



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

December 24, 2010

Raise NPV for Long-Term Oil Price of \$100

Summary and Recommendation

Higher Net Present Value (NPV) for producers concentrated on oil validates stock price gains and points to further potential. Though all seven buy recommendations remain more than half concentrated on natural gas by value, **Cimarex (XEC)**, **Dorchester Minerals, L.P. (DMLP)** and **Birchcliff Energy Ltd. (BIREF)** saw the most unlevered increase in present value from oil among the official buys. Concentrated 89%, 88% and 87% on oil, **Whiting Petroleum (WLL)**, **Denbury Resources (DNR)** and **Legacy Reserves L.P. (LGCY)** saw the most overall unlevered increase. BIREF, DMLP and **Enerplus Corporation (ERF)** have the lowest McDep in each of three groups, respectively (see [Tables 1-2](#)).

\$100 a Barrel Approaching

Our long-term oil price expectation of \$100 is up from \$75. Our first use of \$100 in our calculations in early 2008 did not hold as it dropped back to \$75 after financial panic struck later that year. We made our new estimates by increasing the oil value in the old estimates by a third (25/75). A median McDep Ratio of 0.95 on new estimates suggests that the small cap stocks are priced for \$95 oil (0.95 times 100). Coincidentally, the price of oil quoted for December 2016 is \$92, the same as for today. The relatively flat trend is borne out by cash flow multiples for oil-oriented stocks generally lower than for natural gas-oriented stocks (see [Table 3](#)).

\$8 Natural Gas Farther in the Future

Unchanged, our long-term price of \$8 a million Btu for natural gas still looks high in the context of \$100 oil. Specifically, a median McDep Ratio of 0.95 on new estimates suggests that the small cap stocks are priced for \$7.60 natural gas. Price expectations rise sharply, but not to high levels for consumers. The price of natural gas quoted for December 2016 is \$6.18, up 50% from \$4.07 today. By definition, the new technology that is increasing supply and driving down price also increases the volume likely to be recovered relative to past expectations for most producers. As a result, higher volume likely offsets lower price leaving present value for natural gas unchanged for now.

Also Pointing the Way for Large Caps

All of the stocks in our income and small cap coverage are in price uptrends compared to the 200-day average (see [Table 4](#)). We are optimistic those trends can continue. The dramatic increase in oil values that are showing up in small caps ultimately apply to large caps as well. Though we don't have official buy recommendations among oil-concentrated small caps, most of our large cap recommendations are oil-concentrated.

Kurt H. Wulff, CFA



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Table 1										
McDep Income and Small Cap Energy Portfolio										
Debt, Business Segments and Income Yield										
						Present Value by Segment (%)				
	Symbol/Rating	Price (US\$/sh)	EV/ Market	Enterprise Value (\$mm)	NAmer. Natural Gas	Oil Prod'n	Dist. NTM (\$/un)	Dist. Yield (%)	McDep Ratio	
	B = Buy CB (see below)	23-Dec 2010	Cap							
Small Cap Independent Producers										
Cimarex Energy Company	XEC	B	89.39	1.08	8,300	52	48	0.32	0.4	0.97
Peyto Exploration and Development	PEYUF		19.13	1.19	2,770	69	31	0.71	3.7	0.96
Berry Petroleum Company	BRY		43.51	1.44	3,420	26	74	0.30	0.7	0.95
Petrohawk Energy Corporation	HK	B	18.28	1.62	8,920	96	4	-	-	0.94
Whiting Petroleum Corporation	WLL		118.21	1.17	8,150	11	89	-	-	0.93
Ultra Petroleum	UPL		47.85	1.20	8,850	90	10	-	-	0.93
Range Resources	RRC	B	44.56	1.30	9,090	68	32	0.16	0.4	0.91
Denbury Resources Inc.	DNR		19.18	1.44	11,100	12	88	-	-	0.91
Birchcliff Energy Ltd.	BIREF	B	9.38	1.28	1,520	62	38	-	-	0.64
<i>Total or Median</i>					62,100				-	0.93
Top Line Cash Payers										
Cross Timbers Royalty Trust	CRT		40.68	1.00	240	69	31	2.67	6.6	1.10
Permian Basin RT	PBT		22.25	1.00	1,040	31	69	1.55	7.0	1.01
Sabine Royalty Trust	SBR		58.10	1.00	850	38	62	4.04	7.0	0.98
Freehold Royalties Ltd.	FRHLF		20.56	1.07	1,280	20	80	1.67	8.1	0.94
Dorchester Minerals, L.P.	DMLP	B	26.46	1.02	830	60	40	1.71	6.5	0.88
<i>Total or Median</i>					4,200				7.0	0.98
Bottom Line Cash Payers										
Linn Energy, LLC	LINE		37.35	1.41	7,700	38	62	2.64	7.1	1.22
Vanguard Natural Resources, LLC	VNR		28.90	1.40	1,200	31	69	2.20	7.6	1.05
Legacy Reserves L.P.	LGCY		27.37	1.35	1,480	13	87	2.08	7.6	0.98
San Juan Basin Royalty Trust	SJT	B	23.93	1.00	1,120	100	-	1.35	5.6	0.96
Encore Energy Partners, L.P.	ENP		21.77	1.25	1,230	19	81	2.00	9.2	0.96
Hugoton Royalty Trust	HGT	B	20.82	1.00	830	86	14	1.28	6.2	0.95
Pengrowth Energy Corporation	PGH		12.87	1.35	5,200	29	71	0.83	6.5	0.94
Mesa Royalty Trust	MTR		47.13	1.00	88	75	25	3.57	7.6	0.89
Enerplus Corporation	ERF		31.07	1.19	6,500	34	66	2.14	6.9	0.86
<i>Total or Median</i>					25,300				7.1	0.96
Composite										
<i>Enterprise Value Weighting</i>					91,700	48	52			0.94
<i>Equal Weighting</i>						49	51			0.95
<i>Equal Weighted Buys</i>						73	27			0.89

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.

Dist. = Income distribution. NTM = Next Twelve Months Ended December 31, 2011. Enterprise Value = Market Cap and Debt.



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			<i>Price</i> (\$/sh)	<i>Shares</i> (mm)	<i>Market</i> <i>Cap</i> (\$mm)	<i>Net</i> <i>Present</i> <i>Value</i> (\$/un)	<i>Debt/</i> <i>Present</i> <i>Value</i>	<i>McDep</i> <i>Ratio</i>
	<i>Symbol/</i> <i>Rating</i>	<i>23-Dec</i> <i>2010</i>						
Small Cap Independent Producers								
Cimarex Energy Company	XEC	B	89.39	85.8	7,670	92.00	0.07	0.97
Peyto Exploration and Development Corp	PEYUF		19.13	121.8	2,330	20.00	0.15	0.96
Berry Petroleum Company	BRY		43.51	54.4	2,370	47.00	0.29	0.95
Petrohawk Energy Corporation	HK	B	18.28	302.0	5,520	20.00	0.36	0.94
Whiting Petroleum Corporation	WLL		118.21	59.0	6,970	128.00	0.14	0.93
Ultra Petroleum	UPL		47.85	154.0	7,370	52.00	0.16	0.93
Range Resources	RRC	B	44.56	157.1	7,000	50.00	0.21	0.91
Denbury Resources Inc.	DNR		19.18	401.0	7,690	22.00	0.28	0.91
Birchcliff Energy Ltd.	BIREF	B	9.38	127.3	1,190	16.00	0.14	0.64
<i>Total or Median</i>					<i>48,110</i>		<i>0.16</i>	<i>0.93</i>
Top Line Cash Payers								
Cross Timbers Royalty Trust	CRT		40.68	6.0	240	37.00	-	1.10
Permian Basin RT	PBT		22.25	46.6	1,040	22.00	-	1.01
Sabine Royalty Trust	SBR		58.10	14.6	850	59.00	-	0.98
Freehold Royalties Ltd.	FRHLF		20.56	58.4	1,200	22.00	0.06	0.94
Dorchester Minerals, L.P.	DMLP	B	26.46	30.7	810	30.00	0.02	0.88
<i>Total or Median</i>					<i>4,140</i>			<i>0.98</i>
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		37.35	146.5	5,470	28.00	0.35	1.22
Vanguard Natural Resources, LLC	VNR		28.90	29.8	860	27.00	0.30	1.05
Legacy Reserves L.P.	LGCY		27.37	40.1	1,100	28.00	0.25	0.98
San Juan Basin Royalty Trust	SJT	B	23.93	46.6	1,120	25.00	-	0.96
Encore Energy Partners, L.P.	ENP		21.77	45.3	990	23.00	0.19	0.96
Hugoton Royalty Trust	HGT	B	20.82	40.0	830	22.00	-	0.95
Pengrowth Energy Corporation	PGH		12.87	299.0	3,850	14.00	0.25	0.94
Mesa Royalty Trust	MTR		47.13	1.9	88	53.00	-	0.89
Enerplus Corporation	ERF		31.07	177.5	5,510	37.00	0.14	0.86
<i>Total or Median</i>					<i>19,820</i>			<i>0.96</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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			<i>Price</i> <i>(\$/sh)</i>	<i>Revenue</i>	<i>Dist/</i>	<i>Adjstd</i>		
	<i>Symbol/</i>		<i>23-Dec</i>	<i>Royalty</i>	<i>Equity</i>	<i>Prod</i>	<i>PV/</i>	<i>EV/</i>
	<i>Rating</i>		<i>2010</i>	<i>(%)</i>	<i>Ebitda</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>
Small Cap Independent Producers								
Range Resources	RRC	B	44.56		-	11.8	16.5	15.1
Peyto Exploration and Development Corp	PEYUF		19.13		0.49	18.4	13.8	13.3
Ultra Petroleum	UPL		47.85		-	12.6	13.2	12.3
Birchcliff Energy Ltd.	BIREF	B	9.38		-	19.8	17.7	11.4
Petrohawk Energy Corporation	HK	B	18.28		-	7.0	11.3	10.7
Berry Petroleum Company	BRY		43.51		-	11.3	9.2	8.7
Denbury Resources Inc.	DNR		19.18		-	12.9	9.4	8.5
Cimarex Energy Company	XEC	B	89.39		-	6.2	7.4	7.2
Whiting Petroleum Corporation	WLL		118.21		-	9.3	7.7	7.2
	<i>Median</i>					<i>11.8</i>	<i>11.3</i>	<i>10.7</i>
Top Line Cash Payers								
Cross Timbers Royalty Trust	CRT		40.68	84	0.96	13.2	13.3	14.7
Sabine Royalty Trust	SBR		58.10	100	1.00	7.8	14.6	14.4
Permian Basin RT	PBT		22.25	32	0.98	13.2	14.0	14.1
Dorchester Minerals, L.P.	DMLP	B	26.46	77	0.87	6.7	15.2	13.5
Freehold Royalties Ltd.	FRHLF		20.56	71	0.84	8.4	11.1	10.4
	<i>Median</i>					<i>8.4</i>	<i>14.0</i>	<i>14.1</i>
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		37.35		1.43	18.3	15.2	18.5
San Juan Basin Royalty Trust	SJT	B	23.93		0.81	13.6	15.0	14.3
Hugoton Royalty Trust	HGT	B	20.82		0.85	12.6	14.6	13.8
Mesa Royalty Trust	MTR		47.13		0.91	8.7	13.5	12.0
Legacy Reserves L.P.	LGCY		27.37		0.82	12.0	11.0	10.8
Vanguard Natural Resources, LLC	VNR		28.90		0.80	13.0	9.8	10.3
Encore Energy Partners, L.P.	ENP		21.77		0.93	13.5	10.7	10.2
Pengrowth Energy Corporation	PGH		12.87		0.53	9.6	8.9	8.3
Enerplus Corporation	ERF		31.07		0.55	9.7	9.5	8.2
	<i>Median</i>					<i>12.6</i>	<i>11.0</i>	<i>10.8</i>
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 December 31, 2011; 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 4									
Oil and Gas Income and Small Cap Stocks									
Rank by Enterprise Value to 200 Day Average									
			Price (\$/sh)	Enterprise Value/					
	Symbol/ Rating		23-Dec 2010	52Wk High	52Wk Low	50 Day Avg.	200 Day Avg.	McDep Ratio	
Small Cap Independent Producers									
	Peyto Exploration and Development Co	PEYUF	19.13	1.00	1.55	1.11	1.24	0.96	
	Whiting Petroleum Corporation	WLL	118.21	1.00	1.67	1.08	1.24	0.93	
	Berry Petroleum Company	BRY	43.51	0.98	1.44	1.09	1.22	0.95	
	Cimarex Energy Company	XEC	B	89.39	0.99	1.73	1.10	1.22	0.97
	Denbury Resources Inc.	DNR		19.18	0.97	1.26	1.03	1.09	0.91
	Ultra Petroleum	UPL		47.85	0.90	1.23	1.04	1.06	0.93
	Range Resources	RRC	B	44.56	0.85	1.27	1.07	1.04	0.91
	Birchcliff Energy Ltd.	BIREF	B	9.38	0.90	1.16	1.02	1.02	0.64
	Petrohawk Energy Corporation	HK	B	18.28	0.76	1.17	1.01	1.00	0.94
	<i>Median</i>			<i>0.97</i>	<i>1.27</i>	<i>1.07</i>	<i>1.09</i>	<i>0.93</i>	
Top Line Cash Payers									
	Freehold Royalties Ltd.	FRHLF		20.56	1.00	1.42	1.07	1.19	0.94
	Permian Basin RT	PBT		22.25	0.94	1.60	1.01	1.14	1.01
	Cross Timbers Royalty Trust	CRT		40.68	0.96	1.44	1.02	1.12	1.10
	Sabine Royalty Trust	SBR		58.10	0.98	1.45	1.02	1.12	0.98
	Dorchester Minerals, L.P.	DMLP	B	26.46	0.90	1.28	0.98	1.03	0.88
	<i>Median</i>			<i>0.96</i>	<i>1.44</i>	<i>1.02</i>	<i>1.12</i>	<i>0.98</i>	
Bottom Line Cash Payers									
	Enerplus Corporation	ERF		31.07	0.99	1.88	1.08	1.21	0.86
	Linn Energy, LLC	LINE		37.35	1.00	1.89	1.04	1.17	1.22
	Pengrowth Energy Corporation	PGH		12.87	0.98	1.99	1.02	1.13	0.94
	Vanguard Natural Resources, LLC	VNR		28.90	0.99	1.42	1.07	1.13	1.05
	Encore Energy Partners, L.P.	ENP		21.77	0.99	1.82	1.05	1.11	0.96
	Legacy Reserves L.P.	LGCY		27.37	0.99	1.39	1.03	1.10	0.98
	Hugoton Royalty Trust	HGT	B	20.82	0.94	1.39	1.02	1.07	0.95
	Mesa Royalty Trust	MTR		47.13	0.87	1.30	0.97	1.02	0.89
	San Juan Basin Royalty Trust	SJT	B	23.93	0.84	1.40	0.97	1.00	0.96
	<i>Median</i>			<i>0.99</i>	<i>1.42</i>	<i>1.03</i>	<i>1.11</i>	<i>0.96</i>	

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

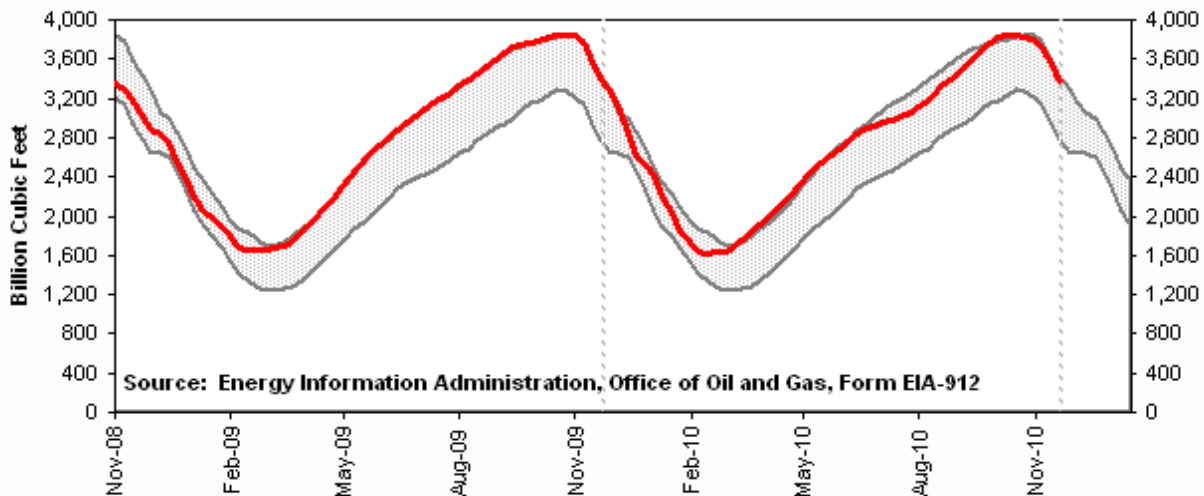


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Working Gas in Underground Storage Compared with 5-Year Range



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