

## 2008 Investor and Analyst Meeting October 15-16, 2008

Oklahoma City, OK







### Welcome to CHK!



### **Forward-Looking Statements**



- This presentation includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements give our current expectations or forecasts of future events. They include estimates of natural gas and oil reserves, expected natural gas and oil production and future expenses, projections of future natural gas and oil prices, planned capital expenditures for drilling, leasehold acquisitions and seismic data, and planned asset sales, as well as statements concerning anticipated cash flow and liquidity, our business strategy and other plans and objectives for future operations. Disclosures concerning the fair value of derivative contracts and their estimated contribution to our future results of operations are based upon market information as of a specific date. These market prices are subject to significant volatility.
- Although we believe the expectations and forecasts reflected in these and other forward-looking statements are reasonable, we can give no assurance they will prove to have been correct. They can be affected by inaccurate assumptions or by known or unknown risks and uncertainties. Factors that could cause actual results to differ materially from expected results are described in "Risk Factors" in the Prospectus Supplement we filed with the Securities and Exchange Commission on July 10, 2008. These risk factors include the volatility of natural gas and oil prices; the limitations our level of indebtedness may have on our financial flexibility; our ability to compete effectively against strong independent oil and gas companies and majors; the availability of capital on an economic basis, including planned asset monetization transactions, to fund reserve replacement costs; our ability to replace reserves and sustain production; uncertainties inherent in estimating quantities of natural gas and oil reserves and projecting future rates of production and the amount and timing of development expenditures; uncertainties in evaluating natural gas and oil reserves of acquired properties and associated potential liabilities; unsuccessful exploration and development drilling; declines in the values of our natural gas and oil properties resulting in ceiling test write-downs; lower prices realized on natural gas and oil sales and collateral required to secure hedging liabilities resulting from our commodity price risk management activities; the negative impact lower natural gas and oil prices could have on our ability to borrow; drilling and operating risks, including potential environmental liabilities; production interruptions that could adversely affect our cash flow; and pending or future litigation.
- We caution you not to place undue reliance on these forward-looking statements, which speak only as of the date of
  this presentation, and we undertake no obligation to update this information. We urge you to carefully review and
  consider the disclosures made in this presentation and our filings with the Securities and Exchange Commission that
  attempt to advise interested parties of the risks and factors that may affect our business.



## Certain Reserve & Production Information



- The Securities and Exchange Commission has generally permitted 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 the terms "unproved" reserves, including both "risked" and "unrisked" unproved reserves, reserve "potential" or "upside", "ultimate recovery" and other descriptions of volumes of reserves potentially recoverable through additional drilling or recovery techniques that the SEC's guidelines may prohibit us from including in filings with the SEC. To estimate unproved reserves, the company uses a probability-weighted statistical approach to estimate the potential number of drillsites and potential unproved reserves associated with such drillsites. These estimates are by their nature more speculative than estimates of proved reserves and accordingly are subject to substantially greater risk of being actually realized by the company. The company's methodology for estimating "unproved" reserves is different from the methodology and guidelines used by the Society of Petroleum Engineers for estimating "probable" and "possible" reserves.
- Our production forecasts are dependent upon many assumptions, including estimates of production decline rates from existing wells and the outcome of future drilling activity. Also, our internal estimates of reserves, particularly those in our recent acquisitions where we may have limited review of data or experience with the properties, may be subject to revision and may be different from those estimates by our external reservoir engineers at year end. Although we believe the expectations, estimates and forecasts reflected in these and other forward-looking statements are reasonable, we can give no assurance they will prove to have been correct. They can be affected by inaccurate assumptions and data or by known or unknown risks and uncertainties.



### Analyst Days' Agenda



#### Wednesday, October 15

1:30 pm
 1:45 pm
 Welcome: Jeff Mobley, SVP – Investor Relations and Research
 Company Overview and Strategy: Aubrey McClendon, CEO

2:45 pm
 Financial Overview: Marc Rowland, EVP and CFO

3:45 pm
 Operations Overview: Steve Dixon, EVP and COO; Jeff Fisher, SVP – Production

4:30 pm
 Exploration & Technological Overview: Mark Lester, EVP – Exploration

5:00 – 7:00 pm
 Breakout Session: Reservoir Technology Center and 3-D Visualization Room tours and

Cocktail Reception: The Wildcat Restaurant

• 7:15 pm Dinner: CHK Fitness Center Gym

#### Thursday, October 16

7:00 am
 Breakfast: Blue Room Theater Foyer

7:30 am
 Haynesville Shale Overview: John Kapchinske, VP Geosciences – Southern Division;

John Sharp, Geoscience Manager - Louisiana

8:30 am
 9:15 am
 Barnett Shale Overview: Tom Layman, Geoscience Manager – Barnett Shale
 Fayetteville Shale Overview: Scott Sachs, VP Geoscience – Northern Division

10:00 am
 Marcellus Shale: Hank DeWitt, VP Geoscience – Eastern Division

■ 10:45 am Break

11:00 am
 Anadarko Basin Washes & Sahara Overview: Scott Sachs, VP Geoscience – Northern Division

• 11:30 am Other Play Overviews: Mark Lester, EVP – Exploration; Larry Lunardi, VP Geophysics

12:15 pm Closing Comments: Aubrey McClendon, CEO

12:30 pm
 Lunch: Buffet Available in Rooms B115 & B118; Boxed lunches in Blue Room Theater Foyer

• 12:30 – 2:30 pm Optional Rig Tour, WEHLU Field, Northwest Oklahoma City – Boxed lunch will be provided





## **CHK Overview Video**





## Company Overview and Strategy Aubrey K. McClendon, CEO



#### **Goals for the Meeting**





We appreciate your attendance today and hope you will come away impressed with:

- Attractiveness of our strategy
- Quality of our assets and technology
- Strength of our financial resources
- Value of asset monetization strategies
- Uniqueness of our culture
- Vision for the future
- Have navigated substantial challenges over past 19 years to build CHK into the nation's #1 natural gas producer, current challenges are easily manageable compared to past challenges

We are here to answer all of your questions about anything you have heard or imagined about CHK in the past few days and weeks



## **How Cheap is Cheap?**



Projected September 30, 2008 NAV @ various NYMEX gas prices<sup>(1)</sup>

	_	Average NYMEX Natural Gas Prices											
(\$ in millions, except per share data)			\$5.00		\$6.00		\$7.00		\$8.00		\$9.00		\$10.00
Proved reserves		\$	15,500	\$	19,700	\$	23,900	\$	28,100	\$	32,300	\$	36,500
Unproved reserves <sup>(2)</sup>			6,000		12,000		24,100		36,100		48,100		60,200
Value of CHK hedges <sup>(3)</sup>			2,900	ш	3,100		4,000		2,900		1,600		400
Value of CNR hedges			-		-		(100)		(100)		(100)		(200)
Other assets <sup>(4)</sup>			4,400		4,400		4,400		4,400		4,400		4,400
PXP and BP future drilling cost receivables			2,450		2,450		2,450		2,450		2,450		2,450
Less: long-term debt (net of cash equivalents)			(12,800)		(12,800)		(12,800)		(12,800)		(12,800)		(12,800)
Less: preferred stock (when not dilutive)			(500)		(300)		-		-		-		-
Less net working capital			(700)	п	(700)		(700)		(700)		(700)		(700)
Shareholder value		\$	17,250	\$	27,850	\$	45,250	\$	60,350	\$	75,250	\$	90,250
Fully diluted common shares (in millions) <sup>(5)</sup>			584	П	590		596		596		596		596
NAV per share		\$	29.54	\$	47.20	\$	75.92	\$	101.26	\$	126.26	\$	151.43
Potential % upside <sup>(4)</sup>			18%		89%		204%		305%		405%		506%
Asset value to long-term debt			2.3x		3.2x		4.5x		<b>5.7</b> x		6.9x		8.1x
Leasehold Transaction Implied Values	Undrilled	Implied Shale	lmp	lied	d Shale			_					

Acres Net	Leasehold	Leasehold Value
		Ebabbilola Value
to CHK	Value/Acre	(\$ in billions)
1,800,000	\$7,500	\$13.5
480,000	\$15,000	\$7.2
415,000	\$12,500	\$5.2
280,000	\$17,500	\$4.9
L4,425,000	\$1,000	\$14.4
L5,600,000	\$2,033	\$31.7
	1,800,000 480,000 415,000 280,000 4,425,000	1,800,000       \$7,500         480,000       \$15,000         415,000       \$12,500         280,000       \$17,500         .4,425,000       \$1,000

Prices	@ 10/10/0	8
	Oil	Gas
2008	\$ 109.03	\$ 8.60
2009	\$ 80.78	\$ 7.42
2010	\$ 85.14	\$ 7.98
2011	\$ 87.16	\$ 8.00
2012	\$ 87.76	\$ 7.91
rage	\$ 89.97	\$ 7.98
	2008 2009 2010 2011	2008 \$ 109.03 2009 \$ 80.78 2010 \$ 85.14 2011 \$ 87.16 2012 \$ 87.76



NYMEX natural gas price scenarios and NYMEX oil price held constant at \$80.00 per bbl 60 tofe of unproved reserves valued from \$0.10-\$1.00/mcfe
Buildings, drilling rigs, midstream gas assets at net book value and investments at market value Based on common stock price of \$25.00 per share

### **Attractiveness of Our Strategy**





- Company founded in 1989 with a \$50,000 initial investment and 10 employees
- No other company has achieved more with less in a shorter time frame
- CHK has always been good at strategic thinking and adapting to changing industry conditions
- CHK was:
  - Early to horizontal drilling
  - Early to resource plays
  - Early to predict structurally stronger natural gas prices
  - Early to appreciate the value of the land grab
  - Early to shales
  - Early to Appalachia
  - Early to hedging
  - Early to vertical integration
  - Early to demonstrate and create latent asset value in shale plays through industry JV's & VPP's
- CHK is well-positioned strategically and financially to ride out the current storm



#### **History of CHK**







- 1993-97: IPO introduced our strategy of "Growth through the Drillbit"; became #1 stock in America during '94-96 after >70% 1993 decline
- 1998-99: Rode out tough times because we had no debt maturities for 5 years and then reinvented company around three ideas:
  - Gas prices going higher on declining production and rising electrical generation demand
  - Tight reservoirs were the best places to achieve manufacturing type predictability
  - Improved horizontal drilling applied to tight reservoirs would lead to the opportunity to lock up huge swaths of newly prospective lands and provide differentially positive performance for decades to come
- 2000-07: Natural gas prices moved up, land grab implemented, transitioned geological focus from tight sands and carbonates to shales
- 2008 and beyond: #1 U.S. natural gas producer; #1 driller of new wells in the U.S.; asset monetizations capture value and demonstrate huge latent value in asset base; remain technological leader; remain proactive and highly adaptive to evolving industry conditions



## Quality of our Assets and Technology





- CHK has the best E&P assets in the U.S. bar none
- In the Big 4 Shale plays:
  - #1 in Haynesville and #1 in Marcellus
  - #2 in Barnett and #2 in Fayetteville
    - ➤ No one else is in Top 2 in more than one play; CHK is Top 2 in all 4!
- Large-cap leading growth rates with positive cash generation in 2H'08 and beyond
- CHK's DD&A rate is going lower while industry's costs are moving higher
- Unparalleled leasehold inventory will generate differentially superior performance for decades to come
  - We own what someday all will crave; some already do
- Proprietary Chesapeake Reservoir Technology Center (CRTC) is a difference maker in shale technology
- We're also a leader in 3-D seismic technology



#### Strength of Financial Resources





- We have cash on hand of \$1.1 billion (as of 10/9/08)
  - 40'08 cash build of ~\$2.0 billion
  - 2009 and 2010 cash flow positive as well
- On track to sell ~\$2.5 3.0 billion of leasehold and producing properties in Q4'08
- Leasing expenditures reduced from ~\$10.6 billion in 2007 and 2008 to ~\$3.2 billion in 2009 and 2010
- CHK is well hedged; MTM gains for 3Q'08 exceeded
   \$6.5 billion
- 3Q'08 net income could exceed \$3 billion
  - Debt to book cap reduced from 57% at 6/30/08 to  $\sim 39\%$  by 12/31/08
- By 12/31/08, cash availability should exceed \$3.5 billion with no senior note debt maturities until July 2013 plan is to keep a large liquidity position through the storm



## Value of Asset Monetization Strategy



- CHK thinks like a manufacturer we don't want everything we make piled up in a warehouse for sale a long time into the future
- For PDP's: find it for < \$2/mcfe and sell it for \$5+/mcfe through VPP's
  - "Out with the old, in with the new"
- For PUD's and probables/possibles: buy acreage for x, sell 25% of it for up to 10x
  - Advance present value, reduce risk
- In 2008, CHK has "made" ~\$6 billion from asset sales (Woodford, Haynesville, Fayetteville). If CHK used Successful Efforts accounting, the gains on the sales would have shown up in our income statement, but under Full Cost accounting, CHK recognizes this gain through a reduction of our cost pool which results in a lower DD&A rate, but over a long period of time. Would there have been so many recent financial concerns about our future, if we had been able to run ~\$6 billion of extra profits through our income statement and added it to our balance sheet? This would have increase our equity by 33%!
  - Successful Efforts "more conservative"? No way!
- Innovative JV arrangements with PXP and BP have enabled a \$2.5 billion reduction in future drilling capex and reduced CHK's potential current cash tax burden by nearly \$1 billion
- CHK deals with companies that have the need for US natural gas exposure through shale plays and who have the cash to make deals
- Stay tuned for Marcellus deal to close in 4Q'08



### **Uniqueness of Our Culture**





- Large employee company that still remains highly entrepreneurial and friendly
- Distinctive corporate campus leads to collegial culture and enthusiastic employees
- Building height limit of five stories reflects management's desire to keep organizational levels to five
  - Keep low to the ground for faster decision making
- Campus amenities (restaurants, health facilities, movie theater, etc.) icing on cake
- 2,800 geoscience, engineering, operations and land professionals – best place in industry to look for and produce natural gas
  - CHK has 2,800 Oklahoma City employees, of which 43% are younger than 30 – surely the youngest workforce in the industry
- Compensation reviews twice per year
  - All 7,300+ employees receive restricted stock grants and biannual raises and bonuses
- Well motivated, happy and youthful employee base has a "can do" attitude and is highly adaptive to changing industry and financial market conditions



#### Vision for the Future



#### Near term:

- The 1-2 punch of lower natural gas prices and credit crunch will balance natural gas markets by mid '09 or early '10, at the latest
  - Natural gas prices probably range bound between \$7-9 NYMEX for a few years, but industry needs at least \$9 - 10 NYMEX to support today's rig count, so rig count will fall
  - Credit crunch will likely accelerate rig reductions and balance natural gas markets quicker than lower gas prices will
- Reduced capex and strong CHK cash inflows from asset monetization deals closing in next 90 days should cause liquidity concerns to fade away
- Huge surprise for investors lies just ahead: SEC modernizes reserve recognition rules, CHK's proved reserves likely to exceed 20 tcfe by YE'09

#### Longer term:

- U.S. natural gas prices driven upwards by environmental considerations, transportation network changeover to CNG and plug-ins and LNG exports
- World natural gas prices stay strong as crude supply remains "peakish", and in developed countries, environmental considerations favor natural gas and in less developed countries, electricity shortages drive need for quickly built gas-fired generation
- U.S. natural gas is clean, affordable and abundant:
  - It can lead a rejuvenation of our economy through the lowest gas prices in the industrialized world
  - It can lead to a rebuilding of our auto manufacturers
  - It can improve the environment
  - It can reduce balance of trade deficit
  - It can save and create American jobs
  - It can enhance national security





## Financial Overview Marc Rowland, EVP & CFO



### **Cash Situation @ 10/9/08**



- Cash on hand \$1.1 billion
  - Safe, liquid U.S. treasuries or equivalents
- Bank credit facility (due November 2012)
  - \$3.5 billion committed: \$3.47 borrowed
- Maintenance covenants per bank credit facility
  - Consolidated indebtedness to consolidated total capitalization must be <0.70:1</li>
    - > 6/30/08 ratio was 0.57:1 (based on \$13.9 billion of consolidated debt and \$10.3 billion of equity)
    - $\geq$  9/30/08 pro forma ratio was 0.59:1 (assuming \$14.9 billion of consolidated debt and no change to equity)
  - Consolidated indebtedness to EBITDA must be less than 3.75:1
    - > 6/30/08 ratio was 2.05:1 (based \$13.9 billion of consolidated debt and \$6.8 billion of EBITDA)
    - > 9/30/08 pro forma ratio was ~2.19:1 (assuming \$14.9 billion of consolidated debt and no change to EBITDA)
- Debt incurrence covenants per pre-July 2005 (most restrictive) senior note indentures
  - Financial covenants in the indentures are debt incurrence covenants and not maintenance covenants.
     Therefore, we only have to meet one of the following covenants to be able to incur additional indebtedness
  - EBITDA coverage ratio must be >2.25:1
    - > 6/30/08 ratio was 9.05:1
    - ➤ No expectations of deterioration in this covenant for 9/30/08
  - Consolidated net tangible assets must be >200% of indebtedness
    - 6/30/08 consolidated net tangible assets did not exceed 200% of indebtedness
    - > 9/30/08 consolidated net tangible assets are not expected to exceed 200% of indebtedness
    - > Since EBITDA coverage ratio is met, it is not necessary to meet this covenant to incur additional indebtedness



## **Near-Term Sources of Additional Cash**



Timing

Anticipate generating approximately \$3.0 - 4.5 billion of additional cash through the following transactions:

	Ilming
<ul> <li>Mid-stream bank credit facility</li> </ul>	To close 10/15/08
<ul> <li>Miscellaneous Oklahoma assets</li> </ul>	Goal - 4Q'08
<ul><li>South Texas assets</li></ul>	Goal - 11/08
<ul> <li>Marcellus Shale Joint Venture</li> </ul>	Goal - 11/08
Mid-stream partner	4Q'08 - 1Q'09
• VPP#4	Goal - 4Q'08



## What is CHK's Maintenance Capex? How Low Could Capex Go?



• In 2009, our unique Haynesville and Fayetteville Shale joint ventures deals allow us to drill in the:

	Gross Cost (\$mm)	Drilling Carry (\$mm)	Net Cost (\$mm)	Reserves Additions	Net F&D Cost (\$/mcfe)
Haynesville Shale (average of 26 rigs)	\$900	\$455	\$445	590	~\$0.75
Fayetteville Shale (average of 21 rigs)	\$620	\$520	\$100	340	~\$0.30
Total	<b>\$1,520</b>	\$975	<del>\$545</del>	930	~\$0.60

- So, we could invest ~\$550 million to find ~930 bcfe, or 95% of our 2009E production at a finding and development cost of only ~\$0.60/mcfe
- Marcellus Shale joint venture to come



## Counter Party Exposure @ 10/9/08<sup>(1)</sup>



#### **Receivables**

<ul><li>Barclays</li></ul>	\$182 mm
<ul> <li>Deutsche Bank</li> </ul>	104
<ul><li>J Aron (Goldman)</li></ul>	97
<ul><li>Morgan Stanley</li></ul>	80
- Citi	62
- BNP	59
- BP	32
<ul><li>Calyon</li></ul>	30
<ul><li>All others (6)</li></ul>	56
	\$701

#### **Payables**

<ul> <li>Credit Suisse</li> </ul>	\$62
<ul><li>All others (5)</li></ul>	49
` ,	\$111

**Net due CHK** 

\$590 mm



### **Financial Highlights**



- \$28.5 billion enterprise value
  - \$14.9 billion equity value, \$12.9 billion net long-term debt and \$0.7 billion working capital deficit
- Strong profitability
  - 2009E: ebitda \$6.4 billion, operating cash flow \$6.0 billion, net income to common \$2.2 billion
- Well hedged
  - 73% of 4Q'08, 69% of 2009 and 42% of 2010 production hedged at average prices of \$9.19, \$9.56 and \$9.81 per mcfe, respectively
- Innovative joint venture arrangements
  - CHK/PXP in Haynesville Shale: \$3.3 billion for 20% interest
  - CHK/BP in Fayetteville Shale: \$1.9 billion for 25% interest
  - CHK/?? in Marcellus Shale, plan to announce a transaction by year-end 2008
- Prudent balance sheet
  - Balanced financing mix of equity and long-term debt with long-dated fixed maturities
  - Strong asset and cash flow coverage of debt
  - Substantial asset growth, cash generation and earnings set to meaningfully deleverage CHK by YE'10
- Anticipating substantial balance sheet improvement
  - Strong asset growth and earnings growth expected over the next two years
  - In the last four weeks CHK reduced drilling capex by ~\$3.7 billion, or ~20% and reduced leasehold and property expenditures by \$1.4 mm or ~16%
  - Expect to primarily direct ~\$2.0 billion of excess cash generation in 40'08 to debt reduction
- Great value to investors
  - 2009E multiples: 2.5x operating cash flow, 4.4x ebitda, 6.6x P/E ratio
  - Trading at steepest ever discount to estimated net asset value per share



#### Data above incorporates:

- CHK's spending and production forecast and realized and locked gains as of 10/14/08
- Reconciliations to GAAP measures appear on page 9
- Summary of hedging positions appear on page 23
- An assumed common stock price of \$25.00, NYMEX prices of \$8.00/mcf and \$80.00/bbl and excludes effects of FAS 133 (unrealized hedging gain or loss)

## Cash Resource Plan 4Q'08 - '10(1)



Net Cash Resources (\$ in millions)	Q4'08E	2009E	2010E	Total
Operating cash flow <sup>(1)(2)</sup>	\$1,375 - \$1,425	\$5,800 - \$6,000	\$6,250 - \$6,750	\$13,425 - \$14,175
Leasehold and producing properties transactions				
Sales	2,100 - 2,500	1,250 - 2,000	1,250 - 2,000	4,600 - 6,500
Volumetric Production Payments	400 - 500	1,000 - 1,250	1,000 - 1,250	2,400 - 3,000
Acquisitions	(750 - 1,000)	(1,250 - 1,750)	(1,000 - 1,500)	(3,000 - 4,250)
Net leasehold and producing properties transactions	1,750 - 2,000	1,000 - 1,500	1,250 - 1,750	4,000 - 5,250
Debt and equity offerings	-	-	-	-
Midstream debt and equity financings	1,050 - 1,275	500 - 700	500 - 700	2,050 - 2,675
Proceeds from investments and other	-	500 - 750	150 - 250	650 - 1,000
Total:	\$4,175 - \$4,700	\$7,800 - \$8,950	\$8,150 - \$9,450	\$20,125 - \$23,100
Net Cash Uses (\$ in millions)				
Drilling	<b>\$1,200 - \$1,300</b>	\$4,250 - \$4,750	\$4,750 - \$5,250	\$10,200 - \$11,300
Geologic and geophysical	75	225 - 275	225 - 275	525 - 625
Midstream infrastructure and compression	300 - 325	1,000 - 1,200	900 - 1,000	2,200 - 2,525
Other PP&E	50 - 75	250 - 300	250 - 300	550 - 675
Dividends, capitalized interest, etc.	150 - 200	575 - 600	575 - 600	1,300 - 1,400
Cash income taxes	350 - 450	200 - 300	200 - 300	750 - 1,050
Total:	\$2,125 - \$2,425	\$6,500 - \$7,425	\$6,900 - \$7,725	\$15,525 - \$17,575
Net Cash Change	\$2,050 - 2,275	<b>\$1,300 - 1,525</b>	<b>\$1,250 - 1,725</b>	\$4,600 - 5,525
Revolving credit facility (\$ in millions)				
Beginning balance, net of cash on hand	\$2,000	(\$150)	(\$1,550)	
Potential change	(\$2,150)	(\$1,400)	(\$1,500)	
Ending balance, net of cash on hand	(\$150)	(\$1,550)	(\$3,050)	
Production (bcfe per day)	2.36	2.67	3.34	
Proved reserves (tcfe)	12.5	15.0	17.0	
Proved reserves per fully diluted share (mcfe)	21.0	25.2	28.6	
YOY % change in proved reserves per FD share	16%	20%	13%	
Long-term debt, net of cash on hand (\$ in millions)	\$10,650	\$9,250	\$7,750	
Long-term debt per mcfe of proved reserves	\$0.85	\$0.62	\$0.46	



<sup>(1)</sup> From Outlook as of 10/14/08 and well as NYMEX prices of \$7.00-\$8.00/mcf and \$80/bbl

Before changes to asset and liabilities. Reconciliations to GAAP measures appear on pages 8-10

<sup>(2)</sup> (3) Under existing SEC proved reserve definitions – likely to increase by up to 5 tcfe per year beginning 12/31/09

# 2008 Financial Projections at Various Natural Gas Prices

As of 10/14/2008 Outlook

(\$ in millions; oil at \$104.97 NYMEX)	\$6.00	\$7.00	\$8.00	\$9.00	\$10.00
O/G revenue (unhedged) @ 846 bcfe <sup>(1)</sup>	\$7,336	\$7,452	\$7,569	\$7,685	\$7,822
Hedging effect <sup>(2)</sup>	(63)	(102)	(182)	(253)	(363)
Marketing and other (@ \$0.15/mcfe)	127	127	127	127	127
Production taxes 5%	(324)	(330)	(336)	(341)	(348)
LOE (@ \$1.05/mcfe)	(888)	(888)	(888)	(888)	(888)
G&A (@ \$0.46/mcfe) <sup>(3)</sup>	(389)	(389)	(389)	(389)	(389)
Ebitda	5,799	5,870	5,901	5,941	5,961
Interest (@ \$0.38/mcfe)	(317)	(317)	(317)	(317)	(317)
Operating cash flow <sup>(2)(3)(4)</sup>	5,482	5,553	5,584	5,624	5,644
Oil and gas depreciation (@ \$2.35/mcfe)	(1,988)	(1,988)	(1,988)	(1,988)	(1,988)
Depreciation of other assets (@ \$0.22/mcfe)	(186)	(186)	(186)	(186)	(186)
Income taxes (38.5% rate)	(1,274)	(1,301)	(1,313)	(1,328)	(1,336)
Net income to common <sup>(1)</sup>	\$2,034	\$2,078	\$2,097	\$2,122	\$2,134
Net income to common per fully diluted shares	\$3.62	\$3.70	\$3.73	\$3.78	\$3.80
Net debt/ ebitda <sup>(5)</sup>	2.2x	2.2x	2.2x	2.2x	2.2x
Debt to book capitalization ratio	39%	39%	39%	39%	39%
Ebitda/fixed charges (including pfd. dividends) <sup>(6)</sup>	9.4x	9.5x	9.5x	9.6x	9.6x
MEV/operating cash flow <sup>(7)</sup>	2.7x	2.7x	2.7x	<b>2.6</b> x	2.6x
EV/ebitda <sup>(8)</sup>	<b>4.9</b> x	4.8x	<b>4.8</b> x	<b>4.8</b> x	4.8x
PE ratio <sup>(9)</sup>	6.9x	6.8x	6.7x	6.6x	6.6x



<sup>1)</sup> Before effects of FAS 133 (unrealized hedging gain or loss)

Includes the non-cash effect of CNR hedges

<sup>)</sup> Includes charges related to stock based compensation

Before changes in assets and liabilities

Net debt = long-term debt less cash

<sup>(6)</sup> Fixed charges (\$619mm) = interest expense of \$586 million plus dividends of \$33 million

<sup>(7)</sup> MEV (Market Equity Value) = \$14.9 billion (\$25.00/share x 596 mm fully diluted shares as of 09/30/08)

EV (Enterprise Value) = \$28.5 billion (Market Equity Value, plus \$12.9 billion of net long-term debt and \$0.7 billion working capital deficit as of 9/30/08)

<sup>(9)</sup> Assuming a common stock price of \$25.00/share

# 2009 Financial Projections at Various Natural Gas Prices

As of 10/14/2008 Outlook

(\$ in millions; oil at \$80.00 NYMEX)	\$6.00	\$7.00	\$8.00	\$9.00	\$10.00
O/G revenue (unhedged) @ 975 bcfe <sup>(1)</sup>	\$5,662	\$6,456	\$7,250	\$8,044	\$8,837
Hedging effect <sup>(2)</sup>	1,172	1,523	958	395	(147)
Marketing and other (@ \$0.15/mcfe)	146	146	146	146	146
Production taxes 5%	(283)	(323)	(362)	(402)	(442)
LOE (@ \$1.15/mcfe)	(1,121)	(1,121)	(1,121)	(1,121)	(1,121)
G&A (@ \$0.46/mcfe) <sup>(3)</sup>	(449)	(449)	(449)	(449)	(449)
Ebitda	5,127	6,232	6,422	6,613	6,824
Interest (@ \$0.43/mcfe)	(414)	(414)	(414)	(414)	(414)
Operating cash flow <sup>(2)(3)(4)</sup>	4,713	5,818	6,008	6,199	6,410
Oil and gas depreciation (@ \$2.25/mcfe)	(2,194)	(2,194)	(2,194)	(2,194)	(2,194)
Depreciation of other assets (@ \$0.22/mcfe)	(215)	(215)	(215)	(215)	(215)
Income taxes (38.5% rate)	(887)	(1,313)	(1,386)	(1,459)	(1,541)
Net income to common <sup>(1)</sup>	<b>\$1,417</b>	\$2,096	\$2,213	\$2,331	\$2,460
Net income to common per fully diluted shares	\$2.41	\$3.57	\$3.77	\$3.97	\$4.19
Net debt/ebitda <sup>(5)</sup>	2.5	2.1	2.0	1.9	1.9
Debt to book capitalization ratio	34%	33%	33%	33%	33%
Ebitda/fixed charges (including pfd. dividends) <sup>(6)</sup>	8.7	10.6	10.9	11.3	11.6
MEV/operating cash flow <sup>(7)</sup>	3.2x	2.6x	2.5x	2.4x	2.3x
EV/ebitda <sup>(8)</sup>	5.5x	<b>4.6</b> x	<b>4.4</b> x	4.3x	4.2x
PE ratio <sup>(9)</sup>	10.4x	7.0x	6.6x	6.3x	6.0x



<sup>1)</sup> Before effects of FAS 133 (unrealized hedging gain or loss)

Includes the non-cash effect of CNR hedges

<sup>3)</sup> Includes charges related to stock based compensation

Before changes in assets and liabilities

Net debt = long-term debt less cash

<sup>(6)</sup> Fixed charges (\$587mm) = interest expense of \$563 million plus dividends of \$24 million

<sup>(7)</sup> MEV (Market Equity Value) = \$14.9 billion (\$25.00/share x 596 mm fully diluted shares as of 09/30/08)

EV (Enterprise Value) = \$28.5 billion (Market Equity Value, plus \$12.9 billion of net long-term debt and \$0.7 billion working capital deficit as of 9/30/08)

<sup>(9)</sup> Assuming a common stock price of \$25.00/share

## 2010 Financial Projections at Various Natural Gas Prices

As of 10/14/2008 Outlook

(\$ in millions; oil at \$80.00 NYMEX)	\$6.00	\$7.00	\$8.00	\$9.00	\$10.00
O/G revenue (unhedged) @ 1,130 bcfe <sup>(1)</sup>	\$6,524	\$7,448	\$8,372	\$9,297	\$10,221
Hedging effect <sup>(2)</sup>	941	1,331	930	504	81
Marketing and other (@ \$0.15/mcfe)	170	170	170	170	170
Production taxes 5%	(336)	(384)	(431)	(479)	(526)
LOE (@ \$1.20/mcfe)	(1,356)	(1,356)	(1,356)	(1,356)	(1,356)
G&A (@ \$0.46/mcfe) <sup>(3)</sup>	(520)	(520)	(520)	(520)	(520)
Ebitda	5,423	6,689	7,165	7,616	8,070
Interest (@ \$0.38/mcfe)	(424)	(424)	(424)	(424)	(424)
Operating cash flow <sup>(2)(3)(4)</sup>	4,999	6,265	6,741	7,192	7,646
Oil and gas depreciation (@ \$2.20/mcfe)	(2,486)	(2,486)	(2,486)	(2,486)	(2,486)
Depreciation of other assets (@ \$0.22/mcfe)	(249)	(249)	(249)	(249)	(249)
Income taxes (38.5% rate)	(872)	(1,359)	(1,542)	(1,716)	(1,891)
Net income to common <sup>(1)</sup>	\$1,392	\$2,171	\$2,464	\$2,741	\$3,020
Net income to common per fully diluted shares	\$2.33	\$3.63	\$4.12	\$4.59	\$5.05
Net debt/ebitda <sup>(5)</sup>	2.4	1.9	1.8	1.7	1.6
Debt to book capitalization ratio	28%	27%	27%	27%	27%
Ebitda/fixed charges (including pfd. Dividends) <sup>(6)</sup>	9.3	11.4	12.2	13.0	13.8
MEV/operating cash flow <sup>(7)</sup>	3.0x	2.4x	2.2x	<b>2.1</b> x	<b>1.9</b> x
EV/ebitda <sup>(8)</sup>	5.2x	4.3x	4.0x	3.7x	3.5x
PE ratio <sup>(9)</sup>	10.7x	6.9x	6.1x	<b>5.4</b> x	5.0x



<sup>1)</sup> Before effects of FAS 133 (unrealized hedging gain or loss)

Includes the non-cash effect of CNR hedges

<sup>3)</sup> Includes charges related to stock based compensation

Before changes in assets and liabilities

Net debt = long-term debt less cash

<sup>(6)</sup> Fixed charges (\$585mm) = interest expense of \$563 million plus dividends of \$22 million

<sup>7)</sup> MEV (Market Equity Value) = \$14.9 billion (\$25.00/share x 596 mm fully diluted shares as of 09/30/08)

EV (Enterprise Value) = \$28.5 billion (Market Equity Value, plus \$12.9 billion of net long term debt and \$0.7 billion working capital deficit as of 9/30/08)

<sup>(9)</sup> Assuming a common stock price of \$25.00/share

#### **CHK's Strong Credit Profile**



- Size and Scale: \$28.5 billion EV; 12.1 tcfe of proved reserves, 60 tcfe of risked unproved reserves and the nation's most active drilling program
  - Low risk operating strategy: no offshore or international assets; broad and diversified base of drilling and production; >10-year backlog of low-cost drilling operations
- Industry's best risk mitigation strategy: commodity hedging and service industry hedging insulates CHK from many risks that affect peers
- Strong growth profile: 29 consecutive quarters (and 18 years) of organic production growth
  - 35% total production growth in '04, 29% in '05, 23% in '06, 23% in '07, projecting increases of 17-19% in '08 and 15-17% in '09
- <u>Industry's largest backlog of low-risk, identifiable drilling projects:</u> CHK's cupboard is full and leasing expenditures are being sharply reduced
- Market Support: CHK's debt typically trades through its current agency ratings because the company's scale, track record, asset quality, risk mitigation strategies and debt structure are very appealing to many investment grade and crossover investors



### **CHK's Strong Credit Profile**

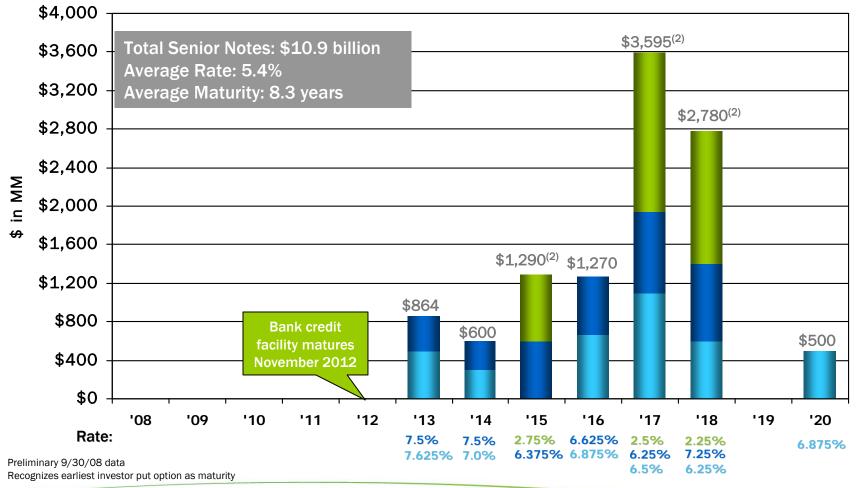


- Strong asset coverage
  - Asset value covers debt ~6.0x at \$8.00 per mcf natural gas prices
  - Increasing net asset value coverage underpins CHK's credit strength
- Financing discipline and track record of balance sheet improvement
  - In the past seven years, CHK has consistently pursued a disciplined strategy of incrementally financing its external capital needs with a 50/50 combination of debt and equity
    - Issued \$1.1 billion of common equity in April 2008 and \$1.6 billion in July 2008
  - Substantial preferred stock has been converted to common
    - > \$1.0 billion converted in 2007 and \$450 million in 2008
  - While debt per mcfe has remained relatively flat, profit margins, interest coverage and debt to capitalization ratios have greatly improved
- Substantial projected free cash flow allows CHK to build asset value and strengthens the company's ability to service existing debt
  - In 2009, CHK will be able to replace 100% of proved reserves with  $\sim$ 10% of cash flow (i.e. maintenance capex) leaving  $\sim$ 90% of cash flow for growth
  - Anticipate >\$30 billion of cumulative cash flow through 2013, but only \$11 billion in senior notes outstanding, first debt maturity in 2013
    - > Cumulative free cash flow through 2013 alone covers existing debt ~3.5x



# Senior Note Maturity Schedule @ 9/30/08<sup>(1)</sup>



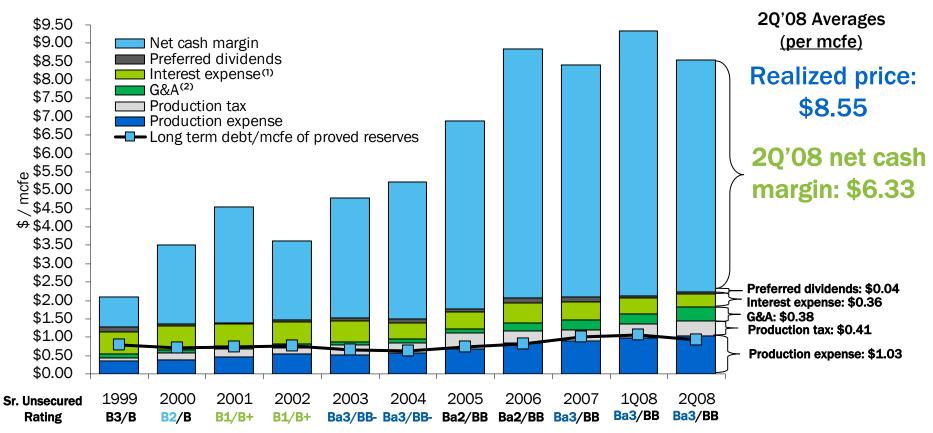




(1)

# Strong Cash Margins and Steady Debt Levels per Mcfe





Total cash costs = \$2.22



Excludes unrealized gains/losses on interest rate derivatives

<sup>(2)</sup> Excludes non-cash stock based compensation



## Natural Gas & Oil Hedging



## Why Do We Hedge?



- Improve revenues
  - Our goal is to achieve at least \$1.00 per mcfe more than without hedging
- Capture strong profit margins
- Mitigate risk
- Secure cash flow for reinvestment in drilling and leasehold acquisition
- Monetize a key company asset: volatility
  - Options have real value, can be priced and sold for cash up front
  - We sell options to improve price realizations and/or generate incremental cash flow
  - We get those options for free when we buy producing assets and when we drill new wells
  - These options are typically not embedded in CHK's share price...but they can be through an effective hedging program
  - Sometimes it is prudent to take some chips off the table



## Key Elements of an Effective Hedging Strategy





#### **Diligent study of:**

- Supply fundamentals
- Demand fundamentals
- Replacement and production cost dynamics
- Competing fuels
  - Coal
  - Oil products
  - LNG
  - Nuclear
  - Alternative energy
- Weather
  - Hurricanes
  - Winter heating degree days
  - Summer cooling degree days

#### Implementation and execution:

- Board policy and management procedures
- Counterparty hedging facilities
- Selection of appropriate hedging tools
- Meteorological team lead by Jon Davis



### Types of Hedging Instruments



- We don't use exchange traded contracts
  - Prefer over-the-counter contracts
  - Swaps
  - "Knock out" or "kick out" swaps
  - Cap-swaps
  - Basis protection swaps
  - Call option selling
  - Put option buying
  - Collars (including three ways)
- Sample counter-parties
  - Barclays
  - BNP
  - BP
  - Calyon
  - Credit Suisse
  - Deutsche Bank
  - J. Aron (Goldman Sachs)
  - Morgan Stanley
  - RBS
- Secured facilities & collateral arrangements



















**CREDIT SUISS** 

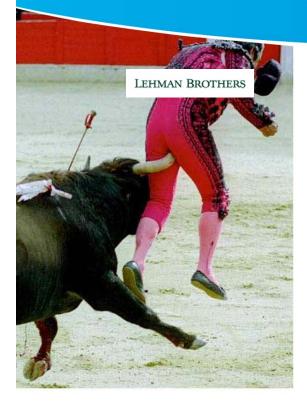






### **Hedging Itself Presents Risks**





#### Counterparty failure can occur

- Enron
- Calpine
- Mirant
- Dynegy
- Bear Stearns, Lehman Brothers, Wachovia
  - > CHK only had exposure to Lehman among all of these

#### Collateral calls

- Margin requirements can be significant if not managed
  - > CHK has no margin-based hedging arrangements

#### Effectiveness

- Basis changes extreme
- Weather events

#### • FASB 133

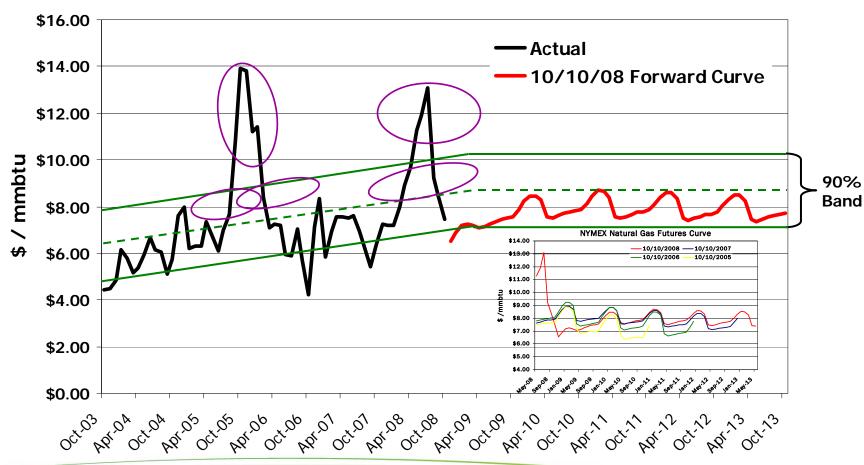
- Financial statement effects are huge and can result in large swings
  - Income statement affected by mark-to-market gains and losses of noncash flow hedges
  - Balance sheet also impacted by changes in mark-to-market of cash flow hedges
  - > 20'08 MTM loss of \$4.3 billion
  - > 30'08 MTM gain of \$6.6 billion



### We Play Offense into Price Spikes



#### **NYMEX Natural Gas Prices**





- Offensive rather than defensive strategy
- Price maker not price taker
- Margin capture and risk mitigation focus

## Why This Range (NYMEX)?



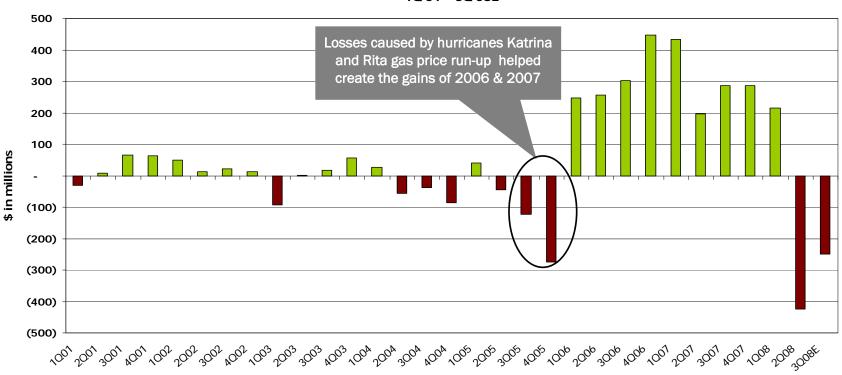
- ~\$7.00 NYMEX floor (increasing by \$0.50/mcf/year)
  - Approximate industry breakeven level to explore, drill, complete, produce and with G&A and capital costs
  - Stimulates demand from industrial consumers and power generation facilities
  - Recent surges in global coal prices have substantially raised the floor on U.S. natural gas prices
- \$9.00 \$12.00 NYMEX ceiling (increasing by \$1-2/mcf per year)
  - A discount to crude oil appears reasonable given that the world is much closer to a peak in world oil production than world natural gas production
  - Higher levels would result in ~2 bcf/day of demand to switch from natural gas to residual fuel
  - Increased importation of LNG cargos more likely
  - Industrial demand destruction more likely
  - Increased supplies from natural gas producers more likely
  - U.S. natural gas market must gain a bridge to world natural gas market and/or oil market pricing
    - > LNG exports and CNG/plug-ins offer that in the future



## **CHK Hedging Track Record**



#### Quarterly Realized Gains and Losses 1Q'01 - 3Q'08E



Since 2006, CHK's hedging program has generated ~\$1.6 billion of realized, lifted and MTM gains, which has greatly reduced acquisition and financial risks and made investing for the future easier and safer



# Successful Hedging Reduces Risk and Helps Secure Attractive Cash Margins



#### CHK's natural gas and oil hedge positions for 2008-2010(1)(2)

Natural Gas Swaps <sup>(3)(4)</sup>	% Hedged	NYMEX Avg. Price
4Q 2008 Total	60%	\$9.19
2009 Total	61%	\$9.39
2010 Total	40%	\$9.58

Oil <sup>(6)</sup>	% Hedged	NYMEX Avg. Price
4Q 2008 Total	60%	\$77.57
2009 Total	70%	\$82.38
2010 Total	37%	\$90.25

Natural Gas Collars <sup>(5)</sup>	% Hedged	NYMEX Avg. Floor Price	Nymex Avg. Ceiling Price
4Q 2008 Total	13%	\$7.75	\$9.32
2009 Total	7%	\$8.05	\$11.18
2010 Total	2%	\$7.71	\$11.46

NYMEX Strip Prices @ 10/10/08						
		Oil	Gas			
3Q - 4Q	2008	\$ 109.03	\$ 8.60			
	2009	\$ 80.78	\$ 7.42			
	2010	\$ 85.14	\$ 7.98			
	2011	\$ 87.16	\$ 8.00			
	2012	\$ 87.76	\$ 7.91			
5-Year Ave	rage	\$ 89.97	\$ 7.98			



(1) (2) Excludes written calls

Includes CNR derivative liabilities assumed at MTM value upon closing. Assumes approximately the midpoint of company production forecast for each item and includes hedging positions as of 10/14/08 Includes positions with knockout provisions for 18% of 40'08 production at knockout prices of \$5.45 - \$6.50/mcf and for 39% and 30%, respectively, for 2009 and 2010 production at knockout prices of \$5.45 - \$7.40/mcf

Does not include calls written with average premiums of \$0.70 at average strike prices of \$10.39 in 40'08, \$0.61 and \$11.37 in 2009 and \$0.72 and \$10.77 in 2010

Includes three-way collars

Includes cap-swaps and knockout swaps



## Chesapeake Midstream Partners, L.P. (CMP)



#### **CMP** Overview





- Chesapeake formed Chesapeake Midstream Partners, L.P. ("CMP") to hold its gathering and processing assets<sup>(1)</sup>
  - Organized as unrestricted, wholly owned subsidiary
  - \$~460 mm revolving credit facility to close 10/15/08
  - Intend to raise equity capital interest to fund development of CMP assets
- Funding of CMP as separate asset is consistent with overall CHK financing strategy
  - Segregating assets into discreet financing vehicles allows CHK to achieve a more efficient cost of capital
  - Largest pure-play, shale-focused midstream gathering company in the industry
  - Corporate sponsorship with the leading driller, acreage holder and producer of natural gas in the U.S.
- CHK Projected production increases in excess of 16% in each of the next 3 years will drive organic growth
- Significant, stable current cash flow derived from fixed fee gathering and processing contracts
- High quality and efficient assets constructed to handle significant growth over current throughput, including ample 3<sup>rd</sup> party capacity

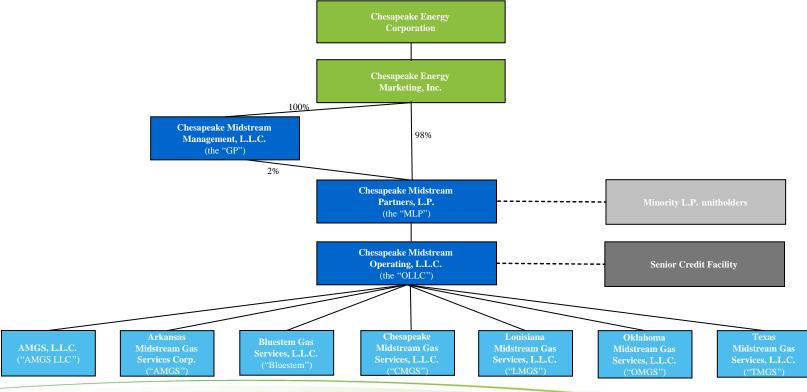


### **CMP Structure**



#### CMP is currently 100% owned by CEC

— Through its operating subsidiaries, CMP holds over 2,500 miles of gathering pipelines in Oklahoma, Texas, Louisiana, Arkansas and Kansas as well as three  $\rm CO_2$  /  $\rm H_2S$  extraction facilities, two small refrigeration plants and six JT processing skids





### **Description of the Assets**

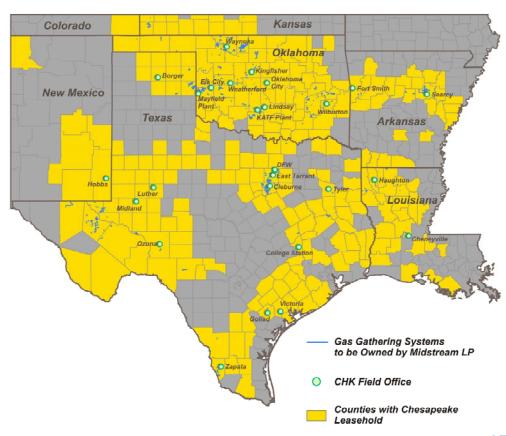


- The assets of Chesapeake Midstream will consist of ~2,500 miles of gathering pipelines in Oklahoma, Texas, Louisiana. Arkansas and Kansas
- In addition there are three CO<sub>2</sub>/H<sub>2</sub>S extraction facilities, two small refrigeration plants and six JT processing skids in operation for the removal and sale of natural gas liquids

#### Assets include:

- The Barnett System, located in Tarrant, Johnson, Dallas, Parker, Ellis and Hill Counties, Texas
- The Fayetteville System, located in Van Buren, Faulkner and White Counties, Arkansas
- The Mid-Continent System, comprised of the gathering systems located throughout Oklahoma, Texas, Louisiana, Arkansas and Kansas
- The Haynesville System, to be located over the general leasing area considered the Haynesville including the counties of Harrison, Panola and Shelby in Texas and the parishes of Caddo, Bossier, Webster, Bienville, Desoto, Red River, Sabine and Natchitoches in Louisiana
- Bluestem Treating Facilities, which include 2 treating facilities located in Beckham and Grady Counties, Oklahoma

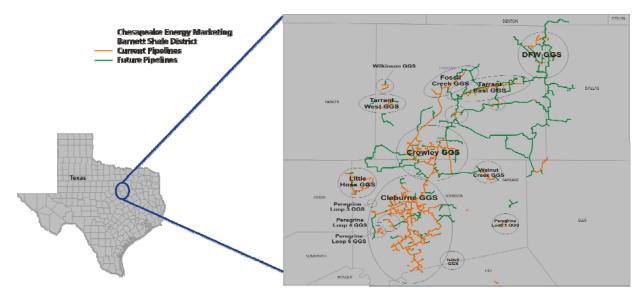
#### **Map of Current Systems**





## **Barnett System Overview**



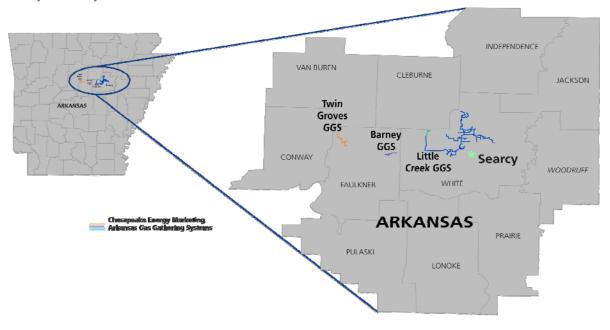


- Fifteen gathering systems with ~650 miles of gathering pipeline located in and around Fort Worth, Texas
- Greater than 760 mmcf/day of throughput as of September 2008
- 286 miles of pipeline surveyed for construction
- 190 miles of pipeline proposed for construction
- Range of system size from 4" well connection lines to 24" major trunk lines



## **Fayetteville System Overview**



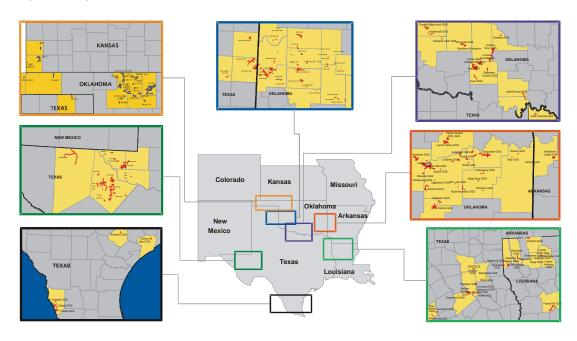


- Eight gathering systems with ~226 miles of gathering pipeline located on the east side of Fayetteville Shale
- 174 mmcf/day of throughput as of September 2008
- 75 miles of pipeline surveyed for construction
- 169 miles of pipeline proposed for construction
- 4" to 20" pipelines



## **Mid-Continent System Overview**



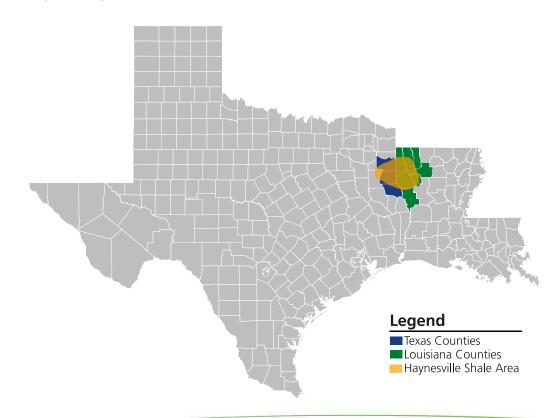


- 184 gathering systems with ~1,905 miles of gathering pipeline located in Oklahoma, Texas, Louisiana, Arkansas, and Kansas
- Pipelines on these systems range in size from 2" to 16"
- Various small plants including refrigeration and JT skids
- 720 mmcf/day of throughput as of September 2008
- 367 miles of pipeline surveyed for construction
- 1,192 miles of pipeline proposed for construction



## **Haynesville System Overview**





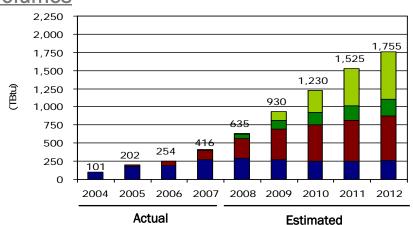
- Haynesville system is in the early stages of development
- 4 gathering systems currently operating with ~23 miles of pipeline located in Northwest Louisiana and East Texas
- 53 mmcf/day as of September 2008, expected to increase to 77 mmcf/day by 4Q'08
- 430 miles of pipeline surveyed for construction
- 27 miles of pipeline proposed for construction



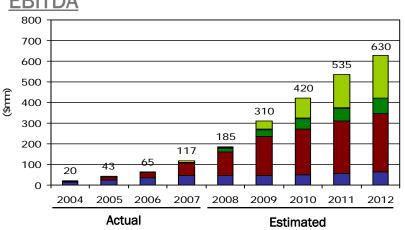
## **Consolidated CMP Financial Performance**



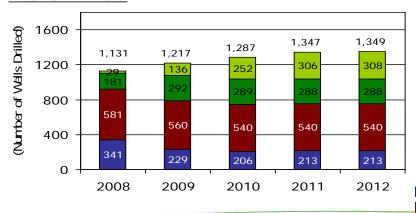




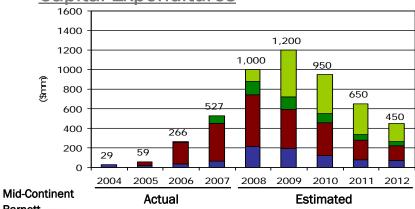
#### **EBITDA**



#### Wells Drilled



#### **Capital Expenditures**





Barnett
Fayetteville
Bluestem
Haynesville



### Operations Overview Steve Dixon, Chief Operating Officer Jeff Fisher, SVP - Production



2008 Investor and Analyst Meeting

## Key Operational Takeaways and Perspectives







- Enormity of CHK's opportunity set and quality of CHK's drilling inventory
- Tremendous economies of scale
- Unparalleled vertical integration
- Unique operational skill set and coordinated operational value chain
- State-of-the-art technologies that enable CHK geoscientists and engineers to "crack the code" on resource plays
- Outstanding return profile and predictable large-cap leading growth profile



### **Operations Overview**





In February 2008,
Chesapeake Energy
was named
Hydrocarbon Producer
of the Year at the 9<sup>th</sup>
Annual Platts Global
Energy Awards

#### CHK is the nation's most active driller by a wide margin

- ~145 operated rigs currently, on the way down to ~135 until gas markets re-balance, 91 non operated and 20 info only rigs; collector of ~15% of all daily drilling information in the U.S. (~20% in our areas of interest)
  - > Twice as active as the next most active driller
  - No company has operated more than ~125 rigs since Exxon and Amoco did in the mid-1980s

#### #1 producer of U.S. natural gas

2Q'08 natural gas production of 2,143 mmcf/day; ~3.5% of U.S.
 production; 2009E 2,475 mmcf/day and 2010E 2,880 mmcf/day

#### #1 large-cap proved reserve growth

12.1 tcfe estimated proved reserves at 9/30/08; targeting ~12.5 tcfe of proved reserves by 12/08 and 14.5 - 15.0 tcfe by 12/09

#### #1 gas resource play

- >10-year drilling inventory of 37,300 net drilling locations
  - > 15.6 mm net acres of U.S. onshore leasehold
- 60 tcfe of risked unproved reserves at 9/30/08
  - > 190 tcfe of unrisked unproved reserves



### We're Good at Anticipating Opportunities & Challenges







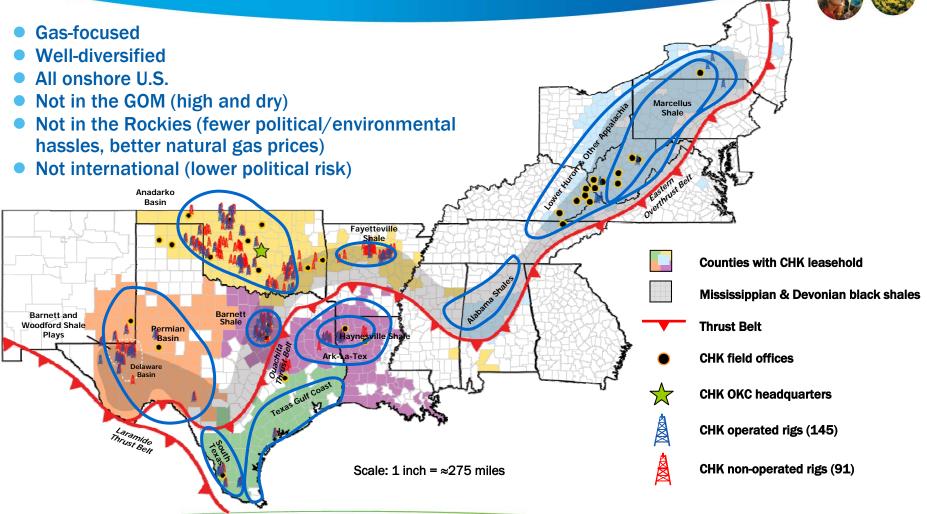
- CHK recognized earlier than most that higher oil and natural gas prices, combined with better drilling and completion technology, would potentially make unconventional gas resource plays highly economic
- Today, Chesapeake is well positioned for the future:
  - Won the great early 21<sup>st</sup> century land grab and built the nation's top gas resource base
    - Leading position in every major U.S. onshore resource play east of the **Rockies**
  - Developed world-class technical capabilities in unconventional resources and discovered multiple new plays
  - Achieved substantial operating scale and vertical integration including the nation's 6th largest drilling rig fleet, related service businesses and a large midstream gathering and processing operation
  - Built a successful and distinctive entrepreneurial corporate culture, thereby enabling CHK to have what it believes is the most talented, motivated and productive workforce in the industry
    - > Expanded employee base over 13-fold over the last ten years to 7,200



Now moving to advance present value forward through

asset monetization's via VPP's and promoted partnerships

## **CHK Footprint**

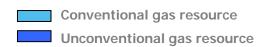


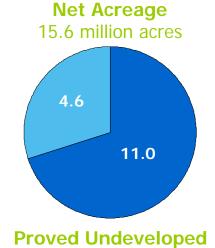


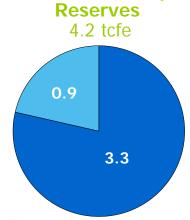
#### America's #1 Gas Resource Base

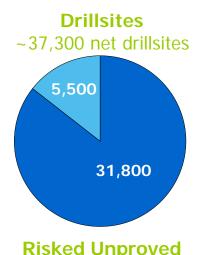


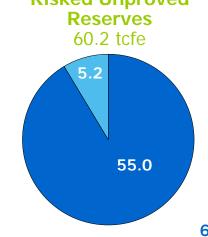
- CHK is well positioned for long-term profitable growth
- Largest combined inventories of leasehold and 3-D seismic data in the industry
- 2.3 bcfe of daily production, 92% gas
- 12.1 tcfe of proved reserves, 93% gas
- 60.2 tcfe of <u>risked</u> unproved reserves
  - 190 tcfe of <u>unrisked</u> unproved reserves
- 15.6 million net acres of leasehold
- 21.1 million acres of 3-D seismic data
- >10-year inventory of ~37,300 net drillsites













- As of 9/30/08
- Risk disclosure regarding unproved reserve estimates appears on page ii of the meeting presentation package

## **CHK's Drilling Inventory**



Play Area	CHK Industry Position <sup>(1)</sup>	CHK Net Acreage	Est. Drilling Density (Acres)	Risked Net Undrilled Wells	Est. Avg. Reserves Per Well (bcfe)	Total Proved Reserves (bcfe)	Risked Unproved Reserves (bcfe)	Total Proved and Risked Unproved Reserves (bcfe)	Unrisked Unproved Reserves (bcfe)	Current Daily Production (mmcfe)	Current Operated Rig Count
Conventional Gas Resource									ı		<u> </u>
Southern Oklahoma	#1	345,000	120	600	2.20	740	900	1,640	3,300	155	6
South Texas	#3	130,000	80	350	2.00	430	400	830	1,700	125	4
Mountain Front	#1	140,000	320	100	5.00	220	300	520	1,100	70	2
Other Conventional	Top 3	3,985,000	Various	4,450	Various	2,320	3,600	5,920	19,500	455	13
Conventional Sub-total		4,600,000		5,500		3,710	5,200	8,910	25,600	805	25
Unconventional Gas Resource											
Marcellus Shale	#1	1,770,000	80	5,500	3.75	45	17,200	17,245	68,800	15	3
Haynesville Shale	#1	480,000	80	3,000	6.50	200	14,400	14,600	29,000	50	14
Fort Worth Barnett Shale	#2	315,000	60	3,000	2.65	2,810	5,200	8,010	6,900	560	40
Fayetteville Shale (Core Area)	#2	415,000	80	3,700	2.20	535	6,600	7,135	8,900	145	18
Sahara	#1	970,000	70	7,400	0.55	1,125	2,800	3,925	4,600	225	12
Colony, Granite & Atoka Washes	#1	333,000	120	1,100	3.25	1,065	2,300	3,365	4,200	200	14
Deep Haley	#1	500,000	320	300	6.00	270	1,200	1,470	6,400	85	5
Other Unconventional	Top 3	8,302,000	Various	7,800	Various	2,310	5,300	7,610	104,800	265	57
Unconventional Sub-total		11,000,000		31,800		8,360	55,000	63,360	164,800	1,530	120
Total		15,600,000		37,300		12,070	60,200	72,270	190,400	2,335	145



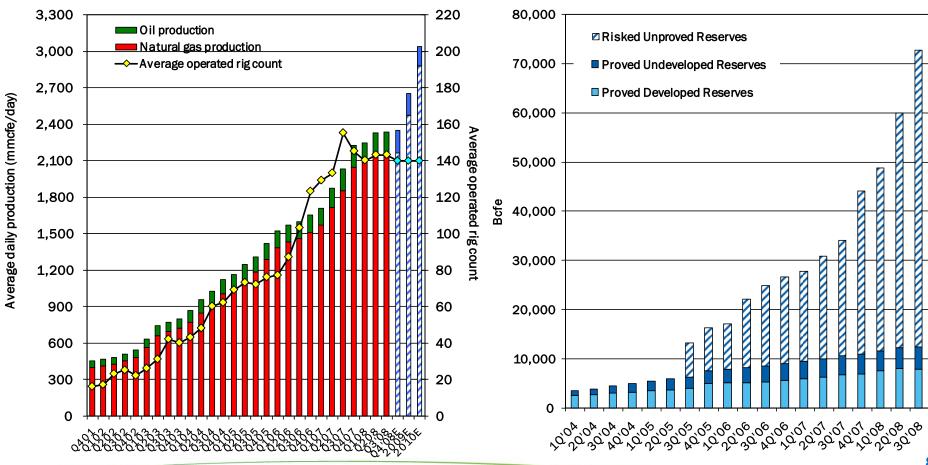
As of 9/30/08

<sup>·</sup> Risk disclosure regarding unproved reserve estimates appears on page ii of the meeting presentation package

2008 Investor and Analyst Meeting

# Top-Tier Production and Reserve Growth



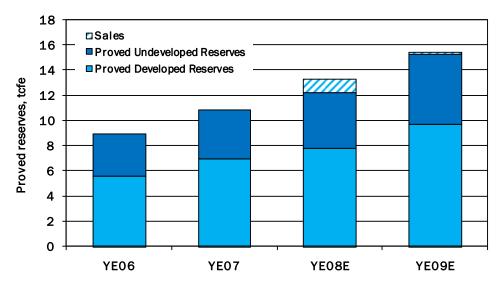




#### Reserve Profile



- Most thorough reserve report in the business
  - Daily
    - > Updates on well status & production
  - Weekly
    - > 40 different QC reports
  - Monthly
    - > Publish proforma
    - > Publish finding cost report
    - > Production vs. forecast variance report
  - Quarterly
    - > Review & prepare reserve report
  - Annual
    - 3rd-party prepared reserve report on 79% of reserves
    - ➤ Internal preparation of reserve report reconciled to 3<sup>rd</sup> party estimates

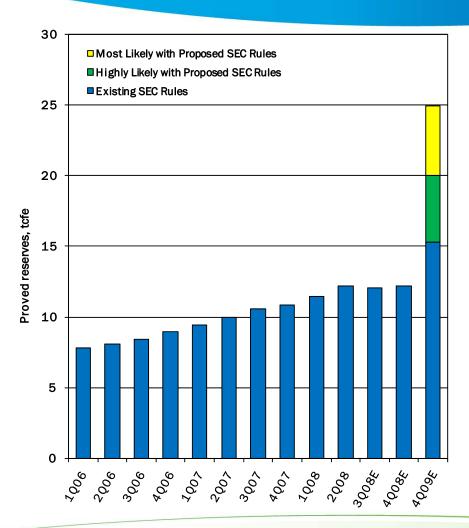


- Increased proved reserves at 9/30/08 to 12.1 tcfe, net of 0.4 tcfe of 3Q'08 sales
- 14% YOY growth; up 11% YTD
- Replaced YTD production of ~630 bcfe with 1.8 tcfe of new proved reserves for a 290% reserve replacement rate



## Implications of Proposed SEC Reserve Reporting Rules





- Expect final SEC rules by YE 2008
- Proposed rules eliminate limitation of two parallel offsets to a producing well as proven drilling locations
- Since 2006, less than 20% of the CHK wells drilled in the Barnett & Fayetteville Shale plays have been proven undeveloped reserves under existing SEC rules
- Uncertainty, as measured by EUR distribution ratios, shows little variance between current rules proven and non-proven locations
- Proposed SEC rules could allow 5x increase in shale play proven reserves
- CHK likely biggest industry beneficiary of rule change because of largest shale position, 20 tcfe of proved reserves likely by YE'09



#### **Benefits of Scale**





#### Vendor relations

- For many of our vendors, CHK is their largest customer
- CHK gets the best crews and equipment

#### Cost

- Purchasing and negotiating power
- volume discounts

#### Operating efficiency

- Learning curve
- Reduced cycle time
- Minimize downtime
- Repeatable results
- Application of best practices

#### First in line for:

- New technology and collaborative technical relationships
- Goods and services
- Top-notch employees

#### Technology transfer

- We are good in the Haynesville because we've been good in all of the other major U.S. shale plays
- Centralized organization and decision making
- Cross communication between technical experts embedded in organization
- Industry surveillance



## Benefits of Vertical Integration – Drilling Rigs





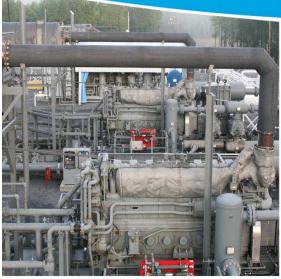
- Embedded inside of Chesapeake is a Top-10 rig company
- Since 2001, CHK invested in rig companies and built new rigs as a hedge against cost inflation
- Alignment of interests between contractor and operator uncommon in industry
- 83 rigs in our fleet, with another 24 on order
  - 16 rigs with horsepower > 1,500
  - 47 rigs with horsepower between 900 and 1,500
  - 44 rigs with horsepower < 900</p>
- 2/3rds of our fleet is newly built in the last 3 years
- Significant advantages with "built for CHK purpose" rigs
  - Top drives
  - Electrified
  - Noise abatement
  - Pipe handling systems
  - Skidding systems
  - Iron roughnecks
- Additional link in the value chain
  - 22% gross profit margins on rigs



2008 Investor and Analyst Meeting

## Benefits of Vertical Integration – Compression







- Embedded inside of Chesapeake is a Top-10 compression company
  - Availability of equipment
  - Shrinking market options
  - Higher service quality and reduced downtime
- Started in 2003; today we have over 1,800 units
  - 600,000 hp
- Growing to over 2,500 units
  - Over 1,000,000 hp
- Significant advantages with in-house compression
  - Custom build, fit for purpose
  - Lower line pressures that enhance well productivity
  - Reduced downtime
  - Faster project cycle time
- Additional link in the value chain
  - + \$30 million of net income/year



## Benefits of Vertical Integration – Midstream







- Embedded inside of Chesapeake is a Top-10 midstream company
- Started in 2002, CMP has grown to >300 employees
- Enables strategic development for new shale basins
  - New gathering infrastructure required
  - Accelerated development pace
  - 1<sup>st</sup> mover advantages for right-of-ways
  - Synchronized planning between well locations and gathering lines
- Over 2,500 miles of pipeline and growing by the day
  - Over 600 miles installed in 2007
  - Over 500 miles YTD 2008
- Gather 60% of CHK's daily production volumes
- Significant advantages to in-house gathering
  - Treating plants to remove contaminants
  - Processing plants for high value natural gas liquids
  - Fit for purpose facility planning
- Additional link in value chain
  - + \$300 million 2009E EBITDA



## Benefits of Vertical Integration – Drilling Services



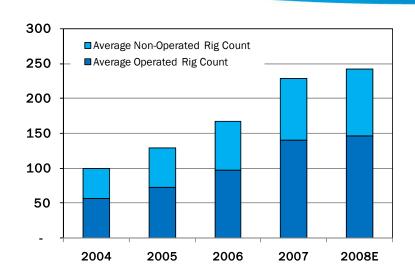


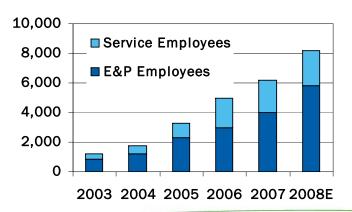
- Embedded inside of Chesapeake is a Top-10 drilling services company
- Trucking
  - 216 Trucks for moving rigs with 36 more on order
  - 13 Cranes with 6 more on order
  - 300+ Trailers with 25 more on order
  - Capable of moving ~10 rigs per day
- Tanks
  - 1.050 Frac Tanks with 575 more on order
- Tool Rental
  - Drill Pipe: 685K feet on hand with 1 million more on order
  - Drill Collars & BOP's
  - 100+ Mud pump packages
  - Air packages
- Excavating is our newest endeavor
  - Smaller locations, more precise dirt work
- Additional links in the value chain
  - 2.1 year payout on frac tanks
  - 2.2 year payout on drill pipe



## **Skillfully Managing Growth**







- Doubled operated rig count from 2005 to 2008 to accelerate conversion of acreage to proved reserves
  - Achieved without disruption or loss of efficiency
- Focused footprint and strategy allowed ramp up to 150 operated rigs
  - Organization geared to high activity and efficiency
  - Incredibly detailed, yet highly automated
  - Operations transformed into a low risk gas manufacturing machine
- Focus on human capital
  - Total employee base increased six-fold since 2003 to 7,200; E&P employees up five-fold to 4,500
  - Aggressive college recruiting & internship programs
  - Campus expansion; expanded & added field offices
  - Incentivized and motivated workforce
  - High employee retention through cutting edge projects, first-class facilities, entrepreneurial culture and equity ownership
  - Youthful technical departments with avg. age of 37 years in land and engineering, and 40 years in geoscience

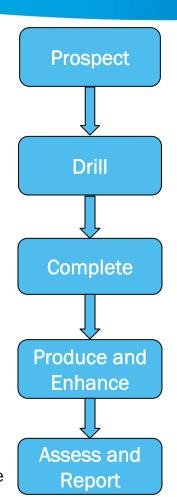


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## Coordinated Operational Value Chain



- Signing 18,000 leases/mo
- ~33,000 squares miles 3-D
- 37,300 drilling locations
- 130 150 rigs
- 350 miles drilled/yr
- 1,850 wells drilled/yr
- over 5,000 frac stages/yr
- over 1 billion # prop/yr
- 23,000 operated wells
- 1,500 workovers/yr
- 97% telemetry coverage
- Over 36,000 wells reviewed
- · Detailed outlook and guidance



- Cutting edge geoscience capabilities
- RTC and core analysis to identify sweet spots
- Industry leading land acquisition machine
- Rig ownership alignment of interests and lower turnover
- Vertical integration
- Information systems and real time drilling performance monitoring
- Completing more rock than any other company
- Leader in completion technology innovation
- Integration of CRTC and petrophysical data
- Sophisticated Automation and telemetry systems
- Real time monitoring of production variance and well downtime
- Well review process generates active workover program
- Formal quarterly in-house reserve updates; unique in industry
- Rigorous economic look backs on drilling programs and acquisitions
- Enhanced transparency for internal decisions and external reporting

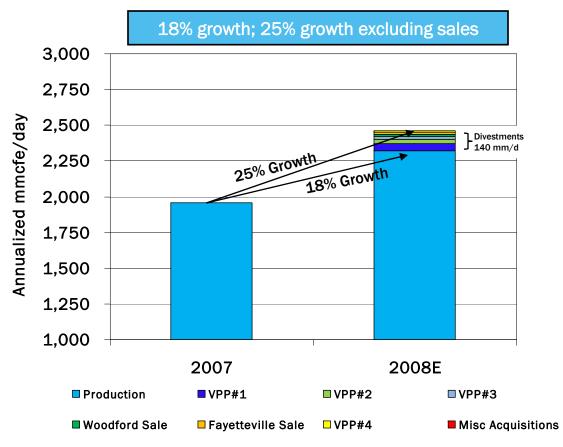


## Tremendous Organic Production Growth



- ~3,100 wells drilling in 2008
  - Over 1,850 operated
  - Over 1,250 non-operated
- Over 650 mmcfe/day of new production added in 2008 through drilling

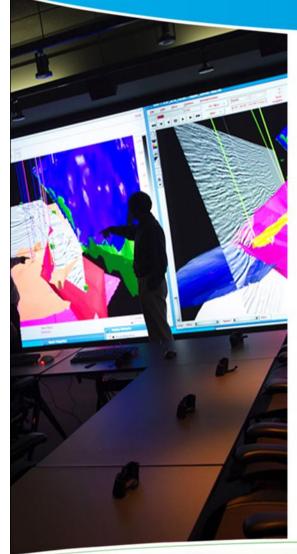
2008 organic production growth by play area							
	Well	Volume	Annualized rate				
Play Area	count	Bcfe	Mmcfe/day				
Barnett	625	89.1	244				
Fayetteville	482	19.0	52				
Haynesville	35	9.0	25				
Marcellus	20	1.8	5				
Other Unconventional	1,278	78.5	215				
Conventional	717	41.0	112				
TOTAL	3,156	238.5	653				



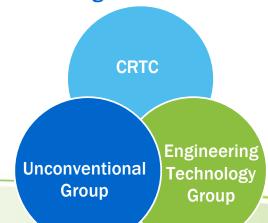


### **Enabling Technologies**





- Horizontal drilling & completions
- Automated, fit-for-purpose drilling rigs
- Improved completion and hydraulic fracture stimulation techniques including multiple stages, targeting & isolation; perforation clusters and fluid/proppant combinations
- 3-D seismic data (wired for now, wireless to come) and data processing – greatly improved imaging of the rock
- Micro-seismic watch the rock during stimulation
- Core analysis understand the rock and how to make it productive
- Reservoir characterization and performance prediction
- IT systems and data integration





## Cracking the Code on Unconventional Assets



- We are perfecting Barnett and Fayetteville Shale drilling and completion techniques
- We discovered the Haynesville Shale and it's working well
- We are transferring expertise to the **Marcellus Shale**
- We will transform many new plays
  - Delaware Basin Shales
  - Oil shales
  - Other unconventional oil & natural gas plays

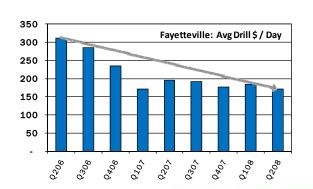
**Apply Cutting-Edge Utilize Seismic and** Geoscience **Petrophysical Analysis to Technology to Discover Refine the Sweet Spots New Prospect Areas CRTC Engineering Unconventional** Technology Group Group Optimization, **Refine Drilling and** efficiency gains, Completion design to scale, repeatability **Achieve Play Viability; Transfer Technology** from Other Plays

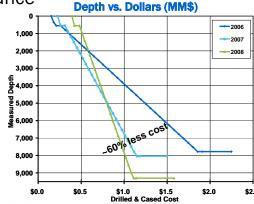


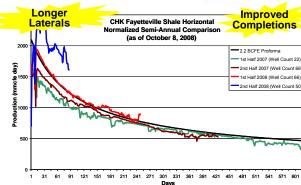
## **Efficiency Gains**

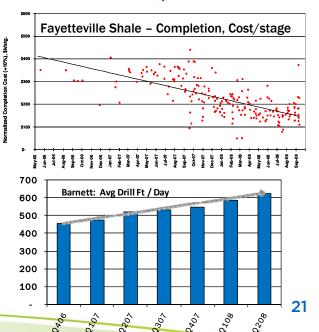


- Manufacturing approach to drilling in resource plays has lead to substantial efficiency gains
- Nature of plays, focus on quality rocks and large leasehold position creates statistical repeatability and consistent drilling program performance
- Continuous improvement
  - Increasing footage drilled per day
  - Lowering average drilling cost per foot
  - Lowering stimulation cost
  - Improving production performance





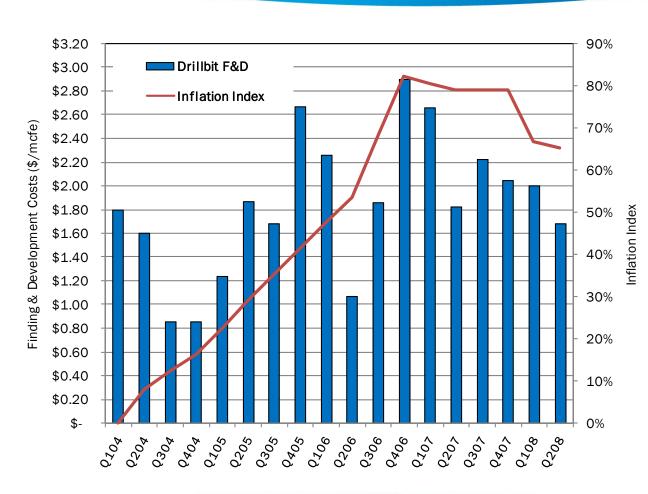






## **Drillbit Finding & Development Costs**





- Since 3Q'06, CHK's drilling and completion costs per mcfe have steadily declined because of shift to shale drilling (enhanced portfolio)
- Improved efficiencies with resource plays
- Costs should continue to decline in 2009 and 2010 as shale focus increases further and BP and PXP drilling cost carries kick in

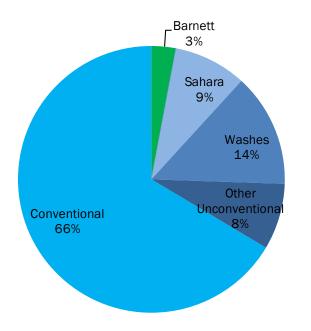


- Drillbit F&D based on exploration and development costs and reserves, which includes performance revisions and excludes revisions due to price
- The internally generated Inflation Index is used to quantify trends in costs associated with our
  drilling & completion program and is based on cost trends for tangible items such as tubing/casing
  and intangible items such as drilling rig rates, stimulation costs, cementing costs, etc.

### **Portfolio Transition & Upgrade**

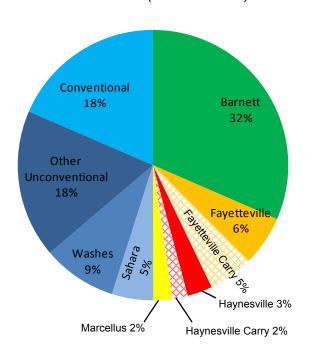


## 2004 Portfolio: 40% ROR



#### 2008 Portfolio:

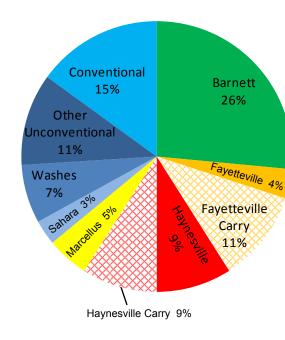
54% ROR (without carry) 67% ROR (with carries)



#### 2009 Portfolio:

58% ROR (without carry)

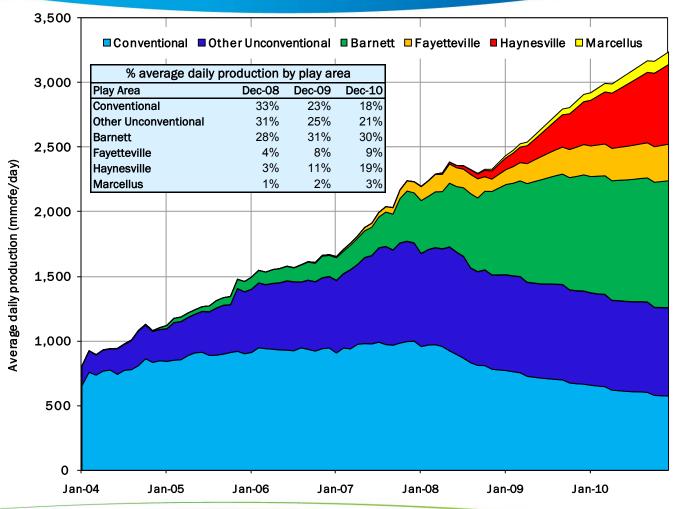
~167% ROR (with carries)





## **CHK Long-term Production Outlook**







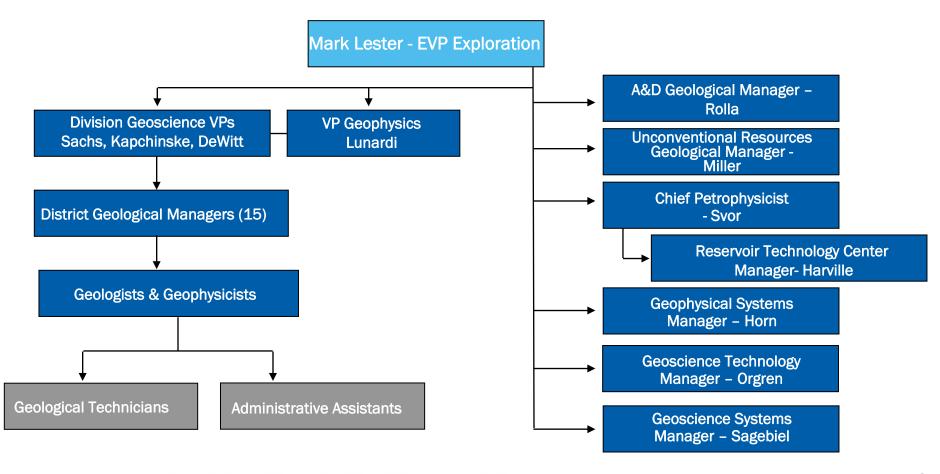


## Exploration & Technological Overview Mark Lester – EVP Exploration



## **Geoscience Department Structure**



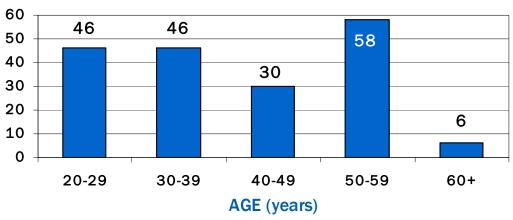




## Chesapeake Geoscience Department



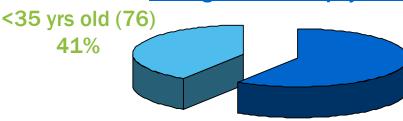
#### **GEO PROFESSIONALS (186)**



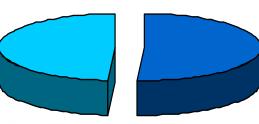
- 287 total staff (as of 9/1/08)
- 186 professionals & 101 support/technicians
  - -127 Geologists
  - -32 Geophysicists
  - –27 Management (all degreed Geologists and Geophysicists)

#### **Geologists and Geophysicists**

 321 degrees from 137 different colleges and universities







**Total Staff** 

>35 yrs old (110) 59%

>35 yrs old (147) 51%

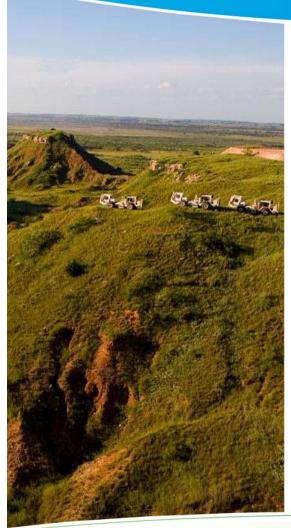


**Chesapeake Geoscience Professionals** 



## CHK has the Largest Inventory of 3-D Seismic Data in the U.S.





- Current inventory of ~32,800 square miles (21 million acres) of 3-D seismic data in 11 states
- Currently recording 3-D seismic on 9 surveys covering 1,715 square miles (1.1 million acres) in 4 states (Oklahoma, Texas, Louisiana, & West Virginia)
- Currently permitting & surveying on 9 additional 3-D seismic surveys covering 938 square miles (600,000 acres) in 6 states (Oklahoma, Texas, Arkansas, Louisiana, Pennsylvania & West Virginia)
- Seismic budget of \$300 mm in 2008 and \$250 mm for 2009 and 2010
- CHK continues to apply the latest technological advances in data processing and reprocessing to obtain the maximum interpretation benefits from our data, including:
  - Pre-stack depth imaging
  - High frequency data enhancement
  - Coherence and curvature volumes
  - Pre-stack AVO analysis and inversion
  - Specialty noise attenuation techniques



#### Visualization Room in Action



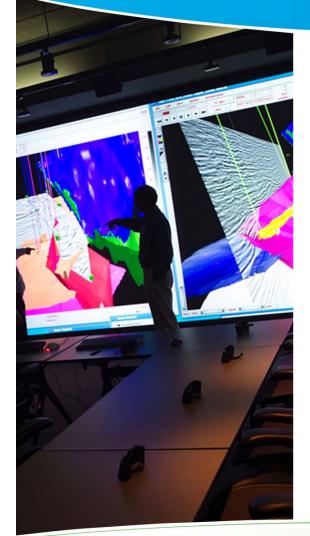




- CHK's state-of-the-art, 3-D visualization room includes an 18 x 8' dual projection screen
- Seven workstations with total of 40 gigabytes of memory and 75 terabytes of available network storage
- Allows for group presentations, prospect analysis, and aids in selecting drillsites & wellbore paths



## Leading-edge Technology & Resources



- CHK owns licenses for over 100 different types of geological & geophysical software
- CHK is one of the largest users of Geographix Geologic mapping software, with CHK's Oklahoma City office being the single largest site in the U.S. for Geographix software use
- CHK has 38 dual-monitor 3-D geophysical workstations for its geoscientists to interpret and map its enormous 3-D seismic database
- CHK has two state-of-the-art 3-D seismic visualization rooms
- CHK has e-logs for more than 1.9 million wells in our onshore U.S. database



## Petrophysical & Unconventional Resources Groups



- CHK recognized many years ago the future potential and value of "unconventional" reservoirs
- In March 2005, CHK hired Jeff Miller (Mitchell Energy, Devon) to build and lead its unconventional resources team of geoscientists
  - Goal was to identify and evaluate reservoir and economic potential of unconventional resource plays across the U.S.
- In May 2006, CHK added Rick Svor (UPRC, Anadarko Petroleum) as the company's Chief Petrophysicist, charged with working closely with Jeff Miller and the Unconventional Group to do detailed log, sample and core petrophysical analysis
- Due to time delays, lack of quality control and data confidentiality issues, CHK decided in the fall of 2006 to build its own state-of-the-art core and sample analysis lab...the Chesapeake Reservoir Technology Center (CRTC)
- In October 2006, CHK hired John Kieschnick (TerraTek) as Lead Scientist and Don Harville (Core Lab) as Manager to equip, staff and run the CRTC



#### The CRTC Vision



- To develop a proprietary core analysis procedure and state-of-the-art petrophysical laboratory
  - Start-up April 1, 2007, now has 20 full-time employees
- Utilize the CRTC to analyze all CHK shale core (almost 10,000 feet analyzed since 4/07)
- Leverage CHK technology to gain entry into existing plays
- Integrate CRTC with engineering to enhance and develop improved completion technology

#### **CRTC** Benefits:

- Timely analysis of accurate data helps guide CHK leasing activity, play coverage, and completion effectiveness
  - The usefulness of core data is enhanced through the linkage of production and log data; engineering and geoscience teams work closely with the CRTC to continually improve completion technology and results
- Consistent high quality data set is generated to help evaluate various plays and their potential
- Confidentiality of data and test results is maintained while accurate and speedy information is delivered
- Our reservoir analysis techniques position CHK as the "preferred" partner in shale plays



#### **CRTC Staff**



- The CRTC is staffed with industry leaders in tight reservoir technology evaluation
- The CRTC leadership has over 180 years of combined experience in reservoir evaluation
- The CRTC staff has multiple patents and years of research in reservoir characterization
- CHK believes this shale lab is unique in the industry and helps explain CHK's success in shales
- The CRTC is slated for expansion in 2010



## **CRTC Analysis**



#### **Petrophysical Measurements:**

- Tight rock analysis
- Porosity
- Permeability
- Water saturation
- Core spectral gamma log

- Gas-filled porosity
- Bound water
- Mobile oil saturation
- Grain density
- Bulk density



**Spectral Core Gamma** 

#### **Source Rock Analyzer**



**High-speed Centrifuge** 





**Tight Rock Permeameter** 



### **CRTC Analysis**



#### **Petrologic Characterization:**

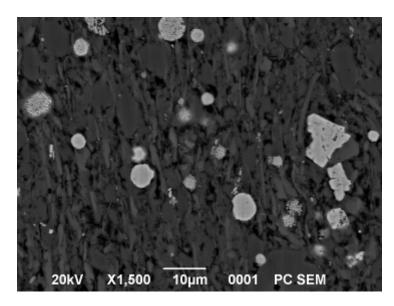
- The CRTC has its own scanning electron microscope (SEM), thin section petrographic scope and X-ray diffraction (XRD) to characterize the composition, texture and pore size distribution in tight sands and shales
- New technology such as argon ion cutting allows analysis of a polished section of the sample to quantify micropores in shales



X-ray Diffraction



**SEM** 



Argon ion polished shale



## **CRTC Analysis**



#### **Rock Mechanics:**

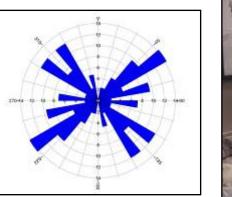
The CRTC has a number of tools to measure the mechanical properties of rock including:

- Fracture Orientation
- Sonic Velocity
- Hardness/toughness

**Fractured Core Measurements** 

#### **Innovative Solutions**

- Current CRTC research involves testing proppant material for optimized fracture design
- CRTC simulates fractures in the lab and measures the rock's sensitivity to frac fluids, proppant sizes and closure pressures
- CRTC also evaluates new technologies to improve unconventional resource analysis





Flow-through Completions Research



## Throughput Since CRTC Opened in April 2007



Conventional Core Footage	9,745 feet	
Rotary Sidewall Cores	1,077	
Cuttings Samples	1,184	
TRA Samples	5,375	
XRD Samples	3,047	
RockEval and TOC Samples	4,745	
Headcount = 20		

- The CRTC has already more than paid for itself in work performed
- Intangible benefits are considerably more significant
- CRTC can process about 600 feet of core per month

#### **Work in Progress**

- Enhanced Oil Recovery experiments
- CO2-toluene cleaning and humidity drying lab
- Thermogravimetric Analysis (TGA) Lab



## Core Viewing – Where Would You Land Your Lateral?



#### **Woodford Core in Delaware Basin**









## **Engineering Technology Group**







- Team of 10 headed up by John Reinhart (ex-Schlumberger),
   Manager-Engineering Technology and Special Projects
- Support all Districts company-wide to improve drilling, completion, and production efficiencies
- Work closely with the Petrophysical Group and the Reservoir Technology Center to optimize completions through stimulation modeling, fluid compatibility testing, proppant material & size testing, closure pressure testing
- Disseminate testing & study results across all districts and play types
- Analyze Microseismic data to constantly improve our completions in order to maximize the return on dollars spent



## **Technology Transfer**







- Transfer knowledge and expertise from various CHK unconventional resource plays to emerging resource plays
- Unconventional & Petrophysical groups work closely with CHK Engineering Technology Group and the CRTC to constantly compare and contrast various plays
- Conduct regularly scheduled "Technology Transfer"
  meetings with geologists & engineers company-wide to
  transfer knowledge on the petrophysical characteristics
  and the completions and drilling technology of various
  unconventional resource plays



### Recipe for Success







- <u>Teamwork:</u> constant communication; between both the disciplines as well as between operational districts
- Solid Science: process the log, sample & core analysis to distinguish which formations are most likely to be commercially productive...prior to extensive leasehold and drilling expenditures
- Extensive Analysis: know the clay types and percentages, porosity, permeability, siliceous content, depth, pressure, frac barriers (containment), presence and degree of natural fracturing
- Geo-steering: identifying, targeting, and keeping the horizontal wellbore within the best rock in the target formation
- Refinement: continually studying and tweaking the drilling and completions in a play to improve recoveries and economics over time
- Best Practices: following and learning from what other companies are doing



Chesapeake

## **CHK's Four Major Shale Plays**

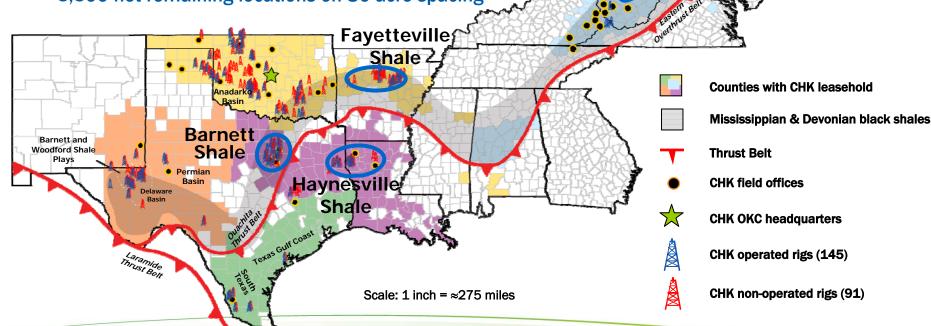




<u>Fayetteville Shale:</u> 18 operated rigs currently drilling;
 ~3,700 net remaining locations on 80-acre spacing

Haynesville Shale: 14 operated rigs currently drilling;
 ~3,000 net remaining locations on 80-acre spacing

Marcellus Shale: 3 operated rigs currently drilling;
 ~5,500 net remaining locations on 80-acre spacing



Marcellus

Shale

• Risk disclosure regarding unproved reserve estimates appears on page ii of the meeting presentation package

# Comparison of Chesapeake's "Big Four" Shale Plays

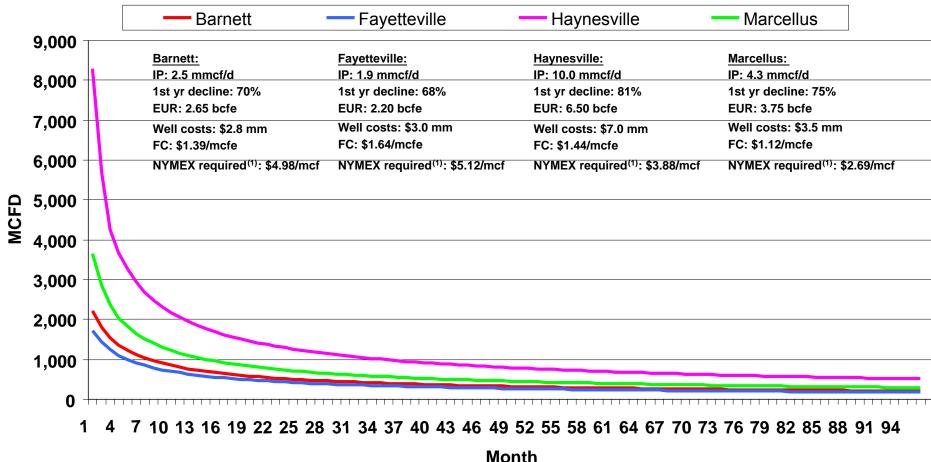


	Texas - Barnett (Ft. Worth Basin)	Louisiana/Texas - Haynesville	Arkansas - Fayetteville	Appalachian Basin - Marcellus
Depth TVD	5,400' - 9,600'	10,000' - 13,000'	1,200' - 7,500'	1,500' - 8,000'
Thickness	250' - 500'	200' - 300'	50' - 200'	75' - 300'
GIP BCF/square mile	100 avg.	200 avg.	48 avg.	100 avg.
Recovery factor	34% / 60 ac. Spacing	26% / 80 ac. Spacing	37% / 80 ac. Spacing	30% / 80 ac. Spacing
Porosity (avg.)	7%	10%	6.5%	6%
TOC (avg.)	5%	4%	4.0%	6%
Reserves/well (horizontal)	2.65 BCF	6.5 BCF	2.2 BCF	3.75 BCF
Dominant Lithology of Play	Siliceous Mudstone	Argillaceous / Calcareous Mudstone	Siliceous Mudstone	Argillaceous Mudstone
Age	Mississippian 320 - 345 million years	Jurassic 152 - 156 million years	Mississippian 320 - 345 million years	Devonian 385 - 390 million years



### **Major Shale Type Curves**







Pre-leasehold pro forma finding costs range from \$1.12-\$1.64/mcfe

(1) NYMEX natural gas price required to generate a pre-tax 10% rate of return

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## Drilling Diversity Snapshot in Time (~10/1/08)





- CHK had 150 operated rigs drilling
- 50% drilling in our "Big Four" shale resource plays
- 70% drilling horizontal wells targeting 17 different formations in 8 states
- 60% drilling with aid of 3-D seismic data and 20% are exploratory
- ~25% drilling to total depths <10,000', 50% to depths</li>
   10,000' 15,000', and 25% to depths >15,000'

