

## Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

December 3, 2001

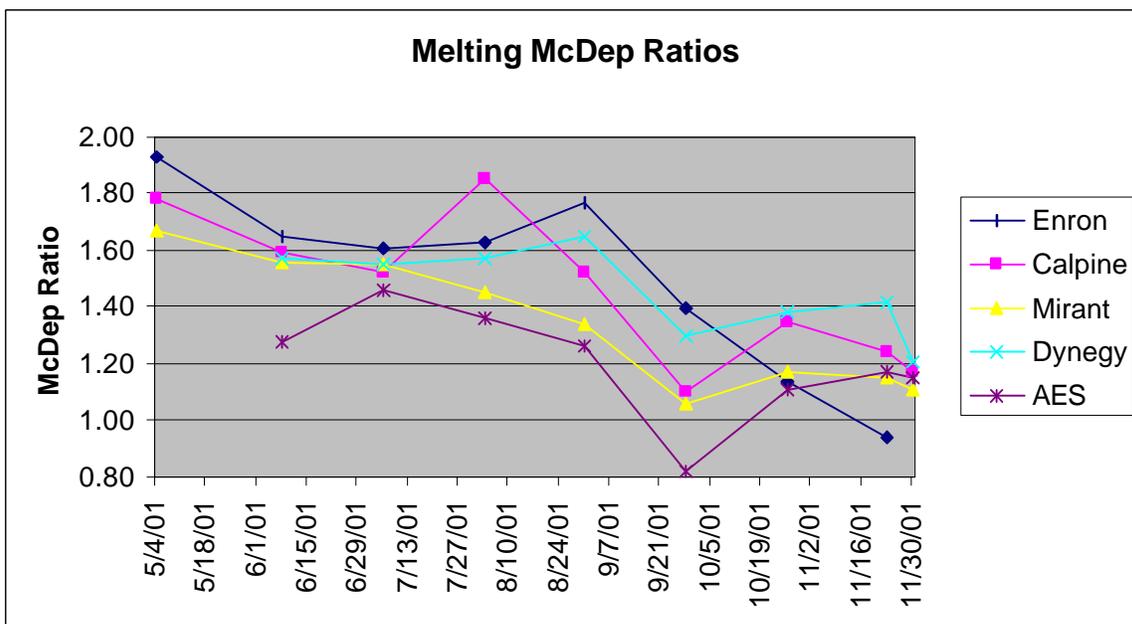
# After Enron

## Summary and Recommendation

So many have lost so much in Enron that there is likely to be little tolerance for hype in high McDep Ratio, high debt peers like Sell recommended **Calpine (CPN)**, as well as **Dynegy (DYN)**, **AES (AES)** and **Mirant (MIR)**. McDep Ratios have already declined sharply for those stocks, but there remain questions about promised prospects in some cases. Lower McDep Ratio, Buy recommended power stocks **Exelon** and **American Electric Power** have less valuation risk and have abundant low cost real assets. Strong Buys **Burlington Resources (BR)** and **Marathon Oil (MRO)** have among the lowest valuation risk and are prime potential building blocks for a Mega Cap energy company. Recommended non-U.S. stocks, **PetroChina (PTR)**, **CNOOC Limited (CEO)**, **PanCanadian Energy (PCX)**, and **Purcell Energy (PEL.TO)** may have political risk, but have low valuation risk and low financial risk. While the weather is too warm, the futures curve is steep for recommended natural gas producers **Forest Oil (FST)**, and **San Juan Basin Royalty Trust (SJT)**. Build a diversified energy portfolio with new ideas and old from our valuation ranking of 61 stocks (see Table L-1, L-2, S-1 and S-2).

## McDep Ratios Down for High Fliers, But Still Moderately High

We had no idea Enron would collapse so spectacularly. We did realize that the stock had high valuation risk. Other high McDep Ratio companies have seen that measure decline as well (see Chart).



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Each of the five stocks also have high financial risk signaled by ratios of Debt/Present Value that we display next to the McDep Ratio in valuation tables. We are also cynics about the extraordinary leverage, mostly undisclosed, in derivatives. Leverage allows smart persons to make a lot of money quickly. Too often those persons attribute too much of their success to themselves rather than to luck magnified by leverage.

We do take a stand recommending the sale of Calpine. The McDep Ratio on Calpine doesn't look as menacing as it did. However, the denominator of the ratio may be overstated as it depends on the validity of the company's reported financial results.

We know that Dynegy is in volatile businesses and in the past it has been a volatile stock. We like Mr. Watson, but thought his use of a professional golf tournament sponsored by his company to televise his own image was a questionable use of stockholder funds. Nor was Dynegy too thoughtful in its proposed rescue of Enron. If the aim was to acquire some of Enron's assets on the cheap it will be at the expense of Enron's customers. Dynegy will do well to remember that the very parties it attempts to disadvantage are also Dynegy's customers.

AES has been another industry success story to this point. The company has many power projects in developing countries. Diversified by country, the projects are not overly exposed to a single political regime, but do depend heavily on world economic progress, as do all emerging countries. Meanwhile AES has high financial risk with the highest ratio of debt to present value of large companies in our coverage. By comparison, our China energy company recommendations, PTR and CEO, share the developing country risk of AES, but have much lower valuation risk and financial risk than AES.

### **CNOOC Limited Has Preferred Position Offshore China**

Two events the past week reinforce our enthusiasm for our latest recommendation (see Stock Idea: CNOOC Limited - China Energy Growth Limited). At its meeting in New York, Phillips (soon to be **ConocoPhillips**) reminded analysts that the company's large discovery offshore China was one of its most important sources of future earnings. The company has a 49% interest in 800 million barrels recoverable and the reserves are still climbing. We add that the other 51% is held by CNOOC.

Also last week, the Kerr-McGee/**Newfield Exploration**/Ultra group announced a discovery offshore China. The press release made no mention of CNOOC probably because the Chinese company need not assert its 51% ownership until it knows drilling has been successful.

Investors who like the China exploration prospects of international companies should like the exploration prospects of CNOOC. The international companies are assuming similar political risk as are the investors in CNOOC. The latter has a preferred business risk in

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that it need not pay for unsuccessful exploration. Finally, the valuation risk and financial risk of CNOOC is as low as practically any of the international companies.

### **Are Commodity Futures a Price Forecast?**

Do futures traders attempt to forecast prices or do they simply take the current price and put a time structure on it related to storage costs, interest rates and other measurable factors? There is no doubt that one can transact at the futures prices quoted. As a result some buyers and sellers of contracts are making a judgment of future price relative to futures contract price.

Actually our theoretical understanding of futures is limited and still developing. Empirically we know that futures prices are as credible an indication of consensus forecasts as anything we know. We use futures prices in our estimates of cash flow by quarter and for the next few years. Thereafter we escalate with the inflation embedded in Treasury securities and we use a discount rate tied to Treasury interest.

While we treat futures as a price forecast for the next few years, we know it is not a good forecast. One need not track futures for long to realize they are as fickle as the stock market and the future rarely unfolds as futures prices would have it.

In the end, because futures are the most widely known indication, if not forecast, of future prices, we use them. As a result our quantitative estimates fluctuate, but our actual recommendations are based on judgment.

As enthusiastic as we are about futures for analytical purposes, we are not enthusiastic about too much use of futures by most independent oil and gas companies. Some companies are disclosing that their futures contracts with Enron may be no more than trombones for the River City Band.

### **Oil Futures Reach to 2008 and Natural Gas to 2007**

Futures quotes are extended this month on the New York Mercantile Exchange as we access through the Wall Street Journal's Internet site (see Chart). We are not using the far out years in our estimates yet and may not. The more that time goes on it seems too unrealistic to us that price would not go up at least with inflation. More than likely in the case of the far out years, the factors dominating the Nymex numbers may be unrelated to expected actual prices.

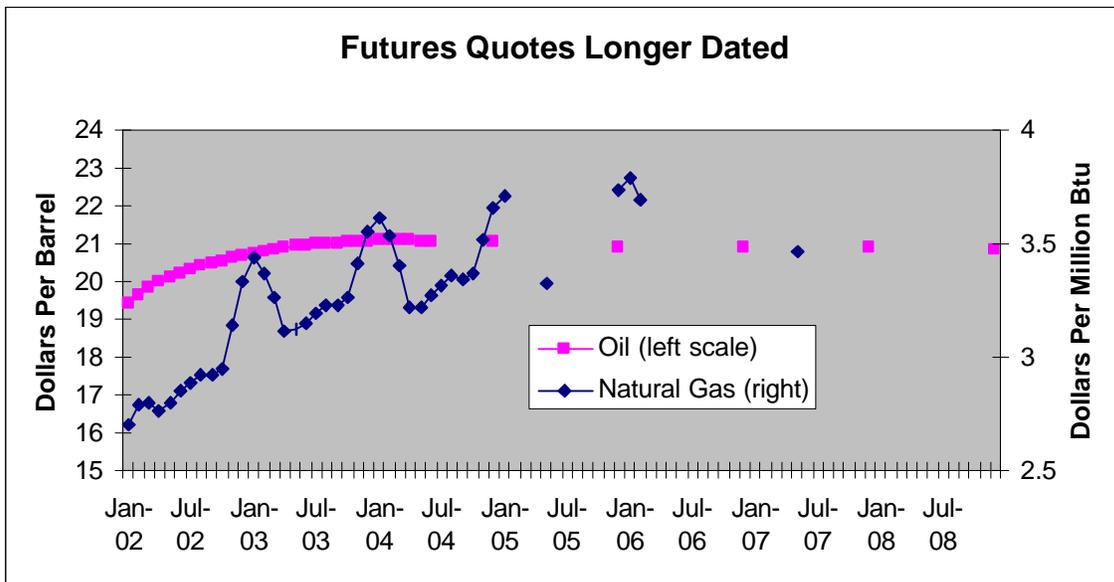
Compared to almost two years ago when we first started incorporating futures prices into our weekly calculations, the natural gas quotes have changed the most. During that time the clean fuel has made an historic transition upward from a steep discount to oil.

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### Western Natural Gas Exceeds Benchmark for December

Our final commodity price observation has a bearing on the expected February declaration of monthly distribution for recommended San Juan Basin Royalty Trust. The El Paso San Juan index for December appears likely to be about \$2.30 per million btu's (see Chart on next page from Bloomberg). Recent quotes for the Henry Hub in Louisiana, the reference pricing point for the industry, have been less than \$2.00. Perhaps the western producers will make up for ground lost with an artificially low index for October.

We have resisted publishing estimates of monthly distributions for SJT believing that the fluctuations could just as readily be misleading as helpful. Look for a change in our practice before long. For the time being one can see that the low index price for October points to a low distribution to be declared in December. Perhaps some unsuspecting unitholders may sell on a low distribution. The more relevant indicators to us are the pickup in price for January and February on the basis of history below, and the continued steep climb in futures for the next few years above.

Kurt H. Wulff, CFA

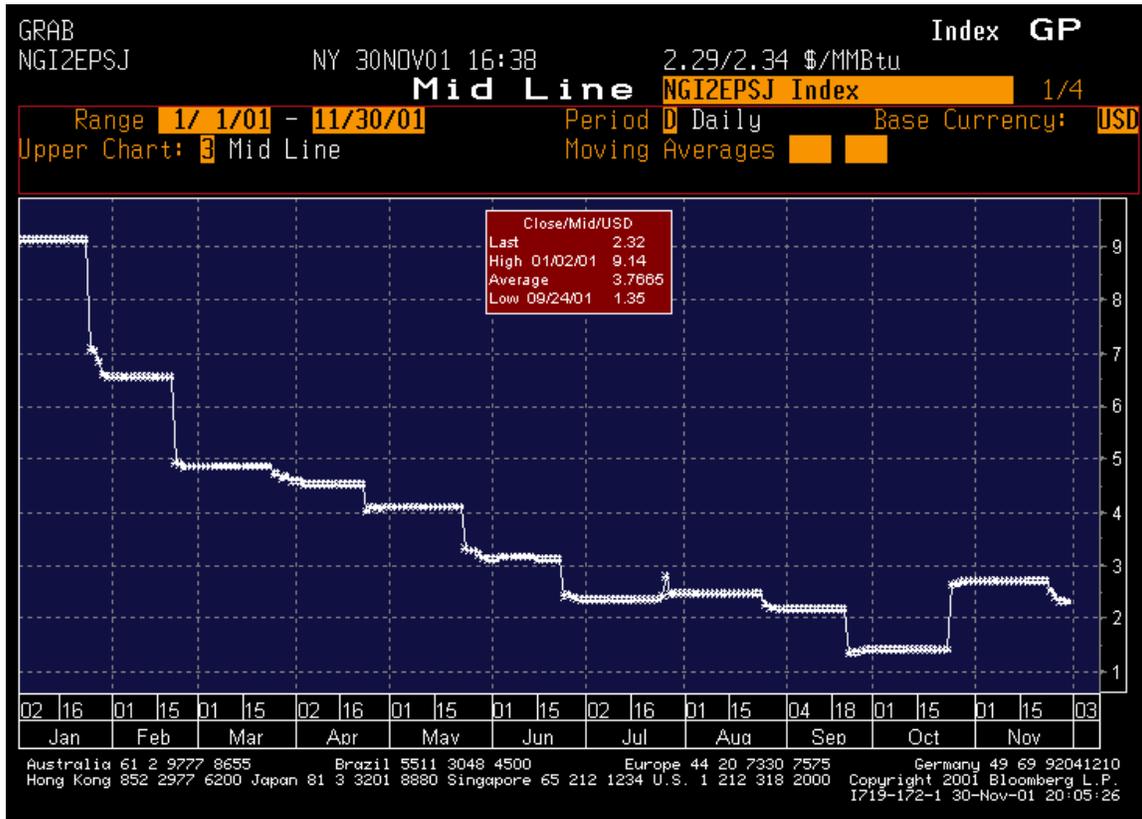
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#### Bloomberg Chart of El Paso San Juan Monthly Index



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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) 30-Nov 2001	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
<b>Mega Cap</b>							
Exxon Mobil Corporation	XOM	37.40	6,924	259,000	36.00	0.09	1.04
BP plc	BP	44.17	3,738	165,000	47.00	0.16	0.95
TotalFinaElf S.A.	TOT	64.09	1,382	89,000	70.00	0.17	0.93
Royal Dutch/Shell	RD	48.34	3,520	170,000	55.00	0.06	0.89
ChevronTexaco Corporation	CVX	85.01	1,062	90,300	100.00	0.15	0.87
				<i>Total or Median</i>		<i>0.15</i>	<i>0.93</i>
<b>Power</b>							
Dynegy Inc.	DYN	30.35	338	10,200	20.30	0.58	1.21
Calpine Corporation	CPN	21.56	377	8,100	14.90	0.62	1.17
AES Corporation	AES	16.52	543	9,000	8.80	0.83	1.15
Mirant Corporation	MIR	24.41	353	8,600	18.60	0.65	1.11
Duke Energy Corporation	DUK	36.15	773	28,000	35.80	0.43	1.01
El Paso Corporation	EPG	44.50	532	23,700	44.80	0.49	1.00
American Electric Power Co. Inc.	AEP	41.25	322	13,300	45.50	0.61	0.96
Williams Companies	WMB	26.72	515	13,800	32.30	0.47	0.91
Southern Company	SO	22.75	683	15,500	27.40	0.42	0.90
Dominion Resources	D	58.45	247	14,400	79.40	0.45	0.85
Exelon Corporation	EXC	44.61	323	14,400	78.60	0.42	0.75
				<i>Total or Median</i>		<i>0.47</i>	<i>0.96</i>
<b>Natural Gas and Oil</b>							
Occidental Petroleum Corp.	OXY	25.00	372	9,300	28.50	0.50	0.94
Unocal Corporation	UCL	32.89	257	8,500	38.90	0.35	0.90
ENI S.p.A.	E	59.20	789	46,700	71.40	0.19	0.86
Anadarko Petroleum Corp.	APC	51.90	250	13,000	64.10	0.24	0.86
ConocoPhillips	P	55.63	680	37,900	71.20	0.34	0.86
Devon Energy (incl MND,AXN)	DVN	34.39	165	5,700	54.60	0.48	0.81
Burlington Resources (incl HTR)	BR	35.14	205	7,200	53.00	0.30	0.76
Marathon Oil Corporation	MRO	27.40	310	8,500	42.00	0.27	0.75
OAo Lukoil	LUKOY	45.56	299	13,600	69.10	0.09	0.69
				<i>Total or Median</i>		<i>0.28</i>	<i>0.83</i>
<b>Service</b>							
Baker Hughes Inc.	BHI	32.97	338	11,100	24.50	0.13	1.30
Schlumberger Ltd.	SLB	48.01	581	27,900	44.00	0.12	1.08
Halliburton Company	HAL	21.43	430	9,200	27.20	0.13	0.82

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 4 - 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.**

	Symbol/ Rating	Price (\$/sh) 30-Nov 2001	EV/ Sales 2001E	EV/ Ebitda NTM	P/E NTM	Dividend or Distribution NTM (%)	PV/ Ebitda NTM	
<b>Mega Cap</b>								
Exxon Mobil Corporation	XOM	37.40	1.4	11.5	26	2.5	11.1	
BP plc	BP	44.17	1.2	9.8	17	3.0	10.3	
TotalFinaElf S.A.	TOT	64.09	1.2	9.4	20	2.9	10.1	
Royal Dutch/Shell	RD	3	48.34	1.1	9.4	23	2.9	10.6
ChevronTexaco Corporation	CVX	85.01	1.3	8.5	19	3.3	9.7	
	<i>Median</i>		<i>1.2</i>	<i>9.4</i>	<i>20</i>	<i>2.9</i>	<i>10.3</i>	
<b>Power</b>								
Dynegy Inc.	DYN	30.35	0.5	10.9	14	1.0	9.0	
Calpine Corporation	CPN	4	21.56	2.3	10.5	-	9.0	
AES Corporation	AES	16.52	3.6	10.4	13	-	9.0	
Mirant Corporation	MIR	24.41	0.6	10.0	11	-	9.0	
Duke Energy Corporation	DUK	36.15	0.8	9.1	13	3.0	9.0	
El Paso Corporation	EPG	44.50	0.9	9.0	13	1.9	9.0	
American Electric Power Co. Inc.	AEP	2	41.25	0.6	8.7	11	5.8	9.0
Williams Companies	WMB	26.72	2.5	8.2	11	3.0	9.0	
Southern Company	SO	22.75	2.7	8.1	14	5.9	9.0	
Dominion Resources	D	58.45	3.4	7.7	13	4.4	9.0	
Exelon Corporation	EXC	2	44.61	2.1	6.7	10	3.8	9.0
	<i>Median</i>		<i>2.1</i>	<i>9.0</i>	<i>13</i>	<i>3.0</i>	<i>9.0</i>	
<b>Natural Gas and Oil</b>								
Occidental Petroleum Corp.	OXY	25.00	1.5	9.4	22	4.0	10.0	
Anadarko Petroleum Corp.	APC	51.90	2.8	8.1	24	0.6	9.5	
Unocal Corporation	UCL	17.11	2.6	7.7	60	2.4	8.5	
ConocoPhillips	P	55.63	0.8	7.3	19	2.6	8.5	
ENI S.p.A.	E	59.20	1.5	6.9	15	3.1	8.0	
Burlington Resources (incl HTR)	BR	1	35.14	4.1	6.2	27	1.6	8.1
Devon Energy (incl MND,AXN)	DVN	34.39	3.1	5.7	16	0.6	7.0	
Marathon Oil Corporation	MRO	1	27.40	0.4	4.8	10	3.4	6.5
OAO Lukoil	LUKOY	45.56	1.2	4.1	9	2.4	6.0	
	<i>Median</i>		<i>1.5</i>	<i>6.9</i>	<i>19</i>	<i>2.4</i>	<i>8.1</i>	
<b>Service</b>								
Baker Hughes Inc.	BHI	32.97	2.1	10.4	23	1.4	9.0	
Schlumberger Ltd.	SLB	48.01	2.5	8.6	24	1.6	9.0	
Halliburton Company	HAL	21.43	0.8	6.5	14	2.3	9.0	

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2002; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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	Symbol/ Rating	Price (\$/sh) 30-Nov 2001	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
<b>Power</b>							
Consol Energy Inc.	CNX	22.00	79	1,700	35.90	0.51	0.81
CMS Energy Corporation	CMS	23.03	128	3,000	48.30	0.62	0.80
Sempra Energy	SRE	23.16	203	4,700	41.70	0.50	0.78
Constellation Energy Group	CEG	23.75	152	3,600	56.50	0.35	0.62
<i>Total or Median</i>				<i>13,000</i>		<i>0.51</i>	<i>0.79</i>
<b>Natural Gas and Oil</b>							
Ocean Energy, Inc.	OEI	17.72	178	3,200	20.00	0.30	0.92
Imperial Oil Limited (30%)	IMO	26.55	119	3,200	30.00	0.11	0.90
Murphy Oil Corporation	MUR	71.91	46	3,300	82.00	0.18	0.90
PanCanadian Energy	PCX	2	256	6,560	33.00	0.14	0.81
Norsk Hydro ASA (49%)	NHY	38.95	127	4,900	54.00	0.18	0.77
Petro-Canada	PCZ	24.10	267	6,400	33.00	0.08	0.75
Valero Energy Corp.(with UDS)	VLO	35.00	110	3,900	60.00	0.47	0.78
PetroChina Company Ltd (10%)	PTR	2	176	3,100	28.00	0.16	0.69
<i>Total or Median</i>				<i>34,600</i>		<i>0.17</i>	<i>0.79</i>
<b>Small Cap</b>							
Quicksilver Resources Inc.	KWK	15.64	19.3	300	10.00	0.60	1.22
Spinnaker Exploration Company	SKE	41.47	28.3	1,180	40.00	-	1.04
Penn Virginia Corporation	PVA	31.45	9.0	280	35.00	0.10	0.91
XTO Energy Inc.	XTO	16.25	124.0	2,020	19.00	0.28	0.90
Encore Acquisition Corp. (25%)	EAC	13.48	7.5	101	16.00	0.22	0.88
Southwestern Energy Company	SWN	11.15	25.6	290	15.00	0.47	0.86
Magnum Hunter Resources, Inc.	MHR	8.50	36.8	310	11.00	0.35	0.85
Stone Energy Company	SGY	35.65	26.4	940	42.00	0.11	0.87
Newfield Exploration Company	NFX	30.90	49.3	1,520	39.00	0.21	0.84
Swift Energy Company	SFY	18.29	24.8	450	25.00	0.29	0.81
Forest Oil Corporation	FST	2	48.5	1,260	37.00	0.28	0.79
CNOOC Limited (19%)	CEO	2	78	1,490	30.00	-	0.64
<i>Total or Median</i>				<i>9,840</i>		<i>0.22</i>	<i>0.86</i>
<b>Trusts and Partnerships</b>							
Penn Virginia Res. Part, L.P.(48%)	PVR	24.25	7.5	180	18.40	-	1.31
TEPPCO Partners, L.P.	TPP	32.12	39	1,240	26.90	0.57	1.08
Dorchester Hugoton, Ltd.	DHULZ	13.30	10.7	143	11.30	-	1.18
Cross Timbers Royalty Trust	CRT	17.99	6.0	108	18.40	-	0.98
Hugoton RoyaltyTrust	HGT	10.69	40.0	430	15.20	-	0.70
San Juan Basin Royalty Trust	SJT	2	46.6	480	15.30	-	0.67
<i>Total or Median</i>				<i>2,580</i>		<i>-</i>	<i>1.03</i>
<b>Micro Cap</b>							
Abraxas Petroleum Corporation	ABP	1.29	23.6	30	0.50	0.96	1.06
Purcell Energy, Ltd. (US\$)	PEL.TO	2	27.4	56	3.50	0.09	0.62
Energy Partners Ltd.(30%)	EPL	2	8.1	50	10.00	0.16	0.68

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

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

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<b>Power</b>								
Consol Energy Inc.	CNX	22.00	2.0	7.3	7	5.1	9.0	
CMS Energy Corporation	CMS	23.03	0.9	7.2	8	6.3	9.0	
Sempra Energy	SRE	23.16	1.1	7.0	9	4.3	9.0	
Constellation Energy Group	CEG	23.75	1.6	5.6	7	2.0	9.0	
	<i>Median</i>		<i>1.4</i>	<i>7.1</i>	<i>8</i>	<i>4.7</i>	<i>9.0</i>	
<b>Natural Gas and Oil</b>								
Imperial Oil Limited (30%)	IMO	26.55	1.0	9.9	25	2.0	11.1	
Murphy Oil Corporation	MUR	71.91	0.8	7.2	34	2.1	8.0	
Ocean Energy, Inc.	OEI	17.72	4.3	7.2	30	0.9	7.8	
PanCanadian Energy	PCX	2	25.60	1.3	6.8	17	1.0	8.4
Petro-Canada	PCZ		24.10	1.3	5.2	12	1.1	6.9
Valero Energy Corp.(with UDS)	VLO		35.00	0.3	5.2	5	1.1	6.7
Norsk Hydro ASA (49%)	NHY		38.95	0.8	4.7	14	2.7	6.0
PetroChina Company Ltd (10%)	PTR	2	17.59	1.7	3.7	9	10.4	5.4
	<i>Median</i>			<i>1.2</i>	<i>6.0</i>	<i>15</i>	<i>1.6</i>	<i>7.4</i>
<b>Small Cap</b>								
Quicksilver Resources Inc.	KWK		15.64	5.7	15.5	-	12.7	
Encore Acquisition Corp. (25%)	EAC		13.48	4.9	9.1	34	-	10.3
XTO Energy Inc.	XTO		16.25	5.7	8.9	26	0.2	9.9
Spinnaker Exploration Company	SKE		41.47	7.3	8.7	40	-	8.4
Penn Virginia Corporation	PVA		31.45	4.3	8.0	37	2.9	8.8
Swift Energy Company	SFY		18.29	5.2	7.6	34	-	9.4
Magnum Hunter Resources, Inc.	MHR		8.50	3.8	6.6	-	-	7.8
Forest Oil Corporation	FST	2	26.04	2.8	6.6	236	-	8.4
Southwestern Energy Company	SWN		11.15	2.8	6.3	22	-	7.3
Stone Energy Company	SGY		35.65	3.9	5.2	26	-	6.0
CNOOC Limited (19%)	CEO	2	19.08	3.7	5.0	11	1.3	7.9
Newfield Exploration Company	NFX		30.90	3.4	4.3	14	-	5.2
	<i>Median</i>			<i>3.9</i>	<i>6.6</i>	<i>30</i>	<i>-</i>	<i>8.4</i>
<b>Trusts and Partnerships</b>								
Penn Virginia Res. Part, L.P.(48%)	PVR		24.25	10.8	14.5	17	8.2	11.0
Dorchester Hugoton, Ltd.	DHULZ		13.30	9.0	13.8	18	21.7	11.7
Cross Timbers Royalty Trust	CRT		17.99	7.3	13.2	14	7.0	13.5
TEPPCO Partners, L.P.	TPP		32.12	0.7	11.9	15	7.2	11.0
San Juan Basin Royalty Trust	SJT	2	10.26	6.3	8.4	11	8.7	12.6
Hugoton RoyaltyTrust	HGT		10.69	5.3	8.4	13	8.0	11.9
	<i>Median</i>			<i>6.8</i>	<i>12.6</i>	<i>15</i>	<i>8.1</i>	<i>11.8</i>
<b>Micro Cap</b>								
Abraxas Petroleum Corporation	ABP		1.29	6.5	12.4	-	-	11.8
Energy Partners Ltd.(30%)	EPL	2	6.17	2.2	4.8	-	-	7.1
Purcell Energy, Ltd. (US\$)	PEL.TO	2	2.03	3.2	4.5	13	-	7.2

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

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 analysis by Kurt Wulff doing business as McDep Associates is accessible at <http://www.mcdep.com>. Owning shares in energy stocks, neither Mr. Wulff nor his spouse act contrary to a buy or sell rating. Mr. Wulff is not paid by covered companies.