

Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

April 17, 2003

Independent Natural Gas and Oil Producers

Summary and Recommendation

Expanding our research coverage by 11 to 39 stocks concentrated purely on production, we see independent natural gas and oil producers as a leadership group in stock market performance over the next several years. Buy recommendations already in place offer practical representation for most investors to benefit from investments that we expect to earn an attractive real return with inflation protection and deflation resistance. Our competitive ideas among large cap peers are **Encana (ECA)** and **Burlington Resources (BR)**; among mid caps, **XTO Energy (XTO)** and **CNOOC Limited (CEO)**; and among small caps and income stocks, **Canadian Oil Sands Trust (COS_u.TO)** and **San Juan Basin Royalty Trust (SJT)**. There are no stocks in each size group that can beat those recommended issues on all three measures of low McDep Ratio, low debt and long life, but many of the remaining stocks also have strong appeal (see Tables INGO-1 thru INGO-3). All buy and sell recommendations are flagged in our regular tables (see Tables L-1, M-1, S-1).

It Feels Like 1975 for Independents

Natural gas and oil prices continue to display favorable trends even though the cold winter has passed and the Iraq War is over. That reinforces the idea that the long twenty-year slide in energy commodity prices is over and a multi-year advancing phase is underway. It feels a lot to us like 1975. At that time we also expanded our research coverage and recommended a “package” of “independent natural gas exploration companies”. Then, too, we had been concentrating much of our analysis on the integrated companies, but were finding more exciting potential among the independents. Our enthusiasm proved to be understated in terms of the subsequent performance of the stocks. Some of that performance we would attribute to the inflationary economic conditions of the time that do not appear as prevalent today. Yet there were also real price increases in excess of inflation. We also see real price increases ahead today.

Should price expectations not materialize, we can be comforted that today’s stock prices do not seem to anticipate real commodity price gains. Moreover if we are disappointed because economic activity is weak and there is more widespread debt deflation, we can be comforted that our recommended stocks have low or no debt.

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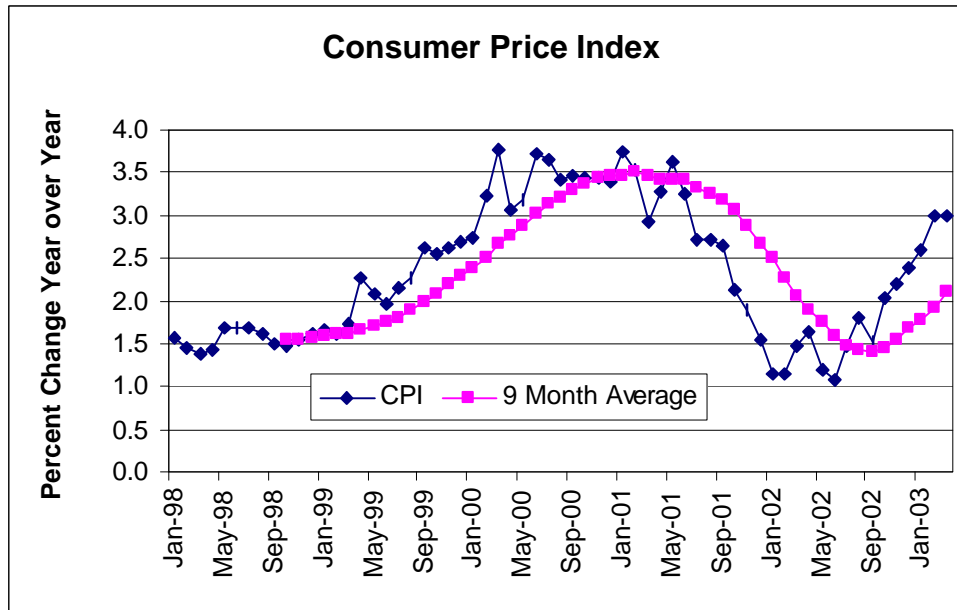
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Inflation at 3% Per Year in March

The Bureau of Labor Statistics discloses that the consumer price index increased 3.0% in March 2003 over March 2002. That follows a similar increase for February (see Chart). We would not be as quick as some to dismiss the trend on the basis that the only increases were in energy and now that the war is over energy prices will go down. We shall see.

If instead energy prices remain on an upward trend, as we believe is likely to be the case eventually, investors in energy can benefit directly. Diversified investors with some representation in independent natural gas and oil producers can protect against devaluation.



Valuation Relates Industry Outlook to Stocks

Expanding the number of companies under coverage gives us a larger sample for testing statistical relationships. The conclusion remains that the most powerful connection we measure is between cash flow multiple and reserve life. About a third of the variation in the market cash flow multiple, EV/Ebitda, is explained in statistical terms by adjusted reserve life. As a result we use reserve life to give us a starting point for what we think the cash flow multiple should be, PV/Ebitda. Our previous estimates of present value and our tentative estimates for eleven new companies make the fitted formula $PV/Ebitda = 2.39 + 0.41 \text{ times } R/P_{adj}$. About 60% of the variation in assessed cash flow multiple is

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explained in statistical terms by adjusted reserve life. Cash flow multiple times cash flow gives us present value, the denominator of the McDep Ratio.

If the above analysis seems too simple, we detail more thorough calculations regularly for three of the stocks (see companion analysis, *Natural Gas Royalty Trusts*).

Pick Stocks with Low McDep Ratio, Low Ratio of Debt and Long Life

The appeal of the McDep Ratio should be obvious. If one can buy \$1.00 of energy resource assets for less than \$0.80, the deal should be especially attractive. If one pays more than \$1.20 for \$1.00 of value, one needs extra conviction that there is some hidden potential unrecognized by the McDep Ratio. In any event, from a value perspective, the lower the ratio, the better.

Since the McDep Ratio already neutralizes for the impact of debt on valuation, it should not matter what specific level of debt a stock carries. In fact among the 39 stocks there is no meaningful correlation between the unlevered market cash flow multiple and the ratio of debt. Visually, it appears that high debt small cap stocks tend to have lower McDep Ratios. Thus the low valuation might be caused in part by too much debt. We won't reinforce that except to say that in an optimistic commodity environment ratios of debt below 0.50 should be manageable. Yet if things don't turn out that well and commodity prices take a temporary dip, as they have been known to do, a "safe" ratio of debt of 0.40 might overnight become an "unsafe" 0.50.

Long life, too, should already be reflected in valuation as we adjust cash flow multiple. Yet we continue to have an added qualitative bias for long life believing that surprises are more likely to be positive. That is the opposite of the inventory theory that argues for more rapid turnover of assets. In an industry that has difficulty finding new high quality resources, few managers have a good reinvestment record. Thus it can be better for investors if the asset lasts longer and gives management less money to reinvest immediately.

IPAA Conference Ahead

With a reliable analytical framework we can be reassured that our featured recommendations continue to make sense. A reliable framework is also important to us for evaluating new ideas. The 11 companies we just added to coverage and more along with many of those already in our coverage will be among the companies meeting with investors in New York at the end of the month. The Independent Petroleum Association of America is the sponsor of the largest neutral industry conference matching companies in the petroleum industry with investment analysts and portfolio managers.

Kurt H. Wulff, CFA

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

	<i>Symbol/</i>		<i>Price</i>		<i>Market</i>	<i>Net</i>	<i>Debt/</i>	
	<i>Rating</i>		<i>(\$/sh)</i>	<i>Shares</i>	<i>Cap</i>	<i>Present</i>	<i>Present</i>	<i>McDep</i>
			<i>16-Apr</i>	<i>(mm)</i>	<i>(\$mm)</i>	<i>Value</i>	<i>Value</i>	<i>Ratio</i>
			<i>2003</i>			<i>(\$/sh)</i>		
Large Cap								
Occidental Petroleum Corp.	OXY		30.11	382.5	11,520	35.00	0.36	0.91
Encana Corporation	ECA	B	31.82	470.0	15,000	40.00	0.24	0.85
Devon Energy	DVN		47.46	163.0	7,700	65.00	0.42	0.84
Burlington Resources	BR	B	46.71	202.0	9,400	60.00	0.26	0.83
Anadarko Petroleum Corp.	APC		44.87	258.0	11,600	60.00	0.29	0.82
Unocal Corporation	UCL		26.59	255.0	6,800	40.00	0.35	0.78
Mid Cap								
Pogo Producing Company	PPP		38.68	64.5	2,500	38.00	0.22	1.01
XTO Energy Inc.	XTO	B	19.03	168.9	3,210	24.00	0.25	0.84
Pioneer Natural Resources Company	PXD		27.00	118.0	3,190	35.00	0.31	0.84
CNOOC Limited (19%)	CEO	B	25.98	78.1	2,030	35.00	-	0.74
Canadian Natural Resources Limited	CNQ		32.69	139.0	4,540	55.00	0.29	0.71
Small Cap								
Ultra Petroleum Corp.	UPL		9.10	78.0	710	7.00	0.15	1.26
Provident Energy Trust	PVX		7.30	63.5	460	6.00	0.23	1.17
Dorchester Minerals, L.P.	DMLP		15.02	27.0	410	13.00	-	1.16
Enerplus Resources Fund	ERF		19.16	75.0	1,440	20.00	0.16	0.96
Quicksilver Resources Inc.	KWK		23.02	20.4	470	25.00	0.35	0.95
Pengrowth Energy Trust	PGH		9.73	110.0	1,070	11.00	0.16	0.90
Cross Timbers Royalty Trust	CRT		19.41	6.0	116	22.10	-	0.87
Newfield Exploration Company	NFX		32.64	51.7	1,690	40.00	0.31	0.87
Stone Energy Company	SGY		34.60	26.5	920	46.00	0.27	0.82
Hugoton RoyaltyTrust (46%)	HGT		13.89	18.4	260	17.20	-	0.81
Evergreen Resources, Inc.	EVG		47.07	22.0	1,040	60.00	0.10	0.81
Cimarex Energy Company	XEC		18.92	41.0	780	24.00	0.03	0.80
Denbury Resources Inc.	DNR		10.38	55.0	570	15.00	0.29	0.78
San Juan Basin Royalty Trust	SJT	B	14.67	46.6	680	19.00	-	0.77
Encore Acquisition Corp. (25%)	EAC		17.18	7.0	120	24.00	0.19	0.77
St. Mary Land and Exploration Compar	SM		25.76	29.0	750	35.00	0.11	0.76
Wesport Resources Corporation	WRC		19.50	68.0	1,330	30.00	0.29	0.75
Spinnaker Exploration Company	SKE		18.76	33.8	630	25.00	-	0.75
Forest Oil Corporation	FST	N	22.02	48.2	1,060	35.00	0.33	0.75
Magnum Hunter Resources, Inc.	MHR		5.50	69.0	380	11.00	0.45	0.73
Chesapeake Energy Corporation	CHK		7.75	220.0	1,710	14.00	0.38	0.72
Swift Energy Company	SFY		7.60	27.2	210	16.00	0.43	0.70
The Houston Exploraton Company	THX		28.64	31.0	890	45.00	0.16	0.70
Vintage Petroleum, Inc.	VPI		9.57	63.0	600	20.00	0.40	0.69
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	23.87	76.8	1,830	45.00	0.15	0.60
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.73	30.0	22	1.00	0.85	0.96
Energy Partners Ltd.(30%)	EPL	B	9.91	8.3	82	12.00	0.34	0.89
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.77	26.6	47	2.80	0.28	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

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

	Symbol/ Rating	Price (\$/sh) 16-Apr 2003	EV/ Sales NTM	EV/ Ebitda NTM	P/E NTM	Dividend or Distribution NTM (%)	PV/ Ebitda NTM	
Large Cap								
Occidental Petroleum Corp.	OXY	30.11	2.3	5.5	9	3.5	6.1	
Unocal Corporation	UCL	26.59	1.9	5.1	13	3.0	6.5	
Anadarko Petroleum Corp.	APC	44.87	3.7	5.0	8	0.9	6.0	
Burlington Resources	BR	B	46.71	3.6	4.9	10	1.2	5.8
Encana Corporation	ECA	B	31.82	2.0	4.3	10	0.9	5.1
Devon Energy	DVN		47.46	2.9	4.3	6	-	5.2
Mid Cap								
Pioneer Natural Resources Company	PXD		27.00	5.1	8.0	28	-	9.5
XTO Energy Inc.	XTO	B	19.03	4.1	5.8	10	0.2	6.9
Pogo Producing Company	PPP		38.68	3.2	5.0	13	0.3	4.9
CNOOC Limited (19%)	CEO	B	25.98	3.4	4.4	9	2.4	6.0
Canadian Natural Resources Limited	CNQ		32.69	2.0	3.2	6	1.3	4.5
Small Cap								
Ultra Petroleum Corp.	UPL		9.10	8.8	14.3	27	-	11.4
Evergreen Resources, Inc.	EVG		47.07	6.0	8.6	15	-	10.7
Dorchester Minerals, L.P.	DMLP		15.02	6.9	8.5	11	10.6	7.3
Cross Timbers Royalty Trust	CRT		19.41	5.5	7.4	8	12.7	8.5
Quicksilver Resources Inc.	KWK		23.02	4.3	6.4	11	-	6.8
Enerplus Resources Fund	ERF		19.16	4.7	6.2	10	14.9	6.5
San Juan Basin Royalty Trust	SJT	B	14.67	4.7	5.7	7	15.3	7.4
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	23.87	3.2	5.7	6	5.6	9.4
Pengrowth Energy Trust	PGH		9.73	3.6	5.4	12	19.4	6.0
Forest Oil Corporation	FST	N	22.02	3.3	5.4	17	-	7.2
Hugoton Royalty Trust (46%)	HGT		13.89	4.1	5.4	6	16.3	6.7
Encore Acquisition Corp. (25%)	EAC		17.18	3.4	5.2	12	-	6.8
Provident Energy Trust	PVX		7.30	3.5	5.1	11	21.2	4.3
Swift Energy Company	SFY		7.60	3.2	4.9	13	-	7.0
Magnum Hunter Resources, Inc.	MHR		5.50	2.8	4.7	9	-	6.5
Chesapeake Energy Corporation	CHK		7.75	3.2	4.6	9	1.5	6.4
Wesport Resources Corporation	WRC		19.50	3.2	4.5	12	-	5.9
St. Mary Land and Exploration Compan	SM		25.76	2.8	4.3	12	0.4	5.7
Vintage Petroleum, Inc.	VPI		9.57	2.3	4.2	40	1.7	6.2
Cimarex Energy Company	XEC		18.92	2.9	4.2	12	-	5.3
Denbury Resources Inc.	DNR		10.38	2.7	3.7	7	-	4.8
Stone Energy Company	SGY		34.60	2.7	3.6	7	-	4.4
Newfield Exploration Company	NFX		32.64	2.5	3.2	6	-	3.6
The Houston Exploraton Company	THX		28.64	2.4	2.9	7	-	4.1
Spinnaker Exploration Company	SKE		18.76	2.4	2.7	9	-	3.6
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.73	6.3	11.5		-	12.0
Energy Partners Ltd.(30%)	EPL	B	9.91	2.7	4.6	28	-	5.2
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.77	3.2	4.4	9	-	6.0

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended December 31, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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Table INGO-3
Independent Natural Gas and Oil Producers
Rank by Adjusted Reserve Life Index

	Symbol/ Rating	Price (\$/sh) 16-Apr 2003	EV/ Ebitda NTM	Adjusted Reserves/ Production NTM	NA Gas/ Ebitda (%)	PV/ Ebitda NTM	McDep Ratio	
Large Cap								
Devon Energy	DVN	47.46	4.3	7.7	72	5.2	0.84	
Unocal Corporation	UCL	26.59	5.1	8.4	36	6.5	0.78	
Encana Corporation	ECA	B	31.82	4.3	8.6	66	5.1	0.85
Anadarko Petroleum Corp.	APC	44.87	5.0	10.0	56	6.0	0.82	
Occidental Petroleum Corp.	OXY	30.11	5.5	10.6	18	6.1	0.91	
Burlington Resources	BR	B	46.71	4.9	10.9	83	5.8	0.83
Mid Cap								
Pogo Producing Company	PPP	38.68	5.0	5.8	37	4.9	1.01	
Canadian Natural Resources Limited	CNQ	32.69	3.2	7.3	54	4.5	0.71	
CNOOC Limited (19%)	CEO	B	25.98	4.4	9.1	-	6.0	0.74
XTO Energy Inc.	XTO	B	19.03	5.8	12.0	86	6.9	0.84
Pioneer Natural Resources Company	PXD	27.00	8.0	12.3	62	9.5	0.84	
Small Cap								
Newfield Exploration Company	NFX	32.64	3.2	3.8	79	3.6	0.87	
Spinnaker Exploration Company	SKE	18.76	2.7	3.8	85	3.6	0.75	
The Houston Exploraton Company	THX	28.64	2.9	5.3	95	4.1	0.70	
Provident Energy Trust	PVX	7.30	5.1	5.9	62	4.3	1.17	
St. Mary Land and Exploration Compan	SM	25.76	4.3	6.2	69	5.7	0.76	
Cimarex Energy Company	XEC	18.92	4.2	6.2	80	5.3	0.80	
Stone Energy Company	SGY	34.60	3.6	6.4	67	4.4	0.82	
Dorchester Minerals, L.P.	DMLP	15.02	8.5	8.2	86	7.3	1.16	
Denbury Resources Inc.	DNR	10.38	3.7	8.3	49	4.8	0.78	
Wesport Resources Corporation	WRC	19.50	4.5	8.3	71	5.9	0.75	
Pengrowth Energy Trust	PGH	9.73	5.4	8.9	38	6.0	0.90	
Chesapeake Energy Corporation	CHK	7.75	4.6	9.2	92	6.4	0.72	
Forest Oil Corporation	FST	N	22.02	5.4	9.6	78	7.2	0.75
Magnum Hunter Resources, Inc.	MHR	5.50	4.7	11.0	72	6.5	0.73	
Enerplus Resources Fund	ERF	19.16	6.2	11.1	55	6.5	0.96	
Cross Timbers Royalty Trust	CRT	19.41	7.4	11.3	65	8.5	0.87	
Swift Energy Company	SFY	7.60	4.9	12.0	38	7.0	0.70	
San Juan Basin Royalty Trust	SJT	B	14.67	5.7	12.1	99	7.4	0.77
Encore Acquisition Corp. (25%)	EAC	17.18	5.2	12.7	19	6.8	0.77	
Hugoton RoyaltyTrust (46%)	HGT	13.89	5.4	12.7	95	6.7	0.81	
Quicksilver Resources Inc.	KWK	23.02	6.4	14.7	87	6.8	0.95	
Vintage Petroleum, Inc.	VPI	9.57	4.2	15.0	36	6.2	0.69	
Ultra Petroleum Corp.	UPL	9.10	14.3	16.3	94	11.4	1.26	
Evergreen Resources, Inc.	EVG	47.07	8.6	20.0	100	10.7	0.81	
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	23.87	5.7	20.0	-	9.4	0.60
Micro Cap								
Energy Partners Ltd.(30%)	EPL	B	9.91	4.6	7.0	61	5.2	0.89
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.77	4.4	9.1	69	6.0	0.74
Abraxas Petroleum Corporation	ABP	0.73	11.5	11.7	76	12.0	0.96	

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2004
PV = Present Value of oil and gas and other businesses

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Table L-1
Mega Cap and Large Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

	<i>Symbol/ Rating</i>	<i>Price (\$/sh) 16-Apr 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>
Mega Cap							
Exxon Mobil Corporation	XOM	34.69	6,755	234,000	35.00	0.09	0.99
BP plc	BP	38.56	3,725	144,000	45.00	0.16	0.88
Royal Dutch/Shell	RD B	42.65	3,473	148,000	55.00	0.19	0.82
TotalFinaElf S.A.	TOT	65.99	1,317	86,900	85.00	0.16	0.81
ChevronTexaco Corporation	CVX B	63.50	1,063	67,500	95.00	0.19	0.73
	<i>Total or Median</i>			<i>680,000</i>		<i>0.16</i>	<i>0.82</i>
Energy Infrastructure							
Southern Company	SO	28.56	696	19,900	28.00	0.43	1.01
Duke Energy Corporation	DUK	15.30	832	12,700	16.00	0.69	0.99
El Paso Corporation	EP N	6.75	589	4,000	10.00	0.79	0.93
Exelon Corporation	EXC N	51.08	325	16,600	65.00	0.51	0.89
American Electric Power Co. Inc.	AEP N	24.82	348	8,600	35.00	0.60	0.88
Dominion Resources	D	58.41	294	17,100	76.00	0.44	0.87
Enel S.p.a. (32%)	EN	28.66	388	11,100	37.00	0.40	0.86
	<i>Total or Median</i>			<i>70,000</i>		<i>0.55</i>	<i>0.89</i>
Natural Gas and Oil							
Occidental Petroleum Corp.	OXY	30.11	383	11,500	35.00	0.36	0.91
Encana Corporation	ECA B	31.82	470	15,000	40.00	0.24	0.85
Devon Energy	DVN	47.46	163	7,700	65.00	0.42	0.84
Burlington Resources	BR B	46.71	202	9,400	60.00	0.26	0.83
ConocoPhillips	COP B	50.77	680	34,500	70.00	0.38	0.83
Anadarko Petroleum Corp.	APC	44.87	258	11,600	60.00	0.29	0.82
ENI S.p.A.	E	71.50	750	53,600	90.00	0.14	0.82
Unocal Corporation	UCL	26.59	255	6,800	40.00	0.35	0.78
Marathon Oil Corporation	MRO B	23.12	310	7,200	40.00	0.31	0.71
OAo Lukoil	LUKOY	60.05	206	12,400	90.00	0.12	0.71
Petroleo Brasileiro S. A.	PBR N	16.51	1,086	17,900	30.00	0.25	0.66
	<i>Total or Median</i>			<i>176,000</i>		<i>0.28</i>	<i>0.82</i>
Service							
Baker Hughes Inc.	BHI	27.21	339	9,200	25.00	0.09	1.08
Halliburton Company	HAL	20.27	434	8,800	22.00	0.25	0.94
Schlumberger Ltd.	SLB	37.41	581	21,700	44.00	0.22	0.88

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

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Mid Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

	<i>Symbol/ Rating</i>	<i>Price (\$/sh)</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>
Energy Infrastructure							
Kinder Morgan Energy Partners, L.P.	KMP S	38.67	141	5,500	14.00	0.47	1.93
Kinder Morgan Management, LLC	KMR S	34.20	40	1,400	14.00	0.47	1.76
Kinder Morgan, Inc.	KMI S	44.23	123	5,400	14.00	0.80	1.44
Williams Companies	WMB	5.10	518	2,600	1.00	0.97	1.13
Calpine Corporation	CPN N	4.00	381	1,500	1.00	0.98	1.07
AES Corporation	AES	4.41	558	2,500	1.00	0.98	1.07
Constellation Energy Group	CEG	28.91	164	4,700	25.00	0.61	1.06
Dynegy Inc.	DYN	2.84	418	1,200	1.00	0.97	1.06
Mirant Corporation	MIR	1.90	402	800	1.00	0.96	1.03
CMS Energy Corporation	CMS	5.53	139	800	5.00	0.93	1.01
Sempra Energy	SRE	26.54	206	5,500	30.00	0.59	0.95
Valero Energy Corporation	VLO	37.52	114	4,300	50.00	0.50	0.88
<i>Total or Median</i>				<i>36,200</i>		<i>0.86</i>	<i>1.06</i>
Natural Gas and Oil							
Murphy Oil Corporation	MUR	43.52	93	4,000	41.00	0.24	1.05
Petro-Canada	PCZ	32.25	264	8,500	38.00	0.20	0.88
Imperial Oil Limited (30%)	IMO	30.90	114	3,500	36.00	0.12	0.87
XTO Energy Inc.	XTO B	19.03	169	3,200	24.00	0.25	0.84
Suncor Energy	SU	16.67	448	7,500	22.00	0.22	0.81
Norsk Hydro ASA (49%)	NHY	40.78	126	5,200	60.00	0.26	0.76
CNOOC Limited (19%)	CEO B	25.98	78	2,030	35.00	-	0.74
PetroChina Company Ltd (10%)	PTR B	21.55	176	3,800	33.00	0.15	0.71
<i>Total or Median</i>				<i>37,700</i>		<i>0.21</i>	<i>0.83</i>
Coal Producers (Small Cap)							
Penn Virginia Res. Part, L.P.	PVR	24.86	15	400	18.00	-	1.38
Consol Energy Inc.	CNX	16.91	79	1,300	5.00	0.88	1.28
Peabody Energy	BTU	27.06	55	1,500	18.00	0.75	1.13
Alliance Res. Part, L.P.	ARLP	23.66	16	400	20.00	0.45	1.11
Arch Coal	ACI	18.31	48	900	18.00	0.61	1.01
Massey Energy	MEE	9.40	75	700	18.00	0.37	0.70
<i>Total or Median</i>				<i>5,200</i>		<i>0.53</i>	<i>1.12</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

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Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

April 17, 2003

Table S-1
Small Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

	<i>Symbol/</i>		<i>Price</i>		<i>Market</i>	<i>Net</i>	<i>Debt/</i>	
	<i>Rating</i>		<i>(\$/sh)</i>	<i>Shares</i>	<i>Cap</i>	<i>Present</i>	<i>Present</i>	<i>McDep</i>
			<i>16-Apr</i>	<i>(mm)</i>	<i>(\$mm)</i>	<i>Value</i>	<i>Value</i>	<i>Ratio</i>
			<i>2003</i>			<i>(\$/sh)</i>		
Energy Infrastructure								
Enterprise Products Part (16%)	EPD		22.10	28.5	630	6.70	0.63	1.84
El Paso Energy Partners	EPN	S	31.85	57.0	1,820	10.60	0.60	1.82
Enbridge Energy Partners, L.P.	EEP	S	43.00	35.0	1,510	14.90	0.64	1.69
Plains All Amer. Pipeline	PAA		26.16	50.0	1,310	11.60	0.49	1.64
Enbridge Energy Management, L.L.C	EEQ	S	38.85	9.0	350	14.90	0.64	1.59
Northern Border Partners	NBP		39.27	44.0	1,730	20.40	0.62	1.35
TEPCO Partners, L.P.	TPP		31.39	50.0	1,570	17.70	0.56	1.34
AmeriGas Partners, L.P.	APU		24.98	49.4	1,230	18.30	0.51	1.17
Western Gas Resources	WGR		34.30	33.7	1,160	37.60	0.29	0.94
<i>Total or Median</i>					<i>11,300</i>		<i>0.60</i>	<i>1.59</i>
Natural Gas and Oil								
Provident Energy Trust	PVX		7.30	63.5	460	6.00	0.23	1.17
Dorchester Minerals, L.P.	DMLP		15.02	27.0	406	13.00	-	1.16
Unit Corporation	UNT		19.51	43.6	850	18.00	0.04	1.08
Pogo Producing Company	PPP		38.68	64.5	2,500	38.00	0.22	1.01
Enerplus Resources Fund	ERF		19.16	75.0	1,440	20.00	0.16	0.96
Quicksilver Resources Inc.	KWK		23.02	20.4	470	25.00	0.35	0.95
Pengrowth Energy Trust	PGH		9.73	110.0	1,070	11.00	0.16	0.90
Newfield Exploration Company	NFX		32.64	51.7	1,690	40.00	0.31	0.87
<i>Penn Virginia Corporation</i>	<i>PVA</i>		<i>38.11</i>	<i>9.0</i>	<i>340</i>	<i>45.00</i>	<i>0.06</i>	<i>0.86</i>
Southwestern Energy Company	SWN		13.27	36.0	480	17.00	0.30	0.85
Stone Energy Company	SGY		34.60	26.5	920	46.00	0.27	0.82
Encore Acquisition Corp. (25%)	EAC		17.18	7.0	120	24.00	0.19	0.77
Spinnaker Exploration Company	SKE		18.76	33.8	630	25.00	-	0.75
Forest Oil Corporation	FST	N	22.02	48.2	1,060	35.00	0.33	0.75
Magnum Hunter Resources, Inc.	MHR		5.50	69.0	380	11.00	0.45	0.73
Swift Energy Company	SFY		7.60	27.2	210	16.00	0.43	0.70
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	23.87	76.8	1,830	45.00	0.15	0.60
<i>Total or Median</i>					<i>14,900</i>		<i>0.22</i>	<i>0.86</i>
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		19.41	6.0	116	22.10	-	0.87
Hugoton RoyaltyTrust (46%)	HGT		13.89	18.4	260	17.20	-	0.81
San Juan Basin Royalty Trust	SJT	B	14.67	46.6	680	19.00	-	0.77
Micro Cap								
Energy Partners Ltd.(30%)	EPL	B	9.91	8.3	82	12.00	0.34	0.89
Abraxas Petroleum Corporation	ABP		0.73	30.0	22	1.00	0.85	0.96
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.77	26.6	47	2.80	0.28	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

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