



**Brigham Exploration Company  
Investor Presentation  
June, 2008**

# ***Forward Looking Statements / Note Regarding Reserves***

---

Except for the historical information contained herein, the matters discussed in this presentation are forward looking statements that are based upon current expectations. Important factors that could cause actual results to differ materially from those in the forward looking statements include risks inherent in exploratory drilling activities, the timing and extent of changes in commodity prices, unforeseen engineering and mechanical or technological difficulties in drilling wells, availability of drilling rigs, land issues, federal and state regulatory developments and other risks more fully described in the Company's filings with the U.S. Securities and Exchange Commission.

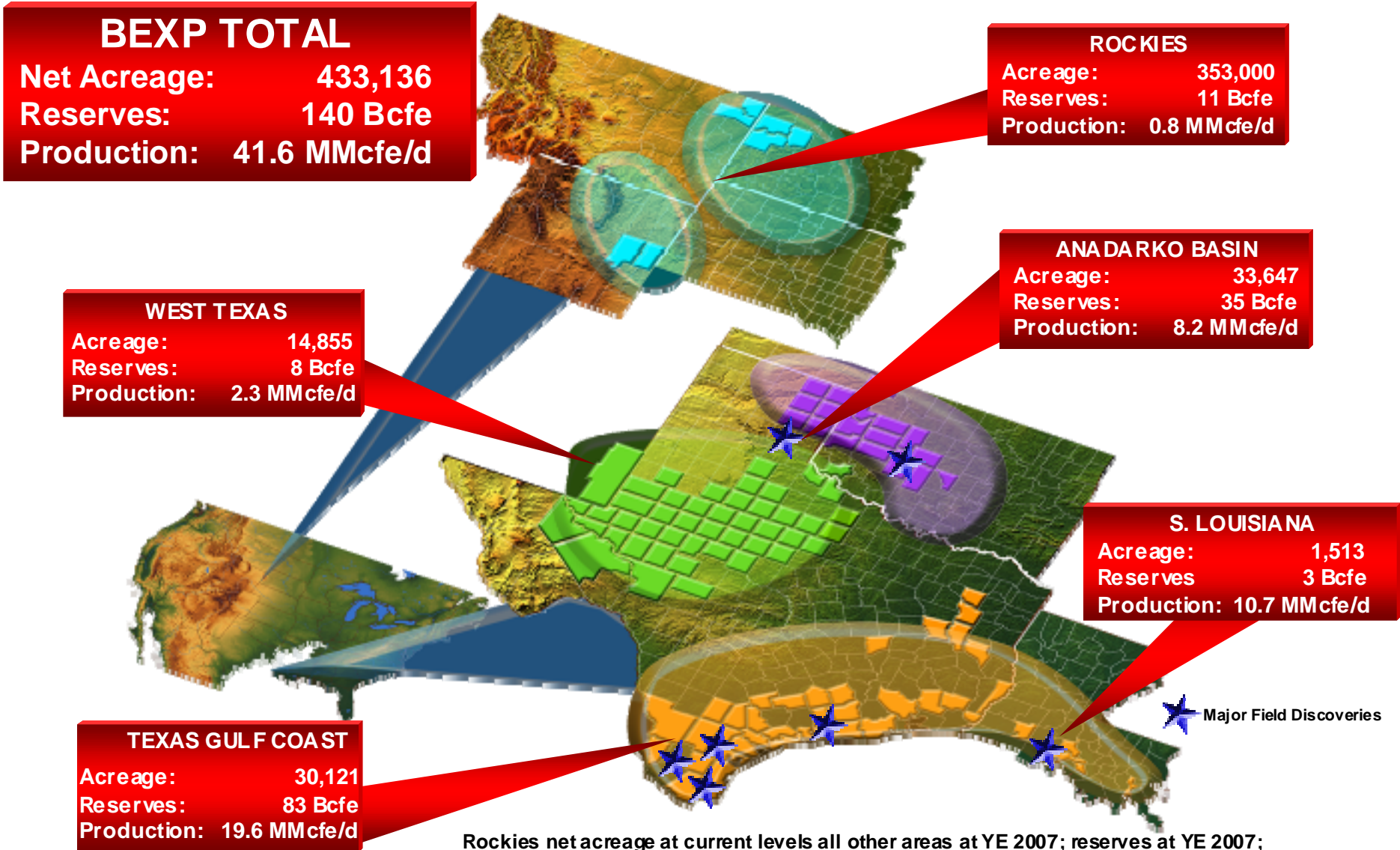
Cautionary Note to U.S. Investors – The U.S. Securities and Exchange Commission (SEC) permits oil and gas companies, in their filings with the SEC, to disclose only proved reserves that a company has demonstrated by actual production or conclusive formation tests to be economically and legally producible under existing economic and operating conditions. We use certain terms in this presentation such as probable reserves, probable drilling locations, possible reserves and possible drilling locations that the SEC's guidelines prohibit us from including in filings with the SEC. These terms include reserves with substantially less certainty and no discount or other adjustment is included in the presentation of such numbers. U.S. investors are urged to consider closely the disclosures in our form 10-K available on our internet site or by contacting us at 6300 Bridge Point Parkway, Building 2 Suite 500, Austin, TX 78730.

# Corporate Profile

---

- Drill-bit focused E&P company that leverages technology for organic growth
  - Resource play potential totaling over 353,000 net acres
    - 287,000 net acres in the Williston Basin
      - 88,000 net acres in Mountrail County / extensional areas
      - 99,000 net acres west of Nesson Anticline in Williams & McKenzie Cos, ND
      - 100,000 net acres in Montana with multi-pay potential
    - 66,000 acres in the Powder River Basin
  - Multi-year development drilling inventory in long-standing focus areas including the onshore Gulf Coast and Anadarko Basin
  - Proven exploration capabilities with substantial exploration upside in the onshore Gulf Coast and Anadarko Basin
- Year-end 2007 proved reserves of 140.2 Bcfe
  - 76% natural gas; 49% proved developed

# Core Operating Areas



Rockies net acreage at current levels all other areas at YE 2007; reserves at YE 2007; production average for 2007

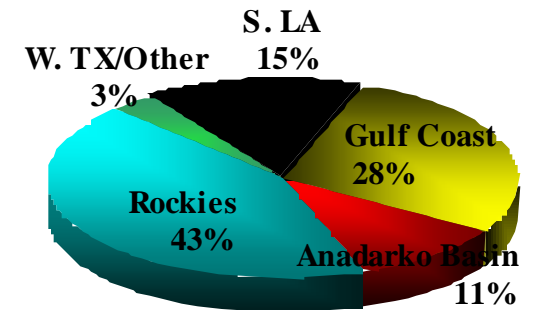
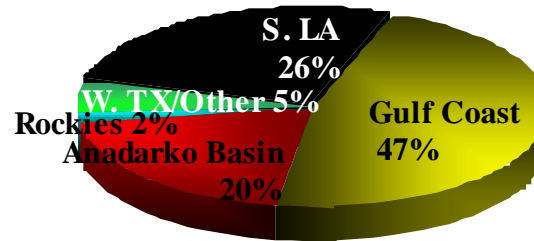
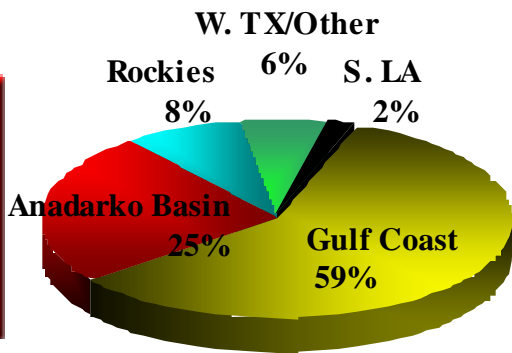
# Key Operating Statistics

**YE 2007 Proved Reserves**

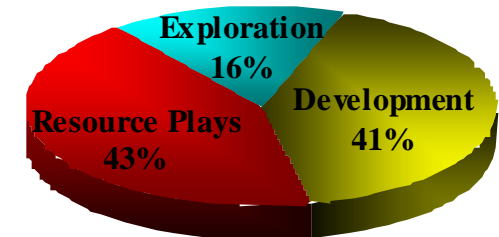
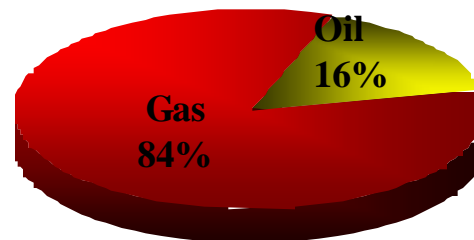
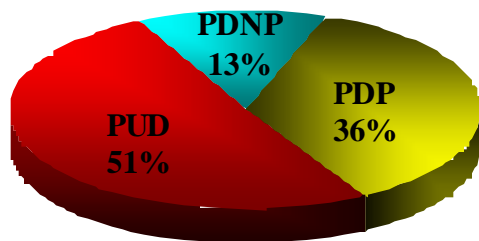
**2007 Production**

**2008 E&D Capex\***

**By Area**



**Other**



\* Based on budget announced February 6, 2008

# 2007 Accomplishments

---

- 217% reserve replacement with high value reserves at total proved all sources finding cost of \$3.88/Mcfe
  - Estimated 3 year total proved drilling costs by major play, for those plays representing 91% of 2008 capex budget:
    - Vicksburg - \$2.51 / Mcfe
    - Williston Basin - \$2.74 / Mcfe
    - S. LA - \$3.87 / Mcfe
    - West Texas - \$0.98 / Mcfe
- Production costs were low, driving superior margins in 2007:
  - 12% decrease in LOE to a very low \$0.71 / Mcfe
  - Partly as a result, cash gross profit per unit was a record \$6.83 / Mcfe
- 13% increase in 2007 average daily production to a record 41.6 MMcfe/d
- Strong production & rising prices drove:
  - 20% increase in revenue incl. hedge settlements but excl. unrealized losses to a record \$125 Million
  - 24% increase in EBITDA to record \$106 Million
- Continued to assemble highly impactful acreage position in Williston Basin, particularly considering our size
  - Over 287,000 net acres in Williston Basin Bakken play, ~ 88,000 in Mountrail Cnty & extensional areas
  - 4 successful horizontal Mountrail County Bakken completions in 4 attempts

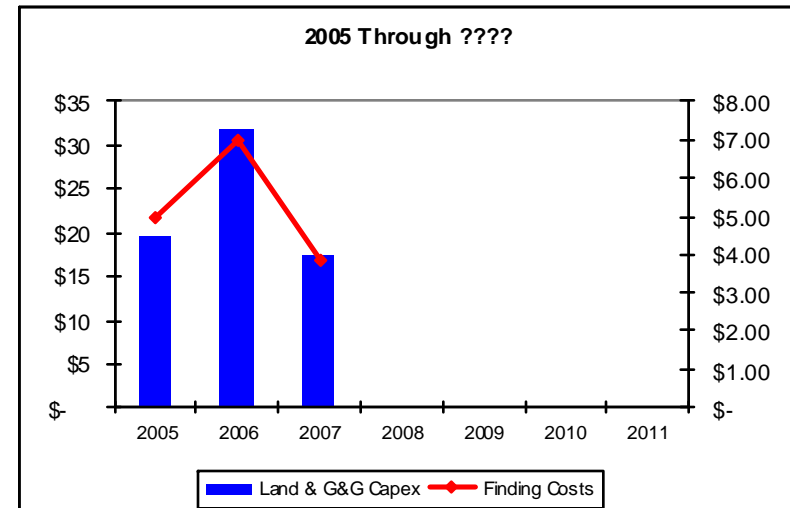
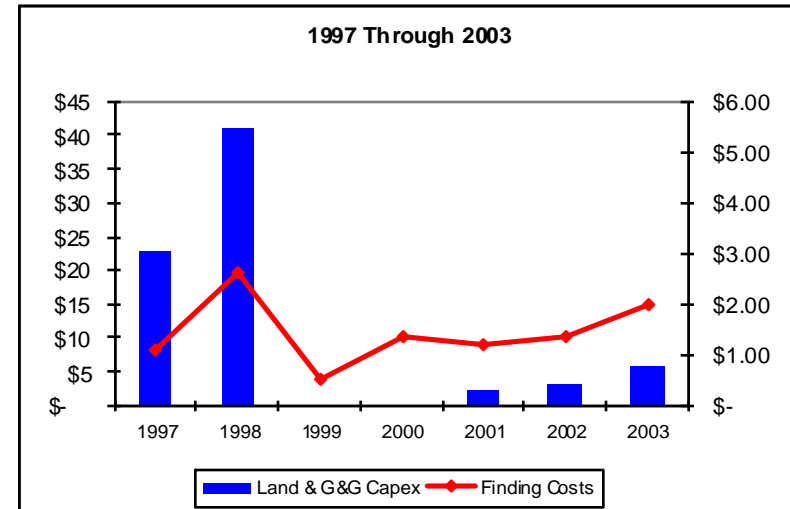
# 2008 Capital Expenditure Highlights

---

- 2008 announced E&D capital expenditure budget of \$120.9 million
  - 85% drilling capex; 15% land and seismic capex
  - Increase of 6% from 2007 E&D capital expenditures
  - 100% funded with discretionary cash flow and proceeds from Granite Wash asset sale (assuming discounted NYMEX prices)
  - \$48 million or 40% of budget allocated to the Williston Basin
  - \$48 million or 40% allocated to the Vicksburg and Southern Louisiana, our two most successful project areas over the last two years
- Williston Basin budget represents drilling 17 wells and additional acreage / seismic acquisition
  - Drilling program comprised of 16 Bakken wells and one Red River well
  - 16 Bakken wells include 7 high interest Brigham operated wells
  - \$11 million allocated to land and 3-D seismic acquisitions
- Will reevaluate budget at mid-year to determine the potential for an increase

# Land & G&G Capex vs. Finding Costs

- Historically, our longer term investments in acreage and seismic preceded a multi-year period of low finding costs and reserve growth (upper chart)
- Increased levels of land and G&G spending in 2005 through 2008 to capture resource play opportunities (lower chart)
  - 2005 – 2007 spent \$69 million
  - In 2008, expect to spend \$18 million
- Resource play inventory provides potential opportunity to grow reserves and production on a more consistent and predictable basis
  - 353,000 net acres in the Rockies, of which ~ 287,000 net acres is located in the Williston Basin



# 2008 Opportunity Set

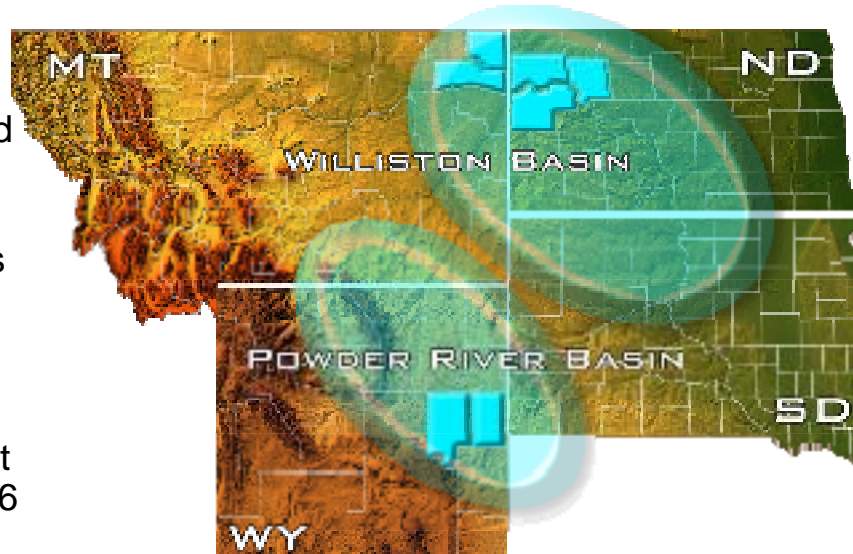
---

- Significant activity in Mountrail County and extensional areas
  - 88,000 net acres in Mountrail County and extensional areas
  - Currently, one rig drilling with opportunity to add additional rig in 2H 2008
- Testing advanced completion technologies on 99,000 net acres west of Nesson Anticline
  - Re-entering and redrilled lateral of Mrachek well in McKenzie Co, ND to stage frac with swell packers
- 100,000 net acres in Montana targeting multiple objectives including the Bakken
  - Utilizing proprietary 3-D interpretation techniques to identify Red River targets
    - Two recent successful Red River prospects drilled to date
    - 16 additional Red River prospects identified
  - Conduct 3-D shoot in Roosevelt County, MT to identify additional Red River and Bakken opportunities
- Vicksburg drilling commenced with 3 wells successfully completed, production approaching record levels
  - Triple Crowne Field Sullivan F-35 completed at initial rate of 6.8 MMcfe per day
  - Home Run Field Sullivan C-39 completed at initial rate of 3.9 MMcfe per day
  - Floyd Fault Block Sullivan C-38 completed at initial rate of 3.1 MMcfe per day
  - Adding pay in Triple Crowne Field Sullivan F-33 takes BEXP Vicksburg production over 20 MMcfed
- Southern Louisiana wells completing / additional activity commencing in 2Q and 3Q 2008
  - Completing Carey Estate #1
  - First Southern Louisiana joint venture well currently drilling, 2<sup>nd</sup> spudding in June
  - Cotten Land #5 commences 3Q 2008

# Rockies Resource Play Potential

## Williston Basin

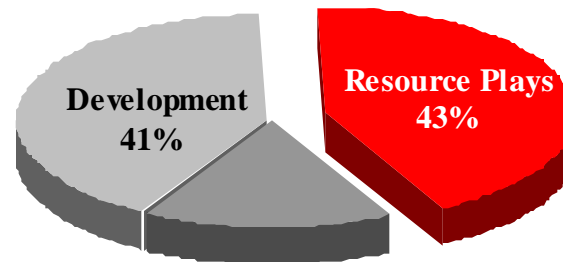
- Targeting Bakken, Red River, Mission Canyon and other
- Approx. 287,000 net acres
  - 187,000 net acres ND
  - 100,000 net acres MT
- 3 Bakken wells drilled west of Nesson Anticline in 2006
  - Re-entering Mracheck
- Over 88,000 net acres in Mountrail County and extensional areas
  - 4 BEXP operated wells producing
  - 1 BEXP operated offset completing / 1 drilling
  - Extensional tests currently completing / planned for August



## Powder River Basin

- JV with American Oil & Gas targeting Mowry shale
- Over 66,000 net acres
  - 206 net potential locations (assumes 320 acre spacing)
- 4 wells producing
- Successfully drilled critical 5<sup>th</sup> well, utilizing swell packers in completion; flowing well back after completion

### 2008 E&D Capex Budget

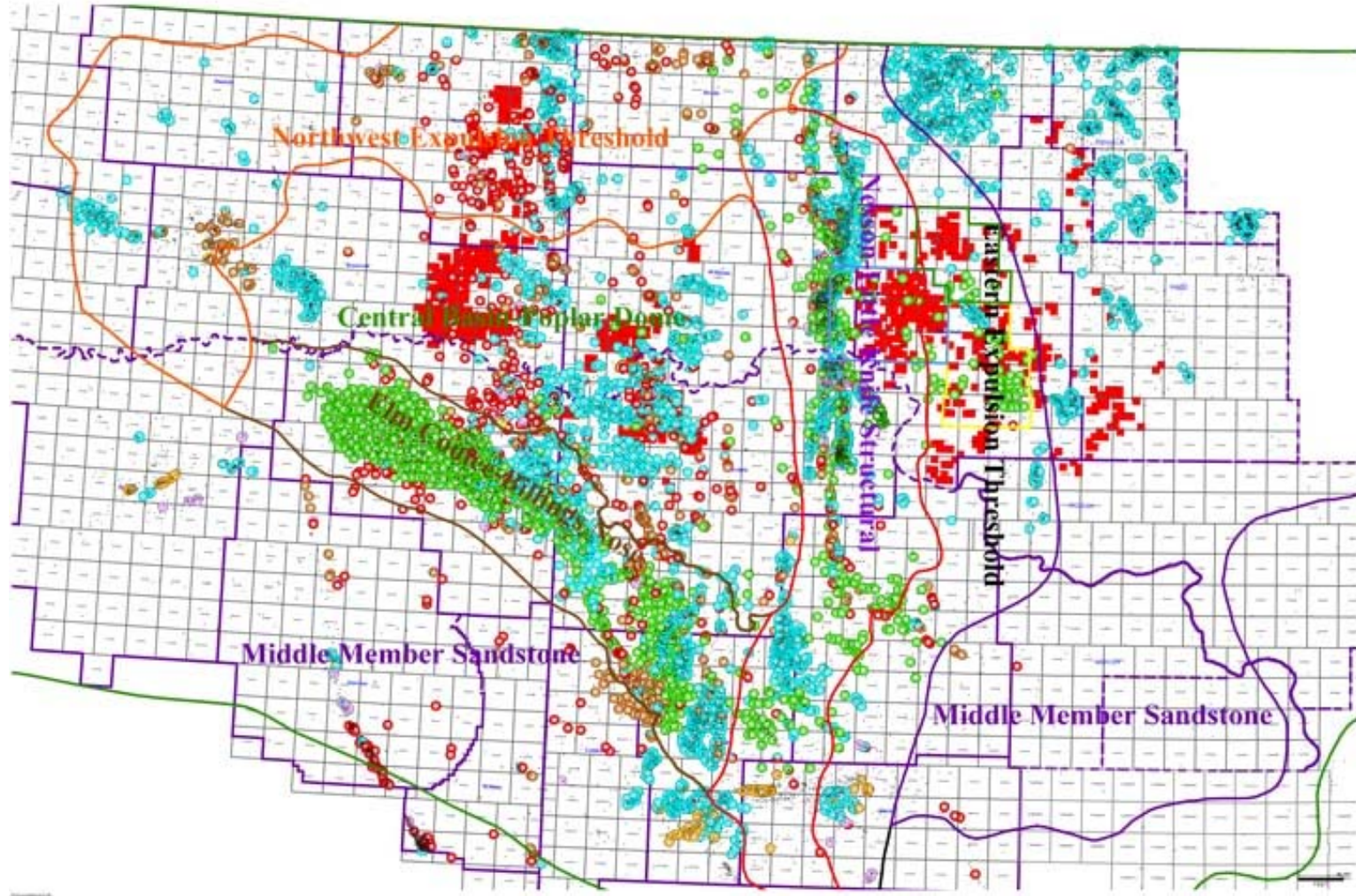




## **Williston Basin Review**

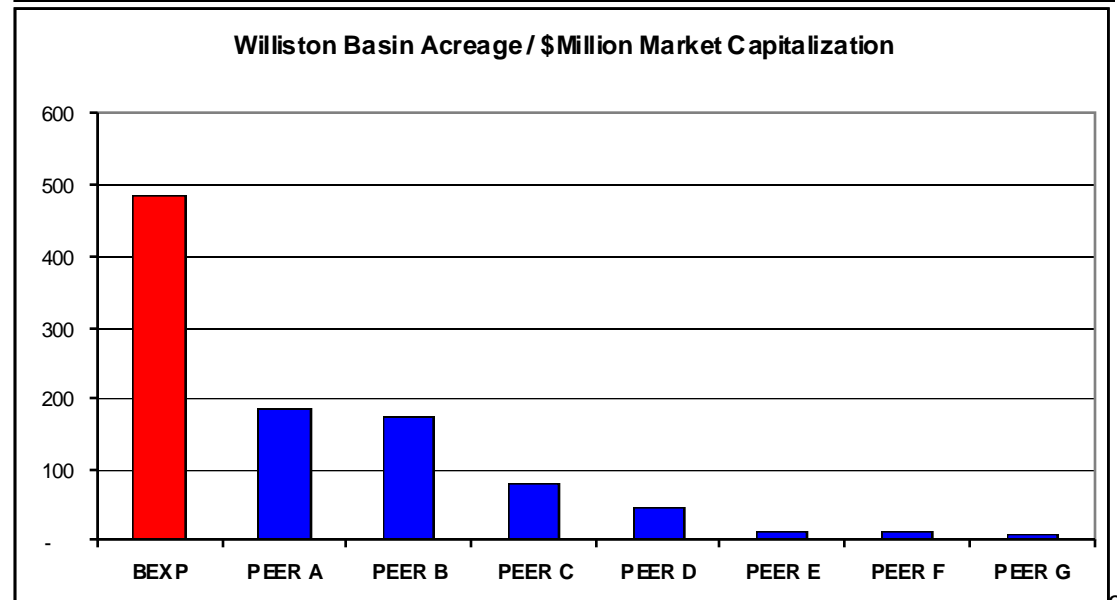
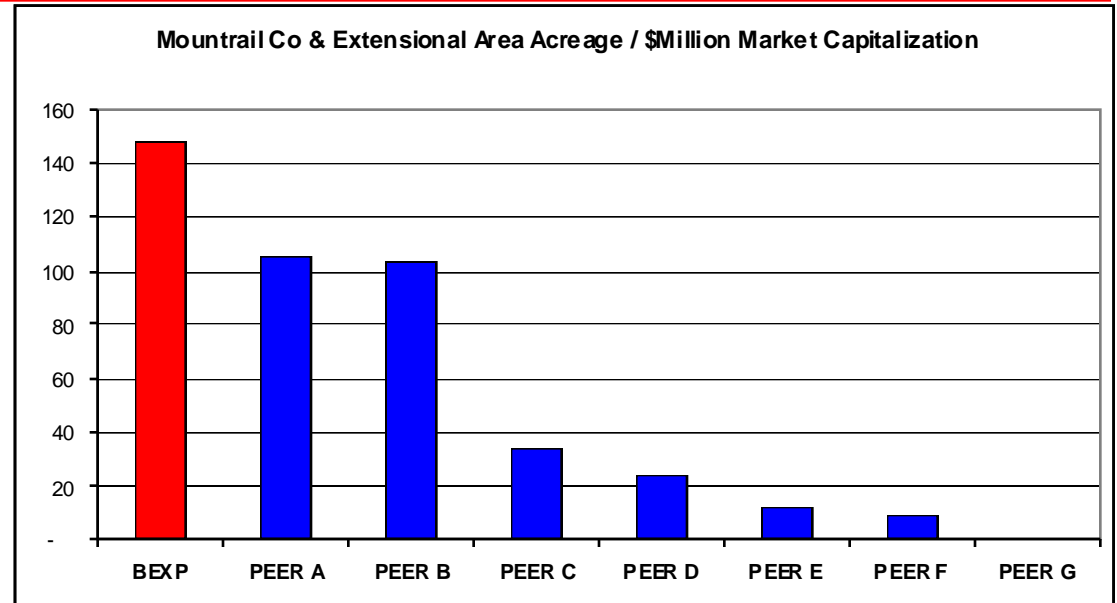
# ***Williston Basin USGS Assessment - 3.65 BBo Recoverable BEXP's 287,000 Net Acres Attractively Located***

---



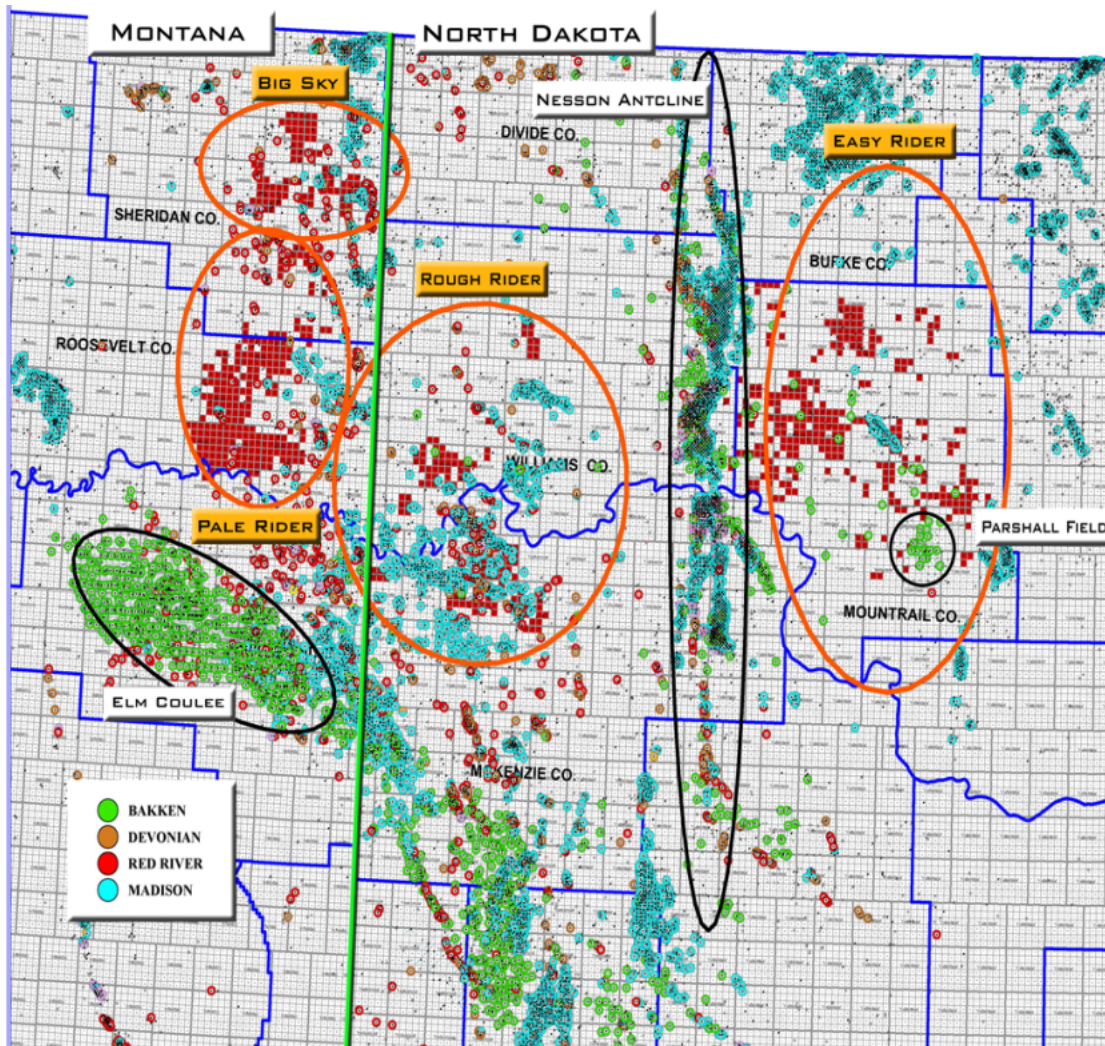
# High Potential Acreage Position

- 88,000 net acres In Mountrail County and Extensional Areas potentially provides 137 net drilling locations
  - Other operator currently testing 320 acre spacing
- Additional 99,000 net acres in Williams and McKenzie Counties, North Dakota
- Additional 100,000 net acres in Roosevelt and Sheridan Counties, Montana
- Market Capitalization as of May 22, 2008
- Peer group comprised of Continental, EOG, Kodiak, Northern Oil & Gas, St. Mary, Whiting and XTO



# Williston Basin Overview

## Multiple Objective Potential – Over 287,000 Net Acres

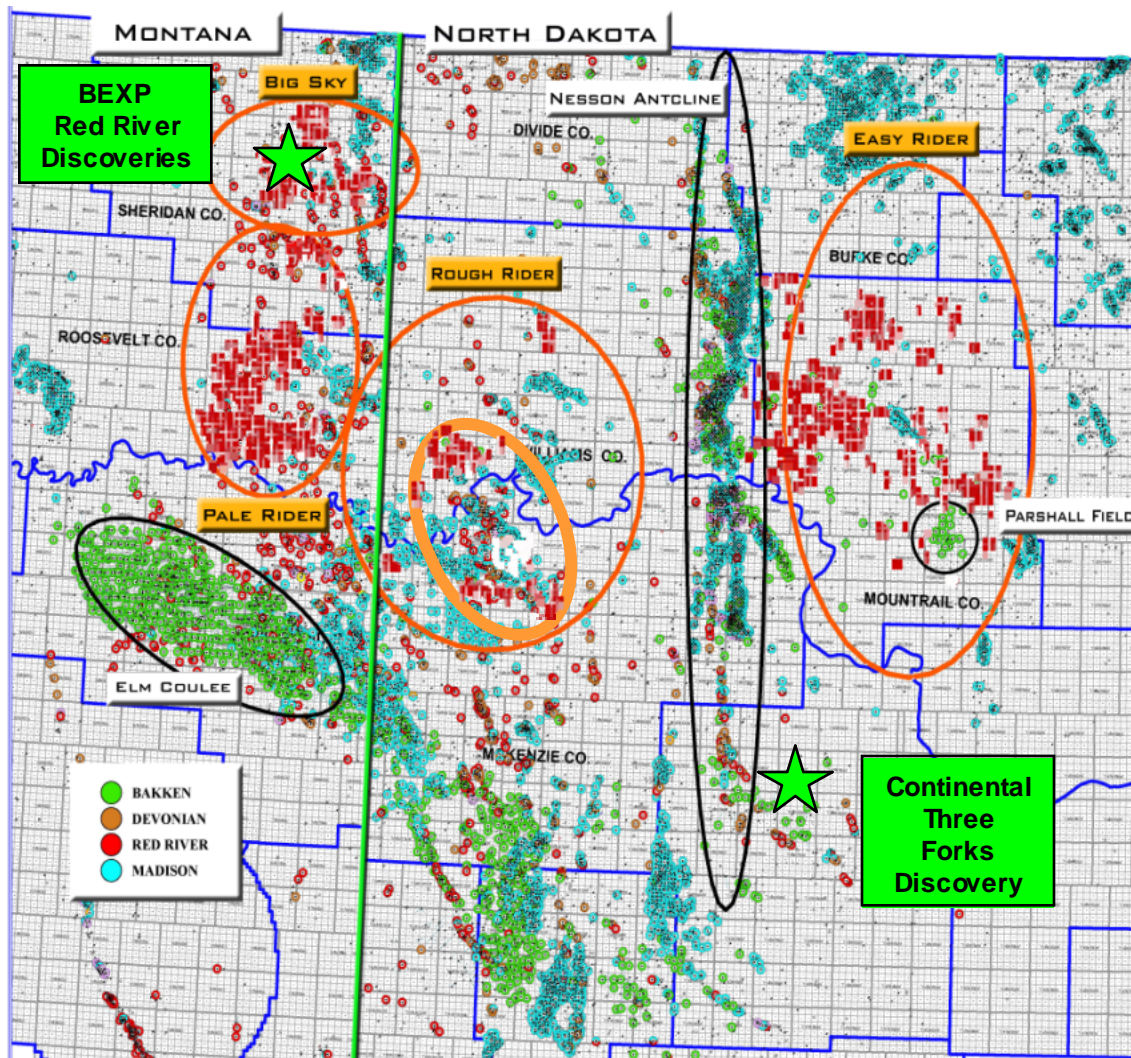


- Bakken Elm Coulee Field (Richland County, MT) discovered 2001
  - 3 years later declared economic
- BEXP drilled 3 Bakken wells in Williams / McKenzie Counties, ND in 2006
  - 99,000 net acres
  - Field / Erickson wells IP @ 200 Bopd, subsequently stabilized at 50 – 90 Bopd, est. avg. EUR 165,000 Boe each
  - Mracheck (3<sup>rd</sup> well) currently being reentered
- Currently over 88,000 net acres in Mountrail County, ND and extensional areas
  - Numerous high rate completions in area
  - Extensive leasing efforts ongoing
  - Targeting extensional areas with similar attributes
- BEXP Red River discovery in Sheridan Co, MT utilizing 3-D seismic
  - 16 Prospects & leads identified
  - Prospecting for Red River, Bakken, Mission Canyon and other potential objectives on 100,000 net acres

Acresage Summary: MT ~100,000 net acres; ND west of Nesson Anticline ~ 99,000 net acres; ND east of Nesson Anticline over 88,000 net acres

# Williston Basin Historical Overview

## Multiple Objective Potential – Approaching 300,000 Net Acres



- Bakken Elm Coulee Field (Richland County, MT) discovered 2001
  - 3 years later declared economic
- BEXP drilled 3 Bakken wells in Williams / McKenzie Counties, ND in 2006
  - 99,000 Net Acres in those counties
  - Field / Erickson wells IP @ 200 Bopd, subsequently stabilized at 50 – 90 Bopd, est. avg. EUR 165,000 Boe each
  - Mracheck (3<sup>rd</sup> well) completed with swell packers, results likely in June
- Currently over 88,000 net acres in Mountrail County, ND and extensional areas
  - Numerous high rate completions
  - Extensive leasing efforts ongoing
  - Targeting extensional areas with similar attributes
- Two BEXP Red River discoveries in Sheridan Co, MT utilizing 3-D seismic
  - 16 Prospects & leads identified
  - Prospecting for Red River, Bakken, Mission Canyon & other potential objectives on 100,000 net acres

Acreage Summary: MT ~100,000 net acres; ND west of Nesson Anticline ~ 51,500 net acres; ND east of Nesson Anticline over 88,000 net acres

\* Reported EOG Acreage in Yellow

***Williston Basin Overview***  
***2<sup>nd</sup> Consecutive Red River Discovery in Eastern Montana***

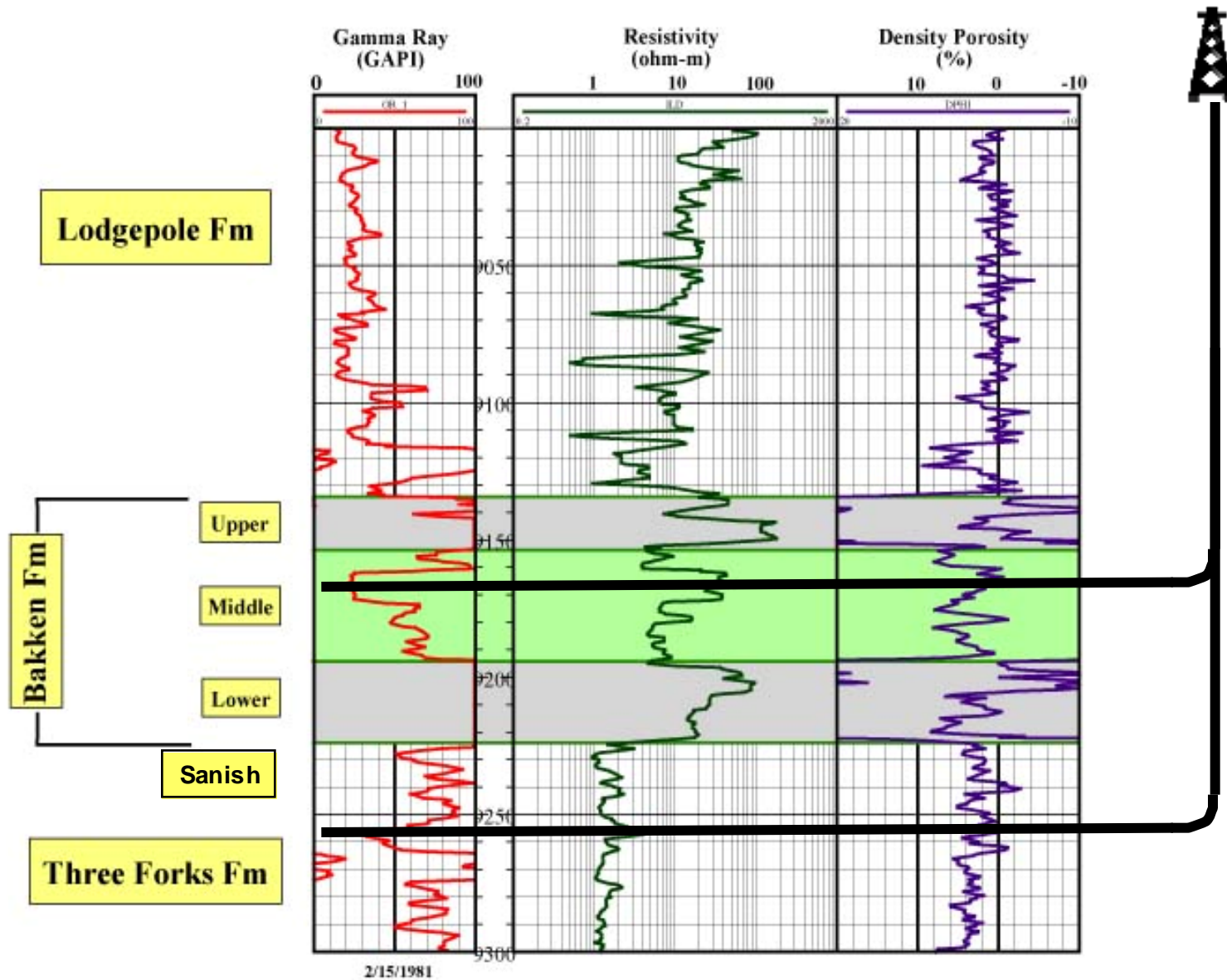
---

***Richardson 30 #1 Gas Flare***



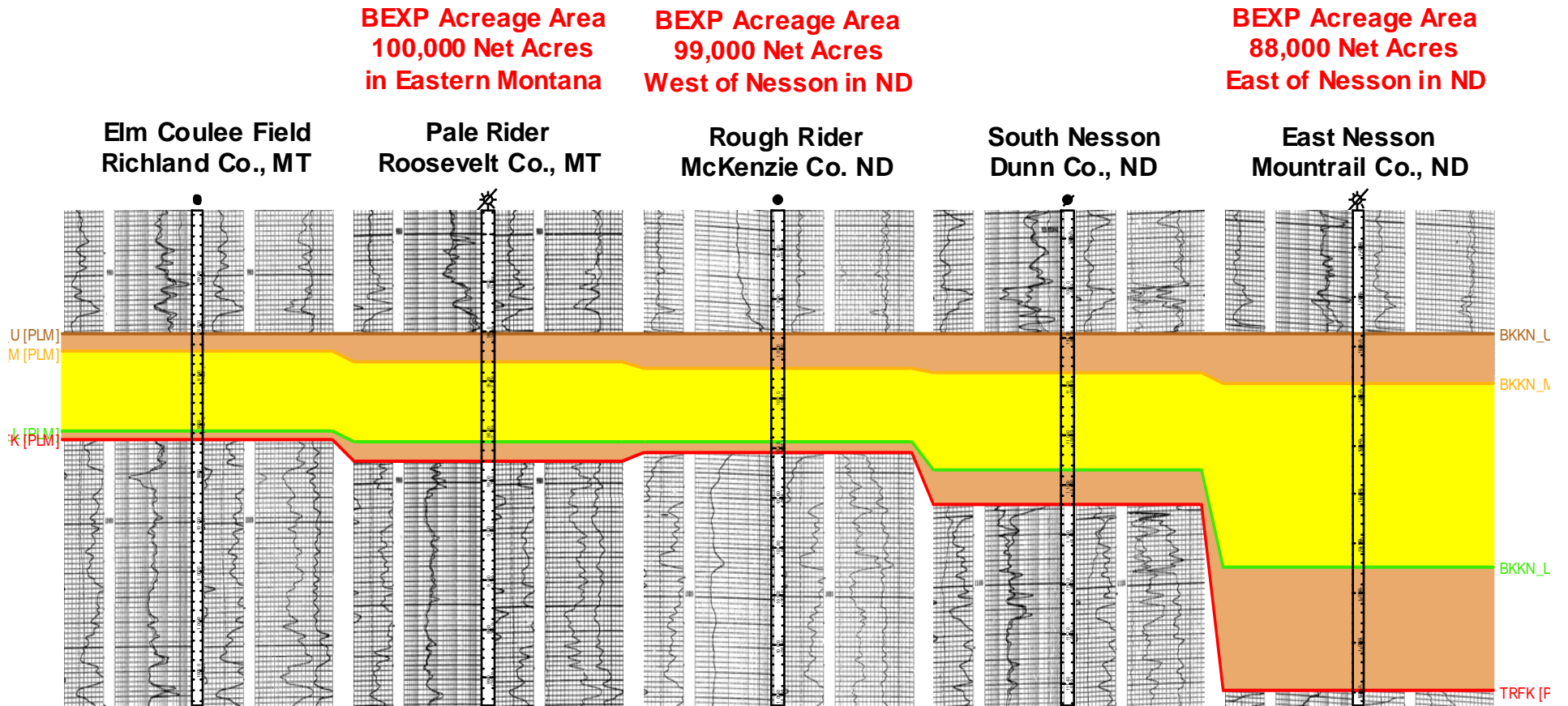
# Mountrail County Bakken Type Log

## Lear Petroleum East Parshall S #1



# Williston Basin Overview – Expansive Bakken Reservoir

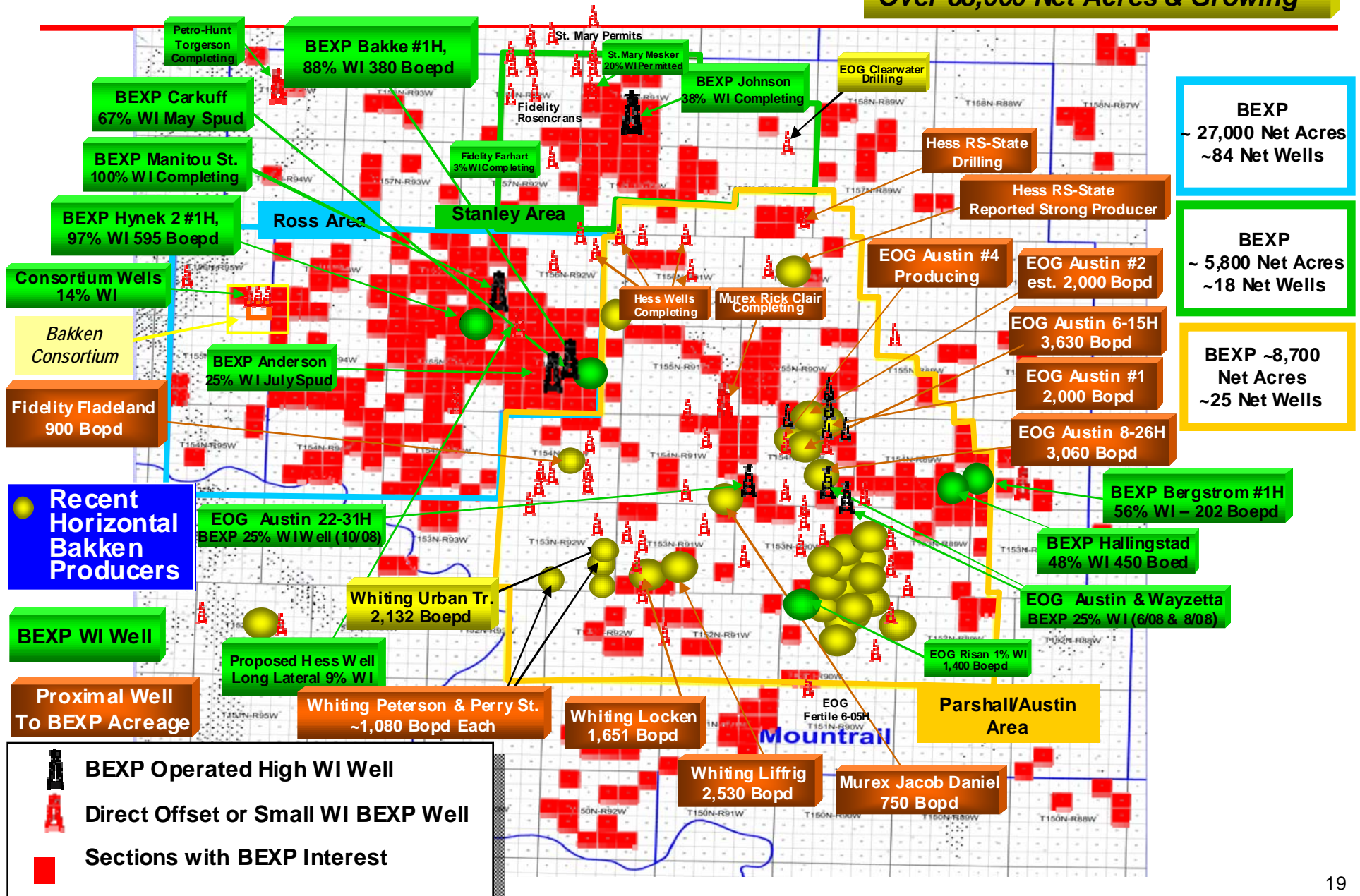
## Bakken Cross Section West to East Across Williston



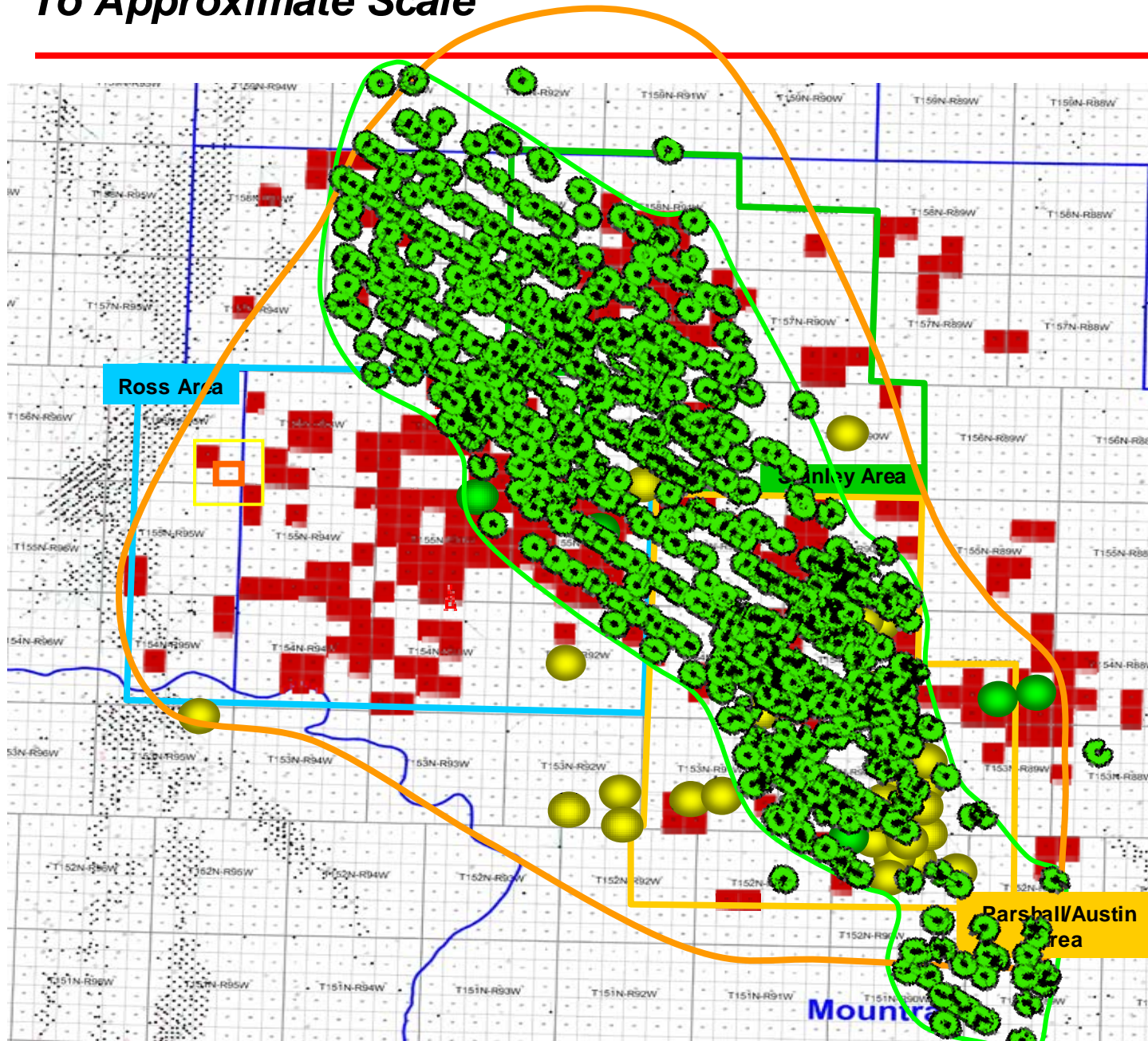
# Williston Basin - Mountrail County Area

## Bakken Drilling Activity is Accelerating

**Estimated BEXP Leasehold  
Over 88,000 Net Acres & Growing**



# Williston Basin Elm Coulee/Mountrail County Overlay To Approximate Scale

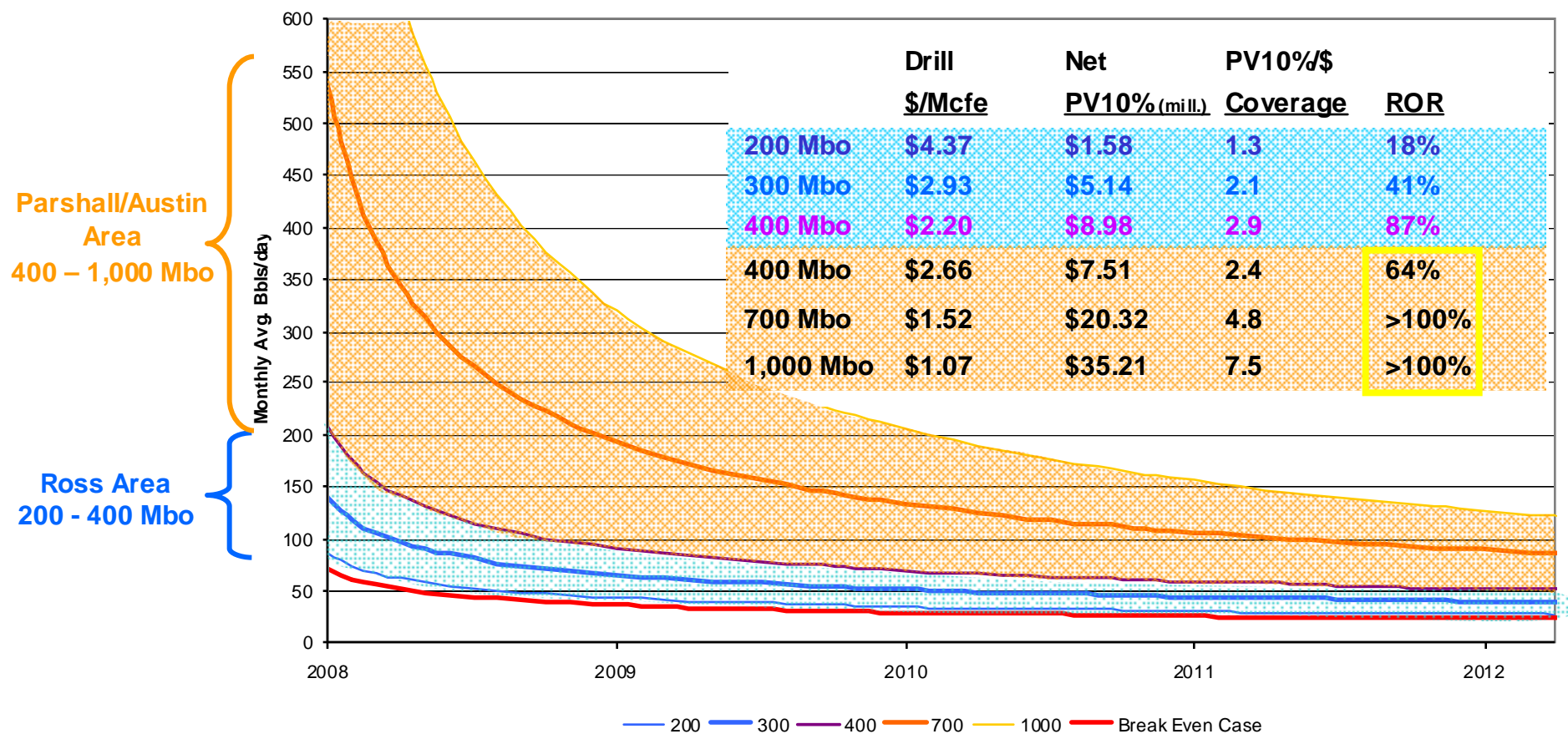


- Approximately 2 laterals in each section thus far in Elm Coulee (some long laterals from other sections, some tri-laterals)
- 9 rigs recently running in Elm Coulee; 26 rigs drilling in Mountrail County
- Current Mountrail Co. drilling area roughly double aerial extent Elm Coulee (~1,300 vs 560 sq. miles)

# Williston Basin Bakken Reserves & Economics

Parshall/Austin Avg. Reserves Currently Est. @ 400 – 1,000 Mbo

## Ross/Parshall Mboe Averages vs. Break Even Case

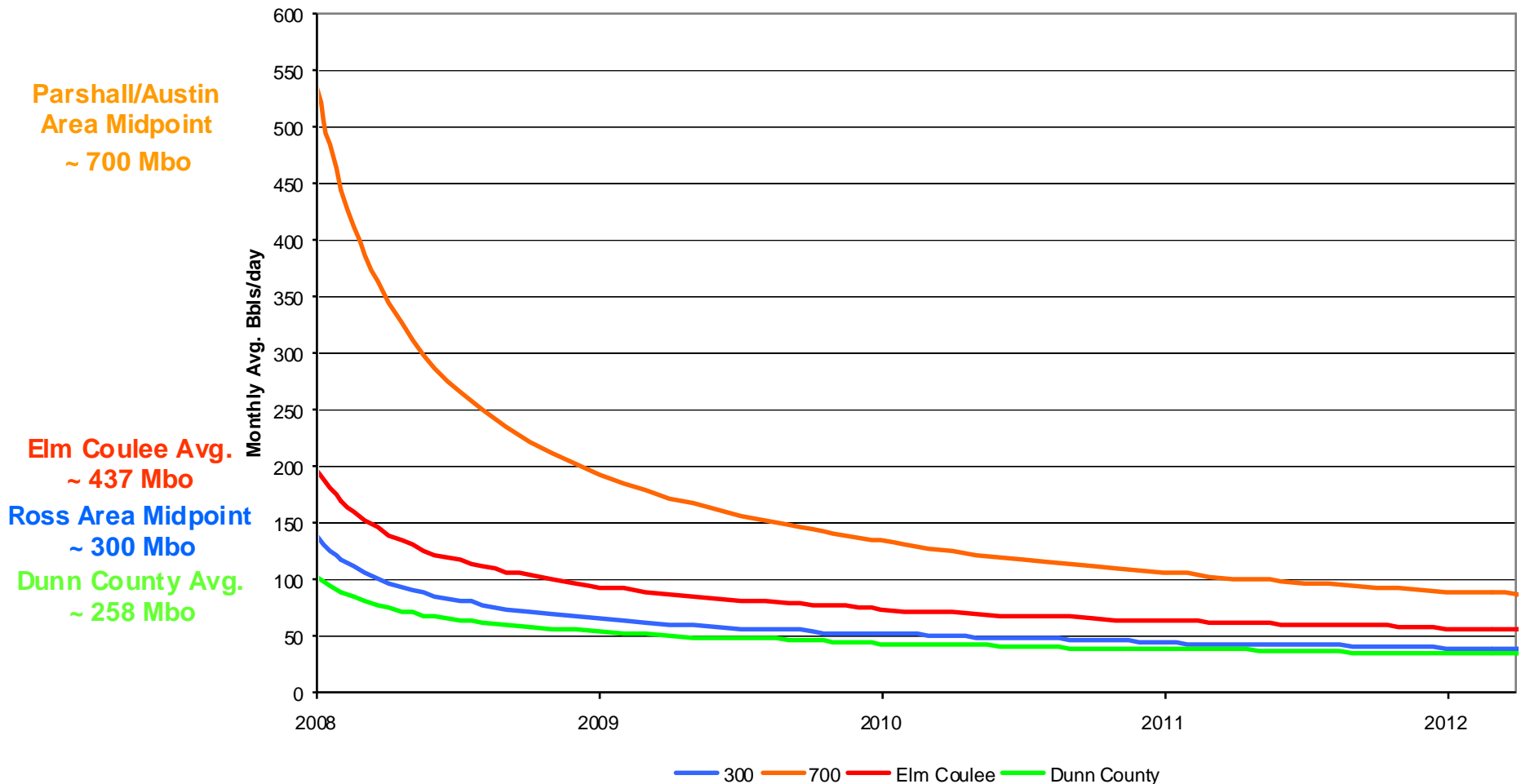


\* Based on NYMEX strip at 4/07/08. Price differentials: \$1.256/Mcf & -\$5.337/Bbl. CWC of \$4.95 million in Ross, \$5.5 million in Parshall/Austin. OPEX at \$8397/month. Monthly average rate which given natural declines is less than IP rates.

# Williston Basin Bakken Reserves & Economics

## Elm Coulee & Dunn County EUR's vs Mountrail Area

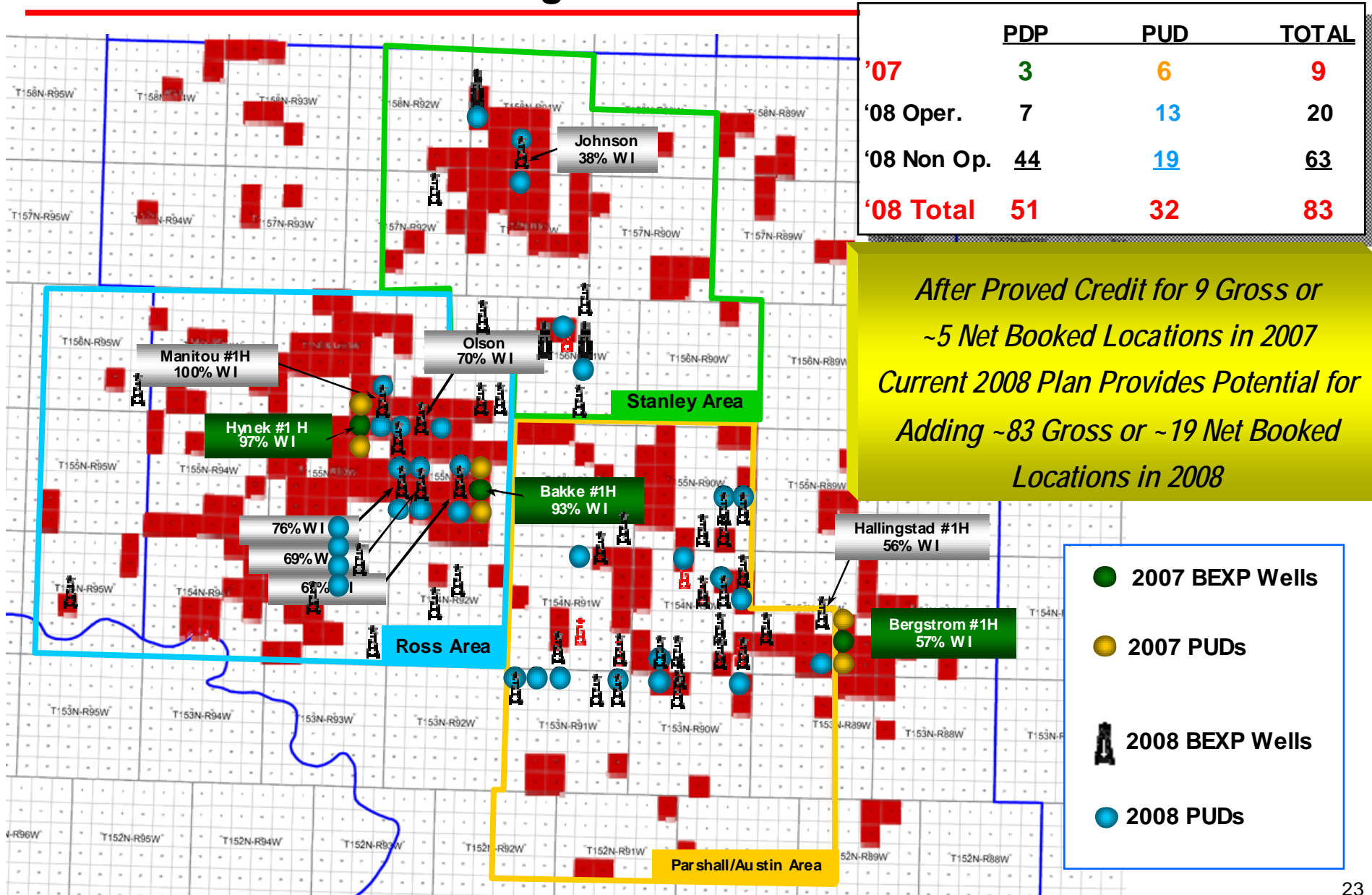
Ross/Parshall Averages vs. Elm Coulee & Dunn County Average



\* Based on NYMEX strip at 4/07/08. Price differentials: \$1.256/Mcf & -\$5.337/Bbl. CWC of \$4.95 million in Ross, \$5.5 million in Parshall/Austin. OPEX at \$8397/month. Monthly average rate which given natural declines is less than IP rates.

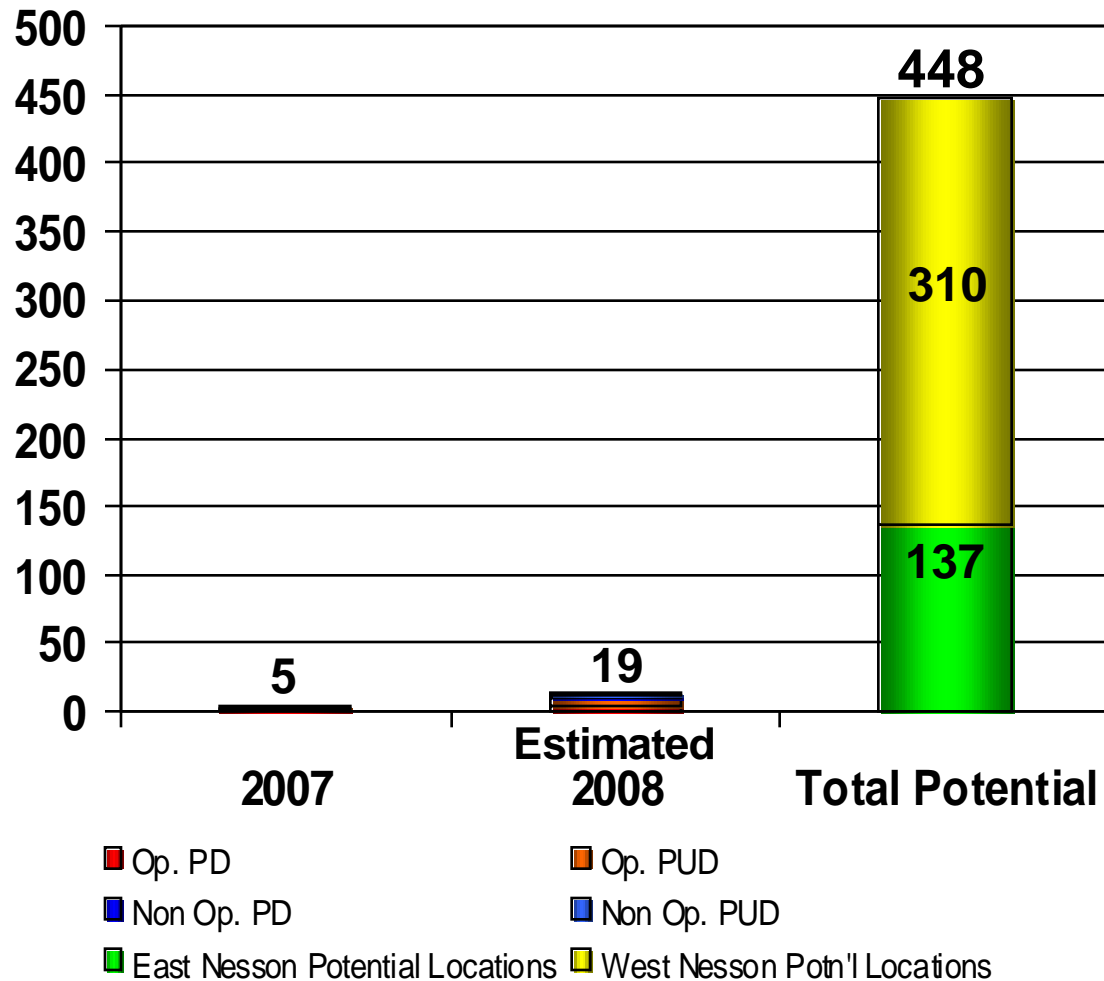
# Mountrail County & Extensional Areas

## Current 2007 – 2008 Drilling Plan



# Extensive Bakken Drilling Inventory

## Net Wells Proved in 2007, Expected to be Proved in 2008 & Potential Locations



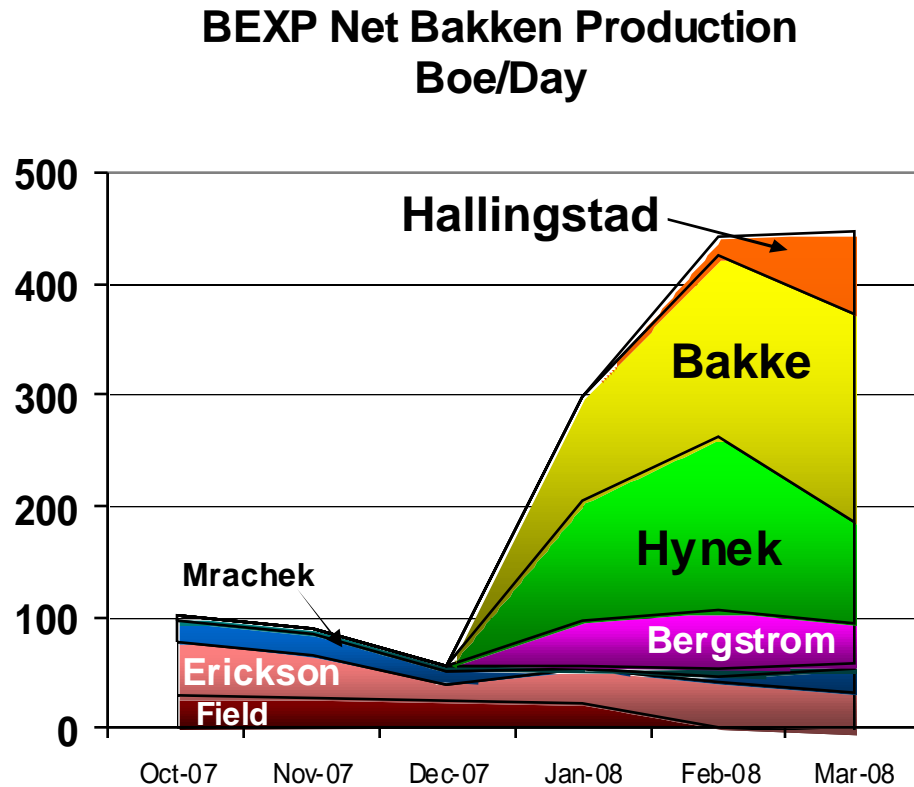
- Approximately 2.5 net wells were proved developed @ YE 2007, estimate roughly 8.6 net proved developed wells @ YE 2008
- Estimate to have ~19 total net proved wells @ YE 2008, assuming current permits & proposals
- Assuming avg. \$5 million/well CWC, approximately \$685 million in potential drilling opportunities east of Nesson, and roughly \$2.3 billion in total potential Williston Basin Bakken drilling investments

\* Current potential acreage inventory. Assumptions in potential locations include 640 acre spacing.

# BEXP Net Bakken Production

Estimated Exit Q1 2008 ~ 450 Boepd Net

---



- ~400 Net Boepd from 2.5 net wells completed late 2007 & early 2008. Estimated 8.6 net wells online by YE 2008
- Manitou State (100% WI, Ross Area) currently completing
- Johnson (38% WI, N. Stanley Area) currently completing
- Mrachek (100% WI, West of Nesson) currently completing
- Non Operated Parshall Area drilling picking up mid-year with planned June spud of 25% WI offset to EOG 3,060 Bopd discovery

# Bakken Economic Sensitivities

## Flat \$90/Bo & \$7/Mcfg Case

200 – 400 MBO Wells Should  
Generate ROR's of 15% - ~100%

Total PV10 Value ~88,000 Net  
Acres @ various well spacings\*

### \$5.2 Million CWC

Cases	MBO	Gross Reserves		Net Reserves		ROR %	Coverage Disc 10%	Cost \$/MCFE	Total PV10 Value ~88,000 Net Acres @ various well spacings*	
		MMCF	MMCFE	MMCFE	MMCFE				640 acres 138 Net Loc'ns	320 acres 275 Net Loc'ns
									\$MM	\$MM
Low 200 MBO	201	214	1,418	1,134	16.2%	1.2	\$4.58	\$166	\$333	\$333
Mid 300 MBO	300	265	2,067	1,654	39.3%	1.9	\$3.14	\$664	\$1,327	\$1,327
Mid 450 MBO	451	406	3,109	2,487	96.3%	3.0	\$2.09	\$1,447	\$2,894	\$2,894
High 700 MBO	700	244	4,447	3,557	>100%	4.4	\$1.46	\$2,443	\$4,887	\$4,887

Total PV10 Value ~88,000 Net  
Acres @ various well spacings\*

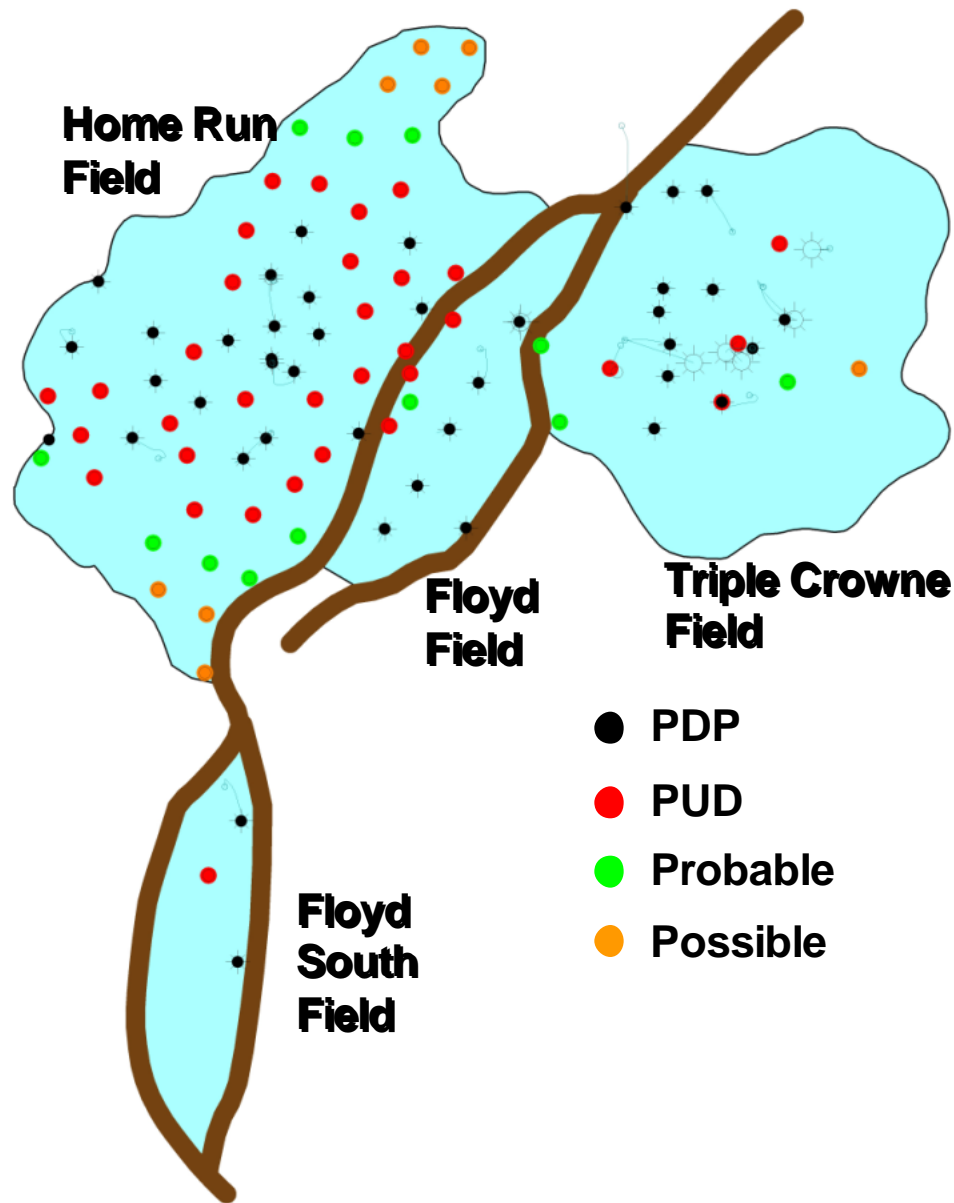
### \$4 Million CWC

Cases	MBO	Gross Reserves		Net Reserves		ROR %	Coverage Disc 10%	Cost \$/MCFE	Total PV10 Value ~88,000 Net Acres @ various well spacings*	
		MMCF	MMCFE	MMCFE	MMCFE				640 acres 138 Net Loc'ns	320 acres 275 Net Loc'ns
									\$MM	\$MM
Low 200 MBO	201	214	1,418	1,134	26.7%	1.6	\$3.53	\$331	\$662	\$662
Mid 300 MBO	300	265	2,067	1,654	68.9%	2.5	\$2.42	\$828	\$1,657	\$1,657
Mid 450 MBO	451	406	3,109	2,487	>100%	3.9	\$1.61	\$1,612	\$3,224	\$3,224
High 700 MBO	700	244	4,447	3,557	>100%	5.8	\$1.12	\$2,608	\$5,217	\$5,217

# Vicksburg Overview

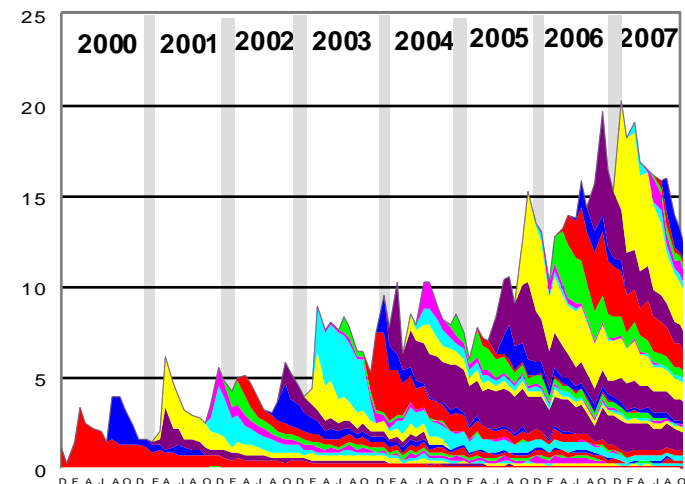


# Vicksburg ExxonMobil Joint Venture Overview



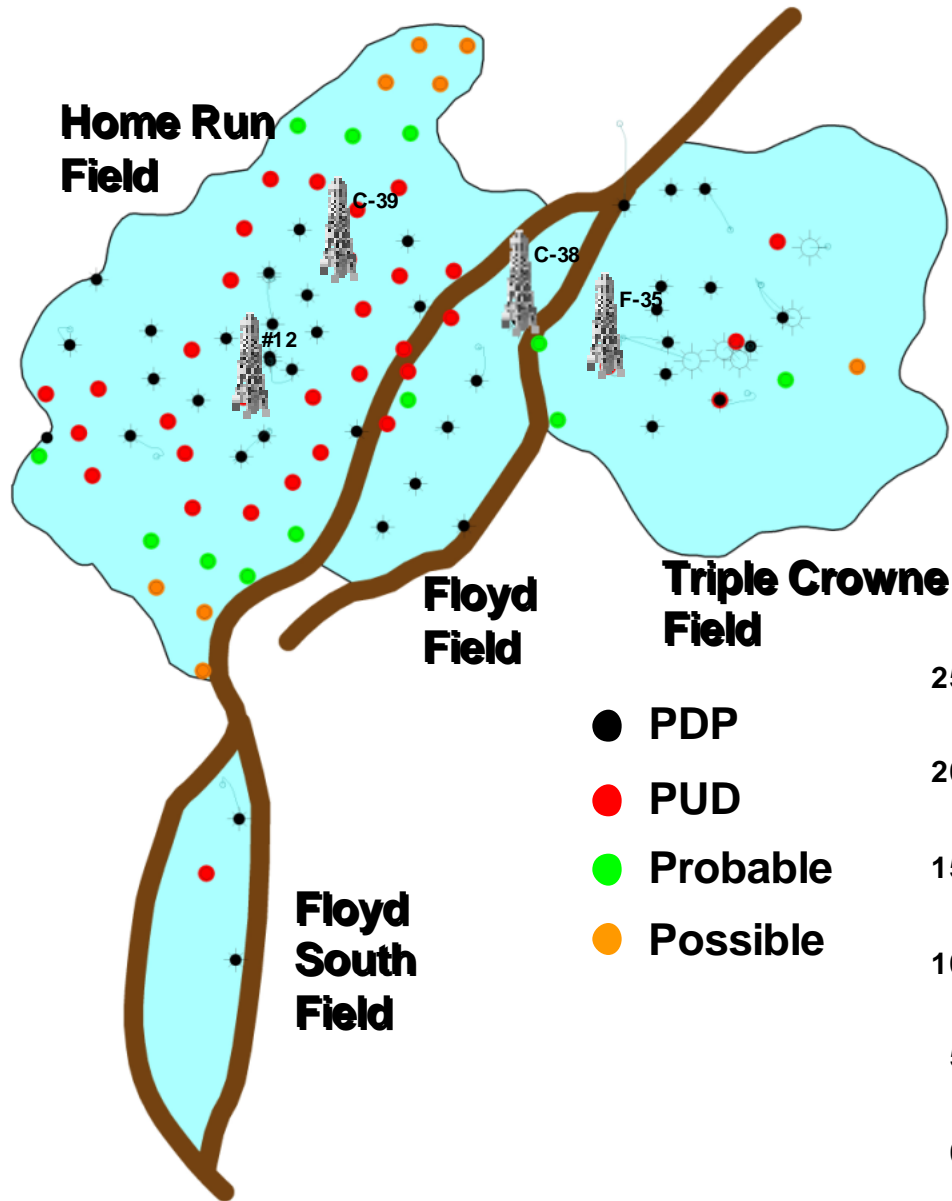
- Formed the first JV with ExxonMobil in 1997
  - 4 additional JVs implemented
- Since 1999, 39 completions in 41 attempts
- In 2007, completed all 5 100% initial WI wells
  - Anticipate 2008 wells at initial 100% WI
- 3 Year Total Proved F&D of \$2.77/Mcfe
- 54 drilling locations at year-end 2007
  - 34 proved, 12 probable and 8 possible
- Acquired additional acreage in southwest Home Run / shallow rights in eastern Triple Crowne

**Net Vicksburg Production (MMcfe/d)**

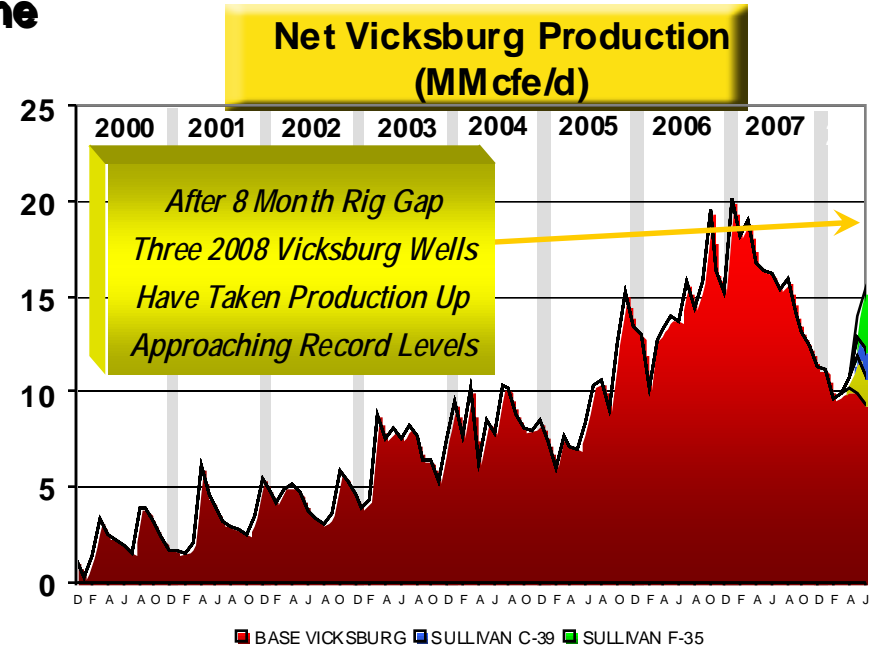


# Vicksburg ExxonMobil Joint Venture Overview

After 8 Month Rig Pause, 1<sup>st</sup> 3 2008 Wells Grew Production to Near Record Levels



- Formed the first JV with ExxonMobil in 1997
  - 4 additional JVs implemented
- Since 1999, 39 completions in 41 attempts
- In 2007, completed all 5 100% initial WI wells
  - Anticipate 2008 wells at initial 100% WI
- 3 Year Total Proved F&D of \$2.77/Mcfe
- 54 drilling locations at year-end 2007
  - 34 proved, 12 probable and 8 possible
- Acquired additional acreage in southwest Home Run / shallow rights in eastern Triple Crowne

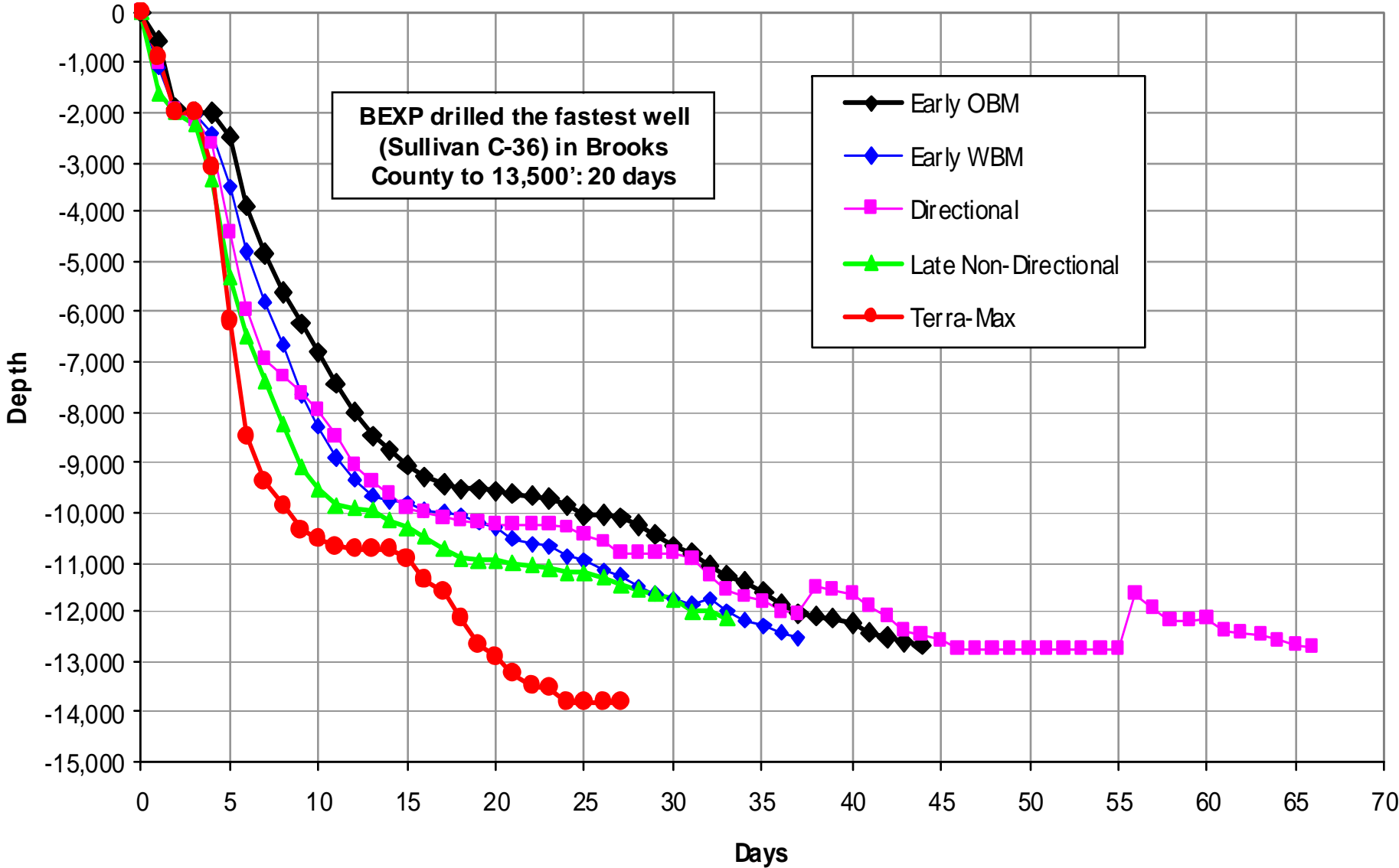


# ***Driving Operational Excellence Implementing Optimal Drill & Complete Technologies***

---

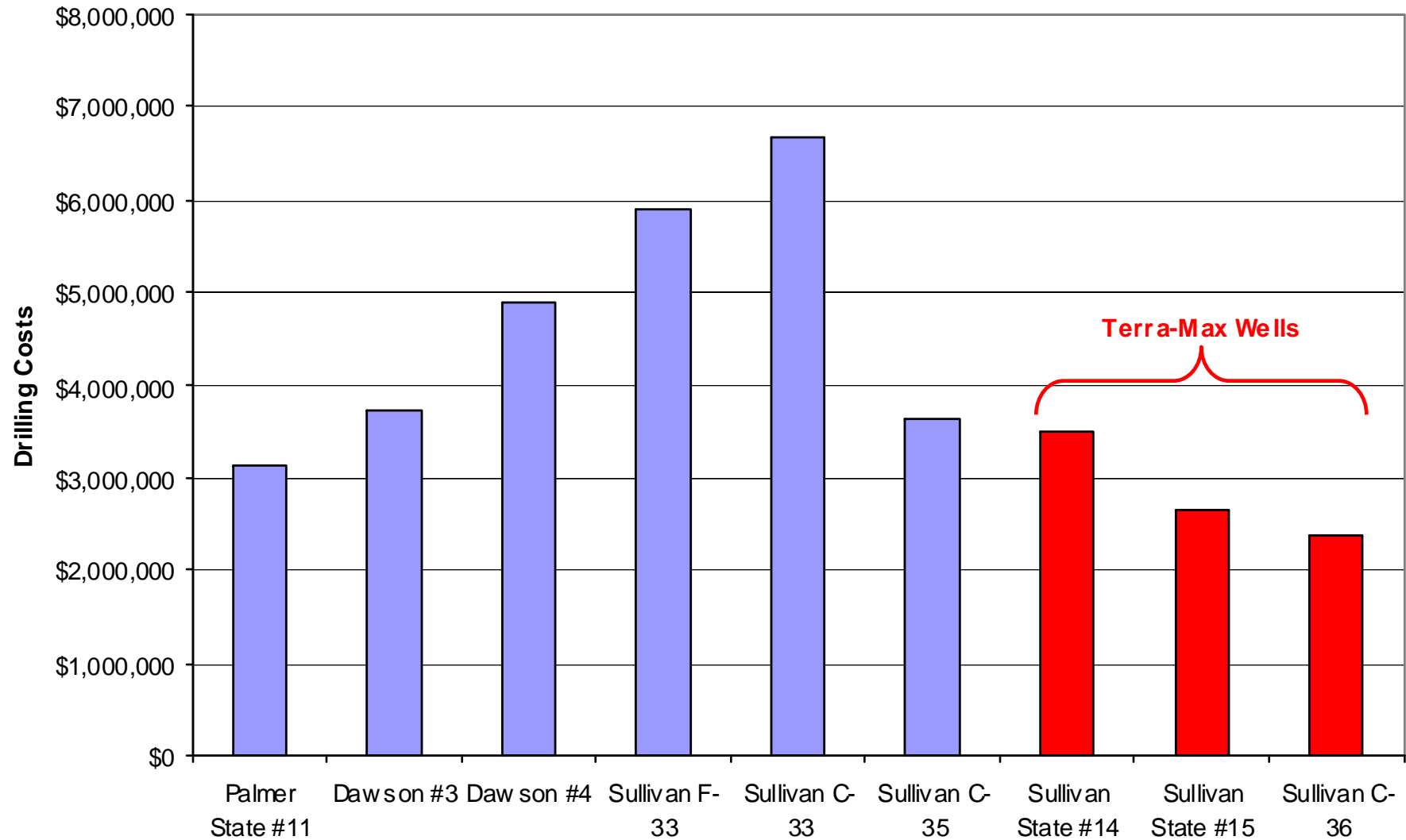
- Early wells drilled with oil based drilling fluids
  - Experienced severe losses and casing problems / collapses
- Switched to water based mud and alleviated most lost circulation issues
- Continual evolution of drilling and completion practices to limit casing failures
- Latest enhancement, Terra-Max drilling fluid, is greatest operational improvement
  - Reduced drilling days
  - Reduced mud losses / mud costs
  - Elimination of costly drilling liners
  - Reduced hole enlargement
  - Limited / no differential sticking
- Terra-Max paper recently presented at the AADE Drilling Fluids Conference in Houston

# Brooks County Vicksburg Drilling Curves



# Brooks County Vicksburg Drilling Costs 2006-2007 Wells

---

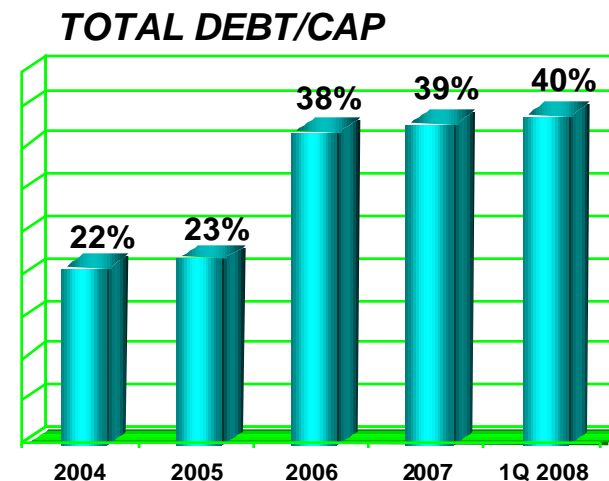
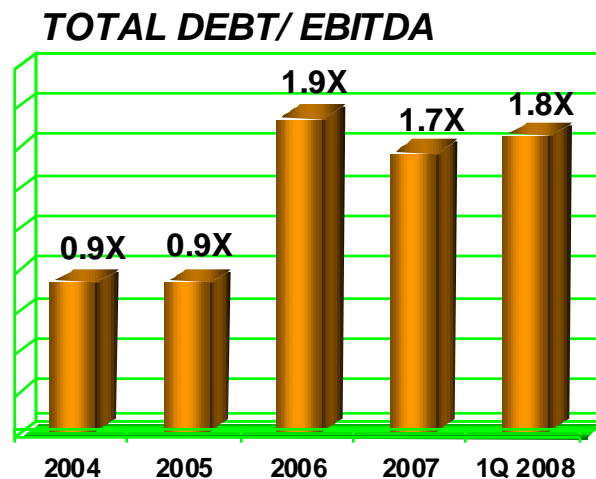


# Balance Sheet

## Maintain Strong Balance Sheet

---

- Current balance sheet ratios in-line with that of peer companies
- Conservative 2008 capex budget funded with cash flow and proceeds from Granite Wash asset sale
- Target total debt / EBITDA and total debt / book capitalization ratios below 2.0x and 45%, respectively



# 2008 Capital Expenditure Plan

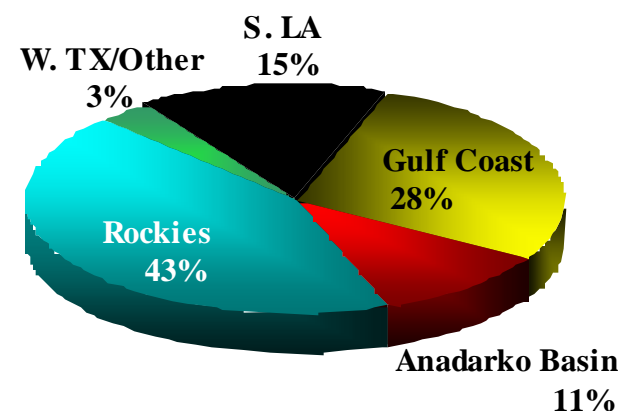
## Funding Review

- **In January, announced \$121 million E&D capex budget for 2008:**
  - Annualizing Q1 cash flow, combined with \$36 million of proceeds from Granite Wash asset sale, covers 100% of announced 2008 capex budget
- **Other “equity-like” funding sources:**
  - Production outperformance versus Q2 guidance
  - Additional asset sales
- **Greater usage of availability under credit facility:**
  - \$32 million outstanding as of April 30, 2008 with current borrowing base of \$135 million
  - Drilling results that de-risk Bakken acreage
- **Will re-evaluate capex budget to determine potential for increase in the second half of 2008**

**E&D CAPEX (\$ MILLIONS)**

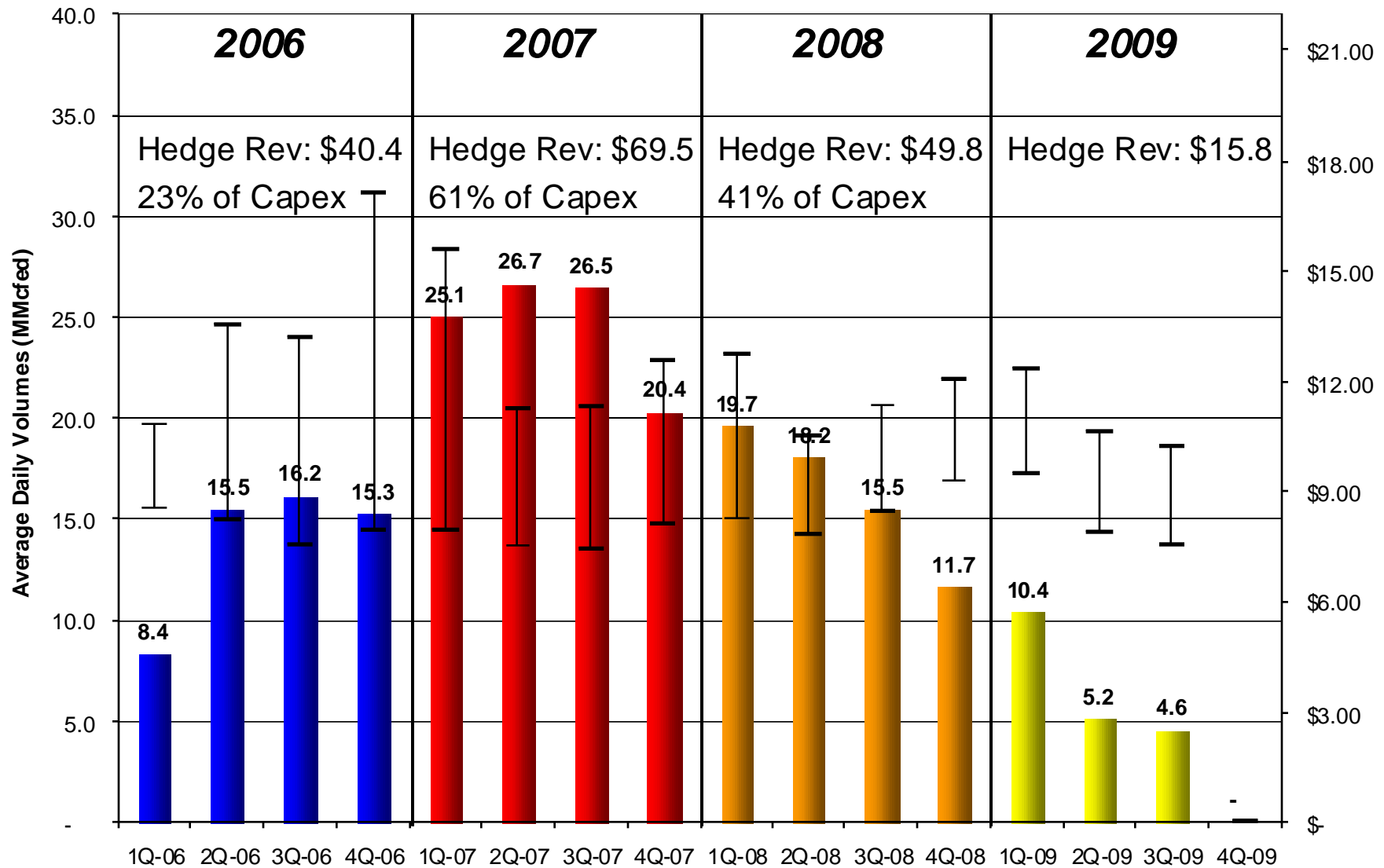


**Allocation By Focus Area**



# Hedge Portfolio

## 2008 Hedged at \$8.11/Mcfe Floor Price



# NAV Per Share Analysis

## Utilizing XTO Williston Basin Acquisition Data

All Amounts in Millions Except Per Share Data and Per Acre Costs

### BEXP Proved Net Asset Value (NAV) Per Share \* :

Proved Asset PV10 Value	\$ 776.1
Less: Debt Outstanding	<u>189.1</u>
Proved NAV	\$ 587.0
Shares Outstanding	<u>46.2</u>
<b>Proved NAV Per Share</b>	<b>\$ 12.71</b>

### BEXP Williston Basin Undeveloped Acreage Potential Value / BEXP Potential NAV Per Share \*\* :

	<u>Acreage 100% Prospective</u>		<u>Acreage 50% Prospective</u>	
	<u>\$95,000 /BO Production Multiple</u>	<u>\$17.50 /BO Reserve Multiple</u>	<u>\$95,000 /BO Production Multiple</u>	<u>\$17.50 /BO Reserve Multiple</u>
Implied XTO Per Acre Undeveloped Acreage Cost	\$ 4,186	\$ 3,070	\$ 4,186	\$ 3,070
BEXP Williston Basin Undeveloped Acreage Potential Value	\$ 1,173.0	\$ 860.0	\$ 586.7	\$ 430.2
BEXP Proved NAV Plus Williston Basin Undeveloped Acreage Potential Value	\$ 1,760.0	\$ 1,447.0	\$ 1,173.7	\$ 1,017.2
<b>BEXP Potential NAV Per Share</b>	<b>\$ 38.10</b>	<b>\$ 31.32</b>	<b>\$ 25.40</b>	<b>\$ 22.02</b>

\* Based on 2007 year-end proved reserves, May 27, 2008 strip prices and March 31, 2008 balance sheet.

\*\* Implied acreage values based on XTO Williston Basin acquisition assuming \$95,000 per BOE of production and \$17.50 per BOE of proved reserves. Implied acreage values then applied to BEXP's prospective Williston Basin undeveloped acreage.



## **Key Takeaways**

# Key Takeaways

---

- Numerous resource play, conventional and exploration near-term catalysts
- Significant Mountrail County, North Dakota and extensional area activity
  - 88,000 net acres results in 137 net locations on 640 acre spacing
  - 4 Mountrail Co. wells producing / 2 completing / 1 operated well drilling with non-operated drilling accelerating
- Significant acreage west of Nesson Anticline in North Dakota
  - 99,000 net acres in Williams and McKenzie Counties
  - Horizontal sidetrack of Mrachek well testing with latest completion technologies
- Red River success in Sheridan County, MT
  - Two consecutive recent Red River wells drilled validating 3-D seismic attributes
  - 16 additional prospects and leads currently identified on 100,000 net acres in MT
- Resumed Vicksburg drilling program
  - Triple Crowne Sullivan F-35 completed at initial rate of 6.8 MMcfe per day
  - Home Run Sullivan C-39 completed at initial rate of 3.9 MMcfe per day
  - Floyd Fault Block Sullivan C-38 completed at initial rate of 3.1 MMcfe per day
  - F-33 recompletion producing at ~4 MMcfe per day
  - BEXP Vicksburg production approaching record 20 MMcfe per day
- Southern Louisiana Accelerating
  - Cary Estate completing
  - First Southern Louisiana JV well drilling, 2<sup>nd</sup> commencing in June



**Brigham Operated Johnson 33 #1 in Mountrail County, ND**

**END**