A Weekly Analysis of Energy Stocks Using the McDep Ratio October 29, 2001

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Summary and Recommendation

A seller's run on the stock of **Enron** (**ENE**), a company with risky financial assets and liabilities, coincides with a burst of gains in price for natural gas producers who own real resource assets. For Enron whose stock price has dropped 51% in three weeks and 82% from its high in the past year, we see a parallel to the collapse of Metallgesellschaft, the bankruptcy of Orange County and the demise of Long Term Capital Management. For natural gas producers we see the eventual realization of resource value far beyond most expectations. Our natural gas recommendations include Strong Buy Burlington Resources (BR) and recommended PanCanadian Energy (PCX) and San Juan Basin Royalty Trust (SJT). When high McDep Ratio, high debt stocks like Enron are in trouble, low McDep Ratio, low debt stocks can be reassuring alternatives including Strong Buy Marathon Oil Corporation (MRO), now fully separated from U.S. Steel Corporation. At the same time we revise our rating on **Royal Dutch/Shell (RD)** to Neutral from Buy in recognition of the sharp recovery the stock made from a sharp decline. While we continue to recommend **Energy Partners** (**EPL**), we are disappointed that a recent high potential well became a dry hole. For those recommendations and more, as well as possible alternatives, the stats are in the valuation tables (see Table L-1, L-2, S-1 and S-2).

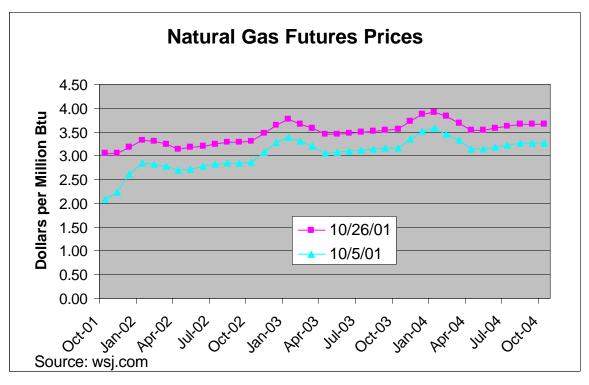
Enron is All About Confidence

Though Enron operates primarily in the energy business, the company is really a financial company that absolutely must have the confidence of investors and lenders to survive. Like banks and insurance companies Enron is so highly leveraged that a small percentage reduction in value of an asset could be a large percentage reduction in net worth or present value of equity. Nor is all of that leverage disclosed. The \$29 billion of debt we know about approximates 77% of estimated present value and twice market cap. The debt we don't know about, contracts to buy and sell energy, money and other commodities, probably exceeds a trillion dollars.

When confidence starts to go, it gains speed and leaves surprise failures in its wake. Recall the hedge fund that almost brought down the world financial system with a trillion dollars of bets primarily in the bond market and only a billion dollars of equity. Long Term Capital Management bet that the price difference between low quality bonds and high quality bonds would narrow when in fact the supposedly extreme price spread became even more extreme. Then the very same investment bankers brought in to help LTCM out of its bond market squeeze, traded furiously against LTCM's positions thereby insuring the demise of the failing geniuses (When Genius Failed, Roger Lowenstein, Random House, 2000).

Natural Gas Price Surprisingly Strong as Enron Stock Collapses

Over just the past three weeks, natural gas for delivery in October increased 50% in price from about \$2 a million btu to about \$3. The full three year forward curve advanced 14% in the same time (see Chart). The gains are all the more remarkable coming at a time when storage reservoirs are practically as full as possible.



Surprise rapid price movements as we have just seen in natural gas can be distressing for those who take unreasonable risks. Orange County went bankrupt when the Federal Reserve increased interest rates in unusually rapid fashion in 1994. The German commodity house took huge losses when heating oil markets moved rapidly in the wrong direction. For that matter, the California Public Utility Commission allowed Pacific Gas and Electric to go bankrupt this year when electricity price moved too rapidly for the PUC to respond.

The seemingly anomalous action in natural gas makes us wonder if Enron has made large sales of natural gas that it does not have. That is the kind of information Enron would want to keep secret. Now, facing a loss of confidence and a possible shrinking of its credit, Enron may be trying to acquire the gas it promised to deliver. As other traders get wind of Enron's predicament, they bid up the price of natural gas expecting to sell to Enron at an even higher price.

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We can know about such developments only after the fact. All we know is that Enron is the largest trader of energy futures. We believe that the market understates the value of natural gas.

Confidence in Enron Shaken

Whether Enron is the LTCM of energy remains to be seen. What is already well known is enough for concern.

Guided by former Chief Executive Officer Jeff Skilling, Enron consciously pursued an "asset lite" strategy that was supposed to generate large profits without owning the assets of production, like natural gas reserves. The company is indeed light on real assets, owning practically no natural gas reserves.

Mr. Skilling maintained that Enron's assets and liabilities were balanced at the end of each day. If one were nervous that Enron sold natural gas at a low price in 2010, for example, one could be reassured that Enron also bought natural gas at a low price in 2010 and made its profit on the transaction costs. That all sounds good, but in practice the match must be only approximate. In our opinion, there is no perfect hedge, a lot can still go wrong.

Enron's strategy appeared to work spectacularly for a while. It seemed to peak with the Internet Bubble and the early success of Enron Online. Then a few months ago, Mr. Skilling resigned unexpectedly. We surmise that something made him uncomfortable.

More recently we learn that the company's chief financial officer opaquely feathered his own nest with an apparent scheme to overstate earnings by disguising losses. He earned large compensation from failed partnerships. Enron seems to have recorded the billion-dollar loss only on its balance sheet and not against reported earnings. Only a few days ago the CFO resigned, or was fired.

Now all of Enron's financial dealings are suspect.

We have no rating on the stock because we have no basis for recommending purchase. Present Value of Equity is in single digits and that may be too high. The calculation takes cash flow at face value and values it at the same multiple of Ebitda as the market values the largest energy company, Exxon Mobil. Yet what is cash flow at Enron? It is the small difference between very large numbers that cannot be measured accurately and are less than fully disclosed.

Finally, the turn of fortunes at Enron distresses us because we have had great admiration for Ken Lay, the company chairman. Whether or not Mr. Lay can restore the company's high standing, he has earned a place in history for leading the charge for deregulating the natural gas and electricity markets.

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When Financial Asset Quality is Doubtful, Real Assets More Valuable

The main investment implication of Enron is that companies with real assets of natural gas and oil reserves and manufacturing plant are undervalued strategically. Sure a smart person can make a quick killing in financial transactions. Too often that same person becomes confused about the role of luck and skill and then fails spectacularly.

There are good reasons why the Mega Cap Energy companies are still here and prospering. For one thing they have a preference for owning assets, not just contracting for them. For another they avoid getting overleveraged.

We are comfortable owning the Mega Caps, but we are willing to take modest risks in non-Mega Caps for the possible benefit of greater return. Our Buy recommendations among non-Mega Caps have McDep Ratios ranging from 0.63 to 0.97 while our Sell recommendation, **Calpine** (**CPN**), has a McDep Ratio of 1.35.

Marathon Oil Corporation Free of Steel

One of our asset-rich recommendations appears especially timely. After two decades tied to U.S. Steel, Marathon is once again an independent natural gas and oil producer. Shareholders of USX-Marathon Group and USX-Steel Group voted on Thursday, October 25 to reorganize as completely separate companies to be named Marathon Oil Corporation and U.S. Steel Corporation. Subject to a favorable tax ruling, the transaction is expected to be effective by year-end. A major impediment to stock market appreciation has been removed and we are optimistic that the stock can be a winner again.

Investors ask, "Who is going to buy Marathon?" We are not counting on an acquisition as we expect the new Chief Executive Officer to concentrate reinvestment in the company's strongest properties and prospects and to be generous in returning capital through dividends and stock repurchase. Should Mr. Cazalot not be as successful as we expect, Marathon would be an attractive acquisition candidate.

We first recommended Marathon 28 years ago in October 1973 on the expectation that the Texas Railroad Commission would lift the allowable producing rate in the Yates oil field.

After the strong move in energy stocks peaked in 1980, the stock fell back. Convinced that the company's resource value exceeded its stock market value we recommended the stock again on April 1, 1981 as a leading candidate for financial restructuring. Sedco, the drilling company, and the Bass brothers, advised by Richard Rainwater, soon began to accumulate the stock. At mid year, Mobil made a tender offer and by year-end, U.S. Steel made its winning bid.

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While Marathon stockholders profited from selling to USX, Marathon assets ended up subsidizing steel operations. We do not recall recommending USX stock.

In 1990, as an advisor to investor Carl Icahn, we recommended that USX holders vote for a spinoff of Steel from the energy and other diversified businesses of USX. Although USX took out full page newspaper ads criticizing the McDep analysis, management compromised by implementing the tracking stock idea whereby steel and energy could trade separately, but still be part of the same legal structure. As we recall, Mr. Icahn sold his stock soon thereafter for a price higher than, or at least close to where Marathon trades more than ten years later.

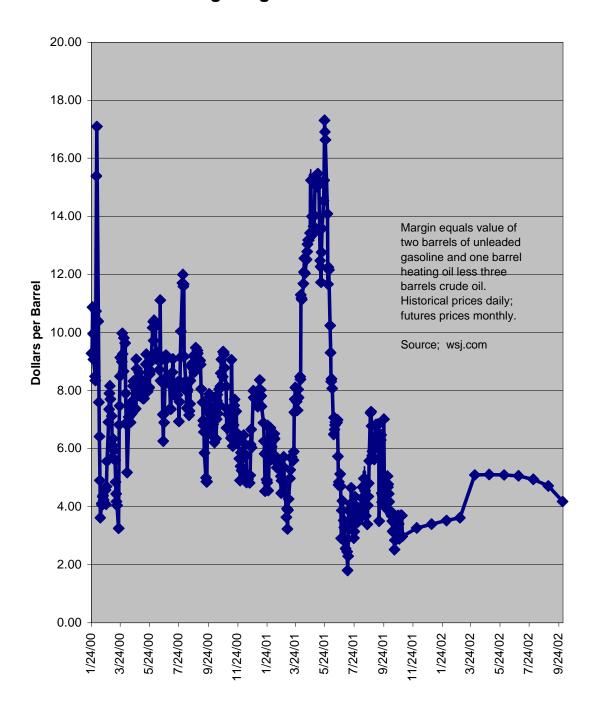
In 2001 we have recommended Marathon again partly in anticipation of the event that occurred last week. Now it is time for the benefit of that change to unfold. The option of selling out to a large buyer is at least as good as in other undervalued companies. That is important even if there is currently no obvious acquirer.

On the fundamental side we have seen a sharp recovery in natural gas, which accounts for perhaps a third of the value in Marathon. Crude oil, which accounts for perhaps another third of value, has taken its hit for slower economic activity. We don't see much further weakness and we see a lot of strength eventually. The refining business has now come down quite sharply to a profit margin well below what we expect in the next few years (see Chart). Futures prices imply higher profits than current spot prices. While the more relevant prices for Marathon are those in Chicago, only the New York futures prices are quoted widely.

Finally there is good strategic justification to own Marathon and other energy stocks. A recent heading in the New York Times caught our attention: *The High, Hidden Cost of Saudi Arabian Oil*. The article reminds us that while our country has many friends in Saudi Arabia, we may have even more enemies in that country. The alternative implication of the New York Times heading is: *The High, Hidden Value of Non-Saudi Arabian Oil*.

Kurt H. Wulff, CFA

Refining Margin - New York Harbor



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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	/	26- <i>Oct</i>	Shares	Cap	Value	Present	McDep
	Rat	ing	2001	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Mega Cap								
Exxon Mobil Corporation	XOM		41.06	6,963	286,000	38.60	0.04	1.06
Royal Dutch/Shell	RD	3	52.35	3,544	186,000	50.80	0.06	1.03
ChevronTexaco Corporation	CVX		88.93	1,063	94,600	89.40	0.17	1.00
BP plc	BP		49.36	3,744	185,000	51.50	0.15	0.96
TotalFinaElf S.A.	TOT		71.25	1,406	100,000	86.80	0.14	0.85
Total or Median	ı				852,000		0.14	1.00
Power								
Dynegy Inc.	DYN		38.45	338	13,000	20.60	0.56	1.38
Calpine Corporation	CPN	4	25.00	318	8,000	11.10	0.72	1.35
Duke Energy Corporation	DUK		38.50	779	30,000	26.40	0.55	1.20
Mirant Corporation	MIR		27.45	353	9,700	18.60	0.65	1.17
Enron Corp.	ENE		15.40	913	14,100	9.50	0.77	1.14
AES Corporation	AES		14.64	543	7,900	8.80	0.83	1.11
Williams Companies	WMB		28.00	485	13,600	23.30	0.62	1.08
El Paso Corporation	EPG		49.96	532	26,600	48.60	0.47	1.02
American Electric Power Co. Inc.	AEP	2	42.83	322	13,800	46.40	0.61	0.97
Southern Company	SO		24.19	683	16,500	27.40	0.42	0.93
Dominion Resources	D		61.10	247	15,100	79.40	0.45	0.87
Exelon Corporation	EXC	2	41.05	324	13,300	87.40	0.39	0.68
Total or Median	ı				161,000		0.58	1.05
Natural Gas and Oil					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Occidental Petroleum Corp.	OXY		26.18	372	9,700	32.20	0.46	0.90
Anadarko Petroleum Corp.	APC		60.00	268	16,100	73.70	0.21	0.85
Burlington Resources (incl HTR)	BR	1	38.90	205	8,000	50.20	0.31	0.85
ENI S.p.A.	Е		64.11	789	50,600	86.20	0.17	0.79
Phillips Petroleum Company	P		57.91	383	22,200	82.70	0.28	0.78
Unocal Corporation	UCL		34.00	257	8,700	49.00	0.29	0.78
Devon Energy (incl MND,AXN)	DVN		39.90	165	6,600	66.40	0.43	0.77
Conoco Inc.	COC		27.28	636	17,400	46.60	0.30	0.71
Marathon Oil Corporation	MRO	1	28.54	310	8,800	50.00	0.24	0.67
Total or Median					138,000		0.29	0.78
Service					,			
Baker Hughes Inc.	BHI		36.76	338	12,400	24.50	0.13	1.43
Schlumberger Ltd.	SLB		53.10	581	30,900	44.00	0.12	1.18
Halliburton Company	HAL		27.92	430	12,000	27.20	0.13	1.02
					,0			

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

McDep Ratio = Market cap and **De**bt to **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 (\$/sh) EV/ E			EV/	Div Dis	PV/		
	Symbol/		26- <i>Oct</i>	Sales	Ebitda	P/E	NTM	Ebitda
	Rati		2001	2001E	NTM	NTM	(%)	NTM
Mega Cap					-,	-,	(, ,,	-,
Exxon Mobil Corporation	XOM		41.06	1.3	9.6	20	2.2	9.0
Royal Dutch/Shell	RD	3	52.35	1.1	9.3	21	2.7	9.0
ChevronTexaco Corporation	CVX		88.93	1.2	9.0	21	2.9	9.0
BP plc	BP		49.36	1.1	8.7	19	2.7	9.0
TotalFinaElf S.A.	TOT		71.25	1.4	7.6	15	2.6	9.0
Median				1.2	9.0	20	2.7	9.0
Power								
Dynegy Inc.	DYN		38.45	0.3	12.4	18	0.8	9.0
Calpine Corporation	CPN	4	25.00	2.6	12.2	13	_	9.0
Duke Energy Corporation	DUK		38.50	0.9	10.8	15	2.9	9.0
Mirant Corporation	MIR		27.45	0.6	10.5	13	-	9.0
Enron Corp.	ENE		15.40	0.2	10.3	9	3.2	9.0
AES Corporation	AES		14.64	3.5	10.0	11	_	9.0
Williams Companies	WMB		28.00	3.1	9.7	12	2.1	9.0
El Paso Corporation	EPG		49.96	0.9	9.1	14	1.7	9.0
American Electric Power Co. Inc.	AEP	2	42.83	0.6	8.7	12	5.6	9.0
Southern Company	SO		24.19	2.8	8.4	15	5.5	9.0
Dominion Resources	D		61.10	3.4	7.9	14	4.2	9.0
Exelon Corporation	EXC	2	41.05	2.1	6.1	9	4.1	9.0
Median				1.5	9.9	13	2.5	9.0
Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		26.18	1.5	8.1	14	3.8	9.0
Anadarko Petroleum Corp.	APC		60.00	2.8	7.7	19	0.3	9.0
Burlington Resources (incl HTR)	BR	1	38.90	4.8	7.6	67	1.4	9.0
Phillips Petroleum Company	P		57.91	0.8	7.1	14	2.5	9.0
Unocal Corporation	UCL		17.11	2.4	6.6	26	2.4	8.5
ENI S.p.A.	E		64.11	1.5	6.3	13	2.8	8.0
Devon Energy (incl MND,AXN)	DVN		39.90	3.2	5.8	16	0.5	7.5
Conoco Inc.	COC		27.28	0.8	5.7	12	2.8	8.0
Marathon Oil Corporation	MRO	1	28.54	0.4	4.4	9	3.2	6.5
Median				1.5	6.6	14	2.5	8.5
Service								
Baker Hughes Inc.	BHI		36.76	2.3	11.5	26	1.3	9.0
Schlumberger Ltd.	SLB		53.10	2.7	9.5	26	1.4	9.0
Halliburton Company	HAL		27.92	1.0	8.2	19	1.8	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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Table S-1
Mid Cap and Small Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

Power Consol Energy Inc. CNX 27.21 79 2,200 35.90 0.51 0.88 20.68 20.58 20.58 20.58 20.60 48.30 0.62 0.78 20.60 20.60 20.78 20.60 20.78 20.60 20.78 20.60 20.78 20.60 20.78 20.60 20.70		Symbol/ Ratin	g	Price (\$/sh) 26-Oct 2001	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
CMS Energy Corporation CMS 20.54 128 2,600 48.30 0.62 0.78 Sempra Energy SRE 22.27 203 4,500 41.70 0.50 0.78 Constellation Energy Group CEG 23.41 152 3.500 56.50 0.35 0.62 Natural Gas and Oil Cecan Energy, Inc. OEI 19.81 178 3,500 20.60 0.29 0.97 Imperial Oil Limited (30%) IMO 28.36 119 3,400 29.30 0.11 0.97 Murphy Oil Corporation MUR 82.10 46 3,700 94.60 0.16 0.89 PanCanadian Energy PCX 2 27.59 262 7,230 32.10 0.14 0.88 Valero Energy Corp. (with UDS) VLO 39.99 110 4,400 54.50 0.49 0.86 Norsk Hydro ASA (49%) NHY 38.43 127 4,900 51.90 0.19 0.79 Pettro-Chian Companty Ltd (10%)	Power								
Sempra Energy Group	Consol Energy Inc.	CNX		27.21	79	2,200	35.90	0.51	0.88
Constellation Energy Group CEG 23.41 152 3,600 56.50 0.35 0.62 Natural Gas and Oil Ocean Energy, Inc. OEI 19.81 178 3,500 20.60 0.29 0.97 Imperial Oil Limited (30%) IMO 28.36 119 3,400 29.30 0.11 0.97 Murphy Oil Corporation MUR 82.10 46 3,700 29.46 0.16 0.89 PanCanadian Energy PCX 2 27.59 262 7,230 32.10 0.14 0.88 Valero Energy Corp, (with UDS) VLO 39.99 110 4,400 54.50 0.49 0.86 Norsk Hydro ASA (49%) NHY 38.43 127 4,900 51.90 0.19 0.79 Petro-Canada PCZ 26.15 267 7,000 34.0 0.08 0.78 Petro-China Company LI 2 18.14 176 3,200 31.0 0.14 0.63 <th< td=""><td>CMS Energy Corporation</td><td>CMS</td><td></td><td>20.54</td><td>128</td><td>2,600</td><td>48.30</td><td>0.62</td><td>0.78</td></th<>	CMS Energy Corporation	CMS		20.54	128	2,600	48.30	0.62	0.78
Constellation Energy Group CEG 23.41 152 3,600 56.50 0.35 0.62 Natural Gas and Oil Ocean Energy, Inc. OEI 19.81 178 3,500 20.60 0.29 0.97 Imperial Oil Limited (30%) IMO 28.36 119 3,400 29.30 0.11 0.97 Murphy Oil Corporation MUR 82.10 46 3,700 29.46 0.16 0.89 PanCanadian Energy PCX 2 27.59 262 7,230 32.10 0.14 0.88 Valero Energy Corp, (with UDS) VLO 39.99 110 4,400 54.50 0.49 0.86 Norsk Hydro ASA (49%) NHY 38.43 127 4,900 51.90 0.19 0.79 Petro-Canada PCZ 26.15 267 7,000 34.0 0.08 0.78 Petro-China Company LI 2 18.14 176 3,200 31.0 0.14 0.63 <th< td=""><td></td><td>SRE</td><td></td><td>22.27</td><td>203</td><td>4,500</td><td>41.70</td><td>0.50</td><td>0.77</td></th<>		SRE		22.27	203	4,500	41.70	0.50	0.77
Natural Gas and Oil Cacae Energy, Inc.	Constellation Energy Group	CEG		23.41	152	3,600	56.50	0.35	
Ocean Energy, Inc. OEI 19.81 178 3,500 20.60 0.29 0.97 Imperial Oil Limited (30%) IMO 28.36 119 3,400 29.30 0.11 0.97 Murphy Oil Corporation MUR 82.10 46 3,700 94.60 0.16 0.89 Pan Canadian Energy PCX 2 27.59 262 7,230 32.10 0.14 0.88 Valero Energy Corp. (with UDS) VLO 39.99 110 4,400 54.50 0.49 0.86 Norsk Hydro ASA (49%) NHY 38.43 127 4,900 51.90 0.19 0.79 Petro-Chanad PCZ 26.15 267 7,000 34.40 0.08 0.78 Petro-China Company Ltd (10%) PTR 2 18.14 176 3,200 31.70 0.14 0.63 Total or Median Total or Median Total or Median 11.4 14.86 19.3 290 5.50 0.73 1.45 S	Total or Median					12,900		0.51	0.78
Imperial Oil Limited (30%)	Natural Gas and Oil								
Murphy Oil Corporation MUR 82.10 46 3,700 94.60 0.16 0.89 PanCanadian Energy PCX 2 27.59 262 7,230 32.10 0.14 0.88 Valero Energy Corp.(with UDS) VLO 39.99 110 4,400 54.50 0.49 0.86 Norsk Hydro ASA (49%) NHY 38.43 127 4,900 51.90 0.19 0.79 Petro-Canada PCZ 26.15 267 7,000 34.40 0.08 0.78 Petro-China Company Ltd (10%) PTR 2 18.14 176 3,200 31.70 0.14 0.63 Total or Median Total or Median Total or Median Total or Median 1.05 3,300 31.70 0.14 0.63 Smill Cap Total or Median KWK 14.86 19.3 290 5.50 0.73 1.45 Spinnaker Exploration Company SKE 43.90 28.4 1,250 38.60 - 1.14	Ocean Energy, Inc.	OEI		19.81	178	3,500	20.60	0.29	0.97
PanCanadian Energy	Imperial Oil Limited (30%)	IMO		28.36	119	3,400	29.30	0.11	0.97
PanCanadian Energy PCX 2 27.59 262 7.230 32.10 0.14 0.88 Valero Energy Corp.(with UDS) VLO 39.99 110 4.400 54.50 0.49 0.86 Norsk Hydro ASA (49%) NHY 38.43 127 4.900 51.90 0.19 0.79 Petro-Canada PCZ 26.15 267 7.000 34.40 0.08 0.78 Petro-China Company Ltd (10%) PTR 2 18.14 176 3.200 31.70 0.14 0.63 Total or Median Total or Median Total or Median Total or Median Small Cap Cuicksilver Resources Inc. KWK 14.86 19.3 290 5.50 0.73 1.45 Spinnaker Exploration Company SKE 43.90 28.4 1.250 38.60 -	Murphy Oil Corporation	MUR		82.10	46	3,700	94.60	0.16	0.89
Norsk Hydro ASA (49%)	PanCanadian Energy	PCX	2	27.59	262	7,230	32.10	0.14	0.88
Norsk Hydro ASA (49%)	Valero Energy Corp.(with UDS)	VLO		39.99	110	4,400	54.50	0.49	0.86
Petro-Canada PCZ 26.15 267 7,000 34.40 0.08 0.78 PetroChina Company Ltd (10%) PTR 2 18.14 176 3,200 31.70 0.14 0.63 Total or Median Total or Median 37,300 0.15 0.87 Small Cap Quicksilver Resources Inc. KWK 14.86 19.3 290 5.50 0.73 1.45 Spinnaker Exploration Company SKE 43.90 28.4 1,250 38.60 - 1.14 Magnum Hunter Resources, Inc. MHR 11.10 37.0 410 10.40 0.36 1.05 XTO Energy Inc. XTO 18.55 123.0 2,280 17.70 0.29 1.04 SOW Suthwestern Energy Company SWN 12.00 25.7 310 13.90 0.48 0.93 Southwestern Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC <		NHY		38.43	127	4,900	51.90	0.19	0.79
Total or Median 37,300 0.15 0.87 Small Cap Quicksilver Resources Inc. KWK 14.86 19.3 290 5.50 0.73 1.45 Spinnaker Exploration Company SKE 43.90 28.4 1,250 38.60 - 1.14 Magnum Hunter Resources, Inc. MHR 11.10 37.0 410 10.40 0.36 1.05 XTO Energy Inc. XTO 18.55 123.0 2,280 17.70 0.29 1.04 Southwestern Energy Company SWN 12.00 25.7 310 13.90 0.48 0.93 Louis Dreyfus Natural Gas Corp. LD 3 39.70 44.8 1,780 45.10 0.23 0.91 Swift Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75	-	PCZ		26.15	267	7,000	34.40	0.08	0.78
Total or Median 37,300 0.15 0.87 Small Cap Quicksilver Resources Inc. KWK 14.86 19.3 290 5.50 0.73 1.45 Spinnaker Exploration Company SKE 43.90 28.4 1,250 38.60 - 1.14 Magnum Hunter Resources, Inc. MHR 11.10 37.0 410 10.40 0.36 1.05 XTO Energy Inc. XTO 18.55 123.0 2,280 17.70 0.29 1.04 Southwestern Energy Company SWN 12.00 25.7 310 13.90 0.48 0.93 Louis Dreyfus Natural Gas Corp. LD 3 39.70 44.8 1,780 45.10 0.23 0.91 Swift Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75	PetroChina Company Ltd (10%)	PTR	2	18.14	176	3,200	31.70	0.14	0.63
Quicksilver Resources Inc. KWK 14.86 19.3 290 5.50 0.73 1.45 Spinnaker Exploration Company SKE 43.90 28.4 1,250 38.60 - 1.14 Magnum Hunter Resources, Inc. MHR 11.10 37.0 410 10.40 0.36 1.05 XTO Energy Inc. XTO 18.55 123.0 2,280 17.70 0.29 1.04 Southwestern Energy Company SWN 12.00 25.7 310 13.90 0.48 0.93 Louis Dreyfus Natural Gas Corp. LD 3 39.70 44.8 1,780 45.10 0.23 0.91 Swift Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75 8.8 330 47.70 0.19 0.33 Newfield Exploration Company NFX						37,300		0.15	0.87
Spinnaker Exploration Company SKE 43.90 28.4 1,250 38.60 - 1.14 Magnum Hunter Resources, Inc. MHR 11.10 37.0 410 10.40 0.36 1.05 XTO Energy Inc. XTO 18.55 123.0 2,280 17.70 0.29 1.04 Southwestern Energy Company SWN 12.00 25.7 310 13.90 0.48 0.93 Louis Dreyfus Natural Gas Corp. LD 3 39.70 44.8 1,780 45.10 0.23 0.91 Swift Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75 8.8 330 47.70 0.19 0.83 Newfield Exploration Company NFX 36.09 49.3 1,780 49.50 0.17 0.77 Stone Energy Company SGY	Small Cap								
Magnum Hunter Resources, Inc. MHR 11.10 37.0 410 10.40 0.36 1.05 XTO Energy Inc. XTO 18.55 123.0 2,280 17.70 0.29 1.04 Southwestern Energy Company SWN 12.00 25.7 310 13.90 0.48 0.93 Louis Dreyfus Natural Gas Corp. LD 3 39.70 44.8 1,780 45.10 0.23 0.91 Swift Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75 8.8 330 47.70 0.19 0.83 Newfield Exploration Company NFX 36.09 49.3 1,780 49.50 0.17 0.77 Stone Energy Company SGY 39.60 26.5 1,050 54.60 0.09 0.75 Forest Oil Corporation FST	Quicksilver Resources Inc.	KWK		14.86	19.3	290	5.50	0.73	1.45
XTO Energy Inc. XTO 18.55 123.0 2,280 17.70 0.29 1.04 Southwestern Energy Company SWN 12.00 25.7 310 13.90 0.48 0.93 Louis Dreyfus Natural Gas Corp. LD 3 39.70 44.8 1,780 45.10 0.23 0.91 Swift Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75 8.8 330 47.70 0.19 0.83 Newfield Exploration Company NFX 36.09 49.3 1,780 49.50 0.17 0.77 Stone Energy Company SGY 39.60 26.5 1,050 54.60 0.09 0.75 Forest Oil Corporation FST 28.58 50.2 1,440 42.90 0.21 0.74 Trusts and Partnerships	Spinnaker Exploration Company	SKE		43.90	28.4	1,250	38.60	_	1.14
Southwestern Energy Company SWN 12.00 25.7 310 13.90 0.48 0.93 Louis Dreyfus Natural Gas Corp. LD 3 39.70 44.8 1,780 45.10 0.23 0.91 Swift Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75 8.8 330 47.70 0.19 0.83 Newfield Exploration Company NFX 36.09 49.3 1,780 49.50 0.17 0.77 Stone Energy Company SGY 39.60 26.5 1,050 54.60 0.09 0.75 Forest Oil Corporation FST 28.58 50.2 1,440 42.90 0.21 0.74 Trusts and Partnerships TEPPCO Partners, L.P. TPP 34.80 38 1,320 18.00 0.58 1.39 <t< td=""><td>Magnum Hunter Resources, Inc.</td><td>MHR</td><td></td><td>11.10</td><td>37.0</td><td>410</td><td>10.40</td><td>0.36</td><td>1.05</td></t<>	Magnum Hunter Resources, Inc.	MHR		11.10	37.0	410	10.40	0.36	1.05
Louis Dreyfus Natural Gas Corp. LD 3 39.70 44.8 1,780 45.10 0.23 0.91 Swift Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75 8.8 330 47.70 0.19 0.83 Newfield Exploration Company NFX 36.09 49.3 1,780 49.50 0.17 0.77 Stone Energy Company SGY 39.60 26.5 1,050 54.60 0.09 0.75 Forest Oil Corporation FST 28.58 50.2 1,440 42.90 0.21 0.74 Total or Median TPP 34.80 38 1,320 18.00 0.58 1.39 Dorchester Hugoton, Ltd. DHULZ 12.65 10.7 136 11.40 - 1.11 Cross Timbers Royalty Trust SIT	XTO Energy Inc.	XTO		18.55	123.0	2,280	17.70	0.29	1.04
Louis Dreyfus Natural Gas Corp. LD 3 39.70 44.8 1,780 45.10 0.23 0.91 Swift Energy Company SFY 24.47 25.7 630 28.40 0.24 0.89 Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75 8.8 330 47.70 0.19 0.83 Newfield Exploration Company NFX 36.09 49.3 1,780 49.50 0.17 0.77 Stone Energy Company SGY 39.60 26.5 1,050 54.60 0.09 0.75 Forest Oil Corporation FST 28.58 50.2 1,440 42.90 0.21 0.74 Total or Median TPP 34.80 38 1,320 18.00 0.58 1.39 Dorchester Hugoton, Ltd. DHULZ 12.65 10.7 136 11.40 - 1.11 Cross Timbers Royalty Trust SIT	Southwestern Energy Company	SWN		12.00	25.7	310	13.90	0.48	0.93
Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75 8.8 330 47.70 0.19 0.83 Newfield Exploration Company NFX 36.09 49.3 1,780 49.50 0.17 0.77 Stone Energy Company SGY 39.60 26.5 1,050 54.60 0.09 0.75 Forest Oil Corporation FST 28.58 50.2 1,440 42.90 0.21 0.74 Total or Median 11,650 0.22 0.90 Trusts and Partnerships Trust and Partnerships Trust		LD	3	39.70	44.8	1,780	45.10	0.23	0.91
Encore Acquisition Corp. (25%) EAC 12.99 7.5 97 15.60 0.16 0.86 Penn Virginia Corporation PVA 37.75 8.8 330 47.70 0.19 0.83 Newfield Exploration Company NFX 36.09 49.3 1,780 49.50 0.17 0.77 Stone Energy Company SGY 39.60 26.5 1,050 54.60 0.09 0.75 Forest Oil Corporation FST 28.58 50.2 1,440 42.90 0.21 0.74 Total or Median 11,650 0.22 0.90 Trusts and Partnerships Trust and Partnerships Trust	Swift Energy Company	SFY		24.47	25.7	630	28.40	0.24	0.89
Newfield Exploration Company NFX 36.09 49.3 1,780 49.50 0.17 0.77 Stone Energy Company SGY 39.60 26.5 1,050 54.60 0.09 0.75 Forest Oil Corporation FST 28.58 50.2 1,440 42.90 0.21 0.74 Total or Median 11,650 0.22 0.90 TEPPCO Partners, L.P. TPP 34.80 38 1,320 18.00 0.58 1.39 Dorchester Hugoton, Ltd. DHULZ 12.65 10.7 136 11.40 - 1.11 Cross Timbers Royalty Trust CRT 17.75 6.0 107 16.90 - 1.06 Hugoton RoyaltyTrust HGT 11.26 40.0 450 14.80 - 0.76 San Juan Basin Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 Micro Cap Abraxas Petroleum Corporation ABP <		EAC		12.99	7.5	97	15.60	0.16	0.86
Stone Energy Company SGY 39.60 26.5 1,050 54.60 0.09 0.75 Forest Oil Corporation FST 28.58 50.2 1,440 42.90 0.21 0.74 Total or Median 11,650 0.22 0.90 Trusts and Partnerships TEPPCO Partners, L.P. TPP 34.80 38 1,320 18.00 0.58 1.39 Dorchester Hugoton, Ltd. DHULZ 12.65 10.7 136 11.40 - 1.11 Cross Timbers Royalty Trust CRT 17.75 6.0 107 16.90 - 1.06 Hugoton Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 San Juan Basin Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 <td>Penn Virginia Corporation</td> <td>PVA</td> <td></td> <td>37.75</td> <td>8.8</td> <td>330</td> <td>47.70</td> <td>0.19</td> <td>0.83</td>	Penn Virginia Corporation	PVA		37.75	8.8	330	47.70	0.19	0.83
Forest Oil Corporation FST 28.58 50.2 1,440 42.90 0.21 0.74 Total or Median	Newfield Exploration Company	NFX		36.09	49.3	1,780	49.50	0.17	0.77
Total or Median 11,650 0.22 0.90 Trusts and Partnerships TEPPCO Partners, L.P. TPP 34.80 38 1,320 18.00 0.58 1.39 Dorchester Hugoton, Ltd. DHULZ 12.65 10.7 136 11.40 - 1.11 Cross Timbers Royalty Trust CRT 17.75 6.0 107 16.90 - 1.06 Hugoton Royalty Trust HGT 11.26 40.0 450 14.80 - 0.76 San Juan Basin Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 Total or Median 2,550 - 1.06 Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	Stone Energy Company	SGY		39.60	26.5	1,050	54.60	0.09	0.75
Trusts and Partnerships TEPPCO Partners, L.P. TPP 34.80 38 1,320 18.00 0.58 1.39 Dorchester Hugoton, Ltd. DHULZ 12.65 10.7 136 11.40 - 1.11 Cross Timbers Royalty Trust CRT 17.75 6.0 107 16.90 - 1.06 Hugoton Royalty Trust HGT 11.26 40.0 450 14.80 - 0.76 San Juan Basin Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 Total or Median 2,550 - 1.06 Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	Forest Oil Corporation	FST		28.58	50.2	1,440	42.90	0.21	0.74
TEPPCO Partners, L.P. TPP 34.80 38 1,320 18.00 0.58 1.39 Dorchester Hugoton, Ltd. DHULZ 12.65 10.7 136 11.40 - 1.11 Cross Timbers Royalty Trust CRT 17.75 6.0 107 16.90 - 1.06 Hugoton Royalty Trust HGT 11.26 40.0 450 14.80 - 0.76 San Juan Basin Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 Total or Median 2,550 - 1.06 Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	Total or Median					11,650		0.22	0.90
Dorchester Hugoton, Ltd. DHULZ 12.65 10.7 136 11.40 - 1.11 Cross Timbers Royalty Trust CRT 17.75 6.0 107 16.90 - 1.06 Hugoton Royalty Trust HGT 11.26 40.0 450 14.80 - 0.76 San Juan Basin Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 Total or Median 2,550 - 1.06 Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	Trusts and Partnerships								
Cross Timbers Royalty Trust CRT 17.75 6.0 107 16.90 - 1.06 Hugoton RoyaltyTrust HGT 11.26 40.0 450 14.80 - 0.76 San Juan Basin Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 Total or Median 2,550 - 1.06 Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	TEPPCO Partners, L.P.	TPP		34.80	38	1,320	18.00	0.58	1.39
Hugoton RoyaltyTrust HGT 11.26 40.0 450 14.80 - 0.76 San Juan Basin Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 Total or Median 2,550 - 1.06 Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	Dorchester Hugoton, Ltd.	DHULZ		12.65	10.7	136	11.40	-	1.11
San Juan Basin Royalty Trust SJT 2 11.49 46.6 540 15.20 - 0.76 Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	Cross Timbers Royalty Trust	CRT		17.75	6.0	107	16.90	-	1.06
Total or Median 2,550 - 1.06 Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	Hugoton RoyaltyTrust	HGT		11.26	40.0	450	14.80	-	0.76
Micro Cap Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	San Juan Basin Royalty Trust	SJT	2	11.49	46.6	540	15.20	-	0.76
Abraxas Petroleum Corporation ABP 1.58 23.6 37 0.90 0.94 1.05 Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	Total or Median					2,550		-	1.06
Purcell Energy, Ltd. (US\$) PEL.TO 2.21 26.6 59 3.10 0.10 0.74	Micro Cap								
	Abraxas Petroleum Corporation	ABP		1.58	23.6	37	0.90	0.94	1.05
Energy Partners Ltd (30%) FPI 2 7.60 8.1 61 12.30 0.10 0.65	Purcell Energy, Ltd. (US\$)	PEL.TO		2.21	26.6	59	3.10	0.10	0.74
Energy Funders Edd. (3070) ETE 2 7.00 0.1 01 12.30 0.10 0.03	Energy Partners Ltd.(30%)	EPL	2	7.60	8.1	61	12.30	0.10	0.65

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio
October 29, 2001

Table S-2

Mid Cap and Small Cap Energy Companies

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

			Price (\$/sh)	EV/	Dividend or EV/ EV/ Distribution			PV/
	Symbol/		(φ/sn) 26-Oct	Sales	Ebitda	P/E	NTM	Ebitda
	Rati	ng	2001	2001E	NTM	NTM	(%)	NTM
	11077	0	2001	20012	1,11,1	.,	(/ 0 /	1,11,1
Power								
Consol Energy Inc.	CNX		27.21	2.1	7.9	9	4.1	9.0
CMS Energy Corporation	CMS		20.54	0.8	7.1	7	7.1	9.0
Sempra Energy	SRE		22.27	1.1	6.9	9	4.5	9.0
Constellation Energy Group	CEG		23.41	1.6	5.6	7	2.1	9.0
Median				1.4	7.0	8	4.3	9.0
Natural Gas and Oil								
Imperial Oil Limited (30%)	IMO		28.36	1.1	8.7	19	1.9	9.0
Murphy Oil Corporation	MUR		82.10	0.9	7.1	26	1.8	8.0
Ocean Energy, Inc.	OEI		19.81	4.2	6.8	22	0.8	7.0
PanCanadian Energy	PCX	2	27.59	1.2	6.2	12	0.9	7.0
Valero Energy Corp.(with UDS)	VLO		39.99	0.3	6.1	6	1.0	7.0
Petro-Canada	PCZ		26.15	1.4	5.5	12	1.0	7.0
Norsk Hydro ASA (49%)	NHY		38.43	0.7	3.9	10	2.7	5.0
PetroChina Company Ltd (10%)	PTR	2	18.14	1.6	3.2	7	10.3	5.0
Median				1.2	6.1	12	1.4	7.0
Small Cap								
Quicksilver Resources Inc.	KWK		14.86	5.9	20.3		-	14.0
Magnum Hunter Resources, Inc.	MHR		11.10	5.5	10.5		-	10.0
Spinnaker Exploration Company	SKE		43.90	8.6	10.2	48	-	9.0
XTO Energy Inc.	XTO		18.55	5.9	9.3	27	0.2	9.0
Louis Dreyfus Natural Gas Corp.	LD	3	39.70	6.1	9.1	32	-	10.0
Southwestern Energy Company	SWN		12.00	2.6	8.3	169	-	9.0
Swift Energy Company	SFY		24.47	6.0	8.1	28	-	9.0
Encore Acquisition Corp. (25%)	EAC		12.99	4.4	7.7	23	-	9.0
Penn Virginia Corporation	PVA		37.75	4.7	6.6	11	2.4	8.0
Forest Oil Corporation	FST		28.58	2.3	5.9	34	-	8.0
Newfield Exploration Company	NFX		36.09	4.2	5.4	24	-	7.0
Stone Energy Company	SGY		39.60	4.1	5.2	30	-	7.0
Median				5.1	8.2	29	-	9.0
Trusts and Partnerships								
TEPPCO Partners, L.P.	TPP		34.80	0.7	12.5	17	6.0	9.0
Cross Timbers Royalty Trust	CRT		17.75	6.9	11.8	13	7.9	11.2
Dorchester Hugoton, Ltd.	DHULZ		12.65	7.6	11.1	14	23.7	10.0
San Juan Basin Royalty Trust	SJT	2	11.49	6.2	8.0	11	8.8	10.5
Hugoton RoyaltyTrust	HGT		11.26	5.0	7.7	11	8.8	10.1
Median				6.2	11.1	13	8.8	10.1
Micro Cap								
Abraxas Petroleum Corporation	ABP		1.58	6.3	11.6		-	11.0
Purcell Energy, Ltd. (US\$)	PEL.TO		2.21	3.1	4.4	12	-	6.0
Energy Partners Ltd.(30%)	EPL	2	7.60	2.0	4.2		-	6.4

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