

Oil and Gas Strengthen U.S. Security

Summary and Recommendation

Surprising trends in shale gas and shale oil of the past five years give the U.S. more economic strength, global political credibility and domestic security. A rocket shot of growth thrusts the U.S. past Russia and Saudi Arabia to No.1 in oil and gas production. The U.S. rose to No. 1 in oil in 2014 by a slim margin according to the latest annual analysis released by BP on June 10 (see chart [U.S. No. 1 in Oil](#) on page 2). Together the U.S., Saudi Arabia and Russia account for some 40% of global oil production. The U.S. became No 1 in natural gas in 2009 and has widened the gap with Russia further in the past five years (see chart [U.S. No. 1 in Natural Gas](#) on page 3). Together the U.S. and Russia account for some 40% of global natural gas production. The higher prices that sparked the innovation that drove growth turned to lower prices reflecting new supply abundance. Lower commodity price translated to lower stock price for producers. We believe oil and gas price will recover in the next 18 months to levels that are more rewarding to producers while still beneficial to consumers. The 24 oil and gas stocks in our coverage at a median McDep Ratio of 0.64 appear attractive for long-term investment. Eventual lifting of Federal controls on exports of U.S. oil and gas would further enhance U.S. economic strength, global political credibility and domestic security.

Supply and Demand Rebalancing

Coincident with the beginning of price recovery, U.S. inventories of crude oil have been declining from a high level (see chart [U.S. Crude Oil Stocks](#) on page 3). Rapid supply growth from the Eagle Ford, Bakken and Permian is slowing temporarily (see chart [Regional Oil](#) on page 4). Abundant resources in the Permian and other areas can support renewed growth as price strengthens. Remarkably, technological progress has further potential to reduce costs and add to profits for efficient operators.

U.S. working gas in storage tracks close to the middle of the historical range attesting to balance for now at low price level (see chart [Working Gas](#) on page 4). Seasonal demand for natural gas in air conditioning in the summer and heating in the winter may catalyze increases from current price levels. Longer term, export projects and petrochemical plants under construction will absorb further supply growth. The Marcellus formation is the most dramatic contributor to new supply (see chart [Regional Natural Gas](#) on page 5).

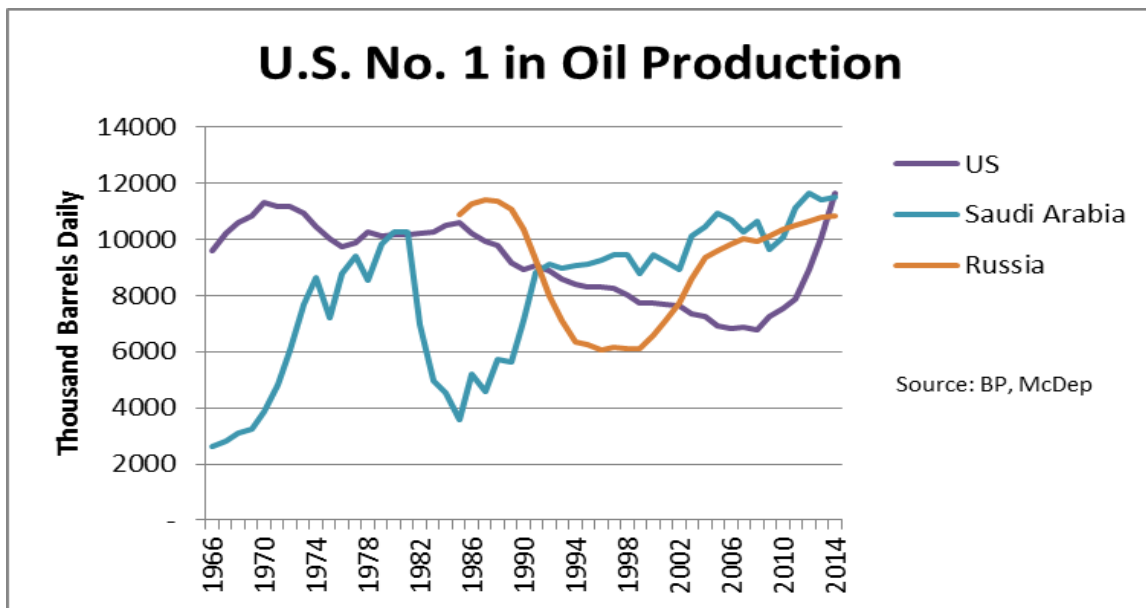
The long-term global market for natural gas exported from the U.S. is practically unlimited, we like to say. Consider that global coal consumption is 25% greater than

global natural gas consumption. Natural gas production would have to more than double to displace all of the global coal market. China alone produces 47% of the world's coal (see chart [Coal Displacement Potential](#) on page 5). At the same time, Europe trades clean air and large tracts of developed land for security as it uses increasing amounts of coal to generate electricity rather than to import more natural gas from Russia.

Growth and/or Income in U.S. Oil and Gas

Attractive oil and gas producer investments offer returns in forms ranging from all growth to all income to suit a range of portfolio and tax preferences. Growing global integrated companies and big dividend independent producers offer dividends ranging from 3.2% for **Marathon Oil (MRO)** to 6.5% for **Royal Dutch Shell (RDS)**. Independent producers concentrated more on reinvesting cash flow include great shale oil innovators **EOG Resources (EOG)** and **Continental Resources (CLR)**. Finally, in the Income group, **Dorchester Minerals (DMLP)** pays an estimated 6% a year, mainly from a growing oil stream largely financed by others (see [Tables 1-4](#)) on pages 6-9).

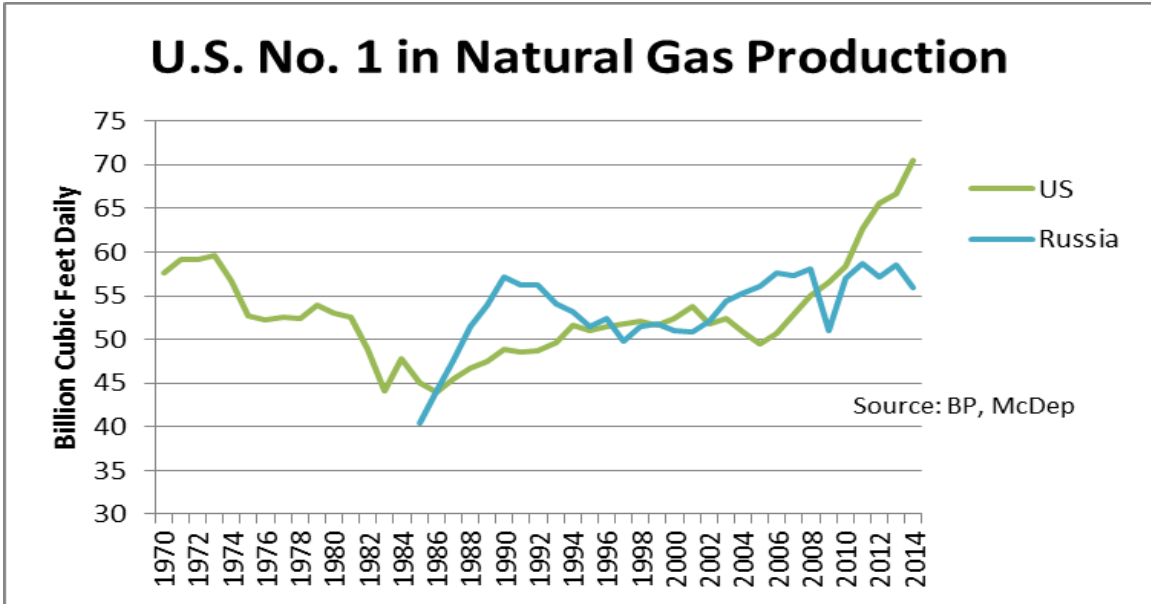
Kurt H. Wulff, CFA





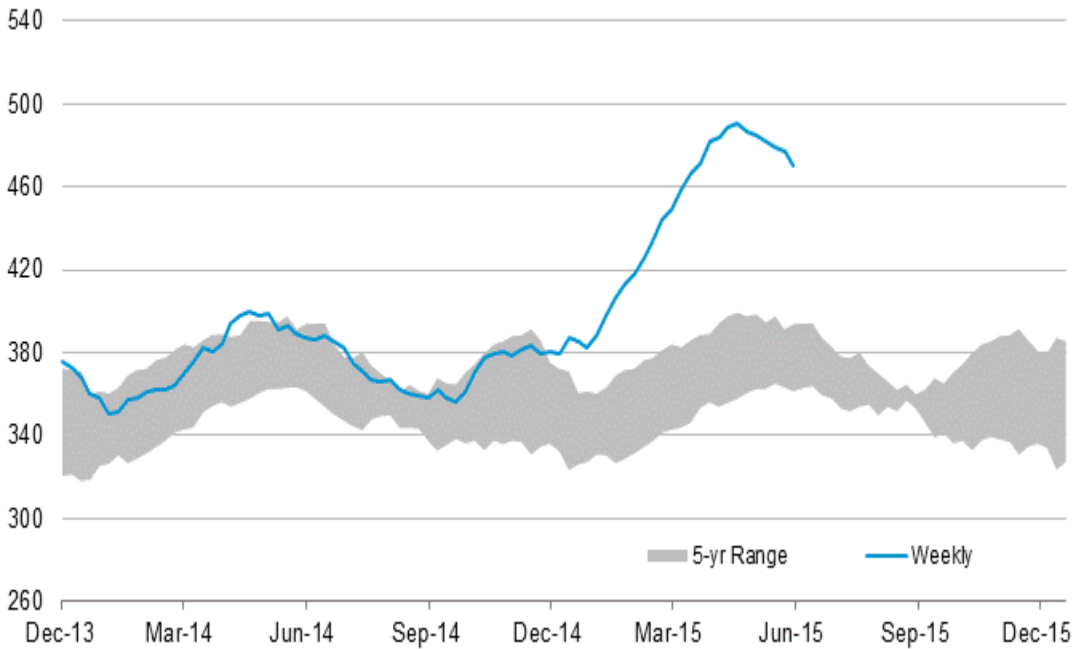
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U.S. crude oil stocks

million barrels

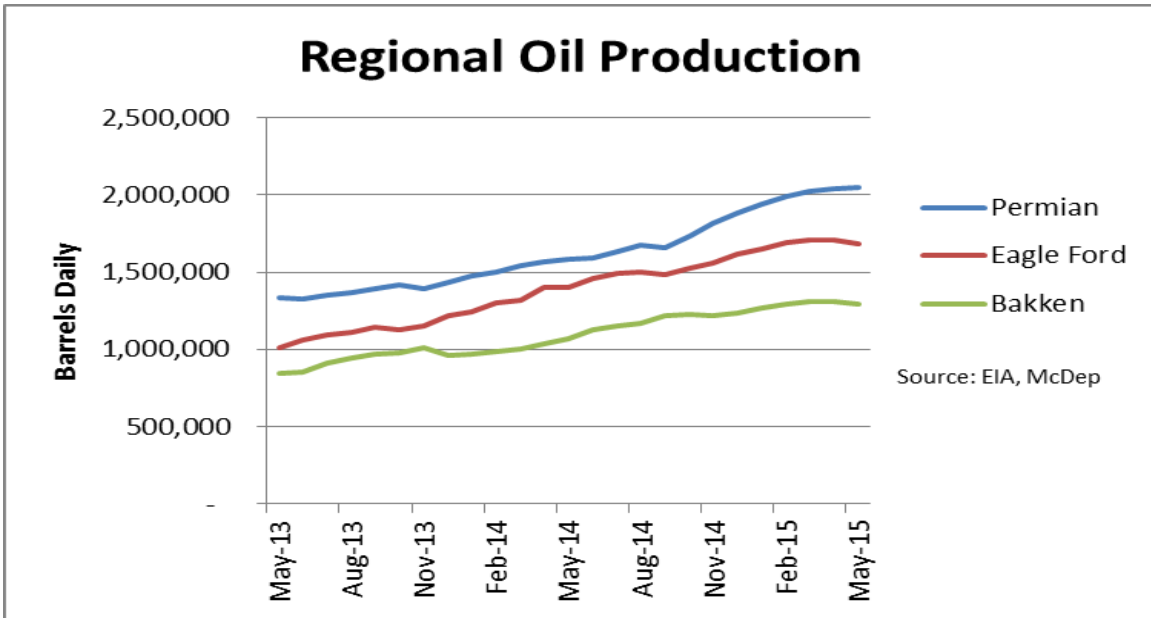


Source: U.S. Energy Information Administration

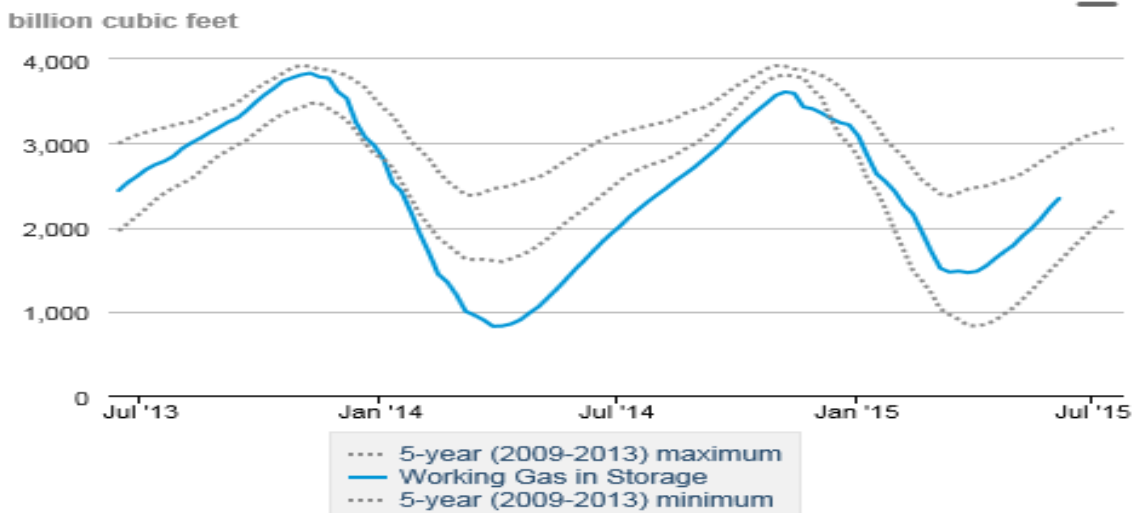


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Working natural gas in underground storage

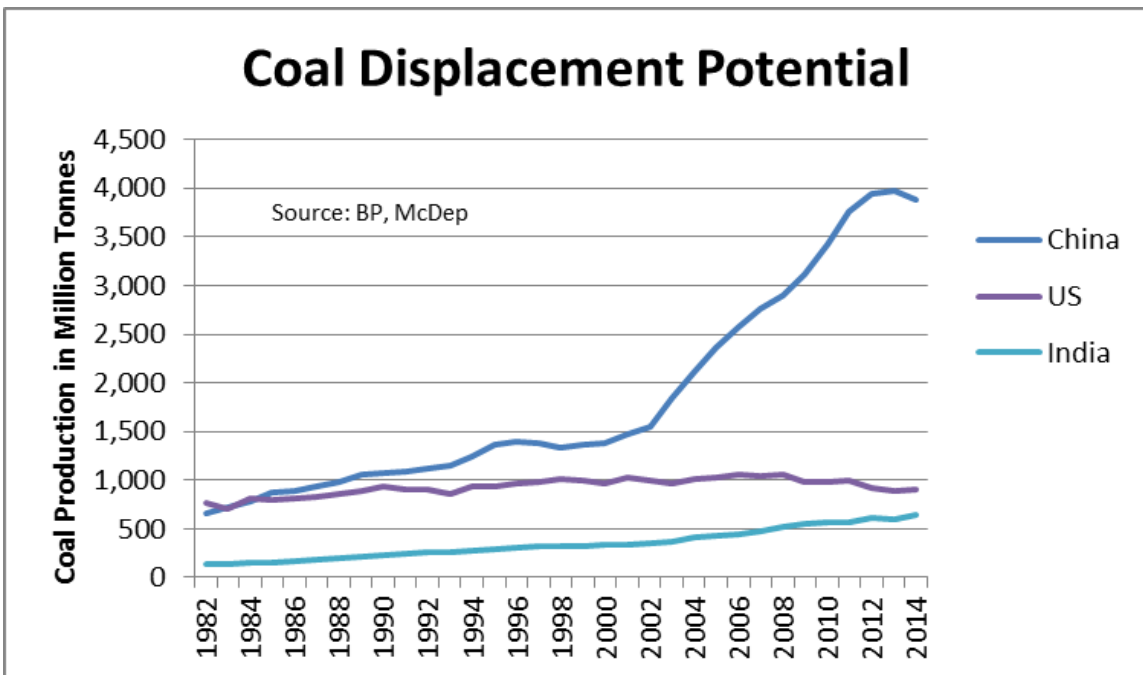
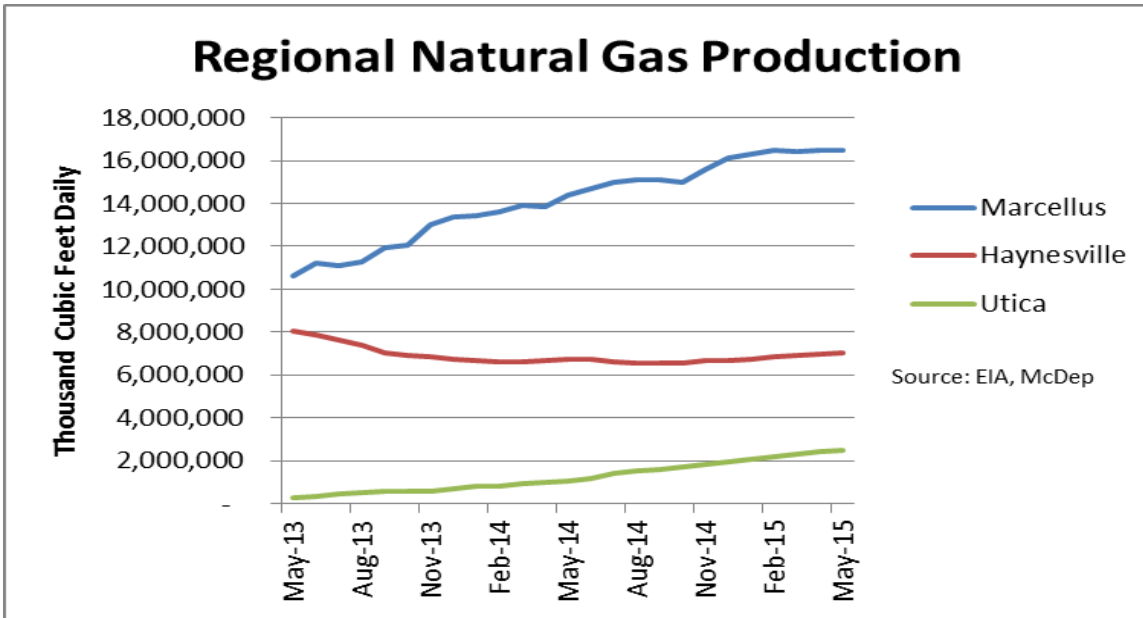


 Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report"



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Symbol/Rating		Price (US\$/sh)	EV/ Market Cap	Enterprise Value (\$mm)	Present Value by Segment (%)					Dist. Yield	McDep Ratio
					North Amer.	Rest of World	Oil Prod'n	Down- stream	NTM (%)		
Global Integrated											
Exxon Mobil Corporation	XOM	83.72	1.23	435,000	7	14	64	16	3.5	0.80	
Royal Dutch Shell (BG pro form)	RDS-A	58.00	1.54	349,000					6.5	0.74	
Chevron Corporation	CVX B	99.29	1.30	243,000	3	9	73	14	4.3	0.72	
Total S.A.	TOT B	49.71	1.49	170,000			17	66	17	0.65	
<i>Total or Median</i>			<i>1.40</i>	<i>1,197,000</i>			<i>66</i>	<i>16</i>	<i>4.9</i>	<i>0.73</i>	
Large Independent											
EOG Resources, Inc.	EOG	89.22	1.13	55,000	14	4	83		0.8	0.83	
Occidental Petroleum Corp.	OXY	77.45	1.12	66,600	6	1	81	12	3.9	0.79	
Devon Energy Corporation	DEV	61.63	1.70	43,000	30		55	15	1.6	0.73	
ConocoPhillips	COP B	63.27	1.47	116,000	14	13	73		4.6	0.72	
Marathon Oil Corporation	MRO B	26.44	1.49	26,700	9	2	88		3.2	0.63	
<i>Total or Median</i>			<i>1.47</i>	<i>307,000</i>	<i>14</i>		<i>81</i>		<i>3.2</i>	<i>0.73</i>	
Small Independent											
Cimarex Energy Company	XEC	118.89	1.16	12,100	41		59		0.5	0.87	
Continental Resources (32%)	CLR	46.78	1.41	7,800	18		82		-	0.63	
Range Resources	RRC	52.51	1.46	12,700	73		27		0.3	0.62	
California Resources	CRC B	7.43	3.43	9,700	13		87		0.5	0.59	
Whiting Petroleum Corporation	WLL B	34.21	1.48	12,000	6		94		-	0.55	
<i>Total or Median</i>			<i>1.46</i>	<i>54,000</i>	<i>18</i>		<i>82</i>		<i>0.3</i>	<i>0.62</i>	
Income											
Dorchester Minerals, L.P.	DMLP	23.11	1.00	710	36		64		6.0	0.72	
Sabine Royalty Trust	SBR	39.23	1.00	570	42		58		7.2	0.58	
San Juan Basin Royalty Trust	SJT B	10.92	1.00	510	100		-		4.2	0.52	
Permian Basin RT	PBT	8.25	1.00	380	23		77		7.5	0.52	
Cross Timbers Royalty Trust	CRT B	17.07	1.00	100	54		46		7.3	0.40	
<i>Total or Median</i>			<i>1.00</i>	<i>2,300</i>	<i>42</i>		<i>58</i>		<i>7.2</i>	<i>0.52</i>	
Canada											
Imperial Oil Limited (30%)	IMO	38.47	1.29	12,700	1		77	22	1.1	0.79	
EnCana Corporation	ECA	11.86	1.86	18,600	57		43		2.4	0.73	
Canadian Oil Sands Limited	COSWF	8.11	1.72	6,700			100		2.0	0.54	
Birchcliff Energy Ltd.	BIREF B	6.48	1.58	1,600	77		23		-	0.52	
Cenovus Energy Inc.	CVE B	16.16	1.37	18,200	9		85	7	5.3	0.48	
<i>Total or Median</i>			<i>1.58</i>	<i>58,000</i>			<i>77</i>		<i>2.0</i>	<i>0.54</i>	

Estimated present value presumes a long-term price for oil of US\$90 a barrel and natural gas, \$6 a million btu.
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses



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Table 2								
McDep Energy Stocks								
Net Present Value and McDep Ratio								
			Price (US\$/sh)		Market	Net		
	Symbol/Rating		15-Jun	Shares	Cap	Present	Debt/	McDep
	B = Buy		2015	(mm)	(US\$m)	Value	Present	Ratio
						(US\$/sh)	Value	
Global Integrated								
Exxon Mobil Corporation	XOM		83.72	4,211	353,000	110.00	0.15	0.80
Royal Dutch Shell (BG pro forma)	RDS-A		58.00	3,900	226,000	89.00	0.26	0.74
Chevron Corporation	CVX	B	99.29	1,876	186,000	150.00	0.17	0.72
Total S.A.	TOT	B	49.71	2,285	114,000	90.00	0.21	0.65
	<i>Total or Median</i>				879,000		0.19	0.73
Large Independent								
EOG Resources, Inc.	EOG		89.22	545	48,600	110.00	0.10	0.83
Occidental Petroleum Corp.	OXY		77.45	770	59,600	100.00	0.08	0.79
Devon Energy Corporation	DVN		61.63	410	25,300	100.00	0.30	0.73
ConocoPhillips	COP	B	63.27	1,246	79,000	100.00	0.23	0.72
Marathon Oil Corporation	MRO	B	26.44	675	17,850	50.00	0.21	0.63
	<i>Total or Median</i>				230,400		0.21	0.73
Small Independent								
Cimarex Energy Company	XEC		118.89	88	10,400	140.00	0.12	0.87
Continental Resources (32%)	CLR		46.78	118	5,500	85.00	0.19	0.63
Range Resources	RRC		52.51	166	8,700	100.00	0.19	0.62
California Resources	CRC	B	7.43	382	2,800	25.00	0.42	0.59
Whiting Petroleum Corporation	WLL	B	34.21	237	8,100	75.00	0.18	0.55
	<i>Total or Median</i>				36,000		0.19	0.62
Income								
Dorchester Minerals, L.P.	DMLP		23.11	31	710	32.00	-	0.72
Sabine Royalty Trust	SBR		39.23	15	570	68.00	-	0.58
San Juan Basin Royalty Trust	SJT	B	10.92	47	510	21.00	-	0.52
Permian Basin RT	PBT		8.25	47	380	16.00	-	0.52
Cross Timbers Royalty Trust	CRT	B	17.07	6	100	42.00	-	0.40
	<i>Total or Median</i>				2,300		-	0.52
Canada								
Imperial Oil Limited (30%)	IMO		38.47	255	9,800	52.00	0.18	0.79
EnCana Corporation	ECA		11.86	839	10,000	20.00	0.34	0.73
Canadian Oil Sands Limited	COSWF		8.11	485	3,900	20.00	0.22	0.54
Birchcliff Energy Ltd.	BIREF	B	6.48	154	1,000	16.00	0.19	0.52
Cenovus Energy Inc.	CVE	B	16.16	825	13,300	40.00	0.13	0.48
	<i>Total or Median</i>				38,000		0.19	0.54
Estimated present value presumes a long-term price for oil of US\$90 a barrel and natural gas, \$6 a million btu.								
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses								



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			<i>Price (US\$/sh)</i>	<i>Adjustd Resrvs/ Prod</i>	<i>PV/ Ebitda</i>	<i>EV/ Ebitda</i>	<i>P/E</i>	<i>Dividend NTM</i>
	<i>Symbol/Rating</i>		<i>15-Jun 2015</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>	<i>(\$/sh)</i>
	B = Buy							
Global Integrated								
Exxon Mobil Corporation	XOM		83.72	14.2	10.5	8.4	17	2.92
Chevron Corporation	CVX	B	99.29	8.9	10.3	7.4	22	4.28
Total S.A.	TOT	B	49.71	9.7	9.1	5.9	12	2.75
Royal Dutch Shell (BG pro forma)	RDS-A		58.00					3.76
	<i>Median</i>			<i>9.7</i>	<i>10.3</i>	<i>7.4</i>	<i>17</i>	
Large Independent								
EOG Resources, Inc.	EOG		89.22	9.3	15.1	12.5	28	0.67
Devon Energy Corporation	DVN		61.63	10.1	14.7	10.8	81	0.96
ConocoPhillips	COP	B	63.27	11.3	14.3	10.3	192	2.92
Occidental Petroleum Corp.	OXY		77.45	9.1	12.1	9.6	35	3.00
Marathon Oil Corporation	MRO	B	26.44	12.8	14.2	8.9		0.84
	<i>Median</i>			<i>10.1</i>	<i>14.3</i>	<i>10.3</i>	<i>58</i>	
Small Independent								
Range Resources	RRC		52.51	14.9	26.0	16.1	66	0.16
Cimarex Energy Company	XEC		118.89	8.2	14.8	12.8	213	0.64
Continental Resources (32%)	CLR		46.78	11.4	17.1	10.8	154	-
California Resources	CRC	B	7.43	12.1	17.8	10.5		0.04
Whiting Petroleum Corporation	WLL	B	34.21	10.5	13.6	7.5	47	-
	<i>Median</i>			<i>11.4</i>	<i>17.1</i>	<i>10.8</i>	<i>110</i>	
Income								
San Juan Basin Royalty Trust	SJT	B	10.92	8.4	33.6	17.5	24	0.46
Sabine Royalty Trust	SBR		39.23	9.4	23.9	13.8	14	2.84
Dorchester Minerals, L.P.	DMLP		23.11	7.7	18.4	13.3	25	1.39
Cross Timbers Royalty Trust	CRT	B	17.07	12.4	24.2	9.8	14	1.24
Permian Basin RT	PBT		8.25	9.9	18.2	9.4	13	0.62
	<i>Median</i>			<i>9.4</i>	<i>23.9</i>	<i>13.3</i>	<i>14</i>	
Canada								
Imperial Oil Limited (30%)	IMO		38.47	27.4	14.0	11.0	16	0.42
EnCana Corporation	ECA		11.86	6.7	13.1	9.6	112	0.28
Cenovus Energy Inc.	CVE	B	16.16	15.5	19.9	9.6		0.86
Birchcliff Energy Ltd.	BIREF	B	6.48	12.6	18.3	9.5		-
Canadian Oil Sands Limited	COSWF		8.11	17.5	13.0	7.0	19	0.16
	<i>Median</i>			<i>15.5</i>	<i>14.0</i>	<i>9.6</i>	<i>19</i>	
	<i>Grand Median</i>			<i>11</i>	<i>15</i>	<i>10</i>		

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2016; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses



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Table 4										
McDep Energy Stocks										
Total Return Year-to-Date 2015										
Ranked by Unlevered Total Return										
			Price	Price			Equity	Unlevered		
			(\$/sh)	(\$/sh)	Price	Cash	Total		Total	
	Symbol/Rat		15-Jun	29-Dec	Change	Distrib.	Return	Debt	Return	McDep
			2015	2014	(%)	(%)	(%)	(\$/sh)	(%)	Ratio
Global Integrated										
Total S.A.	TOT	B	49.71	52.74	(6)	1	(4)	25	(3)	0.65
Exxon Mobil Corporation	XOM		83.72	93.07	(10)	1	(9)	20	(8)	0.80
Chevron Corporation	CVX	B	99.29	113.32	(12)	1	(11)	30	(9)	0.72
Royal Dutch Shell (BG pro forma)	RDS-A		58.00	68.31	(15)	1	(14)	32	(9)	0.74
	<i>Median</i>				(11)		(10)		(8)	0.73
Large Independent										
Devon Energy Corporation	DVN		61.63	61.15	1	0	1	43	1	0.73
Occidental Petroleum Corp.	OXY		77.45	81.71	(5)	1	(4)	9	(4)	0.79
EOG Resources, Inc.	EOG		89.22	94.33	(5)	0	(5)	12	(5)	0.83
Marathon Oil Corporation	MRO	B	26.44	28.58	(7)	1	(7)	13	(5)	0.63
ConocoPhillips	COP	B	63.27	70.11	(10)	1	(9)	30	(6)	0.72
	<i>Median</i>				(5)		(5)		(5)	0.73
Small Independent										
Continental Resources (32%)	CLR		46.78	38.26	22	-	22	19	15	0.63
California Resources	CRC	B	7.43	5.77	29	0	29	18	7	0.59
Cimarex Energy Company	XEC		118.89	110.27	8	0	8	20	7	0.87
Whiting Petroleum Corporation	WLL	B	34.21	34.09	0	-	0	16	0	0.55
Range Resources	RRC		52.51	56.00	(6)	0	(6)	24	(4)	0.62
	<i>Median</i>				8		8		7	0.62
Income										
Sabine Royalty Trust	SBR		39.23	36.68	7	3	10	-	10	0.58
Cross Timbers Royalty Trust	CRT	B	17.07	18.07	(6)	2	(3)	-	(2)	0.40
Dorchester Minerals, L.P.	DMLP		23.11	25.16	(8)	2	(6)	-	(5)	0.72
Permian Basin RT	PBT		8.25	9.12	(10)	1	(9)	-	(8)	0.52
San Juan Basin Royalty Trust	SJT	B	10.92	13.97	(22)	1	(21)	-	(21)	0.52
	<i>Median</i>				(8)		(6)		(5)	0.52
Canada										
Birchcliff Energy Ltd.	BIREF	B	6.48	6.75	(4)	-	(4)	4	(3)	0.52
Canadian Oil Sands Limited	COSWF		8.11	9.20	(12)	0	(11)	6	(7)	0.54
EnCana Corporation	ECA		11.86	13.94	(15)	1	(14)	10	(8)	0.73
Imperial Oil Limited (30%)	IMO		38.47	43.49	(12)	0	(11)	11	(9)	0.79
Cenovus Energy Inc.	CVE	B	16.16	20.95	(23)	1	(22)	6	(17)	0.48
	<i>Median</i>				(12)		(11)		(8)	0.54
	<i>Grand Median</i>				(7)		(6)		(5)	0.64
Natural Gas (\$/mmbtu)			2.89	3.19	(9)					
Oil - West Texas Intermediate (\$/bbl)			59.52	53.69	11					

Source: McDep LLC, Yahoo, CME Group, Bloomberg



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Index of Recent Research			
Stock Ideas			
<u>Date</u>	<u>Symbol</u>	<u>Subject</u>	<u>Theme</u>
12-May	MRO	Marathon Oil	New Buy on Independent Shale Oil (Meter Reader)
1-May		CVX, XOM, RDS, TOT	Raise NPV for XOM and TOT on Cash Flow Margin
30-Apr	SJT	San Juan Basin Royalty Trust	New Buy on Depressed Natural Gas
29-Apr	CVE	Cenovus Energy	New Buy on Operating Leverage
28-Apr	TOT	Total	Operating Strength Reinforces New Buy
14-Apr	RDSA	Royal Dutch Shell plc	Shell to Acquire BG - Catalyst for Confidence (MR)
9-Mar	XOM	Exxon Mobil	Safe at Any Likely Oil Price
27-Feb	EOG	EOG Resources	Top Value Creator
30-Jan	COSWF	Canadian Oil Sands Ltd.	Syncrude Lowers Breakeven to \$US32 a Barrel
23-Dec	RRC	Range Resources	Record Appalachian Well (Meter Reader)
9-Dec	WLL	Whiting Petroleum	Kodiak Acquisition Completed (Meter Reader)
25-Nov	COP	ConocoPhillips	Strong 4% Dividend Independent Producer
13-Nov	BIREF	Birchcliff Energy	Raise NPV to US\$16 on Alberta Natural Gas
4-Nov	CRC	California Resources Corporation	Pure Play Largest California Producer (Meter Reader)
21-Oct	XEC	Cimarex Energy	Strong Independent Producer (Meter Reader)
14-Oct	DVN	Devon Energy	Rebalance Candidate (Meter Reader)
7-Oct	ECA	Encana Corporation	Suttles' Stamp (Meter Reader)
23-Sep	CLR	Continental Resources	Raise NPV to \$85 on 29% Growth (Meter Reader)
8-Aug	DMLP	Dorchester Minerals, L.P.	Robust Bakken and Permian Oil Growth
10-Jun	OXY	Occidental Petroleum	Raise NPV to \$120, Spinoff Filed (Meter Reader)
18-Mar	PBT	Permian Basin Royalty Trust	Rising Oil Production, Understated Income (Meter Reader)
For historical research by stock, go to mcdep.com , click on Stock Ideas , click on stock by name.			
Meter Reader			
12-May	MRO	Marathon Oil	New Buy on Independent Shale Oil
14-Apr	RDS	Royal Dutch Shell plc	Shell to Acquire BG - Catalyst for Confidence
10-Mar		DMLP, SBR, CRT, SJT	RTF Income Tracks Oil Price
10-Feb		CRT, CRC, COP, CVX	Oil Price Cycle Advances
13-Jan		SBR, XEC, COSWF, DVN, XOM	Oil and Gas Stocks on Sale
30-Dec		Book Review	The Moral Case for Fossil Fuels by Alex Epstein
23-Dec	RRC	Range Resources	Record Appalachian Well
16-Dec			Oil and Gas Stocks for 2015 - For Contrarians and Rebalancers
9-Dec	WLL	Whiting Petroleum	Kodiak Acquisition Completed (Meter Reader)
2-Dec			Rebuild Oil and Gas Positions
25-Nov	COP	ConocoPhillips	Strong 4% Dividend Independent Producer
18-Nov	DMLP, SJT	RTF (Royalty Trust Fund)	DMLP, SJT and the RTF - High Income without Debt
11-Nov	COSWF	Canadian Oil Sands Ltd.	Record Monthly Production
4-Nov	CRC	California Resources Corporation	Pure Play Largest California Producer
28-Oct	CVE	Cenovus Energy	Same Stock Price, Twice the Production
21-Oct	XEC	Cimarex Energy	Strong Independent Producer
14-Oct	DVN	Devon Energy	Rebalance Candidate
7-Oct	ECA	Encana Corporation	Suttles' Stamp
30-Sep		RTF (Royalty Trust Fund)	Current Income and Future Fraccing
For earlier editions, go to mcdep.com , click on Meter Reader .			
Industry Ideas			
28-May		DMLP, SBR, CRT, SJT, PBT	Distributions Rise on Roll Forward
1-Apr			Recommitting to Oil and Gas Stocks
30-Dec		Book Review	The Moral Case for Fossil Fuels by Alex Epstein (Meter Reader)
18-Nov	DMLP, SJT	RTF (Royalty Trust Fund)	DMLP, SJT and the RTF - High Income without Debt (Meter Reader)



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LLC

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