A Weekly Analysis of Energy Stocks Using the McDep Ratio July 15, 2002

# **Follow the Fees**

#### **Summary and Recommendation**

Among energy income investments U.S. Royalty Trusts offer the fairest deal to investors followed by Canadian Royalty Trusts. A few U.S. Master Limited Partnerships are acceptable, but most are likely toxic to investors' future wealth. Our Buy recommendations are **San Juan Basin Royalty Trust (SJT)** and **Canadian Oil Sands Trust (COS\_u.TO)** and our Strong Sell recommendations are **Kinder Morgan (KMI, KMP, KMR)** and **El Paso Energy Partners (EPN)**. Every professional person who charges fees for services should be grateful that high greed partnerships exist because almost any professional fee looks reasonable by comparison. Investors receiving \$100 of distribution may have first paid fees of \$0.20 in the case of SJT; \$17 in the case of a Canadian Royalty Trust like **Enerplus Resources Fund (ERF)**; and \$107 in the case of the highest fee U.S. Master Limited Partnership, KMP. Elsewhere among our recommendations the commodity price trends remain positive though some stock price trends have weakened. Low McDep Ratio, low debt stocks are among the strongest commitments investors can make (see Tables L-1, L-2, M-1, M-2, S-1 and S-2).

#### **Energy Income Investment Fees**

		Mgt.	Capital	Acquis.	Admin	
	Greed	(% of	(% of	(% of	(% of	
	Gauge	Dist.)	Value)	Value) N	Mkt Cap)	Sponsor
U.S. Master Limited Partnerships						
Kinder Morgan (KMP,KMR)	2.52	50%	5%	2%	2.0%	Kinder Morgan (KMI)
El Paso Energy Partners (EPN)	1.53	50%	5%	2%	2.0%	El Paso (EP)
TEPPCO Partners, L.P. (TPP)	1.28	50%	5%	2%	2.0%	Duke(DUK)/Phillips (P)
Enbridge Energy Partners (EEP)	0.91	50%	5%	2%	2.0%	Enbridge Inc. (ENB)
Enterprise Products Part. (EPD)	0.87	50%	5%	2%	1.0%	RD/Shell (RD) (20%)
Northern Border Partners (NBP)	0.86	50%	5%	2%	2.0%	Enron, Williams (WMB)
Plains All Amer. Pipeline (PAA)	0.76	50%	5%	2%	2.0%	Plains Resources (PLX)
Penn Virginia Res. Part, L.P.(PVR)	0.67	50%	5%	2%	4.0%	Penn Virginia (PVA)
AmeriGas Partners, L.P. (APU)	0.61	50%	5%	2%	2.0%	UGI Corporation (UGI)
Dorchester Hugoton (DHULZ)		5%			0.7%	Preston Peak
Canadian Royalty Trusts						
Enerplus Resources Fund (ERF)		4%	5%	2%	0.6%	El Paso (EP)
Provident Energy Trust (PVX)		4%	5%	0%	1.0%	Unitholders
Canadian Oil Sands Trust (COS_u.TO	)	0%	0%	0%	0.4%	Encana (ECA)
U.S. Royalty Trusts						
San Juan Basin Royalty Trust (SJT)		0%	0%	0%	0.2%	Unitholders
Cross Timbers Royalty Trust (CRT)		0%	0%	0%	0.1%	XTO Energy (XTO)
Hugoton RoyaltyTrust (HGT)		0%	0%	0%	0.1%	XTO Energy (XTO)

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 15, 2002

### **Management Fees a Potential Time Bomb**

Investors bear the burden of fees for management, capital raising, property acquisition and administration that we attempt to identify for 16 energy income investments that are primarily sold to individual investors (see table above). The analysis is relevant for institutional investors as it may have implications for investments in related issuers such as sponsoring companies and it sheds light on the shady practices of an industry competing for investor funds.

The good news is that there are no management fees for U.S. Royalty Trusts or for Canadian Oil Sands Trust. The fees are limited for other Canadian Royalty Trusts and for one U.S. Master Limited Partnership, Dorchester Hugoton. We are distinguishing between management fees and administration fees that we discuss separately. Management fees are usually called "incentive" fees. In the case of Canadian Royalty Trusts, PVR and ERF, that designation has a ring of truth. PVR's fee above 2% is not earned until investors earn a minimum total return including unit price change. ERF builds in a performance requirement relative to peers before it can earn all its incentive and then it is limited at a moderate level.

Nine of the MLP's qualify for our high greed designation because of their fee structure that potentially diverts an incremental 50% of cash flow to the general partner. On that basis, we list the management fee at 50% recognizing that not all are yet collecting 50%. The nine MLP's are ranked in descending order of their reading on our Greed Gauge discussed in previous research. The lowest-ranking stock on that measure, APU is collecting a management fee of 2% for now. The highest-ranking stock, KMP, is collecting a management fee of about 40% on average now.

#### **Capital Raising Comes at a Price**

Investors are told that Canadian royalty trusts and U.S. MLP's are better than U.S. royalty trusts because the former are actively managed while the latter are passive. We have often joked over the years that not having a management was an advantage, not a disadvantage.

Active management really means regular visits to the capital market because after paying out high income there is little cash flow left to manage actively. Of course, capital does not flow freely into new entities. Thus we list a Capital fee at 5% of the amount to be raised. If new capital raised matches cash distributed, the capital fee is equivalent to about 5% of the distribution. While new investors might rationalize that someone else pays the capital fee existing investors have no choice because ownership is transferred to new investors in exchange for the net proceeds of the capital raising.

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 15, 2002

### **Acquisition Fees Are "Customary"**

Similarly investors are told that the advantages of being able to do acquisitions, to enter into commodity hedges and to take on debt are also not shared by U.S. royalty trusts. Again, the answer really depends on whether the management of the active entity is trustworthy and competent.

After it is raised, new capital is invested. Few deals are done where someone does not collect a fee. Typical disclosures allow that certain parties have been paid customary fees. Acknowledging that fees that management pays itself for acquisitions may be abusive, some Canadian royalty trusts explicitly disavow such fees including those listed in our table. We still show a 2% Acquisition fee for PVR and ERF to allow for payments to third parties though that may not always be the case. Again, if new capital matches cash distributed and new capital is applied to an acquisition, the acquisition fee might amount to 2% of the distribution.

Often for high greed partnerships "acquisitions" are mere transfers among related parties at artificial prices. Our fee analysis does not explicitly recognize the potential hidden cost of such transactions.

#### **Administration Costs Not Always Disclosed Separately**

Active management also costs more as the number of different projects accumulates. While our numbers are readily traceable for royalty trusts, administration costs for high greed MLP's are a rough estimate.

#### Following the Fees Strengthens the Case Against High Greed Partnerships

The high greed fees are among the most deceptive we have ever seen. Nor do we agree that it is all disclosed and therefore it is all right. Disclosure is much less than complete. At this time of re-examination of what went wrong in our capital markets we resonate with this approximate quote from Jim Browning of the *Wall Street Journal* speaking on *CNBC* at 7:10 am on 7/11/02, "There are things that became accepted practice in the 1990s that are clearly not acceptable." A key distinction between high greed partnerships in our coverage and Enron, Tyco and Worldcom is that the collapse and public indignation has not yet occurred. That is fortunate because investors can still take protective action.

Now we quote Joe Nocera at the same time and place, "The options mania has created an incentive for fraud." High greed partnership compensation has the complexity of options and derivatives. It is designed to look innocuous and simple, but in reality is a sophisticated stripping of assets from unsuspecting persons, in our opinion. We believe high greed compensation creates an incentive for fraud.

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 15, 2002

For another example of the dangers of the complex arrangement, let us look back to the derivative scandals of 1994. Recall that the Federal Reserve made multiple increases in short term interest rates in 1994. Those surprise moves had unexpected consequences. Orange County went bankrupt on money market investments and supposedly sophisticated Proctor and Gamble lost hundreds of millions on similar, supposedly safe, investments. We won't point any fingers because there is probably enough blame to spread among all parties. As we recall, Merrill Lynch made a settlement payment to Orange County and Bankers Trust, now Deutsche Bank, made a settlement payment to P&G.

There are many ways partnerships can be deceptive. Most make frequent acquisitions. As a result there is no consistent basis for making normal operating comparisons. Nor do we know whether miraculous increases in cash flow for newly acquired properties reflect "good" management or clever contracting. The same companies that engaged in bogus electricity trades are active buyers of energy infrastructure services.

Cash flow is likely overstated because the amount influences the distribution that in turn influences general partner compensation. In one infrastructure partnership not in our coverage, the supposedly stable transportation fee actually depended on natural gas price. As a result surprisingly high income a year ago was accompanied by a high distribution and high general partner compensation. When that did not last, the distribution to limited partners was cut and the stock price dropped sharply. We did not notice that the general partner gave back any cash from ramping up the distribution artificially.

Another possible trick is to take advantage of current low interest rates and buy properties with debt. The determination of distribution typically makes little allowance for debt repayment. The combination allows for an artificially high distribution and accompanying general partner compensation. Nor does borrowing long term necessarily entail higher interest rates. An unscrupulous general partner can use interest rate swaps to keep the distribution and GP compensation artificially high. Yet the counter parties to swaps are not fools. The piper has to be paid when short-term rates increase as they did violently in 1994.

As in the case of Worldcom, by the time fraud is known, it is too late. Better for investors to avoid the situations where fraud is most tempting.

A critical test between now and mid August may be the new Securities and Exchange Commission requirement that top managers must attest under oath that the accounting they use is fair. In our opinion, no one directly or indirectly responsible for a high greed partnership can honestly say that is the case.

#### Kurt H. Wulff, CFA

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 15, 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/		11- $Jul$	Shares	Cap	Value	Present	McDep
	Rat	ing	2002	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Mega Cap								
Exxon Mobil Corporation	XOM		37.10	6,858	254,000	36.00	0.09	1.03
BP plc	BP		47.53	3,734	178,000	50.00	0.15	0.96
TotalFinaElf S.A.	TOT		77.58	1,352	104,900	90.00	0.14	0.88
Royal Dutch/Shell	RD	3	50.56	3,502	177,000	60.00	0.12	0.86
ChevronTexaco Corporation	CVX	2	82.65	1,062	87,800	110.00	0.16	0.79
Total or Median					802,000		0.14	0.88
Energy Infrastructure								
Southern Company	SO		26.02	701	18,200	23.90	0.47	1.05
Duke Energy Corporation	DUK		27.95	792	22,100	30.40	0.48	0.96
American Electric Power Co. Inc.	AEP	3	37.04	322	11,900	42.20	0.63	0.95
Williams Companies	WMB		5.56	521	2,900	10.20	0.78	0.90
Enel S.p.a. (32%)	EN		27.20	388	10,600	32.70	0.39	0.90
Dominion Resources	D		61.60	269	16,600	76.20	0.45	0.90
El Paso Corporation	EP		18.10	546	9,900	27.30	0.61	0.87
Exelon Corporation	EXC	3	47.39	323	15,300	70.80	0.45	0.82
Total or Median					89,000		0.48	0.90
Natural Gas and Oil								
OAO Lukoil	LUKOY		69.25	299	20,700	70.00	0.08	0.99
Occidental Petroleum Corp.	OXY		26.92	372	10,000	30.00	0.48	0.95
ENI S.p.A.	E		78.65	776	61,000	85.00	0.18	0.94
Devon Energy	DVN		45.01	165	7,400	55.00	0.48	0.90
Encana Corporation	ECA	2	29.01	484	14,000	35.00	0.25	0.87
Anadarko Petroleum Corp.	APC		45.44	266	12,100	56.00	0.26	0.86
Unocal Corporation	UCL		34.20	245	8,400	45.00	0.33	0.84
ConocoPhillips	P	2	53.40	680	36,300	80.00	0.32	0.77
Marathon Oil Corporation	MRO	1	24.84	310	7,700	40.00	0.36	0.76
Burlington Resources	BR	1	35.76	202	7,200	57.00	0.32	0.74
Total or Median					164,000		0.32	0.86
Service								
Baker Hughes Inc.	BHI		30.33	338	10,300	24.50	0.13	1.21
Schlumberger Ltd.	SLB		43.22	581	25,100	44.00	0.12	0.98
Halliburton Company	HAL		13.27	430	5,700	25.00	0.14	0.60

Buy/Sell rating after symbol: 1-Strong Buy, 2-Buy, 3-Neutral, 4-Sell, 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 15, 2002

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

				EV/	EV/	Dividend or Distribution		PV/
	Symbol/		11-Jul	Sales	Ebitda	P/E	NTM	Ebitda
	R	ating	2002	NTM	NTM	NTM	(%)	NTM
Mega Cap								
Exxon Mobil Corporation	XOM		37.10	1.6	10.4	22	2.5	10.1
BP plc	BP		47.53	1.4	8.8	18	2.9	9.2
TotalFinaElf S.A.	TOT		77.58	1.3	8.3	17	2.4	9.4
ChevronTexaco Corporation	CVX	2	82.65	1.2	7.2	14	3.4	9.1
Royal Dutch/Shell	RD	3	50.56	1.3	7.0	13	2.8	8.1
Medi	an			1.3	8.3	17	2.8	9.2
Energy Infrastructure								
Southern Company	SO		26.02	3.3	9.4	15	5.1	9.0
Duke Energy Corporation	DUK		27.95	0.8	8.6	11	3.9	9.0
American Electric Power Co. Inc.	AEP	3	37.04	0.6	8.6	11	6.5	9.0
Williams Companies	WMB		5.56	2.0	8.1	5	14.4	9.0
Enel S.p.a. (32%)	EN		27.20	2.2	8.1	33	6.0	9.0
Dominion Resources	D		61.60	3.4	8.1	13	4.2	9.0
El Paso Corporation	EP		18.10	0.6	7.8	10	5.0	9.0
Exelon Corporation	EXC	3	47.39	2.2	7.4	10	3.7	9.0
Medi	an			2.1	8.1	11	5.1	9.0
Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		26.92	1.5	7.7	13	3.7	8.1
ConocoPhillips	P	2	53.40	0.9	7.4	17	2.7	9.5
Anadarko Petroleum Corp.	APC		45.44	2.7	6.9	15	0.7	8.1
ENI S.p.A.	E		78.65	1.7	6.8	15	4.3	7.3
Devon Energy	DVN		45.01	3.0	6.7	45	0.4	7.4
Encana Corporation	ECA	2	29.01	3.7	5.7	12	0.9	6.5
Marathon Oil Corporation	MRO	1	24.84	0.4	5.5	11	3.7	7.3
Burlington Resources	BR	1	35.76	3.8	5.2	11	1.5	7.0
Unocal Corporation	UCL		34.20	2.3	5.2	12	2.3	6.2
OAO Lukoil	LUKOY	•	69.25	1.8	4.8	10	1.6	4.9
Medi	an			2.1	6.2	12	1.9	7.3
Service								
Baker Hughes Inc.	BHI		30.33	1.9	9.7	21	1.5	9.0
Schlumberger Ltd.	SLB		43.22	2.3	7.9	21	1.7	9.0
Halliburton Company	HAL		13.27	0.6	4.9	10	3.8	8.2

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 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 15, 2002

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

	Price							
			(\$/sh)		Market	Present	Debt/	
	Symbol/		11-Jul	Shares	Cap	Value	Present	McDep
	Ra	ating	2002	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Energy Infrastructure								
Enterprise Products Part.	EPD		18.20	175	3,200	6.50	0.52	1.86
Kinder Morgan Energy Partners, L.P.	KMP	5	31.41	136	4,300	12.40	0.48	1.80
Kinder Morgan Management, LLC	KMR	5	31.24	30	900	12.40	0.48	1.80
Kinder Morgan, Inc.	KMI	5	38.88	125	4,900	16.00	0.78	1.32
Calpine Corporation	CPN	3	5.53	375	2,100	5.00	0.87	1.01
AES Corporation	AES		3.54	543	1,900	8.80	0.83	0.90
Valero Energy Corporation	VLO		36.10	104	3,800	60.00	0.46	0.79
Consol Energy Inc.	CNX		19.56	79	1,600	35.90	0.51	0.78
Mirant Corporation	MIR		5.03	353	1,800	18.60	0.65	0.74
Sempra Energy	SRE		18.90	203	3,800	41.70	0.50	0.73
Dynegy Inc.	DYN		6.51	419	2,700	14.90	0.51	0.73
CMS Energy Corporation	CMS		10.25	128	1,300	43.80	0.62	0.71
Constellation Energy Group	CEG		26.00	152	4,000	56.50	0.35	0.65
Total or Median					32,300		0.52	0.84
Natural Gas and Oil								
Ocean Energy, Inc.	OEI		19.82	178	3,500	20.00	0.30	0.99
Suncor Energy	SU		16.85	454	7,700	17.00	0.25	0.99
Imperial Oil Limited (30%)	IMO		29.63	114	3,400	30.00	0.14	0.99
Murphy Oil Corporation	MUR		70.88	46	3,200	82.00	0.18	0.89
Petro-Canada	PCZ		26.89	262	7,100	31.00	0.11	0.88
Norsk Hydro ASA (49%)	NHY		46.07	126	5,800	54.00	0.18	0.88
XTO Energy Inc.	XTO	2	18.35	124	2,300	26.00	0.21	0.77
PetroChina Company Ltd (10%)	PTR	2	21.23	176	3,700	30.00	0.17	0.76
Total or Median					30,700		0.18	0.94

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 3 - Neutral, 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 15, 2002

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

			Price	Price Dividend or				
			(\$/sh)	EV/	EV/	Di	stribution	PV/
	Symbol	/	11-Jul	Sales	Ebitda	P/E	NTM	Ebitda
	R	Cating	2002	NTM	NTM	NTM	(%)	NTM
Energy Infrastructure								
Enterprise Products Part.	EPD		18.20	1.6	16.7	39	6.9	9.0
•	KMP	5	31.41	4.2	16.7	22	7.5	9.0
Kinder Morgan Management, L.P.	KMR	5 5	31.41	4.2	16.1	22	7.5 7.6	9.0
Kinder Morgan Management, LLC						5		
Calpine Corporation	CPN	3 5	5.53	2.0	11.5		0.5	11.4
Kinder Morgan, Inc.	KMI	3	38.88	3.7	11.1	14	0.5	8.4
AES Corporation	AES		3.54	2.8	8.1	3	-	9.0
Consol Energy Inc.	CNX		19.56	1.9	7.0	7	5.7	9.0
Mirant Corporation	MIR		5.03	0.4	6.7	2	-	9.0
Sempra Energy	SRE		18.90	1.0	6.6	7	5.3	9.0
Dynegy Inc.	DYN		6.51	0.3	6.5	6	4.6	9.0
CMS Energy Corporation	CMS		10.25	0.7	6.4	5	14.2	9.0
Constellation Energy Group	CEG		26.00	1.7	5.8	8	1.8	9.0
Valero Energy Corporation	VLO		36.10	0.2	5.3	7	1.1	6.8
Median				1.7	7.0	7	4.6	9.0
Natural Gas and Oil								
Suncor Energy	SU		16.85	3.6	10.7	24	1.3	10.8
Imperial Oil Limited (30%)	IMO		29.63	1.4	10.2	23	1.8	10.3
Ocean Energy, Inc.	OEI		19.82	4.6	7.8	34	0.8	7.8
Murphy Oil Corporation	MUR		70.88	0.8	7.1	33	2.1	8.0
Petro-Canada	PCZ		26.89	1.7	6.5	17	0.9	7.4
XTO Energy Inc.	XTO	2	18.35	3.2	6.0	12	0.2	7.8
Norsk Hydro ASA (49%)	NHY		46.07	0.8	4.2	13	2.3	4.8
PetroChina Company Ltd (10%)	PTR	2	21.23	1.7	3.8	8	6.0	5.1
Median				2.4	7.4	23	1.1	7.9

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 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 15, 2002

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

			Price			Net		
			(\$/sh)		Market	Present	Debt/	
	Symbol/		11-Jul	Shares	Cap	Value	Present	McDep
	Rati	ing	2002	(mm)	(\$mm)	(\$/sh)	Value	Ratio
<b>Energy Infrastucture</b>								
El Paso Energy Partners	EPN	5	32.18	39.9	1,280	11.10	0.59	1.77
Enbridge Energy Partners,	EEP		44.67	31.0	1,380	16.60	0.58	1.71
TEPPCO Partners, L.P.	TPP		29.75	46.5	1,380	12.90	0.61	1.51
Plains All Amer. Pipeline	PAA		24.85	41.6	1,030	14.90	0.39	1.41
Northern Border Partners	NBP		35.01	42.0	1,470	20.10	0.57	1.32
Penn Virginia Res. Part, L.P.(48%)	PVR		20.10	7.7	150	17.90	0.12	1.11
Penn Virginia Corporation	PVA		38.22	9.0	340	35.00	0.10	1.08
AmeriGas Partners, L.P.	APU		23.38	49.0	1,150	23.50	0.47	1.00
Total or Median					8,200		0.52	1.36
Natural Gas and Oil								
Provident Energy Trust	PVX		7.41	36.0	270	5.00	0.46	1.26
Dorchester Hugoton, Ltd.	DHULZ		13.25	10.7	142	11.60	(0.17)	1.16
Quicksilver Resources Inc.	KWK		22.76	19.4	440	19.00	0.44	1.11
Newfield Exploration Company	NFX		33.30	48.6	1,620	33.00	0.25	1.01
Spinnaker Exploration Company	SKE		35.21	28.5	1,000	35.00	0.03	1.01
CNOOC Limited (19%)	CEO	2	29.10	78.0	2,270	30.00	-	0.97
Enerplus Resources Fund	ERF		18.56	69.6	1,290	20.00	0.19	0.94
Stone Energy Company	SGY		35.60	26.4	940	42.00	0.29	0.89
Pogo Producing Company	PPP		25.76	60.5	1,560	32.00	0.27	0.86
Encore Acquisition Corp. (25%)	EAC		16.45	7.5	123	20.00	0.18	0.85
Southwestern Energy Company	SWN		11.95	25.6	310	17.00	0.44	0.83
Forest Oil Corporation	FST	3	25.20	46.8	1,180	35.00	0.30	0.81
Magnum Hunter Resources, Inc.	MHR		7.00	71.5	500	11.00	0.46	0.80
Unit Corporation	UNT		16.00	36.2	580	21.00	0.03	0.77
Swift Energy Company	SFY		14.07	24.8	350	22.00	0.32	0.75
Canadian Oil Sands Trust (US\$)	COS_u.TO	2	27.02	56.9	1,540	40.00	0.12	0.71
Total or Median					14,100		0.26	0.87
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		15.38	6.0	92	20.10	-	0.76
Hugoton RoyaltyTrust (46%)	HGT		10.18	18.4	190	15.70	-	0.65
San Juan Basin Royalty Trust	SJT	2	10.16	46.6	470	16.20	-	0.63
Micro Cap								
Energy Partners Ltd.(30%)	EPL	2	8.30	8.2	68	10.00	0.38	0.89
Abraxas Petroleum Corporation	ABP		0.65	27.0	18	2.00	0.84	0.89
Purcell Energy, Ltd. (US\$)	PEL.TO	2	1.54	27.3	42	3.00	0.18	0.60

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 3 - Neutral, 4 - Sell, 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 15, 2002

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

			Price Dividend o				vidend or	
			(\$/sh)	EV/	EV/	Dis	stribution	PV/
	Symbol/		11-Jul	Sales	Ebitda	P/E	NTM	Ebitda
	Rati	ing	2002	NTM	NTM	NTM	(%)	NTM
Energy Infrastucture								
El Paso Energy Partners	EPN	5	32.18	11.3	15.9	27	8.1	9.0
Enbridge Energy Partners,	EEP		44.67	6.9	15.4	86	7.8	9.0
TEPPCO Partners, L.P.	TPP		29.75	1.1	13.6	19	7.7	9.0
Plains All Amer. Pipeline	PAA		24.85	0.2	12.7	18	8.2	9.0
Northern Border Partners	NBP		35.01	7.5	11.9	15	9.1	9.0
Penn Virginia Res. Part, L.P.(48%)	PVR		20.10	7.5	10.0	11	10.0	9.0
AmeriGas Partners, L.P.	APU		23.38	1.6	9.0	13	9.4	9.0
Penn Virginia Corporation	PVA		38.22	3.4	5.2	13	2.4	4.8
Median				5.1	12.3	17	8.2	9.0
Natural Gas and Oil								
Dorchester Hugoton, Ltd.	DHULZ		13.25	6.5	9.8	14	8.8	8.5
Quicksilver Resources Inc.	KWK		22.76	5.0	9.2	25	-	8.3
Provident Energy Trust	PVX		7.41	3.8	7.7	96	15.0	6.1
Canadian Oil Sands Trust (US\$)	COS_u.TO	2	27.02	4.0	7.4	8	4.7	10.3
Enerplus Resources Fund	ERF		18.56	4.9	6.9	17	11.8	7.4
Magnum Hunter Resources, Inc.	MHR		7.00	3.2	6.6	20	-	8.3
CNOOC Limited (19%)	CEO	2	29.10	4.9	6.3	13	0.8	6.5
Forest Oil Corporation	FST	3	25.20	3.7	6.3	20	-	7.8
Encore Acquisition Corp. (25%)	EAC		16.45	4.2	6.3	14	-	7.4
Pogo Producing Company	PPP		25.76	3.7	6.2	36	0.5	7.3
Swift Energy Company	SFY		14.07	4.1	6.1	29	-	8.1
Southwestern Energy Company	SWN		11.95	2.2	5.3	12	-	6.3
Unit Corporation	UNT		16.00	2.7	5.1	11	-	6.6
Spinnaker Exploration Company	SKE		35.21	4.2	4.9	15	-	4.8
Newfield Exploration Company	NFX		33.30	3.4	4.7	19	-	4.7
Stone Energy Company	SGY		35.60	3.4	4.5	11	-	5.0
Median				3.9	6.3	16	-	7.3
<b>Natural Gas Royalty Trusts</b>								
Cross Timbers Royalty Trust	CRT		15.38	5.8	8.4	9	11.0	10.9
Hugoton RoyaltyTrust (46%)	HGT		10.18	4.6	7.0	10	9.8	10.7
San Juan Basin Royalty Trust	SJT	2	10.16	5.3	6.9	10	10.4	11.0
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.65	4.3	6.2		_	6.9
Energy Partners Ltd.(30%)	EPL	2	8.30	2.6	5.1		_	5.7
Purcell Energy, Ltd. (US\$)	PEL.TO	2	1.54	2.9	3.9	9	-	6.5

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