



Independent Stock Idea

November 12, 2017

Birchcliff Energy Ltd. (BIREF) Downward Price Pressure Lifting

<i>Symbol</i>	BIREF	<i>Ebitda Next Twelve Months ending 9/30/18 (US\$mm)</i>	297
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	60
<i>Price (US\$/sh)</i>	4.44	<i>Natural Gas and Oil Production/Ebitda (%)</i>	100
<i>Pricing Date</i>	11/10/17	<i>Adjusted Reserves/Production NTM</i>	12.5
<i>Shares (mm)</i>	268	<i>EV/Ebitda</i>	6.0
<i>Market Capitalization (US\$mm)</i>	1,190	<i>PV/Ebitda</i>	11.0
<i>Debt (US\$mm)</i>	600	<i>Undeveloped Reserves (%)</i>	69
<i>Enterprise Value (EV) (US\$mm)</i>	1,790	<i>Natural Gas and Oil Ebitda (\$/boe)</i>	12.90
<i>Present Value (PV) (US\$mm)</i>	3,280	<i>Present Value Proven Reserves(\$/boe)</i>	7.50
<i>Net Present Value (US\$/share)</i>	10	<i>Oil and Gas Ebitda Margin (%)</i>	59
<i>Debt/Present Value</i>	0.18	<i>Earnings Next Twelve Months (US\$/sh)</i>	0.27
<i>McDep Ratio - EV/PV</i>	0.55	<i>Price/Earnings Next Twelve Months</i>	16
<i>Dividend Yield (%/year)</i>	1.8	<i>Indicated Annual Dividend (US\$/sh)</i>	0.08
Note: Estimated cash flow and earnings tied to one-year futures prices for oil and natural gas.			
Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.			
Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.			
For historical analysis of Birchcliff since 2008 see www.mcdep.com/5bir.htm			

Summary and Recommendation

We recommend current purchase of the shares of **Birchcliff Energy (BIREF)** on the lifting of price pressure on Canadian natural gas, after the completion of pipeline maintenance, and the lifting of price pressure on the stock, after the completed sale of holdings of a major owner. Meanwhile, operations reported on November 8, were better than expected. In the latest quarter, price of C\$18.50 a barrel oil equivalent (boe) minus expense of C\$8.40 yielded cash flow (Ebitda) of C\$10.20. For the next twelve months, price of C\$23.00 a boe minus expense of C\$10.00 would yield Ebitda of C\$13.00 (see table [Operating and Financial Performance](#) on page 2). Alberta natural gas price at the AECO hub dropped some 75% in the third quarter and on some days was actually negative. Since then operations are back to normal on the TransCanada pipeline and the AECO price has rebounded (see chart [AECO](#) on page 3). Furthermore, cold temperatures have finally arrived. Prospective winter demand, among other factors, is contributing to increasingly positive momentum for the price of oil, natural gas and related stocks. Strengthening fundamental factors appear to offer solid support for our estimated Net Present Value (NPV) for Birchcliff of US\$10 a share compared to stock price of less than US\$5 (see table [Present Value](#) on page 3). On the second lifting of price pressure, Mr. Seymour Schulich who owned upwards of 25% of Birchcliff at times has completed the sale of all of his shares. The Canadian philanthropist and long-time McDep client has helped Birchcliff to become a larger, stronger, more widely held, independent company. We see attractive investment returns ahead for BIREF and other stocks in our coverage (see [Tables 1-4](#) on pages 4-7).

Kurt H. Wulff, CFA



Independent Stock Idea

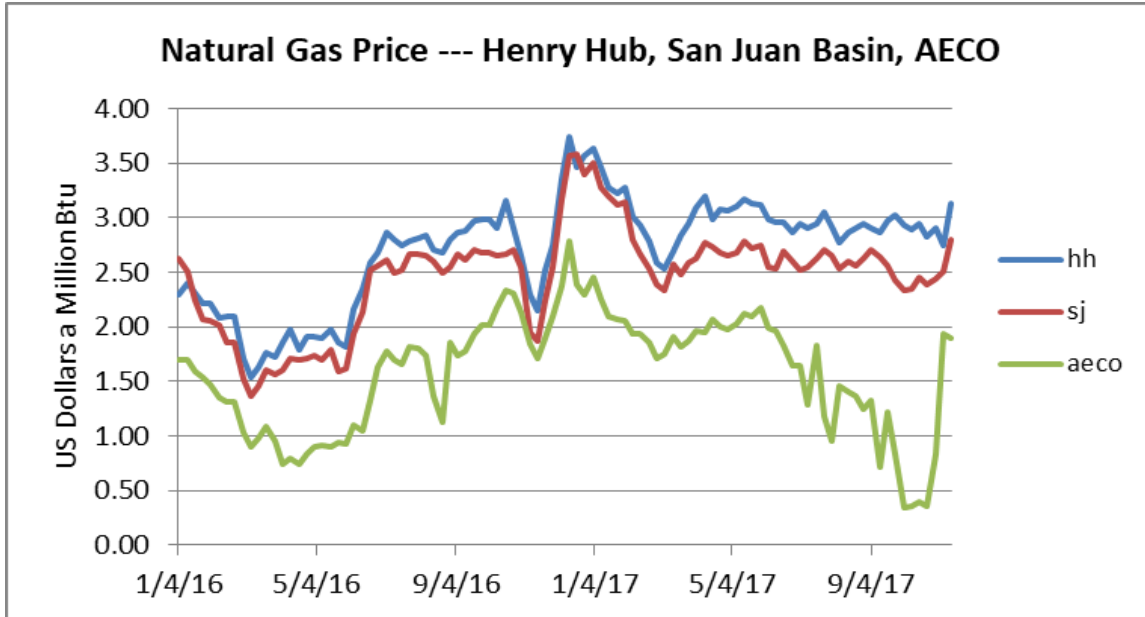
November 12, 2017

Birchcliff Energy Ltd.											
Next Twelve Months Operating and Financial Estimates											
(Canadian Dollars)											
	Q3	Q4	Year	Q2	Q3	Q4E	Year	Q1E	Q2E	Q3E	Next Twelve Months
	9/30/16	12/31/16	2016	6/30/17	9/30/17	12/31/17	2017	3/31/18	6/30/18	9/30/18	9/30/18
Volume (before royalty)											
Natural Gas (bcf)	24.3	26.6	90.5	27.0	28.4	35.0	116.6	34.2	34.6	35.0	138.7
Natural Gas (mmcf)	264	290	247	297	309	380	320	380	380	380	380
Days	92	92	366	91	92	92	365	90	91	92	365
Oil (mmb)	0.97	1.15	2.93	1.38	1.27	1.45	5.28	1.42	1.44	1.45	5.77
Oil (mbd)	10.6	12.5	8.0	15.1	13.8	15.8	14.5	15.8	15.8	15.8	15.8
Total (mmboe)	5.02	5.59	18.0	5.88	6.00	7.28	24.7	7.12	7.20	7.28	28.9
Total (mboed)	54.5	60.8	49.2	64.6	65.3	79.1	67.7	79.1	79.1	79.1	79.1
Price											
Henry Hub (US\$/mmbtu)	2.81	2.98	2.46	3.18	2.99	2.97	3.12	3.29	2.98	3.01	3.06
Currency (US\$/C\$)	0.77	0.75	0.76	0.75	0.80	0.79	0.77	0.79	0.79	0.79	0.79
Henry Hub (C\$/mmbtu)	3.65	3.98	3.25	4.27	3.74	3.77	4.04	4.17	3.78	3.82	3.88
Differential (C\$/mmbtu)	1.12	0.67	0.84	1.14	1.63	0.94	1.26	1.04	0.94	1.14	1.02
Company (C\$/mcf)	2.53	3.31	2.41	3.13	2.11	2.83	2.78	3.13	2.83	2.67	2.86
WTI Cushing (US\$/bbl)	44.91	49.21	43.31	48.26	48.20	55.03	50.85	57.14	57.25	56.63	56.51
WTI Cushing (C\$/bbl)	58.32	65.61	57.21	64.66	60.25	69.78	65.90	72.46	72.59	71.81	71.66
Differential (C\$/bbl)	21.32	24.46	16.59	19.79	19.81	24.42	22.05	25.36	25.41	25.13	25.09
Company (C\$/bbl)	37.00	41.15	40.62	44.88	40.44	45.36	43.85	47.10	47.19	46.68	46.58
Total (\$/bbl)	19.42	24.24	18.73	24.89	18.54	22.64	22.46	24.44	23.02	22.15	23.05
Revenue (\$mm)											
Natural Gas	61	88	219	85	60	99	324	107	98	93	397
Oil	36	47	119	62	51	66	231	67	68	68	269
Royalties	(7)	(10)	(21)	(5)	(4)	(6)	(26)	(8)	(8)	(7)	(29)
Total	90	125	316	142	107	159	529	166	158	154	637
Expense	41	46	140	49	46	66	210	64	65	66	260
Ebitda (\$mm)	49	80	177	93	61	93	320	102	93	88	377
Deprec., Deplet., & Amort.	41	43	149	44	42	51	179	51	51	51	204
Other non-cash	1	13	31	17	178	2	177	2	2	2	8
Interest	9	8	33	8	8	8	33	8	8	8	32
Ebt	(2)	16	(37)	24	(167)	32	(69)	41	32	27	133
Income tax	0	5	(7)	8	(44)	10	(14)	12	10	8	40
Net Income (\$mm)	(2)	11	(30)	16	(123)	23	(55)	29	23	19	93
Per share (\$)	(0.01)	0.04	(0.22)	0.06	(0.46)	0.08	(0.21)	0.11	0.08	0.07	0.35
Shares (millions)	234	269		268	268	268		268	268	268	268
Ebitda margin (after royalty)	54%	64%	56%	66%	57%	59%	60%	61%	59%	57%	59%
Tax rate	-15%	32%	18%	33%	26%	30%	21%	30%	30%	30%	30%



Independent Stock Idea

November 12, 2017



Birchcliff Energy Ltd.					
Functional Cash Flow and Present Value					
	<i>NTM</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Present</i>	
	<i>Ebitda</i>	<i>R/P</i>	<i>Ebitda</i>	<i>Value</i>	
North American Natural Gas	177	13.1	13.0	2,300	70%
Oil	120	10.1	8.2	980	30%
	297	12.5	11.0	3,280	100%
Debt				600	
Net Present Value (US\$mm)				2,680	
Shares				268	
Net Present Value - Standard Estimate (US\$/sh)				10	
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)				13	



Independent Stock Idea

November 12, 2017

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		10-Nov 2017								
Global Integrated											
	Chevron Corporation	CVX	117.18	222,000	287,000	1.29	8.3	9.2	59	3.7	0.89
	Exxon Mobil Corporation	XOM	82.94	354,000	446,000	1.26	9.3	10.8	49	3.7	0.86
	Royal Dutch Shell	RDS-A B	63.90	266,000	391,000	1.47	6.9	8.0	51	5.9	0.85
	Total S.A.	TOT B	56.17	145,000	202,000	1.39	5.9	8.5	55	5.2	0.70
	<i>Total or Median</i>			987,000	1,326,000	1.34	7.6	8.8	53	4.4	0.86
Large Independent											
	EOG Resources, Inc.	EOG	104.58	60,600	67,800	1.12	10.9	9.1	89	0.6	1.20
	Pioneer Natural Resources	PXD	158.93	27,000	28,700	1.06	9.1	8.6	87	0.1	1.06
	Occidental Petroleum Corp.	OXY	68.17	52,200	65,000	1.25	9.7	10.5	80	4.5	0.93
	Devon Energy Corporation	DVN	40.41	21,400	29,100	1.36	7.4	8.0	62	0.6	0.92
	Marathon Oil Corporation	MRO B	15.62	13,280	20,300	1.53	7.2	8.3	79	1.3	0.88
	ConocoPhillips	COP B	52.99	64,000	88,000	1.36	8.3	10.0	69	2.0	0.83
	<i>Total or Median</i>			238,500	299,000	1.30	8.7	8.8	80	1.0	0.92
Small Independent											
	Cimarex Energy Company	XEC	125.05	11,700	13,200	1.13	9.3	9.0	70	0.3	1.04
	Continental Resources (32%)	CLR B	46.69	5,600	7,700	1.38	7.7	8.8	75	-	0.87
	California Resources	CRC	16.26	700	6,700	9.7	8.4	10.2	89	-	0.82
	Whiting Petroleum Corporation	WLL	25.74	2,300	5,600	2.39	5.7	10.0	92	-	0.57
	Range Resources	RRC B	19.23	4,700	9,300	1.97	7.2	14.1	32	0.4	0.51
	<i>Total or Median</i>			25,000	43,000	1.97	7.7	10.0	75	-	0.82
Income											
	San Juan Basin Royalty Trust	SJT	7.67	360	360	1.00	14.8	15.4	-	6.7	0.96
	Permian Basin RT	PBT	9.59	450	450	1.00	14.5	16.6	78	6.4	0.87
	Sabine Royalty Trust	SBR	42.65	620	620	1.00	17.2	24.3	66	5.8	0.71
	Dorchester Minerals, L.P.	DMLP B	15.60	500	500	1.00	10.1	15.5	77	9.5	0.65
	Cross Timbers Royalty Trust	CRT B	15.08	90	90	1.00	9.1	17.5	28	8.8	0.52
	<i>Total or Median</i>			2,000	2,000	1.00	14.5	16.6	66	6.7	0.71
Canada											
	EnCana Corporation	ECA	12.65	12,300	18,600	1.51	10.0	9.7	67	0.5	1.03
	Imperial Oil Limited (30%)	IMO	31.99	8,200	10,200	1.25	7.5	8.6	67	1.6	0.87
	Suncor Energy	SU B	36.42	60,600	78,200	1.29	7.5	8.7	84	2.8	0.86
	Cenovus Energy Inc.	CVE	11.26	13,800	23,900	1.73	6.1	9.5	83	1.4	0.64
	Birchcliff Energy Ltd.	BIREF B	4.44	1,200	1,800	1.50	6.0	11.0	30	1.8	0.55
	<i>Total or Median</i>			96,000	133,000	1.50	7.5	9.5	67	1.6	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 9/30/18.
 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



Independent Stock Idea

November 12, 2017

Table 2											
McDep Energy Stocks											
Production Operating Leverage											
Ranked by McDep Ratio											
			Price		Oil	Operating					
			(US\$/sh)		Equiv.	Expense		Ebitda	Ebitda	Oper Lev	
Symbol/Rating		10-Nov	Volume	Price	Fixed	Var.	NTM	NTM	Ebitda chg/	McDep	
	B = Buy	2017	(mmboe)	(\$/boe)	(\$/boe)	(%)	(\$/boe)	(\$mm)	Price chg	Ratio	
Global Integrated (excl. Downstream)											
Chevron Corporation	CVX		117.18	814	42.66	11	15	25.30	20,605	1.43	0.89
Exxon Mobil Corporation	XOM		82.94	1,465	42.46	4	42	20.60	30,189	1.19	0.86
Royal Dutch Shell	RDS-A	B	63.90	1,320	40.45	6	12	29.50	38,942	1.20	0.85
Total S.A.	TOT	B	56.17	965	42.46	0	40	25.50	24,599	1.00	0.70
<i>Total or Median</i>										1.20	0.86
Large Independent (excl. Downstream)											
EOG Resources, Inc.	EOG		104.58	230	39.36	11	3	27.00	6,223	1.41	1.20
Pioneer Natural Resources	PXD		158.93	117	39.28	11	3	27.00	3,161	1.41	1.06
Occidental Petroleum Corp.	OXY		68.17	230	39.66	12	9	23.90	5,509	1.50	0.93
Devon Energy Corporation	DVN		40.41	186	30.29	10	5	18.90	3,506	1.53	0.92
Marathon Oil Corporation	MRO	B	15.62	147	32.07	11	6	19.10	2,810	1.58	0.88
ConocoPhillips	COP	B	52.99	420	41.10	8	19	25.30	10,618	1.32	0.83
<i>Total or Median</i>										1.45	0.92
Small Independent											
Cimarex Energy Company	XEC		125.05	74	29.18	6	14	19.00	1,414	1.32	1.04
Continental Resources (32%)	CLR	B	46.69	35	36.44	3	13	28.60	998	1.10	0.87
California Resources	CRC		16.26	47	42.98	15	26	16.90	796	1.89	0.82
Whiting Petroleum Corporation	WLL		25.74	45	36.66	9	16	21.90	978	1.41	0.57
Range Resources	RRC	B	19.23	132	18.82	8	5	9.80	1,296	1.82	0.51
<i>Total or Median</i>										1.41	0.82
Income											
San Juan Basin Royalty Trust	SJT		7.67	3	15.23	5	15	7.99	24	1.63	0.96
Permian Basin RT	PBT		9.59	1	34.03	10	6	21.95	31	1.46	0.87
Sabine Royalty Trust	SBR		42.65	1	32.25	2	11	26.77	36	1.07	0.71
Dorchester Minerals, L.P.	DMLP	B	15.60	2	32.84	7	8	23.35	50	1.30	0.65
Cross Timbers Royalty Trust	CRT	B	15.08	0	37.82	8	10	26.08	10	1.31	0.52
<i>Total or Median</i>										1.31	0.71
Canada (excl. Downstream)											
EnCana Corporation	ECA		12.65	112	29.58	12	3	16.58	1,853	1.72	1.03
Imperial Oil Limited (30%)	IMO		31.99	62	40.77	17	5	21.80	1,353	1.78	0.87
Suncor Energy	SU	B	36.42	283	53.14	22	3	29.28	8,288	1.75	0.86
Cenovus Energy Inc.	CVE		11.26	212	28.67	11	2	17.16	3,636	1.64	0.64
Birchcliff Energy Ltd.	BIREF	B	4.44	23	18.18	4	7	12.90	297	1.31	0.55
<i>Total or Median</i>										1.72	0.86

For historical research see www.mcdep.com



Independent Stock Idea

November 12, 2017

Table 3											
McDep Energy Stocks											
Net Present Value Per Share											
Ranked by Reserve Life (Adjustd Resrvs/Prod NTM)											
			Price (US\$/sh)			Dividend		Down- stream/ PV	Proven Undev. Resrvs	Adjustd Resrvs/ Prod NTM	Net Present Value (US\$/sh)
	Symbol/Rating		10-Nov 2017	Shares (mm)	Debt (\$mm)	NTM (\$/sh)	P/E NTM	(%)	(%)		
	B = Buy										
Global Integrated											
Exxon Mobil Corporation	XOM		82.94	4,271	91,771	3.08	20	27	31	11.5	100.00
Total S.A.	TOT	B	56.17	2,583	57,015	2.89	11	22	42	8.9	90.00
Chevron Corporation	CVX		117.18	1,896	64,410	4.32	25	20	32	9.2	135.00
Royal Dutch Shell	RDS-A	B	63.90	4,163	124,534	3.76	16	24	25	8.6	80.00
	<i>Median</i>									9.1	
Large Independent											
ConocoPhillips	COP	B	52.99	1,215	23,479	1.06		-	20	10.9	68.00
Occidental Petroleum Corp.	OXY		68.17	766	12,800	3.04	35	14	23	9.2	75.00
Devon Energy Corporation	DVN		40.41	529	7,746	0.24	68	10	20	8.9	45.00
Marathon Oil Corporation	MRO	B	15.62	850	7,044	0.20		-	39	7.7	19.00
EOG Resources, Inc.	EOG		104.58	579	7,214	0.67		-	30	7.0	85.00
Pioneer Natural Resources	PXD		158.93	170	1,700	0.08	36	-	7	6.0	150.00
	<i>Median</i>									8.3	
Small Independent											
Range Resources	RRC	B	19.23	245	4,575	0.08	18	-	44	11.8	56.00
Whiting Petroleum Corporation	WLL		25.74	91	3,242	-		-	53	12.5	72.00
Continental Resources (32%)	CLR	B	46.69	119	2,134	-		-	59	11.4	56.00
California Resources	CRC		16.26	42	6,000	-		-	29	10.3	50.00
Cimarex Energy Company	XEC		125.05	94	1,483	0.32	21	-	21	5.8	120.00
	<i>Median</i>									11.4	
Income											
Sabine Royalty Trust	SBR		42.65	15	-	2.47	17	-	4	12.3	60.00
San Juan Basin Royalty Trust	SJT		7.67	47	-	0.51	15	-	-	10.2	8.00
Permian Basin RT	PBT		9.59	47	-	0.62	16	-	12	9.4	11.00
Cross Timbers Royalty Trust	CRT	B	15.08	6	-	1.32	11	-	-	9.0	29.00
Dorchester Minerals, L.P.	DMLP	B	15.60	32	-	1.48	14	-	-	6.5	24.00
	<i>Median</i>									9.4	
Canada											
Suncor Energy	SU	B	36.42	1,663	17,687	1.01	14	16	44	13.6	44.00
Cenovus Energy Inc.	CVE		11.26	1,229	10,058	0.16		4	55	12.8	22.00
Birchcliff Energy Ltd.	BIREF	B	4.44	268	599	0.08	16	-	69	12.5	10.00
Imperial Oil Limited (30%)	IMO		31.99	255	2,008	0.50	11	32	23	9.2	38.00
EnCana Corporation	ECA		12.65	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 www.mcdep.com .											



Independent Stock Idea

November 12, 2017

Table 4										
McDep Energy Stocks										
Total Return Year-to-Date 2017										
Ranked by Unlevered Total Return										
			Price	Price	Price	Cash	Equity	Unlevered		
	Symbol/Rati		(\$/sh)	(\$/sh)	Change	Distrib.	Total	Debt	Return	McDep
			10-Nov	30-Dec	(%)	(%)	(%)	(\$/sh)	(%)	Ratio
			2017	2016						
Global Integrated										
	Royal Dutch Shell	RDS-A B	63.90	54.38	18	5	23	30	15	0.85
	Total S.A.	TOT B	56.17	50.97	10	4	14	22	10	0.70
	Chevron Corporation	CVX	117.18	117.70	(0)	3	2	34	2	0.89
	Exxon Mobil Corporation	XOM	82.94	90.26	(8)	2	(6)	21	(5)	0.86
	<i>Median</i>				5		8		6	0.86
Large Independent										
	ConocoPhillips	COP B	52.99	50.14	6	2	8	19	6	0.83
	EOG Resources, Inc.	EOG	104.58	101.10	3	1	4	12	4	1.20
	Occidental Petroleum Corp.	OXY	68.17	71.23	(4)	3	(1)	17	(1)	0.93
	Marathon Oil Corporation	MRO B	15.62	17.31	(10)	1	(9)	8	(6)	0.88
	Devon Energy Corporation	DVN	40.41	45.67	(12)	0	(11)	15	(8)	0.92
	Pioneer Natural Resources	PXD	158.93	180.00	(12)	0	(12)	10	(11)	1.06
	<i>Median</i>				(7)		(5)		(3)	0.92
Small Independent										
	California Resources	CRC	16.26	21.29	(24)	-	(24)	142	(3)	0.82
	Cimarex Energy Company	XEC	125.05	135.90	(8)	0	(8)	16	(7)	1.04
	Continental Resources (32%)	CLR B	46.69	51.54	(9)	-	(9)	18	(7)	0.87
	Whiting Petroleum Corporation	WLL	25.74	48.08	(46)	-	(46)	36	(27)	0.57
	Range Resources	RRC B	19.23	34.36	(44)	0	(44)	19	(28)	0.51
	<i>Median</i>				(24)		(24)		(7)	0.82
Income										
	Permian Basin RT	PBT	9.59	7.71	24	7	31	-	31	0.87
	Sabine Royalty Trust	SBR	42.65	35.15	21	6	27	-	27	0.71
	San Juan Basin Royalty Trust	SJT	7.67	6.62	16	10	26	-	26	0.96
	Dorchester Minerals, L.P.	DMLP B	15.60	17.55	(11)	5	(6)	-	(6)	0.65
	Cross Timbers Royalty Trust	CRT B	15.08	17.97	(16)	5	(11)	-	(11)	0.52
	<i>Median</i>				16		26		26	0.71
Canada										
	Suncor Energy	SU B	36.42	32.69	11	2	14	11	10	0.86
	EnCana Corporation	ECA	12.65	11.74	8	0	8	6	5	1.03
	Imperial Oil Limited (30%)	IMO	31.99	34.76	(8)	1	(7)	8	(6)	0.87
	Cenovus Energy Inc.	CVE	11.26	15.13	(26)	1	(25)	8	(16)	0.64
	Birchcliff Energy Ltd.	BIREF B	4.44	7.01	(37)	1	(36)	2	(27)	0.55
	<i>Median</i>				(8)		(7)		(6)	0.86
	<i>Grand Median</i>				(8)		(6)		(5)	0.86
	Natural Gas (\$/mmbtu)		3.21	3.74	(14)					
	Oil - West Texas Intermediate (\$/bbl)		56.74	53.72	6					
	Total Stock Market - U.S.	VTI	132.54	115.32	15					
	Developed Markets - ex US	VEA	44.04	36.54	21					
	Emerging Markets	VVO	44.59	35.78	25					
Source: McDep LLC, Yahoo, CME Group, Bloomberg										
For historical research see www.mcdep.com										



Independent Stock Idea

November 12, 2017

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