

CENTENNIAL

*Core Oil
Delaware Basin Pure-Play*

***Third Quarter 2017
Earnings Presentation***

November 6, 2017



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” 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 the non-GAAP financial measure, Adjusted EBITDAX. Please refer to slide 15 for a reconciliation of Adjusted EBITDAX to net (loss) 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 in slide 15 from net (loss) income 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.

Centennial – Q3 2017 highlights

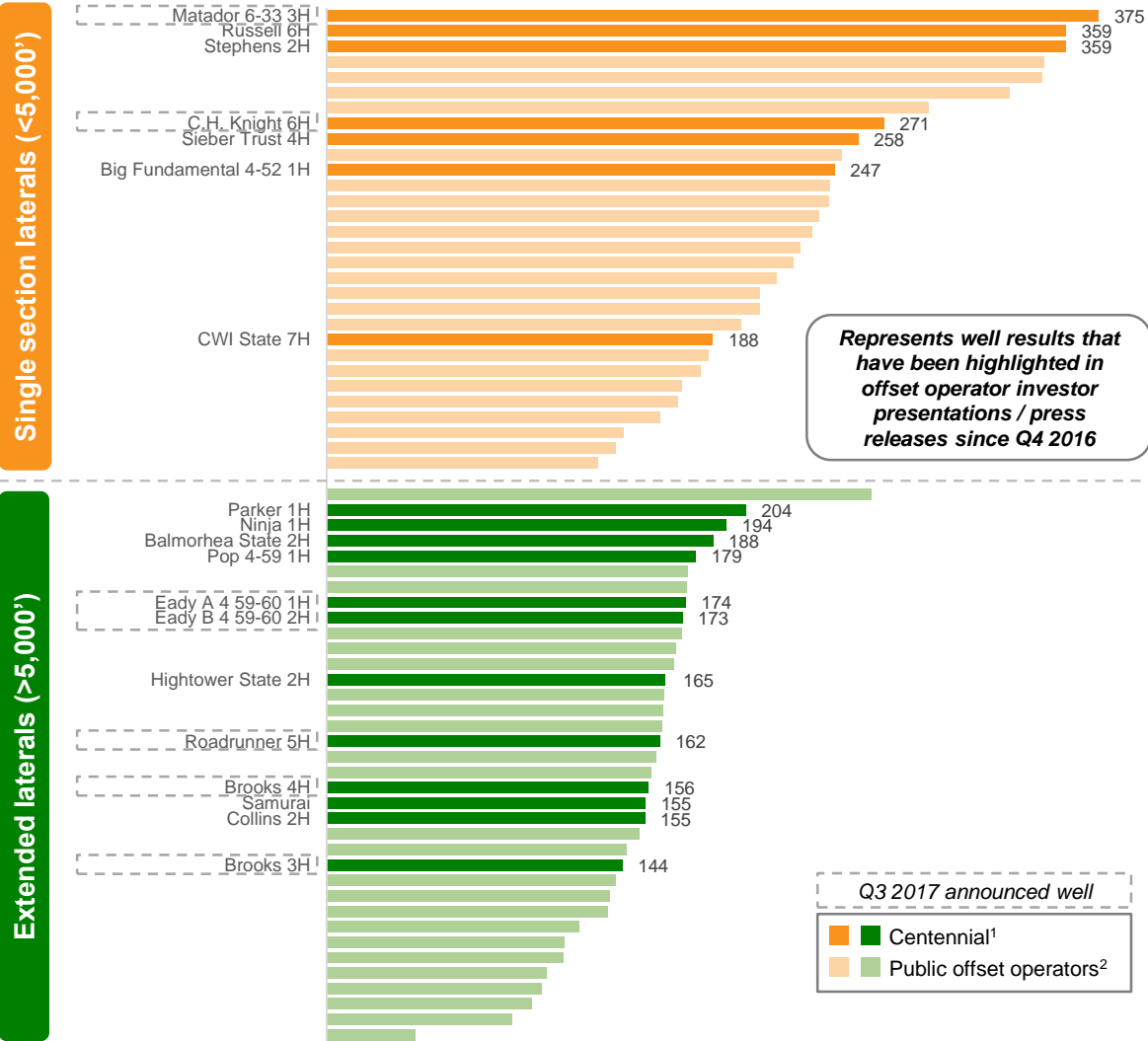
- Reported Q3 2017 daily production of 34,700 Boe/d and 21,108 Bo/d
 - Represents an increase of 17% and 21%, respectively, compared to Q2 2017
 - Increased oil commodity mix to 61% in Q3, up from 59% in Q2
- Increased full-year 2017 production guidance, while reducing full-year DD&A cost guidance for the second consecutive quarter
 - Also decreased anticipated full-year production taxes
- Delivered strong well results from both the Northern and Southern Delaware Basins, including Centennial's best oil well to date
- Reported \$14.4mm of GAAP net income⁽¹⁾ and \$74.3mm of adjusted EBITDAX⁽²⁾
- Entered into a long-term proppant supply agreement with a local sand provider, reducing future completion costs
 - Completed the Company's first wells using in-basin proppant with strong production results

(1) Net income attributable to common shareholders

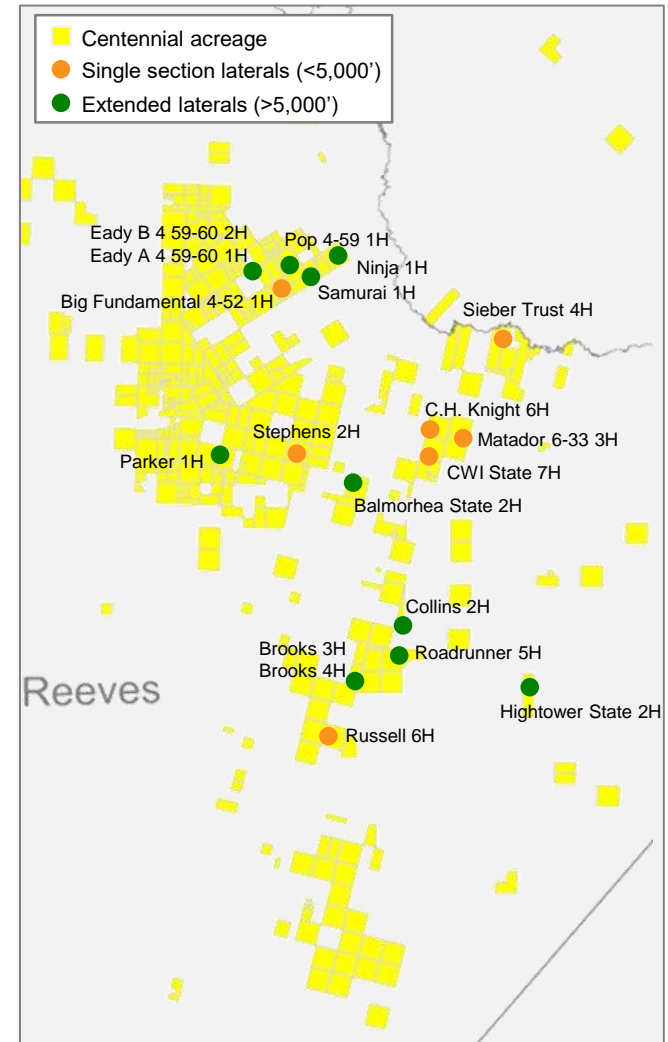
(2) Adjusted EBITDAX is not presented in accordance with generally accepted accounting principles in the United States. Please see slide 15 for a reconciliation to net income, our most directly comparable financial measure calculated and presented in accordance with GAAP.

Industry leading well results in Reeves County

CDEV / offset operator Reeves County well results (IP-30 Bo/d / 1,000')



Centennial Reeves County well locator map



Source: Company presentations and press releases since Q4 2016

(1) Includes CDEV Reeves County well results released in connection with Q3 17 earnings, Q2 17 earnings, Q1 17 earnings and Q4 16 earnings

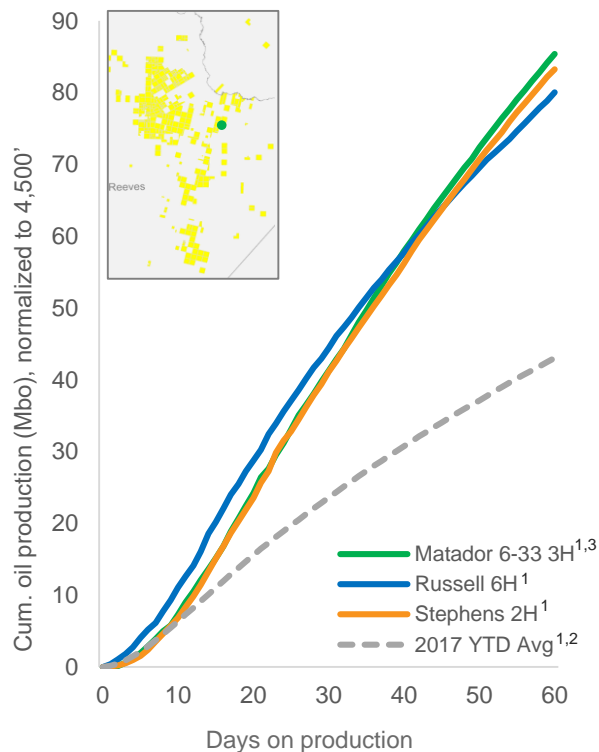
(2) Reeves County peer group includes: CRZO, CXO, EOG, FANG, NBL, OXY, PDCE, WPX and XEC

Q3 2017 Well Result Highlights

Single section laterals

Matador 6-33 3H

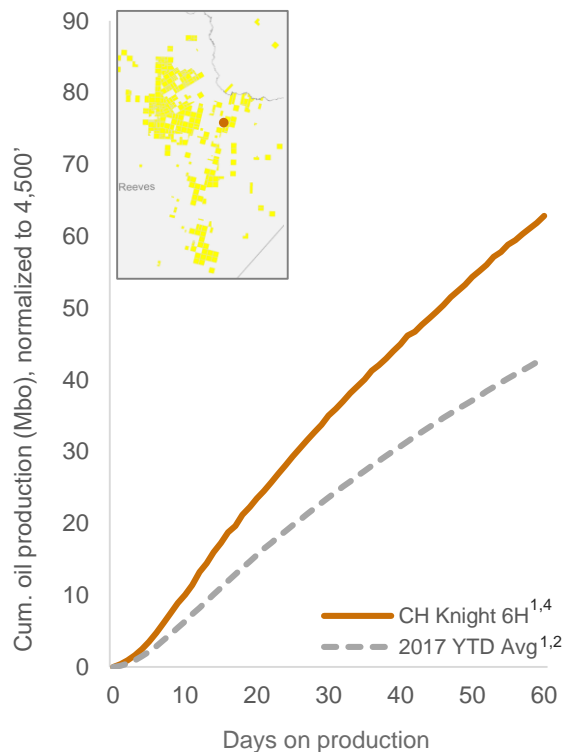
Matador well is CDEV's best well to-date



Well statistics	
Lateral length (ft.)	4,264
IP-30 (Bo/d)	1,599
IP-30 / 1,000' (Bo/d)	375
Cluster / stage	15
Proppant (lbs. / ft)	2,386

CH Knight 6H

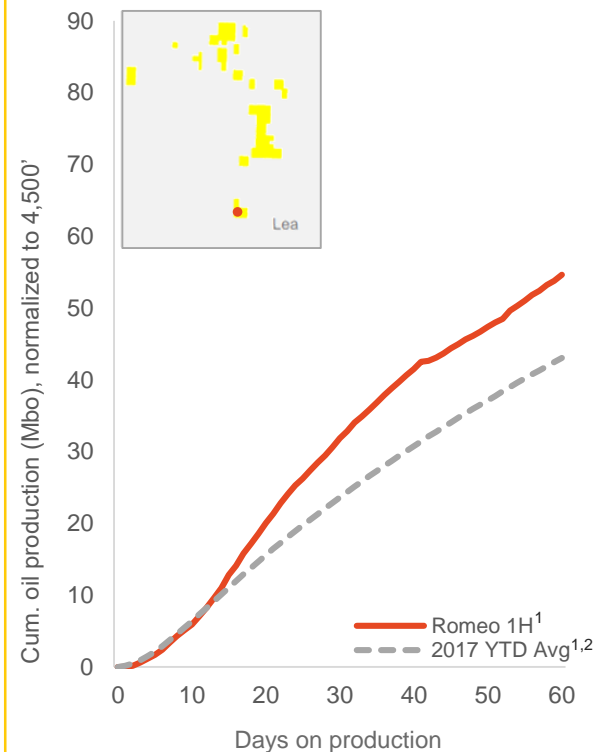
Strong results from Arroyo area



Well statistics	
Lateral length (ft.)	4,351
IP-30 (Bo/d)	1,178
IP-30 / 1,000' (Bo/d)	271
Cluster / stage	15
Proppant (lbs. / ft)	2,334

Romeo 1H

Strong initial New Mexico well result outperforming YTD 2017 average



Well statistics	
Lateral length (ft.)	4,204
IP-30 (Bo/d)	1,105
IP-30 / 1,000' (Bo/d)	263
Cluster / stage	15
Proppant (lbs. / ft)	3,003

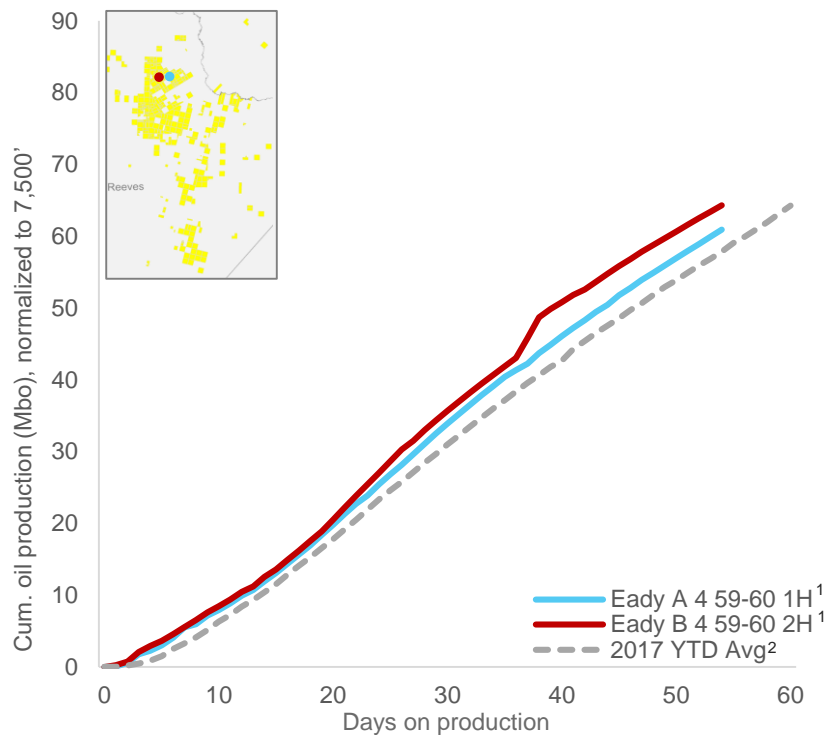
(1) Cumulative oil production normalized to 4,500' for the Matador 6-33 3H, Russell 6H, Stephens 2H, CH Knight 6H and the Romeo 1H and 2017 YTD Avg
 (2) Year to date 2017 average only includes production from single section laterals, normalized to 4,500'
 (3) Based on normalized 30 day cumulative oil production
 (4) Well brought on production on 6/30/17

Q3 2017 Well Result Highlights

Extended laterals

Eady A 4 59-60 1H & Eady B 4 59-60 2H

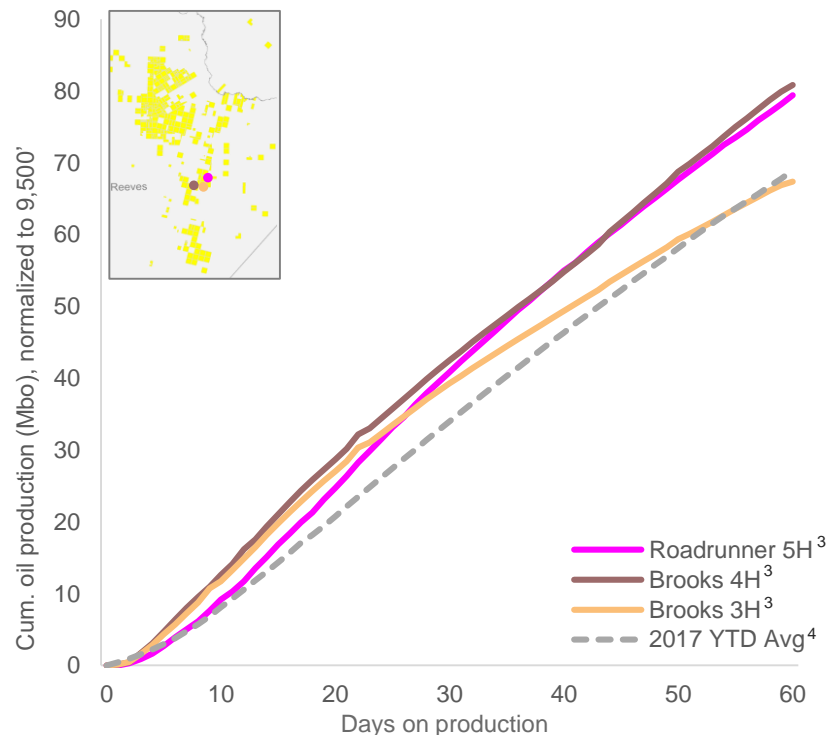
In-basin proppant outperformance



Well statistics	Eady A	Eady B
Lateral length (ft.)	7,010	6,608
IP-30 (Bo/d)	1,222	1,142
IP-30 / 1,000' (Bo/d)	174	173
Cluster / stage	15	15
Proppant (lbs. / ft)	3,055	2,898

Roadrunner 5H, Brooks 3H & Brooks 4H

Solid results from Q3 two-section laterals

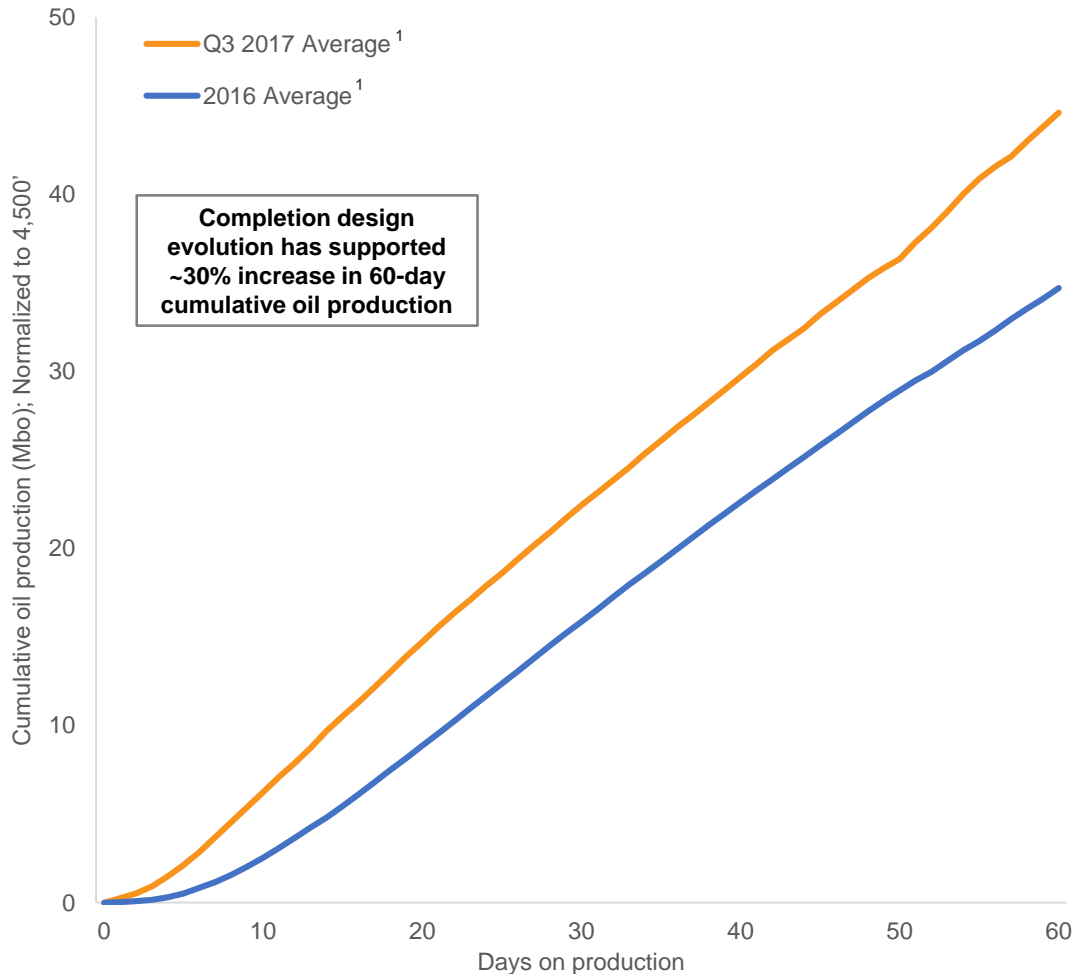


Well statistics	Roadrunner 5H	Brooks 3H	Brooks 4H
Lateral length (ft.)	9,462	9,572	8,629
IP-30 (Bo/d)	1,531	1,375	1,350
IP-30 / 1,000' (Bo/d)	162	144	156
Cluster / stage	15	15	15
Proppant (lbs. / ft)	2,285	2,073	2,154

- (1) Cumulative oil production normalized to 7,500' for the Eady B 4 59-60 2H and Eady A 4 59-60 1H
- (2) Year to date 2017 average only includes production from 1.5 section laterals, normalized to 7,500'
- (3) Cumulative oil production normalized to 9,500' for the Roadrunner 5H, Brooks 3H & Brooks 4H
- (4) Year to date 2017 average only includes production from 2 section laterals, normalized to 9,500'

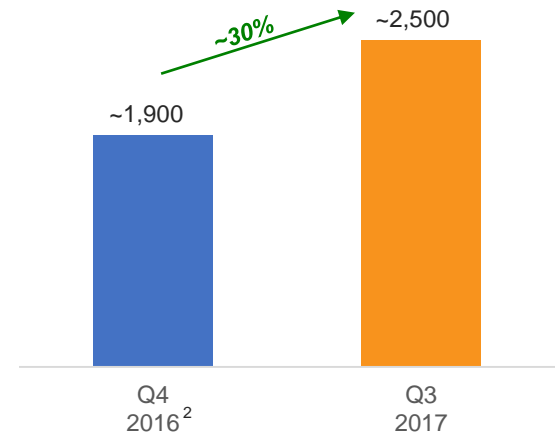
Completion design evolution improving production

Q3 cum. oil production for single section laterals (<5,000')

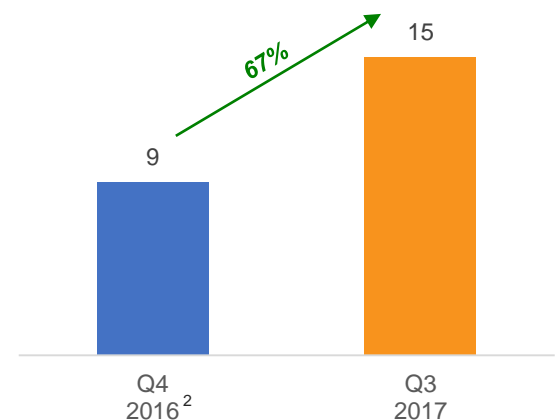


Completion design evolution

Proppant intensity (Lbs. / ft.)



Clusters / stage (average)



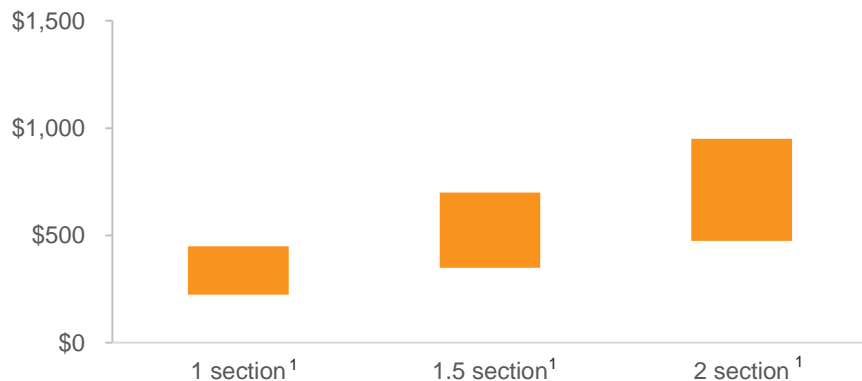
(1) Represents average results from single section laterals (including only wells with less than 5,000' lateral) across all formations, normalized to 4,500'
 (2) Q4 2016 represents the Successor Period (October 11, 2016 to December 31, 2016), includes only wells completed and brought on-line by Centennial

In-basin proppant provides meaningful cost savings

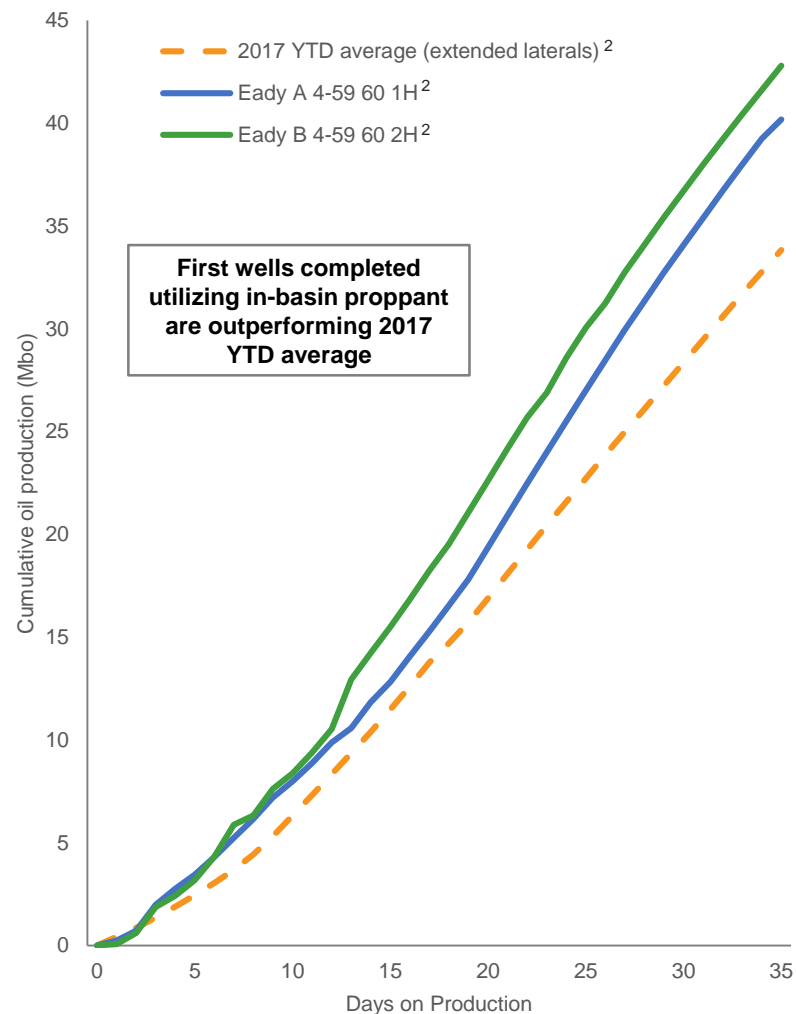
Overview

- Centennial has entered into a long-term proppant supply agreement with a local sand provider
 - Proximity of mine to acreage position drives meaningful cost savings and logistical efficiencies
 - Contract is expected to cover ~50% of total proppant needs over the next three years
- Anticipate ~5-10% savings in total well cost for a well completed using in-basin proppant
- Centennial has confirmed the quality of the proppant is sufficient to meet current completion design parameters across the portfolio
 - Eady A 4 59-60 1H and Eady B 4 59-60 2H represent Centennial's first wells completed using in-basin proppant
 - Utilized a stacked, staggered 440' spacing pattern in the Upper and Lower Wolfcamp A, respectively
 - Strong production results exceeding YTD 2017 average Centennial extended lateral cumulative production

Illustrative cost savings analysis per well (\$ 000s)



Performance of first wells utilizing in-basin proppant

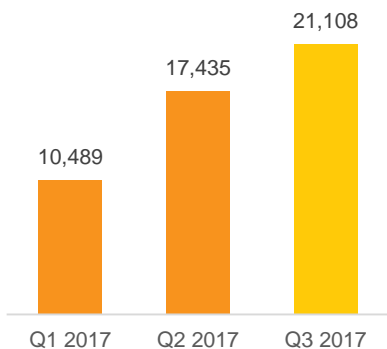


(1) Represents illustrative cost savings assuming in-basin proppant used for completion
 (2) Cumulative production results normalized to 7,500'

Operational execution driving financial results

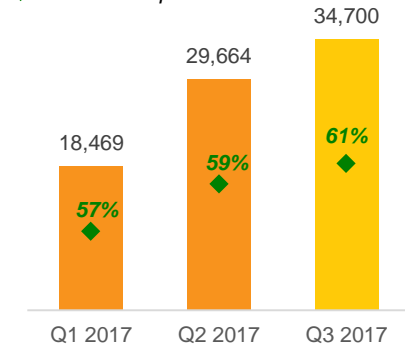
Production

Oil production (Bo/d)



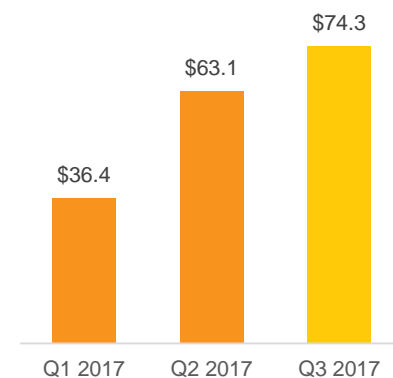
Oil equivalent production (Boe/d)

◆ % oil of total production

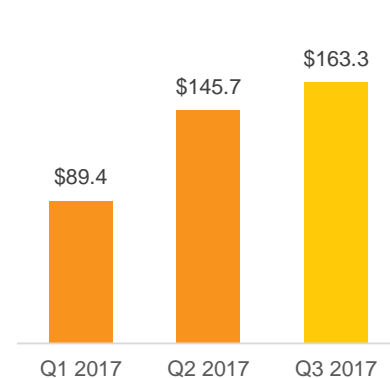


Cash flow / capital expenditures

Adjusted EBITDAX¹ (\$ mm)

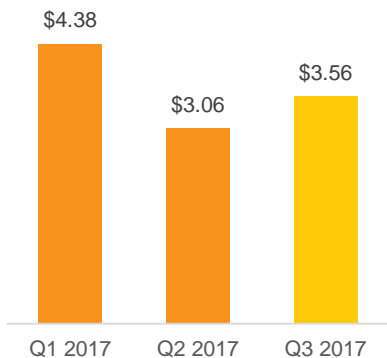


D&C capex incurred (\$ mm)

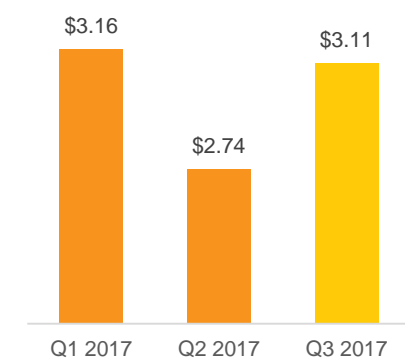


Unit cost overview

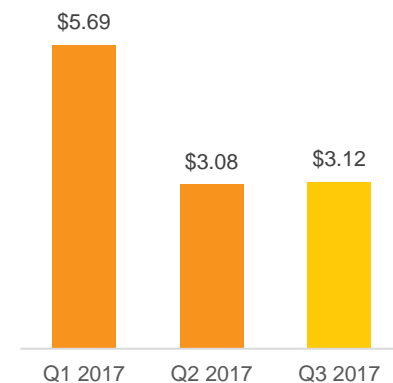
LOE (\$/Boe)



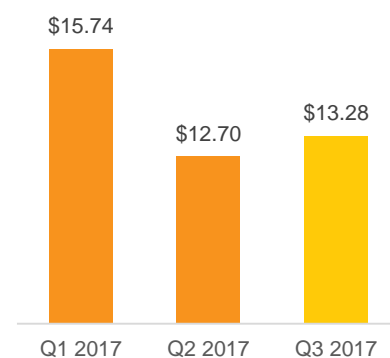
GP&T (\$/Boe)



Cash G&A (\$/Boe)²



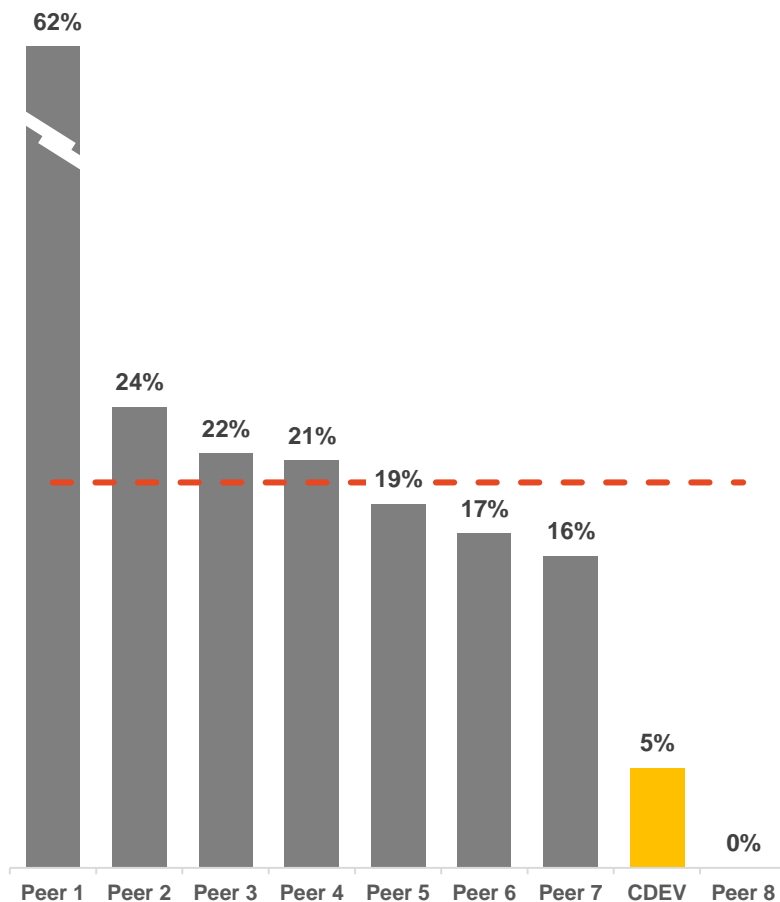
DD&A (\$/Boe)



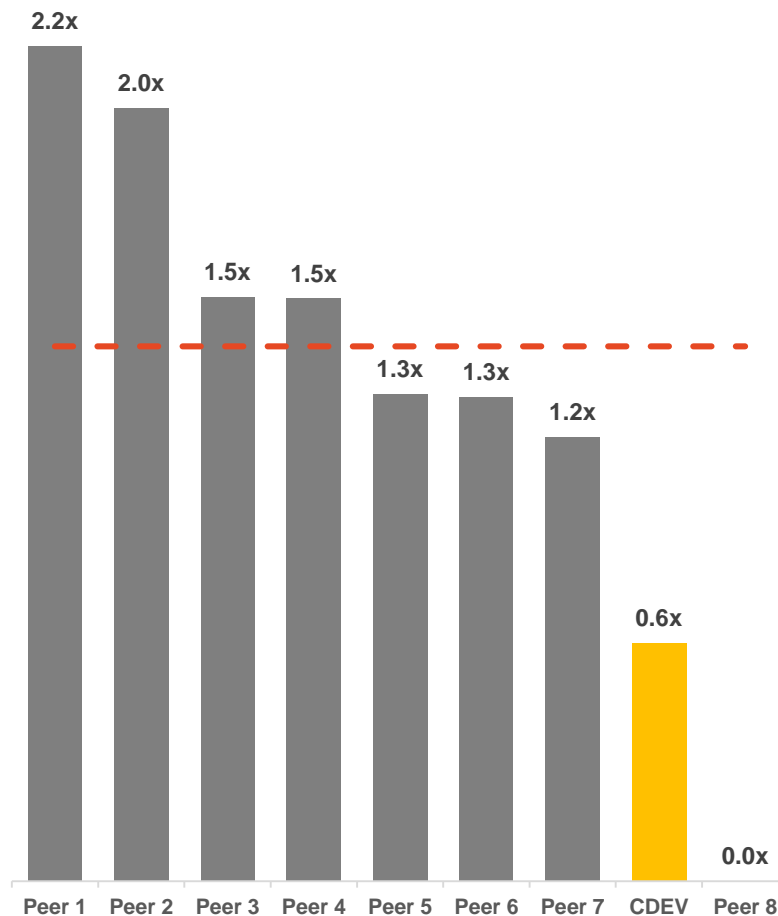
(1) Adjusted EBITDAX is not presented in accordance with generally accepted accounting principles in the United States. Please see slide 15 for a reconciliation to net income, our most directly comparable financial measure calculated and presented in accordance with GAAP.
 (2) Q1 2017 G&A / Boe metric includes ~\$1.8mm in one-time / non-recurring charges

Superior leverage profile provides operational flexibility

Net Debt / Total Capitalization¹



Net Debt / 2017E EBITDAX¹



Source: Company filings and consensus estimates
 Note: Peer group includes: CPE, CXO, EGN, FANG, JAG, LPI, PE, and RSPP; dotted line represents median and excludes CDEV
 (1) CDEV, CXO and LPI as of 9/30/17; remaining companies as of 6/30/17; pro forma for capital markets and A&D activity

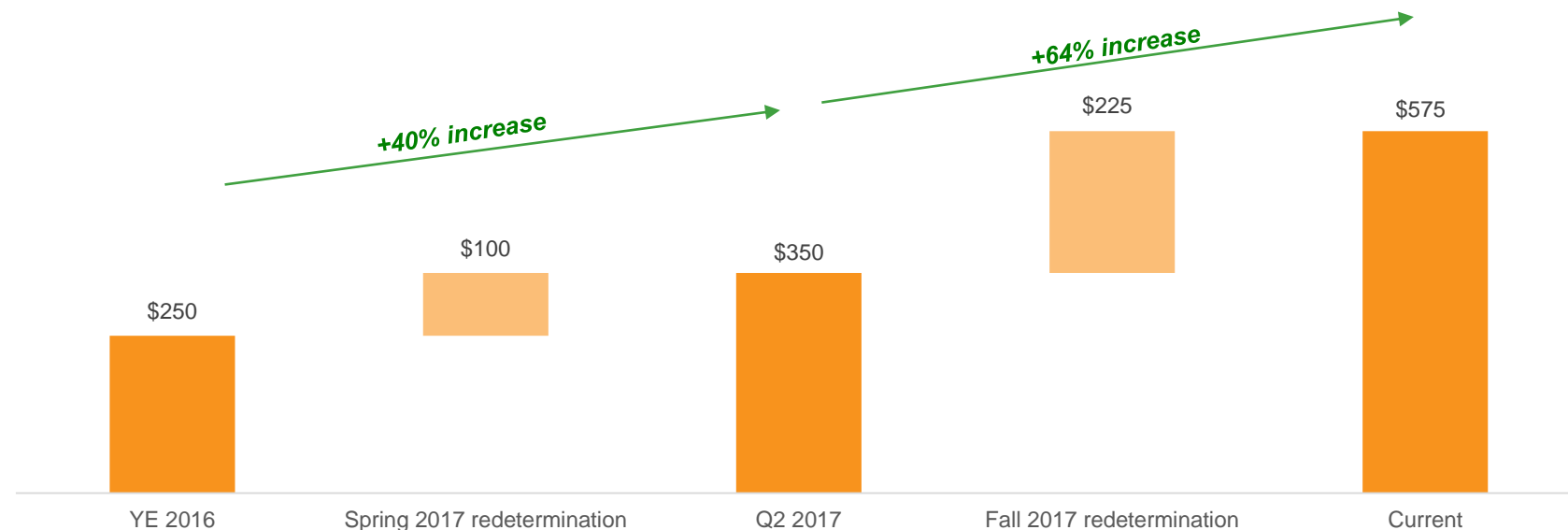
Liquidity supported by borrowing base growth

Liquidity summary (\$ mm)¹

- Borrowing base increases driven primarily by organic production growth
 - Fall 2017 redetermination completed: \$225mm increase to \$575mm
 - \$165mm in total borrowings as of September 30, 2017

	Liquidity profile (9/30/17 balance sheet)
Borrowing base	\$575
Less: amount drawn	(165)
Borrowing base availability	\$410
Plus: Cash and cash equivalents	3
Less: Letters of credit	(1)
Total liquidity	\$412

Borrowing base growth (\$ mm)



(1) Amounts may not sum due to rounding

Revised 2017 Guidance Summary

Guidance summary

- Production guidance increased slightly
 - ~200 Bo/d increase to the mid-point of daily oil production
 - ~500 Boe/d increase to the mid-point of daily oil equivalent production
- Running 6 rigs through year-end
- No changes to LOE and GP&T guidance, reduction in anticipated DD&A and production tax and tightening of G&A range
- Full-year capital unchanged

Updated FY 2017 guidance

	2017 FY Guidance	Updated 2017 FY Guidance
Net Average Daily Production (Boe/d)	27,350 - 31,650	27,850 - 32,150
Oil Net Average Daily Production (Bo/d)	17,100 - 18,900	17,300 - 19,100
Production Costs (\$ / Boe)		
Lease Operating Expense	(\$3.25) - (\$3.55)	(\$3.25) - (\$3.55)
Gathering, Processing & Transportation	(\$2.75) - (\$3.25)	(\$2.75) - (\$3.25)
Depreciation, Depletion, Amortization	(\$14.00) - (\$16.00)	(\$13.00) - (\$15.00)
Cash General and Administrative ¹	(\$3.00) - (\$3.50)	(\$3.10) - (\$3.50)
Severance and Ad Valorem Taxes (% of revenue)	6% - 7%	5.5% - 6.5%
Capital Expenditure Program (\$MM)		
D&C Capital Expenditure	\$475 - \$540	\$475 - \$540
Land	\$50 - \$70	\$50 - \$70
Facilities, Seismic and Other	\$10 - \$15	\$10 - \$15
Operated Drilling Program		
Wells Spud (Gross)	65 - 75	72 - 78
Wells Completed (Gross)	65 - 75	65 - 75

(1) Represents G&A expenses less equity based compensation expense, which Centennial does not estimate

Q3 2017 Financial Results

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

(\$ in millions, unless specified)	Q1 2017	Q2 2017	Q3 2017
Average Daily Production (Boe/d)	18,469	29,664	34,700
Average Daily Oil Production (Bo/d)	10,489	17,435	21,108
% Oil	57%	59%	61%
Financial highlights			
Total Revenue	\$ 61.1	\$ 91.1	\$ 111.6
Adjusted EBITDAX ²	\$ 36.4	\$ 63.1	\$ 74.3
Net Income ³	\$ 9.8	\$ 20.8	\$ 14.4
Unit Costs (\$/Boe)			
Lease Operating Expense	\$ 4.38	\$ 3.06	\$ 3.56
Gathering, Processing & Transportation	\$ 3.16	\$ 2.74	\$ 3.11
Severance & Ad Valorem Taxes	\$ 1.92	\$ 1.75	\$ 2.02
Cash G&A	\$ 5.69	\$ 3.08	\$ 3.12
Depreciation, Depletion & Amortization	\$ 15.74	\$ 12.70	\$ 13.28
Capital Expenditures Incurred			
Drilling & Completion	\$ 89.4	\$ 145.7	\$ 163.3
Land and Other	9.2	17.1	14.2
Facilities, Seismic and Other	2.2	6.8	2.3
Total Capital Expenditures	\$ 100.8	\$ 169.6	\$ 179.8
Total Debt Balance	\$ -	\$35.0	\$165.0
Cash and Cash Equivalents	54.9	-	2.6
Liquidity⁴	\$304.4	\$ 314.1	\$ 186.7

(1) Amounts may not sum due to rounding

(2) Adjusted EBITDAX is not presented in accordance with generally accepted accounting principles in the United States. Please see slide 15 for a reconciliation to net income, our most directly comparable financial measure calculated and presented in accordance with GAAP.

(3) Net income attributable to common shareholders

(4) Liquidity defined as cash, plus availability under the revolving credit facility; Note: Q3 2017 liquidity shown prior to closing of \$575mm borrowing base

Centennial Resource Development Overview

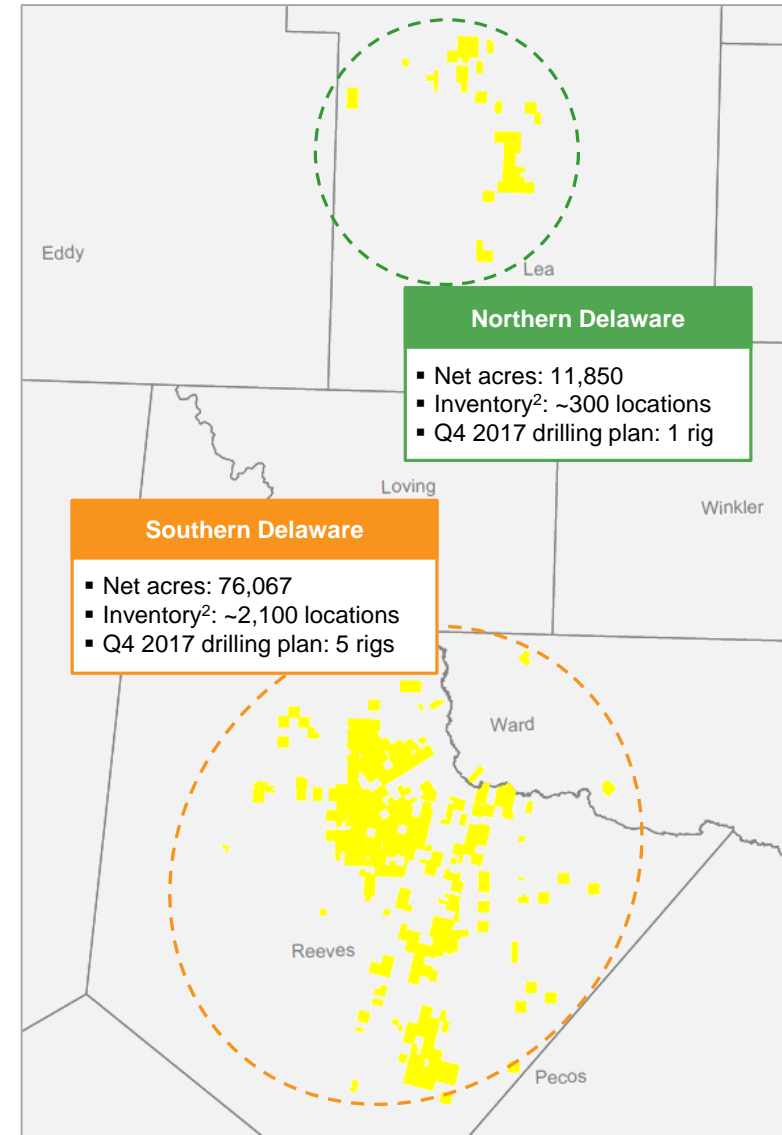
Core Delaware Basin Pure-Play

Q3 2017 highlights

- Increased Q3 2017 average daily oil production volumes by 21% compared to Q2 2017; average daily oil equivalent volumes up 17%
 - Increased commodity mix from 59% oil to 61% oil from Q2 to Q3 2017
- ~200 Bo/d increase and ~500 Boe/d increase to the mid-point of daily oil and oil equivalents production, respectively
- Lowered the midpoint of annual cost guidance for DD&A and production tax
- Delivered some of the strongest well results since Q4 2016 in Reeves County

Summary operational statistics

Operational overview			
	Q1 2017	Q2 2017	Q3 2017
Total production (Boe/d)	18,469	29,664	34,700
Oil production (Bo/d)	10,489	17,435	21,108
% oil	57%	59%	61%
Active operated rigs running	5	6	6
2017E production guidance (midpoint)		Previous	Revised
2017E production (Boe/d)		29,500	30,000
2017E oil production (Bo/d)		18,000	18,200
Acreage ¹			
Total net acreage			~88,000
% Operated			84%
Drilling inventory ²			
Gross horizontal drilling locations			~2,400
Gross operated horizontal drilling locations			~1,400
Proved reserves			
Total proved reserves at 12/31/16 (MBoe) ³			82,959
% oil			56%



(1) As of 12/31/2016 plus incremental GMT acquisition acreage / inventory
 (2) Represents gross horizontal drilling locations; for legacy Centennial assumes credit for the Upper and Lower Wolfcamp A, Wolfcamp B, Wolfcamp C and 3rd Bone Spring Sand; for GMT assumes credit for the Avalon Shale, 1st Bone Spring Sand, 2nd Bone Spring Sand, 3rd Bone Spring Sand and Wolfcamp A
 (3) As of 12/31/2016; does not include incremental proved reserves from GMT acquisition

Reconciliation of Adjusted EBITDAX to Net Income

Adjusted EBITDAX reconciliation (\$ thousands)¹

	Q1 2017	Q2 2017	Q3 2017
	For the three months ended March 31, 2017	For the three months ended June 30, 2017	For the three months ended September 30, 2017
Adjusted EBITDAX reconciliation to net income:			
Net income (loss) attributable to common shareholders	\$9,823	\$20,762	\$14,447
Net income attributable to noncontrolling interest	884	2,436	1,813
Interest expense	410	707	1,015
Income tax expense (benefit)	-	9,069	8,233
Depreciation, depletion and amortization	26,160	34,300	42,387
Impairment and abandonment expenses	(29)	-	-
Non-cash portion of derivative (gain) loss	(4,156)	(2,256)	1,286
Stock-based compensation expense	2,610	2,318	3,360
Exploration expense	-	2,470	1,622
Transaction costs	887	457	42
(Gain) loss on sale of oil and natural gas properties	(166)	(7,191)	141
Adjusted EBITDAX	\$36,423	\$63,072	\$74,346

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