A Weekly Analysis of Energy Stocks Using the McDep Ratio September 11, 2003

Get Real with Gas

Summary and Recommendation

Short-term interest rates below inflation.... a half trillion dollar U.S. federal budget deficit to finance military and social programs.... a half trillion dollar trade deficit to finance profligate consumption.... and inflation expectations are low? Get real! Add natural gas to your portfolio to earn a real return and protect against the vulnerability of the dollar to accelerating inflation. We rank 33 producers of North American natural gas by concentration. Our large cap recommendations in that group are **Anadarko (APC)**, **Burlington Resources (BR), Encana (ECA)** and **XTO Energy (XTO)**.

Stocks with Real Natural Gas Assets

Investors who own our recommended stocks are already well positioned to earn a real return with inflation protection and deflation resistance. Yet, it can be helpful to step back now and then to look at a wider selection of investment possibilities. Screening our coverage of about 100 stocks we find 33 that are concentrated 50% or more on North American natural gas. The stocks are ranked separately in ascending order of concentration (see Table).

Concentration narrows the list, but says nothing about valuation. We put our reputation and our own money into the stocks marked "B" for Buy. Of course, there are potentially attractive investments in addition to those we recommend.

Here is the brief significance of the additional statistical measures we list in the special ranking. Reserve life is an indicator of cash flow multiple. The cash flow multiple we assess is presented as PV/Ebitda. The longer the reserve life, the higher the cash flow multiple, generally. There is something intuitively simple about the next column, EV/mcfe, market value per unit of reserves. The problem is that not every mcf of natural gas has the same value. Thus we break down summary valuation into two steps --- cash flow times cash flow multiple equals present value. The latter number then becomes the denominator of the McDep Ratio. Ideally, one would buy the stock with the lowest McDep Ratio and then make the most money, risk adjusted, if all the McDep Ratios were to become equal.

Stocks at a McDep Ratio of 1.0 offer an unlevered return in underlying resources near 7% per year on today's commodity price expectations of about \$4.80 per million btu for sixyear natural gas, if all of our analysis is reasonable (for detailed rate of return calculations see *Natural Gas Royalty Trusts*, September 4, 2003). Assuming no increase from the

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average inflation-adjusted price of oil for the past 35 years and a rising premium for natural gas to 1.25 times oil, we think the six-year price of natural gas should be about \$7 in 2006 dollars (see *Meter Reader*, June 12, 2003). In that case the expected return would jump to perhaps 15% per year. If inflation heats up, oil and natural gas returns presumably would adjust further.

Kurt H. Wulff, CFA

			N. Am.	Adjusted		0.44	
	G 1 1/		Gas/	Reserves/	PV/	9/10	
	Symbol/		Ebitda	Production	Ebitda	EV/	McDep
	Ra	ting	(%)	NTM	NTM	Mcfe	Ratio
Pioneer Natural Resources Company	PXD		50	12.3	8.6	1.36	0.81
Apache Corporation	APA		50	10.0	6.5	1.97	0.96
Canadian Natural Resources Limited	CNQ		50	7.3	4.5	0.98	0.81
Enerplus Resources Fund	ERF		53	11.1	6.0	1.33	1.24
Anadarko Petroleum Corp.	APC	В	56	10.0	6.8	1.54	0.81
Provident Energy Trust	PVX		59	5.9	4.3	2.48	1.28
Unit Corporation	UNT		60	10.7	7.7	2.70	1.12
Energy Partners Ltd.	EPL	В	61	6.2	5.6	2.39	0.95
Stone Energy Company	SGY		66	6.4	4.6	2.20	0.87
St. Mary Land and Exploration Compan	y SM		66	6.2	5.9	1.96	0.80
Encana Corporation	ECA	В	68	8.7	5.3	1.33	0.95
Southwestern Energy Company	SWN		68	9.1	6.1	2.11	1.03
Wesport Resources Corporation	WRC		69	8.3	6.1	1.86	0.85
Magnum Hunter Resources, Inc.	MHR		69	11.0	6.8	1.42	0.83
Devon Energy	DVN		70	7.7	5.3	1.91	0.87
Abraxas Petroleum Corporation	ABP		74	11.7	13.3	2.38	1.01
Forest Oil Corporation	FST		75	9.6	7.5	1.45	0.77
Burlington Resources	BR	В	75	10.9	6.6	1.44	0.85
Penn Virginia Corporation	PVA		77	10.6	5.7	1.28	0.96
Cross Timbers Royalty Trust	CRT		78	11.3	9.3	2.91	1.06
Cimarex Energy Company	XEC		78	6.2	5.4	2.17	0.87
Purcell Energy, Ltd. (US\$)	PEL.TO		79	6.6	6.9	1.30	0.78
Newfield Exploration Company	NFX		79	3.8	3.9	3.50	0.98
XTO Energy Inc.	XTO	В	82	11.3	9.9	1.77	0.89
Spinnaker Exploration Company	SKE		84	3.8	3.8	3.81	0.89
Dorchester Minerals, L.P.	DMLP		85	8.2	7.7	4.47	1.36
Quicksilver Resources Inc.	KWK		85	14.7	7.3	1.33	0.99
Chesapeake Energy Corporation	CHK		92	9.2	6.6	1.90	0.84
Hugoton RoyaltyTrust (46%)	HGT		93	11.9	7.3	2.35	1.21
Ultra Petroleum Corp.	UPL		94	14.9	10.9	2.59	1.90
The Houston Exploraton Company	THX		94	5.3	4.4	2.43	0.80
San Juan Basin Royalty Trust	SJT	В	99	12.1	7.7	2.03	0.98
Evergreen Resources, Inc.	EVG	D	100	20.0	11.0	1.50	0.90
Evergreen resources, me.	210		100	20.0	11.0	1.50	0.72
Median			75	9.6	6.6	1.96	0.92

North American Natural Gas Producers Ranked in Ascending Order of Concentration

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

	Price				Net				
			(\$/sh)		Market	Present	Debt/		
	Symbol/	r	10-Sep	Shares	Cap	Value	Present	McDep	
	Ra	ating	2003	(mm)	(\$mm)	(\$/sh)	Value	Ratio	
Mega Cap									
Exxon Mobil Corporation	XOM		38.00	6,687	254,000	35.00	0.10	1.08	
Total S.A.	TOT		78.15	1,276	99,700	85.00	0.19	0.93	
BP plc	BP		42.56	3,694	157,000	50.00	0.15	0.87	
Royal Dutch/Shell	RD	В	45.41	3,473	158,000	55.00	0.18	0.86	
ChevronTexaco Corporation	CVX	В	72.99	1,064	77,700	95.00	0.22	0.82	
Total or Median					746,000		0.18	0.87	
Producer/Refiners - Large Cap and	I Mid Ca	р							
Murphy Oil Corporation	MUR		56.49	92	5,220	41.00	0.26	1.28	
Imperial Oil Limited (30%)	IMO		38.65	113	4,380	36.00	0.12	1.06	
Petro-Canada	PCZ		40.79	265	10,810	45.00	0.19	0.92	
Norsk Hydro ASA (49%)	NHY		52.00	126	6,570	60.00	0.27	0.90	
Valero Energy Corporation	VLO		38.26	114	4,360	50.00	0.50	0.88	
ConocoPhillips	COP	В	56.71	681	38,600	70.00	0.38	0.88	
ENI S.p.A.	E		77.41	750	58,100	90.00	0.14	0.88	
OAO Lukoil	LUKOY	7	74.90	206	15,000	90.00	0.12	0.85	
Petroleo Brasileiro S. A.	PBR		23.69	1,096	26,000	30.00	0.25	0.84	
Suncor Energy	SU		19.45	476	9,260	25.00	0.14	0.81	
Marathon Oil Corporation	MRO	В	28.64	310	8,880	40.00	0.31	0.80	
PetroChina Company Ltd (10%)	PTR	В	32.69	176	5,750	50.00	0.11	0.69	
Total or Median					188,000		0.19	0.88	
Independent Natural Gas and Oil									
Pogo Producing Company	PPP		45.41	65	2,930	38.00	0.22	1.15	
Occidental Petroleum Corp.	OXY		35.00	383	13,400	35.00	0.38	1.00	
Apache Corporation	APA		66.80	159	10,600	70.00	0.20	0.96	
Encana Corporation	ECA	В	37.27	472	17,600	40.00	0.20	0.95	
XTO Energy Inc.	XTO	В	20.45	185	3,790	24.00	0.24	0.89	
Devon Energy	DVN		51.02	163	8,300	65.00	0.42	0.87	
CNOOC Limited (19%)	CEO	В	34.97	78	2,730	40.00	-	0.87	
Unocal Corporation	UCL		31.77	255	8,100	40.00	0.35	0.87	
Burlington Resources	BR	В	48.08	202	9,700	60.00	0.27	0.85	
Pioneer Natural Resources Company	PXD		25.12	119	2,990	35.00	0.33	0.81	
Canadian Natural Resources Limited	CNQ		40.21	139	5,590	55.00	0.29	0.81	
Anadarko Petroleum Corp.	APC	В	43.00	252	10,800	60.00	0.32	0.81	
Total or Median					97,000		0.28	0.87	
Service									
Baker Hughes Inc.	BHI		31.42	339	10,700	25.00	0.09	1.24	
Halliburton Company	HAL		24.33	434	10,500	22.00	0.25	1.08	
Schlumberger Ltd.	SLB		48.13	581	28,000	44.00	0.22	1.07	
č									

Buy/Sell rating after symbol: B - Buy, S - Sell

McDep Ratio = Market c_{ap} and Debt to present value of oil and gas and other businesses

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Table 1-2

Energy Producers

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

			Price				vidend or	DU/
	Symbol/		(\$/sh) 10-Sep	EV/ Sales	EV/ Ebitda	Dis P/E	tribution NTM	PV/ Ebitda
		ating	2003	Sales NTM	Ebiiaa NTM	T/E NTM	(%)	Ebilaa NTM
Mega Cap	N	ung	2003	1 1 1 111	1 1 1 1 1	1 1 1 111	(/0)	1 N 1 1 V1
Exxon Mobil Corporation	XOM		38.00	1.2	7.8	15	2.6	7.3
BP plc	BP		42.56	0.8	6.9	15	3.7	7.9
Total S.A.	TOT		78.15	1.1	6.8	13	4.5	7.3
ChevronTexaco Corporation	CVX	В	72.99	0.9	6.6	13	4.0	8.1
Royal Dutch/Shell	RD	В	45.41	1.0	6.3	12	4.4	7.3
Median				1.0	6.8	13	4.0	7.3
Producer/Refiners - Large Cap and	l Mid Car)						
Murphy Oil Corporation	MUR		56.49	1.7	10.3	37	1.4	8.1
Imperial Oil Limited (30%)	IMO		38.65	1.2	7.8	15	1.5	7.4
Suncor Energy	SU		19.45	2.4	6.6	12	0.6	8.1
ConocoPhillips	COP	В	56.71	0.7	6.0	9	2.8	6.8
Marathon Oil Corporation	MRO	В	28.64	0.4	5.5	13	3.5	6.8
Valero Energy Corporation	VLO		38.26	0.3	4.8	5	1.0	5.5
Petro-Canada	PCZ		40.79	1.4	4.5	11	0.7	4.9
ENI S.p.A.	E		77.41	1.7	4.1	9	5.5	4.7
Petroleo Brasileiro S. A.	PBR		23.69	1.5	3.9	5	3.6	4.6
PetroChina Company Ltd (10%)	PTR	В	32.69	2.2	3.8	8	6.2	5.5
OAO Lukoil	LUKOY		74.90	1.0	3.6	6	2.6	4.2
Norsk Hydro ASA (49%)	NHY		52.00	0.8	3.6	10	2.9	4.0
Median				1.3	4.7	9	2.7	5.5
Independent Natural Gas and Oil								
XTO Energy Inc.	XTO	В	20.45	5.8	8.8	21	0.2	9.9
Pioneer Natural Resources Company			25.12	5.1	7.0	23	-	8.6
Occidental Petroleum Corp.	OXY		35.00	2.5	6.7	12	3.0	6.7
Apache Corporation	APA		66.80	4.5	6.2	14	0.6	6.5
CNOOC Limited (19%)	CEO	В	34.97	4.7	6.0	12	4.5	6.9
Pogo Producing Company	PPP	_	45.41	3.9	6.0	17	0.3	5.2
Burlington Resources	BR	В	48.08	3.8	5.7	13	1.2	6.6
Unocal Corporation	UCL	_	31.77	2.1	5.5	15	2.5	6.4
Anadarko Petroleum Corp.	APC	В	43.00	3.7	5.5	10	0.9	6.8
Encana Corporation	ECA	В	37.27	2.4	5.1	13	0.8	5.3
Devon Energy	DVN		51.02	3.0	4.7	7	-	5.3
Canadian Natural Resources Limited	-		40.21	2.3	3.7	7	1.0	4.5
Median Nedian				3.7	5.8	13	0.9	6.6
Service Delver Hughes Inc.	DIII		21.42	2.2	12.2	27	1.5	10.9
Baker Hughes Inc.	BHI		31.42	2.2 1.1	13.3 9.7	37 22	1.5 2.1	10.8 9.0
Halliburton Company	HAL		24.33		9.7 9.6	22 35		
Schlumberger Ltd.	SLB		48.13	2.6	9.0	33	1.6	8.9

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciationand amortization; NTM = Next Twelve Months Ended September 30, 2004; P/E = Stock Price toEarnings; PV = Present Value of oil and gas and other businesses

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Table 2-1 Energy Pipeline and Power Companies Rank by McDep Ratio: Market Cap and Debt to Present Value

	Symbo Rat		Price (\$/sh) 10-Sep 2003	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Large Cap Power								
Duke Energy Corporation	DUK		17.63	832	14.700	16.00	0.69	1.03
Southern Company	SO		29.29	696	20,400	28.00	0.09	1.03
Exelon Corporation	EXC		60.14	325	20,400 19,500	28.00 65.00	0.43	0.96
American Electric Power Co. Inc.	AEP		29.14	348	10,100	35.00	0.60	0.90
Enel S.p.a. (32%)	EN		30.30	388	11,800	37.00	0.00	0.93
Dominion Resources	D		60.71	294	17,800	76.00	0.40	0.89
Total or Median	-		00.71	274	94,300	70.00	0.47	0.95
Mid Cap Pipeline and Power					74,500		0.47	0.75
Kinder Morgan Energy Partners, L.P.	KMP	S	41.96	138	5,770	14.00	0.47	2.06
Kinder Morgan Management, LLC	KMR	S	38.01	46	1,750	14.00	0.47	1.91
Kinder Morgan, Inc.	KMI	S	51.97	123	6,390	14.00	0.80	1.51
Williams Companies	WMB		8.88	518	4,600	1.00	0.00	1.25
Constellation Energy Group	CEG		36.80	164	6,040	25.00	0.61	1.18
AES Corporation	AES		6.89	558	3,840	1.00	0.98	1.10
Calpine Corporation	CPN		5.56	381	2,120	1.00	0.98	1.11
Dynegy Inc.	DYN		3.58	418	1,500	1.00	0.97	1.08
CMS Energy Corporation	CMS		7.30	139	1,010	5.00	0.93	1.00
Sempra Energy	SRE		29.80	206	6,140	30.00	0.59	1.00
El Paso Corporation	EP		7.65	589	4,500	10.00	0.79	0.95
Total or Median			7.05	507	43,660	10.00	0.80	1.11
Small Cap Pipeline					75,000		0.00	1.11
Enterprise Products Part (44%)	EPD		22.32	96	2,140	8.50	0.49	1.84
Enbridge Energy Partners, L.P.	EEP	S	48.56	39	1,900	19.00	0.57	1.68
Gulfterra Energy Partners	GTM	S	39.95	55	2,200	15.70	0.56	1.67
Plains All Amer. Pipeline, L.P.	PAA	5	30.92	50	1,550	15.00	0.44	1.60
Enbridge Energy Management, L.L.C	EEQ	S	43.55	9	410	19.00	0.57	1.56
TEPPCO Partners, L.P.	TPP	5	35.02	58	2,030	18.00	0.52	1.45
Northern Border Partners	NBP		43.60	47	2,030	20.00	0.62	1.45
Magellan Midstream Partners, L.P.	MMP		44.68	27	1,220	29.00	0.38	1.34
AmeriGas Partners, L.P.	APU		24.70	52	1,290	20.00	0.46	1.13
Western Gas Resources	WGR		38.16	37	1,410	40.00	0.27	0.97
Total or Median					64,340		0.54	1.45
Coal								
Penn Virginia Res. Part, L.P.	PVR		29.17	15	450	18.00	-	1.63
Consol Energy Inc.	CNX		19.73	79	1,560	5.00	0.88	1.35
Alliance Res. Part, L.P.	ARLP		28.49	16	450	20.00	0.45	1.23
Peabody Energy	BTU		31.51	55	1,730	18.00	0.75	1.19
Arch Coal	ACI		22.86	48	1,090	18.00	0.61	1.11
Massey Energy	MEE		13.05	75	980	18.00	0.37	0.83
Total or Median					6,300		0.53	1.21

Buy/Sell rating after symbol: B - Buy, S - Sell

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

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Table 2-2

Energy Pipeline and Power Companies

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

	Price Dividend						vidend or	or		
			(\$/sh)	EV/	EV/	Dis	tribution	<i>PV</i> /		
	Symbol	l/	10-Sep	Sales	Ebitda	P/E	NTM	Ebitda		
	Rat	ing	2003	NTM	NTM	NTM	(%)	NTM		
Large Cap Power										
Southern Company	SO		29.29	3.3	9.4	16	4.7	9.1		
Duke Energy Corporation	DUK		17.63	2.3	9.3	10	6.2	9.0		
Exelon Corporation	EXC		60.14	2.3	8.7	12	3.1	9.0		
Dominion Resources	D		60.71	3.4	8.0	12	4.2	9.0		
Enel S.p.a. (32%)	EN		30.30	2.1	8.0	24	4.6	8.9		
American Electric Power Co. Inc.	AEP		29.14	0.8	7.9	11	4.8	8.5		
Median			27.14	0.8 2.5	8.3	13	4.6	9.0		
Mid Cap Pipeline and Power	L			2.5	0.5	15	7.0	9.0		
Kinder Morgan Energy Partners, L.P.	KMP	S	41.96	2.9	17.9	22	6.2	8.7		
Kinder Morgan Management, LLC	KMR	S	38.01	2.7	16.6	20	6.8	8.7		
Calpine Corporation	CPN	5	5.56	2.4	13.5	20	-	12.2		
Dynegy Inc.	DYN		3.58	2.9	12.2	29	-	11.3		
Kinder Morgan, Inc.	KMI	S	51.97	2.5	12.1	16	1.2	7.9		
AES Corporation	AES	5	6.89	3.7	11.3	20		10.1		
Williams Companies	WMB		8.88	3.7	10.3	20	0.5	8.3		
Constellation Energy Group	CEG		36.80	2.7	9.6	17	2.8	8.1		
CMS Energy Corporation	CMS		7.30	1.1	9.0	9	-	8.7		
Sempra Energy	SRE		29.80	2.2	8.7	11	3.4	8.7		
El Paso Corporation	EP		7.65	2.4	6.6	5	2.1	6.9		
Median			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2.7	11.3	16	1.2	8.7		
Small Cap Pipeline	×			2.7	11.0	10	1.2	0.7		
Enterprise Products Part (44%)	EPD		22.32	1.2	16.5		6.5	9.0		
Gulfterra Energy Partners	GTM	S	39.95	5.6	15.0	25	6.8	9.0		
Northern Border Partners	NBP		43.60	6.9	13.6	18	7.3	9.4		
Enbridge Energy Partners, L.P.	EEP	S	48.56	1.2	13.5	20	7.6	8.0		
TEPPCO Partners, L.P.	TPP		35.02	1.0	13.1	20	7.1	9.0		
Plains All Amer. Pipeline, L.P.	PAA		30.92	0.2	12.8	17	7.1	8.0		
Enbridge Energy Management, L.L.C	EEQ	S	43.55	1.1	12.5	18	8.5	8.0		
Magellan Midstream Partners, L.P.	MMP		44.68	3.9	10.8	13	6.7	8.1		
AmeriGas Partners, L.P.	APU		24.70	1.5	8.9	15	8.9	8.0		
Western Gas Resources	WGR		38.16	0.6	6.3	10	-	6.6		
Median	ı			1.2	13.0	18	7.1	8.1		
Coal										
Penn Virginia Res. Part, L.P.	PVR		29.17	10.8	14.0	16	6.9	8.6		
Consol Energy Inc.	CNX		19.73	2.1	13.1	45	2.8	9.7		
Peabody Energy	BTU		31.51	1.7	10.6	26	1.3	9.0		
Arch Coal	ACI		22.86	1.6	10.0		1.0	9.0		
Alliance Res. Part, L.P.	ARLP		28.49	1.3	8.6	24	7.0	7.0		
Massey Energy	MEE		13.05	1.3	7.4		1.2	8.9		
Median	ı			1.7	10.3	25	2.1	8.9		

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation

and amortization; NTM = Next Twelve Months Ended June 30, 2004; P/E = Stock Price to

Earnings; PV = Present Value of oil and gas and other businesses

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Table 3-1 Independent Natural Gas and Oil Producers - Small Cap Rank by McDep Ratio: Market Cap and Debt to Present Value

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Rating 2003 (nm) (\$/mn) (\$/sh) Value Ratio Short Life Dorchester Minerals, L.P. DMLP 17.74 27.0 480 13.00 - 1.36 Southwestern Energy Company SWN 17.67 36.0 640 17.00 0.30 1.03 Newfield Exploration Company NFX 38.90 51.7 2,010 40.00 0.31 0.98
Short Life D 17.74 27.0 480 13.00 - 1.36 Southwestern Energy Company SWN 17.67 36.0 640 17.00 0.30 1.03 Newfield Exploration Company NFX 38.90 51.7 2,010 40.00 0.31 0.98
Dorchester Minerals, L.P.DMLP17.7427.048013.00-1.36Southwestern Energy CompanySWN17.6736.064017.000.301.03Newfield Exploration CompanyNFX38.9051.72,01040.000.310.98
Southwestern Energy Company SWN 17.67 36.0 640 17.00 0.30 1.03 Newfield Exploration Company NFX 38.90 51.7 2,010 40.00 0.31 0.98
Newfield Exploration Company NFX 38.90 51.7 2,010 40.00 0.31 0.98
Energy Partners Ltd. EPL B 11.12 37.3 414 12.00 0.26 0.95
Spinnaker Exploration Company SKE 22.38 33.8 760 25.00 - 0.89
Denbury Resources Inc. DNR 12.50 55.0 690 15.00 0.29 0.88
Stone Energy Company SGY 38.15 26.5 1,010 46.00 0.27 0.87
Cimarex Energy Company XEC 20.80 41.0 850 24.00 0.03 0.87
Wesport Resources Corporation WRC 23.72 68.0 1,610 30.00 0.29 0.85
Chesapeake Energy Corporation CHK 10.30 220 2,270 14.00 0.38 0.84
The Houston Exploraton Company THX 34.51 31.0 1,070 45.00 0.16 0.80
St. Mary Land and Exploration Company SM 27.00 29.0 780 35.00 0.11 0.80
Forest Oil Corporation FST 23.10 48.2 1,110 35.00 0.33 0.77
Total or Median 13,700 0.27 0.87
Long Life
Ultra Petroleum Corp. UPL 14.36 78.0 1,120 7.00 0.15 1.90
Unit Corporation UNT 20.33 43.6 890 18.00 0.04 1.12
Quicksilver Resources Inc. KWK 24.62 20.4 500 25.00 0.35 0.99
Penn Virginia Corporation PVA 43.11 9.0 390 45.00 0.06 0.96
Evergreen Resources, Inc. EVG 54.47 22.0 1,200 60.00 0.10 0.92
Swift Energy Company SFY 13.55 27.2 370 16.00 0.43 0.91
Encore Acquisition Corp. (40%) EAC B 19.30 11.2 216 24.00 0.18 0.84
Magnum Hunter Resources, Inc. MHR 7.70 69.0 530 11.00 0.45 0.83
Vintage Petroleum, Inc. VPI 11.12 63.0 700 20.00 0.40 0.74
Total or Median 5,900 0.18 0.92
Canadian Royalty Trusts
Provident Energy Trust PVX 8.19 63.5 520 6.00 0.24 1.28
Enerplus Resources Fund ERF 25.70 75.0 1,930 20.00 0.16 1.24
Pengrowth Energy Trust PGH 12.58 112.0 1,410 11.00 0.20 1.12
Canadian Oil Sands Trust (US\$) COSWF B 28.76 86.3 2,480 45.00 0.19 0.71
Total or Median 6,300 0.19 1.18
Natural Gas Royalty Trusts
Hugoton RoyaltyTrust (46%) HGT 18.99 18.4 350 15.70 - 1.21
Cross Timbers Royalty Trust CRT 21.47 6.0 129 20.20 - 1.06
San Juan Basin Royalty Trust SJT B 17.80 46.6 830 18.10 - 0.98
Micro Cap
Abraxas Petroleum Corporation ABP 1.03 30.0 31 1.00 0.85 1.01
Purcell Energy, Ltd. (US\$) PEL.TO 1.88 27.9 53 2.80 0.32 0.78

Buy/Sell rating after symbol: B - Buy, S - Sell

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 September 11, 2003

Table 3-2

Independent Natural Gas and Oil Producers - Small Cap Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

	Pric			Price			Dividend or		
			(\$/sh)	EV/	EV/	Dis	stribution	PV/	
	Symbol/		10-Sep	Sales	Ebitda	P/E	NTM	Ebitda	
	-	ting	2003	NTM	NTM	NTM	(%)	NTM	
		0					()		
Short Life									
Dorchester Minerals, L.P.	DMLP		17.74	8.5	10.6	14	8.5	7.7	
Southwestern Energy Company	SWN		17.67	3.0	6.3	13	-	6.1	
Forest Oil Corporation	FST		23.10	3.5	5.7	20	-	7.5	
Chesapeake Energy Corporation	CHK		10.30	3.8	5.5	12	1.2	6.6	
Energy Partners Ltd.	EPL	В	11.12	3.1	5.3	29	-	5.6	
Wesport Resources Corporation	WRC		23.72	3.7	5.2	16	-	6.1	
Cimarex Energy Company	XEC		20.80	3.3	4.7	13	-	5.4	
St. Mary Land and Exploration Compan	y SM		27.00	3.0	4.7	13	0.4	5.9	
Denbury Resources Inc.	DNR		12.50	3.1	4.3	9	-	4.9	
Stone Energy Company	SGY		38.15	3.0	4.0	9	-	4.6	
Newfield Exploration Company	NFX		38.90	2.9	3.8	8	-	3.9	
The Houston Exploraton Company	THX		34.51	2.9	3.5	9	-	4.4	
Spinnaker Exploration Company	SKE		22.38	3.0	3.4	13	-	3.8	
Median	!			3.1	4.7	13	-	5.6	
Long Life									
Ultra Petroleum Corp.	UPL		14.36	12.8	20.7	40	-	10.9	
Evergreen Resources, Inc.	EVG		54.47	7.1	10.1	18	-	11.0	
Unit Corporation	UNT		20.33	3.7	8.7	22	-	7.7	
Quicksilver Resources Inc.	KWK		24.62	4.8	7.2	14	-	7.3	
Swift Energy Company	SFY		13.55	4.2	6.4	23	-	7.0	
Magnum Hunter Resources, Inc.	MHR		7.70	3.3	5.7	15	-	6.8	
Penn Virginia Corporation	PVA		43.11	3.0	5.5	14	2.1	5.7	
Encore Acquisition Corp. (40%)	EAC	В	19.30	3.6	5.2	11	-	6.2	
Vintage Petroleum, Inc.	VPI		11.12	2.4	4.5	40	1.4	6.1	
Median	!			3.7	6.4	18	-	7.0	
Canadian Royalty Trusts									
Enerplus Resources Fund	ERF		25.70	5.6	7.4	12	11.8	6.0	
Pengrowth Energy Trust	PGH		12.58	4.6	6.9	14	13.5	6.2	
Canadian Oil Sands Trust (US\$)	COSWF	В	28.76	3.6	6.6	7	5.0	9.3	
Provident Energy Trust	PVX		8.19	3.8	5.5	13	20.0	4.3	
Natural Gas Royalty Trusts									
Cross Timbers Royalty Trust	CRT		21.47	7.0	9.9	10	9.9	9.3	
Hugoton RoyaltyTrust (46%)	HGT		18.99	6.5	8.8	10	9.8	7.3	
San Juan Basin Royalty Trust	SJT	В	17.80	6.2	7.6	9	11.4	7.7	
San suan Dusin Royarty 110st	531	D	17.00	0.2	7.0	,	11.7	/./	
Micro Cap									
Abraxas Petroleum Corporation	ABP		1.03	7.0	13.3		-	13.3	
Purcell Energy, Ltd. (US\$)	PEL.TO		1.88	3.6	5.4	19	-	6.9	

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciationand amortization; NTM = Next Twelve Months Ended September 30, 2004; P/E = Stock Price toEarnings; PV = Present Value of oil and gas and other businesses