price of ~$181MM (and warrants(2)) with Arch Energy Partners acquiring an undivided 30% interest in the assets for a cash purchase price of ~$54MM
  - Arch entered into a cooperation agreement with Northern simultaneous with the execution of the acquisition agreement

Attractive Near Term Projects

- 21.6 Marcellus net work-in-progress ("WIP") wells expected to add substantial, near-term cash flow with high capital efficiency
- Preliminary 2021 and 2022 budget confirms development of both wells in process and additional development of undeveloped locations
- Development plan provides production growth while remaining free cash flow positive

Low Risk High Impact Upside

- ~1,150 gross undeveloped locations (management estimate)
  - IRRs of 33% - 93% at strip as of March 5, 2021
- EQT is a low-cost operator in Appalachia and will look to optimize development with a lean operating structure and capital cost reduction targets for Marcellus wells of <$700/ft



Source: Enverus, FactSet, Reliance data.

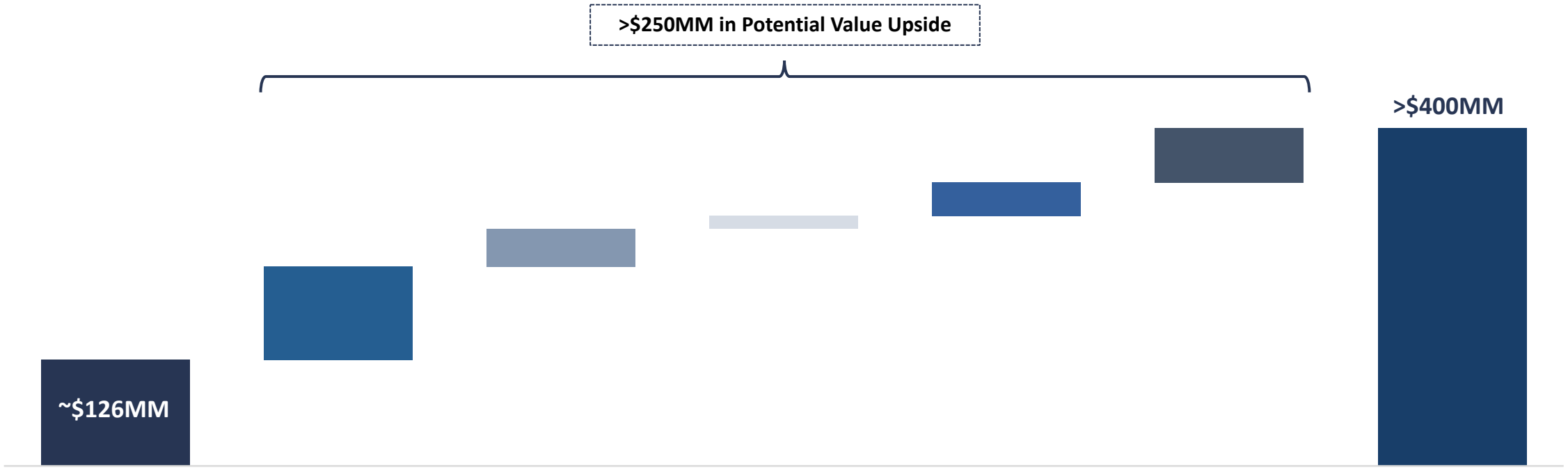
(1) Permits 2015 through 2020.

(2) In addition to cash payment, Northern to issue Reliance 3,250,000 common share warrants with an exercise price of $14.00 (in each case, for a duration of seven years and subject to a 90 day lock-up period from and after the closing of the proposed transaction).

PV22 DEAL WITH MEANINGFUL UPSIDE

NYSE American: NOG

➢ *In addition to operational improvements and capital efficiencies future performance is expected to benefit from operational expertise from EQT*



Cash Purchase Price	PDP + WIP PV10	G&A Savings	Capex Reductions	Productivity Uplift	Undeveloped Inventory	Total Value
• Transaction underwritten on basis of Chevron as operator, significant opportunities for improvement	• PDP + WIP PV10 based on reserve report	• Estimated G&A reduced by >2/3 in 2021 and 2022 vs. 2020 based on most recent budget proposal • Previous operator had ~1,000 employees working on the asset at one point; EQT is more efficient	• Opportunity for ~15% reduction from previous operator $/ft D&C by moving inline with EQT targets • Recent WIP D&C cost proposals below $700/ft	• EQT's current wells in this area have >20% productivity compared to previous operator	• Assumes asset is run in maintenance case for 2025+ (~8 net wells per year) • Significant undeveloped resource • 7 undeveloped locations have been converted into new WIPs already	

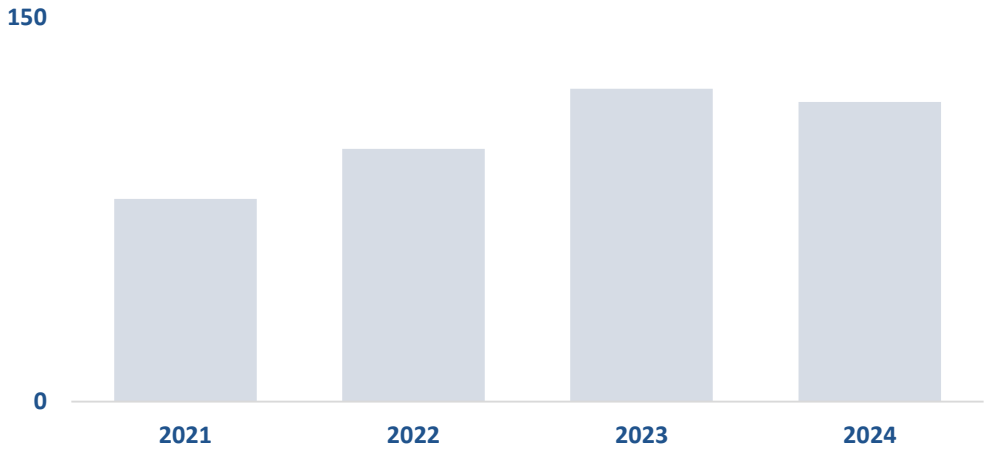
Source: Management projections and Reliance data.

RELIANCE APPALACHIA: ASSET-LEVEL PROJECTION DETAIL

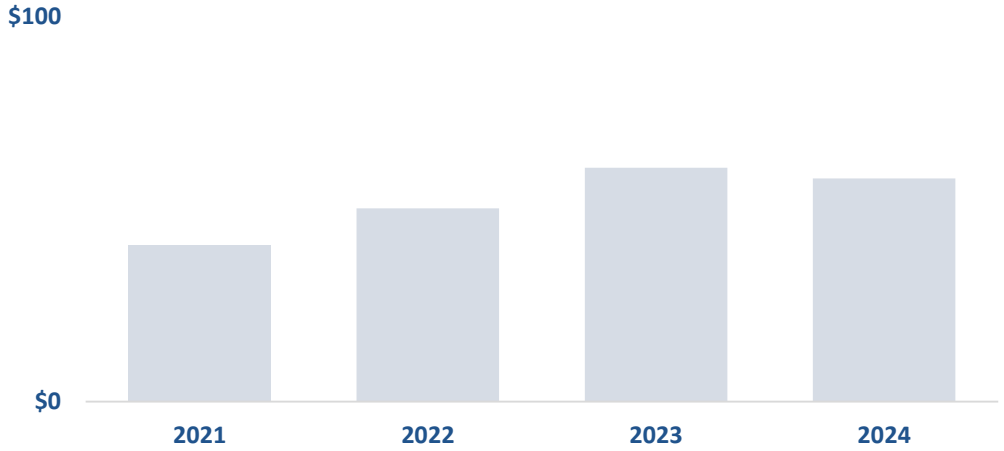
NYSE American: NOG

- *Projections assume PDP and WIP completions and no further development of new wells (strip pricing as of 3/5/21)*

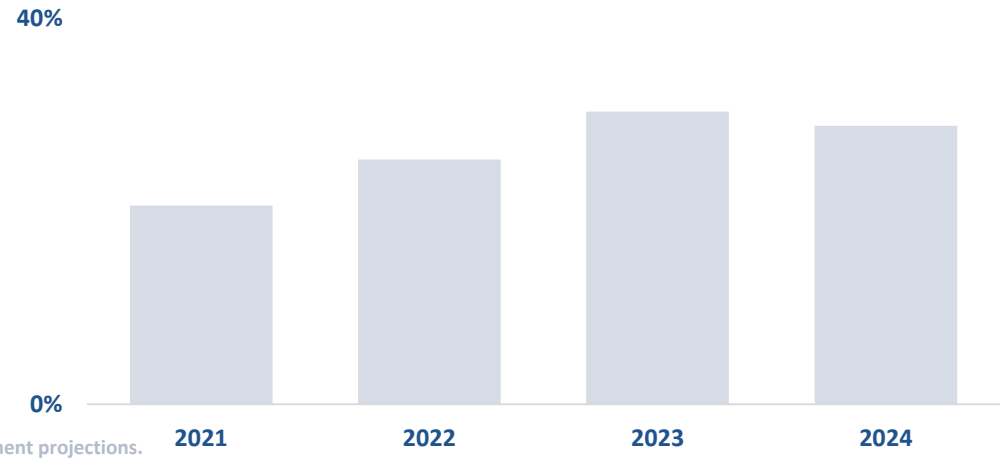
Production (MMcfe/d)



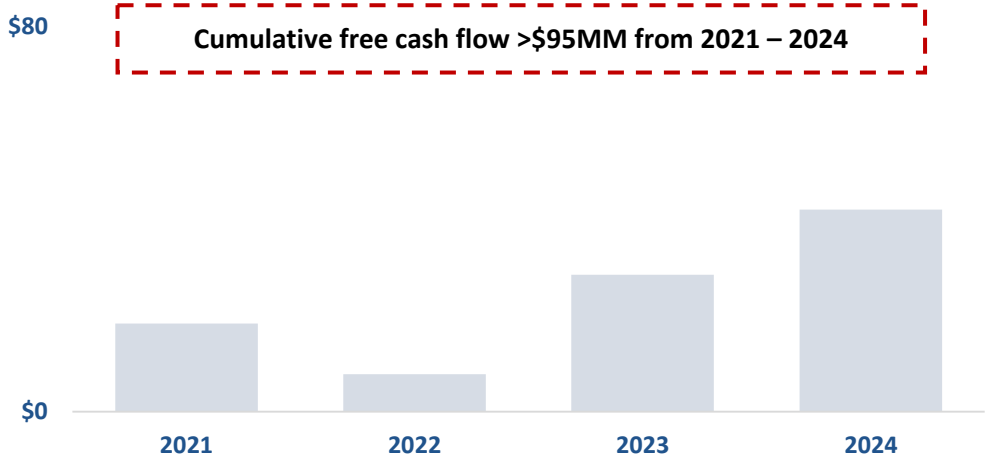
Cash Flow From Operations ($MM)



ROCE(1)



Free Cash Flow ($MM)



Cumulative free cash flow >$95MM from 2021 – 2024

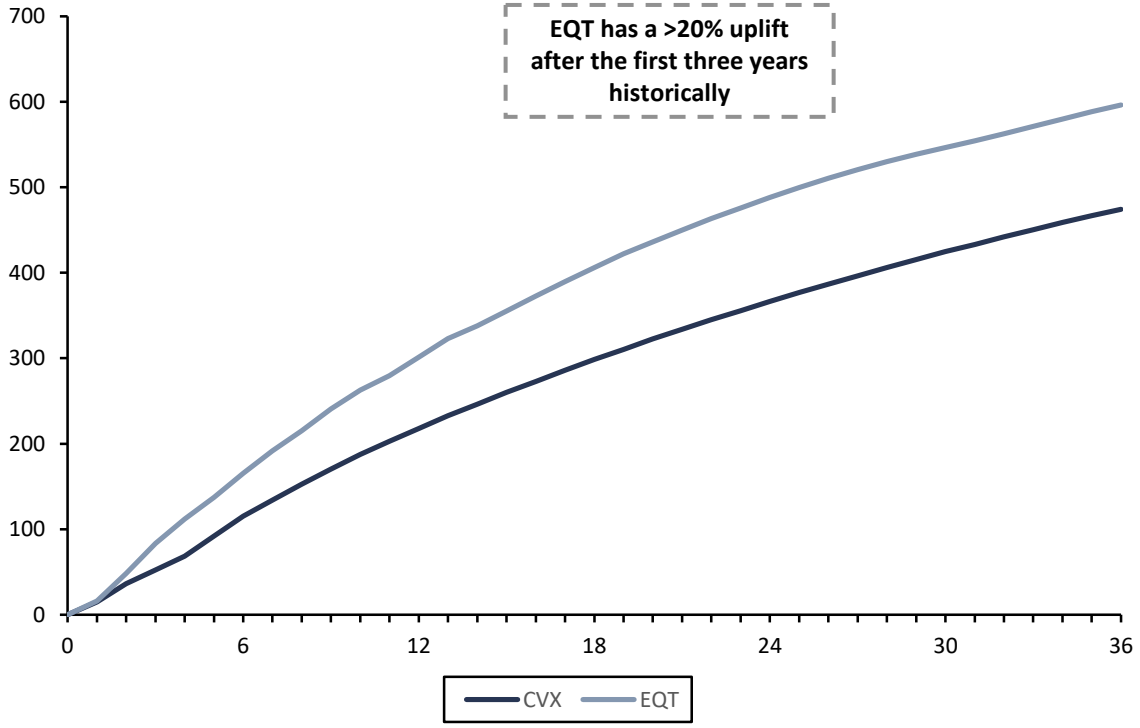
Source: NOG Management projections.
Note: Shown at 70% ownership of Reliance PDA asset. Strip pricing as of 3/5/21.
(1) ROCE calculated as EBIT / Capital Employed. Capital Employed is calculated as Total Assets – Current Liabilities.

EQT EXPECTED TO DRIVE MATERIAL IMPROVEMENTS IN OPERATIONAL PERFORMANCE AND COST LEADERSHIP

NYSE American: NOG

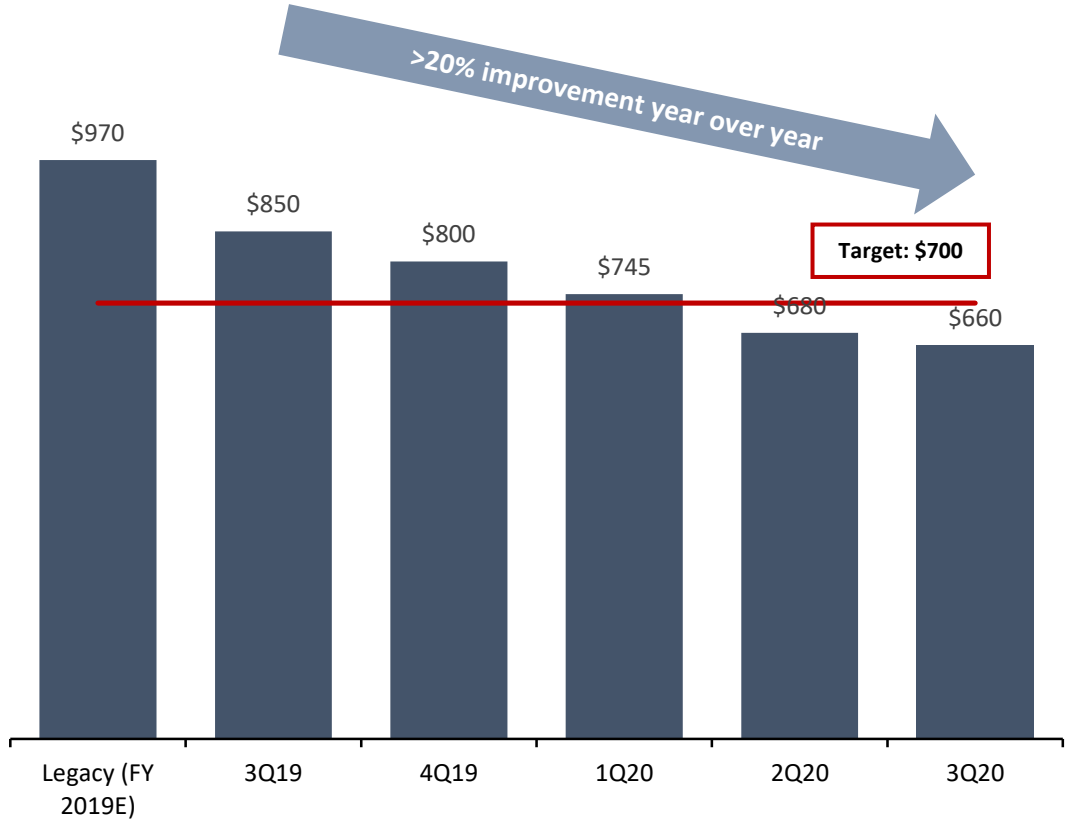
- *EQT expected to deliver better operating results with lower costs and will benefit from economies of scale and application of best practices*

EQT vs CVX Production Performance



Operator	Well Count	Average Lateral Length (ft)	Average IP90 (Mcfpd / 1,000')
CVX	35	6,189	587
EQT	43	9,789	1,049

PA Marcellus Well Costs(1) ($/ft)



Source: Public disclosures.
Note: Using wells with first production in 2016+, located in Greene, Fayette, and Washington Counties and producing from the Marcellus reservoir.
(1) Includes pad construction and production facilities.

NATURAL GAS DIVERSITY WELCOMED

NYSE American: NOG

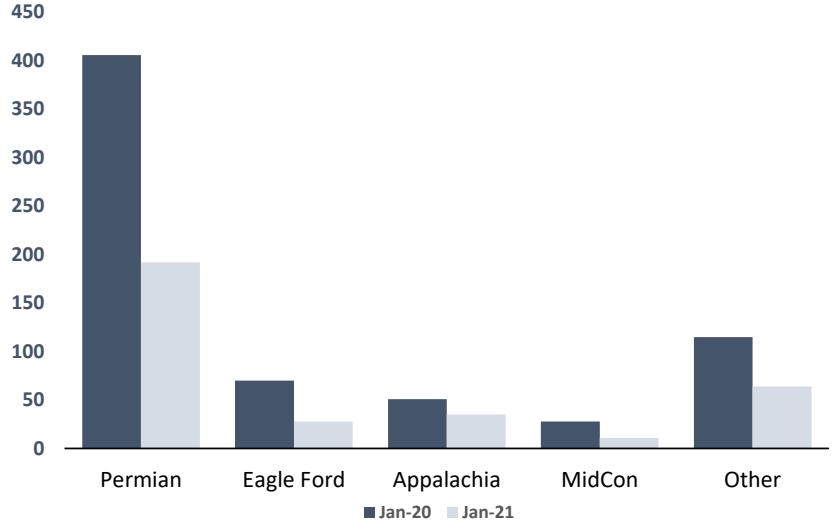
Expectations for an Undersupplied Market in 2021

- **Rapid decline in oil-directed activity materially reduces associated gas supply**
  - U.S. rigs down ~51% reducing well inventory and affecting future gas supply
- **Appalachia and Haynesville rig counts are well below maintenance activity levels**
- **Gas producers are focused on deleveraging and cash flow, reducing dry gas growth**
- Current commodity price environment does not incentivize adequate supply response to meet future growth
  - Gas markets may be short supply over the near term suggesting an undervalued strip

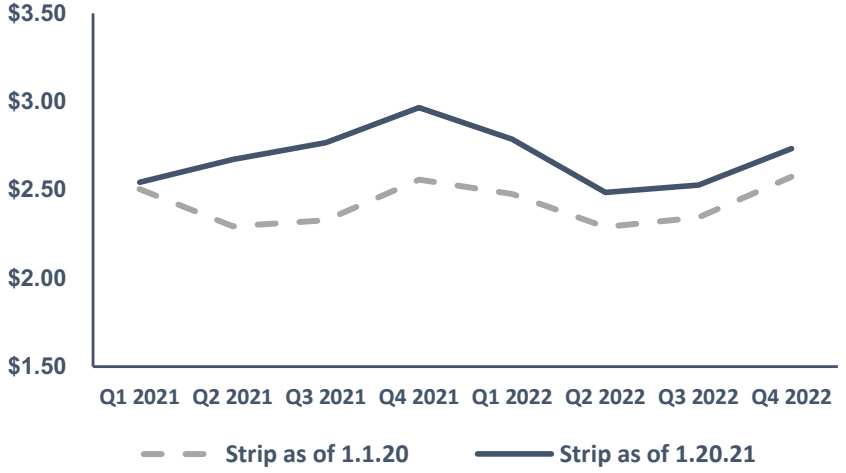
Natural Gas Pricing Environment Improves

- Natural Gas Prices strengthen as demand loss more than offset by supply declines
  - Witnessed modest declines in lower 48 gas production, requires cautious approach to higher prices
- Long-term price support expected from continued capital discipline, increased power generation demand, long-term LNG demand and coal/nuclear retirements

Rig Counts



Natural Gas Strip Price ($/MMBtu)



Source: EIA, Baker Hughes, Wall Street Research, and Factset as of 1/20/21.



I. LAUNCH OF A NATIONAL NON-OP FRANCHISE

II. Q4 TAKEAWAYS AND KEY POINTS

III. MARCELLUS TRANSACTION OVERVIEW- ADJUSTED FOR EQT'S EXERCISED PREFERENTIAL PURCHASE RIGHT

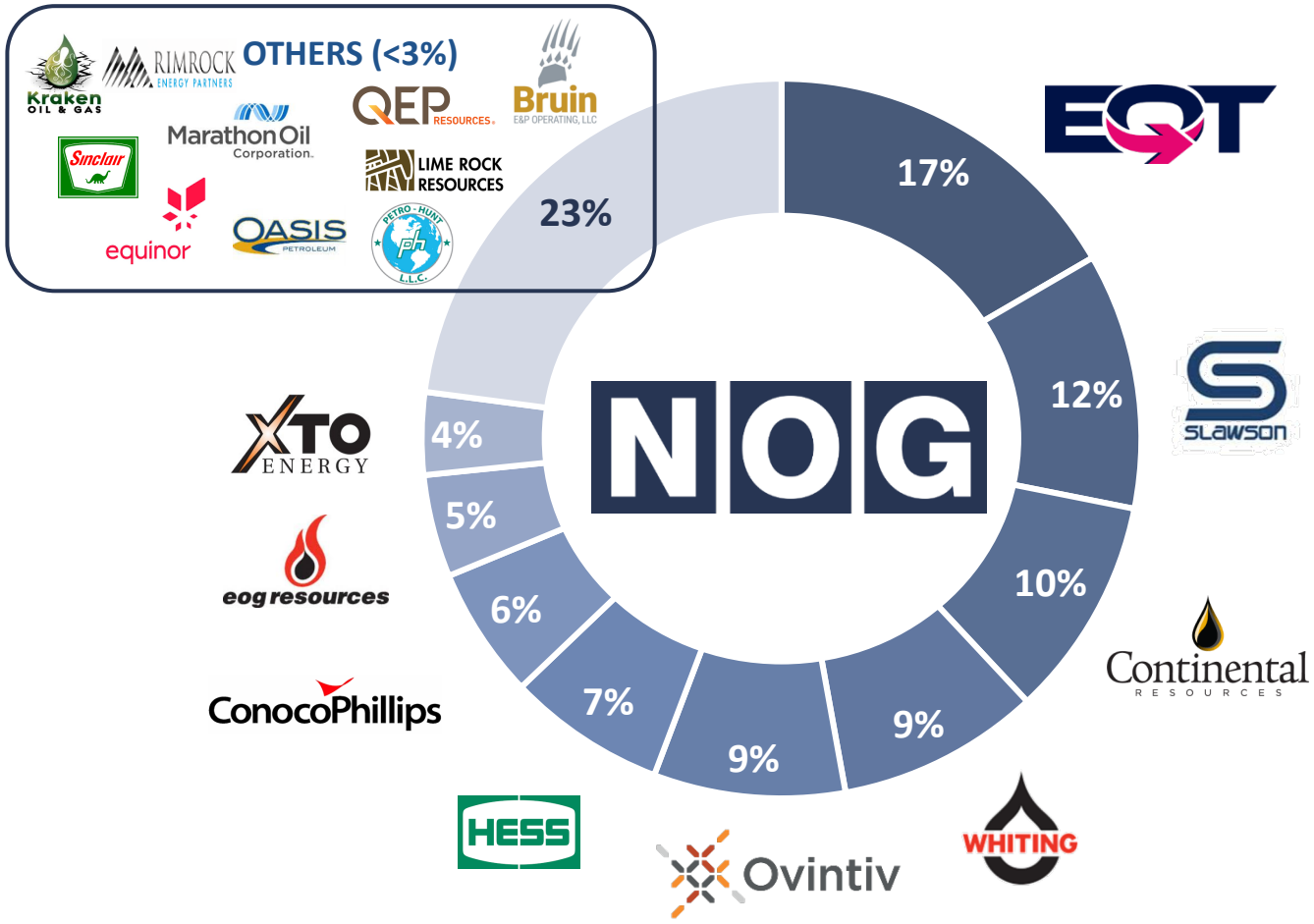
IV. APPENDIX: SUPPLEMENTAL INFO

DIVERSIFIED BASE & PARTNERED WITH BASIN LEADERS

NYSE American: NOG

➢ *Leverage to some of the best performing operators in multiple basins*

% OF NET PRODUCING WELLS BY OPERATOR



Key Takeaways

- ✓ **Q4:20 production of 35,738 boepd is comprised of 40+ different operators**
- ✓ **>65% of Q4 2020's wells in process are operated by *ConocoPhillips, Continental Resources, Slawson, Enerplus, WPX and Mewbourne***
- ✓ **97% of wells in process are located in the 'Big 4' counties**

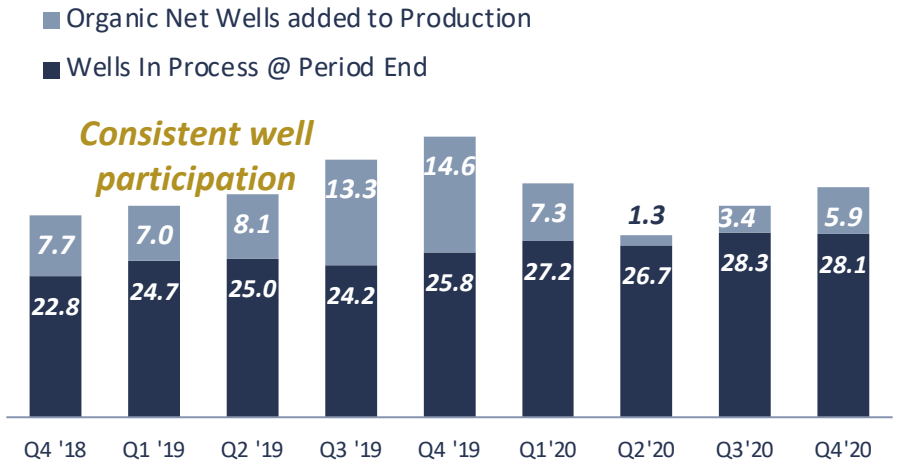
Source: Producing wells as of 12/31/20 inclusive of Reliance acquisition

NON-OP OF SCALE WITH IMPROVING COST STRUCTURE

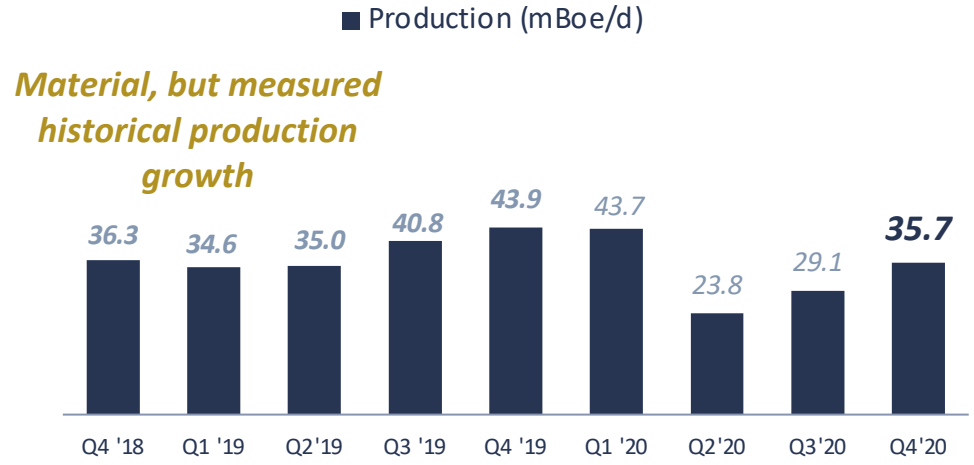
NYSE American: NOG

➢ *Participation in the highest quality wells with stable AFE costs generates consistent production & higher IRRs*

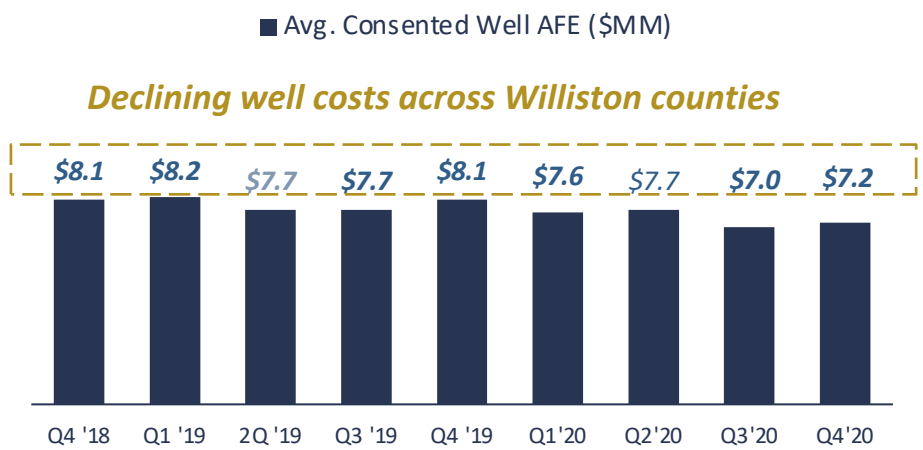
CONSISTENTLY FUNDING ATTRACTIVE WELLS…



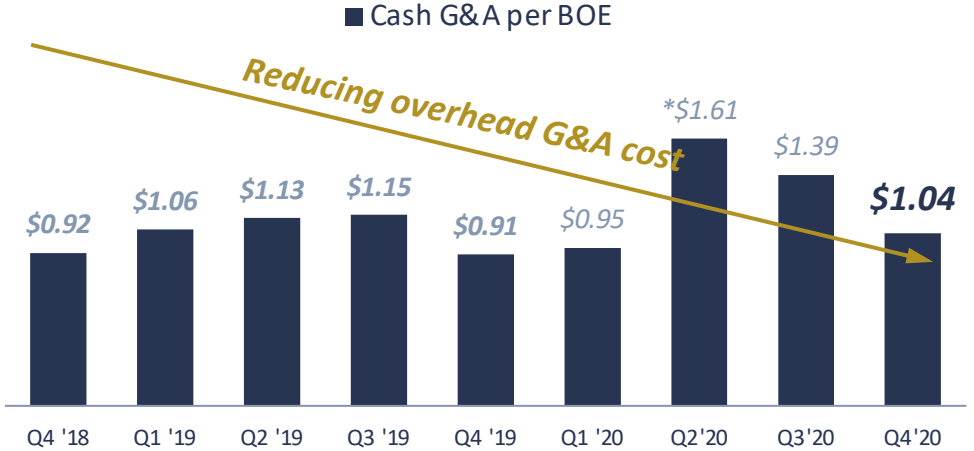
…GENERATES CONSISTENT PRODUCTION



PARTICIPATING IN COST-EFFECTIVE AFES…



…WHILE MAINTAINING PEER-LEADING LOW CASH G&A[1]



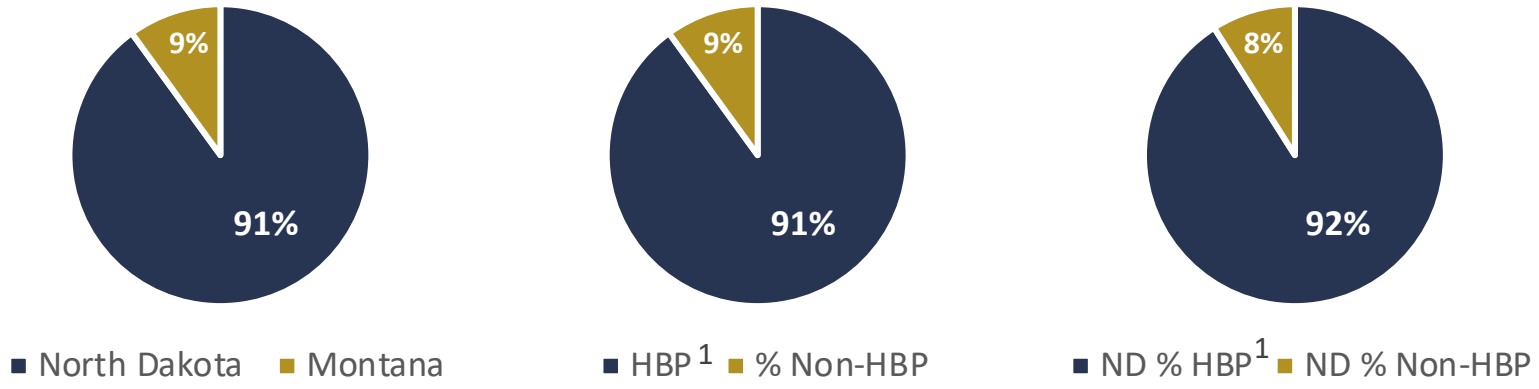
1. Cash G&A is a non-GAAP financial measure. Please see the appendix for reconciliation to the most directly comparable GAAP Measure.
2. Increase reflects 46% reduction in production. On a *non*-per BOE basis, cash G&A actually declined by 8% sequentially.

CURRENT BAKKEN SNAPSHOT

NYSE American: NOG

➢ *Portfolio of high-quality acreage in the heart of the basin with interests in over 7,000 gross Bakken/Three Forks oil wells*

NET ACREAGE SUMMARY

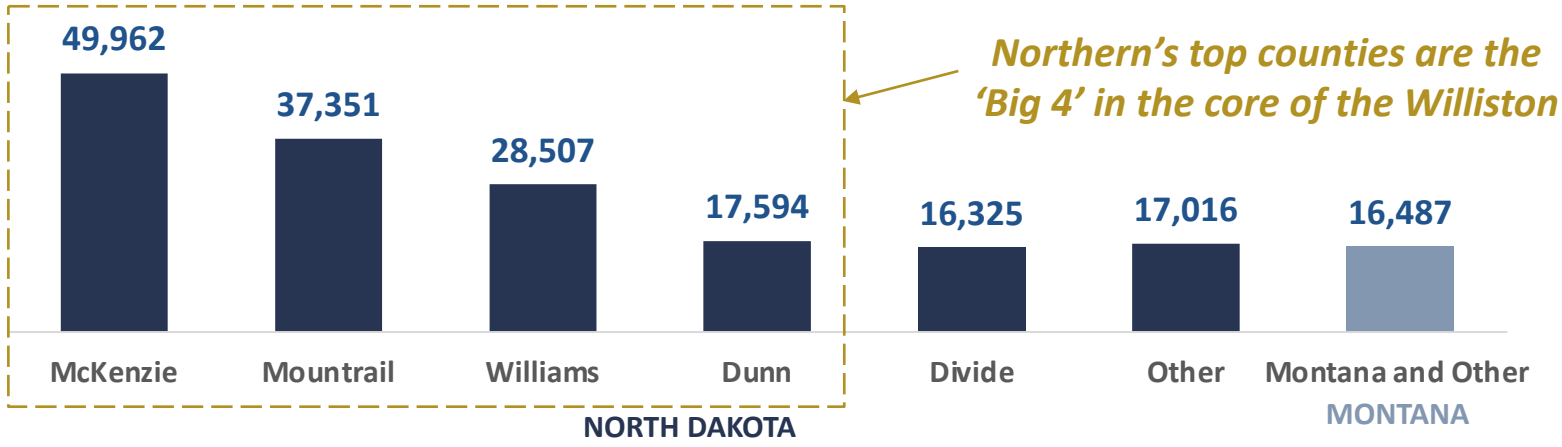


183,242
NET ACRES

91%
HELD BY PRODUCTION[1]

40+
OPERATOR PARTNERS

NET ACRES BY COUNTY



Northern's top counties are the 'Big 4' in the core of the Williston

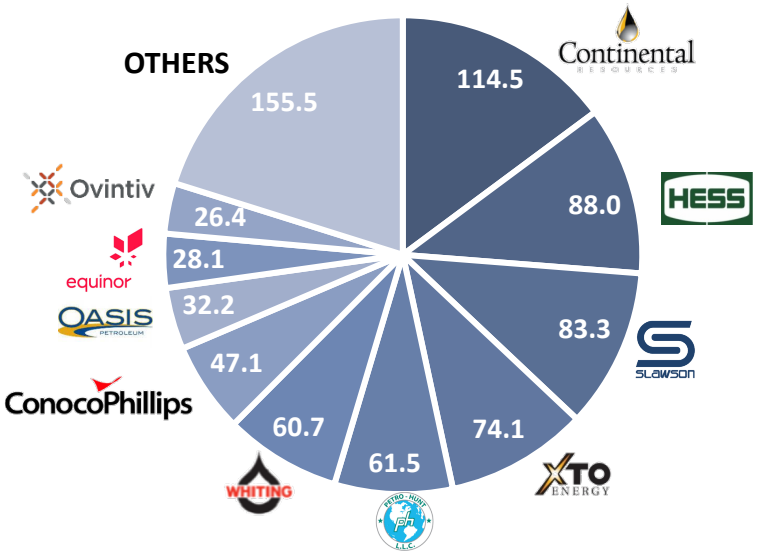
Source: Company data as of 9/30/20. 'HBP' is acreage held by production

1. Includes acreage classified as held by production, held by operations or developed

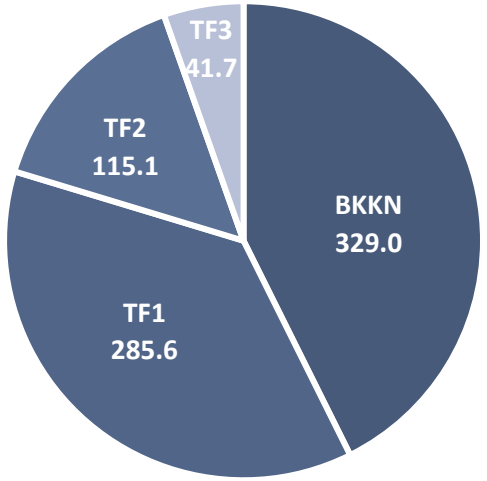
STRONG BAKKEN INVENTORY DRIVES NAV UPSIDE

NYSE American: NOG

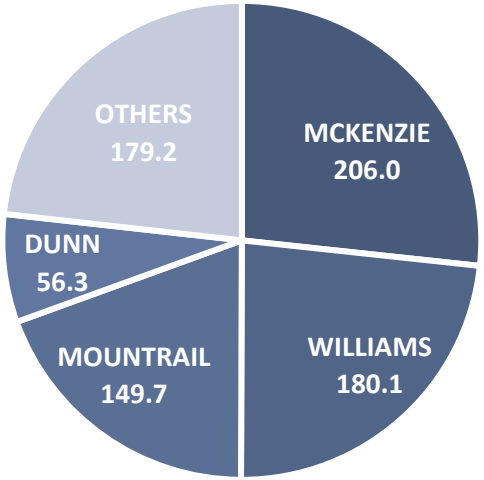
Undeveloped Locations By Operator



Undeveloped Locations By Reservoir



Undeveloped Locations By County



Key Takeaways

- ✓ **Over 60% of 771 future drilling locations controlled by strong balance sheet companies such as *Continental*, *Hess*, *Slawson, XTO, Petro-Hunt, and ConocoPhillips***
- ✓ **77% of net locations in 'Big 4' counties**
- ✓ **Conservative booking approach with minimal locations in lower bench Three Forks**

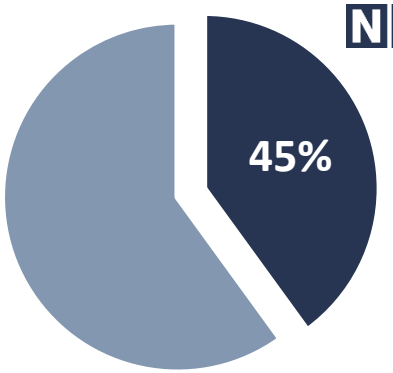
Source: Company info – Undeveloped inventory as of 12/31/19

2020 BAKKEN WELLS WERE IN STRONG AREAS

NYSE American: NOG

➢ *The 2020 program was focused in core areas*

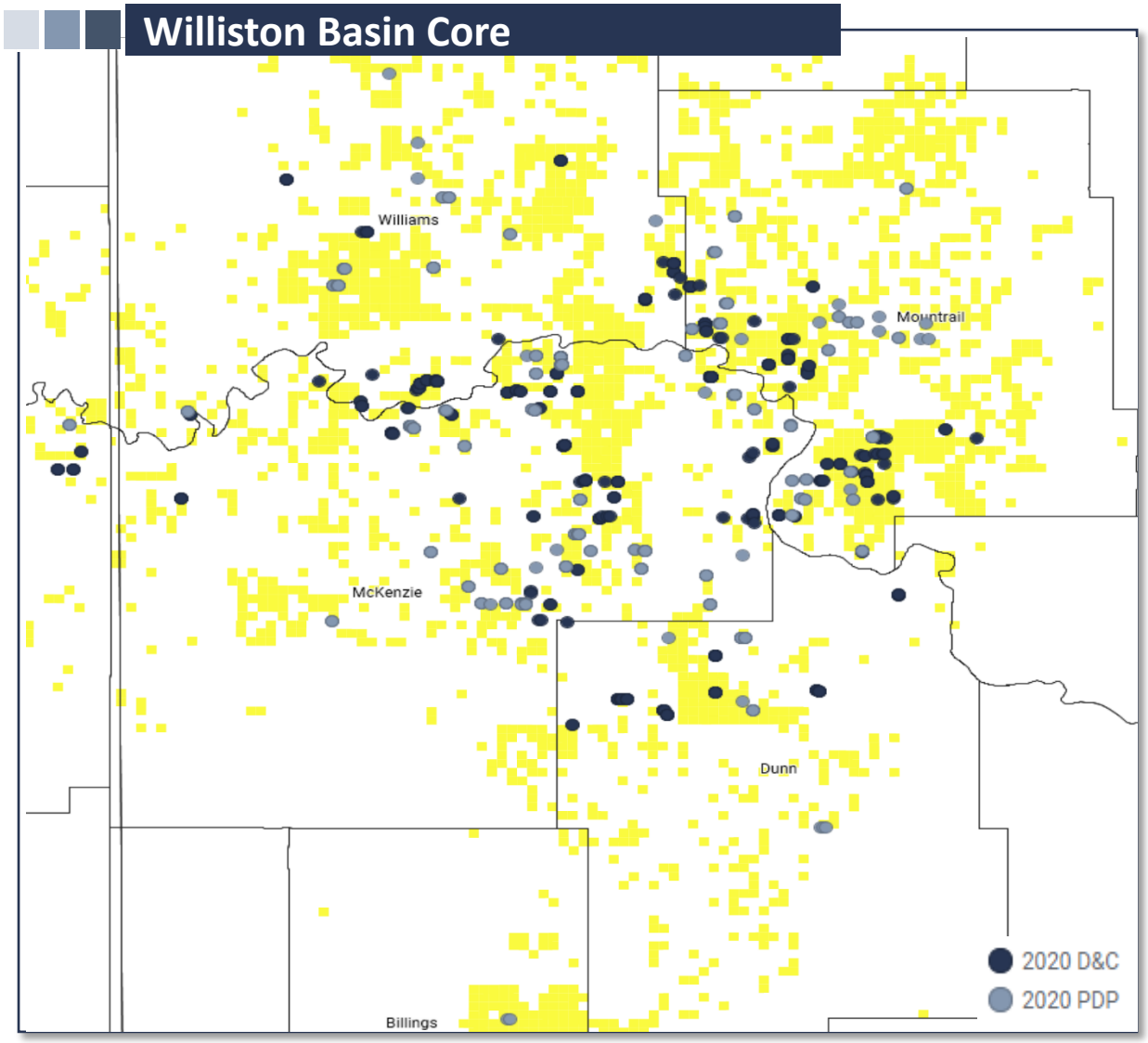
NOG'S DATA ADVANTAGE



NORTHERN HAS PARTICIPATED IN ~45% OF WELLS EVER DRILLED IN THE WILLISTON BASIN

HIGHLIGHTS

- ✓ **Positive reserve performance adjustments in 4 of last 6 years**
- ✓ **Top-tier return on capital metrics**



Sources: Company info, and North Dakota Industrial Commission

HEDGE PROFILE

NYSE American: NOG

- *Northern continues to execute a strategy built around the safeguard of returns during a commodity down-cycle, while retaining flexibility to capture the opportunistic upside*

	CRUDE OIL DERIVATIVE PRICE SWAPS				NATURAL GAS DERIVATIVE PRICE SWAPS			
	Contract Period	Barrels Per Day (Bbls/d)	Total Hedged Volumes (Bbls)	Weighted Average Price ($/Bbl)	Contract Period	Million British Thermal Units Per Day (mmbtu/d)	Total Hedged Volumes (mmbtu)	Weighted Average Price ($/mmbtu)
2021[(1)]:	Q1	24,333	2,190,000	$55.66	Q1	37,500	3,375,000	$2.473
	Q2	24,200	2,202,208	$56.37	Q2	65,104	5,924,507	$2.741
	Q3	23,168	2,131,410	$54.13	Q3	97,598	8,979,028	$2.822
	Q4	23,071	2,122,506	$53.76	Q4	95,481	8,784,210	$2.817
	Avg./Total	23,688	8,646,124	$55.00		74,145	27,062,745	$2.759
2022[(1)]:	Q1	12,000	1,080,000	$51.29	Q1	30,000	2,700,000	$2.980
	Q2	10,250	932,750	$51.20	Q2	10,000	910,000	$2.612
	Q3	10,750	989,000	$51.49	Q3	10,000	920,000	$2.612
	Q4	10,750	989,000	$51.49	Q4	10,000	920,000	$2.612
	Avg./Total	10,934	3,990,750	$51.37		14,932	5,450,000	$2.795
2023:	Q1	1,250	112,500	$51.65	Q1	-	-	-
	Avg./Total	1,250	112,500	$51.65		-	-	-

- *In addition, Northern has approximately 13,930 barrels per day of Clearbrook linked hedges at approximately ($2.38)*
- *Northern also has 0.5 mmbtu/day of Waha natural gas basis hedges for 2H21 for growing Permian volumes*
- *Northern also has 17,900 mmbtu/day of natural gas basis hedges for 2021 and 9,750 mmbtu/day for 2022 related to Appalachia volumes at approximately ($0.613)*

(1) See hedging disclosures in the back of this presentation.

WELL POSITIONED TO WEATHER REGULATORY HEADWINDS

NYSE American: NOG

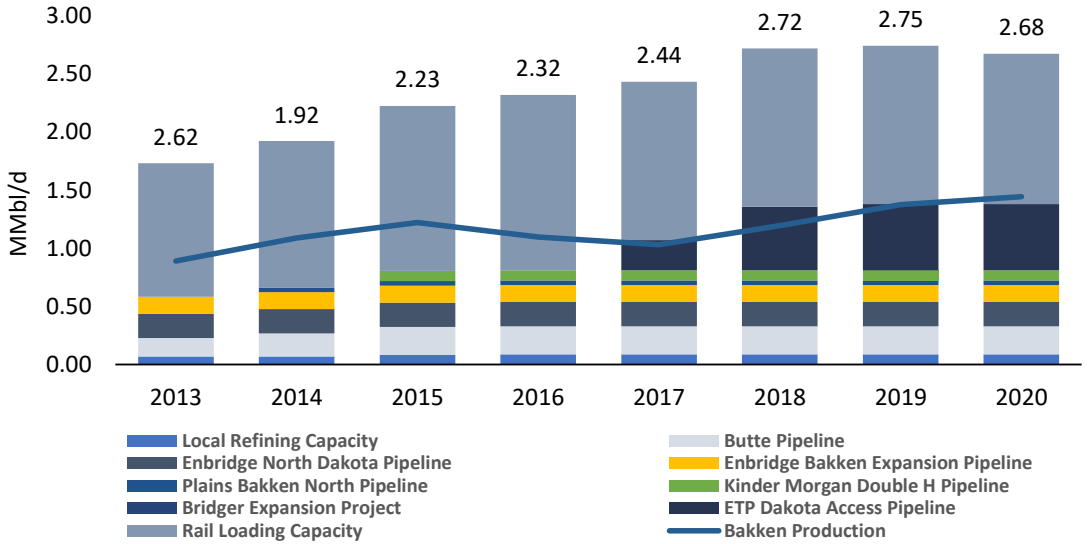
Federal Land Policy Risk

- **Northern has minimal exposure to federal lands with ~8% of total leasehold position subject to the federal regulation**
- Across the ~14,500 net acres on federal land there is currently a backlog of 220 federal permits that have already been approved
- Additionally, there are 340 permits that have been approved by the North Dakota Industrial Commission that have no exposure to federal acreage or regulatory process

Dakota Access Pipeline Considerations

- NOG is well positioned for a possible DAPL shutdown given strong diversity in exposure to all key Bakken operators
  - Benefits include access to various transportation links (other pipelines, rail, trucking) through diverse base of operators
- In the worst case – the estimated incremental cost of a DAPL shutdown to NOG is ~$2/Bbl

Bakken Crude Oil Takeaway Capacity by System



Source: Company disclosures and IHS Markit.

NORTHERN'S SENIOR MANAGEMENT TEAM

NYSE American: NOG



Nicholas O'Grady: Chief Executive Officer

- Nicholas O'Grady has served as Chief Executive Officer since January 2020, following ~18 months as the Company's Chief Financial Officer. Mr. O'Grady leads the Northern team in all respects of the business, including investments, financial management and business strategy. He has nearly two decades of finance experience, both as an investment banker and as a principal investor. Mr. O'Grady began his career in the Natural Resources investment banking group at Bank of America, later moving to the hedge fund industry, with roles at Highbridge Capital Management and Hudson Bay Capital Management.



Adam Dirlam: Chief Operating Officer

- Adam Dirlam has served as Chief Operating Officer since January 2020 following roles as Executive Vice President - Land & Operations since May 2018, Senior Vice President of Land & Operations since 2013 and various other roles upon joining the Company in 2009. Mr. Dirlam leads the M&A and capital allocation efforts. Prior to Northern, Mr. Dirlam served in various finance and accounting roles for Honeywell International.



Mike Kelly, CFA: Chief Strategy Officer

- Mike Kelly was named Chief Strategy Officer in February 2021 after serving as the Executive Vice President of Finance since joining Norhtern in January 2020. Mr. Kelly leads the business development function, helping source and analyze potential acquisitions. He also plays an integral role in Northern's financial planning and investor relations. Prior to joining Northern, Mr. Kelly was a Partner and Head of E&P Research at Seaport Global Securities, where he was a Partner and Head of E&P Research covering over 30 companies in the exploration and production sector since 2011. Prior to that, he spent over five years working as an energy analyst for Kennedy Capital Management in St. Louis.



Chad Allen: Chief Financial Officer

- Chad Allen has served as Chief Financial Officer since January 2020 following roles as Chief Accounting Officer since August 2016 and Corporate Controller upon joining the Company in August 2013. He was also interim CFO from January-May 2018. Mr. Allen leads all accounting, financial and public company related functions. Prior to joining Northern, Mr. Allen was in the audit practice with Grant Thornton LLP from 2010 to 2013, and in the audit practice at McGladrey & Pullen, LLP from 2004 to 2010.



Erik Romslo, Chief Legal Officer and Secretary

- Erik Romslo has served as Chief Legal Officer since January 2020 after joining the Company as General Counsel and Secretary in October 2011 and being named Executive Vice President in January 2013. Mr. Romslo oversees all legal, regulatory and SEC related matters as Chief Legal Officer, and facilitates all Board functions as Secretary. Prior to joining the Company, Mr. Romslo practiced law in the Minneapolis office of the Company's outside counsel, Faegre Drinker Biddle & Reath LLP (formerly Faegre & Benson LLP), from 2005 until 2011, in which he was a member of the Corporate group.



Jim Evans: Executive Vice President and Chief Engineer

- Jim Evans was named Executive Vice President and Chief Engineer in February 2021 following roles as Vice President of Engineering since June 2018 and Reservoir Engineering Manager since 2015. Mr. Evans oversees all aspects of Northern's engineering process, including the valuation of properties, reserves and production forecasting. He began his career as a Reservoir Engineer with Cabot Oil & Gas, overseeing the reserves and development planning for the Green River Basin, and has also held roles at Cornerstone Natural Resources and Fidelity Exploration.

HISTORICAL OPERATING & FINANCIAL INFORMATION

NYSE American: NOG

	2015	2016	2017	2018	2019	2020	December 31, 2019	December 31, 2020
PRODUCTION								
Oil (MBbls)	5,168.7	4,325.9	4,537.3	7,790.2	11,325.4	9,361.1	3,218.9	2,508.6
Natural Gas and NGLs (Mmcf)	4,651.6	4,026.9	5,187.9	9,224.8	16,590.8	16,473.3	4,942.2	4,675.9
Total Production (Mboe)	5,944.0	4,997.1	5,402.0	9,327.6	14,090.5	12,106.7	4,042.6	3,287.9
REVENUE								
Realized Oil Price, including settled derivatives ($/bbl)	$ 68.94	$ 49.44	$ 45.92	$ 57.78	$ 54.66	$ 52.69	$ 51.91	$ 50.20
Realized Natural Gas and NGL Price, including settled derivatives ($/Mcf)	1.60	1.82	3.74	4.74	1.60	1.14	$ 0.47	$ 2.13
Total Oil & Gas Revenues, including settled derivatives (millions)	363.7	221.2	227.7	471.0	645.6	512.3	$ 169.4	$ 135.0
Adjusted EBITDA (millions)(1)	277.3	148.5	144.7	349.3	454.2	351.8	$ 114.2	$ 94.3
KEY OPERATING STATISTICS ($/Boe)								
Average Realized Price	$ 61.19	$ 44.27	$ 42.16	$ 50.50	$ 45.82	$ 42.32	$ 51.91	$ 41.06
Production Expenses	8.77	9.14	9.21	7.15	8.44	9.61	8.84	8.58
Production Taxes	3.63	3.10	3.81	4.86	4.10	2.46	3.92	2.75
General & Administrative Expenses-Cash	2.15	2.31	2.38	1.15	1.11	1.19	1.10	1.04
Total Cash Costs	$ 14.55	$ 14.55	$ 15.40	$ 13.16	$ 13.65	$ 13.26	$ 13.86	$ 12.37
Operating Margin ($/Boe)	$ 46.64	$ 29.72	$ 26.76	$ 37.34	$ 32.17	$ 29.06	$ 28.05	$ 28.69
Operating Margin %	76.2%	67.1%	63.5%	73.9%	70.2%	68.7%	66.9%	69.9%

	2015	2016	2017	2018	2019	2020	December 31, 2019	December 31, 2020
ASSETS								
Current Assets	$ 128.8	$ 46.9	$ 152.8	$ 228.4	$ 133.0	$ 125.6	$ 133.0	$ 125.6
Property and Equipment, net	589.3	376.2	473.2	1,202.7	1,748.6	735.2	1,748.6	735.2
Other Assets	15.8	8.4	6.3	72.5	23.8	11.3	23.8	11.3
Total Assets	$ 733.9	$ 431.5	$ 632.3	$ 1,503.6	$ 1,905.4	$ 872.1	$ 1,905.4	$ 872.1
LIABILITIES								
Current Liabilities	$ 78.1	$ 77.4	$ 123.6	$ 231.5	$ 203.5	$ 182.5	$ 203.5	$ 182.5
Debt	847.8	832.6	979.3	830.2	1,118.2	879.8	1,118.2	879.8
Other Long-Term Liabilities	5.6	8.9	20.2	12.0	25.1	33.1	25.1	33.1
Stockholders' Equity (Deficit)	(197.6)	(487.4)	(490.8)	429.9	558.6	(223.3)	558.6	(223.3)
Total Liabilities & Stockholders' Equity (Deficit)	$ 733.9	$ 431.5	$ 632.3	$ 1,503.6	$ 1,905.4	$ 872.1	$ 1,905.4	$ 872.1
CREDIT STATISTICS								
Adjusted EBITDA (Annual, Q2 2019/20 TTM)	$ 277.3	$ 148.5	$ 144.7	$ 349.3	$ 454.2	$ 351.8	$ 454.2	$ 351.8
Net Debt	$ 831.9	$ 826.1	$ 877.1	$ 832.7	1,111.7	948.3	$ 1,111.7	$ 948.3
Total Debt	$ 835.3	$ 832.6	$ 979.3	$ 835.1	1,127.7	949.8	$ 1,127.7	$ 949.8
Net Debt/Adjusted EBITDA	3.0x	5.6x	6.1x	2.4x	2.4x	2.7x	2.4x	2.7x
Total Debt/Adjusted EBITDA	3.0x	5.6x	6.8x	2.4x	2.5x	2.7x	2.5x	2.7x

1. Adjusted EBITDA is a non-GAAP measure. See reconciliation on the slide that follows.

NON-GAAP RECONCILIATIONS: EBITDA & OTHER

NYSE American: NOG

Adjusted EBITDA by Year (in thousands)	2015	2016	2017	2018	2019	2020
Net Income (Loss)	$ (975,355)	$ (293,494)	$ (9,194)	$ 143,689	$ (76,318)	$ (906,041)
Add:						
Interest Expense	58,360	64,486	70,286	86,005	79,229	58,503
Income Tax Provision (Benefit)	(202,424)	(1,402)	(1,570)	(55)	-	(166)
Depreciation, Depletion, Amortization and Accretion	137,770	61,244	59,500	119,780	210,201	162,120
Impairment of Oil and Natural Gas Properties	1,163,959	237,013	-	-	-	1,066,668
Impairment of Other Current Assets	-	-	-	-	6,398	-
Non-Cash Share Based Compensation	6,273	3,182	6,107	3,876	7,954	4,119
Write-off of Debt Issuance Costs	-	1,090	95	-	-	1,543
(Gain) Loss on the Extinguishment of Debt	-	-	993	173,430	23,187	3,718
Debt Exchange Derivative (Gain) Loss	-	-	-	598	(1,390)	-
Contingent Consideration (Gain) Loss	-	-	-	28,968	29,512	169
Severance - Cash	-	-	-	-	759	-
Financing Expense	-	-	-	884	1,447	-
(Gain) Loss on Unsettled Interest Rate Derivatives	-	-	-	-	-	1,019
(Gain) Loss on Unsettled Commodity Derivatives	88,716	76,347	18,443	(207,892)	173,214	(39,878)
Adjusted EBITDA	$ 277,299	$ 148,466	$ 144,660	$ 349,283	$ 454,193	$ 351,774

Adjusted EBITDA by Quarter (in thousands)	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20
Net Income (Loss)	$ 44,399	$ 94,381	$ (107,937)	$ 368,286	$ (899,200)	$ (233,060)	$ (142,123)
Add:							
Interest Expense	17,778	21,510	20,393	16,551	13,957	14,693	13,358
Income Tax Provision (Benefit)	-	-	-	(166)	-	-	-
Depreciation, Depletion, Amortization and Accretion	46,091	55,566	63,411	61,809	36,756	30,786	32,769
Impairment of Oil and Natural Gas Properties	-	-	-	-	762,716	199,489	104,463
Impairment of Other Current Assets	2,694	5,275	(1,571)	-	-	-	-
Non-Cash Share Based Compensation	1,643	(114)	3,674	1,078	1,214	890	936
Write-off of Debt Issuance Costs	-	-	-	-	-	1,543	-
(Gain) Loss on the Extinguishment of Debt	425	-	22,762	5,527	(217)	(1,592)	-
Debt Exchange Derivative (Gain) Loss	4,874	23	-	-	-	-	-
Contingent Consideration (Gain) Loss	24,763	5,262	879	-	-	-	168
Severance - Cash	-	-	759	-	-	-	-
Financing Expense	-	-	1,447	-	-	-	-
(Gain) Loss on Unsettled Interest Rate Derivatives	-	-	-	677	752	(224)	(186)
(Gain) Loss on Unsettled Commodity Derivatives	(31,857)	(57,506)	110,408	(345,075)	150,077	70,198	84,923
Adjusted EBITDA	$ 110,810	$ 124,396	$ 114,225	$ 108,687	$ 66,055	$ 82,723	$ 94,308

Other Non-GAAP Metrics by Quareter (in thousands)	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20
Cash General and Adminstrative Expense	$ 3,607	$ 4,319	$ 4,443	$ 3,792	$ 3,495	$ 3,716	$ 3,425
Non-cash General and Adminstrative Expense	1,643	(114)	3,674	1,079	1,214	889	936
Total General and Adminstrative Expense	$ 5,250	$ 4,206	$ 8,117	$ 4,871	$ 4,709	$ 4,605	$ 4,361
Net Production (Boe)	3,182	3,752	4,043	3,980	2,166	2,673	3,288
Cash General and Adminstrative Expense per Boe	$ 1.13	$ 1.15	$ 1.10	$ 0.95	$ 1.61	$ 1.39	$ 1.04
Non-cash General and Adminstrative Expense per Boe	$ 0.52	$ (0.03)	$ 0.91	$ 0.27	$ 0.56	$ 0.33	$ 0.29
Total Principal Balance on Debt	$ 861,491	$ 1,145,491	$ 1,127,733	$ 1,047,489	$ 995,287	$ 988,755	$ 949,755
Less: Cash and Cash Equivalents	(2,794)	(1,901)	(16,068)	(8,512)	(1,838)	(1,803)	(1,428)
Net Debt	$ 858,697	$ 1,143,590	$ 1,111,665	$ 1,038,977	$ 993,449	$ 986,952	$ 948,327

Note: Adjusted EBITDA is a non-GAAP measure

NON-GAAP RECONCILIATIONS: ROCE & RECYCLE RATIO

NYSE American: NOG

Q4:20 Return on Capital Employed (ROCE)

EBIT ÷ Capital Employed = 23.5%

- EBIT: $246.2MM (Q4:20 annualized)
  - + Adj. EBITDA: $94.3MM
  - - DD&A: $32.76MM
- Capital Employed: $1,049MM (Avg. of Q4:19/20)
  - + Total Assets: $1,242MM (Avg.)
  - - Current Liabilities: $193MM (Avg.)

Q4:20 Recycle Ratio

Cash Margin ÷ DD&A Rate = 2.69x

- Cash Margin: $30.94/boe
  - + Realized avg. commodity price: $41.06/boe
  - - Cash Costs: $12.37/boe(1)
- DD&A Rate: $9.97/boe

(1) Incorporates Adjusted Cash G&A of $1.04/boe, which excludes stock compensation
Note: Adjusted EBITDA is a non-GAAP measure. Numbers may be off due to rounding.

HEDGING DISCLOSURES

Further Detail about Swap Transaction and Swaption Volumes

1. The Company has entered into certain crude oil derivative contracts for 2022 and 2023 volumes that give counterparties the option to extend such derivative contracts for additional three month, six-month, and twelve-month periods. Options covering a notional volume of 1,010,250 barrels for Q1 2022 at $53.18 per barrel, 1,021,475 barrels for Q2 2022 at $53.18 per barrel, 549,700 barrels for Q3 2022 at $51.67 per barrel, 549,700 barrels for Q4 2022 at $51.67 per barrel are exercisable on December 31, 2021. Options covering a notional volume of 1,170,000 barrels for Q1 2023 at $50.67 per barrel, 819,000 barrels for Q2 2023 at $50.00 per barrel, 851,000 barrels for Q3 2023 at $50.22 per barrel, 851,000 barrels for Q4 2023 at $50.22 per barrel are exercisable on December 31, 2022. If the counterparties exercise all such options, the notional volume of the Company's existing crude oil derivative contracts will increase by these amounts for those respective periods in 2022 and 2023.

2. The Company has entered into certain crude oil derivative basis swap contracts for 2021. Contracts covering a notional volume of 627,990 barrels for Q1 2021 at -$2.338 per barrel, 1,459,640 barrels for Q2 2021 at -$2.188 per barrel, 1,498,680 barrels for Q3 2021 at -$2.483 per barrel, and 1,498,680 barrels for Q4 2021 at -$2.483 are open.

3. The Company has entered into certain natural gas derivative basis swap contracts related to the volumes in the Permian Basin for 2021. Contracts covering a notional volume of 46,000 MMBTU for Q3 2021 at -$0.275 per MMBTU and 23,000 MMBTU for Q4 2021 at -$0.290 are open.

4. The Company has entered into certain natural gas derivative basis swap contracts related to the volumes in the Appalachian Basin for 2021 and 2022. Contracts covering a notional volume of 2,739,507 MMBTU for Q2 2021 at -$0.595 per MMBTU and 1,330,102 MMBTU for Q3 2021 at -$0.626 and 2,462,714 MMBTU for Q4 2021 at -$0.618 are open. In addition, contracts covering a notional volume of 3,557,290 MMBTU for Q1 2022 at -$0.619 per MMBTU are open.

1. See Appendix for further disclosures.