

Big Bucks for Big Oil

Summary and Recommendation

Possibly the best refining profit outlook in thirty years seems strong enough to support higher stock price for the largest energy companies including buy-recommended **Chevron (CVX)**, **ConocoPhillips (COP)** and **Royal Dutch Shell plc (RDS-A, RDS-B)** among others. Refining margins settling down from unusual levels after Hurricane Katrina are likely to continue in the uptrend that has been more firmly defined since early 2005. The current quote for one-year futures of more than \$12 a barrel compares to actual experience of less than \$8 a barrel for the four most recently reported quarters. Cheap on historical earnings and cash flow, the stocks are even cheaper on indicated future earnings and cash flow. Continued economic growth supports the refining outlook while unforeseen high interest rates that cause an economic downturn could change the picture.

Perhaps the Best Refining Outlook in Thirty Years

The high energy growth 1960s was good for refiners as we recall. By the beginning of 1973, investors looked for a shortage of refinery capacity. The shortage was solved with the recession of 1974. When economic growth resumed after 1974 refiners invested in anticipation of an increasing ratio of hard-to-refine heavy oil to easy-to-refine light oil. Those anticipations were temporarily early as more light oil became available in the economic downturn of the early 1980s. Refining seemed to be a drag on performance that contributed to the mega deal takeovers from 1981 to 1985. In the next twenty years the integrated companies earned a reasonable return through consolidation and more efficient allocation of capital. Stable to low crude oil costs helped refining, but despite high operating rates, the refiners could not hold a return that would justify more aggressive expansion. The trend appears to have changed in 2005.

The refiner's margin is a thin difference between two larger prices, the average price for refined products and the price of crude oil. Called the crack spread, the difference can be measured in current prices or "forecast" by futures prices. We track the popular "3-2-1" version which presumes that three parts of crude oil are transformed into two parts of gasoline and one part of heating oil.

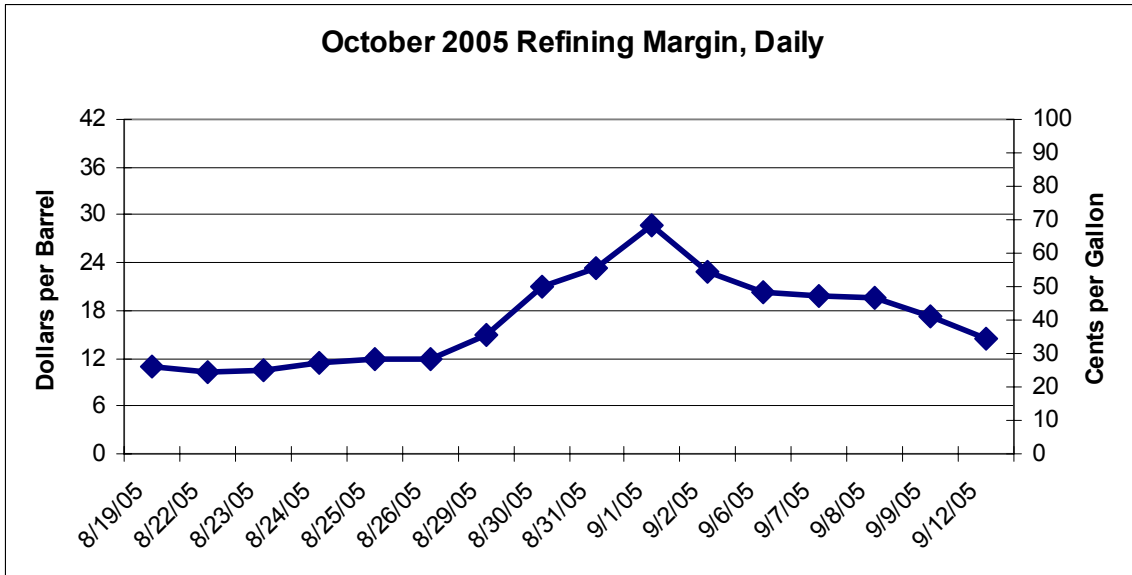
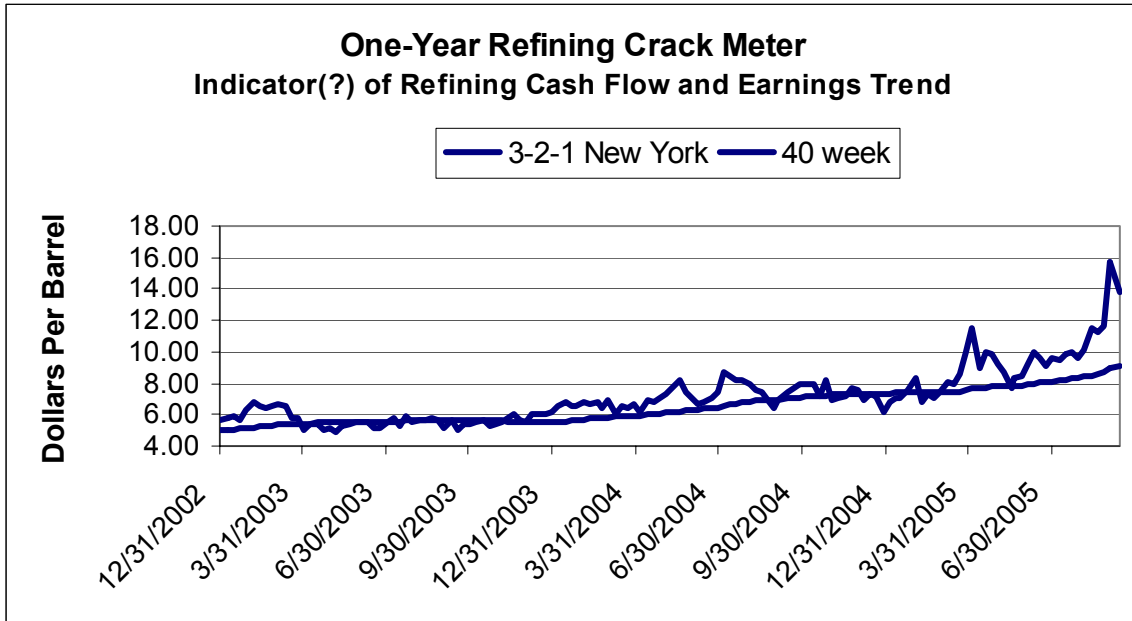
The trend in the crack spread moved definitively above the 40-week average for the first time in 2005 (see chart [One-Year Refining Crack Meter](#)). The daily record for the near-month, October 2005, illustrates more clearly the impact of Katrina (see chart [October 2005 Refining Margin, Daily](#)).

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A Weekly Analysis of Energy Stocks Using the McDep Ratio

September 13, 2005



Source: McDep Associates, Bloomberg, New York Mercantile Exchange

Most of the immediate price impetus of the hurricane has already subsided. Yet, the \$12 crack in the weeks before Katrina is still 50% higher than the actual experience for the trailing four quarters. Presumably a continuing favorable trend would have the crack in the \$10 to \$12 area for the next year. Waiting for history to unfold we have not made any changes yet in estimates of downstream earnings for mega cap companies. The surprises may be on the upside despite the costs for lost capacity for each major refiner. Though the refining margin can surprise in the other direction as well, our buy-recommendations are financially strong companies.

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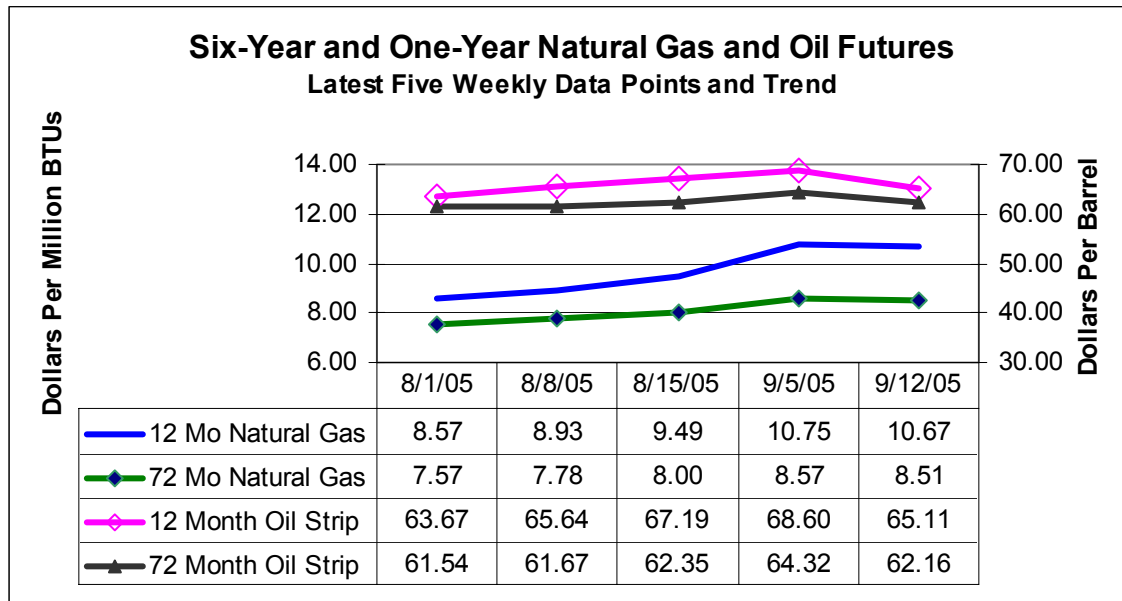
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Oil from Strategic Storage Cools Crude Oil Price

A pricing crisis in crude oil has been averted as is evident in a smooth weekly trend (see table Six-Year and One-Year Natural Gas and Oil Futures). Tapping strategic storage makes up for temporary losses of Gulf of Mexico production. Demand for crude oil is also temporarily low with some ten percent of U.S. refining capacity down for a few months. The long-term trend continues up as defined by current price quotes above the 40-week average.



Ultimately heating oil offers a price limit for natural gas though it is not as clean. We approximate that as natural gas price equal to crude oil price divided by 5. With no government strategic storage for natural gas and continued outages offshore eastern Louisiana, natural gas has further appreciation potential relative to oil.

Balance Functional Representation in Energy Portfolio

After Rank by McDep Ratio and Rank by EV/Ebitda we present Functional and Geographic Mix. We recommend representation in each of the five groups from Mega Cap to Income. We would skew representation to natural gas and non-U.S. domicile. For most investors that would automatically include representation in the refining, or downstream business. In any case, investors might consider that some of the largest companies may be lagging the stock market gains of the oil producers and natural gas producers. An apparent strengthening in the refining business logically makes the mega caps more interesting.

Kurt H. Wulff, CFA

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Oil and Gas Producers Rank by McDep Ratio: Market Cap and Debt to Present Value

	Symbol/ Rating		Price (\$/sh) 12-Sep 2005	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap								
BP plc	BP	B	69.83	3,545	248,000	82.00	0.10	0.87
Total S.A.	TOT	B	133.16	1,182	157,000	160.00	0.13	0.85
Exxon Mobil Corporation	XOM	B	62.52	6,370	398,000	74.00	0.04	0.85
Royal Dutch Shell plc	RDS-A	B	63.98	3,372	216,000	84.00	0.09	0.78
Chevron Corporation	CVX	B	63.30	2,256	143,000	90.00	0.12	0.74
<i>Total or Median</i>					<i>1,162,000</i>		<i>0.10</i>	<i>0.85</i>
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	95.70	123	11,780	20.00	0.76	1.92
Imperial Oil Limited (30%)	IMO	B	107.53	104	11,140	84.00	0.09	1.26
Marathon Oil Corporation	MRO	B	66.94	367	24,570	65.00	0.27	1.02
Petro-Canada	PCZ	B	82.43	263	21,680	84.00	0.19	0.98
Suncor Energy	SU	B	58.53	461	26,990	68.00	0.10	0.87
Norsk Hydro ASA	NHY	B	109.80	251	27,560	130.00	0.13	0.86
Lukoil Oil Company	LUKOY	B	48.65	830	40,000	65.00	0.02	0.75
ConocoPhillips	COP	B	67.16	1,419	95,300	100.00	0.15	0.72
PetroChina Company Ltd (10%)	PTR	B	80.03	176	14,070	120.00	0.01	0.67
<i>Total or Median</i>					<i>273,000</i>		<i>0.13</i>	<i>0.87</i>
Independent Natural Gas and Oil - Large Cap and Mid Cap								
Encana Corporation	ECA	B	49.46	892	44,100	51.00	0.16	0.97
Burlington Resources	BR	B	74.31	385	28,600	86.00	0.09	0.88
XTO Energy Inc.	XTO	B	39.57	372	14,730	48.00	0.17	0.85
CNOOC Limited (29%)	CEO	B	70.32	119	8,390	84.00	0.01	0.84
Devon Energy Corporation	DVN	B	63.26	471	29,800	86.00	0.15	0.77
Occidental Petroleum Corp.	OXY	B	85.10	406	34,600	120.00	0.11	0.74
Anadarko Petroleum Corp.	APC	B	92.43	238	22,000	140.00	0.11	0.70
<i>Total or Median</i>					<i>455,000</i>		<i>0.12</i>	<i>0.85</i>
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B	63.17	23	1,420	65.00	0.10	0.97
Encore Acquisition Company	EAC	B	34.61	49	1,710	50.00	0.17	0.75
Energy Partners Ltd.	EPL	B	25.76	41	1,040	38.00	0.17	0.73
Cimarex Energy Company	XEC	B	43.15	85	3,670	64.00	0.12	0.71
<i>Total or Median</i>					<i>7,800</i>		<i>0.15</i>	<i>0.74</i>
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	51.67	157	8,110	15.00	0.55	2.09
Kinder Morgan Management, LLC	KMR	S3	48.67	56	2,710	15.00	0.55	2.01
Pengrowth Energy Trust	PGH		23.48	157	3,680	20.00	0.16	1.15
San Juan Basin Royalty Trust	SJT		44.95	47	2,100	40.00	-	1.13
Penn West Energy Trust	PWTFF	B	30.49	174	5,300	28.00	0.15	1.08
Enerplus Resources Fund	ERF		42.15	105	4,420	42.00	0.13	1.00
Canadian Oil Sands Trust (US\$)	COSWF	B	105.08	93	9,760	136.00	0.12	0.80
<i>Total or Median</i>					<i>36,100</i>		<i>0.15</i>	<i>1.13</i>

B = Buy, S2 = Short half unlevered position, S3 = Short quarter unlevered position

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses

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September 13, 2005

Oil and Gas Producers

Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

	Symbol/ Rating		Price (\$/sh) 12-Sep 2005	Adjstd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)
Mega Cap								
Exxon Mobil Corporation	XOM	B	62.52	11.5	6.9	5.9	10	1.9
Total S.A.	TOT	B	133.16	9.2	6.3	5.4	9	2.5
BP plc	BP	B	69.83	9.4	5.8	5.0	8	3.1
Chevron Corporation	CVX	B	63.30	9.3	6.0	4.4	7	2.8
Royal Dutch Shell plc	RDS-A	B	63.98	7.2	5.3	4.1	7	3.6
	<i>Median</i>			9.3	6.0	5.0	8	2.8
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	95.70		8.1	15.6	23	3.1
Imperial Oil Limited (30%)	IMO	B	107.53	10.5	6.3	7.9	13	0.8
Suncor Energy	SU	B	58.53	18.1	8.8	7.7	16	0.3
Petro-Canada	PCZ	B	82.43	5.9	5.0	5.0	9	0.8
Norsk Hydro ASA	NHY	B	109.80	8.2	5.3	4.6	10	2.9
Marathon Oil Corporation	MRO	B	66.94	7.1	4.4	4.5	7	1.7
ConocoPhillips	COP	B	67.16	11.2	5.7	4.1	6	1.8
PetroChina Company Ltd (10%)	PTR	B	80.03	13.9	5.8	3.9	8	4.7
Lukoil Oil Company	LUKOY	B	48.65	19.8	5.1	3.8	7	2.0
	<i>Median</i>			10.9	5.7	4.6	9	1.8
Independent Natural Gas and Oil - Large Cap and Mid Cap								
Encana Corporation	ECA	B	49.46	7.2	5.4	5.2	10	1.2
Burlington Resources	BR	B	74.31	9.9	5.7	5.0	10	0.5
XTO Energy Inc.	XTO	B	39.57	11.3	5.7	4.9	8	0.5
Occidental Petroleum Corp.	OXY	B	85.10	11.3	5.8	4.3	7	1.5
CNOOC Limited (29%)	CEO	B	70.32	9.4	5.1	4.2	7	3.3
Anadarko Petroleum Corp.	APC	B	92.43	12.5	5.9	4.1	8	0.8
Devon Energy Corporation	DVN	B	63.26	7.3	4.1	3.2	6	0.5
	<i>Median</i>			10.4	5.7	4.5	8	1.0
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B	63.17	11.0	5.4	5.3	14	0.8
Encore Acquisition Company	EAC	B	34.61	14.7	6.8	5.1	11	-
Cimarex Energy Company	XEC	B	43.15	7.5	4.4	3.1	7	-
Energy Partners Ltd.	EPL	B	25.76	5.1	3.4	2.5	6	-
	<i>Median</i>			9.2	4.9	4.1	9	-
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	51.67		8.2	17.2	28	6.0
Kinder Morgan Management, LLC	KMR	S3	48.67		8.2	16.5	26	6.4
San Juan Basin Royalty Trust	SJT		44.95	11.9	8.0	9.0	10	10.3
Canadian Oil Sands Trust (USS)	COSWF	B	105.08	20.0	9.8	7.9	9	1.6
Pengrowth Energy Trust	PGH		23.48	7.6	5.5	6.3	9	9.9
Enerplus Resources Fund	ERF		42.15	9.8	5.7	5.7	8	8.6
Penn West Energy Trust	PWTFF	B	30.49	8.0	4.5	4.9	7	8.6
	<i>Median</i>			9.8	8.0	7.9	9	8.6

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2006; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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Oil and Gas Producers Functional and Geographic Mix

	Symbol/ Rating	Non- U.S. Domicile	North Amer. Natural Gas (%)	Rest of World Natural Gas (%)	Oil Prod'n (%)	Down- stream (%)	Total Present Value (US\$m)
Mega Cap							
BP plc	BP	B UK	10	12	45	32	324,000
Chevron Corporation	CVX	B	9	9	54	28	230,000
Royal Dutch Shell plc	RDS-A	B UK	4	22	29	45	313,000
Total S.A.	TOT	B France	-	27	38	35	216,000
Exxon Mobil Corporation	XOM	B	10	19	39	32	493,000
		<i>Total or Median</i>	9	19	39	32	1,576,000
Producer/Refiners - Large Cap and Mid Cap							
ConocoPhillips	COP	B	13	7	45	35	166,900
Imperial Oil Limited (30%)	IMO	B Canada	13	-	62	25	31,900
Lukoil Oil Company	LUKOY	B Russia	-	-	62	38	54,900
Marathon Oil Corporation	MRO	B	14	8	33	46	32,900
Norsk Hydro ASA	NHY	B Norway	-	27	39	35	37,400
Petro-Canada	PCZ	B Canada	23	4	53	20	27,200
PetroChina Company Ltd (10%)	PTR	B China	-	9	71	20	213,000
Suncor Energy	SU	B Canada	5	-	89	7	34,900
		<i>Median</i>	9	5	58	30	599,100
Independent Natural Gas and Oil - Large Cap and Mid Cap							
Anadarko Petroleum Corp.	APC	B	60	-	40	-	37,500
Burlington Resources	BR	B	69	5	26	-	36,300
CNOOC Limited (29%)	CEO	B China	-	12	88	-	34,800
Devon Energy Corporation	DVN	B	62	-	38	-	47,500
Encana Corporation	ECA	B Canada	84	-	16	-	54,500
Occidental Petroleum Corp.	OXY	B	15	1	73	11	54,900
XTO Energy Inc.	XTO	B	82	-	18	-	21,600
		<i>Median</i>	62	-	38	-	287,100
Independent Natural Gas and Oil - Small Cap							
Berry Petroleum Company	BRY	B	16	-	84	-	1,920
Encore Acquisition Company	EAC	B	27	-	73	-	2,990
Energy Partners Ltd.	EPL	B	56	-	44	-	1,860
Cimarex Energy Company	XEC	B	70	-	30	-	6,140
		<i>Median</i>	42	-	58	-	12,910
Income							
Canadian Oil Sands Trust (US\$)	COSWF	B Canada	-	-	100	-	14,300
Enerplus Resources Fund	ERF	Canada	61	-	39	-	5,070
Pengrowth Energy Trust	PGH	Canada	43	-	57	-	3,710
Penn West Energy Trust	PWTFF	B Canada	43	-	57	-	5,800
San Juan Basin Royalty Trust	SJT		100	-	-	-	1,860
		<i>Median</i>	43	-	57	-	30,740

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September 13, 2005

Index of Recent Research

Stock Ideas

<u>Date</u>	<u>Symbol</u>	<u>Stock</u>	<u>Theme</u>
9-Sep	APC	Anadarko Petroleum Corporation	Natural Gas Jumps
7-Sep	EPL	Energy Partners, Ltd.	Katrina Survivor
6-Sep	COP	ConocoPhillips	Refining and Natural Gas Event
30-Aug	CEO	CNOOC Ltd	Independent Producer with Income
28-Aug	PTR	PetroChina Company Limited	Income Stock
21-Aug	PTR	PetroChina Company Limited	Understated Natural Gas Resources
18-Aug	SJT	San Juan Basin Royalty Trust	Sharp Stock Price Drop
17-Aug	CVX	Chevron Corporation	Astute Acquisition
16-Aug	* EPL	Energy Partners, Ltd.	Denali 2006
15-Aug	* XEC	Cimarex Energy Company	\$Billion Cash Flow for Small Cap NG Producer
11-Aug	* PWTF	Penn West Energy Trust	Undiscovered by U.S. Investors
11-Aug	* SU	Suncor Energy Inc.	Oil Price and Operating Reliability
11-Aug	* KMx	Kinder Morgan	Canada May Block KM-Terasen Deal
8-Aug	* TOT	Total S.A.	Oil Sands Oui!
3-Aug	* DVN	Devon Energy Corporation	Raise Net Present Value to \$86 a Share
2-Aug	*	26 Stocks - Single Issue Statistics	Raise Net Present Value to \$xx a Share
28-Jul	* EAC	Encore Acquisition Company	HPAI Incline
27-Jul	* NHY	Norsk Hydro ASA	Norsk Natural Gas
27-Jul	* BP	BP p.l.c.	Steady-State Growth
26-Jul	* OXY	Occidental Petroleum Corporation	Back in Libya
22-Jul	* PCZ	Petro-Canada	Approaching Par
22-Jul	* MRO	Marathon Oil Corporation	Raise Net Present Value to \$45 a Share
22-Jul	* IMO	Imperial Oil Limited	Syncrude Boost
22-Jul	* COSWF	Canadian Oil Sands Trust	Distribution Capability Blossoming
20-Jul	* XTO	XTO Energy Inc.	Simpson Sense
14-Jul	* RD	Royal Dutch Petroleum	Frontier Challenge
6-Jul	* COSWF	Canadian Oil Sands Trust	Free (Cash Flow) at Last
29-Jun	* LUKOY	Lukoil Oil Company	Profits and Taxes Rising
1-Jun	* XOM	Exxon Mobil Corporation	Nice Return for Low Risk
31-May	* ECA	EnCana Corporation	Clean Fuel Supplier
31-May	* BR	Burlington Resources, Inc.	Clean Fuel Supplier
5-May	* BRY	Berry Petroleum Company	Oil in the Kitty Litter

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6-Sep		Refining and Natural Gas Event
16-Aug	*	Energy Policy Act of 2005
9-Aug	*	Comparables
2-Aug	*	Raise Present Value for \$50 Oil
25-Jul	*	Strong Trends
19-Jul	*	An Incentive, Not a Tax

* Archived on www.mcdep.com

Also see

U.S. Natural Gas Royalty Trusts - A Weekly Analysis, and Single-Trust Analyses

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