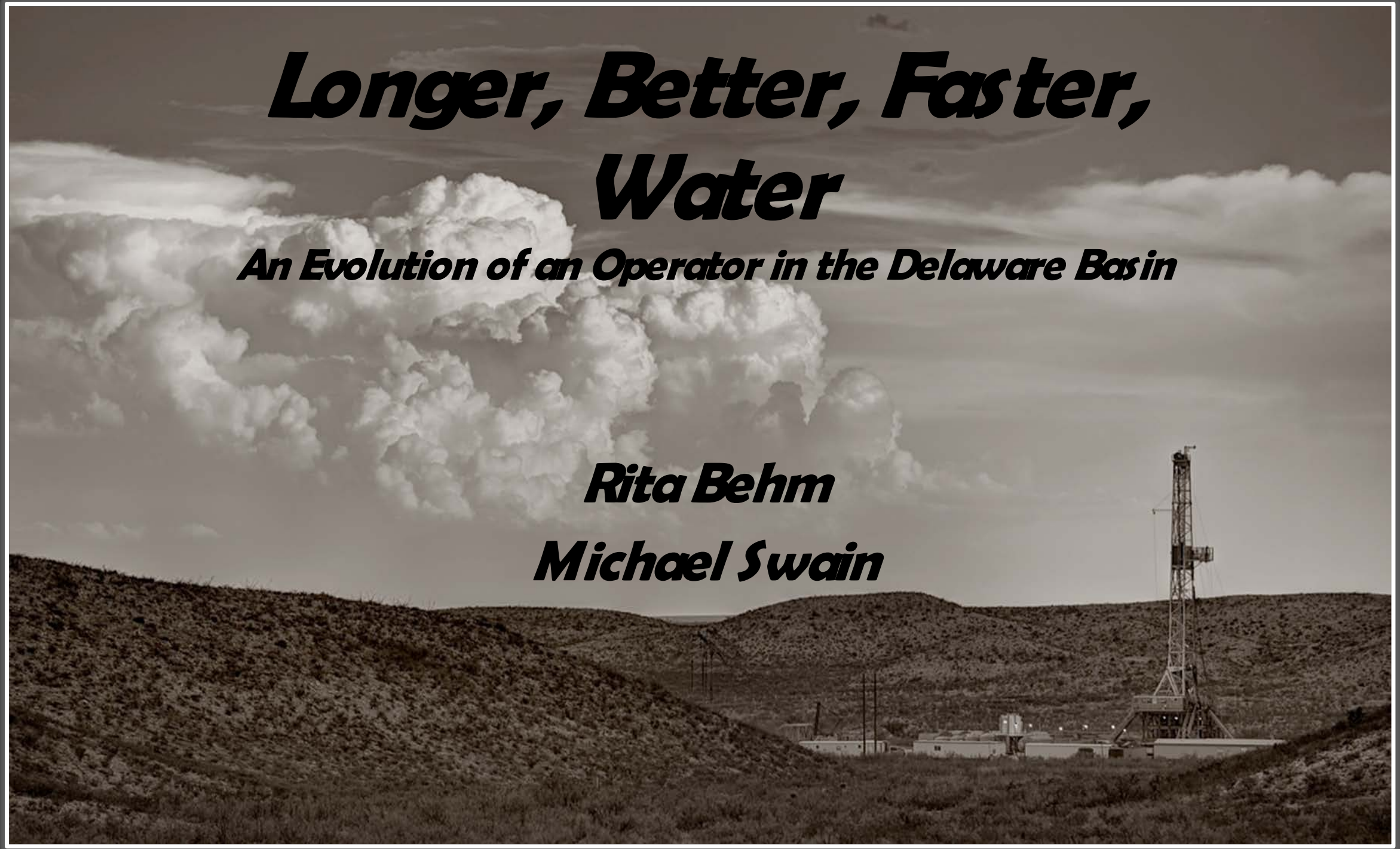
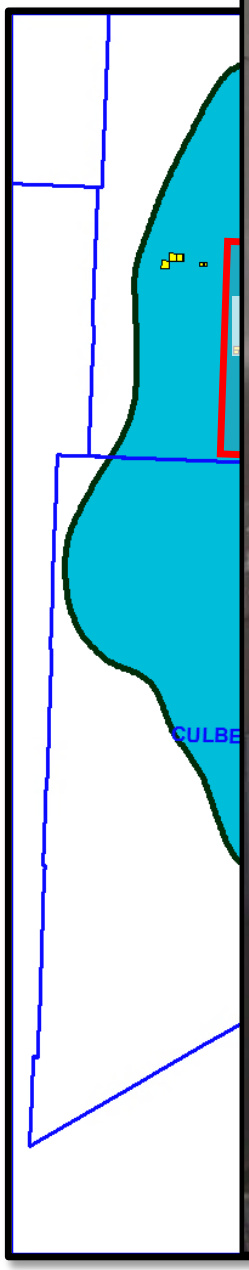


Longer, Better, Faster, Water

An Evolution of an Operator in the Delaware Basin

Rita Behm

Michael Swain



n

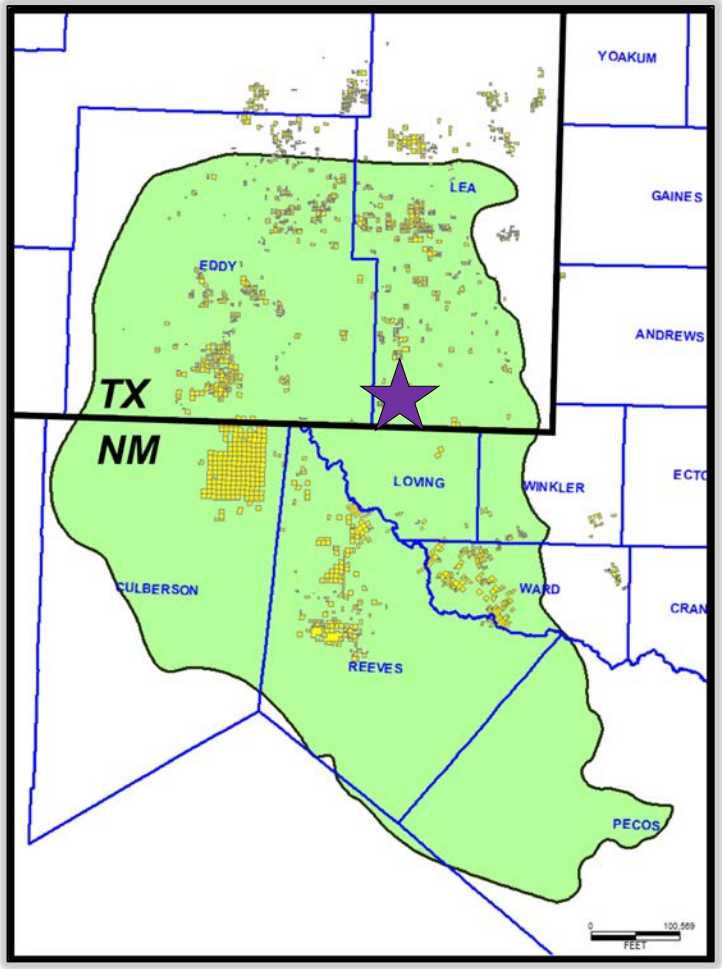
ic Crews

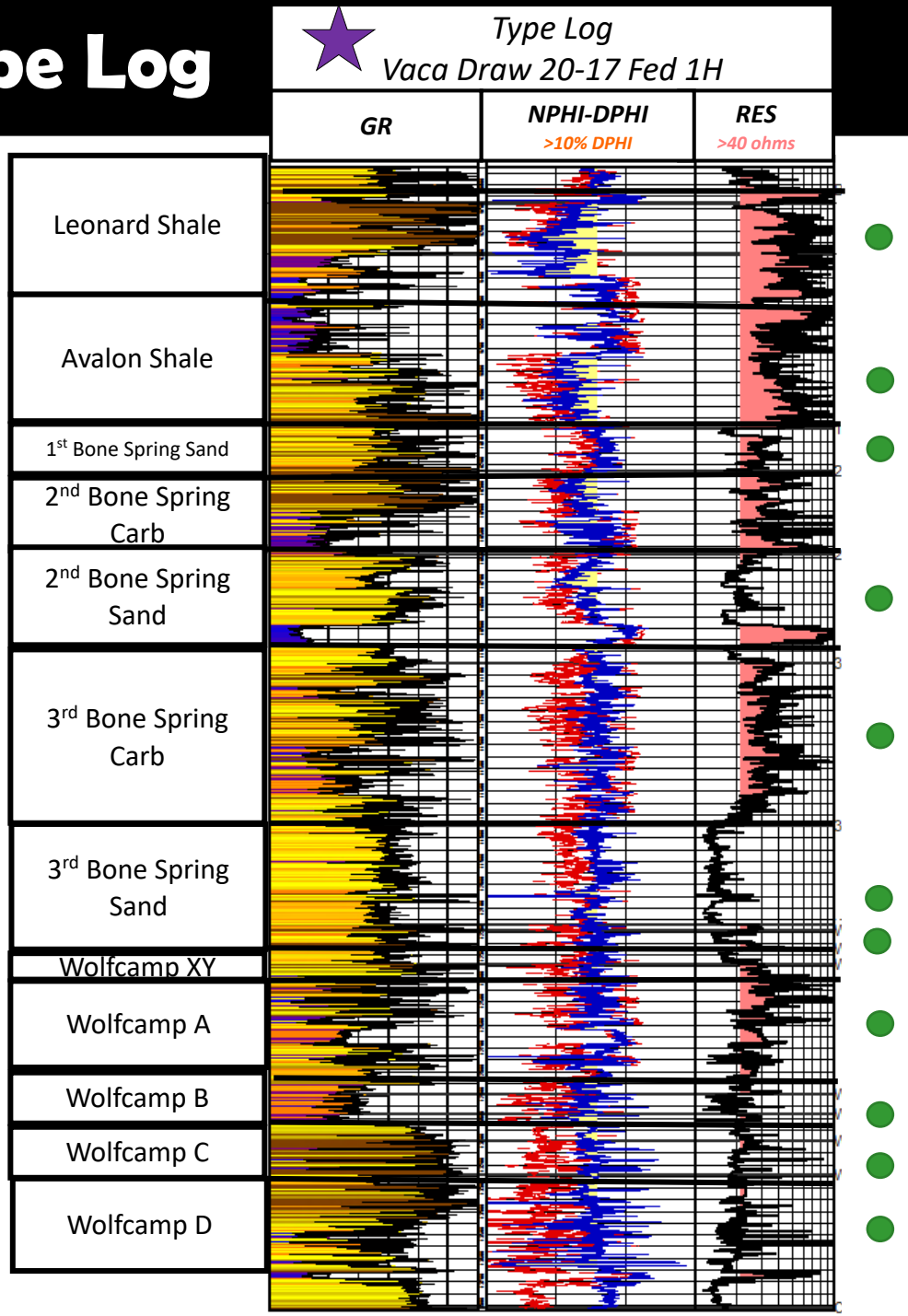
Drilling and
asin since

BOEPD

-30 BOEPD

Delaware Basin Type Log





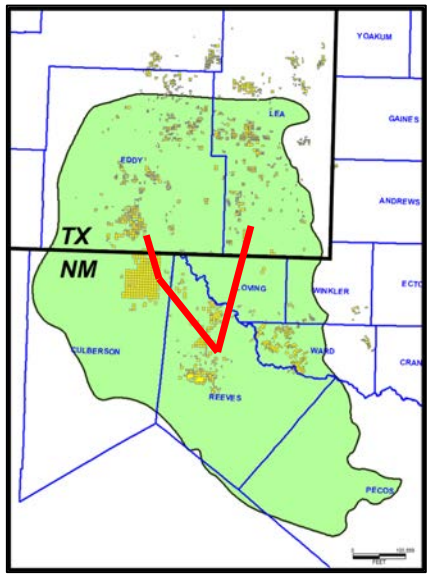
- XEC Currently Executes 11 Distinctive Productive Targets Across our Acreage
- Each Productive Target Presents its own Challenges in Terms of Drilling, Completing, and Producing
- Targets Can Require Many Different Spacing Configurations to Realize Full Development

Cimarex Producing Areas

Red
Bott
Mos
Oil P
8 Pr
Char
Water Cu
Highest Pressure in Basin

Dixie
Dista
Oil P
5 Pr
Char
Faul

Culberson – White City
More Proximal Setting
Gas Prone
6 Productive Targets
Wolfcamp C-D Are Very Productive
Gas Producing allows for Higher Recoveries

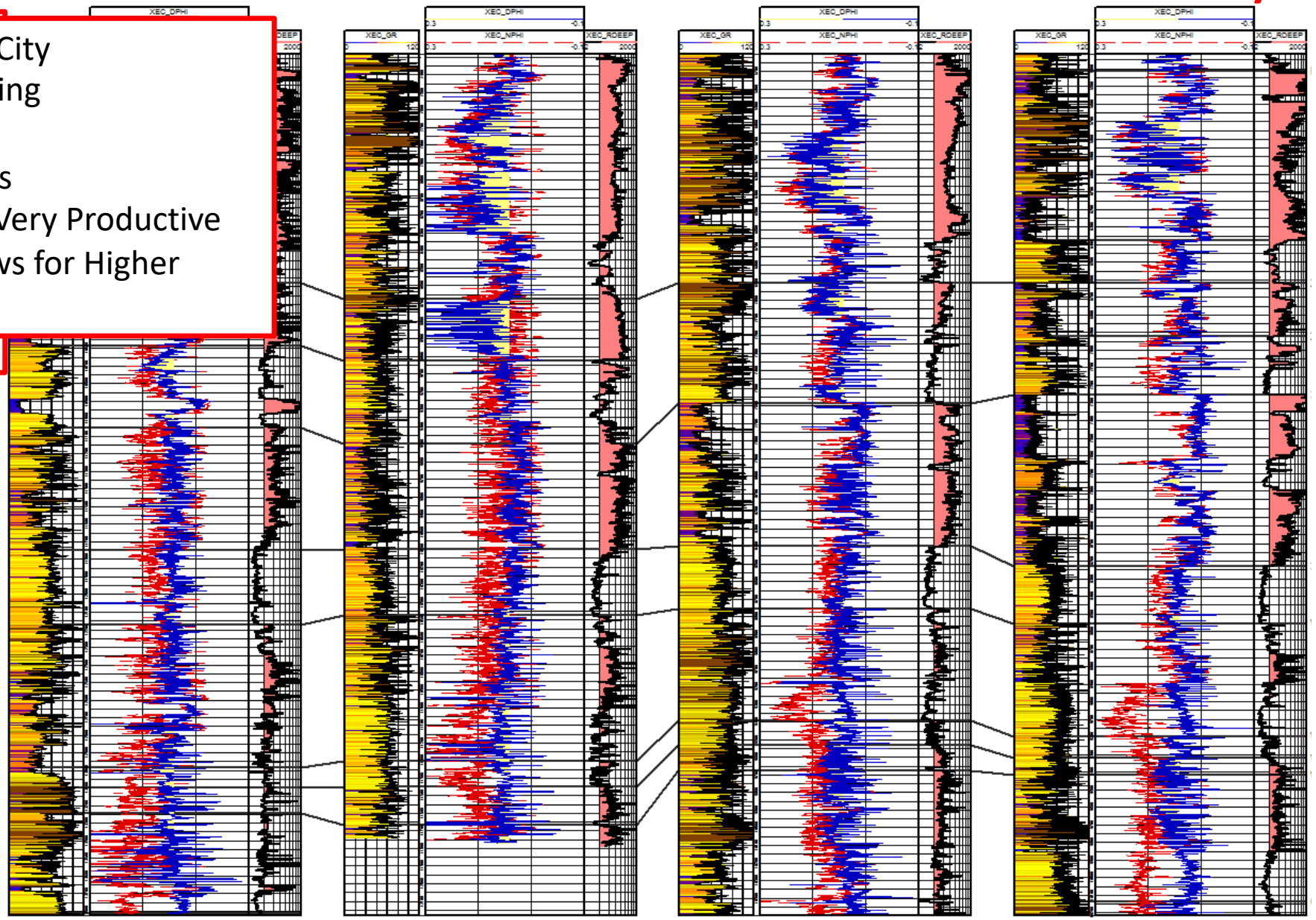


Red Hills

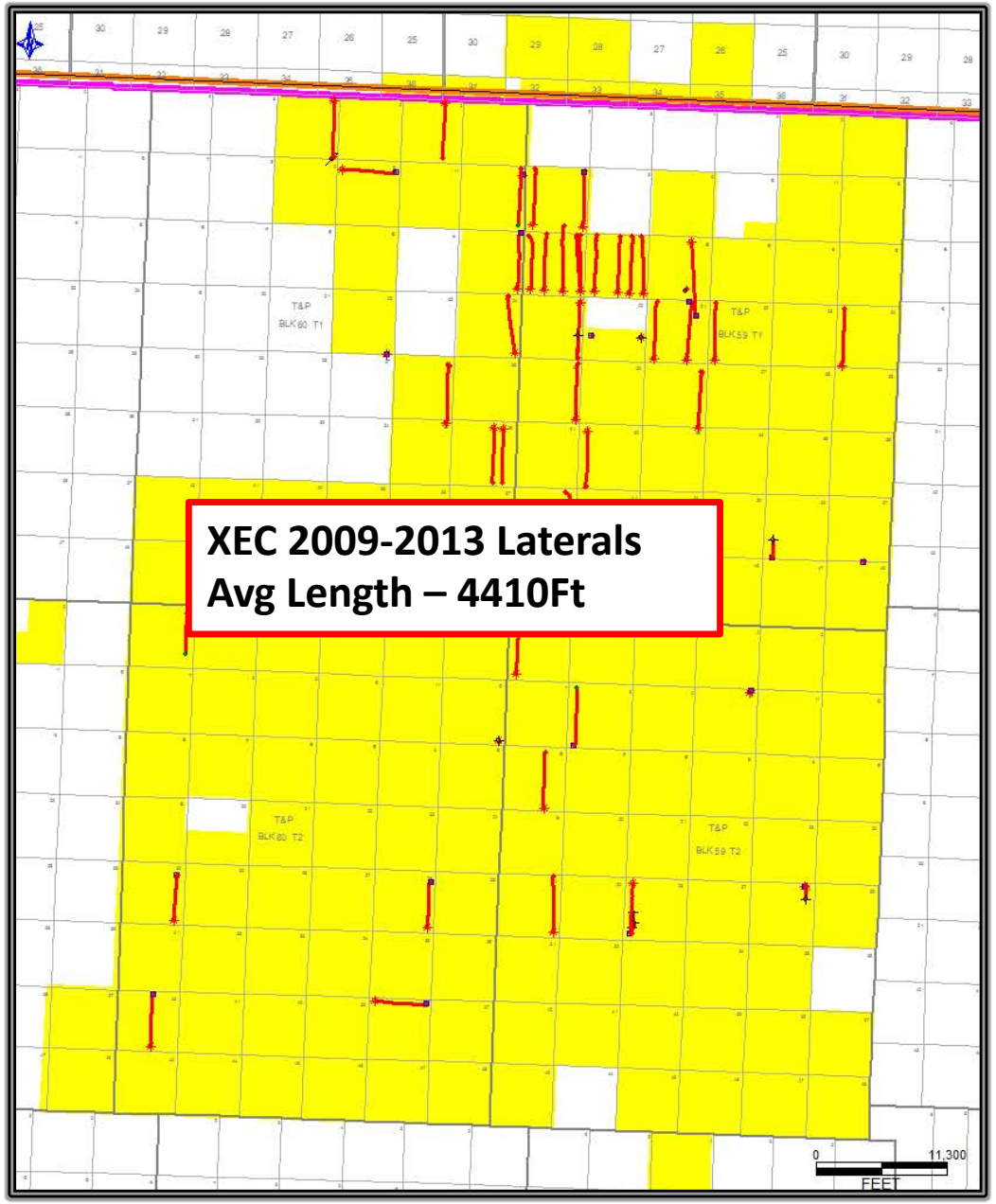
Dixieland

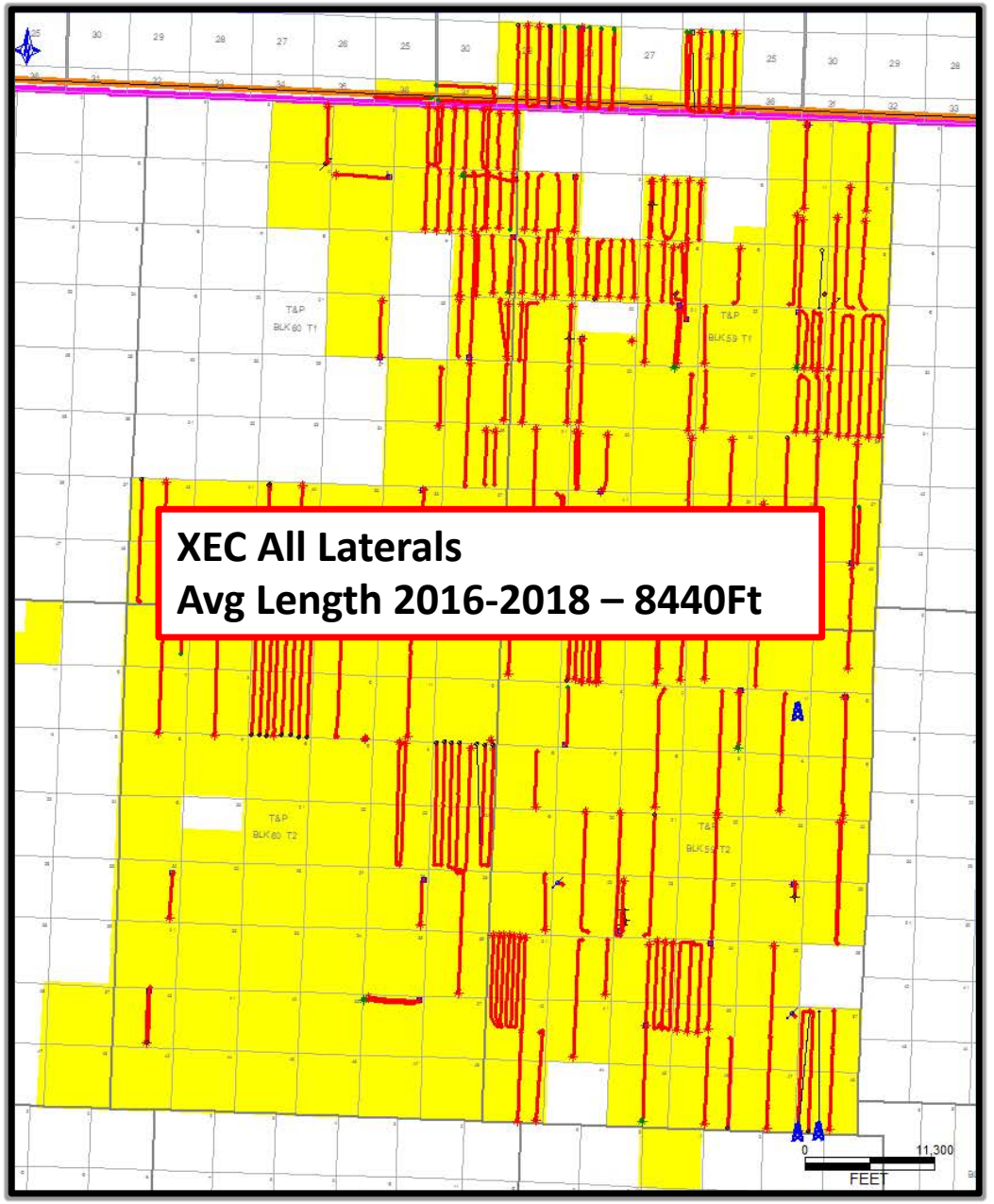
Culberson

White City

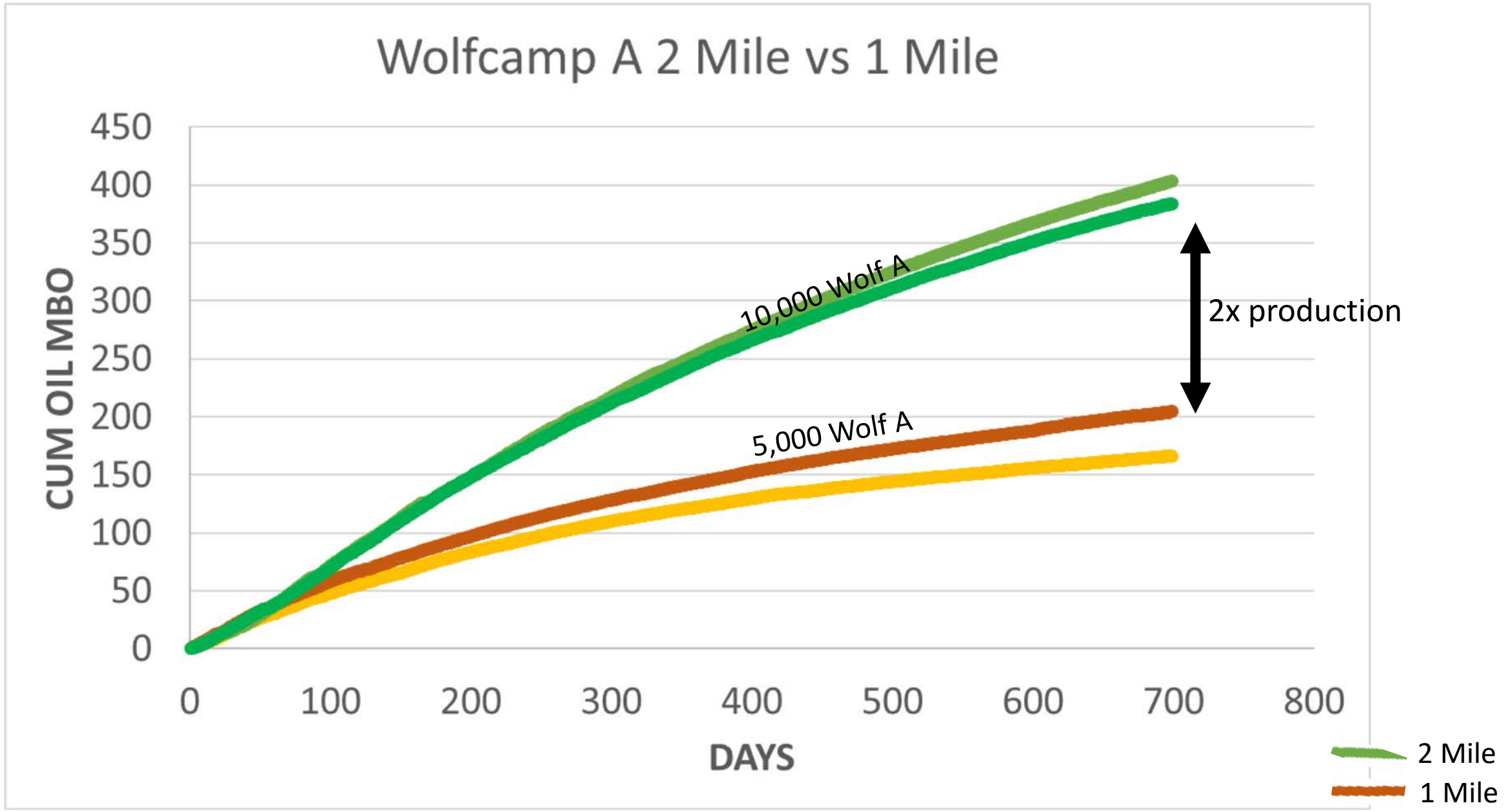


Longer – XEC Culberson County

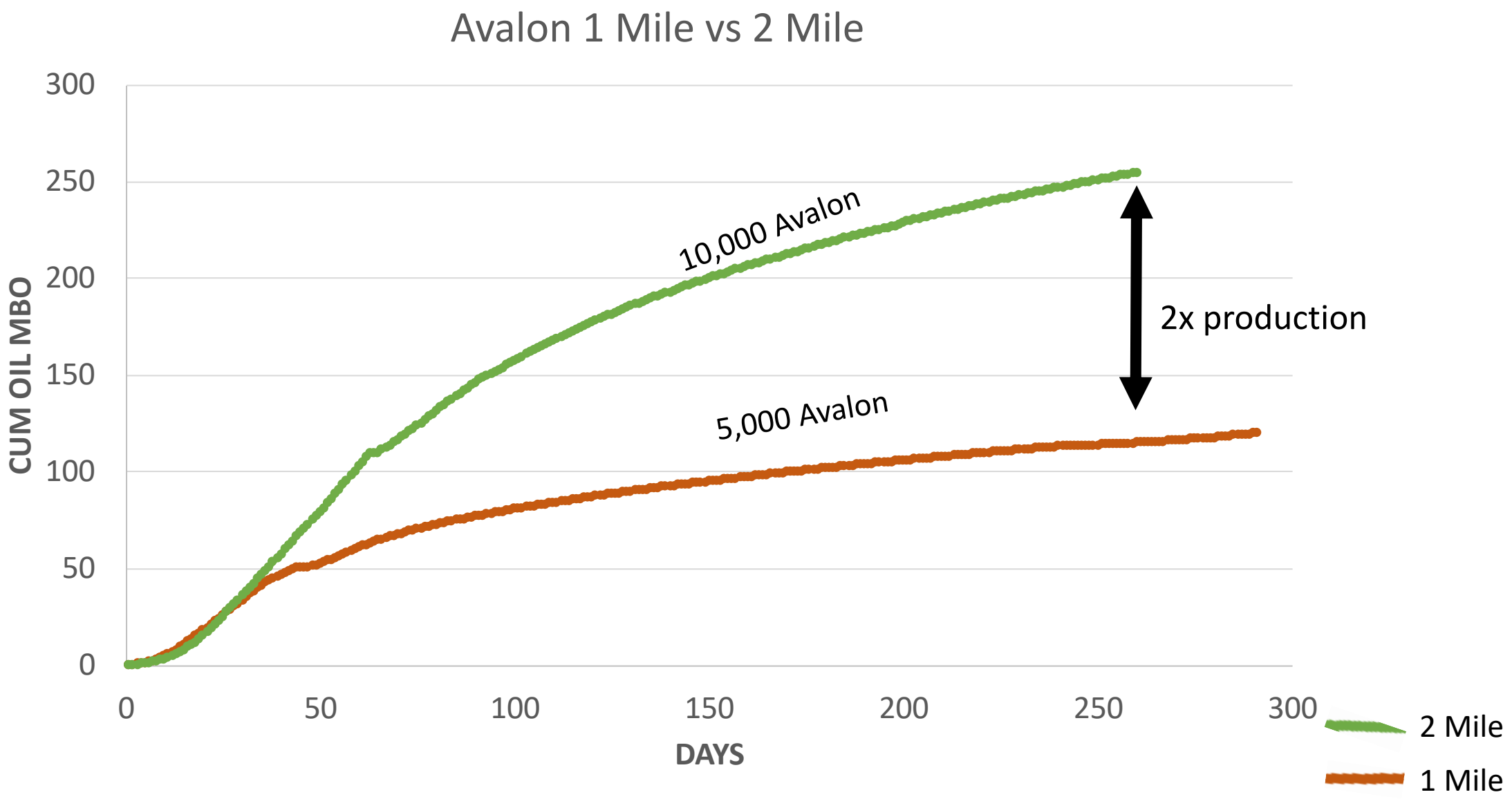




Lateral Length Impact on Production



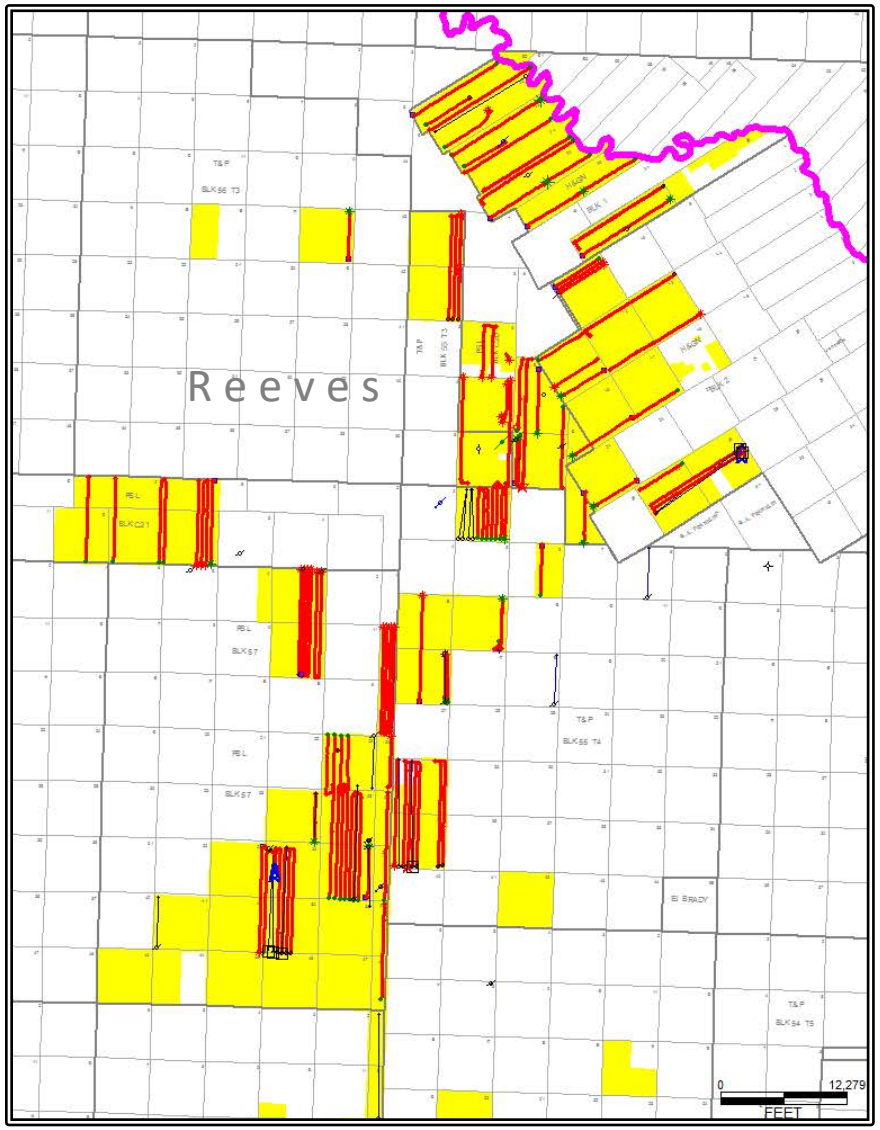
Lateral Length Impact on Production

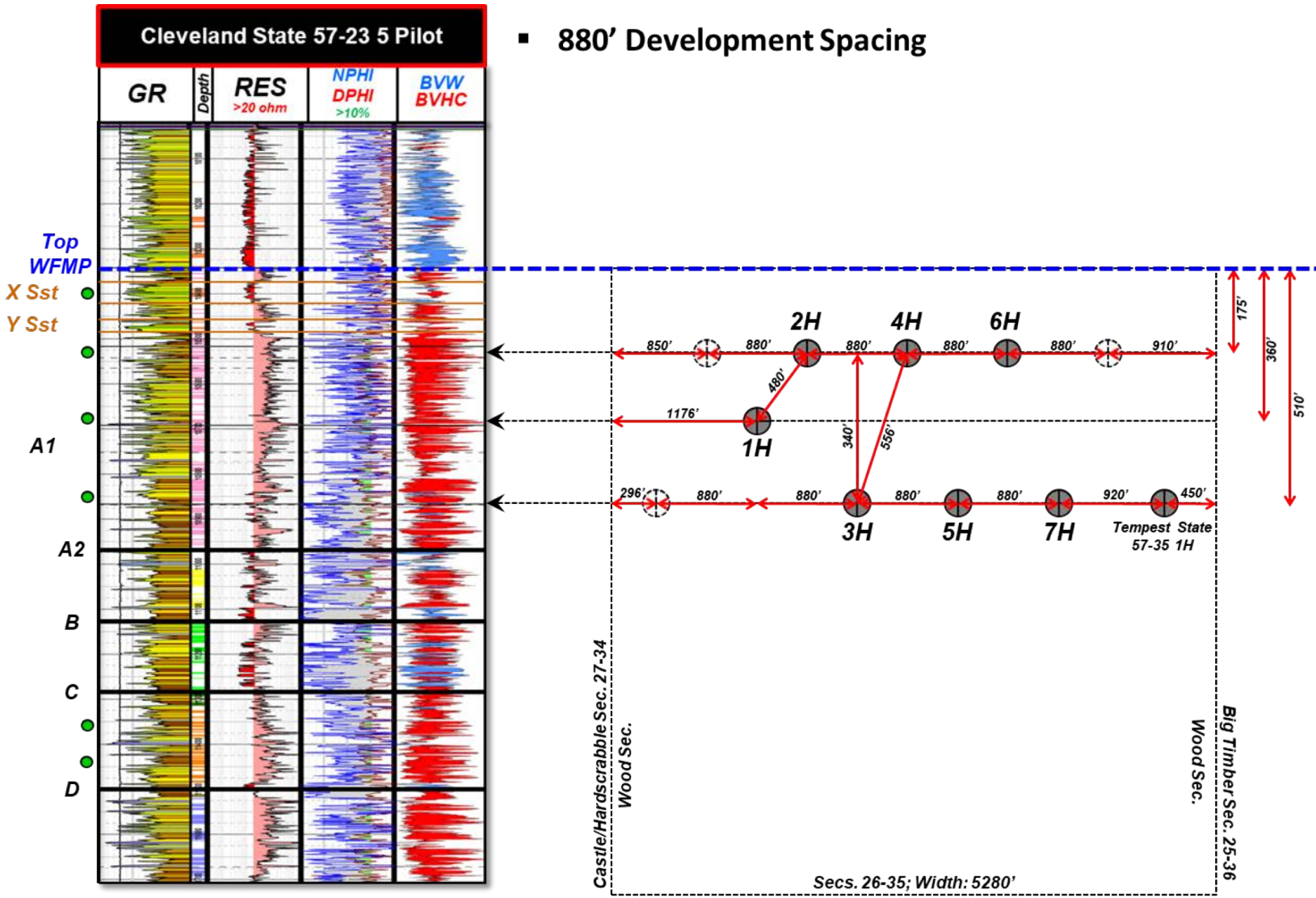


Better – XEC Reeves County

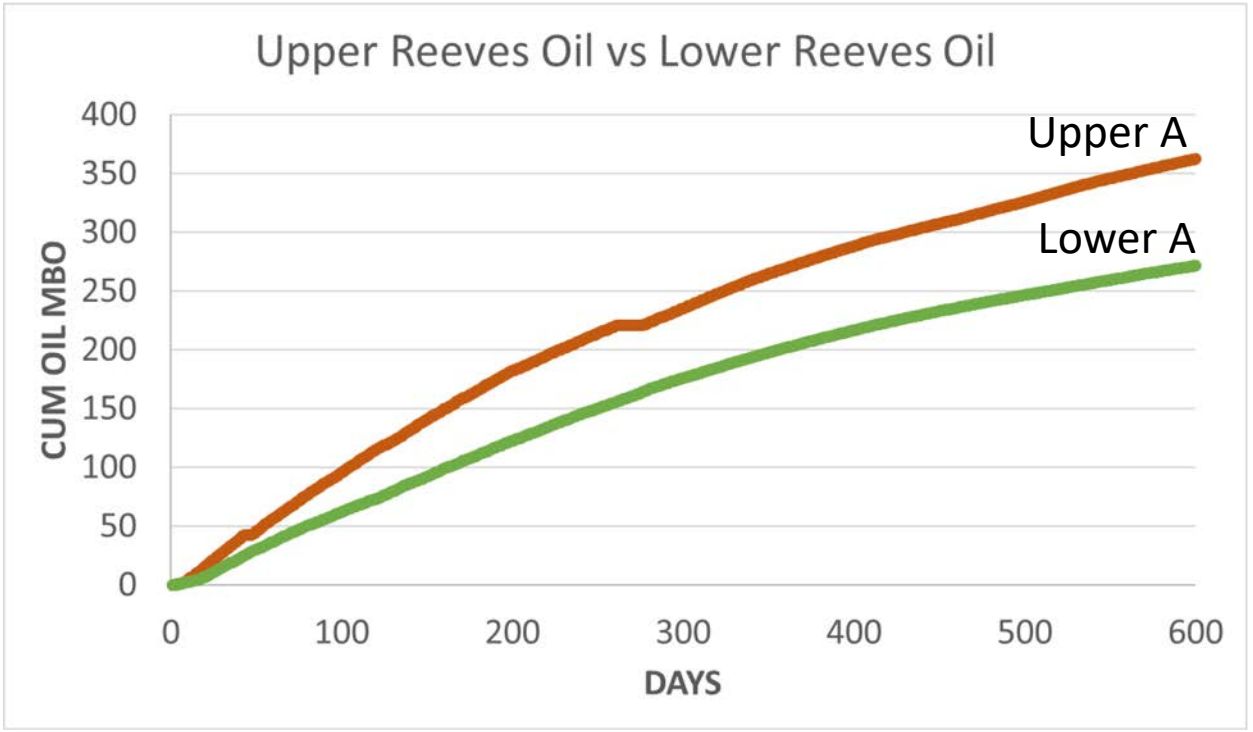
- How can we make wells better? (At a given Location)
- Drill the wells Longer (Previously discussed)
- Target a Different Landing Zone
- Frac the Wells Differently

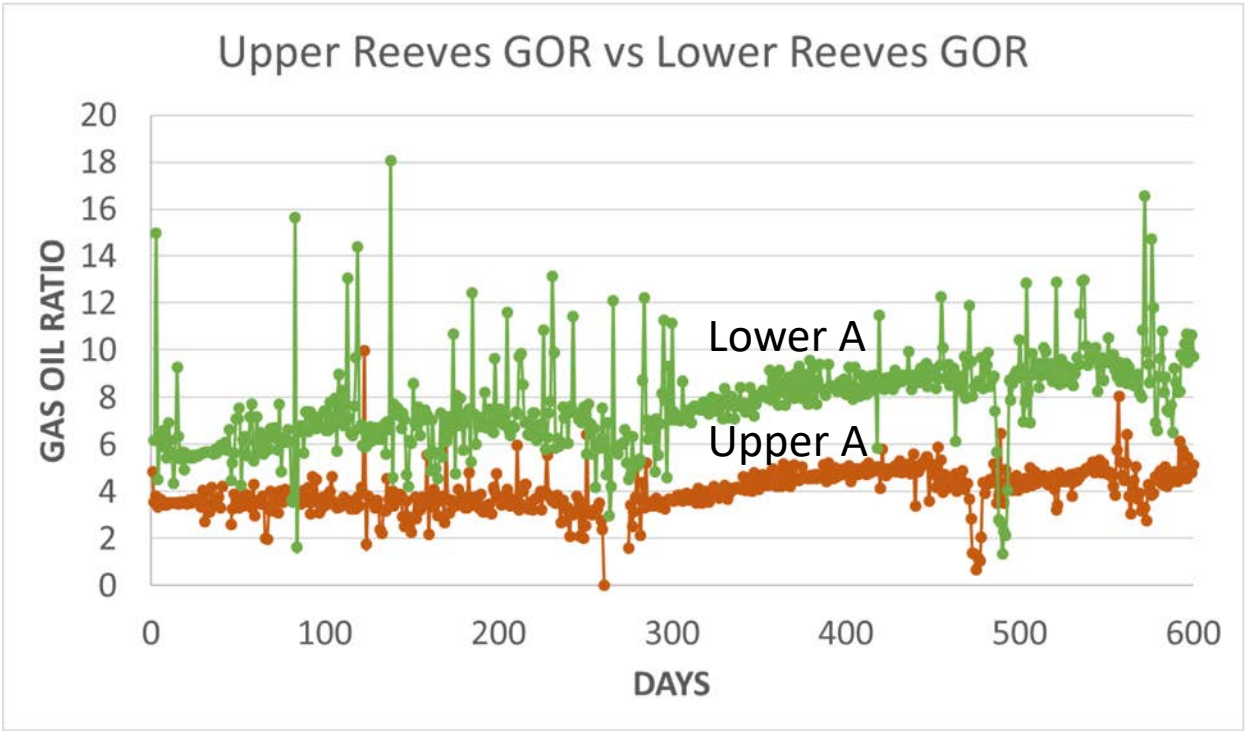
Better – XEC Reeves County





Better – Impact of Landing Zone on Production

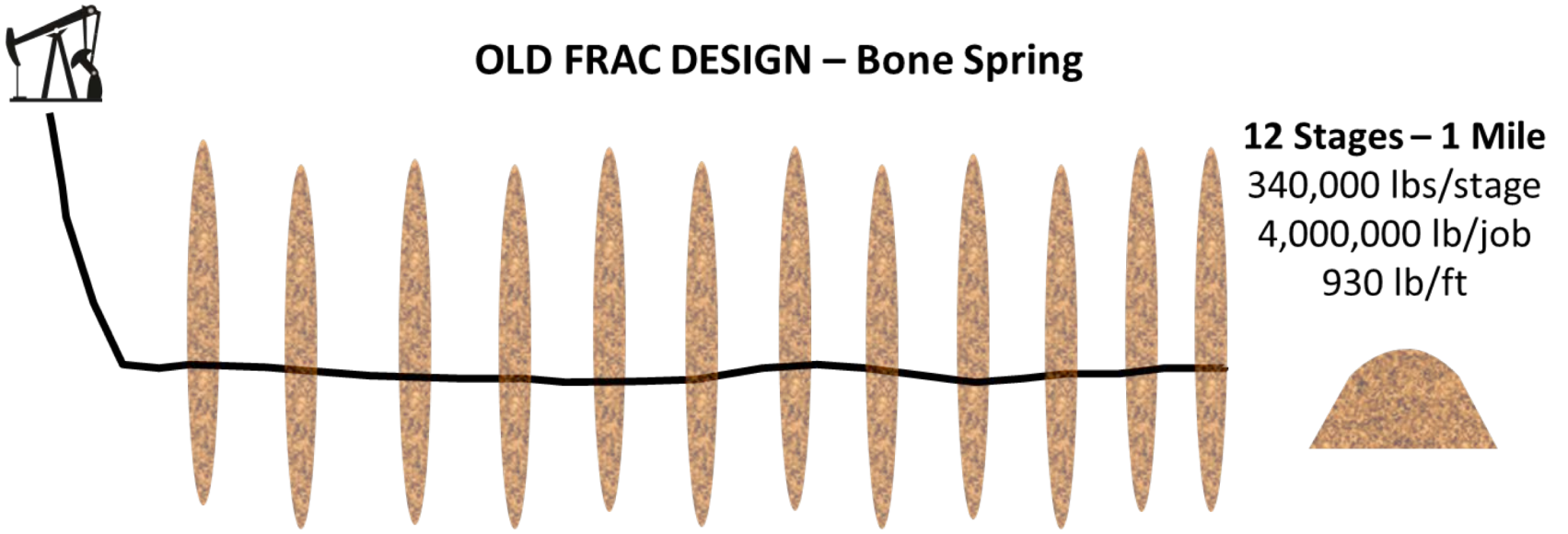


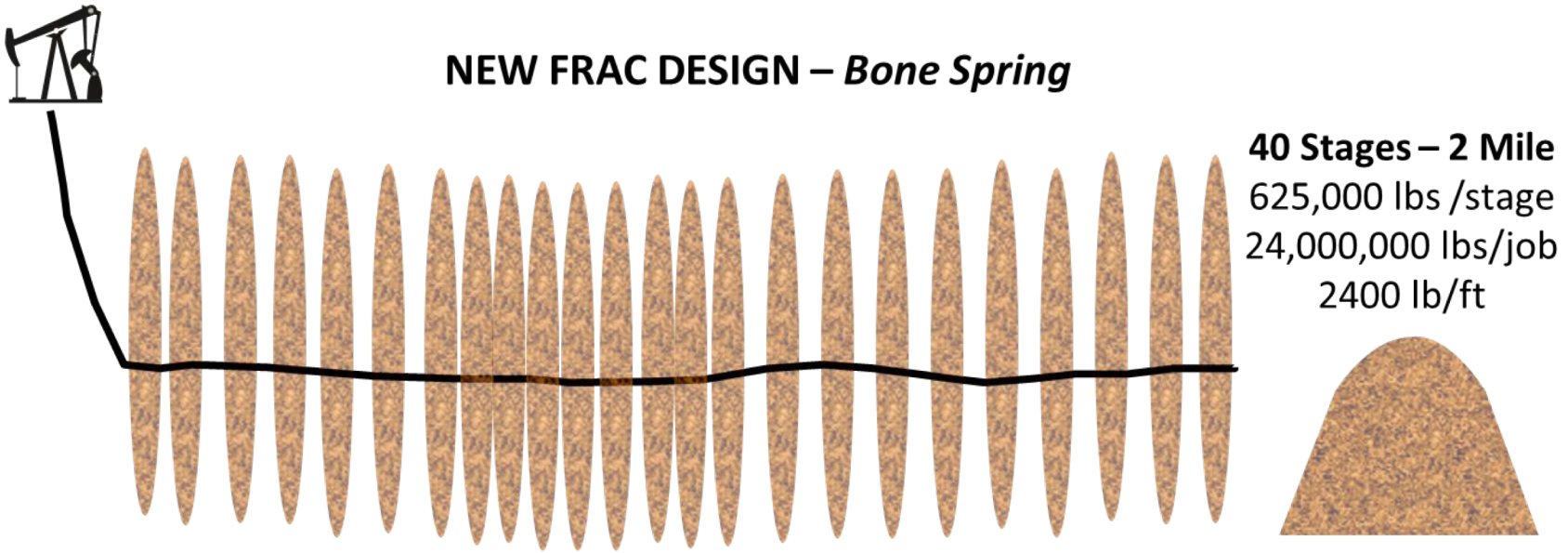


Lower A

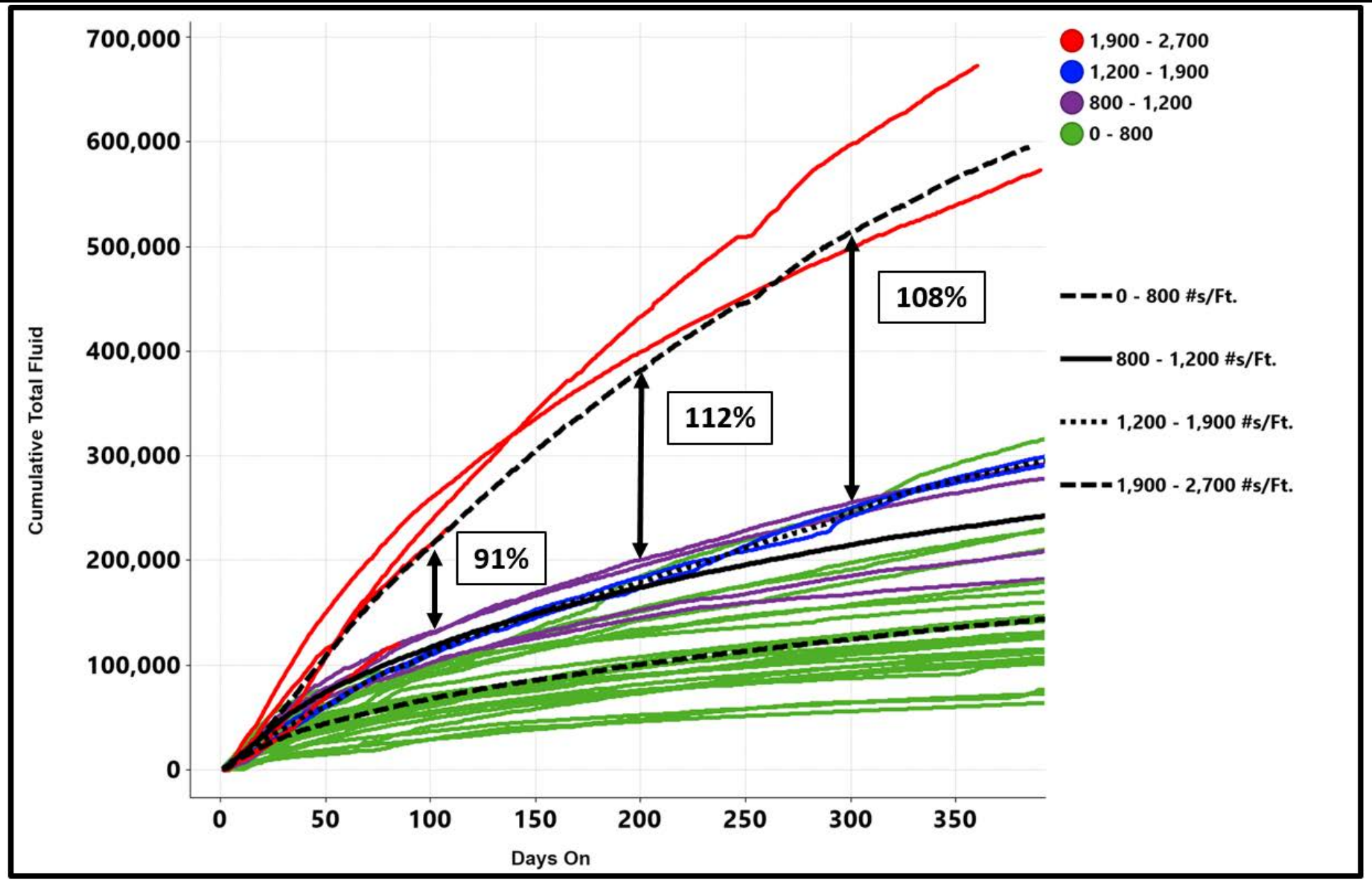
Upper A

Better – Not only Larger Fracs, but Smarter Fracs



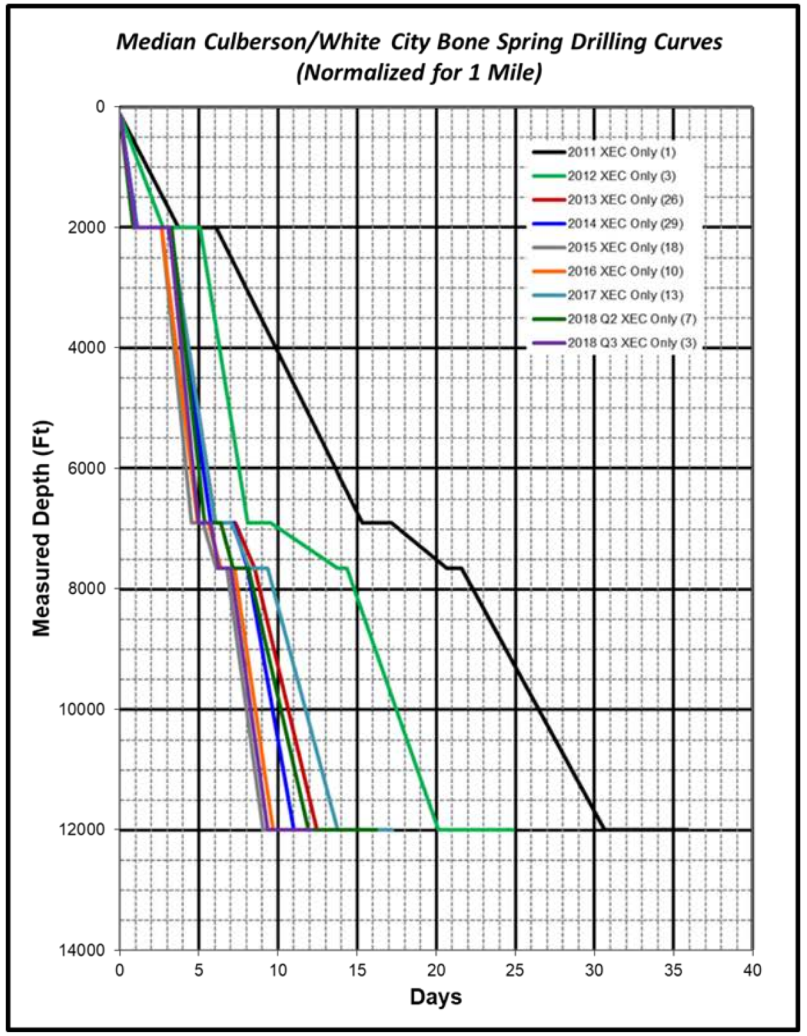


Better – Impact of #/Ft On Production



Faster –

White City – Culberson Bone Spring



Median Days

XEC Only

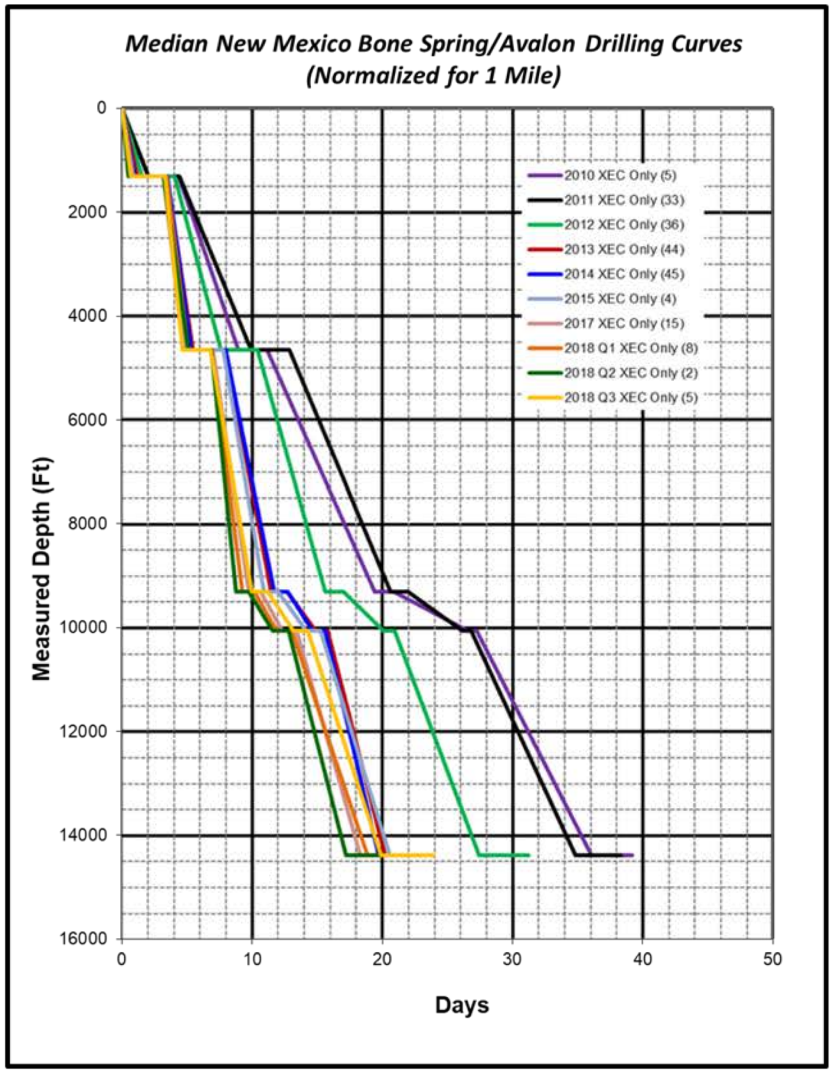
Normalized 1 Mile Lateral (12,000’ MD)

Spud To TD

2011 (1)	30.6	
2012 (3)	20.2	
2013 (26)		12.5
2014 (29)		11.0
2015 (18)		9.0
2016 (10)		9.7
2017 (13)		13.8
2018 Q2 (5)		11.9
2018 Q3 (3)		9.4

Faster –

NM Bone Springs & Avalon



Median Days

XEC Only

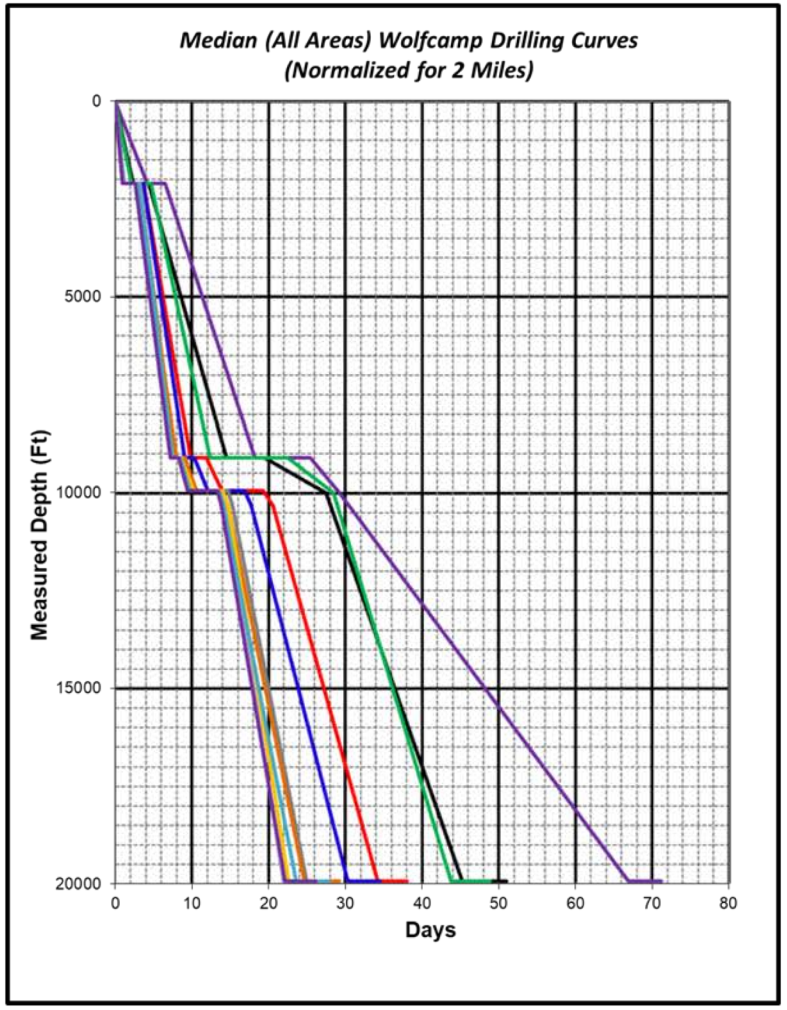
Normalized 1 Mile Lateral (14400' MD)

Spud To TD

2010 (5)	36.0	
2011 (33)		34.8
2012 (36)		27.4
2013 (44)		20.2
2014 (45)		19.7
2015 (4)	20.6	
2017 (15)		18.3
2018 Q1 (8)		18.9
2018 Q2 (2)		17.2
2018 Q3 (5)		19.9

Faster –

Wolfcamp



Median Days

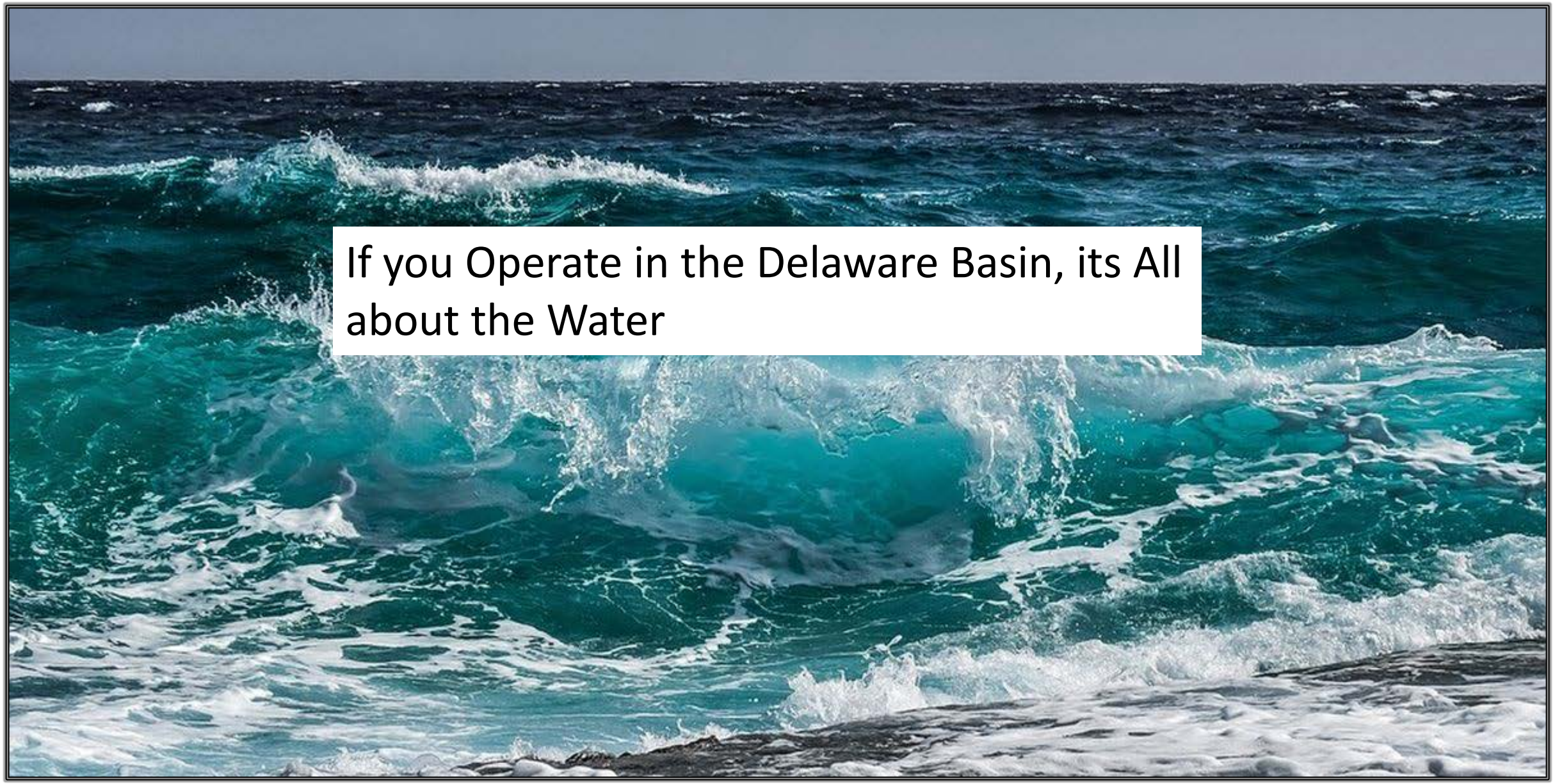
XEC Only

Normalized 2 Mile Lateral (19,925’ MD)

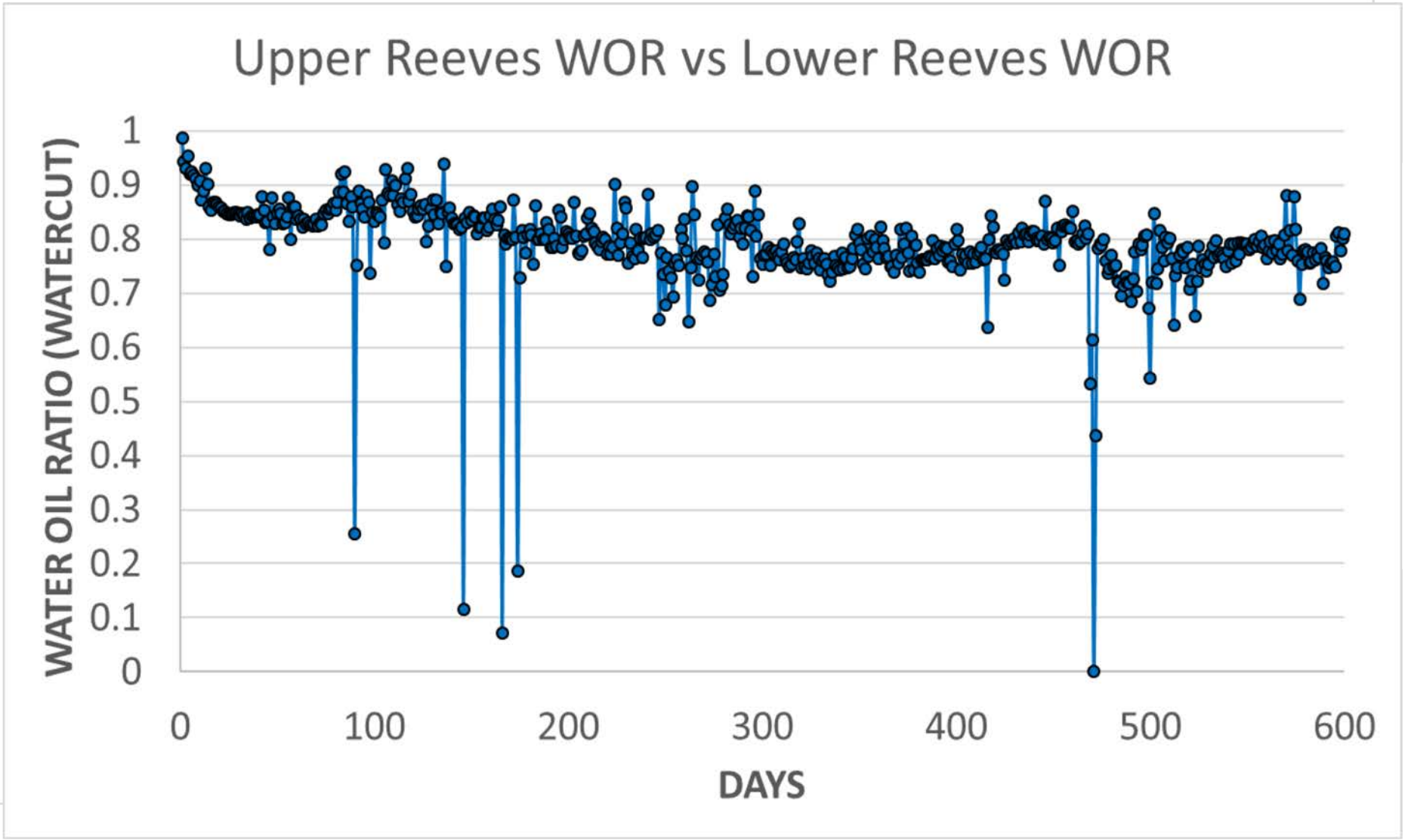
Spud To TD

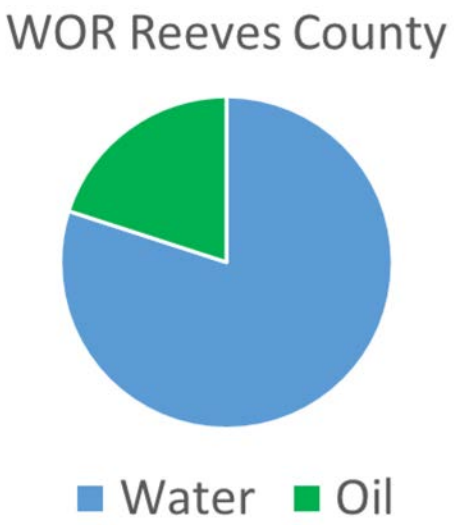
2010 (4)	66.9
2011 (6)	45.3
2012 (13)	43.8
2013 (25)	34.2
2014 (67)	30.3
2015 (34)	24.9
2016 (37)	24.6
2017 (44)	21.9
2018 Q1 (20)	22.6
2018 Q2 (21)	23.6
2018 Q3 (14)	22.1

Water



Water Production



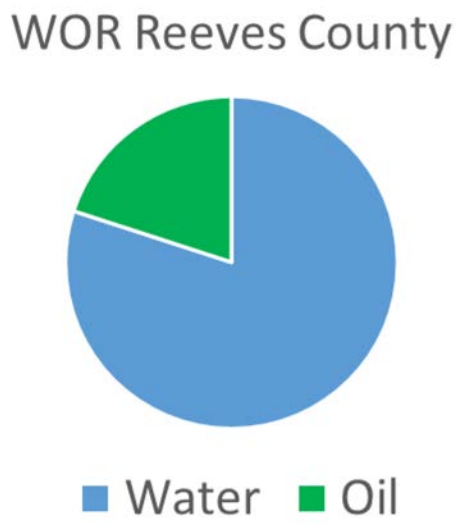


Water Production

1 Well = 1,000,000 BO and 8,000,000 BW (4,000 BWPD)
1 SWD = 40,000 BWPD

1 Section = 12,000,000 BO and 96,000,000 BW (48,000 BWPD)
1 Section = 2 SWDs

4 Sections = 48,000,000 BO and 384,000,000 BW (192,000 BWPD)
4 Sections = 5 SWDs



Assumes 12 well spacing

Water – XEC Water Recycle

Cimarex's "On-the-Fly" Recycling Process

Pipeline

SWD

Layflat/Pipeline

Water – XEC Water Recycle

- Pros
  - No Capital Outlay
  - Less Operational Maintenance
  - Reduced Environmental Liablity
  - No Pulling Water out of the Water Cycle

- Cons
  - Field Limited on Water Production
  - Disposal of Solids
  - Balancing Water Disposal with Frac Operations

Questions