2018 Partner Forum

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FUNDING THE UNIVERSITY OF TEXAS AND TEXAS A&M UNIVERSITY SYSTEMS SINCE 1839

April 25, 2018

DoubleTree – Midland, TX

Today's Key Takeaways

- **Staff changes – increased focus on technical and land expertise**
  - TOGI dissolved and incorporated into UL
- **Full-field development the major emphasis**
  - Focus on long-term consistent development
  - Provides for more predictable planning and logistics
  - Pursuing "scalable" water and sand development options
  - Technical staff fully focused on evaluation of UL assets!
- **Land**
  - Lease Sale – September
  - Evaluating agreements to ensure effective performance
  - Pursuing synergistic trades and swaps
- **UL exploring non-o&g assets - water, sand, sun & wind**
- **Increased focus on the environment, particularly emissions**

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A Long Road…

- Oil and Gas Prices –
  - February 2016, Lease Sale 126: **$29.04/bbl - $1.99/MMBTU**
  - 1st Forum, week of March 3, 2016: **$34.57 - $1.73/MMBTU**
  - 2nd Forum, week of March 9, 2017: **$49.28 - $3.10/MMBTU**
  - Yesterday, April 24, 2018: $**68.92/bbl - $2.75/MMBTU**
- Returns?

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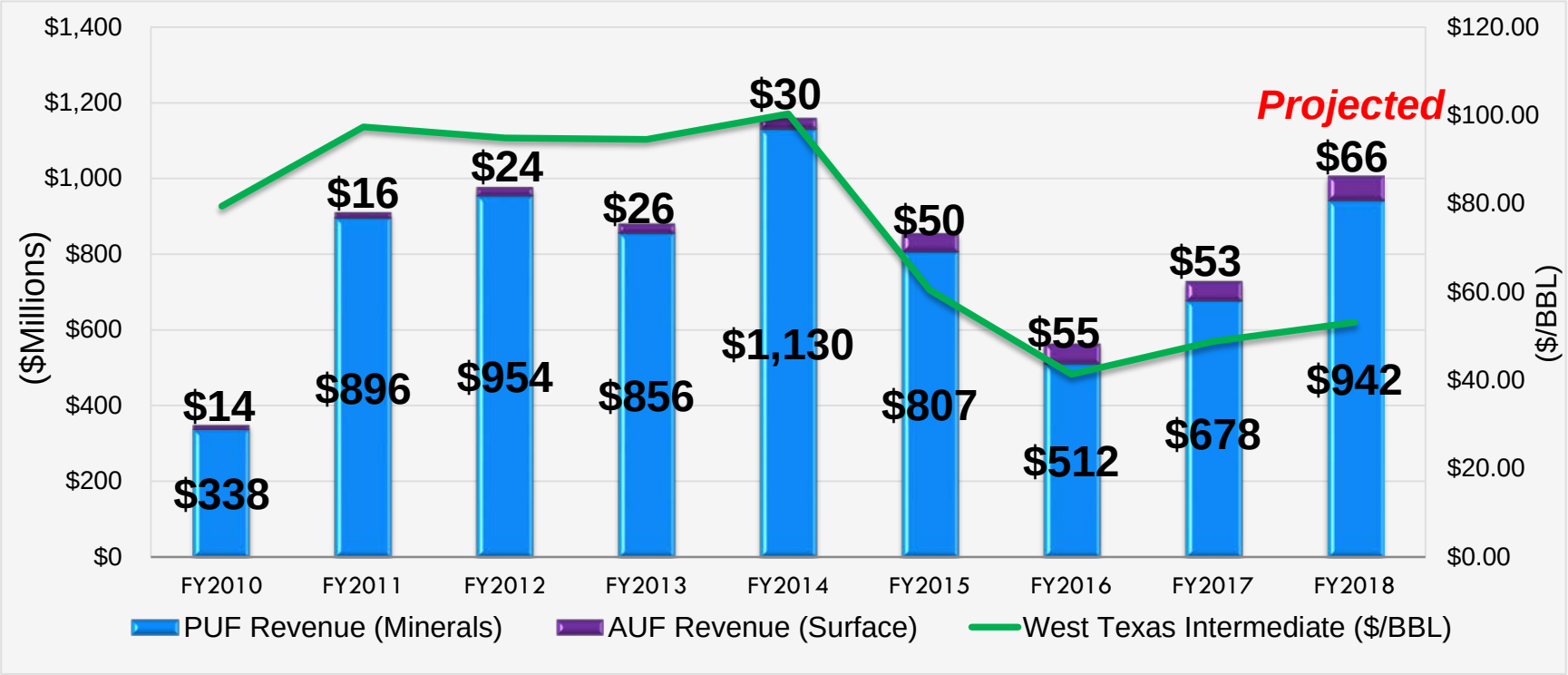
UL Revenue: The Permanent University Fund (PUF) and Available University Fund (AUF)



AUF Revenues come from surface activities such as grazing, water, wind, solar, vineyard, etc. AUF funds are available in year generated to UT System (2/3) and A&M System (1/3).

PUF Revenues come primarily from oil and gas royalties, which average 20%. ~4 - 7% of PUF Market Value is distributed annually to UT System (2/3) and A&M System (1/3)

PUF MARKET VALUE, DEC. 2017: $21B

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UL Organizational Structure

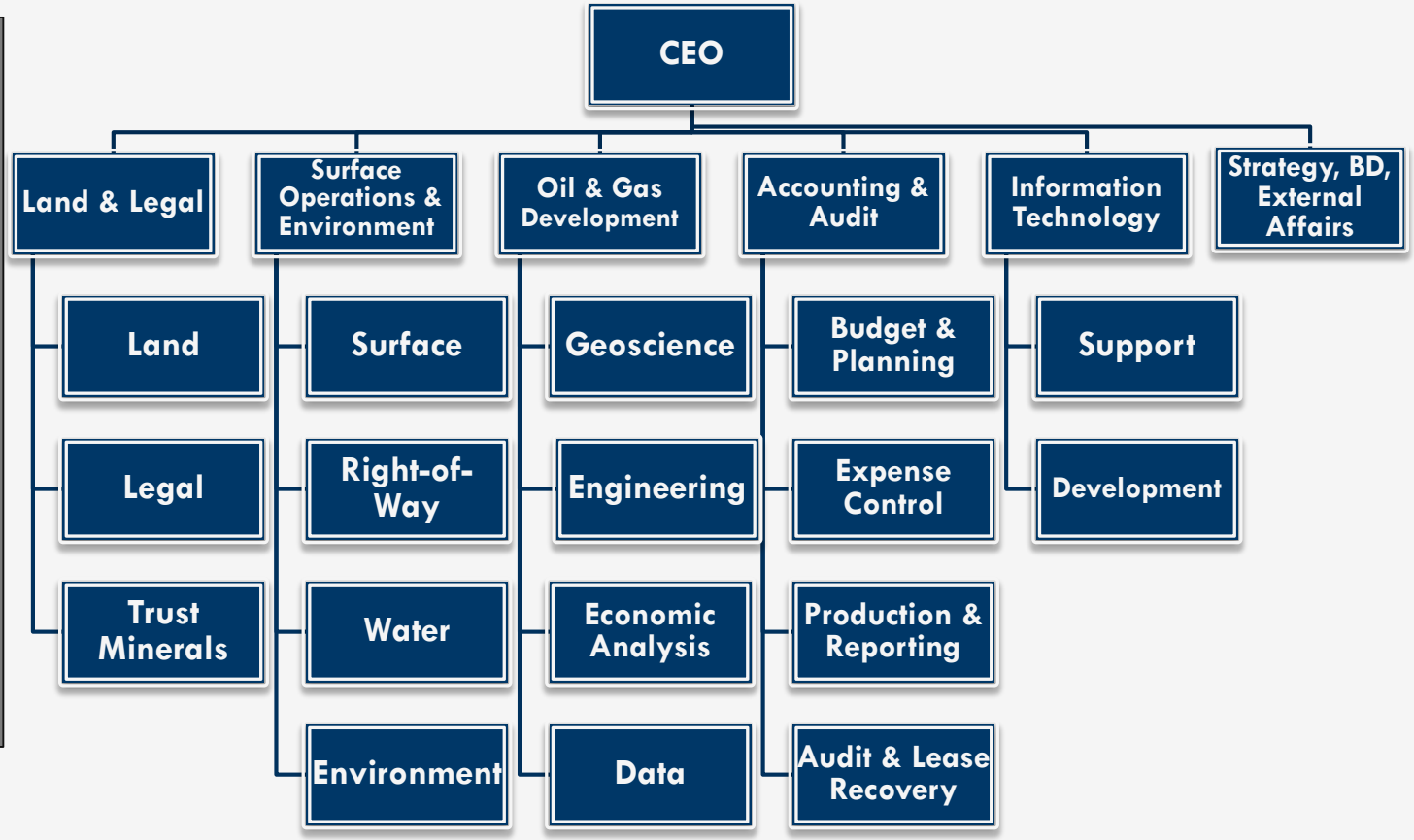
Today's Speakers

Richard Brantley
SVP, Operations

Carrie Clark
SVP - Land & General Counsel

David DeFelice
SVP, Oil and Gas Development

Brian Owen
VP, Land



61 Employees
Annual Expenses ~$25M or ~$1/BOE

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University Lands:
Economic Development Opportunities

Effective Corporate Structure

Oil and Gas

Water Resources

Solar and Wind

Other Surface Activities

Excellent Environmental Stewardship

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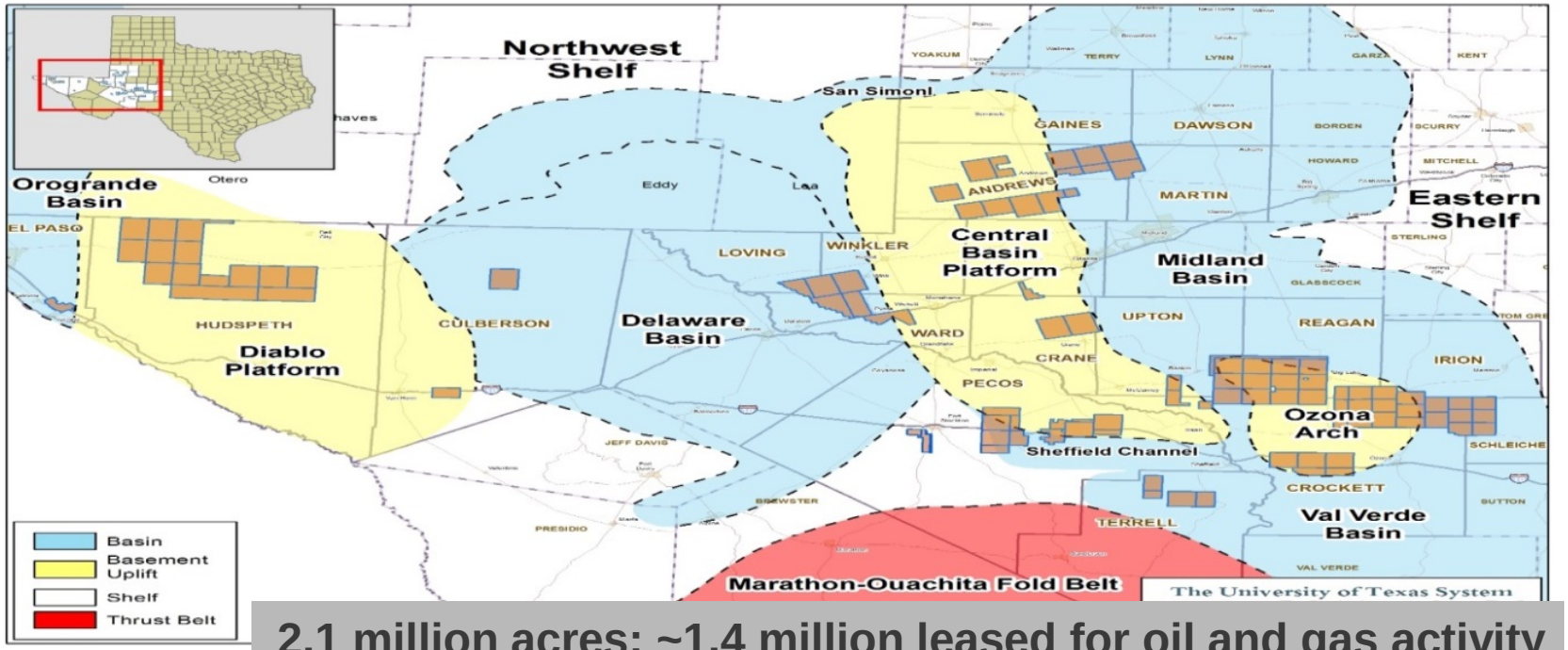
PUF Lands Oil and Gas Assets



2.1 million acres: ~1.4 million leased for oil and gas activity

- Total Net Reserves, Aug. 2017
  - 1.7 billion barrels of oil equivalent (BOE)
  - >20,000 future drilling locations
- Current Daily Production (60% oil)
  - ~ 248,000 BOE gross per day
  - ~ 50,800 BOE net per day (20% royalty)

>166 million of identified horizontal footage on current leases

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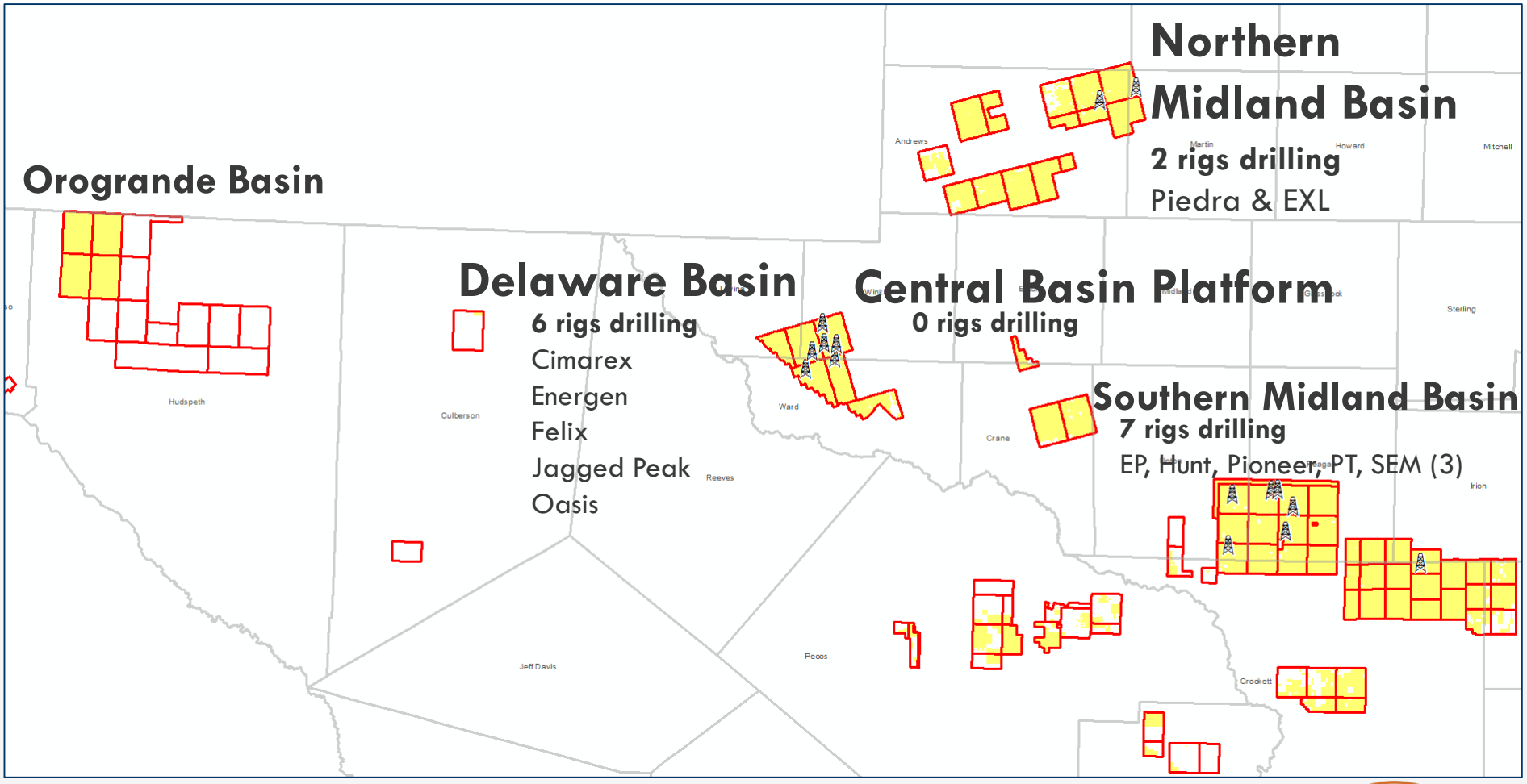
Current Activity – 15 Active Rigs



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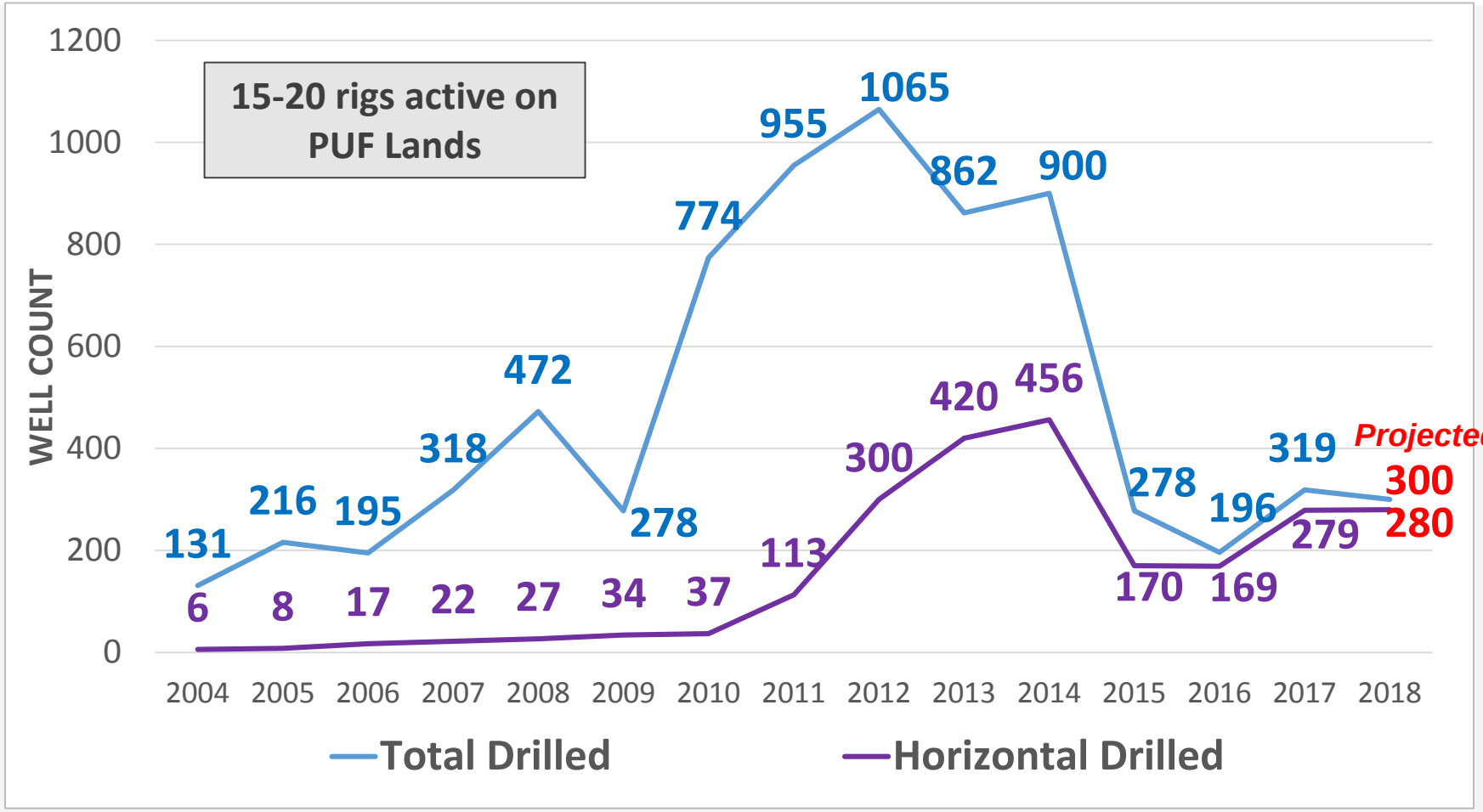
Wells Drilled on PUF Lands



- Operators "projecting" 280-380 wells in 2018
- 45 wells drilled in 1st quarter

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Drilled but Uncompleted Wells ("DUCs")

- ~15% of wells drilled in past two years have not been completed
- UL ensuring language in new leases and agreements addresses issue of timely development/completions

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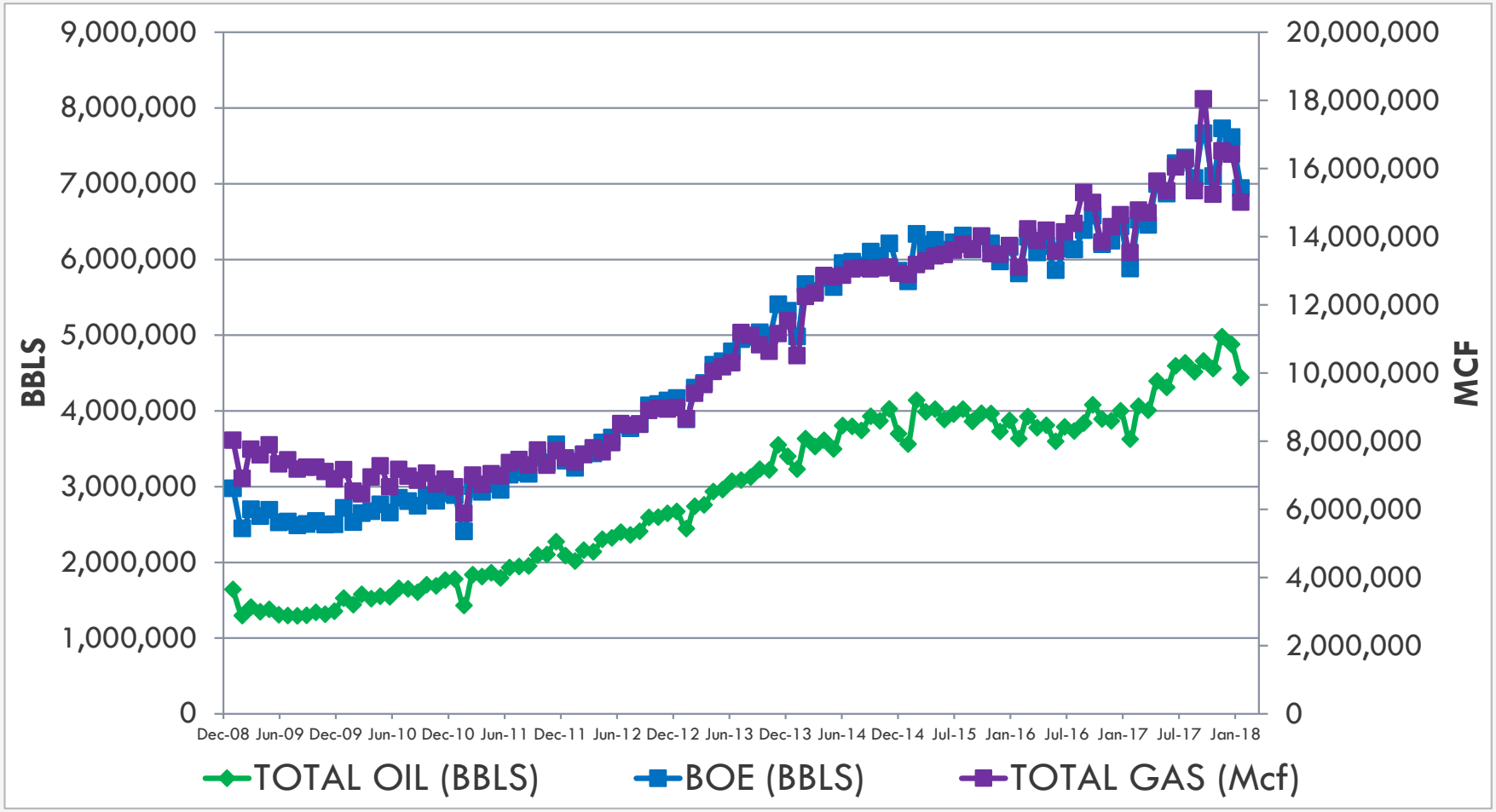
PUF Lands Monthly Production 2009 – 2018



- Record high production in December 2017 of 7.7MM BOE

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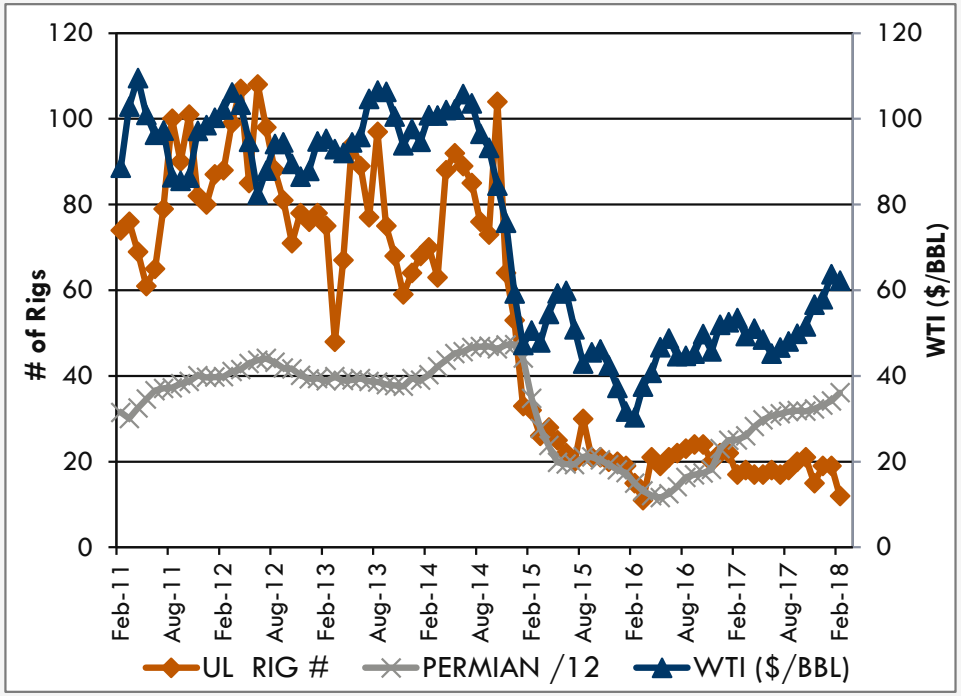
2018 Top Producers
(Through Feb/March)

COMPANY	PRODUCTION (MBOE)
EP ENERGY	2.02
PIONEER	1.46
SHELL	0.93
SEQUITUR	0.89
QEP	0.83
APACHE	0.57
SABLE	0.52
FELIX	0.51
OXY	0.51
JAGGED PEAK	0.5
DIAMONDBACK	0.43
FLEUR DE LIS	0.41
APPROACH	0.4
XTO	0.29
ELEVATION	0.27
FORGE	0.26
CONOCOPHILLIPS	0.25
PT PETROLEUM	0.25
HUNT	0.23
MEWBOURNE	0.24

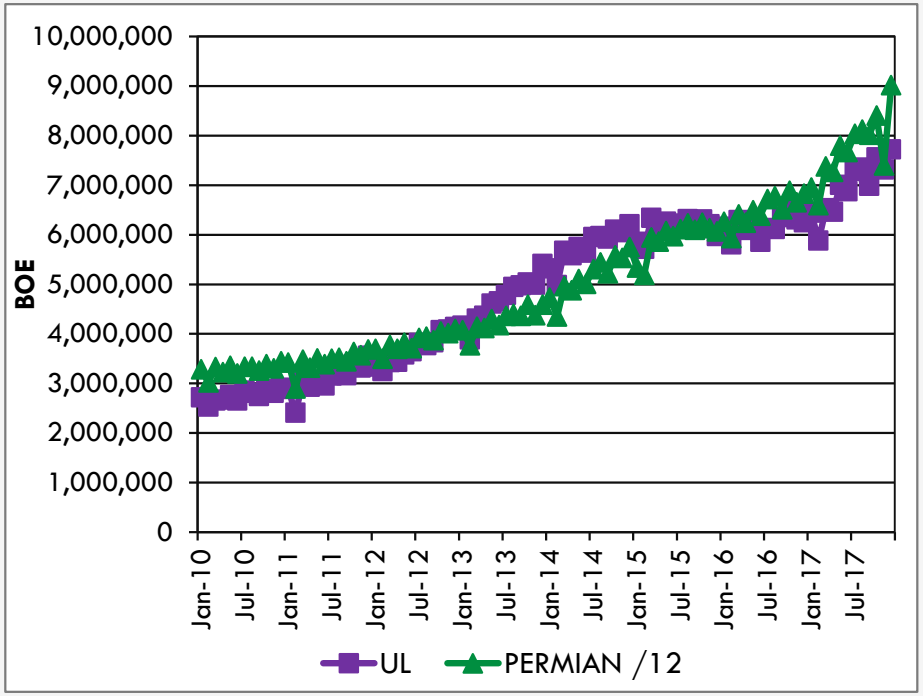
Close Correlation Between Permian Basin and PUF Lands

Permian Rig Count vs. Rig Count on PUF Lands



Sources: Baker Hughes, EIA, University Lands

Permian Production vs. PUF Lands Production



Sources: DrillingInfo, University Lands

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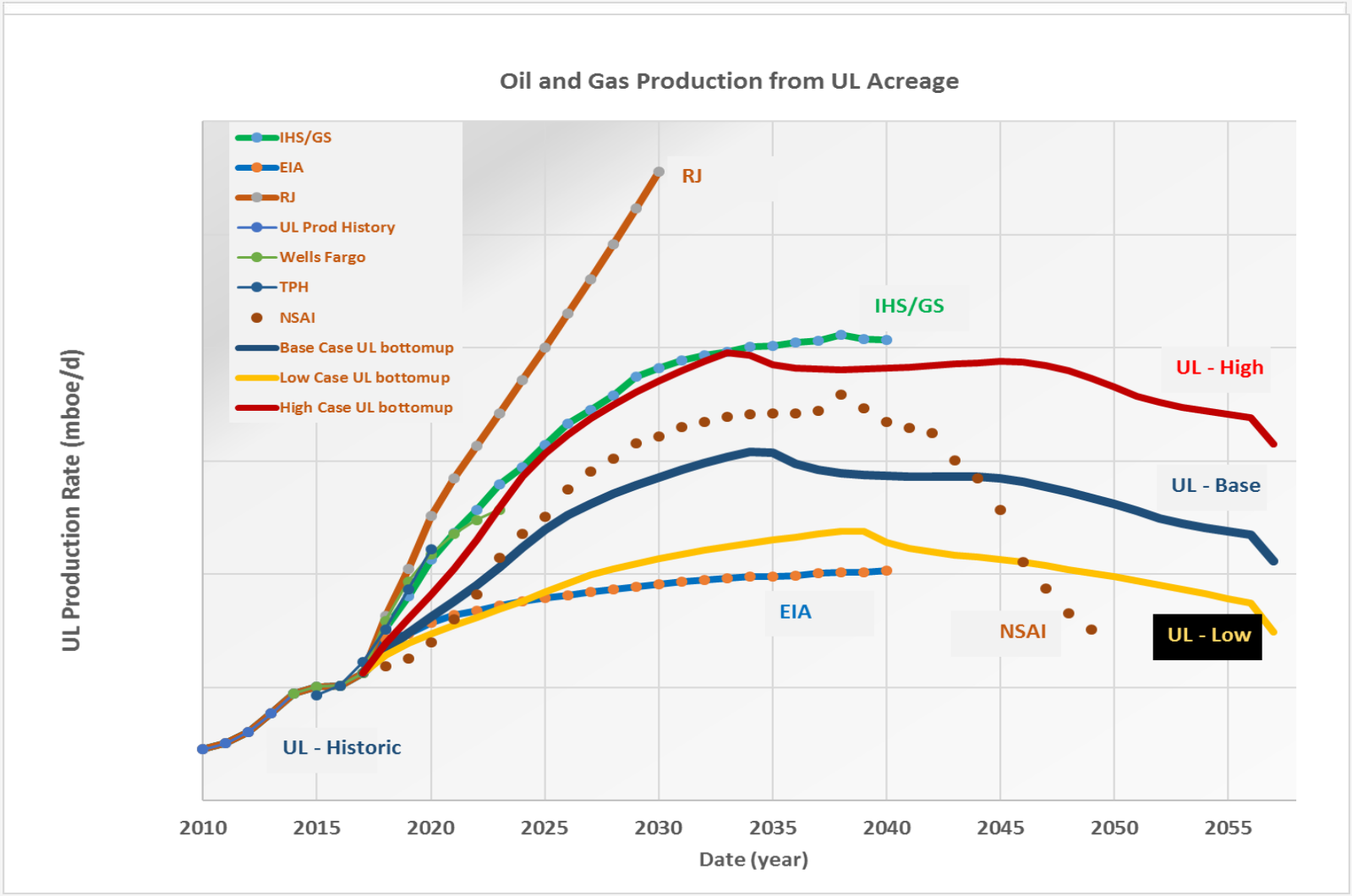
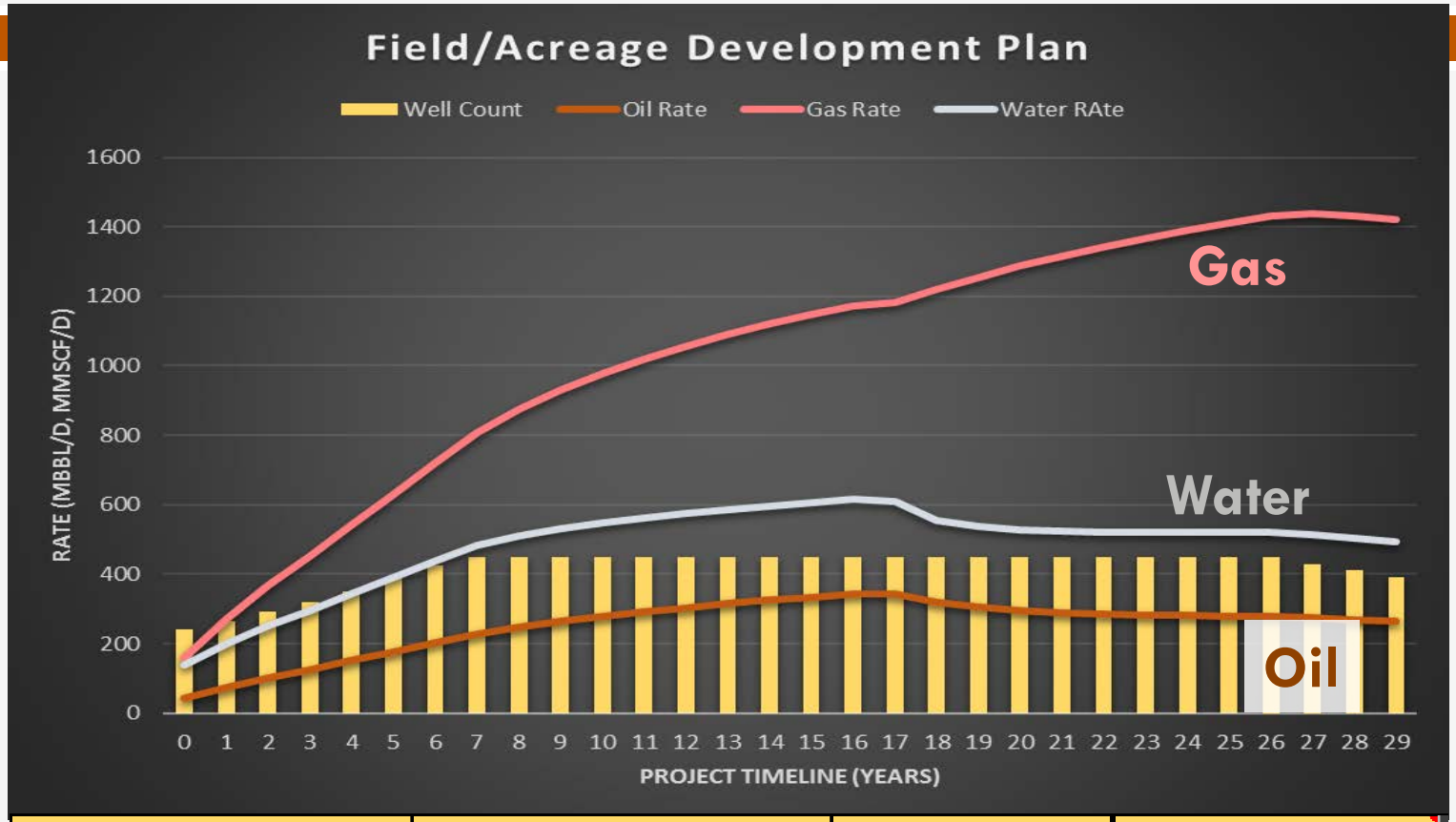
Gross UL Oil Equivalent Production Forecast Including Industry Top-down Cases



PUF Lands Projected Development Outlook



Gross Total Oil (MMbo)	Gross Total Gas (Bcf)	Total NGL (MMbo)	Total Recovery (MMboe)
3851	16689	1502	7301

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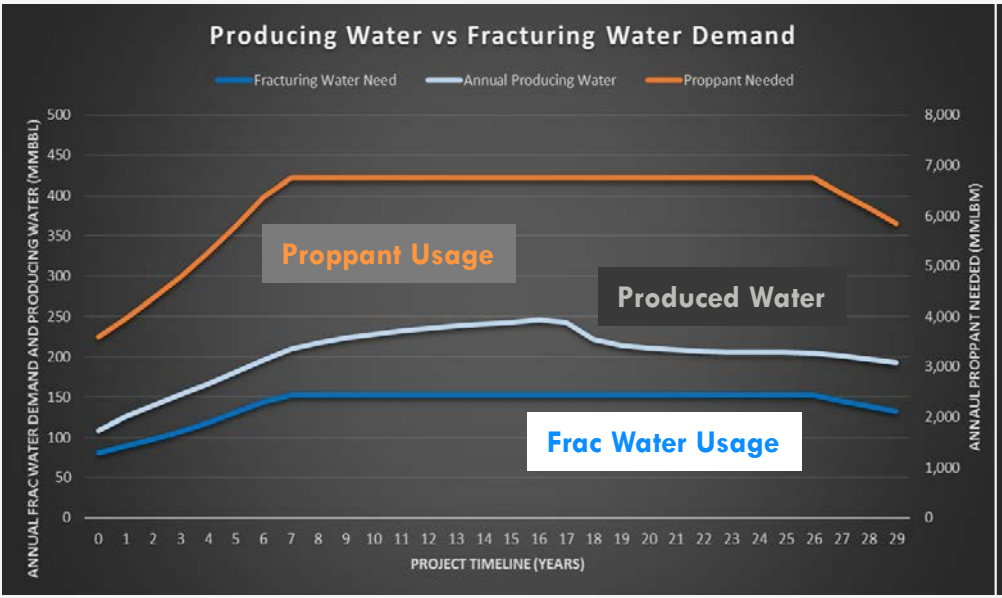
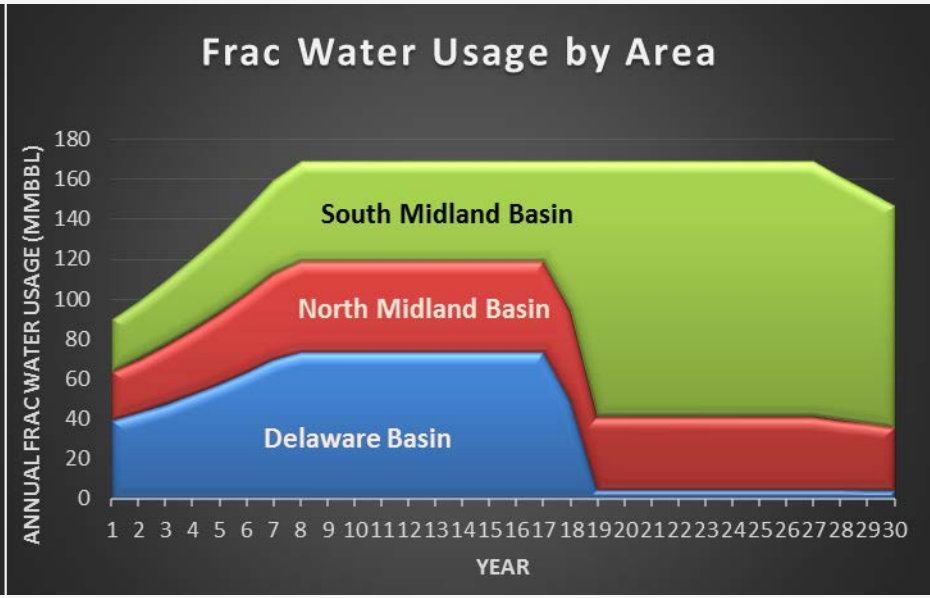
Produced Water vs. Frac Water Demand





Assuming average frac-water usage: 50 bbl/ft, proppant usage: 2000 lb/ft, and 7500' lateral length

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Environment

- Industry must focus on efficiency in infrastructure
- Methane emissions is current focus
  - Particular emphasis on older wells and fields
- Must keep our eyes on all components
  - Air
  - Water
  - Sand
- This is a 50+ year play; we have to commit to effective stewardship and improving performance

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University Lands: 20 Year Vision

- **Oil and gas production will be predominant revenue source**
  - Drilling inventory of 50+ years at normalized rates
  - Assuming ***consistent and increasing development activity*** and continued technical momentum, production levels could increase 50-100% over the next 10-15 years
  - Technology enhancements will continue in all areas of operating activity, including environmental performance
  - While increasing modestly in market share, other energy sources will not satisfy long term world wide energy demand
- **Water resources will be a significant contributor to infrastructure improvement and development in West Texas**
- **Solar and wind energy will be further developed across University Lands acreage**

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University Lands Technical Update

What's new? Faces, Partners, Activity, and Opportunities

Dave DeFelice, SVP – Oil & Gas Development

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UL Technical Team: New Faces

- TOGI incorporated into University Lands
  - Hongie Xiong, PhD: Senior Engineering Advisor
  - Brian Casey: Senior Geological Advisor
- Maryam Schellstede: new Engineering Manager
- John Tackett: now Geoscience Manager
- Callum Hevle: Reservoir Engineer

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UL Technical Team Strategy

- The University Lands Technical Team's mission is to **increase the value of PUF Lands** by leveraging an in-depth **understanding of the subsurface** into execution of a focused, efficient, and profitable **development strategy.**

- Key Drivers
  - Great Partners – aligned in goal of efficient and profitable full-field development
  - Great Database – we value data, we also value your confidentiality
  - Business Focus – win/win scenarios
  - Technical understanding – regional, reservoir, entire strat column
  - Best Practices – drilling, completion, identification of target zones
  - Creativity – technical and business

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New Partners

Lease Sale 128

Delaware Basin

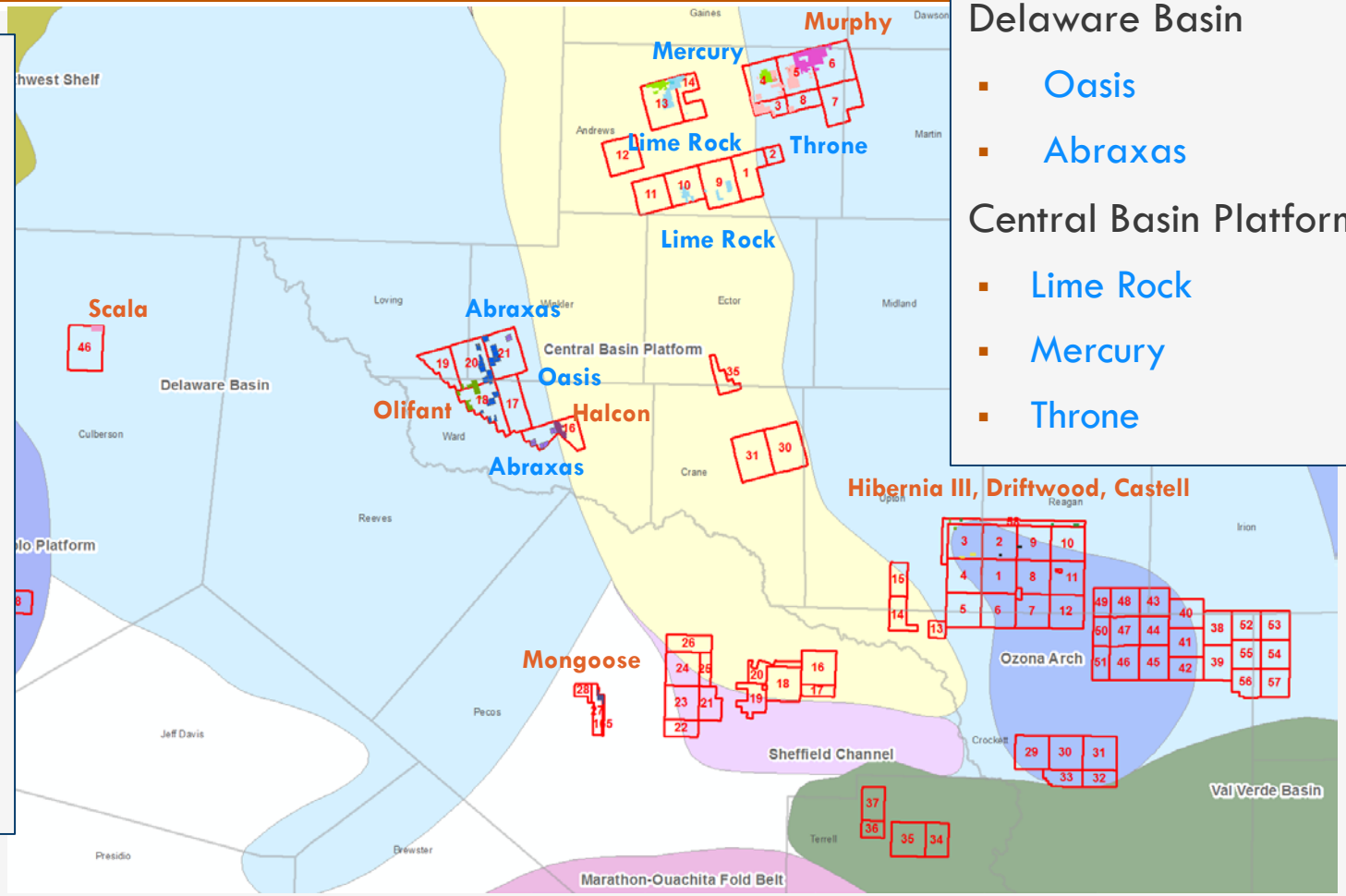
- Scala
- Olifant
- Halcon
- Mongoose

N. Midland Basin

- Murphy

S. Midland Basin

- Hibernia
- Driftwood
- Castell



Operational Changes

Delaware Basin

- Oasis
- Abraxas

Central Basin Platform

- Lime Rock
- Mercury
- Throne

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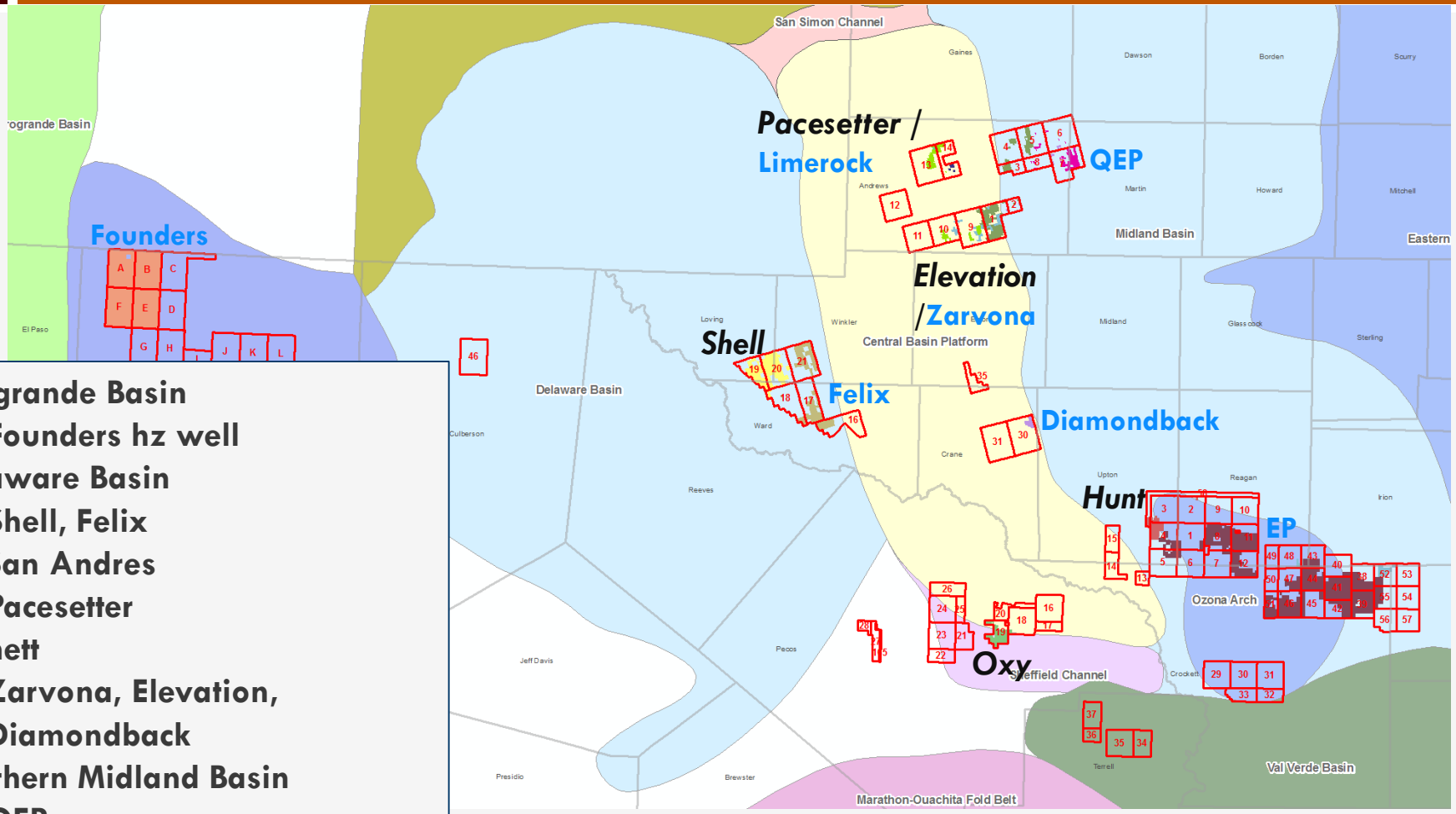
University Lands Activity: Tapping the Potential



Orogrande Basin
- Founders hz well

Delaware Basin
- Shell, Felix

Hz San Andres
- Pacesetter

Barnett
- Zarvona, Elevation, Diamondback

Northern Midland Basin
- QEP

Southern Midland Basin
- EP, Hunt

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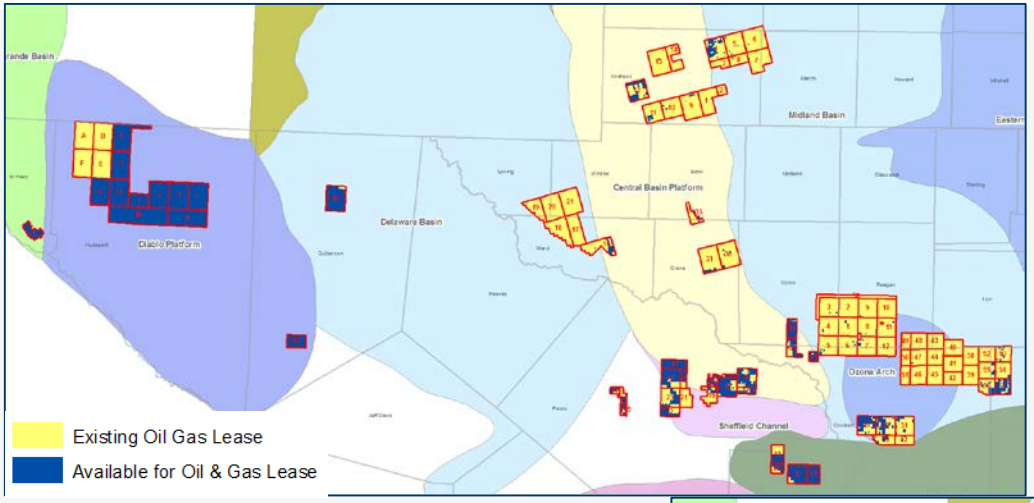
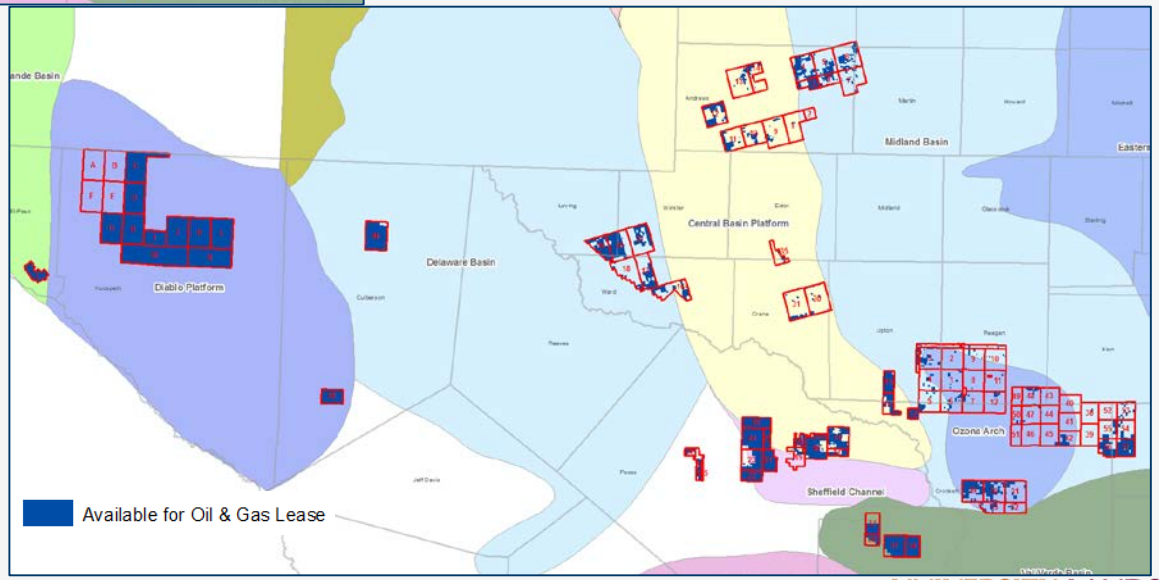
New Opportunities: UL Sale #129
Now Seeking Nominations



Available acreage – all depths

Available acreage – includes severed depths



Opportunities: Efficiency and Technology

- **Accessing more stimulated rock volume/section**
  - Smart fracs – bigger isn't always better
  - Tighter well spacing
  - Minimizing interference/parent-child issues
  - Minimizing non-productive rock volume
- **Better understanding of optimal target zones**
  - Optimal mix of TOC, reservoir storage, and brittleness
  - Correlation with system tracts? Basinwide? Transgressive Systems Tract
- **Getting back to basics with IOR/ EOR**
  - Conventional water floods on the Platform?
  - Conventional and unconventional rocks – CO^2 - has the time come for the Permian?
- **Gas – can we creatively make it work?**

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UL Land & Legal Update

Carrie Clark, SVP – Land & General Counsel

Brian Owen, VP – Land

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UL Legal and Mineral Land Team

- Legal Team
  - Carrie Clark, SVP, Land and General Counsel
    - cclark@utsystem.edu; (713) 352-3830
  - Sonya Csaszar, Attorney
    - scsaszar@utsystem.edu; (832) 632-4452

- Mineral Land Team
  - Brian Owen, VP, Land
    - bowen@utsystem.edu; (832) 632-4413
  - Matt Garlington, Land Supervisor
    - mgarlington@utsystem.edu; (432) 686-4775
  - Lisa Belue, Associate Landman
    - lbelue@utsystem.edu; (432) 686-5479
  - Kaci Chamber, Assistant Landman
    - kchambers@utsystem.edu; (432) 684-4404

- Plan to continue adding quality industry professionals

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University Lands Lease Sale #129

- Wednesday, September 19, 2018
- Tracts included in sale
  - Nominated tracts
    - Nomination period April 2, 2018 to COB Friday June 8, 2018
    - To nominate – written correspondence with the description of the tract including depths
    - Email will suffice as written correspondence
  - Open tracts included by UL
    - Limited to certain areas where development potential is high
  - Board for Lease meeting in June to approved tract list
  - Track list released to the industry in early July
- Sale will be held EnergyNet
  - Bidders will need to be registered with EnergyNet
- Open bidding 30 days prior to sale date
  - EnergyNet will accept bids until 10:00 am Wednesday Sept 19th
- EnergyNet will notify winning bidders when sale results approved by the Board for Lease

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Continuous Development Agreements

- New type of agreement introduced fall 2017
  - Eliminated ambiguous language from previous agreements, language in line with industry terms
  - Perforated lateral footage
    - Eliminated a specific number of wells required, i.e. 5 wells per year
    - Gives more flexibility to Lessees, better economics for longer laterals
    - Footage obligation is on a per year basis, i.e. 100,000 feet per year
    - Footage is more closely tied to actual development requirements for formation
    - Allows operator to stratify yearly obligation faster if drill ahead of schedule
  - Production Sharing Agreements put in place as wells are drilled
    - Simplifies the process and rights of the Lessee to operate wells across lease lines once the Development Agreement terminates
  - Identifies target formation
  - Completion operations timeline
  - Encourages multi-well pads
  - Yearly reporting to ensure full credit for footage drilled in the previous year as well as plans for coming year
  - Recent examples - Elevation Resources & Oasis Petroleum

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Production Sharing Agreements

- New type of agreement for UL
- Allows drilling across UL lease lines, including fee leases
  - 45 PSAs executed since September 1, 2017
  - Majority of wells planned as 10,000' laterals
  - Includes wells traversing HBP tracts
  - Multiple agreements include fee lands
    - Example: Pacesetter Energy
  - Production allocated between leases based on the completed perforated lateral associated with each lease
  - Simple "application" to fill out
    - Pertinent information needed to create form agreement

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Contracts for Development

- Based on UL's current lease form
- Smaller isolated tracts
- Contiguous with existing UL leasehold, DDAs, or Pooled Units
- Promote horizontal development and increased lateral length
- Shorter term than UL leases
  - Generally two years
- Include well/drilling requirement
- Bonus is negotiated
- Process starts with a lessee submitting a written offer
  - Email will suffice

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32

Water & Emissions Management

Richard Brantley, SVP - Operations

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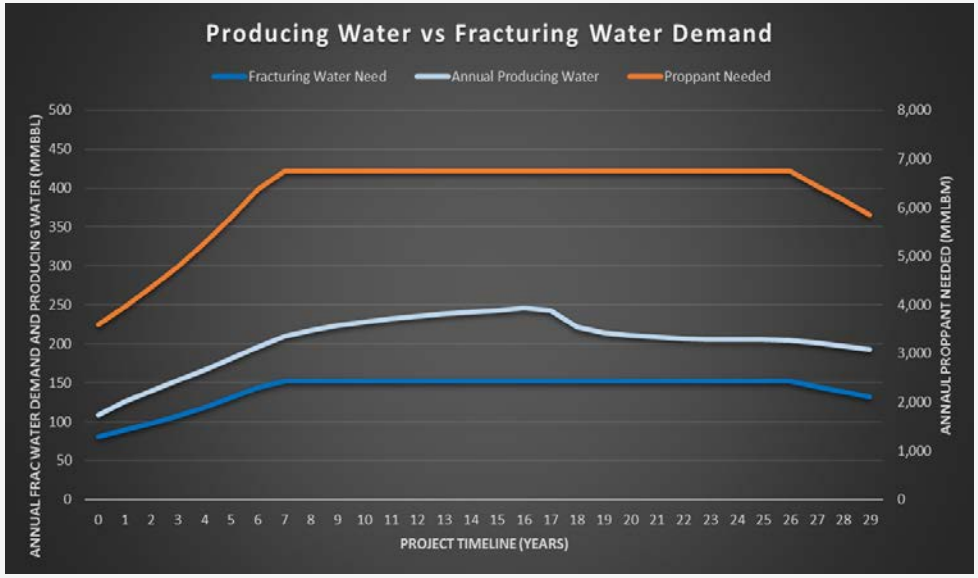
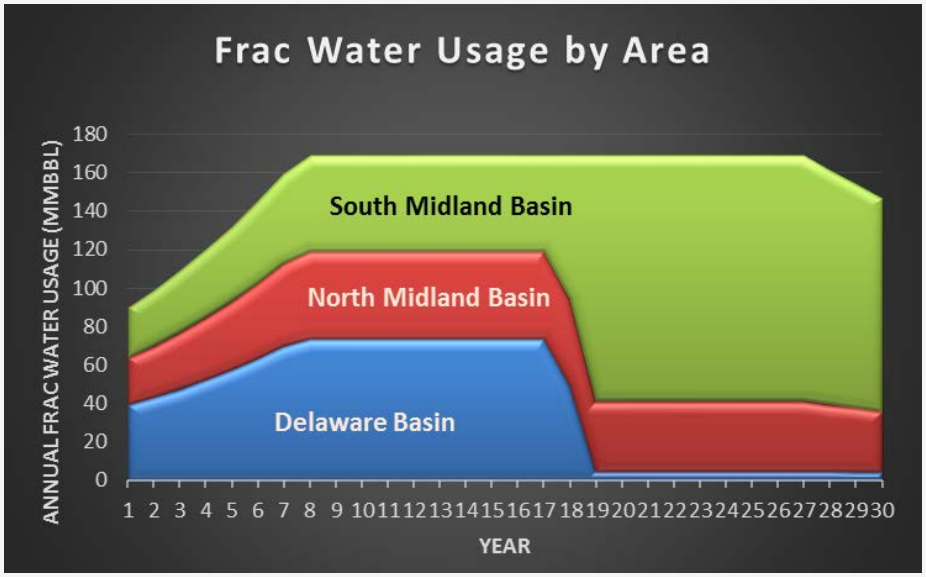
Produced Water vs. Frac Water Demand





*Assuming average frac-water usage: 50 bbl/ft, proppant usage: 2000 lb/ft, and 7500' lateral length

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Received 8 Different Regional "Full-Cycle" Water Management Proposals

Proposal Requirements

1. Support increased mineral development on UL
2. Decrease operator costs for water management associated with E&P development on UL
3. Minimize environmental footprint across UL and the broader Permian

Overarching Goals

Enable a more responsible, economical, and holistic approach to water management

1. Leverage UL size & scale
2. Increase use of produced and brackish water
3. Reduce costs
4. Benefit UL, industry, and environment

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Evaluation Criteria

1. Economic Benefit to UL/Operators
2. Technical Criteria (location, size & scale)
3. Prior Performance/Experience (including financials)
4. *Best Overall Value*

Detailed Business Plan

- ❑ Pro-forma Financials
- ❑ Revenue Projections
- ❑ Sustainability

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Desired Results

- Operator Question – ***What does this mean for me?***
  - Opportunity to Outsource Water Management
    - Midstream Functions – Gas, Crude, Water
    - Redirect Capital to Drilling
    - Utilize Scale of PUF Lands
    - Increase Sustainable Recycling
    - Reduce Disposal Demand
    - Reduce Costs

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Emissions Update

"The Environmental Partnership"

- API-Sponsored & Administered
- 35 Participating Companies
- 15 UL Operators
- UL Encouraging Participation
  - *Rick Costa* - UL Facilities Engineer
    - Focused on Emissions Management
    - Meeting with UL Operators
    - Optical Gas Imaging Camera
    - Emissions Incentive Program (EIP)

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Current Participants

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