

## Oil and Gas Gains in 2018

### Summary and Recommendation

Renewed optimism for global growth promises rising demand for oil and gas at the same time surplus fuel inventories are dwindling. U.S. crude oil price has strengthened while U.S. natural gas price strength appears delayed. Oil producer stock prices have upward momentum. Natural gas producer stock prices may be recovering from surprisingly depressed levels.

- *Optimism for more rapid economic growth.* Global stock price gains in 2017 of 19% in the U.S., 22% in other developed markets and 24% in emerging markets signal more positive expectations (see [Table 4](#) on page 8). We think U.S. government policy stressing less regulation and lower taxes is a contributing factor to better growth.
- *Inventories normalizing.* U.S. crude oil inventories are down some 80 million barrels in nine months, or about 300 thousand barrels a day (see chart [Crude Oil Stocks](#) on page 2). Natural gas in storage tracks the 5-year average implying balance in supply and demand (see chart [Working Gas](#) on page 2).
- *More upside than downside in price outlook.* We think U.S. crude oil price could average \$65 a barrel in 2018 on the way to our long-term expectation of \$70. Implied market expectations range from about \$35 to \$85 (see chart [WTI](#) on page 3). We think natural gas might average \$3.50 a million Btu in 2018 on the way to our long-term expectation of \$4. Implied market expectations range from about \$1.90 to \$5.30 (see chart [Henry Hub](#) on page 3).
- *U.S. fundamental outlook strong.* Volume growing in both oil and natural gas, thanks to shale (see charts [Production](#) on page 4).

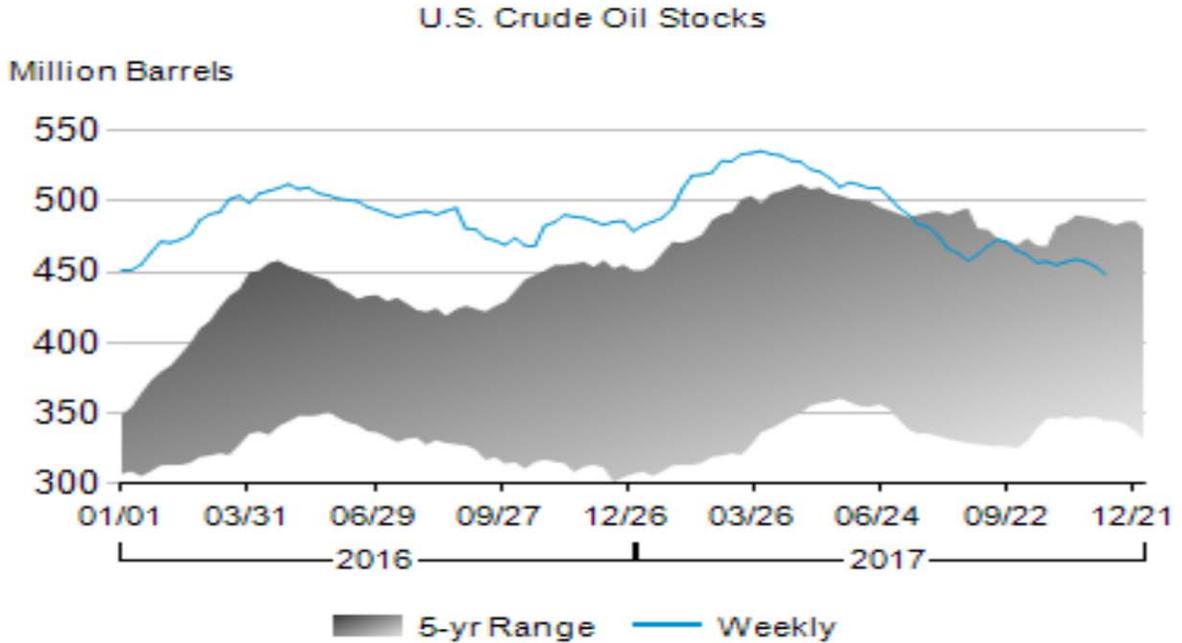
Meanwhile, buy recommendations of conservative global giants, large cap shale oil innovators, high potential small caps, high income payers, and diverse Canadian producers will be maintained until year end (see [Tables 1-4](#) on pages 5-8). In early 2018 we plan to make changes in our coverage. Perhaps we'll modify the structure of our models and concentrate on a few less stocks. We may reconsider naming specific buys and simply feature specific stocks in a timely manner. In any case, we are committed to identifying money-making investment ideas.

Kurt H. Wulff, CFA

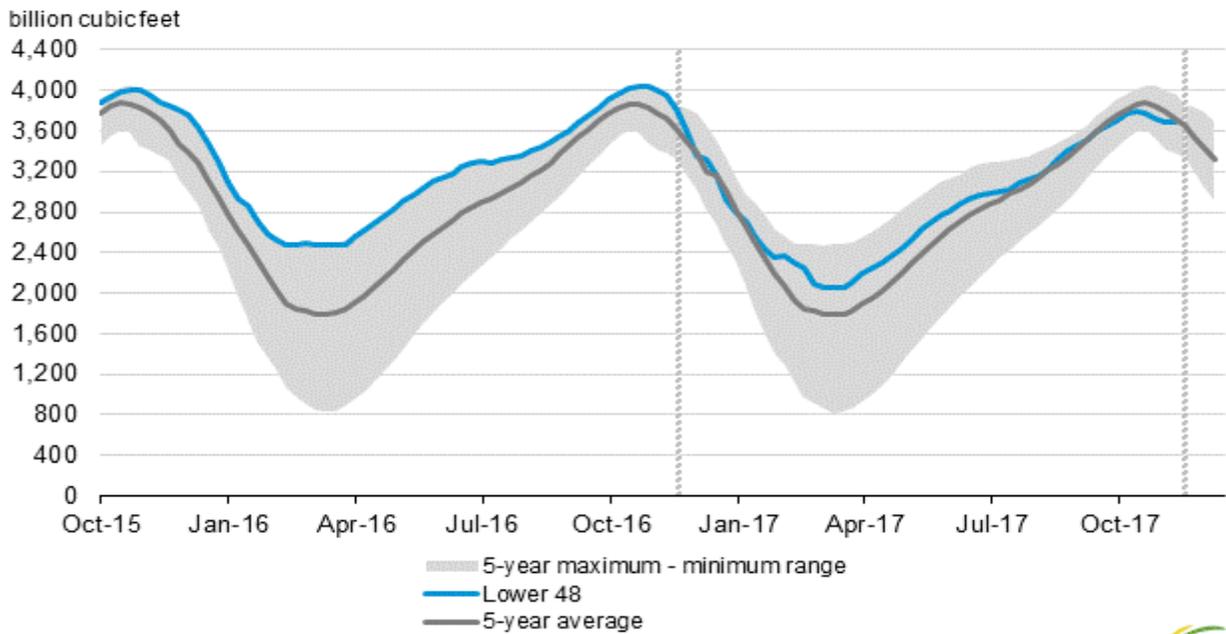


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A Monthly Analysis of Oil and Gas Stocks  
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Working gas in underground storage compared with the 5-year maximum and minimum



Source: U.S. Energy Information Administration

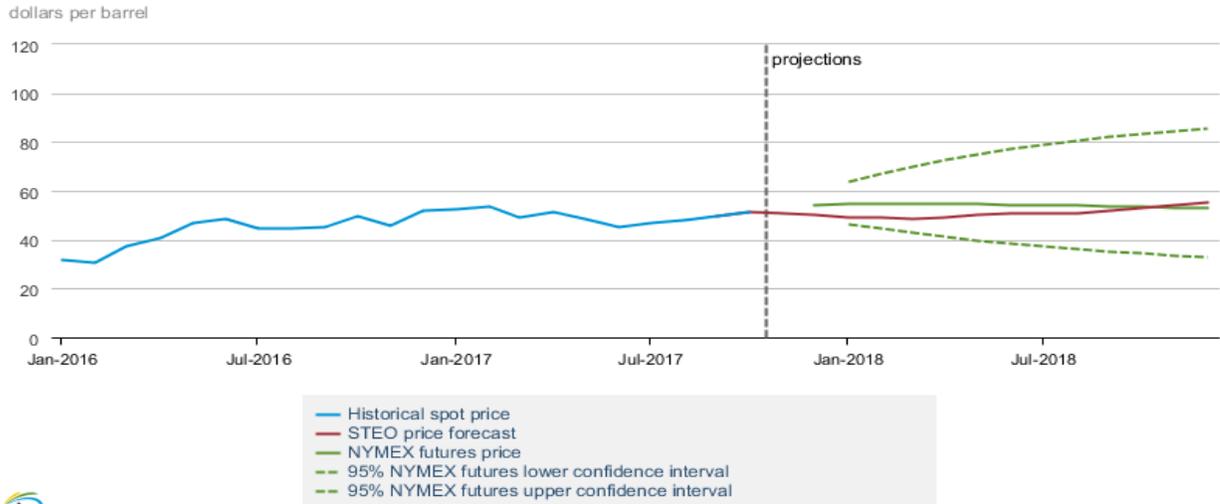




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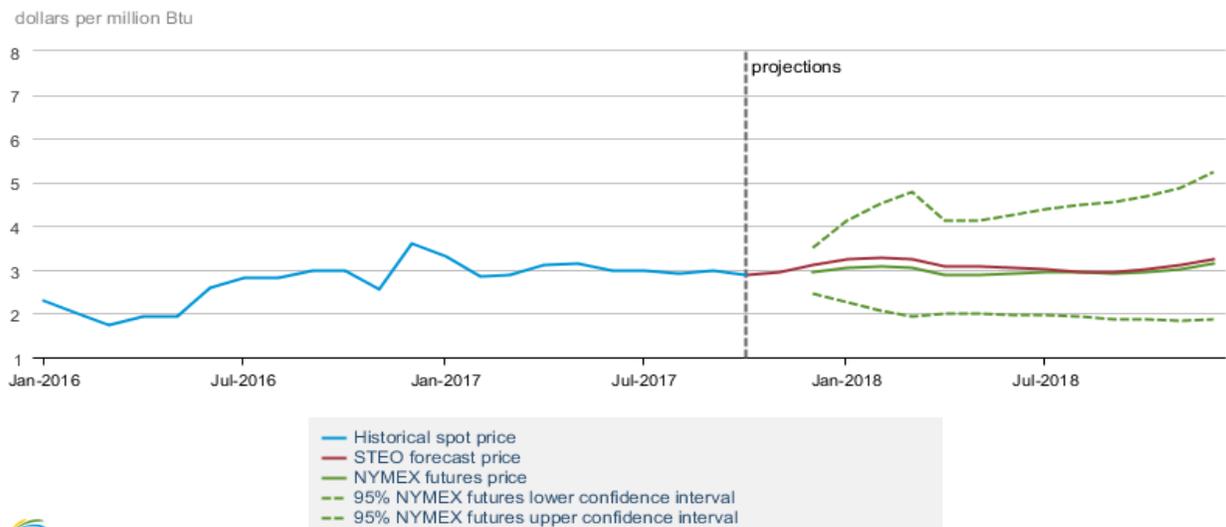
## West Texas intermediate (WTI) crude oil price



Source: Short-Term Energy Outlook, November 2017

Note: Confidence interval derived from options market information for the 5 trading days ending Nov. 2 2017. Intervals not calculated for months with sparse trading in near-the-money options contracts.

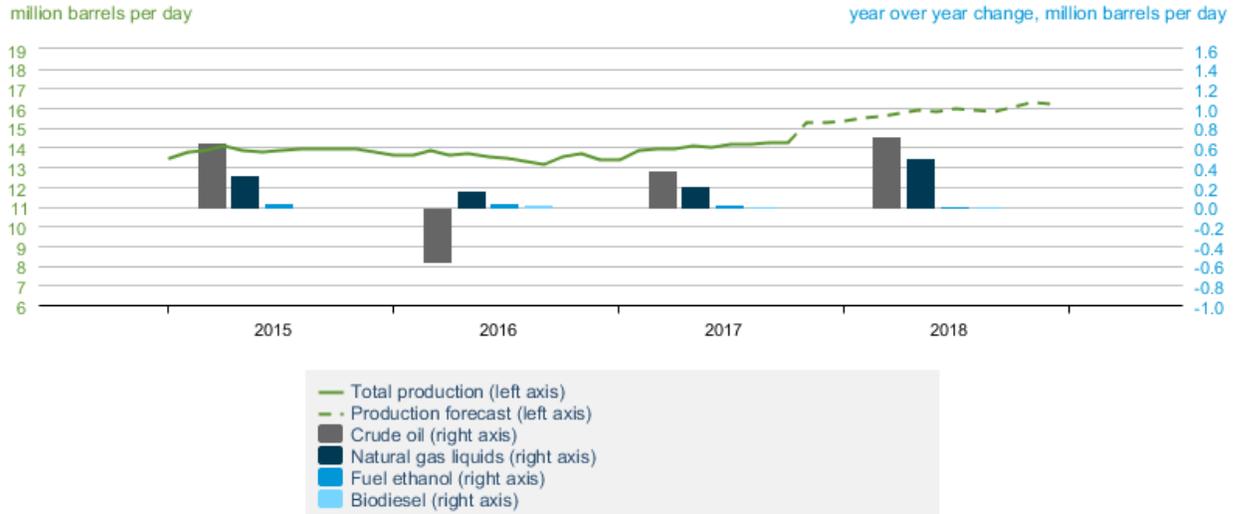
## Henry Hub natural gas price



Source: Short-Term Energy Outlook, November 2017

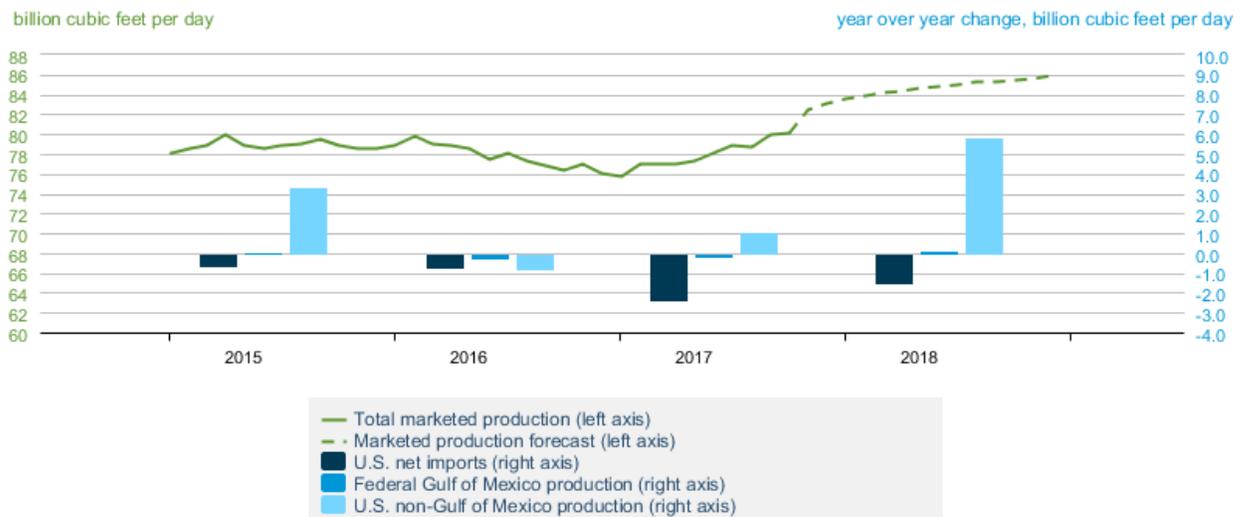
Note: Confidence interval derived from options market information for the 5 trading days ending Nov. 2 2017. Intervals not calculated for months with sparse trading in near-the-money options contracts.

## U.S. crude oil and liquid fuels production



eia Source: Short-Term Energy Outlook, November 2017

## U.S. natural gas production and imports



eia Source: Short-Term Energy Outlook, November 2017



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**Table 1**  
**McDep Energy Stocks**  
**Ranked by McDep Ratio**

			Price (US\$/sh)	Market Cap (US\$m)	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	11-Dec 2017									
<b>Global Integrated</b>											
	Chevron Corporation	CVX	120.42	228,000	293,000	1.28	8.3	9.1	62	3.6	0.91
	Exxon Mobil Corporation	XOM	83.03	355,000	446,000	1.26	8.8	10.2	53	3.7	0.86
	Royal Dutch Shell	RDS-A B	63.94	266,000	391,000	1.47	6.8	7.9	47	5.9	0.85
	Total S.A.	TOT B	55.67	144,000	201,000	1.40	5.9	8.5	51	5.2	0.69
	<i>Total or Median</i>			993,000	1,331,000	1.34	7.5	8.8	52	4.5	0.86
<b>Large Independent</b>											
	EOG Resources, Inc.	EOG	101.21	58,600	65,800	1.12	10.3	8.8	89	0.7	1.17
	Pioneer Natural Resources	PXD	158.67	27,000	29,000	1.07	8.6	8.2	87	0.1	1.05
	Occidental Petroleum Corp.	OXY	69.50	53,200	66,700	1.25	9.8	10.4	81	4.4	0.94
	Devon Energy Corporation	DVN	38.49	20,400	28,100	1.38	7.0	7.8	62	0.6	0.89
	Marathon Oil Corporation	MRO B	15.15	12,880	19,900	1.55	7.1	8.3	79	1.3	0.86
	ConocoPhillips	COP B	51.69	63,000	86,000	1.37	8.1	10.0	69	2.1	0.81
	<i>Total or Median</i>			235,100	296,000	1.31	8.4	8.5	80	1.0	0.92
<b>Small Independent</b>											
	Cimarex Energy Company	XEC	112.72	10,500	12,000	1.14	8.8	9.3	70	0.3	0.95
	Continental Resources (32%)	CLR B	48.07	5,700	7,900	1.37	8.4	9.4	75	-	0.89
	California Resources	CRC	17.12	700	6,800	9.4	8.6	10.3	89	-	0.83
	Whiting Petroleum Corporation	WLL	25.58	2,300	5,600	2.40	5.7	10.0	92	-	0.57
	Range Resources	RRC B	16.70	4,100	8,700	2.12	7.4	15.7	32	0.5	0.47
	<i>Total or Median</i>			23,000	41,000	2.12	8.4	10.0	75	-	0.83
<b>Income</b>											
	San Juan Basin Royalty Trust	SJT	8.10	380	380	1.00	18.1	17.8	-	5.5	1.01
	Permian Basin RT	PBT	8.97	420	420	1.00	13.6	16.7	78	6.8	0.82
	Sabine Royalty Trust	SBR	44.00	640	640	1.00	17.0	23.1	66	5.9	0.73
	Dorchester Minerals, L.P.	DMLP B	14.75	480	480	1.00	9.7	15.8	77	9.9	0.61
	Cross Timbers Royalty Trust	CRT B	14.40	90	90	1.00	9.7	19.7	28	7.9	0.49
	<i>Total or Median</i>			2,000	2,000	1.00	13.6	17.8	66	6.8	0.73
<b>Canada</b>											
	EnCana Corporation	ECA	11.76	11,400	17,700	1.55	9.7	9.8	67	0.5	0.98
	Imperial Oil Limited (30%)	IMO	30.57	7,800	9,700	1.25	6.7	8.0	67	1.6	0.84
	Suncor Energy	SU B	34.76	57,800	75,300	1.30	7.2	8.6	84	2.9	0.83
	Cenovus Energy Inc.	CVE	9.58	11,800	21,600	1.83	4.9	8.4	85	1.6	0.59
	Birchcliff Energy Ltd.	BIREF B	3.41	900	1,500	1.65	5.5	12.0	30	2.3	0.46
	<i>Total or Median</i>			90,000	126,000	1.55	6.7	8.6	67	1.6	0.83

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](http://www.mcdep.com)



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<b>Table 2</b>												
<b>McDep Energy Stocks</b>												
<b>Production Operating Leverage</b>												
<b>Ranked by McDep Ratio</b>												
			<i>Price</i>		<i>Oil</i>	<i>Operating</i>						
	<i>Symbol/Rating</i>		<i>(US\$/sh)</i>	<i>Volume</i>	<i>Price</i>	<i>Expense</i>	<i>Ebitda</i>	<i>Ebitda</i>	<i>Oper Lev</i>			
	B = Buy		<i>11-Dec</i>	<i>(mmboe)</i>	<i>(\$/boe)</i>	<i>Fixed Var.</i>	<i>NTM</i>	<i>NTM</i>	<i>Ebitda chg/</i>	<i>McDep</i>		
			<i>2017</i>			<i>(%)</i>	<i>(\$/boe)</i>	<i>(\$mm)</i>	<i>Price chg</i>	<i>Ratio</i>		
<b>Global Integrated (excl. Downstream)</b>												
Chevron Corporation	CVX		120.42	1,025	43.81	11 14	26.70	27,376	1.41	0.91		
Exxon Mobil Corporation	XOM		83.03	1,490	42.14	4 38	22.30	33,223	1.18	0.86		
Royal Dutch Shell	RDS-A	B	63.94	1,371	40.47	6 14	28.60	39,212	1.21	0.85		
Total S.A.	TOT	B	55.67	910	42.10	0 38	25.90	23,572	1.00	0.69		
<i>Total or Median</i>											<i>1.19</i>	<i>0.86</i>
<b>Large Independent (excl. Downstream)</b>												
EOG Resources, Inc.	EOG		101.21	237	39.50	11 4	27.00	6,410	1.41	1.17		
Pioneer Natural Resources	PXD		158.67	124	39.24	11 3	27.00	3,355	1.41	1.05		
Occidental Petroleum Corp.	OXY		69.50	232	40.09	12 10	24.10	5,595	1.50	0.94		
Devon Energy Corporation	DVN		38.49	191	30.35	10 5	18.90	3,610	1.53	0.89		
Marathon Oil Corporation	MRO	B	15.15	148	31.88	11 6	18.90	2,801	1.58	0.86		
ConocoPhillips	COP	B	51.69	420	41.14	8 19	25.30	10,638	1.32	0.81		
<i>Total or Median</i>											<i>1.45</i>	<i>0.92</i>
<b>Small Independent</b>												
Cimarex Energy Company	XEC		112.72	74	28.65	6 14	18.50	1,370	1.32	0.95		
Continental Resources (32%)	CLR	B	48.07	33	35.97	3 13	28.20	934	1.11	0.89		
California Resources	CRC		17.12	47	43.86	15 27	17.00	798	1.88	0.83		
Whiting Petroleum Corporation	WLL		25.58	45	36.68	9 16	21.90	979	1.41	0.57		
Range Resources	RRC	B	16.70	133	17.84	8 6	8.80	1,166	1.91	0.47		
<i>Total or Median</i>											<i>1.41</i>	<i>0.83</i>
<b>Income</b>												
San Juan Basin Royalty Trust	SJT		8.10	3	14.23	5 15	7.04	21	1.71	1.01		
Permian Basin RT	PBT		8.97	1	37.73	10 9	24.37	31	1.41	0.82		
Sabine Royalty Trust	SBR		44.00	1	31.30	2 10	26.14	38	1.08	0.73		
Dorchester Minerals, L.P.	DMLP	B	14.75	2	32.35	7 8	22.87	49	1.31	0.61		
Cross Timbers Royalty Trust	CRT	B	14.40	0	37.79	8 28	19.30	9	1.41	0.49		
<i>Total or Median</i>											<i>1.41</i>	<i>0.73</i>
<b>Canada (excl. Downstream)</b>												
EnCana Corporation	ECA		11.76	113	29.16	12 3	16.16	1,824	1.74	0.98		
Imperial Oil Limited (30%)	IMO		30.57	40	40.67	17 4	22.00	890	1.77	0.84		
Suncor Energy	SU	B	34.76	277	53.64	22 3	30.07	8,340	1.73	0.83		
Cenovus Energy Inc.	CVE		9.58	208	31.50	11 3	19.67	4,089	1.56	0.59		
Birchcliff Energy Ltd.	BIREF	B	3.41	23	17.26	4 8	11.80	273	1.34	0.46		
<i>Total or Median</i>											<i>1.73</i>	<i>0.83</i>

For historical research see [www.mcdep.com](http://www.mcdep.com)



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			<i>Price (US\$/sh)</i>					<i>Down- stream/ PV</i>	<i>Proven Undev. Resrvs (%)</i>	<i>Adjustd Resrvs/ Prod NTM</i>	<i>Net Present Value (US\$/sh)</i>
	<i>Symbol/Rating</i>		<i>11-Dec 2017</i>	<i>Shares (mm)</i>	<i>Debt (\$mm)</i>	<i>Dividend NTM (\$/sh)</i>	<i>P/E NTM</i>				
	B = Buy										
<b>Global Integrated</b>											
Exxon Mobil Corporation	XOM		83.03	4,271	91,771	3.08	18	24	31	11.3	100.00
Total S.A.	TOT	B	55.67	2,583	57,015	2.92	11	26	42	9.5	90.00
Chevron Corporation	CVX		120.42	1,896	64,410	4.32	24	18	32	9.1	135.00
Royal Dutch Shell	RDS-A	B	63.94	4,163	124,534	3.76	15	28	25	8.3	80.00
	<i>Median</i>									9.3	
<b>Large Independent</b>											
ConocoPhillips	COP	B	51.69	1,215	23,479	1.06		-	20	10.9	68.00
Occidental Petroleum Corp.	OXY		69.50	766	13,500	3.08	35	14	23	9.2	75.00
Devon Energy Corporation	DVN		38.49	529	7,746	0.24	63	10	20	8.7	45.00
Marathon Oil Corporation	MRO	B	15.15	850	7,044	0.20		-	39	7.6	19.00
EOG Resources, Inc.	EOG		101.21	579	7,214	0.67		-	30	6.8	85.00
Pioneer Natural Resources	PXD		158.67	170	2,000	0.08	33	-	7	5.6	150.00
	<i>Median</i>									8.2	
<b>Small Independent</b>											
Whiting Petroleum Corporation	WLL		25.58	91	3,242	-		-	53	12.5	72.00
Range Resources	RRC	B	16.70	245	4,575	0.08	18	-	44	11.8	56.00
Continental Resources (32%)	CLR	B	48.07	119	2,134	-		-	59	11.4	56.00
California Resources	CRC		17.12	43	6,100	-		-	29	10.4	50.00
Cimarex Energy Company	XEC		112.72	94	1,483	0.32	19	-	21	5.8	120.00
	<i>Median</i>									11.4	
<b>Income</b>											
Sabine Royalty Trust	SBR		44.00	15	-	2.59	17	-	4	11.5	60.00
San Juan Basin Royalty Trust	SJT		8.10	47	-	0.44	18	-	-	10.3	8.00
Permian Basin RT	PBT		8.97	47	-	0.61	15	-	12	9.5	11.00
Cross Timbers Royalty Trust	CRT	B	14.40	6	-	1.14	13	-	-	9.1	29.00
Dorchester Minerals, L.P.	DMLP	B	14.75	32	-	1.46	14	-	-	6.5	24.00
	<i>Median</i>									9.5	
<b>Canada</b>											
Suncor Energy	SU	B	34.76	1,663	17,466	1.00	13	16	44	13.8	44.00
Cenovus Energy Inc.	CVE		9.58	1,229	9,811	0.16		5	55	12.9	22.00
Birchcliff Energy Ltd.	BIREF	B	3.41	268	592	0.08	16	-	69	12.5	10.00
Imperial Oil Limited (30%)	IMO		30.57	254	1,937	0.50	10	32	23	9.1	38.00
EnCana Corporation	ECA		11.76	973	6,290	0.06		-	43	5.5	12.00
	<i>Median</i>									12.5	
P/E = Stock Price to Earnings. For historical research see <a href="http://www.mcdep.com">www.mcdep.com</a> .											



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Table 4										
McDep Energy Stocks										
Total Return Year-to-Date 2017										
Ranked by Unlevered Total Return										
			Price	Price			Equity	Unlevered		
			(\$/sh)	(\$/sh)	Price	Cash	Total	Debt	Return	McDep
	Symbol/Rati		11-Dec	30-Dec	Change	Distrib.	Return	(\$/sh)	(%)	Ratio
			2017	2016	(%)	(%)	(%)			
<b>Global Integrated</b>										
	Royal Dutch Shell	RDS-A B	63.94	54.38	18	5	23	30	15	0.85
	Total S.A.	TOT B	55.67	50.97	9	4	13	22	9	0.69
	Chevron Corporation	CVX	120.42	117.70	2	3	5	34	4	0.91
	Exxon Mobil Corporation	XOM	83.03	90.26	(8)	2	(6)	21	(4)	0.86
	<i>Median</i>				6		9		7	0.86
<b>Large Independent</b>										
	ConocoPhillips	COP B	51.69	50.14	3	2	5	19	4	0.81
	EOG Resources, Inc.	EOG	101.21	101.10	0	1	1	12	1	1.17
	Occidental Petroleum Corp.	OXY	69.50	71.23	(2)	3	1	18	1	0.94
	Marathon Oil Corporation	MRO B	15.15	17.31	(12)	1	(12)	8	(8)	0.86
	Pioneer Natural Resources	PXD	158.67	180.00	(12)	0	(12)	12	(11)	1.05
	Devon Energy Corporation	DVN	38.49	45.67	(16)	0	(15)	15	(12)	0.89
	<i>Median</i>				(7)		(5)		(4)	0.92
<b>Small Independent</b>										
	California Resources	CRC	17.12	21.29	(20)	-	(20)	143	(3)	0.83
	Continental Resources (32%)	CLR B	48.07	51.54	(7)	-	(7)	18	(5)	0.89
	Cimarex Energy Company	XEC	112.72	135.90	(17)	0	(17)	16	(15)	0.95
	Whiting Petroleum Corporation	WLL	25.58	48.08	(47)	-	(47)	36	(27)	0.57
	Range Resources	RRC B	16.70	34.36	(51)	0	(51)	19	(33)	0.47
	<i>Median</i>				(20)		(20)		(15)	0.83
<b>Income</b>										
	San Juan Basin Royalty Trust	SJT	8.10	6.62	22	10	33	-	33	1.01
	Sabine Royalty Trust	SBR	44.00	35.15	25	6	31	-	31	0.73
	Permian Basin RT	PBT	8.97	7.71	16	7	23	-	23	0.82
	Dorchester Minerals, L.P.	DMLP B	14.75	17.55	(16)	5	(11)	-	(11)	0.61
	Cross Timbers Royalty Trust	CRT B	14.40	17.97	(20)	5	(15)	-	(15)	0.49
	<i>Median</i>				16		23		23	0.73
<b>Canada</b>										
	Suncor Energy	SU B	34.76	32.69	6	2	9	10	6	0.83
	EnCana Corporation	ECA	11.76	11.74	0	0	1	6	0	0.98
	Imperial Oil Limited (30%)	IMO	30.57	34.76	(12)	1	(11)	8	(9)	0.84
	Cenovus Energy Inc.	CVE	9.58	15.13	(37)	1	(36)	8	(24)	0.59
	Birchcliff Energy Ltd.	BIREF B	3.41	7.01	(51)	1	(50)	2	(38)	0.46
	<i>Median</i>				(12)		(11)		(9)	0.83
	<i>Grand Median</i>				(8)		(7)		(4)	0.84
	<b>Natural Gas (\$/mmbtu)</b>		2.80	3.74	(25)					
	<b>Oil - West Texas Intermediate (\$/bbl)</b>		57.99	53.72	8					
	Total Stock Market - U.S.	VTI	136.80	115.32	19					
	Developed Markets - ex US	VEA	44.46	36.54	22					
	Emerging Markets	VVO	44.43	35.78	24					

Source: McDep LLC, Yahoo, CME Group, Bloomberg

For historical research see [www.mcdep.com](http://www.mcdep.com)



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<b>Index of Recent Research</b>				
<u>Date</u>	<u>Series</u>	<u>Symbol</u>	<u>Subject</u>	<u>Theme</u>
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
30-Mar	ISI	CVE	Cenovus Energy	Buying Out 50% Partner
30-Mar	ISI	COP	ConocoPhillips	Selling Canada
27-Mar	ISI	TOT	Total S.A.	Most Undervalued Global Integrated
21-Mar	ISI	CRT	Cross Timbers Royalty Trust	Top Line Value with Bottom Line Option
14-Mar	Meter Reader			Extra Inventory
				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 <a href="http://mcdep.com">mcdep.com</a> , click on <a href="#">Stock Ideas</a> , click on stock by name.



# Meter Reader

A Monthly Analysis of Oil and Gas Stocks

December 12, 2017

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