McDep LLC

Meter Reader

A Monthly Analysis of Oil and Gas Stocks

December 13, 2016

Optimistic Outlook 2017

						Present Value by Segment (%)					
			Price			North	Rest of			Dist.	
			(US$/sh)	EV/	Enterprise	Amer.	World			Yield	
	Symbol/Rating		12-Dec	Market	Value	Natural	Natural	Oil	Down-	NTM	McDep
			2016	Cap	($mm)	Gas	Gas	Prod'n	stream	(%)	Ratio
Royal Dutch Shell	RDS-A	B	53.41	1.67	353,000	2	18	56	24	7.0	0.77
Total S.A.	TOT	B	49.89	1.52	182,000		19	57	24	5.2	0.65
Marathon Oil Corporation	MRO	B	18.49	1.52	23,800	10	2	88		1.1	0.95
ConocoPhillips	COP	B	51.38	1.62	103,000	13	13	74		1.9	0.82
Continental Resources (32%)	CLR	B	52.80	1.35	8,400	29		71		-	0.96
Range Resources	RRC	B	35.97	1.49	13,100	76		24		0.2	0.73
Dorchester Minerals, L.P.	DMLP	B	17.00	1.00	520	28		72		7.8	0.71
Sabine Royalty Trust	SBR	B	36.86	1.00	540	44		56		7.9	0.61
Birchcliff Energy Ltd.	BIREF	B	7.48	1.32	2,600	74		26		1.0	0.80
Suncor Energy	SU	B	32.56	1.34	72,800	-		86	14	2.7	0.79

Summary and Recommendation

We are optimistic that a diversified portfolio including a positive emphasis on oil and gas stocks will earn a positive return in 2017. Futures prices for 2017 for oil and natural gas are up 30% and 40% to $55 a barrel and $3.40 an mcf from $43 a barrel and $2.50 an mcf indicated for 2016. Since futures prices remain below our long-term expectation of $70 a barrel and $4 an mcf, we believe the direction is up for oil and gas stock prices. A median McDep Ratio of 0.83 for 24 issues implies unlevered appreciation of 20%.

Among the changes in the economic and political outlook as a result of American's electing a new president and congress, reduction in U.S. corporate and personal income tax rates could raise estimates of value. Reducing regulatory drag could have a balanced impact with higher volume possibly offset by more competitive pricing. Overall higher economic growth and higher inflation probably mean higher volume and higher price for oil and gas. Rising interest rates are likely to be of little negative concern as they remain below the rate of inflation. Similarly, rising government debt may be manageable as long as the ratio of debt to gross domestic product is restrained. Setbacks along the way to more prosperity would be cushioned by diversification and may present opportunities. We like a portfolio that includes stocks from each of five covered groups (see Tables 1-4 on pages 2-5).

We appreciate the interest in our work from clients and investors for another year in 2016. It has been 29 years since founding the predecessor of McDep LLC in 1988. We have enjoyed 45 years of investment analysis since joining Donaldson, Lufkin & Jenrette in 1971 and 55 years of oil and gas industry association since our work in the summer of 1961 with ExxonMobil. Continuing in 2017, we plan to streamline our publications to once a month under the *Meter Reader* masthead.

Kurt H. Wulff, CFA

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Table 1

McDep Energy Stocks

Enterprise Value, Segments, Yield and McDep Ratio

	Symbol/Rating		Price (US$/sh) 12-Dec 2016	EV/ Market Cap	Enterprise Value ($mm)	Present Value by Segment (%) North Amer. Natural Gas	Rest of World Natural Gas	Oil Prod'n	Down-stream	Dist. Yield NTM (%)	McDep Ratio
Global Integrated											
Exxon Mobil Corporation	XOM		90.98	1.25	475,000	10	15	49	26	3.3	0.93
Chevron Corporation	CVX		117.15	1.31	289,000	3	14	64	20	3.7	0.90
Royal Dutch Shell	RDS-A	B	53.41	1.67	353,000	2	18	56	24	7.0	0.77
Total S.A.	TOT	B	49.89	1.52	182,000		19	57	24	5.2	0.65
Total or Median				*1.42*	*1,299,000*			*56*	*24*	*4.4*	*0.83*
Large Independent											
EOG Resources, Inc.	EOG		105.83	1.12	65,100	13	1	86		0.6	1.21
Devon Energy Corporation	DVN		48.06	1.43	36,200	30		60	10	0.5	1.05
Occidental Petroleum Corp.	OXY		71.39	1.19	65,000	5	2	84	9	4.3	0.96
Marathon Oil Corporation	MRO	B	18.49	1.52	23,800	10	2	88		1.1	0.95
ConocoPhillips	COP	B	51.38	1.62	103,000	13	13	74		1.9	0.82
Total or Median				*1.43*	*293,000*	*13*		*84*		*1.1*	*0.96*
Small Independent											
Cimarex Energy Company	XEC		140.87	1.10	14,400	38		62		0.2	1.16
Continental Resources (32%)	CLR	B	52.80	1.35	8,400	29		71		-	0.96
California Resources	CRC		19.90	8.47	7,000	13		87		-	0.85
Whiting Petroleum Corporation	WLL		12.10	2.26	7,700	10		90		-	0.82
Range Resources	RRC	B	35.97	1.49	13,100	76		24		0.2	0.73
Total or Median				*1.49*	*51,000*	*29*		*71*		-	*0.85*
Income											
San Juan Basin Royalty Trust	SJT		6.56	1.00	310	100		-		10.6	0.82
Dorchester Minerals, L.P.	DMLP	B	17.00	1.00	520	28		72		7.8	0.71
Permian Basin RT	PBT		7.28	1.00	340	23		77		9.8	0.66
Cross Timbers Royalty Trust	CRT		18.98	1.00	110	71		29		8.4	0.66
Sabine Royalty Trust	SBR	B	36.86	1.00	540	44		56		7.9	0.61
Total or Median				*1.00*	*1,800*	*44*		*56*		*8.4*	*0.66*
Canada											
EnCana Corporation	ECA		12.84	1.53	19,100	41		59		0.5	1.17
Imperial Oil Limited (30%)	IMO		36.37	1.27	11,800	1		62	37	1.3	0.97
Cenovus Energy Inc.	CVE		15.93	1.31	17,400	10		81	9	1.0	0.84
Birchcliff Energy Ltd.	BIREF	B	7.48	1.32	2,600	74		26		1.0	0.80
Suncor Energy	SU	B	32.56	1.34	72,800	-		86	14	2.7	0.79
Total or Median				*1.32*	*124,000*			*62*		*1.0*	*0.84*

Estimated present value presumes a long-term price for oil of US$70 a barrel and natural gas, $4.00 a million btu.
Estimated present value capped by unlevered cash flow multiple (EV/Ebitda)
McDep Ratio = **M**arket **c**ap and **De**bt to **p**resent value of oil and gas and other businesses
For historical research see www.mcdep.com

Table 2

McDep Energy Stocks

Net Present Value and McDep Ratio

	Symbol/Rating	B = Buy	*Price (US$/sh) 12-Dec 2016*	*Shares (mm)*	*Market Cap (US$mm)*	*Net Present Value (US$/sh)*	*Debt/ Present Value*	*McDep Ratio*
Global Integrated								
Exxon Mobil Corporation	XOM		90.98	4,178	380,000	100.00	0.19	0.93
Chevron Corporation	CVX		117.15	1,883	221,000	135.00	0.21	0.90
Royal Dutch Shell	RDS-A	B	53.41	3,965	212,000	80.00	0.31	0.77
Total S.A.	TOT	B	49.89	2,404	120,000	90.00	0.22	0.65
Total or Median					*933,000*		*0.22*	*0.83*
Large Independent								
EOG Resources, Inc.	EOG		105.83	548	58,000	85.00	0.13	1.21
Devon Energy Corporation	DVN		48.06	527	25,300	45.00	0.31	1.05
Occidental Petroleum Corp.	OXY		71.39	764	54,500	75.00	0.15	0.96
Marathon Oil Corporation	MRO	B	18.49	847	15,660	20.00	0.33	0.95
ConocoPhillips	COP	B	51.38	1,246	64,000	70.00	0.31	0.82
Total or Median					*217,500*		*0.31*	*0.96*
Small Independent								
Cimarex Energy Company	XEC		140.87	93	13,100	120.00	0.10	1.16
Continental Resources (32%)	CLR	B	52.80	118	6,300	56.00	0.25	0.96
California Resources	CRC		19.90	42	800	50.00	0.75	0.85
Whiting Petroleum Corporation	WLL		12.10	281	3,400	18.00	0.46	0.82
Range Resources	RRC	B	35.97	244	8,800	56.00	0.24	0.73
Total or Median					*32,000*		*0.25*	*0.85*
Income								
San Juan Basin Royalty Trust	SJT		6.56	47	310	8.00	-	0.82
Dorchester Minerals, L.P.	DMLP	B	17.00	31	520	24.00	-	0.71
Permian Basin RT	PBT		7.28	47	340	11.00	-	0.66
Cross Timbers Royalty Trust	CRT		18.98	6	110	29.00	-	0.66
Sabine Royalty Trust	SBR	B	36.86	15	540	60.00	-	0.61
Total or Median					*1,800*		-	*0.66*
Canada								
EnCana Corporation	ECA		12.84	973	12,500	10.00	0.40	1.17
Imperial Oil Limited (30%)	IMO		36.37	255	9,300	38.00	0.20	0.97
Cenovus Energy Inc.	CVE		15.93	833	13,300	20.00	0.20	0.84
Birchcliff Energy Ltd.	BIREF	B	7.48	263	2,000	10.00	0.19	0.80
Suncor Energy	SU	B	32.56	1,665	54,200	44.00	0.20	0.79
Total or Median					*91,000*		*0.20*	*0.84*

Estimated present value presumes a long-term price for oil of US$70 a barrel and natural gas, $4.00 a million btu.
Estimated present value capped by unlevered cash flow multiple (EV/Ebitda)
McDep Ratio = **M**arket **c**ap and **De**bt to **p**resent value of oil and gas and other businesses
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Table 3

McDep Energy Stocks

Value Multiples and Dividend

Ranked by EV/Ebitda

			Price	Adjustd				
			(US$/sh)	Resrvs/	PV/	EV/		Dividend
	Symbol/Rating		12-Dec	Prod	Ebitda	Ebitda	P/E	NTM
		B = Buy	2016	NTM	NTM	NTM	NTM	($/sh)
Global Integrated								
Exxon Mobil Corporation	XOM		90.98	15.0	11.4	10.6	24	3.00
Chevron Corporation	CVX		117.15	9.8	10.6	9.5	30	4.32
Royal Dutch Shell	RDS-A	B	53.41	9.5	9.2	7.1	16	3.76
Total S.A.	TOT	B	49.89	9.9	9.8	6.4	12	2.59
Median				*9.8*	*10.2*	*8.3*	*20*	
Large Independent								
Devon Energy Corporation	DVN		48.06	8.4	13.6	14.2		0.24
EOG Resources, Inc.	EOG		105.83	7.5	11.0	13.4		0.67
Occidental Petroleum Corp.	OXY		71.39	8.9	11.9	11.4		3.04
Marathon Oil Corporation	MRO	B	18.49	12.6	11.8	11.2		0.20
ConocoPhillips	COP	B	51.38	11.0	11.9	9.7		1.00
Median				*8.9*	*11.9*	*11.4*		
Small Independent								
Continental Resources (32%)	CLR	B	52.80	11.4	14.0	13.4		-
Cimarex Energy Company	XEC		140.87	6.8	11.5	13.2		0.32
Range Resources	RRC	B	35.97	11.9	15.6	11.4		0.08
Whiting Petroleum Corporation	WLL		12.10	9.3	9.6	7.9		-
California Resources	CRC		19.90	12.0	9.3	7.9		-
Median				*11.4*	*11.5*	*11.4*		
Income								
Sabine Royalty Trust	SBR	B	36.86	10.1	20.5	12.6	13	2.92
Dorchester Minerals, L.P.	DMLP	B	17.00	7.4	16.3	11.6	16	1.33
Cross Timbers Royalty Trust	CRT		18.98	7.2	16.3	10.7	12	1.60
Permian Basin RT	PBT		7.28	8.6	14.3	9.5	10	0.72
San Juan Basin Royalty Trust	SJT		6.56	10.0	11.0	9.0	9	0.70
Median				*8.6*	*16.3*	*10.7*	*12*	
Canada								
EnCana Corporation	ECA		12.84	6.1	10.4	12.2		0.06
Birchcliff Energy Ltd.	BIREF	B	7.48	12.1	12.1	9.7		0.08
Imperial Oil Limited (30%)	IMO		36.37	33.0	9.3	9.0		0.46
Cenovus Energy Inc.	CVE		15.93	16.2	9.7	8.1		0.15
Suncor Energy	SU	B	32.56	20.7	10.1	8.0		0.88
Median				*16.2*	*10.1*	*9.0*		
Grand Median				*10*	*11*	*11*		

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended December 31, 2017; 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 2016

Ranked by Unlevered Total Return

			Price ($/sh) 12-Dec 2016	*Price ($/sh) 31-Dec 2015*	*Price Change (%)*	*Cash Distrib. (%)*	*Equity Total Return (%)*	*Debt ($/sh)*	*Unlevered Total Return (%)*	*McDep Ratio*
	Symbol/Rati									
Global Integrated										
Chevron Corporation	CVX		117.15	89.96	30	5	35	37	25	0.90
Exxon Mobil Corporation	XOM		90.98	77.95	17	4	21	23	16	0.93
Royal Dutch Shell	RDS-A	B	53.41	45.79	17	8	25	36	14	0.77
Total S.A.	TOT	B	49.89	44.95	11	6	17	26	11	0.65
Median					*17*		*23*		*15*	*0.83*
Large Independent										
EOG Resources, Inc.	EOG		105.83	70.79	49	1	50	13	43	1.21
Devon Energy Corporation	DVN		48.06	32.00	50	1	52	21	31	1.05
Marathon Oil Corporation	MRO	B	18.49	12.58	47	2	49	10	28	0.95
Occidental Petroleum Corp.	OXY		71.39	67.61	6	4	10	14	8	0.96
ConocoPhillips	COP	B	51.38	46.69	10	2	12	32	7	0.82
Median					*47*		*49*		*28*	*0.96*
Small Independent										
Continental Resources (32%)	CLR	B	52.80	22.98	130	-	130	18	72	0.96
Cimarex Energy Company	XEC		140.87	89.38	58	0	58	14	50	1.16
Range Resources	RRC	B	35.97	24.62	46	0	46	18	27	0.73
Whiting Petroleum Corporation	WLL		12.10	9.44	28	-	28	15	11	0.82
California Resources	CRC		19.90	23.30	(15)	-	(15)	148	(2)	0.85
Median					*46*		*46*		*27*	*0.85*
Income										
Dorchester Minerals, L.P.	DMLP	B	17.00	9.89	72	9	81	-	81	0.71
San Juan Basin Royalty Trust	SJT		6.56	4.14	58	6	65	-	65	0.82
Cross Timbers Royalty Trust	CRT		18.98	13.01	46	8	54	-	54	0.66
Permian Basin RT	PBT		7.28	5.06	44	8	51	-	51	0.66
Sabine Royalty Trust	SBR	B	36.86	26.26	40	7	47	-	47	0.61
Median					*46*		*54*		*54*	*0.66*
Canada										
Birchcliff Energy Ltd.	BIREF	B	7.48	2.93	155	-	155	2	86	0.80
EnCana Corporation	ECA		12.84	5.09	152	1	153	7	66	1.17
Suncor Energy	SU	B	32.56	25.80	26	4	30	11	21	0.79
Cenovus Energy Inc.	CVE		15.93	12.62	26	1	27	5	20	0.84
Imperial Oil Limited (30%)	IMO		36.37	32.52	12	1	13	10	10	0.97
Median					*26*		*30*		*21*	*0.84*
Grand Median					*42*		*47*		*27*	*0.83*
Natural Gas ($/mmbtu)			3.51	2.33	51					
Oil -West Texas Intermediate ($/bbl)			52.83	37.06	43					
S&P 500			2,257	2,044	10					

Source: *McDep LLC, Yahoo, CME Group, Bloomberg*

For historical research see www.mcdep.com

Index of Recent Research

Date	Series	Symbol	Subject	Theme
6-Dec	II	XOM, RDS, CVX, TOT		Total Return Upside
28-Nov	II	COP, DVN, EOG, MRO, OXY		Permian Players
22-Nov	II	CRT, DMLP, PBT, SBR, SJT		Income Payers Sparkle
15-Nov	Meter Reader			Growth, Inflation and Trump
9-Nov	ISI	ECA	Encana Corporation	Raise NPV to US$10 from US$6
31-Oct	ISI	SU	Suncor Energy Inc.	Raise NPV to US$44 from US$35
27-Oct	ISI	RRC	Range Resources	New Buy on Higher NPVof $56
20-Oct	ISI	SJT	San Juan Basin Royalty Trust	Vote Proxy for Less Conflict, More Competence
18-Oct	ISI	CRC	California Resources	Option on Oil Price
14-Oct	ISI	CVX	Chevron	Oilier Global Integrated
11-Oct	Meter Reader			Canada Comeback
4-Oct	ISI	COP	ConocoPhillips	Pure Play Producer
24-Sep	ISI	SJT	San Juan Basin Royalty Trust	Rising for the Dead---Again
13-Sep	Meter Reader			Permian Surprises
6-Sep	ISI	DVN	Devon Energy	Raise NPV to $45 from $33 on Stress Test Success
30-Aug	ISI	SBR	Sabine Royalty Trust	Long-Life Top Line Cash Payer
21-Aug	ISI	BIREF	Birchcliff Energy	Canadian Independent Producer Transformed
17-Aug	ISI	SJT	San Juan Basin Royalty Trust	Preliminary Filing to Replace Trustee
16-Aug	Meter Reader			The Money Glut
11-Aug	ISI	XEC	Cimarex Energy	Raise NPV to $120 from $90
1-Aug	II	XOM, RDS, CVX, TOT		Real Return Standouts
1-Aug	ISI	WLL	Whiting Petroleum	Remove Buy Designation
22-Jul	II	CRT, DMLP, PBT, SBR, SJT		Income Payers in Uptrend
12-Jul	Meter Reader			Mid-Year Strategy
7-Jul	ISI	XOM	Exxon Mobil	Durable Real Return
22-Jun	ISI	BIREF	Birchcliff Energy	Half Billion Dollar Deal with Encana
21-Jun	ISI	SJT	San Juan Basin Royalty Trust	Record Administrative Costs
21-Jun	ISI	PBT	Permian Basin Royalty Trust	Raise Distribution to 9%
14-Jun	Meter Reader			Good Year for Oil and Gas
10-Jun	ISI	SU	Suncor Energy Inc.	Revitalized after Wildfire
7-Jun	ISI	WLL	Whiting Petroleum	Looking Up Again
23-May	ISI	DMLP	Dorchester Minerals, L.P.	Raise Distribution to 9%
17-May	ISI	COP	ConocoPhillips	Strategy Reset to Low Risk Value
12-May	ISI	BIREF	Birchcliff Energy	Record Low Operating Cost
10-May	Meter Reader			Value, Growth, Income and Momentum
9-May	ISI	RRC	Range Resources	Restore Net Present Value to $42 a Share
26-Apr	ISI	CLR	Continental Resources	Disciplined Visionary
13-Apr	Meter Reader			Road to Profits
5-Apr	ISI	TOT	Total S.A.	Globally Diversified Income
22-Mar	II	CRT, DMLP, PBT, SBR, SJT		Income Payer Appreciation Potential 55%-110%
15-Mar	Meter Reader			Best Oil Outlook in Seven Years
7-Mar	II	COP, MRO, CLR, WLL		Buy Low

MR = Meter Reader (published monthly on or about second or third Tuesday)

ISI = Independent Stock Idea

II = Industry Idea

For historical research by stock, go to mcdep.com, click on Stock Ideas, click on stock by name.

Disclaimer: This analysis was prepared by Kurt Wulff, Manager of McDep LLC. 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.