KINDER MORGAN
ENERGY PARTNERS, L.P.

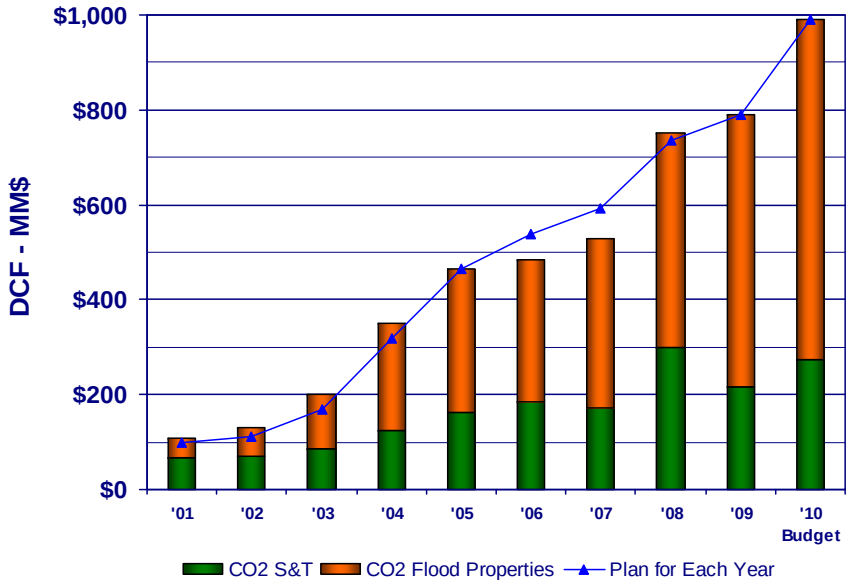
CO_2

Tim Bradley

President CO_2 Group

History of CO_2 Group and Looking Forward

- Shell CO_2 formed in 1998, KM share 20%
- Acquired remaining 80% in April 2000
- Acquired SACROC interests June 2000
- Acquired Yates interests in 2001 and 2003
- Ramped up developments at SACROC 2003+
  - Constructed Centerline PL in 2003
  - Constructed Power Plant 2005
  - Increased oil production 3X+
- Acquired Wink Pipeline in 2004
- Acquired Claytonville and Katz interests 2005-06
- Increased SW Colorado CO_2 Capacity 30% 2008
- Announced Katz CO_2 Project and ESPL 2009



Our footprint and technologies provide us with growth opportunities

- Continued developments at SACROC and Yates
- Katz field development and Eastern Shelf region opportunities
- Future Carbon management/sequestration opportunities

Note: CO_2 Sales and Transportation includes YOGS, CO_2 Sales profit on own use has not been eliminated

2009 Performance Recap – Made Plan

Despite extremely difficult conditions

2009 DCF of $790.1MM vs. $790MMPlan

CO_2 Source and Transportation — **Underperformed**

- $218 MM vs. $254 MM Plan
- Price hurt, volumes close

Yates — **Outperformed**

- $212 MM vs. $209 MM Plan
- 26,511 B/d vs. 26,500 B/d
- Cost improvements offset price hurt

SACROC* — **Outperformed**

- $361 MM vs. $327 MM Plan
- Oil: 30,149 B/d vs. 28,581 B/d
- NGLs: 15,326 B/d vs. 16,868 B/d
- Significant cost improvements

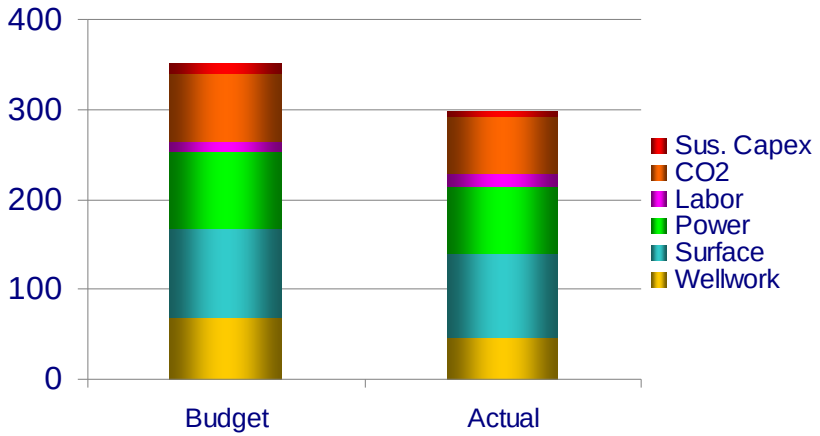
CAPEX — **Outperformed**

- $329 MM actual vs. Plan $449 MM

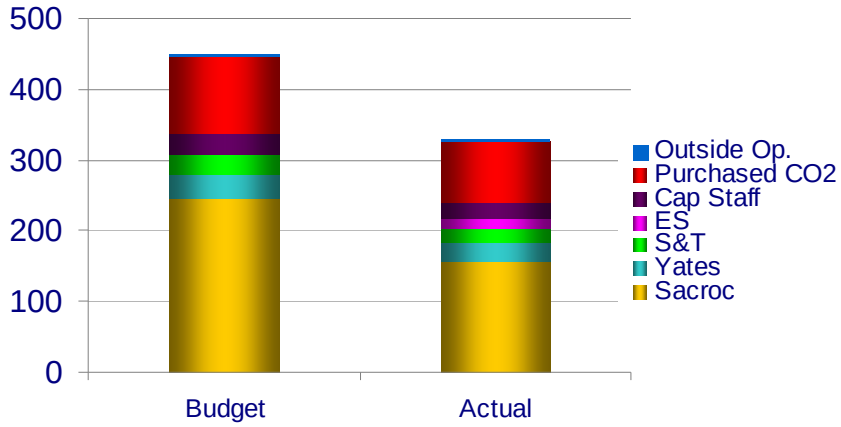
Note: Distributable Cash Flow
*Including SACROC Services and remaining oil and gas assets

2009 Cost Reduction Efforts

Opex, Sus. Capex Reductions, $MM



Expansion Capex Reductions, $MM



OPEX/Sustaining Capex

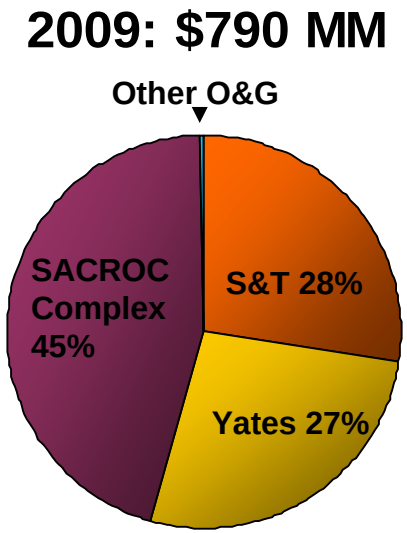
- **Achieved $52.8 MM reduction (15%)**
- **Achieved $48 MM reduction in TOTI**

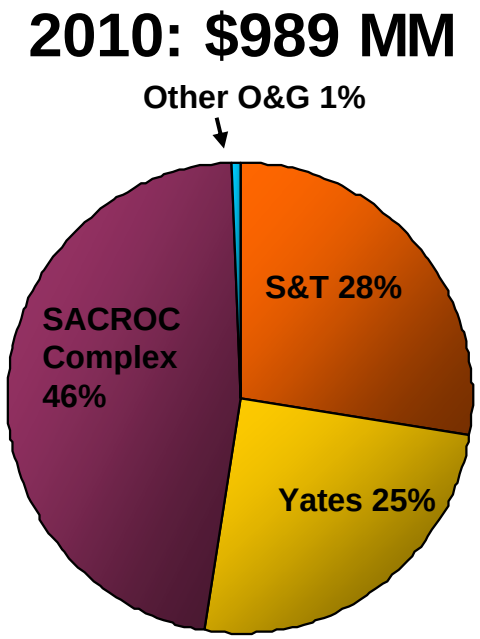
Expansion CAPEX

- **Achieved ~$120 MM reduction (27%)**

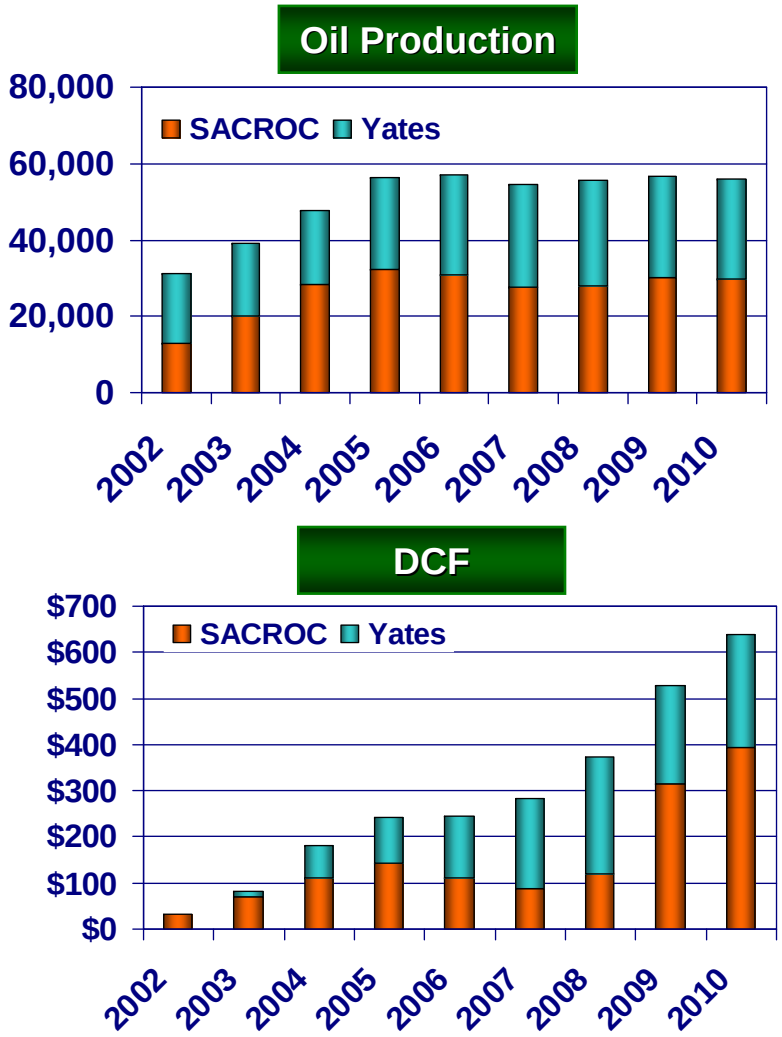
- **135 vendor letters, follow-up discussions**
- **Bidding, Contract negotiations**
- **Wellwork reductions ~ 25-30%**
- **Surface materials, Services ~ 10-15%**
- **SACROC capital program changed**
  - **Developed fewer, but richer patterns**
- **Low ESP failure rate reduced rig count (1/2 rig)**
- **Accelerated Yates compressors (less rental)**
- **TOTI savings mostly from lower severance tax rates**

2009 and 2010 DCF by Asset Group





SACROC and Yates Oil Production DCF



Original Oil in Place, Billion Bbls

- SACROC 2.8
- Yates 5.0

2010 Production

- SACROC oil 29,800 B/d
- SGP NGLs 16,673 B/d
- Yates 26,150 B/d

2010 DCF

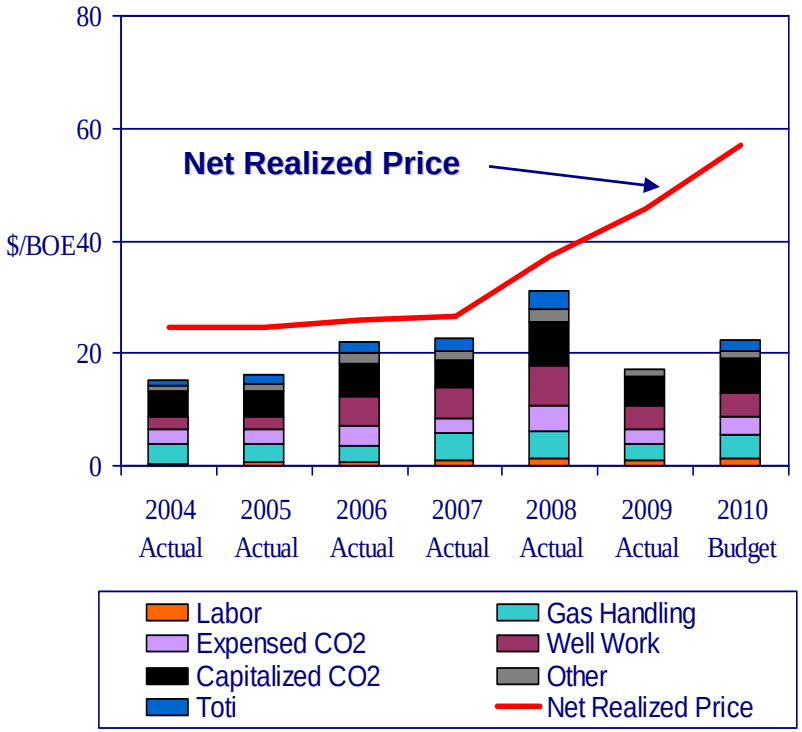
- SACROC Unit only $395 MM
- Yates $245 MM

Note: Yates DCF does not include contribution from MKM

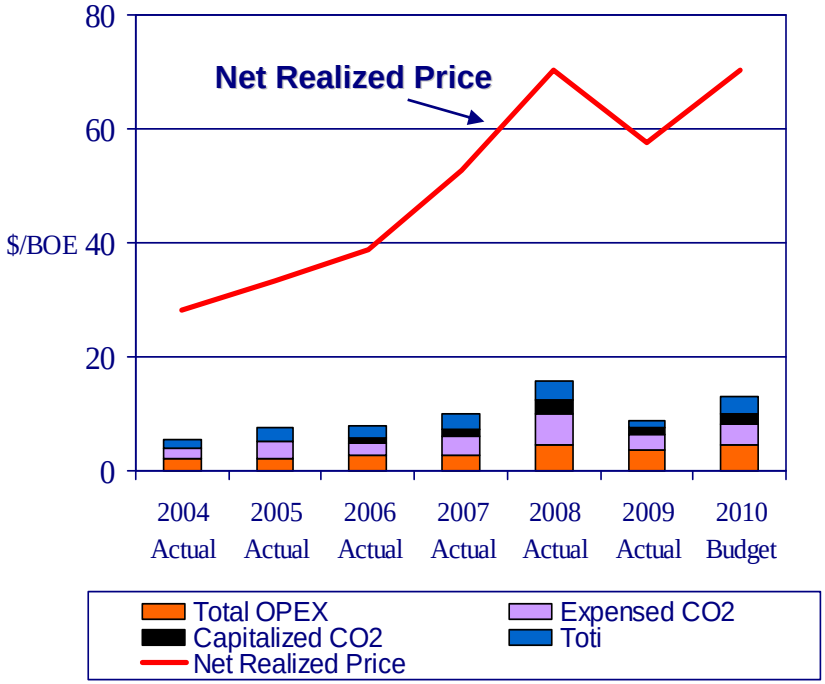
Oil and Gas Margins Remain Strong

Net of Hedged Prices

SACROC Cost Structure

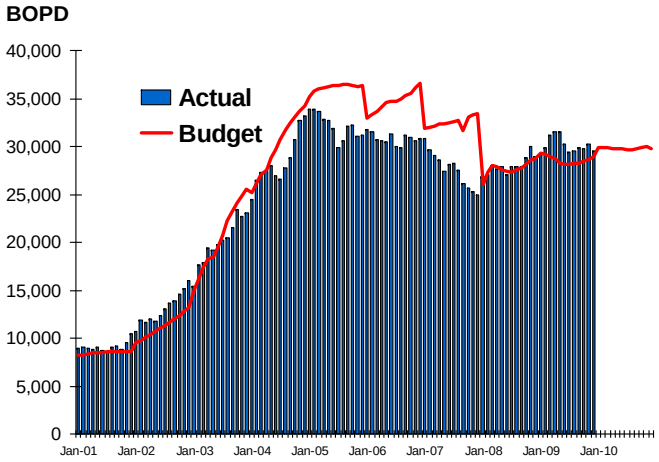


Yates Cost Structure

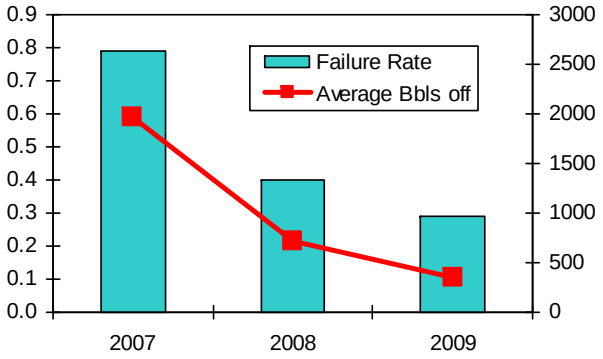


SACROC Production & Operations Highlights

Oil Production 2001-2010



Sub-pump Improvements



2009 – Review

Oil production exceeded plan

- Sub-Pump performance continued to improve
- Compressor run-time improved from 91.5% to 94.7%
- High graded pattern selection
- Injection rates higher than expected – curtailed pattern activations from 46 to 26

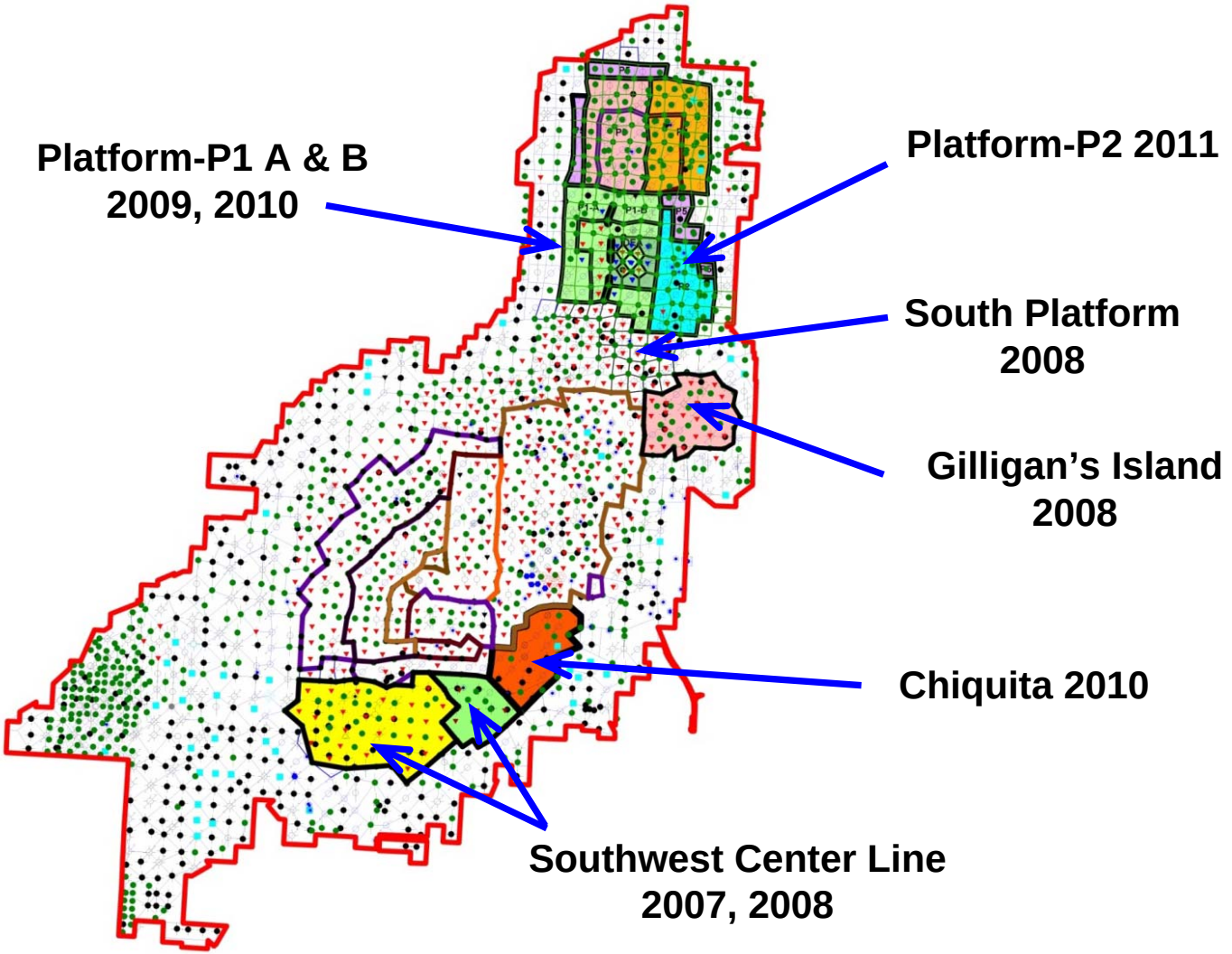
Costs below plan

- Opex/Sustaining Capex: 31 MM$
- Expansion Capex: 89 MM$
- Lower rig costs, goods and services
- Cost reduction efforts
- Lower activity level due to pattern selections

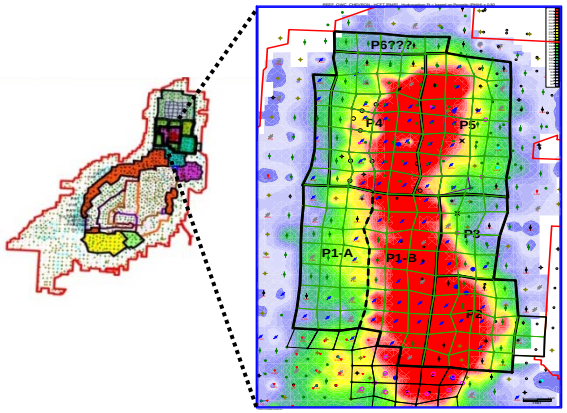
2010 - Focus

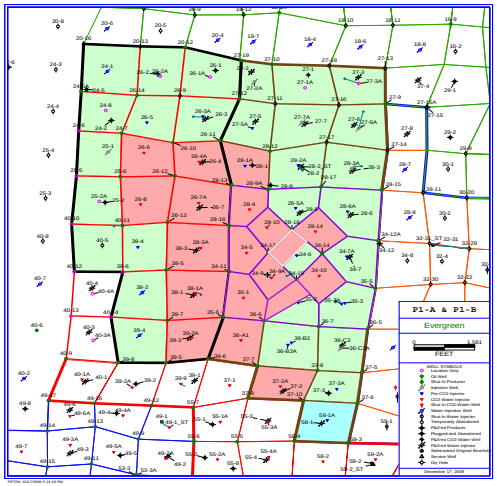
- Costs, Vendors beginning to push increases
- Add patterns at the right pace, manage gas volumes
- Continue to increase run-time
- Continue Conformance improvement projects

SACROC Recent & Future Development Plans



SACROC Development Activities and Plans





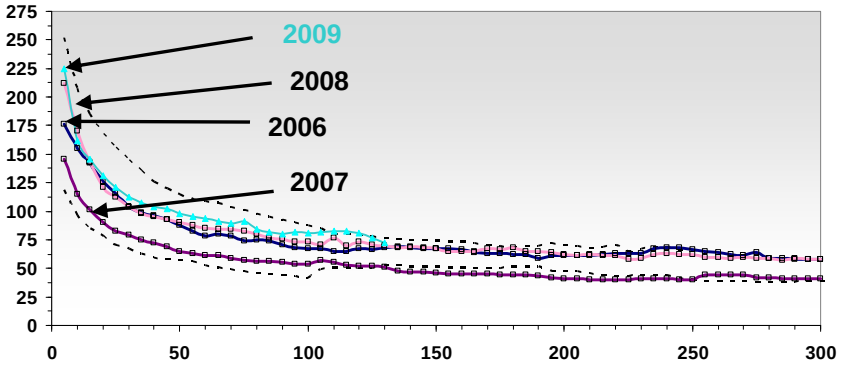
2009

2010

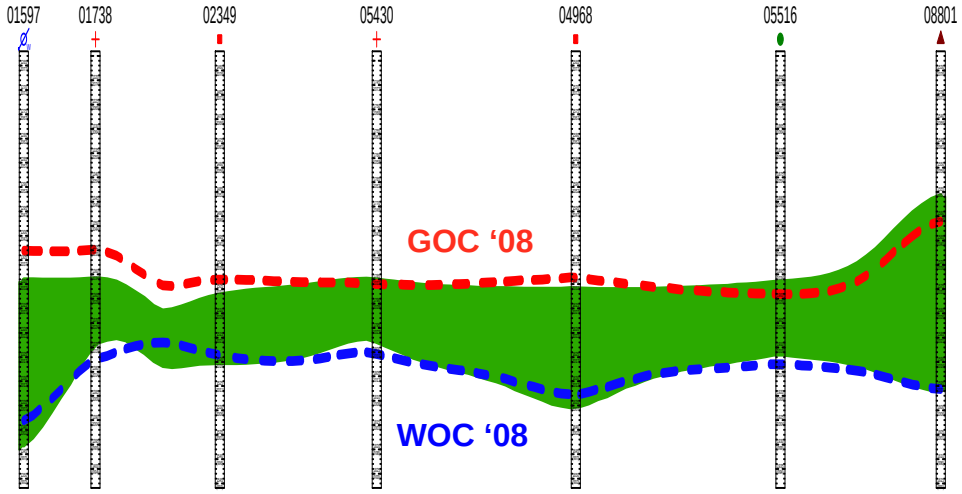
- **2009 Budget – 46 Patterns**
  - Finish S Platform and GI – 10 patterns
  - Activate 21 P1A patterns and 15 P1B patterns
- **2009 Actual – 26 patterns**
  - Finished So. Plat. And GI activations – 10 patterns
  - Activated 7 P1A patterns (sunk costs)
  - Activated 9 P1B patterns (Accelerate infill test)
- **2010 Plan – 39 patterns**
  - Finish P1 – 30 Patterns
  - Develop Chiquita – 9 of 14 patterns
  - P1 patterns have greater conformance risk

Yates Field Production and Development

HDH Production Results



Dec '09 Oil Column Thickness



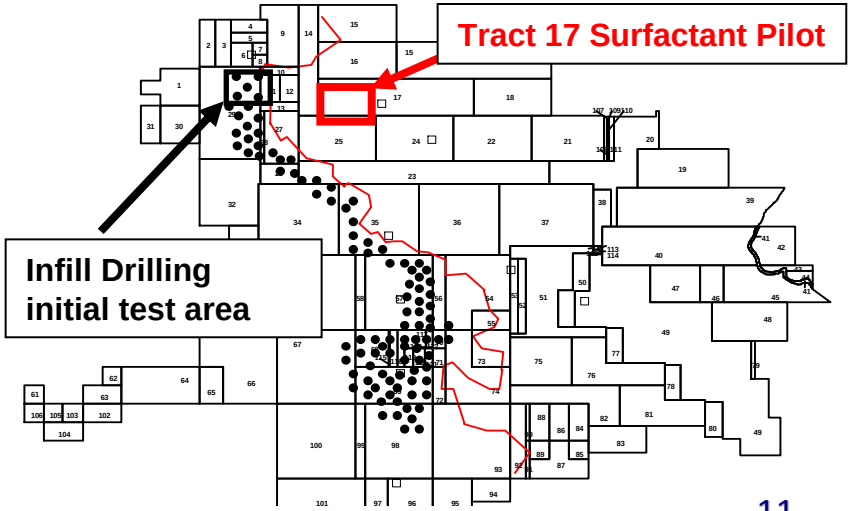
Oil column has thinned relative to 2008

- Expect slightly lower oil production in 2010
- Effectively capturing drained oil

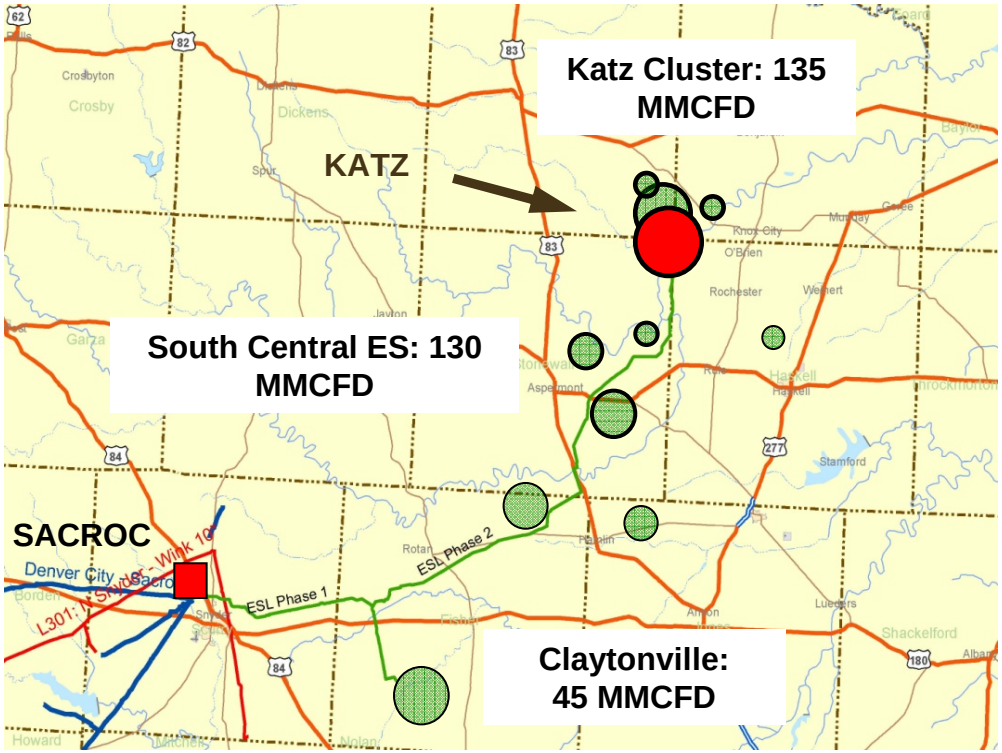
Continue Horizontal drilling program to capture draining oil from CO_2 response

Upside potential on West Side-Infill drilling, reactivations, surfactant

- 5 infill wells producing 250 b/d
- ~100 additional infill locations



Eastern Shelf Pipeline & Katz CO_2 Project



Acquired Katz Field April, 2006

Completed Detailed Geological & Engineering Review of Katz

- **OOIP 206 MMB**
- **Analog field results are encouraging: Expect 25 MMB, 15.8% Recovery**

Strategic Opportunity with Upside

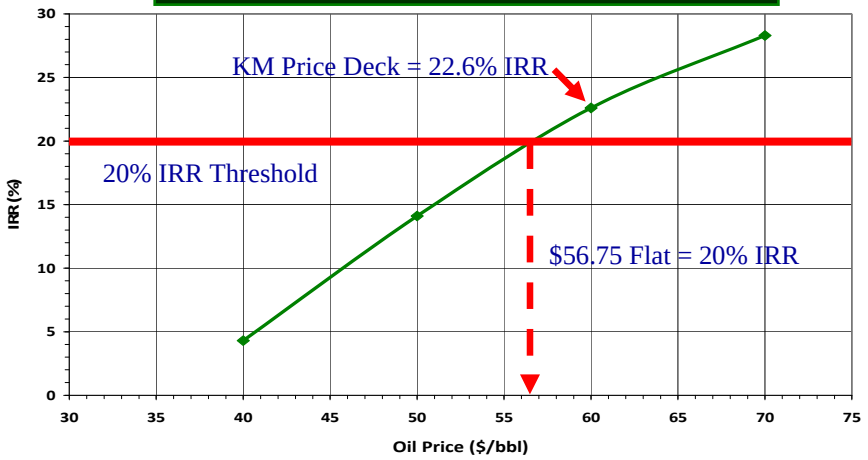
- **Adding CO_2 demand – 65 MMCF/d, 226 BCF**
- **Opening a new basin – up to 200 MMCF/d**
  - Over 1 Billion Bbl OOIP in region
  - Additional prospects include Claytonville, Round Top, Burnett Ranch

Economics (based on $60/b oil price):

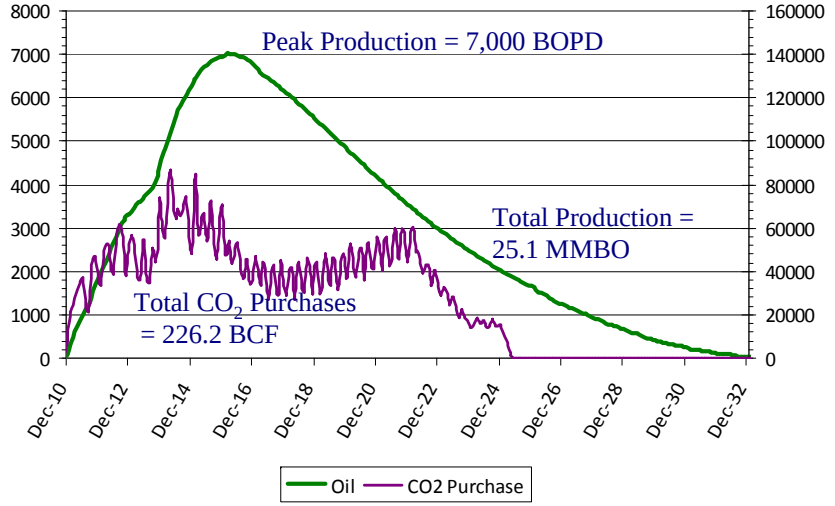
- **~$183 MM Capex**
  - Pipeline $36.3 MM
  - Field Development $146.7 MM
- **22.6% Unlevered IRR**

Eastern Shelf Pipeline & Katz CO_2 Project

Profitability vs. Oil Price



Katz Project Oil Production/ CO_2 Purchases



Katz Project Details

57 Patterns, First injection 1st qtr 2011

Pipeline

- **10" 91 miles, $36.3 MM**

Wellwork

- **CAPEX = $103.2 MM**
- **66% New Drills (Lower Chance of Problem Wells)**
- **Drilling Rig Contract – Rate tied to oil price**
- **Well tubulars purchased at discount**

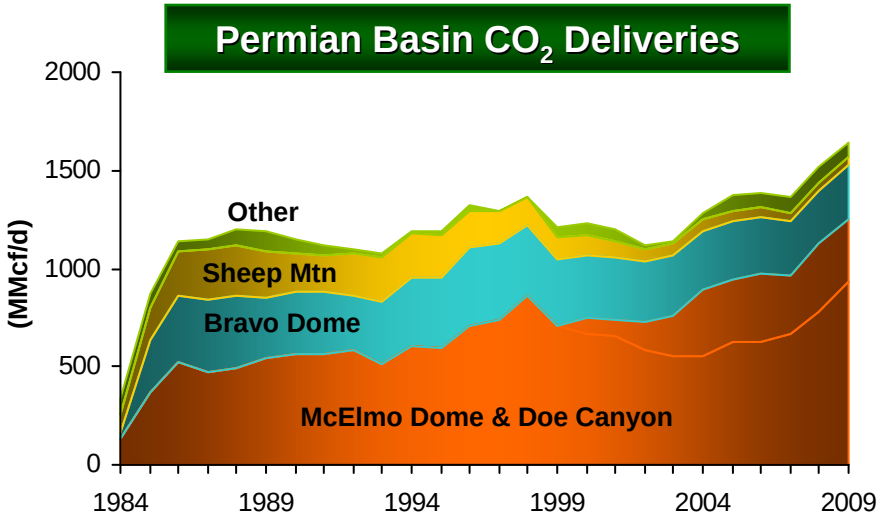
Facilities/Misc.

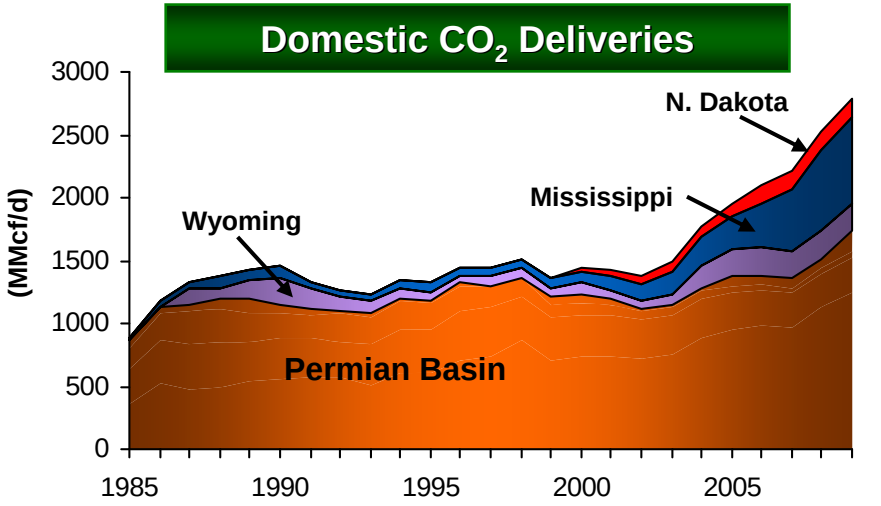
- **CAPEX = $42.9 MM**
- **Will Re-inject All Gas (HC & CO_2); No NGL Recovery**

Execution Risks

- **More Remote Location (Schedule & Costs)**
- **5-Year Execution Plan (Costs)**

CO_2 Source and Transportation
Growing Business Opportunities





Permian Basin

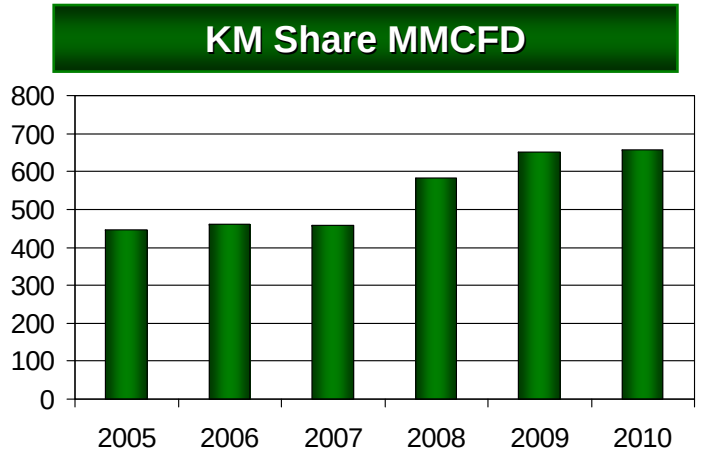
- **Supplies pro-rated on occasion, but oil price dip in early 2009 paused many new EOR project developments**
- **Permian Basin Demand expected to continue to remain stable or grow given existing project expansions plus known new project demand**

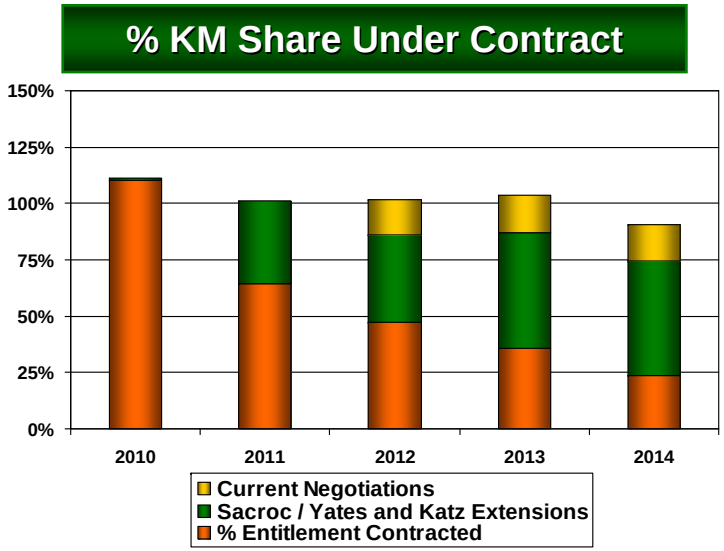
Domestic EOR

- **Industry CO_2 EOR activity is increasing**
- **Naturally occurring sources are being expanded to ultimate capacity**
- **Additional supplies exist**
  - Gasification, Ethylene, Ethylene Oxide, Steam-Methane Reformer, Ammonia & Ethanol facilities
- **Several regions have potential intersection between supply and demand**
  - Gulf Coast, California, Mid-continent, Canada

Sources: KM estimates, Oil and Gas Journal, EIA, XOM, Dakota Gasification, DRI

CO_2 Delivered Volumes





Significant growth since 2005

CAGR: Volumes + 8.3%, Price + 14%

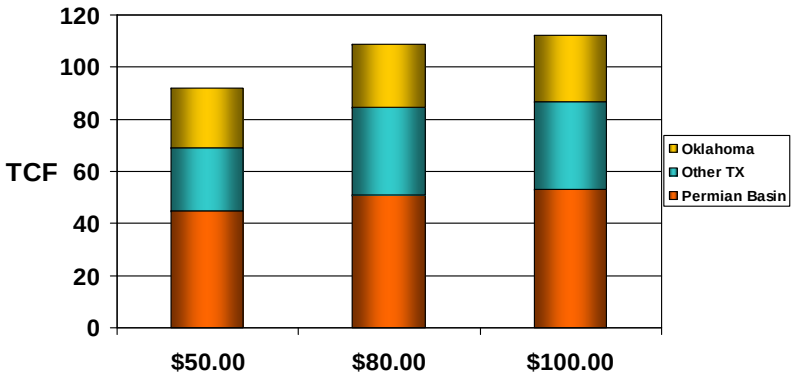
2010 vs. 2009: Volumes Flat, Price + 30%

KM share of EOR demand consumes 40% of our entitled production in 2010

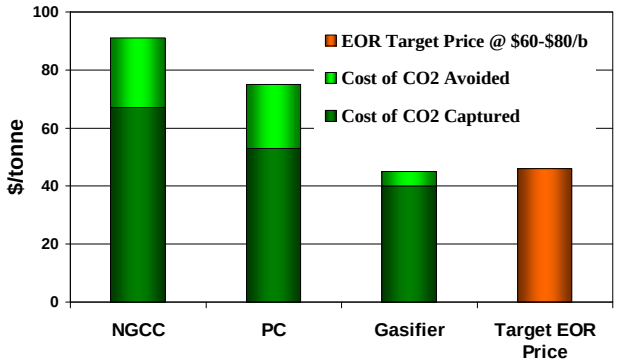
2009 and 2010 Include interruptible, as-available commitments

Strong Long Term Demand for CO_2

Purchased CO^2 Demand vs. Oil Price (a)



Capture Cost and affordability of Man-made CO^2 supplies (b)



Clean Coal and Sequestration may create new opportunities

- Sales and Transport
- EOR

However, economic and regulatory gaps are very large

- The cost of capturing man-made supplies is very expensive
- Carbon prices would need to be much higher than currently being discussed
- Liability, public expectations and requirements are still uncertain

$KMCO_2$ is recognized as an industry leader

- Active participant in industry studies
- Active participant in several Sequestration Partnerships

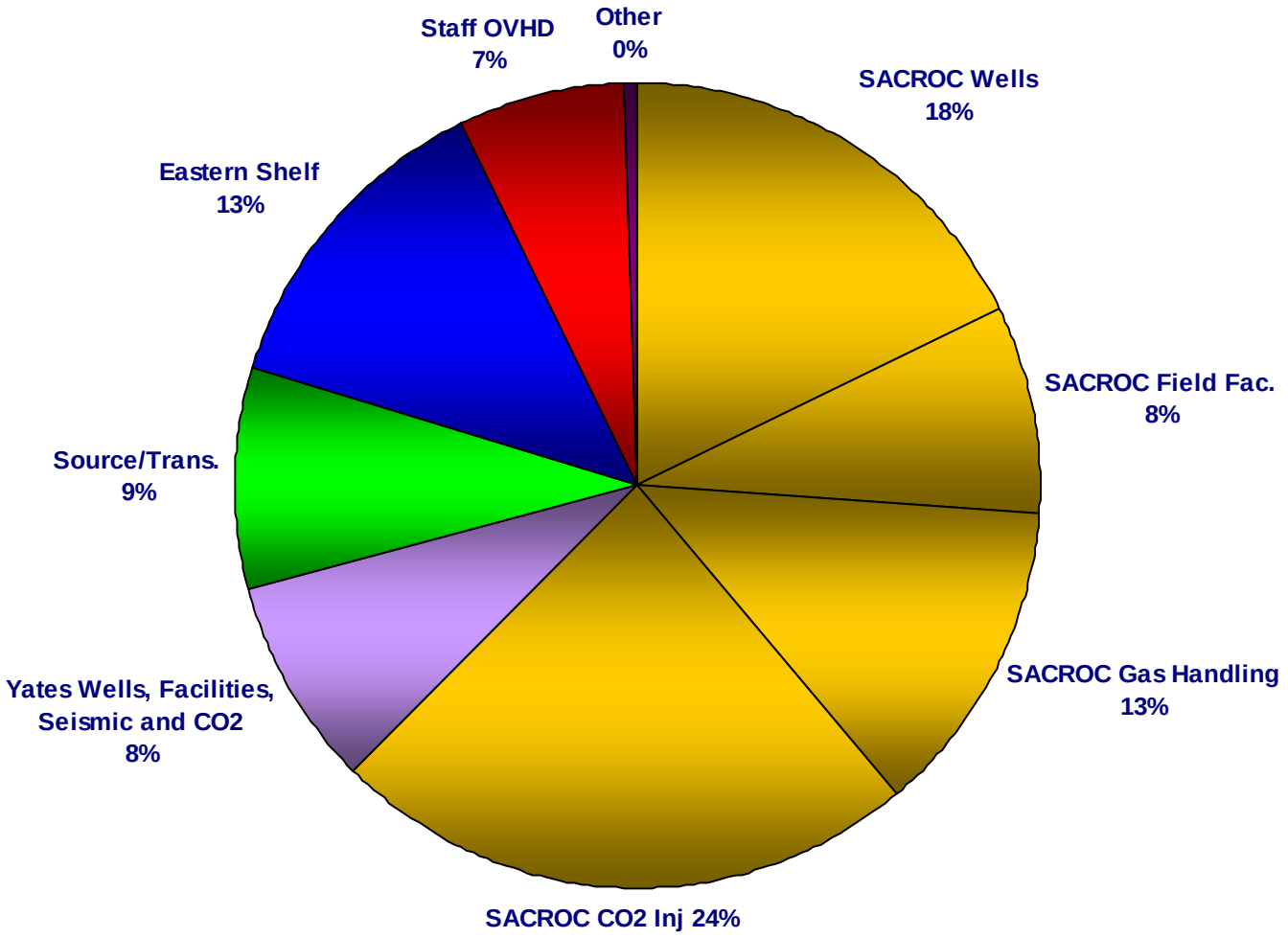
We remain engaged in new project development

- Poised to respond to economic opportunities

(a) Source: Advance Resources International Study, 2008

(b) Sources: NETL, IPCC, KM; NGCC is gas fired combined cycle; PC is Pulverized Coal; IGCC is integrated coal gasification. Cost is at plant gate and does not include transportation; EOR price is at oil field

2010 Expansion Capital Budget - $415 Million



Note: Cost Metrics based on 2009 run rates, under spent 2009 budget by $120 MM

Impact of Oil Price/Volume Variance on 2010 DCF

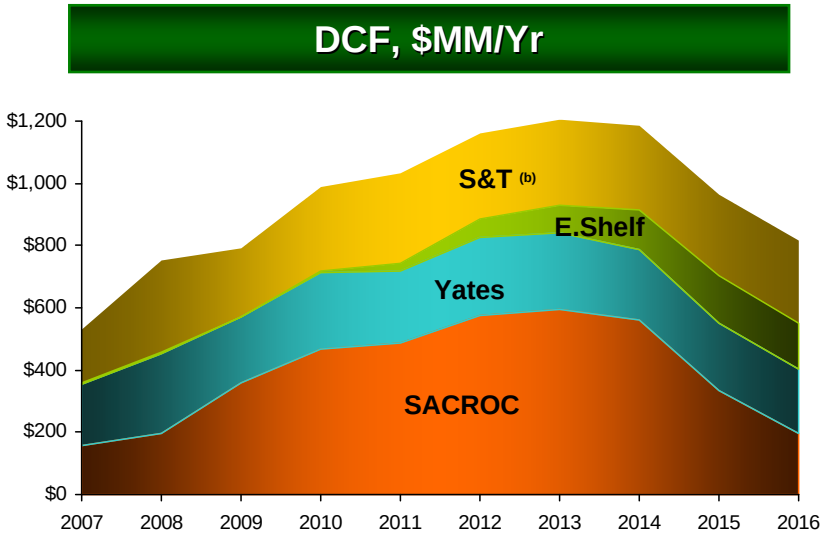
2010 Budget:		**$989 MM**
+/- 1000 BOPD		
SACROC		**$23.7 MM**
Yates		**$12.5 MM**
+/- 1 $/B WTI		**$6 MM**
CO_2	**$1 MM**	
NGL	**$3 MM**	
Crude	**$2 MM**	
3rd Party CO_2 Deliveries		
+/- 50 MMCF/D		**$6.5 MM**

Note: Unhedged WTI price presumed to average $83.73/b, WTI-WTS spread = $3.11

KM CO_2 Current Outlook

Development Plans 2010-2019

1. **SACROC Base Case Forecast**
   - 81 MMBOE Net [(a)], $1.2B KM Share Capex ($366MM CO_2)
   - Continue Platform development plan; Production forecast is based on existing recovery expectations
2. **Yates Base Case**
   - 42 MMBOE Net [(a)], $294MM KM Share Capex ($77MM CO_2)
   - Continue HDH programs and gravity drainage depletion plan; no upside potential included from infill or surfactant
3. **Eastern Shelf**
   - 14MMBOE Net [(a)], $329MM KM Share Capex ($194MM CO_2)
   - Start construction and implement development plans at Katz
     - Claytonville CO_2 project not included
4. **CO_2 S&T**
   - $187MM KM Share Capex, 1.35 BCF/d capacity, Includes Eastern Shelf CO_2 Pipeline
   - Maintain aggressive CO_2 sales program and keep facilities at capacity

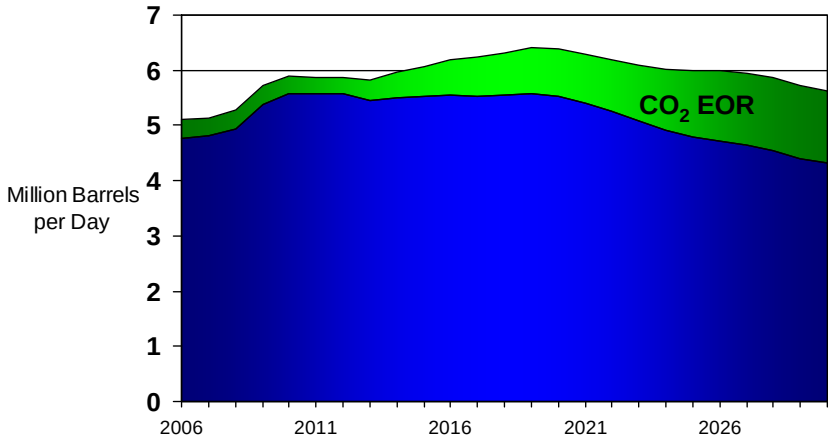


2010 = Budget, 2011 at forward curve, 2012+ at $80/b
Cost Metrics based on 2009 run rate
Development plans may change in different price scenarios

(a) Net Beq = SACROC: Net Crude plus Wet HC Gas divided by 6; Yates: Net Crude and NGLs plus Residue Gas divided by 6, Eastern Shelf: Net Crude only
(b) CO_2 profits not eliminated from S&T

Upside Opportunities Down the Road…

CO_2 EOR forecast to be ~25% of domestic production by 2030 (a)



EOR Projects will make up a larger amount of domestic oil production going forward

- **We have the footprint and management expertise to take advantage of that**

SACROC and Yates have and will continue to provide oil production opportunities:

- **Big Fields get Bigger…**
  - Better Conformance at SACROC is a big opportunity
    - Using latest technology to find residual oil and better target CO_2 injection
  - Yates Infill drilling and Surfactant opportunities

$KMCO_2$ may again have the opportunity to further capitalize on our large, low cost CO_2 supply in a CO_2 short marketplace

- **Approved Eastern Shelf CO_2 PL and Katz Project; opening a large new region**
- **Acquisitions near our operations can reverse the decline**

(a) AEO 2008