

Income Payers at Low Price CRT, PBT, SBR, SJT, DMLP

	Symbol/Rating	Price (US\$/sh) 18-Dec 2015	EV/ Market Cap	Enterprise Value (\$mm)	Present Value by Segment (%)				Dist. Yield NTM (%)	McDep Ratio
					North Amer.	Rest of World	Oil Prod'n	Down- stream		
					Natural Gas	Natural Gas				
Income										
Sabine Royalty Trust	SBR	26.14	1.00	380	53		48	7.9	0.48	
Permian Basin RT	PBT	5.07	1.00	240	23		77	6.4	0.42	
Cross Timbers Royalty Trust	CRT	12.53	1.00	80	63		37	7.2	0.40	
San Juan Basin Royalty Trust	SJT B	4.16	1.00	190	100		-	4.6	0.35	
Dorchester Minerals, L.P.	DMLP B	9.44	1.00	290	40		60	8.4	0.34	
<i>Total or Median</i>			<i>1.00</i>	<i>1,200</i>	<i>53</i>		<i>48</i>	<i>7.2</i>	<i>0.40</i>	

Summary and Recommendation

Seldom have stock prices been as low as today for the units of McDep Income Payers **Cross Timbers Royalty Trust (CRT)**, **Permian Basin Royalty Trust (PBT)**, **San Juan Basin Royalty Trust (SJT)**, **Sabine Royalty Trust (SBR)** and **Dorchester Minerals, L.P. (DMLP)**. We think the declines are exaggerated on a long-term basis. Natural gas price is at a 16-year low and oil price at a 6-year low. During 2015 oil and gas price declined about 40% and the median income payer declined about 40% on an unlevered total return basis (see [Table 4](#) on page 12). Simultaneously as oil and gas price declined, expected future income distributions declined and stock price adjusted to keep yield attractive. Median estimated distribution yield at the beginning of 2015 for the year 2015 was 7.9% and now the estimated distribution yield for 2016 is still 7.2%. Our current estimates start with a volume trend updated for monthly disclosures made most recently on December 18 by CRT, SJT and PBT (see chart [Volume](#) on page 2). While volume is comparatively steady, recent changes in price have been steep (see chart [Price](#) on page 3). After deducting administration, taxes other than income and, in some cases, operating and development costs, remaining cash is distributed to unitholders (see chart [Distributions](#) on page 3). McDep Income Payers are a little known, pure play, no-debt, long-term participation in oil and gas price. Recent developments increase expected distribution for PBT and strengthen volume outlook for CRT (see tables [Operating and Financial Estimates](#) for five stocks and [Tables 1-4](#) for 24 stocks on pages 4- 12).

Lower Budget Triggers Higher Distribution for PBT

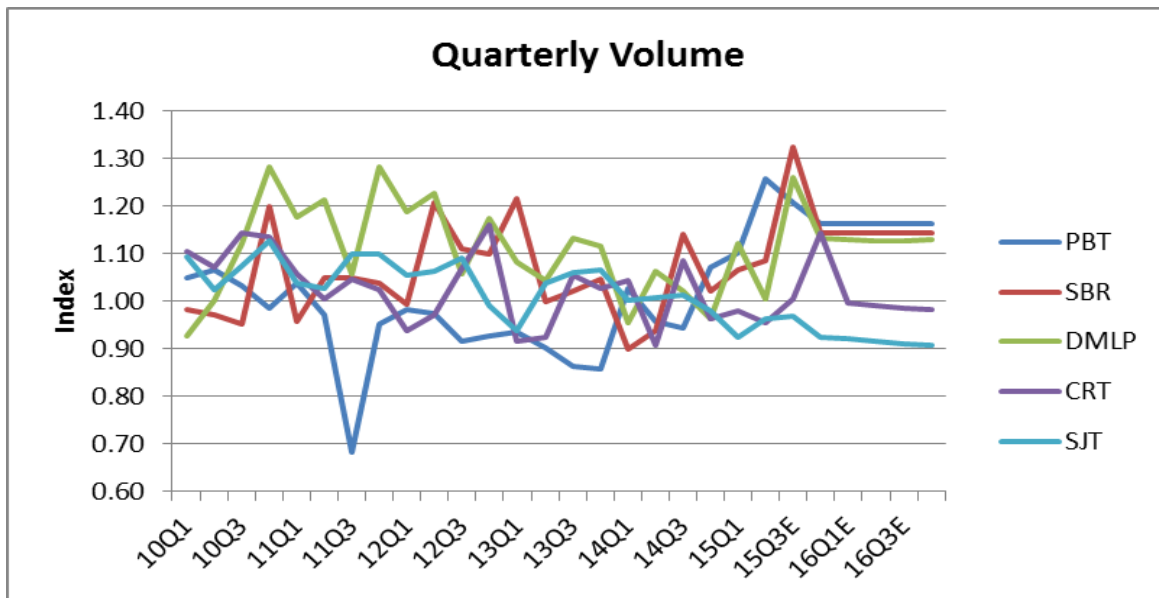
We raise our estimated distribution for PBT by 30% to \$0.33 a unit in 2016 as a result of expected lower development spending in 2016 (see table on page 4). ConocoPhillips, the operator of the properties, informs the trustee that it budgets \$5 million to be spent on the trust's properties in 2016 compared to \$22 million in 2015. While the spending is intended to add to long-term value, it can have the opposite effect of reducing current stock price as it reduces current distribution. As spending is reduced, distribution increases and stock price tends to respond accordingly. About half the value in PBT stock is sensitive to development spending

while the other half benefits from spending financed by others. “Top Line” has been the mainstay of monthly distributions while “Bottom Line” contributions have been limited by spending.

CRT Notches Strong Fourth Quarter

Cumulative monthly disclosures for distribution, volume and price exceeded the quarterly estimate included in our analysis a few months ago (see *Stock Idea*, CRT, 9/22/15). Full quarterly results will not be available until the 10-K annual filing is made late in the first quarter 2016. Top Line revenue royalties account for all of current distributions. Future contributions from bottom line properties offer possible upside when either spending declines or oil price increases.

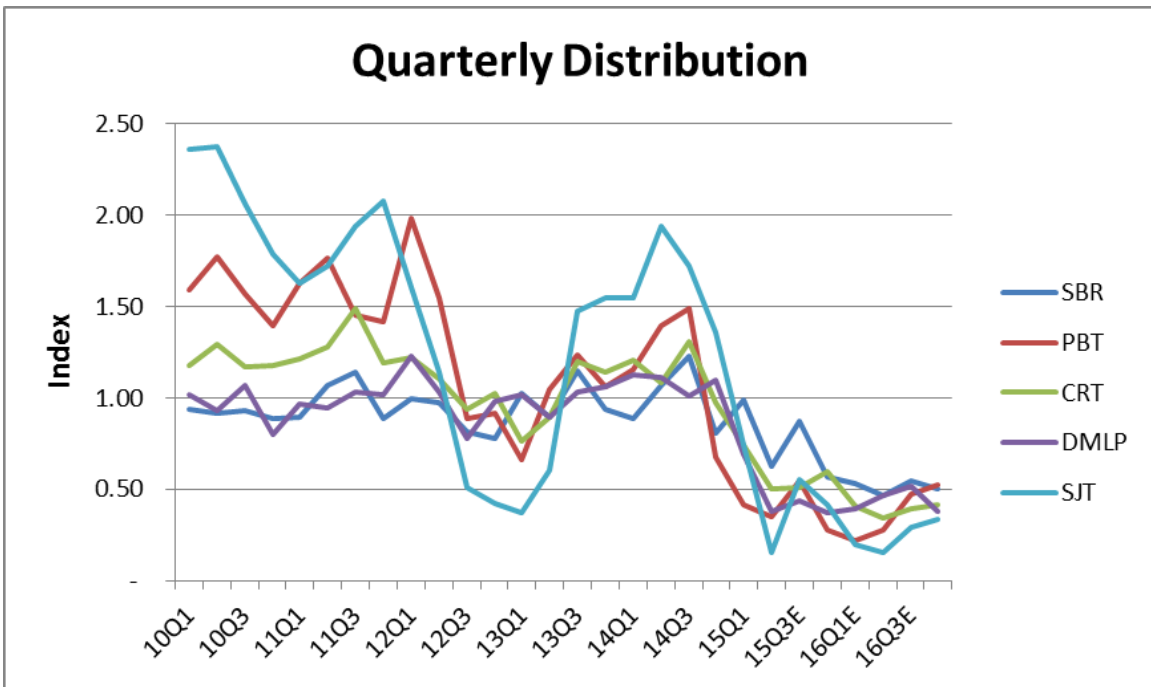
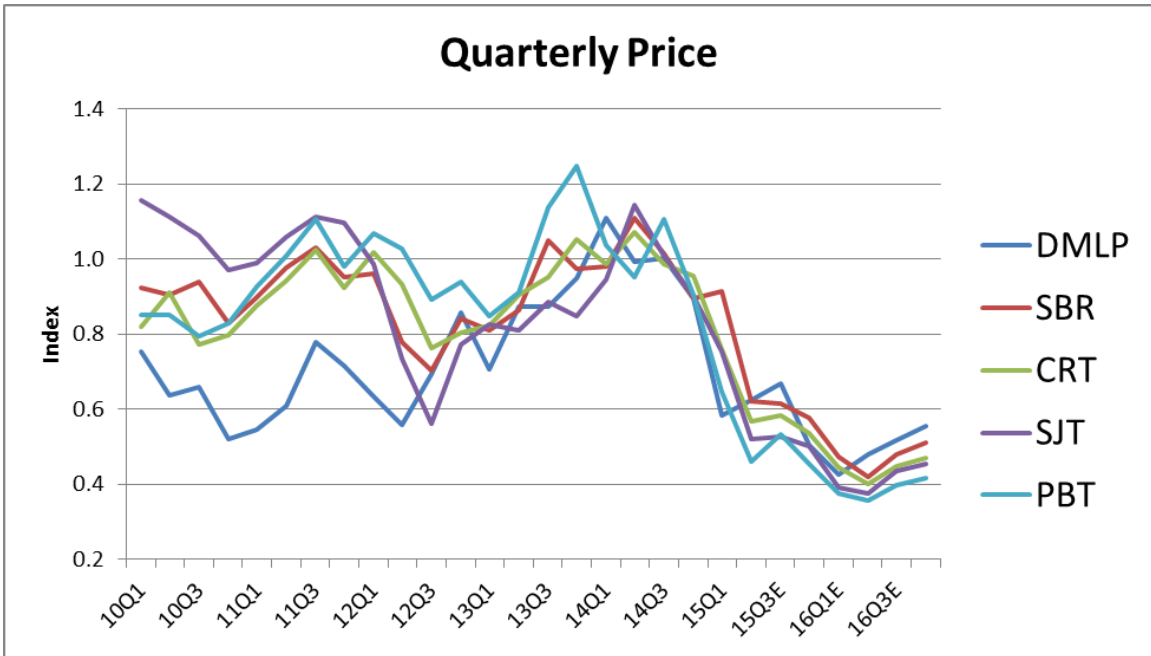
Kurt H. Wulff, CFA





Industry Idea

Analysis of Oil and Gas Stocks
December 21, 2015





Industry Idea

Analysis of Oil and Gas Stocks

December 21, 2015

Permian Basin Royalty Trust									
Next Twelve Months Operating and Financial Estimates									
	Q4	Q3	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Next Twelve Months
	12/31/14	9/30/15	12/31/15	2015E	3/31/16	6/30/16	9/30/16	12/31/16	12/31/16
TOP LINE									
Volume									
Natural Gas (mmcf)	1.2	1.2	1.1	1.2	1.1	1.1	1.1	1.1	1.1
Oil (mbd)	0.94	0.91	0.87	0.91	0.87	0.87	0.87	0.87	0.88
Price (cash lagged two months)									
Natural Gas (\$/mcf)	8.59	4.41	4.37	5.07	3.27	3.21	3.65	3.82	3.47
Oil (\$/bbl)	84.10	54.50	44.28	51.31	37.57	36.66	39.16	40.90	38.21
Revenue (\$mm)									
Natural Gas	1.0	0.5	0.5	2.1	0.3	0.3	0.4	0.4	1.4
Oil	7.2	4.6	3.6	17.0	3.0	2.9	3.1	3.3	12.3
Total Revenue	8.2	5.0	4.0	19.2	3.4	3.2	3.5	3.7	13.8
Expense									
Operating	0.5			1.0					
Production & Property taxes	0.3	0.7	0.6	1.6	0.6	0.6	0.6	0.6	2.4
Total Expense	0.8	0.7	0.6	2.6	0.6	0.6	0.6	0.6	2.4
Ebitda	7.4	4.4	3.4	16.5	2.8	2.6	2.9	3.1	11.3
Ebitda times 95%	7.0	4.1	3.2	15.7	2.6	2.4	2.8	2.9	10.8
BOTTOM LINE									
Volume									
Natural Gas (mmcf)	11.7	15.4	14.1	14.2	14.1	14.1	14.1	14.1	14.4
Oil (mbd)	2.28	2.39	2.42	2.45	2.42	2.42	2.42	2.42	2.41
Price (cash lagged two months)									
Natural Gas (\$/mcf)	5.49	2.64	2.46	2.85	1.84	1.81	2.05	2.15	1.92
Oil (\$/bbl)	81.12	54.16	44.04	50.43	37.36	36.45	38.94	40.67	38.49
Revenue (\$mm)									
Natural Gas	5.9	3.7	3.2	14.8	2.4	2.3	2.7	2.8	10.1
Oil	17.0	11.9	9.8	45.1	8.3	7.8	8.7	9.0	33.9
Total Revenue	22.9	15.6	13.0	59.9	10.7	10.1	11.3	11.8	43.9
Expense									
Operating	8.3	5.6	5.9	25.2	5.9	5.9	5.9	5.9	23.6
Production taxes	1.1	1.2	1.1	3.7	1.1	1.1	1.1	1.1	4.2
Total Expense	9.3	6.8	7.0	28.9	7.0	7.0	7.0	7.0	27.8
Ebitda	13.6	8.8	6.0	31.0	3.7	3.2	4.4	4.9	16.1
Development	11.8	6.5	6.9	23.7	4.0	1.3	1.3	1.3	7.9
(Ebitda-Dvlpmnt) times 75%		1.7	(0.7)	3.9	(0.2)	1.4	2.3	2.7	6.2
Excess Costs			(0.6)	1.9		0.7			0.7
CASH DISTRIBUTION									
Royalty Income (\$mm)									
Top Line	7.0	4.1	3.2	15.7	2.6	2.4	2.8	2.9	10.8
Bottom Line	-	1.8	(0.1)	2.1		0.7	2.3	2.7	5.7
Administration	0.2	0.4	0.3	1.8	0.4	0.3	0.3	0.3	1.3
Distributable Income (\$mm)	6.9	5.5	2.8	16.1	2.2	2.8	4.8	5.3	15.2
Units (millions)	47	47	47	47	47	47	47	47	47
Distribution (\$/unit)	0.15	0.12	0.06	0.34	0.05	0.06	0.10	0.11	0.33



Industry Idea

Analysis of Oil and Gas Stocks

December 21, 2015

Cross Timbers Royalty Trust									
Next Twelve Months Operating and Financial Performance									
	Year	Q3	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Next Twelve Months
	2014	9/30/15	12/31/15	2015	3/31/16	6/30/16	9/30/16	12/31/16	12/31/16
Volume									
Natural Gas (mmcf)	4.5	4.3	5.5	4.4	4.2	4.2	4.2	4.2	4.2
Oil (mbd)	0.61	0.63	0.62	0.64	0.64	0.63	0.63	0.63	0.63
Total (bcf)	2.96	0.74	0.85	3.02	0.74	0.73	0.73	0.73	2.92
Price									
Natural Gas (HH lagged three months)									
Henry Hub (\$/mmbtu)	4.32	2.66	2.76	3.11	2.28	1.87	2.18	2.34	2.16
Differential (%)	(62)	(43)	(69)	(46)	(46)	(46)	(46)	(46)	(46)
CRT (\$/mcf)	7.00	3.81	4.67	4.53	3.32	2.73	3.17	3.41	3.16
Oil (\$/bbl) (WTI lagged two months)									
WTI Cushing	97.76	56.70	44.87	53.37	38.07	37.14	39.68	41.45	39.08
CRT	91.46	54.28	44.00	52.96	37.77	36.86	39.37	41.13	38.78
Total (\$/mcf)	10.70	6.26	5.73	6.52	4.73	4.33	4.79	5.03	4.72
Revenue (\$mm)									
Natural Gas	11.40	1.51	2.38	7.33	1.30	1.05	1.21	1.31	4.86
Oil	20.21	3.15	2.46	12.34	2.21	2.10	2.28	2.34	8.92
Total	31.61	4.65	4.85	19.67	3.50	3.14	3.49	3.65	13.79
Cost (\$mm)									
Tax, transport & other	3.89	0.63	0.68	2.65	0.49	0.44	0.49	0.51	1.93
Production	5.75	1.43	1.43	6.14	1.20	1.20	1.20	1.20	4.80
Total	9.64	2.06	2.11	8.79	1.69	1.64	1.69	1.71	6.73
Cash flow (\$mm)									
Development	3.37	0.54	0.54	2.87	0.10	0.10	0.10	0.10	0.40
Excess or other	(0.54)	(0.10)	(0.36)	(1.96)	(0.07)	(0.13)	(0.03)	0.00	(0.23)
Recovery of excess									
Net proceeds (\$mm)	19.14	2.15	2.56	9.97	1.78	1.54	1.73	1.84	6.89
Royalty income (\$mm)									
Royalty/Net proceeds	86%	88%	82%	87%	85%	85%	85%	85%	85%
Administration	0.52	0.13	0.03	0.53	0.11	0.11	0.11	0.11	0.44
Distributable income (\$mm)	15.88	1.76	2.06	8.13	1.40	1.20	1.36	1.45	5.41
Units (millions)									
Units	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	0.04	0.03	0.15	0.03	0.02	0.03	0.03	0.11
TL OK	0.21	0.05	0.04	0.19	0.02	0.02	0.02	0.02	0.09
TL NM	0.89	0.09	0.08	0.38	0.10	0.08	0.09	0.10	0.38
BL TX	0.00	-							
BL OK	0.00	-							
Oil									
TL TX	0.64	0.08	0.08	0.37	0.07	0.07	0.07	0.07	0.28
TL OK	0.19	0.05	0.06	0.24	0.02	0.02	0.02	0.02	0.08
TL NM	0.08	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.04
BL TX	0.14	-							
BL OK	0.34	-							
Administration	0.08	0.02	0.03	0.11	0.02	0.02	0.02	0.02	0.08
Distribution (\$/unit)	2.65	0.29	0.34	1.35	0.23	0.20	0.23	0.24	0.90

Please see disclosures on the final page.

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Industry Idea

Analysis of Oil and Gas Stocks

December 21, 2015

Sabine Royalty Trust										
Next Twelve Months Operating and Financial Performance										
	Q4	Year	Q3	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Next Twelve Months
	12/31/14	2014	9/30/15	12/31/15	2015	3/31/16	6/30/16	9/30/16	12/31/16	12/31/16
Volume										
Natural Gas (bcf)	1.74	6.41	2.26	1.83	7.48	1.83	1.79	1.81	1.83	7.24
Natural Gas (mmcf)	18.9	17.6	24.8	19.8	20.5	19.8	19.8	19.8	19.8	19.8
Days	92	365	91	92	365	92	90	91	92	365
Oil (mmb)	0.105	0.466	0.132	0.138	0.525	0.138	0.135	0.137	0.138	0.548
Oil (mbd)	1.14	1.28	1.43	1.50	1.44	1.50	1.50	1.50	1.50	1.50
Days	92	365	92	92	365	92	89	92	92	365
Total (bcfe)	2.37	9.21	3.05	2.65	10.63	2.65	2.60	2.63	2.65	10.53
Total (mmcf)	25.8	25.2	33.4	28.9	29.1	28.9	28.9	28.9	28.9	28.9
Price (Henry Hub natural gas lagged three months; WTI Cushing oil, two months)										
Henry Hub (\$/mmbtu)	4.07	4.32	2.66	2.76	3.11	2.28	1.87	2.18	2.34	2.16
Differential (%)	2	0	(10)	4	(5)	4	4	-	-	2
Trust (\$/mcf)	4.00	4.31	2.93	2.64	3.27	2.18	1.79	2.18	2.34	2.12
WTI Cushing (\$/bbl)	91.23	97.76	56.70	44.87	53.37	38.07	37.14	39.68	41.45	39.08
Differential	8.49	10.53	1.26	(1.82)	(1.57)	-	-	-	-	(0.01)
Trust (\$/bbl)	82.74	87.23	55.44	46.69	54.94	38.07	37.14	39.68	41.45	39.09
Total (\$/bcfe)	6.60	7.42	4.57	4.25	5.02	3.48	3.16	3.56	3.76	3.49
Revenue (\$mm)										
Natural Gas	7.0	27.6	6.6	4.8	24.5	4.0	3.2	3.9	4.3	15.4
Oil	8.7	40.6	7.3	6.4	28.8	5.3	5.0	5.4	5.7	21.4
Total	15.6	68.3	13.9	11.3	53.3	9.2	8.2	9.3	10.0	36.8
Expense										
Operating	-	-	-	-	-	-	-	-	-	-
Tax and other	3.3	7.3	0.6	2.3	5.9	0.8	0.6	0.7	2.0	4.1
General and administrative	0.5	2.4	0.6	0.6	2.6	0.6	0.8	0.6	0.6	2.7
Total	3.8	9.7	1.2	2.9	8.4	1.5	1.4	1.3	2.6	6.8
Ebitda	11.8	58.6	12.8	8.4	44.9	7.8	6.8	8.1	7.4	30.0
Exploration	-	-	-	-	-	-	-	-	-	-
Deprec., Deplet., & Amort.	-	-	-	-	-	-	-	-	-	-
Other Non Cash	-	-	-	-	-	-	-	-	-	-
Ebit	11.8	58.6	12.8	8.4	44.9	7.8	6.8	8.1	7.4	30.0
Interest	-	-	-	-	-	-	-	-	-	-
Ebt	11.8	58.6	12.8	8.4	44.9	7.8	6.8	8.1	7.4	30.0
Income Tax	-	-	-	-	-	-	-	-	-	-
Distributable Income (\$mm)	11.8	58.6	12.8	8.4	44.9	7.8	6.8	8.1	7.4	30.0
Units (millions)	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
Per Unit (\$)	0.81	4.02	0.88	0.57	3.08	0.53	0.47	0.55	0.50	2.06



Industry Idea

Analysis of Oil and Gas Stocks

December 21, 2015

Dorchester Minerals, L.P.										
Operating and Financial Performance										
	Q4	Q2	Q3	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Next Twelve Months
	12/31/14	6/30/15	9/30/15	12/31/15	2015	3/31/16	6/30/16	9/30/16	12/31/16	12/31/16
Volume										
Nat Gas (mmcf) - Top Line	9.5	8.7	10.7	10.2	10.0	9.8	9.4	9.0	8.7	9.2
Nat Gas (mmcf) - Btm Line	8.4	9.4	9.6	9.5	9.2	9.4	9.3	9.2	9.1	9.3
Oil (mbd) - Top Line	1.32	1.36	1.38	1.41	1.41	1.44	1.46	1.49	1.52	1.48
Oil (mbd) - Bottom Line	0.64	0.77	1.70	1.10	1.18	1.14	1.19	1.24	1.29	1.21
Days	92	91	92	92	365	91	91	92	92	366
Total (bcfe)	2.7	2.8	3.6	3.2	12.7	3.2	3.2	3.2	3.2	12.7
Total (mmcf)	30	31	39	35	35	35	35	35	35	35
Price										
Henry Hub (\$/mmbtu)	4.02	2.66	2.76	2.28	2.67	1.87	2.18	2.34	2.49	2.22
Top Line (\$/mcf)	3.50	2.31	2.40	1.98	2.34	1.62	1.89	2.03	2.17	1.93
Bottom Line (\$/mcf)	6.24	2.56	2.90	2.39	2.62	1.96	2.28	2.45	2.62	2.33
WTI Cushing (\$/bbl)	73.18	57.94	46.39	41.94	48.72	36.00	38.95	40.90	42.48	39.58
Top Line (\$/bbl)	62.84	50.07	37.22	35.23	41.39	32.40	35.06	36.81	35.69	34.99
Bottom Line (\$/bbl)	63.93	53.65	58.43	41.94	49.78	32.40	35.06	36.81	42.48	36.69
Total (\$/mcf)	7.06	4.98	5.27	3.99	4.74	3.40	3.81	4.08	4.38	3.92
Revenue (\$mm)										
Natural Gas - Top Line	3.1	1.8	2.4	1.9	8.5	1.5	1.6	1.7	1.7	6.5
Oil - Top Line	7.6	6.2	4.7	4.6	21.3	4.2	4.7	5.1	5.0	19.0
Total - Top Line	10.7	8.0	7.1	6.4	29.8	5.7	6.3	6.7	6.7	25.5
Natural Gas - Bottom Line	4.8	2.2	2.6	2.1	8.8	1.7	1.9	2.1	2.2	7.9
Oil - Bottom Line	3.8	3.8	9.1	4.2	21.4	3.4	3.8	4.2	5.0	16.4
Total - Bottom Line	8.6	5.9	11.7	6.3	30.2	5.1	5.7	6.3	7.2	24.3
Total	19.2	14.0	18.8	12.8	60.0	10.7	12.0	13.0	14.0	49.8
Minerals NPI	5.0	4.8	11.1	5.7	25.9	4.5	5.2	5.6	6.5	21.9
Total Rev - Min NPI	14.2	9.2	7.7	7.1	34.1	6.2	6.9	7.4	7.5	27.9
Expense										
Operating, incl. Prod Tax	1.1	1.0	0.6	0.8	3.4	0.6	0.7	0.8	0.8	3.0
General and Administrative	2.1	1.1	1.1	1.1	4.6	1.1	1.1	1.1	1.1	4.3
General Partner	0.3	0.1	0.1	0.1	0.5	0.1	0.1	0.1	0.1	0.3
Minerals NPI	1.3	1.7	2.2	1.1	6.4	1.1	1.3	1.4	1.6	5.5
Total	4.9	4.0	4.0	3.0	14.8	2.9	3.1	3.3	3.6	13.0
Ebitda										
Top Line	8.7	6.7	6.4	5.1	25.2	4.5	5.0	5.4	5.4	20.4
Bottom Line (ex. Min NPI)	2.0	0.2	(0.5)	0.0	0.6	(0.1)	(0.0)	0.1	0.1	0.0
Minerals NPI	3.7	3.1	8.9	4.6	19.5	3.4	3.9	4.2	4.9	16.4
Total Ebitda	14.4	10.0	14.8	9.7	45.2	7.8	8.9	9.7	10.4	36.8
Deprec., Deplet., & Amort.	2.2	2.3	3.0	2.7	10.6	2.6	2.6	2.7	2.7	10.6
Lease Bonus and Other	(4.3)	(0.9)	5.2	-	4.1	-	-	-	-	-
Minerals NPI Capital Spend	8.2	4.9	4.1	4.6	18.0	2.0	2.3	2.5	2.9	9.8
Ebit	8.3	3.7	2.5	2.4	12.5	3.1	3.9	4.5	4.8	16.3
Ebt	8.3	3.7	2.5	2.4	12.5	3.1	3.9	4.5	4.8	16.3
Net Income (\$mm)	8.3	3.7	2.5	2.4	12.5	3.1	3.9	4.5	4.8	16.3
Units (millions)	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7
Net Income Per Unit (\$)	0.27	0.12	0.08	0.08	0.41	0.10	0.13	0.15	0.16	0.53
Distribution - Cash Accounting (\$mm)										
Top Line Revenue	11.4	6.8	7.1	6.4	29.4	5.7	6.3	6.7	6.7	25.5
Bottom Line Net Revenue	5.3	0.4	0.4	0.4	3.7	(0.0)	0.1	0.2	0.2	0.4
Lease Bonus	0.6	0.0	-	-	0.1	-	-	-	-	-
Cash Expense	(2.4)	(2.1)	(1.5)	(2.0)	(7.9)	(2.0)	(2.0)	(2.0)	(2.0)	(8.0)
Minerals NPI	-	-	-	0.2	0.2	1.4	1.5	1.7	2.0	6.6
Distribution	14.9	5.1	6.0	5.0	25.5	5.0	5.9	6.6	6.8	24.4
Distribution Per Unit (\$)	0.49	0.17	0.19	0.16	0.83	0.16	0.19	0.22	0.22	0.80

Please see disclosures on the final page.

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Analysis of Oil and Gas Stocks

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San Juan Basin Royalty Trust										
Next Twelve Months Operating and Financial Estimates										
										<i>Next</i>
	<i>Q4</i>	<i>Year</i>	<i>Q3</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Months</i>
	<i>12/31/14</i>	<i>2014</i>	<i>9/30/15</i>	<i>12/31/15</i>	<i>2015</i>	<i>3/31/16</i>	<i>6/30/16</i>	<i>9/30/16</i>	<i>12/31/16</i>	<i>12/31/16</i>
Volume										
Natural gas (mmbtu)	8.4	34.0	8.2	7.9	32.0	7.9	7.7	7.8	7.7	31.0
Heat Content(btu/cf)	1,105	1,099	1,101	1,098	1,099	1,098	1,098	1,098	1,098	1,098
Natural gas (bcf)	7.6	30.9	7.5	7.2	29.1	7.2	7.0	7.1	7.1	28.3
Natural Gas (mmcf)	82.9	84.7	81.4	78.2	79.8	77.8	77.4	77.1	76.7	77.3
Days	92	365	92	92	365	92	90	92	92	366
Oil (mb)	0.01	0.06	0.02	0.01	0.07	0.01	0.01	0.01	0.01	0.06
Oil (mbd)	0.16	0.16	0.24	0.16	0.18	0.16	0.16	0.16	0.15	0.16
Days	92	365	92	92	365	92	90	92	92	366
Total gas & oil (bcf)	7.7	31.3	7.6	7.3	29.5	7.2	7.1	7.2	7.1	28.6
Price										
Natural gas (\$/mmbtu) (Henry Hub lagged two months)										
Henry Hub (\$/mmbtu)	3.94	4.37	2.71	2.69	2.98	2.01	1.98	2.25	2.36	2.15
Differential (%)	9	7	24	26	22	22	22	22	22	22
Net to SJT (\$/mmbtu)	3.59	4.05	2.05	2.00	2.32	1.56	1.54	1.74	1.83	1.67
Natural gas (\$/mcf)	3.97	4.45	2.26	2.20	2.54	1.71	1.69	1.91	2.01	1.83
Oil (\$/bbl) (WTI Cushing lagged two months)										
WTI Cushing	91.23	97.76	56.70	44.87	53.37	38.07	37.14	39.68	41.45	39.08
SJT	76.85	82.99	54.65	43.25	46.30	33.03	32.23	34.42	35.96	33.91
Total gas & oil (\$/mcf)	4.07	4.56	2.38	2.26	2.61	1.76	1.73	1.96	2.05	1.88
Revenue (\$mm)										
Natural Gas	30.3	137.5	16.9	15.8	74.1	12.3	11.8	13.6	14.2	51.8
Oil	1.1	5.0	1.2	0.6	3.0	0.5	0.5	0.5	0.5	1.9
Total	31.4	142.4	18.1	16.5	77.1	12.8	12.2	14.1	14.7	53.7
Cost (\$mm)										
Severance tax	4.3	19.2	1.9	1.8	8.1	1.4	1.3	1.5	1.6	5.9
Operating	8.0	34.6	7.4	7.1	30.1	7.1	7.1	7.1	7.1	28.5
Total	12.2	53.8	9.3	8.9	38.2	8.5	8.5	8.7	8.7	34.4
Cash flow (\$mm)										
Development	2.2	6.5	1.6	1.5	12.8	1.5	1.5	1.5	1.5	5.8
Net proceeds (\$mm)										
	17.0	82.2	7.2	6.1	26.1	2.8	2.3	3.9	4.5	13.5
Royalty income (\$mm)										
Royalty/Net proceeds	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Administration	0.4	1.7	0.4	0.8	2.6	0.3	0.3	0.3	0.3	1.2
One-time		-			-					-
Distributable income (\$mm)										
	12.4	59.9	5.0	3.8	17.0	1.8	1.4	2.7	3.1	8.9
Units (millions)										
	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6
Per unit	0.27	1.28	0.11	0.08	0.36	0.04	0.03	0.06	0.07	0.19



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Symbol/Rating	Price (US\$/sh) 18-Dec 2015	EV/ Market Cap	Enterprise Value (\$mm)	Present Value by Segment (%)				Dist. Yield NTM (%)	McDep Ratio	
				North Amer.	Rest of World	Oil Prod'n	Down- stream			
				Natural Gas	Natural Gas					
Global Integrated										
Exxon Mobil Corporation	XOM	77.28	1.26	408,000	7	11	57	25	3.8	0.87
Chevron Corporation	CVX	89.81	1.34	225,000	3	8	64	25	4.8	0.85
Royal Dutch Shell (BG pro form)	RDS-A B	43.71	1.72	298,000	3	15	52	30	8.6	0.76
Total S.A.	TOT B	44.29	1.56	160,000		14	58	28	6.0	0.72
<i>Total or Median</i>			<i>1.45</i>	<i>1,091,000</i>			<i>58</i>	<i>26</i>	<i>5.4</i>	<i>0.80</i>
Large Independent										
EOG Resources, Inc.	EOG	71.43	1.17	46,000	16	3	81		0.9	0.91
Occidental Petroleum Corp.	OXY	65.96	1.18	59,200	5	1	78	17	4.5	0.90
ConocoPhillips	COP	45.93	1.66	95,000	16	11	73		6.4	0.78
Devon Energy Corporation	DVN B	28.68	2.10	24,800	28		56	16	3.3	0.62
Marathon Oil Corporation	MRO B	12.50	2.09	17,700	9	1	90		1.6	0.55
<i>Total or Median</i>			<i>1.66</i>	<i>243,000</i>	<i>16</i>		<i>78</i>		<i>3.3</i>	<i>0.78</i>
Small Independent										
Cimarex Energy Company	XEC	90.83	1.13	9,600	41		59		0.7	0.86
California Resources	CRC	1.98	10.07	7,600	13		87		-	0.71
Range Resources	RRC	21.32	2.16	7,700	80		20		0.8	0.62
Continental Resources (32%)	CLR B	22.72	1.86	5,000	20		80		-	0.54
Whiting Petroleum Corporation	WLL B	9.08	3.98	7,400	7		93		-	0.46
<i>Total or Median</i>			<i>2.16</i>	<i>37,000</i>	<i>20</i>		<i>80</i>		<i>-</i>	<i>0.62</i>
Income										
Sabine Royalty Trust	SBR	26.14	1.00	380	53		48		7.9	0.48
Permian Basin RT	PBT	5.07	1.00	240	23		77		6.4	0.42
Cross Timbers Royalty Trust	CRT	12.53	1.00	80	63		37		7.2	0.40
San Juan Basin Royalty Trust	SJT B	4.16	1.00	190	100		-		4.6	0.35
Dorchester Minerals, L.P.	DMLP B	9.44	1.00	290	40		60		8.4	0.34
<i>Total or Median</i>			<i>1.00</i>	<i>1,200</i>	<i>53</i>		<i>48</i>		<i>7.2</i>	<i>0.40</i>
Canada										
Imperial Oil Limited (30%)	IMO	31.13	1.33	10,600	1		69	30	1.3	0.82
EnCana Corporation	ECA	5.03	3.05	12,800	56		44		5.6	0.65
Cenovus Energy Inc.	CVE	12.58	1.35	14,000	12		74	13	3.7	0.62
Canadian Oil Sands Limited	COSWF B	6.08	1.95	5,800			100		2.4	0.54
Birchcliff Energy Ltd.	BIREF B	2.71	2.27	1,000	77		23		-	0.40
<i>Total or Median</i>			<i>1.95</i>	<i>44,000</i>			<i>69</i>		<i>2.4</i>	<i>0.62</i>

Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.50 a million btu.
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses



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			<i>Price</i> <i>(US\$/sh)</i>	<i>Shares</i>	<i>Market</i> <i>Cap</i> <i>(US\$mm)</i>	<i>Net</i> <i>Present</i> <i>Value</i> <i>(US\$/sh)</i>	<i>Debt/</i> <i>Present</i> <i>Value</i>	<i>McDep</i> <i>Ratio</i>
	<i>Symbol/Rating</i>	<i>18-Dec</i> <i>2015</i>		<i>(mm)</i>				
	<i>B = Buy</i>							
Global Integrated								
Exxon Mobil Corporation	XOM		77.28	4,190	324,000	92.00	0.18	0.87
Chevron Corporation	CVX		89.81	1,872	168,000	111.00	0.22	0.85
Royal Dutch Shell (BG pro forma)	RDS-A	B	43.71	3,965	173,000	68.00	0.32	0.76
Total S.A.	TOT	B	44.29	2,312	102,000	71.00	0.26	0.72
	<i>Total or Median</i>				<i>767,000</i>		<i>0.24</i>	<i>0.80</i>
Large Independent								
EOG Resources, Inc.	EOG		71.43	549	39,200	80.00	0.13	0.91
Occidental Petroleum Corp.	OXY		65.96	763	50,300	75.00	0.13	0.90
ConocoPhillips	COP		45.93	1,242	57,000	68.00	0.31	0.78
Devon Energy Corporation	DVN	B	28.68	411	11,800	65.00	0.33	0.62
Marathon Oil Corporation	MRO	B	12.50	677	8,460	34.00	0.29	0.55
	<i>Total or Median</i>				<i>166,800</i>		<i>0.29</i>	<i>0.78</i>
Small Independent								
Cimarex Energy Company	XEC		90.83	93	8,500	108.00	0.10	0.86
California Resources	CRC		1.98	382	800	10.00	0.64	0.71
Range Resources	RRC		21.32	167	3,600	50.00	0.33	0.62
Continental Resources (32%)	CLR	B	22.72	118	2,700	58.00	0.25	0.54
Whiting Petroleum Corporation	WLL	B	9.08	204	1,900	52.00	0.34	0.46
	<i>Total or Median</i>				<i>18,000</i>		<i>0.33</i>	<i>0.62</i>
Income								
Sabine Royalty Trust	SBR		26.14	15	380	55.00	-	0.48
Permian Basin RT	PBT		5.07	47	240	12.00	-	0.42
Cross Timbers Royalty Trust	CRT		12.53	6	80	31.00	-	0.40
San Juan Basin Royalty Trust	SJT	B	4.16	47	190	12.00	-	0.35
Dorchester Minerals, L.P.	DMLP	B	9.44	31	290	28.00	-	0.34
	<i>Total or Median</i>				<i>1,200</i>		<i>-</i>	<i>0.40</i>
Canada								
Imperial Oil Limited (30%)	IMO		31.13	255	8,000	40.00	0.21	0.82
EnCana Corporation	ECA		5.03	843	4,200	13.00	0.44	0.65
Cenovus Energy Inc.	CVE		12.58	827	10,400	23.00	0.16	0.62
Canadian Oil Sands Limited	COSWF	B	6.08	485	3,000	16.00	0.27	0.54
Birchcliff Energy Ltd.	BIREF	B	2.71	154	400	12.00	0.22	0.40
	<i>Total or Median</i>				<i>26,000</i>		<i>0.22</i>	<i>0.62</i>
Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.50 a million btu.								
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses								



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Table 3							
McDep Energy Stocks							
Value Multiples and Dividend							
Ranked by EV/Ebitda							
			Price (US\$/sh)	Adjustd Resrvs/ Prod	PV/ Ebitda	EV/ Ebitda	Dividend
	Symbol/Rating		18-Dec 2015	NTM	NTM	NTM	NTM
	B = Buy						(\$/sh)
Global Integrated							
Exxon Mobil Corporation	XOM		77.28	14.4	10.8	9.4	2.92
Chevron Corporation	CVX		89.81	9.3	9.9	8.4	4.28
Royal Dutch Shell (BG pro forma)	RDS-A	B	43.71	9.9	8.7	6.6	3.76
Total S.A.	TOT	B	44.29	9.9	8.3	6.0	2.65
	<i>Median</i>			9.9	9.3	7.5	18
Large Independent							
EOG Resources, Inc.	EOG		71.43	9.0	16.7	15.1	0.67
Occidental Petroleum Corp.	OXY		65.96	8.9	14.9	13.3	3.00
ConocoPhillips	COP		45.93	11.4	15.3	11.8	2.96
Devon Energy Corporation	DVN	B	28.68	10.2	16.8	10.5	0.96
Marathon Oil Corporation	MRO	B	12.50	11.8	16.5	9.0	0.20
	<i>Median</i>			10.2	16.5	11.8	56
Small Independent							
California Resources	CRC		1.98	12.7	40.5	28.8	-
Range Resources	RRC		21.32	13.8	39.2	24.2	0.16
Cimarex Energy Company	XEC		90.83	7.7	20.5	17.6	0.64
Continental Resources (32%)	CLR	B	22.72	11.4	21.5	11.7	-
Whiting Petroleum Corporation	WLL	B	9.08	11.4	22.0	10.1	-
	<i>Median</i>			11.4	22.0	17.6	
Income							
San Juan Basin Royalty Trust	SJT	B	4.16	8.6	42.1	14.6	0.19
Cross Timbers Royalty Trust	CRT		12.53	12.5	33.6	13.5	0.90
Sabine Royalty Trust	SBR		26.14	8.4	26.7	12.7	2.06
Permian Basin RT	PBT		5.07	9.7	25.9	10.9	0.33
Dorchester Minerals, L.P.	DMLP	B	9.44	7.1	23.4	7.9	0.80
	<i>Median</i>			8.6	26.7	12.7	16
Canada							
EnCana Corporation	ECA		5.03	6.5	32.0	21.0	0.28
Canadian Oil Sands Limited	COSWF	B	6.08	18.0	32.4	17.7	0.14
Cenovus Energy Inc.	CVE		12.58	15.0	20.0	12.4	0.46
Imperial Oil Limited (30%)	IMO		31.13	23.4	13.6	11.2	0.40
Birchcliff Energy Ltd.	BIREF	B	2.71	12.5	19.9	8.0	-
	<i>Median</i>			15.0	20.0	12.4	42
	<i>Grand Median</i>			11	21	12	

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended December 31, 2016; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses



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Table 4										
McDep Energy Stocks										
Total Return Year-to-Date 2015										
Ranked by Unlevered Total Return										
			Price	Price			Equity	Unlevered		
			(\$/sh)	(\$/sh)	Price	Cash	Total	Debt	Return	McDep
	Symbol/Rati		18-Dec	29-Dec	Change	Distrib.	Return	(\$/sh)	(%)	Ratio
			2015	2014	(%)	(%)	(%)			
Global Integrated										
Total S.A.	TOT	B	44.29	52.74	(16)	4	(12)	25	(8)	0.72
Exxon Mobil Corporation	XOM		77.28	93.07	(17)	3	(14)	20	(11)	0.87
Chevron Corporation	CVX		89.81	113.32	(21)	4	(17)	31	(13)	0.85
Royal Dutch Shell (BG pro forma)	RDS-A	B	43.71	68.31	(36)	6	(31)	32	(21)	0.76
	<i>Median</i>				(19)		(15)		(12)	0.80
Large Independent										
Occidental Petroleum Corp.	OXY		65.96	81.71	(19)	3	(17)	12	(14)	0.90
EOG Resources, Inc.	EOG		71.43	94.33	(24)	0	(24)	12	(21)	0.91
ConocoPhillips	COP		45.93	70.11	(34)	4	(30)	30	(21)	0.78
Devon Energy Corporation	DVN	B	28.68	61.15	(53)	1	(52)	32	(34)	0.62
Marathon Oil Corporation	MRO	B	12.50	28.58	(56)	2	(54)	14	(36)	0.55
	<i>Median</i>				(34)		(30)		(21)	0.78
Small Independent										
Cimarex Energy Company	XEC		90.83	110.27	(18)	0	(17)	12	(15)	0.86
California Resources	CRC		1.98	5.77	(66)	1	(65)	18	(16)	0.71
Continental Resources (32%)	CLR	B	22.72	38.26	(41)	-	(41)	19	(27)	0.54
Whiting Petroleum Corporation	WLL	B	9.08	34.09	(73)	-	(73)	27	(41)	0.46
Range Resources	RRC		21.32	56.00	(62)	0	(62)	25	(43)	0.62
	<i>Median</i>				(62)		(62)		(27)	0.62
Income										
Sabine Royalty Trust	SBR		26.14	36.68	(29)	8	(20)	-	(20)	0.48
Cross Timbers Royalty Trust	CRT		12.53	18.07	(31)	7	(24)	-	(24)	0.40
Permian Basin RT	PBT		5.07	9.12	(44)	4	(41)	-	(41)	0.42
Dorchester Minerals, L.P.	DMLP	B	9.44	25.16	(62)	5	(58)	-	(58)	0.34
San Juan Basin Royalty Trust	SJT	B	4.16	13.97	(70)	2	(68)	-	(68)	0.35
	<i>Median</i>				(44)		(41)		(41)	0.40
Canada										
Canadian Oil Sands Limited	COSWF	B	6.08	9.20	(34)	2	(32)	6	(20)	0.54
Imperial Oil Limited (30%)	IMO		31.13	43.49	(28)	1	(28)	10	(22)	0.82
Cenovus Energy Inc.	CVE		12.58	20.95	(40)	3	(37)	4	(31)	0.62
EnCana Corporation	ECA		5.03	13.94	(64)	2	(62)	10	(36)	0.65
Birchcliff Energy Ltd.	BIREF	B	2.71	6.75	(60)	-	(60)	3	(39)	0.40
	<i>Median</i>				(40)		(37)		(31)	0.62
	<i>Grand Median</i>				(38)		(35)		(23)	0.62
Natural Gas (\$/mmbtu)			1.78	3.19	(44)					
Oil - West Texas Intermediate (\$/bbl)			34.64	53.69	(35)					
S&P 500			2,006	2,091	(4)					

Source: McDep LLC, Yahoo, CME Group, Bloomberg



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