

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

**ANNUAL REPORT TO CONGRESS
FISCAL YEAR 2002**

**U.S. Department of the Interior
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Introduction

This report analyzes the three Gulf of Mexico (GOM) Outer Continental Shelf (OCS) oil and gas lease sales held in Fiscal Year (FY) 2002 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 2002 and to present the schedule of lease sales for FY 2003. Cash bonus bidding with both 1/6- and 1/8-royalty rates were 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 Eastern GOM (EGOM) lease sale, only a 1/8-royalty rate was used along with a \$37.50 per acre minimum bid because all blocks offered were in water depths of 1,600 meters or more.

In addition, in the CGOM and WGOM sales, potential 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 EGOM sale, only blocks in water depths of 1,600 meters or more were offered, so the only royalty suspension volume used in that sale was 12 million barrels of oil equivalent per lease.

Review of FY 2002 Lease Sales and Bidding Systems

Three OCS lease sales were held in FY 2002: Sale 181, EGOM; Sale 182, CGOM and Sale 184, 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 EGOM was the first in that planning area since 1988.

In the three GOM sales, 8,781 tracts (about 47.0 million acres) were offered, and 924 tracts (4.87 million acres) received bids. Of the tracts receiving bids, 97.6 percent (902 tracts) were leased. Sale results for the fiscal year are summarized in Table 1.

Although Sale 181 in the EGOM was by far the smallest FY 2002 lease sale in terms of tracts offered, its aggregate high bids were almost as high as Sale 182 in the CGOM in which more than five times as many tracts received bids. In addition, the level of competition in Sale 181 was much greater than the other two sales held in FY 2002 with an average of two bids per tract compared to 1.38 in Sale 182 and 1.21 in Sale 184.

Table 1. Bidding Results for FY 2002 Lease Sales

	Sale 181 – EGOM (12/5/01)	Sale 182 – CGOM (3/20/02)	Sale 184 – WGOM (8/21/02)	Total – FY 2002 (3 Sales)
Tracts Offered	233	4,446	4,102	8,781
- Receiving Bids	95	506	323	924
- Leased	95	491	316	902 ¹
- Rejected	0	15	7	22
Bids Received	190	697	391	1,278
Average Bids/Tract	2.00	1.38	1.21	1.38
Sum of All Bids	\$458,936,089	\$442,441,036	\$181,551,965	\$1,082,929,090
Sum of High Bids	\$340,474,113	\$355,792,253	\$148,558,145	\$844,824,511 ²

Overall bidding results by royalty rate and water depth zone for the GOM sales held in FY 2002 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 five 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 2002 GOM sales were shallow water tracts with 1/6-royalty rates. These tracts received a lower average number of bids per tract than deepwater tracts with 1/8-royalty rates. The average high bid per tract for the 1/8-royalty tracts was about 279 percent higher than that observed for the 1/6-royalty tracts. However, this result was skewed because all the tracts in the EGOM (Sale 181) had 1/8-royalties and received bids that were much higher than in either of the other two sales. If just the CGOM and WGOM sales were considered, the average high bid per tract for the 1/8-royalty tracts was about 134 percent higher than that observed for the 1/6-royalty tracts.

The 1/6-royalty tracts (less than 400 meters) accounted for 51.0 percent of tracts receiving bids, 50.7 percent of tracts leased, and 21.9 percent of high bids received in the three FY 2002 GOM lease sales. Conversely, the 1/8-royalty tracts (400 meters or more) accounted for 49.0 percent of tracts receiving bids, 49.3 percent of tracts leased, and 78.1 percent of high bids received. As shown in Table 3, the mean high bid of \$0.93 million per tract receiving a bid was an increase of 20.7 percent compared to the FY 2001 sales.

1 This figure includes 3 tracts on which companies did not execute leases.

2 Includes forfeited 1/5 bonus on 3 tracts totaling \$561,568.

Table 2. GOM Lease Sale Bidding Results for FY 2002 by Royalty Rate

FY 2002 (3 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	430	41	74	140	239	924
Tracts Leased	420	37	68	138	239	902
Bids Received	564	56	104	170	384	1,278
Average Bids/Tract	1.31	1.37	1.41	1.21	1.61	1.38
Tracts with Multiple Bids	23.26 %	29.27 %	24.32 %	15.71 %	34.73 %	25.43 %
Sum of High Bids (\$MM)	\$163.86	\$21.33	\$64.72	\$123.45	\$481.49	\$844.82
Mean High Bid (\$MM)	\$0.38	\$0.52	\$0.87	\$0.88	\$2.01	\$0.93

In FY 2002, an OCS lease sale, Sale 181, was held in the EGOM for the first time since 1988. The area of Lease Sale 181 was a modified area—limited to 233 tracts in deepwater off Alabama and Louisiana and more than 100 miles from any portion of the Florida coast. All of the tracts were in water depths of 1,600 meters or more. The tracts offered for lease also were in close proximity to the boundary with the CGOM in an area in which recent exploration results have been good. Thus, in an area with no leasing in over a decade and with a limited number of tracts available, the average high bids and level of competition in Sale 181 in the EGOM were much higher than in the other GOM sales held in FY 2002. In fact, the average high bid per tract leased (about \$3.58 million) in Sale 181 was higher than any other sale in the GOM since 1983. Therefore, to provide a better comparison of leasing in the GOM with other fiscal years, refer to Table 2A, which presents the FY 2002 results, excluding Sale 181.

Table 2A. GOM Lease Sale Bidding Results for FY 2002 by Royalty Rate,
Excluding Sale 181 in the EGOM

FY 2002 (3 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	430	41	74	140	144	829
Tracts Leased	420	37	68	138	144	807
Bids Received	564	56	104	170	194	1,088
Average Bids/Tract	1.31	1.37	1.41	1.21	1.35	1.31
Tracts with Multiple Bids	23.26 %	29.27 %	24.32 %	15.71 %	25.00 %	22.68 %
Sum of High Bids (\$MM)	\$163.86	\$21.33	\$64.72	\$123.45	\$141.01	\$514.37
Mean High Bid (\$MM)	\$0.38	\$0.52	\$0.87	\$0.88	\$0.98	\$0.62

Excluding Sale 181 from the FY 2002 results changes not only the distribution of bids, but also causes a significant change in the mean high bid for FY 2002 sales. Without Sale 181, the mean high bid of \$0.62 million per tract receiving a bid in the remaining FY 2002 GOM sales was a decrease of 19.5 percent compared to FY 2001 sales. If only Sales 182 and 184 were considered, the average high bid per tract for the 1/8-royalty tracts was about 134 percent higher than that observed for the 1/6-royalty tracts. So, even with the shallow water, deep gas royalty relief program, tracts in deep water still tend to receive much higher bids than tracts in shallow water depths.

As Table 3 illustrates, Sale 181 (EGOM) was a unique sale. The mean high bid per tract in Sale 181 (last row in the table) was 214 percent higher than the highest combined average for the next highest year, which was 1998. Even in comparison to just 1/8-royalty tracts, the Sale 181 mean high bid was 161 percent higher than the next highest year – 2000.

In Table 3, you 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, although it then declined in FY 2002. 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 2002), 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 ³	\$ 0.39	\$ 1.48	\$ 0.93
FY 2002 ⁴	\$ 0.39	\$ 0.92	\$ 0.62
FY 2002 ⁵	\$ 0.00	\$ 3.58	\$ 3.58

Bidding Systems

For sales in FY 2002, MMS continued to offer deepwater royalty relief at the time of sale, but only on blocks in water depths of 400 meters or more. As was the case in the FY 2001 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 DWRRA, which were applied on a field basis.⁶ 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 change to lease-specific royalty suspension volumes, each lease in water depths of 400 meters 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 FY 2002 sales were:

³ Includes results from all three GOM sales held in FY2002.

⁴ Excludes results from Sale 181 in the EGOM to provide better comparison with previous years in which sales were held only in the CGOM and WGOM.

⁵ 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.

⁶ 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.

- (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 five years of the life of the lease;
- (2) cash bonus bid with a 1/6-royalty rate in water depths of 200 – 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 – 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.

Schedule of FY 2003 Lease Sales

Lease sales scheduled for FY 2003 under the 5-Year Leasing Program and the bidding systems expected to be used in those sales are listed in the table below.

<u>Lease Sale (Date)</u>	<u>Bidding Systems</u>
Sale 185 - CGOM (March 19, 2003)	Cash bonus, fixed 1/6-royalty Cash bonus, fixed 1/6-royalty with royalty suspension volume for natural gas production from deep wells Cash bonus, fixed 1/8-royalty with royalty suspension volume dependent on water depth category
Sale 187 - WGOM (August 20, 2003)	Cash bonus, fixed 1/6-royalty Cash bonus, fixed 1/6-royalty with royalty suspension volume for natural gas production from deep wells Cash bonus, fixed 1/8-royalty with royalty suspension volume dependent on water depth category
Sale 186 – Beaufort Sea (September 24, 2003)	Cash bonus, fixed 1/8-royalty with royalty suspension volume dependent on cost and accessibility zone category