A Weekly Analysis of Energy Stocks Using the McDep Ratio February 4, 2002

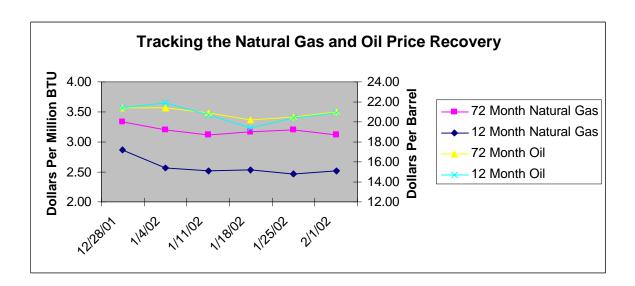
Boom or Gloom?

Summary and Recommendation

Is the stock market about to take off again or were the past few years a bubble that has not yet fully burst? On the optimistic side we want to own the means of energy production and delivery that will be important to a continued high level of economic activity. Currently the most exciting stock among our Buy recommendations is the new Number One independent producer, **Encana Corporation (PCX)**. In addition to offering reasonable value the pending merger of buy recommended PanCanadian Energy (PCX) with Alberta Energy (AOG) promises double digit annual percentage growth in volume for the next three years. On the cautious side we want to avoid owning any stocks floating on a bubble that has not yet burst. The stocks in our coverage most vulnerable to sharp decline may be Strong Sells **Kinder Morgan, Inc. (KMI)**, **Kinder Morgan Energy Partners, L.P. (KMP)** and **Kinder Morgan Management, LLC (KMR)**. For ideas to build and preserve a diversified energy portfolio see our valuation ranking of 71 stocks (Tables L-1, L-2, M-1, M-2, S-1 and S-2).

Natural Gas and Oil Pricing Holding

Six-year oil price advanced for the second week to \$20.97 from \$20.51, while six-year natural gas declined to \$3.11 from \$3.20 after a two-week advance (see Chart). Present Value of natural gas in three royalty trusts that we cover in weekly detail declined by a median 4%, in line with six-year natural gas. Considering the unusually warm weather last month east of the Rockies, the commodities are holding up reasonably well.



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Encana Corporation A New Top Independent With Impressive Growth Prospects

The Encana deal was well received by investors judging by stock price action in the past week. Though PanCanadian Energy offered an apparent premium to acquire Alberta Energy, PCX stock had advanced sharply just before the deal was announced. Now AOG stock has gained much of the apparent premium and PCX stock has recovered from its initial reaction.

We carry over our buy recommendation of PanCanadian Energy to Encana. We add Encana to our Large Cap Natural Gas and Oil group where it offers attractive value at a McDep Ratio of 0.88 (see Table L-1). Financial risk is low with a ratio of Debt to Present Value of 0.20. Market cap of \$13,800 million exceeds that of the previous size leader, Anadarko, by more than a billion dollars.

On top of a solid quantitative appeal, Encana has the unusual growth prospects we saw in PanCanadian plus the unique appeal of Alberta Energy. While railroad land grant properties are a jewel for PCX, a provincial military reservation is a jewel for AOG, which was once the provincial oil company. The new company will be the largest independent natural gas producer in North America. PCX also has rich gas reserves under development offshore Nova Scotia; AOG has the large Jonah gas field in Wyoming. Internationally PCX has the large Buzzard discovery in the North Sea and AOG has growing oil production in Ecuador. (We visited those properties in Ecuador before they were acquired by AOG.)

Management has a long record of distinction. The expected chief executive, Mr. Gwyn Morgan, has made money for investors in AOG, which we have also recommended in the past. The expected chairman, Mr. David O'Brien, orchestrated the long-anticipated restructuring of Canadian Pacific that we recommended prematurely further in the past. Though we still do not know why PCX's chief executive, Mr. David Tuer, resigned unexpectedly a few months ago, we can see that his departure made moot any need to choose among two qualified chiefs for the new entity.

For a first crack at the numbers of the combined entity we project Next Twelve Months Ebitda for the period ending March 31, 2003 at more than C\$3.3 billion (see table on next page). Assessing a multiple of 8.3 times we estimate present value of more than C\$20 billion. Subtracting debt, dividing by shares and converting to US currency we estimate present value of US\$33 a share, the same as our estimate for PCX before the transaction.

Thus, two familiar, successful companies are joining to form a single company that may become one of the better large cap energy investments of the next several years. The McDep value is favorable, financial risk is lower than average, growth prospects are unusual in the industry and management is well qualified.

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Encana Corporation Next Twelve Months Operating and Financial Estimates (Canadian dollars)

				,					Next Twelve
	Q3 9/30/01	Q4E 12/31/01	Q1E 3/31/02	Q2E 6/30/02	<i>Q3E</i> 9/30/02	Q4E 12/31/02	Year 12/31/02	Q1E 3/31/03	Months 3/31/03
Volume									
Natural Gas (mmcfd)	2,444	2,444	2,444	2,444	2,444	2,444	2,444	2,444	2,444
Oil (mbd)	254	254	254	254	254	254	254	254	254
Total (bcf)	365	365	357	361	365	365	1,448	357	1,448
Total (mmcfd)	3,967	3,967	3,967	3,967	3,967	3,967	3,967	3,967	3,967
Price									
Henry Hub (US\$/mmbtu)	2.75	2.22	2.76	2.27	2.43	2.69	2.54	2.92	2.57
Differential	(0.67)	(0.54)	(0.68)	(0.56)	(0.60)	(0.66)	(0.62)	(0.72)	(0.63)
Encana (\$/mcf)	3.42	2.77	3.44	2.82	3.02	3.35	3.16	3.64	3.20
WTI Cushing (US\$/bbl)	26.69	20.45	19.64	20.11	20.41	20.61	20.19	21.06	20.96
Differential	(3.80)	(2.91)	(2.79)	(2.86)	(2.90)	(2.93)	(2.88)	(3.00)	(2.51)
Encana (\$/bbl)	30.49	23.36	22.43	22.97	23.31	23.54	23.07	24.05	23.47
Revenue (\$mm)									
Natural Gas	769	622	757	627	680	752	2,816	800	2,859
Oil	712	546	513	531	544	550	2,137	549	2,174
Other	2,506	2,506	2,506	2,506	2,506	2,506	10,024	2,506	10,024
Total	3,987	3,987	3,987	3,987	3,987	3,987	15,949	3,987	15,949
Expense									
Natural Gas and Oil	469	406	427	404	418	433	1,682	443	1,698
Other	2,375	2,375	2,375	2,375	2,375	2,375	9,500	2,375	9,500
Total	2,844	2,844	3,014	3,103	3,103	3,103	12,322	2,950	12,258
Ebitda (\$mm)									
Natural Gas and Oil	1,012	761	842	754	806	869	3,271	907	3,335
Other	131	131	131	131	131	131	524	131	524
Total	1,143	892	973	885	937	1,000	3,795	1,038	3,859
Exploration									
Deprec., Deplet., & Amort.	509	509	509	509	509	509	2,036	509	2,036
Interest	87	87	87	87	87	87	348	87	348
Ebt	547	296	377	289	341	404	1,411	442	1,475
Income tax	192	104	132	101	120	141	494	155	516
Net Income (\$mm)	356	193	245	188	222	262	917	287	959
Per share (\$)	0.73	0.39	0.50	0.38	0.45	0.54	1.87	0.59	1.96
Shares (millions)	490	490	490	490	490	490	490	490	490
Ebitda margin (ng + o)	68%	65%	66%	65%	66%	67%	24%	67%	24%
Tax rate - current	35%	35%	35%	35%	35%	35%	35%	35%	35%

Manage Your Risks

Though we are optimistic about our energy investments we are also concerned that risks are high in the macro environment. Confidence is everything in capital markets. Having just lived through a bounteous period when nearly everything went right, we are seeing that some things were not as they seemed.

Our compromise is to be optimistic about lower risk investments and to be cautious about high-risk investments. On the latter front we have concerns about valuation and business model risk in the next stock we discuss.

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Wall Street and Financial Media Overstate Value and Understate Risk in Kinder Morgan

Some investors may be willing to pay more for Kinder Morgan Energy Partners stock than would otherwise be the case because of interpretations of financial disclosures published by Wall Street underwriters and by the financial media. In our opinion those interpretations are confusing, to use a term more innocuous than misleading or a stronger word. If that is the case we would think the sources that contribute to the confusion would want to clear it up as soon as possible, particularly before any new securities are offered. If some investors do pay more than they would otherwise, the stock price of KMP and by extension KMR and KMI might fall somewhat when the confusion is cleared up. Conceivably some limited partners might seek compensation from KMI, its auditor or its underwriters.

The sources of confusion we see concern reported values for cash flow per unit and book value per unit. In both cases, the research sources appear to overlook the economic interest of the general partner. As we have pointed out, the general partner, KMI, gets half the cash flow from any new investment on behalf of the limited partners, KMP, and indirectly, KMR. We have suggested that half the cash flow ultimately is likely to be more than half the value.

Cash Flow Per Unit Overstated

Cash flow is both an indicator for determining value and for sizing up risk. Last year KMP reported net income of \$443 million and depreciation, depletion and amortization (DD&A) of \$142 million. The total of \$585 million might be considered cash flow. We would say that the limited partners have access to half or less of that cash flow. Half of \$585 is \$292 million. Divide that by 154 million average units outstanding for the year and we get \$1.90 per unit. Applying a multiple of 6.1 times would produce our present value of \$11.60 per unit. Comparing cash flow to stock price of \$34 implies a cash flow multiple of 18 times, rather high valuation by the standards of the energy industry.

As a measure of risk an investor might compare cash flow to distribution. In the sample calculation above cash flow comes out less than the distribution of \$2.15 per unit declared for last year. That is an indicator of high risk that the distribution may be reduced in the future.

Investors who were persuaded to invest in KMP by the underwriter of the securities may get a different picture. We have seen recent research, for example, from Broker M and Broker U that show on the front page of multi-page analyses cash flow per unit of \$3.61 and cash flow per share of \$3.71 respectively. Broker M further displays Price/Cash Flow of 10.3x, apparently calculated using a stock price of \$37.31.

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Thus, the marketers of Kinder Morgan securities are displaying cash flow per unit results almost twice what we calculated above. Apparently the analysts ignore the fact that half of incremental cash flow goes to the general partner. Investors persuaded to buy units by Broker M and Broker U may have thought that they were getting twice as much value as they were actually getting. On the risk side a large excess of cash flow per unit compared to distribution per unit makes the ability to pay the distribution look much stronger than it really is.

Book Value Per Unit Overstated

Book value is also an indicator for determining value and for sizing up risk. Last year KMP reported limited partner's capital at the end of the third quarter of about \$3.1 billion. The term refers to the value of assets minus liabilities figured roughly at cost. We would say that the limited partners have access to half or less of that ongoing cost-based value, or about \$1.55 billion. Divide that by 165 million units at the end of the quarter and we get \$9.40 per unit. Comparing book value to stock price of \$34 implies a Price/Book ratio of 3.6x, rather high valuation by the standards of the energy industry.

Broker M presents book value at \$18.84 per unit and Price/Book at 2.0x when the stock price was \$37.31. Broker L presents a front-page book value of \$20 per share. Investors who do their own research, or want an independent check, might turn to the websites of *The Wall Street Journal*, *Forbes* or *Yahoo*, for example. There the investor would see book value featured as a valuation measure and stated to be about \$24 per share.

Thus, Wall Street and the financial media are telling investors that book value per unit is twice or more as high as a more realistic number. Apparently the research sources are again ignoring the general partner interest. Some investors may have thought that they were getting twice as much value as they were actually getting. On the risk side a smaller gap between stock price and book value makes the valuation risk look much less than it really is.

Issuer's Dilemma: Act Now or Ignore Confusion Over Accounting

Kinder Morgan, its auditor, underwriters and the financial media can act now to clear up confusion in Kinder Morgan's accounting or continue to ignore it. Acting now might have an adverse stock price impact. Instead ignoring the confusion may work for a while longer. If the confusion is as significant as we believe it is, confused investors may eventually catch on and the stock price may go down later. In that case the potential liability for failing to act now may be greater than the consequences of acting now to clear up confusion. Either way investors in Kinder Morgan stocks are at high risk, in our opinion. In this market, who needs to take those risks?

Kurt H. Wulff, CFA

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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

			Price			Net		
			(\$/sh)		Market	Present	Debt/	
	Symbol/		1-Feb	Shares	Cap	Value	Present	McDep
	Rati	ng	2002	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Mega Cap		_						
Exxon Mobil Corporation	XOM		39.00	6,924	270,000	36.00	0.09	1.08
BP plc	BP		47.00	3,738	176,000	47.00	0.16	1.00
Royal Dutch/Shell	RD	3	50.44	3,520	178,000	55.00	0.04	0.92
TotalFinaElf S.A.	TOT		71.15	1,382	98,000	80.00	0.15	0.91
ChevronTexaco Corporation	CVX		85.37	1,062	90,700	110.00	0.14	0.81
Total or Median					813,000		0.14	0.92
Energy Infrastructure								
Kinder Morgan Management, LLC	KMR	5	35.00	30	1,100	11.60	0.48	2.04
Kinder Morgan Energy Partners, L.P.	KMP	5	34.00	135	4,600	11.60	0.48	2.00
Kinder Morgan, Inc.	KMI	5	52.17	121	6,300	10.90	0.87	1.50
Dynegy Inc.	DYN		25.37	338	8,600	20.30	0.58	1.11
AES Corporation	AES		13.30	543	7,200	8.80	0.83	1.09
American Electric Power Co. Inc.	AEP	2	41.81	322	13,500	42.10	0.64	1.00
Duke Energy Corporation	DUK		34.66	781	27,100	36.30	0.44	0.98
Calpine Corporation	CPN	3	11.30	377	4,300	12.50	0.66	0.97
Southern Company	SO		24.65	683	16,800	27.40	0.42	0.94
Williams Companies	WMB		19.00	521	9,900	22.70	0.58	0.93
El Paso Corporation	EPG		37.05	532	19,700	44.80	0.49	0.91
Mirant Corporation	MIR		11.04	353	3,900	18.60	0.65	0.86
Dominion Resources	D		58.84	247	14,500	79.40	0.45	0.86
Exelon Corporation	EXC	2	50.13	323	16,200	84.00	0.40	0.76
Total or Median					148,000		0.58	0.96
Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		26.18	372	9,700	28.50	0.50	0.96
ENI S.p.A.	E		66.00	789	52,100	71.40	0.19	0.94
Unocal Corporation	UCL		35.10	257	9,000	38.90	0.35	0.93
Anadarko Petroleum Corp.	APC		48.76	250	12,200	56.30	0.27	0.90
ConocoPhillips	P		59.03	680	40,200	71.20	0.34	0.89
Encana Corporation	PCX	2	28.08	490	13,800	33.00	0.20	0.88
Devon Energy (incl MND,AXN)	DVN		37.70	165	6,200	54.60	0.48	0.84
OAO Lukoil	LUKOY		56.25	299	16,800	69.10	0.09	0.83
Burlington Resources (incl HTR)	BR	1	35.25	205	7,200	52.30	0.30	0.77
Marathon Oil Corporation	MRO	1	28.37	310	8,800	42.00	0.27	0.76
Total or Median					166,000		0.27	0.88
Service								
Baker Hughes Inc.	BHI		34.97	338	11,800	24.50	0.13	1.37
Schlumberger Ltd.	SLB		55.20	581	32,100	44.00	0.12	1.23
Halliburton Company	HAL		13.90	429	6,000	24.90	0.12	0.61

Buy/Sell rating after symbol: 1-Strong Buy, 2-Buy, 3-Neutral, 4-Sell, 5-Strong Sell McDep Ratio = \mathbf{M} arket \mathbf{c} ap and \mathbf{D} ebt to \mathbf{p} resent value of oil and gas and other businesses

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Table L-2
Mega Cap and Large Cap Energy Companies
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

	Price Dividend or						idend or	
			(\$/sh)	EV/	EV/	Dis	tribution	PV/
	Symbol/		1- Feb	Sales	Ebitda	P/E	NTM	Ebitda
	Rati	ng	2002	NTM	NTM	NTM	(%)	NTM
Mega Cap								
Exxon Mobil Corporation	XOM		39.00	1.5	11.9	27	2.4	11.1
BP plc	BP		47.00	1.2	10.8	20	2.8	10.8
Royal Dutch/Shell	RD	3	50.44	1.1	10.1	26	2.8	10.9
TotalFinaElf S.A.	TOT		71.15	1.3	9.9	21	2.6	10.9
ChevronTexaco Corporation	CVX		85.37	1.3	8.9	20	3.3	11.0
Median				1.3	10.1	21	2.8	10.9
Energy Infrastructure								
Kinder Morgan Management, LLC	KMR	5	35.00	5.1	18.4	25	6.6	9.0
Kinder Morgan Energy Partners, L.P.	KMP	5	34.00	4.8	18.0	24	6.8	9.0
Kinder Morgan, Inc.	KMI	5	52.17	7.1	13.8	27	0.4	9.2
American Electric Power Co. Inc.	AEP	2	41.81	0.7	10.0	15	5.7	10.0
Dynegy Inc.	DYN		25.37	0.5	10.0	12	1.2	9.0
AES Corporation	AES		13.30	3.4	9.8	10	-	9.0
Williams Companies	WMB		19.00	2.3	9.3	13	4.2	10.0
Duke Energy Corporation	DUK		34.66	0.8	8.8	13	3.2	9.0
Calpine Corporation	CPN	3	11.30	1.8	8.7	7	-	9.0
Southern Company	SO		24.65	2.8	8.5	15	5.4	9.0
El Paso Corporation	EPG		37.05	0.8	8.2	11	2.3	9.0
Mirant Corporation	MIR		11.04	0.5	7.7	5	-	9.0
Dominion Resources	D		58.84	3.4	7.7	13	4.4	9.0
Exelon Corporation	EXC	2	50.13	2.2	6.8	10	3.4	9.0
Median				2.2	9.0	13	3.3	9.0
Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		26.18	1.5	9.6	23	3.8	10.0
Anadarko Petroleum Corp.	APC		48.76	2.8	8.6	30	0.6	9.5
Unocal Corporation	UCL		17.11	2.7	7.9	65	2.3	8.5
ConocoPhillips	P		59.03	0.8	7.5	20	2.4	8.5
ENI S.p.A.	E		66.00	1.6	7.5	17	2.7	8.0
Encana Corporation	PCX		28.08	1.8	7.3	23	0.9	8.3
Burlington Resources (incl HTR)	BR	1	35.25	4.1	6.3	29	1.6	8.1
Devon Energy (incl MND,AXN)	DVN		37.70	3.2	5.9	18	0.5	7.0
OAO Lukoil	LUKOY		56.25	1.5	5.0	11	1.9	6.0
Marathon Oil Corporation	MRO	1	28.37	0.4	5.0	10	3.2	6.5
Median				1.7	7.4	21	2.1	8.2
Service								
Baker Hughes Inc.	BHI		34.97	2.2	11.0	25	1.3	9.0
Schlumberger Ltd.	SLB		55.20	2.8	9.8	27	1.4	9.0
Halliburton Company	HAL		13.90	0.5	4.9	10	3.6	9.0

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

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

		Prio (\$/si		Market	Net Present	Debt/	
	Symbol/ Ratin	1-Fe	b Shares	Cap Cap	Value (\$/sh)	Present Value	McDep Ratio
	Raine	5 200	2 (mm,	(φπιπ)	(φ/3π)	vanic	Runo
Energy Infrastructure							
Enterprise Products Part.	EPD	49.4	5 87	4,300	31.70	0.23	1.43
Valero Energy Corp.(with UDS)	VLO	46.0	2 110	5,100	60.00	0.47	0.88
CMS Energy Corporation	CMS	23.0	8 128	3,000	43.80	0.62	0.82
Consol Energy Inc.	CNX	22.6	8 79	1,800	35.90	0.51	0.82
Sempra Energy	SRE	24.0	1 203	4,900	41.70	0.50	0.79
Constellation Energy Group	CEG	28.4	5 152	4,300	56.50	0.35	0.68
Total or Median				19,100		0.50	0.82
Natural Gas and Oil							
Murphy Oil Corporation	MUR	78.9	0 46	3,600	82.00	0.18	0.97
Ocean Energy, Inc.	OEI	17.0	5 178	3,000	20.00	0.30	0.90
Imperial Oil Limited (30%)	IMO	26.8	1 119	3,200	30.00	0.11	0.90
PanCanadian Energy	PCX	2 28.0	8 256	7,190	33.00	0.14	0.87
Norsk Hydro ASA (49%)	NHY	41.7	3 127	5,300	54.00	0.18	0.81
Petro-Canada	PCZ	22.9	8 267	6,100	33.00	0.08	0.72
PetroChina Company Ltd (10%)	PTR	2 18.6	0 176	3,300	28.00	0.16	0.72
Total or Median				31,700		0.16	0.87

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 3 - Neutral

McDep Ratio = Market cap and **De**bt to **p**resent value of oil and gas and other businesses

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Table M-2
Mid Cap Energy Companies
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

			Price			Di	vidend or	
			(\$/sh)	EV/	EV/	Di	stribution	PV/
	Symbol/		1- Feb	Sales	Ebitda	P/E	NTM	Ebitda
	Ra	ting	2002	NTM	NTM	NTM	(%)	NTM
Energy Infrastructure								
Enterprise Products Part.	EPD		49.45	1.8	12.9	15	5.1	9.0
CMS Energy Corporation	CMS		23.08	0.8	7.4	12	6.3	9.0
Consol Energy Inc.	CNX		22.68	2.0	7.4	8	4.9	9.0
Sempra Energy	SRE		24.01	1.1	7.1	9	4.2	9.0
Constellation Energy Group	CEG		28.45	1.8	6.1	9	1.7	9.0
Valero Energy Corp.(with UDS)	VLO		46.02	0.3	5.8	7	0.9	6.7
Median				1.4	7.2	9	4.6	9.0
Natural Gas and Oil								
Imperial Oil Limited (30%)	IMO		26.81	1.1	10.0	25	2.0	11.1
Murphy Oil Corporation	MUR		78.90	0.9	7.8	37	1.9	8.0
PanCanadian Energy	PCX	2	28.08	1.4	7.3	18	0.9	8.4
Ocean Energy, Inc.	OEI		17.05	4.2	7.0	29	0.9	7.8
Petro-Canada	PCZ		22.98	1.3	5.0	11	1.1	6.9
Norsk Hydro ASA (49%)	NHY		41.73	0.8	4.9	15	2.5	6.0
PetroChina Company Ltd (10%)	PTR	2	18.60	1.7	3.8	10	9.8	5.4
Median				1.3	7.0	18	1.9	7.8

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended December 31, 2002; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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

			Price (\$/sh)		Market	Net Present	Debt/	
	Symbol/		(ψ/3π) 1-Feb	Shares	Сар	Value	Present	McDep
	Rati	ing	2002	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Energy Infrastucture								
El Paso Energy Partners	EPN		36.52	34.0	1,240	6.40	0.71	2.35
Enbridge Energy Partners,	EEP		44.60	31.0	1,380	16.60	0.58	1.71
Penn Virginia Res. Part, L.P.(48%)			24.90	7.5	190	15.10	-	1.65
Plains All Amer. Pipeline	PAA		26.12	38.0	990	14.30	0.47	1.44
TEPPCO Partners, L.P.	TPP		31.77	39	1,230	15.60	0.69	1.32
Northern Border Partners	NBP		40.94	42.0	1,720	30.00	0.41	1.22
AmeriGas Partners, L.P.	APU		21.68	44.0	950	19.50	0.54	1.05
Penn Virginia Corporation	PVA		29.80	9.0	270	35.00	0.10	0.87
Total or Median					8,000		0.50	1.38
Natural Gas and Oil								
Quicksilver Resources Inc.	KWK		17.87	19.3	350	10.00	0.60	1.31
Dorchester Hugoton, Ltd.	DHULZ		14.00	10.7	150	11.30	-	1.24
Spinnaker Exploration Company	SKE		37.03	28.3	1,050	40.00	-	0.93
XTO Energy Inc.	XTO		16.61	124.0	2,060	19.00	0.28	0.91
Southwestern Energy Company	SWN		11.35	25.6	290	15.00	0.47	0.87
Newfield Exploration Company	NFX		32.59	49.3	1,610	39.00	0.21	0.87
Encore Acquisition Corp. (25%)	EAC		13.20	7.5	99	16.00	0.22	0.86
Pogo Producing Company	PPP		25.76	60.5	1,560	32.00	0.29	0.86
Stone Energy Company	SGY		34.71	26.4	920	42.00	0.11	0.85
Swift Energy Company	SFY		17.30	24.8	430	25.00	0.29	0.78
Magnum Hunter Resources, Inc.	MHR		7.24	36.8	270	11.00	0.35	0.78
Forest Oil Corporation	FST	2	24.94	60.5	1,510	37.00	0.26	0.76
CNOOC Limited (19%)	CEO	2	20.84	78	1,630	30.00	_	0.70
Total or Median					11,900		0.26	0.86
Natural Gas Royalty Trusts					,			
Cross Timbers Royalty Trust	CRT		17.62	6.0	106	17.10	_	1.03
Hugoton RoyaltyTrust	HGT		9.84	40.0	390	13.00	_	0.76
San Juan Basin Royalty Trust	SJT	2	9.60	46.6	450	13.10	_	0.73
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Micro Cap								
Abraxas Petroleum Corporation	ABP		1.05	23.6	25	0.50	0.96	1.04
Energy Partners Ltd.(30%)	EPL	2	7.00	8.1	56	10.00	0.34	0.80
Purcell Energy, Ltd. (US\$)	PEL.TO	2	1.92	27.4	53	3.50	0.09	0.59

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 3 - Neutral

McDep Ratio = \mathbf{M} arket \mathbf{c} ap and \mathbf{De} bt to \mathbf{p} resent value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio February 4, 2002

Table S-2
Small Cap Energy Companies
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

		Price Dividend or						
			(\$/sh)	EV/	EV/	Di	stribution	PV/
	Symbol/		1-Feb	Sales	Ebitda	P/E	NTM	Ebitda
	Rat	ing	2002	NTM	NTM	NTM	(%)	NTM
Energy Infrastucture								
El Paso Energy Partners	EPN		36.52	10.4	21.1	101	6.7	9.0
Enbridge Energy Partners,	EEP		44.60	6.9	15.4	86	7.8	9.0
Penn Virginia Res. Part, L.P.(48%)PVR		24.90	11.1	14.9	17	8.0	9.0
Plains All Amer. Pipeline	PAA		26.12	0.2	12.9	17	7.8	9.0
TEPPCO Partners, L.P.	TPP		31.77	0.7	11.9	15	7.2	9.0
Northern Border Partners	NBP		40.94	7.4	11.6	16	7.4	9.0
AmeriGas Partners, L.P.	APU		21.68	1.4	9.4	18	10.1	9.0
Penn Virginia Corporation	PVA		29.80	4.1	7.6	35	3.0	8.8
Median				5.5	12.4	18	7.6	9.0
Natural Gas and Oil								
Quicksilver Resources Inc.	KWK		17.87	6.1	16.7		-	12.7
Dorchester Hugoton, Ltd.	DHULZ		14.00	9.5	14.5	19	20.6	11.7
XTO Energy Inc.	XTO		16.61	5.8	9.0	27	0.2	9.9
Encore Acquisition Corp. (25%)	EAC		13.20	4.8	8.9	34	-	10.3
Spinnaker Exploration Company	SKE		37.03	6.5	7.7	36	-	8.4
Pogo Producing Company	PPP		25.76	4.3	7.5	74	0.5	8.7
Swift Energy Company	SFY		17.30	5.0	7.4	32	-	9.4
Forest Oil Corporation	FST	2	24.94	4.2	7.3		0.5	9.7
Southwestern Energy Company	SWN		11.35	2.8	6.3	23	-	7.3
Magnum Hunter Resources, Inc.	MHR		7.24	3.5	6.0		-	7.8
CNOOC Limited (19%)	CEO	2	20.84	4.1	5.5	12	1.2	7.9
Stone Energy Company	SGY		34.71	3.8	5.1	25	-	6.0
Newfield Exploration Company	NFX		32.59	3.6	4.5	15	-	5.2
Median				4.3	7.4	26	-	8.7
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		17.62	7.4	13.7	15	6.8	13.2
San Juan Basin Royalty Trust	SJT	2	9.60	6.5	8.9	12	8.3	12.1
Hugoton RoyaltyTrust	HGT		9.84	5.3	8.8	15	6.6	11.6
Micro Cap								
Abraxas Petroleum Corporation	ABP		1.05	6.4	12.2		-	11.8
Energy Partners Ltd.(30%)	EPL	2	7.00	2.5	5.7		-	7.1
Purcell Energy, Ltd. (US\$)	PEL.TO	2	1.92	3.0	4.3	13	-	7.3

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