VANGUARD NATURAL RESOURCES, LLC

Energy Capital Investment Symposium
June 3, 2009

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 10-K Annual Report for 2008, Registration Statements on Form S-1 and the related prospectuses, Form 10-Q's for 2009 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 1, 2009.

Overview of Vanguard Natural Resources

- Upstream Energy LLC, headquartered in Houston
  - Initial Public Offering – "VNR" NYSE Arca October 2007
  - Moved to NYSE Big Board in May 2009
  - Increased distributions 18% since IPO
  - Generating stable cash flow in current volatile environment

- Focused on maximizing the productivity of existing assets and maintaining cash distribution payments
  - 108.5 Bcfe total proved reserves, up 62% from 2007
  - Additions to 2008 proved reserves of 47.3 Bcfe replaced 798% of production
  - 75% proved developed
  - 75% gas / 25% oil
  - 18 year reserve life

Company Profile

- **Company Profile** [1]

Equity Market Cap	$ 174	million
Total Debt	134	million
Less Cash	2	million
Enterprise Value	$ 306	million

– [1] **Market data as of June 1, 2009.**

- **Positive cash distribution coverage**
  - Annualized distribution of $2.00 currently yields about 15% at current price
  - Coverage of 1.08x at year end 2008
  - Expect approximately 1.5x coverage at end of 2009

- **Diverse asset base in mature basins**
  - Appalachian Basin – SE Kentucky and NE Tennessee
  - Permian Basin – W Texas and SE New Mexico
  - South Texas – Webb County

Vanguard Investment Highlights

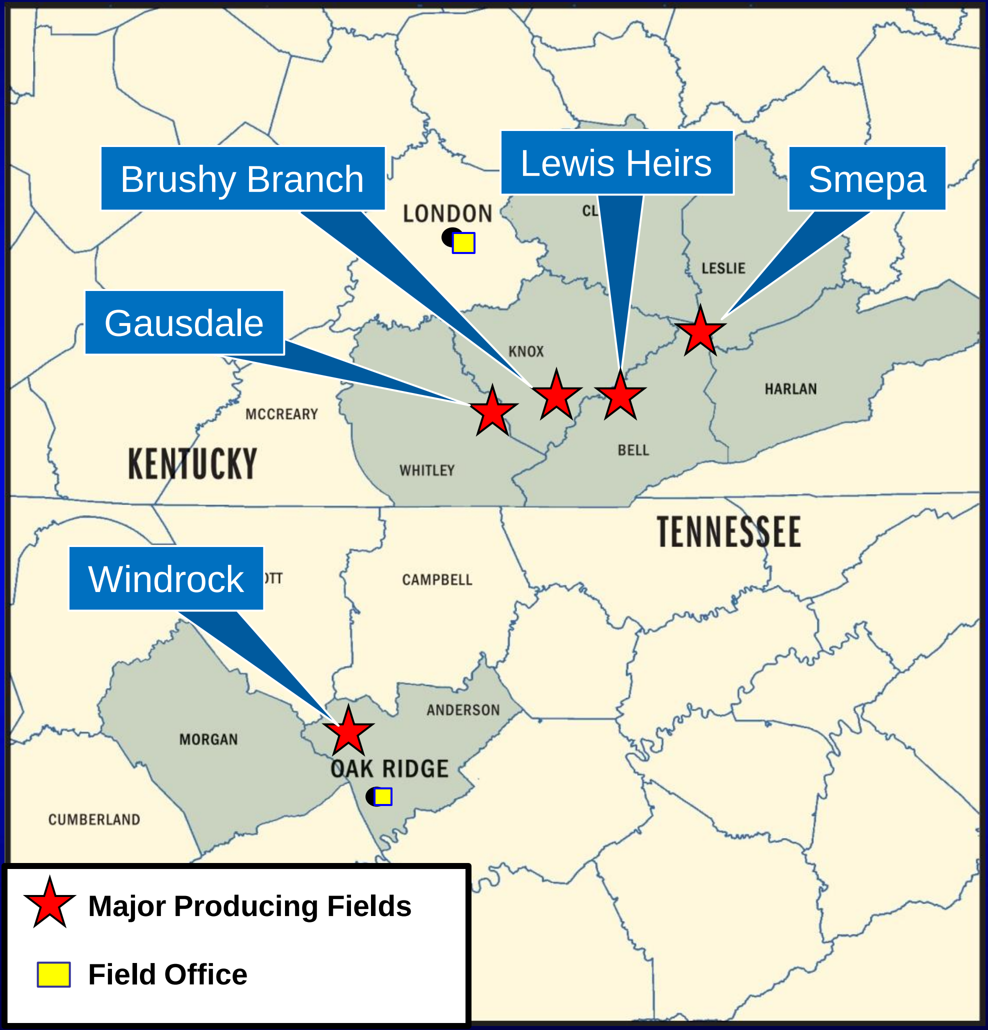
- High quality, long lived reserves with minimal production decline
  - Steady volumes of hydrocarbons produced from oil and gas reserves generate stable cash flows
- Acquisitions in the Permian Basin and South Texas balanced the commodity and geographic mix and supported past cash distribution increases
- Governance structure which aligns the interests of management and unit holders
- Attractive distribution yield

Solid Near-term Outlook for VNR

- Strong hedging book helps to ensure distribution stability, protects against debt covenant violations and maximizes borrowing base availability.
  - ~82% of expected natural gas production is hedged through 2011 at a weighted average price of $8.48 per MMBtu.
  - ~73% of expected crude oil production is hedged thru 2011 at a weighted average price of $86.87 per barrel.
- Assuming conservative prices of $40/bbl and $4.00/mcf through 2011, VNR will be well within required financial debt covenant limits.
- Strong anticipated cash distribution coverage ratio for 2009 >=1.5x expected (cash available divided by cash distributed each quarter) which should allow for distribution to be maintained at current levels.

Appalachian Asset Profile

- High degree of step out development success
- Targeting low-risk, multiple producing horizons
- 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
- Favorable transportation arrangements
- Upside in development of Devonian shale through horizontal drilling when pricing improves



Appalachian Reserves

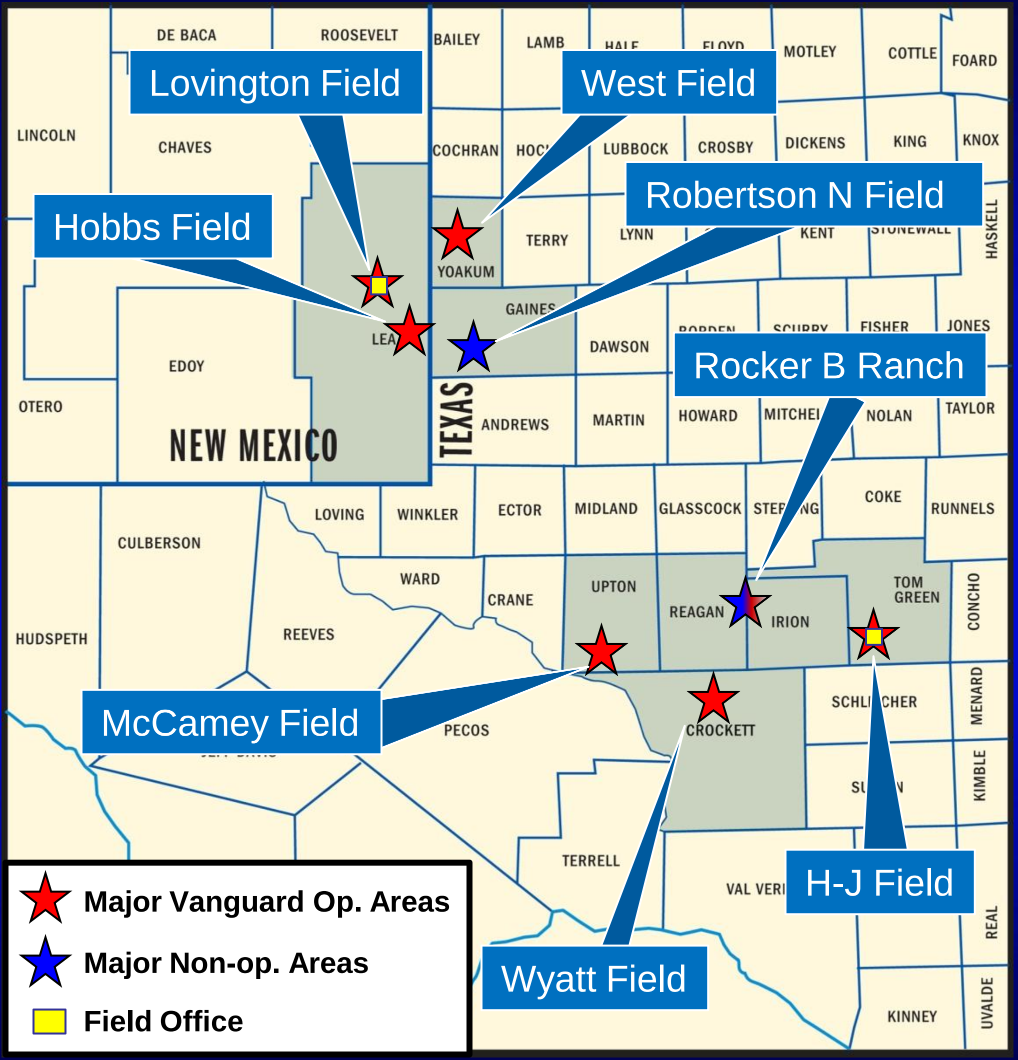
- Proved Reserves: 64 Bcfe
- 96% Gas, 74% PDP
- ~10,000 Mcfe/d current net production
- Gross PUD and probable locations: 604
- 100% WI pre-2007; 40% WI post 2007

Permian Basin Asset Profile

- Acquisition of producing assets from Apache, closed 1/31/08
- Established Permian Basin as an operating area, approx. 50 operated wells in 7 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

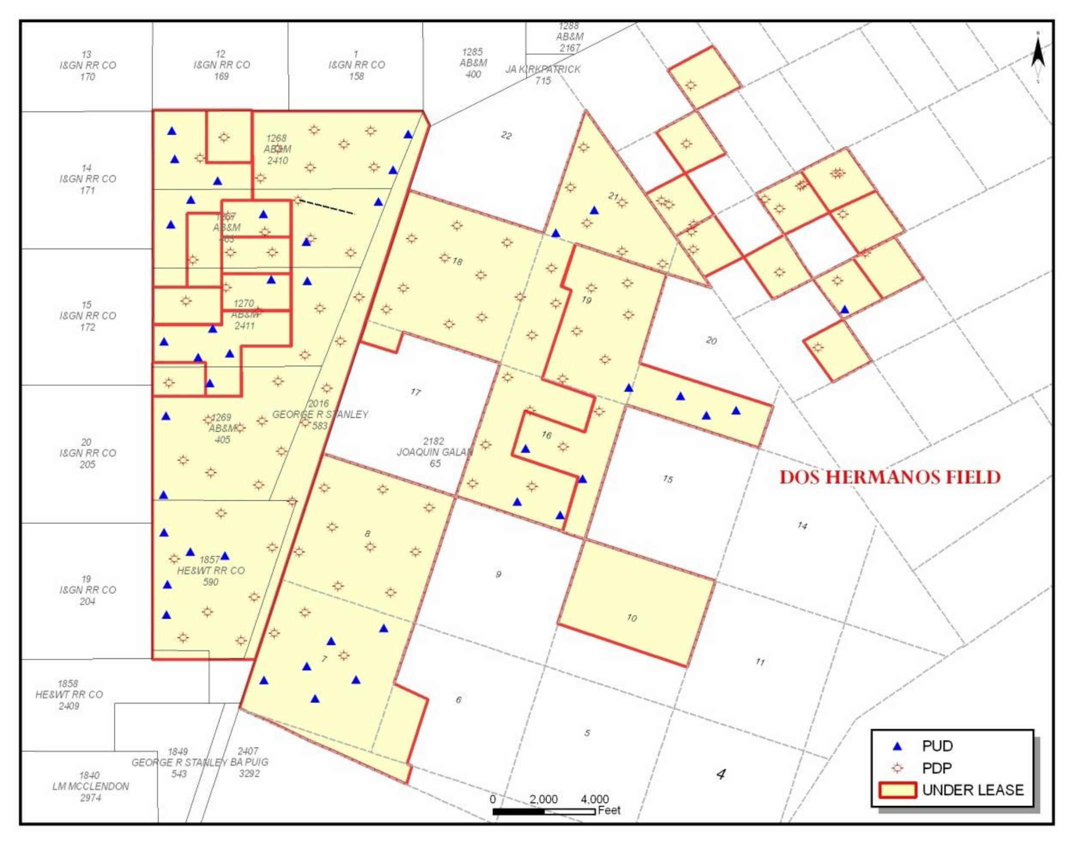
Permian Basin Reserves

- Proved Reserves: 3.7 MMboe
- 85% oil and 90% PDP
- 65% operated
- ~784 Boepd current net production



South Texas Assets

- Acquisition from Lewis Energy, closed July 2008 (60/40 cash and stock transaction)
- Lewis to operate and conduct PUD drilling program through 2013 (6-8 wells per year)
- "Drop-down" opportunities possible as Lewis monetizes mature assets
  - Largest operator in the Olmos trend
  - 1,000+ producing wells
  - 67,000 Mcf/d of net production
  - 350,000 acres under lease
- Swaps on 85% of PDP through 2011 in place at weighted average HSC price of $10.52/mcf



South Texas Reserves

- Proved Reserves: 22 Bcfe
- 100% gas/ngls; 60% PDP
- ~3,200 Mcfe/d current net production

Advantages of Vanguard's LLC Structure

- LLC Partnership structure results in lower cost of capital
  - No entity level income tax
- Tax Shield – minimum 70% of distributions through 2010 will be tax deferred (2007 & 2008 -100%)
  - Unit holders 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"
- Fair governance – all unit holders vote (no general partner)
- Vanguard's management aligned with public unit holders – significant portion of compensation from unit ownership

Prudent Financial Strategy

- Maintain flexible balance sheet
  - $154 million borrowing base resulting from semi-annual redetermination under current credit facility
  - $20 million borrowing availability
- Maintain strong distribution coverage
- Maximize productivity of existing assets
- Disciplined hedging strategy supports cash flow and locks in accretion of acquisitions
- Focused on lowering unit operating costs and allocating capital expenditures to viable projects in sub-$5.00/mcf and $50/bbl market

Overview of Publicly-Traded Partnerships

Taxation Example
(Assuming Units Held For 4-Year Period)

Schedule of Annual Taxes on Distributions				
	Year 1	Year 2	Year 3	Year 4
Purchase Price	$10.00			
Sale Price				$15.00
Income/Unit	$1.00	$1.00	$1.00	$1.00
Depreciation/Unit	($0.70)	($0.70)	($0.70)	($0.70)
Annual Distribution	($2.00)	($2.00)	($2.00)	($2.00)
Basis	$8.30	$6.60	$4.90	$3.20
Taxable portion of income (@70% tax deferral)	$0.30	$0.30	$0.30	$0.30
Taxes paid (@30% rate)	$0.09	$0.09	$0.09	$0.09
Deferred taxes	$0.21	$0.21	$0.21	$0.21

Attractive Post-Tax Return Upon Sale

- In this example, 70% of the allocated share of income is tax-deferred.
- The deferred portion of taxes is paid when the units are sold.
- Capital gains taxes are paid on the sale price of the unit ($15) less the basis ($3.20) less the share of partnership income received ($4.00).

Total Tax Liability After Four Years	
Ordinary Income per Unit	$4.00
Cumulative Taxes Paid	$0.36
Deferred Taxes	$0.84
Total Taxes	$1.20
Capital Gains	$7.80
Taxes due on Capital Gain	$1.17
Total Tax Liability	$2.37
Total Annualized Return	23.6%

Major Taxation Points

- All investors receive a partnership K-1 at the end of the year
  - K-1 allocates the partnerships income and expenses to individual investors based on their percentage ownership of the partnership
- Quarterly distributions received are not taxed as dividends.
  - Distributions lower the investors tax basis in the units which affects the capital gain calculation upon the sale of the unit.
- Deferred portion of taxes are due upon the sale of the unit
  - Depreciation/Depletion expenses are recaptured and taxed at ordinary income rates
- Attractive estate planning tool as heirs get a step-up in cost basis of units

Financial Overview

Risk Management

- Significant percentage of expected natural gas production thru 2011 is hedged via a combination of swaps, collars and puts at a weighted average floor price of $8.50 per MMBtu:

	2009	2010	2011
% Hedged	100%	87%	64%
Swaps	68%/$9.42	70%/$8.95	58%/$7.83
Collars	18%/$7.50-$9.00	17%/$7.90-$9.24	6%/$7.50-$9.00
Puts	14%/$7.50	N/A	N/A

- Significant percentage of expected crude oil production thru 2011 is hedged via swaps and collar at a weighted average floor price of $87.13 per barrel:

	2009	2010	2011
% Hedged	82%	66%	67%
Swaps	68%/$87.23	66%/$85.65	67%/$85.50
Collars	14%/$100-$127	N/A	N/A

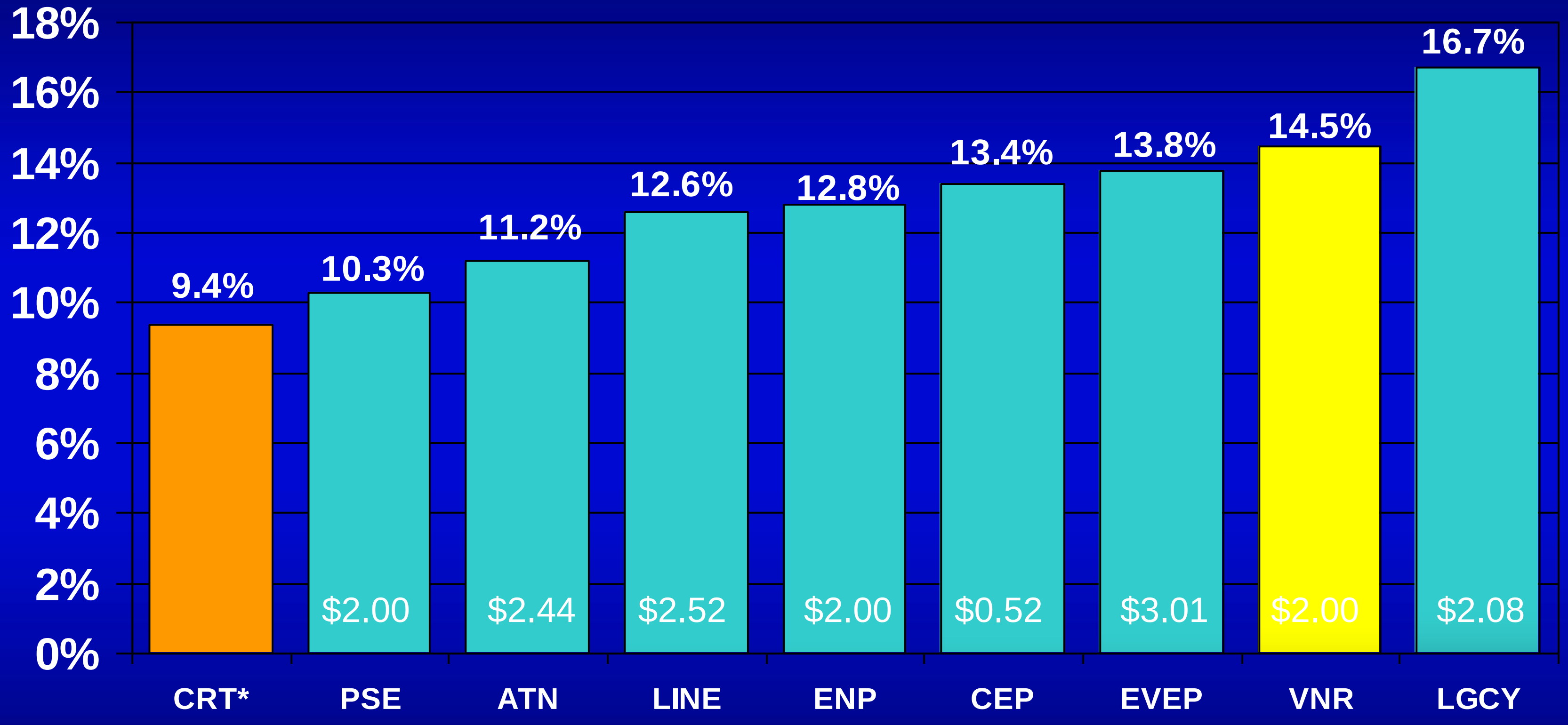
Cash Distribution Coverage for 2009

Crude Oil Prices WTI ($/Barrel)	Natural Gas Prices ($/MMbtu)	$3.00	$4.00	$5.00	$6.00	$7.00
	$30.00	1.57x	1.55x	1.54x	1.52x	1.51x
	$40.00	1.58x	1.56x	1.55x	1.53x	1.52x
	$50.00	1.59x	1.58x	1.56x	1.55x	1.53x
	$60.00	1.61x	1.59x	1.57x	1.56x	1.54x
	$70.00	1.62x	1.60x	1.59x	1.57x	1.56x

Existing oil and gas hedges support the distributions in a period of volatile commodity prices

Comparable Company Distribution Yields

Current Distribution Yields of Peer Group



*CRT – Canadian Royalty Trusts (AAV, BTE, ERF, HTE, PGH, PWE, PVX)

**Yield calculated using the closing unit price on June 1, 2009.

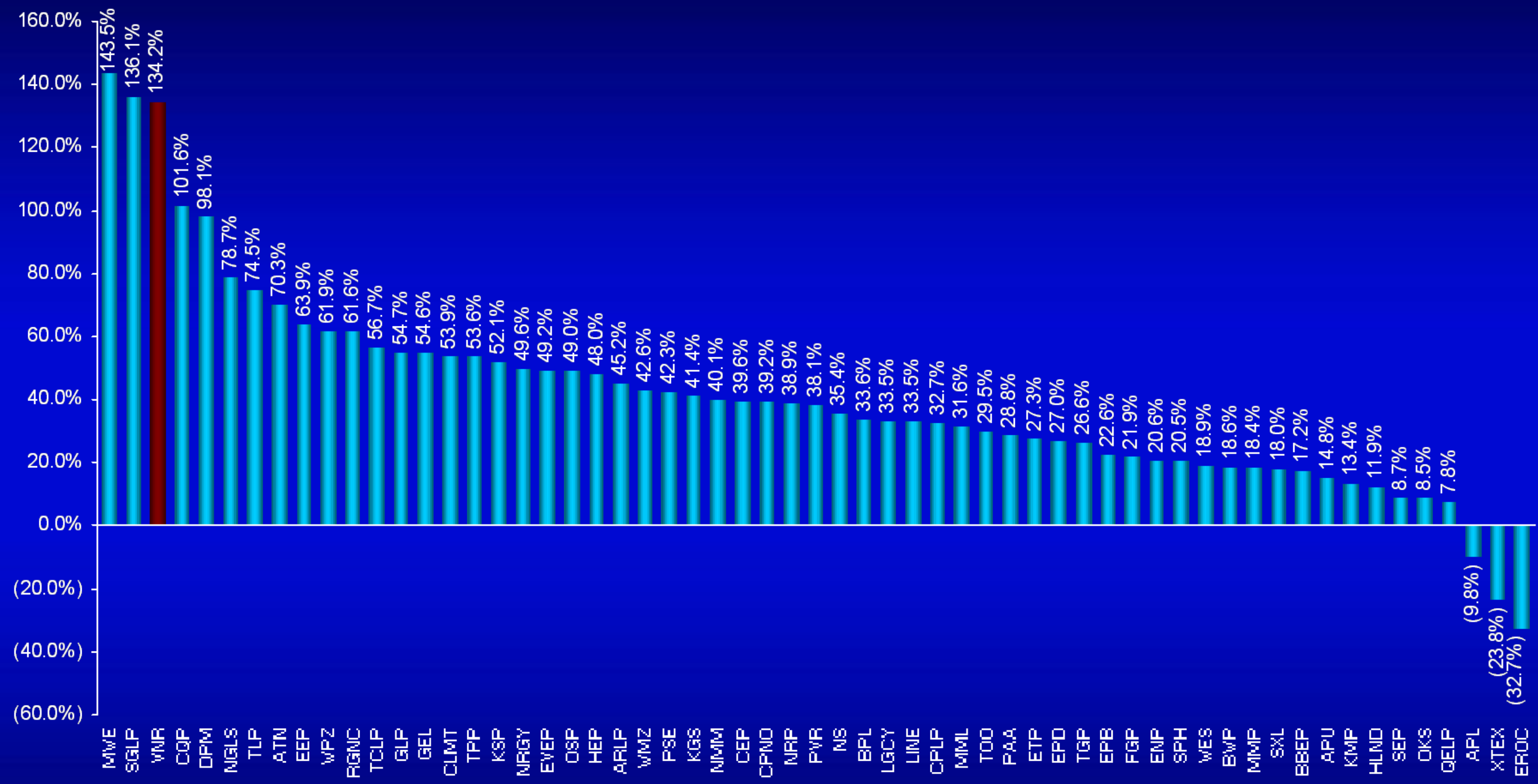
MLP Yields by Subsector

	Average Yield					
	2004	2005	2006	2007	2008	Current
Liquids T&S	6.5%	6.2%	6.8%	6.1%	8.3%	8.6%
Natural Gas T&S	6.8	6.4	6.7	6.1	7.8	8.3
Natural Gas G&P	6.8	5.9	6.2	5.5	12.1	12.7
Propane	8.3	8.1	8.2	7.5	9.8	9.8
Shipping	5.1	5.6	5.8	5.6	12.2	16.3
Upstream	NA	NA	6.6	6.2	12.4	13.3

Note: Market data as of 6/1/2009.

Liquids T&S (KMP, PAA, NS, TPP, MMP, BPL, SXL, HEP, GEL, GLP, TLP)
Natural Gas T&S (EPD, ETP, OKS, EEP, BWP, EPB, TCLP, SEP, WMZ)
Natural Gas G&P (RGNC, APL, WPZ, MWE, CPNO, EROC, NGLS, DPM, WES, HLND, KGS)
Propane (APU, NRGY, FGP, SPH)
Shipping (TGP, TOO, KSP, CPLP, OSP, NMM)
Upstream (LINE, ATN, EVEP, ENP, LGCY, PSE, VNR)

MLP YTD Performance



Note: Market data as of 6/1/2009.

Debt Summary

($ in millions)

Facility Size	$ 400
Borrowing Base	$ 154
Amount Outstanding	$ 134
Borrowing Availability	$ 20
Maturity Date	March 2011
Interest Rate Pricing Grid (a):	
Borrowing Base Utilization of:	
less than 33%	L + 150 bps
greater than 33% and less than 66%	L + 175 bps
greater than 66% and less than 85%	L + 200 bps
greater than 85%	L + 213 bps

Interest Rate Hedges	Amount	Weighted Average Fixed LIBOR Rate
Expiring December 2010 through January 2013	$100	2.50%

Debt Covenants		As of 3/31/09
Adjusted EBITDA / Interest Expense	2.5x Min	8.7x
Total Debt / Adjusted EBITDA	4.0x Max	2.7x
Current Assets / Current Liabilities	1.0x Min	9.4x
Percentage Drawn on Facility	90% threshold	76%

2009 Calendar Year Guidance [1]

Total Production (Mmcfe)	6,442 - 6,785
Average Daily Production – Mcfe/d	17,650 - 18,590
Lease Operating Expenses (000’s)	$10,500 - $11,000
G&A (000’s)	$ 3,100 - $ 3,600
Non-cash G&A [2]	$ 2,580 - $ 2,580
Cash Interest Expense (000’s)	$ 4,300 - $ 4,300
Capital Expenditures (000’s)	$ 6,000 - $ 6,500
Adjusted EBITDA (000’s)	$49,975 - $51,575
Distributable Cash Flow (000’s)	$38,175 - $39,275

[1] Based on an average natural gas Henry Hub price of $5.14 per MMBtu and WTI Sweet oil price of $46.80 per barrel for 2009.

[2] Amounts represent non-cash expense recognition of Class B unit grants over vesting period. Amount does not include any compensation under the Company’s long-term incentive plan which includes grants of phantom units to management on an annual basis. Any compensation from these grants is tied to appreciation in the VNR unit price. Vanguard is not providing guidance on the unit price for 2009.

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