

ANNUAL MEETING

May 16, 2018

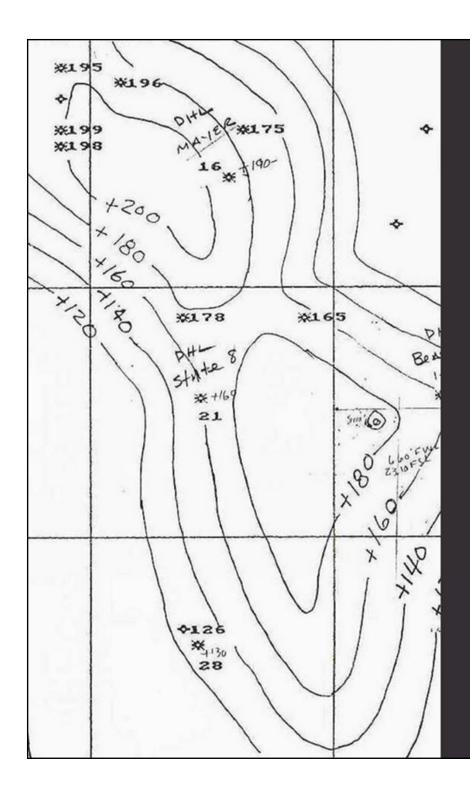






Forward-Looking Statements

Portions of this document may constitute, and our officers and representatives may from time to time make, "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words such as: "anticipate", "intend", "plan", "goal", "seek", "believe", "project", "estimate", "expect", "strategy", "future", "likely", "may", "should", "will" and similar references to future periods. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, such statements are subject to certain risks, uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated or projected. Therefore, you should not rely on any of these forward-looking statements. Examples of such uncertainties and risks include, but are not limited to, changes in the price or demand for oil and natural gas, changes in the operations on or development of the Partnership's properties, changes in economic and industry conditions and changes in regulatory requirements (including changes in environmental requirements) and the Partnership's consolidated financial position, business strategy and other plans and objectives for future operations. These and other factors are set forth in the Partnership's filings with the Securities and Exchange Commission. Any forward-looking statement made by us in this document is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.



OUTLINE

- Observations and Trends
- Distributions
- Minerals NPI Activity
- Production and Reserves
- Property Discussion





Observations and Trends

Increased Volatility Based on Many Factors

- Production Volumes
 - Pad Operations → Drilling & Completion
 - Midstream challenges
- Cash Flow and Distributions
 - Wide range of ownership %
 - Timing → First pays and prior period adjustments
 - Lease bonuses and leasehold sales

Permian Basin Activity is Driving Results

- Midland Basin
 - Transitioning to development mode → some delineation remains
 - Optimization of lateral lengths and well completion
- Delaware Basin
 - Still in delineation mode → current activity will define the eastern boundary in Winkler County
 - Consolidation of operatorship may temper rig count

Active Portfolio Management

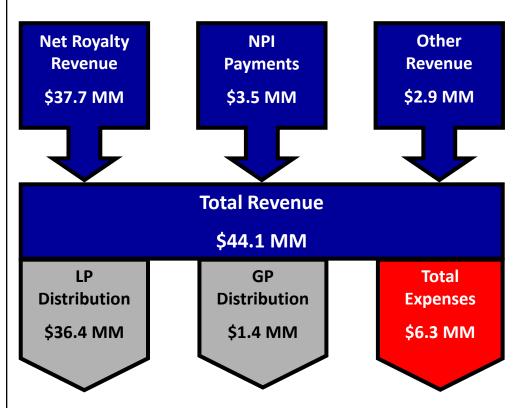
- Maximizing asset value while pursuing accretive acquisitions
- Demands on partnership resources → people and time

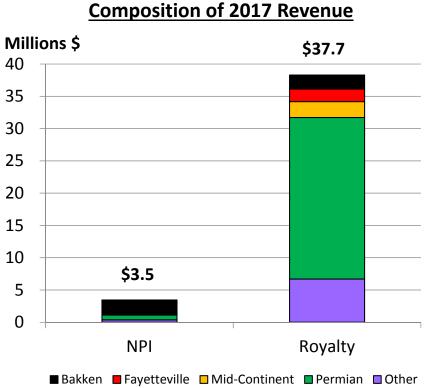


2017 Distributions

Cash Distributions Paid in Calendar 2017

• Reflects Q4 2016 to Q3 2017 activity



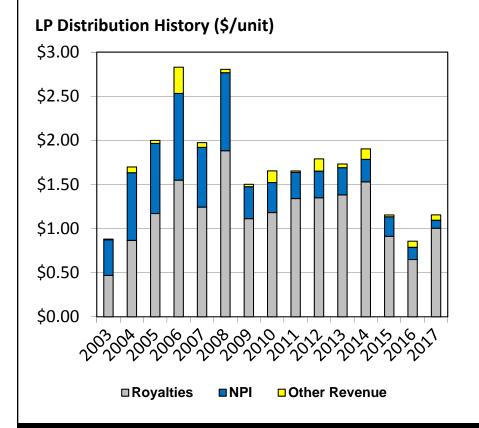


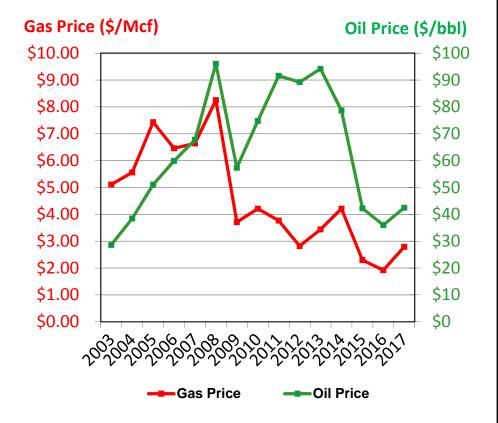


2017 Distributions

Components and Prices

- Royalty properties contributed 85% to total 2017 LP distributions
- Gross Revenue → 67% oil & liquids sales, 26% gas sales, 7% other



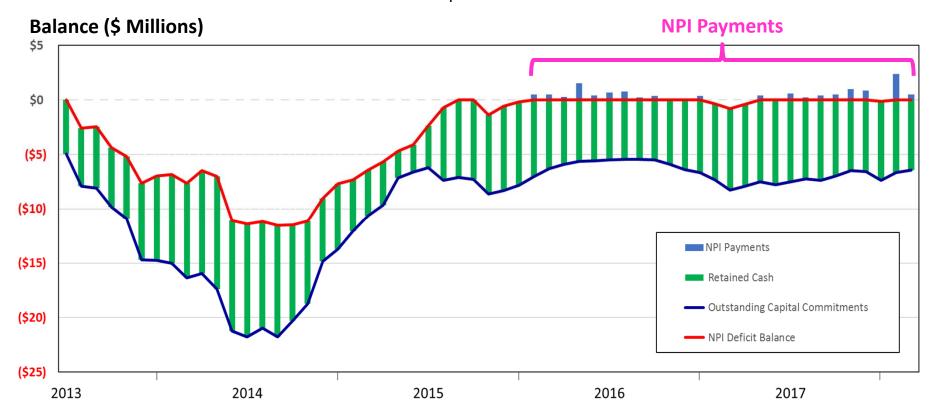




Minerals NPI

Activity from August 2013 through March 2018

- Reached surplus in September 2015 for the first time since July 2013
- NPI Payments to DMLP for trailing 12 months through March 2018 total \$6.9MM
- NPI deficits in 2017 due to new Bakken capital commitments





Minerals NPI

Trailing 12 Months Activity through March 2018

• Trailing 12 months operating margin of 65%

Trailing 12 Months Revenue	\$17.7 MM
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Trailing 12 Months Expenses (LOE, taxes, etc.) (\$6.2 MM)

Trailing 12 Months Net Operating Income \$11.5 MM

Trailing 12 Months NPI Payments

\$6.9 MM

Outstanding Capital Commitments

By Play	
Bakken	(\$ 6.3 MM)
Other Basins	(\$ 0.2 MM)
Total Capital Commitments	(\$ 6.5 MM)

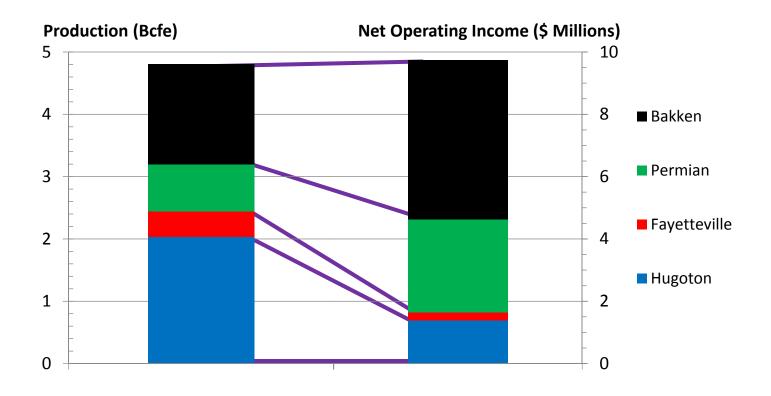
By Status	
Wells in Pay Status	(\$ 3.4 MM)
Wells not in Pay Status	(\$ 3.1 MM)
Total Capital Commitments	(\$ 6.5 MM)



2017 NPI Net Operating Income

NPI contributions to distributions are not proportionate to production

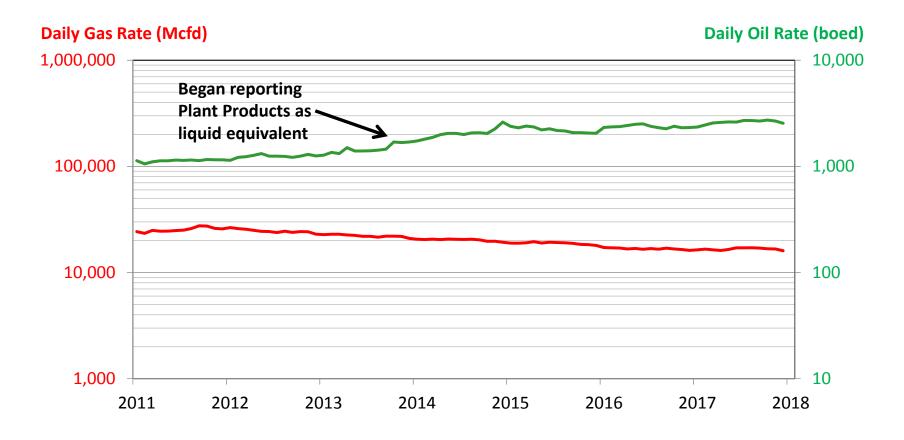
- Oil from Permian and Bakken represent the majority of Net Operating Income
- Natural gas from Fayetteville and Hugoton are much smaller contributors due to lower margins





Total Production

- Oil trend volatility affected by NPI contributions
- Gas decline is due to reduced activity in dry gas basins





Royalty and NPI Production

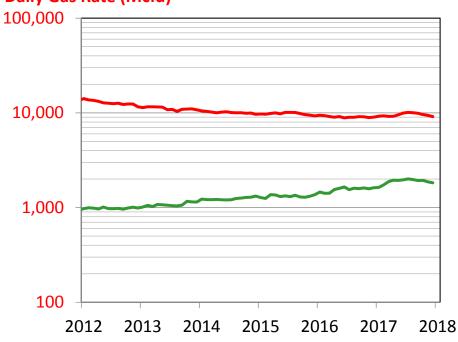
Royalty Production

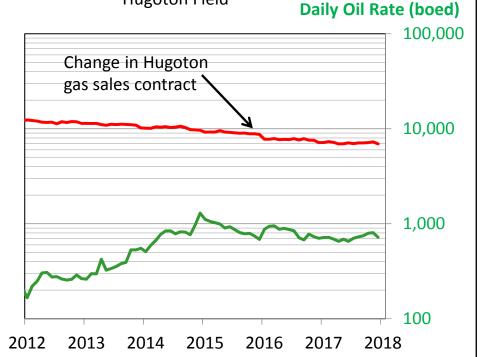
- Oil largely driven by robust Midland Basin development
- Gas decline is suppressed by associated gas from Bakken and Permian

NPI Production

- Oil was driven by Bakken participation and recent contributions from Permian APO interests
- Gas production is dominated by Hugoton Field

Daily Gas Rate (Mcfd)



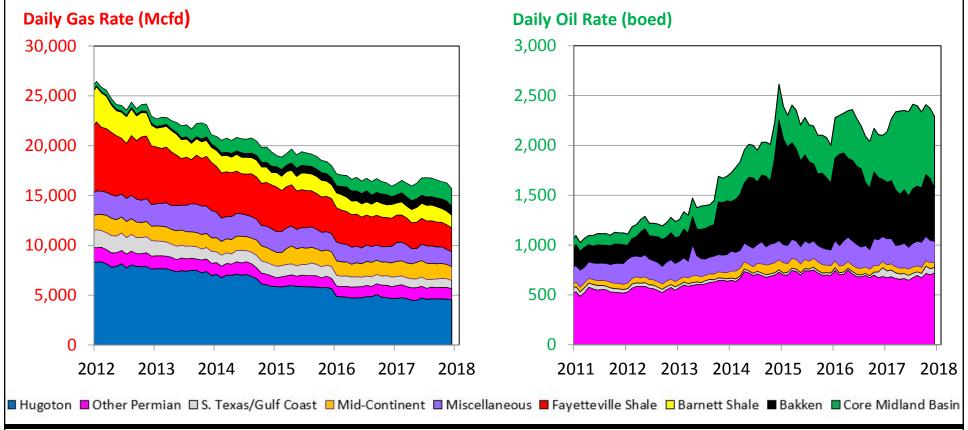




Composition of Production

Contribution from Diverse Sources

- New plays have replaced declines in legacy assets
- Opportunities for production growth in mature basins



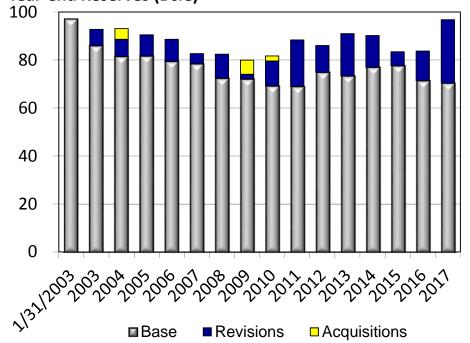


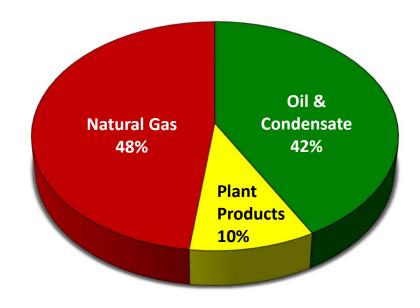
2017 Reserves

Total Proved Reserves of 96.8 Bcfe on 12/31/2017

- All reserves are Proved Developed Producing (PDP)
- Demonstrated history of positive revisions → new plays, infill drilling, and new technology
- Oil and Plant Product volumes exceed 50% of total reserves in 2017
- Over 40% of Plant Product volumes from the Permian Basin

Year-end Reserves (Bcfe)

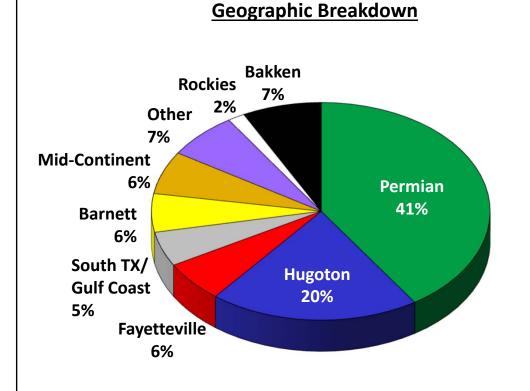




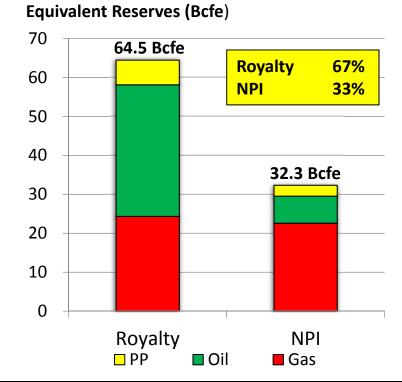


2017 Reserve Composition

- Permian and Bakken comprise 80% of total oil reserves
- Hugoton and Fayetteville comprise 48% of total gas reserves



Royalty-NPI Split

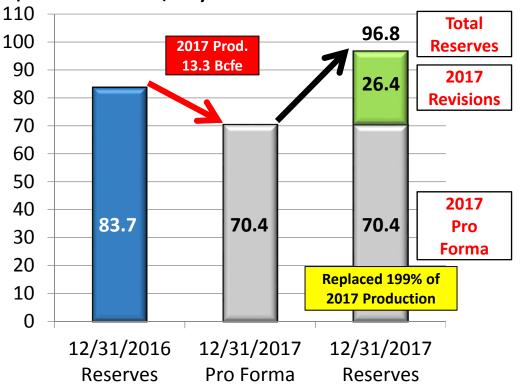




2017 Reserve Revisions

- Midland Basin was a major driver of upward oil revisions
- Extended economic limits and Permian activity supported gas reserves

Equivalent Reserves (Bcfe)



Natural Gas Reserves (Bcf)			
Year-End 2016	41.2		
2017 Production	(6.5)		
Revisions	12.2		
Year-End 2017 46.9			
14% Year-over-year Increase			
Replaced 188% of Gas Production			

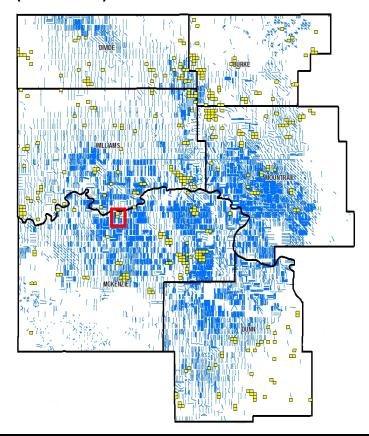
Oil Reserves (Mboe)		
Year-End 2016	7,092	
2017 Production	(1,133)	
Revisions	2,352	
Year-End 2017 8,311		
17% Year-over-year Increase		
Replaced 208% of Oil Production		



Bakken/Three Forks

- 70,390 gross ac (8,905 net ac) in six core ND counties
- Majority of mineral interests are unleased
- Year-end 2017 PDP reserves of 1.16 MMboe (RI & WI)

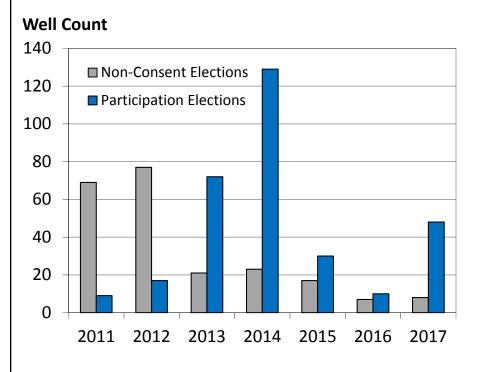
	Well Count	Average APO GWI	Average APO NRI
Completed/Producing	683	1.892%	1.920%
Drilling/DUC/Confidential	22	1.638%	1.703%
Permitted AND Proposed	6	2.033%	2.033%
Permitted NOT Proposed	10	6.726%	6.993%
Total	721	1.953%	1.985%



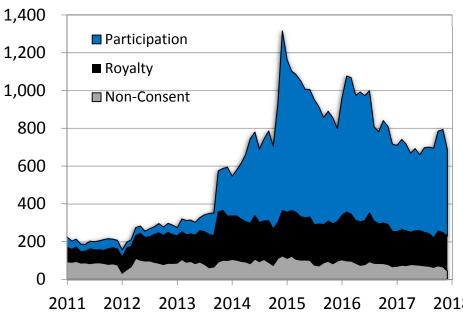


Bakken/Three Forks

- 2017 exit rate → 686 boed (73% NPI)
- 13 wells producing but not yet in pay
- 7 participation elections YTD 2018
- Rig count increased from 51 in May 2017 to 60 in May 2018



Daily Production (boed)





Bakken/Three Forks

McKenzie County Example

- 320 gross ac (104 net ac)
- Average NRI → 3.960%
- Participated with unleased interest

Continental Resources

1) Uhlman-Pittsburgh Unit (16 wells)

2,633 ac Spacing Unit

Uhlman 1-7H (1st Prod 2014) → EUR: 1.0 MMboe

3 new wells → 1st Prod April 2018

Potential Development Plan:

Producing Wells

Remaining Locations 16

6

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Permitted not spud 10

32 potential locations @ 660' offsets in MB & TF

Continental Resources

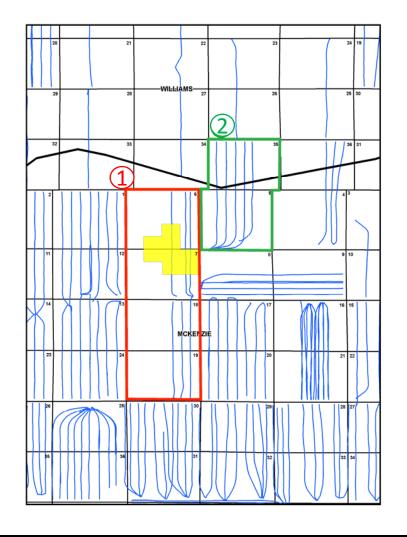
2) Garfield Unit (5 wells)

First well in 2013, 4 additional wells in June 2017

3 Middle Bakken wells & 2 Three Forks wells

Average IP (peak) → 1,588 boed

Produced 1.3 MMboe since June 2017

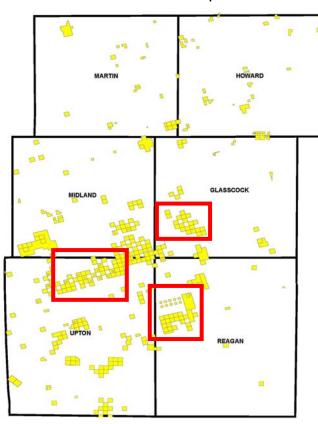




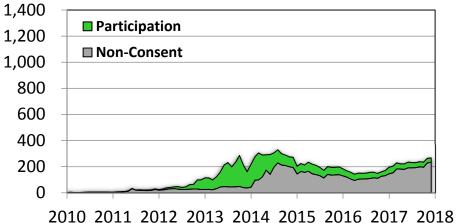
Midland Basin

Wolfcamp/Spraberry

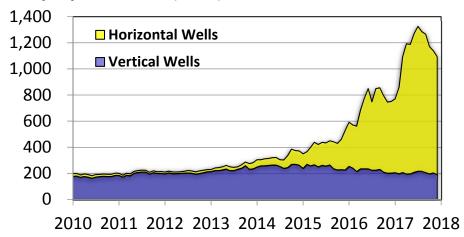
- 248,580 gross ac (15,430 net ac)
- Unleased at some depths in numerous tracts



NPI Production (boed)



Royalty Production (boed)



Note: Production graphs limited to "in pay" volumes from Glasscock, Howard, Martin, Midland, Reagan, and Upton Counties. Net acreage includes multiple interest types. 19



Midland Basin

Glasscock County Example

- 10,240 gross ac (1,120 net ac) with an average NRI of 1.688%
- Horizontal activity on 8 of 16 sections

RSP Permian

1) Calverley 9-4 (17 wells)

13 wells producing (all in pay) – 4 permits

Cumulative 28 month production → 7,921,000 boe

2) Calverley 22-27 (8 wells)

4 wells producing (all in pay) – 4 wells spud Cumulative 10 month production → 633,000 boe

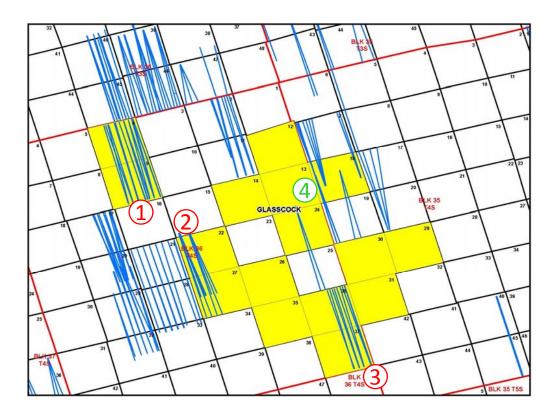
3) Calverley 37-36 (8 wells)

2 wells producing (not in pay) – 2 wells spud – 4 permits

Diamondback

4) Riley & Tomahawk (20 wells)

9 wells producing (all in pay) – 11 permits Cumulative 25 month production → 2,057,000 boe



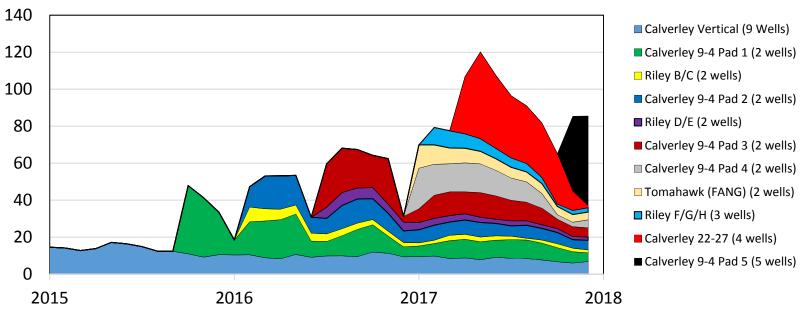


Midland Basin

Glasscock County Example (con't)

- Calverley Area → RSP Permian and Diamondback Energy
- Production profile representative of pad development

Daily Production (boed)





Midland Basin

Reagan County Example

- 22,331 gross ac (3,502 net ac)
- "Bolt-Under" acquisition Increased Northwestern Reagan County acreage position by 63%
- Waiting on results of recent Wolfcamp C activity

Parsley Energy

1) Bates (12 wells)

12 wells producing (all in pay)
Cumulative 22 month production → 1,741,000 boe

2) Ringo (20 wells)

20 wells producing (17 in pay) Cumulative 52 month production \rightarrow 3,207,000 boe

3) Brynlee (5 wells)

2 wells producing (all in pay) – 3 wells spud Cumulative 26 month production → 569,000 boe

Pioneer Natural Resources

4) Ringo-Bird (3 wells)

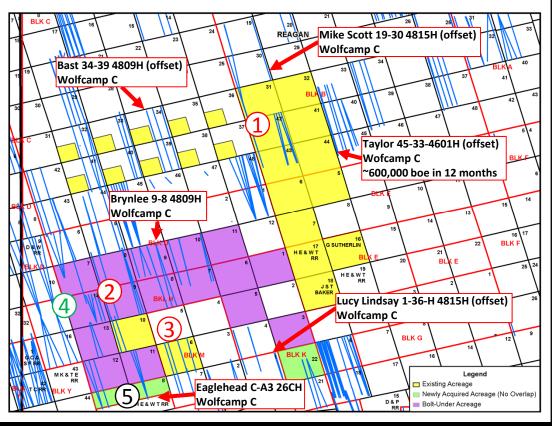
3 wells producing (all in pay)

Cumulative 9 month production \rightarrow 494,000 boe

Callon Petroleum

5) Eaglehead (8 wells)

2 wells producing (not in pay) – 3 wells spud – 3 permitted Cumulative 8 month production \rightarrow 254,000 boe





Midland Basin

Northern Upton County Example

- Leased at all depths in 9,372 gross ac (428 net ac)
- Unleased at various depths in 12,899 gross ac (500 net ac)
- DMOLP has backed-in with full APO interest in 37 horizontal wells
- 22 additional horizontal wells have been spud but have not reached payout

Parsley Energy

1) JRS Farms 22-27 (6 wells)

6 wells producing (4 in pay)
Average NRI → 2.094% (unleased, APO)
Cumulative 15 month production → 1,375,000 boe
Payout periods ranged from 4 to 12 months

2) Sebastian 19-30 (8 wells)

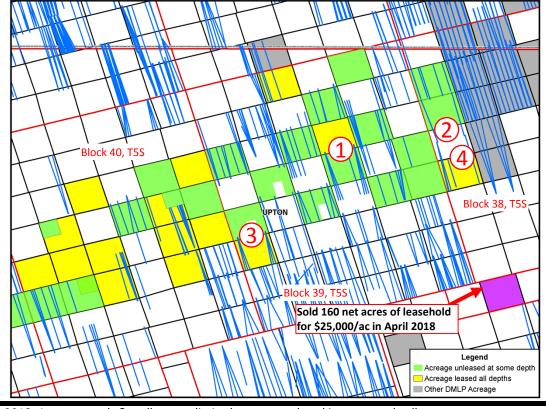
4 wells producing (all in pay) – 4 wells spud Average NRI → 0.807% Average IP – 1,472 boed (83% oil) Cumulative 5 month production → 418,000 boe

3) Louis (6 wells)

6 wells producing (all in pay) Average NRI \rightarrow 6.250% Cumulative 24 month production \rightarrow 1,129,000 boe

4) Sebastian 19-18 (6 wells)

3 wells spud – 3 permits Average NRI → 16.250% (unleased)

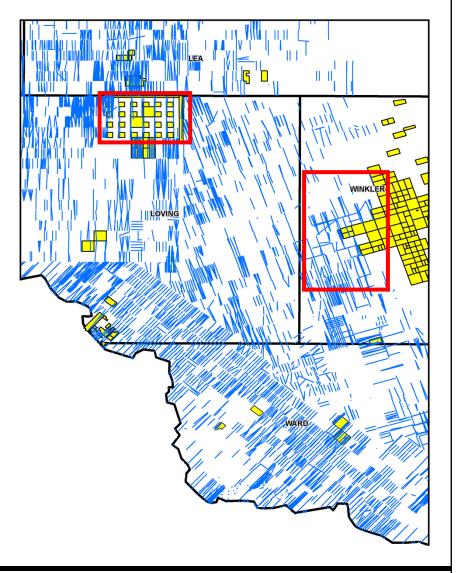




Delaware Basin

Wolfcamp / Bone Springs

- 13,538 gross ac (911 net ac) located in Loving, Reeves and Ward counties, Texas and Lea County, New Mexico
- 640 gross ac of ORRI's
- Majority of tracts are leased at 1/4 royalty
- Prospective in multiple zones within the Wolfcamp and Bone Springs plays
- Eastern extension will determine Dorchester's exposure in Winkler County, if any





Delaware Basin

Loving County Example

- 9,948 gross ac (398 net ac)
- 21 new wells permitted YTD 2018

Anadarko Petroleum

1) Silvertip (33 wells)

Average NRI → 0.570%

15 wells producing (13 in pay)

17 wells drilling/WOC

1 well permitted not spud

Cumulative 15 month production → 2,363,000 boe

10 wells spud in one stand-up 640-acre unit

Sold 48 net acres of leasehold for \$30,000/ac in 2017

XTO Energy

2) St. Lucia/Kitts/John (38 wells)

Average NRI → 0.352%

5 wells producing (3 in pay)

7 wells drilling/WOC

26 wells permitted not spud

St. Lucia 76 2833 11H produced 467,000 boe in 20 months

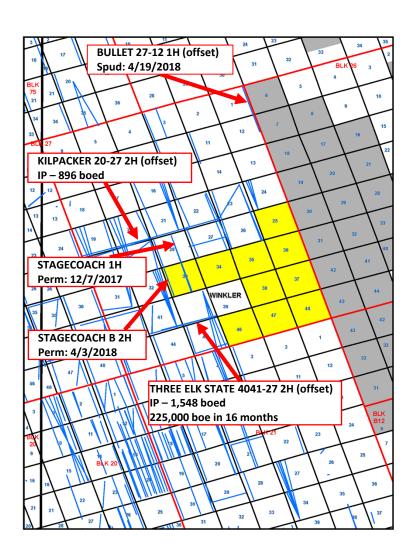




Delaware Basin

Winkler County Example

- Wolfcamp / Bone Springs
- Varying undivided mineral interests in 6,400 gross acres in Block 27
- 90% leased/HBP with average NRI of 8.940%
- Recent activity has extended the prospective limits of the Basin to the east
- Ongoing leasehold acquisition campaigns
- Operators are Felix, Mewbourne, Oasis, RSP Permian and XTO
- Current activity contiguous to DMLP position
 - 2 wells producing
 - 18 wells spud/WOC
 - 12 wells permitted not spud (2 on DMLP tracts)
- No clear timeline for confirmation of this area's productivity





APPENDIX



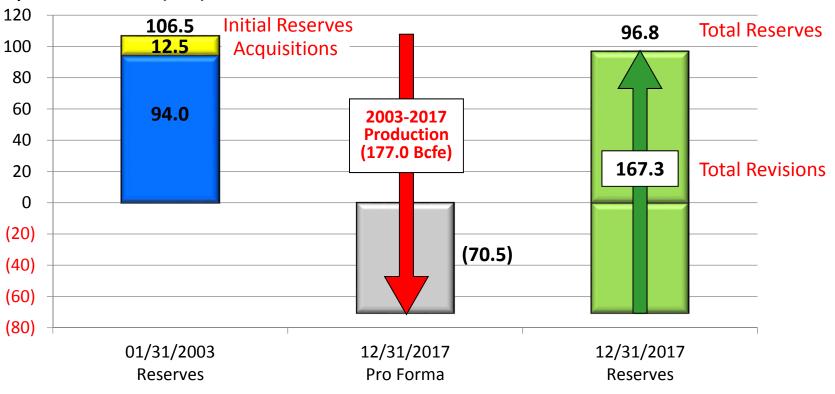


2017 Reserves

History of Positive Reserve Revisions

• Cumulative Reserve Revisions have exceeded 100% of Current Reserves

Equivalent Reserves (Bcfe)

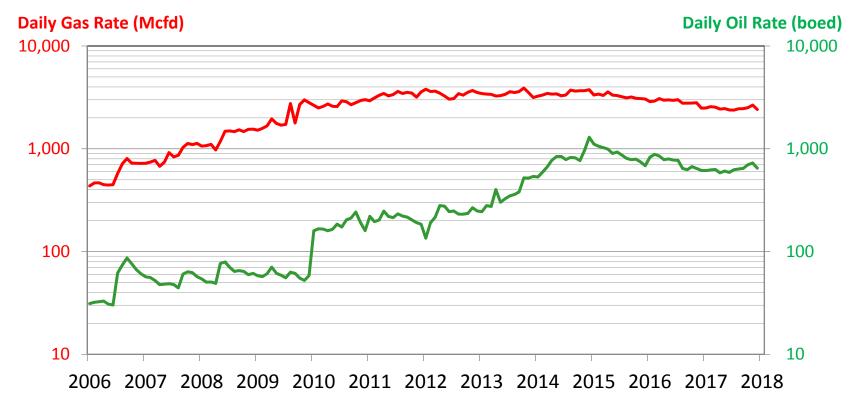




Minerals NPI

Production by Product

- Added 91 new wells in 2017 located in North Dakota, Oklahoma, and Texas
- Gas production has declined since 2012, but oil production has increased by over 250%
- Bakken Participations & Permian Payouts activity led to oil increase in 2017

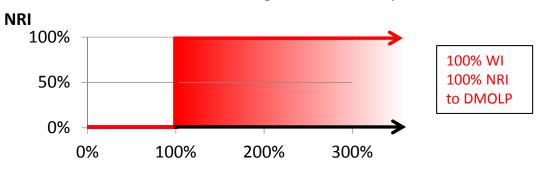




Non-Consent/Non-Participation

Texas

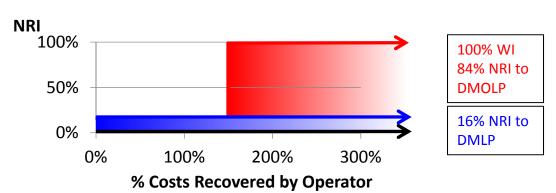
• Unleased mineral owner backs in for full working interest after operator recovers 100% of costs



North Dakota

% Costs Recovered by Operator

• Unleased mineral owner receives 16% royalty and backs in for full working interest after operator recovers 150% of costs





Non-Consent/Non-Participation

Texas

• Unleased mineral owner backs in for full working interest after operator recovers 100% of costs

Selected Texas Counties	Total N/C Well Count	Paid Out Well Count	Average BPO NRI	Average APO NRI
Howard	17	4	0.000%	2.235%
Ector	67	32	0.000%	12.290%
Gaines	16	7	0.000%	3.991%
Midland	80	28	0.000%	3.341%
Upton	205	115	0.000%	3.069%
Total	385	186	0.000%	4.732%

North Dakota

• Unleased mineral owner receives 16% royalty and backs in for full working interest after operator recovers 150% of costs

Selected North Dakota Counties	Total N/C Well Count	Paid Out Well Count	Average BPO NRI	Average APO NRI
Burke	25	0	0.031%	0.273%
Divide	39	3	0.240%	1.509%
Dunn	29	4	0.672%	4.216%
McKenzie	78	18	0.221%	1.426%
Mountrail	77	17	0.585%	3.511%
Williams	97	14	0.469%	2.857%
Total	345	56	0.398%	2.454%

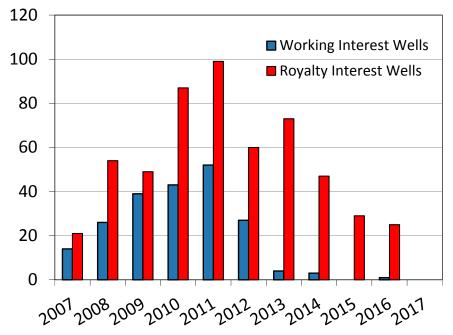


Fayetteville Shale

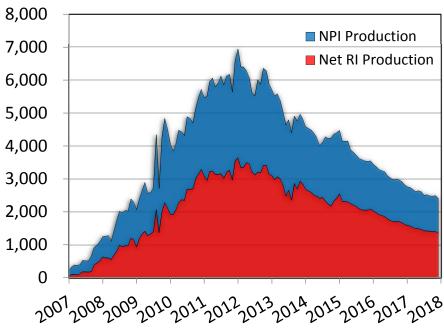
Eastern Arkoma Basin

- 23,336 gross ac (11,464 net ac) in 196 sections
- 476 wells producing at year-end
- 2017 exit rate → 2.4 MMcfd (44% WI)
- No new wells on DMLP acreage in 2017

New Wells on Production



Daily Production (Mcfd)

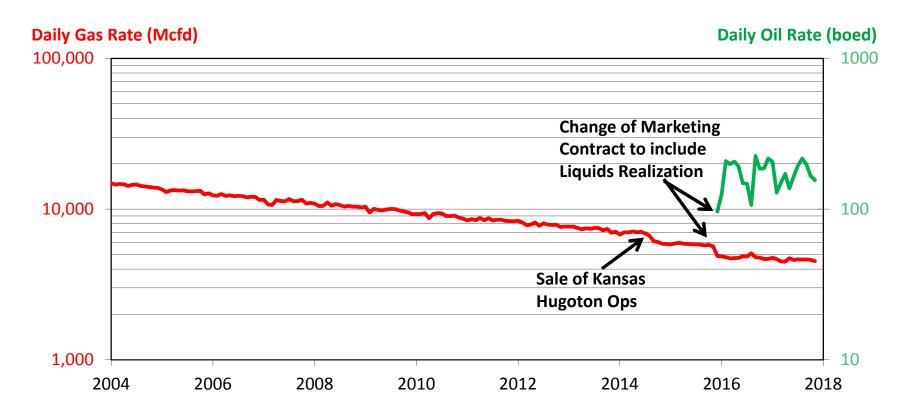




Hugoton Operated Properties

Hugoton Field – Oklahoma Panhandle

- Divested Kansas operations in Sept 2014 average net sales of 2.8 MMcfd
- Ongoing well optimization and cost-saving initiatives, but limited upside potential

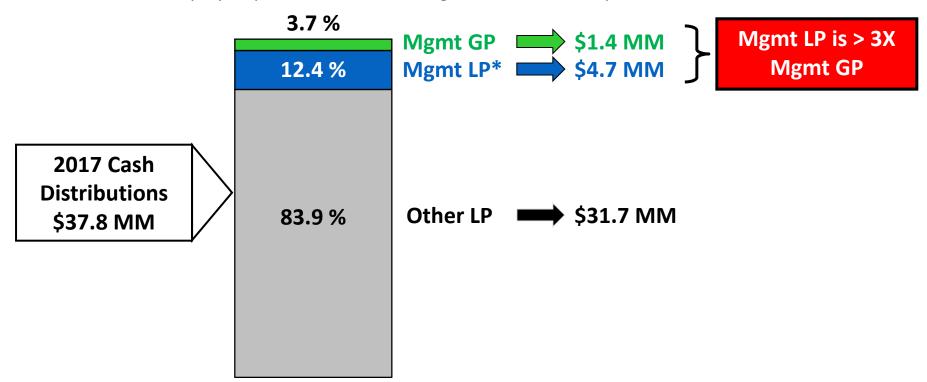




Management Ownership

Alignment of GP and LP interests

- GP has no incentive distribution rights fixed sharing ratio
- Management's LP interest exceeds its GP interest
- Not incentivized to make dilutive transactions
- DSD Royalty Acquisition increased Management's LP ownership





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