



# Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio  
July 15, 2008

## Forty Percent Premium for Natural Gas Explorer

### Summary and Recommendation

Canadian producer Duvernay Oil (DDV.TO) accepted a \$6 billion offer from buy-recommended **Royal Dutch Shell (RDS)** that sparked a stock price gain on July 14 in McDep covered companies with nearby exploration of 12%, 5% and 4% respectively in **Birchcliff Energy (BIR.TO)**, buy-recommended **Canadian Natural Resources (CNQ)** and buy-recommended **Encana (ECA)**. Offering a 42% premium over closing price the previous day for Duvernay, RDS may be most interested in exploration potential in the Montney trend of Northeast British Columbia and Northwest Alberta. In addition to 96 million barrels of proven reserves, Duvernay listed a thousand Montney/Doig locations that might have a speculative net present value of \$6 billion when it presented to investors at the Canadian Association of Petroleum Producers (CAPP) conference last month (see graphic below). At the same conference, Birchcliff listed 120 locations, which might have a half billion dollars net present value on similar assumptions. As for RDS, the pending acquisition signals the return of a past leader to Canadian natural gas. The deal reinforces our belief that new natural gas supply is the most under-rated alternative energy source to meet the demand oil may not fill.

Kurt H. Wulff, CFA

	<b>Gas Development Project Parameters</b> <i>(all figures are Duvernay estimates unless otherwise indicated)</i>		
	<b>Sunset - Groundbirch</b>		<b>Deep Basin</b>
	<b>Doig</b>	<b>Montney</b>	
<b>Total Cost per Well (Drill, Complete, Tie-in) (000's)</b>	\$2,300	\$5,500	\$3,750
<b>Average Reserves/Well (bcf)</b>	1.9	4.5	2.7
<b>Year 1 Full Production Rate</b>	950 mcfpd	2,750 mcfpd	1,650 mcfpd
<b>Development Cost/boe</b>	\$7.26	\$7.33	\$8.33
<b>Operating Expenses/boe</b>	\$3.44	\$3.08	\$5.27
<b>Royalty Rate</b>	19%	23%	27%
<b>Net Present Value @ 10% (000's)</b>	\$4,730	\$7,052	\$4,591
<b>Long Term Gas Price – 1 Year</b>	\$7.45/mcf	\$7.45/mcf	\$7.75/mcf
<b>Future Development Locations</b>	350	350-700	1,380



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Oil and Gas Producers - Rank by McDep Ratio								
			Price			Net		
			(US\$/sh)		Market	Present	Debt/	
	Symbol/		14-Jul	Shares	Cap	Value	Present	McDep
		Rating	2008	(mm)	(US\$m)	(US\$/sh)	Value	Ratio
<b>Mega Cap</b>								
Petrobras	PBR		62.36	4,387	273,570	75.00	0.10	0.85
Exxon Mobil Corporation	XOM	B	85.42	5,362	458,000	118.00	0.05	0.74
Chevron Corporation	CVX	B	92.80	2,206	205,000	135.00	0.08	0.71
BP plc	BP	B	64.32	3,146	202,000	104.00	0.16	0.68
Royal Dutch Shell plc	RDS-A	B	76.23	3,106	237,000	120.00	0.10	0.67
Total S.A.	TOT	B	78.57	2,254	177,000	125.00	0.10	0.67
ConocoPhillips	COP	B	88.47	1,582	140,000	150.00	0.17	0.66
Gazprom (50%)	OGZPY	B	53.25	2,865	152,600	88.00	0.09	0.64
<i>Total or Median</i>					1,845,000		0.10	0.68
<b>Producer/Refiners - Large Cap</b>								
Suncor Energy	SU	B	61.19	946	57,890	75.00	0.08	0.83
Imperial Oil Limited (30%)	IMO	B	52.77	272	14,340	65.00	0.05	0.82
StatoilHydro ASA (29%)	STO	B	33.80	928	31,370	52.00	0.12	0.69
Marathon Oil Corporation	MRO	H	45.66	717	32,740	75.00	0.18	0.68
Petro-Canada	PCZ	B	52.24	488	25,490	90.00	0.10	0.62
PetroChina Company Ltd (14%)	PTR	B	126.93	256	32,520	220.00	0.04	0.59
Lukoil Oil Company	LUKOY	B	96.90	826	80,000	170.00	0.01	0.58
<i>Total or Median</i>					274,000		0.08	0.68
<b>Independent Natural Gas and Oil - Large Cap</b>								
CNOOC Limited (34%)	CEO	H	166.37	152	25,330	180.00	-	0.92
Encana Corporation	ECA	B	86.13	753	64,900	100.00	0.18	0.89
EOG Resources	EOG	B	119.04	250	29,700	140.00	0.05	0.86
Chesapeake Energy Corporation	CHK		63.00	556	35,030	80.00	0.22	0.83
Canadian Natural Resources	CNQ	B	96.12	540	51,900	124.00	0.17	0.81
Anadarko Petroleum Corp.	APC	B	70.10	470	32,900	100.00	0.27	0.78
XTO Energy Inc.	XTO	B	60.62	549	33,290	88.00	0.19	0.75
Occidental Petroleum Corp.	OXY	B	84.06	828	69,600	120.00	0.05	0.71
Devon Energy Corporation	DVN	B	111.11	449	49,900	170.00	0.10	0.69
<i>Total or Median</i>					393,000		0.17	0.81
<b>Independent Natural Gas and Oil - Small Cap</b>								
Birchcliff Energy Ltd. (US\$)	BIR.TO		15.10	112	1,690	14.00	0.09	1.07
Encore Acquisition Company	EAC	B	69.88	54	3,770	75.00	0.25	0.95
Berry Petroleum Company	BRY	B	58.18	45	2,640	65.00	0.32	0.93
Cimarex Energy Company	XEC	B	63.81	85	5,440	100.00	0.07	0.66
Energy Partners Ltd.	EPL		14.26	32	450	30.00	0.35	0.66
<i>Total or Median</i>					14,000		0.25	0.93
<b>Income</b>								
Kinder Morgan Energy Partners, L.P.	KMP	S	56.82	189	10,750	17.00	0.57	2.01
Kinder Morgan Management, LLC	KMR	S	54.00	65	3,510	17.00	0.57	1.94
Canadian Oil Sands Trust	COSWF	B	50.61	479	24,240	57.00	0.04	0.89
San Juan Basin Royalty Trust	SJT	B	42.51	47	1,980	48.00	-	0.89
Penn West Energy Trust	PWE	B	31.39	377	11,830	40.00	0.25	0.84
Pengrowth Energy Trust	PGH		18.62	247	4,600	24.00	0.25	0.83
Hugoton Royalty Trust	HGT	B	33.37	40	1,330	42.00	-	0.79
Enerplus Resources Fund	ERF		43.60	153	6,670	63.00	0.14	0.74
<i>Total or Median</i>					64,900		0.20	0.86
B = Buy, S = Sell, H = Hold								
Present Value = Shares times Net Present Value divided by (1-Debt/Present Value).								
Debt = Present Value times Debt/Present Value								
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.								



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Oil and Gas Producers - Rank by EV/Ebitda								
			Price (US\$/sh)	Adjustd Resrvs/ Prod	PV/ Ebitda	EV/ Ebitda	P/E	Divd or Distrib
	Symbol/ Rating		14-Jul 2008	NTM	NTM	NTM	NTM	NTM (%)
<b>Mega Cap</b>								
Gazprom (50%)	OGZPY	B	53.25	24.6	10.5	6.7	10	0.9
Petrobras	PBR		62.36	10.4	7.7	6.6	11	1.4
Exxon Mobil Corporation	XOM	B	85.42	12.2	6.1	4.5	7	1.9
Chevron Corporation	CVX	B	92.80	9.4	5.5	3.9	6	2.8
Total S.A.	TOT	B	78.57	9.0	5.8	3.9	6	4.2
BP plc	BP	B	64.32	9.9	5.6	3.8	6	5.0
ConocoPhillips	COP	B	88.47	10.7	5.5	3.6	5	2.1
Royal Dutch Shell plc	RDS-A	B	76.23	7.5	5.2	3.5	6	4.2
	<i>Median</i>			10.2	5.7	3.9	6	2.5
<b>Producer/Refiners - Large Cap</b>								
Imperial Oil Limited (30%)	IMO	B	52.77	13.9	7.5	6.2	10	0.7
Suncor Energy	SU	B	61.19	21.2	7.1	5.9	9	0.6
StatoilHydro ASA (29%)	STO	B	33.80	7.7	5.4	3.7	7	5.0
Marathon Oil Corporation	MRO	H	45.66	8.3	5.3	3.6	6	2.1
PetroChina Company Ltd (14%)	PTR	B	126.93	14.4	6.0	3.6	6	4.1
Lukoil Oil Company	LUKOY	B	96.90	18.4	5.9	3.4	5	1.7
Petro-Canada	PCZ	B	52.24	6.5	4.2	2.6	4	1.0
	<i>Median</i>			13.9	5.9	3.6	6	1.7
<b>Independent Natural Gas and Oil - Large Cap</b>								
Chesapeake Energy Corporation	CHK		63.00	11.5	7.7	6.4	11	0.4
Canadian Natural Resources	CNQ	B	96.12	8.7	6.7	5.4	10	0.4
XTO Energy Inc.	XTO	B	60.62	12.2	7.1	5.3	11	0.8
EOG Resources	EOG	B	119.04	10.0	6.1	5.2	10	0.4
Encana Corporation	ECA	B	86.13	8.7	5.8	5.1	9	1.9
CNOOC Limited (34%)	CEO	H	166.37	9.2	5.2	4.8	8	2.3
Devon Energy Corporation	DVN	B	111.11	9.4	6.0	4.1	7	0.5
Anadarko Petroleum Corp.	APC	B	70.10	9.5	5.3	4.1	7	1.0
Occidental Petroleum Corp.	OXY	B	84.06	11.6	5.8	4.1	7	1.5
	<i>Median</i>			9.5	6.0	5.1	9	0.8
<b>Independent Natural Gas and Oil - Small Cap</b>								
Birchcliff Energy Ltd. (US\$)	BIR.TO		15.10	7.0	7.8	8.4	25	-
Encore Acquisition Company	EAC	B	69.88	13.9	6.0	5.7	10	-
Berry Petroleum Company	BRY	B	58.18	10.2	6.1	5.7	9	0.5
Cimarex Energy Company	XEC	B	63.81	7.5	4.7	3.1	6	0.3
Energy Partners Ltd.	EPL		14.26	7.3	3.3	2.1	-	-
	<i>Median</i>			7.5	6.0	5.7	9	-
<b>Income</b>								
Kinder Morgan Energy Partners, L.P.	KMP	S	56.82		7.4	14.9	22	6.5
Kinder Morgan Management, LLC	KMR	S	54.00		7.4	14.3	21	6.8
San Juan Basin Royalty Trust	SJT	B	42.51	10.4	8.6	7.6	9	10.7
Canadian Oil Sands Trust	COSWF	B	50.61	22.0	7.2	6.4	7	13.6
Hugoton Royalty Trust	HGT	B	33.37	13.2	7.8	6.2	9	11.3
Pengrowth Energy Trust	PGH		18.62	8.9	5.4	4.5	24	14.4
Enerplus Resources Fund	ERF		43.60	9.6	5.7	4.2	6	11.5
Penn West Energy Trust	PWE	B	31.39	7.2	4.8	4.0	9	14.4
	<i>Median</i>			10.0	7.3	6.3	9	11.4
EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2009; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses								



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McDep Energy Portfolio										
Composite of Buy Recommendations										
						North	Rest			
		Price			Non-	Amer.	of World			
		(US\$/sh)	Portfolio Weight		U.S.	Natural	Natural	Oil	Down-	
		14-Jul	Equity	EV	HQ	Gas	Gas	Prod'n	stream	McDep
	Symbol	2008	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Ratio
<b>Mega Cap</b>										
Exxon Mobil Corporation	XOM	85.42	3.5	3.2		0.2	0.5	1.8	0.6	0.74
Chevron Corporation	CVX	92.80	3.3	3.2		0.2	0.2	2.3	0.5	0.71
BP plc	BP	64.32	2.9	3.2	3.2	0.3	0.3	2.2	0.4	0.68
Royal Dutch Shell plc	RDS-A	76.23	3.2	3.2	3.2	0.1	0.5	1.7	0.8	0.67
Total S.A.	TOT	78.57	3.2	3.2	3.2		0.5	2.2	0.5	0.67
ConocoPhillips	COP	88.47	5.6	6.4		0.9	0.4	3.8	1.2	0.66
Gazprom	OGZPY	53.25	9.6	9.6	9.6		7.7	1.8		0.64
<i>Total or Median</i>			31	32						0.67
<b>Producer/Refiners - Large Cap</b>										
Suncor Energy	SU	61.19	1.4	1.3	1.3	0.0		1.2	0.1	0.83
Imperial Oil Limited	IMO	52.77	1.4	1.3	1.3	0.1		1.0	0.2	0.82
StatoilHydro ASA	STO	33.80	1.5	1.6	1.6		0.5	1.1	-	0.69
Petro-Canada	PCZ	52.24	1.3	1.3	1.3	0.1	0.0	0.9	0.2	0.62
PetroChina Company Ltd (14	PTR	126.93	1.7	1.6	1.6	-	0.1	1.3	0.2	0.59
Lukoil Oil Company	LUKOY	96.90	7.3	6.4	6.4			4.6	1.8	0.58
<i>Total or Median</i>			15	13						0.66
<b>Independent Natural Gas and Oil - Large Cap</b>										
Encana Corporation	ECA	86.13	3.6	3.8	3.8	2.8		0.8	0.2	0.89
EOG Resources	EOG	119.04	5.3	4.8		3.4	0.3	1.2		0.86
Canadian Natural Resources	CNQ	96.12	1.5	1.6	1.6	0.4		1.2		0.81
Anadarko Petroleum Corp.	APC	70.10	3.7	4.8		2.5		2.2	0.1	0.78
XTO Energy Inc.	XTO	60.62	4.2	4.8		3.5		1.3		0.75
Occidental Petroleum Corp.	OXY	84.06	3.5	3.2		0.4	0.0	2.6	0.2	0.71
Devon Energy Corporation	DVN	111.11	6.3	6.4		3.4		3.0		0.69
<i>Total or Median</i>			28	29						0.78
<b>Independent Natural Gas and Oil - Small Cap</b>										
Encore Acquisition Company	EAC	69.88	2.7	3.2		0.5		2.7		0.95
Berry Petroleum Company	BRY	58.18	1.2	1.6		0.7		0.9		0.93
Cimarex Energy Company	XEC	63.81	3.4	3.2		2.0		1.2		0.66
<i>Total or Median</i>			7	8						0.93
<b>Income</b>										
Canadian Oil Sands Trust	COSWF	50.61	5.7	5.1	5.1	(0.5)		5.6		0.89
San Juan Basin Royalty Trust	SJT	42.51	7.5	6.4		6.4				0.89
Penn West Energy Trust	PWE	31.39	2.1	2.6	2.6	0.8		1.8		0.84
Hugoton Royalty Trust	HGT	33.37	3.7	3.2		3.2				0.79
<i>Total or Median</i>			19	17						0.86
<b>Portfolio Composite</b>										
	Canada				17					
	Russia				16					
	Europe				11					
	China				2					
<i>Total or Median</i>			100	100	46	31	11	50	7	0.73

Note: Percentages in the Portfolio Weight - EV column correspond to unlevered positions ranging from triple at 9.6% to four-tenths at 1.3%.



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## Index of Recent Research

### Stock Ideas

<u>Date</u>	<u>Symbol</u>	<u>Subject</u>	<u>Theme</u>
1-Jul	OGZPY	Gazprom	Cheap Natural Gas (Meter Reader)
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

### Meter Reader

14-Jul		Weekly	Forty Percent Premium for Natural Gas Explorer
7-Jul		Chesapeake Energy Corporation	Haynesville Natural Gas
1-Jul		Gazprom	Cheap Natural Gas
24-Jun	*	Weekly	Small Cap Surge

### Oil and Gas Income Stocks

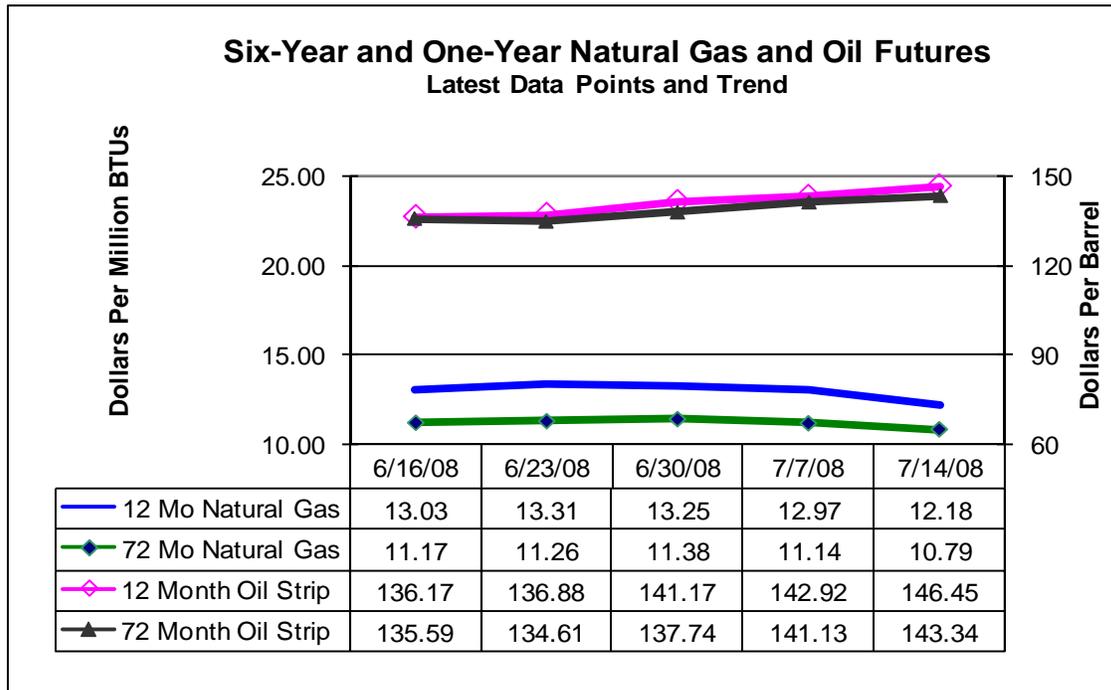
10-Jul		Weekly	Oil Price Trend Up
3-Jul		Weekly	Twenty Dollar Natural Gas Next Winter
27-Jun		Weekly	Monetary Diversification
20-Jun	*	Weekly	Natural Gas Gaining Altitude

\* Archived on [www.mcdep.com](http://www.mcdep.com)



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**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 assume the attributes of the underlying business are reflected in the current price of the stock. Sell recommendations are expected to deliver a total return less than inflation.