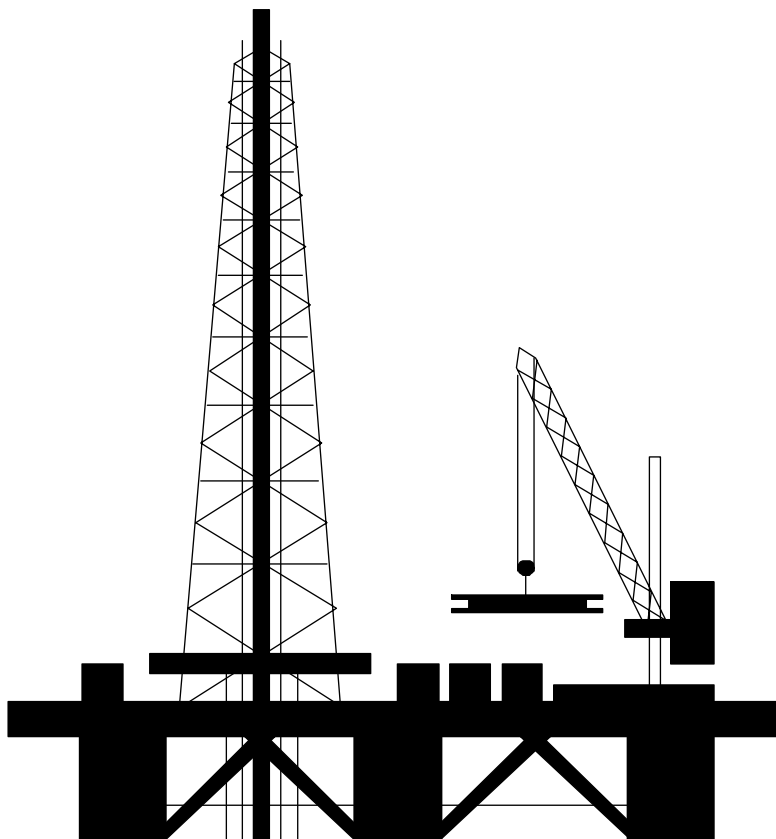


# Western Gulf of Mexico Sale 187 August 20, 2003

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Sale Summary, Bidding Results and  
Related Analyses

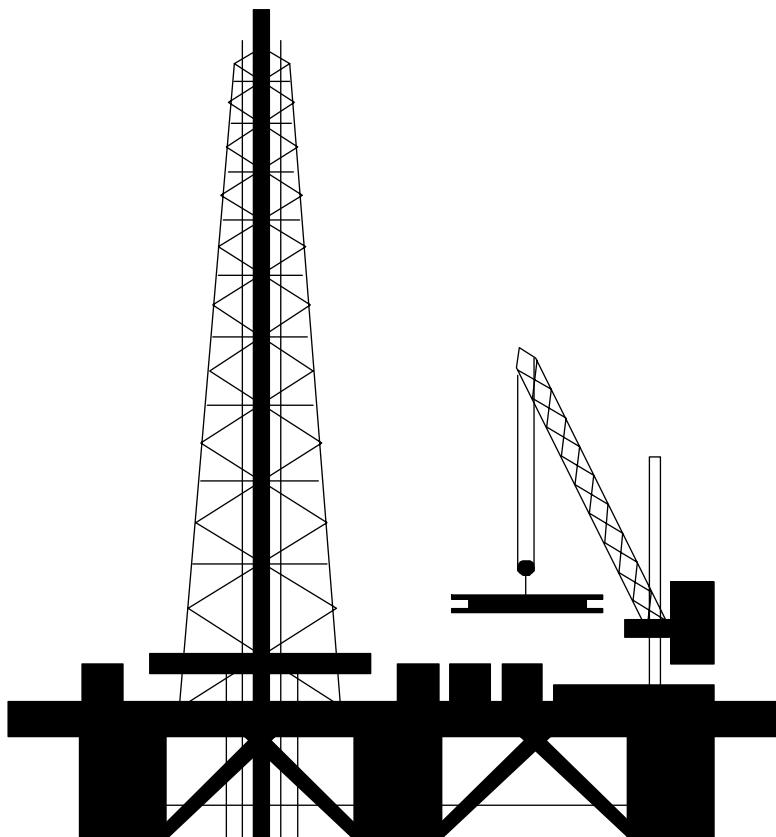


# Western Gulf of Mexico Sale 187 August 20, 2003

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Sale Summary, Bidding Results and  
Related Analyses

By  
Larry Slaski



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# Western Gulf of Mexico

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## Sale 187 August 20, 2003 Sale Overview

Sale 187 in the Western Gulf of Mexico (WGOM) was held on August 20, 2003. In this sale, 335 tracts received 407 bids (an average of 1.21 bids per tract). Tracts that were in water depths eligible for deepwater royalty relief totaled 180, while 110 were in water depths eligible for shallow water, deep gas royalty relief.

### Bidding Results

Sale 187, in terms of the number of tracts receiving bids, was about 4 percent larger than WGOM Sale 184, held in 2002. However, there was a decrease in aggregate high bids in Sale 187 compared to Sale 184 of about 2 percent. In Sale 187, high bids totaled \$148,715,127.

Bidding results by water depth zone are summarized in Table 1 and more complete details are presented in Appendix A.

Table 1.—*Bidding Activity by Water Depth Zone*

Water Depth	Tracts with Bids	High Bids (\$MM)	Number of Bids	Average Bids/Tract
< 200 m.	110	\$60.93	141	1.28
200 - 399 m.	6	\$2.31	8	1.33
400 - 799 m.	39	\$27.44	49	1.26
800 - 1,599 m.	95	\$33.50	109	1.15
1,600+ m.	85	\$24.54	100	1.18
Total	335	\$148.72	407	1.21

Bidding activity in Sale 187 resulted in a slight increase in the number of tracts receiving bids and number of bids, as well as a small decrease in aggregate high bids compared to the previous WGOM sale (Sale 184, August 21, 2002). In Sale 184, 323 tracts received 391 bids, whereas 335 tracts received 407 bids in Sale 187, resulting in increases of 4 percent in each parameter. In addition, the sum of high bids submitted on tracts receiving bids in Sale 187 decreased by about 2 percent compared to Sale 184 (\$148.72 million v. \$151.27 million). The amount of competition for tracts was similar to other recent WGOM lease sales. About 85 percent of tracts received single bids. Two-bid tracts accounted for the next highest percent of tracts receiving bids (about 13 percent). A summary of bidding results by number of bidders is presented in

table 2 and bidding results by number of bids for the various water depth zones are presented in appendix B.

Table 2.—*Bidding Results by Number of Bids Submitted*<sup>1</sup>

<b>Bids</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
1	284	84.77%	\$87.79	59.03%
2	42	12.54%	\$22.23	15.35%
3	6	1.79%	\$12.24	8.23%
4	2	0.60%	\$3.25	2.19%
5 or more	1	0.30%	\$22.60	15.20%
Total	335	100.00%	\$148.72	100.00%

Sale 187 was typical of sales in the WGOM as more tracts received high bids less than \$50 per acre than those receiving bids greater than that amount. In Sale 187, tracts with high bids greater than \$150 per acre accounted for about 39 percent of aggregate high bids, an amount lower than that observed in Sale 184. A summary of bidding results by high bid per acre for the sale is presented in table 3 and bidding results by high bid per acre for the various water depth zones are presented in appendix C. In addition, a graphical presentation of bidding results is presented in appendix D.

Table 3.—*Bidding Results by High Bid per Acre*

<b>High Bid per Acre</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
< \$50	203	60.60%	\$44.20	29.72%
\$50 - 74.99	85	25.37%	\$29.95	20.14%
\$75 - 99.99	14	4.18%	\$6.40	4.30%
\$100 - 149.99	14	4.18%	\$9.57	6.43%
\$150+	19	5.67%	\$56.60	39.40%
Total	335	100.00%	\$148.72	100.00%

<sup>1</sup>In the tables throughout this report, percent totals may not add exactly to 100.00% because of rounding. In addition, other totals in the tables, e.g., high bids, also may differ slightly from the text because of rounding.

## Bidding on Royalty Suspension Volume Tracts

In water depths of less than 200 meters, in which leases are eligible for royalty suspension volumes of 20 billion cubic feet for natural gas from wells 15,000 feet or more deep, 110 tracts received bids in Sale 187 compared to 142 tracts in Sale 184. However, although there was about a 23 percent decrease in tracts receiving bids in this water depth category, their high bids were about 60 percent higher than those from Sale 184. The reason for this increase in high bids was the bidding activity on Tract G25561 (High Island 170), which received 13 bids and a high bid of \$22.6 million.

A total of 39 tracts in 400 - 799 meters that are eligible for royalty suspension volumes of 5 million barrels of oil equivalent (MMBOE) received bids, as did 95 tracts in 800 - 1,599 meters that are eligible for royalty suspension volumes of 9 MMBOE, and 85 tracts in 1,600 meters or more that are eligible for royalty suspension volumes of 12 MMBOE. These tracts accounted for 65 percent of the tracts in the sale receiving bids and 57 percent of the sale's high bids. To put the magnitude of this bidding activity in perspective, the number of tracts receiving bids in water depths of 400 meters or more in Sale 187 was 38 percent higher, but their associated high bids were 18 percent lower than those received in Sale 184.

In the water depth categories between 200 - 399 meters, bidding activity in Sale 187 was much lower than the level observed in Sale 184 for tracts receiving bids. In this water depth category, the number of tracts receiving bids was 73 percent lower and high bids declined by 76 percent. In both Sales 187 and 184, tracts in 200 - 399 meters were not eligible for automatic royalty suspension volumes.

Table 4.—*Bidding Results by High Bid per Acre: Sale 187 v. Sale 184*

<b>Water Depth</b>	<b>Sale 187</b>	<b>Sale 184</b>
< 200 m.	\$100.46	\$51.68
200 - 399 m.	\$70.05	\$77.25
400 - 799 m.	\$122.14	\$184.50
800+ m.	\$56.21	\$95.85

These results suggest that industry continues to perceive significant economic potential to exist in all water depths in the WGOM. In water depths less than 200 meters, the average high bid per acre increased by 94 percent relative to Sale 184. However, most of that difference was due to the high bid of \$22.6 million on Tract G25561. Without that bid, the average high bid for the remaining tracts in that water depth category was \$63.80 per acre or 23 percent higher than the previous sale. In water depths of 800 meters or more, the average high bid per acre declined 41 percent compared to Sale 184.

## Phase 1 Results

Following the post-sale bid evaluation procedures, which include a modified 3-bid rule, high bids on 41 tracts were accepted in Phase 1 of Sale 187. High bids were accepted on 27 tracts in water depths less than 200 meters, 2 tracts in 200 - 399 meters, and 12 tracts in water depths of 400 meters or more, which are eligible for automatic royalty suspension volumes. The Phase 1-accepted high bids accounted for about 12 percent of the tracts and included 22 percent of the high bids. The percent of high bids was greater than the percent of tracts because the tract with the highest bid in the sale (\$22.6 million) received 13 bids and met the criteria for acceptance by the Phase 1 number of bids rule. The other 40 Phase 1 acceptances were wildcat and confirmed tracts determined to be non-viable.

The Sale 187, Phase 1 results by number of bids and high bid per acre are presented in tables 5 and 6, respectively.

Table 5.—Phase 1 Results by Number of Bids

Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	39	95.12%	\$9.26	28.62%
2	1	2.44%	\$0.50	1.54%
3+	1	2.44%	\$22.60	69.84%
Total	41	100.00%	\$32.36	100.00%

Table 6.—Phase 1 Results by High Bid per Acre

High Bid per Acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	34	82.92%	\$6.96	21.51%
\$50 - 74.99	3	7.32%	\$1.01	3.12%
\$75 - 99.99	1	2.44%	\$0.50	1.54%
\$100 - 149.99	2	4.88%	\$1.29	3.99%
\$150+	1	2.44%	\$22.60	69.84%
Total	41	100.00%	\$32.36	100.00%

## **Revised Arithmetic Average Measure of Tract (RAM)**

The Revised Arithmetic Average Measure of Tract (RAM) is a secondary bid acceptance criterion that was used in Phase 2 of the Sale 184 bid evaluation process on multi-bid tracts that have high bids that do not exceed the Government's Adjusted Delayed Value (ADV) of the tract. The ADV is explained in detail in appendix J.

For evaluating the high bids on multi-bid tracts that do not exceed the ADV, the RAM is applied to (a) drainage and development tracts having three or more qualified bids with the third highest bid being at least 25 percent of the tract's high bid and (b) confirmed and wildcat tracts having two or more qualified bids with the second highest bid being at least 25 percent of the tract's high bid. Only bids that are at least 25 percent of the high bid are considered in calculating the RAM. If the high bid exceeds the RAM, it is accepted.

Use of the RAM allows the MMS to balance market factors and its own ADV evaluation in determining fair market value. Using the RAM, the highest ADV required to reject a high bid on a multi-bid tract in Sale 187 was about \$5.5 million, and the majority was less than \$2 million. These values are not unreasonable relative to high bids observed in this sale.

In Sale 187, eight tracts classified as wildcat and confirmed receiving three or more bids were passed to Phase 2 for evaluation. These tracts, potentially, could have their bid acceptance or rejection decision based on the RAM. After adjusting the number of bids to include only those bids that are at least 25 percent of a tract's high bid, four tracts could be eligible for a decision based on the RAM. These four tracts would require ADV's of around \$1 million to \$5.5 million for rejection. The RAM was not used as the decision rule for any bids in Sale 187. Detailed tables of tracts receiving three or more bids by water depth zone are presented in appendix E.

## **Bidding Activity**

The number of companies participating in Sale 187 increased to 63 from the 44 active in Sale 184, the previous WGOM sale. Sixteen companies submitted bids (either solo or jointly) on 10 or more tracts. Amerada Hess was the most active company in terms of bids submitted with 65. The most apparent high bids, 59, were also submitted by Amerada Hess. LLOG Exploration Offshore had the greatest aggregate high bids with a total of \$26.28 million.

With about 15 percent of the tracts receiving bids in the sale being multi-bid tracts, five firms (Shell Offshore, Exxon Mobil, Chevron USA, Nexen Petroleum Offshore, and Maxus (US) Exploration) that submitted 10 or more bids were the high bidder on every bid they submitted. For firms submitting 20 or more bids, the most successful bidder was Amerada Hess, with 59 high bids out of the 65 bids that it offered.

The 10 most active bidders in terms of total amount of high bids are listed in table 7. Also listed in the table are the total number of bids and number of high bids submitted by the companies with their rank indicated in parentheses. Appendix F contains a summary of bids for all companies that participated in the sale.

More than half of the companies that were most active in WGOM Sale 184 (August 21, 2002) continued to be among the most active in Sale 187. Although the magnitude of the high bids was



a bit lower in Sale 187 than in Sale 184, companies with high levels of interest in the WGOM continued to participate at levels similar to recent sales.

Appendix G presents a listing of bidding by the most active companies in Sales 187 and 184.

Table 7.—*Most Active Bidders by Total Amount of High Bids*  
(For number of bids and high bids, rank is in parentheses.)

Company	Total High Bids	Number of Bids	High Bids
LLOG Exploration Offshore	\$26,280,777	8 (18)	6 (17)
Amerada Hess	\$15,656,945	65 (1)	59 (1)
Shell Offshore	\$9,405,150	11 (11)	11 (11)
BP Exploration & Production	\$9,129,420	48 (3)	36 (3)
BHP Billiton Petroleum	\$8,190,078	63 (2)	56 (2)
Dominion E & P	\$7,426,493	4 (28)	3 (24)
Gryphon Exploration	\$6,754,979	21 (7)	17 (8)
Kerr-McGee Oil & Gas	\$6,177,523	23 (5)	19 (5)
Exxon Mobil	\$4,910,000	14 (10)	14 (10)
Total E & P USA	\$4,681,998	22 (6)	18 (6)

### **Sale 187 v. Sale 184**

The results of Sale 187 were similar to the results of Sale 184 in many categories of bidding activity. The average high bid per acre was \$78.41 in Sale 187 as compared with \$85.34 in Sale 184. In Sale 187, 335 tracts received 407 bids, thus slightly exceeding the 323 tracts that received 391 bids in Sale 184. In addition, the average number of bids per tract, 1.21, was the same in both sales. An unusual aspect of Sale 187 was that the high bid (\$22,600,000) on one tract, G25561, which received 13 bids, accounted for 15 percent of the sale's high bids.

The amount of bidding activity in deep water in Sale 187 increased compared to Sale 184. Specifically, the number of tracts potentially eligible for deepwater royalty suspension volumes (water depth of 400 meters or more) receiving bids increased by about 38 percent, but the high bids on these tracts decreased 17 percent. Appendix H presents a graphical comparison of sale results.

In Sale 187, four tracts with high bids that were rejected in Sale 184 received bids. Of these, three high bids were accepted and the Sale 187 high bids exceeded the rejected bids by \$2,657,576. For the tract with a high bid rejected in both Sales 184 and 187, the Sale 187 bid was \$418,950 less than the bid in the previous sale. In addition, there were three rejected tracts in Sale 184 with aggregate high bids of \$783,538 that did not receive bids in Sale 187.

The high bids on the three previously rejected tracts that were accepted in this sale increased from \$938,454 in Sale 184 to \$3,596,030 in Sale 187, an increase in high bids of 283 percent. The number of bids on these three tracts increased from 3 to 6, a gain of 100 percent. The potential to realize substantial gains in high bids on tracts that were previously rejected highlights the importance of MMS's bid adequacy procedures.

# Appendix A

Western Gulf of Mexico  
Outer Continental Shelf  
Oil and Gas Lease Sale 187

## **Bidding Summary**

# Western Gulf of Mexico OCS Oil and Gas Lease Sale 187

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## Sale Day Statistics by Royalty Rate

	<u>16 2/3% Royalty</u>	<u>12 1/2% Royalty</u>	<u>Sale Total</u>
Tracts Receiving Bids	116	219	335
Acres Receiving Bids	639,545.43	1,257,101.68	1,896,647.11
Sum of High Bids	\$63,242,963	\$85,472,164	\$148,715,127
Sum of All Bids	\$160,700,943	\$98,015,364	\$258,716,307
Total Number of Bids	149	258	407
Average Bids	1.28	1.18	1.21
Companies Bidding	53	25	63
Highest Bid per Tract	\$22,600,000	\$5,356,556	\$22,600,000
- Tract Number	G25561	G25670	G25561
- Number of Bids	13	1	13
Highest Bid per Acre	\$3,923.61	\$929.96	\$3,923.61
- Tract Number	G25561	G25670	G25561
- Number of Bids	13	1	13
Most Bids	13	4	13
- Tract Number	G25561	G25610	G25561

# Western Gulf of Mexico OCS Oil and Gas Lease Sale 187

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## Sale Day Statistics for 16 2/3% Royalty Rate Tracts

	<u>16 2/3% w/RS<sup>1</sup></u>	<u>16 2/3% w/ROY<sup>2</sup></u>	<u>16 2/3% Total</u>
Tracts Receiving Bids	110	6	116
Acres Receiving Bids	606,536.92	33,008.51	639,545.43
Sum of High Bids	\$60,930,851	\$2,312,112	\$63,242,963
Sum of All Bids	\$157,751,231	\$2,949,712	\$160,700,943
Total Number of Bids	141	8	149
Average Bids	1.28	1.33	1.28
Companies Bidding	50	6	53
Highest Bid per Tract	\$22,600,000	\$840,236	\$22,600,000
- Tract Number	G25561	G25663	G25561
- Number of Bids	13	2	13
Highest Bid per Acre	\$3,923.61	\$145.87	\$3,923.61
- Tract Number	G25561	G25663	G25561
- Number of Bids	13	2	13
Most Bids	13	2	13
- Tract Number	G25561	G25661 G25663	G25561

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<sup>1</sup> "16 2/3% w/RS" is that category of tract in less than 200 meters of water with a royalty rate of 1/6 that is eligible for royalty suspension volumes of 20 billion cubic feet for natural gas from wells 15,000 feet or more deep.

<sup>2</sup> "16 2/3% w/ROY" is that category of tract in 200 to 399 meters of water with a royalty rate of 1/6 that is not eligible for an automatic royalty suspension volume.

# Western Gulf of Mexico OCS Oil and Gas Lease Sale 187

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## Sale Day Statistics for 12 1/2% Royalty Rate Tracts

	<u>12 1/2% w/RS5<sup>1</sup></u>	<u>12 1/2% w/RS3<sup>2</sup></u>	<u>12 1/2% w/RS4<sup>3</sup></u>	<u>12 1/2% Royalty</u>
Tracts Receiving Bids	39	95	85	219
Acres Receiving Bids	224,640.00	547,200.00	485,261.68	1,257,101.68
Sum of High Bids	\$27,437,797	\$33,495,547	\$24,538,820	\$85,472,164
Sum of All Bids	\$32,072,534	\$37,307,315	\$28,635,515	\$98,015,364
Total Number of Bids	49	109	100	258
Average Bids	1.26	1.15	1.18	1.18
Companies Bidding	19	17	13	25
Highest Bid per Tract	\$5,356,556	\$3,140,390	\$511,000	\$5,356,556
- Tract Number	G25670	G25779	G25772	G25670
- Number of Bids	1	3	1	1
Highest Bid per Acre	\$929.96	\$545.21	\$93.95	\$929.96
- Tract Number	G25670	G25779	G25772	G25670
- Number of Bids	1	3	1	1
Most Bids	4	3	2	4
- Tract Number	G25610	G25779 G25783 G25784	15 tracts	G25610

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<sup>1</sup> “12 1/2% w/RS5” is that category of tract in 400 to 799 meters of water with a royalty rate of 1/8 that is eligible for a royalty suspension volume of 5 MMBOE per lease.

<sup>2</sup> “12 1/2% w/RS3” is that category of tract in 800 to 1,599 meters of water with a royalty rate of 1/8 that is eligible for a royalty suspension volume of 9 MMBOE per lease.

<sup>3</sup> “12 1/2% w/RS4” is that category of tract in 1,600 or more meters of water with a royalty rate of 1/8 that is eligible for a royalty suspension volume of 12 MMBOE per lease.

# Appendix B

Western Gulf of Mexico  
Outer Continental Shelf  
Oil and Gas Lease Sale 187

**Bidding by Number of Bids**

# Sale 187

## *All Tracts*

<b>No. Of Bids</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
1	284	84.78%	\$87.79	59.03%
2	42	12.54%	\$22.83	15.35%
3	6	1.79%	\$12.24	8.23%
4	2	0.60%	\$3.25	2.19%
<u>5+</u>	<u>1</u>	<u>0.30%</u>	<u>\$22.60</u>	<u>15.20%</u>
Total	335	100.00%	\$148.72	100.00%

## *Tracts with 1/6 Royalty Rate*

<b>No. Of Bids</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
1	99	85.34%	\$24.73	39.10%
2	12	10.34%	\$7.83	12.37%
3	3	2.59%	\$7.24	11.44%
4	1	0.86%	\$0.85	1.35%
<u>5+</u>	<u>1</u>	<u>0.86%</u>	<u>\$22.60</u>	<u>35.74%</u>
Total	116	100.00%	\$63.24	100.00%

## *Tracts with 1/8 Royalty Rate*

<b>No. Of Bids</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
1	185	84.47%	\$63.06	73.78%
2	30	13.70%	\$15.01	17.56%
3	3	1.37%	\$5.00	5.85%
4	1	0.46%	\$2.40	2.81%
<u>5+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	219	100.00%	\$85.47	100.00%



## Sale 187, by Water Depth Category

*1/6 Royalty (<200 meters; 20 billion cubic feet Royalty Suspension Volume [RSV] for gas from deep wells, i.e., drilling depth of 15,000 feet or more)*

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	95	86.36%	\$23.61	38.75%
2	10	9.09%	\$6.63	10.88%
3	3	2.73%	\$7.24	11.88%
4	1	0.91%	\$0.85	1.40%
<u>5+</u>	<u>1</u>	<u>0.91%</u>	<u>\$22.60</u>	<u>37.09%</u>
Total	110	100.00%	\$38.15	100.00%

*1/6 Royalty (200-399 meters; no automatic RSV)*

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	4	66.67%	\$1.11	48.21%
2	2	33.33%	\$1.20	51.79%
3	0	0.00%	\$0.00	0.00%
4	0	0.00%	\$0.00	0.00%
<u>5+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	6	100.00%	\$9.79	100.00%

*1/8 Royalty (400-799 meters; 5 MMBOE RSV per lease)*

<b>No. Of Bids</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
1	31	79.49%	\$18.75	68.35%
2	7	17.95%	\$6.28	22.90%
3	0	0.00%	\$0.00	0.00%
4	1	2.56%	\$2.40	8.75%
<u>5+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	39	100.00%	\$27.44	100.00%

*1/8 Royalty (800-1,599 meters; 9 MMBOE RSV per lease)*

<b>No. Of Bids</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
1	84	88.42%	\$24.99	74.60%
2	8	8.42%	\$3.51	10.47%
3	3	3.16%	\$5.00	14.93%
4	0	0.00%	\$0.00	0.00%
<u>5+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	95	100.00%	\$33.50	100.00%

*1/8 Royalty (1,600 or more meters; 12 MMBOE RSV per lease)*

<b>No. Of Bids</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
1	70	82.35%	\$19.32	78.75%
2	15	17.65%	\$5.21	21.25%
3	0	0.00%	\$0.00	0.00%
4	0	0.00%	\$0.00	0.00%
<u>5+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	85	100.00%	\$46.71	100.00%

# Appendix C

Western Gulf of Mexico  
Outer Continental Shelf  
Oil and Gas Lease Sale 187

**Bidding by High Bid per Acre**

## Sale 187

### *All Tracts*

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	203	60.60%	\$44.20	29.72%
\$50 - 74.99	85	25.37%	\$29.95	20.14%
\$75 - 99.99	14	4.18%	\$6.40	4.30%
\$100 - 149.99	14	4.18%	\$9.57	6.43%
<u>\$150+</u>	<u>19</u>	<u>5.67%</u>	<u>\$56.60</u>	<u>39.40%</u>
Total	335	100.00%	\$148.72	100.00%

### *Tracts with 1/6 Royalty Rate*

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	80	68.97%	\$15.17	23.99%
\$50 - 74.99	14	12.07%	\$4.65	7.36%
\$75 - 99.99	8	6.90%	\$3.76	5.95%
\$100 - 149.99	8	6.90%	\$5.71	9.02%
<u>\$150+</u>	<u>6</u>	<u>5.17%</u>	<u>\$33.95</u>	<u>53.68%</u>
Total	307	100.00%	\$63.24	100.00%

### *Tracts with 1/8 Royalty Rate*

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	123	56.16%	\$29.02	33.96%
\$50 - 74.99	71	32.42%	\$25.30	29.60%
\$75 - 99.99	6	2.74%	\$2.64	3.09%
\$100 - 149.99	6	2.74%	\$3.86	4.52%
<u>\$150+</u>	<u>13</u>	<u>5.94%</u>	<u>\$24.65</u>	<u>28.84%</u>
Total	219	100.00%	\$85.47	100.00%

## Sale 187, by Water Depth Category

*1/6 Royalty (<200 meters; 20 billion cubic feet Royalty Suspension Volume [RSV] for gas from deep wells, i.e., drilling depth of 15,000 feet or more)*

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	78	70.91%	\$14.81	24.31%
\$50 - 74.99	12	10.91%	\$3.91	6.42%
\$75 - 99.99	7	6.36%	\$3.40	5.57%
\$100 - 149.99	7	6.36%	\$4.87	7.99%
<u>\$150+</u>	<u>6</u>	<u>5.45%</u>	<u>\$33.95</u>	<u>55.71%</u>
Total	110	100.00%	\$60.93	100.00%

*1/6 Royalty (200-399 meters; no automatic RSV)*

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	2	33.33%	\$0.36	15.54%
\$50 - 74.99	2	33.33%	\$0.74	32.18%
\$75 - 99.99	1	16.67%	\$0.37	15.94%
\$100 - 149.99	1	16.67%	\$0.84	36.34%
<u>\$150+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	6	100.00%	\$2.31	100.00%

*1/8 Royalty (400 - 799 meters; 5 MMBOE RSV per lease)*

<b>High Bid/acre</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
< \$50	18	46.15%	\$3.70	13.48%
\$50 - 74.99	9	23.08%	\$3.07	11.18%
\$75 - 99.99	0	0.00%	\$0.00	0.00%
\$100 - 149.99	3	7.69%	\$1.95	7.12%
<u>\$150+</u>	<u>9</u>	<u>23.08%</u>	<u>\$18.72</u>	<u>68.22%</u>
Total	39	100.00%	\$27.44	100.00%

*1/8 Royalty (800-1,599 meters; 9 MMBOE RSV per lease)*

<b>High Bid/acre</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
< \$50	55	57.89%	\$13.28	39.66%
\$50 - 74.99	31	32.63%	\$11.36	33.91%
\$75 - 99.99	2	2.11%	\$1.01	3.02%
\$100 - 149.99	3	3.16%	\$1.91	5.69%
<u>\$150+</u>	<u>4</u>	<u>4.21%</u>	<u>\$5.93</u>	<u>17.72%</u>
Total	95	100.00%	\$33.50	100.00%

*1/8 Royalty (1,600 or more meters; 12 MMBOE RSV per lease)*

<b>High Bid/acre</b>	<b>Tracts</b>	<b>Percent of Tracts</b>	<b>High Bids (\$MM)</b>	<b>Percent of High Bids</b>
< \$50	50	58.82%	\$12.04	49.07%
\$50 - 74.99	31	36.47%	\$10.87	44.31%
\$75 - 99.99	4	4.71%	\$1.62	6.62%
\$100 - 149.99	0	0.00%	\$0.00	0.00%
<u>\$150+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	85	100.00%	\$24.54	100.00%

# Appendix D

Western Gulf of Mexico  
Outer Continental Shelf  
Oil and Gas Lease Sale 187

**Bidding Results – Graphs**

# Distribution of High Bids Sale 187, WGOM

Prepared by:  
Economics Division, MMS

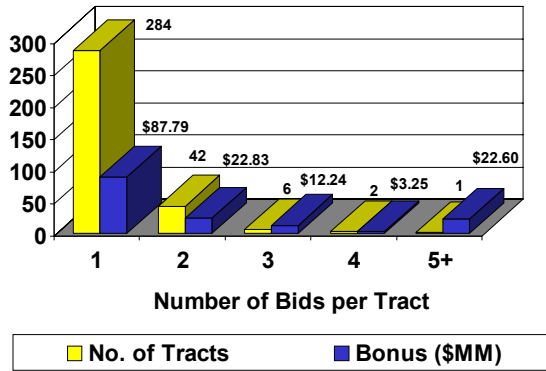
## Sale 187 (WGOM) Bidding Results

- 335 tracts received 407 bids (1.21 bids/tract).
- High bids were \$148.72 MM.
- Average high bid per acre was \$78.41.
- 63 companies submitted bids.
- 116 tracts in < 400 meters received bids - 34.63% of tracts and 42.52% of high bids.
- 219 tracts in 400+ meters received bids - 65.37% of tracts and 57.48% of high bids.



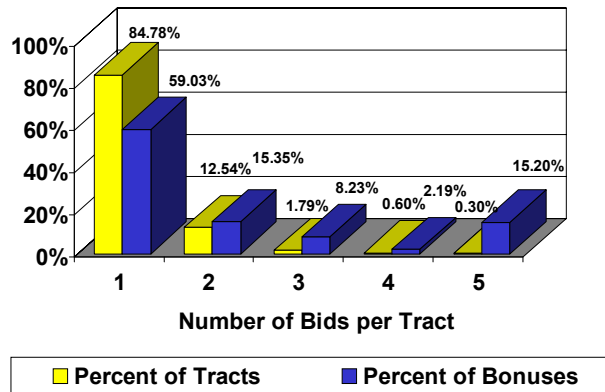
## Sale 187, Aggregate

Bidding Activity by Bids per Tract



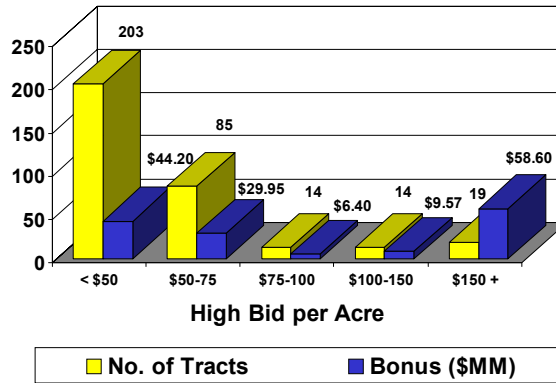
## Sale 187, Aggregate

Bidding Activity by Bids per Tract



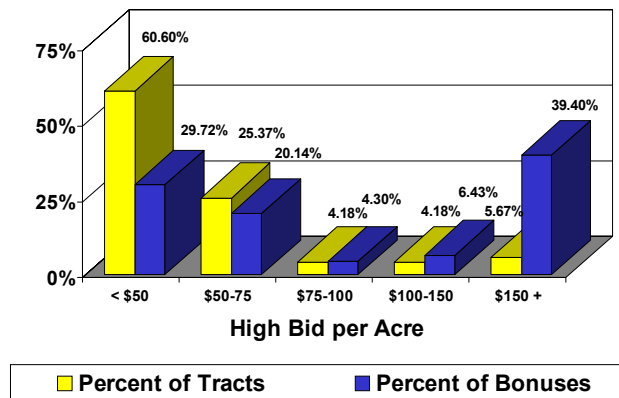
## Sale 187, Aggregate

Bidding Activity by High Bid per Acre



## Sale 187, Aggregate

Bidding Activity by High Bid per Acre



## Sale 187

### Bidding by Water Depth Category

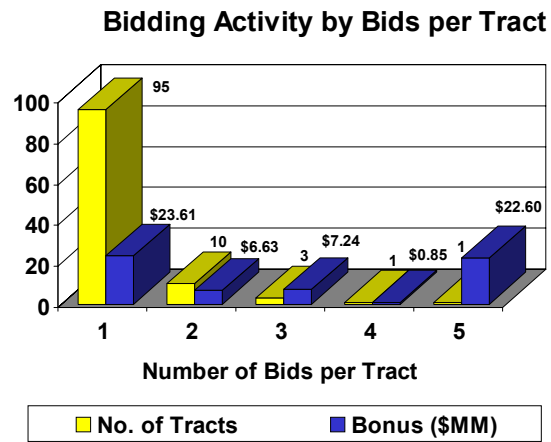
Prepared by:  
Economics Division, MMS

## Sale 187 (WGOM)

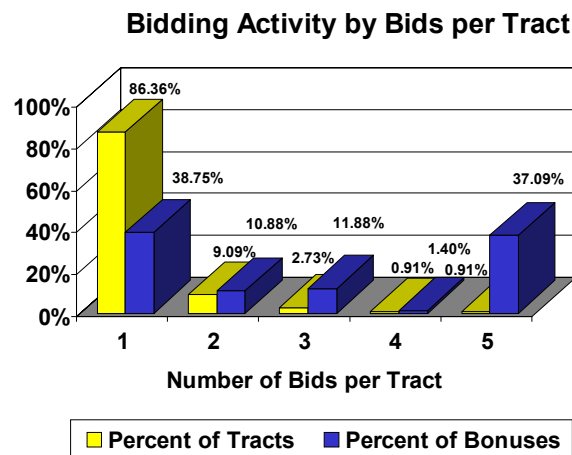
### Bidding by Water Depth Category

- 110 tracts in < 200 meters received 141 bids and high bids of \$60.93 MM (\$100.46/acre).
- 6 tracts in 200-399 meters had 8 bids and high bids of \$2.31 MM (\$70.05/acre).
- 39 tracts in 400-799 meters had 49 bids and high bids of \$27.44 MM (\$122.14/acre).
- 95 tracts in 800-1,599 meters had 109 bids and high bids of \$33.5 MM (\$61.21/acre).
- 85 tracts in > 1,600 meters had 100 bids and high bids of \$24.54 MM (\$50.57/acre).

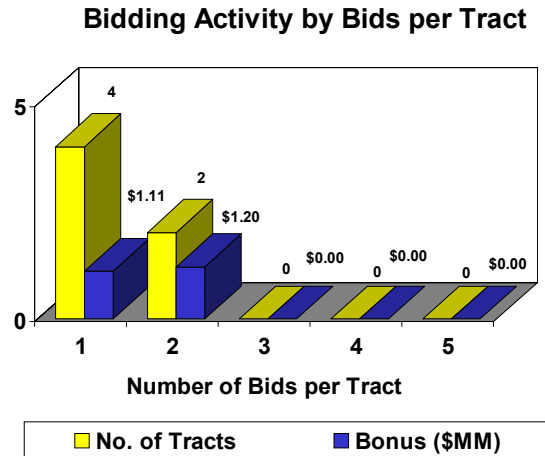
## Sale 187, Tracts in < 200 Meters Water Depth



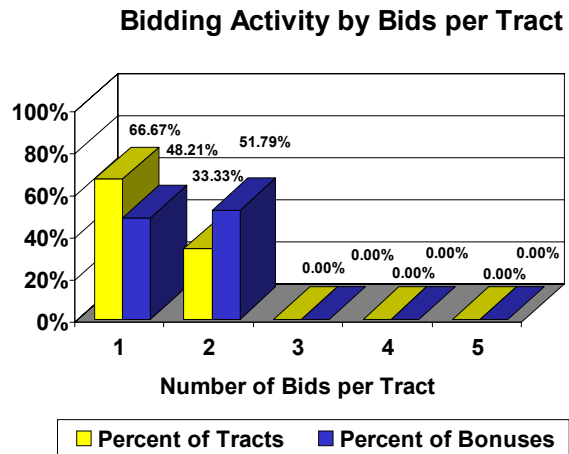
## Sale 187, Tracts in < 200 Meters Water Depth



## Sale 187, Tracts in 200-399 Meters Water Depth

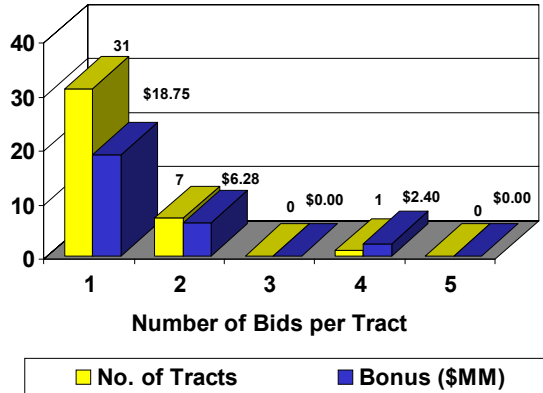


## Sale 187, Tracts in 200-399 Meters Water Depth



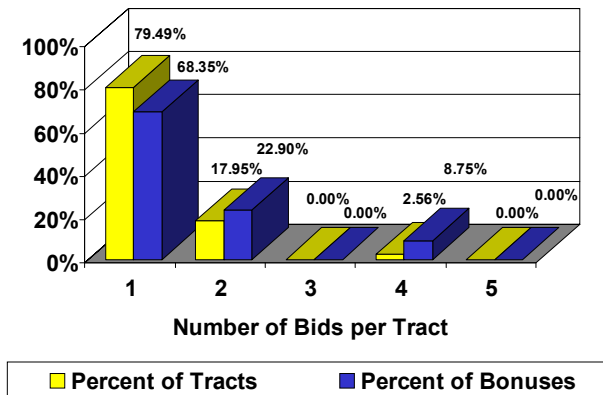
## Sale 187, Tracts in 400-799 Meters Water Depth

Bidding Activity by Bids per Tract

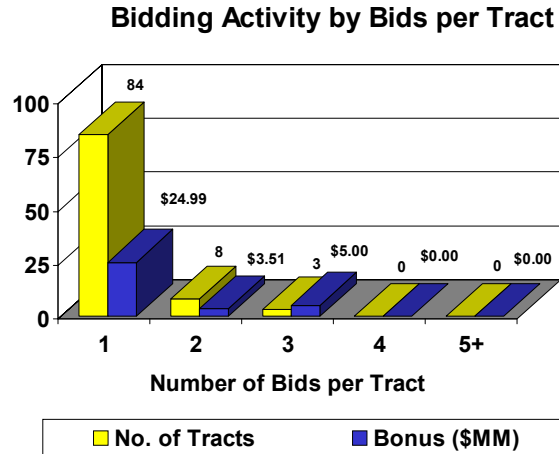


## Sale 187, Tracts in 400-799 Meters Water Depth

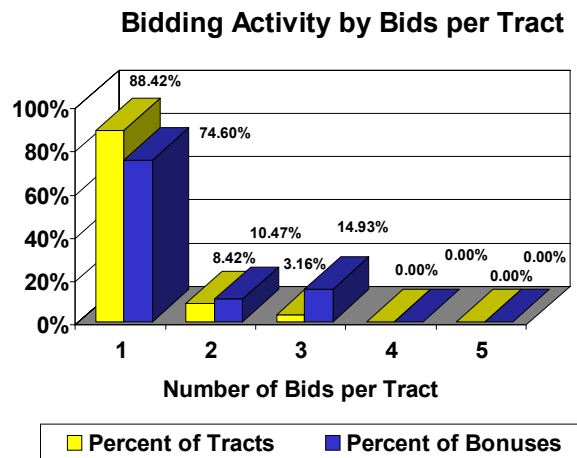
Bidding Activity by Bids per Tract



## Sale 187, Tracts in 800-1,599 Meters Water Depth

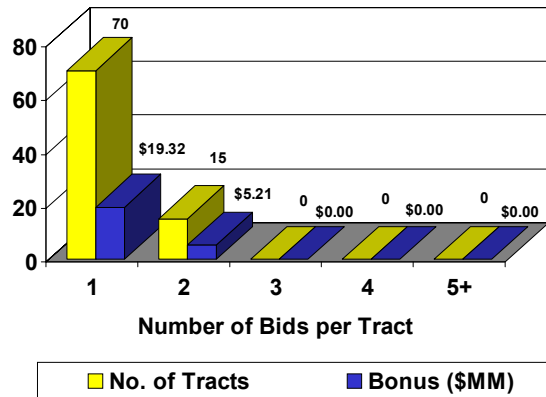


## Sale 187, Tracts in 800-1,599 Meters Water Depth



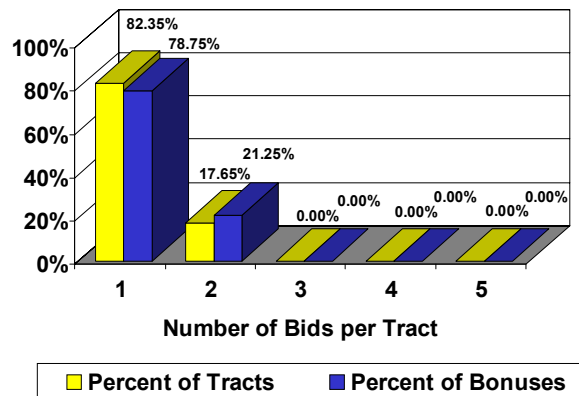
**Sale 187, Tracts in 1,600 Meters or More Water Depth**

**Bidding Activity by Bids per Tract**



**Sale 187, Tracts in 1,600 Meters or More Water Depth**

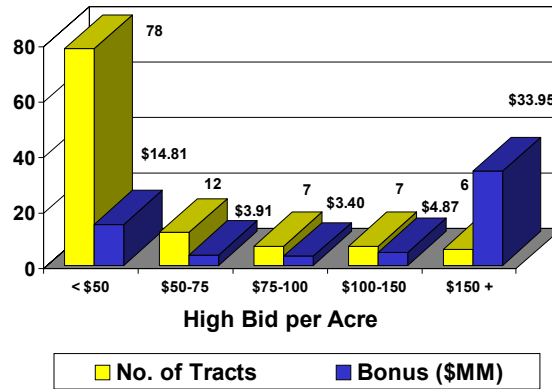
**Bidding Activity by Bids per Tract**





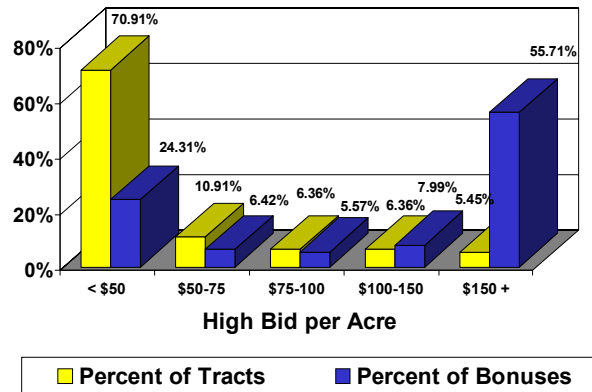
## Sale 187, Tracts in < 200 Meters Water Depth

### Bidding Activity by High Bid per Acre



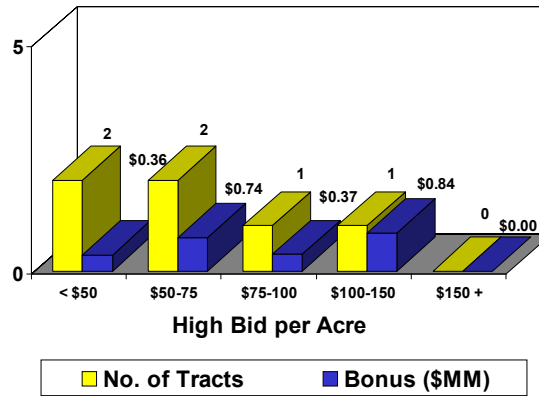
## Sale 187, Tracts in < 200 Meters Water Depth

### Bidding Activity by High Bid per Acre



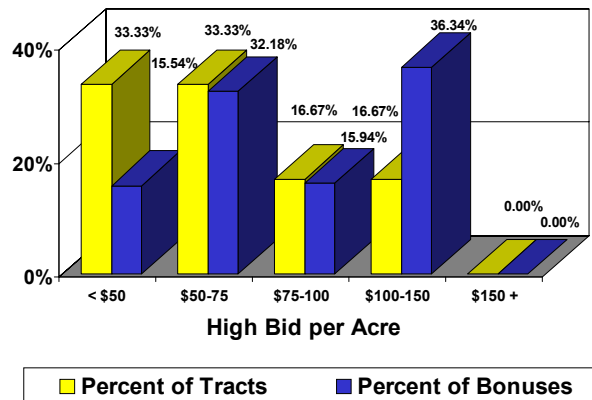
## Sale 187, Tracts in 200-399 Meters Water Depth

### Bidding Activity by High Bid per Acre



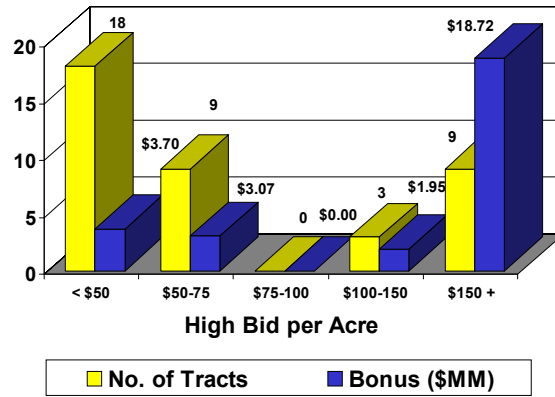
## Sale 187, Tracts in 200-399 Meters Water Depth

### Bidding Activity by High Bid per Acre



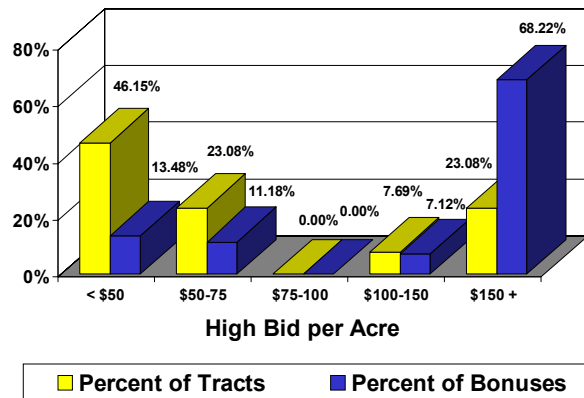
## Sale 187, Tracts in 400-799 Meters Water Depth

### Bidding Activity by High Bid per Acre



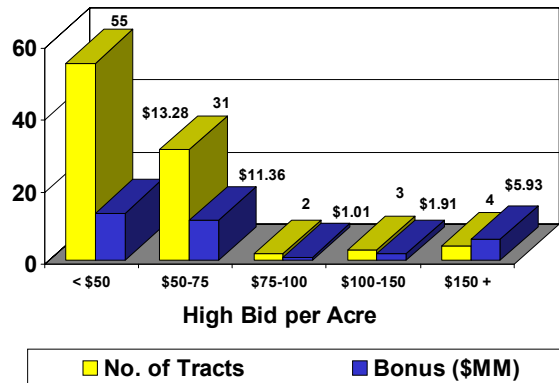
## Sale 187, Tracts in 400-799 Meters Water Depth

### Bidding Activity by High Bid per Acre



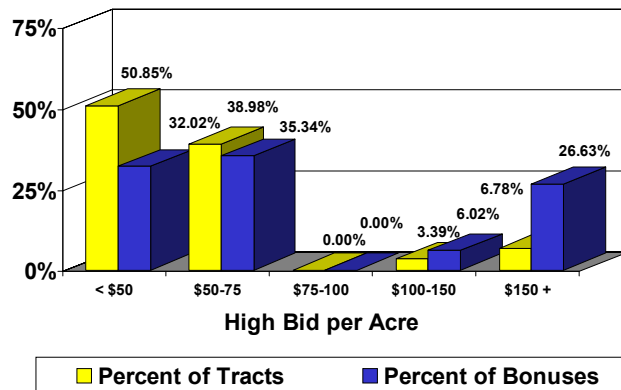
## Sale 187, Tracts in 800-1,599 Meters Water Depth

### Bidding Activity by High Bid per Acre



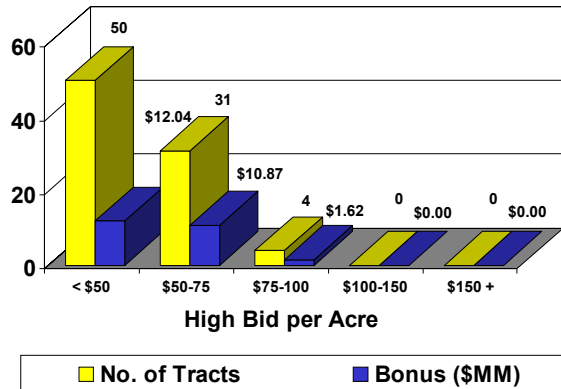
## Sale 187, Tracts in 800-1,599 Meters Water Depth

### Bidding Activity by High Bid per Acre



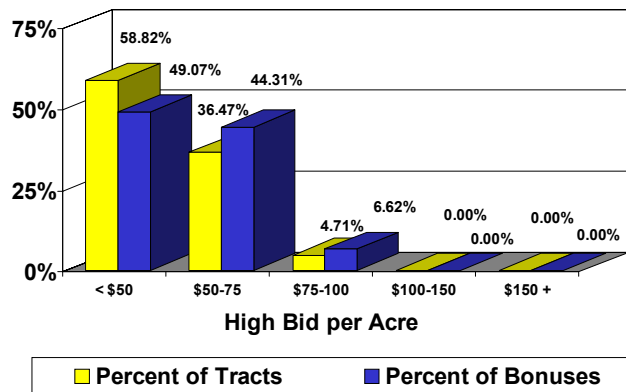
**Sale 187, Tracts in 1,600 Meters or More Water Depth**

**Bidding Activity by High Bid per Acre**



**Sale 187, Tracts in 1,600 Meters or More Water Depth**

**Bidding Activity by High Bid per Acre**



# Appendix E

## **Revised Arithmetic Average Measure (RAM)**

## Sale 187, Tracts with Three or More Bids

In Sale 187, three or more bids were received on 9 tracts. The distribution of those bids by water depth category and third bid as a percent of high bid is presented in table E1.

Table E1.—*Percent Difference Between a Tract’s High Bid and Third Bid by Water Depth Category*

Category	< 25%	25 - 50%	50 - 75%	> 75%	Total
< 200 m.	1	1	1	2	5
200 - 399 m.	0	0	0	0	0
400 - 799 m.	0	0	0	1	1
800 – 1,599 m.	0	0	0	3	3
1,600 m. or more	0	0	0	0	0
Total	1	1	1	6	9

Sale 187 was the thirteenth sale in which the modified number of bids rule was used for Phase 1 acceptance of high bids on selected tracts receiving three or more bids. Under the rule, high bids on wildcat and confirmed tracts receiving three or more bids are accepted in Phase 1, if the third highest bid on the tract is at least 50 percent of the high bid and the high bid per acre ranks in the top 75 percent of high bids per acre for all three-or-more bid tracts within a specified water depth category. (The procedure is described in the *Federal Register*, vol. 64, no.132, pp. 37,560-37,562.) In Sale 187, one three-or-more bid tract (G25561) met the bid acceptance criteria described above.

Sale 187 was also the thirteenth sale using a modified Phase 2 averaging rule, the “Revised Arithmetic Average Measure” (RAM) of tract value. The RAM is a secondary bid acceptance rule that is used on multi-bid tracts if the Government’s value of the tract (ADV) exceeds the high bid. The RAM is an arithmetic average of a tract’s high bid, ADV, and all other bids that are at least 25 percent of the high bid. If a bid on a tract is not at least 25 percent of the high bid, that bid is considered an outlier and not included in the RAM calculation. Thus, the adjusted number of bids on a tract for the RAM calculation can be less than the total number of bids that a tract receives.

For those tracts on which the RAM is used as the bid acceptance rule, if the RAM is less than the tract’s high bid, the high bid is accepted. If the RAM exceeds the high bid, the high bid is rejected.

Eight three-or-more-bid tracts that could potentially use the RAM as the bid acceptance decision rule were passed to Phase 2 for further evaluation. Of those, four did not have second bids that were at least 25 percent of the high bids, so the use of the RAM as a Phase 2 decision criterion for those tracts was not a possibility. For the remaining four tracts, the ADV's that would be needed to reject a tract's high bid using the RAM were calculated. Using the RAM, 1 tract needs an ADV of less than \$1 million, 2 tracts need an ADV of between \$1 million to \$5 million, and 1 needs an ADV of between \$5 million to \$10 million for high bid rejection based on this criterion. The results are presented in table E2.

Table E2.—*ADV Needed to Reject a High Bid Using the RAM by Water Depth Category*

Category	< \$1 MM	\$1-5 MM	\$5-10 MM	> \$10 MM	Total
< 200 m.	1	1	1	0	3
200 - 399 m.	0	0	0	0	0
400 - 799 m.	0	0	0	0	0
800 – 1,599 m.	0	1	0	0	1
1,600 m. or more	0	0	0	0	0
Total	1	2	1	0	4

## Sale 187, Tracts with Three or More Bids Passed to Phase 2

Table E3.—*Tracts in Less Than 200 Meters; Potential Royalty Suspension Volume of 20 Billion Cubic Feet for Natural Gas From Deep (more than 15,000 feet) Wells*

Tract	High Bid	No. of Bids	3 <sup>rd</sup> Bid as % of High Bid	Adjusted No. of Bids	ADV to Reject w/RAM
G25524	\$851,000	4	54.82%	4	\$1,829,257
G25566	\$3,325,555	3	4.78%	1	Not Applicable
G25578	\$3,302,000	3	10.87%	2	\$5,503,478
G25601	\$610,290	3	47.32%	3	\$972,100

Table E4.—*Tracts in 400 - 799 Meters; 5 MMBOE Royalty Suspension Volume*

Tract	High Bid	No. of Bids	3 <sup>rd</sup> Bid as % of High Bid	Adjusted No. of Bids	ADV to Reject w/RAM
G25610	\$2,400,000	4	16.62%	1	Not Applicable



Table E5.—*Tracts in 800 - 1,599 Meters; 9 MMBOE Royalty Suspension Volume*

<b>Tract</b>	<b>High Bid</b>	<b>No. of Bids</b>	<b>3<sup>rd</sup> Bid as % of High Bid</b>	<b>Adjusted No. of Bids</b>	<b>ADV to Reject w/RAM</b>
G25779	\$3,140,390	3	8.24%	1	Not Applicable
G25783	\$930,390	3	24.92%	2	\$1,584,720
G25784	\$930,390	3	23.54%	1	Not Applicable

The RAM was not used in the acceptance of the high bid on any tracts in Sale 187.

# Appendix F

## **Summary of Company Bids**

## Sale 187 - Company Bids by Total Amount of High Bids

Rank	Company Number	Company Name	Total	High	Losers	Total Exposed	Total High Bids	Total Unsuccessful
1	2058	LLOG Exploration Offshore	8	6	2	\$26,914,777	\$26,280,777	\$634,000
2	59	Amerada Hess	65	59	6	\$17,828,411	\$15,656,945	\$2,171,466
3	689	Shell Offshore	11	11	0	\$9,405,150	\$9,405,150	\$0
4	2481	BP Exploration & Production	48	36	12	\$11,917,963	\$9,129,420	\$2,788,544
5	2277	BHP Billiton Petroleum	63	56	7	\$9,232,316	\$8,190,078	\$1,042,238
6	282	Dominion E & P	4	3	1	\$13,851,848	\$7,426,493	\$6,425,355
7	2466	Gryphon Exploration	21	17	4	\$11,264,411	\$6,754,979	\$4,509,432
8	2219	Kerr-McGee Oil & Gas	23	19	4	\$7,884,093	\$6,177,523	\$1,706,570
9	276	ExxonMobil	14	14	0	\$4,910,000	\$4,910,000	\$0
10	1500	Total E & P USA	22	18	4	\$5,682,442	\$4,681,998	\$1,000,444
11	78	Chevron USA	18	18	0	\$4,633,563	\$4,633,563	\$0
12	2079	Nexen Petroleum Offshore	10	10	0	\$4,567,619	\$4,567,619	\$0
13	2169	Spinnaker Exploration	11	10	1	\$8,587,800	\$4,515,300	\$4,072,500
14	2421	Devon Energy Production	20	16	4	\$4,170,869	\$3,423,319	\$747,550
15	1958	Maxus (US) Exploration	10	10	0	\$3,186,560	\$3,186,560	\$0
16	2525	Westport Resources	3	1	2	\$7,520,000	\$2,620,000	\$4,900,000
17	2237	Noble Energy	7	5	2	\$5,312,144	\$2,358,144	\$2,954,000
18	48	Forest Oil	11	8	3	\$4,472,525	\$2,206,178	\$2,266,347
19	1046	The Houston Exploration Co.	9	7	2	\$10,429,871	\$2,023,546	\$8,406,324
20	1364	Newfield Exploration	28	20	8	\$25,130,537	\$1,963,611	\$23,166,926
21	730	Walter Oil & Gas	5	3	2	\$4,297,034	\$1,941,259	\$2,355,775
22	818	Mariner Energy	8	6	2	\$2,023,710	\$1,475,980	\$547,730
23	2579	Tana Exploration	3	3	0	\$1,350,000	\$1,350,000	\$0
24	2643	Contango Offshore	4	4	0	\$1,314,200	\$1,314,200	\$0
25	2312	McMoRan Oil & Gas	1	1	0	\$1,159,377	\$1,159,377	\$0
26	3	Union Oil Co. of California	5	3	2	\$1,976,395	\$928,390	\$1,048,005
27	236	El Paso Production	6	5	1	\$1,074,600	\$916,150	\$158,450
28	1978	The William G. Helis Co.	6	3	3	\$18,876,309	\$854,242	\$18,022,067
29	1935	Pioneer Natural Resources	3	3	0	\$787,826	\$787,826	\$0
30	2330	Cheniere Energy	4	3	1	\$1,028,500	\$726,800	\$301,700
31	1819	ATP Oil & Gas	4	4	0	\$667,800	\$667,800	\$0

Rank	Company Number	Company Name	Total	High	Losers	Total Exposed	Total High Bids	Total Unsuccessful
32	1355	Cabot Oil & Gas	4	3	1	\$915,840	\$558,720	\$357,120
33	981	Anadarko Petroleum	10	6	4	\$4,972,193	\$537,229	\$4,434,963
34	2543	Fidelity E & P	2	2	0	\$528,768	\$528,768	\$0
35	1963	Apex Oil & Gas	2	2	0	\$454,464	\$454,464	\$0
36	2566	F-W Oil Exploration	2	2	0	\$392,230	\$392,230	\$0
37	2377	MCX Gulf of Mexico	3	3	0	\$388,360	\$388,360	\$0
38	2417	Arena Energy	1	1	0	\$357,318	\$357,318	\$0
39	1834	Stone Energy	1	1	0	\$345,600	\$345,600	\$0
40	64	Hunt Oil	5	2	3	\$5,285,350	\$314,650	\$4,970,700
41	1207	Petrobras America	6	2	4	\$1,513,222	\$290,422	\$1,222,800
42	2407	Woodside Energy (USA)	1	1	0	\$249,496	\$249,496	\$0
43	2479	Republic Exploration	2	1	1	\$367,400	\$212,900	\$154,500
44	2522	Denbury Offshore	1	1	0	\$206,000	\$206,000	\$0
45	1298	RIMCO Production	1	1	0	\$175,000	\$175,000	\$0
46	2477	Tarpon Operating	3	3	0	\$166,440	\$166,440	\$0
47	2475	Sterling Energy	1	1	0	\$158,250	\$158,250	\$0
48	906	Vintage Petroleum	1	1	0	\$153,407	\$153,407	\$0
49	1999	Houston Energy	6	3	3	\$3,331,113	\$150,749	\$3,180,365
50	2409	Maritech Resources	1	1	0	\$149,760	\$149,760	\$0
51	2480	Davis Offshore	1	1	0	\$147,118	\$147,118	\$0
52	2625	Miss-Lou Petroleum	1	1	0	\$145,225	\$145,225	\$0
53	2397	Samson Offshore	1	1	0	\$121,240	\$121,240	\$0
54	1704	Remington Oil and Gas	1	1	0	\$87,264	\$87,264	\$0
55	2526	Blue Dolphin Petroleum	1	1	0	\$76,320	\$76,320	\$0
56	2349	Magnum Hunter Production	1	1	0	\$58,176	\$58,176	\$0
57	1284	W & T Offshore	1	1	0	\$56,795	\$56,795	\$0
58	2432	Andex Resources	1	0	1	\$1,821,765	\$0	\$1,821,765
59	1513	Callon Petroleum Operating	1	0	1	\$1,531,250	\$0	\$1,531,250
60	1866	Range Energy Ventures	1	0	1	\$1,351,481	\$0	\$1,351,481
61	1630	Cheyenne International	1	0	1	\$792,269	\$0	\$792,269
62	560	Seneca Resources	1	0	1	\$747,345	\$0	\$747,345
63	2561	NCX Company	1	0	1	\$211,200	\$0	\$211,200

# Appendix G

**Sales 187 and 184**

**Active Bidders**

## Companies Participating in 10 or More Bids in Sale 187

Company	Company Number	< 200 m.	200 - 399 m.	400 - 799 m.	800 - 1,599 m.	1,600 + m.	Total	Exposure	Exposure Rank	Exposure per Bid
Amerada Hess	59	0	0	7	39	19	65	\$17,828,411	4	\$274,283
BHP Billiton Petroleum (DW)	2277	22	0	12	10	19	63	\$9,232,316	10	\$146,545
BP Exploration & Production	2481	0	0	6	27	15	48	\$11,917,963	6	\$248,291
Newfield Exploration	1364	17	0	7	4	0	28	\$25,130,537	2	\$897,519
Kerr-McGee Oil & Gas	2219	0	2	12	4	5	23	\$7,884,093	12	\$342,787
Total E&P USA	1500	0	0	0	0	22	22	\$5,682,442	14	\$258,293
Gryphon Exploration	2466	21	0	0	0	0	21	\$11,264,411	7	\$536,401
Devon Energy Production	2421	3	2	2	4	9	20	\$4,170,869	23	\$208,543
Chevron USA	78	0	0	0	4	14	18	\$4,633,563	19	\$257,420
ExxonMobil	276	0	0	0	9	5	14	\$4,910,000	18	\$350,714
Shell Offshore	689	0	1	2	6	2	11	\$9,405,150	9	\$855,014
Spinnaker Exploration	2169	8	0	2	1	0	11	\$8,587,800	11	\$780,709
Forest Oil	48	7	3	1	0	0	11	\$4,472,525	21	\$406,593
Anadarko Petroleum	981	1	0	0	0	9	10	\$4,972,193	17	\$497,219
Nexen Petroleum Offshore USA	2079	0	0	8	2	0	10	\$4,567,619	20	\$456,762
Maxus (US) Exploration	1958	0	0	0	0	10	10	\$3,186,560	25	\$318,656

### Companies Participating in 10 or More Bids in Sale 184

Company	Company Number	< 200 m.	200 - 399 m.	400 - 799 m.	800 - 1,599 m.	1,600 + m.	Total	Exposure	Exposure Rank	Exposure per Bid
Kerr-McGee Oil & Gas	2219	0	6	8	13	26	53	\$15,361,200	3	\$289,834
Amerada Hess	59	0	3	19	19	11	52	\$16,804,702	2	\$323,167
Pioneer Natural Resources	1935	35	0	1	6	0	42	\$10,553,593	4	\$251,276
Shell Offshore	689	4	1	2	4	28	39	\$41,999,806	1	\$1,076,918
LLOG Exploration Offshore	2058	13	5	3	0	0	21	\$9,826,000	5	\$467,905
ExxonMobil	276	10	0	0	0	10	20	\$4,658,500	10	\$232,925
BHP Petroleum (Deepwater)	2277	0	0	0	8	10	18	\$4,918,623	8	\$273,257
Petrobras America	1207	0	1	11	5	0	17	\$3,301,339	18	\$194,196
Ocean Energy	1777	0	1	1	6	8	16	\$2,884,320	21	\$180,270
El Paso Production	236	13	1	0	0	0	14	\$3,102,310	20	\$221,594
Gryphon Exploration	2466	13	0	0	0	0	13	\$4,478,468	11	\$344,498
Mariner Energy	818	5	4	0	3	0	12	\$3,219,513	19	\$268,293
Murphy Exploration	1689	0	3	6	2	0	11	\$4,322,000	12	\$392,909
Spinnaker Exploration	2169	8	0	0	3	0	11	\$2,807,567	22	\$255,233
F-W Oil Exploration	2566	10	0	0	0	0	10	\$3,862,000	14	\$386,200

# Appendix H

**Sales 187 and 184**

**Comparison of Sales - Graphs**



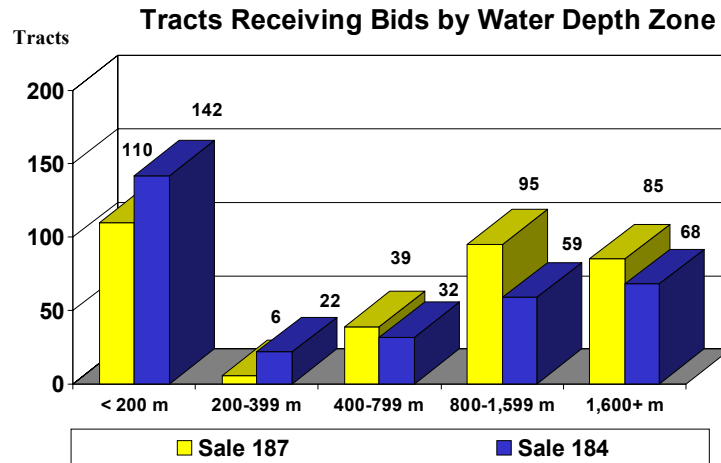
# Sale 187 v. Sale 184

Prepared by:  
Economics Division, MMS

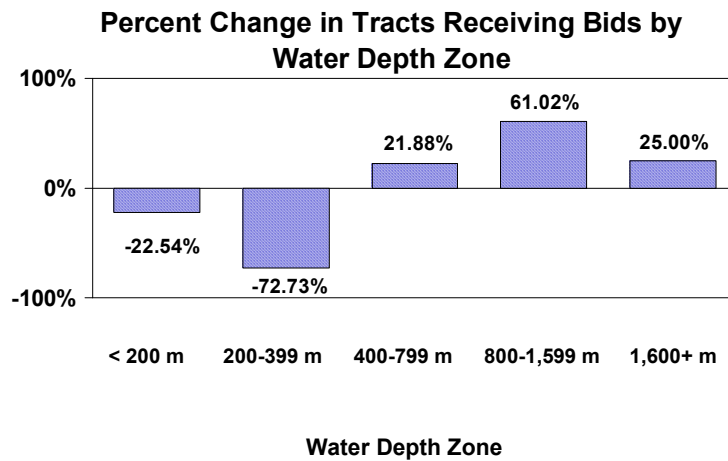
## Sale 187 v. Sale 184 (WGOM) Comparison of Results

- In aggregate, 335 tracts received high bids of \$148.72 MM in Sale 187 and 323 tracts received high bids of \$151.27 MM in Sale 184.
- Bids per tract of 1.21 were the same in both Sale 184 and in Sale 187.
- Sale 187 had 110 tracts in < 200 m. receiving high bids of \$60.93 MM v. 142 tracts and high bids of \$38.15 MM in Sale 184.
- Sale 187 had 225 tracts in 200 m. or more receiving high bids of \$87.79 MM v. 181 tracts and high bids of \$113.12 MM in Sale 184.

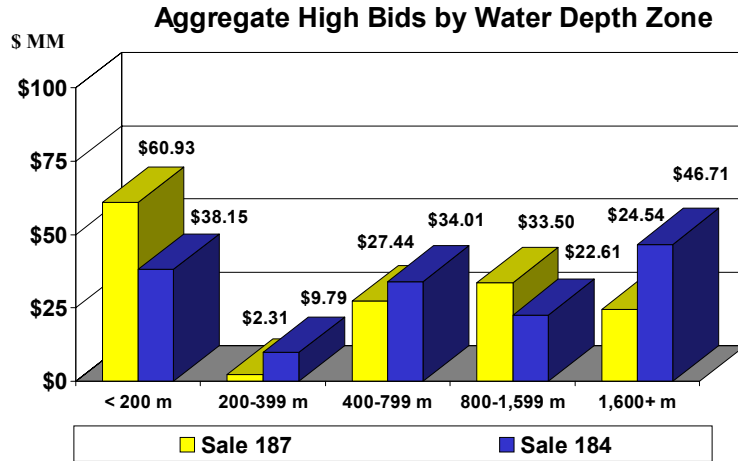
## Sale 187 v. Sale 184 - Tracts



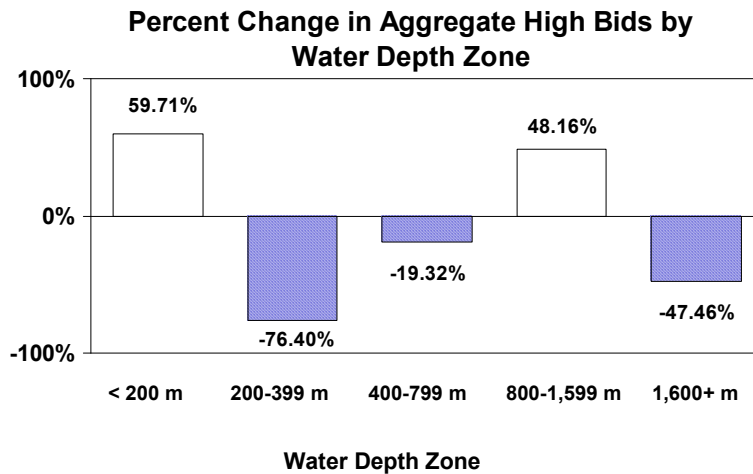
## Sale 187 v. Sale 184 - Tracts



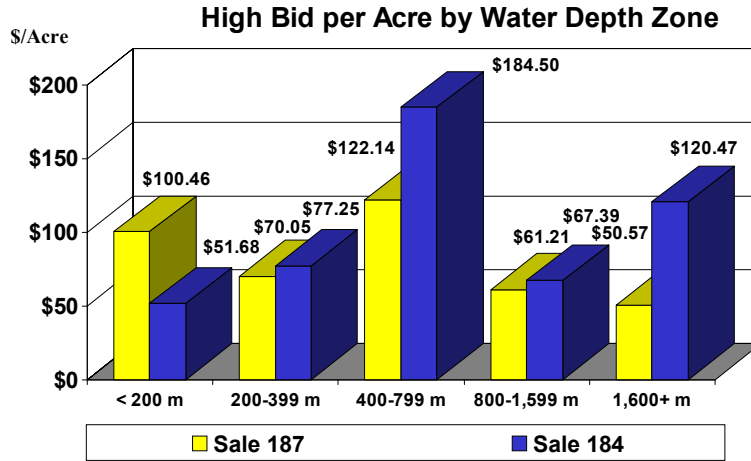
## Sale 187 v. Sale 184 - Bonuses



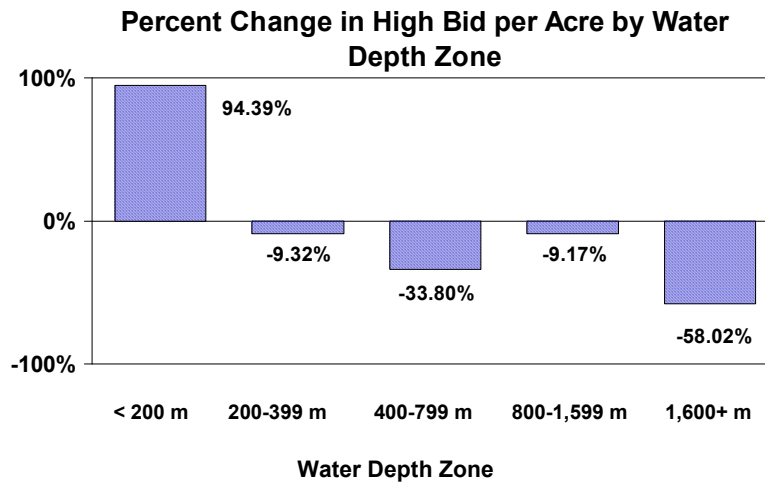
## Sale 187 v. Sale 184 - Bonuses



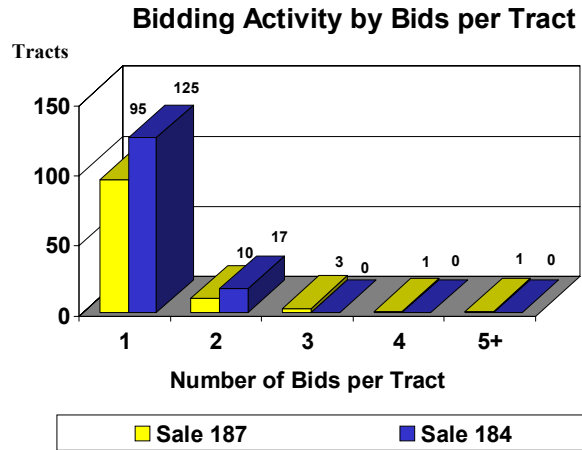
## Sale 187 v. Sale 184 - High Bid per Acre



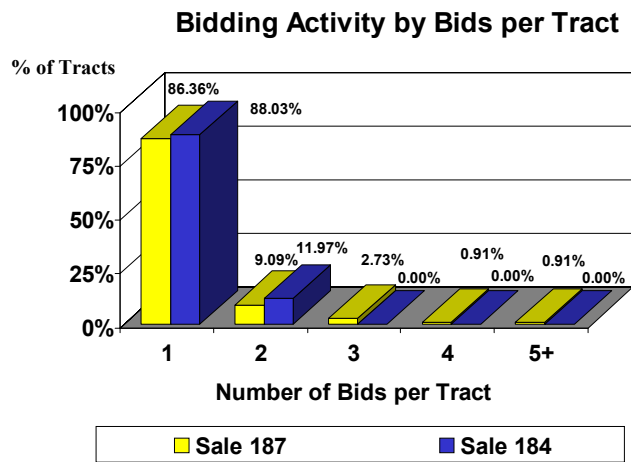
## Sale 187 v. Sale 184 - High Bid per Acre



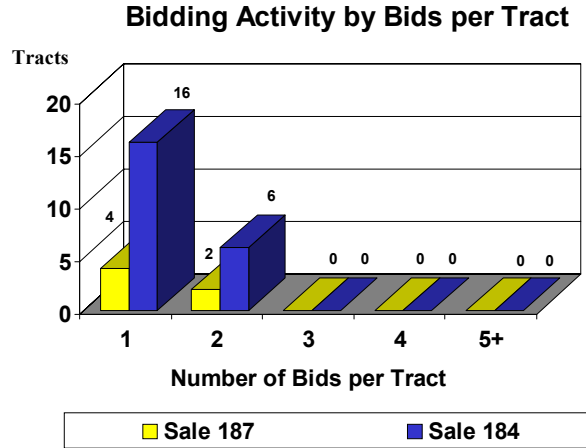
## Sale 187 v. Sale 184 - Tracts < 200 Meters Water Depth



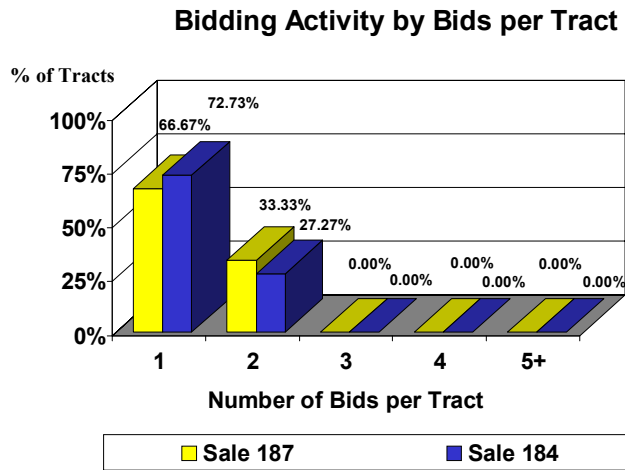
## Sale 187 v. Sale 184 - Tracts < 200 Meters Water Depth



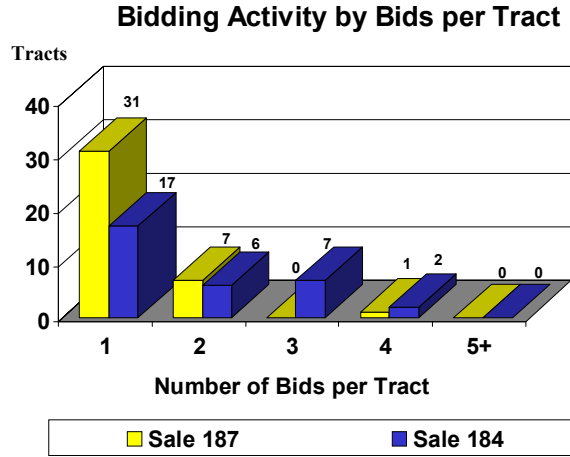
## Sale 187 v. Sale 184 - Tracts in 200 to 399 Meters Water Depth



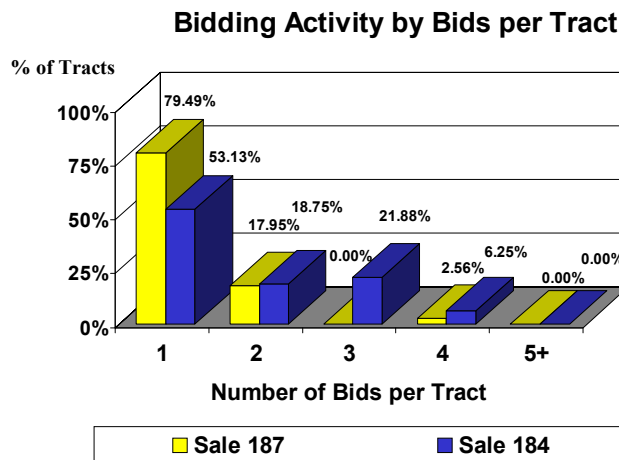
## Sale 187 v. Sale 184 - Tracts in 200 to 399 Meters Water Depth



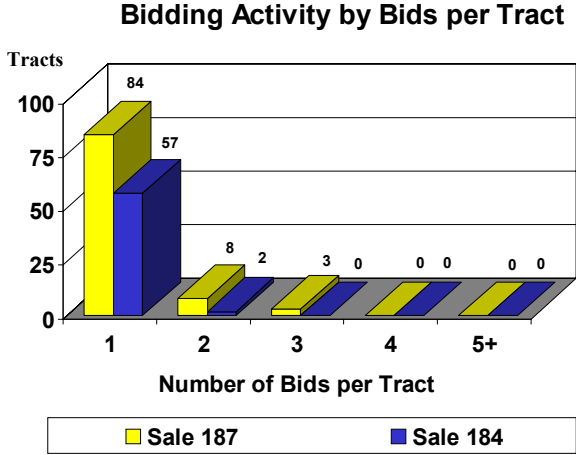
## Sale 187 v. Sale 184 - Tracts in 400 to 799 Meters Water Depth



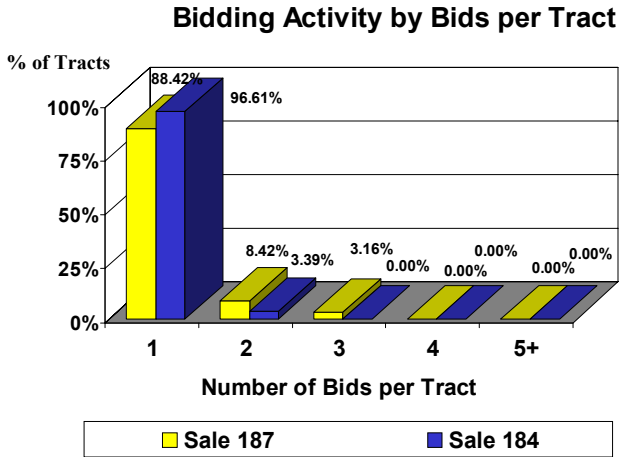
## Sale 187 v. Sale 184 - Tracts in 400 to 799 Meters Water Depth



**Sale 187 v. Sale 184 - Tracts in 800 to 1,599 Meters Water Depth**

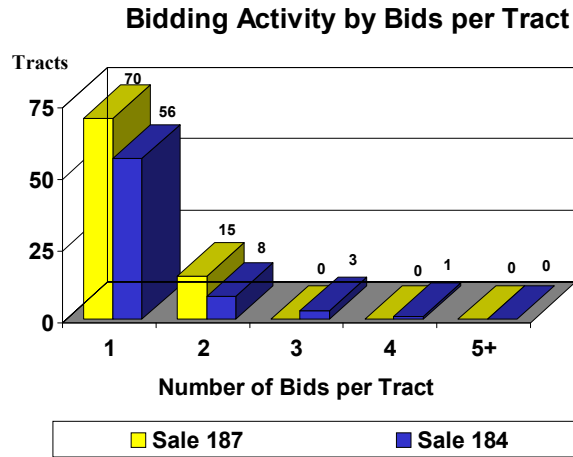


**Sale 187 v. Sale 184 - Tracts in 800 to 1,599 Meters Water Depth**

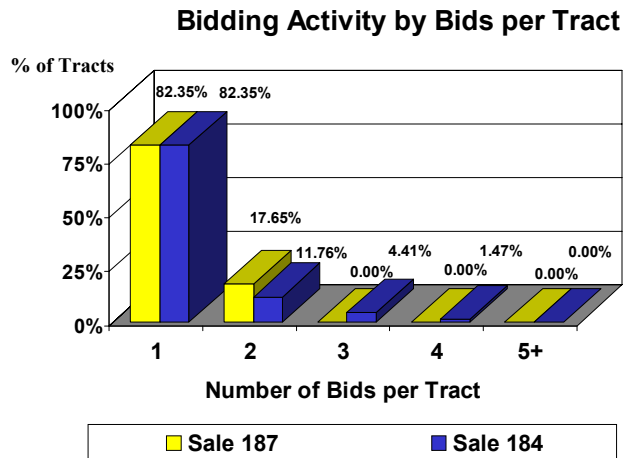




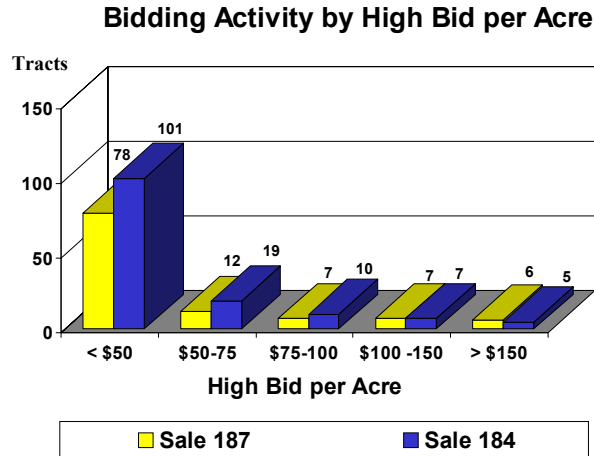
### Sale 187 v. Sale 184 - Tracts in 1,600 Meters or More Water Depth



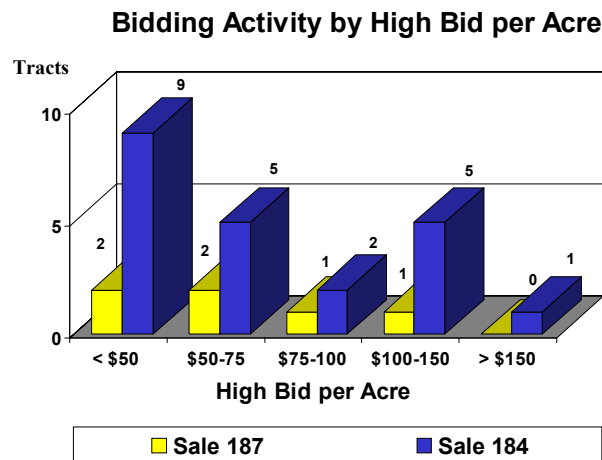
### Sale 187 v. Sale 184 - Tracts in 1,600 Meters or More Water Depth



## Sale 187 v. Sale 184 - Tracts < 200 Meters Water Depth

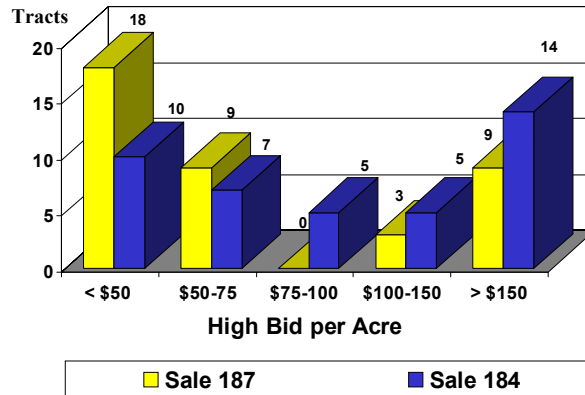


## Sale 187 v. Sale 184 - Tracts in 200 to 399 Meters Water Depth



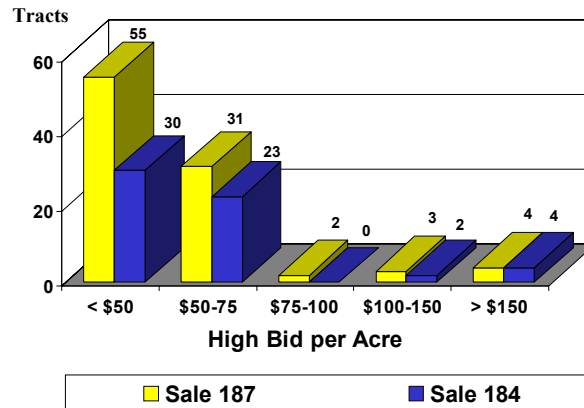
## Sale 187 v. Sale 184 - Tracts in 400 to 799 Meters Water Depth

**Bidding Activity by High Bid per Acre**

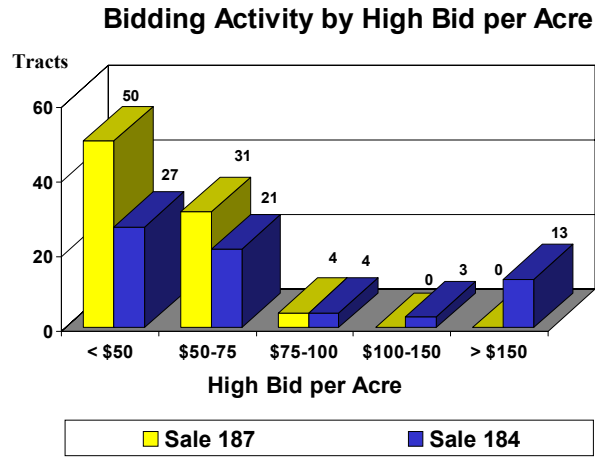


## Sale 187 v. Sale 184 - Tracts in 800 to 1,599 Meters Water Depth

**Bidding Activity by High Bid per Acre**



## Sale 187 v. Sale 184 - Tracts in 1,600 Meters Water or More Depth



# Appendix I

## **High Bid Rejections**

## Sale 187 Rejections

High bids on five tracts were rejected in Sale 187. The rejected blocks received from one bid to two bids. By water depth category, the rejections were as follows: one in less than 200 meters and four in 400 to 799 meters.

Table I1.—*Sale 187, Rejections in Water Depths Less than 200 Meters; Royalty Rate = 1/6; Potential Royalty Suspension Volume for Natural Gas from Deep (15,000 feet or more) Wells*

Tract No.	Bids	High Bid	ADV	RAM
G25580	1	\$450,500	\$1,600,000	Not Applicable

Table I2.—*Sale 187, Rejections in Water Depths of 400-799 Meters; Royalty Rate = 1/8; 5 MMBOE Royalty Suspension Volume*

Tract No.	Bids	High Bid	ADV	RAM
G25666	2	\$668,160	\$1,600,000	Not Applicable
G25671	1	\$259,888	\$1,000,000	Not Applicable
G25674	1	\$259,888	\$1,500,000	Not Applicable
G25684	1	\$1,159,377	\$2,400,000	Not Applicable

## Sale 187 Bidding on Sale 184 Rejections

In Sale 187, four tracts with high bids that were rejected in Sale 184 received bids. In addition, there were three rejected tracts in Sale 184 with aggregate high bids of \$783,538 that did not receive bids in Sale 187.

The high bids on the four tracts with bids increased from \$1,617,292 in Sale 184 to \$3,855,918 in Sale 187, an increase in high bids of 138 percent. The number of bids on these four tracts increased from 5 to 7, a gain of 40 percent. The high bids on three of the four tracts were accepted in Sale 187. Only the high bid on G25671 for \$259,888 was rejected. The potential to realize substantial gains in high bids on tracts that were rejected previously highlights the importance of MMS's bid adequacy procedures.

Table I3.—*Sale 187 High Bids on Sale 184 Rejections*

**Tracts with No Sale 187 Bids**

<b>Sale 184 Rejections</b>			<b>Sale 187 High Bids</b>		
<b>Tract No.</b>	<b>Bids</b>	<b>High Bid</b>	<b>Tract No.</b>	<b>Bids</b>	<b>High Bid</b>
G24355	1	\$277,700			
G24359	1	\$232,000			
G24461	1	\$273,838			
<b>Totals</b>	<b>3</b>	<b>\$783,538</b>			

**Tracts with Sale 187 Bids**

<b>Sale 184 Rejections</b>			<b>Sale 187 High Bids</b>		
<b>Tract No.</b>	<b>Bids</b>	<b>High Bid</b>	<b>Tract No.</b>	<b>Bids</b>	<b>High Bid</b>
G24396	1	\$418,029	G25569	2	\$734,022
G24469	1	\$268,838	G25665	2	\$1,928,888
G24477	2	\$678,838	G25671	1	\$259,888 - Reject
G24504	1	\$251,587	G25694	2	\$933,120
<b>Totals</b>	<b>5</b>	<b>\$1,617,292</b>	<b>Totals</b>	<b>7</b>	<b>\$3,855,918</b>

# Appendix J

## **Bid Adequacy Procedures**



[Federal Register: July 12, 1999 (Volume 64, Number 132)]  
[Notices]  
[Page 37560-37562]  
From the Federal Register Online via GPO Access [wais.access.gpo.gov]  
[DOCID:fr12jy99-108]

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## **DEPARTMENT OF THE INTERIOR**

### **Minerals Management Service**

#### **Modifications to the Bid Adequacy Procedures**

**AGENCY:** Minerals Management Service (MMS), Interior.

**ACTION:** Notification of procedural change.

---

**SUMMARY:** The Minerals Management Service (MMS) has changed a criterion in its existing bid adequacy procedures for ensuring receipt of fair market value on Outer Continental Shelf (OCS) oil and gas leases. The change ensures consistency in the evaluation of tracts.

**DATES:** This modification is effective July 1, 1999.

**FOR FURTHER INFORMATION CONTACT:** Dr. Marshall Rose, Chief, Economics Division, at (703) 787-1536.

The revised bid adequacy procedures are described below.

#### **What Definitions Apply to These Procedures?**

The *MROV* is a dollar measure of a tract's expected net present value, if that tract is leased in the current sale. The calculation of the *MROV* allows for exploration and economic risk, and includes tax consequences, e.g., depletion of the cash bonus.

The *delayed MROV (DMROV)* is a measure used to determine the size of the high bid needed in the current sale to equalize it with the discounted sum of the bonus and royalties expected in the next sale, less the foregone royalties from the current sale. The bonus for the next sale is computed as the *MROV* associated with the delay in leasing under the projected economic, engineering, and geological leasing receipts conditions, including drainage. If the high bid exceeds the *DMROV*, then the leasing receipts from the current sale are expected to be greater than those from the next sale, even in cases in which the *MROV* exceeds the high bid.

The *Adjusted Delayed Value (ADV)* is the minimum of the MROV and the DMROV.

The *RAM* is the revised arithmetic average measure of the MROV and all qualified bids on a tract that are equal to at least 25 percent of the high bid.

*Anomalous bids* are all but the highest bid submitted for a tract by the same company (bidding alone or jointly with another company), parent, or subsidiary. These bids are excluded when applying the number of bids rule or any other bid adequacy measure.

*Legal bids* are those bids which comply with the MMS regulations (30 CFR 256) and the Notice of Sale, e.g., equal or exceed the specified minimum bid. Any illegal bid will be returned to the bidder.

*Qualified bids* are those bids that are legal and not anomalous.

*MONTCAR* is a probabilistic, cash flow computer simulation model used to conduct a resource-economic evaluation that results in an estimate of the expected net present value of a tract (or prospect).

*Nonviable tracts or prospects* are those geographic or geologic configurations of hydrocarbons that are estimated to be uneconomic to produce with the costs and anticipated future prices used in the analysis.

Within the context of our bid adequacy procedures, the term “*unusual bidding patterns*” typically refers to a situation in which two or more companies bid against each other more often than would normally be expected. Companies could agree to bid against each other on certain sets of tracts in a sale so that the number of bids rule would apply for bid acceptance. Other forms of unusual bidding patterns exist as well, and generally involve anti-competitive practices, e.g., if it appears that companies are attempting to avoid bidding against each other in a sale on a set of prospective tracts.

A *confirmed tract* is a previously leased tract having a well(s) which encountered hydrocarbons and may have produced. It contains some oil and/or gas resources whose volume may or may not be known.

A *development tract* is a tract which has nearby productive (past or currently capable) wells with indicated hydrocarbons and which is not interpreted to have a productive reservoir extending under the tract. There should be evidence supporting the interpretation that at least part of the tract is on the same general structure as the proven productive well.

A *drainage tract* is a tract which has a nearby well which is capable of producing oil or gas, and the tract could incur drainage if and when such a well is placed on production. The reservoir, from which the nearby well is capable of producing, is interpreted to extend under the drainage tract to some extent.

A *wildcat tract* is a tract which has neither nearby productive (past or currently capable) wells, nor is interpreted to have a productive reservoir extending under the tract. It has high risk in addition to sparse well control.

*Water depth categories* for bid adequacy purposes in the Gulf of Mexico are designated as (1) less than 800 meters and (2) 800 meters or more.

If different water depth categories are used for a Gulf of Mexico sale, they will be specified in the sale's final notice. For areas other than the Gulf of Mexico, all tracts will be considered to be in the same water depth category, unless an alternative is specified in the final notice of sale.

### **What Problem Is Addressed by the Change?**

In any OCS lease sale, a limited number of tracts may be reclassified from drainage or development (DD) in Phase 1 of the bid evaluation process to confirmed or wildcat (CW) in Phase 2. (The MMS reclassifies a tract if additional Phase 2 analysis supports a classification different than the one assigned the tract in Phase 1 of the evaluation.) However, under the old bid adequacy procedures, a tract classified as CW in Phase 1 was evaluated under different criteria than a tract that was reclassified as CW in Phase 2. This change ensures the consistent treatment of similarly classified tracts whether they are evaluated in Phase 1 or Phase 2.

### **What Change Is Being Made?**

In Phase 1 of the bid adequacy procedures, the MMS classifies tracts as either CW or DD based on information available at the time of sale. Under the old (February 10, 1999) guidelines, tracts within designated water depth categories that were reclassified from DD to CW in Phase 2 only had to have a third largest bid within 50 percent of the high bid to be accepted. Now, DD tracts reclassified as CW tracts must satisfy the same criteria for acceptance that would have had to be met if they were classified as CW in Phase 1.

To ensure consistency in evaluations, the following change is being made. In Phase 1, for CW tracts receiving three-or-more qualified bids, acceptance under the number of bids rule will apply only if the third largest bid is within 50 percent of the high bid, and if the high bid is in the top 75 percent of high bids on a per acre basis for all three-or-more-bid tracts within designated water depth categories. In Phase 2 of the bid evaluation process, DD tracts that have been reclassified as CW will be subject to the same screening criteria that the CW tracts with three-or-more bids had to meet in Phase 1.

## **How Are Bids Evaluated?**

During the bid review process, we conduct evaluations in a two-phased procedure for bid adequacy determination. We also review bids to ensure that they are for at least the minimum amount specified in the notice of sale and that unusual bidding patterns are not present.

### **What Happens in Phase 1 of the Bid Adequacy Procedures?**

In Phase 1, we partition the tracts receiving bids into three general categories:

1. Those tracts with three-or-more bids, on which competitive market forces can be used to assure fair market value;
2. Those tracts which we identify as being nonviable based on adequate data and maps; and
3. Those tracts which we identify as being viable and on which we have the most detailed and reliable data, including tracts classified as DD.

### **What Phase 1 Rules Are Applied to All Tracts Receiving Bids?**

Six Phase 1 rules are applied to all tracts receiving bids:

1. We accept the highest qualified bid on viable CW tracts receiving three-or-more qualified bids if the third largest bid on the tract is at least 50 percent of the highest qualified bid and if the high bid per acre ranks in the top 75 percent of high bids for all three-or-more-bid tracts within a specified water depth category.
2. We accept the highest qualified bid on CW tracts that we determine to be nonviable.
3. We pass to Phase 2 all tracts that require additional information to make a determination on viability or tract type.
4. We pass to Phase 2 all viable CW tracts receiving one or two qualified bids.
5. We pass to Phase 2 all viable CW tracts receiving three-or-more qualified bids if either the third largest such bid is less than 50 percent of the highest qualified bid or if the high bid per acre ranks in the lowest 25 percent of high bids for all three-or-more-bid tracts in the specified water depth category.
6. We pass to Phase 2 all DD tracts.

### **How Is the Percentile Ranking of a Tract's High Bid Calculated?**

The percentile ranking of a tract's high bid is calculated by multiplying 100 times the ratio of the numerical ordering of the three-or-more-bid tract's high bid to the total number of all three-or-more-bid tracts in the designated water depth. For example, suppose there are 21 total tracts identified in Phase 1 as receiving three-or-more-bids in the designated water depth category of at least 800 meters. All tracts in this set having a high bid among the top 15 high bids would satisfy the 75 percent requirement; the 15th ranked high bid would represent the 71st percentile, i.e.,  $(100 * (15/21) = 71)$ .

## **Can any Other Procedures Be Used in Phase 1 to Ensure the Receipt of Fair Market Value?**

In ensuring the integrity of the bidding process, the Regional Director may identify an unusual bidding pattern at any time during the bid review process, but before a tract's high bid is accepted. If the finding is documented, the Regional Director has discretionary authority, after consultation with the Solicitor, to pass those identified tracts to Phase 2 for further analysis. The Regional Director may eliminate all but the largest of the unusual bids from consideration when applying any bid adequacy rule, may choose not to apply a bid adequacy rule, or may reject the tract's highest qualified bid.

## **How Long Does it Take To Complete the Phase 1 Procedures?**

These procedures are generally completed within 3 weeks of the bid opening. All the leases that will be awarded as a result of the Phase 1 analysis are announced at the end of this period.

## **How Long Do the Phase 2 Procedures Take?**

The Phase 2 bid adequacy determinations are normally completed sequentially over a period ranging between 21 and 90 days after the sale. Leases are awarded as the analysis of bids is completed over this time period. The total evaluation period can be extended, if needed, at the Regional Director's discretion (61 FR 34730, July 3, 1996).

## **What are the Initial Steps of the Bid Adequacy Process that Are Followed in Phase 2?**

Activities to assess bids are undertaken by analyzing, partitioning, and evaluating tracts in two steps:

1. Further mapping and/or analysis is performed to review, modify, and finalize viability determinations and tract classifications.
2. Tracts we identify as being viable must undergo an evaluation to determine if fair market value has been received.

## **What Decision Rules Are Applied in Phase 2 of the Bid Evaluation Process?**

After completing the initial two steps, a series of rules and procedures are followed.

1. We accept the highest qualified bid on newly classified CW tracts having three-or-more qualified bids if its third largest bid is at least 50 percent of the highest qualified bid and if its high bid per acre ranks in the top 75 percent of high bids for all three-or-more-bid tracts that reside within its specified water depth category.
2. We accept the highest qualified bid on all tracts determined to be nonviable.
3. We determine whether any categorical fair market evaluation technique(s) will be used.

If so we:

- A. Evaluate, define, and identify the appropriate threshold measure(s) for bid acceptance.
  - B. Accept all tracts whose individual measures of bid adequacy satisfy the threshold categorical requirements.
4. We conduct a full-scale evaluation, which could include the use of MONTCAR, on all remaining tracts passed to Phase 2 and still awaiting an acceptance or rejection decision.

### **What Subset of Tracts Comprise the “Remaining Tracts” That Still Need a Phase 2 Acceptance or Rejection Decision?**

The remaining tracts include tracts not accepted by a categorical rule that we classify as:

- 1. DD tracts, or
- 2. CW tracts that are viable and received:
  - A. One or two qualified bids, or
  - B. Three-or-more qualified bids, if either its third largest bid is less than 50 percent of the highest qualified bid or the high bid is in the bottom 25 percent of all three-or-more-bid CW tracts within a designated water depth category.

### **What Procedures Are Followed for Evaluating the Adequacy of Bids on These Tracts?**

For these tracts we:

- 1. Accept the highest qualified bid, if it equals or exceeds the tract's ADV.
- 2. Reject the highest qualified bid on DD tracts receiving three-or-more qualified bids, if the high bid is less than one-sixth of the tract's MROV.
- 3. Reject the highest qualified bid on DD tracts receiving one or two qualified bids and on CW tracts receiving only one qualified bid, if the high bid is less than the tract's ADV.

### **What Happens Next to the Tracts Still Awaiting an Acceptance or Rejection Decision?**

At this stage of the process, the tracts still awaiting a decision consist of those having a highest qualified bid that is less than the ADV that are either:

- 1. DD tracts receiving three-or-more qualified bids with the highest bid exceeding one-sixth of the tract's MROV or
- 2. Viable CW tracts that receive two-or-more qualified bids.

From these tracts, we select the following:

- A. DD tracts having three-or-more qualified bids with the third largest bid being at least 25 percent of the highest qualified bid, and
- B. CW tracts having two-or-more qualified bids with the second largest bid being at least 25 percent of the highest qualified bid.

We then compare the highest qualified bid on each of these selected tracts to the tract's RAM. For all these tracts, we:

- 1. Accept the highest qualified bid, if the high bid equals or exceeds the tract's RAM, or
- 2. Reject the highest qualified bid, if the high bid is less than the tract's RAM.

Finally, we identify those tracts that are still awaiting a decision, but did not meet the requirements for comparison to the RAM and we reject the high bid on these tracts.

At this point, the acceptance or rejection decisions are made on all the high bids in the sale. The successful bidders are notified and their leases are awarded after the full payment of the high bid is received. The unsuccessful bidders are notified as well and their bid deposits are returned. Unsuccessful bidders may appeal a bid rejection decision as described in 30 CFR 256.47(e)(3).

Dated: July 1, 1999.  
Carolita U. Kallaur,  
Associate Director for Offshore Minerals Management.  
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### The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



### The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Minerals Revenue Management** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.