A Weekly Analysis of Energy Stocks Using the McDep Ratio February 24, 2004

A Trailer Load of Nails

Summary and Recommendation

It seems a long time since we last read an anecdote like one in the Wall Street Journal on February 23 quoting a construction executive stocking up in anticipation of higher prices. That rationale adds weight to our recommendations of oil and gas stocks for real return with inflation protection and deflation resistance. Buy-recommended **Norsk Hydro** (NHY) creates commodities for users to stockpile that in addition to oil include aluminum, magnesium and fertilizer. Since NHY's most valuable commodity, natural gas, can't be stockpiled, users might also buy NHY common stock to hedge future natural gas costs. A low McDep Ratio of 0.77 captures the quantitative appeal of NHY while the pending separation of the fertilizer business in a new company may attract further investor interest.

Yara Expected To Arrive on March 25

Norsk Hydro expects to give birth to "Yara" the number one global fertilizer company on March 25 in the form of a distribution of 80% of the stock to Hydro shareholders and the simultaneous underwritten sale of up to all of the remaining 20%. We have quoted relative net value of about 8% for the spinoff and 92% for the remaining entity (see *Stock Idea*, Norsk Hydro, January 5, 2004).

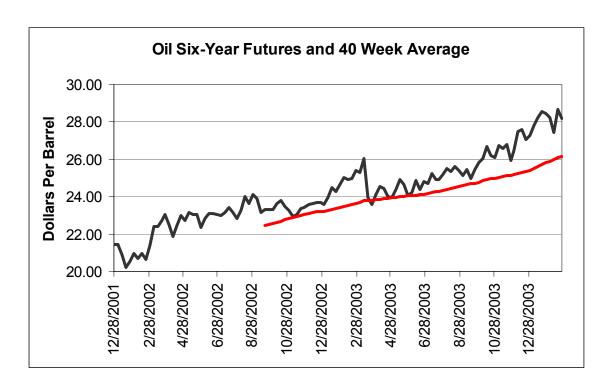
The event will be a watershed culturally. Hydro was founded as a fertilizer company in 1905. North Sea oil greatly expanded the company's value as an investment with the discovery of the Ekofisk field in 1969. Separated organizations, fertilizer and energy, will each have a sharper focus that we hope will produce better business results and better investment recognition.

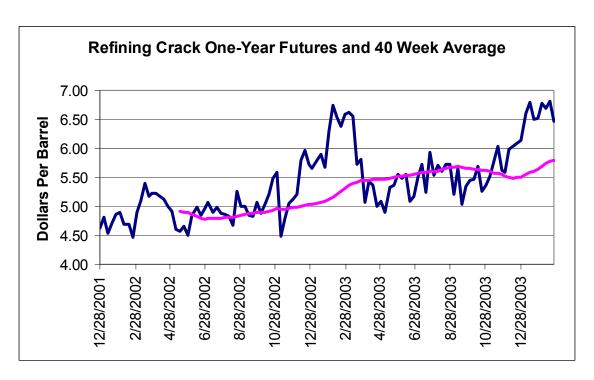
An investor asks whether U.S. holders of NHY will have an illiquid investment in Yara. Though NHY, 44% owned by the Norwegian government, has expressed no commitment to "list" Yara in the U.S., we expect the shares to trade as American Depositary Shares "unlisted" over the counter. The quoted price should track closely the price in Oslo or London converted to dollars.

Vigorous Oil Price Trend

Six-year futures for oil continue in a rising price pattern (see Chart). One-year refining crack futures also continue above the 40 week average (see Chart).

A Weekly Analysis of Energy Stocks Using the McDep Ratio February 24, 2004





Kurt H. Wulff, CFA

A Weekly Analysis of Energy Stocks Using the McDep Ratio February 24, 2004

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

			Price			Net		
			(\$/sh)		Market	Present	Debt/	
	Symbol/		23-Feb	Shares	Cap	Value	Present	McDep
	Rat	ing	2004	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Mega Cap								
Exxon Mobil Corporation	XOM		42.58	6,612	282,000	43.00	0.08	0.99
Total S.A.	TOT		93.16	1,251	116,600	105.00	0.17	0.91
Royal Dutch/Shell	RD	В	48.92	3,389	166,000	60.00	0.18	0.85
ChevronTexaco Corporation	CVX	В	88.34	1,064	94,000	110.00	0.17	0.84
BP plc	BP		48.50	3,684	179,000	60.00	0.13	0.83
Total or Median					838,000		0.17	0.85
Producer/Refiners - Large Cap and	-	~						
Kinder Morgan, Inc.	KMI	S	60.25	124	7,470	14.00	0.80	1.65
Imperial Oil Limited (30%)	IMO		45.07	111	5,000	43.00	0.12	1.04
Valero Energy Corporation	VLO		55.79	120	6,690	55.00	0.42	1.01
Murphy Oil Corporation	MUR		62.05	93	5,760	62.00	0.20	1.00
Marathon Oil Corporation	MRO		34.03	311	10,580	37.00	0.32	0.95
ENI S.p.A.	E		97.90	755	73,900	108.00	0.17	0.92
ConocoPhillips	COP	В	68.85	680	46,800	88.00	0.33	0.85
Suncor Energy	SU		24.95	475	11,850	30.00	0.13	0.85
Petroleo Brasileiro S. A.	PBR		30.74	1,096	33,700	40.00	0.28	0.83
PetroChina Company Ltd (10%)	PTR	В	52.84	176	9,290	65.00	0.09	0.83
Petro-Canada	PCZ		42.39	265	11,230	54.00	0.12	0.81
Norsk Hydro ASA	NHY	В	70.70	257	18,150	95.00	0.17	0.79
Lukoil Oil Company	LUKOY	В	107.60	211	23,000	140.00	0.07	0.78
Total or Median					263,000		0.17	0.85
Independent Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		44.12	396	17,500	50.00	0.26	0.91
Pogo Producing Company	PPP		43.25	64	2,770	50.00	0.10	0.88
CNOOC Limited (19%)	CEO	В	42.15	78	3,290	48.00	-	0.88
XTO Energy Inc.	XTO	В	27.41	188	5,150	33.00	0.19	0.86
Apache Corporation	APA		38.72	324	12,500	47.00	0.19	0.85
Canadian Natural Resources Limited	CNQ		49.50	137	6,780	72.00	0.34	0.79
Unocal Corporation	UCL		36.99	273	10,100	52.00	0.28	0.79
Encana Corporation	ECA	В	41.12	470	19,300	56.00	0.19	0.78
Burlington Resources	BR	В	55.91	198	11,100	80.00	0.21	0.76
Pioneer Natural Resources Company	PXD		30.27	119	3,600	45.00	0.26	0.76
Anadarko Petroleum Corp.	APC	В	51.38	252	12,900	76.00	0.25	0.76
Devon Energy	DVN		54.88	242	13,300	90.00	0.30	0.73
Total or Median					118,000		0.23	0.79
Service								
Baker Hughes Inc.	BHI		36.05	336	12,100	30.00	0.07	1.19
Halliburton Company	HAL		31.02	435	13,500	28.00	0.28	1.08
Schlumberger Ltd.	SLB		63.26	585	37,000	60.00	0.17	1.05
Total or Median					63,000		0.17	1.08

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 February 24, 2004

Table 1-2
Energy Producers
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

			Price	EU/	EII/		Divd or	DIZ/
	G 1 1/		(\$/sh)	EV/	EV/	D/E	Distrib	PV/
	Symbol/	43	23-Feb	Sales NTM	Ebitda NTM	P/E NTM	NTM	Ebitda NTM
Maga Can	Ka	ting	2004	IN I IVI	IN I IVI	IN I IVI	(%)	IN 1 IVI
Mega Cap Exxon Mobil Corporation	XOM		42.58	1.2	7.9	15	2.3	8.0
	TOT		93.16	1.2	6.7	12	4.7	7.4
Total S.A. BP plc	BP		48.50	0.9	6.3	14	3.3	7. 4 7.6
	CVX	В	88.34	1.0	6.2	11	3.3	7.5
ChevronTexaco Corporation	RD	В			6.2	15		7.3
Royal Dutch/Shell Median	KD	В	48.92	1.0 1.0	6.3	13 14	4.6 3.3	7.5
Producer/Refiners - Large Cap and Mi	d Con			1.0	0.3	14	3.3	7.3
Kinder Morgan, Inc.	u Cap KMI	S	60.25	3.0	12.9	18	2.7	7.8
Imperial Oil Limited (30%)	IMO	S		1.3	7.4	14		7.8 7.1
Murphy Oil Corporation	MUR		45.07 62.05	1.5	7.4	17	1.5 1.3	7.1
Suncor Energy	SU		24.95	2.6	6.8	17	0.6	7.3 8.0
Valero Energy Corporation	VLO		55.79	0.3	6.5	10	0.8	6.5
** *		D			5.9			
ConocoPhillips	COP E	В	68.85 97.90	0.7 1.5	5.5	10 11	2.5 4.9	7.0 6.0
ENI S.p.A. Marathon Oil Corporation	MRO			0.4	5.2	10	2.9	5.5
PetroChina Company Ltd (10%)	PTR	В	34.03	2.6	3.2 4.7	9	3.9	5.7
- · · · · · · · · · · · · · · · · · · ·		D	52.84					5.1
Petro-Canada Norak Hydro ASA	PCZ NHY	D	42.39 70.70	1.4 0.8	4.2 4.0	11 9	1.1	5.1
Norsk Hydro ASA Petroleo Brasileiro S. A.	PBR	В		1.6	3.8	5	2.3 3.3	4.6
		В	30.74		3.8	6	2.4	4.6
Lukoil Oil Company Median	LUKOY	D	107.60	1.0 1.4	5.7 5.5	10	2.4 2.4	6.0
Independent Natural Gas and Oil				1.4	3.3	10	2.4	0.0
XTO Energy Inc.	XTO	В	27.41	4.6	6.4	12	0.1	7.5
CNOOC Limited (19%)	CEO	В	42.15	4.6	5.8	11	3.8	6.7
Occidental Petroleum Corp.	OXY		44.12	2.5	5.6	10	2.5	6.1
Anadarko Petroleum Corp.	APC	В	51.38	3.7	5.4	10	1.1	7.2
Pioneer Natural Resources Company	PXD		30.27	3.7	5.2	13	-	6.8
Unocal Corporation	UCL		36.99	2.4	4.9	10	2.2	6.2
Burlington Resources	BR	В	55.91	3.4	4.8	11	1.1	6.3
Encana Corporation	ECA	В	41.12	2.3	4.8	11	0.7	6.1
Apache Corporation	APA		38.72	3.3	4.7	9	0.6	5.5
Canadian Natural Resources Limited	CNQ		49.50	3.1	4.4	9	0.9	5.6
Devon Energy	DVN		54.88	3.1	3.7	7	0.4	5.0
Pogo Producing Company	PPP		43.25	2.6	3.6	8	0.5	4.1
Median				3.2	4.9	10	0.8	6.2
Service								
Halliburton Company	HAL		31.02	1.1	13.1	28	1.6	12.1
Baker Hughes Inc.	BHI		36.05	2.4	13.0	33	1.3	11.0
Schlumberger Ltd.	SLB		63.26	3.1	11.2	39	1.2	10.7
Median				2.4	13.0	33	1.3	11.0

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended December 31, 2004; 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 February 24, 2004

Table 1-3
Energy Producers
Determinants of Present Value

			NG & O	N. Am.	Adjusted	DII/	NG 0 O	МсДер
	~		Prod/	Gas/	Reserves/	PV/	NG&O	Ratio
	Symbol/		Ebitda	Ebitda	Prod	Ebitda	Ebitda/	23-Feb
	Ra	ting	(%)	(%)	NTM	NTM	mcfe	2004
Mega Cap								
Royal Dutch/Shell	RD	В	77	5	8.5	7.3	3.10	0.85
Total S.A.	TOT		76	1	9.2	7.4	2.97	0.91
BP plc	BP		77	9	9.5	7.6	3.06	0.83
ChevronTexaco Corporation	CVX	В	81	11	10.4	7.5	2.70	0.84
Exxon Mobil Corporation	XOM		70	10	10.9	8.0	2.90	0.99
Median			77	9	9.5	7.5	2.97	0.85
Producer/Refiners - Large Cap and M	-							
Valero Energy Corporation	VLO		-	-		6.5		1.01
Kinder Morgan, Inc.	KMI	S	6	-		7.8		1.65
Marathon Oil Corporation	MRO		70	22	6.7	5.5	2.73	0.95
Petro-Canada	PCZ		82	22	7.2	5.1	2.21	0.81
Murphy Oil Corporation	MUR		92	28	7.3	7.3	3.51	1.00
Norsk Hydro ASA	NHY	В	63	-	8.5	5.1	2.93	0.79
Petroleo Brasileiro S. A.	PBR		93	-	9.9	4.6	2.65	0.83
ENI S.p.A.	E		54	-	9.9	6.0	2.63	0.92
Imperial Oil Limited (30%)	IMO		72	17	10.2	7.1	2.38	1.04
ConocoPhillips	COP	В	68	13	11.2	7.0	2.45	0.85
PetroChina Company Ltd (10%)	PTR	В	78	-	16.0	5.7	4.15	0.83
Suncor Energy	SU		93	8	19.0	8.0	3.24	0.85
Lukoil Oil Company	LUKOY	В	54	-	20.0	4.7	1.01	0.78
Median	!		70	-	9.9	6.0	2.65	0.85
Independent Natural Gas and Oil								
Pogo Producing Company	PPP		100	33	5.8	4.1	3.48	0.88
Canadian Natural Resources Limited	CNQ		100	49	7.2	5.6	2.55	0.79
Encana Corporation	ECA	В	98	66	7.3	6.1	3.40	0.78
Devon Energy	DVN		100	59	7.4	5.0	4.06	0.73
Apache Corporation	APA		100	44	8.1	5.5	3.55	0.85
Unocal Corporation	UCL		100	32	8.4	6.2	3.28	0.79
Burlington Resources	BR	В	100	69	10.3	6.3	3.20	0.76
Pioneer Natural Resources Company	PXD		100	63	10.3	6.8	2.96	0.76
CNOOC Limited (19%)	CEO	В	100	-	10.7	6.7	3.83	0.88
Anadarko Petroleum Corp.	APC	В	100	54	10.9	7.2	3.05	0.76
Occidental Petroleum Corp.	OXY		85	13	10.9	6.1	3.18	0.91
XTO Energy Inc.	XTO	В	100	86	11.2	7.5	3.30	0.86
Median	!		100	52	9.3	6.2	3.29	0.79

A Weekly Analysis of Energy Stocks Using the McDep Ratio February 24, 2004

Table 2-1 Independent Natural Gas and Oil Producers - Small Cap Rank by McDep Ratio: Market Cap and Debt to Present Value

			Price			Net		
			(\$/sh)		Market	Present	Debt/	
	Symbol		23-Feb	Shares	Cap	Value	Present	McDep
	Rati	ng	2004	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Short Life								
Spinnaker Exploration Company	SKE		32.87	33.9	1,110	28.00	0.08	1.16
Southwestern Energy Company	SWN		20.93	36.0	750	21.00	0.28	1.00
Western Gas Resources	WGR		48.58	37.0	1,800	50.00	0.17	0.98
Newfield Exploration Company	NFX		45.20	56.0	2,530	52.00	0.24	0.90
Energy Partners Ltd.	EPL		13.02	37.4	487	15.00	0.19	0.89
Range Resources Corporation	RRC		10.68	57.0	610	15.00	0.32	0.80
Chesapeake Energy Corporation	CHK		12.54	220	2,760	18.00	0.35	0.80
Westport Resources Corporation	WRC		31.00	68.0	2,110	42.00	0.22	0.80
Stone Energy Company	SGY		42.15	26.6	1,120	58.00	0.23	0.79
Cimarex Energy Company	XEC	В	27.39	42.7	1,170	35.00	0.00	0.78
Denbury Resources Inc.	DNR		14.05	55.7	780	20.00	0.25	0.78
St. Mary Land and Exploration Compan	:SM		29.80	29.0	860	43.00	0.12	0.73
The Houston Exploraton Company	THX		36.08	31.0	1,120	55.00	0.20	0.72
PetroKazakhstan Inc.	PKZ		24.65	81.0	2,000	35.00	0.04	0.72
Forest Oil Corporation	FST		24.90	49.0	1,220	45.00	0.30	0.69
Total or Median					20,400		0.22	0.80
Long Life								
Ultra Petroleum Corp.	UPL		24.78	78.0	1,930	16.00	0.08	1.50
Unit Corporation	UNT		25.16	43.7	1,100	22.00	0.02	1.14
Quicksilver Resources Inc.	KWK		38.07	23.0	880	37.00	0.25	1.02
Penn Virginia Corporation	PVA		54.30	9.1	490	56.00	0.17	0.97
Berry Petroleum Company	BRY		20.66	22.1	457	22.00	0.12	0.95
Whiting Petroleum Corporation	WLL		21.05	18.7	390	25.00	0.27	0.89
Swift Energy Company	SFY		17.61	27.4	480	22.00	0.37	0.88
Encore Acquisition Corp.	EAC	В	25.57	30.5	779	33.00	0.17	0.81
Evergreen Resources, Inc.	EVG		32.00	44.0	1,410	42.00	0.12	0.79
Magnum Hunter Resources, Inc.	MHR		8.61	68.0	590	15.00	0.38	0.74
Vintage Petroleum, Inc.	VPI		13.56	63.0	850	27.00	0.32	0.66
Total or Median					9,400		0.17	0.89
Micro Cap								
Abraxas Petroleum Corporation	ABP		2.57	35.8	92	1.00	0.84	1.26
Purcell Energy, Ltd. (US\$)	PEL.TC)	1.98	48.0	95	2.80	0.27	0.79

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 February 24, 2004

Table 2-2
Independent Natural Gas and Oil Producers - Small Cap
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

			Price	<i>Price</i> (\$/sh) <i>EV/</i>		Divd or Distrib		PV/
	Symbol/		23-Feb	Sales	EV/ Ebitda	P/E	NTM	Ebitda
	•	ting	2004	NTM	NTM	NTM	(%)	NTM
	Ru	ung	2004	1 1 1 111	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	(70)	1 1 1 11
Short Life								
Western Gas Resources	WGR		48.58	0.8	9.5	20	-	9.7
Southwestern Energy Company	SWN		20.93	3.2	5.9	11	-	5.9
Spinnaker Exploration Company	SKE		32.87	4.9	5.5	17	-	4.7
Cimarex Energy Company	XEC	В	27.39	3.6	4.8	14	-	6.2
Denbury Resources Inc.	DNR		14.05	3.0	4.4	8	-	5.7
Chesapeake Energy Corporation	CHK		12.54	3.4	4.4	8	1.0	5.5
Stone Energy Company	SGY		42.15	3.1	4.4	10	-	5.5
Range Resources Corporation	RRC		10.68	3.4	4.3	8	0.4	5.4
Westport Resources Corporation	WRC		31.00	3.3	4.3	11	-	5.4
Newfield Exploration Company	NFX		45.20	2.9	4.2	10	-	4.6
St. Mary Land and Exploration Company	y SM		29.80	2.7	4.1	11	0.3	5.6
Forest Oil Corporation	FST		24.90	2.8	3.9	7	-	5.7
Energy Partners Ltd.	EPL		13.02	2.4	3.6	17	-	4.0
The Houston Exploraton Company	THX		36.08	2.8	3.5	8	-	4.8
PetroKazakhstan Inc.	PKZ		24.65	1.7	3.2	5	-	4.5
Median				3.0	4.3	10	-	5.5
Long Life								
Ultra Petroleum Corp.	UPL		24.78	10.6	13.7	23	-	9.1
Quicksilver Resources Inc.	KWK		38.07	6.4	9.7	19	-	9.5
Unit Corporation	UNT		25.16	3.4	7.8	19	-	6.9
Evergreen Resources, Inc.	EVG		32.00	5.5	7.4	12	-	9.4
Penn Virginia Corporation	PVA		54.30	3.5	6.2	14	1.7	6.4
Swift Energy Company	SFY		17.61	3.9	5.8	14	-	6.7
Encore Acquisition Corp.	EAC	В	25.57	4.0	5.6	11	-	6.9
Berry Petroleum Company	BRY		20.66	2.9	5.3	9	2.1	5.6
Whiting Petroleum Corporation	WLL		21.05	3.2	5.2	11	-	5.8
Magnum Hunter Resources, Inc.	MHR		8.61	3.2	5.0	10	-	6.7
Vintage Petroleum, Inc.	VPI		13.56	2.4	4.1	9	1.3	6.2
Median				3.5	5.8	12	-	6.7
Micro Cap								
Abraxas Petroleum Corporation	ABP		2.57	9.0	14.8		-	11.8
Purcell Energy, Ltd. (US\$)	PEL.TO		1.98	3.7	5.1	11	-	6.5

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended December 31, 2004; 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 February 24, 2004

Table 2-3
Independent Natural Gas and Oil Producers - Small Cap
Determinants of Present Value

	Symbol/ Rai	ting	NG & O Prod/ Ebitda (%)	N. Am. Gas/ Ebitda (%)	Adjusted Reserves/ Prod NTM	PV/ Ebitda NTM	NG&O Ebitda/ mcfe	McDep Ratio 23-Feb 2004
Short Life								
Spinnaker Exploration Company	SKE		100	81	4.3	4.7	4.76	1.16
Energy Partners Ltd.	EPL		100	61	5.1	4.0	3.46	0.89
PetroKazakhstan Inc.	PKZ		57	-	5.1	4.5	1.09	0.72
Newfield Exploration Company	NFX		100	84	5.2	4.6	3.71	0.90
The Houston Exploraton Company	THX		100	92	5.6	4.8	3.87	0.72
Cimarex Energy Company	XEC	В	100	75	6.2	6.2	3.55	0.78
St. Mary Land and Exploration Company	y SM		100	65	6.8	5.6	3.29	0.73
Stone Energy Company	SGY		100	65	7.1	5.5	3.91	0.79
Chesapeake Energy Corporation	CHK		100	90	7.8	5.5	3.93	0.80
Westport Resources Corporation	WRC		100	71	7.8	5.4	4.06	0.80
Western Gas Resources	WGR		61	61	7.9	9.7	2.57	0.98
Forest Oil Corporation	FST		100	75	7.9	5.7	3.75	0.69
Southwestern Energy Company	SWN		89	73	8.4	5.9	3.63	1.00
Range Resources Corporation	RRC		100	77	8.6	5.4	4.02	0.80
Denbury Resources Inc.	DNR		100	50	8.9	5.7	3.64	0.78
Median				73	7.1	5.5	3.71	0.80
Long Life								
Penn Virginia Corporation	PVA		77	63	9.4	6.4	2.18	0.97
Unit Corporation	UNT		62	55	9.5	6.9	3.70	1.14
Magnum Hunter Resources, Inc.	MHR		100	68	10.0	6.7	3.30	0.74
Whiting Petroleum Corporation	WLL		100	58	10.2	5.8	2.98	0.89
Swift Energy Company	SFY		100	31	11.1	6.7	2.67	0.88
Encore Acquisition Corp.	EAC	В	100	22	12.5	6.9	3.50	0.81
Ultra Petroleum Corp.	UPL		100	96	13.5	9.1	3.57	1.50
Vintage Petroleum, Inc.	VPI		100	28	13.9	6.2	2.47	0.66
Berry Petroleum Company	BRY		100	-	14.6	5.6	2.44	0.95
Evergreen Resources, Inc.	EVG		100	100	17.2	9.4	3.76	0.79
Quicksilver Resources Inc.	KWK		100	87	18.5	9.5	3.04	1.02
Median				58	12.5	6.7	3.04	0.89
Micro Cap								
Purcell Energy, Ltd. (US\$)	PEL.TO		100	77	6.4	6.5	1.82	0.79
Abraxas Petroleum Corporation	ABP		100	77	11.7	11.8	2.59	1.26