

## Natural Gas Royalty Trusts

A Weekly Analysis

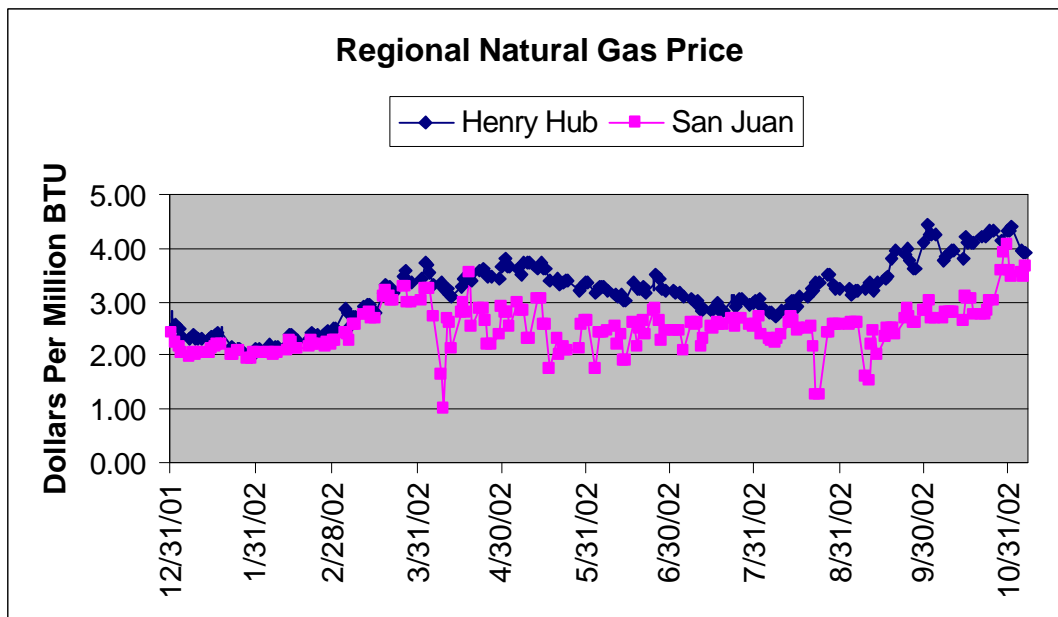
November 11, 2002

# Narrowing Basis

## Summary and Recommendation

The wide gap in commodity price for natural gas in the San Juan Basin of New Mexico compared to the Henry Hub in Louisiana has narrowed (see Chart). Traders refer to the location differential as “basis”. The gap was narrow in the first three months of the year when heating demand for natural gas was strong. Then it widened in the spring months, closed somewhat during the peak summer air conditioning season and widened again in late summer. San Juan Basin prices quoted today would not be reflected in a distribution announcement until late January for SJT and late February for CRT. Meanwhile estimated present value remains little changed for the week. Estimated Next Twelve Months Distribution decreased 5%, 7% and 7% respectively for CRT, HGT, and SJT in the past week as a result of a near one-sigma change in one-year natural gas price. We recommend SJT and also believe CRT and HGT are valid supplements or alternatives for portfolio representation in natural gas.

Kurt H. Wulff, CFA



Source: enerfax.com

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### Rank by McDep Ratio: Market Cap and Debt to Present Value

	<i>Symbol/</i>	<i>Price</i>	<i>Market</i>	<i>Net</i>	<i>Debt/</i>	<i>McDep</i>
	<i>Rating</i>	<i>(\$/sh)</i>	<i>Cap</i>	<i>Present</i>	<i>Present</i>	<i>Ratio</i>
		<i>7-Nov</i>	<i>Shares</i>	<i>Value</i>	<i>Value</i>	
		<i>2002</i>	<i>(mm)</i>	<i>(\$/sh)</i>	<i>(\$mm)</i>	
Cross Timbers Royalty Trust	CRT	17.89	6.0	19.60	107	0.91
San Juan Basin Royalty Trust	SJT	13.04	46.6	16.10	610	0.81
Hugoton RoyaltyTrust (46%)	HGT	11.25	18.4	15.40	210	0.73

Buy/Sell rating after symbol: B - Buy, N - Neutral, S - Sell

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses

### Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

	<i>Symbol/</i>	<i>Price</i>	<i>EV/</i>	<i>EV/</i>	<i>Dividend or</i>	<i>PV/</i>
	<i>Rating</i>	<i>(\$/sh)</i>	<i>Sales</i>	<i>Ebitda</i>	<i>Distribution</i>	<i>Ebitda</i>
		<i>7-Nov</i>	<i>NTM</i>	<i>NTM</i>	<i>P/E</i>	<i>NTM</i>
		<i>2002</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>	<i>NTM</i>
					<i>NTM</i>	
					<i>(%)</i>	
<b>Natural Gas Royalty Trusts</b>						
Cross Timbers Royalty Trust	CRT	17.89	6.5	9.2	10	10.2
San Juan Basin Royalty Trust	SJT	13.04	5.8	7.4	10	9.1
Hugoton RoyaltyTrust (46%)	HGT	11.25	4.7	6.9	10	9.4

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

### Natural Gas and Oil Futures

November 7, 2002

	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>Six</i>
							<i>Year</i>
<b>Natural Gas (\$/mmbtu)</b>							
Year ending November	3.84	3.85	3.76	3.75	3.78	3.82	3.80
Year ending December	3.87	3.84	3.75	3.75	3.78		
<b>Light Sweet Crude Oil (\$/bbl)</b>							
Year ending November	24.11	22.76	22.52	22.59	22.50	22.38	22.81
Year ending December	23.93	22.72	22.52	22.59	22.50		

Source: Nymex, FutureSource, wsj.com

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## Natural Gas Royalty Trusts

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

Volume Decline (%/yr):	10	Price Escalation post 2007 (%/yr):	2.3
Volume Enhancement (%/yr):	10	Discount Rate (%/yr):	5.2
		U.S. TIPS Inflation (%/yr):	1.5
		U.S. 10 Year Yield (%/yr):	3.8
PV/Volume (\$/mcf):	2.68	PV/EBITDA 2002:	10.4

Year	Natural Gas Volume			Price (\$/mcf)	Revenue (\$mm)	Oil Net (\$mm)	Distribution (\$mm)	Tax Credit (\$/unit)	Disc Factor	Present Value (\$/unit)	
	Basic (bcf)	Enhanced (bcf)	Total (bcf)								
Total 2003 through 2032; years ending on 9/30											
	25	19	44	4.16	182	7	189	31.57	0.02	0.62	<b>19.60</b>
2003	2.6	0.0	2.6	3.63	9.4	1.3	10.7	1.78	0.02	0.97	1.76
2004	2.3	0.3	2.6	3.72	9.6	1.2	10.8	1.80		0.93	1.67
2005	2.1	0.5	2.6	3.63	9.4	0.9	10.3	1.72		0.88	1.51
2006	1.9	0.7	2.6	3.55	9.1	0.8	10.0	1.67		0.84	1.39
2007	1.7	0.9	2.6	3.57	9.2	0.8	10.0	1.66		0.79	1.32
2008	1.5	1.1	2.6	3.65	9.4	0.7	10.1	1.68		0.76	1.27
2009	1.4	1.2	2.6	3.74	9.6	0.6	10.3	1.71		0.72	1.23
2010	1.2	1.3	2.6	3.83	9.9	0.6	10.5	1.75		0.68	1.19
2011	1.1	1.5	2.6	3.91	10.1		10.1	1.68		0.65	1.09
2012	1.0	1.3	2.3	4.01	9.3		9.3	1.55		0.62	0.95
2013	0.9	1.2	2.1	4.10	8.6		8.6	1.43		0.58	0.83
2014	0.8	1.1	1.9	4.19	7.9		7.9	1.31		0.56	0.73
2015	0.7	1.0	1.7	4.29	7.3		7.3	1.21		0.53	0.64
2016	0.7	0.9	1.5	4.39	6.7		6.7	1.11		0.50	0.56
2017	0.6	0.8	1.4	4.49	6.2		6.2	1.03		0.48	0.49
2018	0.5	0.7	1.2	4.60	5.7		5.7	0.94		0.45	0.43
2019	0.5	0.6	1.1	4.70	5.2		5.2	0.87		0.43	0.37
2020	0.4	0.6	1.0	4.81	4.8		4.8	0.80		0.41	0.33
2021	0.4	0.5	0.9	4.92	4.4		4.4	0.74		0.39	0.29
2022	0.3	0.5	0.8	5.04	4.1		4.1	0.68		0.37	0.25
2023	0.3	0.4	0.7	5.15	3.8		3.8	0.63		0.35	0.22
2024	0.3	0.4	0.7	5.27	3.5		3.5	0.58		0.33	0.19
2025	0.3	0.3	0.6	5.40	3.2		3.2	0.53		0.32	0.17
2026	0.2	0.3	0.5	5.52	2.9		2.9	0.49		0.30	0.15
2027	0.2	0.3	0.5	5.65	2.7		2.7	0.45		0.29	0.13
2028	0.2	0.2	0.4	5.78	2.5		2.5	0.41		0.27	0.11
2029	0.2	0.2	0.4	5.92	2.3		2.3	0.38		0.26	0.10
2030	0.1	0.2	0.3	6.05	2.1		2.1	0.35		0.25	0.09
2031	0.1	0.2	0.3	6.19	1.9		1.9	0.32		0.23	0.08
2032	0.1	0.2	0.3	6.34	1.8		1.8	0.30		0.22	0.07

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## Natural Gas Royalty Trusts

### A Weekly Analysis

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**Table CRT-2**  
**Cross Timbers Royalty Trust**  
**Distributable Income**

	<i>Q1</i>	<i>Q2</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Next</i>	
	<i>3/31/02</i>	<i>6/30/02</i>	<i>9/30/02</i>	<i>12/31/02</i>	<i>2002E</i>	<i>3/31/03</i>	<i>6/30/03</i>	<i>9/30/03</i>	<i>Twelve</i>	
									<i>Months</i>	
									<i>9/30/03</i>	
<b>Highlights</b>										
Tax credit (\$mm)										
Per unit	0.03	0.02	0.02	0.02	0.09					0.02
Distributable Income (\$mm)	1.80	1.72	2.49	2.64	8.66	2.81	2.64	2.61		10.70
Per unit	0.30	0.29	0.42	0.44	1.44	0.47	0.44	0.43		1.78
Units (millions)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0
<b>Volume</b>										
Natural Gas (bcf)	0.78	0.71	0.71	0.72	2.92	0.72	0.71	0.71		2.86
Natural Gas (mmcf)	8.5	7.8	7.8	7.8	8.0	7.8	7.8	7.8		7.8
Days	92	90	91	92	365	92	90	91		365
Oil (mb)	83	82	85	85	336	85	82	85		338
Oil (mbd)	0.90	0.93	0.93	0.93	0.92	0.93	0.93	0.93		3.70
Days	92	89	92	92	365	92	89	92		365
Total (bcf)	1.28	1.20	1.23	1.23	4.94	1.23	1.20	1.23		4.89
<b>Price</b>										
Natural Gas (HH lagged three months)										
Henry Hub (\$/mmbtu)	2.41	2.53	3.38	3.21	2.88	3.95	3.91	3.77		3.71
Differential (\$/mmbtu)	(0.13)	(0.04)	0.07	0.06	(0.00)	0.08	0.08	0.08		0.08
CRT (\$/mcf)	2.54	2.57	3.31	3.15	2.89	3.87	3.83	3.69		3.63
Oil (\$/bbl) (WTI lagged two months)										
WTI Cushing	19.56	23.80	26.49	28.96	24.70	25.57	24.82	24.35		25.93
CRT	17.28	20.50	24.49	26.96	22.36	23.57	22.82	22.35		23.94
Total (\$/mcf)	2.67	2.92	3.63	3.70	3.23	3.89	3.82	3.71		3.78
<b>Revenue (\$mm)</b>										
Natural Gas	1.98	1.82	2.37	2.27	8.43	2.79	2.71	2.64		10.41
Oil	1.44	1.69	2.09	2.30	7.51	2.01	1.88	1.90		8.09
Total	3.42	3.50	4.45	4.57	15.94	4.80	4.59	4.54		18.50
<b>Cost (\$mm)</b>										
Tax, transport & other	0.34	0.51	0.62	0.64	2.11	0.67	0.64	0.64		2.59
Production	0.75	0.72	0.72	0.72	2.91	0.72	0.72	0.72		2.88
Total	1.09	1.23	1.34	1.36	5.03	1.39	1.36	1.36		5.47
<b>Cash flow (\$mm)</b>										
Development	0.28	0.14	0.14	0.20	0.77	0.20	0.20	0.20		0.80
Excess	(0.07)	0.07								
<b>Net proceeds (\$mm)</b>	2.11	2.06	2.96	3.01	10.15	3.21	3.02	2.98		12.23
<b>Royalty income (\$mm)</b>										
Royalty/Net proceeds	89%	89%	89%	89%	89%	89%	89%	89%		89%
Administration	0.08	0.09	0.14	0.04	0.35	0.04	0.04	0.04		0.16
<b>Distributable income (\$mm)</b>	1.80	1.72	2.49	2.64	8.66	2.81	2.64	2.61		10.70
<i>Modeling ratios</i>										
Tax and other/revenue	0.10	0.15	0.14	0.14	0.13	0.14	0.14	0.14		0.14

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# Natural Gas Royalty Trusts

## A Weekly Analysis

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**Table HGT-1**  
**Hugoton Royalty Trust**  
**Present Value**

Volume Decline (%/yr):	10	Price Escalation Post 2007 (%/yr):	2.3
Volume Enhancement (%/yr):	10	Discount rate (%/yr):	5.8
Capex/Cash Flow (%):	30	U.S. TIPS Inflation (%/yr):	1.5
Variable Cost (%):	17	U.S. 10 Year Yield (%/yr):	3.8
PV/Volume (\$/mcf):	1.24	PV/EBITDA 2002:	9.5

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 2003 through 2032; years ending on 9/30													
	279	217	496	4.05	2009	421	342	195	1052	26.29	0.00	0.59	15.40
2003	29.1	0.0	29.1	3.27	95.2	14.0	16.2	18.2	46.8	1.17	0.00	0.97	1.14
2004	26.2	2.9	29.1	3.64	106.0	14.0	18.0	22.2	51.8	1.29		0.92	1.19
2005	23.6	5.5	29.1	3.55	103.3	14.0	17.6	21.5	50.2	1.25		0.87	1.09
2006	21.2	7.9	29.1	3.47	101.1	14.0	17.2	21.0	48.9	1.22		0.82	1.00
2007	19.1	10.0	29.1	3.50	101.9	14.0	17.3	21.2	49.4	1.23		0.77	0.96
2008	17.2	11.9	29.1	3.58	104.3	14.0	17.7	21.8	50.8	1.27		0.73	0.93
2009	15.5	13.6	29.1	3.66	106.7	14.0	18.1	22.4	52.2	1.30		0.69	0.90
2010	13.9	15.2	29.1	3.75	109.2	14.0	18.6	23.0	53.6	1.34		0.65	0.88
2011	12.5	16.6	29.1	3.83	111.7	14.0	19.0	23.6	55.1	1.38		0.62	0.85
2012	11.3	14.9	26.2	3.92	102.9	14.0	17.5		71.3	1.78		0.58	1.04
2013	10.2	13.4	23.6	4.01	94.7	14.0	16.1		64.6	1.61		0.55	0.89
2014	9.1	12.1	21.2	4.11	87.2	14.0	14.8		58.4	1.46		0.52	0.76
2015	8.2	10.9	19.1	4.20	80.3	14.0	13.7		52.6	1.32		0.49	0.65
2016	7.4	9.8	17.2	4.30	74.0	14.0	12.6		47.4	1.18		0.46	0.55
2017	6.7	8.8	15.5	4.40	68.1	14.0	11.6		42.5	1.06		0.44	0.47
2018	6.0	7.9	13.9	4.50	62.7	14.0	10.7		38.0	0.95		0.41	0.39
2019	5.4	7.1	12.5	4.61	57.8	14.0	9.8		33.9	0.85		0.39	0.33
2020	4.9	6.4	11.3	4.71	53.2	14.0	9.0		30.1	0.75		0.37	0.28
2021	4.4	5.8	10.2	4.82	49.0	14.0	8.3		26.6	0.67		0.35	0.23
2022	3.9	5.2	9.1	4.94	45.1	14.0	7.7		23.4	0.59		0.33	0.19
2023	3.5	4.7	8.2	5.05	41.5	14.0	7.1		20.4	0.51		0.31	0.16
2024	3.2	4.2	7.4	5.17	38.3	14.0	6.5		17.7	0.44		0.30	0.13
2025	2.9	3.8	6.7	5.29	35.2	14.0	6.0		15.2	0.38		0.28	0.11
2026	2.6	3.4	6.0	5.41	32.4	14.0	5.5		12.9	0.32		0.26	0.08
2027	2.3	3.1	5.4	5.54	29.9	14.0	5.1		10.8	0.27		0.25	0.07
2028	2.1	2.8	4.9	5.66	27.5	14.0	4.7		8.8	0.22		0.24	0.05
2029	1.9	2.5	4.4	5.79	25.3	14.0	4.3		7.0	0.17		0.22	0.04
2030	1.7	2.2	3.9	5.93	23.3	14.0	4.0		5.3	0.13		0.21	0.03
2031	1.5	2.0	3.5	6.07	21.5	14.0	3.7		3.8	0.09		0.20	0.02
2032	1.4	1.8	3.2	6.21	19.8	14.0	3.4		2.4	0.06		0.19	0.01

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

	<i>Q1</i>	<i>Q2</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Next Twelve Months</i>
	<i>3/31/02</i>	<i>6/30/02</i>	<i>9/30/02</i>	<i>12/31/02</i>	<i>2002E</i>	<i>3/31/03</i>	<i>6/30/03</i>	<i>9/30/03</i>	<i>9/30/03</i>
<b>Highlights</b>									
Revenue (\$mm) (80%)	18.5	16.5	19.7	23.1	77.9	24.7	23.6	23.9	95.2
Cash flow (\$mm) (80%)	12.0	10.1	13.2	15.7	51.1	17.1	16.2	16.4	65.3
Per unit	0.30	0.25	0.33	0.39	1.28	0.43	0.41	0.41	1.63
Tax credit (\$mm)	0.2	0.2	0.2	0.2	0.7				0.2
Per unit	0.00	0.00	0.00	0.00	0.02				0.00
Distributable Income (\$mm)	7.4	5.3	8.6	11.0	32.3	12.4	11.6	11.7	46.8
Per unit	0.18	0.13	0.22	0.28	0.81	0.31	0.29	0.29	1.17
<b>Units</b> (millions)	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
<b>Volume</b>									
Natural Gas (bcf)	9.0	8.3	8.6	8.6	34.6	8.6	8.4	8.6	34.3
Natural Gas (mmcf)	98.1	93.1	93.4	94.0	94.7	94.0	94.0	94.0	94.0
Days	92	89	92	92	365	92	89	92	365
Oil (mb)	90	88	90	90	358	89	85	87	350
Oil (mbd)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0
Days	92	89	92	92	365	92	89	92	365
Total (bcf)	9.6	8.8	9.1	9.2	36.7	9.2	8.9	9.2	36.4
<b>Price</b>									
Natural Gas (HH lagged two months)									
Henry Hub (\$/mmbtu)	2.34	2.92	3.23	3.59	3.02	3.89	3.85	3.78	3.78
Differential (\$/mmbtu)	(0.03)	0.67	0.49	0.54	0.45	0.58	0.58	0.57	0.57
HGT (\$/mcf)	2.38	2.25	2.60	3.05	2.57	3.31	3.28	3.21	3.21
Oil (\$/bbl) (WTI Cushing lagged two months)									
WTI Cushing	19.56	23.80	26.49	28.96	24.70	25.57	24.82	24.35	25.93
HGT	18.80	22.27	25.99	28.46	23.88	25.07	24.32	23.85	25.45
Total (\$/mcf)	2.42	2.33	2.70	3.15	2.65	3.36	3.32	3.26	3.27
<b>Revenue</b> (\$mm)									
Natural Gas	21.5	18.6	22.3	26.4	88.8	28.6	27.4	27.8	110.2
Oil	1.7	2.0	2.4	2.5	8.6	2.2	2.1	2.1	8.9
Total	23.2	20.6	24.7	28.9	97.3	30.8	29.5	29.9	119.1
<b>Cost</b> (\$mm)									
Tax, transport & other	1.7	1.9	2.2	2.9	8.7	3.1	2.9	3.0	11.9
Production	4.4	4.0	3.8	4.6	16.8	4.6	4.4	4.6	18.2
Overhead	2.0	2.0	2.1	1.8	7.9	1.8	1.8	1.8	7.3
Total	8.1	7.9	8.1	9.3	33.4	9.5	9.2	9.4	37.4
<b>Cash flow</b> (\$mm)									
Development	5.8	5.8	5.8	5.7	23.1	5.7	5.7	5.7	22.8
<b>Net proceeds</b> (\$mm)	9.3	6.9	10.8	13.9	40.8	15.6	14.6	14.7	58.9
<b>Royalty income</b> (\$mm)									
Royalty/Net proceeds	80%	80%	80%	80%	80%	80%	80%	80%	80%
Administration	0.1	0.2	(0.0)	0.1	0.3	0.1	0.1	0.1	0.3
<b>Distributable income</b> (\$mm)									
	7.4	5.3	8.6	11.0	32.3	12.4	11.6	11.7	46.8
<i>Cost ratios</i>									
Tax and other/revenue	7%	9%	9%	10%	9%	10%	10%	10%	10%
Production cost (\$/mcf)	0.46	0.46	0.42	0.50	0.46	0.50	0.50	0.50	0.50
Overhead cost (\$/mcf)	0.21	0.23	0.23	0.20	0.22	0.20	0.20	0.20	0.20
Development/Cash flow	0.38	0.46	0.35	0.29	0.36	0.27	0.28	0.28	0.28

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# Natural Gas Royalty Trusts

## A Weekly Analysis

November 11, 2002

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

Volume Decline (%/yr):	11	Price Escalation Post 2007 (%/yr):	2.3
Volume Enhancement (%/yr):	10	Discount rate (%/yr):	5.8
Capex/Cash Flow (%):	25	U.S. TIPS Inflation (%/yr):	1.5
Variable Cost (%):	12	U.S. 10 Year Yield (%/yr):	3.8
PV/Volume (\$/mcf):	1.33	PV/EBITDA 2002:	9.3

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 2003 through 2032; years ending on 9/30													
	321	244	565	3.67	2075	389	249	193	1244	26.70	0.03	0.60	16.10
2003	35.5	0.0	35.5	2.96	105.1	11.7	12.6	18.9	61.9	1.33	0.03	0.97	1.32
2004	31.7	3.6	35.3	3.33	117.3	13.0	14.1	22.6	67.7	1.45		0.92	1.33
2005	28.3	6.7	35.0	3.24	113.5	13.0	13.6	21.7	65.2	1.40		0.87	1.21
2006	25.3	9.5	34.8	3.17	110.3	13.0	13.2	21.0	63.0	1.35		0.82	1.11
2007	22.6	11.9	34.5	3.20	110.4	13.0	13.3	21.0	63.1	1.35		0.77	1.05
2008	20.2	14.1	34.3	3.27	112.2	13.0	13.5	21.4	64.3	1.38		0.73	1.01
2009	18.0	16.0	34.0	3.35	114.0	13.0	13.7	21.8	65.5	1.41		0.69	0.97
2010	16.1	17.7	33.8	3.43	115.8	13.0	13.9	22.2	66.7	1.43		0.65	0.94
2011	14.4	19.2	33.6	3.51	117.7	13.0	14.1	22.6	67.9	1.46		0.62	0.90
2012	12.8	17.2	30.0	3.59	107.5	13.0	12.9		81.6	1.75		0.58	1.02
2013	11.5	15.3	26.8	3.67	98.2	13.0	11.8		73.5	1.58		0.55	0.87
2014	10.2	13.7	23.9	3.75	89.8	13.0	10.8		66.0	1.42		0.52	0.74
2015	9.1	12.2	21.3	3.84	82.0	13.0	9.8		59.2	1.27		0.49	0.62
2016	8.2	10.9	19.1	3.93	74.9	13.0	9.0		53.0	1.14		0.46	0.53
2017	7.3	9.7	17.0	4.02	68.5	13.0	8.2		47.3	1.01		0.44	0.45
2018	6.5	8.7	15.2	4.12	62.6	13.0	7.5		42.1	0.90		0.41	0.37
2019	5.8	7.8	13.6	4.21	57.2	13.0	6.9		37.3	0.80		0.39	0.31
2020	5.2	6.9	12.1	4.31	52.2	13.0	6.3		33.0	0.71		0.37	0.26
2021	4.6	6.2	10.8	4.41	47.7	13.0	5.7		29.0	0.62		0.35	0.22
2022	4.1	5.5	9.7	4.51	43.6	13.0	5.2		25.4	0.54		0.33	0.18
2023	3.7	4.9	8.6	4.62	39.8	13.0	4.8		22.1	0.47		0.31	0.15
2024	3.3	4.4	7.7	4.72	36.4	13.0	4.4		19.0	0.41		0.30	0.12
2025	2.9	3.9	6.9	4.83	33.3	13.0	4.0		16.3	0.35		0.28	0.10
2026	2.6	3.5	6.1	4.94	30.4	13.0	3.6		13.8	0.30		0.26	0.08
2027	2.3	3.1	5.5	5.06	27.8	13.0	3.3		11.4	0.25		0.25	0.06
2028	2.1	2.8	4.9	5.18	25.4	13.0	3.0		9.3	0.20		0.24	0.05
2029	1.9	2.5	4.4	5.30	23.2	13.0	2.8		7.4	0.16		0.22	0.04
2030	1.7	2.2	3.9	5.42	21.2	13.0	2.5		5.6	0.12		0.21	0.03
2031	1.5	2.0	3.5	5.55	19.4	13.0	2.3		4.0	0.09		0.20	0.02
2032	1.3	1.8	3.1	5.67	17.7	13.0	2.1		2.6	0.06		0.19	0.01

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# Natural Gas Royalty Trusts

## A Weekly Analysis

November 11, 2002

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

	<i>Q1</i>	<i>Q2</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Next</i>
	<i>3/31/02</i>	<i>6/30/02</i>	<i>9/30/02</i>	<i>12/31/02</i>	<i>2002E</i>	<i>3/31/03</i>	<i>6/30/03</i>	<i>9/30/03</i>	<i>Twelve</i>
									<i>Months</i>
<b>Highlights</b>									
Revenue (\$mm) (75%)	19.2	18.6	20.8	23.3	81.9	27.9	26.7	27.2	105.1
Cash flow (\$mm) (75%)	14.1	14.1	16.1	18.4	62.7	21.8	20.8	21.1	82.1
Per unit	0.30	0.30	0.35	0.39	1.34	0.47	0.45	0.45	1.76
Tax credit (\$mm)	0.5	1.4	1.4	1.4	4.7				1.4
Per unit	0.01	0.03	0.03	0.03	0.10				0.03
Distributable Income (\$mm)	3.5	9.0	12.2	14.8	39.5	16.1	15.4	15.6	61.9
Per unit	0.08	0.19	0.26	0.32	0.85	0.35	0.33	0.34	1.33
<b>Units</b> (millions)	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6
<b>Volume</b>									
Natural gas (mmbtu)	12.5	12.0	11.6	12.5	48.7	12.5	12.1	12.5	49.8
Heat Content(btu/cf)	1,092	1,077	970	1,066	1,050	1,066	1,066	1,066	1,066
Natural gas (bcf)	11.5	11.1	12.0	11.8	46.4	11.8	11.4	11.8	46.7
Natural Gas (mmcf)	124.7	125.1	130.4	127.8	127.0	127.8	127.8	127.8	127.8
Days	92	89	92	92	365	92	89	92	365
Oil (mb)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Oil (mbd)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total gas & oil (bcf)	11.6	11.3	12.2	11.9	47.0	11.9	11.5	11.9	47.4
<b>Price</b>									
Natural gas (\$/mmbtu) (Henry Hub lagged two months)									
Henry Hub (\$/mmbtu)	2.34	2.92	3.23	3.59	3.02	3.89	3.85	3.78	3.78
Differential (%)	14	31	32	25	27	25	25	25	27
Total	2.01	2.02	2.33	2.69	2.20	2.92	2.89	2.83	2.76
Natural gas (\$/mcf)	2.20	2.18	2.26	2.87	2.31	3.11	3.08	3.02	2.95
Oil (\$/bbl) (WTI Cushing lagged two months)									
WTI Cushing	19.56	23.80	26.49	28.96	24.70	25.57	24.82	26.81	26.54
SJT	15.78	19.14	22.49	24.96	20.86	21.57	20.82	22.81	22.56
Total gas & oil (\$/mcf)	2.20	2.19	2.28	2.60	2.32	3.12	3.09	3.03	2.96
<b>Revenue</b> (\$mm)									
Natural Gas	25.2	24.2	27.1	30.3	106.9	36.6	35.1	35.5	137.5
Oil	0.4	0.5	0.7	0.7	2.3	0.6	0.6	0.7	2.6
Total	25.6	24.8	27.8	31.1	109.2	37.2	35.7	36.2	140.2
<b>Cost</b> (\$mm)									
Severance tax	2.6	2.4	2.3	2.9	10.2	3.7	3.6	3.6	13.8
Operating	4.1	3.7	4.0	3.7	15.5	4.5	4.3	4.5	16.9
Total	6.7	6.0	6.3	6.5	25.6	8.2	7.9	8.1	30.7
<b>Cash flow</b> (\$mm)	18.8	18.8	21.5	24.5	83.6	29.0	27.8	28.1	109.4
Development	11.3	3.4	2.1	4.0	20.8	7.3	6.9	7.0	25.2
<b>Net proceeds</b> (\$mm)	7.5	15.4	19.4	20.5	62.8	21.8	20.8	21.1	84.2
<b>Royalty income</b> (\$mm)	5.6	11.5	14.5	15.4	47.1	16.3	15.6	15.8	63.2
Royalty/Net proceeds	75%	75%	75%	75%	75%	75%	75%	75%	3.0
Administration	0.4	0.5	0.7	0.2	1.8	0.2	0.2	0.2	0.8
One-time	1.7	2.0	1.6		5.3				-
<b>Distributable income</b> (\$mm)	3.5	9.0	12.2	14.8	39.5	16.1	15.4	15.6	61.9
<i>Modeling ratios</i>									
Severance tax/revenue	10.2%	9.5%	8.4%	9.2%	9.3%	10.0%	10.0%	10.0%	9.8%
Operating cost (\$/mcf)	0.36	0.32	0.33	0.31	0.33	0.37	0.37	0.37	0.36

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## Natural Gas Royalty Trusts

A Weekly Analysis

November 11, 2002

**Table SJT-3**  
**San Juan Basin Royalty Trust**  
**Monthly Declarations**

	<i>Aug-02</i>	<i>Sep-02</i>	<i>Oct-02</i>	<i>Nov-02</i>	<i>Dec-02</i>	<i>Jan-03</i>
<b>Distribution</b> (\$/unit)						
Declared	0.08	0.10	0.12			
<i>Projected</i>				0.09	0.11	0.12
<b>Volume</b>						
Natural gas (mmbtu)	3.77	3.95	4.49	3.96	4.09	3.96
Heat Content(btu/cf)	807	1,068	1,084	1,057	1,057	1,057
Natural gas (bcf)	4.67	3.70	4.15	3.74	3.87	3.74
Natural Gas (mmcf)	156	119	134	125	125	125
Days	30	31	31	30	31	30
<b>Price</b>						
Natural gas industry quotes lagged two months (\$/mmbtu)						
Henry Hub Daily/Futures	3.22	2.99	3.09	3.55	4.12	3.92
San Juan Monthly Index	2.24	2.62	2.50	2.42	2.52	3.24
SJT/Henry Hub	0.75	0.78	0.74	0.67	0.64	0.73
SJT/San Juan Index	1.08	0.89	0.91	0.98	1.04	0.88
SJT (\$/mmbtu)	2.41	2.32	2.28	2.37	2.62	2.86
SJT (\$/mcf)	1.95	2.47	2.47	2.50	2.77	3.02
<b>Revenue</b> (\$mm)						
Natural Gas	9.1	9.1	10.2	9.4	10.7	11.3
Other	(0.2)	0.0	(0.1)	(0.0)	(0.0)	(0.0)
<b>Cost</b> (\$mm)						
Severance tax	0.8	0.9	0.9	0.9	1.0	1.1
Operating	1.6	1.3	1.1	1.3	1.3	1.3
Total	2.4	2.2	2.0	2.2	2.3	2.4
<b>Cash flow</b> (\$mm)	6.5	6.9	8.2	7.1	8.3	8.8
Development	1.0	0.5	1.0	1.5	1.5	1.5
<b>Net proceeds</b> (\$mm)	5.5	6.5	7.2	5.6	6.8	7.3
<b>Royalty income</b> (\$mm)	4.1	4.9	5.4	4.2	5.1	5.5
Royalty/Net proceeds	75%	75%	75%	75%	75%	75%
One time	0.6					
<b>Distributable income</b> (\$mm)	3.5	4.9	5.4	4.2	5.1	5.5
<b>Units</b> (millions)	46.6	46.6	46.6	46.6	46.6	46.6
<b>Distribution</b> (\$/unit)	0.08	0.10	0.12	0.09	0.11	0.12
<i>Latest Twelve Month Average</i>						
Heat Content(btu/cf)	1,059	1,059	1,057			
Natural Gas (mmcf)	124	123	125			
SJT/Henry Hub	0.73	0.73	0.74			
SJT/San Juan Index	0.87	0.87	0.87			
Other revenue	(0.0)	(0.0)	(0.0)			
Operating	1.3	1.3	1.3			
Development	2.5	2.4	2.2			
Severance tax/revenue	10.0%	9.8%	9.7%			

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