



Meter Reader

A Weekly Analysis of Large Cap Oil and Gas Stocks

May 17, 2011

Petrobras (PBR) Out-of-Favor Oil Growth

<i>Symbol</i>	PBR	<i>Ebitda Next Twelve Months ending 3/31/12 (US\$m)</i>	43,400
<i>Rating</i>	Contrarian Buy	<i>North American Natural Gas/Ebitda (%)</i>	0
<i>Price (US\$/sh)</i>	33.62	<i>Natural Gas and Oil Production/Ebitda (%)</i>	83
<i>Pricing Date</i>	5/16/11	<i>Adjusted Reserves/Production NTM</i>	13.3
<i>Shares (mm)</i>	6539	<i>EV/Ebitda</i>	6.4
<i>Market Capitalization (US\$m)</i>	220,000	<i>PV/Ebitda</i>	10.7
<i>Debt (US\$m)</i>	59,000	<i>Undeveloped Reserves (%)</i>	40
<i>Enterprise Value (EV) (US\$m)</i>	278,000	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	37.80
<i>Present Value (PV) (US\$m)</i>	464,000	<i>Present Value Proven Reserves(US\$/boe)</i>	17.77
<i>Net Present Value (US\$/share)</i>	62	<i>Present Value Proven Reserves(US\$/mcf)</i>	2.96
<i>Debt/Present Value</i>	0.13	<i>Earnings Next Twelve Months (US\$/sh)</i>	3.25
<i>McDep Ratio - EV/PV</i>	0.60	<i>Price/Earnings Next Twelve Months</i>	10
<i>Dividend Yield (%/year)</i>	3.5	<i>Indicated Annual Dividend (US\$/sh)</i>	1.18
Note: Estimated cash flow and earnings tied to one-year futures prices for oil and natural gas.			
Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.			
Estimated present value presumes a long-term price for oil of US\$100 a barrel and natural gas, \$8 a million btu.			
The Brazilian Government has voting control and with public sector entities owns 48% of Petrobras' equity.			

Summary and Recommendation

Offering an expected doubling of oil production by 2020, buy-recommended **Petrobras (PBR)** becomes a contrarian selection in the face of out-of-favor sentiment signaled by the stock price falling below its 200-day average. The company's oil discoveries offshore Brazil are the largest in the Western Hemisphere in several decades. Since the doubling will take time and money to achieve, we discount its eventual value to 28% of estimated Net Present Value of \$62 a share (see table [Functional Cash Flow and Present Value](#) on page 2). Yet, at a McDep Ratio of 0.59, investors may not be paying much if anything for that growth and at the same time less than present value for the businesses currently generating cash flow. Meanwhile, earnings for the first quarter 2011, released May 16, were ahead of our expectations from four months ago. Higher crude oil price boosted Ebitda from oil production while price controls restricted Ebitda from refined products (see table [Next Twelve Months Operating and Financial Estimates](#) on page 3). Crude oil price remains a positive factor as the quote for the next six years at \$96 a barrel is above the 40-week average of \$94 (see tables [Six-Year Commodity Price Meter](#) on page 2 and [Six-Year and One-Year Natural Gas and Oil Futures](#) on page 9). Among emerging market and other large cap recommendations, Petrobras stock looks more than competitive by McDep Ratio (see [Tables 1-2](#) on pages 4-5). Unlevered cash flow multiple appears higher than for integrated peers, but not by much considering the company's oil outlook (see [Table 3](#) on page 6). Ratio of enterprise value to 200-day average below 1.0 defines contrarian appeal (see [Table 4](#) on page 7).

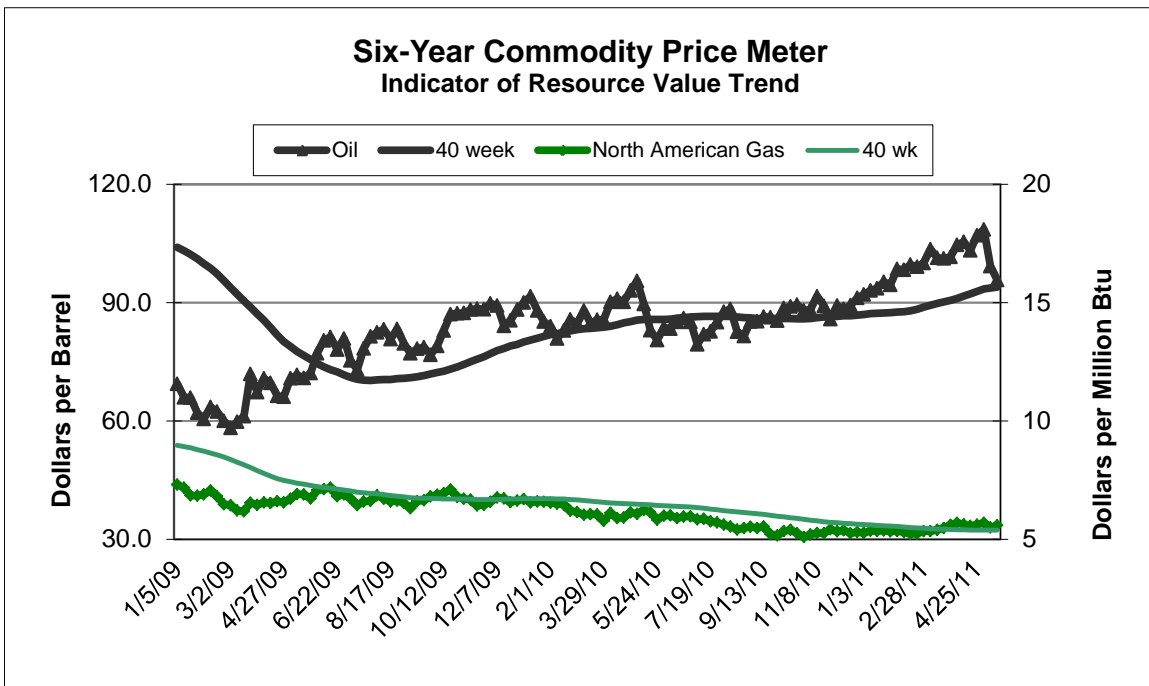
Kurt H. Wulff, CFA



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Petrobras					
Functional Cash Flow and Present Value					
	<i>NTM Ebitda</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Present</i>	
	<i>(US\$mm)</i>	<i>R/P</i>	<i>Ebitda</i>	<i>Value</i>	
				<i>(US\$mm)</i>	
Natural Gas	750	13.1	10.7	8,000	2%
Oil	35,490	13.4	7.8	276,000	59%
Downstream	7,200		6.9	50,000	11%
Pre Salt Deep Water Oil				130,000	28%
	43,440	13.3	10.7	464,000	100%
Debt (US\$mm)					59,000
Net Present Value (US\$mm)					405,000
Shares (mm)					6,539
Net Present Value - Standard Estimate (US\$/sh)					62
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					64





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Petrobras									
Next Twelve Months Operating and Financial Estimates									
(International Financial Reporting Standards beginning 2010, US\$)									
									<i>Next</i>
	<i>Q1</i>	<i>Q4</i>	<i>Year</i>	<i>Q1</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Year</i>	<i>Months</i>
	<i>3/31/10</i>	<i>12/31/10</i>	<i>2010</i>	<i>3/31/11</i>	<i>6/30/11</i>	<i>9/30/11</i>	<i>12/31/11</i>	<i>2011E</i>	<i>3/31/12</i>
Volume									
Natural Gas (mmcf)	2,472	2,682	2,564	2,604	2,604	2,604	2,604	2,604	2,604
Oil (mbd)	2,127	2,173	2,148	2,184	2,184	2,184	2,184	2,184	2,184
Total gas & oil (mmb)	229	241	940	236	238	241	241	956	958
Total gas & oil (mbd)	2,539	2,620	2,575	2,618	2,618	2,618	2,618	2,618	2,618
Price									
Natural gas (\$/mcf)	2.41	2.36	2.56	1.74	1.74	1.74	1.74	1.74	1.74
Oil (\$/bbl)									
WTI Cushing	78.67	85.10	79.43	94.10	102.38	97.97	98.80	98.32	99.18
Brent	76.24	86.48	79.47	104.97	114.21	109.29	110.22	109.67	110.64
Company	72.19	79.32	73.86	93.61	101.85	97.47	98.29	97.82	98.66
Total gas & oil (\$/bbl)	62.83	68.20	64.15	79.83	86.70	83.04	83.73	83.33	84.04
NY Harbor 3-2-1 (\$/bbl)	7.15	11.15	9.68	17.69	22.66	22.85	17.91	20.28	20.43
Revenue (mm\$)									
Natural gas	537	583	2,394	408	412	417	417	1,654	1,659
Oil	13,820	15,857	57,907	18,401	20,243	19,584	19,750	77,977	78,866
Total production	14,357	16,440	60,301	18,809	20,655	20,001	20,167	79,632	80,525
Other	13,650	15,614	61,000	14,006	14,006	14,006	14,006	56,023	56,023
Total	28,007	32,054	121,302	32,814	34,661	34,007	34,172	135,655	136,548
Expense									
Production	7,955	9,555	32,888	10,215	11,360	11,000	11,092	43,667	44,289
Other	11,676	13,920	54,141	12,963	12,206	12,206	12,206	49,581	48,823
Ebitda (mm\$)									
Production	6,402	6,885	27,413	8,594	9,295	9,000	9,075	35,964	36,236
Other	1,973	1,694	6,859	1,042	1,800	1,800	1,800	6,442	7,200
Total Ebitda	8,376	8,579	34,273	9,637	11,095	10,800	10,875	42,407	43,436
Exploration	557	804	2,169	564	564	564	564	2,256	2,256
Deprec., Deplet., & Amort.	1,814	2,312	8,472	2,131	2,131	2,131	2,131	8,522	8,522
Other non cash	82	(2,216)	(3,361)	(1,816)					
Ebit	5,923	7,679	26,993	8,758	8,400	8,106	8,180	33,445	32,658
Ebt	5,923	7,679	26,993	8,758	8,400	8,106	8,180	33,445	32,658
Income Tax	1,633	1,442	6,947	2,180	2,940	2,837	2,863	10,821	11,430
Net Income (mm\$)									
Production	3,495	4,854	17,049	5,824					
Other	795	1,383	2,996	754					
Total Net Income	4,290	6,236	20,046	6,578	5,460	5,269	5,317	22,624	21,227
Shares (millions)									
Per share (\$)	0.98	0.95	4.10	1.01	0.84	0.81	0.81	3.46	3.25
Ebitda Margin (E&P)	45%	42%	45%	46%	45%	45%	45%	45%	45%
Tax Rate	28%	19%	26%	25%	35%	35%	35%	32%	35%



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Table 2								
McDep Large Cap Energy Portfolio								
Net Present Value and McDep Ratio								
			Price (US\$/sh)		Market Cap (US\$mm)	Net Present Value (US\$/sh)	Debt/ Present Value	McDep Ratio
	Symbol/Rating		16-May 2011	Shares (mm)				
B = Buy, CB (see below)								
U.S. Integrated								
Marathon Oil Corporation	MRO	B	50.29	713	35,860	68.00	0.19	0.79
Exxon Mobil Corporation	XOM	B	80.24	4,971	399,000	112.00	0.11	0.75
Chevron Corporation	CVX	B	101.65	2,009	204,000	154.00	0.08	0.69
ConocoPhillips	COP	B	71.43	1,445	103,000	119.00	0.19	0.68
<i>Total or Median</i>						742,000	0.15	0.72
Europe								
BG Group plc	BRGXF		21.70	3,407	73,900	25.00	0.13	0.88
Royal Dutch Shell plc	RDS-A	B	69.03	3,087	213,000	96.00	0.18	0.77
Statoil ASA (33%)	STO	B	25.67	1,050	27,000	44.00	0.21	0.67
BP plc	BP		42.46	3,168	135,000	93.00	0.24	0.58
Total S.A.	TOT	B	57.22	2,251	129,000	111.00	0.13	0.58
<i>Total or Median</i>						578,000	0.18	0.67
Brazil/Russia/Australia/China								
CNOOC Limited (34%)	CEO		228.66	152	34,900	220.00	0.04	1.04
Woodside Petroleum Ltd.	WOPEY	B	47.30	774	36,600	49.00	0.14	0.97
PetroChina Company Ltd (14%)	PTR	B	134.43	256	34,400	210.00	0.15	0.69
Petrobras	PBR	CB	33.62	6,539	219,800	62.00	0.13	0.60
Gazprom (50%)	OGZPY	B	13.95	5,750	80,200	28.00	0.11	0.55
Lukoil Oil Company	LUKOY	B	61.35	781	47,900	150.00	0.05	0.44
<i>Total or Median</i>						454,000	0.12	0.65
U.S. Independent								
Southwestern Energy Company	SWN		41.23	349	14,400	42.00	0.09	0.98
Anadarko Petroleum Corp.	APC		73.40	498	36,600	78.00	0.35	0.96
Chesapeake Energy Corp.	CHK		29.62	746	22,100	33.00	0.40	0.94
EOG Resources, Inc.	EOG	B	104.70	251	26,300	130.00	0.13	0.83
Occidental Petroleum Corp.	OXY	B	101.00	814	82,200	123.00	0.05	0.83
Devon Energy Corporation	DVN	B	81.78	430	35,200	112.00	0.08	0.75
<i>Total or Median</i>						216,800	0.11	0.88
Canada								
Penn West Exploration	PWE		25.43	440	11,400	31.00	0.22	0.87
Imperial Oil Limited (30%)	IMO	B	46.26	256	11,900	62.00	0.07	0.76
Cenovus Energy Inc.	CVE	B	33.57	753	25,300	49.00	0.17	0.74
EnCana Corporation	ECA	B	32.46	738	24,000	51.00	0.22	0.72
Suncor Energy	SU	B	39.56	1,575	62,300	64.00	0.14	0.67
Canadian Natural Resources Limited	CNQ		40.65	1,089	44,300	67.00	0.14	0.66
Canadian Oil Sands Limited	COSWF	B	30.43	485	14,700	52.00	0.06	0.61
<i>Total or Median</i>						194,000	0.14	0.72
CB=Contrarian Buy, Stock Price may in downtrend compared to 200-day average.								
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses								
Estimated present value presumes a long-term price for oil of US\$100 a barrel and natural gas, \$8 a million btu.								



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Table 3								
McDep Large Cap Energy Portfolio								
Value Multiples and Distribution Yield								
			Price (US\$/sh)	Adjustd Resrvs/ Prod	PV/ Ebitda	EV/ Ebitda	P/E	Divd or Distrib NTM
	Symbol/Rating		16-May 2011	NTM	NTM	NTM	NTM	(%)
	B = Buy, CB (see below)							
U.S. Integrated								
Exxon Mobil Corporation	XOM	B	80.24	13.8	7.2	5.4	9	2.2
ConocoPhillips	COP	B	71.43	11.9	7.7	5.2	9	3.7
Marathon Oil Corporation	MRO	B	50.29	8.6	6.2	4.9	10	2.0
Chevron Corporation	CVX	B	101.65	8.4	6.1	4.2	7	2.8
	<i>Total or Median</i>			10.2	6.7	5.0	9	2.5
Europe								
BG Group plc	BRGXF		21.70	13.8	9.0	7.9	14	1.0
Royal Dutch Shell plc	RDS-A	B	69.03	8.9	6.5	5.0	9	4.9
BP plc	BP		42.46	10.4	7.3	4.3	6	4.0
Total S.A.	TOT	B	57.22	9.6	6.8	3.9	6	5.6
Statoil ASA (33%)	STO	B	25.67	6.6	5.5	3.7	7	4.4
	<i>Total or Median</i>			9.6	6.8	4.3	7	4.4
Brazil/Russia/Australia/China								
Woodside Petroleum Ltd.	WOPEY	B	47.30	15.1	10.8	10.5	17	2.2
Petrobras	PBR	CB	33.62	13.3	10.7	6.4	10	3.5
CNOOC Limited (34%)	CEO		228.66	5.6	5.4	5.6	10	2.4
PetroChina Company Ltd (14%)	PTR	B	134.43	13.6	7.8	5.4	9	3.9
Gazprom (50%)	OGZPY	B	13.95	30.2	6.9	3.8	6	2.4
Lukoil Oil Company	LUKOY	B	61.35	15.9	6.3	2.7	4	3.0
	<i>Total or Median</i>			14.3	7.4	5.5	9	2.7
U.S. Independent								
Southwestern Energy Company	SWN		41.23	8.3	11.7	11.5	25	-
Chesapeake Energy Corp.	CHK		29.62	12.3	12.0	11.3	20	1.0
Anadarko Petroleum Corp.	APC		73.40	8.8	8.3	8.0		0.5
Devon Energy Corporation	DVN	B	81.78	10.7	9.5	7.1	14	0.8
Occidental Petroleum Corp.	OXY	B	101.00	10.9	8.0	6.6	13	1.8
EOG Resources, Inc.	EOG	B	104.70	9.2	8.0	6.6	23	0.6
	<i>Total or Median</i>			9.9	8.9	7.5	20	0.7
Canada								
EnCana Corporation	ECA	B	32.46	12.7	13.4	9.6	44	2.5
Cenovus Energy Inc.	CVE	B	33.57	21.0	12.3	9.1	28	2.5
Imperial Oil Limited (30%)	IMO	B	46.26	21.4	11.8	9.0	15	1.0
Penn West Exploration	PWE		25.43	8.8	10.3	9.0	35	4.4
Canadian Natural Resources Limited	CNQ		40.65	21.0	11.7	7.7	19	0.9
Suncor Energy	SU	B	39.56	21.1	10.3	6.9	14	1.0
Canadian Oil Sands Limited	COSWF	B	30.43	29.8	11.3	6.9	11	4.1
	<i>Total or Median</i>			21.0	11.7	9.0	19	2.5
CB=Contrarian Buy, Stock Price may be in downtrend compared to 200-day average.								
EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2012; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses								



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Table 4									
McDep Large Cap Energy Portfolio									
Rank by Enterprise Value to 200 Day Average									
			Price						
			(\$/sh)	Enterprise Value/					
	Symbol		16-May	52Wk	52Wk	50 Day	200 Day	McDep	
	Rating		2011	High	Low	Avg.	Avg.	Ratio	
U.S. Integrated									
	Marathon Oil Corporation	MRO	B	50.29	0.94	1.45	0.98	1.17	0.79
	Chevron Corporation	CVX	B	101.65	0.93	1.43	0.97	1.10	0.69
	Exxon Mobil Corporation	XOM	B	80.24	0.92	1.35	0.96	1.08	0.75
	ConocoPhillips	COP	B	71.43	0.91	1.31	0.94	1.05	0.68
	<i>Median</i>			<i>0.93</i>	<i>1.39</i>	<i>0.97</i>	<i>1.09</i>	<i>0.72</i>	
Europe									
	Statoil ASA (33%)	STO	B	25.67	0.90	1.24	0.95	1.06	0.67
	Royal Dutch Shell plc	RDS-A	B	69.03	0.91	1.28	0.96	1.04	0.77
	BG Group plc	BRGXF		108.50	0.86	1.44	0.90	1.04	0.88
	Total S.A.	TOT	B	57.22	0.91	1.24	0.96	1.03	0.58
	BP plc	BP		42.46	0.91	1.28	0.96	0.99	0.58
	<i>Median</i>			<i>0.91</i>	<i>1.28</i>	<i>0.96</i>	<i>1.04</i>	<i>0.69</i>	
Brazil/Russia/Australia/China									
	Woodside Petroleum Ltd.	WOPEY	B	47.30	0.92	1.35	0.99	1.08	0.97
	Gazprom (50%)	OGZPY	B	13.95	0.83	1.40	0.90	1.06	0.55
	CNOOC Limited (34%)	CEO		228.66	0.85	1.52	0.94	1.04	1.04
	PetroChina Company Ltd (14%)	PTR	B	134.43	0.88	1.26	0.95	1.03	0.69
	Lukoil Oil Company	LUKOY	B	61.35	0.82	1.33	0.89	1.00	0.44
	Petrobras	PBR	CB	33.62	0.82	1.06	0.90	0.94	0.60
	<i>Median</i>			<i>0.84</i>	<i>1.34</i>	<i>0.92</i>	<i>1.03</i>	<i>0.65</i>	
U.S. Independent									
	Occidental Petroleum Corp.	OXY	B	101.00	0.86	1.37	0.99	1.10	0.83
	Southwestern Energy Company	SWN		48.14	0.92	1.31	1.01	1.10	0.98
	Chesapeake Energy Corp.	CHK		29.62	0.89	1.24	0.94	1.07	0.94
	Devon Energy Corporation	DVN	B	81.78	0.89	1.34	0.93	1.06	0.75
	Anadarko Petroleum Corp.	APC		73.40	0.91	1.51	0.95	1.05	0.96
	EOG Resources, Inc.	EOG	B	104.70	0.88	1.18	0.95	1.04	0.83
	<i>Median</i>			<i>0.89</i>	<i>1.33</i>	<i>0.95</i>	<i>1.06</i>	<i>0.88</i>	
Canada									
	Canadian Oil Sands Limited	COSWF	B	30.54	0.87	1.30	0.93	1.08	0.61
	Imperial Oil Limited (30%)	IMO	B	46.26	0.84	1.26	0.91	1.07	0.76
	Penn West Exploration	PWE		25.43	0.92	1.32	0.98	1.07	0.87
	EnCana Corporation	ECA	B	32.46	0.95	1.16	0.99	1.05	0.72
	Suncor Energy	SU	B	39.56	0.85	1.31	0.92	1.03	0.67
	Cenovus Energy Inc.	CVE	B	33.57	0.86	1.28	0.92	1.03	0.74
	Canadian Natural Resources	CNQ		40.65	0.82	1.26	0.89	0.99	0.66
	<i>Median</i>			<i>0.86</i>	<i>1.28</i>	<i>0.92</i>	<i>1.05</i>	<i>0.72</i>	
CB=Contrarian Buy, Stock Price may be in downtrend compared to 200-day average.									



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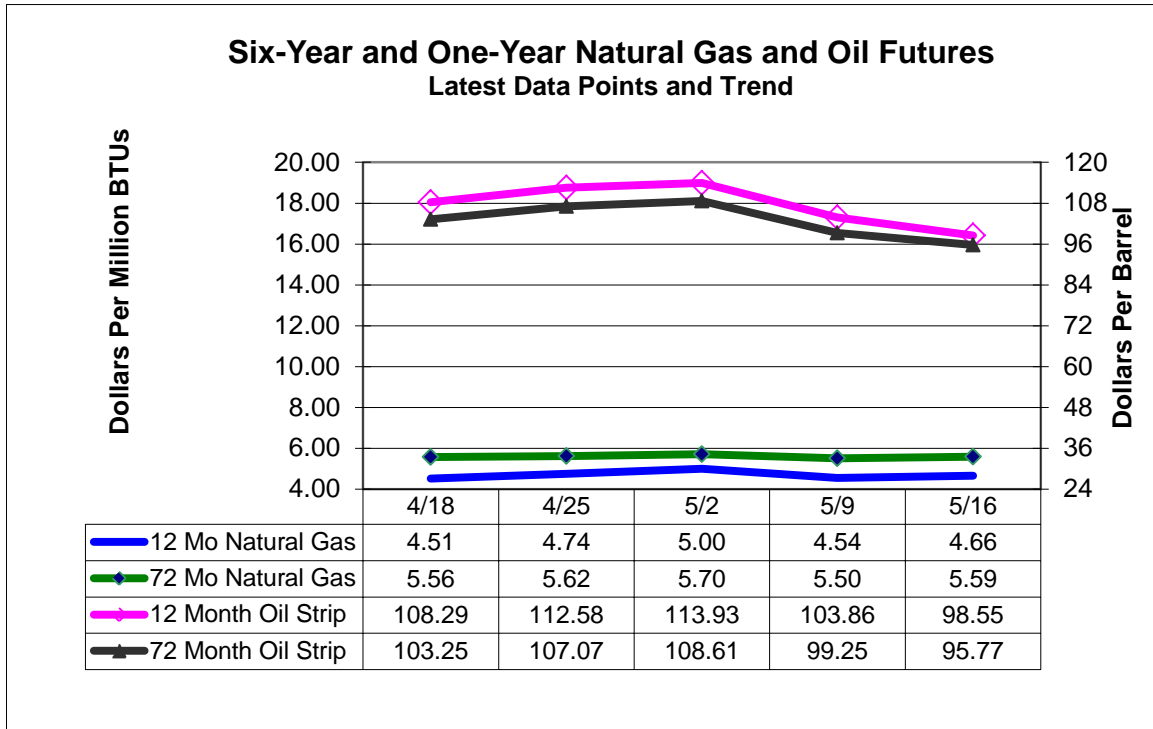
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Index of Recent Research			
<i>Date</i>	<i>Symbol</i>	<i>Subject</i>	<i>Theme</i>
Stock Ideas			
13-May	DMLP	Dorchester Minerals, L.P.	Fayetteville and Bakken Growth (Income and Small Cap Weekly)
10-May	EOG	EOG Resources	High-Profit Light Sweet North American Oil (Meter Reader)
3-May	TOT	Total	Profiting Outside U.S. (Meter Reader)
29-Apr	BIREF	Birchcliff Energy	Independent Engineer Confirms Natural Gas Upside (ISCW)
29-Apr	COSWF	Canadian Oil Sands Limited	Dividend Increased 50%
22-Apr	ERF	Enerplus Corporation	New Buy - Bakken and Marcellus with 7% Income (ISCW)
19-Apr	DVN	Devon Energy	Rich Resources, Low McDep, Low Debt (Meter Reader)
15-Apr	WLL	Whiting Petroleum	New Buy on Chairman Volker's Prudhoe Bay (ISCW)
12-Apr	COP	ConocoPhillips	Bad Government Actions Good for Oil Profits (Meter Reader)
8-Apr	RRC	Range Resources	Raise NPV to \$60 from \$50 a Share (Income and Small Cap)
5-Apr	CVX	Chevron	Raise NPV to \$154 a Share from \$146 (Meter Reader)
1-Apr	SJT	San Juan Basin Royalty Trust	Remove Buy at McDep Ratio of 1.10 (ISCW)
29-Mar	XOM	Exxon Mobil	Natural Gas Enhanced by Nuclear (Meter Reader)
22-Mar	PTR	PetroChina	Overlooked Oil in PTR Stock (Meter Reader)
15-Mar	LUKOY	Lukoil	Lukoil and Russia Ride the Rise of Oil (Meter Reader)
11-Mar	HGT	Hugoton Royalty Trust	Contrarian Commodity Income (Income and SC Weekly)
8-Mar	CNQ	Canadian Natural Resources	End Buy (Meter Reader)
1-Mar	CVE	Cenovus Energy	High Growth in Deep Oil Sands (Meter Reader)
23-Feb	WOPEY	Woodside Petroleum Ltd.	Double LNG Late 2011
22-Feb	OGZPY	Gazprom	Nearer Accord on Natural Gas to China (Meter Reader)
18-Feb	PEYUF	Peyto Exploration	Raise NPV to \$24 a Share from \$20 (Income and Small Cap)
16-Feb	XEC	Cimarex Energy	Raise NPV to \$120 on Oil Reserves
10-Feb	ECA	Encana	\$C5.4 Billion Joint Venture Highlights Undervaluation
4-Feb	HK	Petrohawk	Raise NPV to \$24 a Share from \$20 (Income and Small Cap)
26-Jan	OXY	Occidental Petroleum	Growing U.S. Oil Production
18-Jan	MRO	Marathon Oil	Refining/Marketing Spinoff May Boost Value 27% (MR)
11-Jan	IMO	Imperial Oil	Accelerating Growth (Meter Reader)
For historical research by stock, go to mcdep.com , click on Stock Ideas , click on stock by name.			
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10-May	EOG	EOG Resources	High-Profit Light Sweet North American Oil
3-May	TOT	Total	Profiting Outside U.S.
26-Apr		Large Cap Weekly Analysis	Sell in May? No Way
19-Apr	DVN	Devon Energy	Rich Resources, Low McDep, Low Debt
For earlier editions, go to mcdep.com , click on Meter Reader .			
Income and Small Cap Weekly			
13-May	DMLP	Dorchester Minerals, L.P.	Fayetteville and Bakken Growth
6-May	BRY, DNR, LINE	Berry, Denbury, Linn	Raise NPV as Oil Price Swings
29-Apr	BIREF	Birchcliff Energy	Independent Engineer Confirms Natural Gas Upside
22-Apr	ERF	Enerplus Corporation	New Buy - Bakken and Marcellus with 7% Income
For earlier editions, go to mcdep.com , click on Energy Income .			



Meter Reader

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 May 17, 2011



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