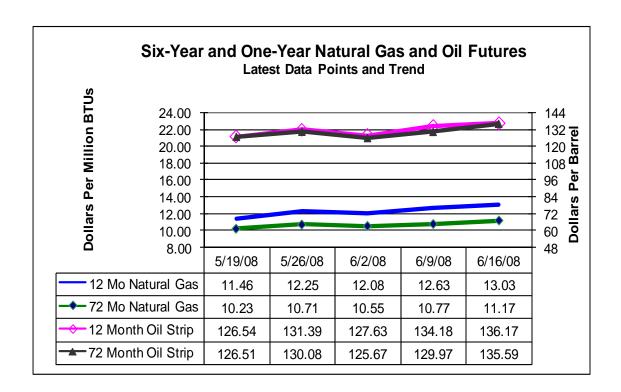


### **Shale Gas**

### **Summary and Recommendation**

Buy-recommendations **Devon Energy (DVN), XTO Energy (XTO), EOG Resources (EOG)** and **Encana (ECA)** are among the leaders developing new natural gas supply from previously unyielding shale formations. DVN produces a third of the three billion cubic feet daily (bcfd) that has propelled the Barnett Shale under and around Fort Worth, Texas, to a position as the top U.S. natural gas field. By comparison, total U.S. natural gas production last year was 20 trillion cubic feet, or 55 bcfd. In his presentation at the Canadian Association of Petroleum Producers (CAPP) conference in Calgary on June 16, Chief Executive Randy Eresman discussed Encana's results in the Horn River Shale in British Columbia and the Haynesville Shale in Louisiana. Considering both potentially comparable in opportunity to the Barnett, Mr. Eresman expects his company to develop a billion cubic feet daily from each. Shale gas resource potential is large, but it has to be unlocked well by well. Flush initial production dissipates in the first year, insuring that price must remain attractive for drilling to continue and overall volume to be sustained. Shale gas joins coal bed methane and tight gas as prominent unconventional sources of natural gas supply that respond to higher price.

Kurt H. Wulff, CFA



 $A\ Weekly\ Analysis\ of\ Energy\ Stocks\ Using\ the\ McDep\ Ratio$  June 17, 2008



Oil and	Gas Pro	oduc	cers - K	ank by	McDep R	atio		
			Price			Net		
			(US\$/sh)		Market	Present	Debt/	
	Symbol/		16-Jun	Shares	Сар	Value	Present	McDe
		ating	2008	(mm)	(US\$mm)	(US\$/sh)	Value	Rati
Mega Cap								
Petrobras	PBR		68.52	4,387	300,600	75.00	0.10	0.92
Chevron Corporation	CVX	В	99.49	2,206	220,000	135.00	0.08	0.70
Exxon Mobil Corporation	XOM	В	87.99	5,362	472,000	118.00	0.05	0.7
BP plc	BP	В	68.88	3,146	217,000	104.00	0.16	0.7
Royal Dutch Shell plc	RDS-A	В	80.99	3,106	252,000	120.00	0.10	0.7
Gazprom (50%)	OGZPY	В	58.50	2,940	172,000	88.00	0.09	0.6
ConocoPhillips	COP	В	94.58	1,582	150,000	150.00	0.17	0.6
Total S.A.	TOT	В	81.28	2,254	183,000	125.00	0.10	0.6
Total or Median					1,967,000		0.10	0.7
Producer/Refiners - Large Cap Imperial Oil Limited (30%)	IMO	В	56.50	272	15,360	65.00	0.05	0.88
Suncor Energy	SU	В	63.05	946	59,650	75.00	0.03	0.8
StatoilHydro ASA (29%)	STO	В	38.46	928	35,690	52.00	0.08	0.8
Marathon Oil Corporation	MRO	Н	51.49	717	36,920	75.00	0.12	0.7
Petro-Canada	PCZ	В	57.50	488	28,060	90.00	0.10	0.6
Lukoil Oil Company	LUKOY	В	105.50	826	87,000	170.00	0.01	0.6
PetroChina Company Ltd (14%)	PTR	В	131.06	256	33,580	220.00	0.04	0.6
Total or Median					296,000		0.08	0.7
Independent Natural Gas and Oil -	Large Ca	ıp			· · · · · · · · · · · · · · · · · · ·			
Encana Corporation	ECA	В	93.41	753	70,300	100.00	0.18	0.9
EOG Resources	EOG	В	129.43	250	32,300	140.00	0.05	0.9
CNOOC Limited (34%)	CEO	Н	167.08	152	25,440	180.00	-	0.9
Canadian Natural Resources	CNQ	В	102.43	540	55,300	124.00	0.17	0.8
Anadarko Petroleum Corp.	APC	В	77.69	470	36,500	100.00	0.27	0.8
Chesapeake Energy Corporation	CHK		61.06	493	30,100	80.00	0.28	0.8
XTO Energy Inc.	XTO	В	68.47	549	37,580	88.00	0.19	0.8
Occidental Petroleum Corp.	OXY	В	89.54	828	74,100	120.00	0.05	0.7
Devon Energy Corporation	DVN	В	116.46	449	52,300	170.00	0.10	0.7
Total or Median	Small Ca				414,000		0.17	0.8
Independent Natural Gas and Oil - Birchcliff Energy Ltd. (US\$)	BIR.TO	p	13.89	112	1.560	14.00	0.00	1.0
Encore Acquisition Company	EAC	В	72.77	54	1,560 3,920	75.00	0.09	0.98
Berry Petroleum Company	BRY	В	56.25	45	2,550	65.00	0.23	0.9
Cimarex Energy Company	XEC	В	71.98	85	6,130	100.00	0.07	0.7
Energy Partners Ltd.	EPL		15.03	32	480	30.00	0.35	0.6
Total or Median			10.00		14,600	20.00	0.25	0.9
Income					1.,000		0.20	0.7
Kinder Morgan Energy Partners, L.P	KMP	S	59.28	189	11,210	17.00	0.57	2.0
Kinder Morgan Management, LLC	KMR	S	55.74	65	3,620	17.00	0.57	1.9
San Juan Basin Royalty Trust	SJT	В	45.05	47	2,100	48.00	-	0.9
Canadian Oil Sands Trust	COSWF	В	52.55	479	25,170	57.00	0.04	0.9
Pengrowth Energy Trust	PGH		20.44	247	5,050	24.00	0.25	0.8
Penn West Energy Trust	PWE	В	33.97	377	12,800	40.00	0.25	0.8
Hugoton Royalty Trust	HGT	В	34.61	40	1,380	42.00	-	0.8
Enerplus Resources Fund	ERF		46.64	153	7,140	63.00	0.14	0.7
Total or Median					68,500		0.19	0.9
B = Buy, S = Sell, H = Hold								
Present Value = Shares times Net Pre			ded by (1-D	ebt/Prese	nt Value).			
Debt = Present Value times Debt/Pres								
McDep Ratio = Market cap and Debt	to present	t valu	e of oil and	gas and o	ther businesse	2		

A Weekly Analysis of Energy Stocks Using the McDep Ratio  $\tt June~17,2008$ 



			Price	Adjustd				Divd or
			(US\$/sh)	Resrvs/	PV/	EV/		Distrib
	Symbol/		16-Jun	Prod	Ebitda	Ebitda	P/E	NTM
	Ra	ting	2008	NTM	NTM	NTM	NTM	(%)
Mega Cap								
Gazprom (50%)	OGZPY	В	58.50	24.6	12.0	8.3	13	0.8
Petrobras	PBR		68.52	10.4	8.2	7.6	13	1.3
Exxon Mobil Corporation	XOM	В	87.99	12.2	6.3	4.8	8	1.8
Chevron Corporation	CVX	В	99.49	9.4	5.7	4.3	7	2.6
Total S.A.	TOT	В	81.28	9.0	6.1	4.2	7	3.9
BP plc	BP	В	68.88	9.9	5.8	4.2	6	4.7
ConocoPhillips	COP	В	94.58	10.7	5.7	3.9	6	2.0
Royal Dutch Shell plc	RDS-A	В	80.99	7.5	5.4	3.8	7	4.0
Median C				10.2	6.0	4.3	7	2.3
Producer/Refiners - Large Cap	D (C	D	7.5.70	12.0	7.0		10	
Imperial Oil Limited (30%)	IMO	В	56.50	13.9	7.9	7.0	12	0.6
Suncor Energy	SU	В	63.05	21.2	7.6	6.5	10	0.6
StatoilHydro ASA (29%)	STO	В	38.46	7.7	5.7	4.4	8	4.3
Marathon Oil Corporation	MRO	Н	51.49	8.3	5.4	4.1	7	1.9
PetroChina Company Ltd (14%)	PTR	В	131.06	14.4	6.4	3.9	7	4.0
Lukoil Oil Company	LUKOY PCZ	В	105.50	18.4	6.2	3.9	6	1.5
Petro-Canada	PCZ	В	57.50	6.5	6.2	3.0 4.1	5 7	0.9 1.5
Median  Independent Natural Gas and Oil - La	rgo Con			13.9	0.2	4.1	/	1.3
Chesapeake Energy Corporation	CHK		61.06	11.5	7.1	5.9	9	0.4
Canadian Natural Resources	CNQ	В	102.43	8.7	6.8	5.8	11	0.4
XTO Energy Inc.	XTO	В	68.47	12.2	6.9	5.6	13	0.4
EOG Resources	EOG	В	129.43	10.0	6.0	5.5	11	0.7
Encana Corporation	ECA	В	93.41	8.7	5.6	5.3	10	1.7
CNOOC Limited (34%)	CEO	Н	167.08	9.2	5.6	5.2	9	2.3
Occidental Petroleum Corp.	OXY	В	89.54	11.6	6.1	4.6	8	1.4
Anadarko Petroleum Corp.	APC	В	77.69	9.5	5.3	4.5	8	0.9
Devon Energy Corporation	DVN	В	116.46	9.4	6.0	4.3	8	0.5
Median	DVII		110.10	9.5	6.0	5.3	9	0.7
Independent Natural Gas and Oil - Sm	all Cap			7.0	0.0			
Birchcliff Energy Ltd. (US\$)	BIR.TO		13.89	7.0	7.8	7.8	22	
Encore Acquisition Company	EAC	В	72.77	13.9	6.3	6.2	11	-
Berry Petroleum Company	BRY	В	56.25	10.2	6.3	5.7	9	0.5
Cimarex Energy Company	XEC	В	71.98	7.5	4.7	3.5	7	0.2
Energy Partners Ltd.	EPL		15.03	7.3	3.3	2.2		-
Median				7.5	6.3	5.7	10	-
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S	59.28		7.4	15.3	23	6.2
Kinder Morgan Management, LLC	KMR	S	55.74		7.4	14.6	22	6.6
San Juan Basin Royalty Trust	SJT	В	45.05	10.4	7.9	7.4	9	11.0
Canadian Oil Sands Trust	COSWF	В	52.55	22.0	7.9	7.3	8	12.0
Hugoton Royalty Trust	HGT	В	34.61	13.1	7.4	6.1	9	11.4
Pengrowth Energy Trust	PGH		20.44	8.9	5.6	5.0	33	12.9
Enerplus Resources Fund	ERF		46.64	9.6	5.9	4.6	7	10.6
Penn West Energy Trust	PWE	В	33.97	7.2	4.9	4.4	9	13.2
Median				10.0	7.4	6.7	9	11.2
EV = Enterprise Value = Market Cap an	d Debt: El	sitda	- Farnings	hefore inte	erect tay	depreciation	, –	

A Weekly Analysis of Energy Stocks Using the McDep Ratio  $\tt June~17,2008$ 



		<u>M</u> c	Dep E	Cnergy	<b>Portf</b>	<u>colio</u>				
Composite of Buy Recommendations										
						North	Rest			
		Price			Non-	Amer.	of World			
		(US\$/sh)		o Weight	U.S.	Natural	Natural	Oil	Down-	
		16-Jun	Equity	EV	HQ	Gas	Gas	Prod'n	stream	McDep
	Symbol	2008	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Ratio
Меда Сар										
Chevron Corporation	CVX	99.49	3.3	3.2		0.2	0.2	2.3	0.5	0.76
Exxon Mobil Corporation	XOM	87.99	3.5	3.2		0.2	0.5	1.8	0.6	0.76
BP plc	BP	68.88	2.9	3.2	3.2	0.3	0.3	2.2	0.4	0.72
Royal Dutch Shell plc	RDS-A	80.99	3.2	3.2	3.2	0.1	0.5	1.7	0.8	0.71
Gazprom	OGZPY	58.50	9.7	9.6	9.6		7.6	2.0		0.69
ConocoPhillips	COP	94.58	5.6	6.4		0.9	0.4	3.8	1.2	0.69
Total S.A.	TOT	81.28	3.2	3.2	3.2		0.5	2.2	0.5	0.68
Total or Median			31	32						0.71
Producer/Refiners - Large	Cap									0.,1
Imperial Oil Limited	IMO	56.50	1.4	1.3	1.3	0.1		1.0	0.2	0.88
Suncor Energy	SU	63.05	1.3	1.3	1.3	0.0		1.2	0.1	0.85
StatoilHydro ASA	STO	38.46	1.6	1.6	1.6	0.0	0.5	1.1	-	0.77
Petro-Canada	PCZ	57.50	1.3	1.3	1.3	0.1	0.0	0.9	0.2	0.77
Lukoil Oil Company	LUKOY	105.50	7.2	6.4	6.4	0.1	0.0	4.6	1.8	0.63
PetroChina Company Ltd (14		131.06	1.7	1.6	1.6		0.1	1.3	0.2	0.63
	PIK	131.00	1.7		1.0	-	0.1	1.3	0.2	
Total or Median Independent Natural Gas as	-4 O:1 T	anas Can		13						0.72
				2.0	2.0	2.0		0.0	0.2	0.05
Encana Corporation	ECA	93.41	3.6	3.8	3.8	2.8	0.2	0.8	0.2	0.95
EOG Resources	EOG	129.43	5.2	4.8		3.4	0.3	1.2		0.93
Canadian Natural Resources	CNQ	102.43	1.5	1.6	1.6	0.4		1.2		0.86
Anadarko Petroleum Corp.	APC	77.69	3.8	4.8		2.5		2.2	0.1	0.84
XTO Energy Inc.	XTO	68.47	4.3	4.8		3.5		1.3		0.82
Occidental Petroleum Corp.	OXY	89.54	3.5	3.2		0.4	0.0	2.6	0.2	0.76
Devon Energy Corporation	DVN	116.46	6.3	6.4		3.4		3.0		0.72
Total or Median			28	29						0.84
Independent Natural Gas at		mall Cap								
<b>Encore Acquisition Company</b>	EAC	72.77	2.7	3.2		0.5		2.7		0.98
Berry Petroleum Company	BRY	56.25	1.2	1.6		0.7		0.9		0.91
Cimarex Energy Company	XEC	71.98	3.4	3.2		2.0		1.2		0.74
Total or Median			7	8						0.91
Income										
San Juan Basin Royalty Trust	SJT	45.05	7.4	6.4		6.4				0.94
Canadian Oil Sands Trust	COSWF	52.55	5.6	5.1	5.1	(0.5)		5.6		0.93
Penn West Energy Trust	PWE	33.97	2.1	2.6	2.6	0.8		1.8		0.89
Hugoton Royalty Trust	HGT	34.61	3.7	3.2		3.2		1.0		0.82
Total or Median	1101	301	19	17		3.2				0.91
Portfolio Composite			100	100	46	31	11	51	7	0.77
Canada			100	100	17		11		,	3.,,,
Russia					16					
Europe					11					
China					2					
China										
Notes Demonstrates in the Dem	folio W:	olat EV	1		d to mel			na fuar: 1	mimle of O	60/
Note: Percentages in the Por		gnt - EV (	corumn c	orrespon	u to unle	everea pos	luons rangi	ng irom t	ripie at 9	.0%
to four-tenths at 1.3%	).	l	1	1					1	

A Weekly Analysis of Energy Stocks Using the McDep Ratio  $\tt June~17,2008$ 



## **Index of Recent Research**

### **Stock Ideas**

<u>Date</u>		<u>Symbol</u>	<u>Subject</u>	<u>Theme</u>
17-Jun		XTO	XTO Energy Inc.	Beating a Tax Deadline
16-Jun		BRY	Berry Petroleum	Timely Natural Gas Deal
13-Jun		PWE	Penn West Energy Trust	Raise Distribution, Adjust NPV (Income Weekly)
6-Jun		COSWF	Canadian Oil Sands Trust	Raise Distribution Estimate 50% (Income Weekly)
4-Jun		LUKOY	Lukoil Oil Company	Raise Net Present Value to \$170 a Share
29-May		XTO	XTO Energy Inc.	Low McDep Ratio Natural Gas
27-May	*	EAC	Encore Acquisition Company	Bullish Encore (Meter Reader)
22-May		PBR	Petrobras	Raise Net Present Value to \$75 a Share
13-May	*	PWE	Penn West Energy Trust	Raise Net Present Value to \$45 a Share
13-May	*	STO	StatoilHydro ASA	Raise Net Present Value to \$52 a Share
13-May	*	ECA	EnCana Corporation	Splits Natural Gas and Oil Sands (Meter Reader)
9-May	*	CNQ	Canadian Natural Resources	Raise Net Present Value to \$124 a Share
8-May	*	EAC	Encore Acquisition Company	\$120 a Barrel Excitement
7-May	*	DVN	Devon Energy Corporation	Resources Three Times Reserves
7-May	*	TOT	Total S.A.	Euro Oil Leader
6-May	*	XEC	Cimarex Energy Company	Raise Net Present Value to \$85 a Share
6-May	*	APC	Anadarko Petroleum Corporation	Positives Outweigh Negatives
2-May	*	CVX	Chevron Corporation	Refining Penalty
2-May	*	EOG	EOG Resources Inc.	Stock Outperforms
1-May	*	IMO	Imperial Oil Limited	ExxonMobil's Undeveloped Opportunities
1-May	*	MRO	Marathon Oil Corporation	Hangover from Last Year's Refining Boom
1-May	*	XOM	Exxon Mobil Corporation	World's Safest Investment
29-Apr	*	BP	BP p.l.c.	Getting Back on Track
29-Apr	*	PCZ	Petro-Canada	Low McDep Ratio
29-Apr	*	RDSA	Royal Dutch Shell plc	Non U.S. Energy MegaCap
28-Apr	*	PTR	PetroChina Company Limited	Winter Sacrifice
28-Apr	*	CEO	CNOOC Ltd	Raise Net Present Value to \$140 a Share
25-Apr	*	SJT	San Juan Basin Royalty Trust	Better News Ahead (Income Weekly)
24-Apr	*	COP	ConocoPhillips	Timely Investment Choice
24-Apr	*	OXY	Occidental Petroleum Corporation	Raise Net Present Value to \$100 a Share
24-Apr	*	SU	Suncor Energy	Booming Oil
22-Apr	*	ECA	EnCana Corporation	Largest North American Natural Gas Producer
18-Apr	*	HGT	Hugoton Royalty Trust	Simpson Sustainability (Income Weekly)
16-Apr	*	KMP	Kinder Morgan	Mounting Oil Losses
18-Feb	*	OGZPY	Gazprom	60-Day Bargain, 200-Day Momentum

### **Meter Reader**

17-Jun		Weekly	Shale Gas
10-Jun		Weekly	NASDAQ 5000, Oil 500
3-Jun	*	Weekly	Summer Crack
27-May	*	Encore Acquisition Company	Bullish Encore

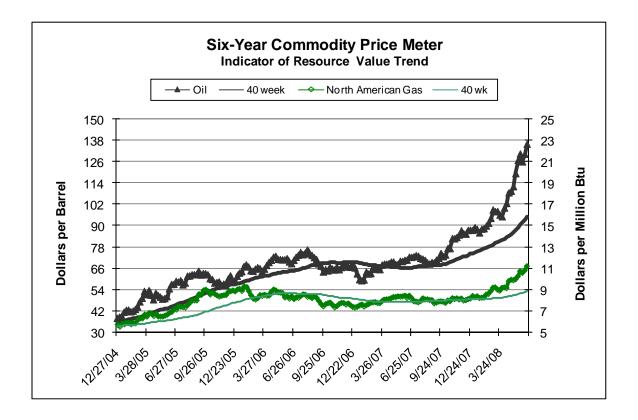
### Oil and Gas Income Stocks

13-Jun	Penn West Energy Trust	Raise Distribution, Adjust NPV
6-Jun	Canadian Oil Sands Trust	Raise Distribution Estimate 50%
30-May	Weekly	Portfolio Builders
23-May *	Weekly	Stocks Lag Oil Price

<sup>\*</sup> Archived on www.mcdep.com

A Weekly Analysis of Energy Stocks Using the McDep Ratio June 17, 2008





**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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