



Meter Reader Special

Mid-Year Ranking of Oil and Gas Stocks
July 2, 2018

Outperformance in First Half 2018 Attractive Value, Auspicious Momentum

Summary and Recommendation

After outperforming in the first half of 2018, oil and gas stocks stay at attractive value with the median McDep Ratio of 22 stocks in our coverage at 0.85. McDep stocks gained a median 9% in price and distributions in six months compared to total world common stocks at about 0%. McDep Ratios below 1.0 imply undervaluation relative to our long-term oil price of \$70 a barrel and an expected 7% real unlevered return. While current price for U.S. crude oil futures over the next twelve months has reached \$70, momentum may carry price higher in the next two years just as momentum carried price below \$30 two years ago. At the same time, about 15 of our 22 stocks have triple positive momentum that we define as the golden cross pattern with the 50-day average stock price above the 200-day and the current price above both the 200-day and the 50-day average. Combinations of momentum and value that intrigue us include:

Value below McDep Ratio of 0.8 and Momentum Triple Positive

Royal Dutch Shell (RDSB) – global integrated oil with profitable liquefied natural gas
Devon Energy (DVN) – mid-size shale oil producer aggressively restructuring
Marathon Oil (MRO) – four basin U.S. shale oil producer executing successfully
California Resources (CRC) – top west coast oil producer with supercharged leverage
Whiting Petroleum (WLL) – new CEO boosting performance of Bakken producer
Birchcliff Energy (BIREF) – stock just turned triple positive after extraordinary decline

Value below McDep Ratio of 0.8 and Momentum Turning Positive

Three producers with more natural gas exposure are no longer triple negative because stock price has moved above the 50-day average. Positive change must start somewhere.
Cimarex Energy (XEC) – Permian and Oklahoma shale oil with natural gas
Cross Timbers Royalty Trust (CRT) – Top Line Permian oil and New Mexico gas
Range Resources (RRC) – Pennsylvania natural gas waiting for pipeline

Value below McDep Ratio of 0.8 and Momentum Triple Negative

San Juan Basin Royalty Trust (SJT) – worst might be over after steep drop to McDep Ratio of 0.72 from 1.21 near January peak



Meter Reader Special

Mid-Year Ranking of Oil and Gas Stocks
July 2, 2018

McDep Ratio 0.9 – 1.0 and Momentum Dip

Three oil producers less undervalued have triple positive momentum broken with recent price dip below 50-day average. The stocks are “buy the dip” candidates on a chart basis.
Pioneer Natural Resources (PXD) – large, concentrated, predictable shale oil grower
Continental Resources (CLR) – shale oil pioneer, founder CEO Harold Hamm
Permian Basin Royalty Trust (PBT) – 8.9% distribution yield

We judge stocks primarily based on our fundamental rankings (see [Tables 1-4](#) on pages 3-6). Momentum, or price trends, can sometimes help in timing decisions or call attention to pending developments before other signs. When negative surprises occur, we take comfort in the protection afforded by a diversified portfolio of investments. We like stocks in each of our five groups and provide more detail in past analyses (see [Index of Recent Research](#) on page 7).

Kurt H. Wulff, CFA



Meter Reader Special

Mid-Year Ranking of Oil and Gas Stocks

July 2, 2018

		Price (US\$/sh)	Market Cap (US\$mm)	Enterprise Value (\$mm)	EV/ Market Cap	EV/ Ebitda NTM	PV/ Ebitda NTM	Oil Prod'n/ Ebitda (%)	Dist. Yield NTM (%)	McDep Ratio (EV/PV)	
	Symbol/Rating	29-Jun 2018									
Integrated											
	Exxon Mobil Corporation	XOM	82.73	353,000	444,000	1.26	8.1	8.7	50	4.0	0.93
	Chevron Corporation	CVX	126.43	242,000	305,000	1.26	7.2	8.2	63	3.5	0.87
	Suncor Energy	SU	40.68	67,000	86,000	1.29	6.6	7.8	79	2.7	0.85
	Royal Dutch Shell	RDS-B	72.65	304,000	421,000	1.38	6.8	8.7	51	5.2	0.79
	<i>Total or Median</i>			966,000	1,256,000	1.27	7.0	8.4	57	3.8	0.86
Large Independent											
	Occidental Petroleum Corp.	OXY	83.68	64,200	77,900	1.21	8.2	7.5	80	3.7	1.09
	EOG Resources, Inc.	EOG	124.43	74,400	81,500	1.10	8.0	8.3	91	0.4	0.96
	Pioneer Natural Resources	PXD	189.24	32,400	35,000	1.08	7.7	8.1	94	0.0	0.95
	ConocoPhillips	COP	69.62	83,000	106,000	1.28	7.2	8.0	77	1.6	0.90
	<i>Total or Median</i>			254,000	300,400	1.15	7.9	8.0	85	1.0	0.96
Mid-Size Independent											
	Hess Corporation	HES	66.89	20,700	29,100	1.41	11.0	9.6	89	1.5	1.14
	Continental Resources	CLR	64.76	24,200	30,600	1.26	7.8	8.3	83	-	0.94
	Devon Energy Corporation	DEV	43.96	23,200	28,200	1.22	7.4	9.7	86	0.7	0.77
	Cimarex Energy Company	XEC	101.74	9,700	11,200	1.15	5.8	7.7	82	0.6	0.75
	Marathon Oil Corporation	MRO	20.86	17,770	24,500	1.38	4.9	8.1	90	1.0	0.60
	<i>Total or Median</i>			95,600	123,600	1.26	7.4	8.3	86	0.7	0.77
Small Independent											
	California Resources	CRC	45.44	2,100	8,400	4.0	5.9	7.6	92	-	0.77
	Whiting Petroleum Corporation	WLL	52.72	4,800	8,200	1.70	4.7	7.2	97	-	0.66
	Range Resources	RRC	16.73	4,100	8,800	2.13	6.0	10.0	46	0.5	0.60
	Birchcliff Energy Ltd.	BIREF	3.67	1,000	1,600	1.63	4.9	9.4	50	2.1	0.53
	<i>Total or Median</i>			12,000	27,000	1.91	5.4	8.5	71	0.2	0.63
Income											
	Sabine Royalty Trust	SBR	47.10	690	690	1.00	12.7	13.5	71	7.8	0.94
	Permian Basin RT	PBT	9.33	440	440	1.00	11.2	12.0	80	8.9	0.93
	Dorchester Minerals, L.P.	DMLP	20.60	670	670	1.00	9.4	10.9	84	9.1	0.86
	San Juan Basin Royalty Trust	SJT	5.79	270	270	1.00	11.7	16.1	-	8.4	0.72
	Cross Timbers Royalty Trust	CRT	14.49	90	90	1.00	7.3	12.7	37	11.3	0.58
	<i>Total or Median</i>			2,200	2,200	1.00	11.2	12.7	71	8.9	0.86

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation, amort.
 Estimated Ebitda (cash flow) tied to NTM futures prices for oil and natural gas. NTM = Next Twelve Months ending 6/30/19.
 Estimated Present Value (PV) presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.
 McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses. For historical research see www.mcdep.com



Meter Reader Special

Mid-Year Ranking of Oil and Gas Stocks
July 2, 2018

	Symbol/Rating	Price	Upstream NTM			Down- stream Uplift (\$/boe)	Total Ebitda NTM (\$mm)	Distrib./ Ebitda (%)	Distrib. NTM (\$/sh)	
		(US\$/sh) 29-Jun 2018	Volume (mmboe)	Equiv. Price (\$/boe)	Ebitda Margin (%)					Ebitda (\$/boe)
Integrated										
Royal Dutch Shell	RDS-B	72.65	1370	47.69	70	33.20	11.68	45,482	26	3.76
Exxon Mobil Corporation	XOM	82.73	1450	51.11	51	26.10	11.68	37,858	26	3.28
Chevron Corporation	CVX	126.43	1058	52.63	63	32.90	7.28	34,806	20	4.48
Suncor Energy	SU	40.68	300	60.02	57	34.12	9.15	10,220	14	1.10
<i>Total or Median</i>			<i>4178</i>	<i>51.87</i>	<i>60</i>	<i>33.05</i>	<i>10.42</i>	<i>128,367</i>	<i>23</i>	
Large Independent										
ConocoPhillips	COP	69.62	458	50.23	64	32.20	0.00	14,753	9	1.14
EOG Resources, Inc.	EOG	124.43	280	48.76	74	36.26	0.00	10,158	3	0.56
Occidental Petroleum Corp.	OXY	83.68	262	50.30	60	30.30	6.10	7,943	25	3.08
Pioneer Natural Resources	PXD	189.24	124	49.50	74	36.60	0.00	4,552	0	0.08
<i>Total or Median</i>			<i>1125</i>	<i>49.87</i>	<i>69</i>	<i>34.23</i>	<i>0.00</i>	<i>37,406</i>	<i>6</i>	
Mid-Size Independent										
Marathon Oil Corporation	MRO	20.86	167	43.05	70	30.10	0.00	5,015	3	0.20
Continental Resources	CLR	64.76	108	44.76	81	36.40	0.00	3,940	-	-
Devon Energy Corporation	DVN	43.96	209	31.19	58	18.20	0.00	3,799	4	0.32
Hess Corporation	HES	66.89	97	47.21	58	27.20	0.00	2,649	12	1.00
Cimarex Energy Company	XEC	101.74	86	32.28	69	22.20	0.00	1,919	3	0.64
<i>Total or Median</i>			<i>667</i>	<i>43.05</i>	<i>69</i>	<i>27.20</i>	<i>0.00</i>	<i>17,322</i>	<i>3</i>	
Small Independent										
Whiting Petroleum Corporation	WLL	52.72	50	50.84	68	34.80	0.00	1,725	-	-
Range Resources	RRC	16.73	139	19.53	54	10.50	0.00	1,457	1	0.08
California Resources	CRC	45.44	50	55.41	52	28.80	0.00	1,428	-	-
Birchcliff Energy Ltd.	BIREF	3.67	22	19.35	74	14.40	0.00	324	6	0.08
<i>Total or Median</i>			<i>260</i>	<i>35.19</i>	<i>61</i>	<i>21.60</i>	<i>0.00</i>	<i>4,933</i>	<i>1</i>	
Income										
Dorchester Minerals, L.P.	DMLP	20.60	2.34	41.33	73	30.23	0.00	71	85	1.87
Sabine Royalty Trust	SBR	47.10	1.76	35.53	86	30.65	0.00	54	100	3.70
Permian Basin RT	PBT	9.33	1.22	47.62	67	31.98	0.00	39	99	0.83
San Juan Basin Royalty Trust	SJT	5.79	3.73	12.23	51	6.21	0.00	23	98	0.49
Cross Timbers Royalty Trust	CRT	14.49	0.43	42.78	64	27.38	0.00	12	83	1.64
<i>Total or Median</i>			<i>9</i>	<i>41.33</i>	<i>67</i>	<i>30.23</i>	<i>0.00</i>	<i>199</i>	<i>98</i>	

For historical research see www.mcdep.com



Meter Reader Special

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July 2, 2018

Table 3											
McDep Energy Stocks											
Net Present Value Per Share											
		Price (US\$/sh)	Shares	Debt	P/E	Prod	Resrvs	Undev/ Devel.	Nat Gas/	Top Line/	Net Present
Symbol/Rating	29-Jun 2018	Shares (mm)	Debt (\$mm)	P/E NTM	Prod NTM	Resrvs (%)	Ebitda (%)	Ebitda (%)	Value (US\$/sh)		
Integrated											
Chevron Corporation	CVX	126.43	1,913	62,659	15	7.1	57	23			150.00
Royal Dutch Shell	RDS-B	72.65	4,189	116,710	11	7.2	22	31			100.00
Exxon Mobil Corporation	XOM	82.73	4,270	90,941	13	9.6	52	28			90.00
Suncor Energy	SU	40.68	1,644	19,077	10	8.5	87				50.00
	<i>Median</i>					7.9	55				
Large Independent											
Pioneer Natural Resources	PXD	189.24	171	2,600	18	7.3	9	6			200.00
EOG Resources, Inc.	EOG	124.43	598	7,071	18	4.9	43	10			130.00
ConocoPhillips	COP	69.62	1,186	23,143	14	7.7	31	23			80.00
Occidental Petroleum Corp.	OXY	83.68	767	13,700	15	7.4	35	4			75.00
	<i>Median</i>					7.3	33				
Mid-Size Independent											
Cimarex Energy Company	XEC	101.74	96	1,498	10	4.8	35	18			140.00
Continental Resources	CLR	64.76	374	6,333	20	5.6	121	17			70.00
Devon Energy Corporation	DVN	43.96	528	5,000	16	8.3	24	14			60.00
Hess Corporation	HES	66.89	310	8,399		7.4	59	11			55.00
Marathon Oil Corporation	MRO	20.86	852	6,734	10	5.4	60	10			40.00
	<i>Median</i>					5.6	59				
Small Independent											
Whiting Petroleum Corporation	WLL	52.72	91	3,367	18	6.8	84	3			100.00
California Resources	CRC	45.44	46	6,300		8.9	41	8			100.00
Range Resources	RRC	16.73	247	4,657	13	10.0	83	54			40.00
Birchcliff Energy Ltd.	BIREF	3.67	268	621	13	7.2	228	50			9.00
	<i>Median</i>					8.0	83				
Income											
Sabine Royalty Trust	SBR	47.10	15	-	13	10.1	3	37	100		50.00
Cross Timbers Royalty Trust	CRT	14.49	6	-	9	11.6	-	69	83		25.00
Dorchester Minerals, L.P.	DMLP	20.60	32	-	14	6.9	-	21	76		24.00
Permian Basin RT	PBT	9.33	47	-	11	6.7	-	21	41		10.00
San Juan Basin Royalty Trust	SJT	5.79	47	-	12	11.2	-	100	-		8.00
	<i>Median</i>					10.1					

P/E = Stock Price to Earnings. For historical research see www.mcdep.com.



Meter Reader Special

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July 2, 2018

Table 4									
McDep Energy Stocks									
Total Return Year-to-Date 2018									
Ranked by Unlevered Total Return									
		Price	Price			Equity	Unlevered		
		(\$/sh)	(\$/sh)	Price	Cash	Total		Total	
	Symbol/Rat	29-Jun	29-Dec	Change	Distrib.	Return	Debt	Return	McDep
		2018	2017	(%)	(%)	(%)	(\$/sh)	(%)	Ratio
Integrated									
Suncor Energy	SU	40.68	36.72	11	2	12	12	9	0.85
Royal Dutch Shell	RDS-B	72.65	68.29	6	3	9	28	6	0.79
Chevron Corporation	CVX	126.43	125.19	1	2	3	33	2	0.87
Exxon Mobil Corporation	XOM	82.73	83.64	(1)	2	1	21	1	0.93
	<i>Median</i>			4		6		4	0.86
Large Independent									
ConocoPhillips	COP	69.62	54.89	27	1	28	20	21	0.90
EOG Resources, Inc.	EOG	124.43	107.91	15	0	16	12	14	0.96
Occidental Petroleum Corp.	OXY	83.68	73.66	14	2	16	18	13	1.09
Pioneer Natural Resources	PXD	189.24	172.85	9	0	10	15	9	0.95
	<i>Median</i>			14		16		13	0.96
Mid-Size Independent									
Hess Corporation	HES	66.89	47.47	41	1	42	27	27	1.14
Continental Resources	CLR	64.76	52.97	22	-	22	17	17	0.94
Marathon Oil Corporation	MRO	20.86	16.93	23	1	24	8	16	0.60
Devon Energy Corporation	DVN	43.96	41.40	6	0	7	9	5	0.77
Cimarex Energy Company	XEC	101.74	122.01	(17)	0	(16)	16	(15)	0.75
	<i>Median</i>			22		22		16	0.77
Small Independent									
Whiting Petroleum Corporation	WLL	52.72	26.48	99	-	99	37	41	0.66
California Resources	CRC	45.44	19.44	134	-	134	137	17	0.77
Birchcliff Energy Ltd.	BIREF	3.67	3.50	5	1	6	2	4	0.53
Range Resources	RRC	16.73	17.06	(2)	0	(2)	19	(1)	0.60
	<i>Median</i>			52		53		10	0.63
Income									
Dorchester Minerals, L.P.	DMLP	20.60	15.20	36	5	41	-	41	0.86
Sabine Royalty Trust	SBR	47.10	44.60	6	3	9	-	9	0.94
Permian Basin RT	PBT	9.33	8.87	5	4	9	-	9	0.93
Cross Timbers Royalty Trust	CRT	14.49	14.69	(1)	4	3	-	3	0.58
San Juan Basin Royalty Trust	SJT	5.79	8.24	(30)	3	(27)	-	(27)	0.72
	<i>Median</i>			5		9		9	0.86
	<i>Grand Median</i>			8		9		9	0.85
Natural Gas (\$/mmbtu)		2.92	2.95	(1)					
Oil - West Texas Intermediate (\$/bbl)		74.33	60.09	24					
Total Stock Market - U.S.	VII	140.43	137.25	2	1	3			
Developed Markets - ex US	VEA	42.86	44.86	(4)	1	(4)			
Emerging Markets	VWO	42.18	45.91	(8)	0	(8)			
Total Stock Market - World	VT	73.37	74.26	(1)	1	(0)			
Source: McDep LLC, Yahoo, CME Group, Bloomberg					For historical research see www.mcdep.com				



Meter Reader Special

Mid-Year Ranking of Oil and Gas Stocks
July 2, 2018

Index of Recent Research				
<i>Date</i>	<i>Series</i>	<i>Symbol</i>	<i>Subject</i>	<i>Theme</i>
21-Jun	II	CRT, DMLP, PBT, SBR, SJT		8% Cash in Uncertain Times
12-Jun	Meter Reader			Positive Charts
6-Jun	ISI	RDS	Royal Dutch Shell	Bright Future in Integrated Gas
30-May	ISI	BIREF	Birchcliff Energy	A Play on Narrowing the Gap
24-May	ISI	DMLP	Dorchester Minerals, L.P.	Riding the Shale Trend
15-May	Meter Reader			\$70 Oil Here
9-May	ISI	XEC	Cimarex Energy	Quality Company, Lagging Stock
4-May	ISI	MRO	Marathon Oil	Raise NPV to \$40 a Share from \$30
30-Apr	ISI	XOM	ExxonMobil	Reduce NPV to \$90 from \$100 a Share
24-Apr	II	CRT, DMLP, PBT, SBR, SJT		8% Median Distribution Yield
19-Apr	ISI	DMLP	Dorchester Minerals, L.P.	11% Distribution Reinforced
17-Apr	II	COP,EOG,OXY,PXD		Positive Trends for Large Cap Independent Producer
10-Apr	Meter Reader			Transition to Moderate Growth and Inflation
3-Apr	II	SJT, CRT	San Juan Basin	Regional Natural Gas Price Softness
21-Mar	II	BIREF, CRC, RRC, WLL		Small Cap High Reward, High Risk
15-Mar	Meter Reader		ExxonMobil	Out-of-Favor Industry Leader
12-Mar	ISI	DMLP	Dorchester Minerals, L.P.	Raise Distribution Yield to 11%
1-Mar	ISI	EOG	EOG Resources	Raise NPV to \$130 on Production
28-Feb	II	CLR, XEC, HES, DVN, MRO		Oil Price Upside for Mid-Size Independent Producer
20-Feb	II	CRT, DMLP, PBT, SBR, SJT		7% Distributions Inflation Protected
13-Feb	Meter Reader			Insulate Inflation
5-Feb	ISI	HES	Hess Corporation	Repositioning for Reward
2-Feb	ISI	COP	ConocoPhillips	Raise NPV to \$80 on Higher Cash Flow
25-Jan	II	CVX, RDS, SU, XOM		Integrated Oil Value Creators
19-Jan	ISI	DMLP	Dorchester Minerals, L.P.	Highest Distribution in Three Years
16-Jan	Meter Reader			Growth is Good
2-Jan	Meter Reader Special			New Look at Beginning of Year 2018
29-Dec	Meter Reader Special			Trending Up at End of Year 2017
20-Dec	II	CRT, DMLP, PBT, SBR, SJT		Top Line Premium and Bottom Line Upside
12-Dec	Meter Reader			Oil and Gas Gains in 2018
5-Dec	ISI	RDS	Royal Dutch Shell	Share Buyback Ahead
27-Nov	ISI	CLR	Continental Resources	Oil Price Helps
16-Nov	Meter Reader			Buy ETF or Global Integrated Stock
12-Nov	ISI	BIREF	Birchcliff Energy	Downward Price Pressure Lifting
6-Nov	ISI	DMLP	Dorchester Minerals, L.P.	Royalty Growth Ratified
2-Nov	ISI	MRO	Marathon Oil	Shale Oil Value
26-Oct	ISI	SU	Suncor Energy Inc.	Record Production
24-Oct	ISI	CRT	Cross Timbers Royalty Trust	Free Cash Flow
17-Oct	II	COP, DVN, EOG, MRO,PXD, OXY		Oil Price Moderators
10-Oct	Meter Reader			Stock Price Momentum Picking Up
4-Oct	ISI	COP	ConocoPhillips	Cash to the Owners
				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.



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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.