CENTENNIAL

Core Oil Delaware Basin Pure-Play

First Quarter 2020 Earnings Presentation

May 4, 2020

Important Information

Forward-Looking Statements

The information in this presentation includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical fact included in this presentation, regarding our strategy, future operations, financial position, estimated revenues and losses, projected costs, prospects, plans and objectives of management are forward-looking statements. When used in this presentation, the words "could," "believe," "anticipate," "intend," "estimate," "expect," "project," "goal," "plan," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words. These forward-looking statements are based on management's current expectations and assumptions about future events and are based on currently available information as to the outcome and timing of future events. We caution you that these forward-looking statements are subject to all of the risks and uncertainties, most of which are difficult to predict and many of which are beyond our control, incident to the development, production, gathering and sale of oil and natural gas. These risks include, but are not limited to, commodity price volatility, inflation, lack of availability of drilling and production equipment and services, environmental risks, drilling and other operating risks, regulatory changes, the uncertainty inherent in estimating reserves and in projecting future rates of production, cash flow and access to capital, the timing of development expenditures and the other risks described in our filings with the Securities and Exchange Commission. Except as otherwise required by applicable law, we disclaim any duty to update any forward-looking statements, all of which are expressly qualified by the statements in this section, to reflect events or circumstances after the date of this presentation.

Use of Non-GAAP Financial Measures

This presentation includes non-GAAP financial measures, such as Adjusted EBITDAX, Net debt and Net debt to last twelve months ("LTM") EBITDAX. Please refer to slide 13 for a reconciliation of Adjusted EBITDAX to net income, the most comparable GAAP measure. We believe Adjusted EBITDAX is useful as it allows us to more effectively evaluate our operating performance and compare the results of our operations from period to period and against our peers without regard to financing methods or capital structure. We exclude the items listed on slide 13 from net income (loss) in arriving at Adjusted EBITDAX because these amounts can vary substantially from company to company within our industry depending upon accounting methods and book values of assets, capital structures and the method by which the assets were acquired. Adjusted EBITDAX should not be considered as an alternative to, or more meaningful than, net income as determined in accordance with GAAP or as an indicator of our operating performance or liquidity. Certain items excluded from Adjusted EBITDAX are significant components in understanding and assessing a company's financial performance, such as a company's cost of capital and tax structure, as well as the historic cost of depreciable assets, none of which are components of Adjusted EBITDAX. Our presentation of Adjusted EBITDAX should not be construed as an inference that our results will be unaffected by unusual or non-recurring items. Our computations of Adjusted EBITDAX may not be comparable to other similarly titled measures of other companies.

The Company defines Net debt as long-term debt, net, plus unamortized debt discount and debt issuance costs on Senior Notes minus cash and cash equivalents. The Company presents this metric to help evaluate its capital structure and financial leverage and believes that it is widely used by professional research analysts, including credit analysts, and others in the evaluation of total leverage.

The Company defines Net debt to LTM EBITDAX as Net debt (defined above) divided by Adjusted EBITDAX (reconciled on slide 13) for the prior twelve-month period. The Company presents this metric to show trends that investors may find useful in understanding the Company's ability to service its debt. This metric is widely used by professional research analysts, including credit analysts, in the valuation and comparison of companies in the oil and gas exploration and production industry.

Recent Financial Highlights & Operational Update

- Reduced current operated rig count from five to zero, suspending near term drilling and completions
 - Revised total capital budget ~60% below original guidance
 - Plan flexible approach to future operational activity depending upon commodity prices
- Initiated plan to reduce annual G&A expenses by ~30% on an annualized basis
- Decreased unit costs sequentially during the first quarter
- Hedged significant amount of Q2 and Q3 2020 oil volumes to protect against downside risk
- Expect to curtail up to 40% of production during May in response to weak realized prices
- Amended credit facility to replace total leverage covenant with first lien leverage covenant of 2.75x
- Launched debt exchange offer in an effort to reduce total debt and lower interest expense
- Liquidity of \$468 million as of 3/31, pro forma for recently approved \$700 million borrowing base¹
- Maintain focus on balance sheet protection and liquidity

Centennial Resource Development Overview

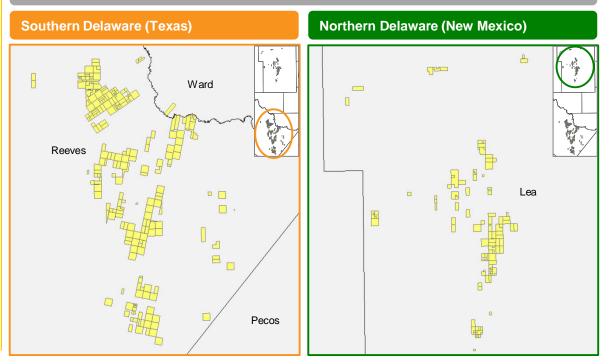
Key Company Statistics

Operational Overview	
Production	
Q1 Total Production (Boe/d)	71,820
Q1 Oil Production (Bo/d)	41,512
% oil	58%
Capital Expenditures (\$ mm)	
Q1 Total Capital Exp.	\$175.4
Q1 D&C Capital Exp.	\$146.8
Updated FY 2019 Total Capital Exp.	\$240 - 290
% Reduction from Original Budget	~60%
Acreage (as of 12/31/19)	
Total net acreage	~78,200
% CDEV Operated	93%
% Held by Production	87%
Financial Overview (Q1 2020)	
Leverage	
Net Debt / LTM EBITDAX	2.0x
Net Debt / Book Capitalization	29%

Company Overview

- Large contiguous oil-rich acreage in the core of the Southern and Northern Delaware Basins
- Top tier technical team delivering solid well results and consistent execution
- Maintaining focus on balance sheet and reducing spend across operations
- Adjusting activity levels due to changes in market environment

Asset Overview



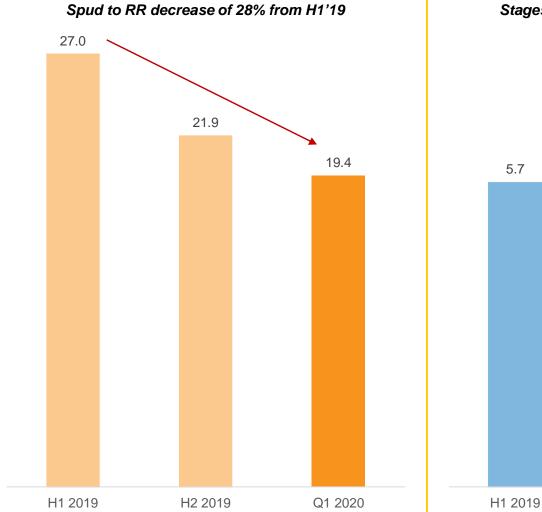
Driving Down Unit Costs



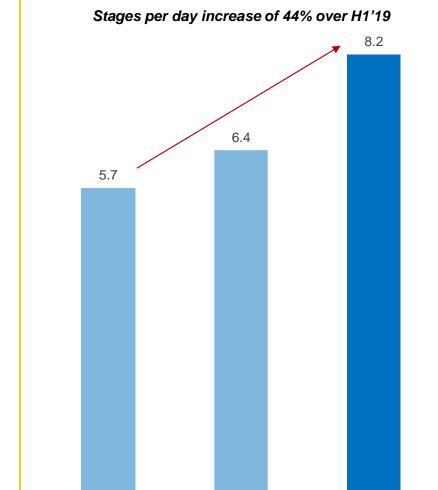
- Lease Operating Expenses (LOE)
 - Electricity: Transition to electric power, resulting in lower equipment rental costs
 - Artificial Lift: Transition to lower failure gas lift
 - Chemical Optimization: Increased treatment efficiencies & pricing decreases
- General and Administrative (G&A)
 - Initiated plan to reduce annual G&A expenses by approximately 30% on an annualized basis
 - Reduction in workforce to better align with anticipated activity levels
 - Reduced executive management salaries by 10% – 25% and Board of Director retainers by 25%
 - Reduction to non-payroll expenses, such as IT, office, professional fees, etc.

YTD 2020 D&C Performance Review

Drilling Efficiency (Spud to RR)¹



Completion Stages Pumped Per Day²



H2 2019

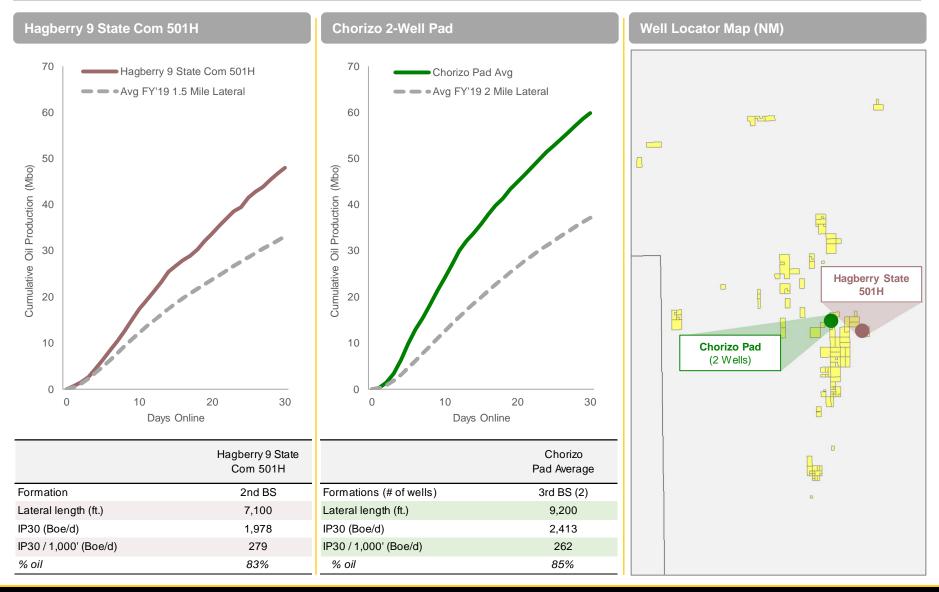
(1) Spud to rig release includes time associated with rig mobilization

(2) Completion stages pumped per day include time associated with location moves

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Q1 2020

Recent Northern Delaware Well Results



Note: Cumulative oil production curves shown on a non-normalized basis; % oil shown on a 2-stream basis; % oil statistic based on the IP-30 figures

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Capital Structure and Liquidity Overview

Capital Structure Overview

- Solid leverage profile at 3/31/20
 - First Lien debt / LTM EBITDAX of 0.4x
 - Net debt / LTM EBITDAX of 2.0x
- \$235mm drawn on Credit Facility as of 3/31/20
- Recently completed Spring 2020 borrowing base redetermination
 - Borrowing base and elected commitment amount adjusted to \$700mm¹
 - Suspended total leverage covenant through FY 2021 and replaced with first lien leverage covenant that starts at 2.75x LTM EBITDAX and steps down to 2.5x during 2022
- \$468 million of liquidity at 3/31/20 (based on \$700mm borrowing base amount) ^{1,4}
- No bond maturities until 2026
- Recently launched debt exchange offer in an effort to reduce total debt and lower interest expense

Capitalization and Liquidity (\$ mm)

	Actual
Capitalization	(as of 3/31/20)
Cash and cash equivalents	\$3.8
Revolving credit facility	\$235.0
Senior Unsecured Notes ²	\$900.0
Total debt	\$1,135.0
Book equity ³	\$2,726.8
Total capitalization	\$3,861.8
Credit statistics	
First Lien debt / LTM EBITDAX	0.4x
Net debt / LTM EBITDAX	2.0x
Net debt / book capitalization	29%
Liquidity (\$ mm)	Pro-forma (3/31/20)
Borrowing base ¹	\$700.0
Less: Revolver borrowings	(\$235.0)
Less: Letters of credit	(\$0.8)
Plus: Cash	\$3.8
Liquidity ⁴	\$468.1
Borrowing base utilization	34%

(1) In connection with the pending Senior Notes exchange offer, a minimum availability condition to borrowing would be implemented in the amount of the lesser of \$100 million and 25% of the

aggregate principal amount of senior secured notes outstanding at the time of borrowing, if the exchange offer is accepted by bondholders

(2) Reflects the aggregate principal amount

(3) Book equity includes non-controlling interest





Note: Amounts may not sum due to rounding.

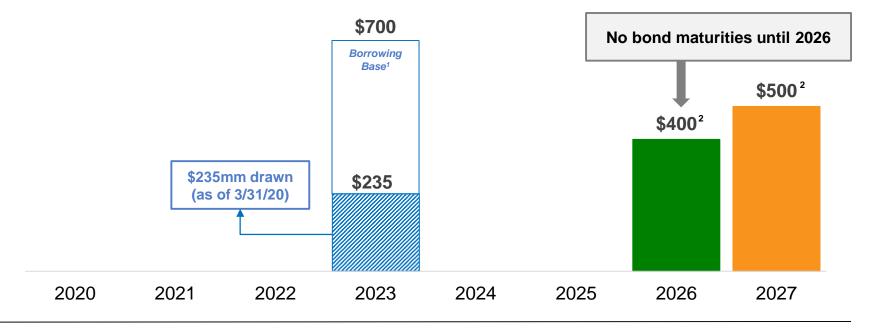
Debt Maturity Schedule

Debt Maturity Schedule (\$ mm)

Credit Facility Borrowings

5.375% Senior Unsecured Notes

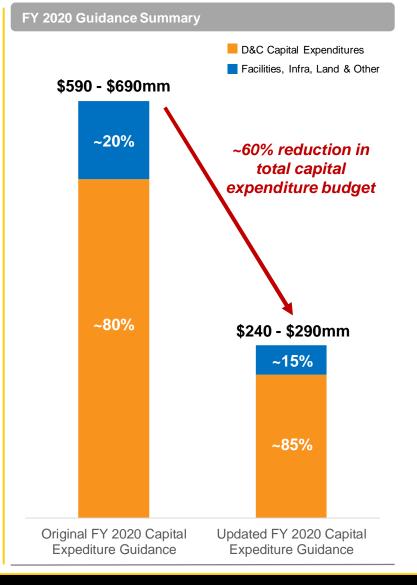
6.875% Senior Unsecured Notes



FY 2020 Capital Guidance Summary

Guidance summary

- In response to the current macro environment, Centennial recently suspended all drilling and completion activities, compared to a five-rig program and two completion crews active in early March
- Updated FY 2020 total capital budget range of \$240 million to \$290mm
 - Represents ~60% reduction compared to original capital program
 - ~85% of updated budget focused on drilling and completion activity with the remainder allocated to non-D&C activity (facilities, infrastructure, land, etc.)
- Given ongoing uncertainty and market volatility, further production and unit cost guidance will be suspended until the Company has more certainty regarding its future operating plans



Hedge Position Overview

	Q2	Q3	Q4	Bal. 2020
WTI Fixed Price Swaps				
Total Volume (Bbl)	2,852,000	2,300,000	184,000	5,336,000
Daily Volume (Bbl/d)	31,341	25,000	2,000	19,404
Weighted Average Price (\$ / Bbl)	\$26.14	\$26.83	\$36.36	\$26.79
MidCush Basis Swaps				
Total Volume (Bbl)	543,000	644,000	644,000	1,831,000
Daily Volume (Bbl/d)	5,967	7,000	7,000	6,658
Weighted Average Price (\$ / Bbl)	\$1.12	\$0.63	\$0.63	\$0.78
Henry Hub Fixed Price Swaps				
Total Volume (MMBtu)	2,730,000	2,760,000	930,000	6,420,000
Total Volume (MMBtu/d)	30,000	30,000	10,109	23,345
Weighted Average Price (\$/MMBtu)	\$2.03	\$2.03	\$2.03	\$2.03
Waha Differential Basis Swaps				
Total Volume (MMBtu)	2,730,000	2,760,000	930,000	6,420,000
Daily Volume (MMBtu/d)	30,000	30,000	10,109	23,345
Weighted Average Price (\$/MMBtu)	(\$1.62)	(\$1.62)	(\$1.62)	(\$1.62)

Quarterly Financial Results

Financial summary (\$mm, unless otherwise noted)¹

	FY 2019				FY 2020
(\$ in millions, unless specified)	Q1	Q2	Q3	Q4	Q1
Average Daily Production (Boe/d)	72,035	76,122	76,312	79,734	71,820
Average Daily Oil Production (Bo/d)	40,508	43,105	42,079	45,031	41,512
% Oil	56%	57%	55%	56%	58%
Financial highlights					
Total Revenue	\$214.6	\$244.2	\$229.1	\$256.4	\$192.8
Pre-Hedge Realized Oil Price (\$/Bbl)	\$48.15	\$54.63	\$51.71	\$53.25	\$45.14
Adjusted EBITDAX ²	\$141.1	\$170.1	\$132.9	\$160.1	\$113.5
Net Income (loss) ³	(\$8.1)	\$17.9	(\$3.6)	\$9.6	(\$548.0)
Unit Costs (\$/Boe)					
Lease Operating Expense	\$4.61	\$5.04	\$6.03	\$5.30	\$4.99
Gathering, Processing & Transportation	2.32	2.34	2.97	2.82	2.59
Severance & Ad Valorem Taxes	2.49	2.48	1.74	2.41	2.54
Cash G&A	1.89	1.78	1.81	2.12	1.99
Depreciation, Depletion & Amortization	14.89	16.18	16.06	16.75	15.49
Capital Expenditures Incurred					
Drilling & Completion	\$188.4	\$179.8	\$160.5	\$162.8	\$146.8
Facilities, Infrastructure and Other	45.6	44.6	40.6	31.2	25.2
Land	11.2	13.0	11.0	3.2	3.4
Total Capital Expenditures	\$245.2	\$237.4	\$212.1	\$197.2	\$175.4
Cash and Cash Equivalents	\$89.5	\$28.4	\$10.9	\$10.2	\$3.8
Total Debt Outstanding ⁴	\$900.0	\$900.0	\$1,020.0	\$1,075.0	\$1,135.0
Liquidity ⁵	\$888.7	\$827.6	\$690.1	\$634.5	\$468.1

(1) Amounts may not sum due to rounding

Adjusted EBITDAX is not presented in accordance with generally accepted accounting principles in the United States. Please refer to slide 13 for a reconciliation of Adjusted EBITDAX to net income (2)

(loss), the most comparable GAAP measure (3)

Net income (loss) attributable to common shareholders

(4) Reflects the aggregate principal amount

Liquidity defined as cash, plus availability under the revolving credit facility elected commitment amount in prior periods (FY'19) and borrowing base in current period (FY'20)

Reconciliation of Adjusted EBITDAX to Net Income (Loss)

Adjusted EBITDAX reconciliation (\$ thousands) ¹					
	FY 2019				FY 2020
(\$ in thousands, unless specified)	Q1	Q2	Q3	Q4	Q1
Net income (loss) attributable to common shareholders	(\$8,112)	\$17,877	(\$3,585)	\$9,618	(\$547,983)
Net income (loss) attributable to noncontrolling interest	(425)	1,125	(128)	44	(2,362)
Interest expense	10,160	14,437	15,246	16,148	16,421
Income tax expense (benefit)	(2,263)	5,928	1,393	739	(83,208)
Depreciation, depletion and amortization	96,558	112,114	112,720	122,851	101,258
Impairment and abandonment expenses	31,264	4,418	6,745	4,818	611,300
Non-cash portion of derivative loss (gain)	5,494	4,260	(9,740)	(4,108)	8,452
Stock-based compensation expense	5,884	6,076	7,357	6,998	5,892
Exploration expense	2,516	3,861	2,869	2,144	4,009
(Gain) loss on sale of long-lived assets	2	(9)	22	842	(245)
Adjusted EBITDAX	\$141,078	\$170,087	\$132,899	\$160,094	\$113,534

(1) Adjusted EBITDAX is not presented in accordance with generally accepted accounting principles in the United States