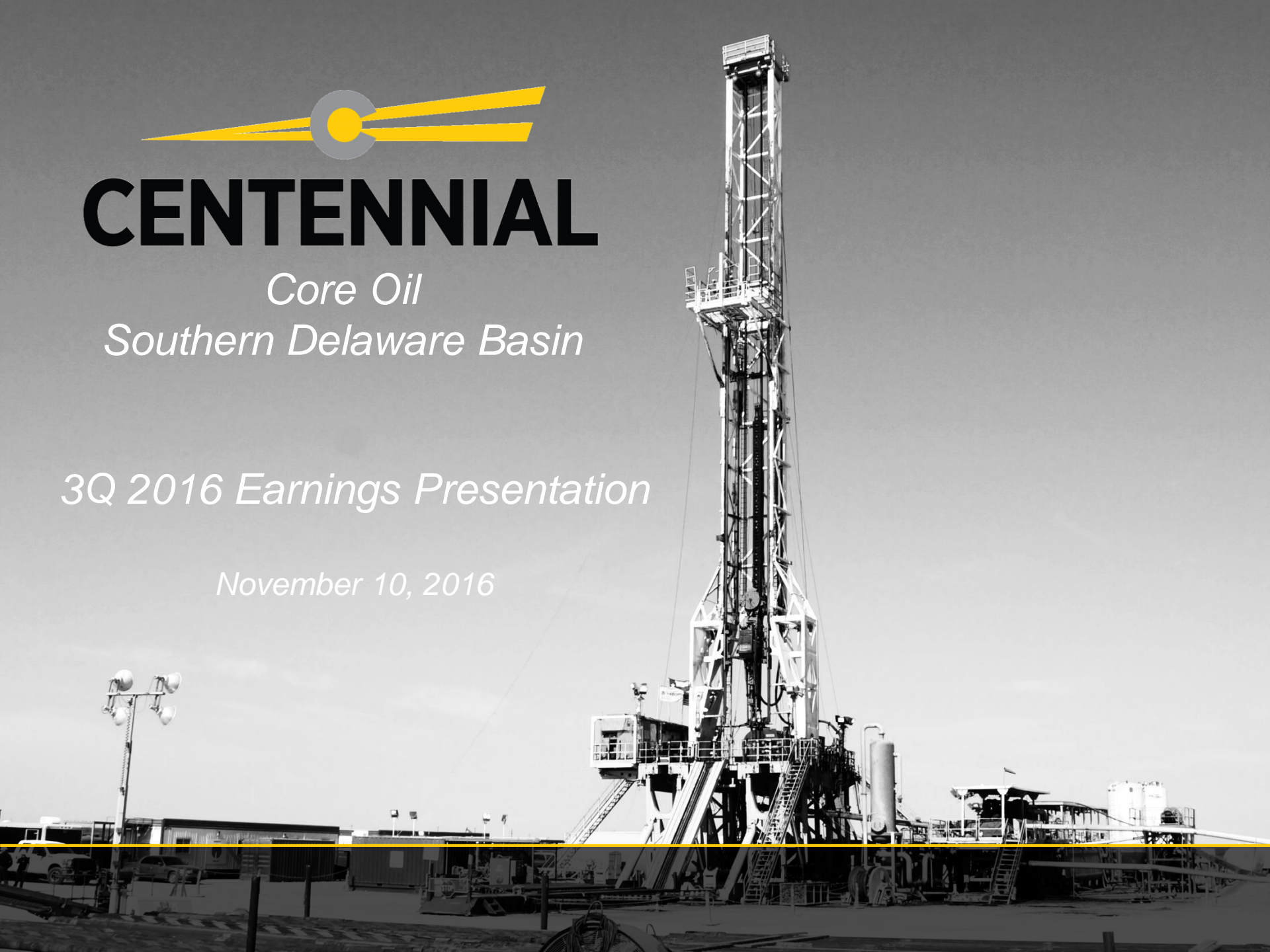


CENTENNIAL

*Core Oil
Southern Delaware Basin*

3Q 2016 Earnings Presentation

November 10, 2016



Important Information

Centennial Acquisition

On October 11, 2016, we completed the acquisition of approximately 89% of the outstanding membership interests in Centennial Resource Production, LLC (“CRP”). Following the acquisition, our only significant asset is our ownership of this approximate 89% membership interest. This presentation provides, among other things, financial and operating results of CRP for the quarter ended September 30, 2016 prior to our ownership in CRP. References to “we,” “us” and “our” in this presentation refer to Centennial Resource Development, Inc. and, as the context requires, CRP.

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 9 for a reconciliation of Adjusted EBITDAX to net (loss) income, the most comparable GAAP measure. We believe Adjusted EBITDAX is useful because 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 9 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 costs 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.

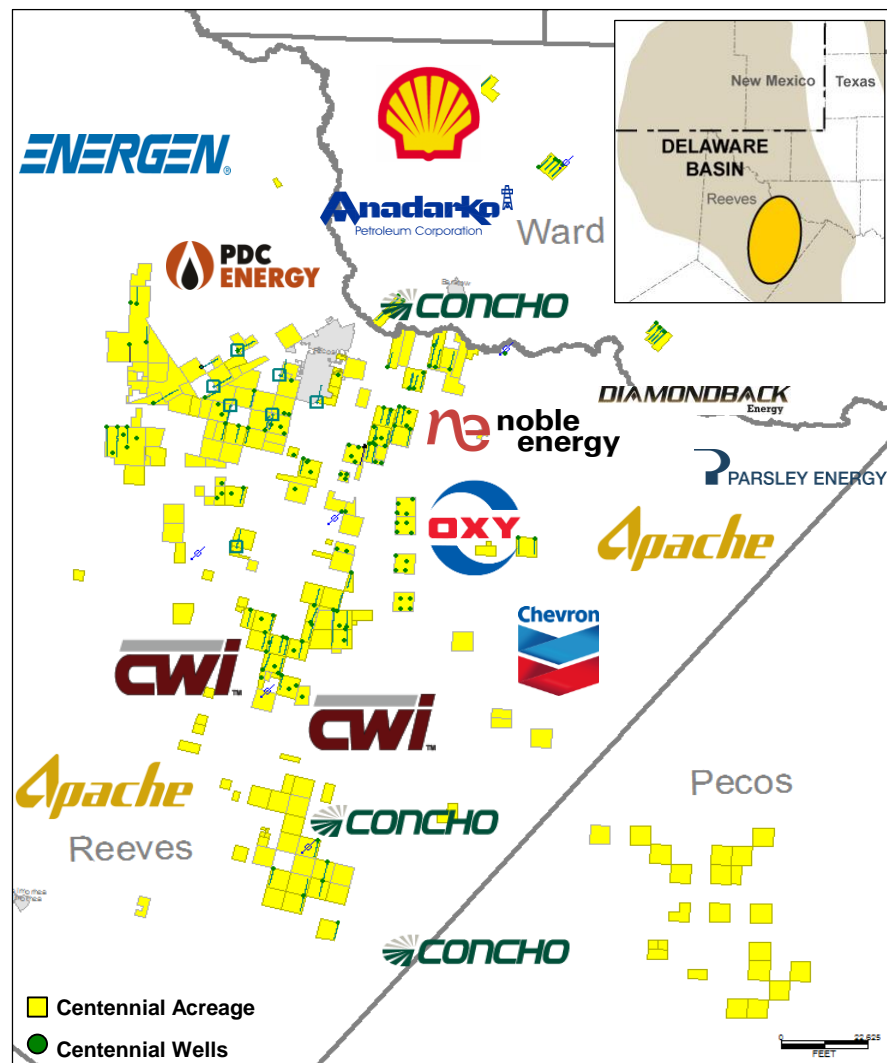
Core Delaware Basin Pure-Play

- Large, contiguous core position in Southern Delaware Basin
 - 38,000+ quality net acres primarily in Reeves County ⁽¹⁾
 - 80%+ operated
- Low-risk, oil-rich base with rapid growth potential
 - Currently running three rigs, up from 1 rig in 2Q
 - Proved reserves: 32.5 MMBoe; 71% oil, 83% liquids ⁽²⁾
- Delineation across multiple Hz zones
 - 65 operated Hz wells as of November 2016
- 1,350+ identified horizontal drilling locations ⁽³⁾
 - 670+ operated locations
 - Assumes 880' spacing
 - Upside in Avalon and 2nd and 3rd Bone Spring shales

Key Statistics (\$ in Millions)

Market Capitalization ⁽⁴⁾	\$ 2,782
Less: Cash on Balance Sheet ⁽⁵⁾	(100)
Enterprise Value	\$ 2,682
Cash plus Revolver Availability	\$ 300
3Q'16 Average Production (Boe/d)	8,903
3Q'16 Average Oil Production (Bo/d)	6,109

Acreage in the Oily Southern Delaware Core



(1) Excludes Pecos County acreage.

(2) Reserves per Netherland, Sewell & Associates, Inc. ("NSAI") as of 12/31/15.

(3) No locations included from Pecos County.

(4) Includes Class C shares for a total of 183.5mm shares outstanding and a \$15.16 share price as of 11/9/16.

(5) Cash as of 9/30/16 pro forma for Centennial/Silver Run business combination.

Delivering on Investor Returns

Macro Forecast: Improved crude oil supply-demand fundamentals

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

Game Plan:

2016

- Maintain conservative balance sheet
- Maintain clear, easy to understand financials

2017

- Grow net oil production from ~6,100 ⁽¹⁾ to 30,000 BOPD by 2020
- Become small cap technical leader in G&G and well completion technology
- Achieve above average competence in drilling technology and execution
- Evaluate Bone Spring Shale prospectivity across acreage
- Target \$100 million per year spend for acreage acquisitions

2018

- Achieve lowest G&A unit costs among peers
- Achieve lowest LOE unit costs among peers

2020

- Achieve 30,000 BOPD
- Selectively pursue transformative acquisition in Permian or 2nd basin

(1) 3Q 2016 Average Oil Production

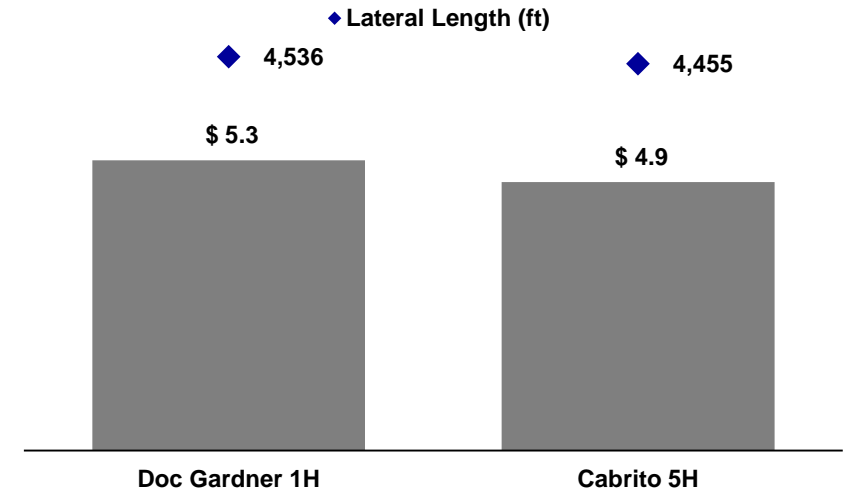
The Centennial Team

Name	Position	Background
Mark Papa	Chief Executive Officer	<ul style="list-style-type: none">■ Formerly Chief Executive Officer of EOG Resources■ Partner, Riverstone
Sean Smith	Chief Operating Officer	<ul style="list-style-type: none">■ Legacy VP of Geosciences, Centennial■ Formerly General Manager, High Plains Division at QEP
George Glyphis	Chief Financial Officer	<ul style="list-style-type: none">■ Legacy Chief Financial Officer, Centennial■ Formerly Managing Director at J.P. Morgan Investment Banking
Davis O'Connor	General Counsel	<ul style="list-style-type: none">■ Legacy General Counsel, Centennial■ Formerly General Counsel at Berry Petroleum
Jamie Wheat	Chief Accounting Officer	<ul style="list-style-type: none">■ Legacy Chief Accounting Officer, Centennial■ Formerly Chief Accounting Officer at Berry Petroleum
Matt Garrison	VP of Geosciences	<ul style="list-style-type: none">■ Formerly Division Exploration Manager at EOG Resources
Sean Marshall	VP of Land	<ul style="list-style-type: none">■ Formerly Director of Land Negotiation at Encana
Oscar Peters	VP of Operations	<ul style="list-style-type: none">■ Formerly Drilling and Completions Manager at Resolute Energy■ Formerly Area Production and Drilling Manager at EOG Resources
Terry Sherban	VP of Reservoir Engineering	<ul style="list-style-type: none">■ Legacy VP of Reservoir Engineering, Centennial■ Formerly VP of Acquisitions at Venoco

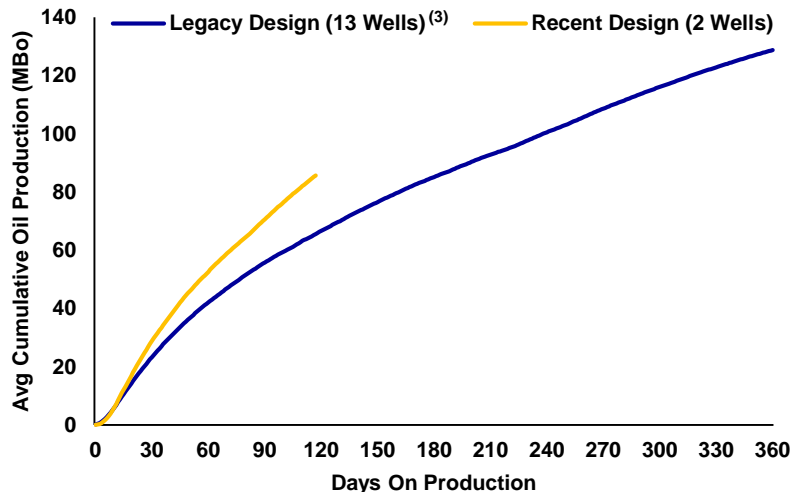
Driving Operational Improvements

- When analyzing D&C capital efficiency, Centennial continues to be a top tier performer
- Continuous completion enhancements driving well results that exceed expectations

D&C CAPEX – Q3 Completed Wells (\$MM) ⁽¹⁾



Well Performance by Completion Design ⁽²⁾



Completion Optimization

Design Parameter	Legacy Design	Recent Design	Current Design
Stage Spacing (ft)	210	160	160
Total Proppant (Lbs/ft)	1,500	1,500-2,000	2,000+
Proppant Type	30/50 White (100%) 100 Mesh (0%)	30/50 White (75%) 100 Mesh (25%)	40/70 RCS (20%) 100 Mesh (80%)
Clusters per stage	3	3	6+
Fluid Type	Slickwater (<75%)	Slickwater (85%)	Slickwater (100%)
Gel Weight (Lbs/gal)	20+	18	None
Pump Rate (Bbls/min)	60	70	90

(1) D&C CAPEX per field estimates and includes cost of facilities and artificial lift install.
 (2) Excludes extended lateral wells (lateral length > 5,000ft).
 (3) Includes all Reeves County Wolfcamp A wells completed since January 2015 with the Legacy Completion Design.

Pro Forma CRP Balance Sheet

- Business combination between Centennial and Silver Run closed 10/11/16
- Debt free balance sheet with ~\$100mm of cash at closing
- Cash + revolver availability of ~\$300 million based on ~\$100 million of cash and ~\$200 million undrawn revolver

CRP Balance Sheet as of 9/30/16

(\$ in millions, unless specified)	Actual 9/30/2016	Transaction Adjustments	Pro Forma 9/30/2016
Cash and Cash Equivalents	\$ 0	\$ 100	\$ 100
Revolving Credit Facility	\$ 124	\$ (124)	\$ -
First Lien Term Loan	65	(65)	-
Total Debt	\$ 189	\$ (189)	\$ -
Financial & Operating Statistics			
Q3 2016 Adjusted EBITDAX Annualized	\$ 69		\$ 69
Proved Reserves (MMBoe) ⁽¹⁾	32		32
Proved Developed Reserves (MMBoe) ⁽¹⁾	13		13
Q3 2016 Production (Boe/d)	8,903		8,903
Credit metrics			
Total Debt /			
Q3 2016 Adjusted EBITDAX Annualized	2.8x		0.0x
Proved Reserves (\$/Boe)	\$ 5.82		\$ -
Proved Developed Reserves (\$/Boe)	\$ 14.41		\$ -
Q3 2016 Production (\$/Boe/d)	\$ 21,202		\$ -
Cash + Revolver Availability			
Borrowing Base	\$ 140	\$ 60	\$ 200
Less: Amount Drawn	(124)		-
Borrowing Base Availability	\$ 16		\$ 200
Plus: Cash and Cash Equivalents	0		100
Less: Letters Of Credit	(0)		(0)
Cash + Revolver Availability	\$ 16		\$ 300

(1) Reserves per NSAI as of 12/31/15.

3Q 2016 Financial Results of CRP

(\$ in millions, unless specified)	Q3 2016	
Average Daily Production (Boe/d)		8,903
Average Daily Oil Production (Bo/d)		6,109
<i>% Oil</i>		<i>69%</i>
Average NYMEX Oil Price (\$/Bbl)		\$ 44.94
Average NYMEX Gas Price (\$/MMBtu)		\$ 2.79
<u>Average Realized Prices</u>		
Oil (\$/Bbl)		\$ 41.62
Gas (\$/Mcf)		2.67
NGL (\$/Bbl)		14.02
Total Revenue (\$/Boe)		\$ 33.36
Plus: Net Cash Receipts on Settled Derivatives (\$/Boe)		2.38
Total Net Revenue + Net Cash Receipts on Settled Derivatives (\$/Boe)		\$ 35.74
<i>Oil Differential (\$/Bbl)</i>		<i>\$ (3.32)</i>
<i>Gas Differential (% of NYMEX HHub)</i>		<i>96%</i>
<i>NGL Differential (% of NYMEX WTI)</i>		<i>31%</i>
Total Revenue		\$ 27.3
Total Net Revenue + Net Cash Receipts on Settled Derivatives		\$ 29.3
Adjusted EBITDAX		\$ 17.1
Cash Expenses	(\$/Boe)	(\$ mm)
Lease Operating Expenses	\$ 4.46	\$ 3.7
Transportation, Gathering & Processing	2.18	1.8
Severance & Ad Valorem Taxes	1.75	1.4
Cash G&A	6.41	5.3
Total Cash Expenses	\$ 14.80	\$ 12.1
<u>Capital Expenditures</u>		
Drilling & Completion and Facilities		\$ 23.8
Land and Other		3.4
Total Capital Expenditures		\$ 25.6
Total Debt Balance		\$ 189.0
Interest Expense		\$ 2.0

Reconciliation of Adjusted EBITDAX to Net Income for CRP

(\$ in thousands)	Three months ended Sep 30,		Nine months ended Sep 30,	
	2016	2015	2016	2015
Net income (loss)	\$ (5,134)	\$ 3,326	\$ (35,727)	\$ (25,282)
Interest expense	1,983	1,469	5,422	4,743
Income tax benefit	-	-	(406)	-
Depreciation, depletion and amortization and accretion of asset retirement obligations	18,454	19,880	60,939	64,003
Abandonment expense and impairment of unproved properties	1,649	-	2,546	3,851
Loss (gain) on derivatives	(1,741)	(13,344)	4,184	(12,320)
Net cash receipts on settled derivatives	1,952	9,185	16,623	25,972
Contract termination and rig stacking	-	221	-	2,388
Gain on sale of assets	(15)	(9)	(11)	(2,688)
Adjusted EBITDAX	\$ 17,148	\$ 20,728	\$ 53,570	\$ 60,667

Hedging Summary for CRP

	4Q 2016	2017
<u>Fixed Swap Hedges</u>		
Crude Oil Swaps – WTI (Bbl)	193,200	675,250
Crude Oil Swaps – WTI (Bbl/d)	2,100	1,850
Weighted Average Price (\$/Bbl)	\$ 55.21	\$ 50.41
Natural Gas Swaps – HHub (MMBtu)	-	1,460,000
Natural Gas Swaps – HHub (MMBtu/d)	-	4,000
Weighted Average Price (\$/MMBtu)	\$ -	\$ 2.94
<u>Midland-Cushing Basis Hedges</u>		
Basis Swaps – Basis (Bbl)	320,300	127,750
Basis Swaps – Basis (Bbl/d)	3,400	350
Weighted Average Price (\$/Bbl)	\$ (0.45)	\$ (0.20)