

## Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 3, 2003

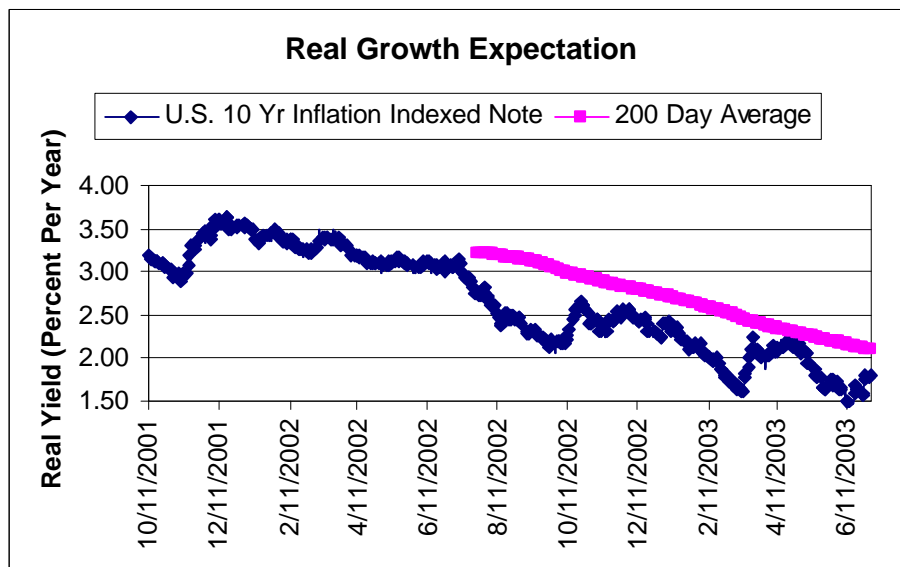
# TIPS Auction Ahead

## Summary and Recommendation

Investors who want to have part of their portfolio safe under almost any circumstances may wish to participate in the first auction of 2003 for U.S. Treasury Inflation Protection Securities on the tentative calendar for July 9. A new issue of Ten-Year TIPS would be priced on a real yield that continues to be in a downtrend implying capital appreciation potential and low expectations for real growth in the economy. The nominal yield on the conventional Ten-Year Note also continues in a downtrend. The difference between the real yield and the nominal yield measures inflation expectations that have leveled out on a flat trend. We expect inflation to be higher in the next decade as it usually has been during a period of free money when short-term interest rates are below the rate of inflation as they are now. In that event TIPS would provide valuable protection. We also expect the upward trend in six-year natural gas and oil futures to continue. A portfolio heavily represented in TIPS and low McDep Ratio, low ratio of debt energy stocks should be able to make money and to weather storm threats.

## Real Yield on TIPS Trends Downward

The “on-the-run” issue of Ten-Year TIPS first auctioned a year ago has a coupon of 3%. In a measure of how much real yield has declined the past year, the new issue is likely to have a coupon under 2%, perhaps as low as 1.5% per year. A well defined downtrend is still underway as the latest quote of 1.8% remains below the 200 day average of 2.1% (see Chart).



Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.

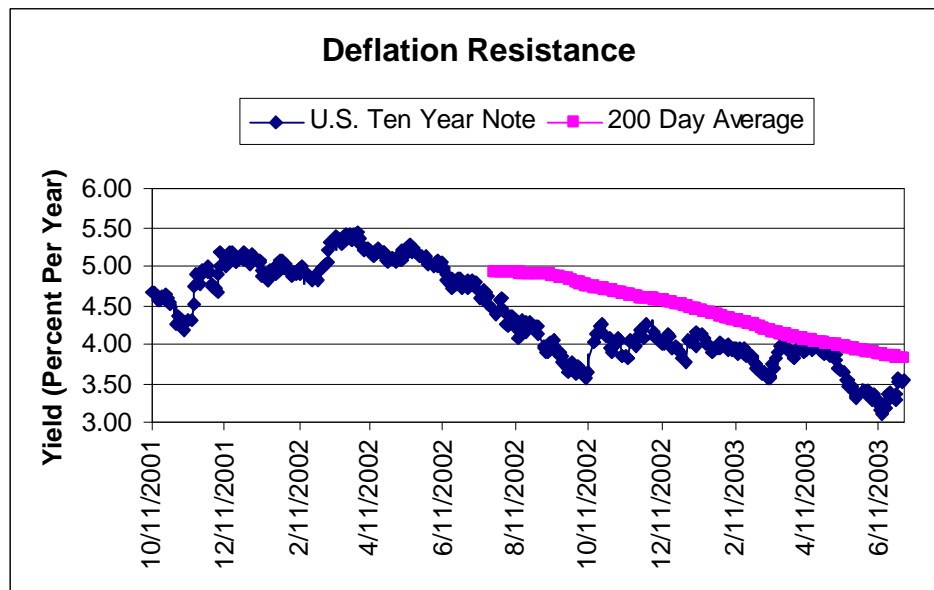
## Meter Reader

*A Weekly Analysis of Energy Stocks Using the McDep Ratio*

July 3, 2003

### Nominal Yield Also Trends Downward

Despite prominent warnings of a bond bubble, the yield on the conventional Ten-Year Note also remains below its 200 day average (see Chart). On the basis of historical experience leading up to 1946, there could be further yield decline to 1%. Bond holders might have thought they were making money then as the price of the bond continued to increase. That was an illusion for buy and hold bond investors as actual ten-year inflation exceeded the nominal yield long before it declined to 1%. Applying that experience to today, the Ten-Year Note might still make money for traders for awhile, but buy and hold investors are likely to be disappointed by maturity.



### Inflation Expectation Flattens

The difference between real yield and nominal yield implies inflation expectation. After surging earlier in 2003, inflation expectation has flattened (see Chart). The current measure at about 1.7% per year is well below the historical norm for the last century near 3%. It is further below the 10%, 4% and 8% inflation of the previous free money periods of 1914-1918, 1933-1951 and 1970-1980. Investors who buy and hold TIPS would be protected from inflation. Those investors would also be largely protected in the event of deflation because the principal would still be repaid at par.

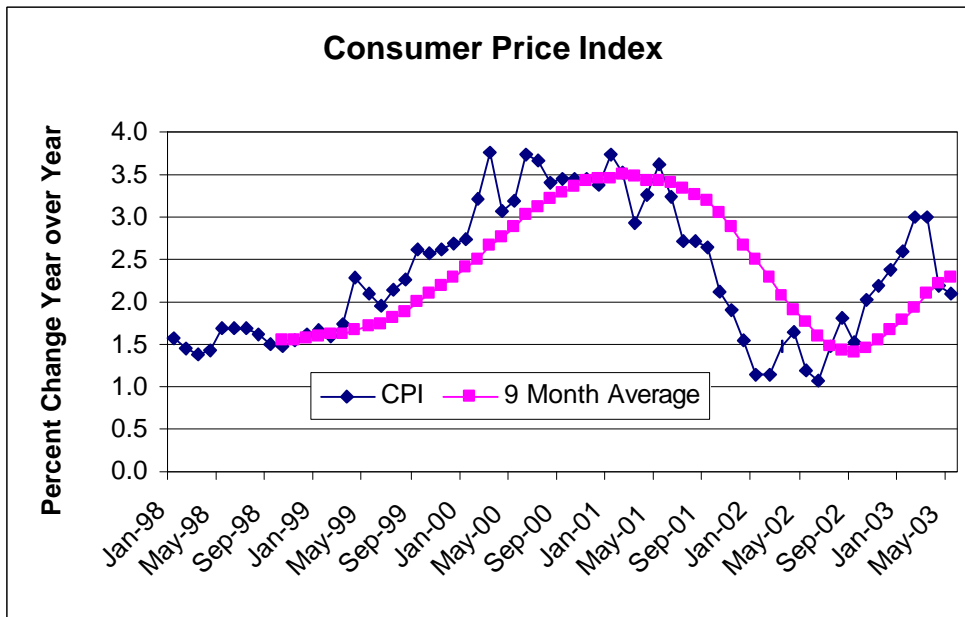
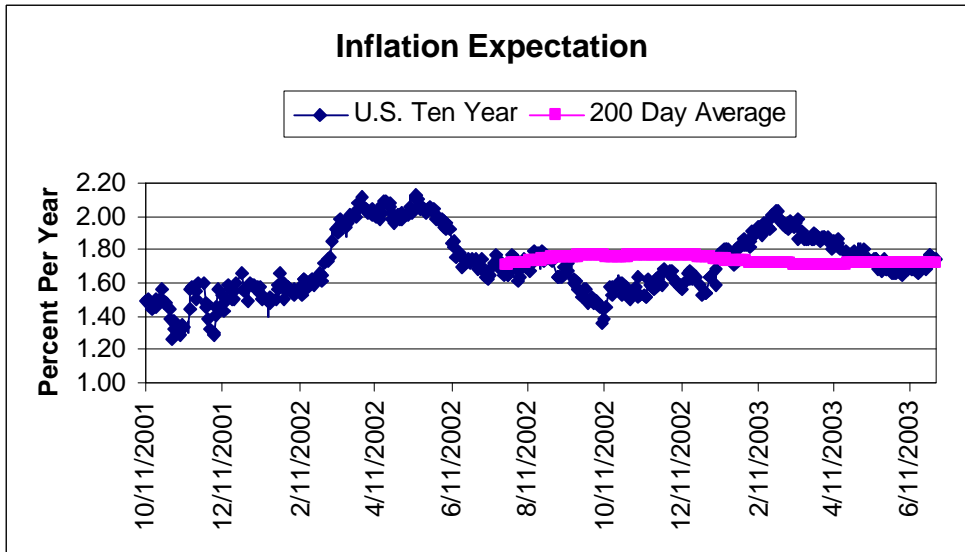
One-year inflation as measured by the Consumer Price Index is more volatile than ten-year inflation expectation. The CPI trend has also flattened for now (see Chart).

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.

# Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 3, 2003



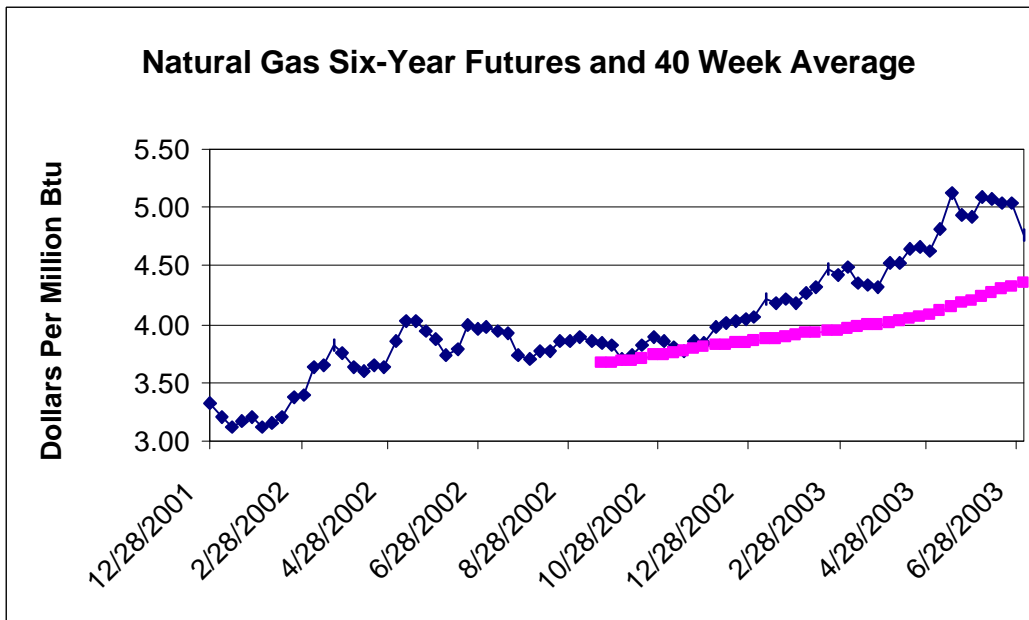
Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.

## Meter Reader

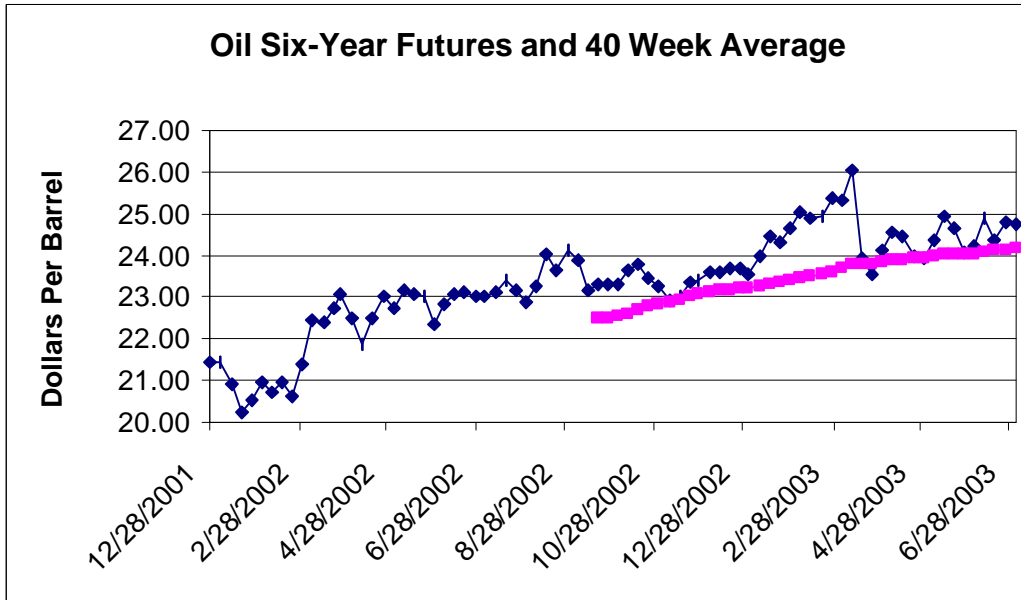
A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 3, 2003

### Six-Year Natural Gas in Uptrend



### Six-Year Oil in Uptrend



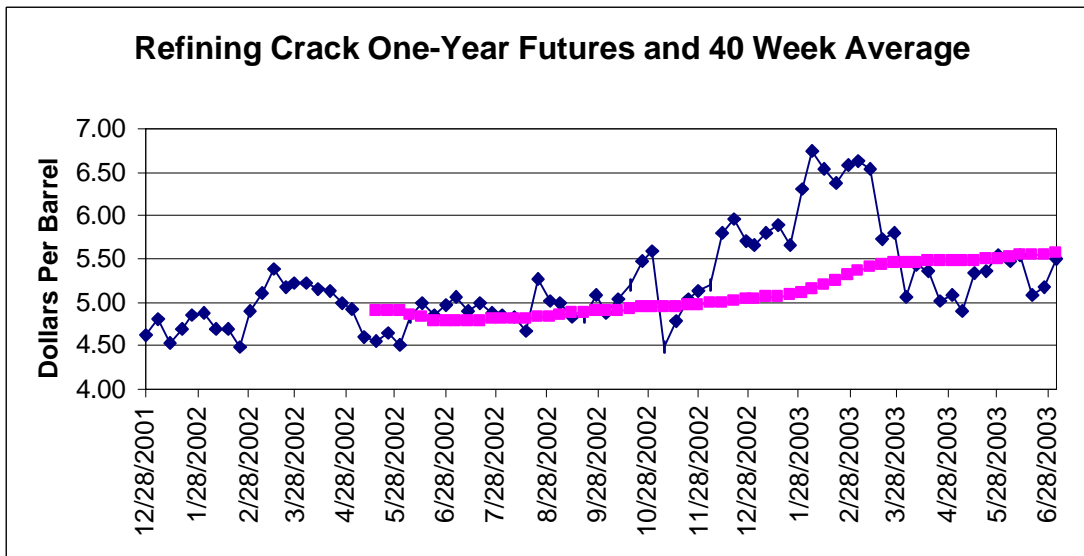
Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.

## Meter Reader

*A Weekly Analysis of Energy Stocks Using the McDep Ratio*

July 3, 2003

### One-Year Refining Margin in Flat Trend



Kurt H. Wulff, CFA

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.

# Meter Reader

## A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 3, 2003

**Table 1-1**  
**Energy Producers**  
**Rank by McDep Ratio: Market Cap and Debt to Present Value**

	Symbol/ Rating	Price (\$/sh) 2-Jul 2003	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
<b>Mega Cap</b>							
Exxon Mobil Corporation	XOM	36.28	6,714	244,000	35.00	0.09	1.03
Total S.A.	TOT	75.71	1,292	97,800	85.00	0.17	0.91
Royal Dutch/Shell	RD B	46.69	3,473	162,000	55.00	0.18	0.88
BP plc	BP	41.83	3,721	156,000	50.00	0.15	0.86
ChevronTexaco Corporation	CVX B	72.65	1,064	77,300	95.00	0.20	0.81
<i>Total or Median</i>				<i>737,000</i>		<i>0.17</i>	<i>0.88</i>
<b>Producer/Refiners - Large Cap and Mid Cap</b>							
Murphy Oil Corporation	MUR	51.51	92	4,760	41.00	0.26	1.19
Imperial Oil Limited (30%)	IMO	34.30	113	3,890	36.00	0.12	0.96
Petro-Canada	PCZ	39.45	265	10,450	45.00	0.19	0.90
OAo Lukoil	LUKOY	79.20	206	16,000	90.00	0.12	0.89
Valero Energy Corporation	VLO	36.81	114	4,200	50.00	0.50	0.87
Norsk Hydro ASA (49%)	NHY	49.00	126	6,190	60.00	0.28	0.87
ConocoPhillips	COP B	55.05	682	37,500	70.00	0.38	0.87
ENI S.p.A.	E	74.43	750	55,800	90.00	0.14	0.85
Suncor Energy	SU	18.80	476	8,950	25.00	0.14	0.79
Marathon Oil Corporation	MRO B	26.60	310	8,250	40.00	0.31	0.77
Petroleo Brasileiro S. A.	PBR N	19.94	1,096	21,900	30.00	0.25	0.75
PetroChina Company Ltd (10%)	PTR B	28.23	176	4,960	40.00	0.14	0.75
<i>Total or Median</i>				<i>178,000</i>		<i>0.19</i>	<i>0.87</i>
<b>Independent Natural Gas and Oil</b>							
Pogo Producing Company	PPP	42.95	65	2,770	38.00	0.22	1.10
Occidental Petroleum Corp.	OXY	34.00	383	13,000	35.00	0.38	0.98
Encana Corporation	ECA B	38.10	470	17,900	40.00	0.21	0.96
Apache Corporation	APA	63.44	159	10,100	70.00	0.20	0.93
Burlington Resources	BR B	52.86	202	10,700	60.00	0.27	0.91
Devon Energy	DVN	52.49	163	8,600	65.00	0.42	0.89
XTO Energy Inc.	XTO B	19.36	185	3,590	24.00	0.24	0.85
CNOOC Limited (19%)	CEO B	29.26	78	2,280	35.00	-	0.84
Pioneer Natural Resources Company	PXD	25.95	119	3,090	35.00	0.33	0.83
Anadarko Petroleum Corp.	APC B	44.09	258	11,400	60.00	0.30	0.82
Unocal Corporation	UCL	28.70	255	7,300	40.00	0.35	0.82
Canadian Natural Resources Limited	CNQ	39.16	139	5,440	55.00	0.29	0.80
<i>Total or Median</i>				<i>96,000</i>		<i>0.28</i>	<i>0.87</i>
<b>Service</b>							
Baker Hughes Inc.	BHI	33.45	339	11,300	25.00	0.09	1.30
Schlumberger Ltd.	SLB	48.15	581	28,000	44.00	0.22	1.07
Halliburton Company	HAL	22.72	434	9,900	22.00	0.25	1.03

Buy/Sell rating after symbol: B - Buy, N - Neutral, S - Sell

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

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.

## Meter Reader

### A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 3, 2003

**Table 1-2**  
**Energy Producers**  
**Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.**

	Symbol/ Rating	Price (\$/sh) 2-Jul 2003	EV/ Sales NTM	EV/ Ebitda NTM	P/E NTM	Dividend or Distribution NTM (%)	PV/ Ebitda NTM
<b>Mega Cap</b>							
Exxon Mobil Corporation	XOM	36.28	1.1	9.3	20	2.8	9.0
Total S.A.	TOT	75.71	1.0	7.7	15	4.6	8.5
BP plc	BP	41.83	0.8	7.1	17	3.6	8.3
Royal Dutch/Shell	RD B	46.69	1.0	7.0	16	4.3	8.0
ChevronTexaco Corporation	CVX B	72.65	0.9	6.6	13	3.9	8.1
	<i>Median</i>		<i>1.0</i>	<i>7.1</i>	<i>16</i>	<i>3.9</i>	<i>8.3</i>
<b>Producer/Refiners - Large Cap and Mid Cap</b>							
Murphy Oil Corporation	MUR	51.51	1.5	8.9	28	1.6	7.5
ConocoPhillips	COP B	55.05	0.6	7.2	13	2.9	8.3
Imperial Oil Limited (30%)	IMO	34.30	1.1	7.0	13	1.6	7.3
Suncor Energy	SU	18.80	2.3	6.2	11	0.7	7.9
Marathon Oil Corporation	MRO B	26.60	0.4	4.9	11	3.5	6.3
Valero Energy Corporation	VLO	36.81	0.3	4.8	5	1.1	5.5
Norsk Hydro ASA (49%)	NHY	49.00	0.8	4.3	11	3.0	5.0
Petro-Canada	PCZ	39.45	1.3	4.3	10	0.8	4.7
ENI S.p.A.	E	74.43	1.6	4.1	9	5.8	4.9
OAo Lukoil	LUKOY	79.20	1.1	4.0	7	2.4	4.5
Petroleo Brasileiro S. A.	PBR N	19.94	1.3	3.6	5	4.2	4.9
PetroChina Company Ltd (10%)	PTR B	28.23	1.8	3.2	6	5.1	4.3
	<i>Median</i>		<i>1.2</i>	<i>4.5</i>	<i>11</i>	<i>2.7</i>	<i>5.2</i>
<b>Independent Natural Gas and Oil</b>							
XTO Energy Inc.	XTO B	19.36	5.0	7.4	15	0.2	8.7
Pioneer Natural Resources Company	PXD	25.95	4.9	6.8	20	-	8.2
Occidental Petroleum Corp.	OXY	34.00	2.5	6.7	11	3.1	6.8
Apache Corporation	APA	63.44	4.1	5.6	12	0.6	6.1
Pogo Producing Company	PPP	42.95	3.6	5.5	15	0.3	5.0
CNOOC Limited (19%)	CEO B	29.26	3.7	5.5	13	3.6	6.6
Burlington Resources	BR B	52.86	3.8	5.3	11	1.0	5.8
Anadarko Petroleum Corp.	APC B	44.09	3.9	5.3	9	0.9	6.5
Unocal Corporation	UCL	28.70	2.0	5.0	12	2.8	6.2
Encana Corporation	ECA B	38.10	2.1	4.4	10	0.8	4.5
Devon Energy	DVN	52.49	2.9	4.3	6	-	4.9
Canadian Natural Resources Limited	CNQ	39.16	2.1	3.4	6	1.1	4.3
	<i>Median</i>		<i>3.6</i>	<i>5.4</i>	<i>12</i>	<i>0.8</i>	<i>6.1</i>
<b>Service</b>							
Baker Hughes Inc.	BHI	33.45	2.3	14.0	40	1.4	10.8
Schlumberger Ltd.	SLB	48.15	2.6	9.6	35	1.6	8.9
Halliburton Company	HAL	22.72	1.1	9.3	20	2.2	9.0

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2004; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.

## Meter Reader

### A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 3, 2003

**Table 2-1**  
**Energy Pipeline and Power Companies**  
**Rank by McDep Ratio: Market Cap and Debt to Present Value**

	<i>Symbol/ Rating</i>	<i>Price (\$/sh) 2-Jul 2003</i>	<i>Shares (mm)</i>	<i>Market Cap (\$mm)</i>	<i>Net Present Value (\$/sh)</i>	<i>Debt/ Present Value</i>	<i>McDep Ratio</i>
<b>Large Cap Power</b>							
Duke Energy Corporation	DUK	19.47	832	16,200	16.00	0.69	1.07
Southern Company	SO	30.31	696	21,100	28.00	0.43	1.05
Exelon Corporation	EXC N	60.35	325	19,600	65.00	0.51	0.96
American Electric Power Co. Inc.	AEP N	29.80	348	10,400	35.00	0.60	0.94
Dominion Resources	D	64.28	294	18,900	76.00	0.44	0.91
Enel S.p.a. (32%)	EN	31.31	388	12,200	37.00	0.40	0.91
<b>Mid Cap Pipeline and Power</b>							
Kinder Morgan Energy Partners, L.P.	KMP S	39.60	135	5,360	14.00	0.48	1.96
Kinder Morgan Management, LLC	KMR S	37.49	46	1,730	14.00	0.48	1.88
Kinder Morgan, Inc.	KMI S	54.44	123	6,700	14.00	0.80	1.57
Williams Companies	WMB	7.74	518	4,010	1.00	0.97	1.21
Constellation Energy Group	CEG	34.45	164	5,650	25.00	0.61	1.15
Calpine Corporation	CPN N	6.66	381	2,540	1.00	0.98	1.13
AES Corporation	AES	6.95	558	3,880	1.00	0.98	1.12
Dynegy Inc.	DYN	4.31	418	1,800	1.00	0.97	1.10
Mirant Corporation	MIR	2.90	402	1,170	1.00	0.96	1.07
CMS Energy Corporation	CMS	7.99	139	1,110	5.00	0.93	1.04
Sempra Energy	SRE	28.73	206	5,920	30.00	0.59	0.98
El Paso Corporation	EP N	8.03	589	4,700	10.00	0.79	0.96
<b>Small Cap Pipeline</b>							
Enterprise Products Part (16%)	EPD	22.98	29	660	6.70	0.63	1.89
Plains All Amer. Pipeline	PAA	31.90	50	1,600	11.60	0.49	1.89
Enbridge Energy Partners, L.P.	EEP S	48.87	35	1,710	14.90	0.64	1.83
Enbridge Energy Management, L.L.C.	EEQ S	46.42	35	1,620	14.90	0.64	1.77
Gulfterra Energy Partners	GTM S	38.20	55	2,100	15.70	0.56	1.62
TEPPCO Partners, L.P.	TPP	36.90	50	1,850	17.70	0.56	1.48
Williams Energy Partners	WEG	48.06	28	1,330	29.00	0.38	1.41
Northern Border Partners	NBP	41.92	44	1,840	20.40	0.62	1.39
AmeriGas Partners, L.P.	APU	26.92	49	1,330	18.30	0.51	1.23
Western Gas Resources	WGR	39.97	34	1,350	37.60	0.29	1.05
<b>Coal</b>							
Penn Virginia Res. Part, L.P.	PVR	29.15	15	450	18.00	-	1.63
Consol Energy Inc.	CNX	22.89	79	1,810	5.00	0.88	1.42
Peabody Energy	BTU	33.20	55	1,830	18.00	0.75	1.21
Alliance Res. Part, L.P.	ARLP	27.95	16	440	20.00	0.45	1.21
Arch Coal	ACI	22.83	48	1,090	18.00	0.61	1.11
Massey Energy	MEE	13.04	75	980	18.00	0.37	0.83
<i>Total or Median</i>				<i>6,600</i>	<i>0.53</i>	<i>1.21</i>	

Buy/Sell rating after symbol: B - Buy, N - Neutral, S - Sell

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

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.



## Meter Reader

### A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 3, 2003

**Table 2-2**  
**Energy Pipeline and Power Companies**  
**Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.**

			Price (\$/sh)	EV/ Sales	EV/ Ebitda	P/E	Dividend or Distribution	PV/ Ebitda	
	Symbol/ Rating		2-Jul 2003	NTM	NTM	NTM	NTM (%)	NTM	
<b>Large Cap Power</b>									
	DUK		19.47	2.4	9.6	14	5.6	9.0	
	SO		30.31	3.4	9.5	17	4.5	9.1	
	EXC	N	60.35	2.7	8.7	12	3.0	9.0	
	D		64.28	3.5	8.2	14	4.0	9.0	
	EN		31.31	2.2	8.1	24	4.4	8.9	
	AEP	N	29.80	0.8	8.0	11	4.7	8.5	
<b>Mid Cap Pipeline and Power</b>									
	KMP	S	39.60	2.5	17.2	20	6.5	8.8	
	KMR	S	37.49	2.4	16.5	19	6.8	8.8	
	CPN	N	6.66	2.4	13.8	8	-	12.2	
	DYN		4.31	3.0	12.4	35	-	11.3	
	KMI	S	54.44	2.6	12.4	17	1.1	7.9	
	AES		6.95	3.7	11.3	20	-	10.1	
	WMB		7.74	3.6	10.0		0.5	8.3	
	MIR		2.90	1.3	9.5	5	-	8.9	
	CEG		34.45	2.6	9.3	16	3.0	8.1	
	CMS		7.99	1.1	9.1	10	-	8.7	
	SRE		28.73	2.2	8.6	11	3.5	8.7	
	EP	N	8.03	2.4	6.7	5	2.0	6.9	
	<i>Median</i>				2.4	10.0	13	0.5	8.7
<b>Small Cap Pipeline</b>									
	EPD		22.98	1.9	17.1		0.9	9.0	
	PAA		31.90	0.3	17.1	26	6.7	9.0	
	EEP	S	48.87	2.2	16.5	37	7.4	9.0	
	EEQ	S	46.42	2.1	15.9	35	7.8	9.0	
	GTM	S	38.20	5.4	14.6	24	7.1	9.0	
	TPP		36.90	1.1	13.3	19	6.5	9.0	
	NBP		41.92	7.2	12.5	16	7.6	9.0	
	WEG		48.06	4.4	11.9	15	6.2	8.5	
	APU		26.92	1.8	11.0	26	8.2	9.0	
	WGR		39.97	0.7	7.7	17	-	7.4	
	<i>Median</i>				2.0	13.9	24	6.9	9.0
<b>Coal</b>									
	PVR		29.15	10.8	14.0	16	6.9	8.6	
	CNX		22.89	2.2	13.8	52	2.4	9.7	
	BTU		33.20	1.7	10.9	28	1.2	9.0	
	ACI		22.83	1.6	10.0		1.0	9.0	
	ARLP		27.95	1.3	8.5	23	7.2	7.0	
	MEE		13.04	1.3	7.4		1.2	8.9	
	<i>Median</i>				1.7	10.4	26	1.8	8.9

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2004; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.

## Meter Reader

### A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 3, 2003

**Table 3-1**  
**Independent Natural Gas and Oil Producers - Small Cap**  
**Rank by McDep Ratio: Market Cap and Debt to Present Value**

	Symbol/ Rating	Price (\$/sh) 2-Jul 2003	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio	
<b>Short Life</b>								
Dorchester Minerals, L.P.	DMLP	17.41	27.0	470	13.00	-	1.34	
Spinnaker Exploration Company	SKE	26.33	33.8	890	25.00	-	1.05	
Cimarex Energy Company	XEC	22.75	41.0	930	24.00	0.03	0.95	
Southwestern Energy Company	SWN	15.74	36.0	570	17.00	0.30	0.95	
Energy Partners Ltd.	EPL	B	11.20	36.8	412	12.00	0.22	0.95
Newfield Exploration Company	NFX	36.94	51.7	1,910	40.00	0.31	0.95	
Stone Energy Company	SGY	42.08	26.5	1,120	46.00	0.27	0.94	
Denbury Resources Inc.	DNR	13.50	55.0	740	15.00	0.29	0.93	
Wesport Resources Corporation	WRC	22.70	68.0	1,540	30.00	0.29	0.83	
Chesapeake Energy Corporation	CHK	9.92	220	2,180	14.00	0.38	0.82	
Forest Oil Corporation	FST	N	25.03	48.2	1,210	35.00	0.33	0.81
St. Mary Land and Exploration Company	SM	27.25	29.0	790	35.00	0.11	0.80	
The Houston Explorator Company	THX	33.96	31.0	1,050	45.00	0.16	0.79	
<i>Total or Median</i>				<i>13,800</i>		<i>0.27</i>	<i>0.94</i>	
<b>Long Life</b>								
Ultra Petroleum Corp.	UPL	12.55	78.0	980	7.00	0.15	1.68	
Unit Corporation	UNT	21.01	43.6	920	18.00	0.04	1.16	
Quicksilver Resources Inc.	KWK	24.35	20.4	500	25.00	0.35	0.98	
Penn Virginia Corporation	PVA	43.73	9.0	390	45.00	0.06	0.97	
Evergreen Resources, Inc.	EVG	53.50	22.0	1,180	60.00	0.10	0.90	
Magnum Hunter Resources, Inc.	MHR	8.00	69.0	550	11.00	0.45	0.85	
Encore Acquisition Corp. (40%)	EAC	B	19.50	11.2	218	24.00	0.18	0.85
Swift Energy Company	SFY	10.94	27.2	300	16.00	0.43	0.82	
Vintage Petroleum, Inc.	VPI	11.43	63.0	720	20.00	0.40	0.74	
<i>Total or Median</i>				<i>5,800</i>		<i>0.18</i>	<i>0.90</i>	
<b>Canadian Royalty Trusts</b>								
Provident Energy Trust	PVX	8.29	63.5	530	6.00	0.25	1.29	
Enerplus Resources Fund	ERF	23.60	75.0	1,770	20.00	0.16	1.15	
Pengrowth Energy Trust	PGH	12.93	110.0	1,420	11.00	0.18	1.14	
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	26.14	79.5	2,080	45.00	0.17	0.65
<i>Total or Median</i>				<i>5,800</i>		<i>0.18</i>	<i>1.15</i>	
<b>Natural Gas Royalty Trusts</b>								
Cross Timbers Royalty Trust	CRT	24.20	6.0	145	21.50	-	1.12	
Hugoton Royalty Trust (46%)	HGT	18.32	18.4	340	16.30	-	1.12	
San Juan Basin Royalty Trust	SJT	B	17.86	46.6	830	18.90	-	0.94
<b>Micro Cap</b>								
Abraxas Petroleum Corporation	ABP	1.08	30.0	32	1.00	0.85	1.01	
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.75	28.2	49	2.80	0.31	0.74

Buy/Sell rating after symbol: B - Buy, N - Neutral, S - Sell

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

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.

## Meter Reader

### A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 3, 2003

**Table 3-2**  
**Independent Natural Gas and Oil Producers - Small Cap**  
**Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.**

	<i>Symbol/</i>		<i>Price</i>			<i>Dividend or</i>	
	<i>Rating</i>		<i>(\$/sh)</i>	<i>EV/</i>	<i>EV/</i>	<i>Distribution</i>	<i>PV/</i>
			<i>2-Jul</i>	<i>Sales</i>	<i>Ebitda</i>	<i>P/E</i>	<i>Ebitda</i>
			<i>2003</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>
						<i>NTM</i>	<i>NTM</i>
						<i>(%)</i>	
<b>Short Life</b>							
Dorchester Minerals, L.P.	DMLP		17.41	7.9	9.8	13	7.3
Forest Oil Corporation	FST		25.03	3.3	5.2	14	6.5
Southwestern Energy Company	SWN		15.74	2.6	5.2	9	5.5
Chesapeake Energy Corporation	CHK		9.92	3.3	5.0	10	6.1
Wesport Resources Corporation	WRC		22.70	3.3	4.6	12	5.6
Cimarex Energy Company	XEC		22.75	3.2	4.5	12	4.8
Denbury Resources Inc.	DNR		13.50	3.0	4.3	9	4.6
St. Mary Land and Exploration Company	SM		27.25	2.8	4.3	11	5.3
Energy Partners Ltd.	EPL	B	11.20	2.7	4.3		4.5
Stone Energy Company	SGY		42.08	3.0	4.0	8	4.2
Spinnaker Exploration Company	SKE		26.33	3.1	3.5	11	3.3
Newfield Exploration Company	NFX		36.94	2.6	3.3	6	3.5
The Houston Exploraton Company	THX		33.96	2.5	3.0	7	3.8
	<i>Median</i>			<i>3.0</i>	<i>4.3</i>	<i>10</i>	<i>4.8</i>
<b>Long Life</b>							
Ultra Petroleum Corp.	UPL		12.55	10.2	16.3	30	9.7
Evergreen Resources, Inc.	EVG		53.50	6.1	8.6	14	9.5
Unit Corporation	UNT		21.01	3.7	8.1	19	7.0
Quicksilver Resources Inc.	KWK		24.35	4.2	6.1	10	6.2
Swift Energy Company	SFY		10.94	3.5	5.3	13	6.5
Penn Virginia Corporation	PVA		43.73	2.8	5.2	13	5.4
Magnum Hunter Resources, Inc.	MHR		8.00	3.0	5.0	10	5.9
Encore Acquisition Corp. (40%)	EAC	B	19.50	3.3	4.7	10	5.6
Vintage Petroleum, Inc.	VPI		11.43	2.3	4.2	20	5.6
	<i>Median</i>			<i>3.5</i>	<i>5.3</i>	<i>13</i>	<i>6.2</i>
<b>Canadian Royalty Trusts</b>							
Enerplus Resources Fund	ERF		23.60	4.8	6.2	9	5.4
Pengrowth Energy Trust	PGH		12.93	4.0	6.0	13	5.3
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	26.14	3.0	5.0	5	7.7
Provident Energy Trust	PVX		8.29	3.3	4.6	9	3.6
<b>Natural Gas Royalty Trusts</b>							
Cross Timbers Royalty Trust	CRT		24.20	7.6	10.6	11	9.5
Hugoton RoyaltyTrust (46%)	HGT		18.32	5.9	7.8	9	6.9
San Juan Basin Royalty Trust	SJT	B	17.86	6.1	7.6	9	8.0
<b>Micro Cap</b>							
Abraxas Petroleum Corporation	ABP		1.08	6.0	10.2		10.1
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.75	3.3	4.6	10	6.2

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2004; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at [www.mcdep.com](http://www.mcdep.com). Mr. Wulff is not paid by covered companies. Neither he nor his spouse act contrary to a buy or sell rating.