

**New York State  
Leasing of State Lands for  
Oil and Gas Development  
2008 Report**

**New York State  
Department of Environmental Conservation  
Division of Mineral Resources  
625 Broadway  
Albany, New York 12233-6500**

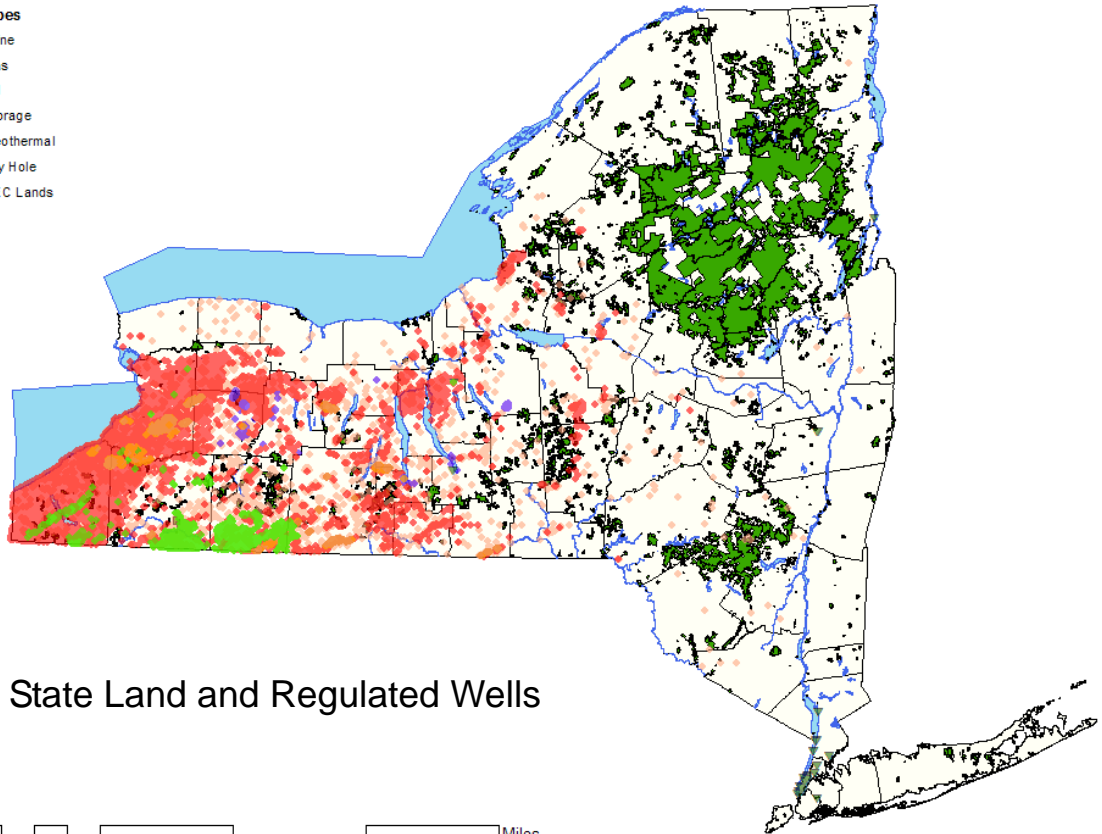
[www.dec.ny.gov/energy/205.html](http://www.dec.ny.gov/energy/205.html)



**David Paterson, Governor**

**Alexander B. Grannis, Commissioner**

- Well Types
- ◆ Brine
  - ◆ Gas
  - ◆ Oil
  - ◆ Storage
  - ▼ Geothermal
  - Dry Hole
  - DEC Lands



## State Land and Regulated Wells

0 25 50 100 150 200 Miles

This report was produced by the  
NYS Department of Environmental Conservation

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## Introduction

This report describes oil and gas activity through year-end 2008 in New York State, focusing on activity on state lands. It contains detailed information on revenues generated from oil and gas production on state lands, the number and location of active state leases, lease sales of state lands and the leasing process. Additional information concerning leasing of state lands may be obtained by contacting the Division of Mineral Resources.

Some 2008 highlights pertaining to state land leasing include:

- State acreage currently under lease decreased to 63,591 acres in 2008 from 83,021 acres in 2007 due to the expiration of leases from the 2003 sale. The 2003 lease sale contracts reached the 5-year mark meaning the primary term expired on 15 contracts, releasing 20,000 acres of state land that could be re-bid in a future sale. Five contracts are in the secondary term generating royalty payments. See page 6 for a summary of the current status of the 2003 contracts.
- Revenue from oil and gas leases on state lands totaled over \$2.1 million in 2008, down from \$11.7 million in 2007. The lack of bonus bids from a lease sale caused the decline. No competitive lease sales for large tracts of state land have been held since 2006.
- Although nearly 59,000 acres of state land have been leased since 1999, only 37 of these acres have been disturbed by well drilling and road and pipeline construction. No wells have been drilled on the lands leased in 2006, although there was minor surface disturbance on a few parcels due to seismic data acquisition.

## State Acreage Under Lease

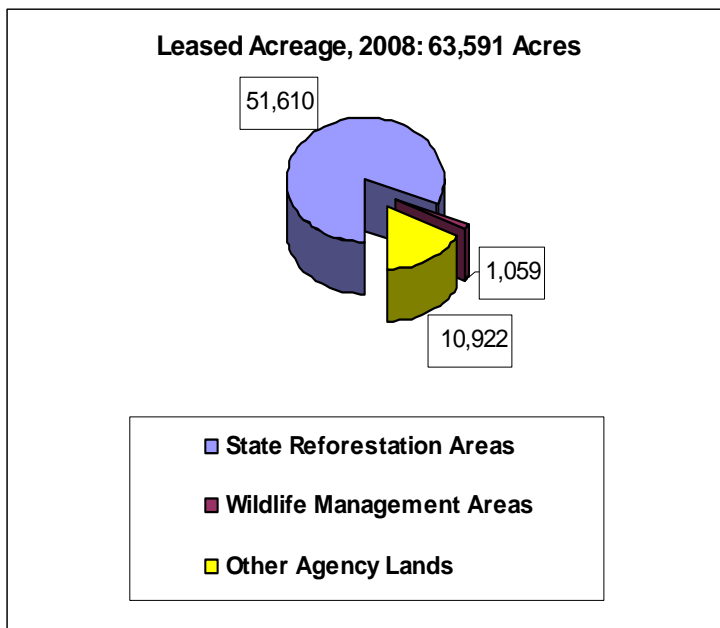
Under the authority contained in Article 23, the New York State Oil, Gas and Solution Mining Law, the DEC acts as leasing agent for State Reforestation Areas, Multiple Use Areas, Wildlife Management Areas and other state lands such as Department of Transportation rights-of-way. The Department has had an active leasing program since the 1960's and some current state leases date back to 1977.

As of year-end 2008, state acreage leased for oil and gas development totaled 63,591 acres in 91 leases, a decrease of 19,430 acres from the 2007 year-end total due to expiration of 15 leases awarded at the 2003 sale. Approximately one-third of the state acreage under lease is in five-year primary terms and the state is due delay rentals. Delay rentals are yearly payments, typically five dollars per acre per lease. If the five year primary term of a lease ends without a well establishing production, the lease expires and oil and gas development rights return to the State.

If the lessee drills a well before the expiration of the lease and discovers and produces hydrocarbons, the lease enters its secondary term. The secondary term lasts as long as commercial amounts of hydrocarbons are produced from the leased tract. Delay rentals are no longer due but the State receives a percentage share of the proceeds from the sale of production, free of the costs of production. The current percentage share, or royalty, is one-eighth or 12.5% of gross production revenue.

After commercial production from all wells on a lease ceases, the lands are reclaimed to Department standards by the operator, the lease is terminated and oil and gas rights are returned to the state.

At year-end 2008, there were 32,452 state acres in 61 leases in their secondary terms and the State's royalty revenue was derived from these leases.



**Figure 1. State leases broken down by type and lease status.**

Acres Under Lease and Lease Status at Year-End 2008	
<b>State Reforestation Areas</b>	
Delay Rental	19,227
Royalty	30,192
Storage	2,191
<b>Wildlife Management Areas</b>	
Delay Rental	0
Royalty	1,004
Storage	55
<b>Other Agency Lands</b>	
Delay Rental	0
Royalty	1,256
Storage	9,666
<b>Total</b>	<b>63,591</b>

2008 Leasing Summary by County									
Amount of Acres Leased						Number of Leases			
County	Rental	Royalty	Storage	Total		Rental	Royalty	Storage	Total
Allegany		126		126			1		1
Broome	512			512		1			1
Cattaraugus		62	9,981	10,043			2	8	10
Cayuga		62		62			4		4
Chautauqua		15,715		15,715			29		29
Chemung	729	582		1,311		2	8		10
Cortland	7,791			7,791		4			4
Erie		10	255	265			2	2	4
Ontario			55	55				1	1
Schuyler	2,416	10,019	1	12,436		1	6	1	8
Seneca		17		17			1		1
Steuben	685	5,859	1,620	8,164		1	8	2	11
Tioga	6,179			6,179		6			6
Tompkins	915			915		1			1
<b>Total</b>	<b>19,227</b>	<b>32,452</b>	<b>11,912</b>	<b>63,591</b>		<b>16</b>	<b>61</b>	<b>14</b>	<b>91</b>

**Figure 2. Tabulation of leases by location, acres leased and status.** The amount of state acres leased in each county and the lease status of these acres is detailed on the left. The number of active state leases in each county and their status is detailed on the right.

Several companies purchase and inject natural gas into depleted gas fields or caverns dissolved in salt beds in New York during summer months when the price and demand for gas is low. They produce and sell the gas during winter months when the demand and price is higher.

State lands may be used for such storage projects

when a storage lease is granted by the State. The State receives yearly rental fees from storage fields under state lands and additional fees based on the volumes of natural gas injected and withdrawn during a given year.

The year-end 2008 total of acreage under storage leases was 11,912, the same as the previous year.

### 2003 Lease Sale - 5 Years Later

Twenty-one leases were awarded at the 2003 competitive lease sale for a total of \$4.5 million in bonus bids. Sixteen leases terminated after the 5 year primary term expired for lack of production. Five leases went into the secondary term & paid one-eighth royalty on the gas production. Total revenue for life of all 21 leases was \$11 million.

<b>2003 Lease Sale – Active Royalty Leases</b>						
<b>Area</b>	<b>Name</b>	<b>Acres</b>	<b>Bid Bonus</b>	<b>Delay Rental</b>	<b>Royalty</b>	<b>Total Revenue</b>
SchuylerSRA #2B	Sugar Hill	970.81	401,061.03	\$11,649.72	\$20,091.85	\$432,802.60
Ste/SchSRA#1	Cinnamon Lake	1,786.61	\$468,288.34	\$16,079.49	\$83,622.16	\$567,989.99
SteubenSRA #3	South Bradford	1,818.00	\$886,370.42	\$5,456.49	\$5,026,618.49	\$5,918,445.40
SteubenSRA #7	Meads Creek	1,451.30	\$306,529.07	\$13,061.70	\$848,630.37	\$1,168,221.14
SteubenSRA #14	Erin Hollow	530.82	\$311,612.57	\$4,777.38	\$135,730.96	\$452,120.91
<b>Total</b>		<b>6,557.54</b>	<b>\$2,373,861.43</b>	<b>\$51,024.78</b>	<b>\$6,114,693.83</b>	<b>\$8,539,580.04</b>

**Figure 3. 2003 sale - royalty leases & revenue as of 12-31-08**

<b>2003 Sale - Expired Leases</b>						
<b>Area</b>	<b>Name</b>	<b>Acres</b>	<b>Bid Bonus</b>	<b>Delay Rental</b>	<b>Royalty</b>	<b>Total Revenue</b>
SchuylerSRA#2A	Sugar Hill	945.30	\$361,681.23	\$11,343.60	\$0.00	\$373,024.83
SchuylerSRA#3	Texas Hollow	937.17	\$49,201.43	\$11,246.04	\$0.00	\$60,447.47
SteubenSRA#4	Cameron	1,990.00	\$47,163.00	\$23,880.00	\$0.00	\$71,043.00
SteubenSRA#6	Urbana	2,654.83	\$163,618.23	\$31,857.96	\$0.00	\$195,476.19
SteubenSRA#8	Birdseye Holw	3,445.65	\$180,896.62	\$41,347.80	\$0.00	\$222,244.42
SteubenSRA#9	Beaver Dams	487.18	\$112,562.93	\$5,846.16	\$0.00	\$118,409.09
SteubenSRA#10	Moss Hill	1,831.64	\$96,161.10	\$21,979.68	\$0.00	\$118,140.78
SteubenSRA#11	Pigtail Hollow	997.91	\$61,502.19	\$11,974.92	\$0.00	\$73,477.11
SteubenSRA#13	Dry Run	1,062.32	\$178,554.74	\$12,747.84	\$0.00	\$191,302.58
SteubenSRA#16	Tracy Creek	569.20	\$23,052.57	\$6,830.40	\$0.00	\$29,882.97
SteubenSRA#18	Cameron Mills	545.61	\$24,880.82	\$3,273.66	\$0.00	\$28,154.48
SteubenMUA#19	Burt Hill	402.96	\$6,044.40	\$4,835.52	\$0.00	\$10,879.92
SteubenSRA#20	Erwin Mtn	506.69	\$162,024.26	\$6,080.28	\$0.00	\$168,104.54
SteubenSRA#21	McCarthy	793.78	\$86,260.08	\$9,525.36	\$0.00	\$95,785.44
SteubenMUA#22	Mt Washington	440.42	\$6,606.30	\$5,285.04	\$0.00	\$11,891.34
ErwinWMA	Erwin	2,365.01	\$644,465.23	\$28,380.12	\$0.00	\$672,845.35
<b>Total</b>		<b>9,984.67</b>	<b>\$2,204,675.13</b>	<b>\$236,434.38</b>	<b>\$0.00</b>	<b>\$2,441,109.51</b>

**Figure 4. 2003 sale - terminated leases & revenue as of 12-31-08**

## 2008 Leasing Revenue Results

Total revenues in 2008 declined to \$2.175 million from \$11.8 million in 2007 due to the fact that a state land lease sale was not held. In 2007, the state posted \$8.9 million in bonus bids from the 2006 sale. Royalty revenues also declined slightly due to declining Trenton-Black River production. Royalties are dependent on drilling and production and are the on-going source of leasing revenues given that lease sales are not held annually. In years when sales were held, 1999, 2003 & 2006, the greatest revenues were realized.

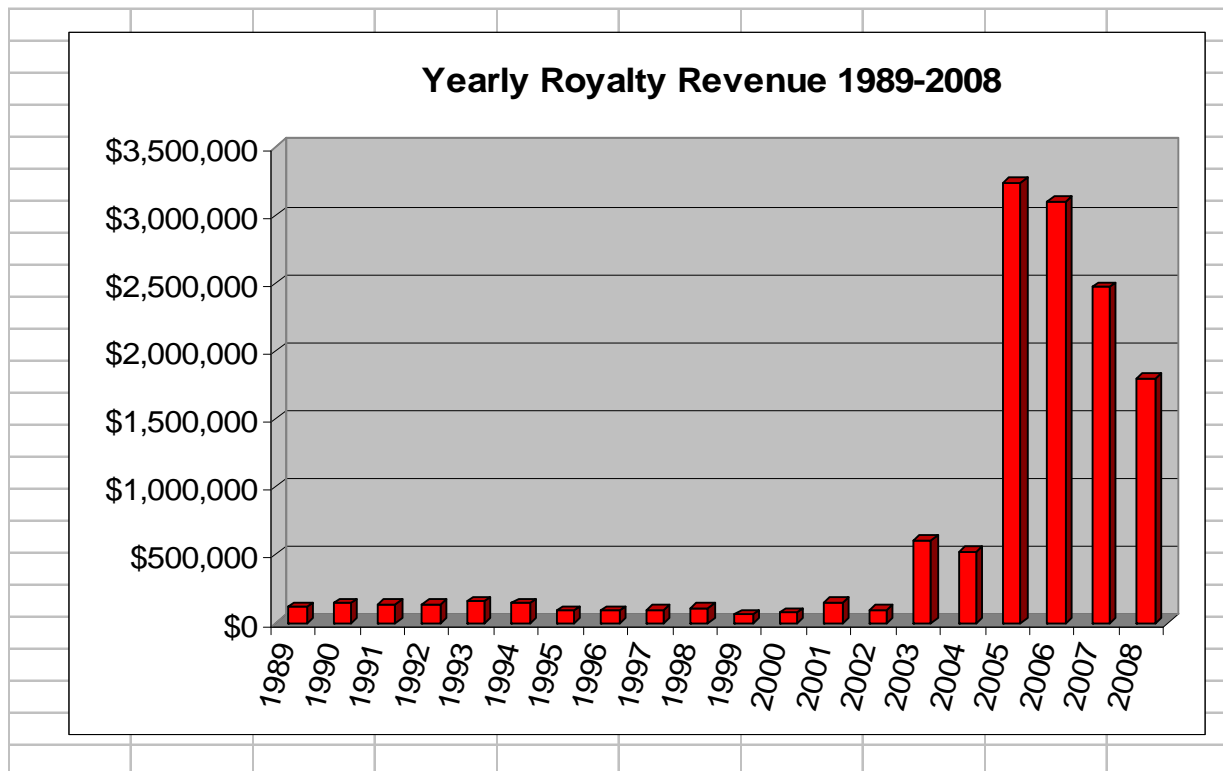
The upswing in royalty revenue since 2001 is attributable to production from the Trenton-Black River play in the central part of the State and to the leasing of state lands in the play area in 1999, 2003 and 2006.

The State began receiving Trenton-Black River royalties from the first well on these lands in 2000 and royalty revenue sharply increased as more wells were completed with state lands in producing units (Figure 6 below and Figure 7). As of year-end 2008, the State was receiving royalties from 29 Trenton-Black River wells, up from 25 wells at year-end 2007.

Royalty revenue for 2008 was approximately \$1.8 million, a decrease of \$700,000 from 2007. Decreasing natural gas production from some of the older Trenton-Black River wells accelerated the decline first seen in 2006.

Since the State first began receiving Trenton-Black River royalties in 2001, yearly royalty revenue increased from \$75,000 to over \$3 million in both 2005 and 2006 before taking slight dips in 2007 and 2008. Total Trenton-Black River royalties at year-end 2008 were \$11.98 million. To date no wells have been drilled on the lands leased in 2006.

Royalties are also paid on wells producing from the Medina sandstone in Chautauqua County but these are low volume wells in comparison to the Trenton wells. Interest is intensifying in the Marcellus shale formation in south-central New York. This play could significantly impact royalty revenues in the future if state lands are leased where the Marcellus production is anticipated.



**Figure 5. Royalty revenue received by the State from oil and gas production on state lands.** The State receives one-eighth of the revenue generated by wells on state lands, in the proportion that state acreage comprises the producing unit.

Leasing Revenue By Payment Type 1988-2008					
Year	Bonus Bids	Delay Rentals	Royalties	Storage Fees	Yearly Total
1988	\$70,070	\$9,646	\$113,581	\$34,249	\$227,546
1989	\$86,188	\$10,337	\$120,391	\$29,104	\$246,020
1990	\$53,051	\$20,647	\$142,635	\$43,610	\$259,943
1991	\$42,070	\$33,490	\$138,092	\$42,972	\$256,624
1992		\$39,578	\$139,978	\$28,542	\$208,098
1993	\$3,970	\$37,812	\$155,963	\$37,950	\$235,695
1994		\$12,285	\$144,336	\$33,019	\$189,640
1995	\$13,837	\$4,574	\$92,449	\$32,809	\$143,669
1996		\$3,595	\$92,817	\$47,180	\$143,592
1997	\$31,424	\$4,006	\$97,502	\$35,096	\$168,028
1998	\$137,951	0	\$107,789	\$33,783	\$279,523
1999	\$3,027,580	\$43,365	\$65,771	\$69,689	\$3,206,405
2000		\$42,280	\$75,327	\$9,781	\$127,388
2001		\$118,732	\$150,922	\$178,128	\$447,782
2002		\$79,435	\$96,620	\$73,617	\$249,672
2003	\$4,583,239	\$16,486	\$609,821	\$117,381	\$5,326,927
2004		\$130,746	\$525,050	\$109,986	\$765,782
2005		\$80,534	\$3,235,206	\$123,930	\$3,439,670
2006		\$75,305	\$3,096,620	\$125,007	\$3,296,932
2007	\$9,001,335	\$166,868	\$2,466,312	\$133,298	\$11,767,812
2008		\$97,269	\$1,866,519	\$211,927	\$2,175,715
<b>Total</b>	<b>\$17,050,715</b>	<b>\$1,027,000</b>	<b>\$13,533,701</b>	<b>\$1,551,058</b>	<b>\$33,162,464</b>

**Figure 6. Revenue generated from leasing of state lands for oil and gas development.** Over 90% of the \$30+ million received in this period has been received in the last ten years.

Revenue for all leasing categories over the last 21 years is displayed in Figure 6. Leasing revenue for the period from 1988 to 1998 averaged approximately \$214,000 per year due to low oil and gas prices and the lack of new leasing and drilling on state lands.

The average yearly revenue for the last ten years, however, jumped fourteen-fold to over \$3.08 million per year. The primary reasons for the jump in revenue are the lease-sale bonuses in 1999, 2003 and 2006 and the royalty revenue from the Trenton-Black River wells on state land.

Delay rentals, the yearly fee for undeveloped state land, decreased this year due to the expiration of 15 leases from the 2003 lease sale.

Storage fees for natural gas storage fields on, or under, state land increased four-fold over the 20-year period. The rise in the price of natural gas over this period is the primary reason for the increase in storage fees. Most state storage lease fees are tied to the price of natural gas and, as the price of gas rises, the fees due the State also increase. Another reason was the issuance of a lease for a new storage project in 1995 and the additional storage fees associated with this project.

<b>State Reforestation Area Lands in Producing Trenton-Black River Units</b>						
<b>State Land (year leased)</b>	<b>Well Name</b>	<b>State Acres Disturbed</b>	<b>Well Status</b>	<b>Gross Production</b>	<b>NYS Net Royalty</b>	<b>State Net Royalty</b>
<b>Chemung SRA 1 (1999)</b>	Chemung SRA #1	1.5	Producing	4.1 BCF	2.90%	\$727,215
	Root #1	0	Producing	3.4 BCF	0.36%	\$78,057
	Hardy #1447A	0	Producing	1.8 BCF	2.80%	\$247,883
<b>Schuyler SRA 1 (1999)</b>	Grand Prix#2 624066	7.7	Producing	3.0 BCF	8.47%	\$2,279,876
	Schuyler 1B	5.7	Shut-in	NA	TBD	\$0
	Aletto	1.01	Producing	.047 BCF	0.005%	\$21,791
<b>Schuyler SRA 2 (1999/2003)</b>	SRA 2 #1	2.5	Producing	1.4 BCF	11.55%	\$994,274
<b>Steuben-Schuyler 1 (2003)</b>	Frost #1	0	Producing	2.0 BCF	5.80%	\$93,805
<b>Steuben SRA 5 (1999)</b>	Howe #1A	0	Producing	8.7 BCF	0.16%	\$80,663
	Van Vleet #1	0	Producing	3.4 BCF	1.00%	\$205,662
<b>Steuben SRA 7 (2003)</b>	Swan #1	0	Producing	1.6 BCF	5.20%	\$615,445
<b>Steuben SRA 3 (2003)</b>	SRA 3 #1	5	Producing	3.5 BCF	7.70%	\$2,261,680
	SRA 3 #2	3	Producing	3.1 BCF	10.40%	\$3,138,604
	Drumm #1	0	Producing	1.7 BCF	0.02%	\$1,927
	Grand Prix#2 624066	0	Producing	NA	0.57%	\$139,449
	Frost #1	0	Producing	NA	0.14%	\$2,564
<b>Steuben SRA 14 (2003)</b>	Behm #1	0	Producing	.22 BCF	7.22%	\$79,250
<b>Total</b>		<b>36.5 acres*</b>		<b>39.04BCF</b>		<b>\$10,850,583</b>
*includes acreage disturbed by dry holes & pipelines						

**Figure 7. Numbers as of December 31, 2008**

BCF = Billion Cubic Feet of gas

T/A = Temporarily Abandoned

TBD = To Be Determined

NA=Not Applicable

State Net Royalty= % of state lands in unit times one-eighth

Wells with DOT lands in the producing unit are excluded from this table.

Trenton-Black River gas production from state lands continued to be the driving force behind the recent surge of leasing revenues (Figure 6). The potential for significant Trenton-Black River production was responsible for the \$16.7 million in bonus bids since 1998. Although the State was receiving royalties from 226 wells, 108 wells located on state lands and 118 wells unitized with state lands at the end of 2008, royalties from 10 Trenton-Black River wells accounted for 88% of all royalties received in the last 10 years. Three of these 10 wells, the Grand Prix #2 and the Steuben SRA #3-1 and 2 wells, were responsible for 63% of that revenue. Furthermore, these three wells had each been producing for less than 5 years.

As of year-end 2008, less than 37 acres of state land leased in the 1999, 2003 and 2006 lease sales had been disturbed by drill sites or gas pipelines (Figure 7). No wells had been drilled on the 2006 lease sale lands at year end 2008. The revenue per acre of disturbed land from these sales will continue to grow as the State receives additional royalty revenue from the producing wells located on these lands.

The Department awards a lease to the company that submits the highest, sealed bonus bid, which reflects the winning bidder's pre-drilling evaluation of potential for oil and gas production. Lease bonuses are guaranteed income to the State.

Royalty revenue is only received if, and when, a well drilled on state land produces oil or gas. While royalty revenue from a well may ultimately yield more revenue than bonus income, exploration is a risky venture and there is no guarantee that any royalty revenue will be generated from a lease. Of the 32 leases awarded by the State in the 1999, 2003 and 2006 leases sales, only ten of these leases have had wells drilled on them or acreage included in a producing unit.

Financial results from the last ten years displayed in Figure 8 show that the Department receives a majority of leasing revenue from guaranteed bonus income followed by substantial royalty revenue. Storage and delay rental revenues are substantially less.

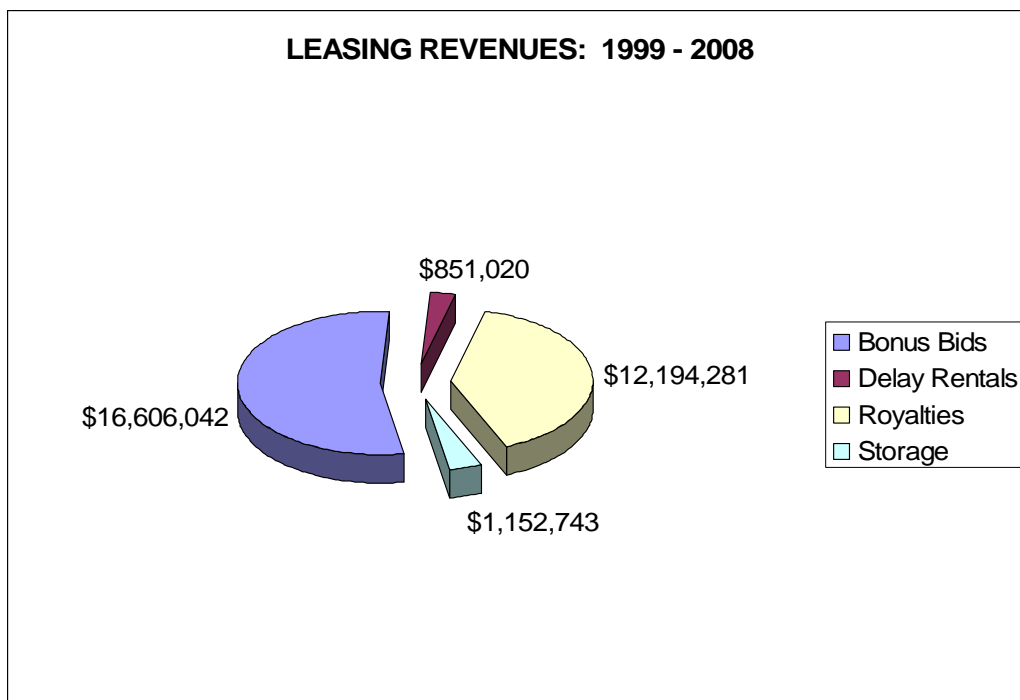


Figure 8. A summary of leasing revenue by type of payment for the last ten years.