



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

October 28, 2011

## Berry Petroleum (BRY)

### Volatility Break

<i>Symbol</i>	BRY	<i>Ebitda Next Twelve Months ending 9/30/12 (US\$mm)</i>	570
<i>Rating</i>		<i>North American Natural Gas/Ebitda (%)</i>	10
<i>Price (\$/sh)</i>	36.82	<i>Natural Gas and Oil Production/Ebitda (%)</i>	100
<i>Pricing Date</i>	10/28/11	<i>Adjusted Reserves/Production NTM</i>	11.6
<i>Shares (mm)</i>	55	<i>EV/Ebitda</i>	6.1
<i>Market Capitalization (\$mm)</i>	2,010	<i>PV/Ebitda</i>	9.2
<i>Debt (\$mm)</i>	1,440	<i>Undeveloped Reserves (%)</i>	51
<i>Enterprise Value (EV) (\$mm)</i>	3,450	<i>Natural Gas and Oil Ebitda (\$/boe)</i>	42.20
<i>Present Value (PV) (\$mm)</i>	5,270	<i>Present Value Proven Reserves(\$/boe)</i>	19.40
<i>Net Present Value (\$/share)</i>	70	<i>Oil and Gas Ebitda Margin (%)</i>	61
<i>Debt/Present Value</i>	0.27	<i>Earnings Next Twelve Months (US\$/sh)</i>	2.49
<i>McDep Ratio - EV/PV</i>	0.66	<i>Price/Earnings Next Twelve Months</i>	15
<i>Dividend Yield (%/year)</i>	0.9	<i>Indicated Annual Dividend (US\$/sh)</i>	0.32
Note: Estimated cash flow and earnings tied to one-year futures prices for natural gas and oil.			
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\$100 a barrel and natural gas, \$8 a million btu.			
For historical research on Berry since 2004 see <a href="http://www.mcdep.com/4bry.htm">http://www.mcdep.com/4bry.htm</a>			

### Summary and Recommendation

We reaffirm estimated Net Present Value of \$70 a share for small cap independent oil producer Berry Petroleum (BRY) in the wake of a 15% drop in stock price since third quarter results were released on October 27. As a result, BRY's McDep Ratio drops to 0.66, which places it among the most undervalued. Cash flow (Ebitda) exceeded our expectations from three months ago and we raise our estimated volume for the next twelve months. The apparent source of disappointment was management's reduction in estimated production for the year. The new outlook is for essentially flat production from the quarter just reported as we also project (see tables Functional Cash Flow and Present Value on page 2 and Next Twelve Months Operating and Financial Estimates on page 2). Chief Executive Bob Heinemann explains that new environmental regulations issued by the State of California are causing a delay in the next increases in volume in the company's growing diatomite project. While the required increase in direct cash outlays is modest, BRY needs time to install additional monitoring equipment among other requirements. Otherwise, Berry appears to be successfully expanding its foothold in the Permian Basin of Texas and is enthused about results from applying new technology on its Utah oil properties. It enjoys premium prices for its oil production in California. We like the management of Berry at the same time we watch the level of debt cautiously. In any case, the decline in stock price looks overdone in our valuation context. Berry's rank by McDep Ratio is corroborated by its similar rank by unlevered cash flow multiple (EV/Ebitda) of 6.1 times (see Tables ISC-1 to ISC-4 on pages 3-6).

Kurt H. Wulff, CFA



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Berry Petroleum Company					
Functional Cash Flow and Present Value					
	NTM Ebitda	Adjusted	PV/	Present	
	(US\$m)	R/P	Ebitda	Value	
				(US\$m)	
North American Natural Gas	60	18.9	18.3	1,100	21%
Oil	510	9.4	8.2	4,170	79%
	570	11.6	9.2	5,270	100%
Debt (US\$m)					1,440
Net Present Value (US\$m)					3,830
Shares (mm)					55
Net Present Value - Standard Estimate (US\$/sh)					70
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					83

Berry Petroleum Company									
Next Twelve Months Operating and Financial Estimates									
	Q3	Q2	Q3	Q4E	Year	Q1E	Q2E	Q3E	Next
	9/30/10	6/30/11	9/30/11	12/31/11	2011E	3/31/12	6/30/12	9/30/12	Twelve
									Months
									9/30/12
<b>Volume</b>									
Natural Gas (mmcf)	73	66	65	65	67	65	65	65	65
Oil (mbd)	21.8	24.6	26.1	26.1	24.9	26.1	26.1	26.1	26.1
Total (mb)	3,118	3,238	3,397	3,397	13,123	3,360	3,360	3,397	13,515
Total (mbd)	33.9	35.6	36.9	36.9	36.0	36.9	36.9	36.9	36.9
<b>Price</b>									
Henry Hub (\$/mmbtu)	4.38	4.32	4.19	3.72	4.08	3.92	3.92	4.02	3.90
Differential (\$/mmbtu)	0.09	(0.04)	(0.04)	(0.03)	(0.06)	(0.05)	(0.05)	(0.06)	(0.05)
Company (\$/mcf)	4.29	4.36	4.23	3.75	4.14	3.97	3.98	4.08	3.95
WTI Cushing (\$/bbl)	76.08	102.55	89.76	89.53	93.98	91.12	90.73	90.49	90.47
Differential	14.55	4.89	(0.80)	(0.79)	2.90	2.82	2.80	2.80	1.90
Company	61.53	97.66	90.56	90.32	91.08	88.30	87.93	87.69	88.56
Total (\$/bbl)	48.76	75.60	71.45	70.44	70.65	69.41	69.15	69.16	69.54
<b>Revenue (\$mm)</b>									
Natural Gas	29	26	25	22	101	23	24	24	94
Oil	123	219	217	217	827	210	209	211	846
Total	152	245	243	239	927	233	232	235	940
<b>Expense</b>									
Lease operating	53	67	71	75	278	73	73	74	296
General and administrative	12	16	15	19	66	18	18	18	74
Total	65	83	86	94	344	92	91	92	370
<b>Ebitda</b>	87	162	157	145	583	142	141	143	570
Exploration	1	-	-	-	-	-	-	-	-
Deprec., Deplet., & Amort.	50	52	55	55	215	55	55	55	220
Other, incl hedge	(12)	30	15	15	78	15	15	15	61
<b>Ebit</b>	47	79	86	75	291	71	71	72	289
Interest	16	18	20	20	74	20	20	20	80
<b>Ebt</b>	32	61	66	55	217	51	51	52	209
Income Tax	11	22	23	19	76	18	18	18	73
<b>Net Income (\$mm)</b>	21	40	43	36	141	33	33	34	136
Per Share (\$)	0.38	0.73	0.79	0.65	2.58	0.61	0.60	0.62	2.49
<b>Shares (millions)</b>	54	55	55	55	55	55	55	55	55
Ebitda Margin	57%	66%	65%	61%	63%	61%	61%	61%	61%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%



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Table ISC-1											
McDep Income and Small Cap Energy Portfolio											
Debt, Segments, Cash Flow, Income and McDep Ratio											
			Price			Enterprise		PV(%)			
Symbol/Rating		(US\$/sh)	EV/	Market	Value	Nat	Oil	Ebitda	NTM	Yield	McDep
CB (see below)		2011	Cap		(\$mm)	Gas		NTM	(\$/un)	(%)	Ratio
<b>Small Cap Independent Producers</b>											
Range Resources	RRC	B	73.25	1.19	13,850	66	34	17.6	0.16	0.2	1.04
Birchcliff Energy Ltd.	BIREF	B	15.49	1.19	2,410	56	44	14.6	-	-	0.97
Peyto Exploration and Developmen	PEYUF		22.21	1.17	3,460	76	24	10.8	0.74	3.3	0.94
PDC Energy	PETD		28.04	1.87	1,240	60	40	8.6	-	-	0.93
Denbury Resources Inc.	DNR		16.85	1.35	9,170	5	95	7.3	-	-	0.67
Berry Petroleum Company	BRY		36.82	1.72	3,450	21	79	6.0	0.32	0.9	0.65
Whiting Petroleum Corporation	WLL	CB	50.39	1.27	7,600	11	89	5.0	-	-	0.62
Cimarex Energy Company	XEC	CB	67.79	1.13	6,570	46	54	5.3	0.40	0.6	0.59
<i>Total or Median</i>					47,800			7.9			0.80
<b>Top Line Cash Payers</b>											
Cross Timbers Royalty Trust	CRT		47.18	1.00	280	87	13		2.94	6.2	1.05
Sabine Royalty Trust	SBR		66.25	1.00	970	51	49		4.17	6.3	0.95
Permian Basin RT	PBT		20.15	1.00	940	42	58		1.33	6.6	0.92
Freehold Royalties Ltd.	FRHLF		18.92	1.06	1,180	18	82		1.67	8.8	0.87
Dorchester Minerals, L.P.	DMLP	CB	24.99	1.00	770	61	39		1.65	6.6	0.83
<i>Total or Median</i>					4,100					6.6	0.92
<b>Bottom Line Cash Payers</b>											
Linn Energy, LLC	LINE		39.05	1.45	9,970	31	69	16.1	2.76	7.1	1.10
Vanguard Natural Resources, LLC	VNR		29.32	1.43	2,140	23	77	11.3	2.30	7.8	1.06
Hugoton RoyaltyTrust	HGT		22.23	1.00	890	88	13	15.8	1.26	5.7	1.01
Legacy Reserves L.P.	LGCY		30.40	1.43	1,890	21	79	10.0	2.16	7.1	1.01
San Juan Basin Royalty Trust	SJT	B	24.87	1.00	1,160	100	-	15.2	1.27	5.1	0.99
Mesa RoyaltyTrust	MTR		44.49	1.00	83	75	25	12.5	2.99	6.7	0.84
Enerplus Corporation	ERF	CB	28.60	1.21	6,200	30	70	8.2	2.15	7.5	0.81
<i>Total or Median</i>					22,300			12.5		7.1	1.01
<b>Composite</b>											
<i>Enterprise Value Weighting</i>					74,200	38	62				0.82
<i>Equal Weighting</i>						48	52				0.89
<i>Equal Weighted Buys</i>						46	54				0.84

CB=Contrarian Buy, Stock Price apparently in downtrend compared to 200-day average.

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses.

Present Value (PV) presumes long-term prices of \$100 a barrel for oil and \$8 a million btu for natural gas.

Dist. = Income distribution. NTM = Next Twelve Months Ended September 30, 2012. Enterprise Value = Market Cap and Debt.



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Table ISC-2

## McDep Income and Small Cap Energy Portfolio Net Present Value and McDep Ratio

			<i>Price</i>		<i>Market</i>	<i>Net</i>	<i>Debt/</i>	
	<i>Symbol/</i>		<i>28-Oct</i>	<i>Shares</i>	<i>Cap</i>	<i>Value</i>	<i>Present</i>	<i>McDep</i>
	<i>Rating</i>		<i>2011</i>	<i>(mm)</i>	<i>(\$mm)</i>	<i>(\$/un)</i>	<i>Value</i>	<i>Ratio</i>
<b>Small Cap Independent Producers</b>								
Range Resources	RRC	B	73.25	159.0	11,650	70.00	0.17	1.04
Birchcliff Energy Ltd.	BIREF	B	15.49	131.0	2,030	16.00	0.15	0.97
Peyto Exploration and Development Cor	PEYUF		22.21	133.1	2,960	24.00	0.14	0.94
PDC Energy	PETD		28.04	23.7	660	32.00	0.43	0.93
Denbury Resources Inc.	DNR		16.85	404.0	6,810	28.00	0.17	0.67
Berry Petroleum Company	BRY		36.82	54.7	2,010	70.00	0.27	0.65
Whiting Petroleum Corporation	WLL	CB	50.39	119.0	6,000	90.00	0.13	0.62
Cimarex Energy Company	XEC	CB	67.79	86.1	5,840	120.00	0.07	0.59
<i>Total or Median</i>					<i>37,960</i>		<i>0.16</i>	<i>0.80</i>
<b>Top Line Cash Payers</b>								
Cross Timbers Royalty Trust	CRT		47.18	6.0	280	45.00	-	1.05
Sabine Royalty Trust	SBR		66.25	14.6	970	70.00	-	0.95
Permian Basin RT	PBT		20.15	46.6	940	22.00	-	0.92
Freehold Royalties Ltd.	FRHLF		18.92	59.1	1,120	22.00	0.05	0.87
Dorchester Minerals, L.P.	DMLP	CB	24.99	30.7	770	30.00	-	0.83
<i>Total or Median</i>					<i>4,080</i>			<i>0.92</i>
<b>Bottom Line Cash Payers</b>								
Linn Energy, LLC	LINE		39.05	176.0	6,870	34.00	0.34	1.10
Vanguard Natural Resources, LLC	VNR		29.32	51.1	1,500	27.00	0.32	1.06
Hugoton RoyaltyTrust	HGT		22.23	40.0	890	22.00	-	1.01
Legacy Reserves L.P.	LGCY		30.40	43.6	1,330	30.00	0.30	1.01
San Juan Basin Royalty Trust	SJT	B	24.87	46.6	1,160	25.00	-	0.99
Mesa RoyaltyTrust	MTR		44.49	1.9	83	53.00	-	0.84
Enerplus Corporation	ERF	CB	28.60	179.6	5,140	37.00	0.14	0.81
<i>Total or Median</i>					<i>16,970</i>			<i>1.01</i>
B=Buy; CB=Contrarian Buy, Stock Price apparently in downtrend compared to 200-day average.								
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses								
Present Value presumes long-term prices of \$100 a barrel for oil and \$8 a million btu for natural gas.								



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Table ISC-3								
McDep Income and Small Cap Energy Portfolio								
Value Multiples - Rank by EV/Ebitda								
			Price (\$/sh)	Revenue	Dist/ Equity	Adjstd Resrvs/ Prod	PV/ Ebitda	EV/ Ebitda
	Symbol/ Rating		28-Oct 2011	Royalty (%)	Ebitda	NTM	NTM	NTM
<b>Small Cap Independent Producers</b>								
Range Resources	RRC	B	73.25		-	14.4	16.9	17.6
Birchcliff Energy Ltd.	BIREF	B	15.49		-	20.3	15.0	14.6
Peyto Exploration and Development Corp	PEYUF		22.21		0.35	13.6	11.5	10.8
PDC Energy	PETD		28.04		-	7.7	9.3	8.6
Denbury Resources Inc.	DNR		16.85		-	13.4	10.8	7.3
Berry Petroleum Company	BRY		36.82		-	11.6	9.2	6.0
Cimarex Energy Company	XEC	CB	67.79		-	6.8	8.9	5.3
Whiting Petroleum Corporation	WLL	CB	50.39		-	8.7	8.1	5.0
	<i>Median</i>					12.5	10.1	7.9
<b>Top Line Cash Payers</b>								
Sabine Royalty Trust	SBR		66.25	100	1.00	7.4	16.8	15.9
Cross Timbers Royalty Trust	CRT		47.18	80	0.97	13.9	14.8	15.5
Permian Basin RT	PBT		20.15	32	0.98	16.5	16.2	14.8
Dorchester Minerals, L.P.	DMLP	CB	24.99	77	0.85	6.6	15.4	12.9
Freehold Royalties Ltd.	FRHLF		18.92	71	0.92	6.6	12.1	10.5
	<i>Median</i>					7.4	15.4	14.8
<b>Bottom Line Cash Payers</b>								
Linn Energy, LLC	LINE		39.05		1.19	17.1	14.6	16.1
Hugoton RoyaltyTrust	HGT		22.23		0.90	13.9	15.7	15.8
San Juan Basin Royalty Trust	SJT	B	24.87		0.78	8.6	15.3	15.2
Mesa RoyaltyTrust	MTR		44.49		0.84	14.5	14.9	12.5
Vanguard Natural Resources, LLC	VNR		29.32		0.91	8.8	10.7	11.3
Legacy Reserves L.P.	LGCY		30.40		0.72	10.2	9.9	10.0
Enerplus Corporation	ERF	CB	28.60		0.59	8.3	10.2	8.2
	<i>Median</i>					10.2	14.6	12.5
B=Buy; CB=Contrarian Buy, Stock Price apparently in downtrend compared to 200-day average.								
EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2012; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses								
Top Line Cash Payers defined as those having Revenue Royalty (see fifth column from right).								



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Table ISC-4								
Oil and Gas Income and Small Cap Stocks								
Rank by Enterprise Value to 200 Day Average								
			Price (\$/sh)	Enterprise Value/				
	Symbol/		28-Oct	52Wk	52Wk	50 Day	200 Day	McDep
	Rating		2011	High	Low	Avg.	Avg.	Ratio
<b>Small Cap Independent Producers</b>								
Range Resources	RRC	B	73.25	0.96	1.78	1.12	1.24	1.04
Birchcliff Energy Ltd.	BIREF	B	15.49	1.02	1.74	1.18	1.18	0.97
Peyto Exploration and Development C	PEYUF		22.21	0.89	1.39	1.05	1.05	0.94
Denbury Resources Inc.	DNR		16.85	0.71	1.42	1.15	0.91	0.67
Whiting Petroleum Corporation	WLL	CB	50.39	0.71	1.51	1.15	0.90	0.62
PDC Energy	PETD		28.04	0.71	1.32	1.12	0.88	0.93
Berry Petroleum Company	BRY		36.82	0.72	1.11	0.91	0.85	0.65
Cimarex Energy Company	XEC	CB	67.79	0.60	1.29	1.08	0.78	0.59
	<i>Median</i>			<i>0.72</i>	<i>1.40</i>	<i>1.12</i>	<i>0.91</i>	<i>0.80</i>
<b>Top Line Cash Payers</b>								
Cross Timbers Royalty Trust	CRT		47.18	0.97	1.25	1.04	1.06	1.05
Sabine Royalty Trust	SBR		66.25	0.94	1.40	1.06	1.04	0.95
Permian Basin RT	PBT		20.15	0.85	1.12	0.96	0.95	0.92
Dorchester Minerals, L.P.	DMLP	CB	24.99	0.83	1.20	1.03	0.94	0.83
Freehold Royalties Ltd.	FRHLF		18.92	0.79	1.36	1.09	0.92	0.87
	<i>Median</i>			<i>0.85</i>	<i>1.25</i>	<i>1.04</i>	<i>0.95</i>	<i>0.92</i>
<b>Bottom Line Cash Payers</b>								
Legacy Reserves L.P.	LGCY		30.40	0.93	1.24	1.08	1.03	1.01
San Juan Basin Royalty Trust	SJT	B	24.87	0.89	1.22	1.05	1.02	0.99
Linn Energy, LLC	LINE		39.05	0.96	1.16	1.04	1.02	1.10
Hugoton RoyaltyTrust	HGT		22.23	0.90	1.16	1.01	1.00	1.01
Vanguard Natural Resources, LLC	VNR		29.32	0.91	1.22	1.06	1.00	1.06
Mesa RoyaltyTrust	MTR		44.49	0.87	1.14	1.02	0.97	0.84
Enerplus Corporation	ERF	CB	28.60	0.88	1.25	1.06	0.96	0.81
	<i>Median</i>			<i>0.90</i>	<i>1.22</i>	<i>1.05</i>	<i>1.00</i>	<i>1.01</i>

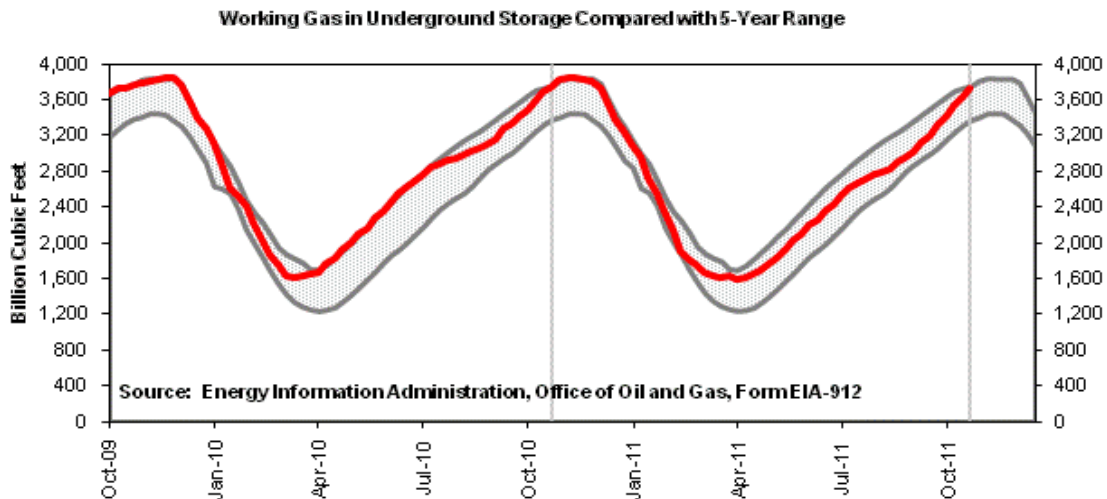
CB=Contrarian Buy, Stock Price apparently in downtrend compared to 200-day average.



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