A Weekly Analysis of Energy Stocks Using the McDep Ratio July 29, 2002

Move Up to Quality

Summary and Recommendation

An exaggerated stock price drop for Buy recommended **ChevronTexaco** (**CVX**, **69.70**) presents an attractive long-term opportunity to invest in a high-quality Mega Cap energy company at a low McDep Ratio. It is a sign of the times in the stock market that normally premium stocks have no premium. Acting on that we reinstate our Buy recommendation of **Royal Dutch Petroleum** (**RD**, **42.39**). Our Buy recommendations of **ConocoPhillips** (**COC/P**) and **Marathon** (**MRO**) are fundamentally more justifiable at lower stock price, but also face more competition for attention. Financial risk is especially low in CVX and RD and just moderate in COC/P and MRO. In the face of a rising risk of failure for financially weak entities, our high debt, high McDep Ratio Strong Sell recommendations have not fallen enough in stock price. We have further concerns about **El Paso Corporation** (**EP**) even after the steep decline in stock price that has already taken place. All current recommendations are ranked in weekly valuation tables (see Tables L-1, L-2, M-1, M-2, S-1 and S-2).

Low-Debt ChevronTexaco Depressed by Index Selling

Understandably as the global investment business has grown and become more sophisticated it seemed increasingly inappropriate that a European domiciled company, Royal Dutch Petroleum, be included in a U.S. index, the S&P 500. Nonetheless dropping such a large company from an index that is the actual model for stock selection for so much money has had a disruptive, artificial impact on energy stocks. We could see the impact as the McDep Ratio for RD dropped to be equal to that for our recommendations CVX, COC/P and MRO. That was the trigger for our renewed recommendation of RD. Then after RD found a stock price level where it stabilized, prices for the other three dropped and previous McDep Ratio relationships began to assert themselves, but at a lower level. Presumably some investors sold those stocks to buy RD at a tempting price while other investors who weight energy holdings by the S&P index sold the other stocks. Without knowing all the details of how we got here, we do know that we have confidence in the investment potential of our recommended stocks.

The degree to which RD and CVX dropped in stock price further impressed us because both have low ratios of Debt to Present Value of 0.12 and 0.16 respectively. Low debt stocks should normally go up and down less than average and less further than high debt stocks. The McDep Ratio helps us keep debt in perspective. Presumably a change in industry conditions would affect the denominator of the ratio similarly for similar

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 29, 2002

companies. At constant relative value, the numerator, market cap and debt, should change by the same amount also. An equal percentage change in the total of market cap and debt should be a higher percentage change in the stock with a higher proportion of debt/lower proportion of equity.

Be Careful Speculating in El Paso Corporation

Some energy infrastructure stocks are so beaten up that it is tempting to take a flier on a turnaround in a company like El Paso (EP). Though the turn could possibly be here, we have low confidence that is the case and in the McDep Ratio framework, the bet is not worth it.

El Paso's current McDep Ratio appears to be a low 0.76 with a ratio of Debt/Present Value of 0.61. Contrast that with ChevronTexaco at 0.69/0.16 and Royal Dutch at 0.74/0.12. Thus even at \$10.34 a share, the fundamental value in EP is not as good as that of CVX and RD.

Thus if one took those McDep Ratios and ratios of debt at face value, only a capital constrained speculator would choose EP. Because of the high ratio of debt, EP stock would normally go up faster and down faster than that of CVX and RD. A normal, thoughtful investor, if he desired to do so, could achieve the same risk adjusted effect by borrowing money to buy CVX and RD or simply buying more CVX and RD and holding less cash.

At the same time, we have low confidence in our estimates for EP and high confidence in our judgment on CVX and RD though, in a commodity business, numbers are always changing. For sure our debt for EP is understated as we have included only one level of the pyramid of debt.

McDep Technique Justifies Strong Sells

We acknowledge that we have used some strong language in justifying our Strong Sell recommendations. Our words are intended to convey conviction, but not any personal animosity or lack of objectivity. Actually our language seems quite mild in comparison to the reality of seeing executives taken away to jail in handcuffs. Our case rests on the

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 29, 2002

numbers. The McDep technique has worked powerfully for us and it points to high vulnerability to stock price decline in energy infrastructure partnerships.

Investors in the partnerships might wonder how something that pays a good income can decline to a much lower price. Those "steady" income payments can disappear overnight as they did for the common stockholders in sponsors, Williams and Dynegy. But the partnerships are not the same as the sponsor as the management of El Paso Energy Partners doth protest. Whatever, the management is the same.

The reality is that the typical limited partner is getting a front-end loaded payment that depends on new financing to be sustained. Moreover downside protection goes to the lenders and the upside reward goes to the general partner. That leaves very little left to give the limited partner any lasting return.

It also helps to have a budding scandal to speed a stock in its decline. Compensation of general partners is a story of 1990s greed that is yet to be told. Consider the complacency of investors who put more than a hundred million dollars into the recent initial public offering of Pacific Energy Partners (PCX). The sponsor is the chairman of Quest Communications, a company that appears to have defrauded investors, including telephone company employees and retirees, of a mere \$70 billion or so, and is now under criminal investigation.

Upgrade Investments in an Uncertain Time

To complete the circle, we have a strong conviction that income investors who sell their high greed partnerships and put the proceeds into CVX or RD will have much more value down the road. Those quality stocks yield 4% and the income could be enhanced in a tax-advantaged way by occasional stock sales. Such sales might not even dilute ownership much as CVX and RD also return cash through stock repurchase. Not only is the value better in the latter, but also the risk is much lower in our opinion.

In the message to income investors there is also a message for institutional investors. Income stocks have sponsors who may be on weak ground. The broader message of upgrading to low McDep Ratio and lower debt makes sense in our opinion for most investors.

Kurt H. Wulff, CFA

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 29, 2002

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/ | | 25-Jul | Shares | Cap | Value | Present | McDep |
| | Ra | ting | 2002 | (mm) | (\$mm) | (\$/sh) | Value | Ratio |
| Mega Cap | | | | | | | | |
| Exxon Mobil Corporation | XOM | | 33.90 | 6,858 | 233,000 | 36.00 | 0.09 | 0.95 |
| BP plc | BP | | 41.96 | 3,734 | 157,000 | 50.00 | 0.15 | 0.86 |
| TotalFinaElf S.A. | TOT | | 65.24 | 1,352 | 88,200 | 90.00 | 0.14 | 0.76 |
| Royal Dutch/Shell | RD | 2 | 42.39 | 3,502 | 148,000 | 60.00 | 0.12 | 0.74 |
| ChevronTexaco Corporation | CVX | 2 | 69.70 | 1,062 | 74,000 | 110.00 | 0.16 | 0.69 |
| Total or Media | ın | | | | 700,000 | | 0.14 | 0.76 |
| Energy Infrastructure | | | | | | | | |
| Southern Company | SO | | 26.92 | 701 | 18,900 | 23.90 | 0.47 | 1.07 |
| American Electric Power Co. Inc. | AEP | 3 | 29.50 | 322 | 9,500 | 42.20 | 0.63 | 0.89 |
| Duke Energy Corporation | DUK | | 22.54 | 792 | 17,900 | 30.40 | 0.48 | 0.87 |
| Dominion Resources | D | | 56.32 | 269 | 15,200 | 76.20 | 0.45 | 0.86 |
| Enel S.p.a. (32%) | EN | | 22.85 | 388 | 8,900 | 32.70 | 0.39 | 0.82 |
| Exelon Corporation | EXC | 3 | 45.55 | 323 | 14,700 | 70.80 | 0.45 | 0.80 |
| El Paso Corporation | EP | | 10.34 | 546 | 5,600 | 27.30 | 0.61 | 0.76 |
| Total or Media | ın | | | | 72,000 | | 0.47 | 0.84 |
| Natural Gas and Oil | | | | | | | | |
| Occidental Petroleum Corp. | OXY | | 24.65 | 372 | 9,200 | 30.00 | 0.48 | 0.91 |
| ENI S.p.A. | E | | 69.25 | 776 | 53,700 | 85.00 | 0.18 | 0.85 |
| Devon Energy | DVN | | 38.45 | 165 | 6,300 | 55.00 | 0.48 | 0.84 |
| OAO Lukoil | LUKOY | | 55.99 | 299 | 16,800 | 70.00 | 0.08 | 0.82 |
| Encana Corporation | ECA | 2 | 26.45 | 484 | 12,800 | 35.00 | 0.25 | 0.82 |
| Anadarko Petroleum Corp. | APC | | 40.06 | 266 | 10,700 | 56.00 | 0.26 | 0.79 |
| Unocal Corporation | UCL | | 29.98 | 245 | 7,300 | 45.00 | 0.33 | 0.77 |
| Burlington Resources | BR | 1 | 34.69 | 202 | 7,000 | 57.00 | 0.28 | 0.72 |
| ConocoPhillips | P | 2 | 46.07 | 680 | 31,300 | 80.00 | 0.32 | 0.71 |
| Marathon Oil Corporation | MRO | 1 | 21.72 | 310 | 6,700 | 40.00 | 0.36 | 0.71 |
| Total or Media | ın | | | | 153,000 | | 0.28 | 0.79 |
| Service | | | | | | | | |
| Baker Hughes Inc. | BHI | | 26.74 | 338 | 9,000 | 24.50 | 0.13 | 1.07 |
| Schlumberger Ltd. | SLB | | 40.75 | 581 | 23,700 | 44.00 | 0.12 | 0.94 |
| Halliburton Company | HAL | | 12.54 | 430 | 5,400 | 25.00 | 0.14 | 0.57 |
| | | | | | | | | |

Buy/Sell rating after symbol: 1-Strong Buy, 2-Buy, 3-Neutral, 4-Sell, 5-Strong Sell McDep Ratio = **M**arket **c**ap and **De**bt to **p**resent value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 29, 2002

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

| | | | Price | | | Di | vidend or | |
|----------------------------------|---------|--------|---------|-------|--------|-----|------------|--------|
| | | | (\$/sh) | EV/ | EV/ | Dis | stribution | PV/ |
| | Symbol/ | / | 25-Jul | Sales | Ebitda | P/E | NTM | Ebitda |
| | Ì | Rating | 2002 | NTM | NTM | NTM | (%) | NTM |
| Mega Cap | | | | | | | | |
| Exxon Mobil Corporation | XOM | | 33.90 | 1.4 | 9.6 | 20 | 2.7 | 10.1 |
| BP plc | BP | | 41.96 | 1.2 | 7.9 | 16 | 3.3 | 9.2 |
| TotalFinaElf S.A. | TOT | | 65.24 | 1.2 | 7.2 | 14 | 2.9 | 9.4 |
| ChevronTexaco Corporation | CVX | 2 | 69.70 | 1.1 | 6.4 | 12 | 4.0 | 9.2 |
| Royal Dutch/Shell | RD | 2 | 42.39 | 1.1 | 5.8 | 11 | 4.0 | 7.9 |
| Mediar | ı | | | 1.2 | 7.2 | 14 | 3.3 | 9.2 |
| Energy Infrastructure | | | | | | | | |
| Southern Company | SO | | 26.92 | 3.3 | 9.6 | 16 | 5.0 | 9.0 |
| American Electric Power Co. Inc. | AEP | 3 | 29.50 | 0.5 | 8.0 | 8 | 8.1 | 9.0 |
| Duke Energy Corporation | DUK | | 22.54 | 0.7 | 7.8 | 9 | 4.9 | 9.0 |
| Dominion Resources | D | | 56.32 | 3.2 | 7.7 | 12 | 4.6 | 9.0 |
| Enel S.p.a. (32%) | EN | | 22.85 | 2.0 | 7.4 | 28 | 7.1 | 9.0 |
| Exelon Corporation | EXC | 3 | 45.55 | 2.2 | 7.2 | 10 | 3.9 | 9.0 |
| El Paso Corporation | EP | | 10.34 | 0.6 | 6.8 | 6 | 8.7 | 9.0 |
| Mediar | ı | | | 2.0 | 7.7 | 10 | 5.0 | 9.0 |
| Natural Gas and Oil | | | | | | | | |
| Occidental Petroleum Corp. | OXY | | 24.65 | 1.4 | 7.4 | 12 | 4.1 | 8.1 |
| ConocoPhillips | P | 2 | 46.07 | 0.8 | 6.6 | 14 | 3.1 | 9.3 |
| Anadarko Petroleum Corp. | APC | | 40.06 | 2.5 | 6.4 | 13 | 0.7 | 8.1 |
| Devon Energy | DVN | | 38.45 | 2.8 | 6.2 | 39 | 0.5 | 7.4 |
| ENI S.p.A. | E | | 69.25 | 1.5 | 6.2 | 13 | 4.9 | 7.3 |
| Burlington Resources | BR | 1 | 34.69 | 4.3 | 5.8 | 13 | 1.6 | 8.0 |
| Encana Corporation | ECA | 2 | 26.45 | 3.5 | 5.3 | 11 | 1.0 | 6.5 |
| Marathon Oil Corporation | MRO | 1 | 21.72 | 0.4 | 5.2 | 9 | 4.2 | 7.3 |
| Unocal Corporation | UCL | | 29.98 | 2.2 | 4.8 | 11 | 2.7 | 6.2 |
| OAO Lukoil | LUKOY | | 55.99 | 1.5 | 4.0 | 8 | 1.9 | 4.9 |
| Mediar | ı | | | 1.8 | 6.0 | 12 | 2.3 | 7.3 |
| Service | | | | | | | | |
| Baker Hughes Inc. | BHI | | 26.74 | 1.7 | 8.6 | 19 | 1.7 | 9.0 |
| Schlumberger Ltd. | SLB | | 40.75 | 2.2 | 7.5 | 20 | 1.8 | 9.0 |
| Halliburton Company | HAL | | 12.54 | 0.5 | 4.7 | 10 | 4.0 | 8.2 |

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 July 29, 2002

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

| | | | Price | | | Net | | |
|-------------------------------------|---------|-------|---------|--------|--------|---------|---------|-------|
| | | | (\$/sh) | | Market | Present | Debt/ | |
| | Symbol/ | | 25-Jul | Shares | Cap | Value | Present | McDep |
| | Ro | ating | 2002 | (mm) | (\$mm) | (\$/sh) | Value | Ratio |
| Energy Infrastructure | | | | | | | | |
| Kinder Morgan Energy Partners, L.P. | KMP | 5 | 30.74 | 136 | 4,200 | 14.00 | 0.49 | 1.61 |
| Kinder Morgan Management, LLC | KMR | 5 | 30.25 | 30 | 900 | 14.00 | 0.49 | 1.60 |
| Enterprise Products Part. | EPD | | 18.30 | 175 | 3,200 | 9.50 | 0.43 | 1.53 |
| Kinder Morgan, Inc. | KMI | 5 | 37.08 | 123 | 4,600 | 8.10 | 0.87 | 1.46 |
| Calpine Corporation | CPN | 3 | 4.06 | 375 | 1,500 | 1.00 | 0.97 | 1.09 |
| AES Corporation | AES | | 1.77 | 543 | 1,000 | 1.00 | 0.98 | 1.02 |
| Williams Companies | WMB | | 0.88 | 521 | 500 | 1.00 | 0.97 | 1.00 |
| Dynegy Inc. | DYN | | 0.51 | 419 | 200 | 1.00 | 0.94 | 0.97 |
| Valero Energy Corporation | VLO | | 31.73 | 104 | 3,300 | 60.00 | 0.46 | 0.75 |
| Sempra Energy | SRE | | 18.60 | 203 | 3,800 | 41.70 | 0.50 | 0.72 |
| Mirant Corporation | MIR | | 3.37 | 353 | 1,200 | 18.60 | 0.65 | 0.71 |
| CMS Energy Corporation | CMS | | 8.13 | 128 | 1,000 | 43.80 | 0.62 | 0.69 |
| Consol Energy Inc. | CNX | | 11.35 | 79 | 900 | 35.90 | 0.51 | 0.66 |
| Constellation Energy Group | CEG | | 24.25 | 152 | 3,700 | 56.50 | 0.35 | 0.63 |
| Total or Median | ı | | | | 25,400 | | 0.64 | 1.01 |
| Natural Gas and Oil | | | | | | | | |
| Suncor Energy | SU | | 15.72 | 454 | 7,100 | 17.00 | 0.25 | 0.94 |
| Ocean Energy, Inc. | OEI | | 18.00 | 178 | 3,200 | 20.00 | 0.30 | 0.93 |
| Imperial Oil Limited (30%) | IMO | | 25.81 | 114 | 2,900 | 30.00 | 0.14 | 0.88 |
| Murphy Oil Corporation | MUR | | 66.80 | 46 | 3,100 | 82.00 | 0.18 | 0.85 |
| Petro-Canada | PCZ | | 25.47 | 262 | 6,700 | 31.00 | 0.11 | 0.84 |
| Norsk Hydro ASA (49%) | NHY | | 39.65 | 126 | 5,000 | 54.00 | 0.18 | 0.78 |
| XTO Energy Inc. | XTO | 2 | 16.85 | 124 | 2,100 | 26.00 | 0.23 | 0.73 |
| PetroChina Company Ltd (10%) | PTR | 2 | 20.00 | 176 | 3,500 | 30.00 | 0.17 | 0.72 |
| Total or Median | ı | | | | 28,000 | | 0.18 | 0.86 |

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 29, 2002

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

| | | | Price | | | | vidend or | |
|-------------------------------------|---------|--------|---------|-------|--------|-----|------------|--------|
| | | | (\$/sh) | EV/ | EV/ | Di | stribution | PV/ |
| | Symbol/ | , | 25-Jul | Sales | Ebitda | P/E | NTM | Ebitda |
| | F | Rating | 2002 | NTM | NTM | NTM | (%) | NTM |
| Energy Infrastructure | | | | | | | | |
| Enterprise Products Part. | EPD | | 18.30 | 1.7 | 16.8 | 40 | 6.8 | 11.0 |
| Kinder Morgan Energy Partners, L.P. | KMP | 5 | 30.74 | 3.1 | 14.5 | 16 | 7.9 | 9.0 |
| Kinder Morgan Management, LLC | KMR | 5 | 30.25 | 3.0 | 14.4 | 16 | 8.1 | 9.0 |
| Kinder Morgan, Inc. | KMI | 5 | 37.08 | 3.4 | 13.2 | 16 | 0.5 | 9.0 |
| Calpine Corporation | CPN | 3 | 4.06 | 1.9 | 11.1 | | | 10.2 |
| AES Corporation | AES | | 1.77 | 2.7 | 9.2 | | | 9.0 |
| Williams Companies | WMB | | 0.88 | 1.8 | 9.0 | | _ | 9.0 |
| Dynegy Inc. | DYN | | 0.51 | 0.2 | 8.7 | | _ | 9.0 |
| Sempra Energy | SRE | | 18.60 | 1.0 | 6.5 | 7 | 5.4 | 9.0 |
| Mirant Corporation | MIR | | 3.37 | 0.4 | 6.4 | 2 | - | 9.0 |
| CMS Energy Corporation | CMS | | 8.13 | 0.7 | 6.2 | 4 | 18.0 | 9.0 |
| Consol Energy Inc. | CNX | | 11.35 | 1.6 | 6.0 | 4 | 9.9 | 9.0 |
| Constellation Energy Group | CEG | | 24.25 | 1.6 | 5.7 | 8 | 2.0 | 9.0 |
| Valero Energy Corporation | VLO | | 31.73 | 0.2 | 5.0 | 6 | 1.3 | 6.8 |
| Mediar | ı | | | 1.6 | 8.9 | 7 | 3.7 | 9.0 |
| Natural Gas and Oil | | | | | | | | |
| Suncor Energy | SU | | 15.72 | 3.4 | 10.2 | 22 | 1.4 | 10.8 |
| Imperial Oil Limited (30%) | IMO | | 25.81 | 1.2 | 9.1 | 20 | 2.1 | 10.3 |
| Ocean Energy, Inc. | OEI | | 18.00 | 4.3 | 7.3 | 31 | 0.9 | 7.8 |
| Murphy Oil Corporation | MUR | | 66.80 | 0.8 | 6.8 | 32 | 2.2 | 8.0 |
| Petro-Canada | PCZ | | 25.47 | 1.6 | 6.2 | 16 | 1.0 | 7.4 |
| XTO Energy Inc. | XTO | 2 | 16.85 | 3.1 | 6.0 | 12 | 0.2 | 8.3 |
| Norsk Hydro ASA (49%) | NHY | | 39.65 | 0.7 | 3.7 | 11 | 2.6 | 4.8 |
| PetroChina Company Ltd (10%) | PTR | 2 | 20.00 | 1.6 | 3.7 | 7 | 6.4 | 5.1 |
| Mediar | ı | | | 2.4 | 7.0 | 21 | 1.2 | 8.2 |

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 29, 2002

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

| | Price | | | | | | | | |
|------------------------------------|----------|-------|---------|--------|--------|---------|---------|-------|--|
| | | | (\$/sh) | | Market | Present | Debt/ | | |
| | Symbol/ | | 25-Jul | Shares | Cap | Value | Present | McDep | |
| | Ra | ıting | 2002 | (mm) | (\$mm) | (\$/sh) | Value | Ratio | |
| Energy Infrastucture | | | | | | | | | |
| El Paso Energy Partners | EPN | 5 | 28.16 | 39.9 | 1,120 | 11.10 | 0.59 | 1.62 | |
| Enbridge Energy Partners, | EEP | | 40.90 | 31.0 | 1,270 | 16.60 | 0.58 | 1.62 | |
| TEPPCO Partners, L.P. | TPP | | 28.95 | 46.5 | 1,350 | 12.90 | 0.61 | 1.49 | |
| Plains All Amer. Pipeline | PAA | | 24.05 | 41.6 | 1,000 | 14.90 | 0.39 | 1.38 | |
| Northern Border Partners | NBP | | 34.66 | 42.0 | 1,460 | 20.10 | 0.57 | 1.32 | |
| Penn Virginia Res. Part, L.P.(48%) | PVR | | 18.55 | 7.7 | 140 | 17.90 | 0.12 | 1.03 | |
| AmeriGas Partners, L.P. | APU | | 21.45 | 49.0 | 1,050 | 23.50 | 0.47 | 0.95 | |
| Penn Virginia Corporation | PVA | | 33.10 | 9.0 | 300 | 35.00 | 0.10 | 0.95 | |
| Total or Median | ! | | | | 7,700 | | 0.52 | 1.35 | |
| Natural Gas and Oil | | | | | | | | | |
| Provident Energy Trust | PVX | | 6.81 | 36.0 | 250 | 5.00 | 0.46 | 1.20 | |
| Dorchester Hugoton, Ltd. | DHULZ | | 12.11 | 10.7 | 130 | 11.60 | (0.17) | 1.05 | |
| Quicksilver Resources Inc. | KWK | | 19.99 | 19.4 | 390 | 19.00 | 0.44 | 1.03 | |
| Newfield Exploration Company | NFX | | 29.10 | 48.6 | 1,410 | 33.00 | 0.25 | 0.91 | |
| Pogo Producing Company | PPP | | 27.65 | 60.5 | 1,670 | 32.00 | 0.27 | 0.90 | |
| CNOOC Limited (19%) | CEO | 2 | 26.36 | 78.0 | 2,060 | 30.00 | - | 0.88 | |
| Spinnaker Exploration Company | SKE | | 29.81 | 28.5 | 850 | 35.00 | 0.03 | 0.86 | |
| Enerplus Resources Fund | ERF | | 16.23 | 69.6 | 1,130 | 20.00 | 0.19 | 0.85 | |
| Stone Energy Company | SGY | | 31.45 | 26.4 | 830 | 42.00 | 0.29 | 0.82 | |
| Encore Acquisition Corp. (25%) | EAC | | 15.63 | 7.5 | 117 | 20.00 | 0.18 | 0.82 | |
| Southwestern Energy Company | SWN | | 10.70 | 25.6 | 270 | 17.00 | 0.44 | 0.79 | |
| Forest Oil Corporation | FST | 3 | 21.80 | 46.8 | 1,020 | 35.00 | 0.30 | 0.74 | |
| Unit Corporation | UNT | | 15.25 | 36.2 | 550 | 21.00 | 0.03 | 0.74 | |
| Magnum Hunter Resources, Inc. | MHR | | 5.20 | 71.5 | 370 | 11.00 | 0.46 | 0.71 | |
| Swift Energy Company | SFY | | 11.54 | 24.8 | 290 | 22.00 | 0.32 | 0.68 | |
| Canadian Oil Sands Trust (US\$) | COS_u.TO | 2 | 25.16 | 56.9 | 1,430 | 40.00 | 0.12 | 0.67 | |
| Total or Median | ļ. | | | | 12,800 | | 0.26 | 0.83 | |
| Natural Gas Royalty Trusts | | | | | | | | | |
| Cross Timbers Royalty Trust | CRT | | 14.68 | 6.0 | 88 | 19.60 | - | 0.75 | |
| Hugoton RoyaltyTrust (46%) | HGT | | 9.74 | 18.4 | 180 | 15.00 | - | 0.65 | |
| San Juan Basin Royalty Trust | SJT | 2 | 9.70 | 46.6 | 450 | 15.10 | - | 0.64 | |
| Micro Cap | | | | | | | | | |
| Abraxas Petroleum Corporation | ABP | | 0.50 | 27.0 | 14 | 2.00 | 0.84 | 0.88 | |
| Energy Partners Ltd.(30%) | EPL | 2 | 7.40 | 8.2 | 61 | 10.00 | 0.38 | 0.84 | |
| Purcell Energy, Ltd. (US\$) | PEL.TO | 3 | 1.50 | 27.3 | 41 | 3.00 | 0.19 | 0.59 | |

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 3 - Neutral, 4 - Sell, 5 - Strong Sell McDep Ratio = **M**arket cap and **De**bt to **p**resent value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 29, 2002

Table S-2
Small 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/ | | 25-Jul | Sales | Ebitda | P/E | NTM | Ebitda |
| | Rai | ting | 2002 | NTM | NTM | NTM | (%) | NTM |
| Emonore Infragturatura | | | | | | | | |
| Energy Infrastucture | EDM | _ | 20.16 | 10.4 | 146 | 24 | 0.2 | 0.0 |
| El Paso Energy Partners | EPN | 5 | 28.16 | 10.4 | 14.6 | 24 | 9.2 | 9.0 |
| Enbridge Energy Partners, | EEP TPP | | 40.90 28.95 | 6.5 1.1 | 14.6 13.4 | 79 18 | 8.6 7.9 | 9.0 9.0 |
| TEPPCO Partners, L.P. | | | | | | | | |
| Plains All Amer. Pipeline | PAA | | 24.05 | 0.2 | 12.4 11.8 | 18 15 | 8.5 9.2 | 9.0 |
| Northern Border Partners | NBP | | 34.66 | 7.4 | | | | 9.0 |
| Penn Virginia Res. Part, L.P.(48%) | PVR | | 18.55 | 6.9 | 9.3 | 10 | 10.8 | 9.0 |
| AmeriGas Partners, L.P. | APU | | 21.45 | 1.5 | 8.6 | 12 | 10.3 | 9.0 |
| Penn Virginia Corporation | PVA | | 33.10 | 3.0 | 4.6 | 11 | 2.7 | 4.8 |
| Median Natural Gas and Oil | ļ. | | | 4.8 | 12.1 | 16 | 8.9 | 9.0 |
| Dorchester Hugoton, Ltd. | DHULZ | | 12.11 | 5.9 | 8.9 | 13 | 9.6 | 8.5 |
| Quicksilver Resources Inc. | KWK | | 19.99 | 4.6 | 8.6 | 22 | 9.0 - | 8.3 |
| Provident Energy Trust | PVX | | 6.81 | 3.6 | 7.3 | 88 | 16.3 | 6.1 |
| Canadian Oil Sands Trust (US\$) | COS u.TO | 2 | 25.16 | 3.7 | 6.9 | 8 | 5.1 | 10.3 |
| Pogo Producing Company | PPP | 2 | 27.65 | 3.8 | 6.5 | 39 | 0.4 | 7.3 |
| Enerplus Resources Fund | ERF | | 16.23 | 4.4 | 6.2 | 15 | 13.5 | 7.3 |
| Encore Acquisition Corp. (25%) | EAC | | 15.63 | 4.4 | 6.0 | 13 | 13.3 | 7. 4 7.4 |
| Magnum Hunter Resources, Inc. | MHR | | 5.20 | 2.9 | 5.9 | 15 | _ | 8.3 |
| Forest Oil Corporation | FST | 3 | 21.80 | 3.4 | 5.8 | 18 | _ | 7.8 |
| CNOOC Limited (19%) | CEO | 2 | 26.36 | 3.4 4.4 | 5.8 5.8 | 11 | 0.9 | 6.5 |
| Swift Energy Company | SFY | 2 | 11.54 | 3.7 | 5.8 5.5 | 24 | 0.9 | 8.1 |
| Southwestern Energy Company | SWN | | 10.70 | 2.1 | 5.0 | 24 11 | _ | 6.3 |
| | UNT | | 15.25 | 2.1 | 3.0 4.9 | 11 | | 6.6 |
| Unit Corporation | | | 29.10 | 3.0 | 4.9 | 16 | - | 6.6 4.7 |
| Newfield Exploration Company | NFX | | | | 4.3 | 13 | - | |
| Spinnaker Exploration Company | SKE | | 29.81 | 3.6 | | | - | 4.8 |
| Stone Energy Company | SGY | | 31.45 | 3.1 | 4.1 | 9 | - | 5.0 |
| Median Natural Gas Royalty Trusts | ! | | | 3.7 | 5.8 | 14 | - | 7.3 |
| Cross Timbers Royalty Trust | CRT | | 14.68 | 5.6 | 8.1 | 9 | 11.4 | 10.8 |
| Hugoton RoyaltyTrust (46%) | HGT | | 9.74 | 4.5 | 6.8 | 10 | 10.0 | 10.3 |
| San Juan Basin Royalty Trust | SJT | 2 | 9.74 | 5.2 | 6.7 | 9 | 10.0 | 10.4 |
| San Juan Basin Royalty Trust | 531 | 2 | 9.70 | 3.2 | 0.7 | 7 | 10.9 | 10.4 |
| Micro Cap | | | | | | | | |
| Abraxas Petroleum Corporation | ABP | | 0.50 | 4.2 | 6.1 | | - | 6.9 |
| Energy Partners Ltd.(30%) | EPL | 2 | 7.40 | 2.5 | 5.1 | | - | 6.0 |
| Purcell Energy, Ltd. (US\$) | PEL.TO | 3 | 1.50 | 2.8 | 3.8 | 9 | - | 6.4 |

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