

**OUTER CONTINENTAL SHELF
LEASE SALES: EVALUATION OF
BIDDING RESULTS**

**ANNUAL REPORT TO CONGRESS
FISCAL YEAR 2003**

**U.S. Department of the Interior
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Introduction

This report analyzes the two Gulf of Mexico (GOM) and one Alaska Outer Continental Shelf (OCS) oil and gas lease sales held in Fiscal Year (FY) 2003 pursuant to section 8 of the OCS Lands Act (OCSLA) [43 U.S.C. 1337].

The report's objectives are to review bidding results in FY 2003 and to present the schedule of lease sales for FY 2004. Cash bonus bidding with both 1/6- and 1/8-royalty rates was used in the Central GOM (CGOM) and Western GOM (WGOM) sales with a \$25 per acre minimum bid requirement in water depths less than 800 meters and a \$37.50 per acre minimum bid in water depths of 800 meters or more. In the Beaufort Sea (Alaska) lease sale, only a 1/8-royalty rate was used along with a \$37.50 per hectare (about \$15 per acre) minimum bid in Zone A (close to infrastructure) and a \$25.00 per hectare (about \$10 per acre) minimum bid in Zone B (farther from infrastructure).

In addition, in the CGOM and WGOM sales, royalty suspension volumes for leases by water depth category and subject to price thresholds were set as follows:

- (1) 20 billion cubic feet per lease in water depths less than 200 meters on deep gas production where a new deep gas reservoir (15,000 feet or greater subsea) is drilled and starts production within the first five years of the life of the lease;
- (2) 5 million barrels of oil equivalent per lease in water depths of 400 to 799 meters;
- (3) 9 million barrels of oil equivalent per lease in water depths of 800 to 1,599 meters; and
- (4) 12 million barrels of oil equivalent per lease in water depths of 1,600 meters or more.

In the Beaufort Sea sale, the lease-specific royalty suspension volume, which applies only to liquids (i.e., petroleum and condensates) varied by sale zone and was subject to a price threshold and a price floor. Under certain conditions, if prices are below the floor price for the specified time period, the lease could receive additional royalty relief. For the Beaufort Sea sale, the royalty suspension volume also was dependent on the lease's surface area. The royalty suspension volumes for this sale were as follows:

Hectares	Zone A Million barrels of oil-equivalent	Zone B Million barrels of oil-equivalent
770 or less	10	15
771 – 1,540	20	30
1,541 or more	30	45

Review of FY 2003 Lease Sales and Bidding Systems

Three OCS lease sales were held in FY 2003: Sale 185, CGOM; Sale 186, Beaufort Sea; and Sale 187, WGOM.

The sales in the CGOM and WGOM were a continuation of the annual areawide sales that have been held in those areas since 1983. The sale in the Beaufort Sea was the first in that planning area since 1998.

In the two GOM sales, 8,455 tracts (about 45 million acres) were offered, and 896 tracts (4.7 million acres) received bids. Of the tracts receiving bids, 97.7 percent (875 tracts) were leased. Sale results for the fiscal year are summarized in Table 1.

In the Beaufort Sea sale, 1,755 tracts (about 3.8 million hectares or 9.4 million acres) were offered and 34 tracts (about 0.074 million hectares or 0.18 million acres) received bids. Of the tracts receiving bids, all were leased. Sale results are presented in Table 1.

Table 1. Bidding Results for FY 2003 Lease Sales

	Sale 185 – CGOM (3/19/03)	Sale 187 – WGOM (8/20/03)	Sale 186 – Beaufort Sea (8/21/02)	Total – FY 2003 (3 Sales)
Tracts Offered	4,459	3,996	1,755	10,210
- Receiving Bids	561	335	34	930
- Leased	545	330	34	909
- Rejected	16	5	0	21
Bids Received	793	407	37	1,237
Average Bids/Tract	1.46	1.21	1.09	1.33
Sum of All Bids	\$414,738,677	\$258,716,307	\$10,175,949	\$683,630,933
Sum of High Bids	\$315,531,229	\$148,715,127	\$8,903,538	\$473,149,894

Overall bidding results by royalty rate and water depth zone for the GOM sales held in FY 2003 are shown in Table 2. As in previous GOM sales, a water-depth criterion was used to assign royalty rates. In the sales, a fixed 1/6-royalty was specified in water depths of less than 400 meters and a fixed 1/8-royalty was specified in water depths of 400 meters or more. In water depths less than 200 meters, a royalty suspension volume subject to a price threshold was offered for 20 billion cubic feet per lease on deep gas production where a new deep gas reservoir (15,000 feet or greater subsea) is drilled and starts production within the first 5 years of the life of the lease. For water depths of 400 meters or more, the following royalty suspension volumes subject to a price threshold were offered: (1) 5 million barrels of oil equivalent per lease in water depths of 400 to 799 meters; (2) 9 million barrels of oil equivalent per lease in water depths of 800 to 1,599 meters; and (3) 12 million barrels of oil equivalent per lease in water depths of 1,600 meters or more.

Table 2 indicates that the majority of tracts receiving bids in FY 2003 GOM sales were shallow water tracts with 1/6-royalty rates. These tracts received a higher average number of bids per tract than deepwater tracts with 1/8-royalty rates. However, the average high bid per tract for the 1/8-royalty tracts was about 6 percent higher than that observed for the 1/6-royalty tracts.

The 1/6-royalty tracts (less than 400 meters) accounted for 55.8 percent of tracts receiving bids, 55.9 percent of tracts leased, and 54.4 percent of high bids received in the two FY 2003 GOM lease sales. Conversely, the 1/8-royalty tracts (400 meters or more) accounted for 44.2 percent of tracts receiving bids, 44.1 percent of tracts leased, and 45.6 percent of high bids received. As shown in Table 3, the mean high bid of \$0.52 million per tract receiving a bid was a decrease of 44.1 percent compared to the FY 2002 CGOM and WGOM sales.

Table 2. GOM Lease Sale Bidding Results for FY 2003 by Royalty Rate

FY 2003 (2 Lease Sales)	Fixed 1/6-Royalty		Fixed 1/8-Royalty			Total
	Less than 200 meters	200 to 399 meters	400 to 799 meters	800 to 1,600 meters	1,600 meters or more	
Tracts Receiving Bids	484	16	74	174	148	896
Tracts Leased	474	15	67	171	148	875
Bids Received	671	29	90	222	188	1,200
Average Bids/Tract	1.39	1.81	1.22	1.28	1.27	1.34
Tracts with Multiple Bids	21.69 %	50.00 %	18.92 %	22.41 %	23.65 %	22.43 %
Sum of High Bids (\$MM)	\$236.12	\$16.26	\$50.85	\$110.11	\$50.91	\$464.25
Mean High Bid (\$MM)	\$0.49	\$1.02	\$0.69	\$0.63	\$0.34	\$0.52

In FY 2003, an OCS lease sale, Sale 186, was held in the Beaufort Sea for the first time since 1998. This was the first sale on the Alaska OCS in which leases were offered with royalty suspension volumes. In this sale, a fixed 1/8-royalty was specified for all tracts offered. The tracts offered also were divided into two zones based on proximity to infrastructure. In each of the zones, a royalty suspension volume, subject to a price threshold and a price floor, was provided. The royalty suspension volume applies only to the liquids (i.e., petroleum and condensates) produced from a lease because currently there is no market for natural gas from Arctic Alaska. In Zone A (the zone with the greater proximity to infrastructure), depending on the surface area of the lease, the largest royalty suspension volume available was 30 million barrels of oil equivalent. In Zone B (the zone with less proximity to infrastructure), depending on the surface area of the lease, the largest royalty suspension volume available was 45 million barrels of oil equivalent. However, in Sale 186, a price floor was used with the royalty suspension volume. If the original royalty suspension volume on the lease is not totally used and the oil price falls below the price floor as specified in the lease, then the lessee would receive additional royalty-free production as an incentive to continue producing with low prices.

Bids were received on 34 tracts in Sale 186 with high bids of \$8.9 million. The average high bid per tract was about \$0.26 million. Although this amount is lower than the average high bid per tract in the FY 2003 GOM sales, the result is not unexpected. Currently, only one lease is producing on the Alaska OCS, and thus the area lacks the infrastructure and proximity to markets that can be found in the GOM. Sale 186 results, by leasing zone are presented in Table 2A.

Table 2A. Lease Sale Bidding Results for Sale 186 in the Beaufort Sea

Sale 186	Zone A	Zone B	Total
Tracts Receiving Bids	12	22	34
Tracts Leased	12	22	34
Bids Received	15	22	37
Average Bids/Tract	1.25	1.00	1.09
Tracts with Multiple Bids	25.00%	0.00%	8.82%
Sum of High Bids (\$MM)	\$5.63	\$3.27	\$8.90
Mean High Bid (\$MM)	\$0.47	\$0.15	\$0.26

Table 3 compares the bidding results for GOM sales since FY 1990 by royalty rate. In Table 3, one can also observe the effects of alternative leasing policies over the years. The Minerals Management Service began offering royalty relief for deep gas wells in shallow water in 2001. In the 1/6-royalty column, the mean high bid increased in FY 2001 compared to FY 2000, declined in FY 2002 and then increased in FY 2003. The MMS began offering deep water royalty relief in 1996. In the 1/8-royalty column, the mean high bid began increasing in FY 1996 and reached a peak in FY 2000. Starting in 2001, lower amounts of deep water royalty relief were offered and the mean high bids continued to be relatively high.

Table 3. Mean High Bid (\$ millions) per Tract (FY 1990 - FY 2003), GOM Sales

Fiscal Year	Fixed 1/6-Royalty	Fixed 1/8-Royalty	Total (Both Rates)
FY 1990	\$ 0.73	\$ 0.60	\$ 0.70
FY 1991	\$ 0.59	\$ 0.34	\$ 0.50
FY 1992	\$ 0.41	\$ 0.43	\$ 0.41
FY 1993	\$ 0.39	\$ 0.28	\$ 0.37
FY 1994	\$ 0.62	\$ 0.23	\$ 0.58
FY 1995	\$ 0.57	\$ 0.32	\$ 0.49
FY 1996	\$ 0.63	\$ 0.52	\$ 0.57
FY 1997	\$ 0.71	\$ 0.82	\$ 0.78
FY 1998	\$ 0.70	\$ 1.30	\$ 1.14
FY 1999	\$ 0.36	\$ 1.16	\$ 0.74
FY 2000	\$ 0.42	\$ 1.37	\$ 0.80
FY 2001	\$ 0.47	\$ 1.18	\$ 0.77
FY 2002 ¹	\$ 0.39	\$ 1.48	\$ 0.93
FY 2002 ²	\$ 0.39	\$ 0.92	\$ 0.62
FY 2002 ³	\$ 0.00	\$ 3.58	\$ 3.58
FY 2003	\$ 0.50	\$ 0.54	\$ 0.52

1 Includes results from all three GOM sales held in FY2002.

2 Excludes results from Sale 181 in the Eastern GOM to provide better comparison with previous years in which sales were held only in the CGOM and WGOM.

3 Includes results only from Sale 181 in the EGOM. In Sale 181, only blocks with a fixed 1/8-royalty rate were offered. Clearly, the bidding results in Sale 181 differ significantly from other recent GOM sales.

Bidding Systems

For sales in FY 2003, MMS continued to offer deepwater royalty relief on blocks in water depths of 400 meters or more. As was the case in the FY 2002 sales, the amount of royalty relief was specified at the time of sale and applied on a lease basis. Previously, for sales between 1996 and 2000, royalty relief reflected suspension volumes specified in the Deep Water Royalty Relief Act (DWRRA) which were applied on a field basis.⁴ Therefore, a lease was not assured royalty relief because, for example, other leases that comprise a field could produce the entire volume before all leases on the field began production. With the post-2000 change to lease-specific royalty suspension volumes, each lease in water depths of 400 meters or more was assured some level of royalty relief, subject to a price threshold. In addition, under the current bidding system, a new deepwater lease can apply for additional, discretionary royalty relief prior to production, if needed, to supplement the sale-specific royalty relief. The discretionary relief alternative was not available to leases under the DWRRA.

The specific bidding systems used in GOM FY 2003 sales were:

- (1) Cash bonus bid with a 1/6-royalty rate and a royalty suspension volume of 20 billion cubic feet per lease in water depths less than 200 meters on deep gas production where a new deep gas reservoir (15,000 feet or greater subsea) is drilled and starts production within the first 5 years of the life of the lease;
- (2) Cash bonus bid with a 1/6-royalty rate in water depths of 200 to 399 meters;
- (3) Cash bonus bid with a 1/8-royalty rate and a royalty suspension volume of 5 million barrels of oil equivalent per lease in water depths of 400 to 799 meters;
- (4) Cash bonus bid with a 1/8-royalty rate and a royalty suspension volume of 9 million barrels of oil equivalent per lease in water depths of 800 to 1,599 meters; and
- (5) Cash bonus bid with a 1/8-royalty rate and a royalty suspension volume of 12 million barrels of oil equivalent per lease in water depths of 1,600 meters or more.

In addition, FY 2003 was the first time that royalty suspension volumes were offered on the Alaska OCS. The specific bidding systems used on the Alaska OCS in the FY 2003 sale were:

- (1) Cash bonus bid with a 1/8-royalty rate and a royalty suspension volume of 30 million barrels of oil equivalent per lease (proportioned relative to a lease's surface area), on liquids only, in sale Zone A; and
- (2) Cash bonus bid with a 1/8-royalty rate and a royalty suspension volume of 45 million barrels of oil equivalent per lease (proportioned relative to a lease's surface area), on liquids only, in sale Zone B.

⁴ A January 8, 2003 United States District Court ruling in Santa Fe Snyder Corporation et al. v. Norton et al. (U.S.D.C., W.D. La, Docket No.2:00-CV-1641) held invalid MMS regulations at 30 CFR 260.112 - 260.117. If this court decision stands, the leases issued under the DWRRA in sales held from 1996 - 2000 will have lease-specific rather than field-based royalty suspension volumes.

Schedule of FY 2004 Lease Sales

Lease sales scheduled for FY 2004 under the 5-Year Oil and Gas Leasing Program 2002-2007, and the bidding systems expected to be used in those sales are listed in the table below. For Sales 190 and 192, royalty relief will be offered in shallow water for natural gas production from deep wells, but the quantity will depend on the type of drilling and depth as specified in 30 CFR 203.40 through 203.47 as opposed to the fixed amount of relief (20 billion cubic feet) offered from 2001-2003.

<u>Lease Sale (Date)</u>	<u>Bidding Systems</u>
Sale 189 - EGOM (December 10, 2003)	Cash bonus, fixed 1/8-royalty with royalty suspension volume
Sale 190 - CGOM (March 17, 2004)	Cash bonus, fixed 1/6-royalty Cash bonus, fixed 1/6-royalty with classes of royalty suspension volume for drilling to and production of natural gas from deep depth wells Cash bonus, fixed 1/8-royalty with classes of royalty suspension volume dependent on oil and gas production from deepwater categories
Sale 191 – Cook Inlet (May 19, 2004)	Cash bonus, fixed 1/8-royalty with royalty suspension volume
Sale 192 - CGOM (August 18, 2004)	Cash bonus, fixed 1/6-royalty Cash bonus, fixed 1/6-royalty with classes of royalty suspension volume for drilling to and production of natural gas from deep depth wells Cash bonus, fixed 1/8-royalty with classes of royalty suspension volume dependent on oil and gas production from deepwater categories