

DEP Income and Small Cap Weekly

Analysis of Oil & Gas Stocks March 16, 2012

Bullish for U.S. Economic Growth

Summary and Recommendation

The new growth outlook for U.S. oil and gas production may be the best energy news for the U.S. economy in 50 years. There is now some credibility in visions of technology solving energy supply and dreams of energy independence. Even much-maligned government energy policy has helped, though by entirely unintended consequences. Good energy news for the U.S. economy also supports a better outlook for the U.S. stock market generally, as well as for oil and gas producers. Stocks of oil producers are performing better now while stocks of natural gas producers have longer term appeal.

Tight Oil Approaching a Million Barrels Daily

Technology that was supposed to create cheap alternative energy has instead created cheap oil and even cheaper natural gas. Following success in expanding natural gas production from shale, horizontal drilling with multi-stage hydraulic fracturing is expanding oil production from shale and similarly low-permeability rock. In a few short years, tight oil has boosted U.S. oil production by nearly a million barrels daily (see chart <u>Tight Oil Production for Selected Plays</u> below). It may be another decade before the U.S and Canada can offset all North American imports, but that has become a believable target rather than the empty promise of multiple U.S. presidents.

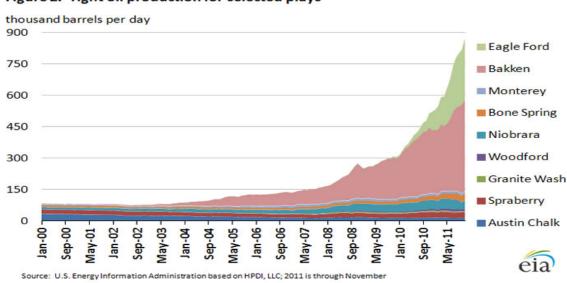


Figure 2. Tight oil production for selected plays

(Continued on next page)



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Gas Rigs Turn to Oil Targets

Natural gas drilling has had so much success that new supply has gotten ahead of demand and driven down price. Responding to those market signals, drillers have redirected their targets toward oil (see chart Share of Rigs by Orientation below). Yet, oil wells also produce natural gas as a byproduct, thereby adding further to the short-term surplus.

Figure 3. Share of weekly active rig counts by orientation

Cheap Natural Gas Sparks Growth

The last time Americans saw such a low price of natural gas relative to oil was in the 1950s and 1960s. Consequently demand grew by some 7% a year for the two decades until shortages developed at the low government-controlled price (see chart Natural Gas Consumption on page 3). Markets today have similar capacity for growth after a period of adjustment. Until shortages occurred in the 1970s, incremental costs of producing more conventional natural gas were low. Now, except for incremental supply as a byproduct of oil drilling, incremental supply of natural gas may require an early price increase to support more drilling.

Government Policy Drives Up Oil Price That Spurs Drilling

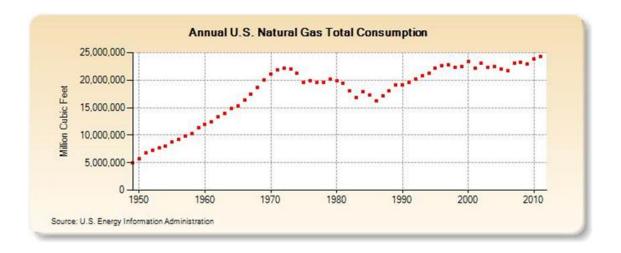
Not surprisingly, the current president claims credit for increasing domestic oil and natural gas supply. Most of the justification often cited is patently false, in our opinion. Yet, on the most important factor, oil price, government policy has succeeded, after a fashion. As an example, the



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president's refusal to approve the Keystone Pipeline has caused oil supply to be jammed at the wellhead in North Dakota and Canada. Due to that restriction and other factors, global oil price is some \$20 a barrel (more than \$0.40 a gallon) above Oklahoma oil price and some \$30 a barrel (\$0.70 a gallon) above North Dakota and Canada. Yet the global oil price has been driven up enough that the discounted \$90 a barrel price is attractive to drillers. Shale oil drilling is expensive and requires oil price upwards of \$70 a barrel now, perhaps climbing over time. Meanwhile, gasoline and heating oil are priced in relation to global oil to the benefit of inland refiners who can access the cheaper supply-restricted crude oil. The consumer pays more as a result of government policy which is probably not intended from a reelection point of view, but may be preferred to help justify uneconomic alternative energy pet projects.



Oil Stocks Lead, Natural Gas Stocks Lag

McDep Ratios appear mostly independent of whether a stock is concentrated more on natural gas or oil (see <u>Table ISC-1</u> and <u>Table ISC-2</u>). Natural gas stocks have higher unlevered cash flow multiples (EV/Ebitda) as investors look past low current cash flow from production at low price (see <u>Table ISC-3</u>). Measured by Enterprise Value compared to 200-day average, oil stocks have the most positive trends in stock price (see <u>Table ISC-4</u>).

Kurt H. Wulff, CFA



				Table IS							
McI	Dep Ir	ıco	me and	Small	Cap Ene	rgy I	Portf	olio			
Debt, S	egmei	nts	, Cash l	Flow, I	ncome a	nd M	cDe	p Ratio	O		
			- n -								
Ç	.l1/D4		Price	EV/	F	PV	07)	EV/	D:-4	D:-4	
Sym			(US\$/sh)		Enterprise		<u>70)</u>		Dist.	Dist.	M D
CD	B = 1			Market	Value	Nat	Oil	Ebitda	NTM	Yield	McDep
СВ	(see bel	ow)	2012	Сар	(\$mm)	Gas	Oii	NTM	(\$/un)	(%)	Ratio
Small Cap Independent Producer	rs										
PDC Energy	PETD		39.25	1.40	1,300	55	45	7.4	-	-	0.98
Range Resources	RRC	CB	60.59	1.26	12,190	64	36	14.3	0.16	0.3	0.89
Berry Petroleum Company	BRY		50.81	1.54	4,290	12	88	5.8	0.32	0.6	0.80
Peyto Exploration and Developmen	PEYUF	7	17.41	1.21	2,810	76	24	8.8	0.72	4.2	0.76
Cimarex Energy Company	XEC	В	80.21	1.13	7,820	43	57	5.9	0.36	0.4	0.75
Denbury Resources Inc.	DNR		19.17	1.37	10,300	4	96	5.8	-	-	0.75
Whiting Petroleum Corporation	WLL	В	57.53	1.27	8,710	9	91	4.8	-	-	0.71
Birchcliff Energy Ltd.	BIREF	CB	9.46	1.39	1,740	58	42	10.6	-	-	0.67
Total or Median					49,200			6.7			0.76
T. I. G.I.B.											
Top Line Cash Payers	DDT		22.70	1.00	1.060	27			1.50		1.10
Permian Basin RT	PBT		22.70	1.00	1,060	37	63		1.50	6.6	1.13
Cross Timbers Royalty Trust	CRT		45.39	1.00	270	70	30		2.55	5.6	1.03
Freehold Royalties Ltd.	FRHLF	-	20.71	1.06	1,280	14	86		1.69	8.2	0.99
Sabine Royalty Trust	SBR	-	61.85	1.00	900	55	45		4.06	6.6	0.95
Dorchester Minerals, L.P.	DMLP	CB	24.07	1.00	740	57	43		2.12	8.8	0.89
Total or Median					4,300					6.6	0.99
Bottom Line Cash Payers											
Linn Energy, LLC	LINE		38.21	1.76	11,760	40	60	10.1	2.76	7.2	1.14
Vanguard Natural Resources, LLC	VNR		28.28	1.38	2,630	21	79	12.2	2.31	8.2	1.09
Enduro Royalty Trust (40%)	NDRO		21.65	1.00	290	45	55	7.4	1.78	8.2	1.03
Legacy Reserves L.P.	LGCY		28.96	1.35	1,860	18	82	8.3	2.20	7.6	0.97
San Juan Basin Royalty Trust	SJT	СВ		1.00	890	100	-	14.8	0.94	5.0	0.91
Mesa RoyaltyTrust	MTR		42.28	1.00	79	75	25	12.9	2.86	6.8	0.88
Hugoton RoyaltyTrust	HGT		14.96	1.00	600	87	13	16.6	0.76	5.1	0.88
Enerplus Corporation	ERF	CB		1.31	6,100	23	77	6.6	2.18	9.3	0.75
Total or Median					24,200			11.1		7.4	0.94
C											
Composite Enterprise Value Weighting					77,600	35	65				0.84
Enterprise Value Weighting					//,000						
Equal Weighting						46	54				0.90
Equal Weighted Buys		-				41	59				0.79
CB=Contrarian Buy, Stock Price ar	parently	in c	lowntrend	compared	l to 200-day a	verage.					
McDep Ratio = Market cap and De											
Present Value (PV) presumes long-								r notural d	200		



		Tab	le ISC-2								
McDep Inc	ome an	d S	mall Ca	p Ener	gy Port	folio					
Net Present Value and McDep Ratio											
			Price			Net					
			(\$/sh)		Market	Present	Debt/				
	Symbol/		15-Mar	Shares	Cap	Value	Present	McDep			
	Ra	ting	2012	(mm)	(\$mm)	(\$/un)	Value	Ratio			
Small Cap Independent Producers											
PDC Energy	PETD		39.25	23.8	930	40.00	0.28	0.98			
Range Resources	RRC	СВ	60.59	160.0	9,690	70.00	0.18	0.89			
Berry Petroleum Company	BRY		50.81	55.0	2,790	70.00	0.28	0.80			
Peyto Exploration and Development Cor			17.41	133.9	2,330	24.00	0.13	0.76			
Cimarex Energy Company	XEC	В	80.21	86.2	6,910	110.00	0.09	0.75			
Denbury Resources Inc.	DNR		19.17	393.0	7,530	28.00	0.20	0.75			
Whiting Petroleum Corporation	WLL	В	57.53	119.0	6,850	88.00	0.15	0.71			
Birchcliff Energy Ltd.	BIREF	CB	9.46	132.0	1,250	16.00	0.19	0.67			
Total or Median					38,280		0.18	0.76			
Top Line Cash Payers											
Permian Basin RT	PBT		22.70	46.6	1,060	20.00	_	1.13			
Cross Timbers Royalty Trust	CRT		45.39	6.0	270	44.00	_	1.03			
Freehold Royalties Ltd.	FRHLF		20.71	58.4	1,210	21.00	0.05	0.99			
Sabine Royalty Trust	SBR		61.85	14.6	900	65.00	- 0.03	0.95			
Dorchester Minerals, L.P.	DMLP	СВ	24.07	30.7	740	27.00	_	0.93			
Total or Median	DIVILI	СБ	24.07	30.7	4,180	27.00		0.89			
Total of Median					4,100			0.99			
Bottom Line Cash Payers											
Linn Energy, LLC	LINE		38.21	175.0	6,690	30.00	0.49	1.14			
Vanguard Natural Resources, LLC	VNR		28.28	67.2	1,900	25.00	0.30	1.09			
Enduro Royalty Trust (40%)	NDRO		21.65	13.2	290	21.00	-	1.03			
Legacy Reserves L.P.	LGCY		28.96	47.5	1,380	30.00	0.25	0.97			
San Juan Basin Royalty Trust	SJT	CB	19.02	46.6	890	21.00	-	0.91			
Mesa RoyaltyTrust	MTR		42.28	1.9	79	48.00	-	0.88			
Hugoton RoyaltyTrust	HGT		14.96	40.0	600	17.00	-	0.88			
Enerplus Corporation	ERF	CB	23.50	196.0	4,610	34.00	0.18	0.75			
Total or Median					16,440			0.94			
B=Buy; CB=Contrarian Buy, Stock Price	annorant1	v in c	loumtrand	compared	to 200 day	/ average					
McDep Ratio = Market cap and De bt to											
Present Value presumes long-term price							gas				



		Tal	ole ISC-3	3				
McDep Inco	me an	d S	mall C	ap Enei	rgy Por	rtfolio		
Value	Multip	les	- Rank	by EV/	Ebitda			
			Price			Adjstd		
			(\$/sh)	Revenue	Dist/	Resrvs/	PV/	EV/
	Symbol/		15-Mar	Royalty	Equity	Prod	Ebitda	Ebitda
	Rai	ting	2012	(%)	Ebitda	NTM	NTM	NTM
Small Cap Independent Producers								
Range Resources	RRC	СВ	60.59		-	15.8	16.0	14.3
Birchcliff Energy Ltd.	BIREF	CB	9.46		-	23.7	15.8	10.6
Peyto Exploration and Development Corp			17.41		0.35	14.9	11.5	8.8
PDC Energy	PETD		39.25		-	8.2	7.6	7.4
Cimarex Energy Company	XEC	В	80.21		-	8.2	7.9	5.9
Berry Petroleum Company	BRY		50.81		-	11.8	7.3	5.8
Denbury Resources Inc.	DNR		19.17		-	14.1	7.8	5.8
Whiting Petroleum Corporation	WLL	В	57.53		-	9.8	6.7	4.8
Median						13.0	7.8	6.7
Top Line Cash Payers								
Cross Timbers Royalty Trust	CRT		45.39	80	0.96	14.6	16.6	17.1
Sabine Royalty Trust	SBR		61.85	100	1.00	7.2	16.0	15.3
Permian Basin RT	PBT		22.70	32	0.91	9.7	12.1	13.8
Dorchester Minerals, L.P.	DMLP	СВ	24.07	77	1.00	6.1	12.7	11.3
Freehold Royalties Ltd.	FRHLF	CD	20.71	71	0.80	6.7	10.0	9.8
Median	11111111		20.71	, 1	0.00	7.2	12.7	13.8
Bottom Line Cash Payers								
Hugoton RoyaltyTrust	HGT		14.96		0.84	14.4	18.9	16.6
San Juan Basin Royalty Trust	SJT	СВ	19.02		0.73	8.7	16.3	14.8
Mesa RoyaltyTrust	MTR	CD	42.28		0.87	14.1	14.6	12.9
Vanguard Natural Resources, LLC	VNR		28.28		1.03	8.7	11.1	12.2
Linn Energy, LLC	LINE		38.21		0.82	14.7	8.9	10.1
Legacy Reserves L.P.	LGCY		28.96		0.63	11.7	8.6	8.3
Enduro Royalty Trust (40%)	NDRO		21.65		0.61	5.7	7.2	7.4
Enerplus Corporation	ERF	СВ	23.50		0.57	8.2	8.9	6.6
Median			20.00		0.07	10.2	10.0	11.1
B=Buy; CB=Contrarian Buy, Stock Price	apparentl	v in a	lowntrend	l compared	to 200-da	ıv average.		
EV = Enterprise Value = Market Cap and							n	
and amortization; NTM = Next Twelve M								
Earnings; PV = Present Value of oil and g					DIOURII	-200		
Top Line Cash Payers defined as those ha				ee fifth co	lumn from	right)		



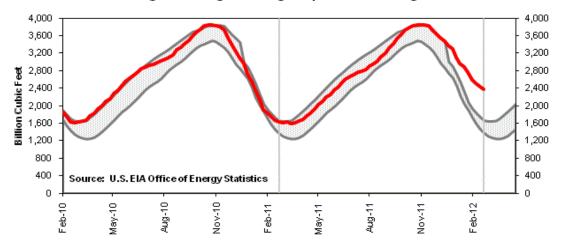
		Ta	ble ISC-4	1				
Oil and	Gas Inc	com	e and S	Small C	Cap Stoc	ks		
Rank by E					-			
			Price					
			(\$/sh)		Enterpris	e Value/		
	Symbol/		15-Mar	52Wk	52Wk		200 Day	McDep
		ting	2012	High	Low	Avg.	Avg.	Ratio
Small Cap Independent Producers								
PDC Energy	PETD		39.25	0.84	1.78	1.11	1.19	0.98
Cimarex Energy Company	XEC	В	80.21	0.71	1.48	1.13	1.12	0.75
Whiting Petroleum Corporation	WLL	В	57.53	0.80	1.64	1.06	1.11	0.71
Denbury Resources Inc.	DNR		19.17	0.79	1.52	1.01	1.09	0.75
Berry Petroleum Company	BRY		50.81	0.88	1.35	1.02	1.06	0.80
Range Resources	RRC	CB	60.59	0.82	1.20	1.00	0.98	0.89
Peyto Exploration and Development C	PEYUF		17.41	0.71	1.03	0.91	0.84	0.76
Birchcliff Energy Ltd.	BIREF	CB	9.46	0.69	1.00	0.82	0.78	0.67
Median				0.80	1.41	1.02	1.07	0.76
Top Line Cash Payers								
Permian Basin RT	PBT		22.70	0.97	1.26	1.08	1.08	1.13
Freehold Royalties Ltd.	FRHLF		20.71	0.86	1.48	1.02	1.07	0.99
Cross Timbers Royalty Trust	CRT		45.39	0.89	1.20	0.97	0.99	1.03
Dorchester Minerals, L.P.	DMLP	CB	24.07	0.80	1.16	1.04	0.99	0.89
Sabine Royalty Trust	SBR		61.85	0.88	1.30	0.98	0.97	0.95
Median				0.88	1.26	1.02	0.99	0.99
Bottom Line Cash Payers								
Legacy Reserves L.P.	LGCY		28.96	0.89	1.22	1.00	1.02	0.97
Vanguard Natural Resources, LLC	VNR		28.28	0.88	1.20	1.01	1.02	1.09
Linn Energy, LLC	LINE		38.21	0.96	1.12	1.01	1.01	1.14
Mesa RoyaltyTrust	MTR		42.28	0.85	1.16	1.02	0.98	0.88
Enerplus Corporation	ERF	CB	23.50	0.77	1.06	0.98	0.90	0.75
San Juan Basin Royalty Trust	SJT	CB	19.02	0.68	1.09	0.98	0.84	0.91
Hugoton RoyaltyTrust	HGT		14.96	0.61	1.08	0.97	0.74	0.88
Median				0.85	1.12	1.00	0.98	0.91
CB=Contrarian Buy, Stock Price appar	1		1	1420	0 1			



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Working Gas in Underground Storage Compared with 5-Year Range



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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 forty 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.