

Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

December 2, 2002

Out in the West Texas Town of El Paso

Summary and Recommendation

Our Sell recommendation of **El Paso Energy Partners (EPN)** takes on new urgency with the official classification of **El Paso Corporation (EP)** as a junk credit. Leading up to the downgrade by a credit rater, EP appeared to go to great lengths to set up a charade of the transfer of San Juan Basin assets to EPN. EP caused EPN to issue new debt at nearly 11% annual interest to finance a purchase that generated cash flow only at that annual rate in the past nine months. Much of the rest of the purchase is to be financed with stock in EPN that EP issues to itself. Like the hero in the classic Marty Robbins ballad, EP and EPN are trying to make it back to Rose's Cantina. The cowboy in the famous song makes it in time to die in the arms of his love, Felina. On a more optimistic note, six-year oil, one-year natural gas and one-year refining margins are in rising trends and we feel good about the prospects for our buy recommendations including **PetroChina (PTR)** and **CNOOC Ltd (CEO)** among others (see Tables L-1, L-2, M-1, M-2, S-1, S-2).

Gunfighter Ballads and Trail Songs

"Something is dreadfully wrong for I feel
A deep burning pain in my side.....
It's getting harder to stay in the saddle.
I'm getting weary, unable to ride."

From the lyrics of *El Paso*, circa 1960

San Juan Transaction Barely Accretive By Liberal Standards

EPN apparently expects to close before year-end on a \$782 million purchase of assets from EP. The assets, primarily gathering lines in the San Juan Basin, apparently generated Ebitda of about \$87 million annualized in the nine months ended September 30, 2002. On that basis the purchase price would be 9.0 times Ebitda.

On November 22, EPN sold \$200 million of debt in a private placement at 10.75% annual yield. Presumably the market yield would now be higher if any of the private buyers were to sell after the Moody's downgrade of EP debt to junk. At 9.0 times, the cash flow generated by the assets would be 11.1%, leaving little for repayment of principal or to compensate equity holders for the increased risk.

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An initial attempt to finance part of the purchase with publicly issued equity failed. As a result EP contemplates an issue of \$350 million of newly created Class C limited partner units to itself. At the current price of publicly traded units and the indicated distribution rate, the immediate annual cash cost to EPN of issuing the new units would be 9.2%. That suggests an "accretive" acquisition because the distribution yield on the units is less than the 11.1% cash generated by the acquired properties. The margin is slim and would shrink rapidly should the issue price be at a normal discount to market price or should market price weaken further.

San Juan Transaction Dilutive by Conservative Standards

That was the good news as cast in the way suggested by EP, EPN and its promoters. We present some calculations that tell a different story (see table).

On the top line McDep Ratio goes from 1.84 to 2.53 should the San Juan acquisition close as contemplated. Any stock with a McDep Ratio above 1.2 is a potential sell.

On the bottom line Limited Partner distribution goes from about one and a half times Limited Partner Equity Ebitda to almost two and a half times. Distributing more than Equity Ebitda defines a potential Ponzi scheme.

The ratio of Debt/Present Value near the middle of the table stays at 0.64. Any energy stock with a ratio of debt over 0.50 is a bankruptcy candidate. There may be money to be made in bankruptcy, but it is unlikely to be made by equity holders who buy before bankruptcy.

The surprise in the proposed acquisition of San Juan properties is how little of the incremental reported income goes to the limited partners. The transaction would be dilutive to LP income and accretive to GP income. We use the income split as the measurable indicator of the value split. The LP share would go from 46% as in the latest quarter annualized to only 29% assuming the San Juan transaction is implemented as proposed.

The promoters of the partnerships pretty much ignore the idea that any value should be allocated to the GP. Yet it is a fact that at the current rate of distribution, the LP's gets 71% of total distributions. That is too low for a value indicator because the GP will likely attempt everything in its power to increase the distribution to qualify for a GP share of 50% of any increment.

We suggest that even 50% is too high for the LP's share of value. The likely scenario is that the GP pushes so hard that the lenders call a stop. Then there is only enough value left to repay the lenders. The GP is under no obligation to repay any distribution it has received. Moreover the GP has practically no principal at stake to lose. The Limited

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Partners would lose their principal when the lenders shut down a partnership. Thus the LP's share can be negative and the GP's share of equity value can be more than 100%.

	Before San Juan	After San Juan
McDep Ratio	1.84	2.53
Ev/Ebitda	16.5	22.8
Market Cap & Debt	1,996	2,249
Market Cap (\$mm)	1,301	1,682
Shares (mm)	44	57
Price (\$/unit)	29.50	29.50
Debt/Present Value	0.64	0.64
Net PV (\$/share)	8.86	5.65
Present Value	1,085	890
PV/Ebitda	9.0	9.0
LP Ebitda	121	99
LP Share	46%	29%
Ebitda	260	336
Depreciation	76	117
Interest	88	127
Series B	15	15
General Partner	44	55
Net Income	37	23
LP Debt	695	568
LP Share	46%	29%
Debt	1,497	1,932
Equity	458	811
Free Assets	173	202
Total Assets	2,128	2,945
Distribution		
GP	49	63
LP	119	154
LP Dist/LP Equity Ebitda	1.54	2.44

As a result, the share of value ultimately going to the LP's is likely to be less than 71%, probably less than 50% and possibly less than 0%. While the expected amount is debatable, the share of reported income attributed to the LP's can be extracted from the public disclosures, disguised as they are. Our estimate of that number could be too low by a wide margin and the valuation of the stock would still look unattractive.

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

	Symbol/ Rating	Price (\$/sh) 27-Nov 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio	
Mega Cap								
Exxon Mobil Corporation	XOM	34.96	6,787	237,000	36.00	0.09	0.97	
BP plc	BP	39.20	3,738	147,000	50.00	0.15	0.82	
TotalFinaElf S.A.	TOT	67.47	1,346	90,800	90.00	0.14	0.78	
Royal Dutch/Shell	RD	B	43.94	3,481	153,000	60.00	0.15	0.77
ChevronTexaco Corporation	CVX	B	66.88	1,063	71,100	101.00	0.17	0.72
	<i>Total or Median</i>			699,000		0.15	0.78	
Energy Infrastructure								
Southern Company	SO		26.14	701	18,300	23.90	0.47	1.05
American Electric Power Co. Inc.	AEP	N	28.49	326	9,300	27.40	0.74	1.01
Enel S.p.a. (32%)	EN		24.85	388	9,600	32.70	0.39	0.85
Exelon Corporation	EXC	N	50.93	323	16,500	70.80	0.45	0.85
Duke Energy Corporation	DUK		19.89	792	15,800	30.40	0.48	0.82
Dominion Resources	D		50.66	269	13,600	76.20	0.45	0.82
El Paso Corporation	EP	N	8.55	590	5,000	20.00	0.66	0.80
	<i>Total or Median</i>			70,000		0.47	0.83	
Natural Gas and Oil								
OAo Lukoil	LUKOY		67.00	299	20,100	70.00	0.08	0.96
Occidental Petroleum Corp.	OXY		27.60	376	10,400	32.00	0.38	0.92
Devon Energy	DVN		45.17	165	7,500	55.00	0.48	0.91
Anadarko Petroleum Corp.	APC		46.80	266	12,400	56.00	0.26	0.88
ENI S.p.A.	E		70.47	776	54,700	85.00	0.18	0.86
Encana Corporation	ECA	B	27.25	470	12,800	35.00	0.28	0.84
Burlington Resources	BR	B	41.71	202	8,400	57.00	0.28	0.81
Unocal Corporation	UCL		29.45	245	7,200	45.00	0.33	0.77
ConocoPhillips	COP	B	48.08	680	32,700	80.00	0.32	0.73
Marathon Oil Corporation	MRO	B	19.78	310	6,100	40.00	0.37	0.68
Petroleo Brasileiro S. A.	PBR	N	13.04	1,086	14,200	30.00	0.27	0.59
	<i>Total or Median</i>			166,000		0.30	0.82	
Service								
Baker Hughes Inc.	BHI		31.79	339	10,800	25.00	0.09	1.25
Schlumberger Ltd.	SLB		43.45	581	25,200	44.00	0.22	0.99
Halliburton Company	HAL		19.19	434	8,300	22.00	0.25	0.90

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

	<i>Symbol/</i>		<i>Price</i>	<i>EV/</i>	<i>EV/</i>	<i>Dividend or</i>	<i>PV/</i>
	<i>Rating</i>	<i>27-Nov</i>	<i>2002</i>	<i>Sales</i>	<i>Ebitda</i>	<i>P/E</i>	<i>Ebitda</i>
				<i>NTM</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>
						<i>NTM</i>	<i>NTM</i>
						<i>(%)</i>	<i>NTM</i>
Mega Cap							
Exxon Mobil Corporation	XOM		34.96	1.2	9.4	20	9.6
BP plc	BP		39.20	1.0	7.5	16	9.1
Royal Dutch/Shell	RD	B	43.94	1.0	7.3	17	9.5
TotalFinaElf S.A.	TOT		67.47	1.1	7.1	14	9.0
ChevronTexaco Corporation	CVX	B	66.88	0.9	6.5	15	9.0
	<i>Median</i>			<i>1.0</i>	<i>7.3</i>	<i>16</i>	<i>9.1</i>
Energy Infrastructure							
Southern Company	SO		26.14	3.3	9.4	15	9.0
American Electric Power Co. Inc.	AEP	N	28.49	0.6	9.1	9	9.0
Enel S.p.a. (32%)	EN		24.85	2.1	7.7	30	9.0
Exelon Corporation	EXC	N	50.93	2.3	7.6	11	9.0
Duke Energy Corporation	DUK		19.89	0.7	7.4	8	9.0
Dominion Resources	D		50.66	3.1	7.3	10	9.0
El Paso Corporation	EP	N	8.55	2.3	6.2	5	7.7
	<i>Median</i>			<i>2.3</i>	<i>7.6</i>	<i>10</i>	<i>9.0</i>
Natural Gas and Oil							
Burlington Resources	BR	B	41.71	4.5	6.7	22	8.4
Devon Energy	DVN		45.17	3.0	6.7	45	7.4
ConocoPhillips	COP	B	48.08	0.8	6.7	13	9.1
ENI S.p.A.	E		70.47	1.5	6.3	14	7.3
Encana Corporation	ECA	B	27.25	2.6	5.9	14	7.0
Anadarko Petroleum Corp.	APC		46.80	2.5	5.8	11	6.7
Occidental Petroleum Corp.	OXY		27.60	1.4	5.5	10	6.0
Marathon Oil Corporation	MRO	B	19.78	0.4	5.1	9	7.6
Unocal Corporation	UCL		29.45	2.1	4.7	11	6.2
OAo Lukoil	LUKOY		67.00	1.7	4.7	10	4.9
Petroleo Brasileiro S. A.	PBR	N	13.04	1.2	3.0	3	5.0
	<i>Median</i>			<i>1.7</i>	<i>5.8</i>	<i>11</i>	<i>7.0</i>
Service							
Baker Hughes Inc.	BHI		31.79	2.2	13.5	38	10.8
Schlumberger Ltd.	SLB		43.45	2.4	8.8	32	8.9
Halliburton Company	HAL		19.19	1.0	8.1	17	9.0

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

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	Symbol/ Rating		Price (\$/sh) 27-Nov 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Energy Infrastructure								
Kinder Morgan Energy Partners, L.P.	KMP	S	34.80	135	4,700	14.00	0.47	1.78
Kinder Morgan Management, LLC	KMR	S	30.58	40	1,200	14.00	0.47	1.62
Kinder Morgan, Inc.	KMI	S	41.40	123	5,100	8.10	0.87	1.51
Enterprise Products Part.	EPD		17.81	175	3,100	9.50	0.43	1.50
Constellation Energy Group	CEG		26.60	164	4,400	20.00	0.69	1.10
Calpine Corporation	CPN	N	4.43	375	1,700	1.00	0.97	1.10
Williams Companies	WMB		2.58	521	1,300	1.00	0.97	1.04
AES Corporation	AES		2.28	543	1,200	1.00	0.98	1.03
CMS Energy Corporation	CMS		10.01	137	1,400	8.70	0.90	1.01
Dynegy Inc.	DYN		1.21	418	500	1.00	0.94	1.01
Sempra Energy	SRE		23.00	207	4,800	24.30	0.64	0.98
Mirant Corporation	MIR		2.15	413	900	4.00	0.86	0.93
Valero Energy Corporation	VLO		32.00	115	3,700	40.00	0.60	0.92
			<i>Total or Median</i>		<i>34,000</i>		<i>0.86</i>	<i>1.04</i>
Natural Gas and Oil								
Murphy Oil Corporation	MUR		86.28	46	3,900	82.00	0.18	1.04
Ocean Energy, Inc.	OEI		18.80	178	3,300	20.00	0.30	0.96
Petro-Canada	PCZ		29.46	262	7,700	31.00	0.11	0.96
XTO Energy Inc.	XTO	B	23.70	124	2,900	26.00	0.25	0.93
Suncor Energy	SU		14.96	454	6,800	17.00	0.25	0.91
Imperial Oil Limited (30%)	IMO		27.88	114	3,200	33.00	0.13	0.87
Norsk Hydro ASA (49%)	NHY		38.50	126	4,900	54.00	0.18	0.76
CNOOC Limited (19%)	CEO	B	24.52	78	1,910	33.00	-	0.74
PetroChina Company Ltd (10%)	PTR	B	19.70	176	3,500	30.00	0.17	0.71
			<i>Total or Median</i>		<i>38,100</i>		<i>0.18</i>	<i>0.91</i>
Coal Producers (Small Cap)								
Consol Energy Inc.	CNX		13.59	79	1,100	5.00	0.88	1.20
Penn Virginia Res. Part, L.P.	PVR		20.56	15	300	17.00	-	1.19
Peabody Energy	BTU		26.96	55	1,500	18.00	0.75	1.12
Arch Coal	ACI		19.96	48	1,000	18.00	0.61	1.04
Fording Coal (US\$)	FDG		20.50	52	1,100	23.00	0.04	0.90
Alliance Res. Part, L.P.	ARLP		23.59	16	400	29.00	0.36	0.88
Massey Energy	MEE		8.85	75	700	18.00	0.37	0.68
					<i>6,100</i>		<i>0.37</i>	<i>1.04</i>

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

	Symbol/ Rating	Price (\$/sh) 27-Nov 2002	EV/ Sales NTM	EV/ Ebitda NTM	P/E NTM	Dividend or Distribution NTM (%)	PV/ Ebitda NTM
Energy Infrastructure							
Enterprise Products Part.	EPD	17.81	1.6	16.5	39	7.0	11.0
Kinder Morgan Energy Partners, L.P.	KMP	S	34.80	3.3	15.0	17	8.4
Kinder Morgan Management, LLC	KMR	S	30.58	3.0	13.7	15	8.4
Kinder Morgan, Inc.	KMI	S	41.40	3.6	13.4	16	8.8
Calpine Corporation	CPN	N	4.43	1.9	11.2		10.2
Constellation Energy Group	CEG		26.60	2.8	10.1	10	9.2
Williams Companies	WMB		2.58	1.9	9.4	-	9.0
AES Corporation	AES		2.28	2.7	9.3		9.0
CMS Energy Corporation	CMS		10.01	1.3	9.1	6	9.0
Dynegy Inc.	DYN		1.21	0.2	9.1	-	9.0
Sempra Energy	SRE		23.00	2.5	8.8	8	9.0
Mirant Corporation	MIR		2.15	0.4	8.4	1	9.0
Valero Energy Corporation	VLO		32.00	0.4	7.2	8	7.8
	<i>Median</i>			<i>1.9</i>	<i>9.4</i>	<i>10</i>	<i>9.0</i>
Natural Gas and Oil							
Suncor Energy	SU		14.96	3.3	9.8	21	10.8
Murphy Oil Corporation	MUR		86.28	1.0	8.3	41	8.0
Ocean Energy, Inc.	OEI		18.80	4.5	7.5	32	7.8
Petro-Canada	PCZ		29.46	1.8	7.0	18	7.4
Imperial Oil Limited (30%)	IMO		27.88	1.1	7.0	13	8.1
XTO Energy Inc.	XTO	B	23.70	4.4	6.2	12	6.6
CNOOC Limited (19%)	CEO	B	24.52	3.3	4.2	9	5.7
Norsk Hydro ASA (49%)	NHY		38.50	0.7	3.6	10	4.8
PetroChina Company Ltd (10%)	PTR	B	19.70	1.6	3.6	7	5.1
	<i>Median</i>			<i>1.8</i>	<i>7.0</i>	<i>13</i>	<i>7.4</i>
Coal Producers (Small Cap)							
Penn Virginia Res. Part, L.P.	PVR		20.56	9.5	13.1	15	11.0
Consol Energy Inc.	CNX		13.59	1.9	11.7	31	9.7
Peabody Energy	BTU		26.96	1.6	10.1	23	9.0
Arch Coal	ACI		19.96	1.5	9.4	112	9.0
Fording Coal (US\$)	FDG		20.50	1.9	8.1	19	9.0
Massey Energy	MEE		8.85	1.0	6.1	221	8.9
Alliance Res. Part, L.P.	ARLP		23.59	1.3	5.3	7	6.0
				<i>1.6</i>	<i>9.4</i>	<i>23</i>	<i>9.0</i>

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

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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>27-Nov</i>	<i>Shares</i>	<i>Cap</i>	<i>Present</i>	<i>Present</i>	<i>McDep</i>
			<i>2002</i>	<i>(mm)</i>	<i>(\$mm)</i>	<i>Value</i>	<i>Value</i>	<i>Ratio</i>
						<i>(\$/sh)</i>		
Energy Infrastructure								
El Paso Energy Partners	EPN	S	29.50	57.0	1,680	5.60	0.64	2.53
Enbridge Energy Partners, L.P.	EEP	S	39.75	35.0	1,390	14.90	0.64	1.61
Enbridge Energy Management, L.L.C	EEQ	S	34.10	9.0	310	14.90	0.64	1.48
Northern Border Partners	NBP		36.08	42.0	1,520	20.10	0.57	1.35
Plains All Amer. Pipeline	PAA		22.84	41.6	950	14.90	0.39	1.33
TEPPCO Partners, L.P.	TPP		27.15	50.0	1,360	17.70	0.56	1.24
AmeriGas Partners, L.P.	APU		21.59	49.0	1,060	23.50	0.47	0.96
Western Gas Resources	WGR		35.30	33.8	1,190	37.60	0.28	0.95
			<i>Total or Median</i>			<i>9,500</i>	<i>0.56</i>	<i>1.34</i>
Natural Gas and Oil								
Dorchester Hugoton, Ltd.	DHULZ		13.55	10.7	146	11.60	(0.17)	1.20
Quicksilver Resources Inc.	KWK		22.85	19.4	440	19.00	0.44	1.11
Provident Energy Trust	PVX		6.44	36.0	230	6.00	0.33	1.05
Newfield Exploration Company	NFX		36.00	48.9	1,760	35.00	0.24	1.02
Pogo Producing Company	PPP		35.60	64.5	2,300	35.00	0.23	1.01
Encore Acquisition Corp. (25%)	EAC		18.80	7.0	132	21.00	0.20	0.92
Penn Virginia Corporation	PVA		33.93	9.0	310	38.00	0.09	0.90
Unit Corporation	UNT		18.38	36.2	670	21.00	0.03	0.88
Enerplus Resources Fund	ERF		16.45	69.6	1,150	20.00	0.19	0.86
Southwestern Energy Company	SWN		11.86	25.6	300	17.00	0.44	0.83
Pengrowth Energy Trust	PGH		8.80	84.6	740	11.00	0.16	0.83
Forest Oil Corporation	FST	N	26.44	46.8	1,240	35.00	0.30	0.83
Stone Energy Company	SGY		30.05	26.4	800	42.00	0.29	0.80
Magnum Hunter Resources, Inc.	MHR		5.75	71.5	410	11.00	0.46	0.74
Spinnaker Exploration Company	SKE		22.00	34.2	750	33.00	-	0.67
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	22.54	57.3	1,290	40.00	0.12	0.62
Swift Energy Company	SFY		9.09	24.8	230	22.00	0.32	0.60
			<i>Total or Median</i>		<i>12,900</i>		<i>0.23</i>	<i>0.86</i>
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		18.78	6.0	113	19.20	-	0.98
San Juan Basin Royalty Trust	SJT	B	13.34	46.6	620	15.70	-	0.85
Hugoton RoyaltyTrust (46%)	HGT		11.55	18.4	210	15.20	-	0.76
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.79	30.0	24	1.00	0.91	0.98
Energy Partners Ltd.(30%)	EPL	B	9.40	8.3	78	10.00	0.38	0.97
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.57	27.3	43	2.50	0.26	0.72

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. Mr. Wulff is not paid by covered companies. He and his spouse do not sell short nor act contrary to a buy or sell rating except for tax loss purposes. 8

Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

December 2, 2002

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

	Symbol/ Rating		Price (\$/sh) 27-Nov 2002	EV/ Sales NTM	EV/ Ebitda NTM	P/E NTM	Dividend or Distribution NTM (%)	PV/ Ebitda NTM
Energy Infrastructure								
El Paso Energy Partners	EPN	S	29.50	8.4	22.7	74	9.2	9.0
Enbridge Energy Partners, L.P.	EEP	S	39.75	1.9	14.4	30	9.1	9.0
Enbridge Energy Management, L.L.C	EEQ	S	34.10	1.7	13.3	26	10.6	9.0
Northern Border Partners	NBP		36.08	7.6	12.1	16	8.9	9.0
Plains All Amer. Pipeline	PAA		22.84	0.2	11.9	17	9.0	9.0
TEPPCO Partners, L.P.	TPP		27.15	0.9	11.1	14	8.8	9.0
AmeriGas Partners, L.P.	APU		21.59	1.5	8.6	12	10.2	9.0
Western Gas Resources	WGR		35.30	0.7	8.6	20	0.6	9.0
	<i>Median</i>			<i>1.6</i>	<i>12.0</i>	<i>18</i>	<i>9.0</i>	<i>9.0</i>
Natural Gas and Oil								
Dorchester Hugoton, Ltd.	DHULZ		13.55	6.5	9.7	13	8.9	8.1
Quicksilver Resources Inc.	KWK		22.85	5.0	9.2	25	-	8.3
Forest Oil Corporation	FST	N	26.44	3.8	6.5	21	-	7.8
Enerplus Resources Fund	ERF		16.45	4.4	6.3	15	13.3	7.4
Magnum Hunter Resources, Inc.	MHR		5.75	3.0	6.1	16	-	8.3
Encore Acquisition Corp. (25%)	EAC		18.80	4.1	5.9	12	-	6.5
Canadian Oil Sands Trust (US\$)	COS_u.TO	B	22.54	3.5	5.9	6	5.6	9.5
Unit Corporation	UNT		18.38	3.1	5.8	13	-	6.6
Pogo Producing Company	PPP		35.60	3.5	5.6	18	0.3	5.5
Pengrowth Energy Trust	PGH		8.80	3.5	5.5	16	17.1	6.6
Provident Energy Trust	PVX		6.44	3.2	5.4	38	24.8	5.2
Southwestern Energy Company	SWN		11.86	2.2	5.2	12	-	6.3
Penn Virginia Corporation	PVA		33.93	3.2	5.2	22	2.7	5.8
Swift Energy Company	SFY		9.09	3.3	4.9	19	-	8.1
Newfield Exploration Company	NFX		36.00	3.1	4.5	15	-	4.4
Stone Energy Company	SGY		30.05	3.0	4.0	9	-	5.0
Spinnaker Exploration Company	SKE		22.00	3.2	3.7	13	-	5.5
	<i>Median</i>			<i>3.3</i>	<i>5.6</i>	<i>15</i>	<i>-</i>	<i>6.6</i>
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		18.78	6.8	9.7	10	9.6	9.9
San Juan Basin Royalty Trust	SJT	B	13.34	5.6	7.1	10	10.4	8.4
Hugoton RoyaltyTrust (46%)	HGT		11.55	4.7	6.6	9	10.8	8.7
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.79	5.8	9.8		-	10.0
Purcell Energy, Ltd. (US\$)	PEL.TO	N	1.57	3.7	5.7	14	-	7.8
Energy Partners Ltd.(30%)	EPL	B	9.40	2.9	5.6		-	5.8

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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