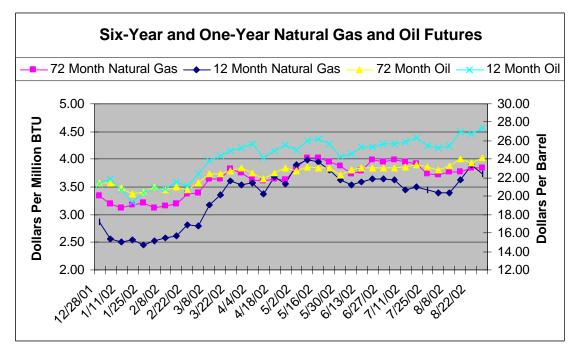
How Does Energy Pricing Look?

Summary and Recommendation

Natural gas is cheap, oil is reasonable and infrastructure margins are low in our opinion. Six-year oil, the most fundamental measure of energy pricing, is \$24.15 a barrel and close to the inflation-adjusted long term average. Commodity traders already act as though the higher one-year price at \$27.35 a barrel (a 2002 high) is temporary. We believe a true "war premium" would be higher. Six-year natural gas could be higher relative to oil because the current relationship is at mere heating parity without recognizing the cleaner burning characteristics of the environmentally preferable fuel (see Chart). One-year natural gas has only recently returned to the six-year level. Fully disclosed futures for refined products allow only a one-year margin calculation that is holding at a low level near the 39-week average. The typical integrated oil company would probably benefit as much in refined product margin as it lost in crude oil profit if one-year oil futures declined to the six-year level. Thus we have confidence in the investment potential of our Buy recommendations including **XTO Energy (XTO)**, **Petrobras (PBR)** and **Conoco/Phillips (COC/P)** to name three (see Table L-1, L-2, M-1, M-2, S-1, and S-2).



Kurt H. Wulff, CFA

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 2, 2002

Table L-1

Mega Cap and Large Cap Energy Companies

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

			Price			Net	D 1./	
	C		(\$/sh)	C1	Market	Present	Debt/	M.D.
	Symbol/	tina	29-Aug 2002	Shares	Cap	Value	Present Value	McDep Ratio
Mega Cap	ка	ting	2002	(mm)	(\$mm)	(\$/sh)	value	Kallo
Exxon Mobil Corporation	XOM		35.39	6,858	243,000	36.00	0.09	0.98
BP plc	BP		46.90	3,738	175,000	50.00	0.09	0.98
TotalFinaElf S.A.	TOT		70.15	1,352	94,900	90.00	0.13	0.93
Royal Dutch/Shell	RD	В	44.83	3,498	157,000	60.00	0.14	0.31
ChevronTexaco Corporation	CVX	B	76.07	1,062	80,800	110.00	0.15	0.79
Total or Median		Ъ	70.07	1,002	751,000	110.00	0.15	0.81
Energy Infrastructure	ı				751,000		0.15	0.01
Southern Company	SO		28.40	701	19,900	23.90	0.47	1.10
Duke Energy Corporation	DUK		27.25	792	21,600	30.40	0.48	0.95
El Paso Corporation	EP	S	16.85	590	9,900	20.00	0.66	0.94
American Electric Power Co. Inc.	AEP	Ň	34.93	322	11,200	42.20	0.63	0.93
Dominion Resources	D		62.20	269	16,700	76.20	0.45	0.90
Enel S.p.a. (32%)	EN		24.85	388	9,600	32.70	0.39	0.85
Exelon Corporation	EXC	Ν	50.01	323	16,200	70.80	0.45	0.84
Total or Median	1				85,000		0.47	0.92
Natural Gas and Oil					,			
Occidental Petroleum Corp.	OXY		29.19	372	10,900	30.00	0.48	0.99
OAO Lukoil	LUKOY		64.25	299	19,200	70.00	0.08	0.92
Devon Energy	DVN		46.05	165	7,600	55.00	0.48	0.91
ENI S.p.A.	E		74.52	776	57,800	85.00	0.18	0.90
Encana Corporation	ECA	В	29.40	470	13,800	35.00	0.28	0.88
Anadarko Petroleum Corp.	APC		43.72	266	11,600	56.00	0.26	0.84
Unocal Corporation	UCL		32.82	245	8,000	45.00	0.33	0.82
ConocoPhillips	Р	В	51.55	680	35,100	80.00	0.32	0.76
Burlington Resources	BR	В	37.78	202	7,600	57.00	0.28	0.76
Marathon Oil Corporation	MRO	В	24.50	310	7,600	40.00	0.36	0.75
Petroleo Brasileiro S. A.	PBR	В	15.52	1,086	16,900	30.00	0.27	0.65
Total or Median	ı				185,000		0.28	0.83
Service								
Baker Hughes Inc.	BHI		27.17	339	9,200	25.00	0.09	1.08
Schlumberger Ltd.	SLB		42.90	581	24,900	44.00	0.22	0.98
Halliburton Company	HAL		14.75	432	6,400	20.00	0.21	0.80

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 2, 2002

Table L-2

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

			Price (\$/sh)	EV/	EV/		idend or tribution	PV/
	Symbol/		(\$/sn) 29-Aug	Ev/ Sales	EV/ Ebitda	P/E	NTM	FV/ Ebitda
	•	ting	29-Aug 2002	NTM	NTM	NTM	(%)	NTM
Mega Cap	n		2002	11111	11111	1,111	(70)	1,111
Exxon Mobil Corporation	XOM		35.39	1.5	10.0	21	2.6	10.1
BP plc	BP		46.90	1.2	8.7	19	3.1	9.1
TotalFinaElf S.A.	TOT		70.15	1.2	7.6	15	2.7	9.4
Royal Dutch/Shell	RD	В	44.83	1.1	7.1	15	3.8	9.1
ChevronTexaco Corporation	CVX	В	76.07	1.2	6.9	13	3.7	9.2
Median	ı			1.2	7.6	15	3.1	9.2
Energy Infrastructure								
Southern Company	SO		28.40	3.4	9.9	16	4.7	9.0
Duke Energy Corporation	DUK		27.25	0.8	8.5	11	4.0	9.0
American Electric Power Co. Inc.	AEP	Ν	34.93	0.6	8.4	10	6.9	9.0
Dominion Resources	D		62.20	3.4	8.1	13	4.1	9.0
Enel S.p.a. (32%)	EN		24.85	2.1	7.7	30	6.5	9.0
Exelon Corporation	EXC	Ν	50.01	2.3	7.6	11	3.5	9.0
El Paso Corporation	EP	S	16.85	2.7	7.5	10	5.2	7.9
Mediar	ı			2.3	8.1	11	4.7	9.0
Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		29.19	1.5	8.0	14	3.4	8.1
ConocoPhillips	Р	В	51.55	0.8	7.1	15	2.8	9.3
Devon Energy	DVN		46.05	3.0	6.8	46	0.4	7.4
Anadarko Petroleum Corp.	APC		43.72	2.7	6.7	14	0.7	8.1
ENI S.p.A.	E		74.52	1.6	6.5	14	4.5	7.3
Burlington Resources	BR	В	37.78	4.6	6.1	15	1.5	8.0
Encana Corporation	ECA	В	29.40	2.5	5.6	12	0.9	6.3
Marathon Oil Corporation	MRO	В	24.50	0.4	5.5	10	3.8	7.3
Unocal Corporation	UCL		32.82	2.3	5.0	12	2.4	6.2
OAO Lukoil	LUKOY		64.25	1.6	4.5	9	1.7	4.9
Petroleo Brasileiro S. A.	PBR	В	15.52	1.4	3.6	4	8.7	5.6
Mediar	ı			1.6	6.1	14	2.4	7.3
Service								
Baker Hughes Inc.	BHI		27.17	1.9	11.6	32	1.7	10.8
Schlumberger Ltd.	SLB		42.90	2.3	8.7	32	1.7	8.9
Halliburton Company	HAL		14.75	0.7	7.8	20	3.4	9.8

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciationand amortization; NTM = Next Twelve Months Ended June 30, 2003; P/E = Stock Price toEarnings; PV = Present Value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 2, 2002

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

	Symbol/ Rating		Price (\$/sh) 29-Aug 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Energy Infrastructure								
Enterprise Products Part.	EPD		21.69	175	3,800	9.50	0.43	1.73
Kinder Morgan Energy Partners, L.P.	KMP	S	32.61	136	4,400	14.00	0.49	1.68
Kinder Morgan Management, LLC	KMR	S	31.75	30	1,000	14.00	0.49	1.64
Kinder Morgan, Inc.	KMI	S	40.87	123	5,000	8.10	0.87	1.53
Constellation Energy Group	CEG		28.25	164	4,600	20.00	0.69	1.13
Calpine Corporation	CPN	Ν	5.13	375	1,900	1.00	0.97	1.12
Dynegy Inc.	DYN		2.07	419	900	1.00	0.94	1.06
Williams Companies	WMB		3.15	521	1,600	1.00	0.97	1.06
AES Corporation	AES		3.19	543	1,700	1.00	0.98	1.05
CMS Energy Corporation	CMS		10.40	137	1,400	8.70	0.90	1.02
Mirant Corporation	MIR		3.80	413	1,600	4.00	0.86	0.99
Sempra Energy	SRE		23.08	207	4,800	24.30	0.64	0.98
Valero Energy Corporation	VLO		32.50	106	3,400	40.00	0.62	0.93
Consol Energy Inc.	CNX		14.20	79	1,100	20.00	0.65	0.90
Total or Median					37,200		0.77	1.06
Natural Gas and Oil								
Suncor Energy	SU		17.99	454	8,200	17.00	0.25	1.04
Ocean Energy, Inc.	OEI		20.76	178	3,700	20.00	0.30	1.03
Murphy Oil Corporation	MUR		83.25	46	3,800	82.00	0.18	1.01
Petro-Canada	PCZ		29.50	262	7,700	31.00	0.11	0.96
Imperial Oil Limited (30%)	IMO		28.24	114	3,200	30.00	0.14	0.95
Norsk Hydro ASA (49%)	NHY		41.85	126	5,300	54.00	0.18	0.82
XTO Energy Inc.	XTO	В	19.70	124	2,400	26.00	0.23	0.81
PetroChina Company Ltd (10%)	PTR	В	20.43	176	3,600	30.00	0.17	0.73
Total or Median					37,900		0.18	0.95

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 2, 2002

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

			Price	EV/	EV/		vidend or	DI7/
	G 1	1 /	(\$/sh)	EV/	EV/		tribution	PV/
	Symbol		29-Aug 2002	Sales NTM	Ebitda NTM	P/E NTM	NTM	Ebitda NTM
	ſ	Rating	2002	IN I IVI	IN I IM	IN I IVI	(%)	IN I IVI
Energy Infrastructure								
Enterprise Products Part.	EPD		21.69	1.9	19.1	47	5.8	11.0
Kinder Morgan Energy Partners, L.P.	KMP	S	32.61	3.2	15.1	17	7.5	9.0
Kinder Morgan Management, LLC	KMR	S	31.75	3.1	14.8	17	7.7	9.0
Kinder Morgan, Inc.	KMI	S	40.87	3.6	13.7	17	0.5	9.0
Valero Energy Corporation	VLO		32.50	0.4	11.6	43	1.2	12.4
Calpine Corporation	CPN	Ν	5.13	1.9	11.4			10.2
Constellation Energy Group	CEG		28.25	2.9	10.3	11	3.4	9.2
Consol Energy Inc.	CNX		14.20	1.9	9.8	11	3.9	10.9
Dynegy Inc.	DYN		2.07	0.2	9.6		-	9.0
Williams Companies	WMB		3.15	1.9	9.5		-	9.0
AES Corporation	AES		3.19	2.8	9.5			9.0
CMS Energy Corporation	CMS		10.40	1.3	9.2	6	6.9	9.0
Mirant Corporation	MIR		3.80	0.5	8.9	3	-	9.0
Sempra Energy	SRE		23.08	2.5	8.8	9	4.3	9.0
Median				1.9	10.1	14	3.7	9.0
Natural Gas and Oil								
Suncor Energy	SU		17.99	3.8	11.3	25	1.2	10.8
Imperial Oil Limited (30%)	IMO		28.24	1.3	9.8	22	1.9	10.3
Murphy Oil Corporation	MUR		83.25	1.0	8.1	39	1.8	8.0
Ocean Energy, Inc.	OEI		20.76	4.8	8.0	35	0.8	7.8
Petro-Canada	PCZ		29.50	1.8	7.0	18	0.9	7.4
XTO Energy Inc.	XTO	В	19.70	3.5	6.7	14	0.2	8.3
Norsk Hydro ASA (49%)	NHY		41.85	0.8	3.9	11	2.5	4.8
PetroChina Company Ltd (10%)	PTR	В	20.43	1.6	3.7	7	6.2	5.1
Median				1.7	7.5	20	1.5	7.9

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 2, 2002

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

	Symbol/ Rat	ting	Price (\$/sh) 29-Aug 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Energy Infrastucture								
El Paso Energy Partners	EPN	S	34.94	42.8	1,500	10.20	0.64	1.89
Enbridge Energy Partners,	EEP		44.23	31.0	1,370	16.60	0.58	1.70
TEPPCO Partners, L.P.	TPP		31.30	46.5	1,450	12.90	0.61	1.56
Plains All Amer. Pipeline	PAA		24.25	41.6	1,010	14.90	0.39	1.39
Penn Virginia Res. Part, L.P.	PVR		20.53	15.3	310	15.00	-	1.37
Northern Border Partners	NBP		36.55	42.0	1,540	20.10	0.57	1.36
AmeriGas Partners, L.P.	APU		23.32	49.0	1,140	23.50	0.47	0.99
Penn Virginia Corporation	PVA		35.00	9.0	320	38.00	0.09	0.93
Total or Median	ļ.				8,600		0.52	1.38
Natural Gas and Oil								
Provident Energy Trust	PVX		6.90	36.0	250	5.00	0.46	1.21
Dorchester Hugoton, Ltd.	DHULZ		13.00	10.7	140	11.60	(0.17)	1.14
Pogo Producing Company	PPP		32.70	60.5	1,980	32.00	0.27	1.02
Quicksilver Resources Inc.	KWK		19.37	19.4	380	19.00	0.44	1.01
Newfield Exploration Company	NFX		33.16	48.6	1,610	33.00	0.25	1.00
CNOOC Limited (19%)	CEO	В	27.53	78.0	2,150	30.00	-	0.92
Enerplus Resources Fund	ERF		17.45	69.6	1,220	20.00	0.19	0.90
Spinnaker Exploration Company	SKE		30.89	28.5	880	35.00	0.03	0.89
Encore Acquisition Corp. (25%)	EAC		16.94	7.5	127	20.00	0.18	0.87
Stone Energy Company	SGY		34.06	26.4	900	42.00	0.29	0.87
Forest Oil Corporation	FST	Ν	26.23	46.8	1,230	35.00	0.30	0.83
Southwestern Energy Company	SWN		11.55	25.6	300	17.00	0.44	0.82
Unit Corporation	UNT		16.51	36.2	600	21.00	0.03	0.79
Magnum Hunter Resources, Inc.	MHR		5.49	71.5	390	11.00	0.46	0.73
Swift Energy Company	SFY		13.06	24.8	320	22.00	0.32	0.72
Canadian Oil Sands Trust (US\$)	COS_u.TO	В	25.33	56.9	1,440	40.00	0.12	0.68
Total or Median	t.				13,900		0.26	0.88
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		17.51	6.0	105	19.90	-	0.88
San Juan Basin Royalty Trust	SJT	В	11.54	46.6	540	16.00	-	0.72
Hugoton RoyaltyTrust (46%)	HGT		11.22	18.4	210	16.10	-	0.70
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.59	27.0	16	2.00	0.84	0.89
Energy Partners Ltd.(30%)	EPL	В	8.09	8.2	67	10.00	0.38	0.88
Purcell Energy, Ltd. (US\$)	PEL.TO	Ν	1.41	27.3	38	3.00	0.22	0.58

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio September 2, 2002

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

			Price (\$/sh)	EV/	EV/	Dividend or Distribution		PV/
	Symbol/		29-Aug	Sales	Ebitda	P/E	NTM	Ebitda
		ting	2002	NTM	NTM	NTM	(%)	NTM
Energy Infrastucture								
El Paso Energy Partners	EPN	S	34.94	9.5	17.0	26	7.7	9.0
Enbridge Energy Partners,	EEP		44.23	6.8	15.3	85	7.9	9.0
TEPPCO Partners, L.P.	TPP		31.30	1.1	14.0	20	7.3	9.0
Penn Virginia Res. Part, L.P.	PVR		20.53	9.6	13.3	15	9.7	9.7
Plains All Amer. Pipeline	PAA		24.25	0.2	12.5	18	8.5	9.0
Northern Border Partners	NBP		36.55	7.7	12.2	16	8.8	9.0
AmeriGas Partners, L.P.	APU		23.32	1.5	9.0	13	9.4	9.0
Penn Virginia Corporation	PVA		35.00	3.3	5.3	23	2.6	5.8
Mediar	1			5.1	12.9	19	8.2	9.0
Natural Gas and Oil								
Dorchester Hugoton, Ltd.	DHULZ		13.00	6.4	9.7	14	8.9	8.5
Quicksilver Resources Inc.	KWK		19.37	4.5	8.4	21	-	8.3
Pogo Producing Company	PPP		32.70	4.3	7.4	46	0.4	7.3
Provident Energy Trust	PVX		6.90	3.6	7.3	90	16.1	6.1
Canadian Oil Sands Trust (US\$)	COS_u.TO	В	25.33	3.7	7.0	8	5.1	10.3
Enerplus Resources Fund	ERF		17.45	4.6	6.6	16	12.5	7.4
Forest Oil Corporation	FST	Ν	26.23	3.8	6.5	21	-	7.8
Encore Acquisition Corp. (25%)	EAC		16.94	4.3	6.4	14	-	7.4
Magnum Hunter Resources, Inc.	MHR		5.49	2.9	6.0	16	-	8.3
CNOOC Limited (19%)	CEO	В	27.53	4.6	6.0	12	0.9	6.5
Swift Energy Company	SFY		13.06	4.0	5.9	27	-	8.1
Unit Corporation	UNT		16.51	2.8	5.3	12	-	6.6
Southwestern Energy Company	SWN		11.55	2.2	5.2	11	-	6.3
Newfield Exploration Company	NFX		33.16	3.4	4.7	18	-	4.7
Stone Energy Company	SGY		34.06	3.3	4.4	10	-	5.0
Spinnaker Exploration Company	SKE		30.89	3.7	4.3	13	-	4.8
Mediar	1			3.8	6.2	15	-	7.3
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		17.51	6.3	8.9	10	10.4	10.2
San Juan Basin Royalty Trust	SJT	В	11.54	5.7	7.4	10	10.0	10.2
Hugoton RoyaltyTrust (46%)	HGT		11.22	4.7	6.9	10	10.4	9.9
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.59	4.2	6.2		-	6.9
Energy Partners Ltd.(30%)	EPL	В	8.09	2.7	5.5		-	6.3
Purcell Energy, Ltd. (US\$)	PEL.TO	Ν	1.41	3.3	5.0	11	-	8.5

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciationand amortization; NTM = Next Twelve Months Ended June 30, 2003; P/E = Stock Price toEarnings; PV = Present Value of oil and gas and other businesses