

## Meter Reader

A Weekly Analysis

August 21, 2000

## Hedge Your Winter Heating Bill

Currently among investments concentrated on long-life natural gas with low financial and management risk, **San Juan Basin Royalty Trust** ranks most undervalued followed by **Cross Timbers Royalty Trust, Hugoton Royalty Trust** and **Dorchester Hugoton, Ltd.** (see table). Weighing the week's changes in prices of oil, natural gas and money, our calculated asset values regain 5% while our projected distributions for the next year gain another 1%. Meanwhile, our annual natural gas bill here in Massachusetts last year was about \$3000 for about 400 mmbtu of natural gas. At the same time the marker price is higher by \$1.40 per mmbtu for the next twelve months. As a result we can expect to pay some \$560 more for gas in the next year than otherwise. Noticing that SJT is selling for about \$3 per unit less than present value, we can capture unrecognized value equal to the expected increase in our natural gas bill by owning less than 200 units of SJT. Of course that conclusion depends on all the assumptions in the calculation. Nonetheless, we believe there is still time to profit from natural gas investments.

Symbol		Price (\$/unit)		Market Cap (mm)	Debt (\$mm)	Net Present Value (\$/unit)		McDep Ratio
		18-Aug	2000			14.60	0.94	
Dorchester Hugoton, Ltd.	DHULZ	13.75	10.7	148	-	14.60	0.94	
Hugoton RT (42.5%)	HGT	12.50	17.0	213	-	15.10	0.83	
Cross Timbers Royalty Trust	CRT	14.44	6.0	87	-	18.30	0.79	
San Juan Basin Royalty Trust	SJT	10.06	46.6	469	-	13.80	0.73	

Our computations for the next four quarters point to Dynamic Distribution Yields exceeding 17% in cash (see table). The trustee's disclosure last week that the operator of the properties held by San Juan Basin Royalty Trust would spend less on development boosted the projected distribution by a few pennies per unit.

Symbol		Price (\$/unit)		Distribution (\$/unit)		Distribution Yield (Percent per year)		Taxable Cash Equivalent	Taxable Equivalent
		18-Aug	2000	Cash	Equivalent	Cash	Equivalent		
Dorchester Hugoton, Ltd.	DHULZ	13.75	1.41	1.95	10.3	14.2			
Hugoton RT (42.5%)	HGT	12.50	1.96	2.32	15.7	18.6			
Cross Timbers Royalty Trust	CRT	14.44	2.32	2.99	16.1	20.7			
San Juan Basin Royalty Trust	SJT	10.06	1.73	2.40	17.2	23.9			

New disclosures to expect in the next week are the monthly distributions for royalty trusts. Look for \$0.18, \$0.15, and \$0.13 per unit respectively for CRT, HGT and SJT. There may be a positive volume surprise for HGT, but we have not had the confidence to project higher levels.

Kurt H. Wulff, CFA

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**Table CRT-1**  
**Cross Timbers Royalty Trust**  
**Present Value**

Volume Decline (%/yr):	9	Price Escalation post 2007 (%/yr):	2.7
Volume Enhancement (%/yr):	7	Discount Rate (%/yr):	7.3
		U.S. TIPS Inflation (%/yr):	1.9
		U.S. 10 Year Yield (%/yr):	5.9

Year	Natural Gas Volume			Price (\$/mcf)	Revenue (\$mm)	Oil Net (\$mm)	Distribution (\$/unit)	Tax Credit (\$/unit)	Disc Factor	Present Value (\$/unit)
	Basic (bcf)	Enhanced (bcf)	Total (bcf)							
<b>Total 2000 through 2029</b>										
	31	24	55	3.75	206	11	217	36.13	0.37	0.50
1999	3.3		3.3	1.99	6.5	0.0	6.6	1.09	0.16	
2000	2.8	0.0	2.8	3.45	9.6	2.0	11.6	1.93	0.12	0.97
2001	2.5	0.2	2.7	4.36	11.9	2.1	14.0	2.34	0.12	0.90
2002	2.3	0.4	2.7	3.74	10.1	1.3	11.4	1.90	0.12	0.84
2003	2.1	0.5	2.7	3.37	9.0	1.0	10.0	1.67		0.78
2004	2.0	0.7	2.6	3.31	8.7	0.8	9.5	1.58		0.73
2005	1.8	0.8	2.6	3.22	8.3	0.7	9.0	1.50		0.68
2006	1.6	0.9	2.5	3.13	8.0	0.5	8.5	1.42		0.63
2007	1.5	1.0	2.5	3.07	7.7	0.5	8.2	1.36		0.59
2008	1.4	1.1	2.5	3.16	7.8	0.4	8.2	1.37		0.55
2009	1.3	1.2	2.4	3.24	7.9	0.4	8.2	1.37		0.51
2010	1.2	1.2	2.4	3.33	7.9	0.3	8.2	1.37		0.48
2011	1.1	1.3	2.3	3.42	8.0	0.2	8.3	1.38		0.44
2012	1.0	1.3	2.3	3.51	8.1	0.2	8.3	1.38		0.41
2013	0.9	1.4	2.3	3.60	8.2	0.1	8.3	1.39		0.39
2014	0.8	1.4	2.2	3.70	8.3	0.1	8.3	1.39		0.36
2015	0.8	1.3	2.0	3.80	7.7		7.7	1.29		0.34
2016	0.7	1.2	1.9	3.90	7.3		7.3	1.21		0.31
2017	0.6	1.1	1.7	4.01	6.8		6.8	1.13		0.29
2018	0.6	1.0	1.5	4.11	6.4		6.4	1.06		0.27
2019	0.5	0.9	1.4	4.23	6.0		6.0	1.00		0.25
2020	0.5	0.8	1.3	4.34	5.6		5.6	0.93		0.24
2021	0.5	0.7	1.2	4.46	5.3		5.3	0.88		0.22
2022	0.4	0.7	1.1	4.58	4.9		4.9	0.82		0.20
2023	0.4	0.6	1.0	4.70	4.6		4.6	0.77		0.19
2024	0.3	0.5	0.9	4.83	4.3		4.3	0.72		0.18
2025	0.3	0.5	0.8	4.96	4.1		4.1	0.68		0.17
2026	0.3	0.5	0.7	5.09	3.8		3.8	0.63		0.15
2027	0.3	0.4	0.7	5.23	3.6		3.6	0.59		0.14
2028	0.2	0.4	0.6	5.37	3.3		3.3	0.56		0.13
2029	0.2	0.3	0.6	5.51	3.1		3.1	0.52		0.12

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Table CRT-2  
Cross Timbers Royalty Trust  
Distributable Income Model

	Q2 6/30/99	Q3 9/30/99	Q4 12/31/99	Year 1999	Q1 3/31/00	Q2 6/30/00	Q3E 9/30/00	Q4E 12/31/00	Year 2000E	Q1E 3/31/01	Q2E 6/30/01
<b>Highlights</b>											
Tax credit (\$mm)											
Per unit	0.04	0.04	0.03	0.16	0.03	0.03	0.03	0.03	0.12	0.03	0.03
Distributable Income (\$mm)	1.17	1.66	2.28	6.55	2.30	2.42	3.22	3.63	11.57	3.72	3.38
Per unit	0.20	0.28	0.38	1.09	0.38	0.40	0.54	0.60	1.93	0.62	0.56
Units (millions)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
<b>Volume</b>											
Natural Gas (bcf)	0.82	0.94	0.97	3.64	0.80	0.77	0.76	0.76	3.09	0.76	0.73
Natural Gas (mmcfd)	9.1	10.3	10.6	10.0	8.7	8.5	8.4	8.3	8.5	8.2	8.1
Days	90	91	92	365	92	91	91	92	366	92	90
Oil (mb)	87	79	94	349	88	81	85	83	337	81	78
Oil (mbd)	0.98	0.86	1.03	0.96	0.96	0.90	0.92	0.90	0.92	0.88	0.87
Days	89	92	92	365	92	90	92	92	366	92	90
Total (bcf)	1.34	1.41	1.54	5.73	1.33	1.26	1.27	1.26	5.12	1.24	1.20
<b>Price</b>											
Natural Gas (HH lagged three months)											
Henry Hub (\$/mmbtu)	1.79	2.22	2.52	2.12	2.45	2.62	3.63	4.22	3.23	4.53	4.33
CRT (\$/mcf)	1.79	2.02	2.39	1.99	2.72	2.88	3.83	4.42	3.45	4.73	4.53
Oil (\$/bbl) (WTI lagged two months)											
WTI Cushing	14.67	18.57	22.59	17.02	26.07	28.33	30.12	31.51	29.00	30.46	28.91
CRT	12.28	16.34	20.21	14.89	24.20	26.86	28.12	29.51	27.13	28.46	26.91
Total (\$/mcf)	1.89	2.26	2.75	2.17	3.25	3.50	4.17	4.61	3.88	4.74	4.51
<b>Revenue (\$mm)</b>											
Natural Gas	1.46	1.89	2.33	7.26	2.17	2.22	2.92	3.37	10.68	3.58	3.32
Oil	1.07	1.30	1.91	5.19	2.14	2.18	2.38	2.45	9.15	2.32	2.10
Total	2.53	3.19	4.23	12.45	4.31	4.40	5.31	5.83	19.84	5.90	5.42
<b>Cost (\$mm)</b>											
Tax, transport & other	0.40	0.48	0.50	1.61	0.58	0.61	0.74	0.82	2.75	0.83	0.76
Production	0.63	0.60	0.60	2.39	0.59	0.65	0.64	0.62	2.50	0.61	0.59
Total	1.02	1.08	1.09	4.00	1.17	1.26	1.38	1.44	5.25	1.44	1.34
<b>Cash flow (\$mm)</b>											
Development	0.08	0.18	0.12	0.74	0.21	0.13	0.17	0.17	0.69	0.17	0.17
Excess	(0.06)	(0.07)		(0.43)					-		
Recovery of excess	0.14	0.10	0.40	0.63	0.24	0.15			0.38		
<b>Net proceeds (\$mm)</b>	<b>1.35</b>	<b>1.91</b>	<b>2.62</b>	<b>7.52</b>	<b>2.68</b>	<b>2.86</b>	<b>3.76</b>	<b>4.22</b>	<b>13.52</b>	<b>4.29</b>	<b>3.90</b>
<b>Royalty income (\$mm)</b>											
Royalty/Net proceeds	90%	89%	88%	89%	88%	87%	87%	87%	87%	88%	88%
Administration	0.04	0.04	0.02	0.14	0.05	0.05	0.04	0.04	0.18	0.04	0.04
<b>Distributable income (\$mm)</b>	<b>1.17</b>	<b>1.66</b>	<b>2.28</b>	<b>6.55</b>	<b>2.30</b>	<b>2.42</b>	<b>3.22</b>	<b>3.63</b>	<b>11.57</b>	<b>3.72</b>	<b>3.38</b>
<b>Modeling ratios</b>											
Tax and other/revenue	0.16	0.15	0.12	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14
Production exp (\$/bbl)	7.20	7.56	6.31	6.86	6.71	8.00	7.50	7.50	7.41	7.50	7.50
<b>Accounting items</b>											
Interest on excess costs	0.02	0.01	0.01	0.06							
Cumulative excess costs	0.77	0.76	0.37	0.37	0.15						

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**Table DHULZ-1**  
**Dorchester Hugoton, Ltd.**  
**Present Value**

Volume Decline (%/yr):	11	Price Escalation Post 2006 (%/yr):	2.7
Volume Enhancement (%/yr):	8	Discount rate (%/yr):	7.3
Capex/Cash Flow (%):	13	U.S. TIPS Inflation (%/yr):	1.9
Variable Cost (%):	15	U.S. 10 Year Yield (%/yr):	5.9

Year	Volume		Total (bcf)	Price (\$/mcf)	Revenue (\$mm)	Fixed Cost (\$mm)	Var Cost (\$mm)	Cap Ex (\$mm)	Free Cash Flow (\$mm) (\$/unit)	Disc Factor	Present Value (\$/unit)
	Basic (bcf)	Enhanced (bcf)									
<b>Total 2000 through 2029</b>											
	61	56	117	3.96	463	75	69	27	292	26.87	0.54
1999	6.9		6.9	2.30	15.8	2.1	2.4	0.4	10.9	1.01	
					Other assets, net				10.4	0.96	1.00
2000	6.4	0.2	6.6	3.71	24.6	2.5	3.7	0.5	17.9	1.65	0.97
2001	5.7	0.8	6.4	3.83	24.7	2.5	3.7	2.4	16.1	1.48	0.90
2002	5.1	1.2	6.3	3.37	21.2	2.5	3.2	2.0	13.5	1.25	0.84
2003	4.6	1.6	6.2	3.04	18.8	2.5	2.8	1.8	11.7	1.08	0.78
2004	4.2	1.9	6.0	3.51	21.2	2.5	3.2	2.0	13.5	1.24	0.73
2005	3.7	2.2	5.9	3.42	20.2	2.5	3.0	1.9	12.7	1.17	0.68
2006	3.4	2.4	5.8	3.35	19.3	2.5	2.9	1.8	12.1	1.12	0.63
2007	3.0	2.6	5.6	3.44	19.4	2.5	2.9	1.8	12.2	1.12	0.59
2008	2.7	2.8	5.5	3.53	19.4	2.5	2.9	1.8	12.2	1.12	0.55
2009	2.5	2.9	5.4	3.63	19.4	2.5	2.9	1.8	12.2	1.13	0.51
2010	2.2	3.0	5.2	3.73	19.5	2.5	2.9	1.8	12.2	1.13	0.48
2011	2.0	3.1	5.1	3.83	19.5	2.5	2.9	1.8	12.2	1.13	0.44
2012	1.8	3.2	5.0	3.93	19.5	2.5	2.9	1.8	12.2	1.13	0.41
2013	1.6	3.2	4.8	4.03	19.5	2.5	2.9	1.8	12.2	1.13	0.39
2014	1.5	3.2	4.7	4.14	19.5	2.5	2.9	1.8	12.2	1.13	0.36
2015	1.3	2.9	4.2	4.25	17.9	2.5	2.7		12.7	1.17	0.34
2016	1.2	2.6	3.8	4.37	16.4	2.5	2.5		11.4	1.06	0.31
2017	1.1	2.3	3.4	4.49	15.1	2.5	2.3		10.3	0.95	0.29
2018	1.0	2.0	3.0	4.61	13.8	2.5	2.1		9.2	0.85	0.27
2019	0.9	1.8	2.7	4.73	12.7	2.5	1.9		8.3	0.76	0.25
2020	0.8	1.6	2.4	4.86	11.6	2.5	1.7		7.4	0.68	0.24
2021	0.7	1.4	2.1	4.99	10.7	2.5	1.6		6.6	0.61	0.22
2022	0.6	1.3	1.9	5.12	9.8	2.5	1.5		5.8	0.54	0.20
2023	0.6	1.1	1.7	5.26	9.0	2.5	1.3		5.1	0.47	0.19
2024	0.5	1.0	1.5	5.40	8.2	2.5	1.2		4.5	0.42	0.18
2025	0.5	0.9	1.4	5.55	7.6	2.5	1.1		3.9	0.36	0.17
2026	0.4	0.8	1.2	5.70	6.9	2.5	1.0		3.4	0.31	0.15
2027	0.4	0.7	1.1	5.85	6.4	2.5	1.0		2.9	0.27	0.14
2028	0.3	0.6	1.0	6.01	5.9	2.5	0.9		2.5	0.23	0.13
2029	0.3	0.6	0.9	6.17	5.4	2.5	0.8		2.1	0.19	0.12

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**Table DHULZ-2**  
**Dorchester Hugoton, Ltd.**  
**Income Model**

	Q2 6/30/99	Q3 9/30/99	Q4 12/31/99	Year 1999	Q1 3/31/00	Q2 6/30/00	Q3E 9/30/00	Q4E 12/31/00	Year 2000E	Q1E 3/31/01	Q2E 6/30/01
<b>Highlights</b>											
Revenue (\$mm)	3.51	4.34	4.39	15.3	4.16	5.57	6.71	7.14	23.6	6.60	5.74
Cash flow (\$mm)	2.35	3.25	3.25	10.9	3.09	3.87	5.39	5.77	18.1	5.27	4.49
Per unit	0.22	0.30	0.30	1.01	0.28	0.36	0.50	0.53	1.67	0.49	0.41
Earnings (\$mm)	1.89	2.77	2.78	9.0	2.64	3.40	4.92	5.31	16.3	4.82	4.04
Per unit	0.17	0.26	0.26	0.83	0.24	0.32	0.45	0.49	1.50	0.44	0.37
Distribution (\$mm)	1.93	1.93	1.93	7.7	3.01	1.93	4.33	4.68	14.0	4.24	3.56
Per unit	0.18	0.18	0.18	0.72	0.28	0.18	0.40	0.44	1.30	0.39	0.33
Units (millions)	10.74	10.74	10.74	10.7	10.74	10.74	10.74	10.74	10.7	10.74	10.74
<b>Volume</b>											
Natural gas (bcf)											
Oklahoma	1.33	1.40	1.43	5.6	1.39	1.37	1.38	1.37	5.5	1.33	1.34
Kansas	0.34	0.33	0.31	1.3	0.29	0.28	0.28	0.27	1.1	0.25	0.25
Total	1.67	1.72	1.74	6.9	1.68	1.66	1.66	1.64	6.6	1.59	1.59
Natural Gas (mmcfd)	18.4	18.7	18.9	18.9	18.5	18.2	18.0	17.8	18.1	17.7	17.5
Days	91	92	92	365	91	91	92	92	366	90	91
<b>Price</b>											
Natural gas											
Henry Hub (\$/mmbtu)	2.22	2.52	2.45	2.24	2.62	3.63	4.22	4.53	3.75	4.33	3.76
Oklahoma (\$/mcf)	2.15	2.60	2.60	2.28	2.53	3.50	4.22	4.53	3.69	4.33	3.76
Kansas (\$/mcf)	2.26	2.68	2.70	2.36	2.72	3.58	4.29	4.60	3.78	4.40	3.83
Total (\$/mcf)	2.17	2.62	2.62	2.30	2.57	3.51	4.23	4.55	3.71	4.34	3.77
<b>Revenue (\$mm)</b>											
Natural Gas											
Oklahoma	2.87	3.63	3.73	12.7	3.53	4.81	5.82	6.22	20.4	5.77	5.04
Kansas	0.76	0.88	0.83	3.1	0.79	1.01	1.19	1.24	4.2	1.12	0.96
Other	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.2	0.05	0.05
Production payment (ORRI)	(0.17)	(0.22)	(0.23)	(0.8)	(0.21)	(0.30)	(0.35)	(0.37)	(1.2)	(0.34)	(0.30)
Total	3.51	4.34	4.39	15.3	4.16	5.57	6.71	7.14	23.6	6.60	5.74
<b>Cost (\$mm)</b>											
Operating	0.96	0.90	0.95	3.6	0.92	1.04	1.07	1.10	4.1	1.08	1.03
General and administrative	0.13	0.14	0.16	0.6	0.14	0.18	0.17	0.17	0.7	0.17	0.16
Management	0.12	0.13	0.13	0.5	0.13	0.14	0.15	0.16	0.6	0.15	0.14
Other	(0.05)	(0.08)	(0.10)	(0.3)	(0.11)	0.35	(0.08)	(0.08)	0.1	(0.08)	(0.08)
Total	1.16	1.09	1.13	4.4	1.07	1.70	1.32	1.36	5.5	1.33	1.26
<b>Cash flow (\$mm)</b>											
Depletion, deprec. & amort.	0.46	0.48	0.48	1.9	0.45	0.46	0.46	0.46	1.8	0.44	0.45
<b>Earnings (\$mm)</b>											
Capital expenditures (\$mm)	0.05	0.21	0.10	0.4	0.04	0.13	0.15	0.15	0.5	0.15	0.15
<i>Cost ratios</i>											
Prod pay/revenue	4.5%	4.9%	5.0%	4.7%	4.8%	5.1%	5.0%	5.0%	5.0%	5.0%	5.0%
Operating cost (\$/mcf)	0.57	0.52	0.54	0.52	0.54	0.63	0.65	0.67	0.62	0.68	0.65
Depletion (\$/mcf)	0.28	0.28	0.27	0.28	0.27	0.28	0.28	0.28	0.28	0.28	0.28

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Volume Decline (%/yr):	11	Price Escalation Post 2006 (%/yr):	2.7
Volume Enhancement (%/yr):	9	Discount rate (%/yr):	7.3
Capex/Cash Flow (%):	24	U.S. TIPS Inflation (%/yr):	1.9
Variable Cost (%):	14	U.S. 10 Year Yield (%/yr):	5.9

Year	Basic (bcf)	Volume Enhanced (bcf)	Total (bcf)	Price (\$/mcf)	Revenue (\$mm)	Fixed Cost (\$mm)	Var Cost (\$mm)	Cap Ex (\$mm)	Distribution (\$mm) (\$/unit)	Tax Credit (\$/unit)	Disc Factor	Present Value (\$/unit)
Total 2000 through 2029												
	279	310	588	3.68	2163	391	303	236	1234	30.84	0.06	0.49 <span style="background-color: black; color: white;">15.10</span>
1999	29.2		29.2	2.16	63.1	12.1	8.8	9.1	33.1	0.83	0.02	
2000	29.2	1.5	30.7	3.22	99.1	13.0	13.9	10.9	61.3	1.53	0.02	0.97 1.50
2001	26.0	4.1	30.1	3.83	115.3	13.0	16.1	20.7	65.5	1.64	0.02	0.90 1.49
2002	23.4	6.4	29.8	3.32	98.8	13.0	13.8	17.3	54.7	1.37	0.02	0.84 1.16
2003	21.1	8.4	29.5	2.99	88.1	13.0	12.3	15.1	47.7	1.19	0.78	0.93
2004	19.0	10.1	29.1	3.21	93.3	13.0	13.1	16.1	51.1	1.28	0.73	0.93
2005	17.1	11.6	28.7	3.12	89.7	13.0	12.6	15.4	48.8	1.22	0.68	0.83
2006	15.4	12.9	28.3	3.06	86.8	13.0	12.2	14.8	46.8	1.17	0.63	0.74
2007	13.9	14.0	27.9	3.15	87.9	13.0	12.3	15.0	47.5	1.19	0.59	0.70
2008	12.5	15.0	27.5	3.23	88.9	13.0	12.5	15.2	48.2	1.21	0.55	0.66
2009	11.3	15.8	27.1	3.32	90.0	13.0	12.6	15.4	48.9	1.22	0.51	0.63
2010	10.2	16.5	26.7	3.41	90.9	13.0	12.7	15.6	49.5	1.24	0.48	0.59
2011	9.2	17.1	26.3	3.50	91.9	13.0	12.9	15.8	50.2	1.25	0.44	0.56
2012	8.2	17.6	25.8	3.59	92.9	13.0	13.0	16.0	50.8	1.27	0.41	0.53
2013	7.4	18.0	25.4	3.69	93.8	13.0	13.1	16.2	51.4	1.28	0.39	0.50
2014	6.7	18.3	25.0	3.79	94.7	13.0	13.3	16.4	52.0	1.30	0.36	0.47
2015	6.0	16.3	22.3	3.89	86.8	13.0	12.2	12.2	61.6	1.54	0.34	0.52
2016	5.4	14.5	19.9	3.99	79.6	13.0	11.1	55.4	1.39		0.31	0.43
2017	4.9	12.9	17.8	4.10	73.0	13.0	10.2	49.8	1.24		0.29	0.36
2018	4.4	11.5	15.9	4.21	66.9	13.0	9.4	44.5	1.11		0.27	0.30
2019	4.0	10.2	14.2	4.33	61.4	13.0	8.6	39.8	0.99		0.25	0.25
2020	3.6	9.1	12.7	4.44	56.3	13.0	7.9	35.4	0.88		0.24	0.21
2021	3.2	8.1	11.3	4.56	51.6	13.0	7.2	31.4	0.78		0.22	0.17
2022	2.9	7.2	10.1	4.68	47.4	13.0	6.6	27.7	0.69		0.20	0.14
2023	2.6	6.4	9.0	4.81	43.4	13.0	6.1	24.3	0.61		0.19	0.12
2024	2.4	5.7	8.1	4.94	39.8	13.0	5.6	21.2	0.53		0.18	0.09
2025	2.1	5.1	7.2	5.07	36.5	13.0	5.1	18.4	0.46		0.17	0.08
2026	1.9	4.5	6.4	5.21	33.5	13.0	4.7	15.8	0.39		0.15	0.06
2027	1.7	4.0	5.7	5.35	30.7	13.0	4.3	13.4	0.34		0.14	0.05
2028	1.6	3.6	5.1	5.49	28.2	13.0	3.9	11.2	0.28		0.13	0.04
2029	1.4	3.2	4.6	5.64	25.9	13.0	3.6	9.2	0.23		0.12	0.03

# Meter Reader

A Weekly Analysis

August 21, 2000

**Table HGT-2**  
**Hugoton Royalty Trust**  
**Distributable Income Model**

	Q2 6/30/99	Q3 9/30/99	Q4 12/31/99	Year 1999	Q1 3/31/00	Q2 6/30/00	Q3E 9/30/00	Q4E 12/31/00	Year 2000E	Q1E 3/31/01	Q2E 6/30/01
<b>Highlights</b>											
Revenue (\$mm) (80%)	16.6	16.8	20.4	63.1	20.0	19.8	28.2	31.1	99.1	32.1	27.3
Cash flow (\$mm) (80%)	11.1	11.5	14.4	42.2	14.1	13.9	21.0	23.5	72.4	24.4	20.4
Per unit	0.28	0.29	0.36	1.06	0.35	0.35	0.52	0.59	1.81	0.61	0.51
Tax credit (\$mm)	0.2	0.2	0.2	0.8	0.2	0.2	0.2	0.2	0.8	0.2	0.2
Per unit	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01
Distributable Income (\$mm)	8.8	8.5	12.2	33.1	10.9	11.3	18.3	20.8	61.3	21.7	17.7
Per unit	0.22	0.21	0.30	0.83	0.27	0.28	0.46	0.52	1.53	0.54	0.44
Units (millions)	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
<b>Volume</b>											
Natural Gas (bcf)	9.6	9.5	9.6	34.2	9.7	8.6	8.8	8.7	35.9	8.7	8.3
Natural Gas (mmcfd)	107.6	103.4	104.2	102.1	105.5	96.0	96.0	95.0	98.4	94.1	93.1
Days	89	92	92	335	92	90	92	92	366	92	89
Oil (mb)	115	104	103	388	100	105	106	105	415	104	99
Oil (mbd)	1.2	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.1
Days	96	92	92	342	92	90	92	92	366	92	89
Total (bcf)	10.3	10.1	10.2	36.5	10.3	9.3	9.5	9.4	38.4	9.3	8.9
<b>Price</b>											
Natural Gas (HH lagged two months)											
Henry Hub (\$/mmbtu)	1.89	2.27	2.66	2.18	2.35	2.82	3.94	4.38	3.38	4.58	4.07
HGT (\$/mcft)	2.00	2.01	2.42	2.12	2.32	2.54	3.64	4.08	3.12	4.28	3.77
Oil (\$/bbl) (WTI Cushing lagged two months)											
WTI Cushing	14.67	18.57	22.59	17.39	26.07	28.33	30.12	30.95	28.87	30.46	28.91
HGT	13.64	18.18	21.72	16.53	25.19	27.63	29.12	29.95	28.01	29.46	27.91
Total (\$/mcft)	2.02	2.07	2.49	2.16	2.43	2.68	3.72	4.14	3.22	4.32	3.83
<b>Revenue (\$mm)</b>											
Natural Gas	19.1	19.1	23.2	72.5	22.5	21.9	32.1	35.7	112.3	37.0	31.3
Oil	1.6	1.9	2.2	6.4	2.5	2.9	3.1	3.1	11.6	3.1	2.8
Total	20.7	21.0	25.4	78.9	25.0	24.8	35.2	38.8	123.9	40.1	34.1
<b>Cost (\$mm)</b>											
Tax, transport & other	2.1	2.1	2.6	8.3	2.4	2.4	3.5	3.9	12.2	4.0	3.4
Production	2.9	2.8	3.0	11.0	3.3	3.2	3.7	3.8	14.0	3.8	3.5
Overhead	1.7	1.8	1.7	6.9	1.7	1.8	1.8	1.8	7.1	1.8	1.7
Total	6.8	6.6	7.4	26.2	7.4	7.4	9.0	9.5	33.3	9.6	8.6
<b>Cash flow (\$mm)</b>											
Development	2.8	3.7	2.8	11.3	3.9	3.3	3.3	3.3	13.6	3.3	3.3
Net proceeds (\$mm)	11.1	10.7	15.2	41.4	13.7	14.1	23.0	26.1	76.9	27.2	22.2
<b>Royalty income (\$mm)</b>											
Royalty/Net proceeds	8.9%	8.5%	12.2%	33.2%	11.0%	11.3%	18.4%	20.9%	61.5%	21.8%	17.7%
Administration	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.1
<b>Distributable income (\$mm)</b>	<b>8.8</b>	<b>8.5</b>	<b>12.2</b>	<b>33.1</b>	<b>10.9</b>	<b>11.3</b>	<b>18.3</b>	<b>20.8</b>	<b>61.3</b>	<b>21.7</b>	<b>17.7</b>
<i>Cost ratios</i>											
Tax and other/revenue	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Production cost (\$/mcft)	0.29	0.28	0.29	0.30	0.32	0.35	0.39	0.41	0.36	0.41	0.39
Overhead cost (\$/mcft)	0.17	0.17	0.17	0.19	0.17	0.19	0.19	0.19	0.18	0.19	0.19

Note: The trust was formed on December 1, 1998. Also there is a two month lag between actual and reported production.

As a result, the first year of operations includes only eleven months of actual production from December 1998 through October 1999.

# Meter Reader

A Weekly Analysis

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**Table SJT-1**  
**San Juan Basin Royalty Trust**  
**Present Value**

Volume Decline (%/yr):	9	Price Escalation Post 2006 (%/yr):	2.7
Volume Enhancement (%/yr):	7	Discount rate (%/yr):	7.3
Capex/Cash Flow (%):	24	U.S. TIPS Inflation (%/yr):	1.9
Variable Cost (%):	12	U.S. 10 Year Yield (%/yr):	5.9

Year	Basic (bcf)	Volume Enhanced (bcf)	Total (bcf)	Price (\$/mcf)	Revenue (\$mm)	Fixed Cost (\$mm)	Var Cost (\$mm)	Cap Ex (\$mm)	Distribution (\$mm)	Tax Credit (\$/unit)	Disc Factor	Present Value (\$/unit)
<b>Total 2000 through 2029</b>												
	309	286	594	3.54	2105	262	253	239	1354	29.07	0.48	0.47 <span style="background-color: black; color: white;">13.80</span>
1999	30.3		30.3	1.76	53.2	7.2	6.4	7.9	31.8	0.68	0.16	
2000	27.8	3.1	30.9	3.06	94.4	8.7	11.3	13.9	63.3	1.36	0.16	0.97 1.47
2001	25.3	4.3	29.6	3.63	107.4	8.7	12.9	20.6	65.2	1.40	0.16	0.90 1.40
2002	23.2	6.0	29.2	3.14	91.7	8.7	11.0	17.3	54.7	1.17	0.16	0.84 1.12
2003	21.3	7.5	28.8	2.84	81.6	8.7	9.8	15.1	47.9	1.03		0.78 0.80
2004	19.5	8.8	28.3	3.06	86.6	8.7	10.4	16.2	51.3	1.10		0.73 0.80
2005	17.9	10.0	27.9	2.98	83.2	8.7	10.0	15.5	49.0	1.05		0.68 0.71
2006	16.4	11.1	27.5	2.92	80.3	8.7	9.6	14.9	47.1	1.01		0.63 0.64
2007	15.1	12.0	27.1	3.00	81.2	8.7	9.7	15.1	47.7	1.02		0.59 0.60
2008	13.8	12.8	26.6	3.08	82.0	8.7	9.8	15.2	48.2	1.04		0.55 0.57
2009	12.7	13.5	26.2	3.16	82.9	8.7	9.9	15.4	48.8	1.05		0.51 0.54
2010	11.6	14.1	25.8	3.25	83.7	8.7	10.0	15.6	49.4	1.06		0.48 0.50
2011	10.7	14.7	25.4	3.33	84.5	8.7	10.1	15.8	49.9	1.07		0.44 0.48
2012	9.8	15.1	24.9	3.42	85.4	8.7	10.2	15.9	50.5	1.08		0.41 0.45
2013	9.0	15.5	24.5	3.52	86.2	8.7	10.3	16.1	51.0	1.09		0.39 0.42
2014	8.2	15.8	24.1	3.61	86.9	8.7	10.4	16.3	51.5	1.11		0.36 0.40
2015	7.6	14.4	22.0	3.71	81.5	8.7	9.8		63.0	1.35		0.34 0.45
2016	6.9	13.1	20.1	3.81	76.3	8.7	9.2		58.5	1.25		0.31 0.39
2017	6.4	11.9	18.3	3.91	71.5	8.7	8.6		54.2	1.16		0.29 0.34
2018	5.8	10.9	16.7	4.02	67.0	8.7	8.0		50.3	1.08		0.27 0.29
2019	5.4	9.9	15.2	4.12	62.8	8.7	7.5		46.6	1.00		0.25 0.25
2020	4.9	9.0	13.9	4.23	58.9	8.7	7.1		43.1	0.92		0.24 0.22
2021	4.5	8.2	12.7	4.35	55.2	8.7	6.6		39.8	0.85		0.22 0.19
2022	4.1	7.4	11.6	4.47	51.7	8.7	6.2		36.8	0.79		0.20 0.16
2023	3.8	6.8	10.6	4.59	48.5	8.7	5.8		33.9	0.73		0.19 0.14
2024	3.5	6.2	9.6	4.71	45.4	8.7	5.5		31.3	0.67		0.18 0.12
2025	3.2	5.6	8.8	4.84	42.6	8.7	5.1		28.7	0.62		0.17 0.10
2026	2.9	5.1	8.0	4.97	39.9	8.7	4.8		26.4	0.57		0.15 0.09
2027	2.7	4.6	7.3	5.10	37.4	8.7	4.5		24.2	0.52		0.14 0.07
2028	2.5	4.2	6.7	5.24	35.1	8.7	4.2		22.1	0.47		0.13 0.06
2029	2.3	3.8	6.1	5.38	32.9	8.7	3.9		20.2	0.43		0.12 0.05

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# Meter Reader

A Weekly Analysis

August 21, 2000

**Table SJT-2**  
**San Juan Basin Royalty Trust**  
**Distributable Income Model**

	Q2 6/30/99	Q3 9/30/99	Q4 12/31/99	Year 1999	Q1 3/31/00	Q2 6/30/00	Q3E 9/30/00	Q4E 12/31/00	Year 2000E	Q1E 3/31/01	Q2E 6/30/01
<b>Highlights</b>											
Revenue (\$mm) (75%)	10.8	13.0	17.4	53.2	17.3	19.3	27.4	30.5	94.4	31.7	27.0
Cash flow (\$mm) (75%)	7.5	9.9	13.4	39.6	13.3	13.7	22.3	25.1	74.4	26.2	22.1
Per unit	0.16	0.21	0.29	0.85	0.28	0.29	0.48	0.54	1.60	0.56	0.47
Tax credit (\$mm)	1.4	1.9	2.5	7.6	1.9	1.9	1.9	1.9	7.5	1.9	1.9
Per unit	0.03	0.04	0.05	0.16	0.04	0.04	0.04	0.04	0.16	0.04	0.04
Distributable Income (\$mm)	5.9	7.8	11.3	31.8	9.9	13.2	18.7	21.5	63.3	22.6	17.9
Per unit	0.13	0.17	0.24	0.68	0.21	0.28	0.40	0.46	1.36	0.48	0.38
Units (millions)	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6
<b>Volume</b>											
Natural gas (mmbtu)											
Conventional	7.4	5.5	6.7	26.9	7.0	7.1	6.8	6.7	27.5	6.6	6.4
Coal Seam	3.8	3.3	3.5	14.4	3.6	3.9	3.6	3.6	14.7	3.5	3.4
Total	11.2	8.8	10.3	41.3	10.6	11.0	10.4	10.3	42.2	10.2	9.9
Conventional (btu/cf)	1,196	1,006	1,159	1,142	1,173	1,130	1,142	1,142	1,147	1,142	1,142
Coal Seam (btu/cf)	881	881	881	881	881	881	881	881	881	881	881
Natural gas (bcf)											
Conventional	6.2	5.5	5.8	23.5	5.9	6.3	5.9	5.9	24.0	5.8	5.6
Coal Seam	4.3	3.8	4.0	16.4	4.1	4.4	4.1	4.1	16.7	4.0	3.9
Total	10.5	9.3	9.8	39.9	10.1	10.7	10.0	9.9	40.7	9.8	9.5
Natural Gas (mmcf/d)	118.4	100.6	106.7	109.4	109.6	118.5	109.0	107.9	111.2	106.8	105.8
Days	89	92	92	365	92	90	92	92	366	92	90
Oil (mb)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Oil (mbd)	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Days	89	92	92	365	92	90	92	92	366	92	90
Total gas & oil (bcf)	10.6	9.4	9.9	40.4	10.2	10.8	10.1	10.0	41.2	9.9	9.6
<b>Price</b>											
Natural gas (\$/mmbtu) (Henry Hub lagged two months)											
Henry Hub (\$/mmbtu)	1.89	2.27	2.66	2.17	2.35	2.82	3.94	4.38	3.38	4.58	4.07
Differential (\$/mmbtu)	0.60	0.04	0.38	0.35	0.19	0.47	0.40	0.40	0.38	0.40	0.40
SJT Conventional	1.29	2.09	2.27	1.75	2.17	2.35	3.54	3.98	2.99	4.18	3.67
SJT Coal Seam	1.20	1.65	2.13	1.58	2.03	2.20	3.34	3.78	2.82	3.98	3.47
Total	1.26	1.93	2.22	1.69	2.12	2.30	3.47	3.91	2.94	4.11	3.60
Natural gas (\$/mcf)											
Conventional	1.54	2.11	2.63	2.00	2.54	2.67	4.04	4.55	3.43	4.77	4.20
Coal Seam	1.06	1.45	1.88	1.39	1.79	1.94	2.94	3.33	2.49	3.50	3.06
Total	1.34	1.84	2.32	1.75	2.23	2.37	3.59	4.05	3.05	4.25	3.73
Oil (\$/bbl) (WTI Cushing lagged two months)											
WTI Cushing	14.67	18.57	22.59	17.02	26.07	28.33	30.12	31.51	29.00	28.79	28.91
SJT	12.72	15.71	20.66	14.25	22.48	21.66	26.12	27.51	24.21	24.79	24.91
Total gas & oil (\$/mcf)	1.35	1.85	2.33	1.76	2.25	2.38	3.60	4.05	3.06	4.25	3.74
<b>Revenue (\$mm)</b>											
Natural Gas - Conventional	9.6	11.5	15.2	47.1	15.1	16.8	23.9	26.6	82.4	27.7	23.6
Coal Seam	4.6	5.5	7.6	22.8	7.4	8.5	12.1	13.6	41.5	14.1	11.9
Total	14.1	17.0	22.8	69.9	22.5	25.2	36.0	40.2	123.9	41.8	35.5
Oil	0.2	0.3	0.4	1.0	0.5	0.5	0.5	0.5	2.0	0.5	0.4
Total	14.4	17.3	23.2	71.0	23.0	25.7	36.5	40.7	125.9	42.2	36.0
<b>Cost (\$mm)</b>											
Severance tax	1.5	1.8	2.4	7.3	2.2	2.3	3.8	4.2	12.5	4.3	3.7
Operating	2.8	2.2	2.9	10.8	3.1	5.2	3.0	3.0	14.2	2.9	2.9
Total	4.3	4.0	5.3	18.1	5.4	7.5	6.8	7.2	26.7	7.3	6.6
<b>Cash flow (\$mm)</b>											
Development	3.0	2.7	2.6	10.6	4.6	4.8	4.6	4.6	18.5	4.6	5.3
Net proceeds (\$mm)	7.1	10.5	15.3	42.3	13.1	13.5	25.2	29.0	80.7	30.4	24.1
<b>Royalty income (\$mm)</b>											
Royalty/Net proceeds	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Administration	0.2	0.1	0.2	0.8	0.2	0.4	0.2	0.2	1.0	0.2	0.2
One-time	0.9			0.9	0.3	3.5			3.7		
<b>Distributable income (\$mm)</b>											
	5.9	7.8	11.3	31.8	9.9	13.2	18.7	21.5	63.3	22.6	17.9
<i>Modeling ratios</i>											
Severance tax/revenue	10.2%	10.4%	10.3%	10.3%	9.8%	9.0%	10.3%	10.3%	9.9%	10.3%	10.3%
Operating cost (\$/mcf)	0.27	0.24	0.29	0.27	0.30	0.48	0.30	0.30	0.35	0.30	0.30

Analyses are prepared from original sources and data believed to be reliable, but no representations are made as to their accuracy or completeness. This summary with supporting documentation is available free at <http://royaltytrusts.intranets.com>. Registration code: sanjuan