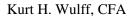
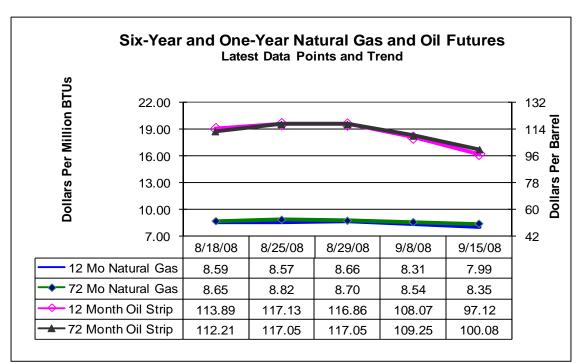


Deep Water Brazil

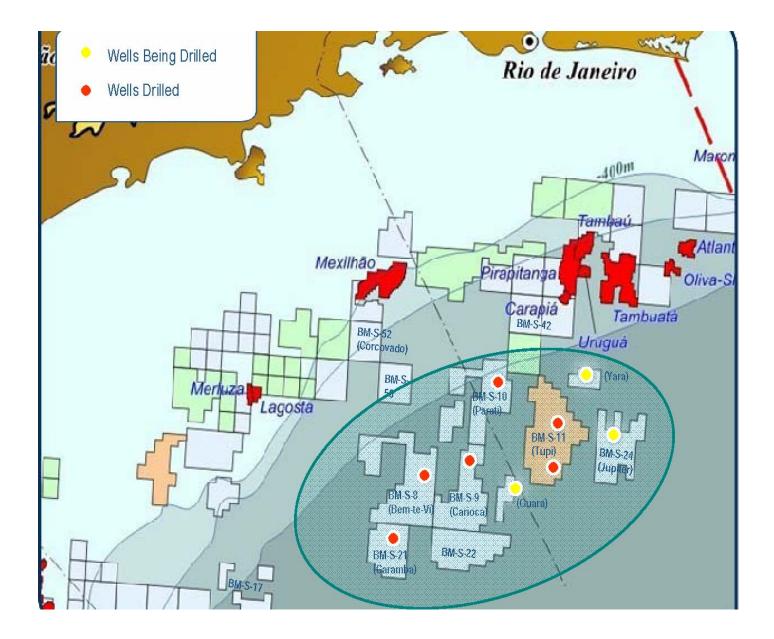
Summary and Recommendation

Among stocks in our coverage, **Petrobras (PBR)** and **BG Group (BRGXF)** offer exciting longterm participation in the world's most important oil discoveries of the past three years. The finds are in the Pre-Salt formation of the Santos Basin offshore Brazil under water a mile deep. After the market decline of recent months, both stocks offer better entry points for accumulating shares. Though our buy ratings remain suspended amid tumultuous financial markets, we believe in the long-term appeal of energy investments. Meanwhile, in a press release last week, Petrobras estimated recoverable reserves of 3 to 4 billion barrels at Yara (65% PBR, 25% BG) (see map, page 2, from PBR disclosures). Combined with last year's estimate of 5 to 8 billion barrels at nearby Tupi (65% PBR, 25% BG), the range of total recoverable reserves has a midpoint of 10 billion barrels. That is enough to support a million barrels a day from the ten platforms PBR has ordered for delivery in 2013 to 2016. Estimates of Present Value include \$102 billion in PBR and \$24 billion in BG for the Pre-Salt off Brazil (see tables <u>Functional Cash Flow and Present</u> <u>Value</u>). McDep Ratios imply that market cap and debt is 0.58 and 0.73 times PV for PBR and BG respectively. Finally, six-year oil ended its uptrend compared to the 40-week average signaling a need for more patience in anticipating renewed price gains (see chart below and on last page).











	Petrobras				
Functional C	ash Flow and	l Present V	alue		
				Present	
1	VTM Ebitda	Adjusted	PV/	Value	
	<u>(US\$mm)</u>	<u>R/P</u>	<u>Ebitda</u>	<u>(US\$mm)</u>	
Rest of World Natural Gas	2,902	10.3	6.2	18,000	5%
Oil	26,194	10.4	8.5	222,000	61%
Downstream	5,660		3.9	22,000	6%
Pre Salt Deep Water Oil				102,000	28%
	34,757	10.4	10.5	364,000	100%
Debt (US\$mm)					35,000
Net Present Value (US\$mm)					329,000
Shares (mm)					4,387
Net Present Value - Standard Estimate (US\$/sh	ı)				75

	BG Group p	plc			
Functional C	ash Flow and	d Present V	alue		
				Present	
Ν	NTM Ebitda	Adjusted	PV/	Value	
	<u>(US\$mm)</u>	<u>R/P</u>	<u>Ebitda</u>	<u>(US\$mm)</u>	
Rest of World Natural Gas	2,670	7.8	8.6	23,000	23%
Oil	3,750	6.8	9.3	35,000	34%
Downstream	3,580		5.6	20,000	20%
Offshore Brazil				24,000	24%
	10,000	7.5	10.2	102,000	100%
Debt (US\$mm)					7,000
Net Present Value (US\$mm)					95,000
Shares (mm)					3,384
Net Present Value - Standard Estimate (US\$/sh	l)				28



Oil and Gas Producers - Rank by McDep Ratio								
					*			
			Price			Net		
			(US\$/sh)		Market	Present	Debt/	
	Symbol/		15-Sep	Shares	Сар	Value	Present	McDep
	-	ating	2008	(mm)	(US\$mm)	(US\$/sh)	Value	Ratio
Mega Cap	K	uing	2000	(mm)	(0.5\$mm)	(03\$/\$11)	vane	Кино
Exxon Mobil Corporation	XOM		74.62	5,261	393,000	118.00	0.05	0.65
Chevron Corporation	CVX BP		80.52	2,206	178,000	135.00	0.09	0.63
BP plc	PBR		51.93	3,137	163,000	104.00	0.17	
Petrobras			40.40	4,387	177,230	75.00	0.10	0.58
Royal Dutch Shell plc	RDS-A COP		60.07	3,095	186,000	120.00	0.11	0.56
ConocoPhillips			68.70	1,555	107,000	150.00	0.17	0.55
Total S.A.	TOT		60.78	2,253	137,000	125.00	0.09	0.53
Gazprom (50%)	OGZPY		31.29	2,865	89,600	88.00	0.09	0.41
Total or Median					1,431,000		0.09	0.57
Producer/Refiners - Large Cap	DECVE		10.75	2 20 4	< c 0 2 0	20.00	0.07	0.72
BG Group plc	BRGXF		19.75	3,384	66,830	28.00	0.07	0.73
Imperial Oil Limited (30%)	IMO		43.05	269	11,560	65.00	0.05	0.68
Marathon Oil Corporation	MRO		40.93	714	29,220	70.00	0.21	0.67
Suncor Energy	SU		43.74	953	41,680	75.00	0.08	0.62
StatoilHydro ASA (29%)	STO		23.57	928	21,870	52.00	0.12	0.52
PetroChina Company Ltd (14%)	PTR		105.97	257	27,270	220.00	0.04	0.50
Petro-Canada	PCZ		37.37	484	18,090	90.00	0.11	0.48
Lukoil Oil Company	LUKOY		60.70	839	51,000	170.00	0.03	0.37
Total or Median					268,000		0.08	0.57
Independent Natural Gas and Oil -	Large Ca	р						
Encana Corporation	ECA		63.78	751	47,900	100.00	0.19	0.71
Canadian Natural Resources	CNQ		72.11	541	39,000	124.00	0.18	0.66
Anadarko Petroleum Corp.	APC		50.90	471	24,000	100.00	0.27	0.64
EOG Resources	EOG		85.10	251	21,400	140.00	0.07	0.63
CNOOC Limited (34%)	CEO		113.76	152	17,320	180.00	-	0.63
XTO Energy Inc.	XTO		46.99	580	27,250	88.00	0.19	0.62
Chesapeake Energy Corporation	СНК		38.25	550	21,040	80.00	0.26	0.62
Occidental Petroleum Corp.	OXY		67.73	826	55,900	120.00	0.06	0.59
Devon Energy Corporation	DVN		89.49	450	40,300	170.00	0.10	0.57
Total or Median					294,000		0.18	0.63
Independent Natural Gas and Oil -	Small Car	D						
Encore Acquisition Company	EAC		43.52	52	2,280	75.00	0.28	0.70
Berry Petroleum Company	BRY		33.33	46	1,520	65.00	0.37	0.69
Birchcliff Energy Ltd. (US\$)	BIR.TO		9.03	117	1,060	14.00	0.10	0.68
Energy Partners Ltd.	EPL		9.01	32	290	30.00	0.39	0.57
Cimarex Energy Company	XEC		45.95	86	3,930	100.00	0.06	0.49
Total or Median			13.75	00	9,100	100.00	0.28	0.68
Income					2,100		0.20	0.00
San Juan Basin Royalty Trust	SJT		36.91	47	1,720	48.00	-	0.77
Pengrowth Energy Trust	PGH		15.59	248	3,870	24.00	0.26	0.74
Penn West Energy Trust	PWE		24.41	380	9,280	40.00	0.20	0.74
Canadian Oil Sands Trust	COSWF		37.71	481	9,280	57.00	0.20	0.71
Hugoton Royalty Trust	HGT		26.88	481	1,080	42.00	0.04	0.68
	ERF						- 0.12	
Enerplus Resources Fund	LIKF	ļ	35.95	165	5,910	63.00	0.13	0.63
Total or Median	37.1	1	L. J. L	1.4/D	40,000		0.08	0.69
Present Value = Shares times Net Pre		d1V10	ied by (1-L	ebt/Prese	nt value).			
Debt = Present Value times Debt/Pre		L_						
	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, \$14 a million btu.							
Estimated present value presumes a l	ong-term p	rice f	or oil of Us	\$\$100 a b	arrel and natur	ai gas, \$14	a million	btu.

Please see disclosures on the final page.



Oil and G	as Prod	uc	ers - Ra	nk by l	EV/Ebi	tda		
								D 1 1
			Price	Adjustd	DL/			Divd or
	G L L		(US\$/sh)	Resrvs/	PV/	EV/	D/E	Distrib
	Symbol/		15-Sep	Prod	Ebitda	Ebitda	P/E	NTM
M	Rati	ng	2008	NTM	NTM	NTM	NTM	(%)
Mega Cap	DDD		40.40	10.4	10.4	6.1	10	0.1
Petrobras	PBR		40.40	10.4	10.4	6.1	12	2.1
Exxon Mobil Corporation	XOM		74.62	12.2	8.1	5.3	9	2.1
Chevron Corporation	CVX		80.52	9.5	7.9	5.0	8	3.2
Gazprom (50%)	OGZPY		31.29	24.6	11.5	4.7	6	1.3
BP plc	BP		51.93	10.0	7.9	4.6	7	6.5
ConocoPhillips	COP		68.70	10.9	8.0	4.4	7	2.7
Total S.A.	TOT		60.78	9.1	7.8	4.1	7	5.3
Royal Dutch Shell plc	RDS-A		60.07	7.6	7.1	3.9	7	5.3
Median				10.2	8.0	4.7	7	3.0
Producer/Refiners - Large Cap	DDGUE		10.55		10.1			1.0
BG Group plc	BRGXF		19.75	7.5	10.1	7.4	14	1.0
Imperial Oil Limited (30%)	IMO		43.05	14.2	10.3	7.0	11	0.8
Suncor Energy	SU		43.74	21.7	11.1	6.9	11	0.4
Marathon Oil Corporation	MRO		40.93	8.8	7.8	5.3	10	2.3
PetroChina Company Ltd (14%)	PTR		105.97	14.3	8.7	4.4	9	4.0
StatoilHydro ASA (29%)	STO		23.57	7.9	7.8	4.1	8	6.2
Petro-Canada	PCZ		37.37	7.2	7.0	3.4	6	2.1
Lukoil Oil Company	LUKOY		60.70	18.6	7.5	2.8	4	2.5
Median				11.5	8.3	4.8	10	2.2
Independent Natural Gas and Oil - La								
Chesapeake Energy Corporation	CHK		38.25	11.1	12.6	7.8	15	0.8
Canadian Natural Resources	CNQ		72.11	9.0	11.4	7.5	18	0.5
XTO Energy Inc.	XTO		46.99	11.4	11.4	7.1	16	1.0
EOG Resources	EOG		85.10	9.8	9.8	6.2	15	0.6
Encana Corporation	ECA		63.78	8.6	8.7	6.1	23	2.5
Anadarko Petroleum Corp.	APC		50.90	9.7	9.0	5.8	16	1.4
Devon Energy Corporation	DVN		89.49	9.3	9.9	5.7	13	0.7
Occidental Petroleum Corp.	OXY		67.73	11.8	8.6	5.0	9	1.9
CNOOC Limited (34%)	CEO		113.76	9.3	7.2	4.6	8	4.2
Median				9.7	9.8	6.1	15	1.0
Independent Natural Gas and Oil - Sn			0.02	7.1	14.0	0.7	(05.6)	
Birchcliff Energy Ltd. (US\$)	BIR.TO		9.03	7.1	14.2	9.7	(256)	-
Encore Acquisition Company	EAC		43.52	13.9	9.3	6.5	14	-
Berry Petroleum Company	BRY		33.33	9.7	9.2	6.4	16	0.9
Energy Partners Ltd.	EPL		9.01	7.2	6.5	3.7	0	-
Cimarex Energy Company	XEC		45.95	7.4	7.4	3.7	8	0.5
Median				7.4	9.2	6.4	11	-
Income	G IT		26.01	10.6	147	11.0	1.4	7.0
San Juan Basin Royalty Trust	SJT		36.91	10.6	14.7	11.3	14	7.2
Canadian Oil Sands Trust	COSWF		37.71	21.6	12.2	8.3	10	11.6
Hugoton Royalty Trust	HGT		26.88	13.1	13.3	8.6	12	8.4
Pengrowth Energy Trust	PGH		15.59	9.1	8.0	6.0	(134)	16.6
Enerplus Resources Fund	ERF		35.95	9.6	9.3	5.8	27	15.0
Penn West Energy Trust	PWE		24.41	7.5	8.1	5.8	13	16.0
Median				10.1	10.7	7.1	12	13.3
EV = Enterprise Value = Market Cap an							on	
and amortization; NTM = Next Twelve				30, 2009; 1	P/E = Stoc	k Price to		
Earnings; PV = Present Value of oil and	gas and oth	ier l	businesses					



		McDe	ep Ener	gy Portfol	lio				
	Geogra	aphic Do	micile a	nd Business	Segmer	nts			
					Prese	nt Value by	Segment	: (%)	
		Price			North	Rest			
		(US\$/sh)	EV/	Enterprise	Amer.	of World			
		15-Sep	Market	Value	Natural	Natural	Oil	Down-	McDep
	Symbol	2008	Cap	(\$mm)	Gas	Gas	Prod'n	stream	Ratio
U.S. Integrated									
Marathon Oil Corporation	MRO	40.93	1.45	42,300	8	6	66	20	0.67
Exxon Mobil Corporation	XOM	74.62	1.09	426,000	7	17	57	20	0.65
Chevron Corporation	CVX	80.52	1.16	205,000	5	8	75	12	0.63
ConocoPhillips	COP	68.70	1.45	155,000	15	7	59	19	0.55
Total or Median *	13%	33%		828,000					0.64
Europe									
BG Group	BRGXF	19.75	1.11	74,100		23	58	20	0.73
BP plc	BP	51.93	1.42	232,000	9	10	70	11	0.59
Royal Dutch Shell plc	RDS-A	60.07	1.26	233,000	3	16	55	26	0.56
Total S.A.	TOT	60.78	1.20	165,000		17	68	15	0.53
StatoilHydro ASA (29%)	STO	23.57	1.31	28,600		38	62		0.52
Total or Median *	11%	29%		733,000					0.56
Brazil/China/Russia									
CNOOC Limited (34%)	CEO	113.76	1.00	17,300		9	91		0.63
Petrobras	PBR	40.40	1.20	212,000			85	8	0.58
PetroChina Company Ltd (14%)	PTR	105.97	1.10	29,900		9	80	12	0.50
Gazprom (50%)	OGZPY	31.29	1.27	114,000		82	18		0.41
Lukoil Oil Company	LUKOY	60.70	1.08	55,000			66	34	0.37
Total or Median *	18%	17%		428,000					0.50
U.S. Independent	a		1.00	1 500	100				
San Juan Basin Royalty Trust	SJT	36.91	1.00	1,720	100		0.2		0.77
Encore Acquisition Company	EAC	43.52	1.66	3,780	17		83		0.70
Berry Petroleum Company	BRY	33.33	2.15	3,280	38		62		0.69
Hugoton Royalty Trust	HGT	26.88	1.00	1,080	100		16	2	0.64
Anadarko Petroleum Corp.	APC	50.90	1.72	41,400	51	-	46	3	0.64
EOG Resources	EOG	85.10	1.12	23,800	69	5	26		0.63
XTO Energy Inc.	XTO	46.99	1.44	39,200	74		26		0.62
Chesapeake Energy Corporation	CHK	38.25	1.74	36,700	84	1	16		0.62
Occidental Petroleum Corp.	OXY	67.73	1.10	61,700	12	1	81	6	0.59
Devon Energy Corporation	DVN	89.49	1.21	48,900	55		45		0.57
Energy Partners Ltd.	EPL	9.01 45.95	3.11	900 4,520	38		62 37		0.57
Cimarex Energy Company Total or Median *	XEC	43.93	1.15	267,000	63		57		
Canada	41%	1170		207,000					0.63
Pengrowth Energy Trust	PGH	15.59	1.55	6.000	33		67		0.74
Penn West Energy Trust	PWE	24.41	1.57	14,600	31		69		0.74
Encana Corporation	ECA	63.78	1.37	65,200	69		25	6	0.71
Birchcliff Energy Ltd. (US\$)	BIR.TO	9.03	1.17	1,240	69		31	0	0.68
Imperial Oil Limited (30%)	IMO		1.17	12,500	69		81	13	0.68
Canadian Oil Sands Trust	COSWF	37.71	1.06	19,300	0		100	15	0.68
Canadian Natural Resources	CNQ	72.11	1.38	53,900	27		73		0.66
Enerplus Resources Fund	ERF	35.95	1.38	7,440	48		52		0.63
Suncor Energy	SU	43.74	1.16	48,200	48		93	4	0.62
Petro-Canada	PCZ	37.37	1.30	23,600	11	3	73	13	0.02
Total or Median *	17%	10%	1.50	252,000	11	5	15	1.5	0.48
Composite	1770	1070		202,000					0.00
Present Value Weighting	100%	100%		2,508,000	11	14	61	13	0.59
Equal Weighting	10070	10070		2,000,000	29	7	57	7	0.59
Former Recommended Wtg.					31	11	51	7	0.01
i ormer Recommended Wig.					51	11	51		
* Percentages in Symbol column r	efer to for	ner recom	mmended	weightings P	ercentages	in Price co	olumn refe	er to	
current market Enterprise Value			linenaeu						
Line prise value		2							



Sacrifice Acknowledged

John W. Nichols, 1914-2008 Ten Percent a Year Volume Growth

Price Controls and Punitive Taxes Punitive Taxes and Price Controls

High-Quality Offshore Producer Resources Concentrated on Fewer Shares May Form Two Independent Companies

Horizon Slippage Sale Called Off

Takeover Climate

Income Model Oil Sands Strategy

Domestic Demand Up, Exports Down

Strong Operating and Financial Results

Long-Term Natural Gas Income (Income Weekly) Long-Term Natural Gas Income (Income Weekly) Distribution Yield 13% (Income Weekly)

Index of Recent Research

Theme

Stock Ideas

SLUCK I	ue	as						
<u>Date</u>		<u>Symbol</u>	<u>Subject</u>					
2-Sep		LUKOY	Lukoil Oil Company					
27-Aug		PTR	PetroChina Company Limited					
27-Aug		CEO	CNOOC Ltd					
22-Aug	*	HGT	Hugoton Royalty Trust					
15-Aug	*	SJT	San Juan Basin Royalty Trust					
8-Aug	*	PWE	Penn West Energy Trust					
7-Aug	*	CNQ	Canadian Natural Resources					
6-Aug	*	EAC	Encore Acquisition Company					
6-Aug	*	DVN	Devon Energy Corporation					
5-Aug	*	XEC	Cimarex Energy Company					
5-Aug	*	APC	Anadarko Petroleum Corporation					
4-Aug	*	PTR	PetroChina Company Limited					
4-Aug	*	CEO	CNOOC Ltd					
1-Aug	*	CVX	Chevron Corporation					
1-Aug	*	TOT	Total S.A.					
1-Aug	*	STO	StatoilHydro ASA					
31-Jul	*	IMO	Imperial Oil Limited					
31-Jul	*	MRO	Marathon Oil Corporation					
31-Jul	*	XOM	Exxon Mobil Corporation					
31-Jul	*	RDSA	Royal Dutch Shell plc					
30-Jul	*	EOG	EOG Resources Inc.					
29-Jul	*	COSWF	Canadian Oil Sands Trust					
29-Jul	*	BP	BP p.l.c.					
25-Jul	*	BRY	Berry Petroleum					
24-Jul	*	ECA	EnCana Corporation					
24-Jul	*	OXY	Occidental Petroleum Corporation					
24-Jul	*	SU	Suncor Energy					
24-Jul	*	PCZ	Petro-Canada					
23-Jul	*	COP	ConocoPhillips					
22-Jul	*	XTO	XTO Energy Inc.					
1-Jul	*	OGZPY	Gazprom					
22-May	*	PBR	Petrobras					
Meter Reader								

16-Sep Weekly Deep Water Brazil 9-Sep Weekly Now What? 5-Sep Flash Suspend Buy Recommendations 2-Sep Weekly Obama for Natural Gas

Oil and Gas Income Stocks

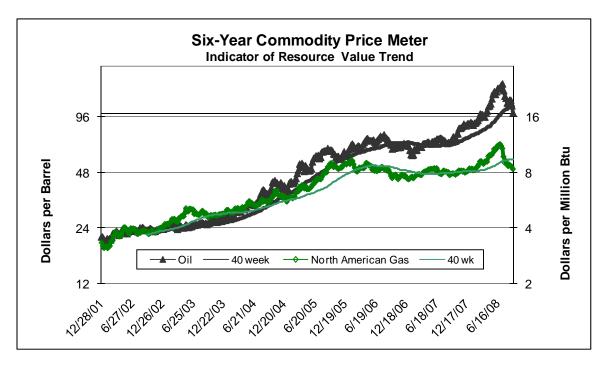
12-Sep	Canadian Oil Sands Trust	Distribution Yield of 9.4%
5-Sep	Weekly	Long-Term Oil Price in Up
29-Aug	Weekly	Opportunity in Long-Term
22-Aug * HGT	Hugoton Royalty Trust	Long-Term Natural Gas In

* Archived on www.mcdep.com

Income Model Rebuilding North American Natural Gas Stellar Record Marred by Hedging Distribution Increased 25% Control Dispute in Russia A Bit of Haynesville Glamour Two Growth Companies in One Largest Oil Producer in Texas **Operations Challenge** Construction Challenge Income Model Stock Price Momentum Changes Cheap Natural Gas (Meter Reader) Raise Net Present Value to \$75 a Share

> 6 if \$80 Oil ptrend n Natural Gas Futures ncome





Disclaimer: This analysis was prepared by Kurt Wulff, Manager of McDep LLC as of January 1, 2008. Previously Mr. Wulff was doing business as McDep Associates. The firm used sources and data believed to be reliable, but makes no representation as to their accuracy or completeness. This analysis is intended for informational purposes and is not a solicitation to buy or sell a security. Past performance is no guarantee of future results.

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Research Methodology/Ratings Description: McDep LLC is an independent research originator focused on oil and gas stocks exclusively. The firm applies the forty years of experience of its analyst to estimate a present value of the oil and gas resources and other businesses of covered companies. That value is compared with a company's stock market capitalization and debt. Stocks with low market cap and debt relative to present value tend to outperform stocks with high market cap and debt relative to present value. Buy recommendations are expected to deliver a total return better than 7% per year above inflation. Hold recommendations are expected to deliver a total return less than inflation.