VANGUARD
NATURAL RESOURCES, LLC

Energy Capital Investment Symposium

June 11, 2008

Forward Looking Statements

Statements made by representatives of Vanguard Natural Resources, LLC during the course of this presentation that are not historical facts are forward looking statements. These statements are based on certain assumptions and expectations made by the Company which reflect management's experience, estimates and perception of historical trends, current conditions, anticipated future developments and other factors believed to be appropriate. Such statements are subject to a number of assumptions, risks and uncertainties, many of which are beyond the control of the Company, which may cause actual results to differ materially from those implied or anticipated in the forward looking statements. These include risks relating to financial performance and results, our indebtedness under our revolving credit facility, availability of sufficient cash to pay our distributions and execute our business plan, prices and demand for gas, oil and natural gas liquids, our ability to replace reserves and efficiently develop our reserves, our ability to make acquisitions on economically acceptable terms, and other important factors that could cause actual results to differ materially from those anticipated or implied in the forward looking statements. See "Risk Factors: in the Company's Annual Report for 2007 , Registration Statements on Form S-1 and the related prospectuses and any other public filings and press releases. Vanguard Natural Resources, LLC undertakes no obligation to publicly update any forward looking statements, whether as a result of new information or future events. This presentation has been prepared as of June 6, 2008.

Overview of Vanguard Natural Resources

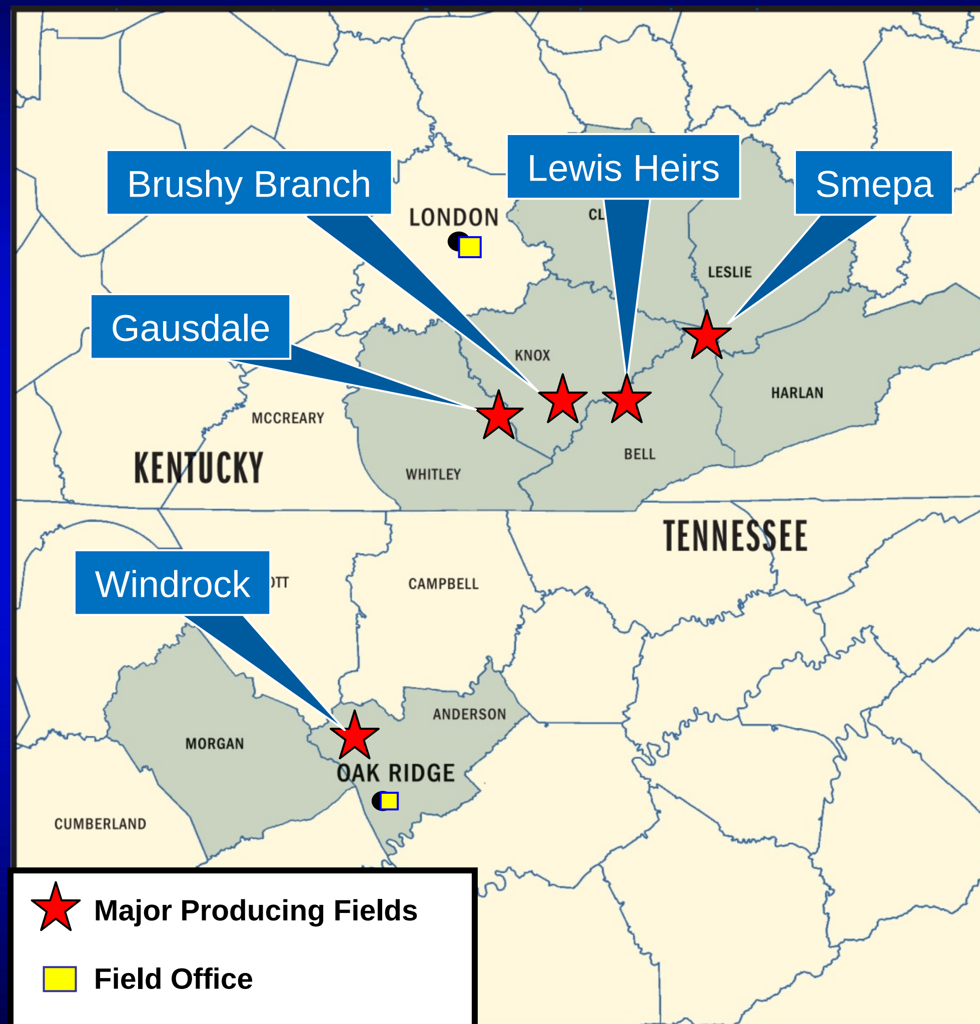
- Growth oriented upstream LLC headquartered in Houston
- Focused on the acquisition, development and exploitation of mature, long life oil and natural gas properties that generate stable cash flow.
- Assets are in:
  - Appalachian Basin – SE Kentucky and NE Tennessee
  - Permian Basin – W Texas and SE New Mexico
- Initial Public Offering - NYSE Arca, October 2007 ("VNR")
- Company Profile
  - 95 BCFE total proved reserves
  - 500+ drilling locations
  - 15 year R/P
  - 75% Gas/25% Oil Reserve Mix

Equity Market Cap	$201 MM
Total Debt	103 MM
Enterprise Value	$304 MM

Note: **Market data as of June 6, 2008 (VNR closing price of $17.92). Reserve data based on 12/31/07 reserve report and internal estimates.**

Appalachian Asset Profile

- High degree of step out development success – low risk and targeting multiple producing horizons, 500+ identified PUD/Probable locations
- Premium pricing due to proximity to northeastern markets: $0.23/Mmbtu over NYMEX
- High BTU content gas compared to other basins : 1,230 Btu/Scf
- Fragmented ownership of producing assets – consolidation opportunities
- Favorable transportation arrangements



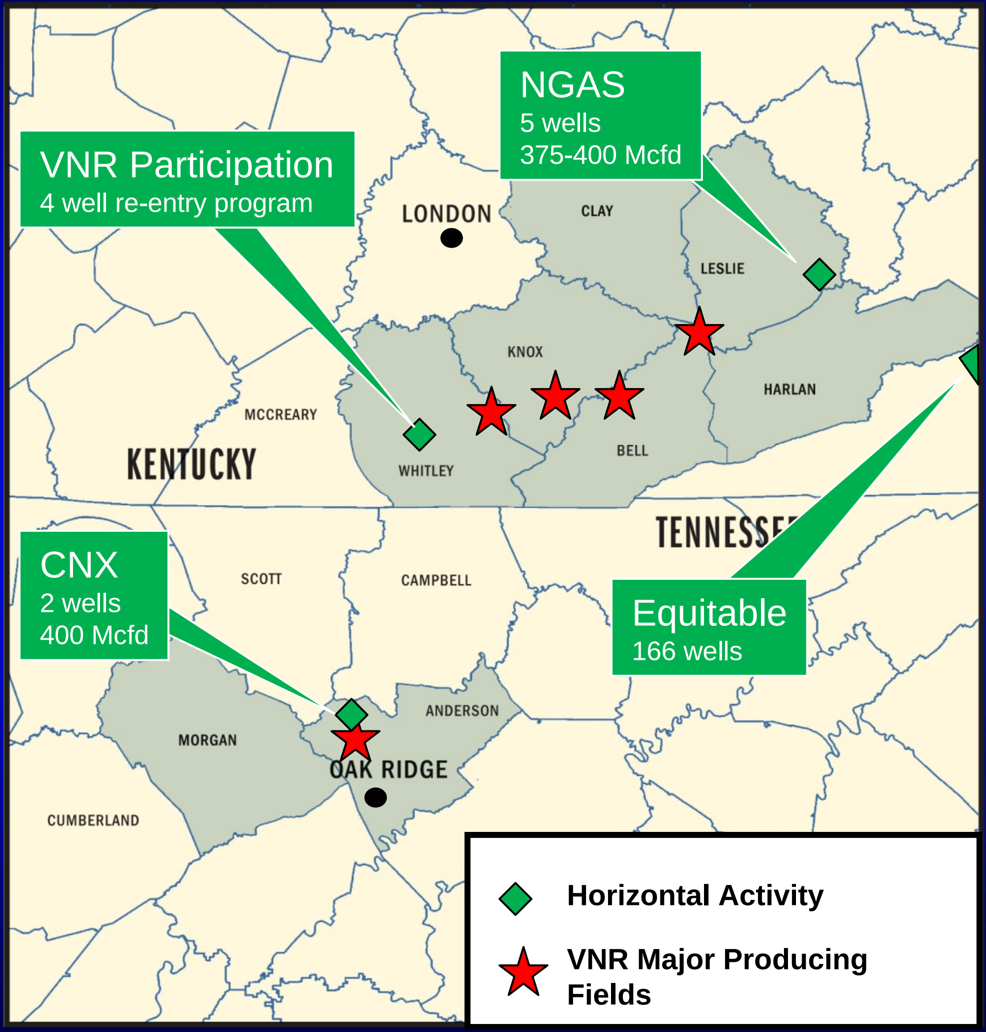
Vanguard's Appalachian Position (1)

- Proved Reserves: 67 Bcfe
- Undeveloped gross acres: 104,000
- Gross locations: 543 (326 proved)

(1) Based on NSAI 12/31/07 Reserve Report

Devonian Shale Potential

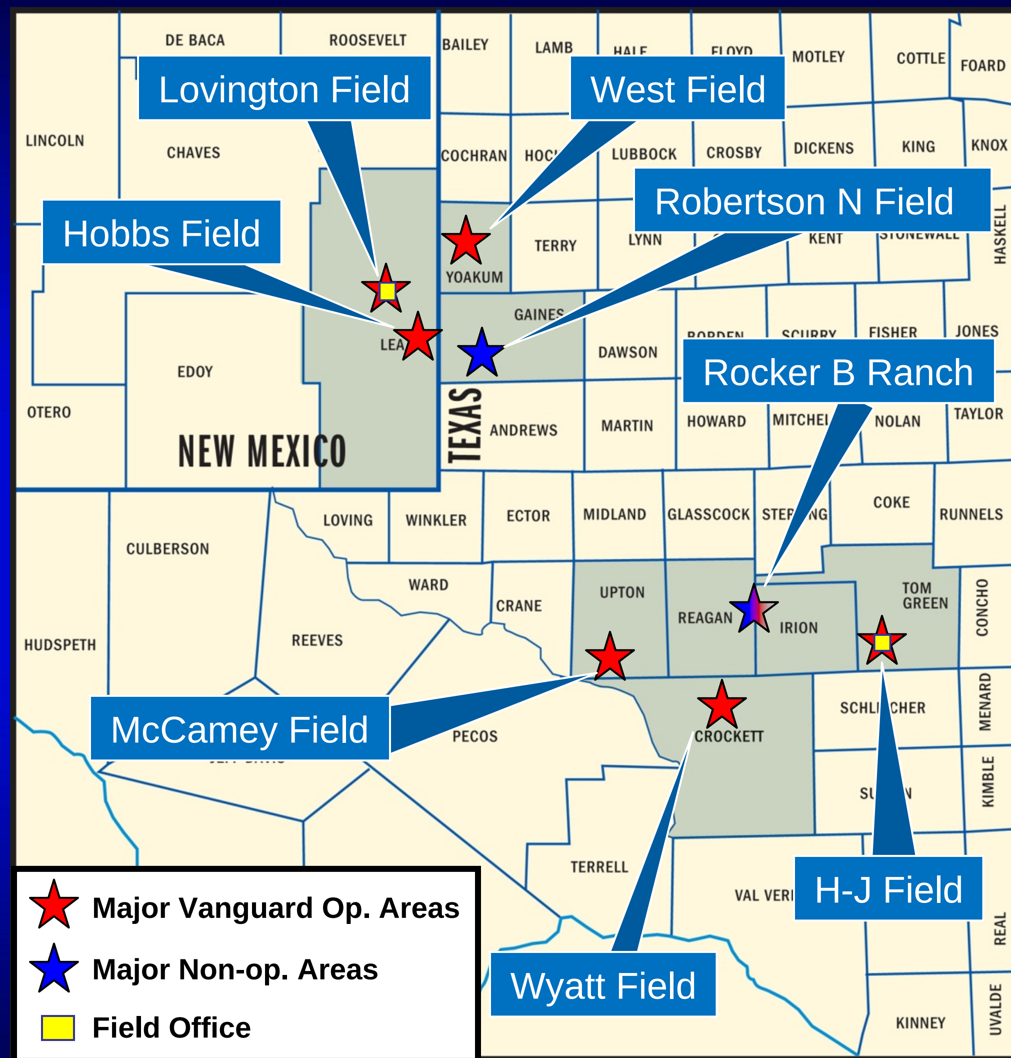
- Development of the Devonian Shale through horizontal drilling is taking place in the southern portion of the Appalachian Basin
- Equitable, CNX and NGAS have all announced multiple successful wells using this application
- Devonian shale formation is present throughout entire 104,000 acres of VNR gross leasehold, at varying depths and thickness depending on location
- VNR will participate for a minority working interest in a 4 well re-entry program to test this concept near our existing fields
- Provided horizontal drilling in the Devonian shale proves to be commercially viable in this portion of the Appalachian Basin, the impact on VNR reserves would be significant



VANGUARD NATURAL RESOURCES, LLC

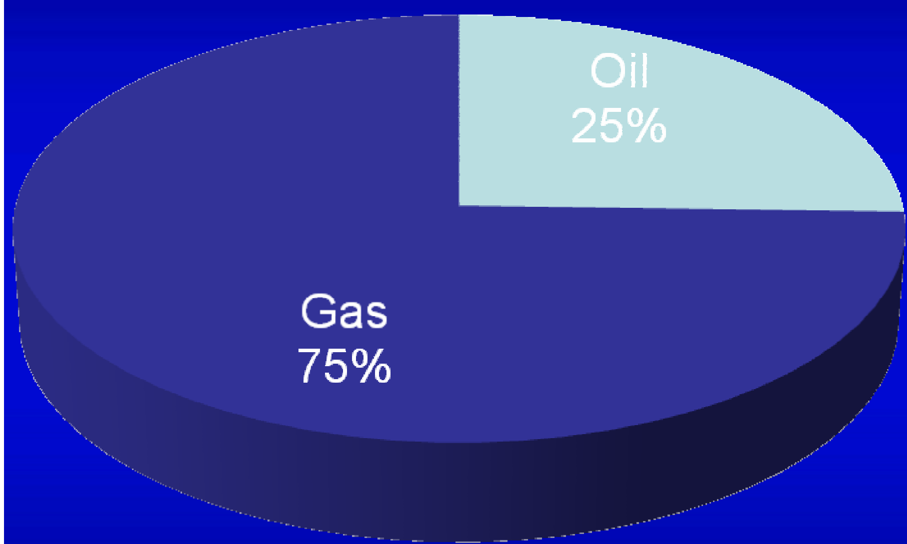
Permian Basin Asset Profile

- Acquisition of producing assets from Apache, closed 1/31/08
- 4.4 Mboe acquired, 84% oil and 89% PDP
- 65% Operated and 35% Non-Operated in terms of Value
- Production of ~ 800 Boepd
- Establishes Permian Basin as an operating area, approx. 65 operated wells in 8 fields
- Nominal re-investment after first year PUD development (7% of cash flow)
- Fragmented ownership of producing assets in acquired fields– opportunities for “bolt-on” acquisitions

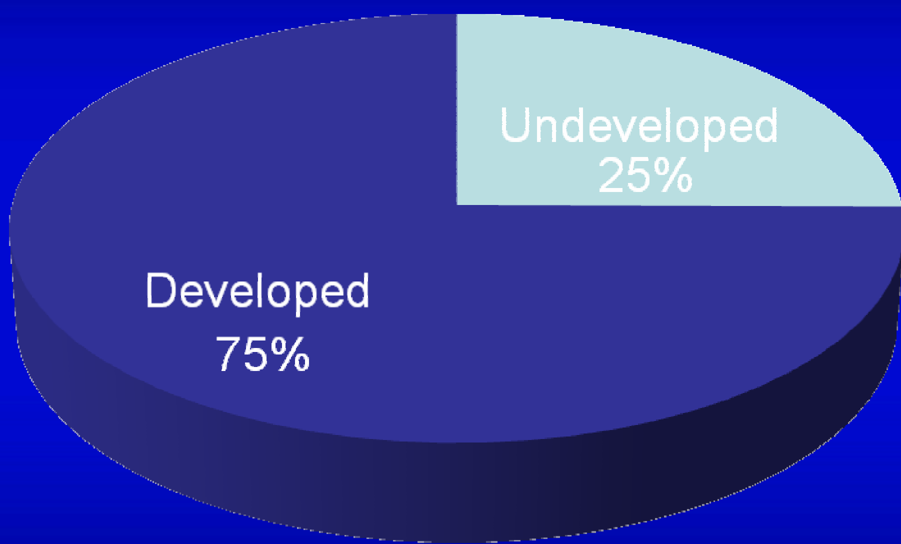


Proved Reserves (1)

Reserves by Commodity



Reserves by Category



(1) Based on internal reserve estimates as of March 31, 2008

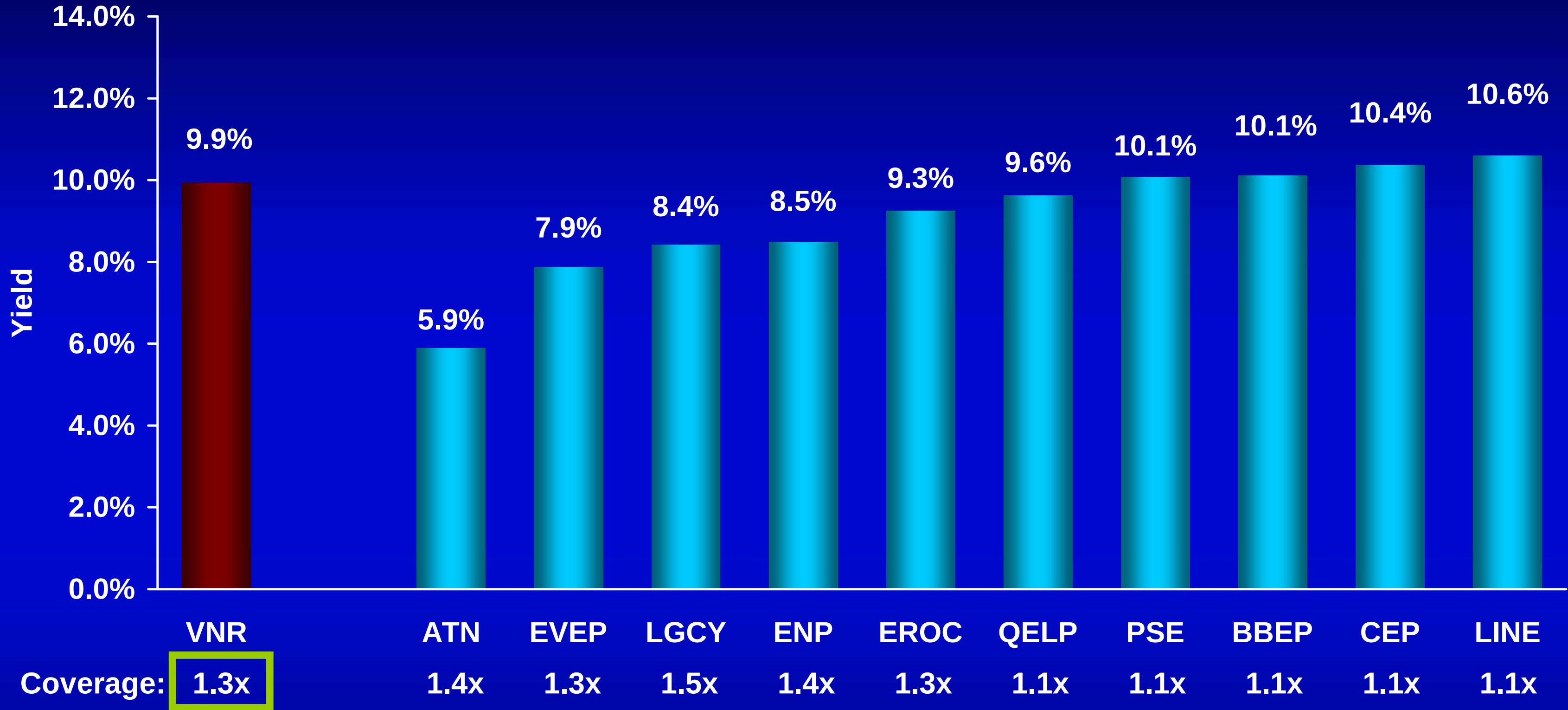
Advantages of Vanguard's LLC Structure

- Fair governance – all unit holders vote (no general partner)
- No entity level income tax – competitive advantage in the acquisition market
- Tax Shield – approximately 70% of distributions thru 2010 will be tax deferred
  - Unitholders benefit from favorable tax treatment compared to alternative yield products while having upside exposure through unit price appreciation
- No Incentive Distribution Rights (IDRs)
  - Investors share equally in all cash flows – no management or general partner "double-dipping"
  - Acquisitions are more accretive without IDRs
- Vanguard's management aligned with public unit holders – significant portion of compensation from unit ownership

Financial Overview

Comparable Company Trading Yields

Current Distribution Yields of Peer Group



Source: Company filings, press releases, Factset and Wall Street Research.
Note: Data as of 06/06/2008. Coverage based on 1Q 2008 except CEP, EVEP, QELP, and BBEP based on Research.
BBEP: Based on price of $22.75 and target distribution of $2.30 for 4Q 2008E announced on 3/17/08
LINE: Based on price of $23.78 and annualized distribution of $2.52 announced on 4/28/08
VNR: Based on price of $17.92 and annualized distribution of $1.78 announced on 3/18/08
QELP: Based on price of $17.04 and annualized distribution of $1.64 announced on 4/25/08
PSE: Based on price of $19.85 and annualized initial distribution of $2.00 as stated in IPO prospectus
ENP: Based on price of $27.13 and annualized distribution of $2.30 announced on 5/6/08
EROC: Based on price of $17.29 and annualized distribution of $1.60 announced on 4/30/08
EVEP: Based on price of $31.51 and annualized distribution of $2.48 announced on 4/28/08
LGCY: Based on price of $23.28 and annualized distribution of $1.96 announced on 4/23/08
ATN: Based on price of $40.05 and annualized distribution of $2.36 announced on 4/22/08
CEP: Based on price of $21.70 and annualized distribution of $2.25 announced on 4/24/08

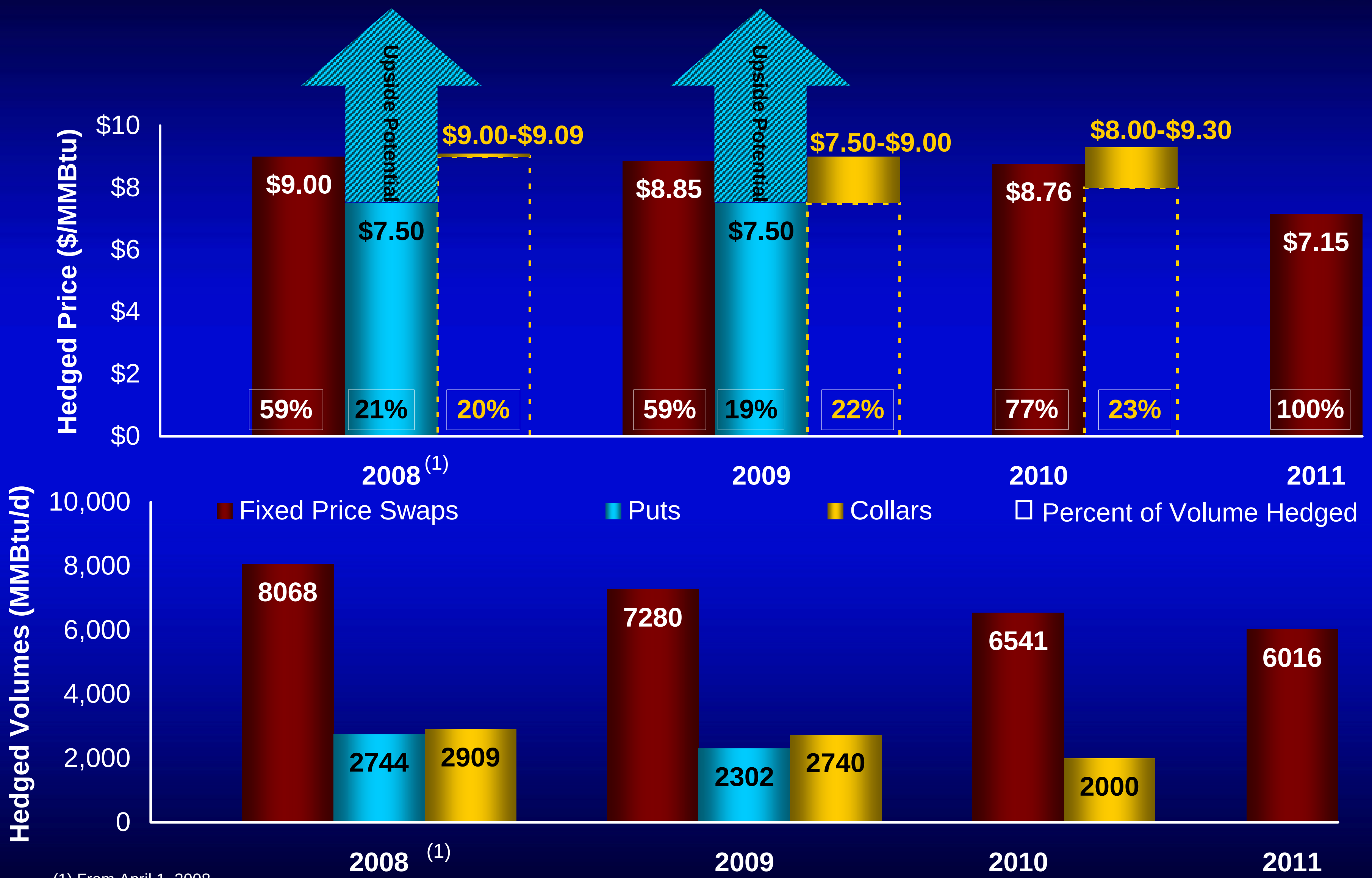
Risk Management

- We intend to maintain hedges for 80-95% of our total 3-year forecasted production (currently at 82%)
- Existing oil and gas hedges support the distributions in a period of volatile commodity prices
- Approximately 74% of expected oil production thru 2012 is hedged via swaps at a weighted average price of $86.01 per barrel
- Expected natural gas production thru 2010 is hedged via a combination of swaps, collars and puts as follows:

	2008	2009	2010
Swaps	59%/$9.00	52%/$8.85	47%/$8.76
Collars	20%/$9.00-$9.07	20%/$7.50-$9.00	15%/$8.00-$9.30
Puts	21%/$7.50	17%/$7.50	N/A

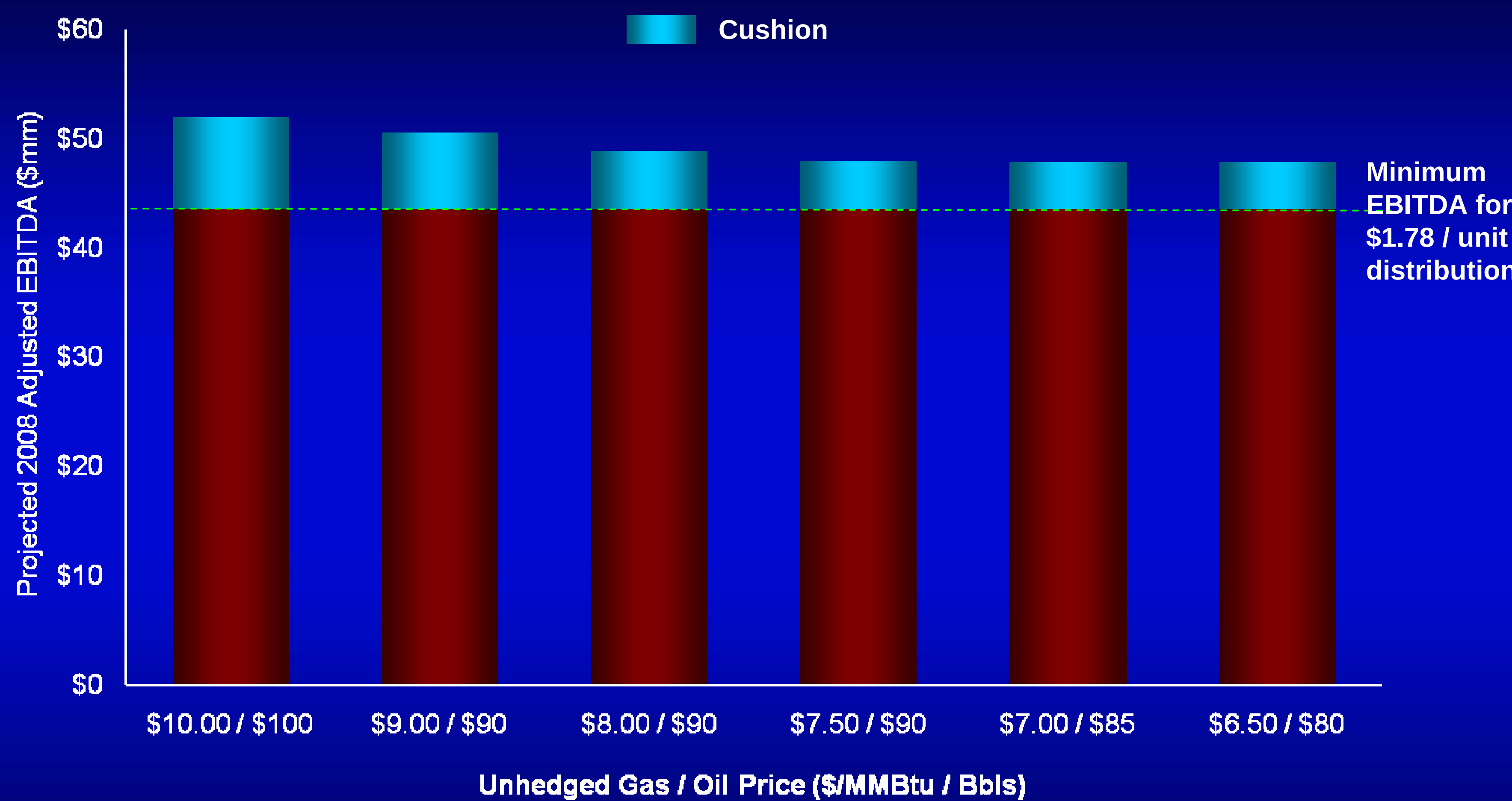
Long-Term Oil Hedges

Long-Term Natural Gas Hedges



(1) From April 1, 2008.
Note: Puts and collars settle on NYMEX monthly closing prices.

Little Sensitivity to Commodity Prices During 2008



Distribution Coverage:	**1.42x**	**1.36x**	**1.27x**	**1.22x**	**1.22x**	**1.22x**

2008 Calendar Year Guidance

Total Production (Mmcfe)	5,430	-	5,959
Average Daily Production - Gas (Mcf/d)	10,900	-	12,054
Average Daily Production - Oil (Bbls/d)	662	-	711
Lease Operating Expenses (000's)	$8,800	-	$10,200
G&A (000's) (excluding incentive comp plans)	$3,600	-	$4,000
G&A incentive comp plans (1)	$3,300	-	$3,300
Cash Interest Expense (000's)	$4,500	-	$5,500
Capital Expenditures (000's)	$17,600	-	$19,000
Adjusted EBITDA (000's)	$46,000	-	$49,700

(1) Amounts represent non-cash expense recognition of Class B unit grants. In addition, the management incentive plan is tied to the unit price. Vanguard is not providing guidance on the unit price for 2008. However, if the VNR units do not appreciate over the grant date price ($15.82) there would be no additional compensation to management.

Growth Outlook

Metrics at IPO	Current Metrics
Total Proved Reserves	**Total Proved Reserves**
Gas 65 Bcf	Gas 73 Bcf
Oil 0.3 MMBbls	Oil 3.9 MMBbls
Total 67 Bcfe	Total 95 Bcfe
Distribution Coverage	**Distribution Coverage**
Forecast Period 1.09x	Estimated 2008 1.22x
One Basin – One Commodity	Two Basins – Two Commodities
No Operations	Operations Team in Place

Debt Summary

($ in millions)

Facility Size	400
Borrowing Base	150
Amount Outstanding	103
Borrowing Availability	47
Maturity Date	March 2011

Interest Rate Pricing Grid	
Borrowing Base Utilization of:	
less than 25%	L + 100 bps
greater than 25% and less than 50%	L + 125 bps
greater than 50% and less than 75%	L + 150 bps
greater than 75%	L + 175 bps

Interest Rate Hedges	Amount	Fixed LIBOR Rate
through December 2010	20	3.88%
through January 2011	30	3.00%
through March 2011	10	2.66%
	60	3.24%

Debt Covenants (Financial)			As of 3/31/08
Adjusted EBITDA / Interest Expense	2.5x	Min	9.3x
Total Debt / Adjusted EBITDA	4.0x	Max	2.5x
Current Assets / Current Liabilities	1.0x	Min	5.6x

Size Matters

<u>Hypothetical Effect of $50 Million Debt Financed Acquisition</u>

Multiple of Cash Flow Paid	5.5x
Incremental Cash Flow Generated	$9.09 million
Interest Cost (5%)	$2.50 million
Capital Reinvestment (25% of cash flow)	$2.27 million
Available Distributable Cash Flow	$4.32 million
Hypothetical Increase in Distribution (after 1.25x coverage)	$0.29/unit

Vanguard Investment Highlights

- High quality, long lived reserves with stable production profile
- Recent Apache acquisition establishes operating platform in the Permian Basin
- Well positioned to grow through acquisitions of producing properties in Appalachia, Permian and other mature producing basins
- Robust hedging program supports distribution visibility and stability
- Governance structure which aligns the interest of management and unit holders
- Attractive distribution yield relative to peers

Focused on Unit Price Appreciation Through Increased Distributions