

MCDEP Income and Small Cap Weekly

Analysis of Oil & Gas Stocks May 18, 2012

Birchcliff Energy (BIREF) Contrarian Buy at Lower NPV

Symbol	BIREF	Ebitda Next Twelve Months ending 3/31/13 (US\$mm)	140
Rating	Contrarian Buy	North American Natural Gas/Ebitda (%)	36
Price (US\$/sh)	5.90	Natural Gas and Oil Production/Ebitda (%)	100
Pricing Date	5/18/12	Adjusted Reserves/Production NTM	22.6
Shares (mm)	146	EV/Ebitda	9.4
Market Capitalization (US\$mm)	860	PV/Ebitda	15.7
Debt (US\$mm)	450	Undeveloped Reserves (%)	73
Enterprise Value (EV) (US\$mm)	1,310	Natural Gas and Oil Ebitda (\$/boe)	20.60
Present Value (PV) (US\$mm)	2,200	Present Value Proven Reserves(\$/boe)	17.60
Net Present Value (US\$/share)	12	Oil and Gas Ebitda Margin (%)	61
Debt/Present Value	0.20	Earnings Next Twelve Months (US\$/sh)	0.21
McDep Ratio - EV/PV	0.60	Price/Earnings Next Twelve Months	29
Dividend Yield (%/year)	0.0	Indicated Annual Dividend (US\$/sh)	0.00
Note: Estimated cash flow and	earnings tied to one	e-year futures prices for oil and natural gas.	
Reported results may var	y widely from estin	nates. Estimated present value per share revised only infrequ	ently.
Estimated present value p	presumes a long-ter	m price for oil of US\$100 a barrel and natural gas, \$6 a milli	ion btu.
For historical analysis of	Birchcliff see www	v.mcdep.com/5bir.htm	

Summary and Recommendation

Volatile markets set up 66% unlevered appreciation potential in the common stock of Contrarian Buy Birchcliff Energy (BIREF) to estimated Net Present Value (NPV) of US\$12 a share where the McDep Ratio would be 1.0. We lower NPV from \$16 a share as plans for growth beyond 2013 may be stretched out (see table Functional Cash Flow and Present Value on page 2). First quarter results reported on May 15 beat our expectations on volume though wider geographical price discounts for natural gas and oil reduced cash flow (Ebitda) from the previous quarter (see table Next Twelve Months Operating and Financial Estimates on page 2). Meanwhile, low operating costs are helping the company withstand low natural gas price following unusually low winter demand in North America. Natural gas markets are recovering from the lows and we like the prospects for the clean fuel. Birchcliff also remains an attractive target for Asian buyers looking to participate in future international trade in liquefied natural gas (LNG) from Canada. The company's major shareholder, Mr. Seymour Schulich, has a record of success investing in resource rich companies that have been acquired by larger producers. Understandably, the small cap Canadian stock is speculative. Compared to most of the stocks in our coverage, Birchcliff's NPV includes more value for wells that have not yet been drilled. The company's near smallest size makes stock price and operating results more volatile. Debt is moderate at 0.20 time present value, but high at more than three times Ebitda. Investors can manage those risks when Birchcliff is part of a diversified energy portfolio.

Kurt H. Wulff, CFA



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Birche	cliff Energy	Ltd.							
Functional Casl	h Flow and	Present Valu	ie						
	NTM Adjusted PV/ Present								
	<u>Ebitda</u>	<u>R/P</u>	<u>Ebitda</u>	<u>Value</u>					
North American Natural Gas	51	12.5	26.5	1,350	61%				
Oil	89	8.9	9.6	850	39%				
	140	11.7	15.7	2,200	100%				
Debt					450				
Net Present Value (US\$mm)					1,750				
Shares					146				
Net Present Value - Standard Estimate (US\$/sh)					12				
NPV Approximation by Cash Flow Multiple Dependent	ding on Rese	erve Life (US	\$/sh)		8				

				nergy Ltd					
	Next Two	elve Months			nancial Es	timates			
		(Canadian	Dollars)					
									Next
									Twelve
	Q1	Q4	Year	QI	Q2E	Q3E	Year	Q1E	Months
	3/31/11	12/31/11	2011	3/31/12	6/30/12	9/30/12	2012E	3/31/13	3/31/13
Volume (before royalty)									
Natural Gas (mmcfd)	81	90	82	95	100	105	101	120	107
Days	90	92	365	91	91	92	366	90	365
Oil (mmb)	0.39	0.44	1.62	0.47	0.47	0.48	1.90	0.54	1.97
Oil (mbd)	4.3	4.8	4.5	5.2	5.2	5.2	5.2	6.0	5.4
Total (mboed)	17.7	19.8	18.1	21.1	21.9	22.7	22.1	26.0	23.3
Price									
Henry Hub (US\$/mmbtu)	4.11	3.55	4.04	2.73	2.22	2.56	2.62	3.44	2.80
Currency (US\$/C\$)	1.01	0.98	1.01	1.00	0.98	0.98	0.99	0.98	0.98
Henry Hub (C\$/mmbtu)	4.05	3.63	3.99	2.73	2.26	2.61	2.66	3.51	2.85
Differential (C\$/mmbtu)	0.03	0.23	0.14	0.41	0.34	0.39	0.40	0.53	0.41
Company (C\$/mcf)	4.02	3.40	3.86	2.32	1.92	2.21	2.26	2.98	2.44
WTI Cushing (US\$/bbl)	94.10	94.06	95.12	102.93	98.17	95.24	98.08	96.33	96.43
WTI Cushing (C\$/bbl)	92.75	96.20	93.92	103.04	100.07	97.08	99.50	98.18	98.28
Differential (C\$/bbl)	6.30	0.79	2.25	12.59	12.23	11.86	12.17	12.00	12.02
Company (C\$/bbl)	86.45	95.41	91.67	90.45	87.84	85.21	87.33	86.18	86.26
Total (\$/bbl)	39.27	38.57	39.95	32.78	29.64	29.73	30.90	33.64	31.23
Revenue (\$mm)									
Natural Gas	29	28	116	20	17	21	84	32	96
Oil	34	42	149	43	41	41	166	47	170
Royalties	(6)	(7)	(29)	(7)	(7)	(7)	(29)	(9)	(31)
Total	57	63	235	56	52	55	221	70	235
Expense	20	28	87	24	20	21	89	27	92
Ebitda (\$mm)	37	35	148	31	32	33	132	42	143
Deprec., Deplet., & Amort.	16	22	72	22	19	19	79	19	76
Other non-cash	3	2	6	(3)			(3)	-	-
Interest	6	5	20	6	6	6	23	6	23
Ebt	13	6	50	6	7	9	32	18	44
Income tax	4	2	15	2	2	3	10	5	13
Net Income (\$mm)	9	4	35	4	5	6	22	12	31
Per share (\$)	0.07	0.03	0.27	0.03	0.03	0.04	0.16	0.08	0.21
Shares (millions)	130	132	131	131	146	146	143	146	146
Ebitda margin (after royalty)	66%	55%	63%	56%	61%	61%	60%	61%	61%
Tax rate	30%	37%	30%	33%	30%	30%	30%	30%	30%



MCDEP Income and Small Cap Weekly Analysis of Oil & Gas Stocks

			,	Table IS	C-1						
McI	Dep In	co	me and	Small	Cap Ene	rgy I	Portf	olio			
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			D :								
Cryss	hol/Pati	in a	Price (US\$/sh)	EV/	Enterprise	PV(0/1	EV/	Dist.	Dist.	
Sym			18-May	Market	Value	Nat	<u>/0)</u>	Ebitda	NTM	Yield	McDep
CD	(see belo	_	2012		(\$mm)	Gas	Oil	NTM	(\$/un)	(%)	
СВ	(see ber	JW)	2012	Сар	(\$mm)	Gas	Oii	11111	(\$/un)	(70)	Ratio
Small Cap Independent Producer	:S										
Range Resources	RRC	В	61.48	1.27	12,530	71	29	15.1	0.16	0.3	0.90
Peyto Exploration and Developmen	PEYUF	1	17.90	1.20	2,980	77	23	10.2	0.72	4.0	0.78
PDC Energy	PETD		25.25	1.89	1,130	56	44	7.3	-	-	0.76
Berry Petroleum Company	BRY		36.39	1.79	3,550	13	87	5.5	0.32	0.9	0.66
Denbury Resources Inc.	DNR		15.04	1.47	8,650	6	94	5.3	-	-	0.63
Birchcliff Energy Ltd.	BIREF	CB	5.90	1.53	1,310	61	39	9.3	-	-	0.60
Whiting Petroleum Corporation	WLL	CB	44.19	1.36	7,130	8	92	4.4	-	-	0.58
Cimarex Energy Company	XEC	CB	55.43	1.22	5,810	42	58	5.0	0.48	0.9	0.55
Total or Median					43,100			6.4			0.64
Ton Line Coch Powers											
Top Line Cash Payers Permian Basin RT	PBT		18.45	1.00	860	37	63		1.39	7.5	0.92
Cross Timbers Royalty Trust	CRT		39.28	1.00	240	70	30		2.41	6.1	0.92
Dorchester Minerals, L.P.	DMLP	CD		1.00	700	57	43		1.79	7.9	0.89
Freehold Royalties Ltd.	FRHLF		17.48	1.00	1,180	16	84		1.79	9.6	0.84
3			50.10	1.04	730	55	45		3.52	7.0	0.84
Sabine Royalty Trust Total or Median	SBR		30.10	1.00		33	43		3.32	7.5	0.77
Total or Mealan					3,700					7.5	0.04
Bottom Line Cash Payers											
Linn Energy, LLC	LINE		35.24	1.69	11,520	40	60	11.5	2.90	8.2	1.10
Vanguard Natural Resources, LLC	VNR		24.26	1.54	1,960	27	74	9.4	2.37	9.8	0.98
Enduro Royalty Trust (40%)	NDRO		18.87	1.00	250	42	58	7.0	1.69	9.0	0.90
Legacy Reserves L.P.	LGCY		25.00	1.41	1,680	23	77	7.8	2.22	8.9	0.88
San Juan Basin Royalty Trust	SJT	CB	17.44	1.00	810	100	-	14.4	0.81	4.7	0.83
Mesa RoyaltyTrust	MTR		31.50	1.00	59	75	25	10.6	2.55	8.1	0.79
Hugoton RoyaltyTrust	HGT		12.93	1.00	520	88	12	15.9	0.68	5.2	0.76
Enerplus Corporation	ERF	CB		1.62	4,400	27	73	5.5	2.12	15.5	0.64
Total or Median					21,200			10.0		8.6	0.85
Composite											
Enterprise Value Weighting					68,000	38	62				0.75
Enterprise value weighting Equal Weighting					00,000	47	53				0.73
Equal Weighted Buys						45	55				0.79
Едииі жеідпіва Виуѕ						713	55				0.70
CB=Contrarian Buy, Stock Price ap	parently	in c	downtrend	compared	to 200-day a	verage.					
McDep Ratio = \mathbf{M} arket \mathbf{c} ap and \mathbf{D} e											
Present Value (PV) presumes long-											
Dist. = Income distribution. NTM =	= Next T	wel	ve Months	Ended M	arch 31, 2013	3. Ente	rprise	Value = N	Aarket C	ap and I	Debt.



MCDEP Income and Small Cap Weekly Analysis of Oil & Gas Stocks

			le ISC-2					
McDep Inc	ome an	d S	mall Ca	p Ener	gy Port	folio		
Net P	resent `	Val	ie and l	McDep	Ratio			
			Price			Net		
			(\$/sh)		Market	Present	Debt/	
	Symbol/		18-May	Shares	Cap	Value	Present	McDep
	Ra	ting	2012	(mm)	(\$mm)	(\$/un)	Value	Ratio
Small Cap Independent Producers								
Range Resources	RRC	В	61.48	160.0	9,840	70.00	0.19	0.90
Peyto Exploration and Development Con			17.90	138.3	2,480	24.00	0.13	0.78
PDC Energy	PETD		25.25	23.9	600	40.00	0.36	0.76
Berry Petroleum Company	BRY		36.39	54.7	1,990	70.00	0.29	0.66
Denbury Resources Inc.	DNR		15.04	391.0	5,880	28.00	0.20	0.63
Birchcliff Energy Ltd.	BIREF	СВ	5.90	146.0	860	12.00	0.20	0.60
Whiting Petroleum Corporation	WLL	CB	44.19	119.0	5,260	88.00	0.15	0.58
Cimarex Energy Company	XEC	СВ	55.43	86.1	4,770	110.00	0.10	0.55
Total or Median				0.01.0	31,680		0.20	0.64
m 11 G 1 D								
Top Line Cash Payers	DDE		10.45	100	0.60	20.00		0.00
Permian Basin RT	PBT		18.45	46.6	860	20.00	-	0.92
Cross Timbers Royalty Trust	CRT	an	39.28	6.0	240	44.00	-	0.89
Dorchester Minerals, L.P.	DMLP	CB	22.80	30.7	700	27.00	-	0.84
Freehold Royalties Ltd.	FRHLF		17.48	64.7	1,130	21.00	0.03	0.84
Sabine Royalty Trust	SBR		50.10	14.6	730	65.00	-	0.77
Total or Median					3,660			0.84
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		35.24	193.0	6,800	30.00	0.45	1.10
Vanguard Natural Resources, LLC	VNR		24.26	52.5	1,270	25.00	0.34	0.98
Enduro Royalty Trust (40%)	NDRO		18.87	13.2	250	21.00	-	0.90
Legacy Reserves L.P.	LGCY		25.00	47.5	1,190	30.00	0.26	0.88
San Juan Basin Royalty Trust	SJT	СВ	17.44	46.6	810	21.00	_	0.83
Mesa RoyaltyTrust	MTR		31.50	1.9	59	40.00	_	0.79
Hugoton RoyaltyTrust	HGT		12.93	40.0	520	17.00	-	0.76
Enerplus Corporation	ERF	СВ	13.71	196.0	2,690	26.00	0.25	0.64
Total or Median					13,590			0.85
D. D. C.	<u> </u>		1 1		4. 200 1			
B=Buy; CB=Contrarian Buy, Stock Price McDep Ratio = M arket c ap and De bt to								
Present Value presumes long-term price							gae	



MCDEP Income and Small Cap Weekly Analysis of Oil & Gas Stocks

		Tal	ole ISC-3	3				
McDep Inco	me an	d S	mall C	ap Enei	rgy Por	tfolio		
Value	Multip	les	- Rank	by EV/	Ebitda			
	_							
			Price			Adjstd		
			('	Revenue	Dist/	Resrvs/	PV/	EV/
	Symbol/		18-May	Royalty	Equity	Prod	Ebitda	Ebitda
	Rai	ting	2012	(%)	Ebitda	NTM	NTM	NTM
Small Cap Independent Producers								
Range Resources	RRC	В	61.48		-	14.5	16.8	15.1
Peyto Exploration and Development Corp			17.90		0.39	10.5	13.1	10.2
Birchcliff Energy Ltd.	BIREF	СВ	5.90		-	22.6	15.7	9.3
PDC Energy	PETD		25.25		-	8.1	9.6	7.3
Berry Petroleum Company	BRY		36.39		-	12.2	8.4	5.5
Denbury Resources Inc.	DNR		15.04		-	13.3	8.4	5.3
Cimarex Energy Company	XEC	СВ	55.43		-	8.2	9.0	5.0
Whiting Petroleum Corporation	WLL	CB	44.19		-	9.7	7.7	4.4
Median						11.3	9.3	6.4
Top Line Cash Payers								
Cross Timbers Royalty Trust	CRT		39.28	78	0.96	16.3	17.5	15.7
Sabine Royalty Trust	SBR		50.10	100	1.00	8.8	18.5	14.2
Dorchester Minerals, L.P.	DMLP	СВ	22.80	77	1.00	6.6	15.1	12.7
Permian Basin RT	PBT		18.45	32	0.91	9.7	13.2	12.1
Freehold Royalties Ltd.	FRHLF		17.48	71	0.83	5.3	10.4	8.7
Median						8.8	15.1	12.7
Bottom Line Cash Payers								
Hugoton RoyaltyTrust	HGT		12.93		0.83	13.2	20.8	15.9
San Juan Basin Royalty Trust	SJT	СВ	17.44		0.67	8.8	17.4	14.4
Linn Energy, LLC	LINE		35.24		1.01	14.5	10.5	11.5
Mesa RoyaltyTrust	MTR		31.50		0.86	7.5	13.4	10.6
Vanguard Natural Resources, LLC	VNR		24.26		0.91	13.6	9.6	9.4
Legacy Reserves L.P.	LGCY		25.00		0.66	11.3	8.9	7.8
Enduro Royalty Trust (40%)	NDRO		18.87		0.62	5.2	7.8	7.0
Enerplus Corporation	ERF	CB	13.71		0.70	6.5	8.6	5.5
Median						10.1	10.0	10.0
B=Buy; CB=Contrarian Buy, Stock Price	apparent1	v in a	lowntrend	l compared	to 200-da	v average.		
EV = Enterprise Value = Market Cap and							n	
and amortization; NTM = Next Twelve M								
Earnings; $PV = Present Value of oil and g$					SIGURII			
Top Line Cash Payers defined as those ha				ee fifth co	lumn from	right)		



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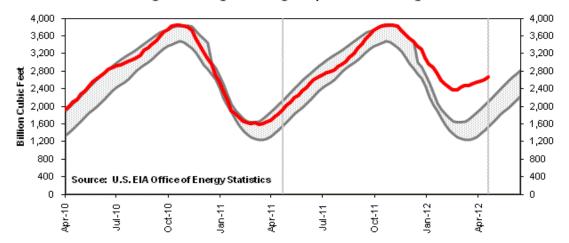
		Ta	ble ISC-4	1				
Oil and (Gas Inc	om	e and S	Small C	Cap Stoc	ks		
Rank by E	nterpr	ise '	Value t	o 200 I	Day Ave	rage		
•						U		
			Price					
			(\$/sh)		Enterpris	e Value/		
	Symbol/		18-May	52Wk	52Wk	50 Day	200 Day	McDep
	Ra	ting	2012	High	Low	Avg.	Avg.	Ratio
Small Cap Independent Producers								
Range Resources	RRC	В	61.48	0.83	1.16	1.01	0.98	0.90
Denbury Resources Inc.	DNR		15.04	0.75	1.28	0.87	0.93	0.63
Whiting Petroleum Corporation	WLL	CB	44.19	0.70	1.34	0.86	0.93	0.58
Peyto Exploration and Development C	PEYUF		17.90	0.73	1.18	1.06	0.90	0.78
PDC Energy	PETD		25.25	0.76	1.27	0.83	0.90	0.76
Berry Petroleum Company	BRY		36.39	0.72	1.10	0.87	0.89	0.66
Cimarex Energy Company	XEC	CB	55.43	0.62	1.07	0.81	0.86	0.55
Birchcliff Energy Ltd.	BIREF	CB	5.90	0.48	1.01	0.84	0.61	0.60
Median				0.73	1.17	0.86	0.90	0.64
Top Line Cash Payers								
Dorchester Minerals, L.P.	DMLP	CB	22.80	0.81	1.10	0.93	0.96	0.84
Freehold Royalties Ltd.	FRHLF		17.48	0.77	1.26	0.91	0.93	0.84
Permian Basin RT	PBT		18.45	0.79	1.02	0.85	0.88	0.92
Cross Timbers Royalty Trust	CRT		39.28	0.77	1.09	0.94	0.87	0.89
Sabine Royalty Trust	SBR		50.10	0.74	1.06	0.84	0.80	0.77
Median				0.77	1.09	0.91	0.88	0.84
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		35.24	0.91	1.08	0.95	0.97	1.10
Legacy Reserves L.P.	LGCY		25.00	0.83	1.09	0.90	0.92	0.88
Vanguard Natural Resources, LLC	VNR		24.26	0.83	1.07	0.91	0.92	0.98
San Juan Basin Royalty Trust	SJT	CB	17.44	0.68	1.11	0.96	0.82	0.83
Mesa RoyaltyTrust	MTR		31.50	0.64	1.08	0.85	0.76	0.79
Hugoton RoyaltyTrust	HGT		12.93	0.54	1.05	0.92	0.71	0.76
Enerplus Corporation	ERF	CB	13.71	0.54	1.00	0.78	0.68	0.64
Median				0.68	1.08	0.91	0.82	0.83
CB=Contrarian Buy, Stock Price appar	ontly in 4	NY met	and com-	orad to 20	O dov over	go.		



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Working Gas in Underground Storage Compared with 5-Year Range



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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