Rex Energy Corporate Presentation



March 2016 R STR



Forward-Looking Statements

Statements in this presentation that are not historical facts are "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. For example, we make statements about significant potential opportunities for our business; future earnings; resource potential; cash flow and liquidity; capital expenditures; reserve and production growth; potential drilling locations; plans for our operations, including drilling, fracture stimulation activities, and the completion of wells; and potential markets for our oil, NGLs, and gas, among other things, that are forward looking and anticipatory in nature. These statements are based on management's experience and perception of historical trends, current conditions, and anticipated future developments, as well as other factors believed to be appropriate. We believe these statements and the assumptions and estimates contained in this presentation are reasonable based on information that is currently available to us. However, management's assumptions and the company's future performance are subject to a wide range of business risks and uncertainties, both known and unknown, and we cannot assure that the company can or will meet the goals, expectations, and projections included in this presentation. Any number of factors could cause our actual results to be materially different from those expressed or implied in our forward looking statements, including (without limitation): economic conditions in the United States and globally; domestic and global demand for oil and natural gas; volatility in oil, gas, and natural gas liquids pricing; new or changing government regulations, including those relating to environmental matters, permitting, or other aspects of our operations; the geologic quality of the company's properties with regard to, among other things, the existence of hydrocarbons in economic quantities; uncertainties inherent in the estimates of our oil and natural gas reserves; our ability to increase oil and natural gas production and income through exploration and development; drilling and operating risks; the success of our drilling techniques in both conventional and unconventional reservoirs; the success of the secondary and tertiary recovery methods we utilize or plan to employ in the future; the number of potential well locations to be drilled, the cost to drill them, and the time frame within which they will be drilled; the ability of contractors to timely and adequately perform their drilling, construction, well stimulation, completion and production services; the availability of equipment, such as drilling rigs, and infrastructure, such as transportation pipelines; the effects of adverse weather or other natural disasters on our operations; competition in the oil and gas industry in general, and specifically in our areas of operations; changes in the company's drilling plans and related budgets; the success of prospect development and property acquisition; the success of our business and financial strategies, and hedging strategies; conditions in the domestic and global capital and credit markets and their effect on us; the adequacy and availability of capital resources, credit, and liquidity including (without limitation) access to additional borrowing capacity; and uncertainties related to the legal and regulatory environment for our industry, and our own legal proceedings and their outcome.

Further information on the risks and uncertainties that may effect our business is available in the company's filings with the Securities and Exchange Commission. We strongly encourage you to review those filings. Rex Energy does not assume or undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Presentation of Information

The estimates of reserves in this presentation are based on a reserve report of our independent external reserve engineers as of December 31, 2015. We believe the data we prepared and supplied to our external reservoir engineers in connection with their preparation of the 12/31/15 reserve report, and the assumptions, forecasts, and estimates contained therein, are reasonable, however, we cannot assure that they will prove to have been correct. Estimates of reserves can be affected by inaccurate assumptions or by known or unknown risks and uncertainties. Please see slide 3 for additional information about our estimates of reserves.

In this presentation, references to Rex Energy, Rex, REXX, the Company, we, our and us refer to Rex Energy Corporation and its subsidiaries. Unless otherwise noted, all references to acreage holdings are as of December 31, 2015 and are rounded to the nearest hundred. All financial information excludes discontinued operations unless otherwise noted.

All estimates of internal rate of return (IRR) are before tax.



Hydrocarbon Volumes

The SEC permits publicly-reporting oil and gas companies to disclose "proved reserves" in their filings with the SEC. "Proved reserves" are estimates that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. SEC rules also permit the disclosure of "probable" and possible" reserves. Rex Energy discloses proved reserves but does not disclose probable or possible reserves. We may use certain broader terms such as "resource potential," "EUR" (estimated ultimate recovery of resources, defined below) and other descriptions of volumes of potentially recoverable hydrocarbons throughout this presentation. These broader classifications do not constitute "reserves" as defined by the SEC and we do not attempt to distinguish these classifications from probable or possible reserves in documents filed with the SEC.

The company defines EUR as the cumulative oil and gas production expected to be economically recovered from a reservoir or individual well from initial production until the end of its useful life. Our estimates of EURs and resource potential have been prepared internally by our engineers and management without review by independent engineers. These estimates are by their nature more speculative than estimates of proved, probable, and possible reserves and accordingly are subject to substantially greater risk of being actually realized. We include these estimates to demonstrate what we believe to be the potential for future drilling and production by the company. Ultimate recoveries will be dependent upon numerous factors including actual encountered geological conditions, the impact of future oil and gas pricing, exploration and development costs, and our future drilling decisions and budgets based upon our future evaluation of risk, returns and the availability of capital and, in many areas, the outcome of negotiation of drilling arrangements with holders of adjacent or fractional interest leases. Estimates of resource potential and other figures may change significantly as development of our resource plays provide additional data and therefore actual quantities that may ultimately be recovered will likely differ materially from these estimates.

Potential Drilling Locations

Our estimates of potential drilling locations are prepared internally by our engineers and management and are based upon a number of assumptions inherent in the estimate process. Management, with the assistance of engineers and other professionals, as necessary, conducts a topographical analysis of our unproved prospective acreage to identify potential well pad locations using operationally approved designs and considering several factors, which may include but are not limited to access roads, terrain, well azimuths, and well pad sizes. For our operations in Pennsylvania, we then calculate the number of horizontal well bores for which the company appears to control sufficient acreage to drill the lateral wells from each potential well pad location to arrive at an estimated number of net potential drilling locations. For our operations in Ohio, we calculate the number of net potential drilling locations. In both cases, we then divide the unproved prospective acreage by the number of net potential drilling locations to arrive at an average well spacing. Management uses these estimates to, among other things, evaluate our acreage holdings and to formulate plans for drilling. Any number of factors could cause the number of wells we actually drill to vary significantly from these estimates, including: the availability of capital, drilling and production costs, commodity prices, availability of drilling services and equipment, lease expirations, regulatory approvals and other factors.

Rex Energy Company Overview



Focused on developing liquids-rich acreage in the Appalachian and Illinois Basins

- Appalachian Basin: Targeting wet-gas windows in the Pennsylvania Marcellus and Ohio Utica Shales
- Illinois Basin: 100% oil production; low decline assets; opportunity for conventional infill drilling



Market Cap ⁽³⁾	\$91 million
Current Borrowing Base Capacity ⁽⁴⁾	\$190 million
2015 Production	195.8 MMcfe/d
4Q'15 Production	186.1 MMcfe/d
1Q'16E Production	~ 200.0 MMcfe/d
2015 Proved Reserves ⁽²⁾	680.4 Bcfe
2015 PV-10	\$300.7 million
% Liquids	40%
2016 Capex	~ \$15 - \$40 million
Net Acreage ⁽¹⁾	~269,800
Liquids-Rich Drilling Locations	~1,527 gross / 1,110 net

- (1) As of December 31, 2015; does not include certain peripheral non-core acreage
- (2) See note Page 2
- (3) As of March 14, 2016
- (4) As of March 15, 2016

FY2016 Operational Capital Expenditures





FY2016 Operational Capital Expenditures

- Joint development agreement reduces operational capex budget to \$15 \$40 million
- Assumes one drilling rig in the Appalachian Basin
- \$4.8 million well cost in Butler Operated Area for a 5,000' lateral
- \$5.3 million well cost in Butler Operated Area for a 6,000' lateral
- Year-over-year production growth of 5% 10%

Current Capitalization⁽¹⁾



Simple Capital Structure

Senior Secured Credit Facility due 2019

\$190 million borrowing base capacity

Covenant - Net Senior Secured Borrowings /TTM EBITDAX - 3.0x; excludes firm transport letters of credit

\$350 million of 8.875% Senior Notes due 2020

\$325 million of 6.25% Senior Notes due 2022

\$161 million of cumulative perpetual convertible preferred stock

Convertible into 8.9 million shares of common stock (\$18.00 / share)

Convertible after 8/20/2019

Common Shares Outstanding as of 12/31/2015

Basic Shares: 54.1 million

Fully Diluted: 63.3 million (assuming full conversion of Series A preferred stock)

(1) Capital structure to change based on outstanding exchange offering



Company Overview





Proved Reserves Growth (Bcfe)



■ Oil and NGLs ■ Natural Gas

Year	Proved Reserves (Bcfe) ⁽¹⁾	% Proved Developed	PV-10 (Millions) ⁽¹⁾	Drill-Bit F&D (\$/Mcfe)	All-In F&D (\$/Mcfe)
2015	680.4	95%	\$300.7	\$1.28	(\$0.32)
2014	1,336.8	44%	\$1,205.2	\$0.67	\$1.13
2013	849.8	42%	\$668.7	\$0.91	\$1.46

Butler Operated Area Midstream Capacity



 285 MMcf/d of total current processing capacity at MarkWest facilities

Processing Capacity

Firm Transportation

> Ethane Sales

> > C3+ Sales



- Incl. 130 MMcf/d of Gulf Coast transportation to begin Nov. 2016
- Incl. 50 MMcf/d of TGP FT to Stn.219
- Incl. 35 MMcf/d of NFG FT
- Access and sales arrangements on three ethane outlets
 - Mariner East 2,000 bbls/d (Feb, 2016)
 - ATEX pipeline currently 6,000 bbls/d to Enterprise Product Partners
 - Mariner West NOVA Chemicals pipeline – currently 2,000 bbls/d
- Marketed by MarkWest
- Rex selling 2,000 bbls/d of C3 & 1,000 bbls/d of C4 in 1Q 2017 on ME2
- Evaluating additional take-in-kind opportunities



Utica Midstream Providers

Warrior

North

Warrior

South



- Acreage dedication to Blue Racer Midstream
- Processing capacity at Natrium facility (Blue Racer)
- ~14 MMcf/d of residue gas firm transportation
- Access to Mariner East I pipeline for ethane volumes
- Access to Blue Racer super system to sell residue gas to the premium Mid-West markets

- Acreage dedication to MarkWest Energy
- Processing capacity of ~25 MMcf/d at Seneca facility
- ~30 MMcf/d of residue gas firm transportation



Source: Publicly available press releases or presentations



Over 1,500 gross liquids-rich drilling locations as of December 31, 2015 based on 650 foot spacing in the Appalachian Basin assets⁽²⁾

Area	Gross Identified Locations ⁽²⁾	Net Identified Locations ⁽²⁾	EUR ⁽¹⁾⁽³⁾⁽⁴⁾	Net Resource Potential ⁽⁴⁾⁽⁵⁾
Legacy Butler Operated Area – Marcellus	466	326	~14.4 Bcfe	3.7 Tcfe
Legacy Butler Operated Area – Upper Devonian	484	339	~14.4 Bcfe	3.8 Tcfe
Moraine East	454	371	~15.1 Bcfe	5.8 Tcfe
Ohio Utica- Warrior North	87	60	~9.0 Bcfe	0.8 Tcfe
Ohio Utica – Warrior South	36	14	~7.2 Bcfe	0.2 Tcfe
Total	1,527	1,110	N/A	14.3 Tcfe



(5) Net resource potential after royalties and non-operated interests

- (1) See note on Hydrocarbon Volumes on page 3
- (2) See Note on Potential Drilling Locations on page 3
- (3) Assumes 5,000' in Appalachian Basin
- (4) Assumes 55% ethane recovery

Legacy Butler Operated Area



Legacy Butler Operated Area: Marcellus & Upper Devonian⁽¹⁾



Field Highlights

- Contiguous acreage position that is only 11 mi. in length and 6 mi. wide
- Average lateral length is ~4,200'
- Currently have 135 wells placed into sales:
 - 2 Utica wells
 - 10 Upper Devonian wells
 - 123 Marcellus wells
- Recent 5 day average wellhead inlet of 195 MMcf/day
- MarkWest provides gas gathering and processing services with current capacity of 285 MMcf/day
 - Bluestone III commissioned in 4Q15

Acreage & Inventory				
Total Gross / Net Acres	~ 83,560/ ~ 60,100			
Average Working Interest	~70%			
Gross / Net Identified Potential Drilling Locations ⁽²⁾⁽³⁾	950 / 665			
Current Well Spacing (Lateral Feet)	650'			

- (1) All production results are on a per well basis
- (2) See note on Potential Drilling Locations on page 3
- (3) Includes Burkett well counts from the Legacy Butler Operated Area

Moraine East Area



2015 HBO / HBP 2016 - 2017 HBO / HBP **Fleeger 2 Pad** 57 **Renick Pad** BRADY **Fleeger Pad Gray Pad** SUHMI

- Completed drilling the first 16 wells in Moraine East
- Completed 12 of the 16 wells by year end 2015
- Average lateral length of first 16 wells ~ 6,200'
- Provided initial test rates on four-well Renick pad
 - Average 24-hour IP test rate of 8.3 MMcfe/d
 - 57% liquids with average condensate rate of 80 bbls/d
- Stonehenge pipeline commissioned in 1Q16
- \$175 million joint exploration and development agreement with Benefit Street Partners L.L.C. ("BSP")
 - BSP to fund 15% of first 16 wells in Moraine East
 - BSP will earn 15% assignment in Moraine East for all acreage within each unit
 - After initial commitment, approximately 30% of Moraine East acreage held by production

24 Hour IP Test Rate					
Well	Formation	Natural Gas (Mcf/d)	NGLs (Bbls/d)	Condensate (Bbls/d)	Total (Mcfe/d)
Renick 2H	Marcellus	2,945	580	47	6,708
Renick 3H	UD Burkett	3,496	675	101	8,154
Renick 4H	Marcellus	3,848	758	85	8,901
Renick 5H	Marcellus	4,238	822	86	9,687
Average		3,632	709	80	8,362

Acreage & Inventory				
Total Gross / Net Acres	~ 52,800			
Average Working Interest	100%			
Gross / Net Identified Potential Drilling Locations ⁽²⁾	454 / 371			
Current Well Spacing (Lateral Feet)	650'			



	Improving Well Design in Butler County						
	4.0 Bcfe	5.3 Bcfe	~7.0 Bcfe	~9.7 Bcfe EUR (80% ethane recovery)	~11.7 Bcfe EUR (80% ethane recovery)	~15.6 Bcfe EUR ⁽¹⁾ (80% ethane recovery)	
	EUR	EUR	EUR	~8.9 Bcfe EUR (55% ethane recovery)	~10.7 Bcfe EUR (55% ethane recovery)	~14.4 Bcfe EUR (55% ethane recovery)	
	Year-End 2010	Year-End 2011	Year-End 2012	Year-End 2013	Year-End 2014	Year-End 2015	
Completion	Conventional Frac	Conventional Frac	Reduced Cluster Spacing	Reduced Cluster Spacing	Reduced Cluster Spacing	Reduced Cluster Spacing	
Gross Average 30 Day Wellhead Gas IP (Mcf/d)	2,070	2,235	3,142	3,175	3,683	4,736	
First Year Decline	66%	66%	54%	50%	48%	44%	
Lateral Length	3,500'	3,500'	4,000'	4,000'	5,000'	5,000'	
Stages / Spacing	12 / 300'	12 / 300'	27 / 150'	27 / 150'	33 / 150'	33 / 150'	
Frac Sand #/Ft	~1,000#/ft	~1,300 #/ft	~1,500 #/ft	~1,800 #/ft	~2,000-2,200 #/ft	~2,200-2,500 #/ft	
All-in Costs	~\$4.7 million	~\$5.3 million	~\$6.5 million	~\$5.9 million	~\$5.7 million	~\$4.8 million	

(1) 15.6 Bcfe EUR reflective of \$50/bbl Oil, \$3.00/MMBtu gas.

(2) EUR reflects gross volumes





All-In well cost for 6,000' lateral = \$5.3 million

Marcellus Economics⁽¹⁾





		YE2015		Moraine East Estimated	
All-In Well	Cost	\$4.8 million		\$5.3 million	
Lateral Leng	ţth	5,0)00'	6,000'	
EUR, Bcfe, 80% & 55% C2		15.6	14.4	16.4	15.1
F&D Cost, \$	F&D Cost, \$/Mcfe		\$0.33	\$0.32	\$0.35
IRR ^{(3),(4)}	\$3.00 NYMEX \$50.00 WTI	21%		20	5%
	Strip Pricing ⁽⁵⁾	17%		20%	
Avg. 30-day (MMcfe/d)	sales rate	4.0	- 6.0	4.0	- 6.0

- (1) See note on Hydrocarbon Volumes and disclaimers at beginning of presentation.
- (2) Economics reflect $\approx 55\%$ ethane recovery.
- (3) Historical price differentials applied to Condensate. Futures differentials applied for gas production for all scenarios.
- (4) Net back price for C3+ 2016: \$15.06, 2017: \$15.41, 2018: \$16.52, 2019: \$17.39, 2020: \$17.95 // C2: 2016: \$7.25, 2017: \$8.23, 2018: \$8.82, 2019: \$9.59, 2020+: \$9.59 for strip case.
- (5) Strip pricing as of 12/31/15 Oil: 2016: \$40.97, 2017: \$46.08, 2018: \$49.39, 2019: \$51.99, 2020+: \$53.66 // Gas: 2016: \$2.50, 2017: \$2.79, 2018: \$2.91, 2019: \$3.03, 2020+: \$3.18

Firm Transport and Processing Capacity



Appalachian Basin Processing Capacity						
Butler Warrior Warrior Area North South						
Current Reserved Processing Capacity (Mcf/d)	180,000	25,000	20,000	225,000		
Interruptible Processing Capacity			15,000	15,000		
Bluestone III Incremental Capacity (Expected PIS 4Q15)	105,000			105,000		
Total Processing Capacity	285,000	25,000	35,000	345,000		



Ohio Utica: Warrior Prospects





Recent Developments

- Drilled and completed three-well Kiko pad
 - Expected to be placed into sales in 1Q16
- Placed into sales three-well Jenkins pad in Warrior North
 - 5-day sales rate of ~1.6 Mboe/d; ~72% liquids
 - 30-day sales rate of ~1.3 Mboe/d; ~72% liquids
- Joint exploration and development agreement with Benefit Street Partners ("BSP")
 - BSP will fund 65% of six wells in Warrior North
 - BSP will earn a 20% assignment for all acreage within each unit they participate in

Acreage & Inventory				
Total Net Acres	~ 21,700			
Warrior North Average Working Interest	~ 100%			
Warrior South Average Working Interest	~ 63%			
Gross / Net Identified Potential Drilling Locations	123 / 74			
Current Assumed Wells Spacing (Lateral Feet)	650'			

Warrior North Prospect Economics⁽¹⁾





		Base case 2016	Upside Curve
All-in Well	Cost	\$7.1 million	\$7.2 million
Lateral Len	gth	6,500'	6,700'
EUR	EUR		2.0 MMBOE
F&D Cost		\$4.84/BOE	\$3.66/BOE
IRR ^{(3),(4)}	\$3.00 NYMEX \$50.00 WTI	14%	29%
	Strip Pricing ⁽⁵⁾	10%	18%
Avg. 30-day (MBOE/d)	y sales rate	0.5 - 1.0	0.7 – 1.2

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Warrior South Prospect Economics⁽¹⁾



Assumes 55% ethane recovery⁽²⁾



		Base case 2016	Upside Curve
All-in Well	Cost	\$7.6 million	\$7.6 million
Lateral Len	gth	5,000 feet	5,000 feet
EUR		1.2 MMBOE	1.46 MMBOE
F&D Cost		\$6.33/BOE	\$5.19/BOE
IRR ^{(3),(4)}	\$3.00 NYMEX \$50.00 WTI	4%	21%
	Strip Pricing ⁽⁵⁾	2%	12%
Avg. 30-day (MBOE/d)	y sales rate	2.0 - 2.5	2.3 - 2.8

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Appendix



Illinois Basin – Conventional Oil





Recent Developments

- Net production from operated assets was ~1,800 bbls/d
- Premium pricing NYMEX minus ~ \$2.50
 - Selling into local markets

Illinois Basin Overview	
Total Net Acres	~79,700
Average Working Interest	100%

Marcellus – Non Operated Overview



Non Operated – Westmoreland County, PA



Non Operated – Clearfield / Centre Counties



Non-Operated Overview

- Sizable acreage position in Westmoreland, Clearfield and Centre Counties, PA
 - ~ 25,400 gross / ~ 10,200 net
- Combined average production for a recent 5-day period 36.6 MMcf/d
- 7.0 gross MMcf/d firm capacity with interruptible takeaway into Columbia gas line in Clearfield/Centre Counties

Acreage	
Total Net Acres	~10,200
Average Working Interest	40%

- (1) Includes non-operated area acreage only
- (2) Well information in gross

Butler Operated Area – Stacked Pays



