# **QEP ENERGY:**

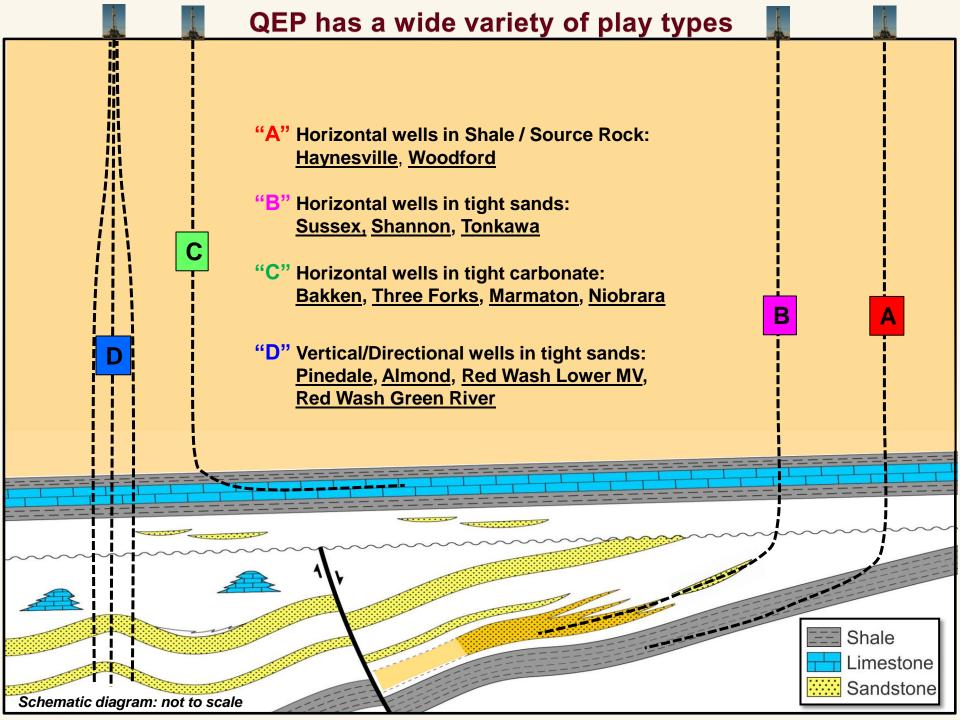
**NORTHERN REGION** 

VINCENT RIGATTI
GENERAL MANAGER

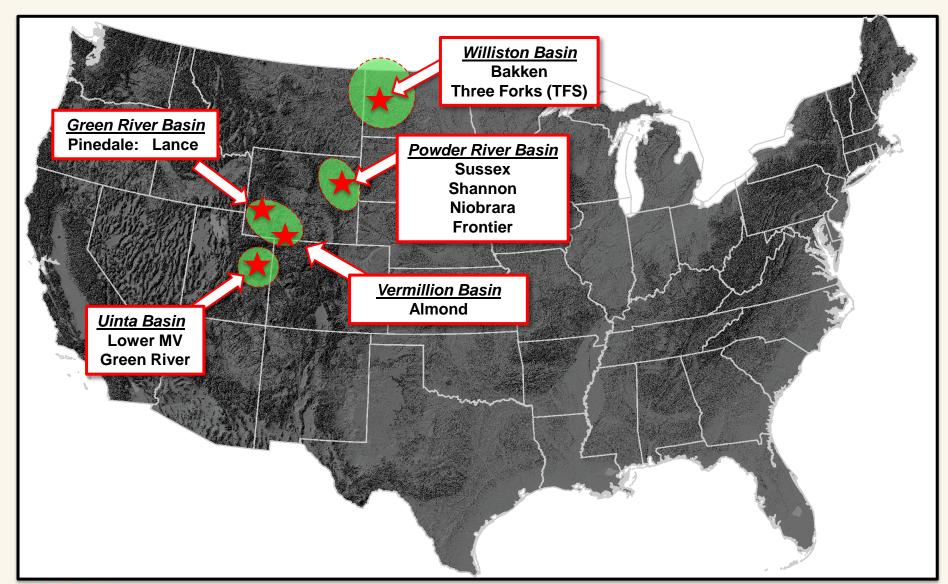
PAUL MATHENY
VICE PRESIDENT AND CHIEF OF STAFF







# **QEP planned Northern Region activity 2012**







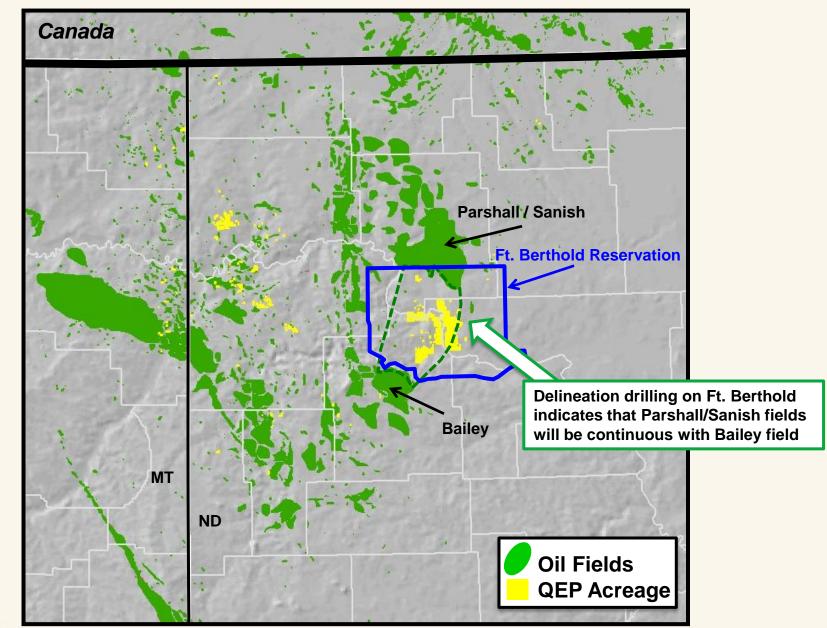


The Resource Growth Company

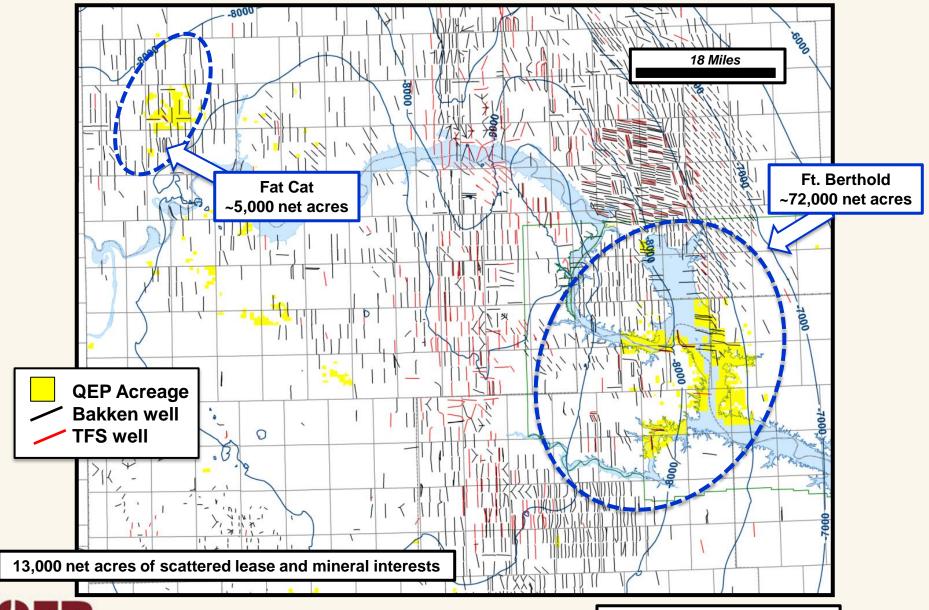
**QEP** Resources, Inc.

Williston Basin: Bakken/Three Forks Review

# Williston Basin: Geographic Setting



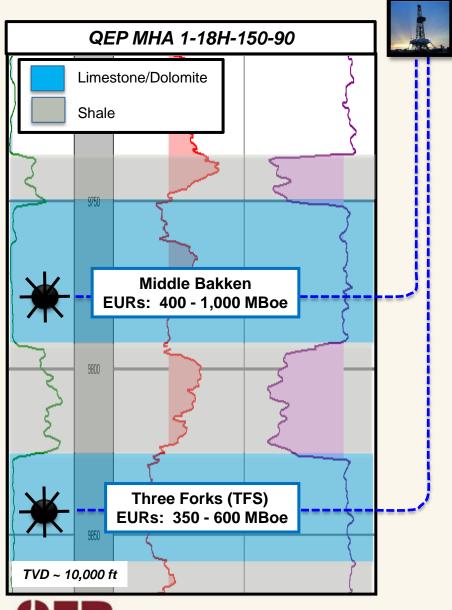
# QEP has 90,000 net acres in the Williston Basin

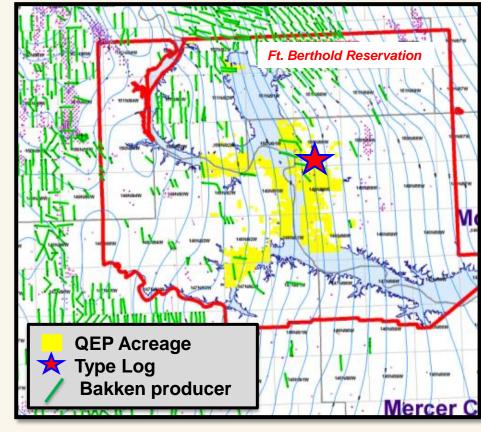




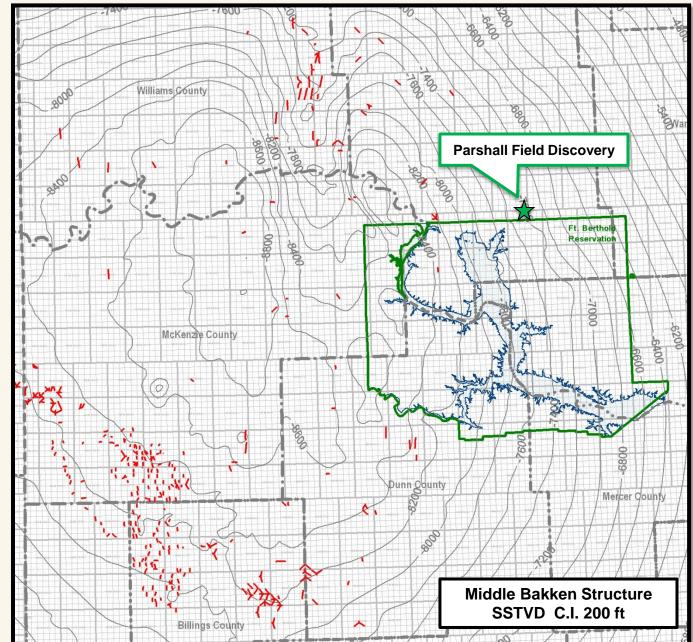
Middle Bakken Structure SSTVD C.I. 100 ft

### Ft. Berthold Stratigraphy and Horizontal Well Targets





- ➤ QEP Bakken and TFS reservoirs will be developed with long (10,000 ft+) laterals on pads with 2 10 wells per pad
- ➤ A typical long lateral is ~ 20,000 ft MD



Bakken or Three Forks wells drilled prior to 2007

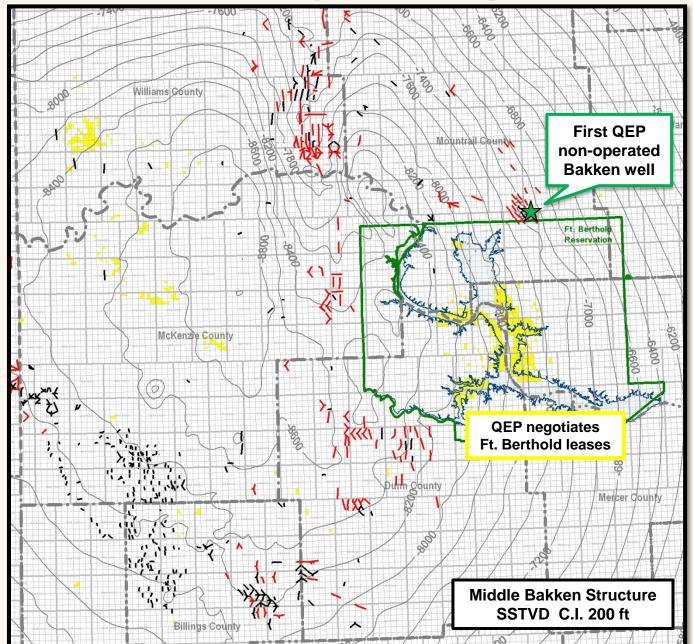


2007

Pre-2007 Bakken or Three Forks wells

Bakken or Three Forks wells drilled in 2007

QEP Acreage





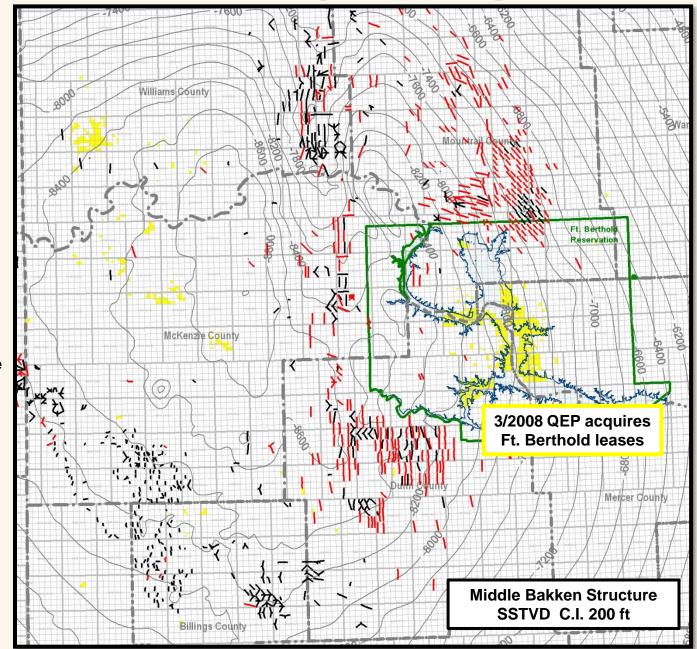
S

2008

Pre-2008 Bakken or Three Forks wells

Bakken or Three Forks wells drilled in 2008

QEP Acreage



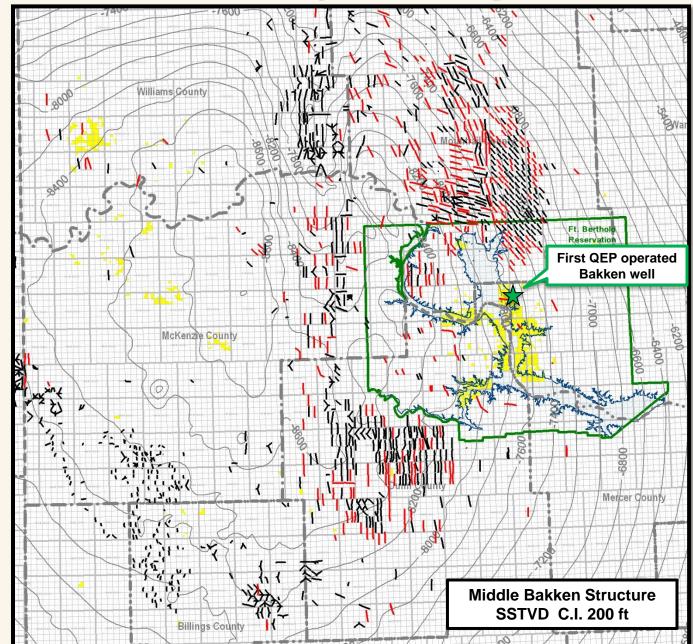


2009

Pre-2009 Bakken or Three Forks wells

Bakken or Three Forks wells drilled in 2009

QEP Acreage



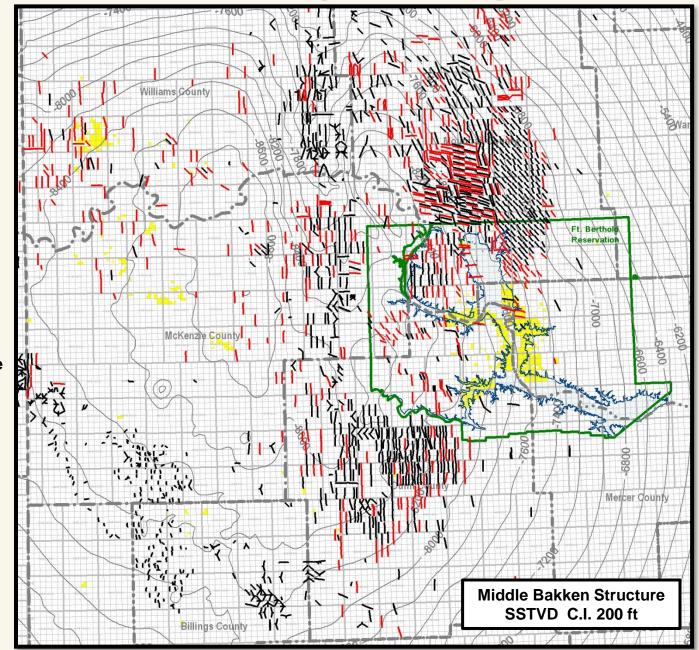


2010

Pre-2010 Bakken or Three Forks wells

Bakken or Three Forks wells drilled in 2010

QEP Acreage



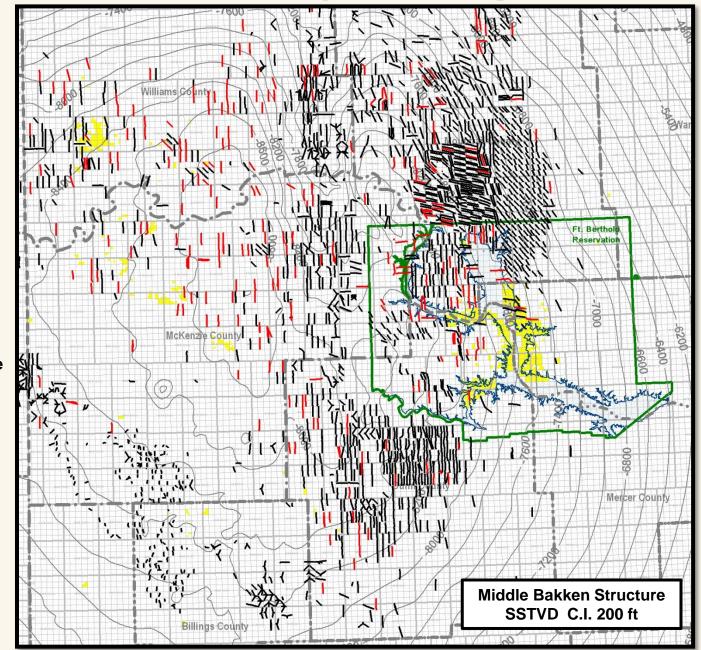


2011

Pre-2011 Bakken or Three Forks wells

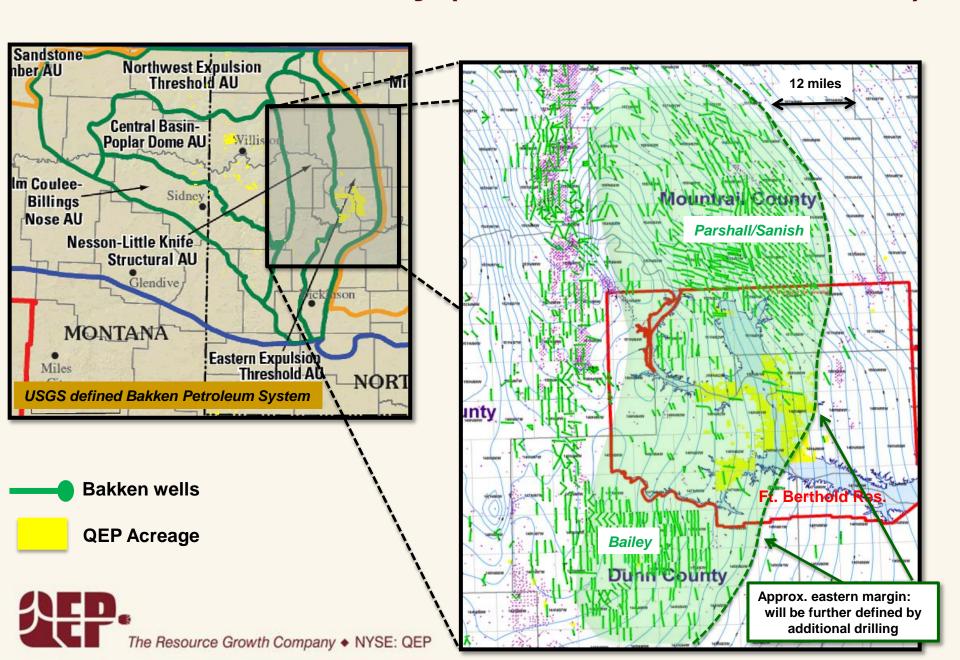
Bakken or Three Forks wells drilled YTD 2011

QEP Acreage





# Williston Bakken Play (East of Nesson Anticline)



# Williston Basin: Regional Bakken EUR Map

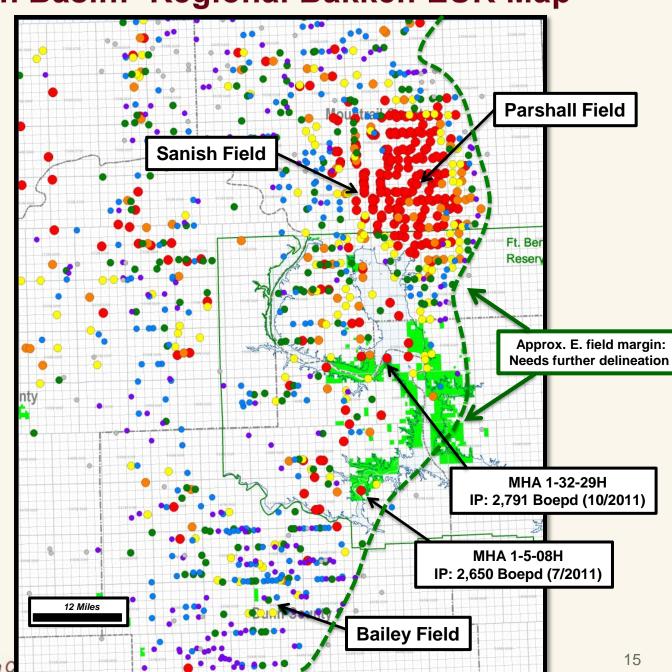
The high EUR Bakken (+500 MBo) trend extends across QEP acreage

QEP Acreage

#### **EUR Bubbles (MBo)**

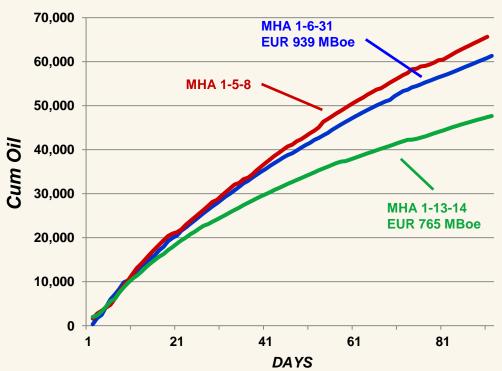
1 - 100	
101 - 200	
201 - 300	
301 - 400	
401 - 500	
501 - 600	
601 - 3000	



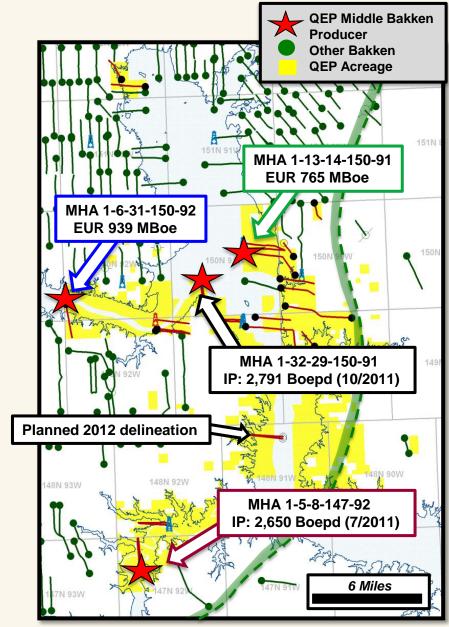


### Ft. Berthold recent Bakken well results

#### Cumulative oil plot of high EUR Bakken wells

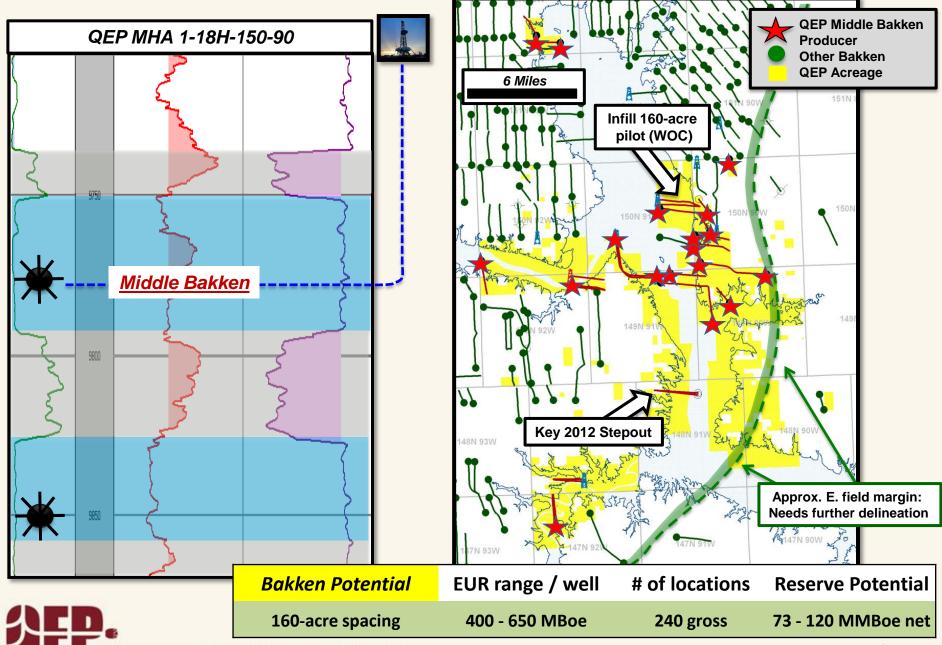


➤ After the first 90 days, QEP's 1-5-8-147-92 is our best performing Bakken well to date



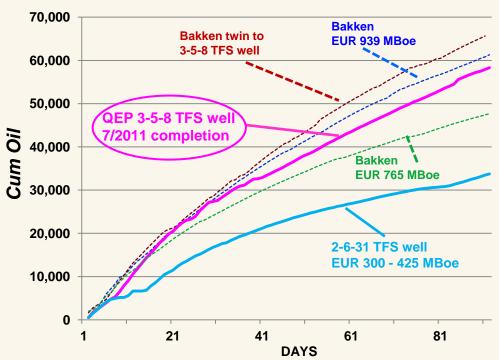


Ft. Berthold Bakken potential

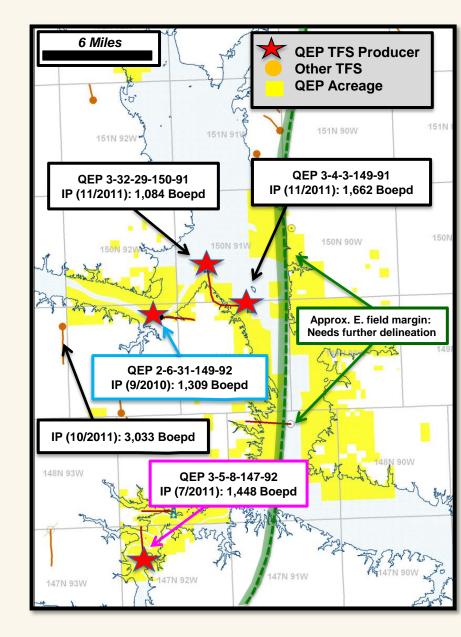


### Ft. Berthold Three Forks (TFS) well results

#### Cumulative oil plot of selected significant wells

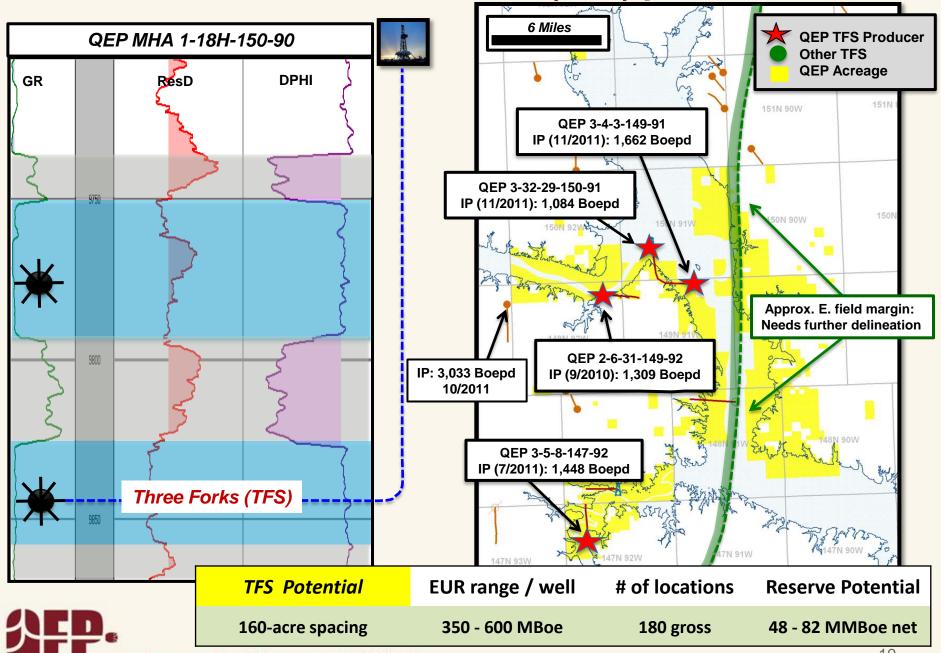


➤ After the first 90 days, QEP's 3-5-8-147-92 TFS well is our 3<sup>rd</sup> best performing well to date, and is comparable to our best Bakken wells

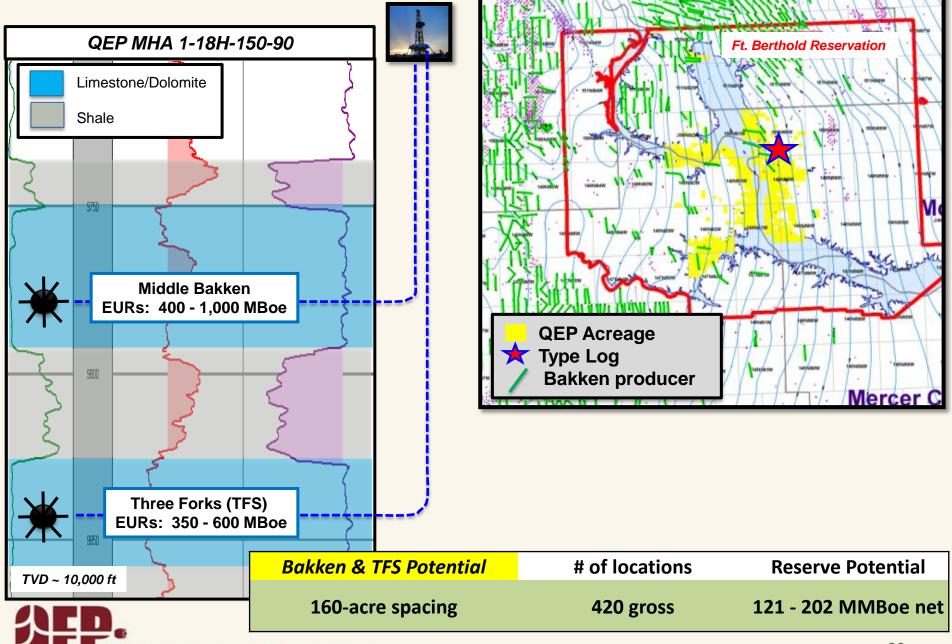




Ft. Berthold Three Forks (TFS) potential

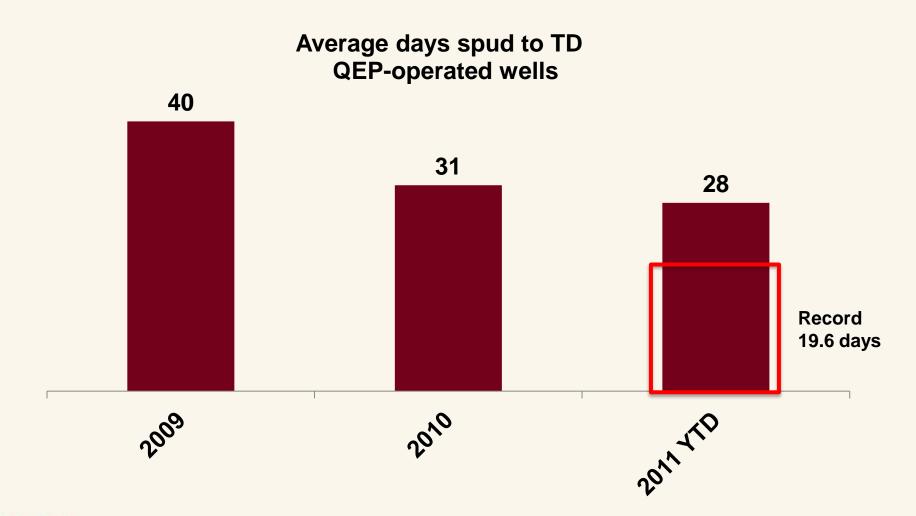


### Ft. Berthold Bakken and Three Forks (TFS) Upside



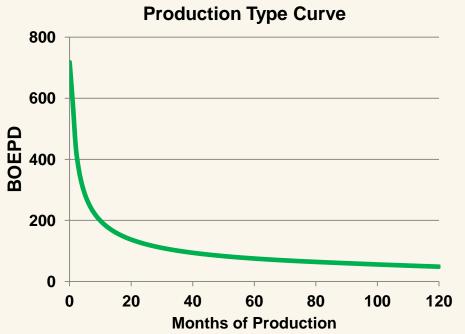
The Resource Growth Company ◆ NYSE: QEP

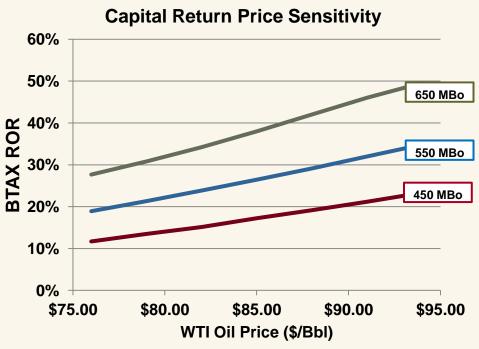
# Bakken/TFS average drilling days have come down





### **Bakken Formation, North Dakota**





Type curve details: IP: 718 Boepd, b factor: 1.8

Initial Decline: 75.4%

■ Terminal decline: 8.0%, Well life: 32.3 years

Type curve EUR: 550 MBoe (50% of EUR in 6.8 yrs)

Well depth: 10,000'/20,000' MD

Completed Well Cost: \$9.5 MM

Economic Summary: \$85/Bbl WTI

BTAX ROR: 26.4%
 BTAX PV10: \$4.2 MM
 Net Finding Cost: \$21.86/Boe
 Net LOE: \$10.20/Boe

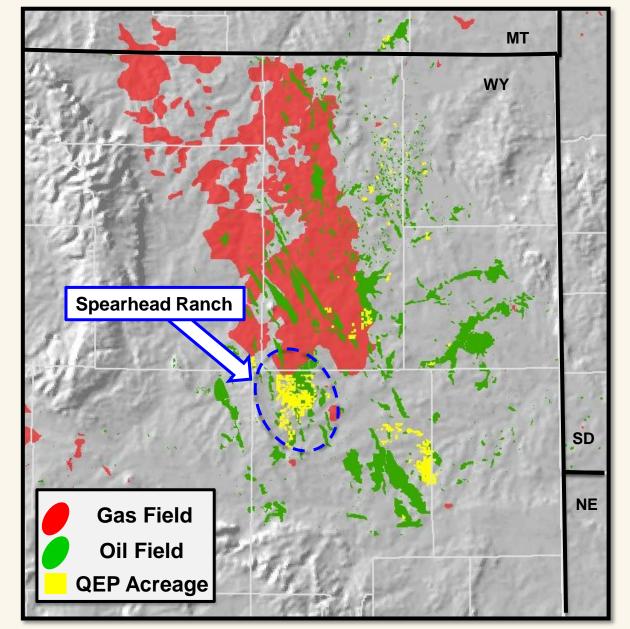




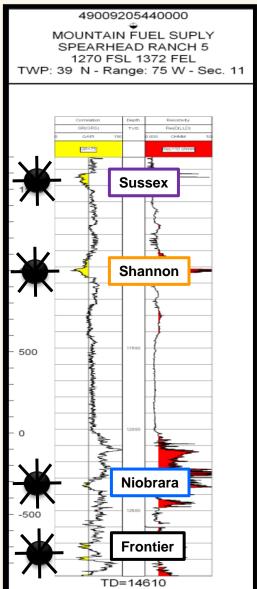
**QEP Resources, Inc.** 

Powder River Basin: Sussex, Shannon, Niobrara, Frontier Review

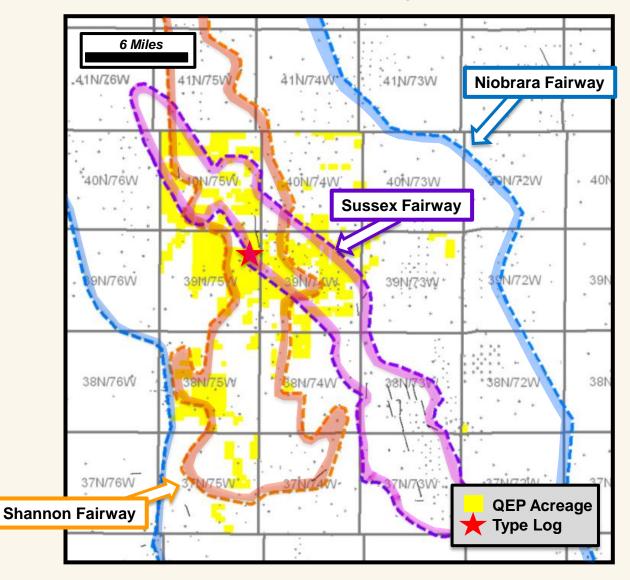
# Powder River Basin: Geographic Setting



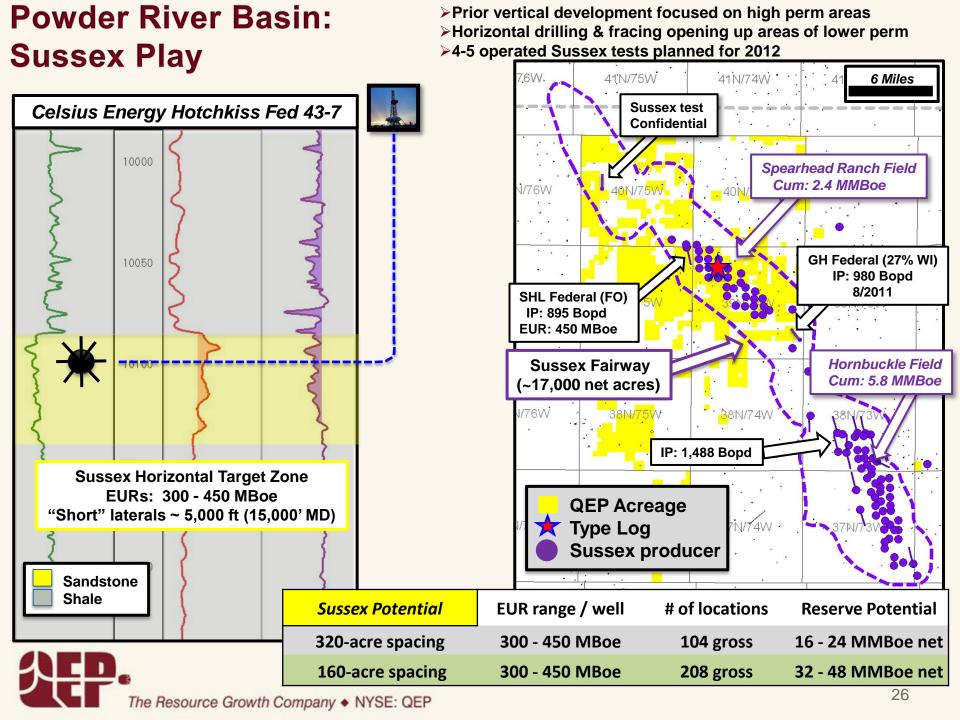
### Powder River Basin – Spearhead Ranch Area

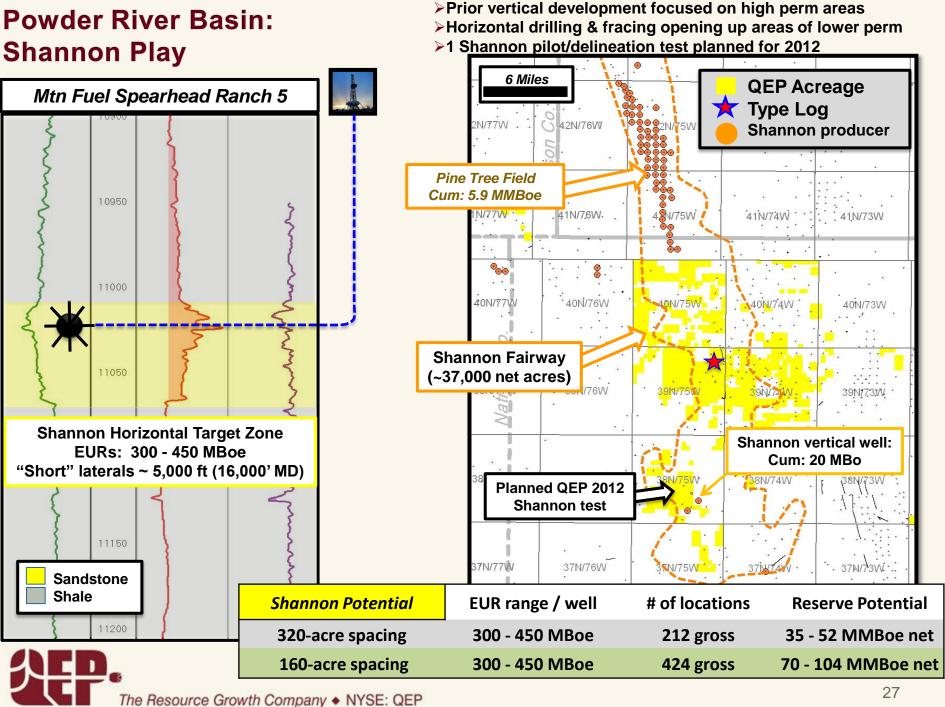


Stacked oil & liquids-rich reservoirs in the generative "kitchen"









#### **Powder River Basin:** 43N/72W 43N/73W **Niobrara Play QEP Acreage** 12 Miles Type Log Mtn Fuel Spearhead Ranch 13 Niobrara producer **Niobrara Fairway** (~40,000 net acres) 11500 41N/75W 41N/73W 40N/71W 40N/74W 40N/73W 11550 39N/71W 39N/70W 39N/73W Chalk **Shale** 38N/77V 38N/74W 38N/70W 38N/72W 11650 Niobrara test 11700 Confidential 36N/74W 36N/73W · 36N/72W **Niobrara Horizontal Target Zone** 38/8W EURs: 350 - 450 MBoe IP: 1,370 Bopd & 2.4 MM "Short" laterals ~ 5,000 ft (16,500' MD) **Spillman Draw** 300 - 400 MBoe EUR 34N/73W 34N/72W 33N/72V( 11850 **Reserve Potential** Niobrara Potential **EUR range / well** # of locations 320-acre spacing 350 - 450 MBoe 280 gross 44 - 56 MMBoe

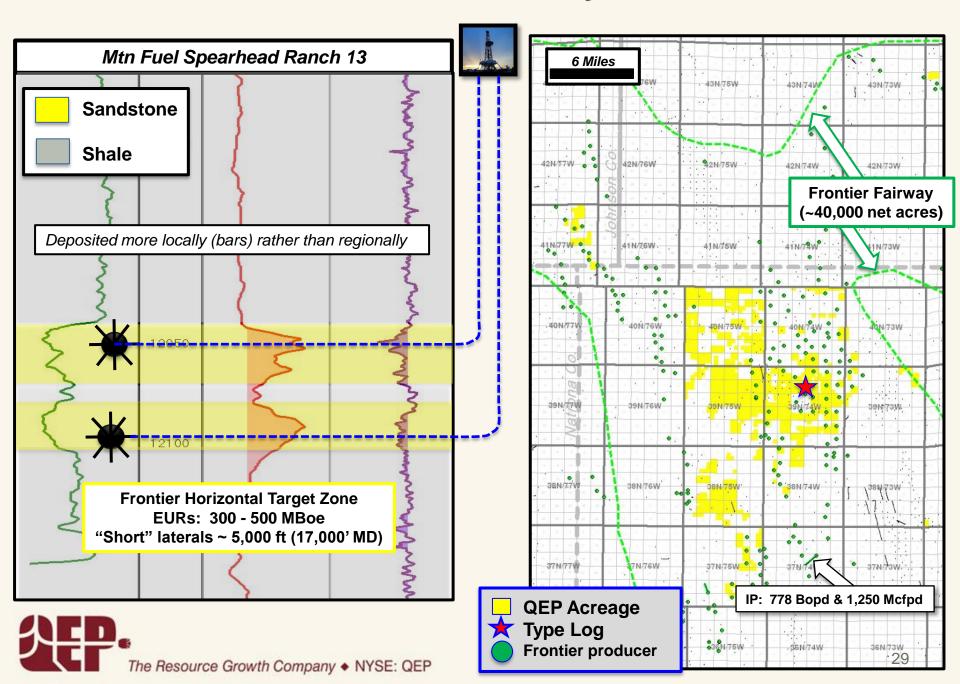
350 - 450 MBoe

88 - 112 MMBoe

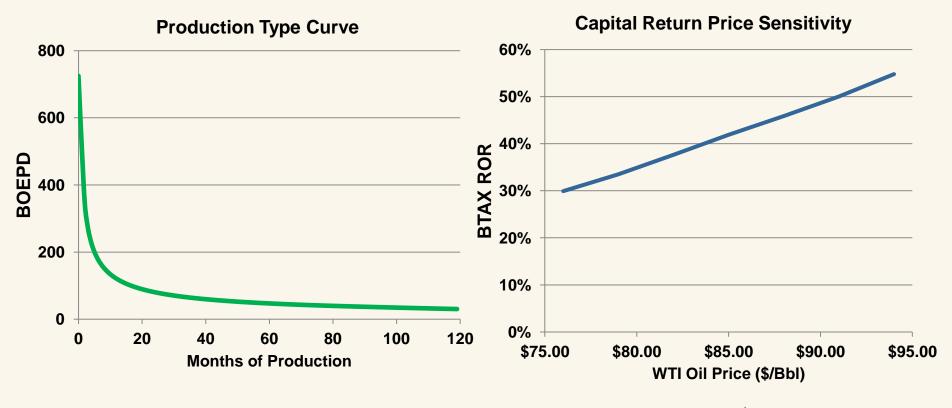
560 gross

160-acre spacing

### **Powder River Basin: Frontier Play**



# Sussex Horizontal Play, Powder River Basin



Type Curve Details: IP: 725 Boepd, b factor: 1.7

Initial Decline: 83.8%

■ Terminal decline: 8.0%, Well life: 30.3 Years

■ Type curve EUR: 350 MBoe (50% of EUR in 6.1 yrs)

Well Depth: 8,400' /13,000' MD

Completed Well Cost: \$6.1 MM

Economic Summary: \$4.50/MMBtu NYMEX,

**\$85/Bbl WTI** 

■ BTAX ROR: 42.0%

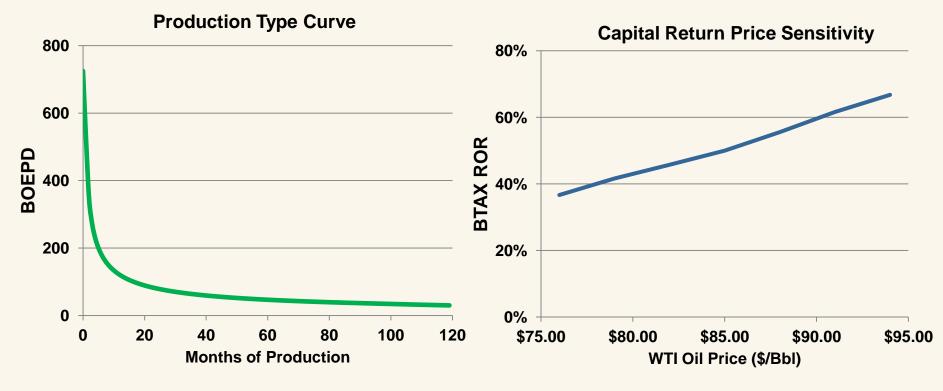
BTAX PV10: \$4.0 MM

Net Finding Cost: \$20.09/Boe

Net LOE: \$11.56/Boe



# Shannon Horizontal Play, Powder River Basin



Type Curve Details: IP: 725 Boepd, b factor: 1.7

Initial Decline: 83.8%

■ Terminal decline: 8.0%, Well life: 30.3 Years

■ Type curve EUR: 350 MBoe (50% of EUR in 6.1 yrs)

Well Depth: 8,900' /13,500' MD

Completed Well Cost: \$6.2 MM

Economic Summary: \$4.50/MMBtu NYMEX,

**\$85/Bbl WTI** 

■ BTAX ROR: 49.3%

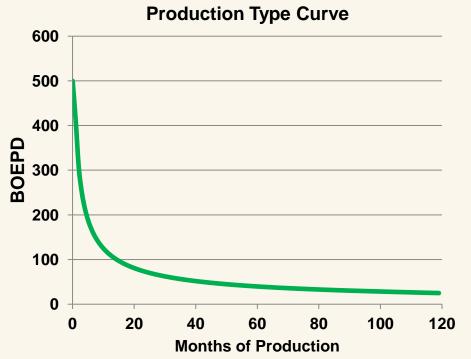
BTAX PV10: \$4.7 MM

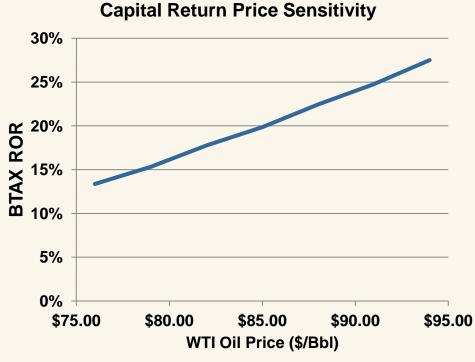
Net Finding Cost: \$18.47/Boe

Net LOE: \$11.56/Boe



# Niobrara Horizontal Play, Powder River Basin





Type Curve Details: IP: 500 Boepd, b factor: 1.5

Initial Decline: 78.3%

■ Terminal decline: 8.0%, Well life: 28.6 Years

Type curve EUR: 300 MBoe (50% of EUR in 7.3 yrs)

Well Depth: 8,400' /13,000' MD

Completed Well Cost: \$7.3 MM

Economic Summary: \$4.50/MMBtu NYMEX,

**\$85/Bbl WTI** 

■ BTAX ROR: 19.9%

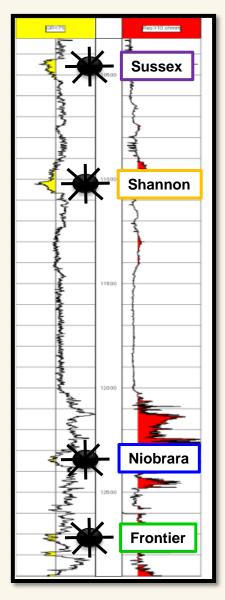
BTAX PV10: \$1.6 MM

Net Finding Cost: \$26.88/Boe

Net LOE: \$11.97/Boe

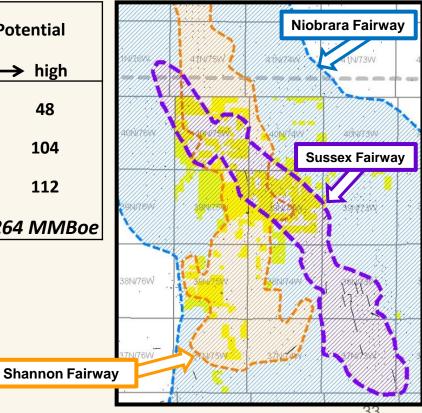


### Powder River Basin: Significant Potential Liquids Growth



- ➤ The stacked oil & liquids-rich zones in the Powder River Basin have the potential for <u>95 264 MMBoe net</u> to QEP on 320 to 160-acre spacing
- ➤ We are early in the evaluation stage
- ➤ Several key Sussex & Shannon tests are planned for 2012

	Net Reserve Potential	
Formation	low ——	→ high
Sussex	16	48
Shannon	35	104
Niobrara	44	112
TOTAL	95 MMBoe	264 MMBoe











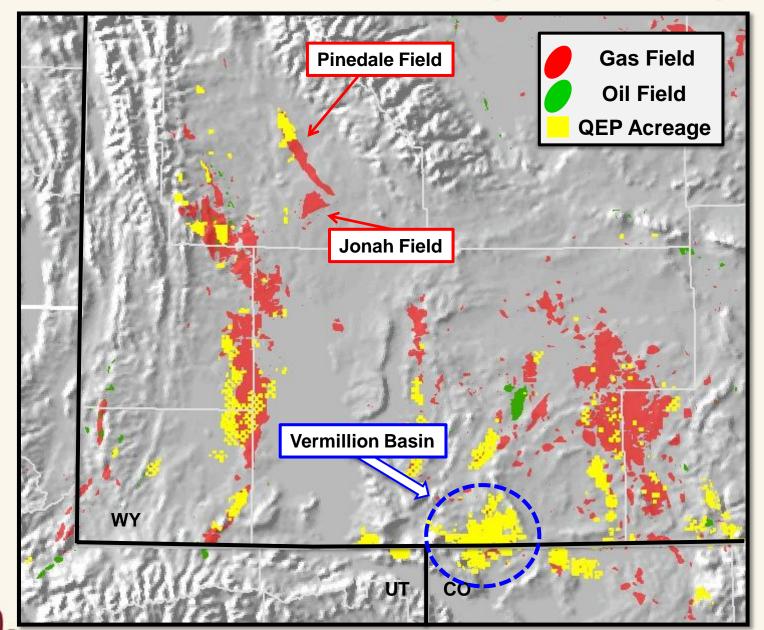


The Resource Growth Company

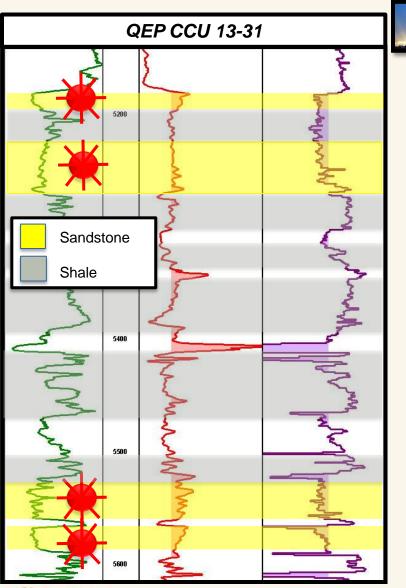
**QEP** Resources, Inc.

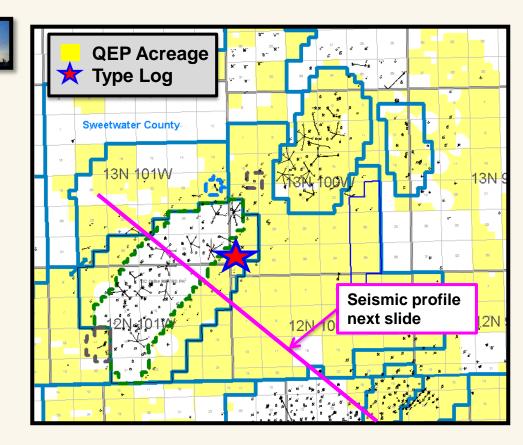
# Green River Basin: Vermillion Almond Play Review

# Vermillion Sub-basin: Geographic Setting



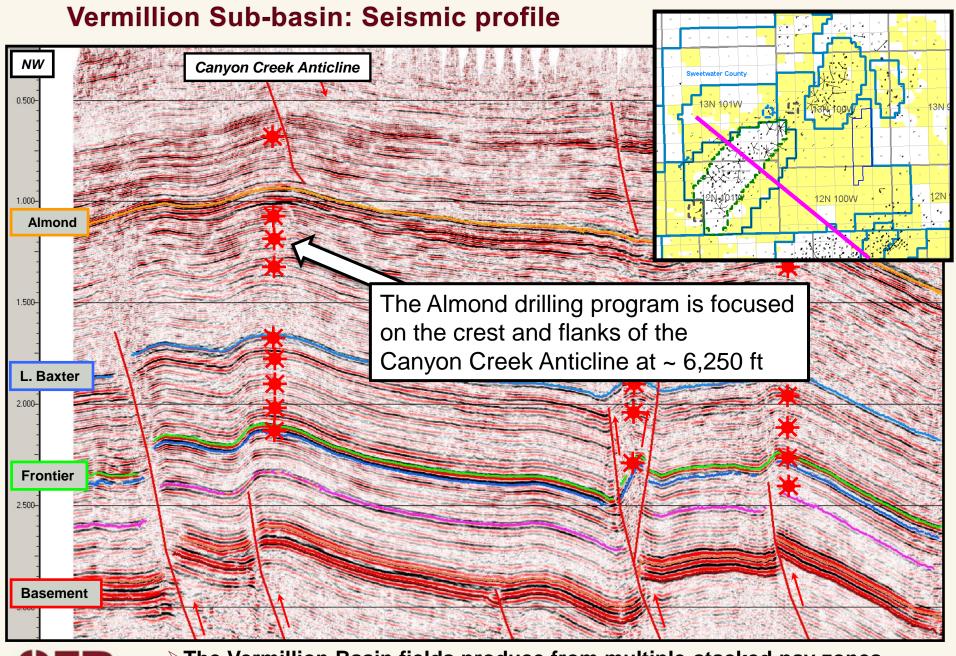
## **Vermillion Basin: Almond Formation Play**





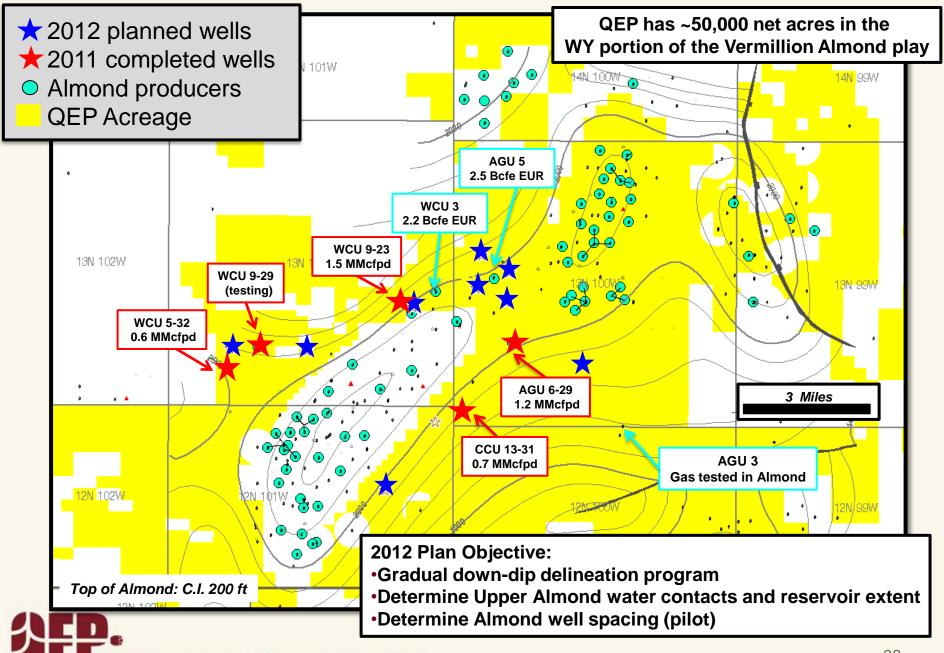
Almond Formation Targets
Multiple Stacked Sandstone Objectives
EURs: 1.5 - 2.5 Bcfe
MD ~ 6250 ft

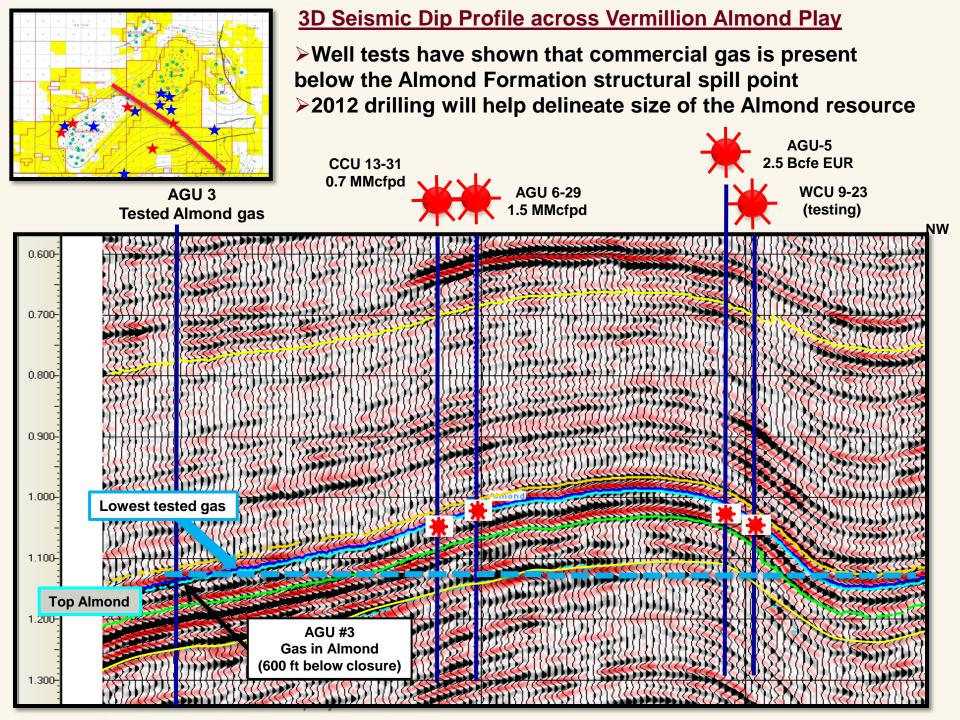




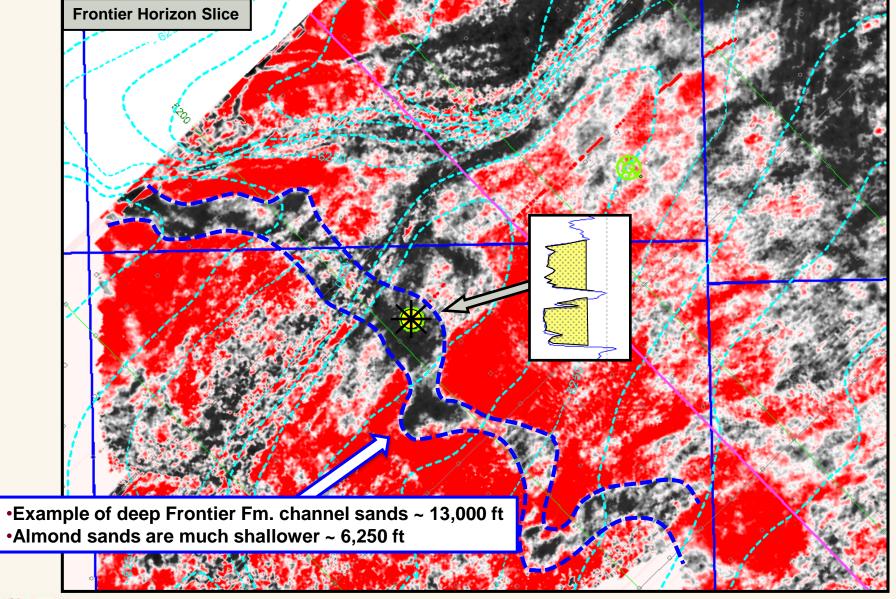
➤ The Vermillion Basin fields produce from multiple-stacked pay zones

### Vermillion Basin Almond Play: 2011 & 2012 activity



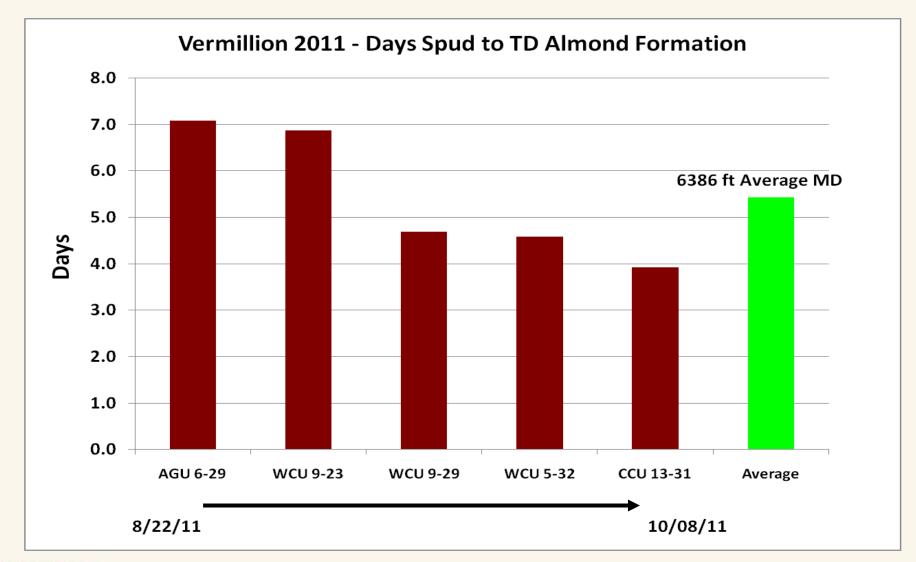


### Our 3D seismic should help us identify target Almond formation sand bodies



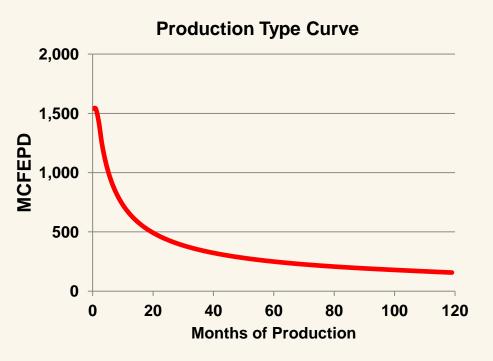


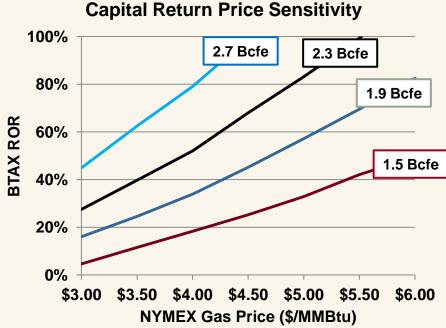
### Recent Almond wells have been drilled in under 5 days





## **Vermillion Almond Play, Wyoming**





Type Curve Details: IP: 1.5 MMcfepd, b factor: 1.5

Initial Decline: 59.9%

■ Terminal decline: 8.0%, Well life: 23.9 Years

Type curve EUR: 1.9 Bcfe (50% of EUR in 5.1 yrs)

Well Depth: 6,250'Completed Well Cost: \$1.8 MM

Economic Summary: \$4.50/MMBtu NYMEX,

**\$85/Bbl WTI** 

■ BTAX ROR: 45.1%

■ BTAX PV10: \$1.3 MM

Net Finding Cost: \$1.07/Mcfe

Net LOE: \$0.87/Mcfe









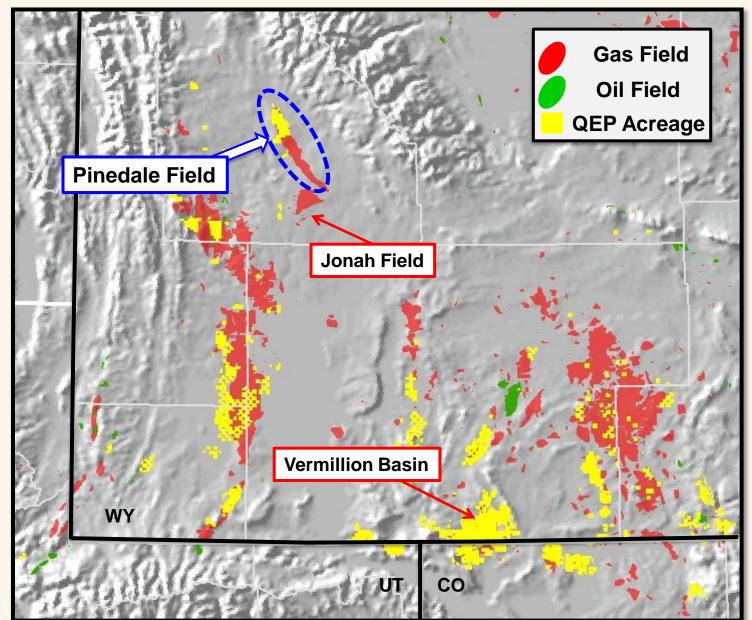
The Resource Growth Company

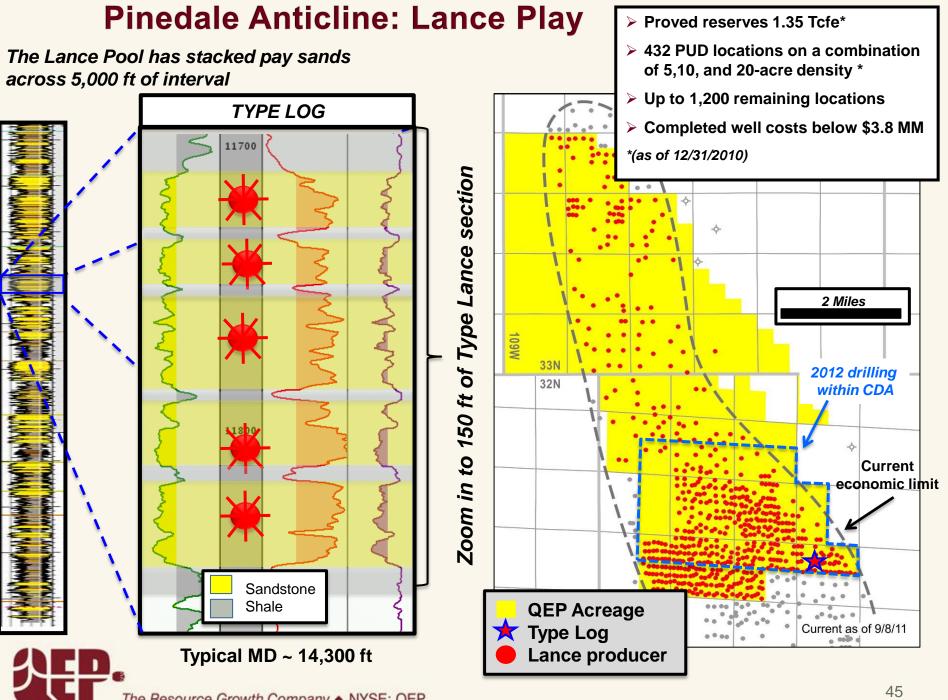
**QEP** Resources, Inc.

Green River Basin:

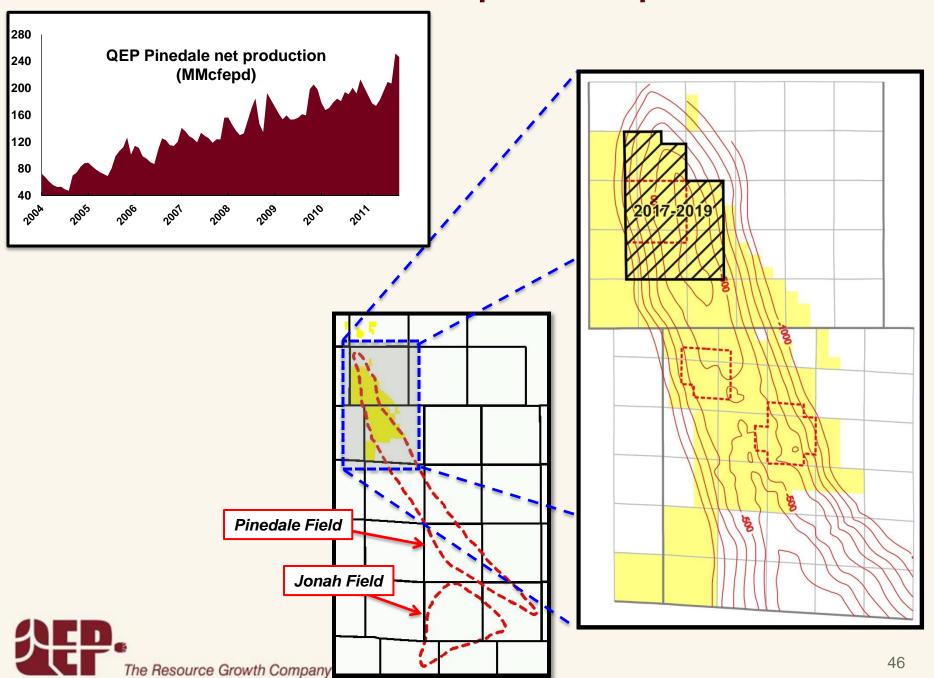
Pinedale Anticline Review

## Pinedale Anticline: Geographic Setting





## **QEP Pinedale Development Sequence**



## Pinedale well pod construction





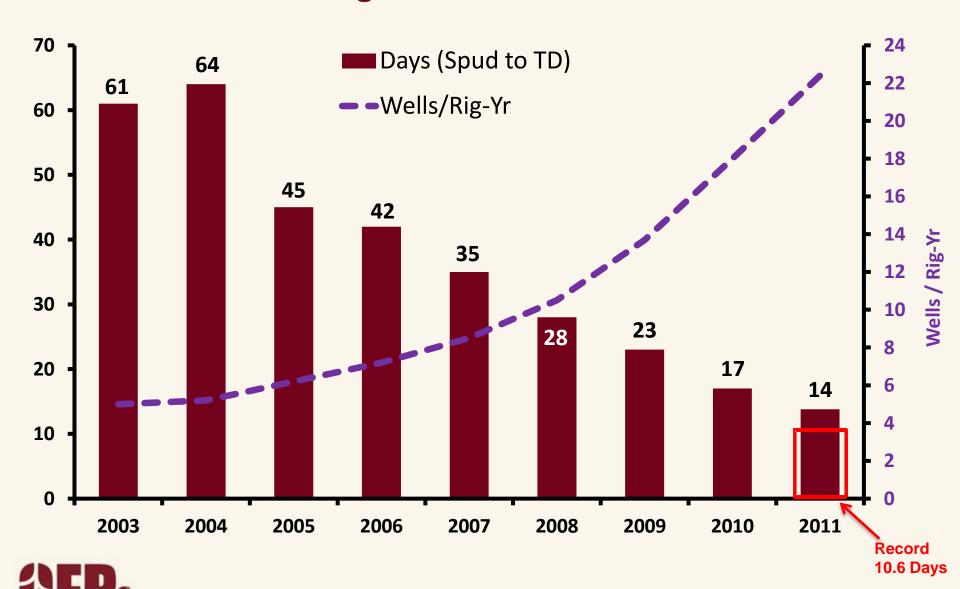




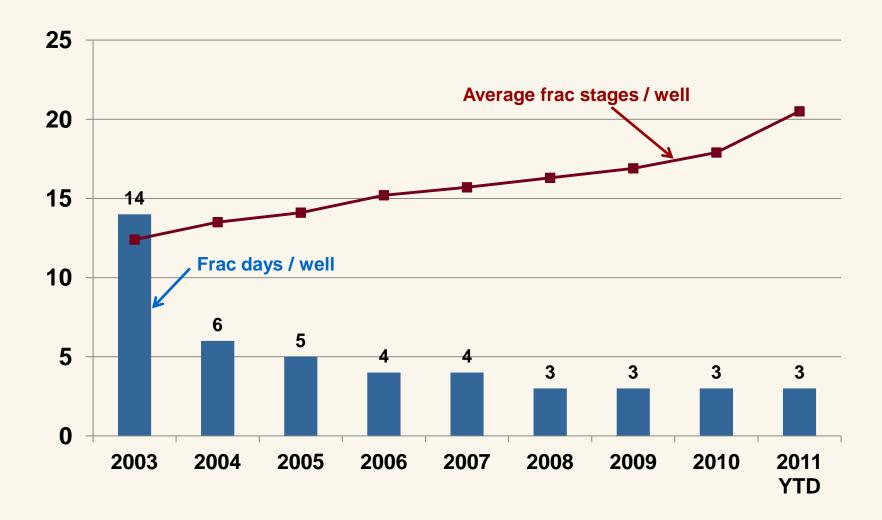




# Pinedale drill times continue to decline; maintaining our low-cost advantage



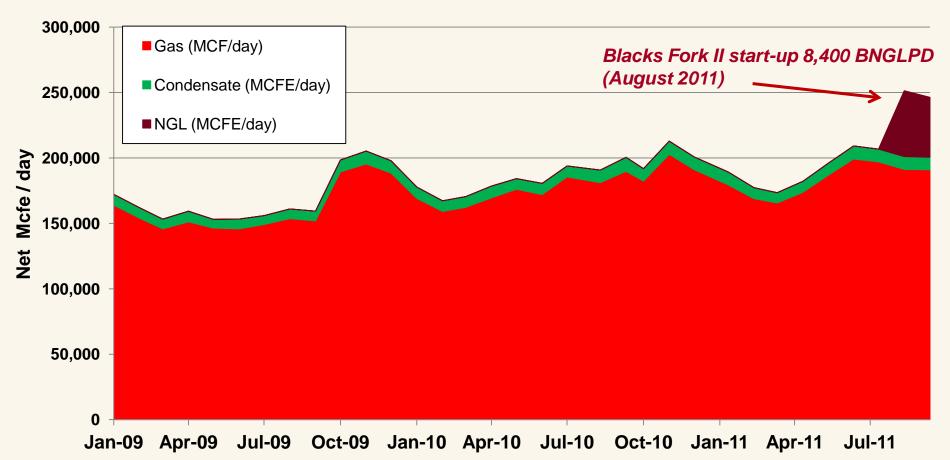
### Completing more Pinedale frac stages in fewer days





## Processing Pinedale gas through our Blacks Fork complex provides significant NGLs and enhanced return on investment

### **QEP Energy Pinedale Net Production**

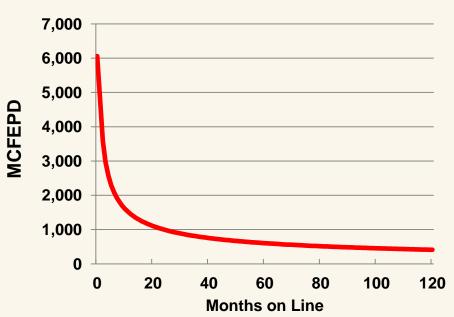


➤ Projected revenues from liquids are estimated to be 32% of November's total

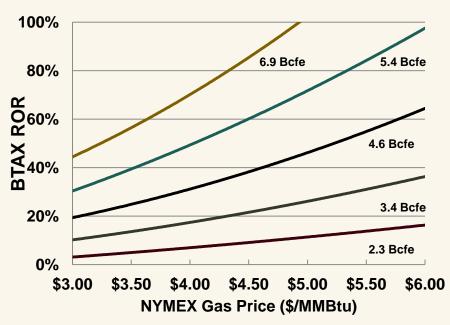


## Lance Pool, Pinedale, Wyoming





### **Capital Return Price Sensitivity**



Type curve details: IP: 5.9 MMcfepd, b factor: 1.6

Initial Decline: 75.7%

Terminal decline: 6.0%, Well life: 40 years

■ Type curve EUR: 4.6 Bcfe (50% of EUR in 7.3 yrs)

Well depth: 14,000'/14,300' MD

Completed Well Cost: \$3.8 MM

Economic summary: \$4.50/MMBtu NYMEX,

\$85 WTI

**BTAX ROR:** 38.3%

BTAX PV10: \$2.0 MM

Net Finding Cost: \$1.06/Mcfe

Net LOE: \$0.18/Mcfe

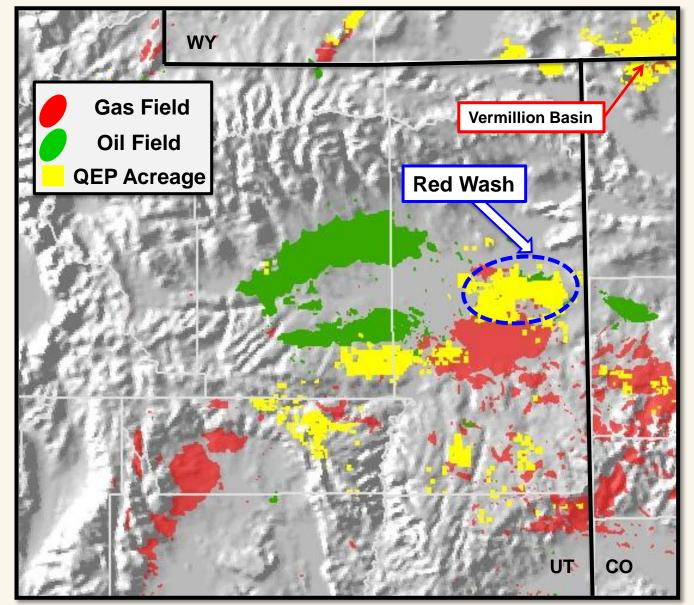




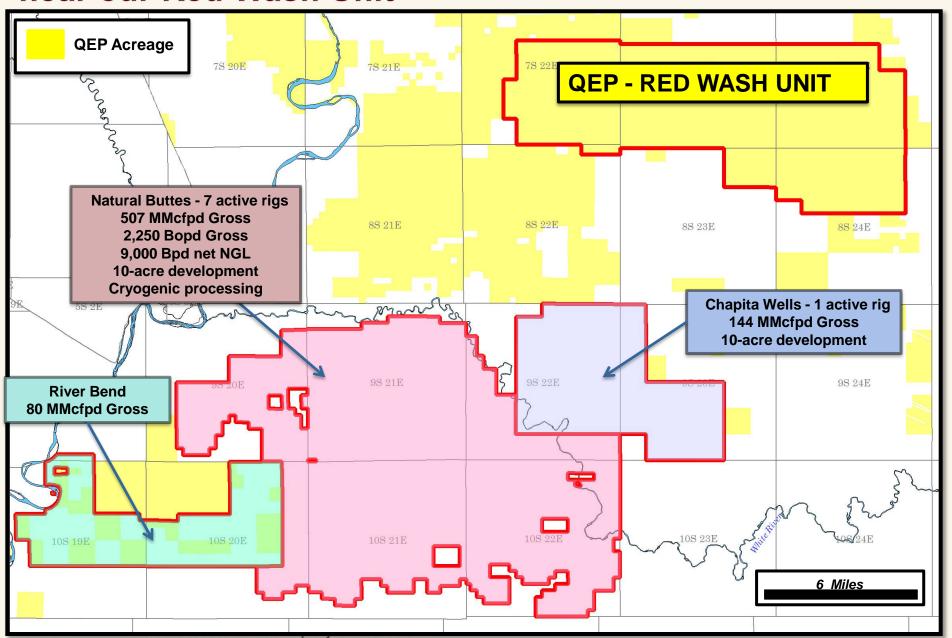
**QEP Resources, Inc.** 

# Uinta Basin: Red Wash Lower Mesaverde (MV) Play Review

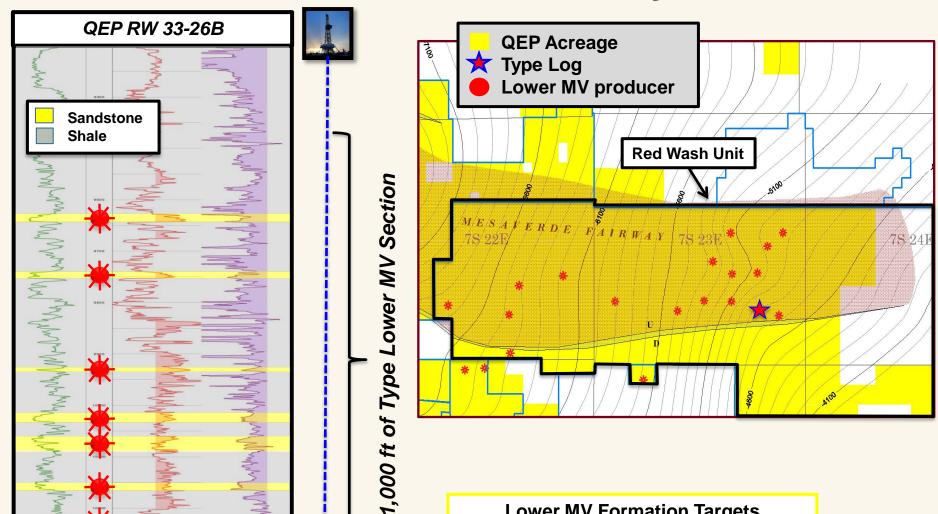
## **Uinta Basin: Geographic Setting**



# There are several large Lower MV development projects near our Red Wash Unit



## **Uinta Basin: Red Wash Lower MV Play**



Lower MV Formation Targets

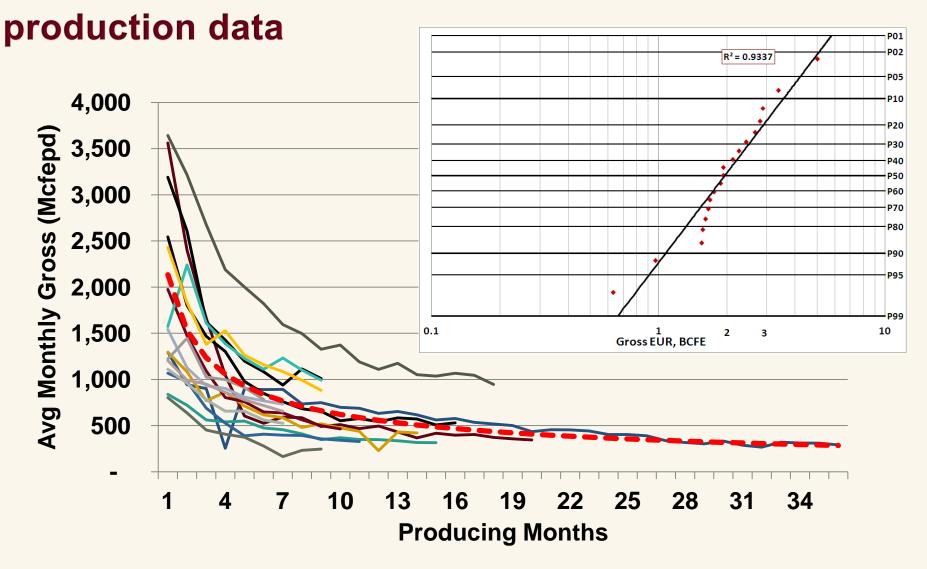
Multiple Vertical Sandstone Objectives

EURs: 0.6 – 5.0 Bcfe

MD ~ 12,000 ft



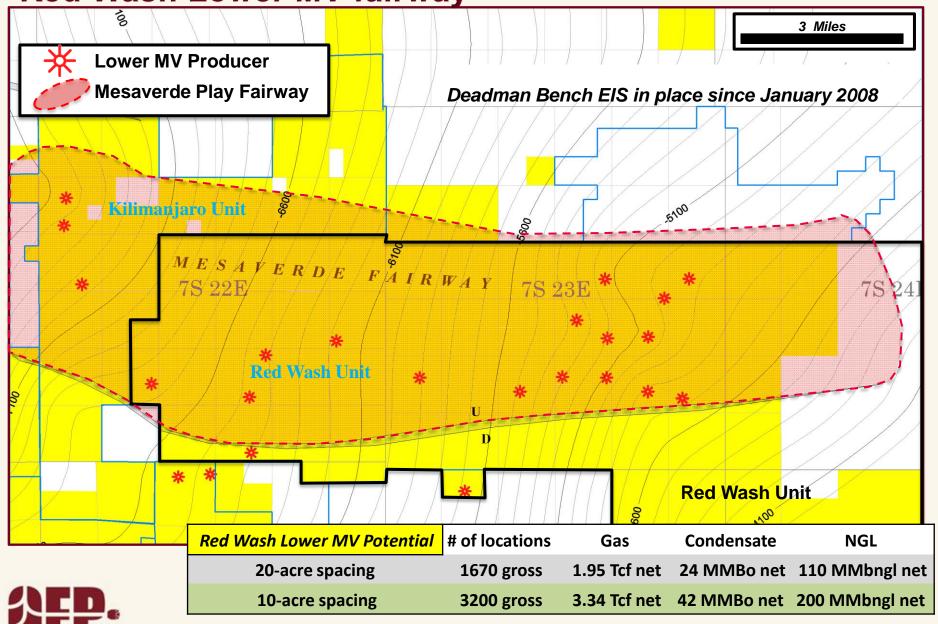
Red Wash Lower MV normalized



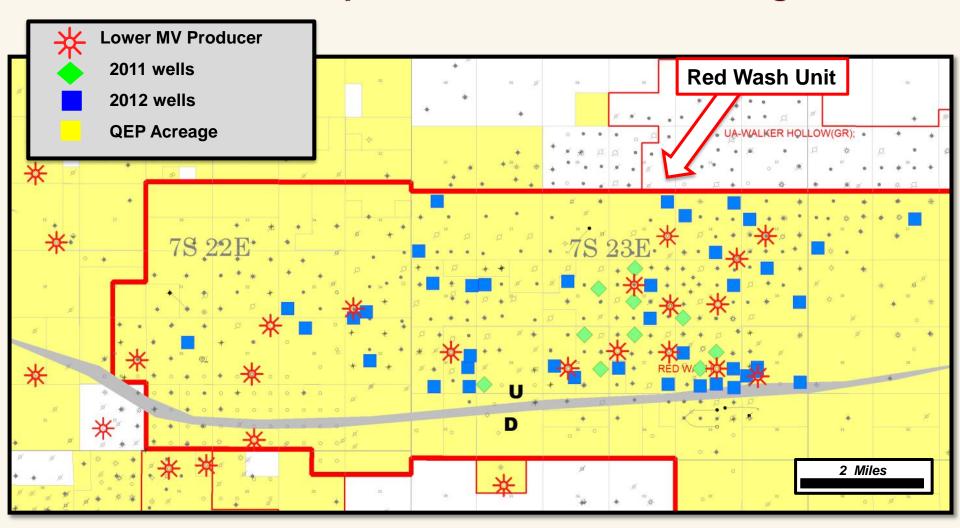
Red Wash Lower MV Type Curve



QEP has significant development potential within the Red Wash Lower MV fairway



### Red Wash Lower MV planned 2011 & 2012 drilling locations

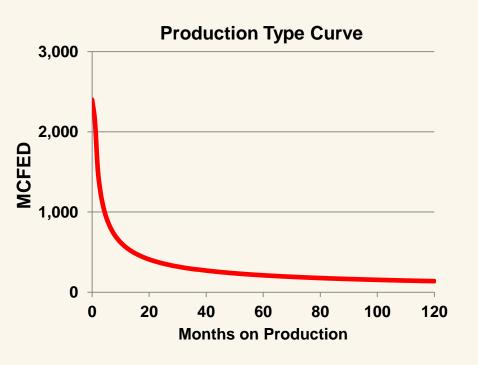


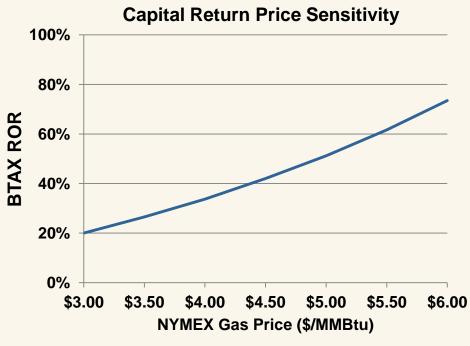
### 2012 Lower MV drilling objectives:

- ➤ Additional delineation across QEP acreage, 40 planned wells in 2012
- ➤Infill pilot program (20 and 10-acre spacing)



## Red Wash Lower MV Play, Uinta Basin





Type Curve Details: IP: 2.4 MMcfepd, b factor: 1.6

Initial Decline: 80.0%

■ Terminal decline: 6.0%, Well life: 40.0 Years

Type curve EUR: 2.1 Bcfe (50% of EUR in 3.5 yrs)

Well Depth: 11,500'Completed Well Cost: \$2.1 MM

Economic Summary: \$4.50/MMBtu NYMEX,

**\$85/Bbl WTI** 

BTAX ROR: 42.0%

BTAX PV10: \$1.5 MM

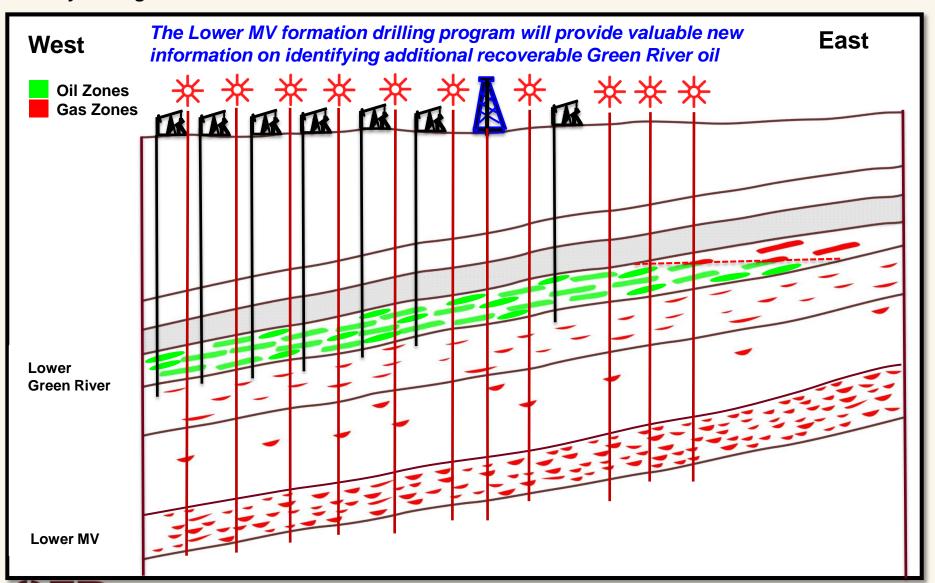
Net Finding Cost: \$1.26/Mcfe

Net LOE: \$0.76/Mcfe

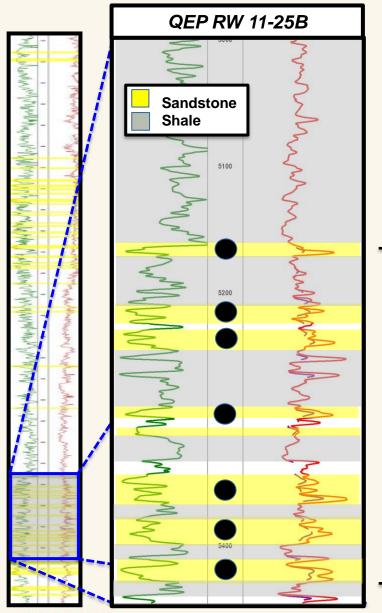


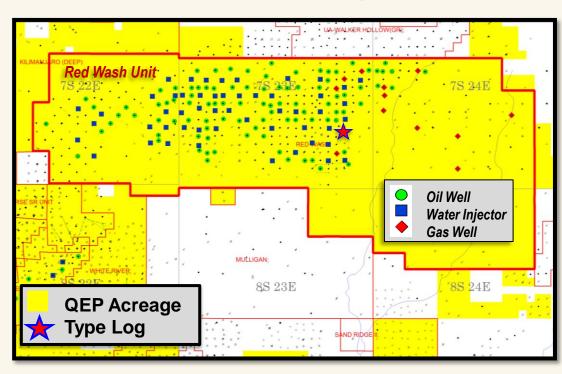
### Red Wash Field schematic cross-section

Early drilling in Red Wash Field was focused on shallow oil in the Green River Formation



### Uinta Basin: Red Wash Green River oil play



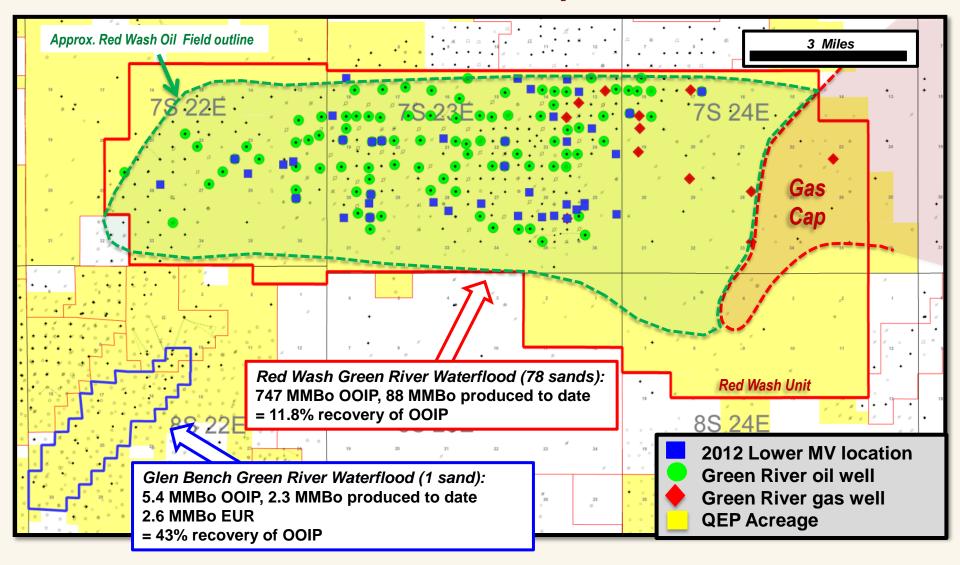


300 ft of Type Green River Section

#### **Green River Formation:**

- ➤ Multiple vertical sandstone objectives across 3,000 ft of interval
- >78 mapped individual reservoirs
- **EURs: 30 1,300 MBo per well**
- **≻Old waterflood in place but inefficient**

### Red Wash Green River oil potential



- ➤ The Glen Bench analog suggests a significant amount of OOIP is being bypassed with the current Red Wash waterflood
- ➤ An incremental 15% recovery in the Red Wash Green River = 112 MMBo

