

#### MCDEP Income and Small Cap Weekly

Analysis of Oil & Gas Stocks December 22, 2011

#### **New NPV for \$6 Long-Term Natural Gas Price**

#### **Summary and Recommendation**

We reduce our long-term price expectation for natural gas to \$6 a million Btu from \$8 for the positive reason that new technology is unlocking natural gas from shale to greatly expand clean fuel supply. Estimated Net Present Value (NPV) for Buy recommendations with the most natural gas volume potential, **Range Resources (RRC)** and **Birchcliff Energy (BIREF)**, remain unchanged. Among the five remaining Buys, the amount of reduction in NPV is in proportion to concentration on natural gas. In order of declining impact, we reduce NPV for **San Juan Basin Royalty Trust (SJT)** to \$21 a unit from \$25, **Dorchester Minerals (DMLP)** to \$27 from \$30, **Cimarex (XEC)** to \$110 a share from \$120, **Enerplus (ERF)** to \$35 from \$37 and **Whiting Petroleum (WLL)** to \$88 from \$90. Only SJT has noticeably less appreciation potential indicated by a McDep Ratio that rises to 1.11. Yet, new technology also likely makes San Juan Basin production last longer. DMLP, XEC, ERF, and WLL continue to have low McDep Ratios ranging from 0.59 to 0.84 (see Table ISC-1 on page 2 and Table ISC-2 on page 3).

Changes in NPV affect the present value unlevered cash flow multiples (PV/Ebitda), but not the market unlevered cash flow multiples (EV/Ebitda) (see <u>Table ISC-3</u> on page 4). Conservatively, we like buying at low EV/Ebitda. Yet, higher EV/Ebitda is also appealing depending on the degree to which it is less than PV/Ebitda. The two ratios are components of the McDep Ratio. EV/Ebitda divided by PV/Ebitda equals the McDep Ratio. The combination of low EV/Ebitda and low McDep Ratio, as in WLL and XEC, suggests lower risk and higher reward, stock price volatility notwithstanding.

Kurt H. Wulff, CFA



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

				Table IS							
Mcl	Dep In	co	me and	Small	Cap Ene	rgy I	Portf	olio			
Debt, S	egmei	ıts	, Cash l	Flow, I	ncome ai	nd M	cDe	p Ratio	0		
			Price								
Syn	bol/Rati	ing	(US\$/sh)	EV/	Enterprise	PV(	%)	EV/	Dist.	Dist.	
35	B = 1		21-Dec	Market	Value	Nat	<del>, 0,</del>	Ebitda	NTM	Yield	McDep
СВ	(see belo		2011	Сар	(\$mm)	Gas	Oil	NTM	(\$/un)	(%)	Ratio
Small Cap Independent Produce	nc.										
Peyto Exploration and Developmen		7	24.20	1.17	3,750	75	25	11.9	0.70	2.9	1.01
PDC Energy	PETD		35.87	1.64	1,390	57	43	8.7	0.70	2.9	1.01
Range Resources	RRC	В		1.04	-	66	34	15.7	0.16	0.3	0.91
Birchcliff Energy Ltd.	BIREF		62.45	1.22	12,130 2,140	56	44	12.9	0.16	0.3	0.91
Berry Petroleum Company	BRY	D	39.10	1.23	-	17	83	5.8	0.32	0.8	0.86
Denbury Resources Inc.	DNR		15.42	1.67	3,580 8,700	4	96	5.8	0.32	0.8	0.68
		CD			-	41	59	5.0			
Cimarex Energy Company	XEC	CB		1.14	6,170	9			0.40	0.6	0.60
Whiting Petroleum Corporation	WLL	CB	46.73	1.29	7,170	9	91	4.4	-	-	0.59
Total or Median					45,000			7.3			0.77
Top Line Cash Payers											
Cross Timbers Royalty Trust	CRT		49.27	1.00	300	87	13		2.58	5.2	1.12
Permian Basin RT	PBT		20.42	1.00	950	37	63		1.36	6.6	1.02
Sabine Royalty Trust	SBR		64.62	1.00	940	55	45		4.02	6.2	0.99
Freehold Royalties Ltd.	FRHLF	1	18.85	1.06	1,180	14	86		1.64	8.7	0.90
Dorchester Minerals, L.P.	DMLP	CB	22.60	1.00	690	57	43		1.77	7.8	0.84
Total or Median					4,100					6.6	0.99
Bottom Line Cash Payers											
Linn Energy, LLC	LINE		38.20	1.44	9,690	29	71	14.3	2.76	7.2	1.18
Hugoton RoyaltyTrust	HGT		19.46	1.00	780	87	13	16.9	1.01	5.2	1.14
San Juan Basin Royalty Trust	SJT	СВ		1.00	1,080	100	-	15.4	1.14	4.9	1.11
Vanguard Natural Resources, LLC	VNR	-	26.97	1.55	2,040	26	74	10.4	2.31	8.6	1.05
Enduro Royalty Trust (40%)	NDRO		20.00	1.00	260	45	55	8.9	1.55	7.8	0.95
Legacy Reserves L.P.	LGCY		27.27	1.43	1,700	19	81	8.5	2.18	8.0	0.93
Mesa RoyaltyTrust	MTR		40.87	1.00	76	75	25	11.2	3.22	7.9	0.85
Enerplus Corporation	ERF	СВ		1.29	5,700	26	74	7.7	2.10	8.6	0.75
Total or Median	2.0		20	1.27	21,300		, .	10.8	2.10	7.8	1.00
Composite											
Enterprise Value Weighting					70,400	37	63				0.80
Equal Weighting  Equal Weighting					70,400	47	53				0.80
Equal Weighted Buys						43	57				0.91
Equal weighted buys						73	31				0.01
CB=Contrarian Buy, Stock Price ap											
McDep Ratio = Market cap and De											
Present Value (PV) presumes long-	term pri	ces	of \$100 a l	barrel for	oil and \$6 a r	nillion	btu for	r natural g	gas.		



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

		Tab	le ISC-2									
McDep Inco	ome an	d Sı	mall Ca	p Ener	gy Port	folio						
Net Present Value and McDep Ratio												
			Price			Net						
			(\$/sh)		Market	Present	Debt/					
	Symbol/		21-Dec	Shares	Cap	Value	Present	McDep				
	Ra	ting	2011	(mm)	(\$mm)	(\$/un)	Value	Ratio				
Small Cap Independent Producers												
Peyto Exploration and Development Cor	PEYUF		24.20	133.1	3,220	24.00	0.14	1.01				
PDC Energy	PETD		35.87	23.8	850	36.00	0.39	1.00				
Range Resources	RRC	В	62.45	159.0	9,930	70.00	0.17	0.91				
Birchcliff Energy Ltd.	BIREF	В	13.31	131.0	1,740	16.00	0.16	0.86				
Berry Petroleum Company	BRY		39.10	54.7	2,140	70.00	0.27	0.68				
Denbury Resources Inc.	DNR		15.42	403.0	6,210	28.00	0.18	0.63				
Cimarex Energy Company	XEC	CB	62.79	86.2	5,410	110.00	0.07	0.60				
Whiting Petroleum Corporation	WLL	CB	46.73	119.0	5,560	88.00	0.13	0.59				
Total or Median					35,060		0.16	0.77				
T I G I D												
Top Line Cash Payers	an m		40.05		200	4400						
Cross Timbers Royalty Trust	CRT		49.27	6.0	300	44.00	-	1.12				
Permian Basin RT	PBT		20.42	46.6	950	20.00	-	1.02				
Sabine Royalty Trust	SBR		64.62	14.6	940	65.00	- 0.05	0.99				
Freehold Royalties Ltd.	FRHLF	CD	18.85	58.8	1,110	21.00	0.05	0.90				
Dorchester Minerals, L.P.	DMLP	CB	22.60	30.7	690	27.00	-	0.84				
Total or Median					3,990			0.99				
<b>Bottom Line Cash Payers</b>												
Linn Energy, LLC	LINE		38.20	176.0	6,720	30.00	0.36	1.18				
Hugoton RoyaltyTrust	HGT		19.46	40.0	780	17.00	_	1.14				
San Juan Basin Royalty Trust	SJT	CB	23.24	46.6	1,080	21.00	-	1.11				
Vanguard Natural Resources, LLC	VNR		26.97	48.8	1,320	25.00	0.37	1.05				
Enduro Royalty Trust (40%)	NDRO		20.00	13.2	260	21.00	_	0.95				
Legacy Reserves L.P.	LGCY		27.27	43.6	1,190	30.00	0.28	0.93				
Mesa RoyaltyTrust	MTR		40.87	1.9	76	48.00	-	0.85				
Enerplus Corporation	ERF	CB	24.58	180.6	4,440	35.00	0.17	0.75				
Total or Median					15,870			1.00				
					. 200 1							
B=Buy; CB=Contrarian Buy, Stock Price												
McDep Ratio = Market cap and Debt to present Value presumes long-term price												



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

		Tab	ole ISC-3	3				
McDep Inco	ome an	d S	mall C	ap Enei	rgy Poi	rtfolio		
Value	Multip	les	- Rank	by EV/	Ebitda			
			Price	D	D: ./	Adjstd	DIZ	F75.7
	G 1 1/			Revenue	Dist/	Resrvs/	PV/	EV/
	Symbol/	ting	21-Dec 2011	Royalty (%)	Equity Ebitda	Prod NTM	Ebitda NTM	Ebitda NTM
	Kai	ung	2011	(70)	Ebiiaa	IV I IVI	IV I IVI	IVIIVI
Small Cap Independent Producers								
Range Resources	RRC	В	62.45		-	14.0	17.2	15.7
Birchcliff Energy Ltd.	BIREF	В	13.31		-	19.3	15.1	12.9
Peyto Exploration and Development Corp			24.20		0.34	12.9	11.8	11.9
PDC Energy	PETD		35.87		-	8.1	8.8	8.7
Berry Petroleum Company	BRY		39.10		-	11.4	8.6	5.8
Denbury Resources Inc.	DNR		15.42		-	12.6	9.1	5.8
Cimarex Energy Company	XEC	СВ	62.79		-	6.9	8.3	5.0
Whiting Petroleum Corporation	WLL	СВ	46.73		_	8.5	7.4	4.4
Median						12.0	9.0	7.3
T								
Top Line Cash Payers	CDT		40.07	00	0.06	141	16.4	10.4
Cross Timbers Royalty Trust	CRT		49.27	80	0.96	14.1	16.4	18.4
Sabine Royalty Trust	SBR		64.62	100	1.00	7.3	16.2	16.1
Permian Basin RT	PBT	-	20.42	32	0.98	17.2	14.5	14.8
Dorchester Minerals, L.P.	DMLP	CB	22.60	77	0.83	6.1	12.6	10.6
Freehold Royalties Ltd.	FRHLF		18.85	71	0.87	6.7	11.1	10.1
Median						7.3	14.5	14.8
Bottom Line Cash Payers								
Hugoton RoyaltyTrust	HGT		19.46		0.88	14.0	14.7	16.9
San Juan Basin Royalty Trust	SJT	CB	23.24		0.76	8.6	14.0	15.4
Linn Energy, LLC	LINE		38.20		1.12	16.2	12.2	14.3
Mesa RoyaltyTrust	MTR		40.87		0.88	13.9	13.2	11.2
Vanguard Natural Resources, LLC	VNR		26.97		0.91	8.7	9.9	10.4
Enduro Royalty Trust (40%)	NDRO		20.00		0.69	7.4	9.4	8.9
Legacy Reserves L.P.	LGCY		27.27		0.66	9.9	9.1	8.5
Enerplus Corporation	ERF	СВ	24.58		0.62	8.4	10.2	7.7
Median						9.3	11.2	10.8
			1 .		. 200			
B=Buy; CB=Contrarian Buy, Stock Price								
EV = Enterprise Value = Market Cap and							n	
and amortization; NTM = Next Twelve M				31, 2012; F	P/E = Stoc	k Price to		
Earnings; PV = Present Value of oil and g								
Top Line Cash Payers defined as those ha	iving Reve	enue I	Royalty (s	see fifth co	lumn fron	n right).		



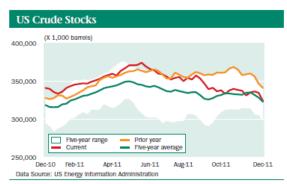
# MCDEP Income and Small Cap Weekly Analysis of Oil & Gas Stocks

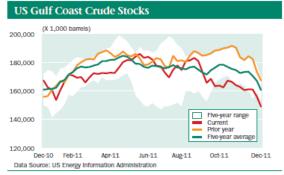
Table ISC-4										
Oil and (	Gas Inc	om	e and S	Small C	Cap Stoc	ks				
Rank by E					•					
			· carear c	0 200 1	l III	5				
			Price							
			(\$/sh)							
	Symbol/		21-Dec	52Wk	Enterpris 52Wk		200 Day	McDep		
		ting	2011	High	Low	Avg.	Avg.	Ratio		
Small Cap Independent Producers										
Peyto Exploration and Development C	PEYUF		24.20	0.95	1.31	1.06	1.10	1.01		
PDC Energy	PETD		35.87	0.81	1.54	1.11	1.06	1.00		
Range Resources	RRC	В	62.45	0.84	1.33	0.92	1.03	0.91		
Birchcliff Energy Ltd.	BIREF	В	13.31	0.88	1.32	0.97	1.01	0.86		
Berry Petroleum Company	BRY		39.10	0.75	1.15	0.98	0.90	0.68		
Whiting Petroleum Corporation	WLL	СВ	46.73	0.67	1.42	1.02	0.89	0.59		
Denbury Resources Inc.	DNR		15.42	0.67	1.32	0.98	0.89	0.63		
Cimarex Energy Company	XEC	CB	62.79	0.56	1.20	0.99	0.80	0.60		
Median				0.78	1.32	0.98	0.95	0.77		
Top Line Cash Payers										
Cross Timbers Royalty Trust	CRT		49.27	1.00	1.30	1.04	1.10	1.12		
Sabine Royalty Trust	SBR		64.62	0.92	1.36	0.99	1.01	0.99		
Permian Basin RT	PBT		20.42	0.87	1.13	1.02	0.97	1.02		
Freehold Royalties Ltd.	FRHLF		18.85	0.78	1.35	1.04	0.94	0.90		
Dorchester Minerals, L.P.	DMLP	CB	22.60	0.75	1.09	0.95	0.88	0.84		
Median				0.87	1.30	1.02	0.97	0.99		
Bottom Line Cash Payers										
Linn Energy, LLC	LINE		38.20	0.95	1.15	1.02	1.01	1.18		
Legacy Reserves L.P.	LGCY		27.27	0.86	1.16	0.99	0.96	0.93		
Vanguard Natural Resources, LLC	VNR		26.97	0.86	1.14	1.00	0.96	1.05		
San Juan Basin Royalty Trust	SJT	CB	23.24	0.83	1.14	0.97	0.96	1.11		
Mesa RoyaltyTrust	MTR		40.87	0.81	1.05	0.94	0.90	0.85		
Enerplus Corporation	ERF	CB	24.58	0.78	1.10	0.95	0.88	0.75		
Hugoton RoyaltyTrust	HGT		19.46	0.79	1.02	0.91	0.88	1.14		
Median				0.83	1.14	0.97	0.96	1.05		



#### DEP Income and Small Cap Weekly

Analysis of Oil & Gas Stocks December 22, 2011





Source: Platts Oilgram

**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.

McDep or its employees may take positions in stocks the firm covers for research purposes. No trades in a subject stock shall be made within a week before or after a change in recommendation.

**Certification:** I, Kurt H. Wulff, certify that the views expressed in this research analysis accurately reflect my personal views about the subject securities and issuers. No part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research analysis.

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.