



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

September 13, 2013

Cross Timbers Royalty Trust (CRT) Fracking Upside in Permian and SCOOP

<i>Symbol</i>	CRT	<i>Ebitda Next Twelve Months ending 9/30/14 (US\$m)</i>	18
<i>Rating</i>	RTF Stock	<i>North American Natural Gas/Ebitda (%)</i>	49
<i>Price (US\$/sh)</i>	28.28	<i>Natural Gas and Oil Production/Ebitda (%)</i>	100
<i>Pricing Date</i>	9/12/13	<i>Adjusted Reserves/Production NTM</i>	12.6
<i>Shares (mm)</i>	6.00	<i>EV/Ebitda</i>	9.5
<i>Market Capitalization (US\$m)</i>	170	<i>PV/Ebitda</i>	14.1
<i>Debt (US\$m)</i>	0	<i>Undeveloped Reserves (%)</i>	0
<i>Enterprise Value (EV) (US\$m)</i>	170	<i>Natural Gas and Oil Ebitda (US\$/mcf)</i>	7.13
<i>Present Value (PV) (US\$m)</i>	252	<i>Present Value Proven Reserves(US\$/boe)</i>	39.58
<i>Net Present Value (US\$/unit)</i>	42	<i>Oil and Gas Ebitda Margin (%)</i>	69
<i>Debt/Present Value</i>	0.00	<i>Earnings Next Twelve Months (US\$/un)</i>	2.73
<i>McDep Ratio - EV/PV</i>	0.67	<i>Price/Earnings Next Twelve Months</i>	10
<i>Distribution Yield (%/year)</i>	9.7	<i>Distribution Next Twelve Months (US\$/sh)</i>	2.73
Note: Estimated cash flow and earnings tied to one-year futures prices for natural gas.			
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\$90 a barrel and natural gas, \$6 a million btu.			
For historical analysis of CRT since 2000 see www.mcdep.com/4crt.htm			

Summary and Recommendation

New fracking successes by industry increase the probability of stock price gain to Net Present Value (NPV) of \$42 for RTF Cash Payer **Cross Timbers Royalty Trust (CRT)**, which derived 42% of last years' distribution from properties in Texas and 22% from leases in Oklahoma. Recent activity by **EOG Resources (EOG)**, **Cimarex Energy (XEC)** and **Devon Energy (DVN)** in growing Permian Basin oil volumes demonstrates latent potential in traditional fields and extension to new areas. CRT's Top Line (TL) oil rights in West Texas, 24% of 2012 distribution, are spread widely. Bottom Line (BL) oil rights in Texas, 7% of 2012 distribution, are concentrated in fields operated by **Occidental Petroleum (OXY)**, Apache and others. TL rights in Oklahoma are also diversified by geography. BL Oklahoma oil rights, 14% of 2012 distribution, are most represented in the South Central Oil Producing Province (SCOOP), the area of active exploration by **Continental Resources (CLR)** of Bakken fame. Trends in Texas and Oklahoma raised the oil contribution to 51% of distribution last year (see charts [CRT Distribution](#) on pages 2-3). Those trends cause us to raise the oil contribution to 30% of NPV, a strong complement to the 70% we see from TL natural gas (see tables [Present Value](#) and [Financial Estimates](#) on pages 3-4). TL natural gas from Texas accounts for most of the premium price the trust reports relative to the industry benchmark. As a result, oil from Texas and Oklahoma and natural gas from Texas enhance the outlook for CRT stock on top of the San Juan Basin attraction we have emphasized most in past analyses. Finally, to further overcome the stock market liquidity restraints in CRT, we like all of our nine RTF stocks, each of which share related attractions of CRT in different degrees and valuation (see [ISC-1](#) to [ISC-4](#) on pages 5-8).

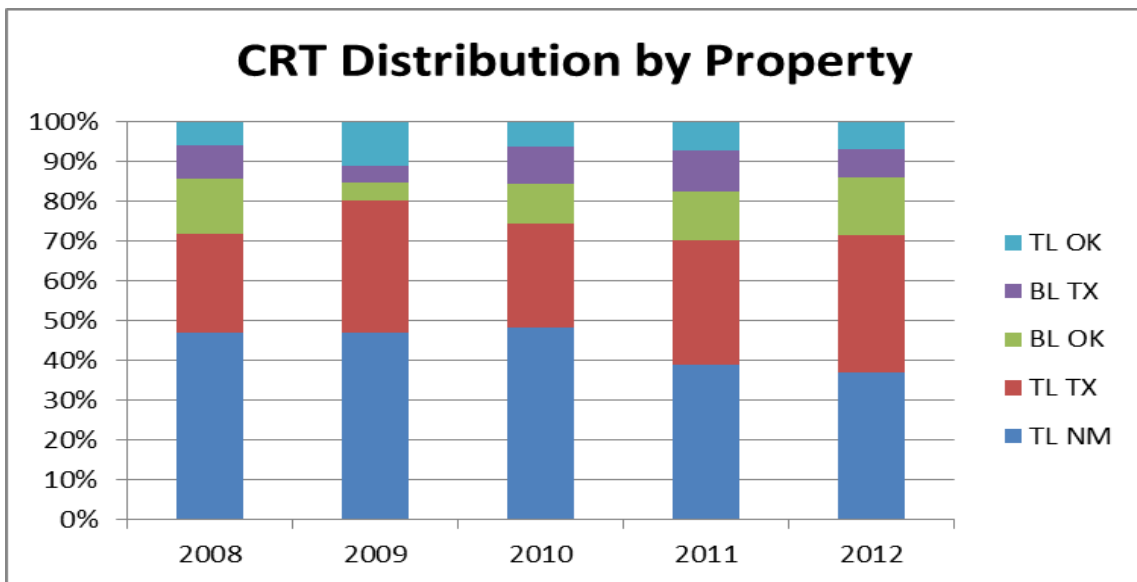
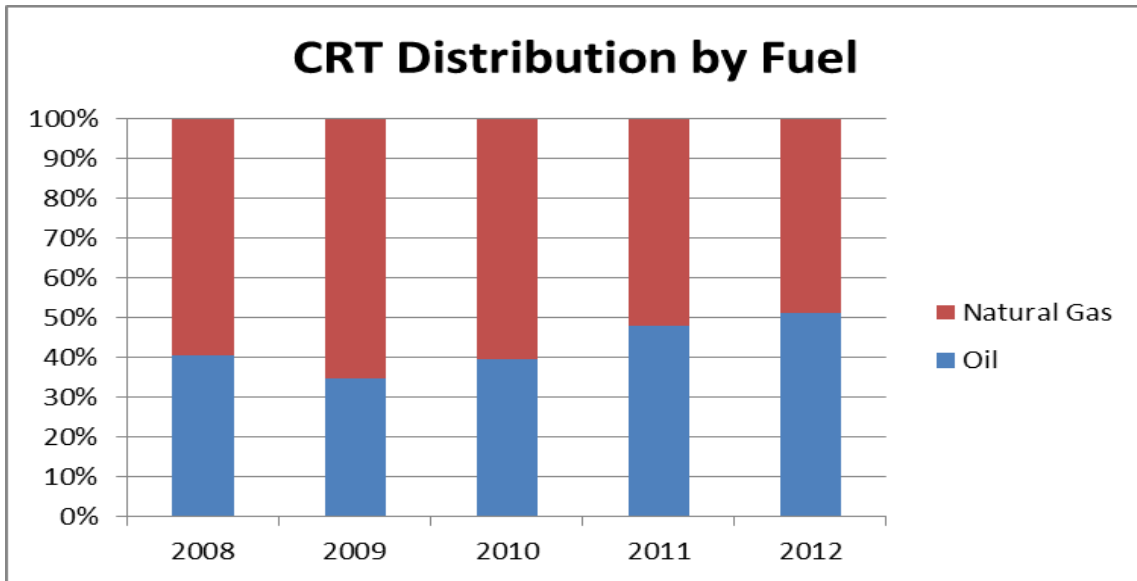
Kurt H. Wulff, CFA



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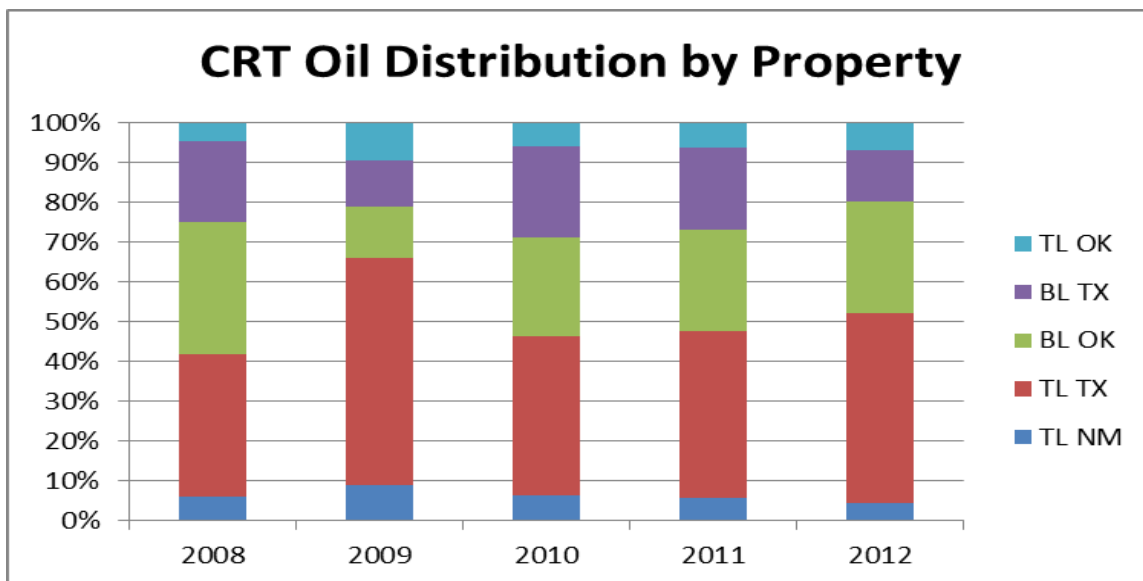




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Cross Timbers Royalty Trust					
Functional Cash Flow and Present Value					
	<i>NTM Ebitda</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Present</i>	
	<i>(US\$mm)</i>	<i>R/P</i>	<i>Ebitda</i>	<i>Value</i>	
				<i>(US\$mm)</i>	
Top Line Natural Gas	9	14.4	19.8	177	70%
Top Line Oil	5	10.3	9.3	50	20%
Bottom Line Oil	4	10.3	7.0	25	10%
	18	12.6	14.1	252	100%
Debt (US\$mm)					-
Net Present Value (US\$mm)					252
Shares (mm)					6
Net Present Value (US\$/sh)					42
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					44
Top Line Approximation at 1.3 times Cash Flow Multiple Depending on Reserve Life					



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Cross Timbers Royalty Trust										
Next Twelve Months Operating and Financial Performance										
	Year	Q1	Q2	Q3E	Q4E	Year	Q1E	Q2E	Q3E	Next Twelve Months
	2012	3/31/13	6/30/13	9/30/13	12/31/13	2013E	3/31/14	6/30/14	9/30/14	9/30/14
Volume										
Natural Gas (bcf)	1.87	0.41	0.36	0.43	0.44	1.64	0.44	0.43	0.43	1.74
Natural Gas (mmcf)	5.1	4.4	4.0	4.8	4.8	4.5	4.8	4.8	4.8	4.8
Days	366	92	90	91	92	365	92	91	91	366
Oil (mb)	198	46	52	54	53	205	54	53	54	214
Oil (mbd)	0.54	0.50	0.58	0.59	0.59	0.56	0.59	0.59	0.59	0.59
Days	366	92	90	92	91	365	92	90	92	365
Total (bcf)	3.06	0.68	0.67	0.76	0.76	2.87	0.76	0.75	0.76	3.03
Price										
Natural Gas (HH lagged three months)										
Henry Hub (\$/mmbtu)	2.82	3.40	3.34	4.10	3.58	3.60	3.71	3.91	3.84	3.76
Differential (%)	(106)	(70)	(83)	(67)	(67)	(72)	(67)	(67)	(67)	(67)
CRT (\$/mcf)	5.81	5.78	6.12	6.84	5.97	6.19	6.19	6.52	6.40	6.27
Oil (\$/bbl) (WTI lagged two months)										
WTI Cushing	95.89	89.97	93.45	98.43	108.51	97.59	106.78	102.21	98.68	104.05
CRT	89.34	79.03	84.64	90.05	99.27	88.61	97.68	93.51	90.28	95.18
Total (\$/mcf)	9.33	8.77	9.83	10.33	10.44	9.87	10.48	10.35	10.10	10.34
Revenue (\$mm)										
Natural Gas	10.88	2.34	2.20	2.96	2.61	10.12	2.71	2.82	2.77	10.92
Oil	17.69	3.64	4.40	4.86	5.30	18.20	5.27	4.94	4.88	20.39
Total	28.57	5.98	6.61	7.82	7.92	28.32	7.98	7.76	7.65	31.31
Cost (\$mm)										
Tax, transport & other	3.96	0.69	0.76	1.10	1.11	3.65	1.12	1.09	1.07	4.38
Production	5.44	1.55	1.34	1.34	1.34	5.57	1.34	1.34	1.34	5.36
Total	9.40	2.24	2.10	2.44	2.45	9.22	2.46	2.43	2.41	9.74
Cash flow (\$mm)										
Development	1.49	0.66	0.72	0.50	0.50	2.38	0.50	0.50	0.50	2.00
Excess or other	-	(0.09)	0.05			(0.04)				
Net proceeds (\$mm)	17.69	3.17	3.74	4.89	4.97	16.76	5.03	4.84	4.74	19.57
Royalty income (\$mm)										
Royalty/Net proceeds	86%	88%	86%	85%	86%	86%	86%	86%	86%	86%
Administration	0.39	0.13	0.13	0.11	0.11	0.48	0.11	0.11	0.11	0.44
Distributable income (\$mm)	14.89	2.66	3.10	4.04	4.16	13.96	4.21	4.05	3.96	16.39
Units (millions)										
Units (millions)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Royalty income (\$/unit)										
Natural Gas										
TL TX	0.26	0.06	0.06							
TL OK	0.09	0.03	0.03							
TL NM	0.88	0.17	0.16							
BL TX	0.00	-	-							
BL OK	0.00	0.00	0.00							
Oil										
TL TX	0.62	0.13	0.15							
TL OK	0.09	0.02	0.02							
TL NM	0.06	0.01	0.01							
BL TX	0.17	-	-							
BL OK	0.37	0.05	0.09							
Administration	0.07	0.02	0.02							
Distribution (\$/unit)	2.48	0.44	0.52	0.67	0.69	2.33	0.70	0.68	0.66	2.73



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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	12-Sep	Market	Value	Nat	Ebitda	NTM	Yield	McDep		
CB (see below)	2013	Cap	(\$mm)	Gas	Oil	NTM	(\$/un)	(%)	Ratio	
Small Cap Independent Producers										
PDC Energy	PDCE	58.42	1.44	2,600	32	68	11.9	-	-	1.19
Range Resources	RRC B	78.99	1.27	16,210	74	26	13.6	0.16	0.2	0.90
Peyto Exploration and Development Corp	PEYUF	29.67	1.17	5,190	80	20	9.9	0.74	2.5	0.89
Continental Resources (32%)	CLR B	101.16	1.24	7,430	16	84	7.0	-	-	0.87
Berry Petroleum Company	BRY	44.40	1.74	4,290	14	86	6.6	0.32	0.7	0.85
Cimarex Energy Company	XEC B	90.97	1.18	9,270	43	57	5.9	0.56	0.6	0.85
Denbury Resources Inc.	DNR	18.01	1.51	10,090	5	95	6.1	-	-	0.84
Halcón Resources	HK	4.75	2.49	5,200	8	92	5.4	-	-	0.84
Whiting Petroleum Corporation	WLL B	53.95	1.35	8,690	8	92	3.7	-	-	0.78
Birchcliff Energy Ltd.	BIREF CB	6.89	1.42	1,620	68	32	8.5	-	-	0.66
<i>Total or Median</i>				1.39	70,600	24	76	6.8		0.85
Leveraged Cash Payers										
Vanguard Natural Resources, LLC	VNR	27.72	1.49	3,090	41	59	10.1	2.46	8.9	1.07
Legacy Reserves L.P.	LGCY	27.24	1.64	2,560	24	76	9.6	2.32	8.5	1.05
Linn Energy, LLC	LINE	27.87	1.97	12,840	47	53	10.0	2.90	10.4	1.04
Enerplus Corporation	ERF	17.18	1.47	5,000	34	66	6.2	1.03	6.0	0.97
<i>Total or Median</i>				1.57	23,500	38	62	9.8	8.7	1.04
RTF Cash Payers										
Freehold Royalties Ltd.	FRHLF	22.52	TL	1,580	16	84	11.4	1.60	7.1	1.07
Dorchester Minerals, L.P.	DMLP B	24.11	TL	740	54	46	10.4	1.90	7.9	0.93
Enduro Royalty Trust (40%)	NDRO	15.23	BL	200	48	52	8.7	1.51	9.9	0.90
Sabine Royalty Trust	SBR	51.52	TL	750	52	48	11.8	4.38	8.5	0.80
San Juan Basin Royalty Trust	SJT B	16.49	BL	770	100	-	11.9	0.84	5.1	0.79
Mesa RoyaltyTrust	MTR	23.18	BL	43	75	25	9.5	1.98	8.6	0.77
Permian Basin RT	PBT	13.52	TL	630	19	81	7.9	1.06	7.8	0.75
Cross Timbers Royalty Trust	CRT	28.28	TL	170	70	30	9.5	2.73	9.7	0.67
Hugoton RoyaltyTrust	HGT	7.79	BL	310	90	10	7.9	0.86	11.1	0.65
<i>Total or Median</i>				5,200	54	46	9.5		8.5	0.79
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 \$90 a barrel for oil and \$6 a million btu for natural gas.										
Dist. = Income distribution. NTM = Next Twelve Months Ended September 30, 2014. Enterprise Value = Market Cap and Debt.										
TL = Top Line income sources, BL = Bottom Line income sources										



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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		12-Sep 2013	(mm)				
Small Cap Independent Producers								
PDC Energy	PDCE		58.42	31.0	1,810	45.00	0.36	1.19
Range Resources	RRC	B	78.99	161.0	12,720	90.00	0.19	0.90
Peyto Exploration and Development Corp.	PEYUF		29.67	149.0	4,420	34.00	0.13	0.89
Continental Resources (32%)	CLR	B	101.16	59.2	5,990	120.00	0.17	0.87
Berry Petroleum Company	BRY		44.40	55.3	2,460	58.00	0.36	0.85
Cimarex Energy Company	XEC	B	90.97	86.5	7,870	110.00	0.13	0.85
Denbury Resources Inc.	DNR		18.01	372.0	6,700	23.00	0.28	0.84
Halcón Resources	HK		4.75	441.0	2,090	7.00	0.50	0.84
Whiting Petroleum Corporation	WLL	B	53.95	119.0	6,420	75.00	0.20	0.78
Birchcliff Energy Ltd.	BIREF	CB	6.89	166.0	1,140	12.00	0.20	0.66
	<i>Total or Median</i>				51,620		0.20	0.85
Leveraged Cash Payers								
Vanguard Natural Resources, LLC	VNR		27.72	75.0	2,080	25.00	0.35	1.07
Legacy Reserves L.P.	LGCY		27.24	57.3	1,560	25.00	0.41	1.05
Linn Energy, LLC	LINE		27.87	234.0	6,520	26.00	0.51	1.04
Enerplus Corporation	ERF		17.18	196.0	3,370	18.00	0.31	0.97
	<i>Total or Median</i>				13,530		0.38	1.04
RTF Cash Payers								
Freehold Royalties Ltd.	FRHLF		22.52	66.8	1,500	21.00	0.05	1.07
Dorchester Minerals, L.P.	DMLP	B	24.11	30.7	740	26.00	-	0.93
Enduro Royalty Trust (40%)	NDRO		15.23	13.2	200	17.00	-	0.90
Sabine Royalty Trust	SBR		51.52	14.6	750	64.00	-	0.80
San Juan Basin Royalty Trust	SJT	B	16.49	46.6	770	21.00	-	0.79
Mesa Royalty Trust	MTR		23.18	1.9	43	30.00	-	0.77
Permian Basin RT	PBT		13.52	46.6	630	18.00	-	0.75
Cross Timbers Royalty Trust	CRT		28.28	6.0	170	42.00	-	0.67
Hugoton Royalty Trust	HGT		7.79	40.0	310	12.00	-	0.65
	<i>Total or Median</i>				5,110			0.79
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 \$90 a barrel for oil and \$6 a million btu for natural gas.								
Recent NPV Changes: CLR to \$120 from \$110, VNR to \$25 from \$22, XEC to \$110 from \$100								



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			Price (\$/sh)	Revenue Royalty (%)	Dist/ Equity Ebitda	Adjstd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM
	Symbol/ Rating		12-Sep 2013					
Small Cap Independent Producers								
Range Resources	RRC	B	78.99		-	13.1	15.0	13.6
Birchcliff Energy Ltd.	BIREF	CB	6.89		-	18.6	12.9	8.5
Peyto Exploration and Development Corp	PEYUF		29.67		0.24	8.9	11.1	9.9
PDC Energy	PDCE		58.42		-	15.3	10.0	11.9
Continental Resources (32%)	CLR	B	101.16		-	11.4	8.1	7.0
Berry Petroleum Company	BRY		44.40		-	12.2	7.7	6.6
Denbury Resources Inc.	DNR		18.01		-	13.6	7.2	6.1
Cimarex Energy Company	XEC	B	90.97		-	7.4	7.0	5.9
Halcón Resources	HK		4.75		-	4.2	6.4	5.4
Whiting Petroleum Corporation	WLL	B	53.95		-	8.5	4.8	3.7
	<i>Median</i>					11.8	7.9	6.8
Leveraged Cash Payers								
Linn Energy, LLC	LINE		27.87		1.08	13.5	9.7	10.0
Vanguard Natural Resources, LLC	VNR		27.72		0.92	9.9	9.4	10.1
Legacy Reserves L.P.	LGCY		27.24		0.84	11.1	9.1	9.6
Enerplus Corporation	ERF		17.18		0.36	6.6	6.4	6.2
	<i>Median</i>					10.5	9.2	9.8
RTF Cash Payers								
San Juan Basin Royalty Trust	SJT	B	16.49		0.61	10.2	15.2	11.9
Sabine Royalty Trust	SBR		51.52	100	1.00	9.0	14.6	11.8
Cross Timbers Royalty Trust	CRT		28.28	90	0.92	12.6	14.1	9.5
Mesa Royalty Trust	MTR		23.18		0.82	5.0	12.3	9.5
Hugoton Royalty Trust	HGT		7.79		0.88	13.3	12.2	7.9
Dorchester Minerals, L.P.	DMLP	B	24.11	75	0.82	7.3	11.3	10.4
Freehold Royalties Ltd.	FRHLF		22.52	86	0.81	4.8	10.7	11.4
Permian Basin RT	PBT		13.52	69	0.62	12.7	10.6	7.9
Enduro Royalty Trust (40%)	NDRO		15.23		0.87	5.8	9.8	8.7
	<i>Median</i>					9.0	12.2	9.5
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, 2014; 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										
McDep Income and Small Cap Energy Portfolio										
Total Return and Enterprise Value Momentum										
			Price (\$/sh)	Equity Total	Enterprise Value/					
	Symbol/		12-Sep	Return	52Wk	52Wk	50 Day	200 Day	McDep	
	Rating		2013	YTD (%)	High	Low	Avg.	Avg.	Ratio	
Small Cap Independent Producers										
	Cimarex Energy Company	XEC	B	90.97	58	1.00	1.49	1.14	1.24	0.85
	PDC Energy	PDCE		58.42	77	0.98	1.63	1.04	1.16	1.19
	Continental Resources (32%)	CLR	B	101.16	38	0.98	1.39	1.06	1.15	0.87
	Whiting Petroleum Corporation	WLL	B	53.95	25	0.99	1.23	1.05	1.09	0.78
	Peyto Exploration and Development C	PEYUF		29.67	29	0.94	1.33	1.04	1.09	0.89
	Range Resources	RRC	B	78.99	27	0.94	1.22	1.01	1.05	0.90
	Berry Petroleum Company	BRY		44.40	33	0.95	1.23	1.05	1.04	0.85
	Denbury Resources Inc.	DNR		18.01	11	0.94	1.16	1.02	1.01	0.84
	Birchcliff Energy Ltd.	BIREF	CB	6.89	(7)	0.83	1.04	0.94	0.92	0.66
	Halcón Resources	HK		4.75	(29)	0.75	1.29	0.94	0.87	0.84
	<i>Median</i>				28	0.94	1.26	1.04	1.07	0.85
Leveraged Cash Payers										
	Enerplus Corporation	ERF		17.18	42	0.98	1.29	1.03	1.12	0.97
	Legacy Reserves L.P.	LGCY		27.24	21	0.94	1.12	1.01	1.02	1.05
	Vanguard Natural Resources, LLC	VNR		27.72	12	0.94	1.09	1.01	1.00	1.07
	Linn Energy, LLC	LINE		27.87	(15)	0.79	1.16	1.04	0.90	1.04
	<i>Median</i>				17	0.94	1.14	1.02	1.01	1.04
RTF Cash Payers										
	San Juan Basin Royalty Trust	SJT	B	16.49	27	0.92	1.34	1.00	1.07	0.79
	Sabine Royalty Trust	SBR		51.52	37	0.94	1.33	0.99	1.05	0.80
	Dorchester Minerals, L.P.	DMLP	B	24.11	26	0.94	1.21	0.99	1.03	0.93
	Permian Basin RT	PBT		13.52	15	0.83	1.13	1.01	1.03	0.75
	Mesa RoyaltyTrust	MTR		23.18	24	0.84	1.23	1.04	1.01	0.77
	Cross Timbers Royalty Trust	CRT		28.28	12	0.82	1.20	1.01	1.01	0.67
	Freehold Royalties Ltd.	FRHLF		22.52	8	0.93	1.13	0.99	0.99	1.07
	Enduro Royalty Trust (40%)	NDRO		15.23	(4)	0.78	1.04	0.99	0.94	0.90
	Hugoton RoyaltyTrust	HGT		7.79	15	0.78	1.26	0.92	0.92	0.65
	<i>Median</i>				15	0.84	1.21	0.99	1.01	0.79
CB=Contrarian Buy, Stock Price apparently in downtrend compared to 200-day average.										
Source: Bloomberg, Yahoo, McDep LLC										

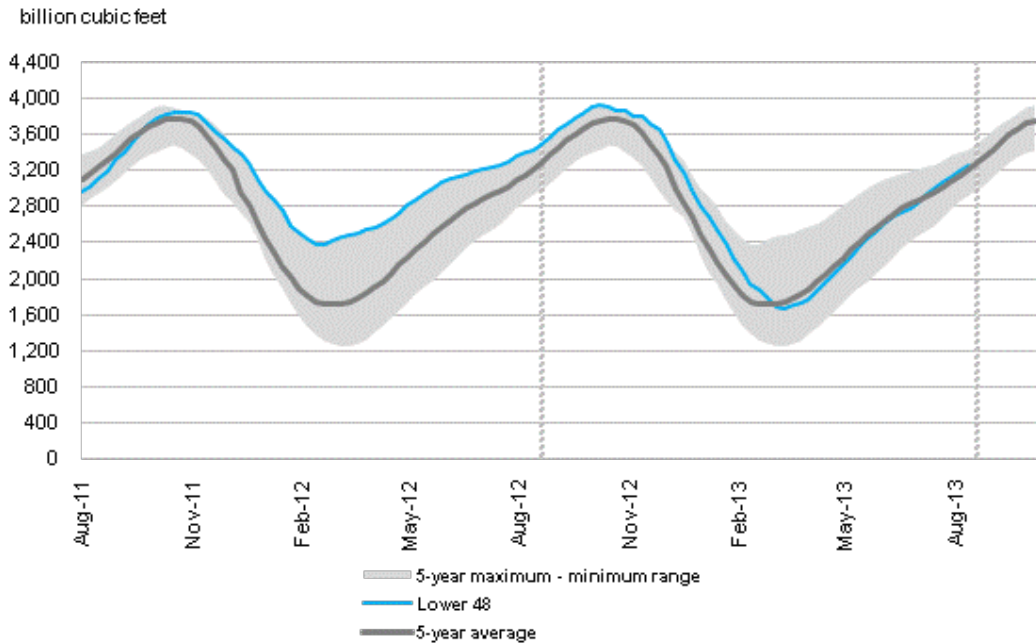


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Working gas in underground storage compared with the 5-year maximum and minimum



Source: U.S. Energy Information Administration

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