

7% Distributions Inflation Protected CRT, DMLP, PBT, SBR, SJT

		Price						Oil	Dist.	
		(US\$/sh)	Market	Enterprise	EV/	EV/	PV/	Prod'n/	Yield	McDep
	Symbol/Rating	16-Feb	Cap	Value	Market	Ebitda	Ebitda	Ebitda	NTM	Ratio
		2018	(US\$m)	(\$mm)	Cap	NTM	NTM	(%)	(%)	(EV/PV)
San Juan Basin Royalty Trust	SJT	9.24	430	430	1.00	16.4	14.2	-	6.0	1.16
Permian Basin RT	PBT	9.43	440	440	1.00	12.8	13.6	80	7.4	0.94
Sabine Royalty Trust	SBR	43.70	640	640	1.00	15.3	17.5	67	6.5	0.87
Dorchester Minerals, L.P.	DMLP	15.80	510	510	1.00	9.8	14.9	81	9.8	0.66
Cross Timbers Royalty Trust	CRT	14.74	90	90	1.00	9.1	15.5	40	8.7	0.59
<i>Total or Median</i>			2,100	2,100	1.00	12.8	14.9	67	7.4	0.87

Summary and Recommendation

McDep Income Payers offer a median estimated cash distribution of 7.4% in 2018 depending a median two-thirds on oil price and one third on natural gas price. The distributions of McDep Income Payers increase or decrease with oil and gas price much as the cash payments of Treasury Inflation Protected Securities (TIPS) automatically adjust with changes in the Consumer Price Index. Our updated analysis highlights some distinguishing characteristics of the five issues in our coverage including comparative charts and individual financial and operating models. We also include valuation tables covering Income Payers and the remaining 16 stock in our oil and gas research (see pages 2 to 12). We feel good about owning each of the Income Payers in the diversified McDep portfolio that also includes TIPS.

Cross Timbers Royalty Trust (CRT) reported its highest monthly distribution in two years on February 16, breaking a comparatively flat trend in monthly payout for the past year (see chart [Monthly Distribution](#) on page 2). The increase coincides with a step up in natural gas volume (see chart [Monthly Underlying Natural Gas Volume](#) on page 3). We had expected higher natural gas volume than what was reported last year. The gain probably came in the San Juan Basin of New Mexico, but that detail won't be disclosed for several months. Top Line natural gas produced in New Mexico accounted for \$0.48 of \$1.01 a unit distribution in 2017 (see table [Operating and Financial Estimates](#) on page 4). CRT also has representation in Southeast New Mexico where drilling is thriving in the Northern Delaware portion of the Permian Basin.

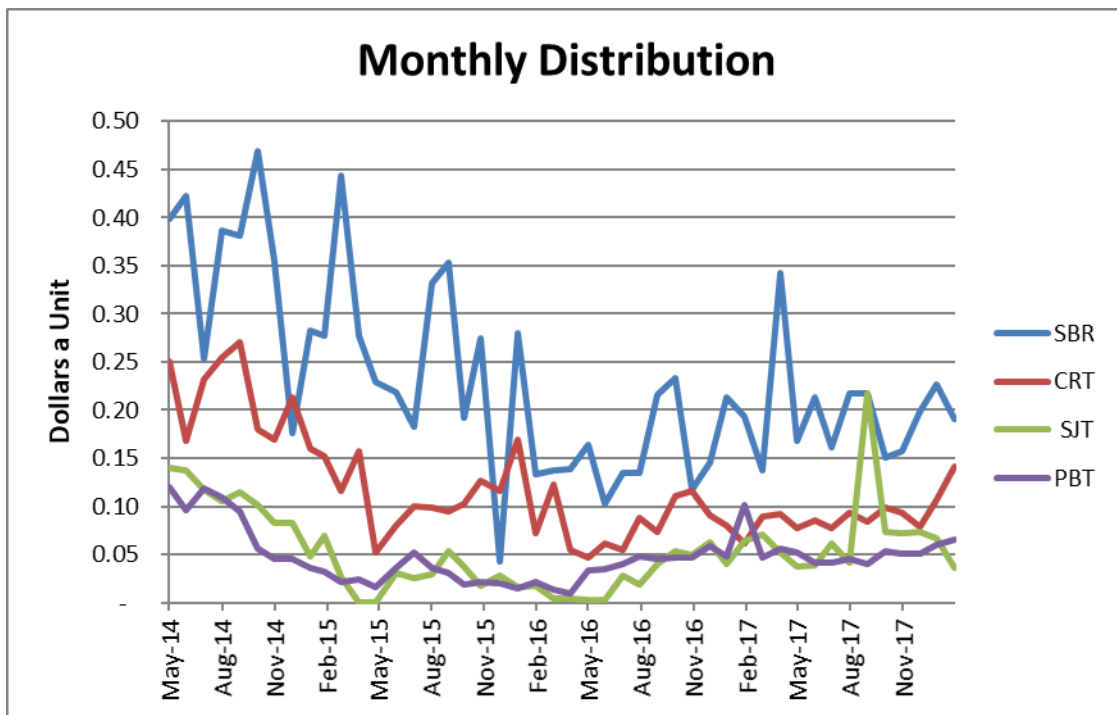
Dorchester Minerals, L.P. (DMLP)'s quarterly distribution declared on January 18 illustrates the higher level of payout we estimate in 2018 compared to 2017 (see chart [Quarterly Distribution](#) on page 3). The partnership participates in flourishing drilling in the Midland Basin portion of the Permian Basin and in the Bakken Trend of North Dakota.

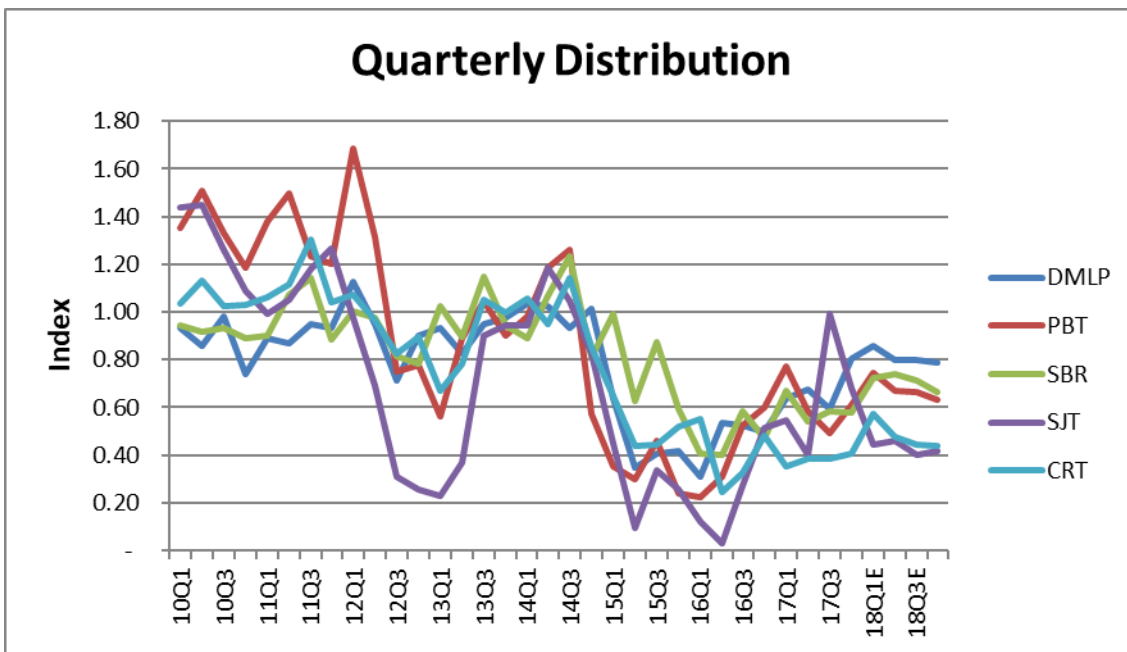
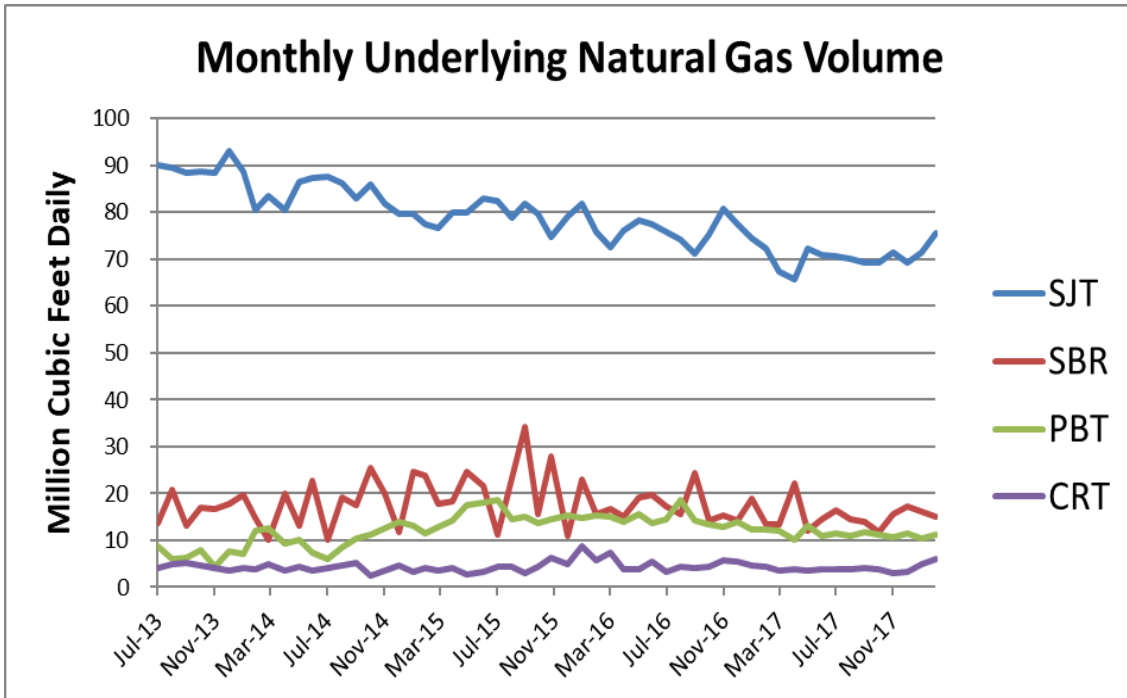
Permian Basin Royalty Trust (PBT)'s distribution is rising on oil price, dampened by volume decline (see table [Operating and Financial Estimates](#) on page 6).

Sabine Royalty Trust (SBR)'s multiple of Present Value to Ebitda (Cash Flow) is highest because of its complete concentration of Top Line royalties. Our cash flow multiple guidelines are 10 times for oil, 12 times for natural gas, Bottom Line; 15 times for oil, 18 times for natural gas, Top Line. The current multiple fluctuates because we seldom change Present Value while futures prices, which influence cash flow estimates, change continuously.

San Juan Basin Royalty Trust (SJT) has long-term appeal not captured well in our guideline multiples that are the main basis for the denominator of the McDep Ratio. Recall that a private equity operator, Hilcorp, has purchased a leading position in the San Juan Basin with the apparent intention of unlocking currently unrecognized value. At the same time there may be some fluctuation in monthly distribution as the new working interest owner of SJT properties brings its accounting to a current basis. The distribution declared on February 16 and reflecting December operations is the first to be up-to-date. On the positive side, volume was higher than estimated for most recent months. On the negative side, operating costs were higher. There may be a connection if operating costs include well workovers that boost production.

Kurt H. Wulff, CFA







Industry Idea

Analysis of Oil and Gas Stocks
February 20, 2018

Cross Timbers Royalty Trust										
Next Twelve Months Operating and Financial Performance										
	Q4	Year	Q3	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Next Twelve Months
	12/31/16	2016	9/30/17	12/31/17	2017	3/31/18	6/30/18	9/30/18	12/31/18	12/31/18
Volume										
Natural Gas (bcf)	0.51	2.05	0.39	0.34	1.54	0.52	0.46	0.46	0.47	1.91
Natural Gas (mmcf/d)	5.5	5.6	4.3	3.7	4.2	5.6	5.1	5.1	5.1	5.2
Days	92	366	91	92	365	92	90	91	92	365
Oil (mb)	53	225	50	57	211	52	48	50	50	199
Oil (mbd)	0.58	0.61	0.54	0.62	0.58	0.57	0.54	0.54	0.54	0.55
Days	92	366	92	92	365	92	89	92	92	365
Total (bcf)	0.83	3.40	0.69	0.68	2.80	0.83	0.75	0.76	0.77	3.10
Price										
Natural Gas (HH lagged three months)										
Henry Hub (\$/mmbtu)	2.81	2.28	3.18	2.99	3.12	2.93	2.98	2.63	2.72	2.82
Differential (%)	(22)	(55)	(31)	(37)	(33)	(63)	(33)	(33)	(33)	(41)
CRT (\$/mcf)	3.44	3.54	4.16	4.11	4.14	4.77	3.96	3.50	3.61	3.98
Oil (\$/bbl) (WTI lagged two months)										
WTI Cushing	46.60	41.85	46.78	49.85	49.54	59.42	61.67	60.71	59.10	60.22
CRT	42.23	38.12	43.75	44.01	45.16	52.93	54.93	54.07	52.64	53.62
Total (\$/mcf)	4.82	4.66	5.52	5.72	5.67	6.30	5.97	5.66	5.62	5.89
Revenue (\$mm)										
Natural Gas	1.76	7.25	1.62	1.41	6.36	2.45	1.82	1.63	1.70	7.59
Oil	2.24	8.58	2.19	2.51	9.53	2.75	2.64	2.69	2.61	10.69
Total	3.99	15.83	3.81	3.92	15.89	5.21	4.46	4.31	4.31	18.29
Cost (\$mm)										
Tax, transport & other	0.56	2.33	0.58	0.59	2.43	0.78	0.67	0.65	0.65	2.74
Production	1.11	4.46	1.22	1.20	4.53	1.32	1.19	1.22	1.23	4.96
Total	1.67	6.79	1.80	1.79	6.96	2.10	1.86	1.86	1.87	7.70
Cash flow (\$mm)										
Development	0.24	1.00	0.33	0.33	1.40	0.33	0.33	0.33	0.33	1.32
Excess or other	(0.06)	(0.38)	(0.17)	(0.17)	0.11					-
Net proceeds (\$mm)										
	2.15	8.42	1.86	1.96	7.42	2.77	2.27	2.12	2.11	9.27
Royalty income (\$mm)										
Royalty/Net proceeds	88%	90%	90%	89%	90%	89%	89%	89%	89%	88%
Administration & reserve	0.11	1.19	0.15	0.13	0.63	0.13	0.13	0.13	0.13	0.52
Distributable income (\$mm)										
	1.91	6.36	1.53	1.62	6.06	2.27	1.89	1.76	1.75	7.67
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	0.03	0.10	0.03	0.03	0.10					
TL OK	0.03	0.10	0.02	0.02	0.10					
TL NM	0.14	0.63	0.12	0.11	0.48					
BL TX	-	-	-	-	-					
BL OK	-	-	-	(0.00)	(0.00)					
Oil										
TL TX	0.08	0.28	0.07	0.07	0.25					
TL OK	0.03	0.12	0.03	0.02	0.11					
TL NM	0.01	0.03	0.01	0.01	0.03					
BL TX	-	-	-	-	-					
BL OK	-	-	-	0.03	0.03					
Administration	0.01	0.06	0.03	0.01	0.09					
Reserve and other	(0.00)	0.12	(0.00)	(0.00)	(0.00)					
Distribution (\$/unit)	0.32	1.06	0.25	0.27	1.01	0.38	0.32	0.29	0.29	1.28



Industry Idea

Analysis of Oil and Gas Stocks
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Dorchester Minerals, L.P.										
Operating and Financial Performance										
	Q4	Year	Q3	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Next Twelve Months
	12/31/16	2016	9/30/17	12/13/17	2017	3/31/18	6/30/18	9/30/18	12/31/18	12/31/18
TOP LINE										
Volume										
Natural Gas (mmcf)	8.8	8.9	10.5	10.4	10.0	10.3	10.2	10.1	10.0	10.1
Oil (mbd)	1.84	1.69	2.25	2.25	2.13	2.25	2.25	2.25	2.25	2.25
Price										
Henry Hub (\$/mmbtu)	2.98	2.46	2.99	2.93	3.11	2.98	2.63	2.72	2.81	2.78
WTI Cushing (\$/bbl)	49.21	43.31	48.20	55.40	50.94	62.38	61.16	59.64	58.14	60.33
Natural Gas (\$/mcf)	2.39	2.05	2.63	2.57	2.84	2.62	2.31	2.39	2.47	2.45
Oil (\$/bbl)	41.84	37.18	43.32	49.79	45.15	56.14	55.04	53.67	52.33	54.30
Revenue (\$mm)										
Natural Gas	1.9	6.7	2.5	2.5	10.3	2.5	2.1	2.2	2.3	9.1
Oil	7.1	23.1	9.0	10.3	35.0	11.4	11.3	11.1	10.8	44.6
Total Revenue	9.0	29.8	11.5	12.8	45.4	13.8	13.4	13.3	13.1	53.7
Expense (allocated)	1.4	5.3	2.2	2.2	8.4	2.2	2.2	2.2	2.2	8.7
Ebitda	7.6	24.4	9.3	10.6	37.0	11.7	11.2	11.1	10.9	44.9
BOTTOM LINE										
Volume										
Natural Gas (mmcf)	8.8	7.7	6.9	6.9	6.7	6.9	6.9	6.9	6.9	6.9
Oil (mbd)	0.80	1.04	0.65	0.68	0.72	0.71	0.74	0.78	0.81	0.76
Price										
Natural Gas (\$/mcf)	2.10	2.08	2.34	2.29	2.53	2.33	2.06	2.12	2.19	2.18
Oil (\$/bbl)	38.74	34.64	41.51	47.71	42.06	49.90	48.93	47.71	46.51	48.26
Revenue (\$mm)										
Natural Gas	1.7	5.8	1.5	1.4	6.1	1.4	1.3	1.3	1.4	5.4
Oil	2.9	13.2	2.5	3.0	11.1	3.2	3.3	3.4	3.5	13.4
Total Revenue	4.6	19.0	4.0	4.4	17.2	4.6	4.6	4.8	4.9	18.9
Expense (allocated)										
Partnership	0.7	3.5	0.6	0.6	2.4	0.6	0.6	0.6	0.6	2.5
Net Profits Interests	2.3	9.5	2.0	2.2	8.6	2.3	2.3	2.4	2.4	9.4
Total Expense	3.0	12.9	2.5	2.8	11.0	2.9	2.9	3.0	3.1	11.9
Ebitda	1.6	6.1	1.4	1.7	6.2	1.7	1.7	1.8	1.8	6.9
Development (estimated)	0.8	4.8	0.6	0.7	2.4	0.7	0.7	0.7	0.7	2.8
NET INCOME										
Top Line	7.6	24.4	9.3	10.6	37.0	11.7	11.2	11.1	10.9	44.9
Bottom Line	0.8	1.4	0.8	1.0	3.8	1.0	1.0	1.0	1.1	4.1
Lease Bonus and residual	(0.0)	(3.0)	0.3		(0.6)					-
Deprec., Deplet., & Amort.	1.9	8.5	2.8	2.8	9.2	2.8	2.8	2.8	2.8	11.2
Total Net Income	6.4	20.2	7.1	8.8	32.1	9.9	9.5	9.3	9.1	37.8
Units (mm)	30.7	30.7	32.3	32.3	31.5	32.3	32.3	32.3	32.3	32.3
Net Income Per Unit (\$)	0.21	0.66	0.22	0.27	1.02	0.31	0.29	0.29	0.28	1.17
DISTRIBUTION										
Top Line Revenue	8.1	26.2	10.0	11.6	41.8	13.3	12.9	12.8	12.6	51.5
Bottom Line Net Revenue	0.9	5.6	1.1	2.3	5.0	1.6	1.6	1.7	1.7	6.6
Lease Bonus and Other	0.2	2.8	0.2	0.6	2.8	0.6	0.1	0.1	0.1	0.9
Cash Expense	(1.8)	(7.1)	(2.1)	(2.2)	(8.3)	(2.2)	(2.2)	(2.2)	(2.2)	(8.8)
Distribution	7.4	27.5	9.2	12.5	41.5	13.3	12.4	12.4	12.2	50.2
Distribution Per Unit (\$)	0.24	0.90	0.28	0.39	1.30	0.41	0.38	0.38	0.38	1.56



Industry Idea

Analysis of Oil and Gas Stocks
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Permian Basin Royalty Trust										
Next Twelve Months Operating and Financial Estimates										
	Q4	Year	Q3	Q4	Year	Q1E	Q2E	Q3E	Q4E	Next Twelve Months
	12/31/16	2016	9/30/17	12/31/17	2017	3/31/18	6/30/18	9/30/18	12/31/18	12/31/18
TOP LINE										
Volume										
Natural Gas (mmcf)	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
Oil (mbd)	0.81	0.82	0.79	0.75	0.77	0.74	0.73	0.72	0.71	0.72
Price (cash lagged two months)										
Natural Gas (\$/mcf)	4.23	3.66	4.95	5.70	5.22	6.44	6.61	6.03	6.14	6.30
Oil (\$/bbl)	41.46	37.86	44.30	45.93	45.80	53.67	55.70	54.83	53.38	54.39
Revenue (\$mm)										
Natural Gas	0.4	1.3	0.4	0.5	1.6	0.5	0.5	0.5	0.5	1.9
Oil	3.1	11.4	3.2	3.2	12.9	3.6	3.6	3.6	3.5	14.4
Total Revenue	3.5	12.7	3.6	3.6	14.6	4.1	4.1	4.1	4.0	16.3
Expense										
Operating		-			-					
Production & Property taxes	0.6	1.9	0.5	0.5	1.2	(0.4)	0.4	0.4	0.4	0.8
Total Expense	0.6	1.9	0.5	0.5	1.2	(0.4)	0.4	0.4	0.4	0.8
Ebitda	2.9	10.9	3.1	3.1	13.4	4.6	3.7	3.7	3.6	15.5
Ebitda times 95%	2.8	10.3	2.9	3.0	12.7	4.3	3.5	3.5	3.4	14.7
BOTTOM LINE										
Volume										
Natural Gas (mmcf)	12.9	14.1	10.9	10.7	10.9	10.5	10.4	10.3	10.2	10.4
Oil (mbd)	2.20	2.37	1.78	1.97	1.89	1.84	1.82	1.80	1.78	1.81
Price (cash lagged two months)										
Natural Gas (\$/mcf)	2.75	2.19	3.02	3.12	3.04	3.47	3.56	3.25	3.31	3.40
Oil (\$/bbl)	42.53	37.92	43.46	46.53	45.92	54.85	56.93	56.04	54.55	55.58
Revenue (\$mm)										
Natural Gas	3.3	11.3	3.0	3.1	12.1	3.4	3.3	3.1	3.1	12.9
Oil	8.6	32.9	7.1	8.4	31.6	9.3	9.2	9.3	8.9	36.7
Total Revenue	11.8	44.2	10.1	11.5	43.7	12.6	12.5	12.4	12.1	49.6
Expense										
Operating	3.9	19.8	4.8	4.2	16.3	4.7	4.7	4.7	4.7	18.8
Production taxes	1.1	4.2	0.6	0.8	1.8	0.6	0.6	0.6	0.6	2.3
Total Expense	5.0	24.0	5.3	4.9	18.1	5.3	5.3	5.3	5.3	21.1
Ebitda	6.9	20.2	4.8	6.6	25.7	7.4	7.2	7.1	6.8	28.5
Development	0.7	4.0	0.6	0.6	1.8	0.6	0.6	0.6	0.6	2.5
(Ebitda-Dvlpmnt) times 75%	4.6	12.1	3.2	4.5	17.9	5.0	5.0	4.8	4.6	19.5
Excess Costs		0.9			-					-
CASH DISTRIBUTION										
Royalty Income (\$mm)										
Top Line	2.8	10.3	2.9	3.0	12.7	4.3	3.5	3.5	3.4	14.7
Bottom Line	4.6	11.3	3.2	4.5	17.9	5.0	5.0	4.8	4.6	19.5
Administration	0.3	2.3	0.2	0.2	1.3	0.4	0.4	0.4	0.4	1.8
Distributable Income (\$mm)	7.1	19.3	5.9	7.3	29.3	8.9	8.0	7.9	7.6	32.4
Units (millions)	47	47	47	47	47	47	47	47	47	47
Distribution (\$/unit)	0.15	0.42	0.13	0.16	0.63	0.19	0.17	0.17	0.16	0.69



Industry Idea

Analysis of Oil and Gas Stocks
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Sabine Royalty Trust										
Next Twelve Months Operating and Financial Performance										
	Q4	Year	Q3	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Next Twelve Months
	12/31/16	2016	9/30/17	12/31/17	2017	3/31/18	6/30/18	9/30/18	12/31/18	12/31/18
Volume										
Natural Gas (bcf)	1.49	6.37	1.25	1.55	5.69	1.45	1.44	1.47	1.50	5.85
Natural Gas (mmcf)	16.2	17.4	13.7	16.8	15.6	15.8	16.0	16.1	16.3	16.0
Days	92	366	91	92	365	92	90	91	92	365
Oil (mmb)	0.128	0.512	0.135	0.153	0.553	0.143	0.141	0.144	0.147	0.574
Oil (mbd)	1.39	1.40	1.47	1.66	1.51	1.55	1.57	1.58	1.60	1.57
Days	92	365	92	92	365	92	89	92	92	365
Total (bcfe)	2.26	9.44	2.06	2.47	9.01	2.31	2.28	2.33	2.38	9.30
Total (mmcf)	24.5	25.8	22.5	26.8	24.7	25.1	25.4	25.6	25.9	25.5
Price (Henry Hub natural gas lagged three months; WTI Cushing oil, two months)										
Henry Hub (\$/mmbtu)	2.81	2.28	3.18	2.99	3.12	2.93	2.98	2.63	2.72	2.82
Differential (%)	1	(2)	(3)	6	6	-	-	-	-	0
Trust (\$/mcf)	2.78	2.33	3.29	2.81	2.95	2.93	2.98	2.63	2.72	2.81
WTI Cushing (\$/bbl)	46.60	41.85	46.78	49.85	49.54	59.42	61.67	60.71	59.10	60.22
Differential	2.23	2.27	1.62	3.16	2.73	2.97	3.08	3.04	2.96	3.02
Trust (\$/bbl)	44.37	39.58	45.16	46.69	46.82	56.45	58.59	57.67	56.15	57.20
Total (\$/bcfe)	4.35	3.72	4.96	4.66	4.73	5.33	5.49	5.22	5.18	5.30
Revenue (\$mm)										
Natural Gas	4.1	14.8	4.1	4.3	16.8	4.3	4.3	3.9	4.1	16.5
Oil	5.7	20.3	6.1	7.1	25.9	8.0	8.3	8.3	8.2	32.9
Total	9.8	35.1	10.2	11.5	42.6	12.3	12.5	12.2	12.3	49.3
Expense										
Tax and other	2.3	5.3	1.1	2.4	5.4	1.1	1.1	1.1	2.0	5.3
General and administrative	0.6	2.6	0.6	0.6	2.5	0.6	0.6	0.6	0.6	2.4
Total	2.9	7.8	1.7	3.0	7.9	1.7	1.7	1.7	2.6	7.7
Ebitda	6.9	27.3	8.5	8.5	34.7	10.6	10.8	10.5	9.7	41.6
Ebit	6.9	27.3	8.5	8.5	34.7	10.6	10.8	10.5	9.7	41.6
Ebt	6.9	27.3	8.5	8.5	34.7	10.6	10.8	10.5	9.7	41.6
Distributable Income (\$mm)	6.9	27.3	8.5	8.5	34.7	10.6	10.8	10.5	9.7	41.6
Units (millions)	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
Distributable Income/Unit (\$)	0.47	1.87	0.58	0.58	2.38	0.73	0.74	0.72	0.67	2.85



Industry Idea

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San Juan Basin Royalty Trust										
Next Twelve Months Operating and Financial Estimates										
	Q3	Year	Q3	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Next Twelve Months
	9/30/16	2016	9/30/17	12/31/17	2017	3/31/18	6/30/18	9/30/18	12/31/18	12/31/18
Volume										
Natural gas (mmbtu)	7.6	31.1	7.2	7.2	28.8	7.5	7.3	7.5	7.5	29.9
Heat Content(btu/cf)	1,114	1,109	1,120	1,111	1,117	1,111	1,111	1,111	1,111	1,111
Natural gas (bcf)	6.8	28.0	6.5	6.5	25.8	6.8	6.6	6.8	6.8	26.9
Natural Gas (mmcf/d)	74.1	76.5	70.3	70.3	70.6	73.7	73.7	73.7	73.7	73.7
Days	92	366	92	92	365	92	89	92	92	365
Oil (mb)	0.02	0.07	0.02	0.02	0.06	0.02	0.02	0.02	0.02	0.07
Oil (mbd)	0.21	0.20	0.19	0.19	0.17	0.19	0.19	0.19	0.19	0.19
Total gas & oil (bcf)	6.9	28.4	6.6	6.6	26.2	6.9	6.7	6.9	6.9	27.3
Price										
Natural gas (\$/mmbtu) (Henry Hub lagged two months)										
Henry Hub (\$/mmbtu)	2.29	2.32	3.15	2.96	3.12	2.85	2.93	2.67	2.72	2.80
Differential (%)	26	26	28	21	23	23	20	22	22	22
Net to SJT (\$/mmbtu)	1.70	1.71	2.27	2.34	2.40	2.19	2.33	2.07	2.12	2.18
Natural gas (\$/mcf)	1.89	1.89	2.55	2.60	2.68	2.43	2.59	2.30	2.36	2.42
Oil (\$/bbl) (WTI Cushing lagged two months)										
WTI Cushing	46.80	41.85	46.78	49.85	49.54	59.42	61.67	60.71	59.10	60.22
SJT	33.94	30.01	35.09	37.39	36.75	44.08	45.75	45.03	43.84	44.67
Total gas & oil (\$/mcf)	1.96	1.94	2.60	2.66	2.73	2.50	2.67	2.38	2.43	2.49
Revenue (\$mm)										
Natural Gas	12.9	53.0	16.5	16.8	69.0	16.5	17.0	15.6	16.0	65.0
Oil	0.7	2.2	0.6	0.6	2.3	0.8	0.8	0.8	0.7	3.0
Total	13.6	55.3	17.1	17.4	71.3	17.2	17.7	16.4	16.7	68.1
Cost (\$mm)										
Severance tax	1.5	6.4	1.9	1.8	7.6	2.0	2.0	1.9	1.9	7.8
Operating	6.1	26.1	5.9	4.3	22.8	6.0	6.0	6.0	6.0	23.9
Total	7.6	32.5	7.8	6.2	30.4	8.0	8.0	7.9	7.9	31.7
Cash flow (\$mm)										
Development	0.1	1.4	(0.6)	0.0	(0.4)	0.3	0.1	0.1	0.1	0.6
Net proceeds (\$mm)										
Development	5.9	21.4	9.9	11.3	41.3	8.9	9.6	8.4	8.7	35.7
Royalty income (\$mm)										
Royalty/Net proceeds	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Administration	0.4	2.2	0.3	(1.7)	(0.4)	0.0	0.3	0.3	0.3	0.9
One-time		-	(7.7)		(7.7)					-
Distributable income (\$mm)										
Development	4.0	13.9	14.8	10.2	39.1	6.7	6.9	6.0	6.2	25.8
Units (millions)										
Development	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6
Per unit	0.09	0.30	0.32	0.22	0.84	0.14	0.15	0.13	0.13	0.55



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Table 1
McDep Energy Stocks
Ranked by McDep Ratio

		Price (US\$/sh)	Market Cap (US\$mm)	Enterprise Value (\$mm)	EV/ Market Cap	EV/ Ebitda NTM	PV/ Ebitda NTM	Oil Prod'n/ Ebitda (%)	Dist. Yield NTM (%)	McDep Ratio (EV/PV)
	Symbol/Rating	16-Feb 2018								
Integrated										
Exxon Mobil Corporation	XOM	76.54	327,000	419,000	1.28	7.7	9.5	49	4.0	0.81
Chevron Corporation	CVX	112.14	214,000	278,000	1.30	7.1	9.0	63	3.9	0.79
Suncor Energy	SU	34.53	57,000	76,000	1.33	6.6	8.8	81	3.3	0.75
Royal Dutch Shell	RDS-B	64.90	271,000	389,000	1.44	6.5	8.9	48	5.8	0.73
<i>Total or Median</i>			869,000	1,162,000	1.32	6.9	9.0	56	3.9	0.77
Large Independent										
EOG Resources, Inc.	EOG	107.64	62,300	69,500	1.12	10.0	10.2	91	0.6	0.98
Occidental Petroleum Corp.	OXY	68.16	52,200	65,800	1.26	8.2	8.8	76	4.5	0.93
Pioneer Natural Resources	PXD	178.79	30,400	32,700	1.08	8.9	9.9	93	0.1	0.90
Hess Corporation	HES	45.65	14,300	22,400	1.56	10.3	11.6	89	2.2	0.88
ConocoPhillips	COP	54.65	66,000	89,000	1.36	6.8	9.1	76	2.1	0.75
Marathon Oil Corporation	MRO	15.65	13,300	20,400	1.53	5.9	8.1	88	1.3	0.72
Devon Energy Corporation	DVN	34.11	18,000	25,700	1.43	5.9	9.1	78	0.7	0.65
<i>Total or Median</i>			256,500	326,000	1.36	8.2	9.1	88	1.3	0.88
Small Independent										
Continental Resources (32%)	CLR	53.33	6,400	8,500	1.34	8.2	8.9	84	-	0.91
California Resources	CRC	19.17	800	6,900	8.4	7.6	9.0	93	-	0.84
Cimarex Energy Company	XEC	98.73	9,400	11,000	1.16	6.8	9.3	79	0.3	0.74
Whiting Petroleum Corporation	WLL	23.33	2,100	5,400	2.53	4.9	8.9	96	-	0.55
Range Resources	RRC	13.28	3,300	7,800	2.41	6.4	11.7	44	0.6	0.54
Birchcliff Energy Ltd.	BIREF	2.46	700	1,300	1.92	4.9	12.8	46	3.2	0.39
<i>Total or Median</i>			23,000	41,000	2.16	6.6	9.2	81	0.2	0.64
Income										
San Juan Basin Royalty Trust	SJT	9.24	430	430	1.00	16.4	14.2	-	6.0	1.16
Permian Basin RT	PBT	9.43	440	440	1.00	12.8	13.6	80	7.4	0.94
Sabine Royalty Trust	SBR	43.70	640	640	1.00	15.3	17.5	67	6.5	0.87
Dorchester Minerals, L.P.	DMLP	15.80	510	510	1.00	9.8	14.9	81	9.8	0.66
Cross Timbers Royalty Trust	CRT	14.74	90	90	1.00	9.1	15.5	40	8.7	0.59
<i>Total or Median</i>			2,100	2,100	1.00	12.8	14.9	67	7.4	0.87

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation, amort.

Estimated Ebitda (cash flow) tied to NTM futures prices for oil and natural gas. NTM = Next Twelve Months ending 12/31/18.

Estimated Present Value (PV) presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses. For historical research see www.mcdep.com



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	Symbol/Rating	Price	Upstream NTM				Down-	Total	Distrib./ Ebitda (%)	Distrib. NTM (\$/sh)
		(US\$/sh)	Volume (mmboe)	Equiv. Price (\$/boe)	Ebitda Margin (%)	Ebitda (\$/boe)	stream Uplift (\$/boe)	Ebitda NTM (\$mm)		
		16-Feb 2018								
Integrated										
Royal Dutch Shell	RDS-B	64.90	1339	43.03	72	31.10	13.74	41,639	26	3.76
Exxon Mobil Corporation	XOM	76.54	1469	45.02	56	25.20	11.98	37,019	24	3.08
Chevron Corporation	CVX	112.14	1024	47.30	64	30.20	7.81	30,922	21	4.32
Suncor Energy	SU	34.53	277	57.67	59	33.76	8.04	9,364	16	1.15
	<i>Total or Median</i>		<i>4109</i>	<i>46.16</i>	<i>61</i>	<i>30.65</i>	<i>10.01</i>	<i>118,945</i>	<i>23</i>	
Large Independent										
ConocoPhillips	COP	54.65	444	45.44	65	29.60	0.00	13,133	10	1.14
EOG Resources, Inc.	EOG	107.64	237	41.66	70	29.16	0.00	6,923	6	0.67
Occidental Petroleum Corp.	OXY	68.16	238	43.18	63	27.20	6.73	6,464	29	3.08
Devon Energy Corporation	DVN	34.11	192	31.89	64	20.50	2.17	3,940	3	0.24
Pioneer Natural Resources	PXD	178.79	121	41.68	73	30.30	0.00	3,657	1	0.16
Marathon Oil Corporation	MRO	15.65	153	35.69	64	22.70	0.00	3,476	5	0.20
Hess Corporation	HES	45.65	89	42.11	58	24.40	0.00	2,184	14	1.00
	<i>Total or Median</i>		<i>1474</i>	<i>41.68</i>	<i>64</i>	<i>27.20</i>	<i>0.00</i>	<i>39,778</i>	<i>6</i>	
Small Independent										
Cimarex Energy Company	XEC	98.73	78	30.75	67	20.50	0.00	1,607	2	0.32
Range Resources	RRC	13.28	133	18.30	50	9.20	0.00	1,226	2	0.08
Whiting Petroleum Corporation	WLL	23.33	45	39.56	62	24.60	0.00	1,097	-	-
Continental Resources (32%)	CLR	53.33	34	38.20	79	30.30	0.00	1,040	-	-
California Resources	CRC	19.17	47	46.32	42	19.50	0.00	913	-	-
Birchcliff Energy Ltd.	BIREF	2.46	22	17.18	66	11.40	0.00	256	8	0.08
	<i>Total or Median</i>		<i>360</i>	<i>34.48</i>	<i>64</i>	<i>20.00</i>	<i>0.00</i>	<i>6,139</i>	<i>1</i>	
Income										
Dorchester Minerals, L.P.	DMLP	15.80	2.14	33.89	72	24.24	0.00	52	97	1.56
Sabine Royalty Trust	SBR	43.70	1.55	31.82	84	26.83	0.00	42	100	2.85
Permian Basin RT	PBT	9.43	1.29	40.99	65	26.49	0.00	34	94	0.69
San Juan Basin Royalty Trust	SJT	9.24	3.29	14.96	53	7.99	0.00	26	98	0.55
Cross Timbers Royalty Trust	CRT	14.74	0.47	35.35	58	20.46	0.00	10	79	1.28
	<i>Total or Median</i>		<i>9</i>	<i>33.89</i>	<i>65</i>	<i>24.24</i>	<i>0.00</i>	<i>164</i>	<i>97</i>	

For historical research see www.mcdep.com



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Table 3
McDep Energy Stocks
Net Present Value Per Share

		<i>Price</i> <i>(US\$/sh)</i>	<i>Shares</i>	<i>Debt</i>	<i>P/E</i>	<i>Devel.</i> <i>Resrvs/</i> <i>Prod</i>	<i>Undev/</i> <i>Devel.</i> <i>Resrvs</i>	<i>Nat</i> <i>Gas/</i> <i>Ebitda</i>	<i>Top</i> <i>Line/</i> <i>Ebitda</i>	<i>Net</i> <i>Present</i> <i>Value</i>	
	<i>Symbol/Rating</i>	<i>16-Feb</i> <i>2018</i>	<i>(mm)</i>	<i>(\$mm)</i>	<i>NTM</i>	<i>NTM</i>	<i>(%)</i>	<i>(%)</i>	<i>(%)</i>	<i>(US\$/sh)</i>	
Integrated											
	Chevron Corporation	CVX	112.14	1,906	64,410	14	7.3	48	21	150.00	
	Exxon Mobil Corporation	XOM	76.54	4,270	91,771	13	9.4	45	28	100.00	
	Royal Dutch Shell	RDS-B	64.90	4,177	118,194	12	7.3	34	31	100.00	
	Suncor Energy	SU	34.53	1,655	18,940	11	9.9	80		50.00	
	<i>Median</i>						8.4				
Large Independent											
	Pioneer Natural Resources	PXD	178.79	170	2,300	24	5.6	8	7	200.00	
	EOG Resources, Inc.	EOG	107.64	579	7,214	29	4.6	43	9	110.00	
	Occidental Petroleum Corp.	OXY	68.16	766	13,600	20	8.1	35	5	75.00	
	ConocoPhillips	COP	54.65	1,198	23,479	14	9.2	25	24	80.00	
	Devon Energy Corporation	DVN	34.11	529	7,746	53	7.7	25	14	60.00	
	Hess Corporation	HES	45.65	314	8,078		8.9	39	11	55.00	
	Marathon Oil Corporation	MRO	15.65	850	7,073	16	5.6	65	12	25.00	
	<i>Median</i>						7.7				
Small Independent											
	Cimarex Energy Company	XEC	98.73	95	1,552	11	5.3	35	21	140.00	
	Whiting Petroleum Corporation	WLL	23.33	91	3,242	14	8.0	111	4	72.00	
	Continental Resources (32%)	CLR	53.33	119	2,134	28	4.8	146	16	60.00	
	California Resources	CRC	19.17	43	6,100		8.7	40	7	50.00	
	Range Resources	RRC	13.28	245	4,575	10	8.5	78	56	40.00	
	Birchcliff Energy Ltd.	BIREF	2.46	268	606	19	7.2	228	54	10.00	
	<i>Median</i>						7.6				
Income											
	Sabine Royalty Trust	SBR	43.70	15	-	15	10.6	4	33	100	50.00
	Cross Timbers Royalty Trust	CRT	14.74	6	-	12	8.0	-	60	79	25.00
	Dorchester Minerals, L.P.	DMLP	15.80	32	-	13	6.5	-	19	87	24.00
	Permian Basin RT	PBT	9.43	47	-	14	8.8	14	20	41	10.00
	San Juan Basin Royalty Trust	SJT	9.24	47	-	17	9.5	-	99	-	8.00
	<i>Median</i>						8.8				
P/E = Stock Price to Earnings. For historical research see www.mcdep.com .											



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Table 4										
McDep Energy Stocks										
Total Return Year-to-Date 2018										
Ranked by Unlevered Total Return										
		Price (\$/sh)	Price (\$/sh)	Price Change (%)	Cash Distrib. (%)	Equity Total Return (%)	Unlevered Total Return (\$/sh)	Unlevered Total Return (%)	McDep Ratio	
	Symbol/Rati	16-Feb 2018	29-Dec 2017							
Integrated										
	Royal Dutch Shell	RDS-B	64.90	68.29	(5)	1	(4)	28	(3)	0.73
	Suncor Energy	SU	34.53	36.72	(6)	-	(6)	11	(5)	0.75
	Exxon Mobil Corporation	XOM	76.54	83.64	(8)	1	(8)	21	(6)	0.81
	Chevron Corporation	CVX	112.14	125.19	(10)	1	(10)	34	(8)	0.79
	<i>Median</i>				(7)		(7)		(5)	0.77
Large Independent										
	Pioneer Natural Resources	PXD	178.79	172.85	3	-	3	14	3	0.90
	ConocoPhillips	COP	54.65	54.89	(0)	1	0	20	0	0.75
	EOG Resources, Inc.	EOG	107.64	107.91	(0)	0	(0)	12	(0)	0.98
	Hess Corporation	HES	45.65	47.47	(4)	-	(4)	26	(2)	0.88
	Marathon Oil Corporation	MRO	15.65	16.93	(8)	0	(7)	8	(5)	0.72
	Occidental Petroleum Corp.	OXY	68.16	73.66	(7)	-	(7)	18	(6)	0.93
	Devon Energy Corporation	DVN	34.11	41.40	(18)	-	(18)	15	(13)	0.65
	<i>Median</i>				(4)		(4)		(2)	0.88
Small Independent										
	Continental Resources (32%)	CLR	53.33	52.97	1	-	1	18	1	0.91
	California Resources	CRC	19.17	19.44	(1)	-	(1)	143	(0)	0.84
	Whiting Petroleum Corporation	WLL	23.33	26.48	(12)	-	(12)	36	(5)	0.55
	Range Resources	RRC	13.28	17.06	(22)	-	(22)	19	(11)	0.54
	Cimarex Energy Company	XEC	98.73	122.01	(19)	0	(19)	16	(17)	0.74
	Birchcliff Energy Ltd.	BIREF	2.46	3.50	(30)	-	(30)	2	(18)	0.39
	<i>Median</i>				(15)		(15)		(8)	0.64
Income										
	San Juan Basin Royalty Trust	SJT	9.24	8.24	12	2	14	-	14	1.16
	Permian Basin RT	PBT	9.43	8.87	6	1	8	-	8	0.94
	Dorchester Minerals, L.P.	DMLP	15.80	15.20	4	3	7	-	7	0.66
	Cross Timbers Royalty Trust	CRT	14.74	14.69	0	1	2	-	2	0.59
	Sabine Royalty Trust	SBR	43.70	44.60	(2)	1	(1)	-	(1)	0.87
	<i>Median</i>				4		7		7	0.87
	<i>Grand Median</i>				(4)		(5)		(3)	0.77
	Natural Gas (\$/mmbtu)		2.57	2.95	(13)					
	Oil - West Texas Intermediate (\$/bbl)		61.65	60.09	3					
	Total Stock Market - U.S.	VTI	140.11	137.25	2					
	Developed Markets - ex US	VEA	45.39	44.86	1					
	Emerging Markets	VWO	48.30	45.91	5					
Source: McDep LLC, Yahoo, CME Group, Bloomberg					For historical research see www.mcdep.com					



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