

# Natural Gas Royalty Trusts

A Weekly Analysis

May 15, 2003

## Present Value Jumps Again

### Summary and Recommendation

A 7% increase in six-year natural gas futures for the week combined with lower nominal and real interest rates sparks a median 9% gain in present value for recommended **San Juan Basin Royalty Trust (SJT)** and for **Hugoton Royalty Trust (HGT)** and **Cross Timbers Royalty Trust (CRT)**. A 10% increase in one-year futures drives a median 10% gain in projected Next Twelve Months (NTM) distributions. When compared with a median 1% increase in stock price, the trusts actually appear lower priced relative to potential. Of course we should be careful about taking the good news too literally; nonetheless, we may indeed be in a new world for natural gas, the premium fuel. Our friends say we have been patient for a long time.

### Monthly Declarations Expected Monday, May 19

We make calculations that suggest that CRT will declare a distribution of \$0.22 per unit (see Table CRT-3). Our calculations suggest that SJT may declare an unusually high distribution of \$0.28 per unit (see Table SJT-3).

Kurt H. Wulff, CFA

### Natural Gas and Oil Futures

May 14, 2003

	2004	2005	2006	2007	2008	2009	Six Year
Natural Gas (\$/mmbtu)							
Year ending May	6.20	5.03	4.83	4.88	4.90	4.89	5.12
Light Sweet Crude Oil (\$/bbl)							
Year ending May	27.07	25.00	24.47	24.38	24.33	24.33	24.93
Natural Gas/Oil (6:1 = 1.0)							
Year ending May	1.37	1.21	1.18	1.20	1.21	1.20	1.23

Source: Nymex, FutureSource, wsj.com, McDep Associates

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

	<i>Symbol/ Rating</i>	<i>Price (\$/sh) 14-May 2003</i>	<i>Shares (mm)</i>	<i>Market Cap (\$mm)</i>	<i>Net Present Value (\$/sh)</i>	<i>Debt/ Present Value</i>	<i>McDep Ratio</i>
Cross Timbers Royalty Trust	CRT	21.98	6.0	132	24.30	-	0.91
Hugoton RoyaltyTrust (46%)	HGT	15.03	18.4	280	19.50	-	0.77
San Juan Basin Royalty Trust	SJT     B	15.80	46.6	740	20.60	-	0.77

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/ Rating</i>	<i>Price (\$/sh) 14-May 2003</i>	<i>EV/ Sales NTM</i>	<i>EV/ Ebitda NTM</i>	<i>P/E NTM</i>	<i>Dividend or Distribution NTM (%)</i>	<i>PV/ Ebitda NTM</i>
Cross Timbers Royalty Trust	CRT	21.98	5.9	7.9	8	12.1	8.7
San Juan Basin Royalty Trust	SJT     B	15.80	4.7	5.7	7	15.2	7.5
Hugoton RoyaltyTrust (46%)	HGT	15.03	4.2	5.4	6	16.5	7.0

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2004; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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

Volume Decline (%/yr):	10	Price Escalation post 2008 (%/yr):	2.6
Volume Enhancement (%/yr):	10	Discount Rate (%/yr):	5.4
Variable Cost (%):	16	U.S. TIPS Inflation (%/yr):	1.8
		U.S. 10 Year Yield (%/yr):	4.0
PV/Volume (\$/mcf):	3.35	PV/EBITDA 2004:	8.9

Year	Natural Gas Volume			Price (\$/mcf)	Revenue (\$mm)	Cost (\$mm)	Oil			Disc Factor	Present Value (\$/unit)
	Basic (bcf)	Enhanced (bcf)	Total (bcf)				Net (\$mm)	Distribution (\$mm)	(\$/unit)		
Total 2004 through 2030; years ending on 3/31											
	26	18	44	5.38	234	37	31	228	38.01	0.64	24.30
2004	2.8	0.0	2.8	5.56	15.3	2.5	3.1	16.0	2.66	0.97	2.59
2005	2.5	0.3	2.8	5.03	13.9	2.2	2.4	14.0	2.33	0.92	2.16
2006	2.2	0.5	2.8	4.62	12.7	2.0	2.2	12.9	2.14	0.88	1.88
2007	2.0	0.7	2.8	4.61	12.7	2.0	2.1	12.7	2.12	0.83	1.77
2008	1.8	0.9	2.8	4.66	12.9	2.1	2.0	12.8	2.13	0.79	1.68
2009	1.6	1.1	2.8	4.67	12.9	2.1	1.9	12.7	2.12	0.75	1.59
2010	1.5	1.3	2.8	4.79	13.2	2.1	1.9	13.0	2.16	0.71	1.54
2011	1.3	1.4	2.8	4.91	13.6	2.2	1.8	13.2	2.20	0.67	1.48
2012	1.2	1.3	2.5	5.04	12.5	2.0	2.3	12.8	2.13	0.64	1.36
2013	1.1	1.2	2.2	5.17	11.5	1.8	2.1	11.8	1.96	0.61	1.19
2014	1.0	1.0	2.0	5.30	10.7	1.7	1.9	10.8	1.80	0.58	1.04
2015	0.9	0.9	1.8	5.44	9.8	1.6	1.7	9.9	1.66	0.55	0.91
2016	0.8	0.8	1.6	5.58	9.1	1.5	1.5	9.2	1.53	0.52	0.79
2017	0.7	0.8	1.5	5.72	8.4	1.3	1.4	8.4	1.40	0.49	0.69
2018	0.6	0.7	1.3	5.87	7.7	1.2	1.2	7.7	1.29	0.47	0.60
2019	0.6	0.6	1.2	6.02	7.1	1.1	1.1	7.1	1.18	0.44	0.52
2020	0.5	0.6	1.1	6.17	6.6	1.1	1.0	6.5	1.09	0.42	0.46
2021	0.5	0.5	1.0	6.33	6.1	1.0		5.1	0.85	0.40	0.34
2022	0.4	0.5	0.9	6.49	5.6	0.9		4.7	0.79	0.38	0.30
2023	0.4	0.4	0.8	6.66	5.2	0.8		4.4	0.73	0.36	0.26
2024	0.3	0.4	0.7	6.83	4.8	0.8		4.0	0.67	0.34	0.23
2025	0.3	0.3	0.6	7.01	4.4	0.7		3.7	0.62	0.32	0.20
2026	0.3	0.3	0.6	7.19	4.1	0.7		3.4	0.57	0.31	0.18
2027	0.2	0.3	0.5	7.37	3.8	0.6		3.2	0.53	0.29	0.15
2028	0.2	0.2	0.5	7.56	3.5	0.6		2.9	0.49	0.28	0.13
2029	0.2	0.2	0.4	7.76	3.2	0.5		2.7	0.45	0.26	0.12
2030	0.2	0.2	0.4	7.96	3.0	0.5		2.5	0.42	0.25	0.10

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

	Q3	Q4	Year	Q1E	Q2E	Q3E	Q4E	Year	Q1E	Next Twelve Months
	9/30/02	12/31/02	6/24/05	3/31/03	6/30/03	9/30/03	12/31/03	2003E	3/31/04	3/31/04
<b>Highlights</b>										
Tax credit (\$mm)										
Per unit	0.03	0.01	0.08							
Distributable Income (\$mm)	2.49	2.80	8.82	2.60	4.09	3.87	4.03	14.59	3.99	15.98
Per unit	0.42	0.47	1.47	0.43	0.68	0.65	0.67	2.43	0.66	2.66
Units (millions)	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)	0.77	0.77	3.03	0.76	0.76	0.76	0.77	3.05	0.77	3.06
Natural Gas (mcmcf)	8.4	8.4	8.3	8.3	8.4	8.4	8.4	8.4	8.4	8.4
Days	91	92	365	92	90	91	92	365	92	365
Oil (mb)	82	91	339	83	77	79	79	318	79	314
Oil (mbd)	0.89	0.99	0.93	0.90	0.86	0.86	0.86	0.87	0.86	0.86
Days	92	92	365	92	89	92	92	365	92	365
Total (bcf)	1.26	1.32	5.06	1.26	1.22	1.24	1.25	4.96	1.25	4.95
<b>Price</b>										
Natural Gas (HH lagged three months)										
Henry Hub (\$/mmbtu)	3.38	3.21	2.88	4.30	6.38	5.79	6.36	5.71	6.42	6.24
Differential (\$/mmbtu)	0.33	0.21	0.09	0.43	0.87	0.58	0.64	0.63	0.64	0.68
CRT (\$/mcf)	3.05	3.00	2.79	3.87	5.51	5.21	5.72	5.08	5.78	5.56
Oil (\$/bbl) (WTI lagged two months)										
WTI Cushing	26.49	28.96	24.70	29.55	32.51	28.58	28.18	29.70	26.90	29.04
CRT	24.79	26.30	22.31	27.55	28.75	26.58	26.18	27.26	24.90	26.58
Total (\$/mcf)	3.47	3.57	3.17	4.16	5.24	4.91	5.20	4.87	5.16	5.13
<b>Revenue (\$mm)</b>										
Natural Gas	2.33	2.32	8.45	2.95	4.16	3.98	4.42	15.52	4.46	17.03
Oil	2.03	2.40	7.55	2.28	2.20	2.10	2.07	8.66	1.97	8.35
Total	4.37	4.71	16.01	5.23	6.37	6.09	6.49	24.18	6.43	25.38
<b>Cost (\$mm)</b>										
Tax, transport & other	0.60	0.66	2.11	0.73	0.89	0.85	0.91	3.38	0.90	3.55
Production	0.79	0.75	3.01	0.75	0.75	0.75	0.75	3.00	0.75	3.00
Total	1.40	1.41	5.13	1.48	1.64	1.60	1.66	6.38	1.65	6.55
<b>Cash flow (\$mm)</b>										
Development	2.97	3.30	10.88	3.75	4.72	4.48	4.83	17.79	4.78	18.82
Excess or other	0.08	0.06	0.57	0.15	0.15	0.15	0.15	0.60	0.15	0.60
		(0.02)	(0.02)					-		
<b>Net proceeds (\$mm)</b>	2.89	3.26	10.33	3.60	4.57	4.33	4.68	17.19	4.63	18.22
<b>Royalty income (\$mm)</b>										
Royalty/Net proceeds	87%	87%	88%	87%	90%	90%	87%	89%	87%	89%
Administration	0.04	0.02	0.22	0.54	0.04	0.04	0.04	0.66	0.04	0.16
<b>Distributable income (\$mm)</b>	2.49	2.80	8.82	2.60	4.09	3.87	4.03	14.59	3.99	15.98
<i>Modeling ratios</i>										
Tax and other/revenue	0.14	0.14	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14

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**Table CRT-3**  
**Cross Timbers Royalty Trust**  
**Monthly Distributions**

	<i>Mar-03</i>	<i>Apr-03</i>	<i>May-03</i>	<i>Jun-03</i>
<b>Distribution</b> (\$/unit)				
Declared	0.18	0.20		
<i>Projected</i>			0.22	0.26
<b>Volume</b>				
Natural Gas (bcf)	233	266	232	257
Natural Gas (mmcf/d)	7.52	8.58	8.30	8.30
Days	31	31	28	31
Oil (mb)	24.8	24.1	26.7	25.8
Oil (mbd)	0.80	0.86	0.86	0.86
Days	31	28	31	30
Total (bcf)	382	411	392	412
<b>Price</b>				
Natural gas industry quotes lagged three months (\$/mmbtu)				
Henry Hub Daily/Futures	4.76	5.41	7.77	5.95
San Juan Monthly Index	3.45	4.14	4.58	5.91
CRT/Henry Hub	0.90	0.83	0.72	1.09
CRT/San Juan Index	1.25	1.08	1.22	1.10
CRT (\$/mcf)	4.30	4.48	5.59	6.51
Oil (\$/bbl)				
WTI Cushing (lagged two months)	32.94	35.87	33.27	28.38
CRT/WTI Cushing	0.91	0.88	0.89	0.89
CRT	29.87	31.53	29.61	25.26
Total (\$/mcf)	4.56	4.75	5.32	5.64
<b>Revenue</b> (\$mm)				
Natural Gas	1.00	1.19	1.30	1.67
Oil	0.74	0.76	0.79	0.65
Total	1.74	1.95	2.09	2.33
<b>Distributable income</b> (\$mm)	1.06	1.23	1.32	1.54
Distributable Income/Revenue (%)				
Natural Gas	75	75	75	75
Oil	41	44	44	44
Total	61	63	63	66

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

Volume Decline (%/yr):	11	Price Escalation Post 2008 (%/yr):	2.6
Volume Enhancement (%/yr):	10	Discount rate (%/yr):	6.0
Capex/Cash Flow (%):	30	U.S. TIPS Inflation (%/yr):	1.8
Variable Cost (%):	17	U.S. 10 Year Yield (%/yr):	4.0
PV/Volume (\$/mcf):	1.90	PV/EBITDA 2004:	7.0

Year	Basic (bcf)	Volume Enhanced (bcf)	Total (bcf)	Price (\$/mcf)	Revenue (\$mm)	Fixed Cost (\$mm)	Var Cost (\$mm)	Cap Ex (\$mm)	Distribution (\$mm)	(\$/unit)	Disc Factor	Present Value (\$/unit)
Total 2004 through 2030; years ending on 3/31												
	247	164	411	5.07	2084	229	354	206	1295	32.38	0.60	19.50
2004	27.5	0.0	27.5	5.28	145.0	8.5	24.6	12.8	99.1	2.48	0.97	2.41
2005	24.6	2.7	27.3	4.76	130.0	8.5	22.1	29.8	69.6	1.74	0.92	1.60
2006	22.0	5.2	27.1	4.38	118.8	8.5	20.2	27.0	63.1	1.58	0.86	1.36
2007	19.6	7.4	27.0	4.37	117.9	8.5	20.0	26.8	62.6	1.56	0.82	1.28
2008	17.5	9.3	26.8	4.41	118.4	8.5	20.1	26.9	62.8	1.57	0.77	1.21
2009	15.7	11.0	26.7	4.42	117.9	8.5	20.0	26.8	62.6	1.56	0.73	1.14
2010	14.0	12.5	26.5	4.54	120.2	8.5	20.4	27.4	63.9	1.60	0.69	1.09
2011	12.5	13.8	26.3	4.65	122.6	8.5	20.8	28.0	65.3	1.63	0.65	1.06
2012	11.2	12.3	23.5	4.77	112.4	8.5	19.1		84.8	2.12	0.61	1.29
2013	10.0	11.0	21.0	4.90	103.1	8.5	17.5		77.1	1.93	0.58	1.11
2014	9.0	9.9	18.8	5.02	94.5	8.5	16.1		70.0	1.75	0.54	0.95
2015	8.0	8.8	16.8	5.15	86.7	8.5	14.7		63.5	1.59	0.51	0.81
2016	7.2	7.9	15.0	5.28	79.5	8.5	13.5		57.5	1.44	0.48	0.69
2017	6.4	7.0	13.4	5.42	72.9	8.5	12.4		52.0	1.30	0.46	0.59
2018	5.7	6.3	12.0	5.56	66.8	8.5	11.4		47.0	1.17	0.43	0.51
2019	5.1	5.6	10.7	5.70	61.3	8.5	10.4		42.4	1.06	0.41	0.43
2020	4.6	5.0	9.6	5.85	56.2	8.5	9.6		38.2	0.95	0.38	0.37
2021	4.1	4.5	8.6	6.00	51.5	8.5	8.8		34.3	0.86	0.36	0.31
2022	3.7	4.0	7.7	6.15	47.2	8.5	8.0		30.7	0.77	0.34	0.26
2023	3.3	3.6	6.9	6.31	43.3	8.5	7.4		27.5	0.69	0.32	0.22
2024	2.9	3.2	6.1	6.47	39.7	8.5	6.8		24.5	0.61	0.30	0.19
2025	2.6	2.9	5.5	6.64	36.4	8.5	6.2		21.8	0.54	0.29	0.16
2026	2.3	2.6	4.9	6.81	33.4	8.5	5.7		19.3	0.48	0.27	0.13
2027	2.1	2.3	4.4	6.99	30.6	8.5	5.2		17.0	0.42	0.25	0.11
2028	1.9	2.1	3.9	7.17	28.1	8.5	4.8		14.8	0.37	0.24	0.09
2029	1.7	1.8	3.5	7.35	25.8	8.5	4.4		12.9	0.32	0.23	0.07
2030	1.5	1.6	3.1	7.54	23.6	8.5	4.0		11.1	0.28	0.21	0.06

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

	Q2	Q3	Q4	Year	Q1E	Q2E	Q3E	Q4E	Year	Q1E	Next Twelve Months
	6/30/02	9/30/02	12/31/02	6/24/05	3/31/03	6/30/03	9/30/03	12/31/03	2003E	3/31/04	3/31/04
<b>Highlights</b>											
Revenue (\$mm) (80%)	16.5	19.7	18.9	73.6	27.8	35.5	35.5	36.6	135.3	37.5	145.0
Cash flow (\$mm) (80%)	10.1	13.3	12.6	48.1	20.3	27.4	27.3	28.3	103.3	29.1	112.2
Per unit	0.25	0.33	0.32	1.20	0.51	0.69	0.68	0.71	2.58	0.73	2.80
Tax credit (\$mm)	0.2	0.2	0.2	0.7							
Per unit	0.00	0.00	0.00	0.02							
Distributable Income (\$mm)	5.3	8.6	8.3	29.6	17.2	24.1	24.0	25.1	90.4	25.8	99.1
Per unit	0.13	0.22	0.21	0.74	0.43	0.60	0.60	0.63	2.26	0.65	2.48
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)	8.3	8.6	8.4	34.3	8.2	7.9	8.2	8.2	32.4	8.2	32.4
Natural Gas (mmcf)	93.1	93.4	91.4	94.0	88.8	88.8	88.8	88.8	88.8	88.8	88.8
Days	89	92	92	365	92	89	92	92	365	92	365
Oil (mb)	88	90	84	353	83	79	81	80	324	81	322
Oil (mbd)	1.0	1.0	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Days	89	92	92	365	92	89	92	92	365	92	365
Total (bcf)	8.8	9.1	8.9	36.4	8.7	8.4	8.7	8.7	34.3	8.7	34.3
<b>Price</b>											
Natural Gas (HH lagged two months)											
Henry Hub (\$/mmbtu)	2.92	3.23	3.59	3.02	4.73	6.33	6.16	6.38	5.90	6.55	6.35
Differential (%)	23	20	30	19	16	16	16	16	16	16	16
HGT (\$/mcf)	2.25	2.60	2.52	2.44	3.96	5.29	5.15	5.33	4.93	5.47	5.31
Oil (\$/bbl) (WTI Cushing lagged two months)											
WTI Cushing	23.80	26.49	28.96	24.70	29.55	32.51	28.58	27.64	29.57	26.66	28.85
HGT	22.27	25.84	28.16	23.70	29.05	32.01	28.08	27.14	29.06	26.16	28.33
Total (\$/mcf)	2.33	2.70	2.65	2.52	4.01	5.29	5.12	5.29	4.92	5.41	5.28
<b>Revenue (\$mm)</b>											
Natural Gas	18.6	22.3	21.2	83.6	32.3	41.8	42.0	43.6	159.7	44.7	172.1
Oil	2.0	2.3	2.4	8.4	2.4	2.5	2.3	2.2	9.4	2.1	9.1
Total	20.6	24.6	23.6	92.0	34.7	44.3	44.3	45.7	169.1	46.8	181.2
<b>Cost (\$mm)</b>											
Tax, transport & other	1.9	2.1	2.5	8.2	3.5	4.4	4.4	4.6	16.9	4.7	18.1
Production	4.0	3.8	3.9	16.1	4.0	3.7	3.8	3.8	15.3	3.8	15.1
Overhead	2.0	2.1	1.5	7.6	1.9	1.9	1.9	1.9	7.8	1.9	7.8
Total	7.9	8.0	7.8	31.8	9.4	10.1	10.2	10.3	40.0	10.4	41.0
<b>Cash flow (\$mm)</b>											
Development	12.7	16.7	15.8	60.2	25.3	34.3	34.1	35.4	129.1	36.4	140.2
	5.8	5.8	5.4	22.7	3.7	4.0	4.0	4.0	15.7	4.0	16.0
<b>Net proceeds (\$mm)</b>											
	6.9	10.9	10.4	37.4	21.6	30.3	30.1	31.4	113.4	32.4	124.2
<b>Royalty income (\$mm)</b>											
Royalty/Net proceeds	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Administration	0.2	0.1	0.0	0.4	0.1	0.1	0.1	0.1	0.3	0.1	0.3
<b>Distributable income (\$mm)</b>											
	5.3	8.6	8.3	29.6	17.2	24.1	24.0	25.1	90.4	25.8	99.1
<b>Cost ratios</b>											
Tax and other/revenue	9%	9%	11%	9%	10%	10%	10%	10%	10%	10%	10%
Production cost (\$/mcf)	0.46	0.42	0.43	0.44	0.46	0.44	0.44	0.44	0.45	0.44	0.44
Overhead cost (\$/mcf)	0.23	0.23	0.17	0.21	0.22	0.23	0.22	0.22	0.23	0.22	0.23
Development/Cash flow	0.46	0.35	0.34	0.38	0.15	0.12	0.12	0.11	0.12	0.11	0.11

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# Natural Gas Royalty Trusts

## A Weekly Analysis

May 15, 2003

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

Volume Decline (%/yr):	11	Price Escalation Post 2008 (%/yr):	2.6
Volume Enhancement (%/yr):	10	Discount rate (%/yr):	6.0
Capex/Cash Flow (%):	25	U.S. TIPS Inflation (%/yr):	1.8
Variable Cost (%):	12	U.S. 10 Year Yield (%/yr):	4.0
PV/Volume (\$/mcf):	1.88	PV/EBITDA 2004:	7.8

Year	Basic (bcf)	Volume Enhanced (bcf)	Total (bcf)	Price (\$/mcf)	Revenue (\$mm)	Fixed Cost (\$mm)	Var Cost (\$mm)	Cap Ex (\$mm)	Distribution (\$mm)	(\$/unit)	Disc Factor	Present Value (\$/unit)
Total 2004 through 2030; years ending on 3/31												
	306	204	509	4.76	2426	352	291	206	1577	33.84	0.61	20.60
2004	34.1	0.0	34.1	4.57	155.7	14.3	18.7	10.7	112.0	2.40	0.97	2.33
2005	30.5	3.4	33.9	4.50	152.3	13.0	18.3	30.3	90.8	1.95	0.92	1.78
2006	27.2	6.4	33.7	4.13	139.1	13.0	16.7	27.4	82.1	1.76	0.86	1.52
2007	24.3	9.1	33.5	4.13	138.1	13.0	16.6	27.1	81.4	1.75	0.82	1.42
2008	21.8	11.5	33.3	4.17	138.6	13.0	16.6	27.2	81.7	1.75	0.77	1.35
2009	19.5	13.6	33.1	4.18	138.1	13.0	16.6	27.1	81.4	1.75	0.73	1.27
2010	17.4	15.5	32.9	4.29	140.8	13.0	16.9	27.7	83.2	1.78	0.69	1.22
2011	15.5	17.1	32.7	4.40	143.6	13.0	17.2	28.3	85.0	1.82	0.65	1.18
2012	13.9	15.3	29.2	4.51	131.6	13.0	15.8		102.8	2.21	0.61	1.35
2013	12.4	13.7	26.1	4.62	120.7	13.0	14.5		93.2	2.00	0.58	1.15
2014	11.1	12.2	23.3	4.74	110.7	13.0	13.3		84.4	1.81	0.54	0.98
2015	9.9	10.9	20.9	4.87	101.5	13.0	12.2		76.3	1.64	0.51	0.84
2016	8.9	9.8	18.6	4.99	93.1	13.0	11.2		68.9	1.48	0.48	0.71
2017	7.9	8.7	16.7	5.12	85.3	13.0	10.2		62.1	1.33	0.46	0.61
2018	7.1	7.8	14.9	5.25	78.3	13.0	9.4		55.9	1.20	0.43	0.52
2019	6.3	7.0	13.3	5.39	71.8	13.0	8.6		50.1	1.08	0.41	0.44
2020	5.7	6.2	11.9	5.52	65.8	13.0	7.9		44.9	0.96	0.38	0.37
2021	5.1	5.6	10.6	5.67	60.3	13.0	7.2		40.1	0.86	0.36	0.31
2022	4.5	5.0	9.5	5.81	55.3	13.0	6.6		35.7	0.77	0.34	0.26
2023	4.1	4.5	8.5	5.96	50.7	13.0	6.1		31.6	0.68	0.32	0.22
2024	3.6	4.0	7.6	6.11	46.5	13.0	5.6		27.9	0.60	0.30	0.18
2025	3.2	3.6	6.8	6.27	42.7	13.0	5.1		24.5	0.53	0.29	0.15
2026	2.9	3.2	6.1	6.43	39.1	13.0	4.7		21.4	0.46	0.27	0.12
2027	2.6	2.8	5.4	6.60	35.9	13.0	4.3		18.6	0.40	0.25	0.10
2028	2.3	2.5	4.9	6.77	32.9	13.0	3.9		15.9	0.34	0.24	0.08
2029	2.1	2.3	4.3	6.94	30.2	13.0	3.6		13.5	0.29	0.23	0.07
2030	1.8	2.0	3.9	7.12	27.7	13.0	3.3		11.3	0.24	0.21	0.05

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# Natural Gas Royalty Trusts

## A Weekly Analysis

May 15, 2003

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

	Q2	Q3	Q4	Year	Q1E	Q2E	Q3E	Q4E	Year	Q1E	Next Twelve Months
	6/30/02	9/30/02	12/31/02	6/24/05	3/31/03	6/30/03	9/30/03	12/31/03	2003E	3/31/04	3/31/04
<b>Highlights</b>											
Revenue (\$mm) (75%)	18.6	20.7	20.4	78.9	31.1	38.4	37.9	39.2	146.5	40.2	155.7
Cash flow (\$mm) (75%)	14.1	16.0	15.6	59.7	25.0	31.5	31.1	32.3	119.9	33.2	128.1
Per unit	0.30	0.34	0.33	1.28	0.54	0.68	0.67	0.69	2.57	0.71	2.75
Tax credit (\$mm)	1.4	1.9	1.9	5.6					-		
Per unit	0.03	0.04	0.04	0.12					-		
Distributable Income (\$mm)	9.0	12.2	11.6	36.3	19.5	27.4	27.1	28.3	102.3	29.2	112.0
Per unit	0.19	0.26	0.25	0.78	0.42	0.59	0.58	0.61	2.19	0.63	2.40
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)	12.0	11.6	12.4	48.5	12.6	11.7	12.1	12.1	48.5	12.1	48.0
Heat Content(btu/cf)	1,077	970	1,064	1,050	1,084	1,068	1,068	1,068	1,072	1,068	1,068
Natural gas (bcf)	11.1	12.0	11.6	46.2	11.6	11.0	11.3	11.3	45.3	11.3	44.9
Natural Gas (mmcf)	125.1	130.4	126.2	126.6	126.5	123.1	123.1	123.1	124.0	123.1	123.1
Days	89	92	92	365	92	89	92	92	365	92	365
Oil (mb)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Oil (mbd)	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total gas & oil (bcf)	11.3	12.1	11.7	46.8	11.8	11.1	11.4	11.4	45.7	11.4	45.4
<b>Price</b>											
Natural gas (\$/mmbtu) (Henry Hub lagged two months)											
Henry Hub (\$/mmbtu)	2.92	3.23	3.59	3.02	4.73	6.33	6.16	6.38	5.90	6.55	6.35
Differential (%)	31	28	40	30	32	32	33	33	33	33	33
Total	2.02	2.33	2.16	2.13	3.24	4.32	4.13	4.28	3.98	4.39	4.28
Natural gas (\$/mcf)	2.18	2.26	2.30	2.24	3.51	4.61	4.41	4.57	4.27	4.69	4.57
Oil (\$/bbl) (WTI Cushing lagged two months)											
WTI Cushing	23.80	26.49	28.96	24.70	29.55	32.51	28.58	27.64	29.57	26.66	28.85
SJT	19.14	21.95	28.35	20.90	28.92	31.82	27.98	27.06	28.92	26.10	28.21
Total gas & oil (\$/mcf)	2.19	2.28	2.32	2.25	3.53	4.62	4.41	4.57	4.27	4.68	4.57
<b>Revenue (\$mm)</b>											
Natural Gas	24.2	27.1	26.7	103.3	40.9	50.6	49.9	51.7	193.1	53.1	205.4
Oil	0.5	0.5	0.6	2.0	0.6	0.6	0.5	0.5	2.3	0.5	2.2
Total	24.8	27.6	27.3	105.2	41.5	51.2	50.5	52.3	195.4	53.6	207.5
<b>Cost (\$mm)</b>											
Severance tax	2.4	2.3	3.1	10.5	4.2	5.3	5.0	5.2	19.8	5.4	20.9
Operating	3.7	4.0	3.4	15.2	3.9	3.9	4.0	4.0	15.8	4.0	15.8
Total	6.0	6.3	6.5	25.6	8.1	9.2	9.0	9.2	35.5	9.3	36.7
<b>Cash flow (\$mm)</b>	18.8	21.3	20.7	79.6	33.3	42.0	41.5	43.1	159.8	44.3	170.8
Development	3.4	2.1	4.7	21.5	6.6	3.6	3.6	3.6	17.2	3.6	14.2
<b>Net proceeds (\$mm)</b>	15.4	19.2	16.1	58.2	26.8	38.4	37.9	39.5	142.6	40.7	156.6
<b>Royalty income (\$mm)</b>											
Royalty/Net proceeds	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Administration	0.5	0.6	0.5	2.0	0.6	1.4	1.4	1.4	4.7	1.4	5.4
One-time	2.0	1.6		5.3					-		-
<b>Distributable income (\$mm)</b>	9.0	12.2	11.6	36.3	19.5	27.4	27.1	28.3	102.3	29.2	112.0
<i>Modeling ratios</i>											
Severance tax/revenue	9.5%	8.5%	11.5%	9.9%	10.2%	10.3%	10.0%	10.0%	10.1%	10.0%	10.1%
Operating cost (\$/mcf)	0.32	0.33	0.29	0.32	0.33	0.35	0.35	0.35	0.34	0.35	0.35
Development/Cash flow	18%	10%	22%	27%	20%	8%	9%	8%	11%	8%	8%

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# Natural Gas Royalty Trusts

A Weekly Analysis

May 15, 2003

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

	<i>Feb-03</i>	<i>Mar-03</i>	<i>Apr-03</i>	<i>May-03</i>	<i>Jun-03</i>	<i>Jul-03</i>	<i>Aug-03</i>
<b>Distribution</b> (\$/unit)							
Declared	0.12	0.20	0.16				
Projected				0.28	0.15	0.18	0.20
<b>Volume</b>							
Natural gas (mmbtu)	3.97	4.58	3.62	4.11	3.98	4.11	3.98
Heat Content(btu/cf)	1,097	1,067	1,107	1,051	1,051	1,051	1,051
Natural gas (bcf)	3.62	4.29	3.27	3.91	3.78	3.91	3.78
Natural Gas (mmcf)	117	138	117	126	126	126	126
Days	31	31	28	31	30	31	30
<b>Price</b>							
Natural gas industry quotes lagged two months (\$/mmbtu)							
Henry Hub Daily/Futures	4.76	5.41	7.77	5.95	5.26	5.80	6.31
San Juan Monthly Index	3.45	4.14	4.58	5.91	3.71	4.03	
SJT/Henry Hub	0.66	0.68	0.54	0.90	0.64	0.63	0.67
SJT/San Juan Index	0.91	0.88	0.91	0.91	0.91	0.91	
SJT (\$/mmbtu)	3.14	3.66	4.16	5.38	3.38	3.67	4.23
SJT (\$/mcf)	3.45	3.91	4.60	5.66	3.55	3.86	4.45
<b>Revenue</b> (\$mm)							
Natural Gas	12.5	16.8	15.0	22.1	13.4	15.1	16.8
Other	(0.1)	(0.1)	0.1	(0.0)	(0.0)	(0.0)	(0.0)
<b>Cost</b> (\$mm)							
Severance tax	1.3	1.7	1.6	2.3	1.4	1.6	1.8
Operating	1.3	1.1	1.4	1.3	1.3	1.3	1.3
Total	2.6	2.8	3.0	3.6	2.7	2.8	3.0
<b>Cash flow</b> (\$mm)	9.8	13.8	12.1	18.5	10.7	12.2	13.8
Development	2.4	1.4	1.1	1.2	1.2	1.2	1.2
<b>Net proceeds</b> (\$mm)	7.4	12.4	11.0	17.3	9.5	11.0	12.5
<b>Royalty income</b> (\$mm)	5.5	9.3	8.3	12.9	7.1	8.2	9.4
Royalty/Net proceeds	75%	75%	75%	75%	75%	75%	75%
One time			0.9				
<b>Distributable income</b> (\$mm)	5.5	9.3	7.4	12.9	7.1	8.2	9.4
<b>Units</b> (millions)	46.6	46.6	46.6	46.6	46.6	46.6	46.6
<b>Distribution</b> (\$/unit)	0.12	0.20	0.16	0.28	0.15	0.18	0.20
<i>Latest Twelve Month Average</i>							
Heat Content(btu/cf)	1,050	1,048	1,051				
Natural Gas (mmcf)	126	127	126				
SJT/Henry Hub	0.70	0.67	0.67				
SJT/San Juan Index	0.90	0.90	0.91				
Other revenue	(0.1)	(0.1)	(0.0)				
Operating	1.3	1.2	1.3				
Development	1.5	1.4	1.2				
Severance tax/revenue	10.1%	10.1%	10.2%				

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