

Growth is Good

Summary and Recommendation

We are happy to see the strong performance of global stock markets. We might be happier if oil and gas stocks had been participating more, but that is changing lately. Moreover, we can be patient recalling that oil and gas stocks made their highs a year after the broader stock market in 2008 and 2007. We attribute the stock market performance in no small part to U.S. government policy stimulus that is leading to less regulation, lower taxes and more economic growth. Growth is good for everyone, in our opinion.

Economic Growth Contributes to Oil and Gas Demand

Declining inventories of oil and natural gas signal demand rising faster than supply. U.S. crude oil inventories have dropped to the middle of the five-year range while U.S. natural gas in storage has dropped to the bottom end of the five-year range (see charts on page 2). Those trends were reflected in price increases this year of 7% for oil for next months delivery and 8% for natural gas. The price trends have further to go to reach our long-term expectations of \$70 a barrel for oil and \$4 a million btu for natural gas compared to \$64 and \$3.20 currently.

Oil and Gas Prices Drive Stock Prices

Year to date, the median stock price gain for the 22 stocks in our coverage was 6% compared to 4% for the U.S. Total Stock Market (see [Table 4](#) on page 6). **Sabine Royalty Trust (SBR)** and **Hess Corporation (HES)** were top gainers at 9% unlevered (9% and 15% levered, respectively). It is gratifying to see steep past decliners like **California Resources (CRC)** climbing back with levered gains of 13%. On a stock price momentum basis, all but three of our covered stocks are in a triple uptrend with price above the 50-day average, above the 200-day average and the 50-day is above the 200-day in the golden cross pattern. Among the three exceptions, **Dorchester Minerals (DMLP)** is close to triple positive just shy of the golden cross. **Range Resources (RRC)** may be bottoming as it has crossed to the positive side of the 50-day.

Operating Performance Also Drives Stock Prices

A median McDep Ratio of 0.90 implies 11% unlevered appreciation in 12 months (see [Table 1](#) on page 3). Higher volume or lower cost than in our base estimates could increase unlevered cash flow (Ebitda) and implied return (see [Table 2](#) on page 4). Changes beyond the range of error in our estimates would lead to a change in Net Present Value per share (see [Table 3](#) on page 5).

San Juan Basin Illustrates Upside Beyond Current McDep Ratio

New owners with new ideas aim to developed trillions of cubic feet of untapped shale gas in one of our largest gas resources. Greatly elaborating on the history and future of the San Juan Basin,

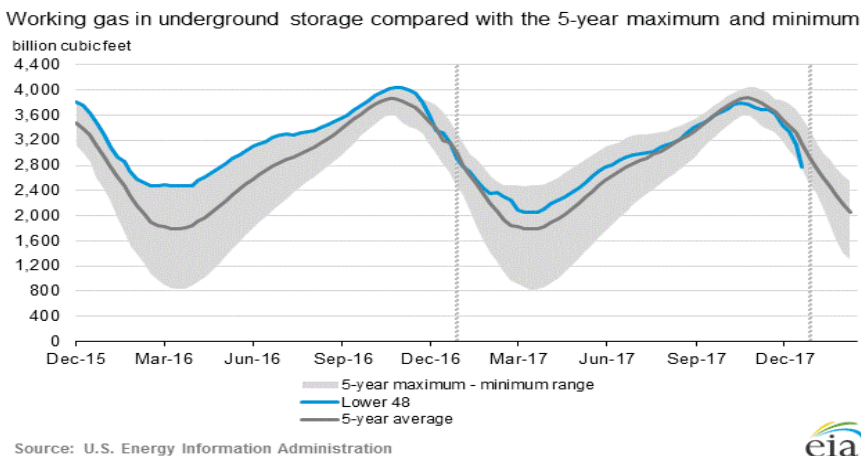
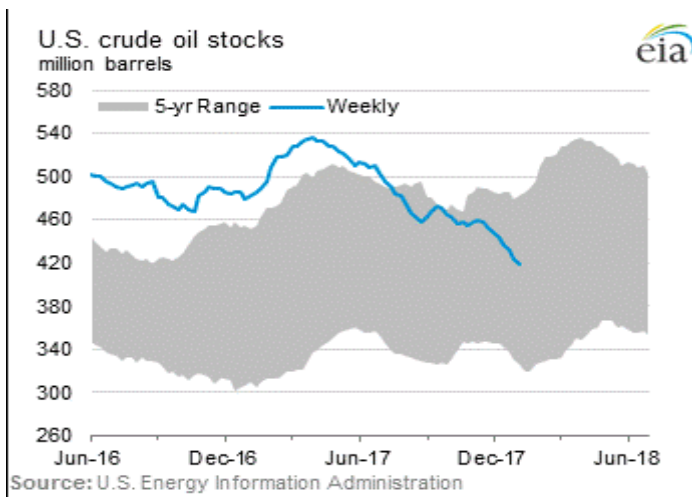


Meter Reader

Monthly Analysis of Oil and Gas Stocks
January 16, 2018

Oil and Gas Investor published a 15-page cover story in its January issue. The article included interviews with the largest land owners, BP and Hilcorp as well as new independents. A brief mention of a familiar name caught our eye as it symbolizes change and opportunity. Bob Simpson, the CEO who sold XTO Energy to **ExxonMobil (XOM)** near the top of the market, is back in the San Juan Basin with a private equity partner near the bottom of natural gas price. Simpson was a colleague of Jon Brumley at Southland Royalty when that company spun off the **San Juan Basin Royalty Trust (SJT)** in 1980. Priced for today's cash flow, SJT is a pure play on the upside of an historic natural gas giant that may become one of our largest natural gas plays again.

Kurt H. Wulff, CFA





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Table 1
McDep Energy Stocks
Ranked by McDep Ratio

		Price (US\$/sh)	Market Cap (US\$mm)	Enterprise Value (\$mm)	EV/ Market Cap	EV/ Ebitda NTM	PV/ Ebitda NTM	Oil Prod'n/ PV (%)	Dist. Yield NTM (%)	McDep Ratio (EV/PV)	
	Symbol/Rating	12-Jan 2018									
Integrated											
	Chevron Corporation	CVX	133.60	253,000	318,000	1.25	8.1	8.9	65	3.2	0.91
	Exxon Mobil Corporation	XOM	87.52	374,000	466,000	1.25	8.3	9.3	53	3.5	0.90
	Suncor Energy	SU	37.97	63,000	81,000	1.28	6.8	8.4	83	2.7	0.80
	Royal Dutch Shell	RDS-B	72.70	303,000	427,000	1.41	6.9	8.8	53	5.2	0.79
	<i>Total or Median</i>			993,000	1,292,000	1.27	7.5	8.8	59	3.4	0.85
Large Independent											
	EOG Resources, Inc.	EOG	115.70	67,000	74,200	1.11	10.1	9.7	91	0.6	1.05
	Occidental Petroleum Corp.	OXY	76.53	58,600	72,100	1.23	9.3	9.2	82	4.0	1.02
	Hess Corporation	HES	54.54	17,200	26,300	1.54	8.8	8.8	89	1.8	0.99
	Pioneer Natural Resources	PXD	186.15	31,700	33,700	1.06	8.8	9.4	92	0.0	0.93
	ConocoPhillips	COP	60.05	73,000	96,000	1.32	8.0	8.8	76	1.8	0.91
	Marathon Oil Corporation	MRO	18.82	16,000	23,000	1.44	7.0	8.6	84	1.1	0.81
	Devon Energy Corporation	DVN	44.04	23,300	31,000	1.33	6.7	8.5	77	0.5	0.79
	<i>Total or Median</i>			286,800	356,000	1.32	8.8	8.8	84	1.1	0.93
Small Independent											
	Continental Resources (32%)	CLR	57.66	6,900	9,000	1.31	8.7	9.0	79	-	0.97
	Cimarex Energy Company	XEC	127.14	11,900	13,400	1.12	8.6	9.4	74	0.3	0.92
	California Resources	CRC	21.94	900	7,000	7.5	7.0	8.2	90	-	0.85
	Range Resources	RRC	17.58	4,300	8,900	2.06	6.7	10.9	39	0.5	0.62
	Whiting Petroleum Corporation	WLL	29.78	2,700	5,900	2.20	5.0	8.2	95	-	0.61
	Birchcliff Energy Ltd.	BIREF	2.88	800	1,400	1.79	4.6	11.1	39	2.8	0.42
	<i>Total or Median</i>			28,000	46,000	1.93	6.9	9.2	77	0.1	0.74
Income											
	San Juan Basin Royalty Trust	SJT	8.54	400	400	1.00	13.2	12.3	-	7.6	1.07
	Sabine Royalty Trust	SBR	48.74	710	710	1.00	17.4	17.9	63	5.7	0.98
	Permian Basin RT	PBT	9.37	440	440	1.00	12.0	12.8	81	7.9	0.94
	Dorchester Minerals, L.P.	DMLP	15.70	510	510	1.00	9.3	14.2	79	10.3	0.65
	Cross Timbers Royalty Trust	CRT	15.41	90	90	1.00	9.3	15.2	32	8.5	0.61
	<i>Total or Median</i>			2,200	2,200	1.00	12.0	14.2	63	7.9	0.94

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 12/31/18.
 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



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	Symbol/Rating	Price	Upstream NTM				Down-	Total	Distrib./ Ebitda	Distrib. NTM
		(US\$/sh)	Volume (mmboe)	Price (\$/boe)	Margin (%)	Ebitda (\$/boe)	stream Uplift (\$/boe)	Ebitda NTM (\$mm)		
		12-Jan 2018								
Integrated										
Royal Dutch Shell	RDS-B	72.70	1372	43.49	73	31.60	13.41	43,369	25	3.76
Exxon Mobil Corporation	XOM	87.52	1486	45.48	57	25.70	11.85	38,181	24	3.08
Chevron Corporation	CVX	133.60	1024	47.49	64	30.40	7.81	31,141	21	4.32
Suncor Energy	SU	37.97	277	59.34	59	35.09	8.09	9,733	14	1.03
<i>Total or Median</i>			4160	46.48	62	31.00	9.97	122,424	22	
Large Independent										
ConocoPhillips	COP	60.05	420	44.55	64	28.70	0.00	12,068	11	1.06
EOG Resources, Inc.	EOG	115.70	240	43.39	71	30.60	0.00	7,335	5	0.67
Occidental Petroleum Corp.	OXY	76.53	232	44.20	64	28.20	5.17	6,549	30	3.08
Devon Energy Corporation	DVN	44.04	194	33.24	66	21.80	2.15	4,228	3	0.24
Pioneer Natural Resources	PXD	186.15	124	43.18	71	30.70	0.00	3,816	0	0.08
Marathon Oil Corporation	MRO	18.82	148	35.17	63	22.20	0.00	3,289	5	0.20
Hess Corporation	HES	54.54	127	43.48	54	23.50	0.00	2,993	11	1.00
<i>Total or Median</i>									5	
Small Independent										
Cimarex Energy Company	XEC	127.14	74	31.20	67	20.90	0.00	1,549	2	0.32
Range Resources	RRC	17.58	133	19.01	52	9.90	0.00	1,320	1	0.08
Whiting Petroleum Corporation	WLL	29.78	45	41.81	64	26.60	0.00	1,188	-	-
Continental Resources (32%)	CLR	57.66	33	39.32	80	31.30	0.00	1,037	-	-
California Resources	CRC	21.94	47	48.28	44	21.40	0.00	1,005	-	-
Birchcliff Energy Ltd.	BIREF	2.88	23	18.37	4	12.90	0.00	298	7	0.08
<i>Total or Median</i>									1	
Income										
Dorchester Minerals, L.P.	DMLP	15.70	2.14	35.29	72	25.46	0.00	54	96	1.61
Sabine Royalty Trust	SBR	48.74	1.45	33.49	84	28.19	0.00	41	100	2.80
Permian Basin RT	PBT	9.37	1.29	41.57	68	28.35	0.00	37	95	0.74
San Juan Basin Royalty Trust	SJT	8.54	3.05	15.63	63	9.90	0.00	30	100	0.65
Cross Timbers Royalty Trust	CRT	15.41	0.42	39.33	60	23.72	0.00	10	80	1.31
<i>Total or Median</i>									96	
For historical research see www.mcdep.com										



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Table 3
McDep Energy Stocks
Net Present Value Per Share

		Price (US\$/sh)					Devel. Resrvs/	Undev/ Devel.	Nat Gas/	Top Line/	Net Present Value
	Symbol/Rating	12-Jan 2018	Shares (mm)	Debt (\$mm)	P/E NTM	Prod NTM	Resrvs (%)	Resrvs (%)	Ebitda (%)	Ebitda (%)	(US\$/sh)
Integrated											
	Chevron Corporation	CVX	133.60	1,896	64,410	18	7.0	48	20		150.00
	Exxon Mobil Corporation	XOM	87.52	4,271	91,771	14	8.9	45	25		100.00
	Royal Dutch Shell	RDS-B	72.70	4,163	124,534	12	6.9	34	28		100.00
	Suncor Energy	SU	37.97	1,663	17,982	10	9.1	80			50.00
	<i>Median</i>						7.9				
Large Independent											
	Pioneer Natural Resources	PXD	186.15	170	2,000	23	5.4	8	7		200.00
	EOG Resources, Inc.	EOG	115.70	579	7,214	27	5.4	43	8		110.00
	Occidental Petroleum Corp.	OXY	76.53	766	13,500	22	7.8	30	2		75.00
	ConocoPhillips	COP	60.05	1,215	23,479	21	9.5	25	22		68.00
	Devon Energy Corporation	DVN	44.04	529	7,746	66	7.6	25	14		60.00
	Hess Corporation	HES	54.54	315	9,178		6.1	39	3		55.00
	Marathon Oil Corporation	MRO	18.82	850	7,044	26	5.4	65	13		25.00
	<i>Median</i>						6.1				
Small Independent											
	Cimarex Energy Company	XEC	127.14	94	1,483	15	5.1	26	22		140.00
	Whiting Petroleum Corporation	WLL	29.78	91	3,242	12	7.1	111	4		72.00
	Continental Resources (32%)	CLR	57.66	119	2,134	28	5.7	146	17		60.00
	California Resources	CRC	21.94	43	6,100		8.4	40	7		50.00
	Range Resources	RRC	17.58	245	4,575	11	7.8	78	55		40.00
	Birchcliff Energy Ltd.	BIREF	2.88	268	609	10	4.9	218	56		10.00
	<i>Median</i>						6.4				
Income											
	Sabine Royalty Trust	SBR	48.74	15	-	17	11.3	4	32	100	50.00
	Cross Timbers Royalty Trust	CRT	15.41	6	-	12	9.1	-	61	80	25.00
	Dorchester Minerals, L.P.	DMLP	15.70	32	-	13	6.5	-	18	87	24.00
	Permian Basin RT	PBT	9.37	47	-	13	8.8	14	19	40	10.00
	San Juan Basin Royalty Trust	SJT	8.54	47	-	13	10.2	-	99	-	8.00
	<i>Median</i>						9.1				
P/E = Stock Price to Earnings. For historical research see www.mcdep.com .											



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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/Rati	12-Jan	29-Dec	Change	Distrib.	Return	Debt	Return	McDep	
		2018	2017	(%)	(%)	(%)	(\$/sh)	(%)	Ratio	
Integrated										
	Chevron Corporation	CVX	133.60	125.19	7	-	7	34	5	0.91
	Royal Dutch Shell	RDS-B	72.70	68.29	6	-	6	30	4	0.79
	Exxon Mobil Corporation	XOM	87.52	83.64	5	-	5	21	4	0.90
	Suncor Energy	SU	37.97	36.72	3	-	3	11	3	0.80
	<i>Median</i>				6		6		4	0.85
Large Independent										
	Hess Corporation	HES	54.54	47.47	15	-	15	29	9	0.99
	Marathon Oil Corporation	MRO	18.82	16.93	11	-	11	8	7	0.81
	Pioneer Natural Resources	PXD	186.15	172.85	8	-	8	12	7	0.93
	ConocoPhillips	COP	60.05	54.89	9	-	9	19	7	0.91
	EOG Resources, Inc.	EOG	115.70	107.91	7	-	7	12	6	1.05
	Devon Energy Corporation	DVN	44.04	41.40	6	-	6	15	5	0.79
	Occidental Petroleum Corp.	OXY	76.53	73.66	4	-	4	18	3	1.02
	<i>Median</i>				8		8		7	0.93
Small Independent										
	Continental Resources (32%)	CLR	57.66	52.97	9	-	9	18	7	0.97
	Whiting Petroleum Corporation	WLL	29.78	26.48	12	-	12	36	5	0.61
	Cimarex Energy Company	XEC	127.14	122.01	4	-	4	16	4	0.92
	California Resources	CRC	21.94	19.44	13	-	13	143	2	0.85
	Range Resources	RRC	17.58	17.06	3	-	3	19	1	0.62
	Birchcliff Energy Ltd.	BIREF	2.88	3.50	(18)	-	(18)	2	(11)	0.42
	<i>Median</i>				7		7		3	0.74
Income										
	Sabine Royalty Trust	SBR	48.74	44.60	9	-	9	-	9	0.98
	Permian Basin RT	PBT	9.37	8.87	6	-	6	-	6	0.94
	Cross Timbers Royalty Trust	CRT	15.41	14.69	5	-	5	-	5	0.61
	San Juan Basin Royalty Trust	SJT	8.54	8.24	4	-	4	-	4	1.07
	Dorchester Minerals, L.P.	DMLP	15.70	15.20	3	-	3	-	3	0.65
	<i>Median</i>				5		5		5	0.94
	<i>Grand Median</i>				6		6		5	0.90
	Natural Gas (\$/mmbtu)		3.20	2.95	8					
	Oil -West Texas Intermediate (\$/bbl)		64.36	60.09	7					
	Total Stock Market - U.S.	VTI	142.75	137.25	4					
	Developed Markets - ex US	VEA	46.80	44.86	4					
	Emerging Markets	VWO	48.48	45.91	6					
Source: McDep LLC, Yahoo, CME Group, Bloomberg					For historical research see www.mcdep.com					



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Index of Recent Research				
<i>Date</i>	<i>Series</i>	<i>Symbol</i>	<i>Subject</i>	<i>Theme</i>
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
25-Sep	II	CRT, DMLP, PBT, SBR, SJT		Cash, Fracking and Inflation
18-Sep	ISI	RRC	Range Resources	Natural Gas at Lowest McDep Ratio
12-Sep	Meter Reader			Currency, Interest and Oil
6-Sep	ISI	TOT	Total S.A.	Gaining Volume on Competitors
30-Aug	ISI	SU	Suncor Energy Inc.	Returning Cash to Shareholders
23-Aug	ISI	BIREF	Birchcliff Energy	Montney Growth
15-Aug	Meter Reader			Energy Outlook to 2026
8-Aug	ISI	SJT	San Juan Basin Royalty Trust	BP Tests Best San Juan Well in 14 Years
4-Aug	ISI	DMLP	Dorchester Minerals, L.P.	Raise Distribution Yield to 8.5%
31-Jul	ISI	CVX	Chevron	Valuable Permian Lands
25-Jul	II	CRT, DMLP, PBT, SBR, SJT		Control Reinvestment with Income Payers
19-Jul	II	COP, DVN, EOG, MRO, PXD, OXY		Potential to Prosper
11-Jul	Meter Reader			Liftoff for Energy Exports
3-Jul	ISI	DMLP	Dorchester Minerals, L.P.	Core Midland Acquisition – Upgrade to Buy
27-Jun	ISI	CLR	Continental Resources	Well-Managed Shale Pioneer
20-Jun	ISI	XOM	Exxon Mobil	Profit from Low-Risk Energy Growth
13-Jun	Meter Reader			Value Beckoning
6-Jun	ISI	MRO	Marathon Oil	A Fourth Shale Focus
30-May	ISI	RDS	Royal Dutch Shell	High Yield While Waiting
26-May	ISI	CVE	Cenovus Energy	High Operating and Financial Leverage
18-May	ISI	DMLP	Dorchester Minerals, L.P.	Midland Basin Spotlight
9-May	Meter Reader			Positive Progress
2-May	ISI	RRC	Range Resources	Growth Accelerating
24-Apr	II	CRT, DMLP, PBT, SBR, SJT		Income Payer Distributions Beat
21-Apr	ISI	PXD	Pioneer Natural Resources	Prominent Permian Producer
17-Apr	ISI	SJT	San Juan Basin Royalty Trust	New Operator to Enhance Value
11-Apr	Meter Reader			IPAA Ideas
				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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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.