

Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

January 18, 2005

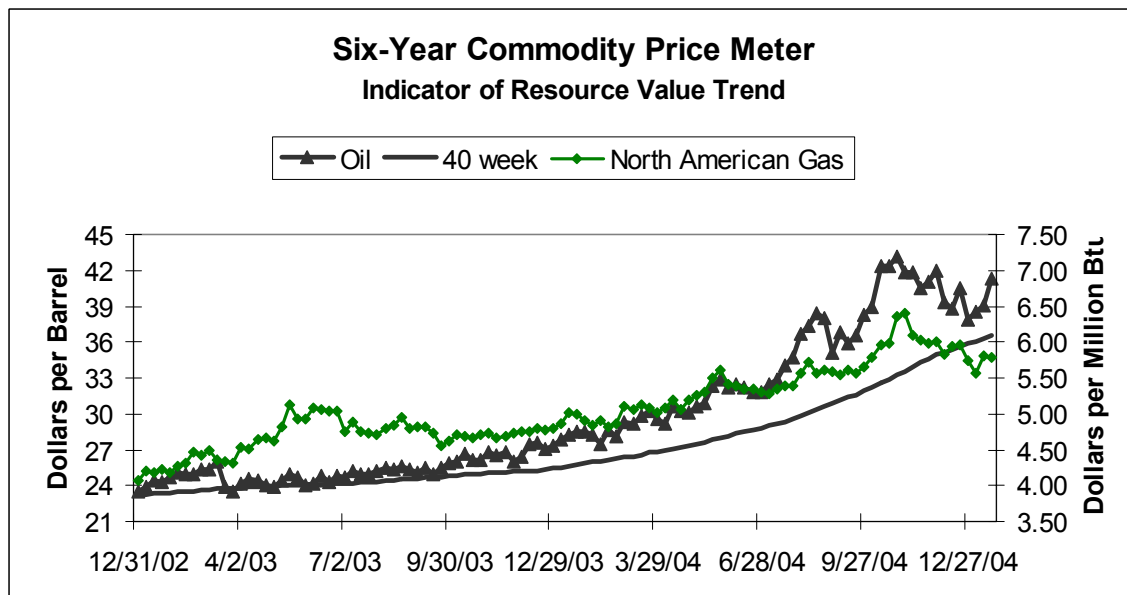
Basics Revisited

Summary and Recommendation

Meter Reader anticipates industry trends, ranks stock regularly by McDep Ratio and indexes recent analyses. Buy recommendations have McDep Ratios of less than 1.20, the lower the better. The recommended McDep Energy Portfolio has nine full positions in B1 rated stocks and six half positions in B2 rated stocks. The first three stocks we would buy today to start a diversified energy portfolio are **Lukoil (LUKOY)**, **Anadarko (APC)** and **Encore Acquisition (EAC)**, the lowest McDep Ratio stocks in each of three different groups.

Long-Term Futures have Positive Momentum

Commodity investors anticipate that the average price of oil for the next six years will be \$41 a barrel (see chart Six-Year Commodity Price Meter). Moreover the trend is rising suggesting that a year from now, perhaps, the six-year price will be higher still.



Natural gas is also above its 40-week average though only the 40-week average for oil appears on the chart. The natural gas trend has been flatter for the past two years. Over the next several years we expect the green natural gas line to rise above the black oil line. The fundamental reason is the environmental advantages of natural gas. Short term

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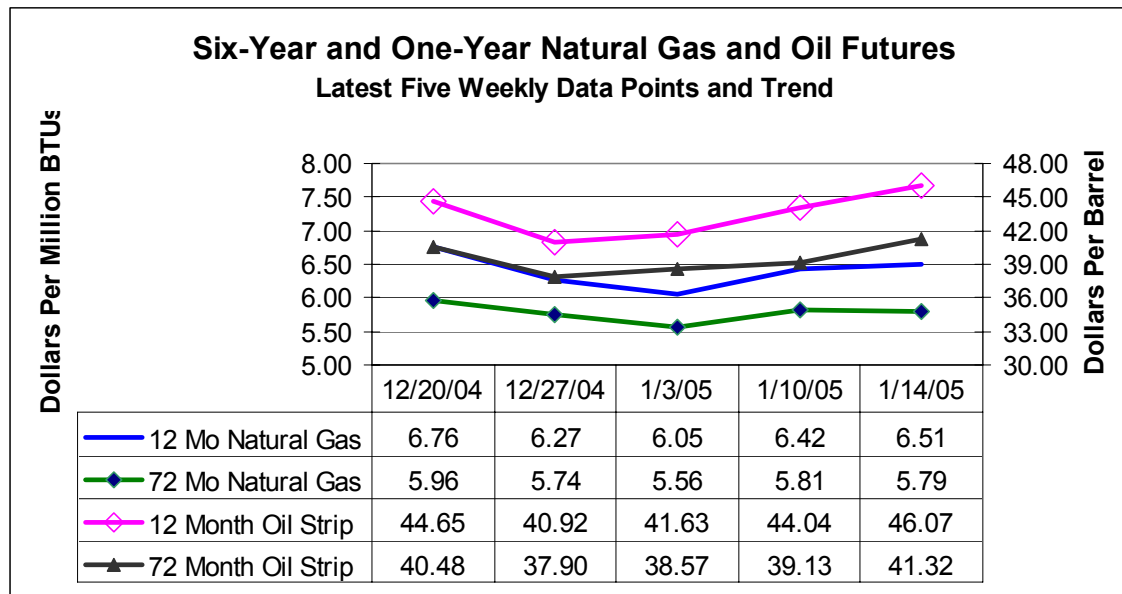
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inventory reasons also support that conclusion. Current inventories of natural gas in North America appear to be near the upper end of the five-year range while current inventories of oil appear to be near the lower end of the five-year range.

Expanded detail for the past five weeks establishes a public record (see chart Latest Five Weekly Data Points and Trend). The six-year compilation of public quotes is unique apparently while the one-year data is widely available on electronic services.



An assumed constant real price of \$35 a barrel underlies our present value estimates for each stock. The calculations were detailed in Stock Ideas published around the third quarter of 2004. As stock prices are below present value typically, investors are assuming a lower oil price as best we can tell.

McDep Energy Portfolio

Investors can test any stock that we cover for current attractiveness (see tables Rank by McDep Ratio and Rank by EV/Ebitda). The McDep Ratio is intended to capture the quantitative potential of a company's mix of properties regardless of management talent. The latter is a qualitative factor to keep in mind.

The McDep Ratio neutralizes for debt. It measures unlevered appreciation potential as in the case of oil and gas reserves before applying specific financing. More commonly used "levered" financial measures such as price to earnings ratios, dividend yields and price to net asset value overstate the attractiveness of high debt stocks. Most of our buy recommendations have low debt and it would not be necessary to make a valuation

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adjustment for leverage. Our sell recommendations have high debt and high valuation, a combination that generally leads to poor investment performance eventually.

Since the McDep Ratio measures unlevered appreciation potential, we suggest that investors weight stocks on an unlevered basis. In simplest terms, that means owning more of low-debt stocks and less of high debt stocks. Financial risk is quantified as ratio of debt to present value. For example, one could own twice as much of a zero debt stock than a stock with a ratio of debt to present value of 0.50 for the same amount of financial risk.

As a guide to building a portfolio for those who want to rely mostly on our analysis we classify recommendations as B1, for full position and B2, for half position. The B2's are either in higher risk political areas like China and Russia or are smaller cap companies that can be more volatile in stock price than mega cap companies. With 9 B1's and 6 B2's one might wonder where to begin.

Start by looking for the lowest McDep Ratio stock in each of five groups. Buy it or start a position and then move on to another. Besides looking for low McDep Ratios we believe it also makes sense to diversify among groups.

Stocks that outperform can become disproportionately large positions. In that case we advocate some rebalancing to take some profits and reinvest in other promising ideas with a McDep Ratio advantage. That activity can be ongoing in up markets as well as down markets.

In some cases a B3 might be as appealing as a B1 or B2. For example, **Devon Energy (DVN)** has a McDep Ratio near that of Anadarko. APC has the qualitative advantage beyond the credit we give it of a longer reserve life (see table [Rank by EV/Ebitda](#)). Devon's qualitative advantage is that Larry Nichols, the person running the company today, has a long record of successful deals and operations.

Finally we update most of our single stock analyses at least once a quarter (see [Index of Recent Research](#)). In addition to the weekly *Meter Reader*, we have a weekly analysis of *U.S. Natural Gas Royalty Trusts*.

Kurt H. Wulff, CFA

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Oil and Gas Producers Rank by McDep Ratio: Market Cap and Debt to Present Value

	Symbol/ Rating		Price (\$/sh) 14-Jan 2005	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap								
Exxon Mobil Corporation	XOM	B3	51.07	6,508	332,000	50.00	0.07	1.02
Shell Transport and Trading Co. plc	SC	B3	50.63	1,587	80,000	51.00	0.17	0.99
BP plc	BP	B3	57.94	3,614	209,000	60.00	0.13	0.97
Total S.A.	TOT	B3	105.68	1,228	130,000	113.00	0.17	0.95
Royal Dutch Petroleum	RD	B1	55.90	2,021	113,000	60.00	0.17	0.94
ChevronTexaco Corporation	CVX	B1	52.30	2,126	111,000	62.50	0.13	0.86
<i>Total or Median</i>					<i>975,000</i>		<i>0.15</i>	<i>0.96</i>
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	71.57	125	8,920	20.00	0.74	1.67
Imperial Oil Limited (30%)	IMO	B3	58.26	107	6,230	58.00	0.10	1.00
Marathon Oil Corporation	MRO	B3	38.30	347	13,290	40.00	0.31	0.97
Norsk Hydro ASA	NHY	B1	77.26	254	19,630	90.00	0.17	0.88
ConocoPhillips	COP	B1	89.02	702	62,500	110.00	0.25	0.86
Suncor Energy	SU	B3	34.52	460	15,880	42.00	0.12	0.84
Petro-Canada	PCZ	B3	49.74	269	13,400	68.00	0.18	0.78
PetroChina Company Ltd (10%)	PTR	B2	53.09	176	9,330	82.00	0.06	0.67
Lukoil Oil Company	LUKOY	B2	121.00	209	25,000	208.00	0.03	0.60
<i>Total or Median</i>					<i>174,000</i>		<i>0.17</i>	<i>0.86</i>
Independent Natural Gas and Oil - Large Cap and Mid Cap								
XTO Energy Inc.	XTO	B1	34.89	272	9,510	38.00	0.19	0.93
Encana Corporation	ECA	B1	57.37	472	27,100	63.00	0.21	0.93
Unocal Corporation	UCL	B3	46.50	274	12,800	54.00	0.24	0.90
CNOOC Limited (19%)	CEO	B2	51.10	78	3,990	59.00	-	0.87
Occidental Petroleum Corp.	OXY	B3	58.13	403	23,400	75.00	0.17	0.81
Burlington Resources	BR	B1	42.65	395	16,800	58.00	0.14	0.77
Devon Energy Corporation	DVN	B3	38.55	500	19,300	55.00	0.22	0.77
Anadarko Petroleum Corp.	APC	B1	64.43	253	16,300	94.00	0.20	0.75
<i>Total or Median</i>					<i>129,000</i>		<i>0.20</i>	<i>0.84</i>
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B2	48.07	22	1,080	43.00	0.06	1.12
Cimarex Energy Company	XEC	B2	36.93	43	1,580	38.00	0.00	0.97
Energy Partners Ltd.	EPL	B3	20.05	39	780	22.00	0.15	0.92
Encore Acquisition Company	EAC	B2	34.00	33	1,110	47.00	0.22	0.78
<i>Total or Median</i>					<i>4,600</i>		<i>0.10</i>	<i>0.95</i>
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	45.40	145	6,580	15.00	0.52	1.98
Kinder Morgan Management, LLC	KMR	S3	41.20	55	2,270	15.00	0.52	1.84
Pengrowth Energy Trust	PGH		20.75	136	2,820	14.00	0.26	1.35
Enerplus Resources Fund	ERF		36.30	104	3,780	28.00	0.19	1.24
San Juan Basin Royalty Trust	SJT	H	28.83	47	1,340	27.00	-	1.06
Canadian Oil Sands Trust (US\$)	COSWF	B1	54.71	91	4,980	72.00	0.19	0.80
<i>Total or Median</i>					<i>21,800</i>		<i>0.23</i>	<i>1.30</i>

B1 = Buy full unlevered position, B2 = Buy half unlevered position, B3 = Alternative buy, H = Hold
S2 = Short half unlevered position, S3 = Short quarter unlevered position
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses

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Oil and Gas Producers

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

	Symbol/ Rating		Price (\$/sh) 14-Jan 2005	Adjstd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)
Mega Cap								
BP plc	BP	B3	57.94	9.9	7.0	6.8	13	2.9
Exxon Mobil Corporation	XOM	B3	51.07	11.1	6.6	6.7	12	2.1
Total S.A.	TOT	B3	105.68	9.6	6.4	6.0	11	3.0
Shell Transport and Trading Co. plc	SC	B3	50.63	8.1	5.4	5.4	10	3.9
Royal Dutch Petroleum	RD	B1	55.90	8.1	5.4	5.1	9	4.1
ChevronTexaco Corporation	CVX	B1	52.30	11.4	5.6	4.8	8	3.1
	<i>Median</i>			9.7	6.0	5.7	10	3.0
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	71.57		8.3	13.8	18	3.1
Suncor Energy	SU	B3	34.52	18.4	8.2	6.9	15	0.6
Imperial Oil Limited (30%)	IMO	B3	58.26	11.3	6.5	6.5	12	1.2
Marathon Oil Corporation	MRO	B3	38.30	7.8	5.9	5.7	11	2.9
ConocoPhillips	COP	B1	89.02	11.9	5.7	4.9	7	1.9
Norsk Hydro ASA	NHY	B1	77.26	8.9	5.2	4.6	11	2.3
Petro-Canada	PCZ	B3	49.74	7.6	5.6	4.4	8	1.0
PetroChina Company Ltd (10%)	PTR	B2	53.09	13.3	5.8	3.9	8	4.4
Lukoil Oil Company	LUKOY	B2	121.00	12.2	4.7	2.8	5	2.8
	<i>Median</i>			11.6	5.8	4.9	11	2.3
Independent Natural Gas and Oil - Large Cap and Mid Cap								
XTO Energy Inc.	XTO	B1	34.89	11.7	6.6	6.1	12	0.6
Occidental Petroleum Corp.	OXY	B3	58.13	11.2	5.8	4.7	8	1.9
Unocal Corporation	UCL	B3	46.50	8.9	5.3	4.7	10	1.7
Burlington Resources	BR	B1	42.65	9.9	5.9	4.5	10	0.8
Encana Corporation	ECA	B1	57.37	6.4	4.8	4.5	11	0.7
CNOOC Limited (19%)	CEO	B2	51.10	9.6	5.0	4.3	8	3.5
Anadarko Petroleum Corp.	APC	B1	64.43	10.9	5.7	4.3	9	0.9
Devon Energy Corporation	DVN	B3	38.55	6.6	4.9	3.8	8	1.0
	<i>Median</i>			9.7	5.5	4.5	9	1.0
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B2	48.07	12.5	5.6	6.3	14	1.0
Encore Acquisition Company	EAC	B2	34.00	11.9	7.0	5.5	11	-
Cimarex Energy Company	XEC	B2	36.93	5.2	4.1	4.0	11	-
Energy Partners Ltd.	EPL	B3	20.05	4.9	4.0	3.7	13	-
	<i>Median</i>			8.6	4.9	4.8	12	-
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	45.40		7.9	15.7	21	6.4
Kinder Morgan Management, LLC	KMR	S3	41.20		7.9	14.6	19	7.1
San Juan Basin Royalty Trust	SJT	H	28.83	12.5	8.3	8.8	10	10.2
Enerplus Resources Fund	ERF		36.30	8.3	6.2	7.8	22	9.5
Canadian Oil Sands Trust (US\$)	COSWF	B1	54.71	20.0	9.5	7.6	9	3.0
Pengrowth Energy Trust	PGH		20.75	7.9	5.6	7.6	15	11.0
	<i>Median</i>			10.4	7.9	8.3	17	8.3

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended December 31, 2005; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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Index of Recent Research

Stock Ideas

<i>Date</i>	<i>Symbol</i>	<i>Stock</i>	<i>Theme</i>
13-Jan	NHY	Norsk Hydro ASA	Oil, Natural Gas and Aluminum
12-Jan	LUKOY	Lukoil Oil Company	Profits Advance
7-Jan	BR	Burlington Resources, Inc.	Royalty Trust Candidate
29-Dec	LUKOY	Lukoil Oil Company	After Yukos
29-Dec	CEO	CNOOC Ltd	Natural Gas Progress
27-Dec	PTR	PetroChina Company Limited	West to East Pipeline Flowing
22-Dec	RD	Royal Dutch Petroleum	Historic Streamlining
22-Dec	SC	Shell Transport & Trading Company, p.l.c.	Historic Streamlining
20-Dec	* BP	BP p.l.c.	Cash Flows to Owners
9-Dec	* SU	Suncor Energy Inc.	Raise Net Present Value to US\$42 a Share
8-Dec	* CVX	ChevronTexaco Corporation	Mega Cap at a Discount
3-Dec	* COSWF	Canadian Oil Sands Trust	After Hubbert's Peak
3-Dec	* COP	ConocoPhillips	Connecting with Lukoil
29-Nov	* XEC	Cimarex Energy Company	Timely Talent
26-Nov	* XTO	XTO Energy Inc.	Twenty Per Cent per Year per Share
24-Nov	* APC	Anadarko Petroleum Corporation	Asset Upgrade
22-Nov	* EAC	Encore Acquisition Company	Opportunity in Hedging Impact
22-Nov	* MTR	Mesa Royalty Trust	Hugoton Predictability, San Juan Surprise
17-Nov	* TOT	Total S.A.	African Oil, European Refining
17-Nov	* UCL	Unocal Corporation	Incremental Production in 2005
15-Nov	* EPL	Energy Partners, Ltd.	Lowest Cash Flow Multiple
15-Nov	* OXY	Occidental Petroleum Corporation	Still Cheap
12-Nov	* CRT	Cross Timbers Royalty Trust	Low Risk, Long Life
9-Nov	* IMO	Imperial Oil Limited	Raise Present Value to US\$58 a Share
9-Nov	* DVN	Devon Energy Corporation	Large Cap Natural Gas
8-Nov	* BRY	Berry Petroleum Company	Smart Oil Contract
8-Nov	* PCZ	Petro-Canada	Looking for Long Life
5-Nov	* SJT	San Juan Basin Royalty Trust	High Winter Distributions Ahead
4-Nov	* ECA	EnCana Corporation	Bold Moves
3-Nov	* MRO	Marathon Oil Corporation	Lower Net Present Value to \$40 a Share
2-Nov	* XOM	Exxon Mobil Corporation	Raise Present Value to \$50 a Share
26-Oct	* KMP	Kinder Morgan Energy Partners, L.P.	Fallen Star
26-Oct	* KMI	Kinder Morgan Inc.	Fallen Star
26-Oct	* KMR	Kinder Morgan Management, LLC	Fallen Star

Meter Reader

11-Jan	*	When, Not If
4-Jan	*	January Thaw
28-Dec	*	Light Oil Volume Peak
21-Dec	*	Staying on the Message

U.S. Natural Gas Royalty Trusts

13-Jan		Green on the Screen
7-Jan	*	All Barrels Are Not the Same
31-Dec	*	Charitable Gifts
24-Dec	*	Weather and Inventories

* Archived on www.mcdep.com

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