CENTENNIAL

Core Oil
Delaware Basin Pure-Play

J.P. Morgan Energy Equity Conference

June 26, 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.

Centennial Resource Development Overview

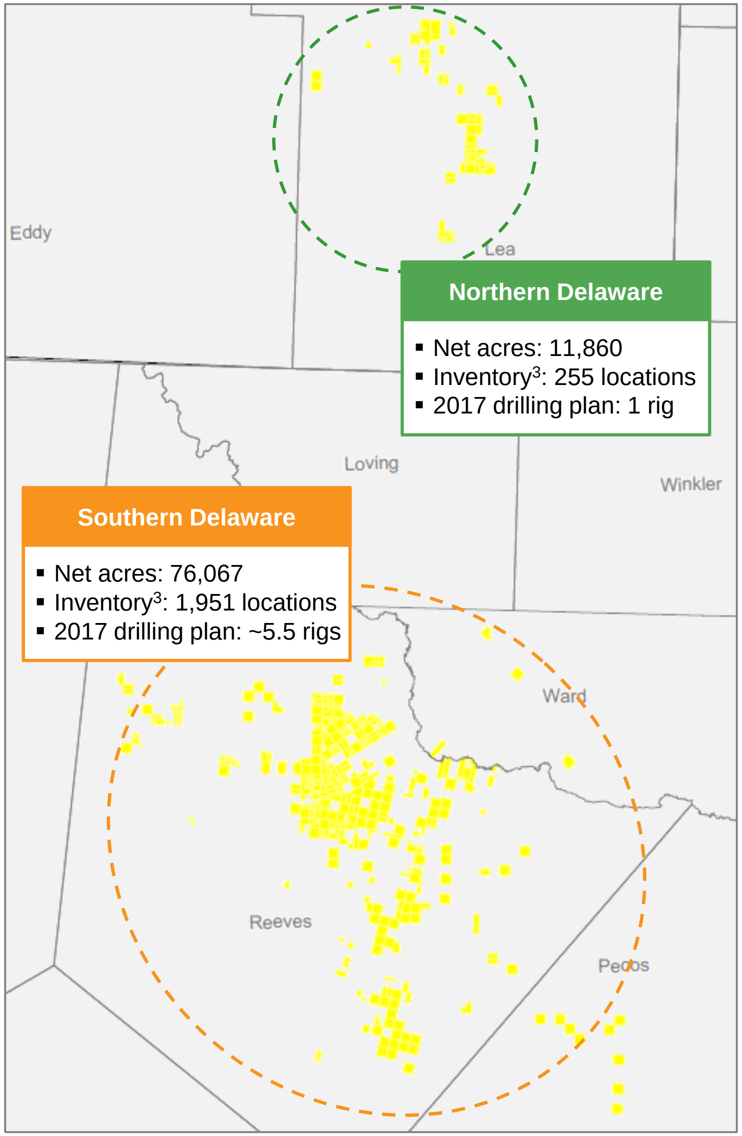
Core Delaware Basin Pure-Play

Company highlights

- Large, contiguous acreage positions in oil-window of Delaware Basin
- Low-risk, oil-rich base with rapid growth potential
- Increased first quarter 2017 average daily oil production volumes by 64% compared to the period from October 11, 2016 through December 31, 2016
- Best-in-class balance sheet provides significant financial flexibility
  - No debt outstanding and $55MM in cash at Q1’17

Summary operational statistics

Operational overview		
Production	Q1 2017 Actual	2017 FYE Guidance[2]
Total production (Boe/d)	18,469	25,750
Oil production (Bo/d)	10,489	15,750
% oil	*57%*	*61%*
Acreage[1]		
Total net acreage		~88,000
% Operated		*84%*
Drilling inventory[1,3]		
Gross horizontal drilling locations		2,206
Gross operated horizontal drilling locations		1,394
Proved reserves		
Total proved reserves at 12/31/16 (MBoe)[4]		82,959
% oil		*56%*



(1) As of 12/31/2016 plus incremental GMT acquisition acreage / inventory
(2) Midpoint of updated 2017 FYE guidance
(3) 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; assumes no locations in Pecos County; for GMT assumes credit for the Avalon Shale, 2nd Bone Spring Sand, 3rd Bone Spring Sand and Wolfcamp A
(4) Does not include any proved reserve impact from GMT acquisition

Differentiated Delaware Basin Pure-Play

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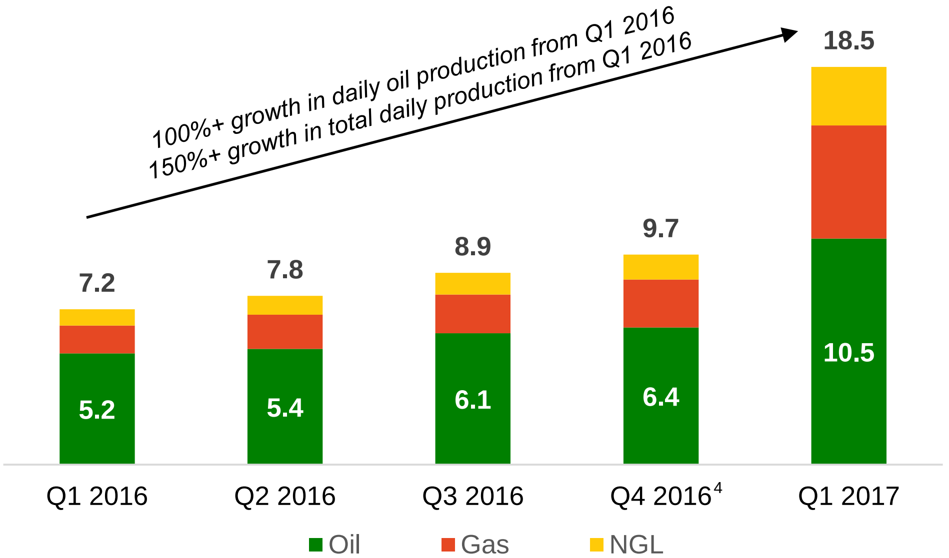
- **Asset quality**
- **Technical expertise**
- **Inventory depth and production growth**
- **Financial flexibility**
- **Management team with track-record of execution**

Delivering production growth

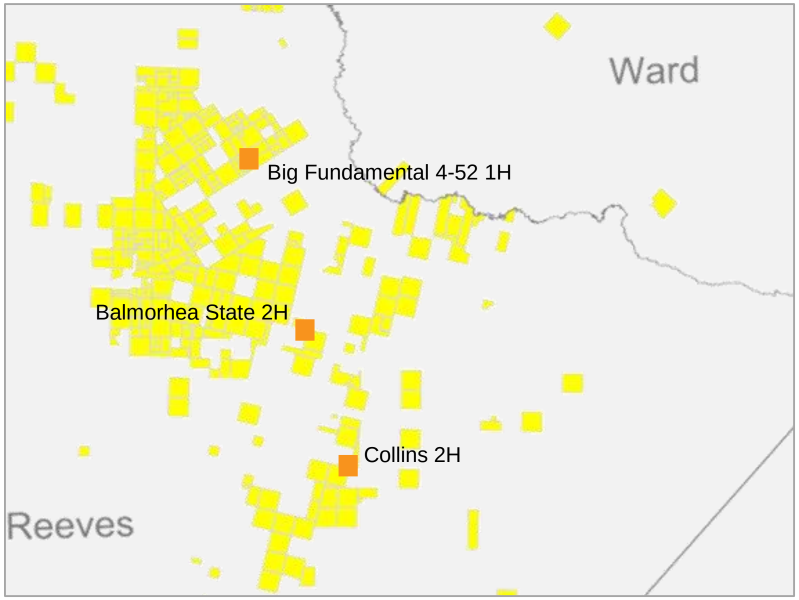
Q1 2017 production overview

- Q1 2017 oil production of 10,489 Bo/d and total production of 18,469 Boe/d
  - On-track for FY 2017 guidance of 15,750 Bo/d and 25,750 Boe/d[1]
- Increased first quarter 2017 average daily oil production volumes by 64% compared to the period from October 11, 2016 through December 31, 2016
- Drilled 15 operated wells with ~5 rigs running for the majority of the quarter, 11 operated wells placed on production
- Big Fundamental 4-52 1H: IP30 / 1,000' of 247 Bo/d and 370 Boe/d
- Strong results from the Balmorhea State 2H and Collins 2H (~82% oil)

Production history (MBoe/d)



Q1 2017 highlights



	Big Fundamental 4-52 1H	Collins 2H	Balmorhea State 2H	Q1 2017 average[2]
Lateral length (ft.)	4,600	6,315	5,750	6,250
Targeted zone	WC UA	WC UA	WC UA	–
IP30 (Bo/d)	1,135	976	1,079	959
IP30 (Boe/d) [3]	1,700	1,183	1,311	1,363
% oil [3]	*67%*	*83%*	*82%*	*70%*
IP30 / 1,000' (Bo/d)	247	155	188	153
IP30 / 1,000' (Boe/d) [3]	370	187	228	218

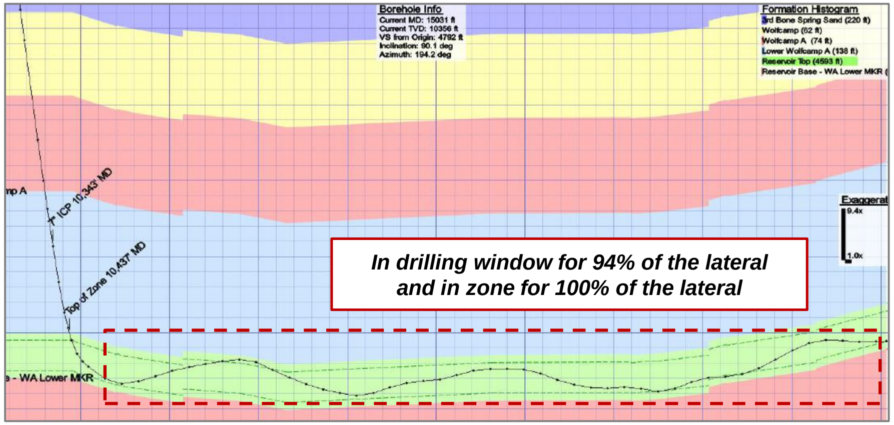
(1) Represents midpoint of updated FY 2017 production guidance pro forma for the GMT acquisition
(2) Average includes results from 11 operated wells placed on production in Q1 2017
(3) Based on two-stream production results
(4) Represents predecessor period from October 1, 2016 through October 10, 2016 and successor period from October 11, 2016 through December 31, 2016

Advancements in geosteering and cluster spacing driving progress towards technical leadership

Geosteering advancements

- Centennial recently brought the geosteering function in-house and recent results indicate a material improvement in the ability to land laterals in the intended drilling window
- Isolating where the lateral is landed limits the number of variables in the equation, driving more efficient analysis of results and stronger well performance
- Q1 2017 average of 93% in-zone represents a material improvement relative to legacy wells
- Targeting a specific drilling window of ~30 feet within the target zone, determined by technical team as optimal landing zone

Sample cross-section: (4,650' lateral length)

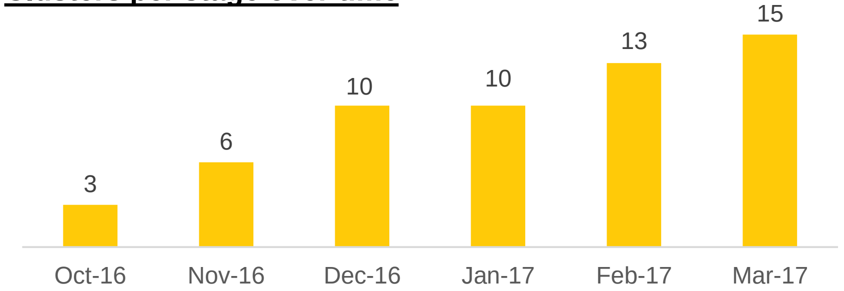


Centennial Q1 2017 average: 93% in zone

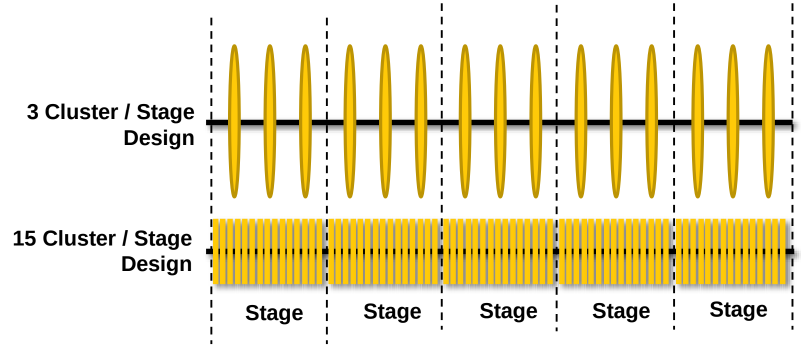
Cluster spacing evolution and design overview

- Tighter cluster spacing increases near-wellbore stimulation and produces shorter frac wings, resulting in increased well performance and potential for tighter well spacing
- Centennial has moved from 3 clusters per stage up to 15 clusters per stage over the last 6 months
- Increasing clusters per stage, but decreasing total stages results in meaningful completion cost savings

Clusters per stage over time



Cluster design evolution



High-quality inventory across 7+ proven zones in the Northern and Southern Delaware

Assumed spacing summary

Formations	CENTENNIAL Standalone	GMT Exploration
Avalon		● ● ● ● ● ● ● ●
1st Bone Spring Sand	Actively evaluating	*Prospective*
2nd Bone Spring Shale	Actively evaluating	*Prospective*
2nd Bone Spring Sand	Actively evaluating	● ● ● ● ●
3rd Bone Spring Carb	Actively evaluating	*Prospective*
3rd Bone Spring Sand	● ● ● ●	● ● ● ● ●
Upper Wolfcamp A	● ● ● ● ● ●	● ● ● ● ● ○ ○ ○
Lower Wolfcamp A	● ● ● ● ●	*5-8 wells / section*
Wolfcamp B	● ● ● ● ● ●	*Prospective*
Wolfcamp C	● ● ● ● ●	

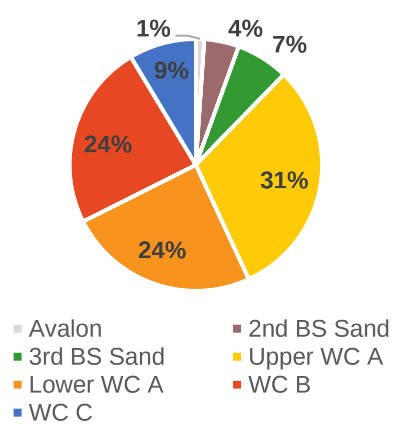
Additional upside from downspacing and additional prospective formations across pro forma position

Inventory summary (gross horizontal drilling locations)

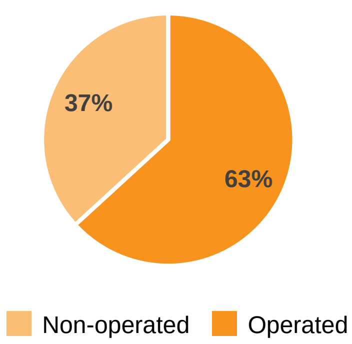
	Operated		Non-operated		
	GMT	PF CDEV	GMT	PF CDEV	Total
Avalon	15	15	–	–	15
2nd Bone Spring Sand	62	62	54	54	116
3rd Bone Spring Sand	55	94	37	62	156
Upper Wolfcamp A	32	430	–	201	631
Lower Wolfcamp A	–	341	–	163	504
Wolfcamp B	–	332	–	177	509
Wolfcamp C	–	120	–	155	275
Total	164	1,394	91	812	2,206

Pro forma inventory allocation

Operated inventory by formation



Operated vs. Non-operated

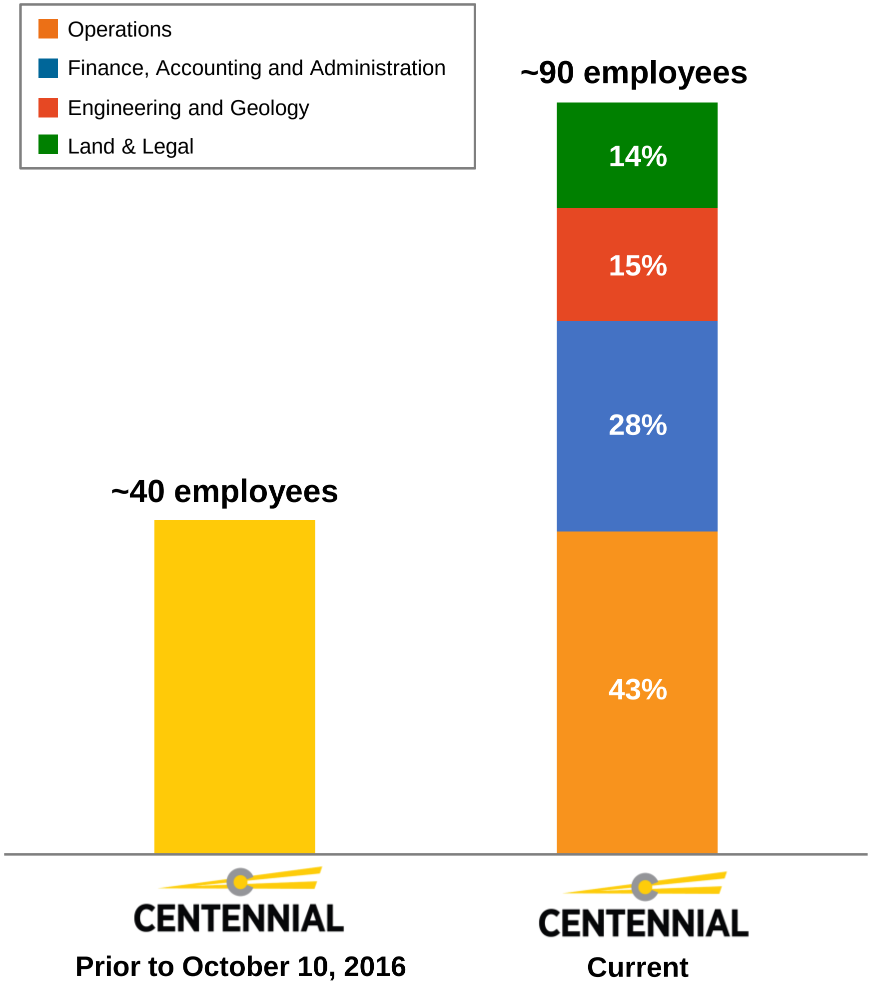


Team in place to execute 2020 game plan

CDEV Management team

Name & Title	Previous Experience
Mark Papa *Chief Executive Officer*	eog resources
Sean Smith *Chief Operating Officer*	QEP Resources; Resolute Energy Corporation
George Glyphis *Chief Financial Officer*	J.P.Morgan
Davis O’Connor *General Counsel*	Berry Petroleum Company
Brent Jensen *Chief Accounting Officer*	Whiting
Matt Garrison *VP of Geosciences*	eog resources
Sean Marshall *VP of Land*	encana
Oscar Peters *VP of Operations*	Resolute Energy Corporation; eog resources

Evolution of CDEV employee base



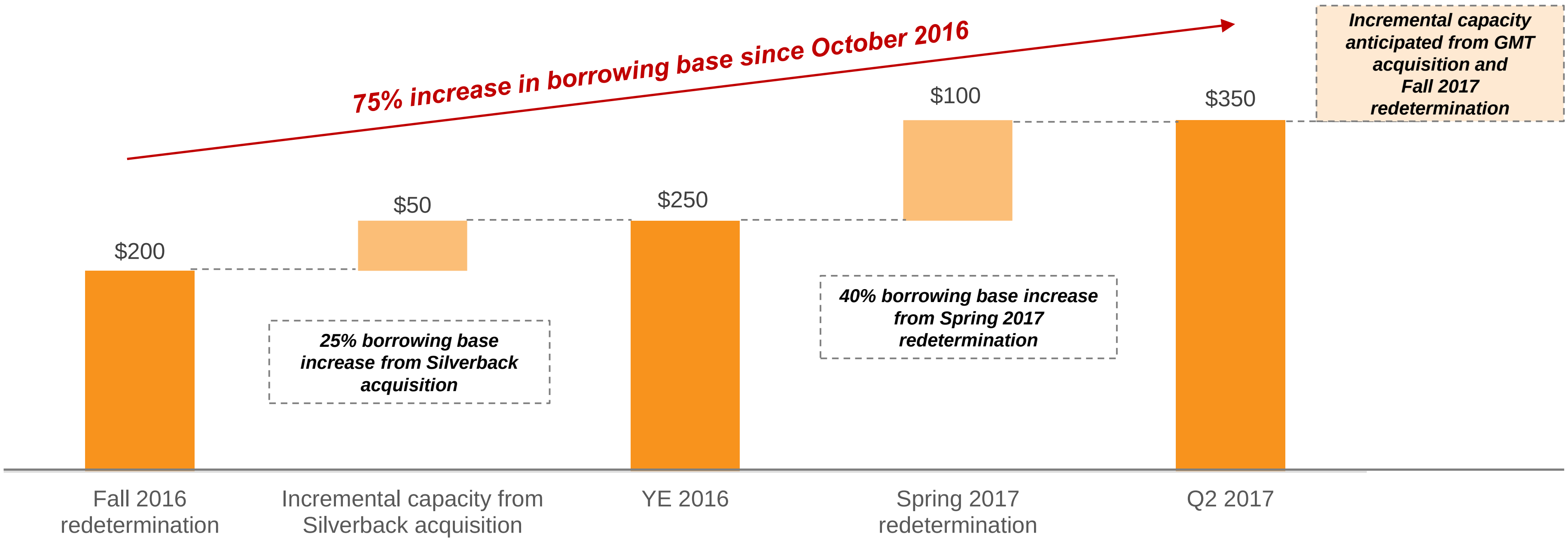
Strong liquidity position

- Significant borrowing base increases driven by organic production growth and Silverback acquisition
  - $50mm incremental borrowing base capacity following closing of Silverback acquisition
  - Completed Spring 2017 redetermination process: $100mm increase, which raises the total borrowing base to $350mm
  - No borrowings outstanding as of March 31, 2017
- Continued production ramp on Centennial acreage and current GMT assets / production expected to drive further borrowing base growth by year-end 2017

Liquidity summary ($ mm)[1]

	As of 3/31/2017	Pro forma 3/31/2017[2]
Borrowing base	$250.0	$350
Less: amount drawn	-	-
Borrowing base availability	$250.0	$350
Plus: Cash and cash equivalents	54.9	54.9
Less: Letters of credit	(0.4)	(0.4)
Total liquidity	$304.4	$404.4

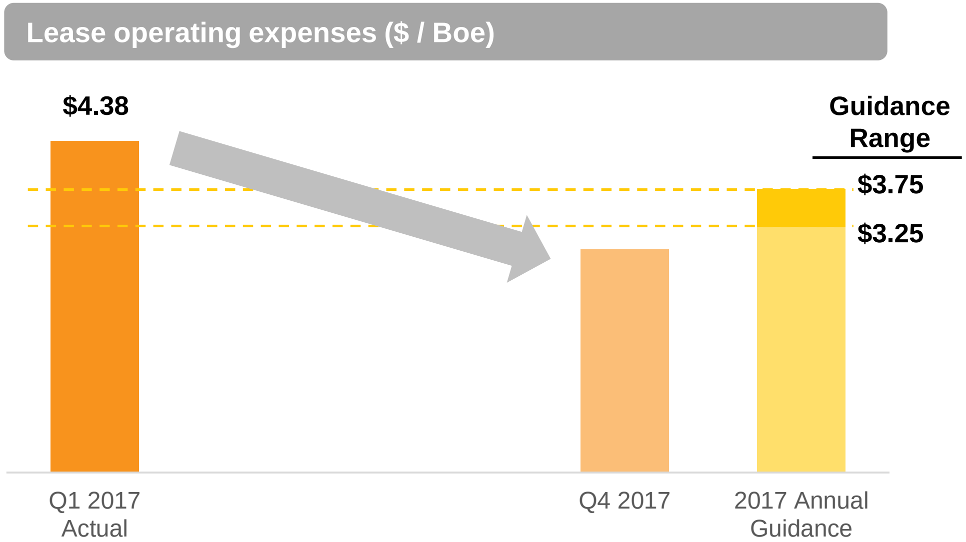
Borrowing base growth ($ mm)

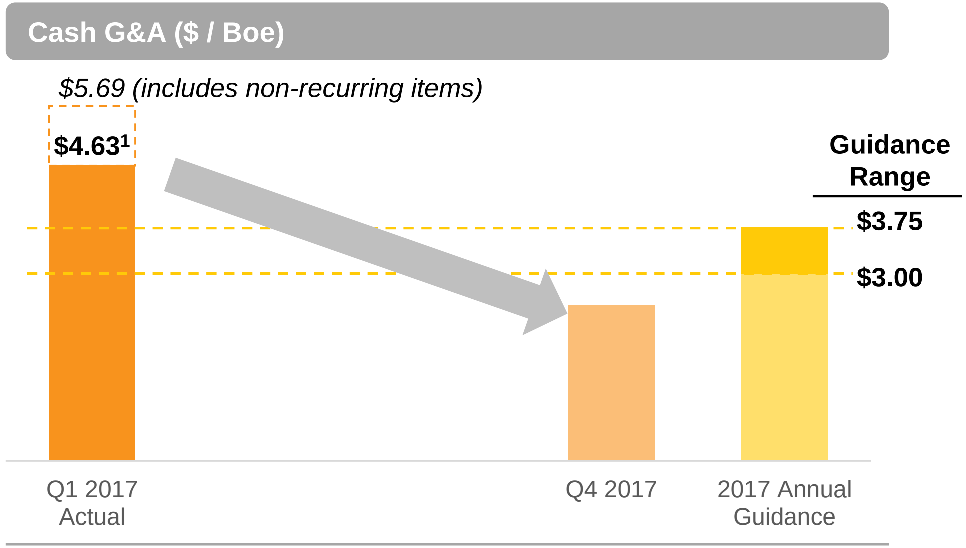


(1) Amounts may not sum due to rounding
(2) Pro forma for $100mm borrowing base increase; does not reflect any adjustments related to GMT acquisition

Rapid production growth drives unit costs lower

- LOE and cash G&A for FY 2017 remain in-line with public guidance on a per unit basis due to projected declines throughout the year
- Declining unit costs driven by increased development activity and significant production growth
  - Expect to increase total production >200% in 2017
- Q1'17 G&A includes multiple non-recurring items related to the Silverback acquisition and other employee related matters
- Centennial technical team highly focused on operational efficiency and cost synergy realization in the field





(1) Adjusted per-unit cash G&A equal to total cash G&A number less ~$1.8mm in one-time / non-recurring charges

2017 Guidance Summary

Guidance summary

- CDEV is currently running 6 rigs
- 1 additional rig will be added on the acquired GMT acreage in Q3 2017
- Production guidance updated to reflect incremental oil-weighted production from GMT acquisition
  - Mid-point of average daily production guidance increased by 5%, representing over 200% growth from 2016 production
  - Mid-point of average daily oil production guidance increased by 6%, representing ~175% growth from 2016 production
- Operated drilling program increased from 60-70 wells spud and completed, to 65-75 wells spud and completed
- Drilling & completion capital increased by ~$38mm at the mid-point driven by GMT development

Updated FY 2017 guidance

	Initial 2017 FY Guidance	Post - GMT 2017 FY Guidance
Net Average Daily Production (Boe/d)	**22,500 - 26,500**	**23,600 - 27,900**
Oil Net Average Daily Production (Bo/d)	14,000 - 15,700	14,850 - 16,650
Production Costs (per Boe)		
Lease Operating	($3.25) - ($3.75)	($3.25) - ($3.75)
Transportation, Processing, Gathering and Other	($3.10) - ($3.60)	($3.10) - ($3.60)
Depreciation, Depletion, Amortization and Accretion of Asset Retirement Obligations	($18.00) - ($20.00)	($18.00) - ($20.00)
Cash General and Administrative	($3.00) - ($3.75)	($3.00) - ($3.75)
Severance and Ad Valorem Taxes (% of revenue)	6% - 8%	6% - 8%
Capital Expenditure Program ($MM)	**$500 - $585**	**$535 - $625**
D&C Capital Expenditure	$440 - $500	$475 - $540
Land	$50 - $70	$50 - $70
Facilities, Seismic and Other	$10 - $15	$10 - $15
Operated Drilling Program		
Wells Spud (Gross)	60 - 70	65 - 75
Wells Completed (Gross)	60 - 70	65 - 75

Centennial 2020 Game Plan

Delivering investor returns through operational outperformance

Objective: Best equity performance of any U.S. Mid-Cap E&P through 2020

2017	▪ Grow net oil production from 5,757 Bo/d in 2016 to 60,000 by 2020
	▪ Become mid-cap technical leader in G&G and well completion technology
	▪ Achieve above average competence in drilling technology
	▪ Evaluate Bone Spring Shale prospectivity across Reeves County acreage
	▪ Maintain one of the lowest net debt positions of all U.S. E&P companies
	▪ Maintain clear, easy to understand financials
	▪ Target up to \$50-\$70 million per year spend for acreage acquisitions
2018	▪ Achieve lowest unit costs among peers – LOE and G&A
2020	▪ Achieve 60,000 Bo/d average annual oil production