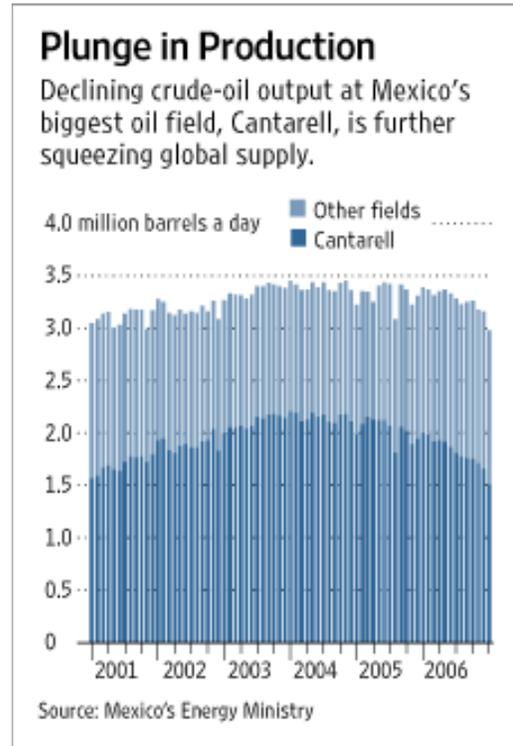


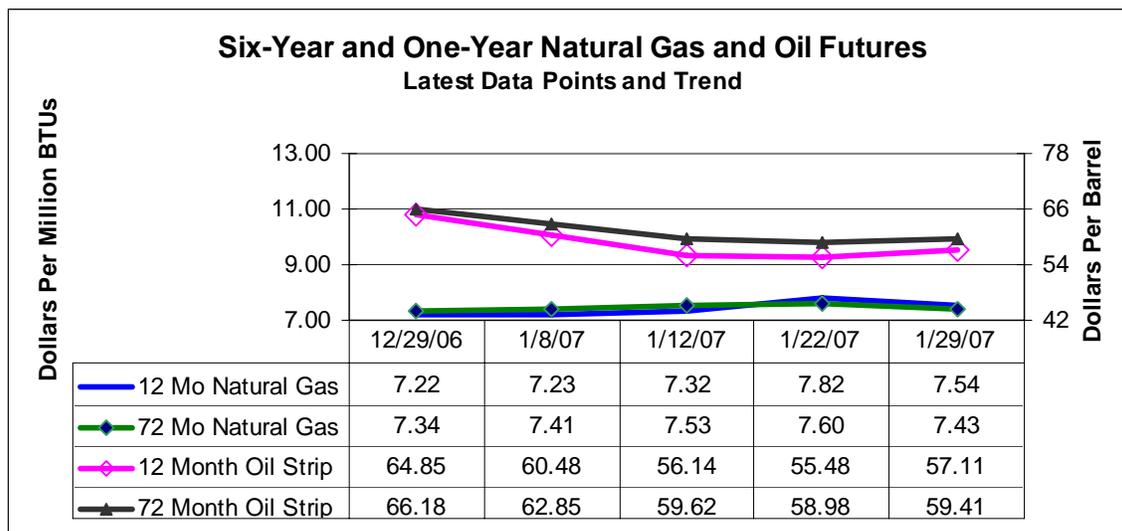
Cantarell over the Cliff

Summary and Recommendation

Accelerating decline in Mexican oil production reminds us of hidden value in proven oil and natural gas reserves in buy-recommended producers including mega cap **Total S.A. (TOT)**, large cap **Anadarko Petroleum (APC)**, and small caps **Berry Petroleum (BRY)** and **Cimarex (XEC)**. The *Wall Street Journal* calls attention to the “Plunge in Production” (see graphic) after highlighting potential acceleration of decline a year ago (see *Meter Reader*, February 15, 2006). For the four stocks, McDep Ratios at 0.85, 0.74, 0.74 and 0.58, respectively, point to increasing undervaluation (see table Rank by McDep Ratio). We suggest full unlevered weightings in the illustrative McDep Energy Portfolio for TOT, APC, XEC and a half weighting for BRY (see table Portfolio Composite). Below the 200 day average, stock price below trend indicates the stocks are out of favor and investors may need more patience.



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 (US\$/sh) 29-Jan 2007	Shares (mm)	Market Cap (US\$m)	Net Present Value (US\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap								
Exxon Mobil Corporation	XOM	B	73.21	5,922	434,000	78.00	0.04	0.94
Total S.A.	TOT	B	66.40	2,302	153,000	80.00	0.14	0.85
Royal Dutch Shell plc	RDS-A	B	67.55	3,200	216,000	84.00	0.13	0.83
BP plc	BP	B	62.83	3,303	208,000	80.00	0.16	0.82
Chevron Corporation	CVX	B	71.55	2,206	158,000	92.00	0.10	0.80
Gazprom (50%)	OGZPY	B	43.60	2,850	124,300	56.00	0.06	0.79
ConocoPhillips	COP	B	64.63	1,672	108,000	100.00	0.20	0.72
<i>Total or Median</i>					<i>1,401,000</i>		<i>0.13</i>	<i>0.82</i>
Producer/Refiners - Large Cap								
Kinder Morgan, Inc.	KMI	S	105.76	133	14,100	33.00	0.76	1.53
Norsk Hydro ASA	NHY	B	31.55	1,236	39,000	31.00	0.14	1.02
Imperial Oil Limited (30%)	IMO	H	34.15	292	9,980	37.00	0.07	0.93
PetroChina Company Ltd (10%)	PTR	B	121.38	179	21,730	140.00	0.04	0.87
Marathon Oil Corporation	MRO	B	87.20	359	31,300	110.00	0.12	0.82
Petro-Canada	PCZ	B	37.90	498	18,870	49.00	0.19	0.82
Suncor Energy	SU	B	73.57	461	33,920	95.00	0.07	0.79
Lukoil Oil Company	LUKOY	B	80.15	835	67,000	110.00	0.02	0.73
<i>Total or Median</i>					<i>236,000</i>		<i>0.10</i>	<i>0.85</i>
Independent Natural Gas and Oil - Large Cap								
CNOOC Limited (34%)	CEO	B	85.06	140	11,890	98.00	-	0.87
XTO Energy Inc.	XTO	B	49.01	371	18,180	60.00	0.14	0.84
Encana Corporation	ECA	B	46.43	824	38,300	65.00	0.12	0.75
Anadarko Petroleum Corp.	APC	B	42.05	463	19,500	75.00	0.42	0.74
EOG Resources	EOG	B	64.99	246	16,000	92.00	0.04	0.72
Occidental Petroleum Corp.	OXY	B	45.17	853	38,500	69.00	0.09	0.68
Devon Energy Corporation	DVN	B	68.04	447	30,400	115.00	0.13	0.64
<i>Total or Median</i>					<i>173,000</i>		<i>0.12</i>	<i>0.74</i>
Independent Natural Gas and Oil - Small Cap								
Energy Partners Ltd.	EPL	B	21.46	41	870	31.00	0.25	0.77
Berry Petroleum Company	BRY	B	29.42	45	1,320	44.00	0.22	0.74
Cimarex Energy Company	XEC	B	36.74	84	3,100	68.00	0.08	0.58
Encore Acquisition Company	EAC	B	25.58	54	1,380	54.00	0.19	0.58
<i>Total or Median</i>					<i>6,700</i>		<i>0.21</i>	<i>0.66</i>
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S	49.60	171	8,460	15.00	0.54	2.07
Kinder Morgan Management, LLC	KMR	S	48.99	62	3,020	15.00	0.54	2.05
Enerplus Resources Fund	ERF		42.17	123	5,190	47.00	0.11	0.91
Pengrowth Energy Trust	PGH		17.23	241	4,150	20.00	0.26	0.90
San Juan Basin Royalty Trust	SJT	B	32.23	47	1,500	40.00	-	0.80
Penn West Energy Trust	PWE	B	29.43	239	7,030	39.00	0.13	0.78
Canadian Oil Sands Trust	COSWF	B	26.10	479	12,500	35.00	0.08	0.77
Hugoton Royalty Trust	HGT	B	24.64	40	990	34.00	-	0.73
<i>Total or Median</i>					<i>42,800</i>		<i>0.12</i>	<i>0.85</i>

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

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Oil and Gas Producers

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

	Symbol/ Rating		Price (US\$/sh) 29-Jan 2007	Adjustd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)
Mega Cap								
Gazprom (50%)	OGZPY	B	43.60	24.0	8.9	7.0	11	0.2
Exxon Mobil Corporation	XOM	B	73.21	11.4	6.8	6.4	12	1.7
Total S.A.	TOT	B	66.40	9.7	7.1	6.1	11	3.1
BP plc	BP	B	62.83	9.7	7.1	5.8	10	3.8
Chevron Corporation	CVX	B	71.55	10.9	6.7	5.3	10	2.9
Royal Dutch Shell plc	RDS-A	B	67.55	7.4	6.0	5.0	9	3.8
ConocoPhillips	COP	B	64.63	10.9	6.6	4.7	8	2.2
		<i>Median</i>		<i>10.9</i>	<i>6.8</i>	<i>5.8</i>	<i>10</i>	<i>2.9</i>
Producer/Refiners - Large Cap								
Kinder Morgan, Inc.	KMI	S	105.76		8.9	13.6	21	3.3
Suncor Energy	SU	B	73.57	18.3	14.4	11.4	22	0.4
Imperial Oil Limited (30%)	IMO	H	34.15	10.3	8.7	8.0	14	0.8
PetroChina Company Ltd (10%)	PTR	B	121.38	15.2	6.7	5.9	12	4.0
Lukoil Oil Company	LUKOY	B	80.15	18.1	8.0	5.9	10	1.6
Norsk Hydro ASA	NHY	B	31.55	8.1	5.4	5.5	12	2.2
Marathon Oil Corporation	MRO	B	87.20	8.6	6.3	5.2	9	1.5
Petro-Canada	PCZ	B	37.90	6.5	6.3	5.1	10	1.2
		<i>Median</i>		<i>10.3</i>	<i>7.4</i>	<i>5.9</i>	<i>12</i>	<i>1.5</i>
Independent Natural Gas and Oil - Large Cap								
XTO Energy Inc.	XTO	B	49.01	12.5	8.5	7.2	11	0.7
EOG Resources	EOG	B	64.99	9.3	8.9	6.4	17	0.4
Anadarko Petroleum Corp.	APC	B	42.05	11.5	8.5	6.3	9	1.7
CNOOC Limited (34%)	CEO	B	85.06	10.6	6.9	6.0	11	3.3
Encana Corporation	ECA	B	46.43	8.7	7.9	5.9	12	0.9
Occidental Petroleum Corp.	OXY	B	45.17	10.9	8.5	5.8	13	1.9
Devon Energy Corporation	DVN	B	68.04	8.2	7.6	4.9	10	0.7
		<i>Median</i>		<i>10.6</i>	<i>8.5</i>	<i>6.0</i>	<i>11</i>	<i>0.9</i>
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B	29.42	10.1	9.3	6.9	12	1.1
Encore Acquisition Company	EAC	B	25.58	15.5	11.0	6.3	19	-
Cimarex Energy Company	XEC	B	36.74	7.8	7.4	4.3	12	0.4
Energy Partners Ltd.	EPL	B	21.46	5.0	5.5	4.2	-	-
		<i>Median</i>		<i>9.0</i>	<i>8.4</i>	<i>5.3</i>	<i>12</i>	<i>0.2</i>
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S	49.60		7.8	16.1	39	6.7
Kinder Morgan Management, LLC	KMR	S	48.99		7.8	16.0	38	6.8
Canadian Oil Sands Trust	COSWF	B	26.10	23.0	15.4	11.8	18	5.8
San Juan Basin Royalty Trust	SJT	B	32.23	9.3	11.1	8.9	11	9.1
Hugoton Royalty Trust	HGT	B	24.64	13.7	11.4	8.3	14	7.2
Enerplus Resources Fund	ERF		42.17	9.5	8.7	7.9	20	10.1
Penn West Energy Trust	PWE	B	29.43	8.1	9.7	7.6	15	11.7
Pengrowth Energy Trust	PGH		17.23	7.1	7.7	6.9	13	14.7
		<i>Median</i>		<i>9.4</i>	<i>9.2</i>	<i>8.6</i>	<i>17</i>	<i>8.1</i>

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended December 31, 2007; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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**Oil and Gas Producers
Portfolio Composite of Buy Recommendations**

Symbol	Price (US\$/sh) 29-Jan 2007	Portfolio Weight		Non- U.S. HQ (%)	North Amer. Natural Gas (%)	Rest of World Natural Gas (%)	Oil Prod'n (%)	Down- stream (%)	McDep Ratio	
		Equity (%)	EV (%)							
Mega Cap										
Exxon Mobil Corporation	XOM	73.21	3.2	2.9		0.2	0.5	1.3	0.9	0.94
Total S.A.	TOT	66.40	2.8	2.9	2.9		0.9	1.2	0.8	0.85
Royal Dutch Shell plc	RDS-A	67.55	2.8	2.9	2.9	0.1	0.5	1.1	1.1	0.83
BP plc	BP	62.83	1.3	1.4	1.4	0.1	0.2	0.7	0.4	0.82
Chevron Corporation	CVX	71.55	5.8	5.7		0.4	0.4	3.4	1.5	0.80
Gazprom	OGZPY	43.60	9.2	8.6	8.6		6.8	1.8		0.79
ConocoPhillips	COP	64.63	4.8	5.7		1.0	0.4	2.9	1.4	0.72
Producer/Refiners - Large Cap										
Norsk Hydro ASA	NHY	31.55	2.9	2.9	2.9		0.7	1.1	1.1	1.02
PetroChina Company Ltd.	PTR	121.38	3.2	2.9	2.9		0.2	2.4	0.2	0.87
Marathon Oil Corporation	MRO	87.20	1.4	1.4		0.1	0.1	0.6	0.6	0.82
Petro-Canada	PCZ	37.90	1.3	1.4	1.4	0.2	0.0	0.9	0.2	0.82
Suncor Energy	SU	73.57	1.5	1.4	1.4	0.1		1.3	0.1	0.79
Lukoil Oil Company	LUKOY	80.15	6.5	5.7	5.7			4.3	1.4	0.73
Independent Natural Gas and Oil - Large Cap										
CNOOC Limited	CEO	85.06	3.3	2.9	2.9		0.3	2.6		0.87
XTO Energy Inc.	XTO	49.01	2.8	2.9		2.0		0.8		0.84
Encana Corporation	ECA	46.43	5.5	5.7	5.7	4.1		1.2	0.4	0.75
Anadarko Petroleum Corp.	APC	42.05	1.5	2.9		1.6		1.2	0.1	0.74
EOG Resources	EOG	64.99	6.3	5.7		4.4	0.4	1.0		0.72
Occidental Petroleum Corp	OXY	45.17	2.9	2.9		0.4	0.0	2.1	0.3	0.68
Devon Energy Corporation	DVN	68.04	5.3	5.7		3.1		2.6		0.64
Independent Natural Gas and Oil - Small Cap										
Energy Partners Ltd.	EPL	21.46	1.1	1.4		0.8		0.7		0.77
Berry Petroleum Company	BRY	29.42	1.2	1.4		0.2		1.2		0.74
Cimarex Energy Company	XEC	36.74	2.8	2.9		2.0		0.9		0.58
Encore Acquisition Comp	EAC	25.58	2.2	2.9		0.7		2.1		0.58
Income										
San Juan Basin Royalty Tr	SJT	32.23	6.6	5.7		5.7				0.80
Penn West Energy Trust	PWE	29.43	4.2	4.3	4.3	1.3		3.0		0.78
Canadian Oil Sands Trust	COSWF	26.10	5.9	5.7	5.7			5.7		0.77
Hugoton Royalty Trust	HGT	24.64	1.7	1.4		1.4				0.73
Portfolio Composite			100	100	49	30	12	48	11	0.76

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Index of Recent Research**Stock Ideas**

<u>Date</u>	<u>Symbol</u>	<u>Stock</u>	<u>Theme</u>
30-Jan	COSWF	Canadian Oil Sands Trust	Record Quarterly Volume
26-Jan	SU	Suncor Energy Inc.	Next Milestone 2008
26-Jan	OXY	Occidental Petroleum Corporation	Stock Cheaper than Oil
26-Jan	PCZ	Petro-Canada	Volume Growth around the Corner
24-Jan	COP	ConocoPhillips	Buying Itself
18-Jan	KMx	Kinder Morgan	Good Bye KMI
18-Jan	EAC	Encore Acquisition Company	Creating MLP for Income Investors
16-Jan	PTR	PetroChina Company Limited	Fourth Largest Oil and Gas Company
16-Jan	BP	BP p.l.c.	New Leader Designated
16-Jan	COP	ConocoPhillips	Weather Deal
12-Jan	LUKOY	Lukoil Oil Company	Downside Oil Price Protection
10-Jan	ECA	EnCana Corporation	Buy on the News
5-Jan	* HGT	Hugoton Royalty Trust	New Buy for Natural Gas Income
28-Dec	* XTO	XTO Energy Inc.	Raise NPV to \$60 a Share
22-Dec	* OGZPY	Gazprom	World's Greatest Energy Company
19-Dec	* NHY	Norsk Hydro ASA	Happy Holideals!
28-Nov	* CEO	CNOOC Ltd	U.S./China Dollar Devaluation Accelerates
20-Nov	* EPL	Energy Partners, Ltd.	Hostile Bidder Withdraws
17-Nov	* SJT	San Juan Basin Royalty Trust	Dip/Rebound and New Shale Potential
14-Nov	* PWE	Penn West Energy Trust	Canada's Dastardly Deed
9-Nov	* BRY	Berry Petroleum	Election Winner
9-Nov	* TOT	Total S.A.	Steady High Return
7-Nov	* APC	Anadarko Petroleum Corporation	Hedging and Deleveraging
7-Nov	* XEC	Cimarex Energy Company	Steady Operations
7-Nov	* EPL	Energy Partners, Ltd.	Buyers Looking
6-Nov	* BRY	Berry Petroleum	Raise NPV to \$44 a Share on Election Eve
3-Nov	* EOG	EOG Resources Inc.	Stealth Explorer
3-Nov	* IMO	Imperial Oil Limited	Hold While Six-Year Oil below 40-Week Average
2-Nov	* DVN	Devon Energy Corporation	Deep Gulf Explorer
1-Nov	* MRO	Marathon Oil Corporation	Raise NPV to \$110 a Share
30-Oct	* CVX	Chevron Corporation	Raise NPV to \$92 a Share
27-Oct	* XOM	Exxon Mobil Corporation	Oil Production Per Share Grows
26-Oct	* RDSA	Royal Dutch Shell plc	New Structure Working

Meter Reader - A Weekly Analysis

30-Jan		Cantarell over the Cliff
23-Jan	*	Clues from Price Patterns
16-Jan	*	Minimal Spare Oil Capacity
9-Jan	*	Oil above \$60

Natural Gas and Oil Royalty Trusts - A Weekly Analysis

26-Jan		Shell Canada Bid Raised
19-Jan		Cap and Trade
11-Jan	*	Convergence 2007
5-Jan	*	The Winter That Wasn't

* Archived on www.mcdep.com

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