



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

July 8, 2011

Shale Strategy II

Summary and Recommendation

Seven small cap oil and gas buy recommendations appear well-positioned to grow volume by applying new technology and to benefit from potentially exciting price developments during the next eighteen months of polarized politics leading up to a presidential election. Buy-recommended **Cimarex (XEC)** readily qualifies as a shale play with its Oklahoma Cana activity along with the six stocks emphasized last week: **Whiting (WLL)** and **Enerplus (ERF)** in the Bakken formation; **Petrohawk (HK)** in the Eagle Ford; **Birchcliff (BIREF)** in the Alberta Montney; **Range Resources (RRC)** in the Marcellus and **Dorchester Minerals (DMLP)** in the Fayetteville. In addition to offering volume growth, the companies may see big price moves as we approach the November 2012 election. Forces are at play similar to those 32 years ago when stock prices tripled for small caps in our continuous coverage. Using more modest expectations, we attempt to capture the dynamics of volume and price in our estimates of present value, which lead to ranking by McDep Ratio (see [Table ISC-1](#) and [Table ISC-3](#) on pages 3-4). The amount of future value we are willing to count is restrained by near term cash flow reflected in ranking by EV/Ebitda (see [Table ISC-3](#) on pages 5). Meanwhile oil price, the main indicator of industry conditions, is in a rising trend with the recent settlement of six-year futures at \$103 a barrel compared to the 40-week average of \$96. Six-year natural gas at \$5.35 trades near the 40-week average of \$5.40 a million btu.

More than Shale

Shale strategy is a convenient name for our small cap oil and gas producer growth strategy. Shale rock traditionally has contained oil and gas that would not flow in quantities large enough to be commercial. Apparently over eons of time some of the oil and gas has migrated from the shale rock to be trapped in sandstone and other rocks. When the most susceptible concentrations were tapped, oil and gas would flow to the surface.

While geologists can determine where oil and gas may be found, engineers develop the techniques of production. More of the riches of shale rock identified by geologists can now be produced economically with the advanced engineering of horizontal drilling with multi-stage fracturing. The same techniques lead to big wells and growing volume in mixed shale, sandstone and carbonate formations, too.

The future potential of all of a company's oil and gas resources makes up our estimate of present value, which is the amount a buyer would pay for a company's properties to capture a return on investment of 7% a year after adjustment for inflation. Cash flow from producing wells can be projected in straight forward fashion while cash flow from undeveloped and probable reserves is more subjective. First year cash flow and the multiple of present value to first year cash flow capture the major variables in convenient fashion. The multiple varies approximately with adjusted reserve life. The multiple is also higher for natural gas in the anticipation that the steep



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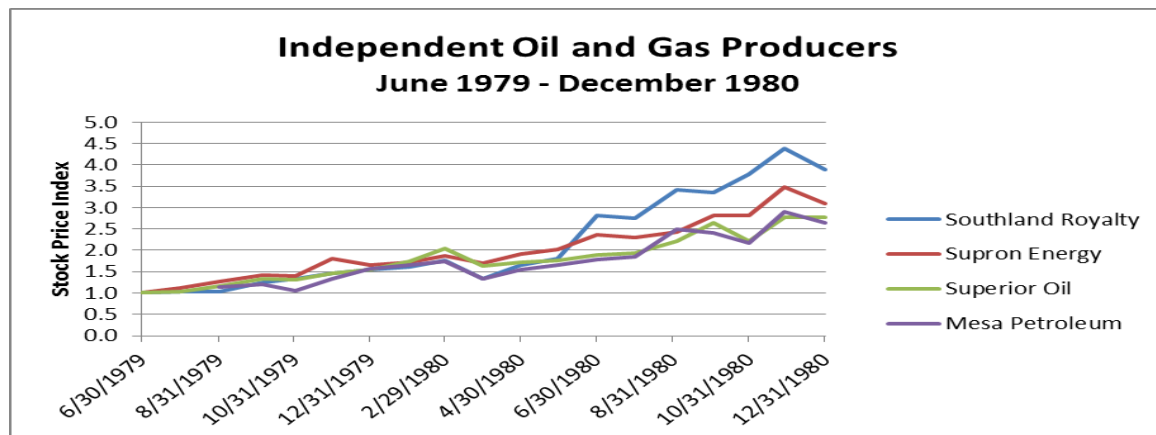
discount for natural gas price compared to oil price will narrow in the future (see table below Natural Gas and Oil Cash Flow, Reserve Life and Present Value). We update first year cash flow for oil and gas price weekly, update volume at least quarterly and reserves at least annually.

Big Picture May Present Big Opportunity

Socialist-oriented political leadership attempting to manipulate market conditions may ultimately be overwhelmed by pressures that refuse to be contained. President Obama's attempt last month to depress oil price with government oil from storage is reminiscent of President Carter's plan to enforce price controls by rationing gasoline. The last eighteen months of President Carter's term were the most rewarding period for small cap oil and gas stocks on top of a long decade of benefiting from the foibles of Republican and Democratic energy and economic policy (see chart below Independent Oil and Gas Producers, June 1979 – December 1980). Our buys and comparable companies are positioned to participate in price should similar gains recur, and in volume should more moderate prices prevail.

Kurt H. Wulff, CFA

Shale Strategy Small Cap Buy Recommendations													
Natural Gas and Oil Cash Flow, Reserve Life and Present Value													
	Natural Gas				Oil				Total Natural Gas and Oil				
	NTM Ebitda (US\$m)	Adjusted R/P	PV/ Ebitda	Present Value (US\$m)	NTM Ebitda (US\$m)	Adjusted R/P	PV/ Ebitda	Present Value (US\$m)	NTM Ebitda (US\$m)	Adjusted R/P	PV/ Ebitda	Present Value (US\$m)	
Proven Developed Reserves Only in Reserve Life (Adjusted R/P)													
Dorchester Minerals, L.P.	DMLP	36	6.6	15.6	560	29	8.8	12.4	360	65	7.0	14.2	920
Proven Developed and Half of Proven Undeveloped Reserves in Reserve Life (Adjusted R/P)													
Range Resources	RRC	461	16.4	18.5	8,500	284	15.1	9.6	2,740	745	16.1	15.1	11,240
Cimarex Energy Company	XEC	470	8.0	10.4	4,900	908	5.7	6.7	6,120	1,378	7.0	8.0	11,020
Petrohawk Energy Corporation	HK	1,111	6.2	9.8	10,840	624	2.5	5.6	3,500	1,735	5.6	8.3	14,340
Proven Reserves and 30% of Probable Reserves in Reserve Life (Adjusted R/P)													
Birchcliff Energy Ltd.	BIREF	87	19.8	15.9	1,380	90	19.2	12.2	1,100	177	19.7	14.0	2,480
Whiting Petroleum Corporation	WLL	127	10.6	10.3	1,300	1,298	11.8	8.4	10,910	1,425	11.6	8.6	12,210
Enerplus Corporation	ERF	240	6.9	11.3	2,700	610	9.9	9.0	5,470	850	8.3	9.6	8,170



Source: DLJ Oil & Gas Valuation



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Table ISC-1												
McDep Income and Small Cap Energy Portfolio												
Debt, Segments, Cash Flow, Income and McDep Ratio												
		Price										
Symbol/Rating		(US\$/sh)	EV/	Enterprise	PV(%)		EV/	Dist.	Dist.			
	B = Buy	7-Jul	Market	Value	Nat	Oil	Ebitda	NTM	Yield	McDep		
CB (see below)		2011	Cap	(\$mm)	Gas		NTM	(\$/un)	(%)	Ratio		
Small Cap Independent Producers												
Peyto Exploration and Development	PEYUF			23.03	1.22	3,730	71	29	11.4	0.74	3.2	0.97
Range Resources	RRC	B		57.08	1.20	10,780	76	24	14.5	0.16	0.3	0.96
Berry Petroleum Company	BRY			55.62	1.47	4,420	26	74	9.3	0.30	0.5	0.95
Birchcliff Energy Ltd.	BIREF	B		14.18	1.22	2,240	56	44	12.6	-	-	0.90
Denbury Resources Inc.	DNR			20.41	1.29	10,430	6	94	8.0	-	-	0.85
Petrohawk Energy Corporation	HK	B		25.12	1.52	11,630	76	24	6.7	-	-	0.81
Cimarex Energy Company	XEC	CB		88.57	1.09	8,350	44	56	6.1	0.40	0.5	0.76
Whiting Petroleum Corporation	WLL	B		59.54	1.23	8,620	11	89	6.1	-	-	0.71
<i>Total or Median</i>						60,200			8.7			0.88
Top Line Cash Payers												
Permian Basin RT	PBT			22.42	1.00	1,050	42	58		1.72	7.7	1.02
Cross Timbers Royalty Trust	CRT			45.54	1.00	270	87	13		2.77	6.1	1.01
Sabine Royalty Trust	SBR			66.49	1.00	970	51	49		4.95	7.4	0.95
Freehold Royalties Ltd.	FRHLF			20.79	1.07	1,290	18	82		1.75	8.4	0.95
Dorchester Minerals, L.P.	DMLP	B		27.71	1.00	850	61	39		1.84	6.6	0.92
<i>Total or Median</i>						4,400					7.4	0.95
Bottom Line Cash Payers												
Linn Energy, LLC	LINE			39.50	1.40	9,030	35	65	13.3	2.64	6.7	1.11
Vanguard Natural Resources, LLC	VNR			29.27	1.67	1,670	26	74	12.8	2.28	7.8	1.05
Legacy Reserves L.P.	LGCY			29.96	1.41	1,840	19	81	10.7	2.12	7.1	1.05
Hugoton Royalty Trust	HGT	B		22.88	1.00	920	88	13	12.8	1.56	6.8	1.04
San Juan Basin Royalty Trust	SJT			25.19	1.00	1,170	100	-	13.1	1.61	6.4	1.01
Encore Energy Partners, L.P.	ENP			21.92	1.30	1,300	17	83	10.3	1.96	8.9	0.96
Enerplus Corporation	ERF	B		31.83	1.27	7,300	33	67	8.5	2.25	7.1	0.89
Mesa Royalty Trust	MTR			45.38	1.00	85	75	25	12.4	3.04	6.7	0.86
<i>Total or Median</i>						23,300			12.6		6.9	1.02
Composite												
<i>Enterprise Value Weighting</i>						87,900	43	57				0.88
<i>Equal Weighting</i>							48	52				0.94
<i>Equal Weighted Buys</i>							52	48				0.87

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 June 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								
			Price (\$/sh)	Shares	Market Cap (\$mm)	Net Present Value (\$/un)	Debt/ Present Value	McDep Ratio
	Symbol/ Rating		7-Jul 2011	(mm)				
Small Cap Independent Producers								
Peyto Exploration and Development Cor	PEYUF		23.03	132.7	3,060	24.00	0.17	0.97
Range Resources	RRC	B	57.08	158.0	9,020	60.00	0.16	0.96
Berry Petroleum Company	BRY		55.62	54.0	3,000	60.00	0.30	0.95
Birchcliff Energy Ltd.	BIREF	B	14.18	130.0	1,840	16.00	0.16	0.90
Denbury Resources Inc.	DNR		20.41	397.0	8,100	25.00	0.19	0.85
Petrohawk Energy Corporation	HK	B	25.12	305.0	7,660	34.00	0.28	0.81
Cimarex Energy Company	XEC	CB	88.57	86.1	7,630	120.00	0.06	0.76
Whiting Petroleum Corporation	WLL	B	59.54	118.0	7,030	90.00	0.13	0.71
<i>Total or Median</i>					47,340		0.17	0.88
Top Line Cash Payers								
Permian Basin RT	PBT		22.42	46.6	1,050	22.00	-	1.02
Cross Timbers Royalty Trust	CRT		45.54	6.0	270	45.00	-	1.01
Sabine Royalty Trust	SBR		66.49	14.6	970	70.00	-	0.95
Freehold Royalties Ltd.	FRHLF		20.79	58.4	1,210	22.00	0.06	0.95
Dorchester Minerals, L.P.	DMLP	B	27.71	30.7	850	30.00	-	0.92
<i>Total or Median</i>					4,350			0.95
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		39.50	163.0	6,440	34.00	0.32	1.11
Vanguard Natural Resources, LLC	VNR		29.27	34.2	1,000	27.00	0.42	1.05
Legacy Reserves L.P.	LGCY		29.96	43.5	1,300	28.00	0.31	1.05
Hugoton RoyaltyTrust	HGT	B	22.88	40.0	920	22.00	-	1.04
San Juan Basin Royalty Trust	SJT		25.19	46.6	1,170	25.00	-	1.01
Encore Energy Partners, L.P.	ENP		21.92	45.5	1,000	23.00	0.22	0.96
Enerplus Corporation	ERF	B	31.83	179.5	5,710	37.00	0.19	0.89
Mesa RoyaltyTrust	MTR		45.38	1.9	85	53.00	-	0.86
<i>Total or Median</i>					17,630			1.02
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		7-Jul 2011	Royalty (%)	Ebitda	NTM	NTM	NTM
Small Cap Independent Producers								
Range Resources	RRC	B	57.08		-	16.1	15.1	14.5
Birchcliff Energy Ltd.	BIREF	B	14.18		-	19.7	14.0	12.6
Peyto Exploration and Development Corp	PEYUF		23.03		0.36	14.9	11.8	11.4
Berry Petroleum Company	BRY		55.62		-	12.0	9.8	9.3
Denbury Resources Inc.	DNR		20.41		-	13.6	9.4	8.0
Petrohawk Energy Corporation	HK	B	25.12		-	5.6	8.3	6.7
Cimarex Energy Company	XEC	CB	88.57		-	7.0	8.0	6.1
Whiting Petroleum Corporation	WLL	B	59.54		-	9.0	8.6	6.1
	<i>Median</i>					12.8	9.6	8.7
Top Line Cash Payers								
Cross Timbers Royalty Trust	CRT		45.54	80	0.97	15.1	15.7	15.9
Sabine Royalty Trust	SBR		66.49	100	1.00	6.8	14.2	13.4
Dorchester Minerals, L.P.	DMLP	B	27.71	77	0.87	7.0	14.2	13.1
Permian Basin RT	PBT		22.42	32	0.98	15.7	12.5	12.7
Freehold Royalties Ltd.	FRHLF		20.79	71	0.83	6.3	10.4	9.8
	<i>Median</i>					7.0	14.2	13.1
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		39.50		0.93	17.5	12.0	13.3
San Juan Basin Royalty Trust	SJT		25.19		0.84	9.2	13.0	13.1
Hugoton Royalty Trust	HGT	B	22.88		0.87	14.0	12.4	12.8
Vanguard Natural Resources, LLC	VNR		29.27		1.03	13.2	12.2	12.8
Mesa Royalty Trust	MTR		45.38		0.83	14.5	14.4	12.4
Legacy Reserves L.P.	LGCY		29.96		0.77	12.0	10.2	10.7
Encore Energy Partners, L.P.	ENP		21.92		0.91	13.1	10.7	10.3
Enerplus Corporation	ERF	B	31.83		0.59	8.3	9.6	8.5
	<i>Median</i>					13.2	12.1	12.6
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 June 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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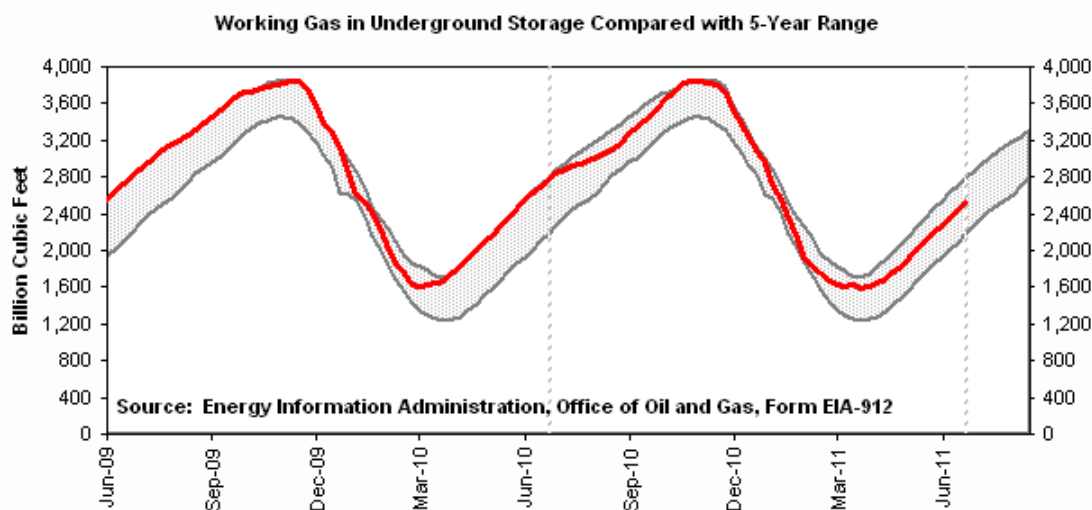
Table ISC-4								
Oil and Gas Income and Small Cap Stocks								
Rank by Enterprise Value to 200 Day Average								
			Price (\$/sh)		Enterprise Value/			
	Symbol/ Rating		7-Jul 2011	52Wk High	52Wk Low	50 Day Avg.	200 Day Avg.	McDep Ratio
Small Cap Independent Producers								
	BIRCL	B	14.18	0.98	1.60	1.05	1.22	0.90
	PEYUF		23.03	0.99	1.59	1.07	1.17	0.97
	BRY		55.62	0.99	1.60	1.08	1.16	0.95
	RRC	B	57.08	0.96	1.57	1.05	1.16	0.96
	HK	B	25.12	0.94	1.39	1.00	1.12	0.81
	DNR		20.41	0.82	1.31	1.00	1.01	0.85
	WLL	B	59.54	0.82	1.44	0.97	1.00	0.71
	XEC	CB	88.57	0.77	1.36	0.96	0.96	0.76
	<i>Median</i>			<i>0.95</i>	<i>1.51</i>	<i>1.03</i>	<i>1.14</i>	<i>0.88</i>
Top Line Cash Payers								
	SBR		66.49	0.94	1.38	1.02	1.09	0.95
	CRT		45.54	0.94	1.36	1.07	1.08	1.01
	PBT		22.42	0.94	1.25	1.07	1.05	1.02
	DMLP	B	27.71	0.92	1.17	1.02	1.01	0.92
	FRHLF		20.79	0.86	1.36	0.96	1.00	0.95
	<i>Median</i>			<i>0.94</i>	<i>1.36</i>	<i>1.02</i>	<i>1.05</i>	<i>0.95</i>
Bottom Line Cash Payers								
	HGT	B	22.88	0.93	1.27	1.02	1.06	1.04
	LINE		39.50	0.98	1.30	1.02	1.04	1.11
	ERF	B	31.83	0.96	1.34	1.02	1.04	0.89
	LGCY		29.96	0.92	1.21	1.00	1.03	1.05
	SJT		25.19	0.90	1.21	1.06	1.02	1.01
	ENP		21.92	0.89	1.19	1.00	1.01	0.96
	VNR		29.27	0.92	1.22	1.00	1.01	1.05
	MTR		45.38	0.89	1.15	1.02	0.96	0.86
	<i>Median</i>			<i>0.92</i>	<i>1.22</i>	<i>1.02</i>	<i>1.03</i>	<i>1.02</i>
CB=Contrarian Buy, Stock Price apparently in downtrend compared to 200-day average.								



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Research Methodology/Ratings Description: McDep LLC is an independent research originator focused on oil and gas stocks exclusively. The firm applies the thirty years of experience of its analyst to estimate a present value of the oil and gas resources and other businesses of covered companies. That value is compared with a company's stock market capitalization and debt. Stocks with low market cap and debt relative to present value tend to outperform stocks with high market cap and debt relative to present value. Buy recommendations are expected to deliver a total return better than 7% per year above inflation. Hold recommendations assume the attributes of the underlying business are reflected in the current price of the stock. Sell recommendations are expected to deliver a total return less than inflation.