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# CRB-EQ

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## **Thomson Reuters/Jefferies CRB Wildcatters Energy E&P Equity Index (WCATI)**

**December 2011**

## Index Description

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- ❑ **Oil & Gas Exploration and Production**
- ❑ **United States and Canada**
- ❑ **Small Cap, Mid-Cap Stocks**
- ❑ **Modified Capitalization-Weighted**
- ❑ **Screened for Liquidity**

**Designed to provide exposure to an underrepresented segment of the US energy sector.**

## Index Characteristics

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- ❑ **Stocks Underrepresented In**
  - Major Stock Market Indexes
  - Major Energy Sector Indexes
  
- ❑ **High Betas Compared To**
  - Major Stock Market Indexes
  - Energy Sector Indexes
  
- ❑ **Low Correlations To**
  - Major Stock Market Indexes
  
- ❑ **High Correlations To**
  - Energy Sector Indexes
  - Energy Commodity Indexes (Futures Based)

**Unique financial characteristics make WCATI an effective way to measure the underlying fundamentals of the US energy sector.**

## Index Features and Benefits

Feature	Benefit
WCATI stocks uncovered by major stock market and sector indexes.	Provides exposure to corner of the market to which most investors are unexposed – minimal duplication of holdings.
WCATI stocks mainly engaged in domestic natural gas exploration and production.	Domestic natural gas will play a crucial role in reducing carbon emissions – CO <sup>2</sup> emissions from natural gas are ~45% less than those of coal.
WCATI stocks small enough to benefit from possible changes in drilling restrictions.	Opening up of national reserves expands opportunity set for WCATI companies. Smaller discoveries result in bigger financial impact – undiluted by existing reserves and operations.
WCATI stocks to benefit from expansion of natural gas infrastructure.	Expanding natural gas infrastructure helps to bring shut-in production on line.
WCATI embodies unique statistical characteristics.	Provides a high volatility mechanism for measuring the performance of a key segment of the US energy sector.

**WCATI natural gas bias gives it a stake in the future of American energy independence.**

## Index Rationale

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### ❑ Focus on Natural Gas

- U.S. Natural Gas Consumption Expected to Rise over the Next Decade
- Natural Gas Emits ~45% Less CO<sup>2</sup> than Coal
- Domestic rather than Foreign Sources
- Abundant Unproved Domestic Reserves

### ❑ Broad Range of Opportunities

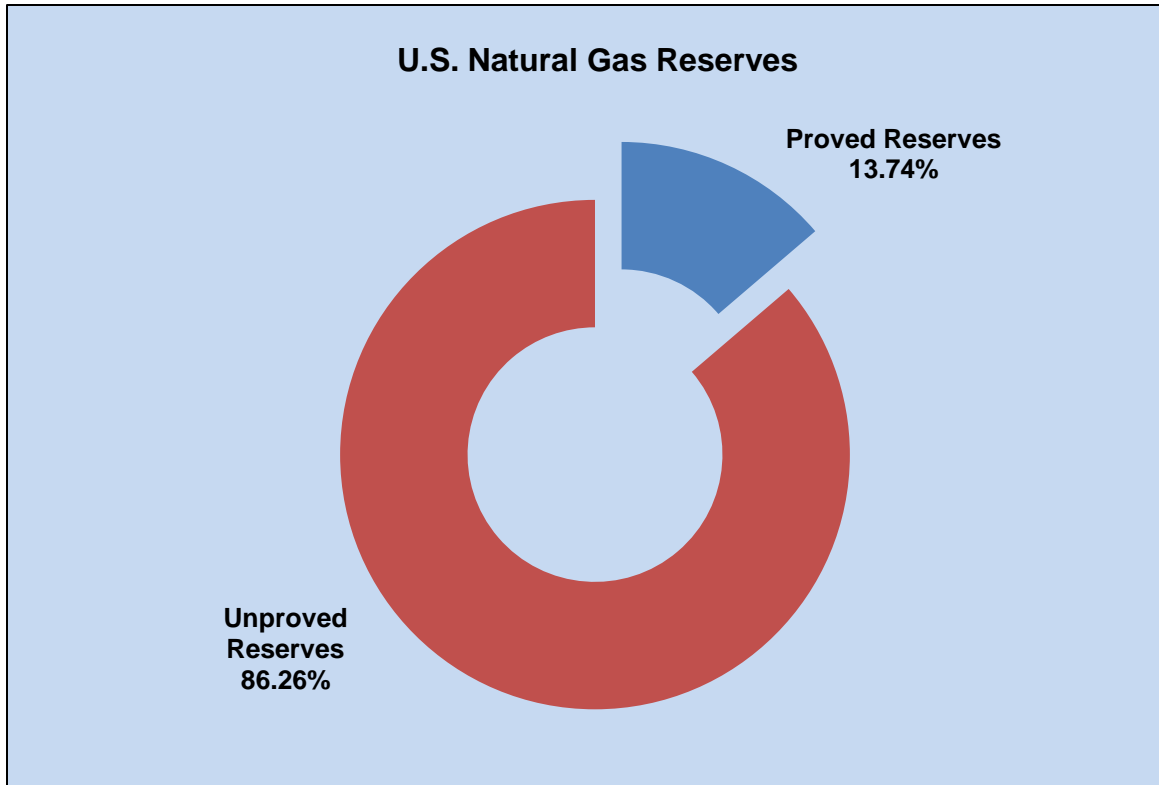
- New Exploration Opportunities – Major Plays Throughout North America
- New and Improving Technologies
  - Shale
  - Coalbed Methane

### ❑ Small Cap Companies Well-Positioned

- New Discoveries Result in Greater Financial Impact
- Financial Resources Widely Available
  - Partnerships
  - Hedged Reserves (Bank Financing)
  - Co-Ventures with Majors

**Wildcatters are well-positioned to capitalize on growing US natural gas consumption with new drilling opportunities and new technologies expanding market potential.**

## US Natural Gas Reserves



**Proved Reserves = 211.09 TCF**  
**Unproved Reserves = 1536.38 TCF**

Source: Energy Information Administration – Annual Energy Outlook 2009

**With unproved reserves more than seven times greater than proved reserves, new drilling opportunities are abundant throughout North America.**

## Index Methodology Overview

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- ❑ A total universe of ~300 E&P stocks domiciled in the United States and Canada
- ❑ Stocks with market caps >\$200 million and <\$2.0 billion eligible
- ❑ Stocks with float market caps >\$150 million and <\$2.0 billion eligible
- ❑ Stock must be listed on regulated exchange (no pink sheets)
- ❑ Stocks representing 95% of index weight must have ADTV >\$1 million per day
- ❑ Float market cap weighted
- ❑ Weightings capped and adjusted for RIC concentration (25/5/45)
- ❑ 25% buffers applied to size constraints at quarterly rebalancing

**Rules-based, transparent methodology provides effective diversification and liquidity.**

## Top Ten Constituents & Capitalization Profile

Top 10 Constituents		
Ticker	Company Name	Weight
PBN CN	Petrobakken Energy Ltd	5.19%
ROSE US	Rosetta Resources Inc	4.95%
EXXI US	Energy Xxi Bermuda	4.94%
CLT CN	Celtic Exploration Ltd	4.29%
BBG US	Bill Barrett Corp	3.49%
FST US	Forest Oil Corp	3.21%
LEG CN	Legacy Oil + Gas Inc	3.17%
NOG US	Northern Oil And Gas Inc	3.10%
GPOR US	Gulfport Energy Corp	3.04%
CR CN	Crew Energy Inc	2.81%

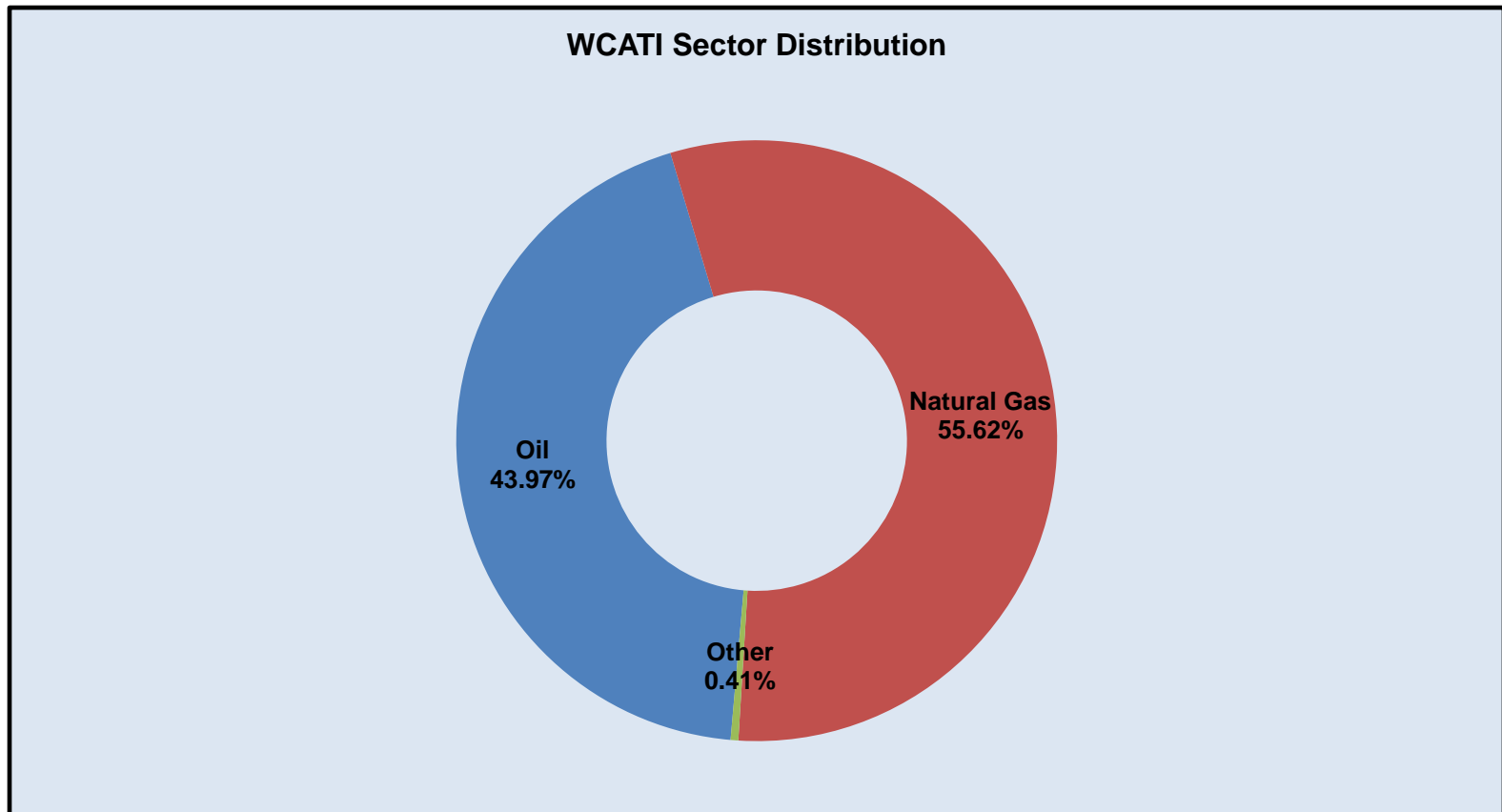
Market Capitalization Profile	
Number of Constituents	64
Total Market Capitalization	52.72 Billion USD
Largest Market Capitalization	2.44 Billion USD
Smallest Market Capitalization	125.93 Million USD
Average Market Capitalization	0.82 Billion USD
Median Market Capitalization	0.60 Billion USD

Source: S-Network, as of 12/30/2011

**WCATI is dominated by large small-cap and mid-cap companies.**

## Index Reserves

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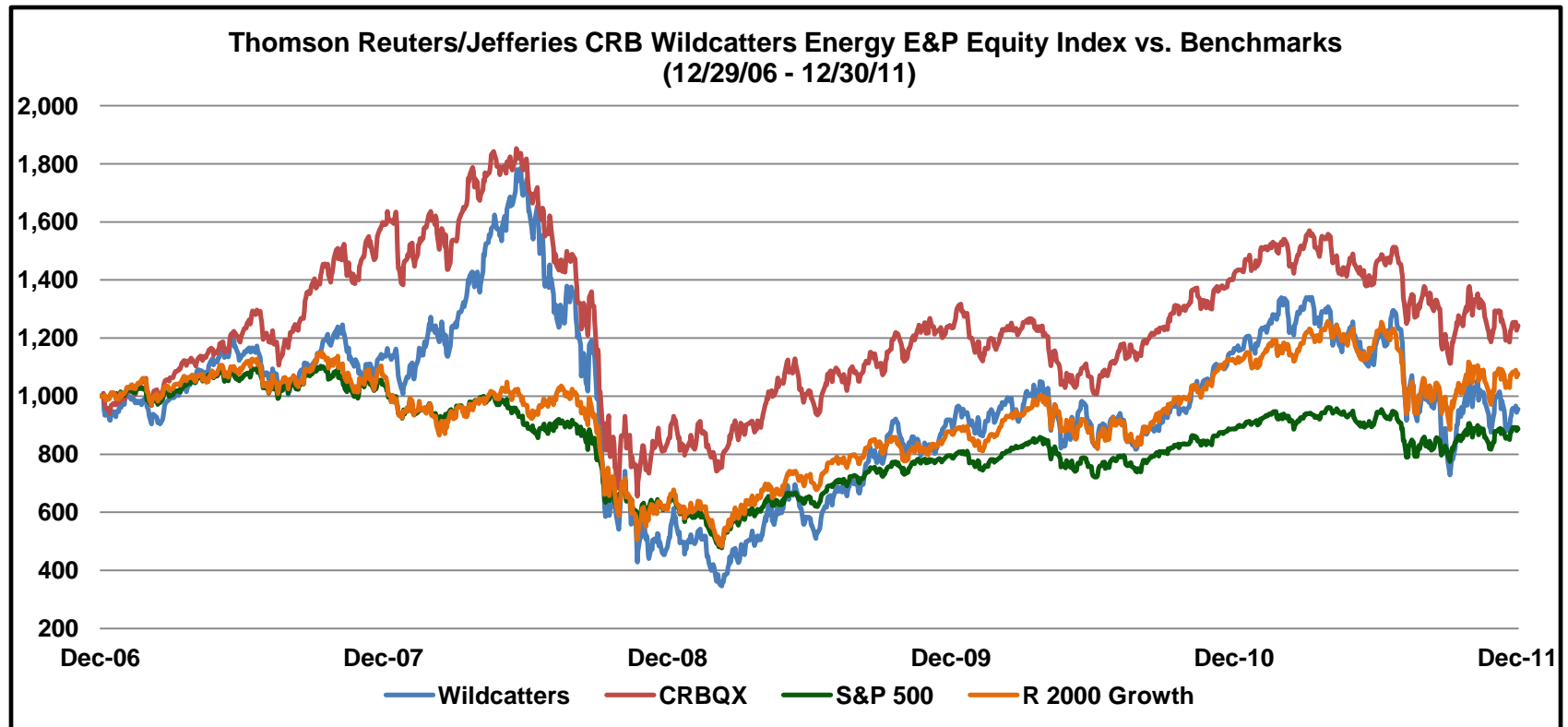


Source: S-Network, as of 12/30/2011

**Approximately 56% of the WCATI proved reserves are natural gas.**

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## Historical Index Performance I

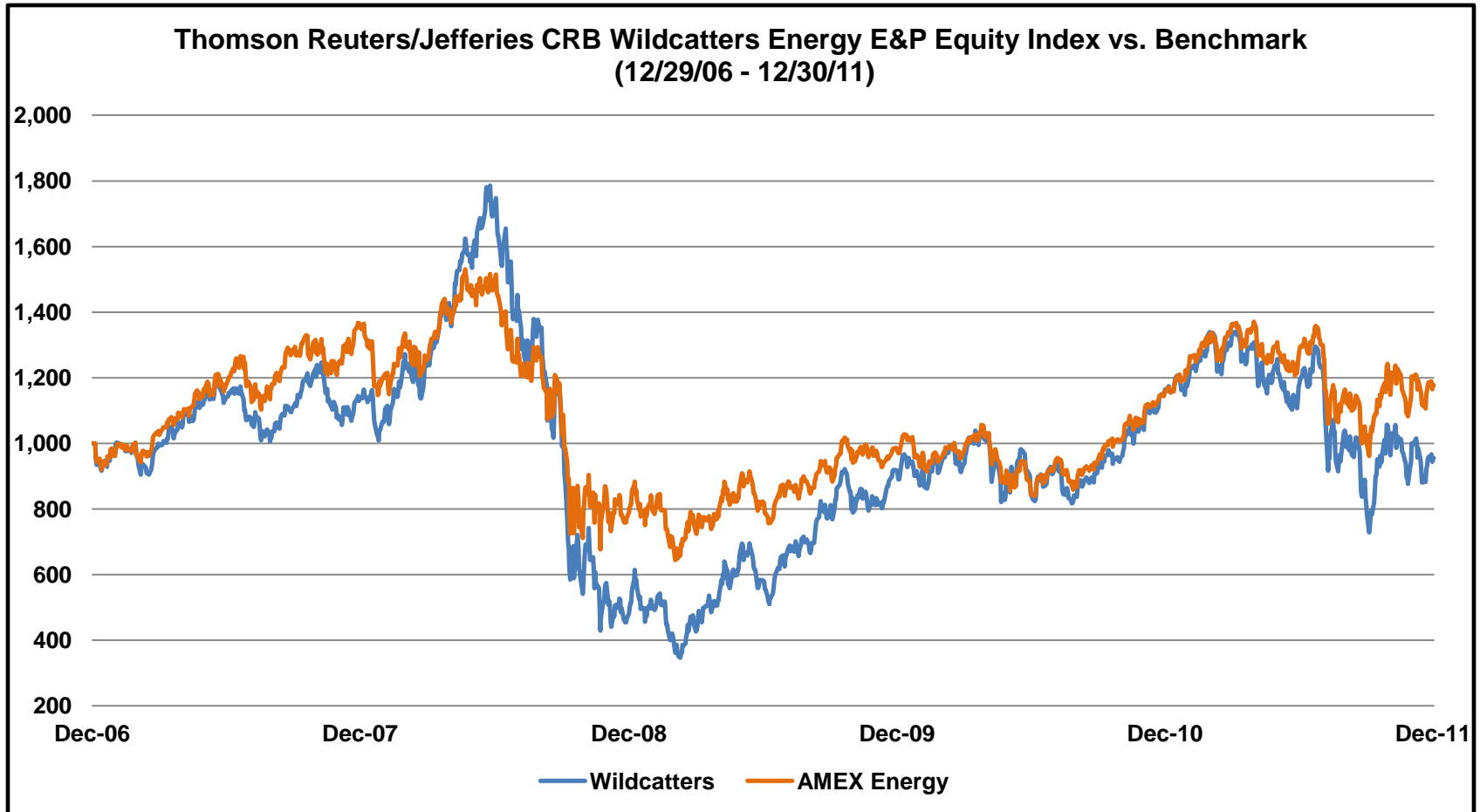


All data for the Thomson Reuters/Jefferies CRB Wildcatters Energy E&P Equity Index before its official launch date are simulated. See disclaimer language on slides 18 & 19 for more information on these hypothetical results.

Source: S-Network as of 12/30/2011

**WCATI has demonstrated unique performance characteristics, outpacing the S&P 500 through the recent run-up in energy prices.**

## Historical Index Performance II



All data for the Thomson Reuters/Jefferies CRB Wildcatters Energy E&P Equity Index before its official launch date are simulated. See disclaimer language on slides 18 & 19 for more information on these hypothetical results.

Source: S-Network as of 12/30/2011

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## Statistical Profile

## Statistical Profile I

Simple Price Appreciation						
	WCATI	CRBQX	S&P 500	Russell 2000	Spot NatGas	AMEX Energy
<b>5 Year</b>	-4.44%	24.31%	-11.33%	7.46%	-45.82%	17.70%
<b>3 Year</b>	85.90%	45.15%	39.23%	65.34%	-47.07%	44.67%
<b>1 Year</b>	-17.67%	-13.06%	0.00%	-3.51%	-29.55%	1.43%

Compound Annual Growth Rate						
	WCATI	CRBQX	S&P 500	Russell 2000	Spot NatGas	AMEX Energy
<b>5 Year</b>	-0.91%	4.45%	-2.38%	1.45%	-11.54%	3.31%
<b>3 Year</b>	22.96%	13.22%	11.66%	18.25%	-19.11%	13.10%
<b>1 Year</b>	-17.67%	-13.06%	0.00%	-3.51%	-29.55%	1.43%

Annualized Monthly Standard Deviation						
	WCATI	CRBQX	S&P 500	Russell 2000	Spot NatGas	AMEX Energy
<b>5 Year</b>	41.95%	27.80%	18.91%	24.63%	50.89%	26.12%
<b>3 Year</b>	40.68%	24.33%	19.00%	24.64%	51.27%	25.06%
<b>1 Year</b>	45.62%	25.61%	15.97%	24.35%	26.21%	29.84%

Sharpe Ratio						
	WCATI	CRBQX	S&P 500	Russell 2000	Spot NatGas	AMEX Energy
<b>5 Year</b>	-0.02	0.16	-0.13	0.05	-0.23	0.12
<b>3 Year</b>	0.56	0.54	0.61	0.74	-0.38	0.52
<b>1 Year</b>	-0.39	-0.51	-0.01	-0.15	-1.13	0.04

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Source: S-Network, as of 12/30/2011

## Statistical Profile II

Monthly Correlation (5 Year / Daily)						
	WCATI	CRBQX	S&P 500	R 2000 Growth	Spot NatGas	AMEX Energy
WCATI	1.0000					
CRBQX	0.8662	1.0000				
S&P 500	0.7802	0.7639	1.0000			
R 2000 Growth	0.7842	0.7180	0.9313	1.0000		
Spot NatGas	0.1231	0.1122	0.0368	0.0257	1.0000	
AMEX Energy	0.9010	0.8631	0.8662	0.7984	0.0739	1.0000

Monthly Beta Matrix (5 Year / Daily)						
	WCATI	CRBQX	S&P 500	R 2000 Growth	Spot NatGas	AMEX Energy
WCATI	1.0000					
CRBQX	1.2458	1.0000				
S&P 500	1.3587	0.9251	1.0000			
R 2000 Growth	1.1228	0.7148	0.7657	1.0000		
Spot NatGas	0.0890	0.0564	0.0153	0.0130	1.0000	
AMEX Energy	1.1056	0.7364	0.6103	0.6843	0.1254	1.0000

Monthly R-Square (5 Year / Daily)						
	WCATI	CRBQX	S&P 500	R 2000 Growth	Spot NatGas	AMEX Energy
WCATI	1.0000					
CRBQX	0.7503	1.0000				
S&P 500	0.6086	0.5836	1.0000			
R 2000 Growth	0.6150	0.5156	0.8674	1.0000		
Spot NatGas	0.0152	0.0126	0.0014	0.0007	1.0000	
AMEX Energy	0.8118	0.7450	0.7503	0.6375	0.0055	1.0000

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Source: S-Network as of 12/30/2011

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# Competitive Analysis

## Competitive Analysis II

Index Name	Index Ticker	ETF Ticker	Monthly Correlation*	Monthly Beta*
S&P 500	SPX	SPY	0.7990	1.7107
Russell 2000	RTY	--	0.8096	1.3011
West Texas Intermediate Cushing Crude Oil Spot Price	USCRWTIC	--	0.6153	0.8449
Henry Hub Natural Gas Spot Price	NGUSHHUB	--	(0.0324)	(0.0256)
Dow Jones J U.S. Select Oil E&P Index	DJSOEP	IEO	0.0277	0.0382
S&P Oil & Gas E&P Select Industry Index	SPSIOP	XOP	0.9681	1.2375
ISE-REVERE Natural Gas Index	FUM	FCG	0.9750	1.1932
Dynamic Energy E&P Intellidex	DWE	PXE	0.9552	1.3312
Dow Jones US Oil & Gas Index	DJUSEN	IYE	0.9067	1.5600
SGES Global 1200 Energy Index	SGES	IXC	0.8908	1.5210
AMEX Energy Select Sector Index	IXE	XLE	0.9223	1.4972
Dynamic Energy Sector Intellidex	EZK	PXI	0.9575	1.3494

\*06/29/2007 – 3/31/2011

Source: S-Network as of 12/30/2011

## Competitive Analysis vs. Exploration & Production Indices

Simple Price Appreciation						
	WCATI	DJ US Select Oil E&P Production Index	S&P Oil and Gas E&P Select Industry Index	ISE-REVERE NatGas Index	Dynamic Energy E&P Intellidex	Henry Hub Nat. Gas. Spot
<b>3 Year</b>	-25.39%	60.06%	78.60%	53.96%	60.13%	-47.06%
<b>2 Year</b>	-3.49%	14.37%	28.68%	4.32%	35.32%	-48.80%
<b>1 Year</b>	-16.12%	-3.60%	0.51%	-7.16%	-2.29%	-29.41%

Compound Annual Growth Rate						
	WCATI	DJ US Select Oil E&P Production Index	S&P Oil and Gas E&P Select Industry Index	ISE-REVERE NatGas Index	Dynamic Energy E&P Intellidex	Henry Hub Nat. Gas. Spot
<b>3 Year</b>	-9.30%	16.98%	21.33%	15.47%	16.99%	-19.10%
<b>2 Year</b>	-1.76%	6.94%	13.44%	2.14%	16.33%	-28.44%
<b>1 Year</b>	-16.12%	-3.60%	0.51%	-7.16%	-2.29%	-29.41%

Annualized Standard Deviation						
	WCATI	DJ US Select Oil E&P Production Index	S&P Oil and Gas E&P Select Industry Index	ISE-REVERE NatGas Index	Dynamic Energy E&P Intellidex	Henry Hub Nat. Gas. Spot
<b>3 Year</b>	44.36%	31.52%	31.82%	33.24%	29.19%	50.61%
<b>2 Year</b>	33.33%	30.45%	31.52%	29.41%	28.49%	41.90%
<b>1 Year</b>	37.58%	37.40%	39.56%	34.91%	34.72%	24.79%

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Source: S-Network, as of 12/30/2011

## Competitive Analysis vs. Energy Indices

Simple Price Appreciation						
	WCATI	DJ U.S. Oil & Gas Index	Global 1200 Energy Index	AMEX Energy Select Index	Dynamic Energy Sector Intellidex	Henry Hub Nat. Gas. Spot
<b>3 Year</b>	85.90%	38.21%	30.40%	44.67%	93.49%	-40.92%
<b>2 Year</b>	7.37%	20.19%	7.01%	21.35%	40.25%	-24.87%
<b>1 Year</b>	-17.67%	2.32%	-1.56%	1.43%	1.87%	-27.44%

Compound Annual Growth Rate						
	WCATI	DJ U.S. Oil & Gas Index	Global 1200 Energy Index	AMEX Energy Select Index	Dynamic Energy Sector Intellidex	Henry Hub Nat. Gas. Spot
<b>3 Year</b>	22.96%	11.39%	9.25%	13.10%	24.61%	-16.09%
<b>2 Year</b>	3.62%	9.63%	3.44%	10.16%	18.43%	-13.32%
<b>1 Year</b>	-17.67%	2.32%	-1.56%	1.43%	1.87%	-27.44%

Annualized Standard Deviation						
	WCATI	DJ U.S. Oil & Gas Index	Global 1200 Energy Index	AMEX Energy Select Index	Dynamic Energy Sector Intellidex	Henry Hub Nat. Gas. Spot
<b>3 Year</b>	40.68%	23.64%	23.82%	25.06%	28.87%	56.30%
<b>2 Year</b>	36.89%	24.84%	24.63%	26.08%	28.17%	59.72%
<b>1 Year</b>	45.25%	27.92%	26.92%	29.77%	33.86%	53.73%

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Source: S-Network, as of 12/30/2011

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