# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

#### FORM 8-K

## CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE

#### **SECURITIES EXCHANGE ACT OF 1934**

Date of report (Date of earliest event reported): March 1, 2017

#### LAREDO PETROLEUM, INC.

(Exact Name of Registrant as Specified in Charter)

Delaware 001-35380 45-3007926

(State or Other Jurisdiction of Incorporation or Organization)

(Commission File Number)

(I.R.S. Employer Identification No.)

15 W. Sixth Street, Suite 900, Tulsa, Oklahoma

74119

(Address of Principal Executive Offices)

(Zip Code)

Registrant's telephone number, including area code: (918) 513-4570

#### Not Applicable

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

#### Item 7.01. Regulation FD Disclosure.

On March 1, 2017, Laredo Petroleum, Inc. (the "Company") posted to its website a Corporate Presentation (the "Presentation"). The Presentation is available on the Company's website, www.laredopetro.com, and is attached to this Current Report on Form 8-K as Exhibit 99.1 and incorporated into this Item 7.01 by reference.

All statements in this Item 7.01 and the Presentation, other than historical financial information, may be deemed to be 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. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance, and actual results or developments may differ materially from those in the forward-looking statements. See the Company's Annual Report on Form 10-K for the year ended December 31, 2016 and the Company's other filings with the SEC for a discussion of other risks and uncertainties. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

In accordance with General Instruction B.2 of Form 8-K, the information furnished under this Item 7.01 of this Current Report on Form 8-K and the exhibit attached hereto are deemed to be "furnished" and shall not be deemed "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, nor shall such information and exhibit be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

#### Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description	
99.1	Presentation dated March 1, 2017.	

#### **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

#### LAREDO PETROLEUM, INC.

Dated: March 1, 2017 By: /s/ Richard C. Buterbaugh

Richard C. Buterbaugh

Executive Vice President and Chief Financial Officer

EXHIBIT INDEX

Exhibit Number Description

99.1 Presentation dated March 1, 2017.



#### Forward-Looking / Cautionary Statements

This presentation, including any oral statements made regarding the contents of this presentation, contains forward-looking statements within the meaning of Section 27A of the Securities Exchange Act of 1934, 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 that address activities, events or developments that Laredo Petroleum, Inc. (together with its subsidiaries, the "Company", "Laredo" or "IPC)" assumes, plans, expects, believes or anticipates will or may occur in the future are forward-looking statements. The words "believe," "expect," "may," "estimates," "will," "anticipate," "plan," "project," "intend," "indicator," "foresee," "forecast," "guidance," "should," "would," "could," "goal," "target," "suggest" or other similar expressions are intended to identify forward-looking statements, which are generally not historical in nature and are not guarantees of future performance. However, the absence of these words does not mean that the statements are not forward-looking. Without limiting the generality of the foregoing, forward-looking statements contained in this presentation specifically include the expectations of plans, strategies, objectives and anticipated financial and operating results of the Company's drilling program, production, hedging activities, capital expenditure levels and other guidance included in this presentation. These statements are based on certain assumptions made by the Company based on management's expectations and perception of historical trends, current conditions, anticipated future developments and rate of return and other factors believed to be appropriate. Such statements are subject to a number of assumptions, risks and uncertainties, many of which are beyond the control of the Company, which many cause actual results to differ materially from those implied or expressed by the forward-looking statements. These includer risks relating to financial performance

Any forward-looking statement speaks only as of the date on which such statement is made and the Company undertakes no obligation to correct or update any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by applicable law.

The SEC generally permits oil and natural gas companies to disclose proved reserves in filings made with the SEC, which are reserve 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 and certain probable and possible reserves that meet the SEC's definitions for such terms. In this presentation, the Company may use the terms "unproved reserves," "resource potential," "estimated ultimate recovery," "EUR," "development ready," "horizontal productivity confirmed," "horizontal productivity not confirmed" or other descriptions of potential reserves or volumes of reserves which the SEC guidelines restrict from being included in filings with the SEC without strict compliance with SEC definitions. "Unproved reserves" refers to the Company's internal estimates of hydrocarbon quantities that may be potentially discovered through exploratory drilling or recovery techniques. "Resource potentially is used by the Company to refer to the estimated quantities of hydrocarbons that may be added to proved reserves, largely from a specified resource play potentially supporting numerous drilling locations. A "resource play" is a term used by the Company to describe an accumulation of hydrocarbons known to exist over a large areal expanse and/or thick vertical section potentially supporting numerous drilling locations, which, when compared to a conventional play, typically has a lower geological and/or commercial development risk. The Company does not choose to include unproved reserve estimates in its filings with the SEC. "Estimated ultimate recovery", or "EUR", refers to the Company's internal estimates of per-well hydrocarbon quantities that may be potentially recovered from a hypothetical and/or actual well completed in the area. Actual quantities that may be ultimately recovered from the Company's interests are unknown. Factors affecting ultimate recovery include the scope of the Company's o

This presentation includes financial measures that are not in accordance with generally accepted accounting principles ("GAAP"), including Adjusted EBITDA. While management believes that such measures are useful for investors, they should not be used as a replacement for financial measures that are in accordance with GAAP. For a reconciliation of Adjusted EBITDA to the nearest comparable measure in accordance with GAAP, please see the Appendix.



- Grew production 11% in 2016 and funded drilling program with operating cash flow
- Increased proved developed reserves organically by approximately 40% at a PD F&D cost of \$5.12 per BOE
- Reduced LOE 37% during 2016 with 4Q-16 unit LOE decreasing to \$3.56 per BOE
- Decreased leverage from 3.3x net debt/TTM Adj. EBITDA in 1Q-16 to 2.9x at YE-2016



#### **Prior Investments Creating Value**

- Multi-zone, contiguous acreage position enabling development efficiencies
  - 2016 average completed lateral length of ~10,000' driving higher rates of return
- Data powering the multivariate Earth Model
  - Increasing UWC & MWC type curves as a result of long-term production outperformance from multivariate Earth Model optimized drilling and completions
  - Most recent well results currently averaging ~36% higher than the new 1.3 MMBOE type curve
- Production corridors lowering operating costs
  - Production corridors benefited LOE by \$0.51/BOE in the fourth quarter of 2016
- Medallion-Midland Basin system growing transported volumes
  - Medallion-Midland Basin system more than <u>doubled</u> delivered volumes in 2016 and is expected to grow >75% exit-to-exit in 2017

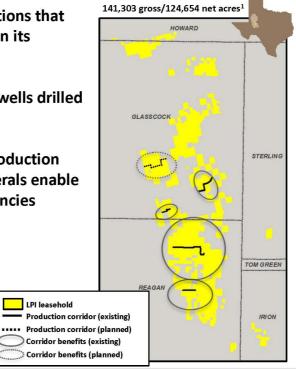
Prior strategic investments and continuous performance improvements yield repeatable benefits



#### **Capitalizing on Contiguous Acreage Position**

- The company has identified >2,000 locations that support lateral lengths of 10,000+ feet on its contiguous acreage
- The expected average lateral length for wells drilled in 2017 will be ~10,000 feet
- Centralized infrastructure in multiple production corridors and the ability to drill long laterals enable increased capital and operational efficiencies

~85% of acreage HBP, enabling a concentrated development plan along production corridors<sup>1</sup>



LPI leasehold

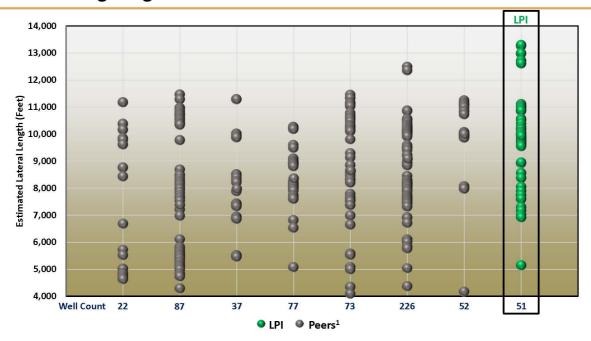


## **Multiple Targeted Horizons**

Hz Wells Drilled	Thickness	OOIP <sup>1</sup>	Identified Landing Points
4	44	44	
2	~415'	90	2 - 3
Harris a	200		
127	~405′	72	2 - 3
61	~620′	69	2-3
30	~520′	69	11
2	~470′	40	1
57	~330′	47	2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2
	~375′	41	1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2
1	1-1-	1-1-1	J-1
	127 61 30 2	127 ~405′ 61 ~620′ 30 ~520′ 2 ~470′ 57 ~330′	127 ~405' 72 61 ~620' 69 30 ~520' 69 2 ~470' 40 57 ~330' 47



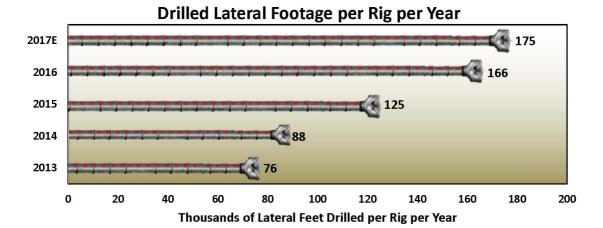
## **Peer-Leading Long-Lateral Execution**



## Contiguous acreage position enables drilling of longer laterals



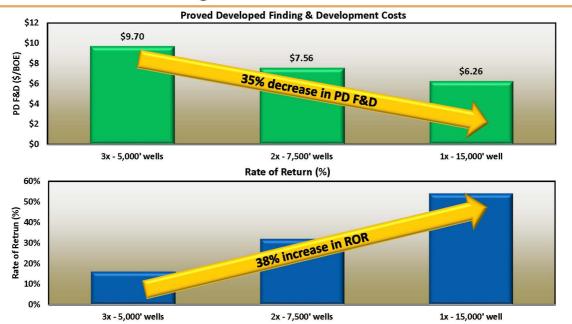
<sup>1</sup> Peers: Callon, Diamondback, Encana, Energen, Parsley, Pioneer & RSP Permian
Note: Data is from IHS Enerdeq for the period of 01/01/2016 – 12/31/2016 for Glasscock, Howard, Irion, Midland, Reagan and Martin & Upton counties, TX



Significant drilling efficiency improvements realized without material increases in capex per rig, improving capital efficiency



#### **Economic Benefits of Longer Laterals**



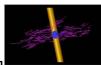
Longer laterals develop equivalent resources for reduced capital, yielding capital efficiency and rate of return improvements

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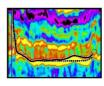


Note: Utilizing 75% NRI and EUR of 1.3 MMBOE per 10,000' lateral (updated type curve as of 2/15/17)
Utilizing flat benchmark of WTI: \$56.10/Bbl & HH: \$3.00/Mcf and flat realized pricing of WTI: \$50.49/Bbl, HH: \$2.16/Mcf & NGLs: \$17.95/Bbl

## Laredo's Technology Workflow

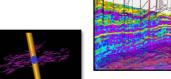












Integration

• Data Collation

• Paradigms

• Prior Knowledge

• New Well Results







**Actions** Predicted Well

- Technology &
- Role of Interference • Optimized Completions
- Optimized Well Spacing Optimized Well Trajectory
- Performance • Ranked Zones
- Ranked Wells
- Holistic Development Plan

#### **Technical Data Sets**

- Production
- Pressure
- Rock properties
- Stress

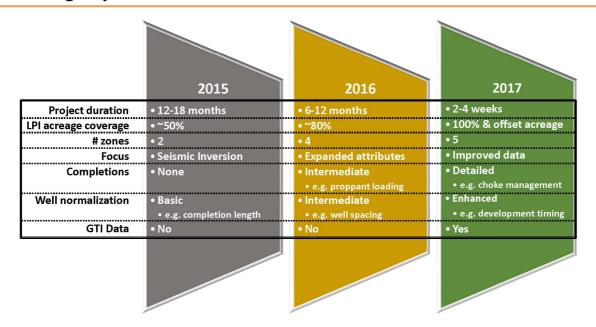
## **Analysis**

- Frac Modeling
- Reservoir Simulation
- Multivariate Analytics

#### Earth Modeling is one of a number of technologies being applied at Laredo to enhance shareholder value



#### **Evolving Beyond the Earth Model**

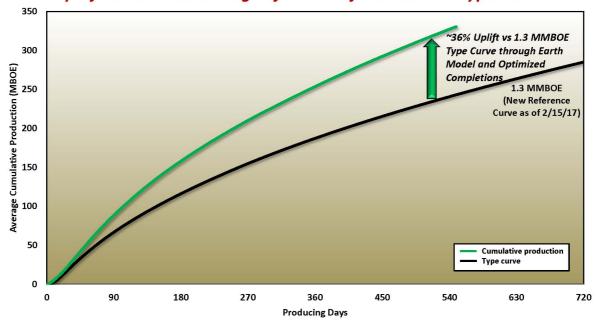


#### Enhanced multivariate analysis of key production drivers



#### **Earth Model and Completion Optimization Benefits**

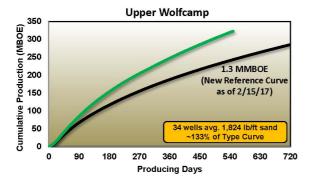
Wells utilizing the Earth Model and optimized completions have performed at an average of ~136% of 1.3 MMBOE Type Curve<sup>1</sup>

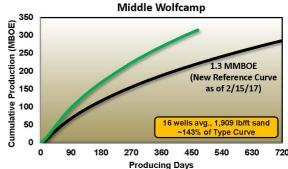


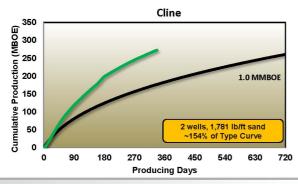


1 Average cumulative production data through 2/6/17. This includes 50 Hz UWC/MWC wells have utilized both the Earth Model and optimized completions with 1,851 lb/ft sand Note: Production has been scaled to 10,000' EUR type curves and non-producing days (for shut-ins) have been removed

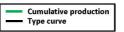
#### **Multivariate Earth Model Enhancing Production**







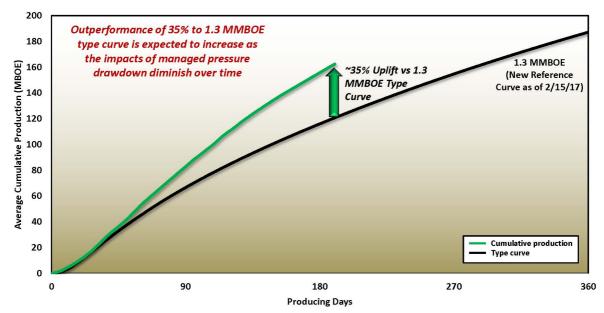
Wells drilled with the Multivariate
Earth Model and optimized drilling and
completions have resulted in significant
outperformance versus the Company's
type curves





Note: Average cumulative production data through 2/6/17. Production has been scaled to 10,000' EUR type curves and non-producing days (for shut-ins) have been removed

#### **Latest Optimization Tests Significantly Exceeding Type Curve**



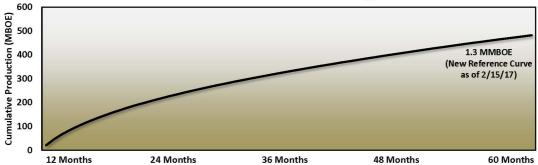
Nine wells utilizing the multivariate Earth Model and optimized drilling and completions with 2,400 lb/ft sand are yielding results significantly greater than type curve



ote: Production through 2/6/2017 for SUGG A 171-172/173, SUGG A 208-209/207, SUGG A 185 utilizing 2,400 lb/ft sand

#### **New UWC & MWC 1.3 MMBOE Cumulative Production Type Curve**





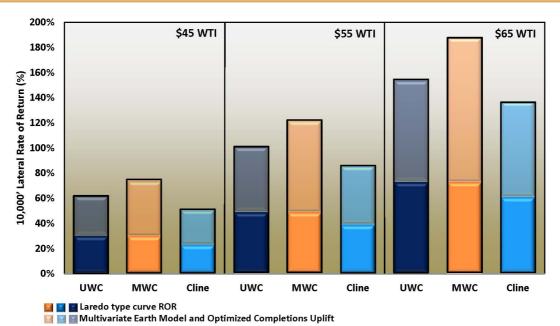
Months	Cumulative Production (MBOE)	Cumulative % Oil
12	189	60%
24	288	56%
36	363	54%
48	426	52%
60	482	51%

Increasing UWC & MWC type curve due to well performance uplifts from the multivariate Earth Model optimized drilling and completions



Note: 10,000' lateral length with 1,800 lb/ft completions

#### Multivariate Earth Model Driving Meaningful Uplift in Returns



Demonstrated performance uplifts in each zone yield significant return improvements



Note: Rate of returns calculated using benchmark prices of WTI: \$45.00/Bbl, \$55.00/Bbl, \$55.00/Bbl, & HH: \$3.00/Mcf, \$3.25/Mcf, \$3.25/Mcf, \$3.50/Mcf and realized pricing of WTI: \$40.50/Bbl, \$49.50/Bbl, \$58.50/Bbl & HH: \$2.16/Mcf, \$2.34/Mcf, \$2.34/Mcf, \$2.52/Mcf & NGIs: \$14.40/Bbl, \$17.60/Bbl, \$20.80/Bbl ROR includes static capital for 10,000' laterals and uplift reflective of current multivariate Earth Model and optimized completions outperformance above type curve by target and can change based on observed performance

#### 2017 Drilling & Completions

- Operating 4 Hz rigs
- Drilling and completing ~70 Hz wells
- ~85% targeting the UWC & MWC
- ~95% average working interest
- Hz wells average ~10,000' lateral length
- Developed as 4-5 well packages

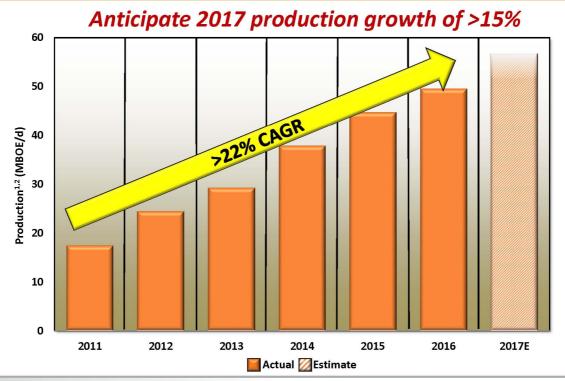


## Over 98% of wells planned for 2017 are expected to be developed as multi-well packages

LAREDO

<sup>1</sup> Does not include acquisitions or investments in Medallion-Midland Basin system

## **Consistent Production Growth**



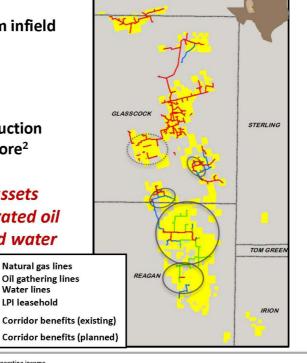


1 Production numbers prior to 2014 have been converted to 3-stream using an 18% uplift. 2014 results have been converted to 3-stream using actual gas plant economics 2011 - 2013 adjusted for Granite Wash divestiture, closed August 1, 2013

#### **Prior Investment in Infrastructure Providing Tangible Benefits**

- ~\$5.5 MM total realized benefits from infield infrastructure in 4Q-161
- ~\$24 MM total benefits for FY-16¹
- ~195 horizontal wells served by production corridors with potential for >2,500 more<sup>2</sup>

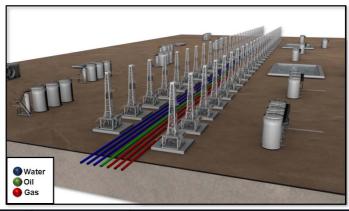
In 4Q-16, Laredo infrastructure assets gathered on pipe 73% of gross operated oil production & 65% of total produced water





1 Benefits defined as capital savings, LOE savings, price uplift and LMS net operating income
2 includes planned Western Glasscock production corridor
Note: Infrastructure includes crude gathering/transportation, water gathering, distribution & recycle, natural gas gathering and centralized gas lift compression

Water lines LPI leasehold ~\$1.3 MM benefit over life of each 10,000' corridor well, with ~25% of the benefit received in the first six months<sup>1</sup>



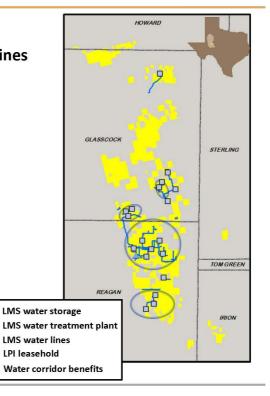
LMS Service	2016 Benefits Actual (\$ MM)	2017 Benefits Estimated (\$ MM) <sup>1</sup>	LPI Financial Benefits
Crude Gathering	\$10.4	\$14.1	Increased revenues & 3 <sup>rd</sup> -party income
Centralized Gas Lift	\$0.9	\$0.9	LOE savings
Frac Water (Recycled vs Fresh)	\$1.1	\$1.8	Capital savings
Produced Water (Recycled vs Disposed)	\$2.0	\$2.4	Capital & LOE savings
Produced Water (Gathered vs Trucked)	\$9.6	\$8.7	Capital & LOE savings
Corridor Benefit	\$24.1	\$27.9	



<sup>1</sup> Benefits estimates as of December 31, 2016

## **Significant Benefits through Water Infrastructure Investments**

- Water infrastructure consists of:
  - 78 miles of total water gathering pipelines
  - Recycling plant capable of processing 30,000 BWPD
  - Linked water storage assets with >5 MMBW capacity
- Enables drilling of multi-well pads
- Yields significant capital and LOE savings
- Minimizes trucking

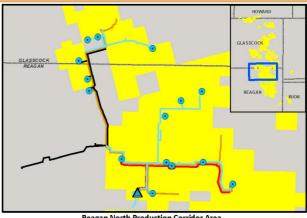




#### **Water Infrastructure Capital and LOE Savings**

- 11.3 MMBW (61%) of total 2016 produced water was gathered on pipe
  - Expected to increase to ~75% in 2017
- 6.3 MMBW (34%) of total 2016 produced water was recycled by LMS
  - Expected to increase to ~57% in 2017
- 4.4 MMBW (15%) of water for completions in 2016 was supplied with recycled water
  - Expected to increase to ~20% in 2017

LNAC Commission	LPI Financial Benefits (2016)			
LMS Service	Category	(\$/BW)	(\$ MM)	
Produced Water (Recycled vs Disposed)	Capital & LOE savings	\$0.32	\$2.0	
Produced Water (Gathered vs Trucked)	Capital & LOE savings	\$0.85	\$9.6	
Frac Water (Recycled vs Fresh)	Capital savings	\$0.26	\$1.1	



Reagan North Production Corridor Area



Laredo's water gathering system displaced ~95,000 truckloads of water in 2016

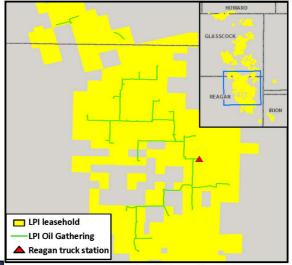


Note: 2017 estimates as of 2/7/2016

#### **LMS Crude Gathering System Benefits**

- 44 miles of crude oil gathering lines
- 7.4 MMBO (64%) of gross operated production in 2016 was gathered on pipe
- Eliminated ~41,000 truckloads of oil in 2016
- Reduces time from production to sales
- Benefits of system increase as trucking costs rise

IMC Comics	LPI Financial Benefits (2016)			
LMS Service	Category	(\$/BbI)	(\$ MM)	
Produced Oil (Gathered vs Trucked)	LMS Operating Income	\$0.57	\$4.3	
Produced Oil (Gathered vs Trucked)	Realized prices	\$0.83	\$6.2	



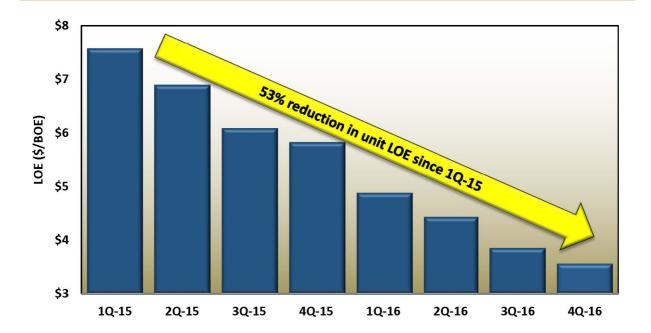
Reagan North Production Corridor Area

LMS is anticipated to gather ~85% of Laredo's gross operated oil production in 2017



Note: 2017 estimates as of 2/7/2016

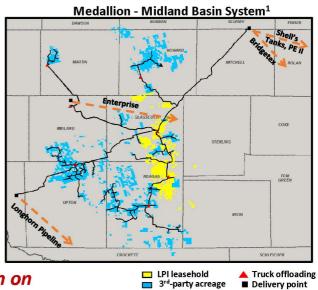
## **Consistent Unit LOE Reduction**





## **Medallion-Midland Basin System**

	YE-15	YE-16
Throughput (MBOPD)	67.6	134.3
Miles of Pipeline	~460	~650²
System Deliverability (MBOPD)	125	550
# of AMI or Firm Commitment Acres	~1.8 MM	~2.0 MM
# of Dedicated Producers	8	10
# of Dedicated or Firm Commitment Acres	>290,000	>520,000



Laredo has firm transportation on Medallion-Midland Basin system to Colorado City and firm transportation of ~30 MBOPD gross to the Gulf Coast



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3rd-party acreage ■ Delivery

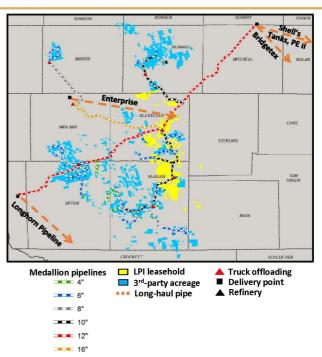
Medallion pipelines ▲ Refinery

Long-haul pipe

#### **Medallion-Midland Basin System Scale**

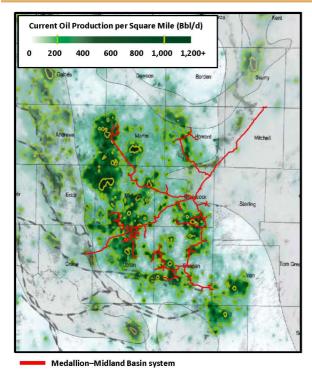
- Majority of system is large-diameter pipe to multiple delivery points
  - 16-inch line to Midland delivery point with 200,000 BOPD capacity
  - 12-inch line to Colorado City delivery point with 150,000 BOPD capacity
  - 12-inch line to Crane delivery point with 150,000 BOPD capacity

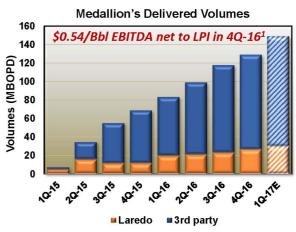
More than 500 miles of the systems' pipelines are 6" or larger, enabling the delivery of ~550,000 barrels of oil to multiple delivery points





## Medallion-Midland Basin: The Premier Pipeline in the Permian





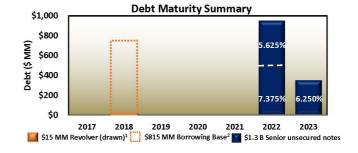
The Medallion-Midland Basin system is expected to grow >75% exit-to-exit in 2017



## **Maintaining Strong Financial Position**

#### Historical Oil Price and Net Debt to Adjusted EBITDA \$75 6.0 Proactively maintaining leverage ratio despite 5.0 \$65 a 33% drop in WTI prices from 4Q-14 to 4Q-16 WTI Price (\$/Bbl) \$55 \$45 3.0 2.0 \$35 1.0 \$25 0.0 4Q-14 1Q-15 2Q-15 3Q-15 4Q-15 1Q-16 2Q-16 4Q-16 3Q-16

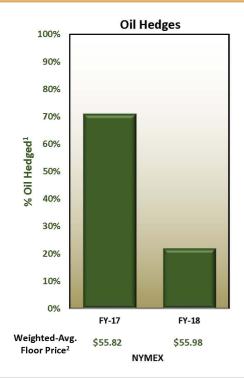
- No term debt due until 2022
  - \$950 million of notes callable at Laredo's option in 2017
- \$824 MM of liquidity<sup>1</sup>

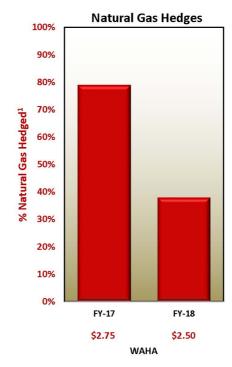




 $^{\rm L}$  As of 2/14/17  $^{\rm 2}$  As of October 2016 redetermination; Medallion interest is not pledged to borrowing base

## **Disciplined Hedging Program**

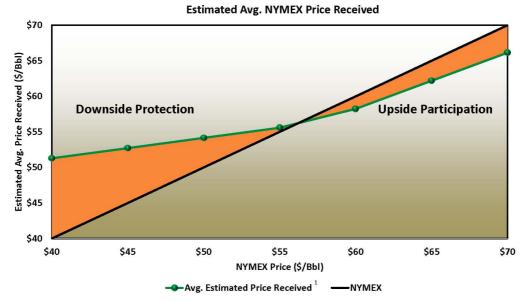




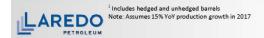
Hedging program provides price protection while retaining substantial upside



1 Utilizing midpoint of current 2016 production for FY-17 and FY-18 percent hedged
2 DI Oil derivatives are settled based on the month's average daily NYMEX price of WTI Light Sweet Crude Oil and natural gas derivatives are settled based on Inside FERC index price for West Texas Waha for the calculation period Note: Does not include 2017 NGL hedges of 444,000 Bbl of ethane or 375,000 Bbl of propane



2017 oil hedges provide significant downside protection while maintaining upside exposure to an increase in the price of oil



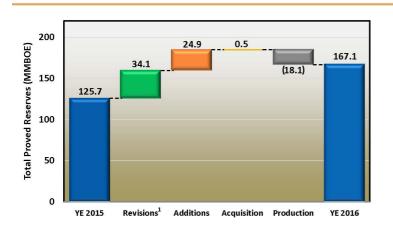
## 2017 Guidance

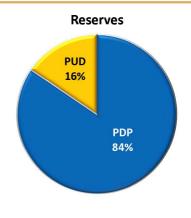
	1Q-17	2Q-17
Production (MBOE/d)	52 - 54	55 - 58
- 1		
Product % of total production:		
Crude oil	44% - 46%	45% - 47%
Natural gas liquids	27% - 28%	*
Natural gas	27% - 28%	*
Price Realizations (pre-hedge):		
Crude oil (% of WTI)	~90%	*
Natural gas liquids (% of WTI)	~32%	*
Natural gas (% of Henry Hub)	~72%	*
Operating Costs & Expenses:		
Lease operating expenses (\$/BOE)	\$3.50 - \$4.00	*
Midstream expenses (\$/BOE)	\$0.20 - \$0.30	*
Production and ad valorem taxes (% of oil, NGL and natural gas revenue)	6.75%	*
General and administrative expenses:		
Cash (\$/BOE)	\$3.35 - \$3.85	*
Non-cash stock-based compensation (\$/BOE)	\$2.00 - \$2.25	*
Depletion, depreciation and amortization (\$/BOE)	\$7.50 - \$8.00	*



\*Will be provided in conjunction with first-quarter 2017 earnings release







# Grew proved developed reserves organically by ~40% at a PD F&D cost of \$5.12 per BOE



Note: Assuming current commodity price environment, service costs and rig cadence as of 2/15/17  $^{1}$  includes reserves from locations developed in 2016 that had previously been booked as PUD reserves but were subsequently removed

## Oil, Natural Gas & Natural Gas Liquids Hedges

OIL <sup>1</sup>	2017	2018
Puts:		
Hedged volume (Bbls)	1,049,375	1,049,375
Weighted average price (\$/Bbl)	\$60.00	\$60.00
Swaps:		
Hedged volume (Bbls)	2,007,500	1,095,000
Weighted average price (\$/Bbl)	\$51.54	\$52.12
Collars:		
Hedged volume (Bbls)	3,796,000	
Weighted average floor price (\$/Bbl)	\$56.92	
Weighted average ceiling price (\$/Bbl)	\$86.00	
Total volume with a floor (Bbls)	6,852,875	2,144,375
Weighted-average floor price (\$/Bbl)	\$55.82	\$55.98

NATURAL GAS <sup>2</sup>		
Put		
Hedged volume (MMBtu)	8,040,000	8,220,000
Weighted average floor price (\$/MMBtu)	\$2.50	\$2.50
Collars:		
Hedged volume (MMBtu)	19,016,500	4,635,500
Weighted average floor price (\$/MMBtu)	\$2.86	\$2.50
Weighted average ceiling price (\$/MMBtu)	\$3.54	\$3.60
Total volume with a floor (MMBtu)	27,056,500	12,855,500
Weighted-average floor price (\$/MMBtu)	\$2.75	\$2.50
NATURAL GAS LIQUIDS <sup>3</sup>		
Swaps - Ethane:		

444,000	
\$11.24	
375,000	
\$22.26	
819,000	
	\$11.24 375,000 \$22.26

34



Note: Open positions as of 01/01/17

Note: Open positions as of 01/01/17

1 Oil derivatives are settled based on the month's average daily NYMEX price of WTI Light Sweet Crude Oil
2 Natural gas derivatives are settled based on Inside FERC index price for West Texas Waha for the calculation period
3 Natural gas liquids derivatives are settled based on the month's daily average of OPIS Mt. Belvieu Purity Ethane and TET Propane

#### **Hydraulic Fracture Test Site (HFTS)**

\$23.1 MM high-profile, joint-industry project led by Laredo and the Gas Technology Institute (GTI)

#### **Laredo's Project Contribution**

- Selected as operator
- Conducted on Laredo's acreage
- No cost to Laredo
- On-time, on-budget
- Strong linkage to completions optimization





In-Progress

 $\checkmark$ 

- Complete
- Slant Well Fracture & Proppant Analysis
- Hydraulic Fracture Modeling
- Fracture Attribute Studies

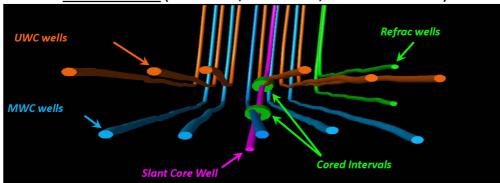
#### **Data Sets Acquired**

- ✓ Drilling, Coring & Logging Slant Well
- ✓ Pilot Hole Logs & Sidewall Cores
- Offset Well Refracs (µ-seismic & tracers)
- Horizontal DFIT's
- **Radioactive Tracers & Fluid Tracers**
- Microseismic Monitoring
- Cross-Well Seismic
- **Surface Seismic Monitoring**
- **Colored Proppant Cluster Indicators**
- Inter-well Pressure Monitoring
- **Fiber Optic Production Logging**
- **Environmental Sampling**
- Oil Fingerprinting / Fluid Sampling



## **Advanced Hydraulic Fracture Data Collected on Laredo Leasehold**

HFTS GTI LAYOUT (6 UWC wells, 5 MWC wells, UWC & MWC refracs)



#### **HYDRAULICALLY FRACTURED CORE**



UWC & MWC

- Natural fractures
- Hydraulic fractures

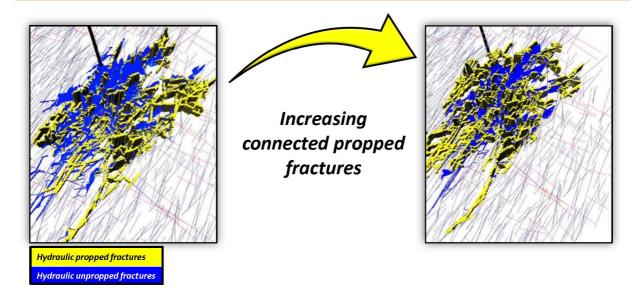
~600 feet recovered

Proppant recovered

Cutting-edge completions data being integrated into the multivariate Earth Model



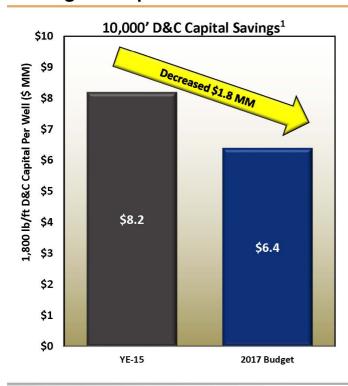
## **Advanced Fracture Modeling**



# Utilizing multivariate Earth Model analysis to optimize completions designs



## **Drilling & Completion Costs**



- Efficiency gains partially offset recent increases in service costs
- D&C capital includes:
  - \$1 MM for 1,800 lb/ft sand
  - Pad preparation
  - Well-site metering
  - Heater treaters
  - Separation equipment
  - Artificial lift equipment

Focused on capital efficient drilling & completion operations



<sup>1</sup> Representative of multi-well pad costs

## Two-Stream to Three-Stream Conversions

		1Q-14	2Q-14	3Q-14	4Q-14	<u>FY-14</u>
	Production (2-Stream)					
0.05	MBOE	2,434	2,607	3,033	3,655	11,729
5	BOE/D	27,041	28,653	32,970	39,722	32,134
늉	% oil	58%	58%	59%	60%	59%
Production	Production (3-Stream)					
의	MBOE	2,902	3,113	3,614	4,330	13,959
ш,	BOE/D	32,358	33,829	38,798	46,379	37,882
	% oil	49%	49%	50%	51%	50%
	2-Stream Prices					
130	Gas (\$/Mcf)	\$7.04	\$6.08	\$5.80	\$4.46	\$5.72
:≣	Oil (\$/Bbl)	\$91.78	\$94.47	\$87.65	\$65.05	\$82.83
Realized Pricing	Avg. Price (\$/BOE)	\$71.17	\$70.13	\$65.78	\$49.70	\$64.62
eg	3-Stream Prices					
<u>=</u>	Gas (\$/Mcf)	\$4.00	\$3.73	\$3.25	\$3.00	\$3.45
e e	NGL (\$/Bbl)	\$32.88	\$28.79	\$29.21	\$19.65	\$27.00
ш,	Oil (\$/Bbl)	\$91.78	\$94.47	\$87.65	\$65.05	\$82.83
	Avg. Price (\$/BOE)	\$59.70	\$58.80	\$55.41	\$41.94	\$52.81
	2-Stream Unit Cost Metrics					
	Lease Operating (\$/BOE)	\$8.95	\$7.74	\$8.30	\$8.04	\$8.23
	Midstream (\$/BOE)	\$0.35	\$0.59	\$0.40	\$0.50	\$0.46
-91	General & Administrative (\$/BOE)					
[일.	Cash	\$9.58	\$8.88	\$6.89	\$4.25	\$7.07
ŧ	Non-cash stock-based compensation	\$1.78	\$2.46	\$2.04	\$1.70	\$1.97
Σ	DD&A (\$/BOE)	\$20.38	\$20.35	\$21.08	\$21.85	\$21.01
Unit Cost Metrics	3-Stream Unit Cost Metrics					
Š	Lease Operating (\$/BOE)	\$7.48	\$6.55	\$7.05	\$6.88	\$6.98
三	Midstream (\$/BOE)	\$0.29	\$0.50	\$0.34	\$0.43	\$0.39
⊃	General & Administrative (\$/BOE)					
	Cash	\$8.05	\$7.44	\$5.78	\$3.59	\$5.94
	Non-cash stock-based compensation	\$1.48	\$2.06	\$1.72	\$1.43	\$1.65
	DD&A (\$/BOE)	\$17.03	\$17.23	\$17.91	\$18.72	\$17.83



Note: 2014 conversion based on management estimates. Utilizes an 18% volume uplift, for converting from 2-stream to 3-stream volume:

#### 2015 & 2016 YTD Actuals

		<u>1Q-15</u>	<u>2Q-15</u>	<u>3Q-15</u>	<u>4Q-15</u>	FY-15	1Q-16	<u>2Q-16</u>	<u>3Q-16</u>	<u>4Q-16</u>	<u>FY-16</u>
Production	Production (3-Stream) MBOE BOE/D % oil	4,274 47,487 51%	4,234 46,532 46%	4,124 44,820 45%	3,714 40,368 45%	16,346 44,782 47%	4,204 46,202 48%	4,338 47,667 46%	4,718 51,276 46%	4,889 53,141 46%	18,149 49,586 47%
Realized Pricing	3-Stream Prices Gas (\$/Mcf) NGL (\$/Bbl) Oil (\$/Bbl) Avg. Price (\$/BOE)	\$2.14 \$13.34 \$41.73 \$27.64	\$1.82 \$12.85 \$50.77 \$29.65	\$2.01 \$10.36 \$42.88 \$25.37	\$1.76 \$11.06 \$36.97 \$22.47	\$1.93 \$11.86 \$43.27 \$26.41	\$1.31 \$8.50 \$27.51 \$17.40	\$1.31 \$12.24 \$39.37 \$23.64	\$2.07 \$11.54 \$39.10 \$24.34	\$2.13 \$14.79 \$43.98 \$27.82	\$1.73 \$11.91 \$37.73 \$23.50
Unit Cost Metrics	3-Stream Unit Cost Metrics Lease Operating (\$/BOE) Midstream (\$/BOE) General & Administrative (\$/BOE) Cash Non-cash stock-based compensation DD&A (\$/BOE)	\$7.58 \$0.37 \$3.99 \$1.12 \$16.83	\$6.90 \$0.38 \$3.99 \$1.49 \$17.03	\$6.09 \$0.26 \$3.89 \$1.67 \$16.19	\$5.83 \$0.43 \$4.29 \$1.75 \$18.01	\$6.63 \$0.36 \$4.03 \$1.50 \$16.99	\$4.88 \$0.14 \$3.73 \$0.90 \$9.87	\$4.43 \$0.27 \$3.32 \$1.41 \$7.88	\$3.85 \$0.22 \$3.49 \$2.05 \$7.45	\$3.56 \$0.26 \$3.28 \$1.98 \$7.68	\$4.15 \$0.22 \$3.45 \$1.61 \$8.17



## **EBITDA Reconciliation**

LPI Adjusted EBITDA	4Q-16	FY 2016
(in thousands)		A District Control
Net income	\$ (18,421)	\$ (260,739)
Plus:		
Depletion, depreciation and amortization	\$ 37,526	\$ 148,339
Impairment expense	\$ -	\$ 162,027
Non-cash stock-based compensation, net of amounts capitalized	\$ 9,667	\$ 29,229
Accretion of asset retirement obligations	\$ 896	\$ 3,483
Mark-to-market on derivatives:		
(Gain) loss on derivatives, net	\$ 43,642	\$ 87,425
Cash settlements received for matured derivatives, net	\$ 37,655	\$ 195,281
Cash settlements received for early termination derivatives, net	\$ -	\$ 80,000
Cash premiums paid for derivatives	\$ (2,697)	\$ (89,669)
Interest expense	\$ 23,004	\$ 93,298
Write-off debt issuance costs	\$ -	\$ 842
Loss on disposal of assets, net	\$ 411	\$ 790
Income from equity method investee	\$ (3,144)	\$ (9,403)
Proportionate Adjusted EBITDA of equity method investee(1)	\$ 6,386	\$ 20,367
Adjusted EBITDA	\$ 134,925	\$ 461,270
<sup>1</sup> Medallion Adjusted EBITDA	40.16	FY 2016
(in thousands)	4Q-16	F1 2016
Income from equity method investee	\$ 3,144	\$ 9,403
Adjusted for proportionate share of:		
Depreciation and amortization	\$ 3,242	\$ 10,964
Proportionate Adjusted EBITDA of equity method investee	\$ 6,386	\$ 20,367

