

Central Gulf of Mexico Sale 172 March 17, 1999

Sale Summary, Bidding Results
and Related Analyses

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Central Gulf of Mexico
Sale 172
March 17, 1999

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Sale 172

Central Gulf of Mexico

March 17, 1999

Sale 172, Central Gulf of Mexico March 17, 1999

Sale 172 in the Central Gulf of Mexico (CGOM) was the fourth sale in that planning area in which the new lease provisions of the Deep Water Royalty Relief Act of 1995 (DWRRA) applied. In this sale, 207 tracts received 272 bids (an average of 1.3 bids per tract) and 101 of those tracts were in water depths eligible for royalty relief.

In Sale 172, revised bid adequacy procedures were in effect. The revision involved a modification of the “three-bid rule” that is used to accept high bids on confirmed or wildcat tracts in Phase 1 of the bid evaluation process. Previously, to be accepted in Phase 1 by the three-bid-rule, the confirmed or wildcat tract had to receive three or more bids with the third largest bid being at least 50 percent of the high bid. Now, in addition to the first condition, the high bid must also rank in the top 75 percent of high bids on a per acre basis for all three-or-more-bid confirmed or wildcat tracts within designated water depth categories. (As established by the *Federal Register* notice published on February 10, 1999, the designated categories in the Gulf of Mexico are: water depths of less than 800 meters and water depths of 800 meters or more, unless other categories are specified in a sale’s final notice.)

As a result of this modification, two tracts with high bids that previously would have been accepted in Phase 1, had the bids passed to Phase 2 for further evaluation.

Bidding Results

Sale 172 was much smaller (about one-quarter the size) than last year’s sale in the CGOM (Sale 169). Sale 172 had a large decrease in number of tracts receiving bids, number of bids, and aggregate high bids compared to Sale 169. In Sale 172, 207 tracts received 272 bids with high bids totaling \$171,804,696.

Three factors that probably contributed to the observed level of bidding activity in Sale 172 were: oil prices, oil industry mergers, and large inventories of undrilled leases. Although oil prices were rebounding off ten-year lows, they were still below the prices at the time of last year’s sale. In addition, the recent merger of BP-Amoco and the proposed Exxon-Mobil merger appeared to affect the participation of those entities in the sale, with Exxon-Mobil not participating at all. Those companies as well as Shell, Conoco, and Chevron appear to have decided that their inventories of unexplored leases in this area were sufficient to preclude any significant bidding activity in this year’s sale.

The availability of DWRRA royalty suspension volumes (RSV) in water depths of 200 meters or greater did not appear to encourage the bidding activity that was evident in previous sales. Thus, in water depths of 200 meters or more, only 101 tracts received high bids of \$138, 826,866 compared to 593 tracts with high bids of \$647,484,274 in Sale 169, the previous sale in this planning area. 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.	106	\$ 32.98	138	1.30
200 - 400 m.	7	\$ 6.72	11	1.57
400 - 800 m.	5	\$ 1.28	5	1.00
800+ m.	89	\$ 130.84	118	1.50
Total	207	\$ 171.80	272	1.33

Bidding activity in Sale 172 resulted in a significant decrease in the number of tracts receiving bids, number of bids, and aggregate high bids compared to the previous CGOM sale (Sale 169, March 18, 1998). In Sale 169, 794 tracts received 1,188 bids, whereas 207 tracts received 272 bids in Sale 172, resulting in decreases of about 74 and 77 percent, respectively. In addition, the sum of high bids submitted on tracts receiving bids in Sale 172 decreased by about 79 percent compared to Sale 169 (\$171.80 million v. \$810.42 million). The decrease in tracts, number of bids, and aggregate high bids was spread across all water depth categories with especially large declines in water depths of 800 meters or more.

The amount of competition for tracts was lower than the previous CGOM lease sale. In Sale 172, about 80 percent of tracts received single-bids. This category of tract continues to represent the largest percent of total high bids (about 57 percent). Of the tracts receiving bids, about 80 percent of tracts with 1/6 royalty rates (< 400 meters water depth) and 81 percent of tracts with 1/8 royalty rates (400 meters or more) received only one bid. Two-bid tracts account for the next highest percent of tracts receiving bids (about 13 percent). A summary of aggregate bidding results by number of bidders for the sale 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

Bids	Tracts	Percent of Tracts	High Bids (\$ MM)	Percent of High Bids
1	166	80.19%	\$97.98	57.03%
2	27	13.04%	\$31.12	18.11%
3	7	3.38%	\$23.08	13.43%
4	4	1.93%	\$12.91	7.52%
5	3	1.45%	\$6.71	3.91%
Total	207	100.00 %	\$171.80	100.00 %

As opposed to many prior sales in the CGOM, in Sale 172, the majority of tracts (57 percent) received high bids of \$50 or more per acre. However, the minimum bid in water depths of 800 meters or more was raised to \$37.50 per acre in this sale, thus limiting the opportunity for bids of less than \$50 per acre to some extent. The sizeable minority of tracts (43 percent) that received high bids of less than \$50 per acre, represented about nine percent of the total high bids received. In Sale 172, tracts with high bids greater than \$150 per acre accounted for a bit more than 73 percent of aggregate high bids, a slight decrease from 76 percent in Sale 169.

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

High Bid per Acre	Tracts	Percent of Tracts	High Bids (\$ MM)	Percent of High Bids
< \$50	89	43.00%	\$14.83	8.63%
\$50 - \$74.99	37	17.87%	\$11.24	6.54%
\$75 - 99.99	18	8.70%	\$8.29	4.83%
\$100 - 149.99	18	8.70%	\$11.23	.54%
\$150 +	45	21.74%	\$126.20	73.46%
Total	207	100.00 %	\$171.80	100.00 %

Bidding on Royalty Suspension Volume Tracts

Compared to recent sales, Sale 172 had a relatively low level of bidding on tracts in water depths of 800 meters or more. A total of 89 tracts in 800 meters or more that are eligible for DWRRA royalty suspension volumes of 87.5 million barrels of oil equivalent (MMBOE) received bids. These tracts accounted for 43 percent of the tracts in the sale receiving bids and 76 percent of the sale's high bids.

In comparing the average high bid per acre by royalty suspension volume water depth category between Sales 172 and 169, in only the deepest category did the Sale 172 averages exceed those of Sale 169. In less than 200 meters, Sale 172's average was \$68.09/acre v. \$171.88/acre in Sale 169. In 200-400 meters, Sale 172's average was \$180.92/acre and Sale 169's was \$185.60/acre. In 400-800 meters, Sale 172's average was \$44.28/acre and Sale 169's was \$339.40/acre. In 800 meters or more, Sale 172's average was \$255.22/acre and Sale 169's was \$183.11/acre.

Phase 1 Results

Following the revised post-sale evaluation procedures, in Phase 1 of Sale 172, high bids were accepted on 44 tracts in water depths less than 200 meters and 11 tracts in water depths eligible for royalty relief. These Phase 1 accepted high bids accounted for about 41.5 percent of the

tracts representing 24.4 percent of the high bids in water depths less than 200 meters. In water depths eligible for DWRRA new lease, royalty suspension volumes, about 10.9 percent of the tracts and 4.1 percent of the high bids were accepted in Phase 1. In terms of Phase 1 bid acceptances, Sonat Exploration GOM was the most successful company as 12 of its 22 high bids were accepted.

All Phase 1 accepted high bids were wildcat or confirmed tracts determined to be non-viable. The Sale 172 Phase 1 results by number of bidders and high bid per acre are presented in Tables 4 and 5, respectively.

Table 4. Phase 1 Results by Number of Bids

Bids	Tracts	Percent of Tracts	High Bids (\$ MM)	Percent of High Bids
1	50	90.91%	\$12.79	92.65%
2	5	9.09%	\$1.01	7.35%
Total	55	100.00 %	\$13.80	100.00 %

Table 5. Phase 1 Results by High Bid per Acre

High Bid per Acre	Tracts	Percent of Tracts	High Bids (\$ MM)	Percent of High Bids
< \$50	37	67.27%	\$5.42	39.26%
\$50 - 74.99	10	18.18%	\$2.65	19.22%
\$75 - 99.99	3	5.45%	\$1.05	7.58%
\$100 - 149.99	3	5.45%	\$1.91	13.82%
\$150 +	2	3.64%	\$2.78	20.13%
Total	55	100.00 %	\$13.80	100.00 %

Revised Arithmetic Average Measure of Tract

For evaluating the high bids on multi-bid tracts that do not exceed the MROV, the RAM is applied to:

- (a) drainage or development tracts having three or more qualified bids with the third largest bid being at least 25 percent of the tract's high bid and
- (b) confirmed or wildcat tracts having two or more qualified bids with the second largest 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, otherwise, the high bid is rejected.

Use of the RAM allows the MMS to consider market factors in the evaluation of high bids. Using the RAM, the highest MROV required to reject a high bid on a multi-bid tract in Sale 172 was about \$4 million. This value for a lease is not unreasonable relative to high bids observed in the sale.

In Sale 172, 14 tracts classified as wildcat or 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 that are at least 25 percent of a tract's high bid, eight tracts could be eligible for a decision based on the RAM. Of those, one would require an MROV less than \$1 million for rejection and the remaining seven would require MROV's between \$1-5 million for rejection. 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 172 decreased to 67 from 87 that were active in Sale 169, the previous CGOM sale. Three companies submitted bids (either solo or jointly) on 20 or more tracts, with Sonat Exploration GOM being the most active company in terms of bids submitted with 28. The most apparent high bids, 22, were also submitted by Sonat and the highest total amount of high bids, \$21 million, was submitted by Elf Exploration on eight tracts.

The ten most active bidders in terms of total amount of high bids are listed in Table 6. 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.

Table 6. 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
Elf Exploration	\$21,174,084	9 (13)	8 (11)
Kerr-McGee Oil & Gas	\$16,785,721	18 (5)	17 (3)
Vastar Resources	\$12,201,693	24 (2)	18 (2)
Union Oil Co. – Calif.	\$10,763,857	10 (10)	7 (12)
Marathon Oil	\$9,501,181	6 (17)	6 (14)
Mariner Energy	\$8,911,040	4 (27)	3 (26)
BHP Petroleum	\$8,643,701	14 (7)	13 (4)
CNG Producing	\$7,280,147	11 (9)	9 (8)
Murphy Exploration	\$7,108,389	19 (4)	13 (4)
Spinnaker Exploration	\$6,929,038	16 (6)	13 (4)

In ranking companies by the number of total bids submitted, although some companies that were most active in CGOM Sale 169 (March 18, 1998) continued to be among the most active in Sale 172, a number of changes were apparent. For example, four companies ranked in the top ten in CGOM Sale 172 as well as in Sale 169. At the same time, one company that was in the Sale 169 top ten was not ranked among the top 25 participants in Sale 172 and two Sale 169 top ten companies did not bid in Sale 172.

The ten most active companies in Sale 169 (listed from first to tenth) with their rank in terms of number of bids submitted in Sale 172 are: Shell Deepwater - 14th; Mobil – did not bid; Conoco - 42nd; Chevron - 17th; Union Oil (California) - 10th; Burlington Resources – 10th; Texaco - 14th; Vastar Resources - 2nd; Exxon - did not bid; and Kerr-McGee - 5th. Sonat Exploration moved into the 1st spot in Sale 172, while Samedan Oil moved into 3rd, and Murphy Exploration & Production moved into 4th.

Appendix G presents a listing of bidding by the most active companies in Sales 172 and 169.

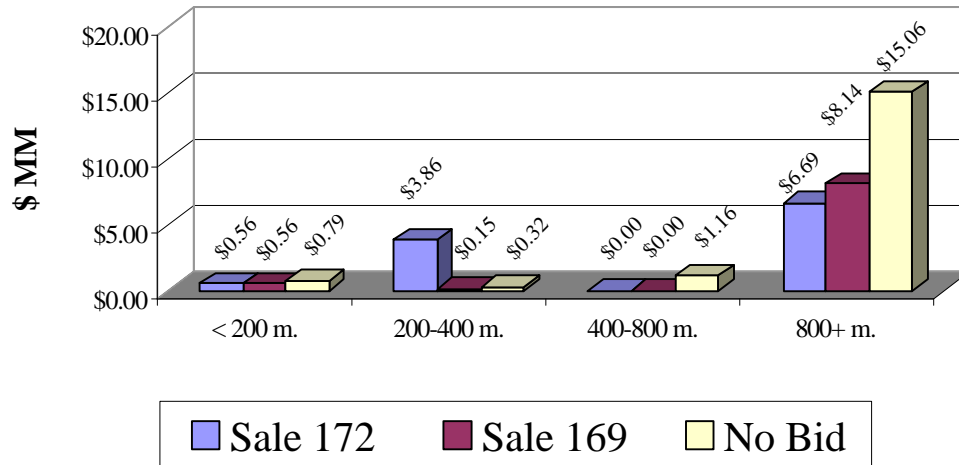
Sale 172 v. Sale 169

Sale 172 was a much smaller sale than Sale 169. In Sale 172, 207 tracts received 272 bids. This was a decline in number of tracts receiving bids of 74 percent and in number of bids by 77 percent. The average number of bids per tract declined to 1.31 in Sale 172 from 1.50 in Sale 169. In addition,, the average high bid per acre was \$161.64 in Sale 172 compared with \$186.88 in Sale 169, a decrease of about 13.5 percent.

The amount of bidding activity in deep water in Sale 172 declined sharply compared to Sale 169. Specifically, the number of tracts potentially eligible for DWRRA royalty suspension volumes (water depth of 200 meters or more) that received bids decreased by 83 percent. High bids on these tracts decreased 78.6 percent, but average high bid per tract in this category increased 25.6 percent. Appendix H presents a graphical comparison of sale results.

In Sale 172, 9 tracts that were rejected in Sale 169 received bids and 32 Sale 169 rejected tracts (with high bids of \$17,322,126) did not. The high bids on the 9 tracts increased from \$8,847,064 in Sale 169 to \$11,107,733 in Sale 172, an increase in high bids of 25.6 percent. The number of bids on these tracts decreased from 20 to 12, a decrease of 40 percent. In addition, the one tract in Sale 169 that received an invalid high bid (Tract 19762, \$131,505), did not receive a bid in Sale 172.

**Sale 169 Rejected Bids, Sale 172 Bids,
and Sale 172 No Bids**



Appendix A

Sale 172

Bidding Summary

Central Gulf of Mexico
OCS Oil and Gas Lease Sale 172

Table A1. Sale Day Statistics by Royalty Rate

	16 2/3% Royalty	12 1/2% Royalty	Sale Total
Tracts Receiving Bids	113	94	207
Acres Receiving Bids	521,420.90	541,440.00	1,062,860.90
Sum of High Bids	\$39,693,980	\$132,110,716	\$171,804,696
Sum of All Bids	\$50,495,668	\$149,143,084	\$199,638,752
Total Number of Bids	149	123	272
Average Bids	1.32	1.31	1.31
Companies Bidding	54	32	67
Highest Bid per Tract	\$3,859,200	\$16,577,900	\$16,577,900
Tract Number	21162	21239	21239
Number of Bids	1	1	1
Highest Bid per Acre	\$670.00	\$2,878.11	\$2,878.11
Tract Number	21162	21239	21239
Number of Bids	1	1	1
Most Bids	5	5	5
Tract Number	21081, 21088	21160	21081, 21088, 21160
Number of Tracts	2	1	3

Central Gulf of Mexico
OCS Oil and Gas Lease Sale 172

Table A2. Sale Day Statistics for 16 2/3% Royalty Rate Tracts

	16 2/3% w/ROY ¹	16 2/3% w/RS ²	16 2/3% Total
Tracts Receiving Bids	106	7	113
Acres Receiving Bids	484,297.96	37,122.94	521,420.90
Sum of High Bids	\$32,977,830	\$6,716,150	\$39,693,980
Sum of All Bids	\$42,291,739	\$8,203,929	\$50,495,668
Total Number of Bids	138	11	149
Average Bids	1.30	1.57	1.32
Companies Bidding	54	9	54
Highest Bid per Tract	\$2,000,160	\$3,859,200	\$3,859,200
Tract Number	21088	21162	21162
Number of Bids	5	1	1
Highest Bid per Acre	\$441.38	\$670.00	\$670.00
Tract Number	21088	21162	21162
Number of Bids	5	1	1
Most Bids	5	4	5
Tract Number	21081, 21088	21156	21081,21088
Number of Tracts	2	1	2

¹ "16 2/3% w/ROY" is that category of tracts in less than 200 meters of water with a royalty rate of 1/6 that is not eligible for DWRRA royalty suspension volumes.

² "16 2/3% w/RS" is that category of tracts in 200 to 400 meters of water with a royalty rate of 1/6 that is potentially eligible for a DWRRA royalty suspension volume of 17.5 MMBOE.

Central Gulf of Mexico
OCS Oil and Gas Lease Sale 172

Table A3. Sale Day Statistics for 12 ½ % Royalty Rate Tracts

	12 ½ % w/RS1 ³	12 ½ % w/RS2 ⁴	12 ½ % Total
Tracts Receiving Bids	5	89	94
Acres Receiving Bids	28,800.00	512,640.00	541,440.00
Sum of High Bids	\$1,275,379	\$130,835,337	\$132,110,716
Sum of All Bids	\$1,275,379	\$147,867,705	\$149,143,084
Total Number of Bids	5	118	123
Average Bids	1.00	1.32	1.31
Companies Bidding	7	32	32
Highest Bid per Tract	\$407,000	\$16,577,900	\$16,577,900
Tract Number	21174	21239	21239
Number of Bids	1	1	1
Highest Bid per Acre	\$70.66	\$2,878.11	\$2,878.11
Tract Number	21174	21239	21239
Number of Bids	1	1	1
Most Bids	1	5	5
Tract Number	21172, 21173, 21174 21199, 21200	21160	21160
Number of Tracts	5	1	1

³ “12 ½ % w/RS1” is that category of tracts in 400 to 800 meters of water with a royalty rate of 1/8 that is potentially eligible for a DWRRA royalty suspension volume of 52.5 MMBOE.

⁴ “12 ½ % w/RS2” is that category of tracts in 800 or more meters of water with a royalty rate of 1/8 that is potentially eligible for a DWRRA royalty suspension volume of 87.5 MMBOE.

Appendix B

Sale 172

Bidding by Number of Bids

Sale 172

All Tracts

<u>No. of Bids</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
1	166	80.19%	\$97.98	57.03%	\$114.90
2	27	13.04%	\$31.12	18.11%	\$229.62
3	7	3.38%	\$23.08	13.43%	\$622.68
4	4	1.93%	\$12.91	7.52%	\$579.65
<u>5</u>	<u>3</u>	<u>1.45%</u>	<u>\$6.71</u>	<u>3.91%</u>	<u>\$439.09</u>
Total	207	100.00%	\$171.80	100.00%	\$161.64

Tracts with 1/6 Royalty Rate

<u>No. of Bids</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
1	90	79.65%	\$23.59	59.42%	\$56.84
2	16	14.16%	\$7.80	19.65%	\$108.05
3	3	2.65%	\$2.18	5.49%	\$155.43
4	2	1.77%	\$3.10	7.81%	\$288.24
<u>5</u>	<u>2</u>	<u>1.77%</u>	<u>\$3.03</u>	<u>7.63%</u>	<u>\$317.66</u>
Total	113	100.00%	\$39.69	100.00%	\$76.13

Tracts with 1/8 Royalty Rate

<u>No. of Bids</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
1	76	80.85%	\$74.39	56.31%	\$169.93
2	11	11.70%	\$23.32	17.65%	\$368.10
3	4	4.26%	\$20.90	15.82%	\$907.06
4	2	2.13%	\$9.81	7.43%	\$851.83
<u>5</u>	<u>1</u>	<u>1.06%</u>	<u>\$3.69</u>	<u>2.79%</u>	<u>\$640.02</u>
Total	94	100.00%	\$132.11	100.00%	\$244.00

Sale 172 by Water Depth Category

1/6 Royalty (<200 meters; no RSV)

<u>No. of Bids</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
1	85	80.19%	\$18.45	55.94%	\$47.77
2	15	14.15%	\$7.49	22.71%	\$107.59
3	3	2.83%	\$2.18	6.61%	\$155.43
4	1	0.94%	\$1.83	5.56%	\$366.86
<u>5</u>	<u>2</u>	<u>1.89%</u>	<u>\$3.03</u>	<u>9.18%</u>	<u>\$317.66</u>
Total	106	100.00%	\$32.98	100.00%	\$68.09

1/6 Royalty (200-400 meters; 17.5 mmboe RSV)

<u>No. of Bids</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
1	5	71.43%	\$5.14	76.53%	\$178.47
2	1	14.29%	\$0.31	4.60%	\$120.56
3	0	0.00%	\$0.00	0.00%	\$0.00
4	1	14.29%	\$1.27	18.87%	\$220.00
<u>5</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>	<u>\$0.00</u>
Total	7	100.00%	\$6.72	100.00%	\$180.92

1/8 Royalty (400-800 meters; 52.5 mmboe RSV)

<u>No. of Bids</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
1	5	100.00%	\$1.28	100.00%	\$44.28
2	0	0.00%	\$0.00	0.00%	\$0.00
3	0	0.00%	\$0.00	0.00%	\$0.00
4	0	0.00%	\$0.00	0.00%	\$0.00
<u>5</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>	<u>\$0.00</u>
Total	5	100.00%	\$1.28	100.00%	\$44.28

1/8 Royalty (800+ meters; 87.5 mmboe RSV)

<u>No. of Bids</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
1	71	79.78%	\$73.11	55.88%	\$178.78
2	11	12.36%	\$23.32	17.83%	\$368.10
3	4	4.49%	\$20.90	15.97%	\$907.06
4	2	2.25%	\$9.81	7.50%	\$851.83
<u>5</u>	<u>1</u>	<u>1.12%</u>	<u>\$3.69</u>	<u>2.82%</u>	<u>\$640.02</u>
Total	89	100.00%	\$130.84	100.00%	\$255.22

Appendix C

Sale 172

Bidding by High Bid per Acre

Sale 172

All Tracts

<u>High Bid/Acre</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
< \$50	89	43.00%	\$14.83	8.63%	\$33.98
\$50 - 74.99	37	17.87%	\$11.24	6.54%	\$60.67
\$75 - 99.99	18	8.70%	\$8.29	4.83%	\$85.82
\$100 - 149.99	18	8.70%	\$11.23	6.54%	\$115.93
<u>\$150 +</u>	<u>45</u>	<u>21.74%</u>	<u>\$126.20</u>	<u>73.46%</u>	<u>\$509.97</u>
Total	207	100.00%	\$171.80	100.00%	\$161.64

Tracts with 1/6 Royalty Rate

<u>High Bid/Acre</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
< \$50	66	58.41%	\$9.46	23.83%	\$31.11
\$50 - 74.99	20	17.70%	\$5.21	13.12%	\$59.57
\$75 - 99.99	7	6.19%	\$2.56	6.45%	\$76.98
\$100 - 149.99	6	5.31%	\$3.38	8.50%	\$121.51
<u>\$150 +</u>	<u>14</u>	<u>12.39%</u>	<u>\$19.09</u>	<u>48.10%</u>	<u>\$277.07</u>
Total	113	100.00%	\$39.69	100.00%	\$76.13

Tracts with 1/8 Royalty Rate

<u>High Bid/Acre</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
< \$50	23	24.47%	\$5.37	4.07%	\$40.56
\$50 - 74.99	17	18.09%	\$6.04	4.57%	\$61.65
\$75 - 99.99	11	11.70%	\$5.73	4.34%	\$90.46
\$100 - 149.99	12	12.77%	\$7.86	5.95%	\$113.69
<u>\$150 +</u>	<u>31</u>	<u>32.98%</u>	<u>\$107.11</u>	<u>81.08%</u>	<u>\$599.86</u>
Total	94	100.00%	\$132.11	100.00%	\$244.00

Sale 172 by Water Depth Category

1/6 Royalty (<200 meters; no RSV)

<u>High Bid/Acre</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
< \$50	65	61.32%	\$9.27	28.11%	\$31.08
\$50 - 74.99	18	16.98%	\$4.57	13.86%	\$60.23
\$75 - 99.99	6	5.66%	\$2.10	6.38%	\$76.49
\$100 - 149.99	5	4.72%	\$3.07	9.30%	\$121.60
<u>\$150 +</u>	<u>12</u>	<u>11.32%</u>	<u>\$13.97</u>	<u>42.35%</u>	<u>\$243.36</u>
Total	106	100.00%	\$32.98	100.00%	\$68.09

1/6 Royalty (200-400 meters; 17.5 mmboe RSV)

<u>High Bid/Acre</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
< \$50	1	14.29%	\$0.19	2.80%	\$32.64
\$50 - 74.99	2	28.57%	\$0.64	9.47%	\$55.21
\$75 - 99.99	1	14.29%	\$0.46	6.80%	\$79.30
\$100 - 149.99	1	14.29%	\$0.31	4.60%	\$120.56
<u>\$150 +</u>	<u>2</u>	<u>28.57%</u>	<u>\$5.13</u>	<u>76.33%</u>	<u>\$445.00</u>
Total	7	100.00%	\$6.72	100.00%	\$180.92

1/8 Royalty (400-800 meters; 52.5 mmboe RSV)

<u>High Bid/Acre</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
< \$50	3	60.00%	\$0.57	44.87%	\$33.12
\$50 - 74.99	2	40.00%	\$0.70	55.13%	\$61.03
\$75 - 99.99	0	0.00%	\$0.00	0.00%	\$0.00
\$100 - 149.99	0	0.00%	\$0.00	0.00%	\$0.00
<u>\$150 +</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>	<u>\$0.00</u>
Total	5	100.00%	\$1.28	100.00%	\$44.28

1/8 Royalty (800+ meters; 87.5 mmboe RSV)

<u>High Bid/Acre</u>	<u>Tracts</u>	<u>Percent of Tracts</u>	<u>High Bids (\$MM)</u>	<u>Percent of High Bids</u>	<u>High Bid per Acre</u>
< \$50	20	22.47%	\$4.80	3.67%	\$41.68
\$50 - 74.99	15	16.85%	\$5.33	4.08%	\$61.73
\$75 - 99.99	11	12.36%	\$5.73	4.38%	\$90.46
\$100 - 149.99	12	13.48%	\$7.86	6.01%	\$113.69
<u>\$150 +</u>	<u>31</u>	<u>34.83%</u>	<u>\$107.11</u>	<u>81.87%</u>	<u>\$599.86</u>
Total	89	100.00%	\$130.84	100.00%	\$255.22

Appendix D

Sale 172

Bidding Results - Graphs

Distribution of High Bids

Sale 172 - CGOM

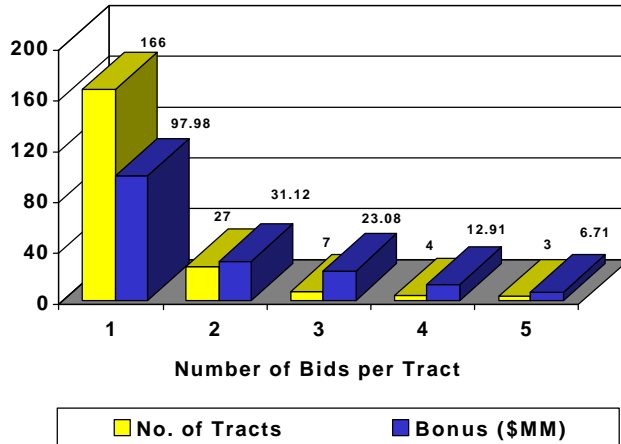
Prepared by:
Economics Division, MMS

Sale 172 (CGOM) - Bidding Results

- 207 tracts received 272 bids (1.3 bids/tract)
- High bids were \$171.8 MM
- Average high bid per acre was \$161.64
- 67 companies submitted bids
- 113 tracts in < 400 meters received bids
- 54.59 % of tracts and 23.11 % of high bids
- 94 tracts in 400+ meters received bids -
45.41 % of tracts and 76.89 % of high bids

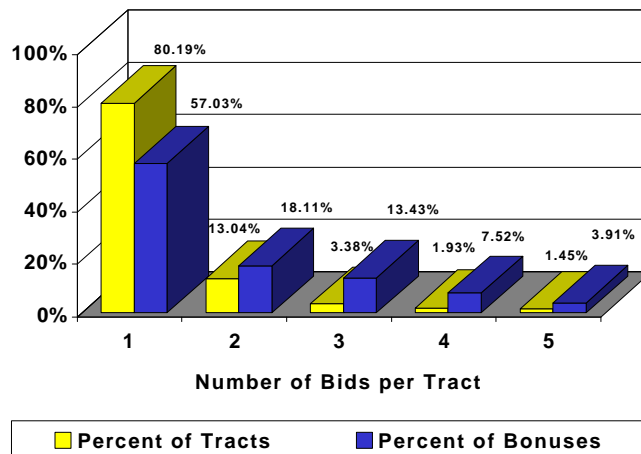
Sale 172 - Aggregate

Bidding Activity by Bids per Tract



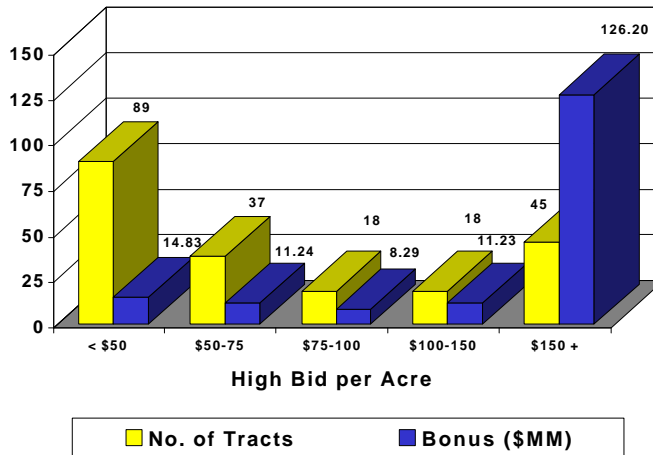
Sale 172 - Aggregate

Bidding Activity by Bids per Tract



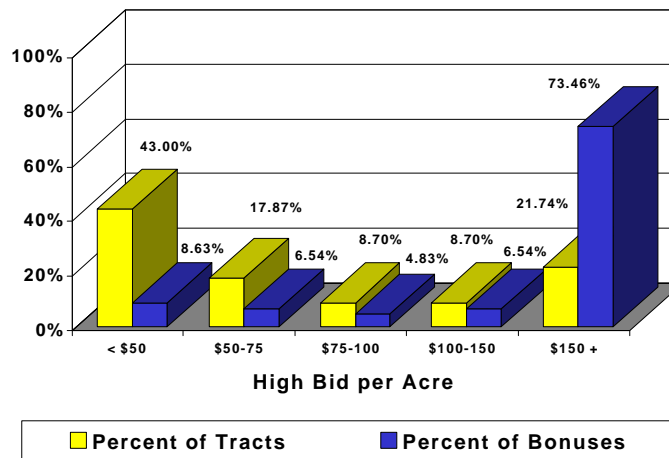
Sale 172 - Aggregate

Bidding Activity by High Bid per Acre



Sale 172 - Aggregate

Bidding Activity by High Bid per Acre



Sale 172

Bidding by Water Depth Category

Prepared by:
Economics Division, MMS

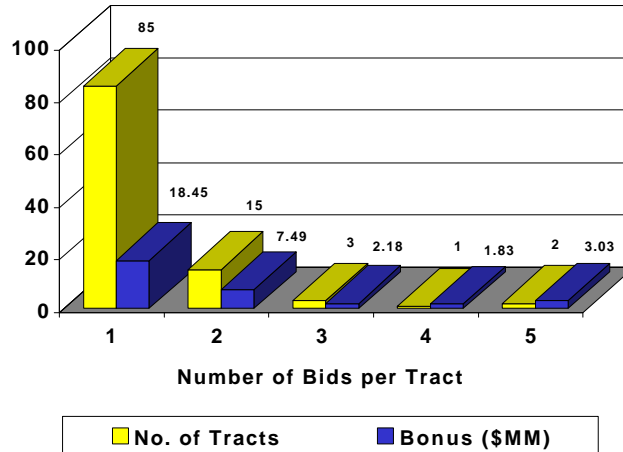
Sale 172 (CGOM)

Bidding by Water Depth Category

- 106 tracts in < 200 meters received 138 bids and high bids of \$32.98 MM (\$68.09/acre)
- 7 tracts in 200-400 meters had 11 bids and high bids of \$6.72 MM (\$180.92/acre)
- 5 tracts in 400-800 meters had 5 bids and high bids of \$1.28 MM (\$44.28/acre)
- 89 tracts in > 800 meters had 118 bids and high bids of \$130.84 MM (\$255.22/acre)

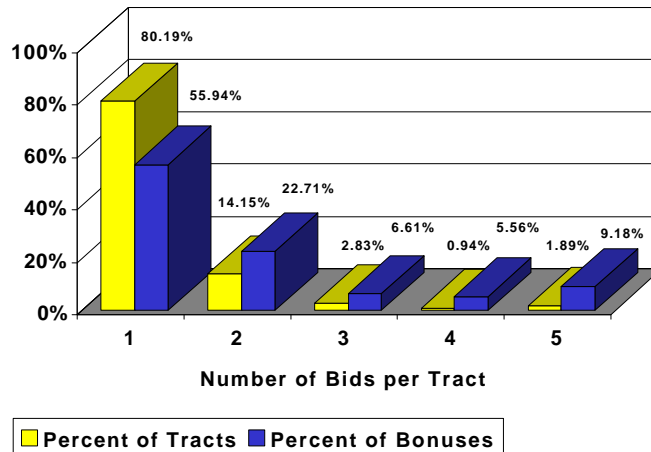
Sale 172 - Tracts in < 200 Meters Water Depth

Bidding Activity by Bids per Tract



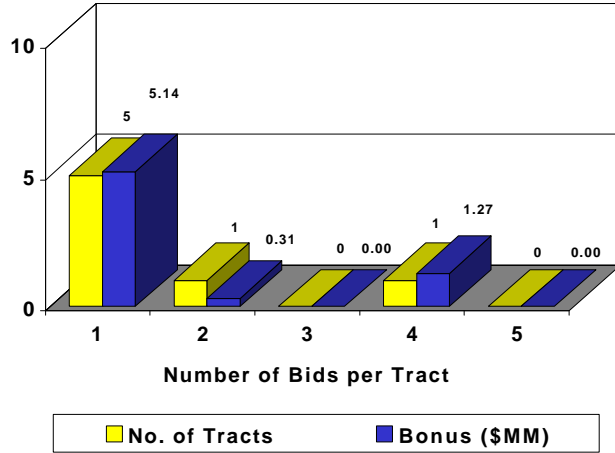
Sale 172 - Tracts in < 200 Meters Water Depth

Bidding Activity by Bids per Tract



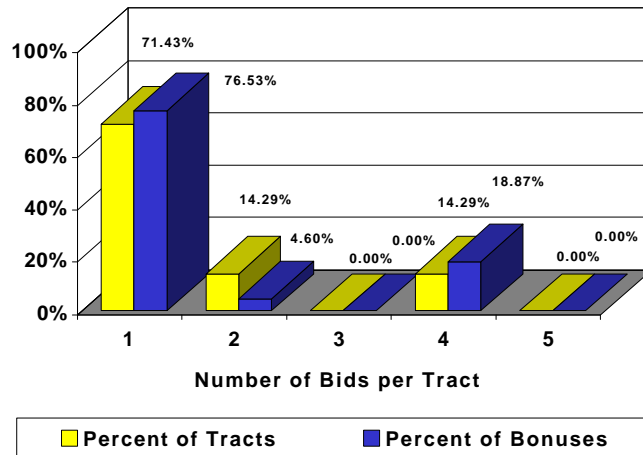
Sale 172 - Tracts in 200-400 Meters Water Depth

Bidding Activity by Bids per Tract



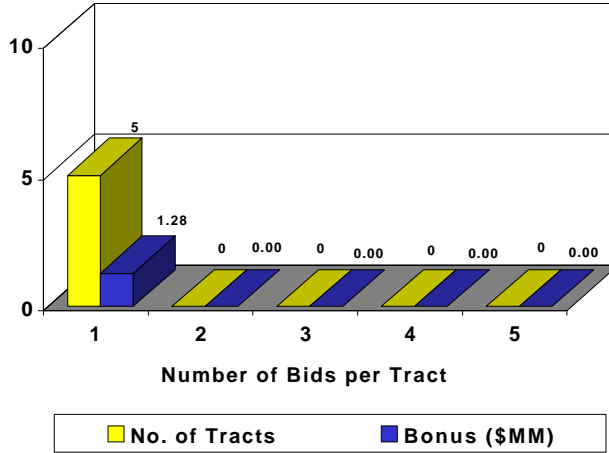
Sale 172 - Tracts in 200-400 Meters Water Depth

Bidding Activity by Bids per Tract



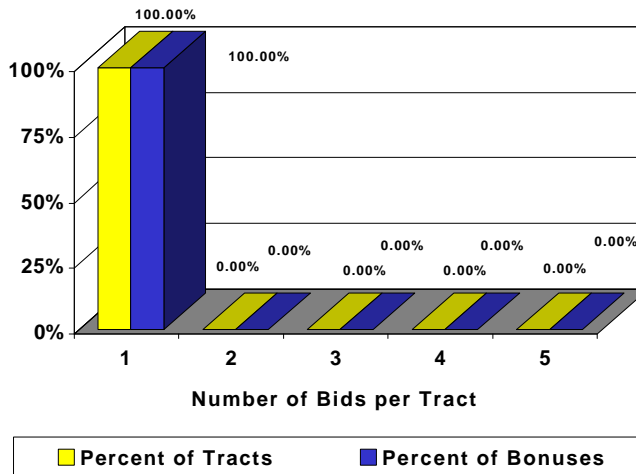
Sale 172 - Tracts in 400-800 Meters Water Depth

Bidding Activity by Bids per Tract



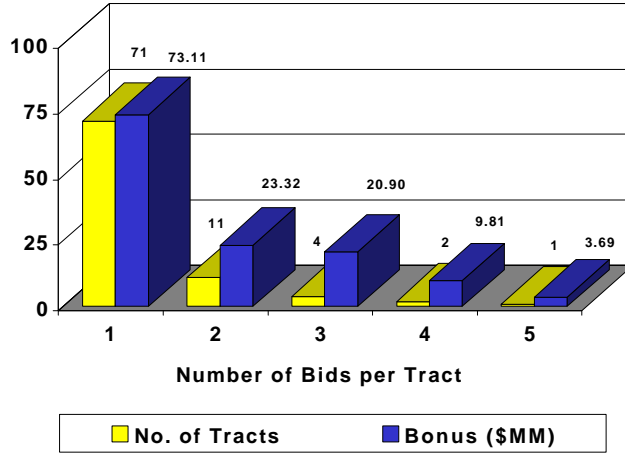
Sale 172 - Tracts in 400-800 Meters Water Depth

Bidding Activity by Bids per Tract



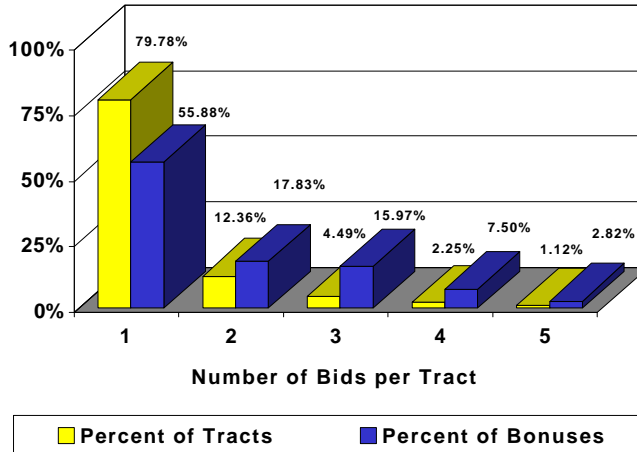
Sale 172 - Tracts in 800+ Meters Water Depth

Bidding Activity by Bids per Tract



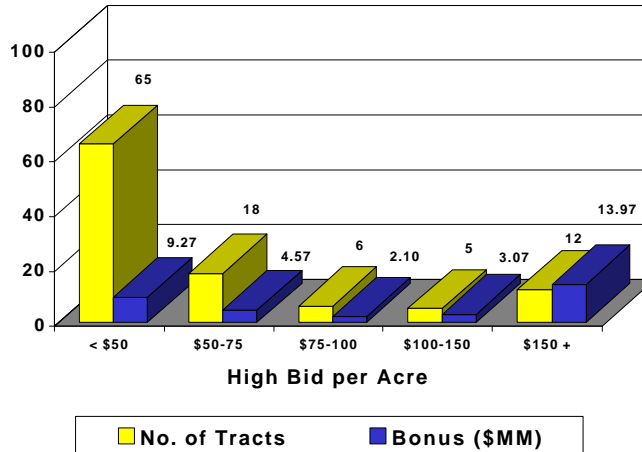
Sale 172 - Tracts in 800+ Meters Water Depth

Bidding Activity by Bids per Tract



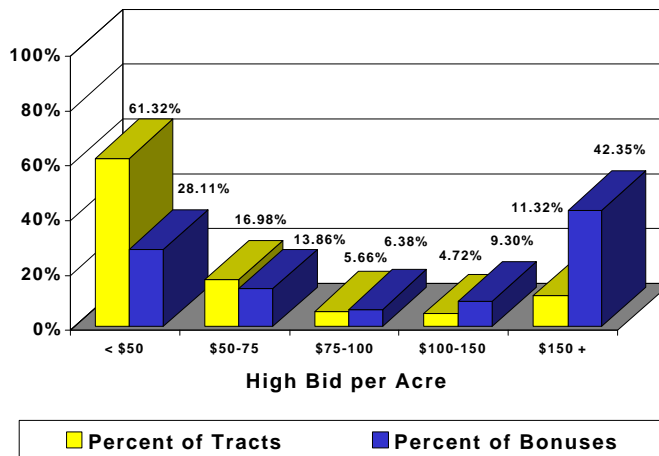
Sale 172 - Tracts in < 200 Meters Water Depth

Bidding Activity by High Bid per Acre



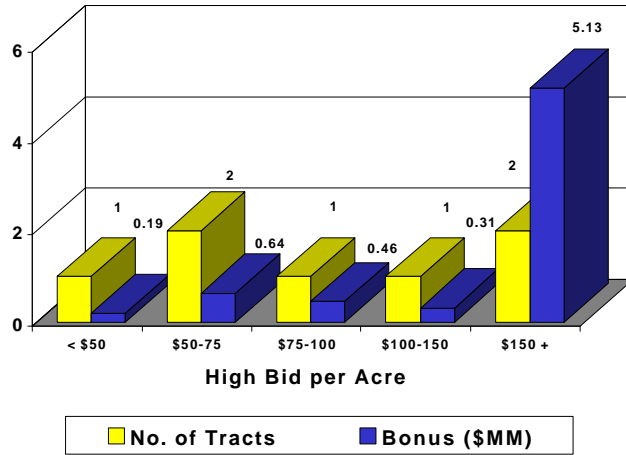
Sale 172 - Tracts in < 200 Meters Water Depth

Bidding Activity by High Bid per Acre



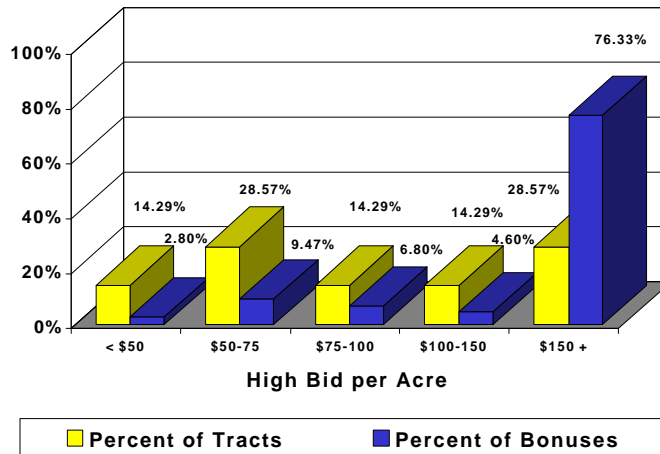
Sale 172 - Tracts in 200-400 Meters Water Depth

Bidding Activity by High Bid per Acre



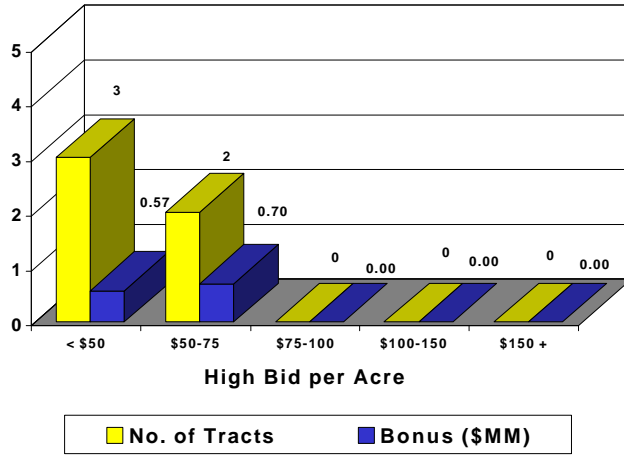
Sale 172 - Tracts in 200-400 Meters Water Depth

Bidding Activity by High Bid per Acre



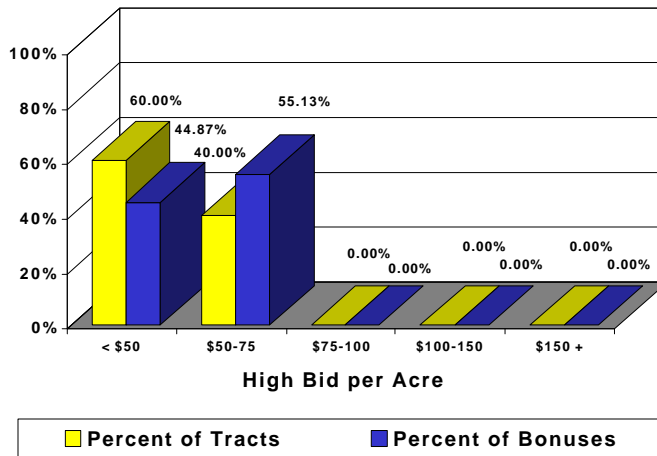
Sale 172 - Tracts in 400-800 Meters Water Depth

Bidding Activity by High Bid per Acre



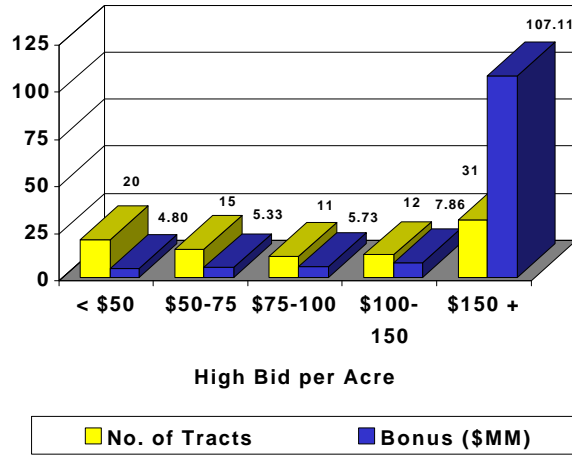
Sale 172 - Tracts in 400-800 Meters Water Depth

Bidding Activity by High Bid per Acre



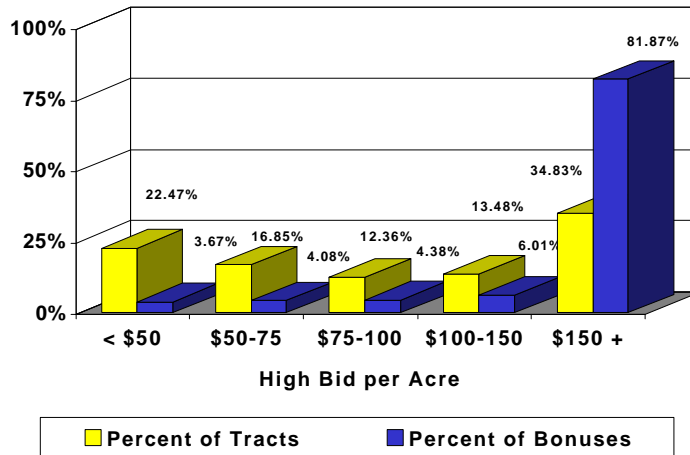
Sale 172 - Tracts in 800+ Meters Water Depth

Bidding Activity by High Bid per Acre



Sale 172 - Tracts in 800+ Meters Water Depth

Bidding Activity by High Bid per Acre



Appendix E

Sale 172

RAM

Sale 172 – Tracts with Three or More Bids

In Sale 172, three or more bids were received on 14 tracts, all confirmed or wildcat. The distribution of those bids by water depth category and third bid as a percent of high bid is presented in Table E1. Of the 14 blocks with three or more bids, two had third largest bids within 50 percent of the high bid and 9 had third bids that were not at least 25 percent of the high bid.

Table E1. Percent Difference between a Tract’s High Bid and Third Largest Bid
By Water Depth Category

Category	< 25 %	25 – 50 %	50 – 75 %	> 75 %	Total
< 200 m.	0	2	1	3	6
200–400 m.	0	0	1	0	1
400-800 m.	0	0	0	0	0
> 800 m.	0	0	1	6	7
Total	0	2	3	9	14

Sale 172 was the first sale in which a secondary screen was used for Phase 1 acceptance of high bids on confirmed or wildcat tracts receiving three or more bids. Under this rule, high bids on wildcat and confirmed tracts are accepted in Phase 1 if: (1) the third highest bid is at least 50 percent of the high bid and (2) the high is in the top 75 percent of high bids for that category of tract in the specified water depth zone. In Sale 172, no tracts had high bids that satisfied both conditions to qualify for Phase 1 acceptance.

Sale 172 was the fourth sale in which the Phase 2 averaging rule, the “Revised Arithmetic Average Measure” (RAM) of tract value was used. The RAM is a secondary bid acceptance rule that is used on multi-bid tracts if the Government’s value of the tract (MROV) exceeds the high bid. The RAM is arithmetic average of a tract’s high bid, MROV, 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 and if the RAM exceeds the high bid, the high bid is rejected. The revised bid evaluation process was described in a notice of procedural changes relative to “Modifications in the Bid Adequacy Procedures” that was published in the *Federal Register* on July 14, 1997 (Volume 62, Number 134).

For the 14 tracts passed to Phase 2 for further evaluation that potentially could use the RAM as the bid acceptance decision rule, the MROV's that would be needed to reject a tract's high bid using the RAM were calculated. Using the RAM, 11 tracts need a MROV less than \$5 million and two tracts need a MROV between \$5 million and \$10 million. With the RAM, the largest MROV needed to reject a high bid was a little more than \$13 million. These results are summarized in Table E2.

Table E2. MROV 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	5	0	0	6
200-400 m.	0	1	0	0	1
400-800 m.	0	0	0	0	0
> 800 m.	0	4	2	1	7
Total	1	10	2	1	14

Sale 172 – Tracts with Three or More Bids Passed to Phase 2

Table E3. Tracts in < 200 Meters; No Royalty Suspension Volume

Tract	High Bid	No. of Bids	3 rd Bid as % of High Bid	Adjusted No. of Bids	MROV to Reject w/RAM
21053	\$814,923	3	50.41%	3	\$1,236,188
21073	\$226,245	3	54.42%	3	\$422,509
21081	\$1,027,699	5	15.18%	1	\$1,027,700
21088	\$2,000,160	5	12.31%	1	\$2,000,161
21095	\$1,834,306	4	17.29%	2	\$2,168,453
21121	\$1,138,400	3	29.67%	3	\$2,436,416

Table E4. Tract in 200 – 400 Meters; 17.5 MMBOE Royalty Suspension Volume

Tract	High Bid	No. of Bids	3 rd Bid as % of High Bid	Adjusted No. of Bids	MROV to Reject w/RAM
21156	\$1,267,200	4	36.22%	3	\$2,528,056

Table E5. Tracts in 800 or More Meters; 87.5 MMBOE Royalty Suspension Volume

Tract	High Bid	No. of Bids	3 rd Bid as % of High Bid	Adjusted No. of Bids	MROV to Reject w/RAM
21160	\$3,686,500	5	14.84%	2	\$3,817,446
21190	\$5,868,000	3	8.67%	1	\$5,868,001
21191	\$13,011,000	3	3.91%	1	\$13,011,001
21225	\$2,212,416	4	13.96%	1	\$2,212,417
21226	\$709,000	3	32.55%	3	\$1,590,376
21245	\$7,600,676	4	4.96%	1	\$7,600,677
21248	\$1,310,676	3	19.27%	2	\$1,507,876

Appendix F

Sale 172

Summary of Company Bids

Sale 172 - Summary of Company Bids by Total Amount of High Bids

<u>Rank</u>	<u>Company #</u>	<u>Company Name</u>	<u>Total</u>	<u>High</u>	<u>Losers</u>	<u>Total Exposed</u>	<u>Total High Bids</u>	<u>Total Unsuccessful</u>
1	1500	Elf Exploration	9	8	1	\$21,421,084.13	\$21,174,084.13	\$247,000.00
2	2219	Kerr-McGee O&G	18	17	1	\$17,091,545.98	\$16,785,720.98	\$305,825.00
3	1855	Vastar Resources	24	18	6	\$14,777,933.19	\$12,201,693.23	\$2,576,239.96
4	3	Union Oil Co. - CA	10	7	3	\$11,809,735.00	\$10,763,857.00	\$1,045,878.00
5	724	Marathon Oil	6	6	0	\$9,501,181.00	\$9,501,181.00	\$0.00
6	818	Mariner Energy	4	3	1	\$10,096,224.88	\$8,911,040.00	\$1,185,184.88
7	2277	BHP Petroleum	14	13	1	\$8,898,701.10	\$8,643,701.10	\$255,000.00
8	282	CNG Producing	11	9	2	\$9,960,517.44	\$7,280,147.32	\$2,680,370.12
9	1689	Murphy Explor. & Prod.	19	13	6	\$8,711,874.00	\$7,108,389.00	\$1,603,485.00
10	2169	Spinnaker Exploration	16	13	3	\$7,466,923.40	\$6,929,038.40	\$537,885.00
11	1680	BP Exploration & Oil	5	4	1	\$7,044,856.90	\$6,792,331.90	\$252,525.00
12	59	Amerada Hess Corp.	10	9	1	\$6,798,765.91	\$6,427,606.84	\$371,159.07
13	1138	Sonata Exploration GOM	28	22	6	\$7,811,120.00	\$5,675,680.00	\$2,135,440.00
14	2211	EEX Corp.	4	4	0	\$4,766,665.00	\$4,766,665.00	\$0.00
15	1904	Burlington Resources	10	7	3	\$4,974,542.34	\$4,109,733.38	\$864,808.96
16	771	Texaco Explor. & Prod.	7	4	3	\$4,098,672.00	\$3,139,200.00	\$959,472.00
17	2018	Basin Exploration	7	5	2	\$4,476,683.00	\$3,043,444.00	\$1,433,239.00
18	185	Samedan Oil	20	13	7	\$4,216,675.01	\$2,687,575.01	\$1,529,100.00
19	2139	Shell Deepwater Development	7	3	4	\$4,989,953.36	\$2,419,111.36	\$2,570,842.00
20	1513	Callon Petroleum	13	9	4	\$2,859,175.60	\$2,336,375.60	\$522,800.00
21	1586	Petsec Energy	3	2	1	\$2,612,810.50	\$2,076,317.50	\$536,493.00
22	2148	Westport O&G	3	3	0	\$1,792,200.58	\$1,792,200.58	\$0.00
23	1001	IP Petroleum	2	2	0	\$1,561,867.68	\$1,561,867.68	\$0.00
24	2332	Pennzenergy Explor. & Prod.	5	5	0	\$1,371,000.00	\$1,371,000.00	\$0.00
25	231	Pogo Producing	2	2	0	\$1,279,710.44	\$1,279,710.44	\$0.00
26	1046	The Houston Exploration Co.	6	6	0	\$1,042,271.00	\$1,042,271.00	\$0.00
27	2025	Coastal O&G USA	4	4	0	\$1,020,834.50	\$1,020,834.50	\$0.00
28	2280	TOTAL Exploration Prod.	1	1	0	\$927,178.75	\$927,178.75	\$0.00
29	1385	Chieftain International (U.S.)	6	3	3	\$1,415,200.00	\$888,158.00	\$527,042.00
30	216	Case-Pomeroy Oil	3	3	0	\$830,379.42	\$830,379.42	\$0.00
31	560	Seneca Resources Corp.	5	5	0	\$824,265.00	\$824,265.00	\$0.00
32	777	OXY USA	4	4	0	\$622,431.42	\$622,431.42	\$0.00

<u>Rank</u>	<u>Company #</u>	<u>Company Name</u>	<u>Total</u>	<u>High</u>	<u>Losers</u>	<u>Total Exposed</u>	<u>Total High Bids</u>	<u>Total Unsuccessful</u>
33	730	Walter O&G	4	4	0	\$610,050.00	\$610,050.00	\$0.00
34	846	Hall-Houston Oil	2	2	0	\$575,000.00	\$575,000.00	\$0.00
35	1978	The Wm. G. Helis Co.	3	3	0	\$570,605.54	\$570,605.54	\$0.00
36	774	Taylor Energy	2	2	0	\$464,675.00	\$464,675.00	\$0.00
37	78	Chevron U.S.A.	6	3	3	\$1,365,714.00	\$369,032.00	\$996,682.00
38	2341	Winwell Resources	2	2	0	\$357,120.00	\$357,120.00	\$0.00
39	148	Union Pacific Resources	3	2	1	\$476,161.68	\$353,034.68	\$123,127.00
40	1958	Maxux (U.S.) Exploration	1	1	0	\$353,000.00	\$353,000.00	\$0.00
41	1999	Houston Energy, Inc.	4	4	0	\$322,217.78	\$322,217.78	\$0.00
42	1364	Newfield Exploration	3	2	1	\$344,680.00	\$304,500.00	\$40,180.00
43	1704	Remington O&G	3	1	2	\$667,500.00	\$217,200.00	\$450,300.00
44	1578	British-Borneo Exploration	1	1	0	\$217,000.00	\$217,000.00	\$0.00
45	1247	Statoil Exploration (US)	3	1	2	\$732,306.98	\$192,706.98	\$539,600.00
46	981	Anadarko Petroleum	5	2	3	\$591,459.00	\$191,459.00	\$400,000.00
47	222	Aviara Energy	1	1	0	\$182,512.50	\$182,512.50	\$0.00
48	1354	Equitable Production	1	1	0	\$182,512.50	\$182,512.50	\$0.00
49	1551	Santa Fe Energy Resources	5	2	3	\$550,950.50	\$170,275.00	\$380,675.50
50	1790	Snyder Oil	5	2	3	\$550,950.50	\$170,275.00	\$380,675.50
51	2050	Barrett Resources	1	1	0	\$156,375.00	\$156,375.00	\$0.00
52	1102	Century Offshore Management	1	1	0	\$132,500.00	\$132,500.00	\$0.00
53	2079	CXY Energy Offshore	3	1	2	\$506,062.00	\$131,777.00	\$374,285.00
54	1832	Forcenergy	2	1	1	\$265,050.00	\$131,650.00	\$133,400.00
55	2189	Bellwether Exploration	1	1	0	\$131,300.00	\$131,300.00	\$0.00
56	1324	B T Operating	1	1	0	\$120,600.00	\$120,600.00	\$0.00
57	1482	Nippon Oil Exploration U.S.A.	1	1	0	\$98,900.00	\$98,900.00	\$0.00
58	689	Shell Offshore	1	1	0	\$66,459.00	\$66,459.00	\$0.00
59	2268	Bois d'Arc Offshore	2	1	1	\$678,000.00	\$37,000.00	\$641,000.00
60	2053	Linder Energy	1	1	0	\$25,720.00	\$25,720.00	\$0.00
61	2222	PetroQuest Energy One	2	1	1	\$67,419.00	\$23,206.50	\$44,212.50
62	2052	Louisiana General Oil	1	1	0	\$6,430.00	\$6,430.00	\$0.00
63	1777	Ocean Energy	1	1	0	\$6,413.00	\$6,413.00	\$0.00
64	1	Cococo	2	0	2	\$570,530.00	\$0.00	\$570,530.00
65	145	J. M. Huber Corp.	1	0	1	\$246,312.00	\$0.00	\$246,312.00
66	2246	King Ranch Energy	1	0	1	\$240,650.00	\$0.00	\$240,650.00
67	48	Forest Oil	1	0	1	\$132,637.50	\$0.00	\$132,637.50

Appendix G

Sales 172 and 169

Active Bidders

Companies Participating in 10 or More Bids in Sale 172

<u>Company Name</u>	<u>Co. Code</u>	<u><200 m.</u>	<u>200 - 400 m.</u>	<u>400 - 800 m.</u>	<u>800+ m.</u>	<u>Total</u>	<u>Total Exposed</u>	<u>Exposure Rank</u>	<u>Exposure per Bid</u>
Sonat Exploration GOM	1138	27	0	0	1	28	\$7,811,120	10	\$278,969
Vastar Resources	1855	6	0	0	18	24	\$14,777,933	3	\$615,747
Samedan	185	7	2	0	11	20	\$2,687,575		\$134,379
Murphy Exploration	1689	1	2	1	15	19	\$8,711,874	9	\$458,520
Kerr-McGee Oil & Gas	2219	1	1	0	16	18	\$17,091,546	2	\$949,530
Spinnaker Exploration	2169	7	0	1	8	16	\$7,466,923		\$466,683
BHP Petroleum (Deepwater)	2277	0	0	1	13	14	\$8,898,701	8	\$635,622
Callon Petroleum	1513	0	0	1	12	13	\$2,859,176		\$219,937
CNG Producing	282	4	1	0	6	11	\$9,960,517	6	\$905,502
Union Oil - California	3	6	0	1	3	10	\$11,809,735	4	\$1,180,974
Amerada Hess	59	1	0	0	9	10	\$6,798,766		\$679,877
Burlington Resources	1904	1	0	0	9	10	\$4,974,542		\$497,454
<u>Other Bidders of Note:</u>									
Elf Exploration	1500	0	0	0	9	9	\$21,421,084	1	\$2,380,120
Mariner Energy	818	0	0	0	4	4	\$10,096,225	5	\$2,524,056
Marathon	724	0	0	0	6	6	\$9,501,181	7	\$1,583,530

Companies Participating in 25 or More Bids in Sale 169

<u>Company Name</u>	<u>Co. Code</u>	<u><200 m.</u>	<u>200 - 400 m.</u>	<u>400 - 800 m.</u>	<u>800+ m.</u>	<u>Total</u>	<u>Total Exposed</u>	<u>Exposure Rank</u>	<u>Exposure per Bid</u>
Shell Deepwater Development	2139	0	0	4	139	143	\$61,337,808	5	\$428,936
Mobil	540	13	1	1	121	136	\$81,827,514	2	\$601,673
Conoco	1	3	0	0	124	127	\$49,620,837	9	\$390,715
Chevron USA	78	21	1	0	82	104	\$29,908,108		\$287,578
Union Oil - California	3	23	0	0	38	61	\$70,105,799	3	\$1,149,275
Burlington Resources	1904	13	0	2	30	45	\$36,481,488		\$810,700
Texaco	771	3	2	1	39	45	\$15,077,918		\$335,065
Vastar Resources	1855	12	0	1	30	43	\$57,118,761	6	\$1,328,343
Exxon	276	0	0	0	39	39	\$23,040,440		\$590,781
Kerr-McGee Oil & Gas	2219	12	1	1	24	38	\$51,256,365	7	\$1,348,852
Anadarko Petroleum	981	5	1	2	29	37	\$8,412,952		\$227,377
Pennzoil	1750	4	1	3	28	36	\$8,807,452		\$244,651
Amerada Hess	59	5	3	4	22	34	\$28,048,000		\$824,941
Agip Petroleum	162	1	1	4	26	32	\$13,570,406		\$424,075
Murphy Exploration	1689	8	4	6	13	31	\$19,981,571		\$644,567
BHP Petroleum (GOM)	2010	0	0	0	31	31	\$15,215,826		\$490,833
Elf Exploration	1500	0	0	0	29	29	\$50,929,765	8	\$1,756,199
Amoco	114	1	0	0	28	29	\$6,301,133		\$217,280
Samedan	185	9	5	6	8	28	\$19,375,164		\$691,970
Marathon	724	0	0	1	26	27	\$142,830,915	1	\$5,290,034

Other Bidders of Note:

Sun Operating L. P.	1022	0	0	5	17	22	\$64,731,350	4	\$2,942,334
Mariner Energy	818	0	1	0	12	13	\$47,287,430	10	\$3,637,495
Statoil Exploration (US)	1247	1	0	2	6	9	\$44,457,120	11	\$4,939,680

Appendix H

Sales 172 and 169

Comparison of Sales – Graphs

Sale 172 v. Sale 169

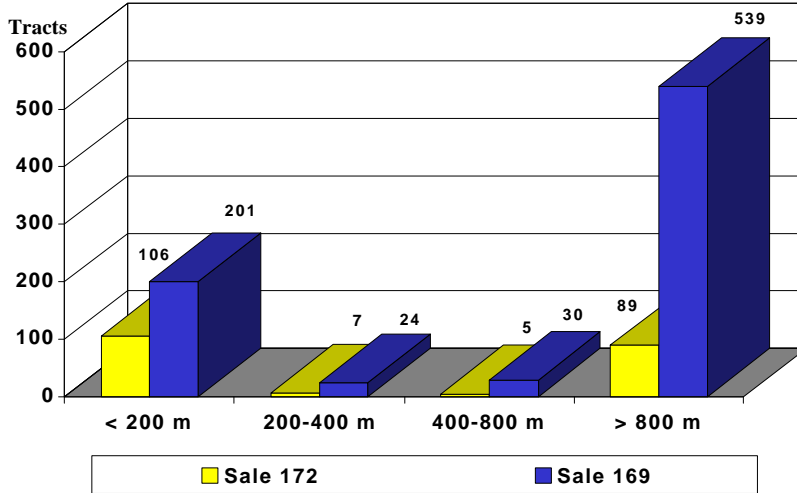
Prepared by:
Economics Division, MMS

Sale 172 - Sale 169 (CGOM) Comparison of Results

- In aggregate, 207 tracts received high bids of \$171.80 MM in Sale 172 and 794 tracts received high bids of \$810.42 MM in Sale 169
- Bids per tract declined from 1.5 to 1.3 in Sale 172
- Sale 172 had 106 tracts in < 200 m. receiving high bids of \$32.98 MM v. 201 tracts and high bids of \$162.94 MM in Sale 169
- Sale 172 had 101 tracts in > 200 m. receiving high bids of \$138.82 MM v. 593 tracts and high bids of \$647.48 MM in Sale 169

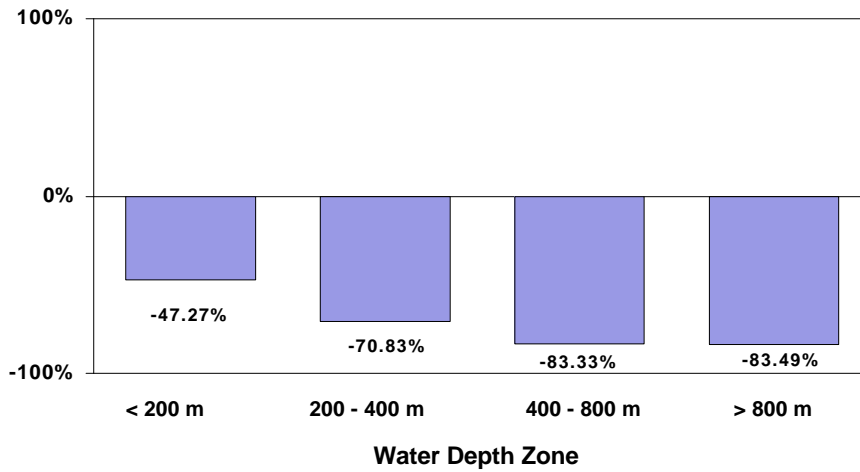
Sale 172 v. Sale 169 - Tracts

Tracts Receiving Bids by Water Depth Zone



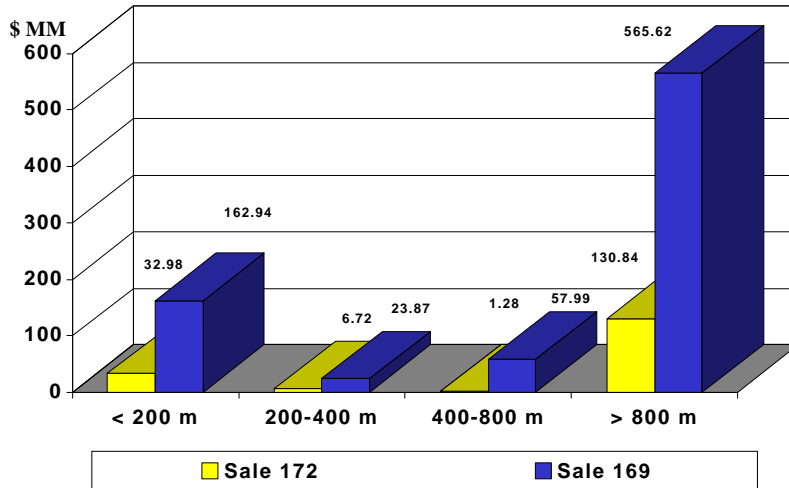
Sale 172 v. Sale 169 - Tracts

Percent Change in Tracts Receiving Bids by Water Depth Zone



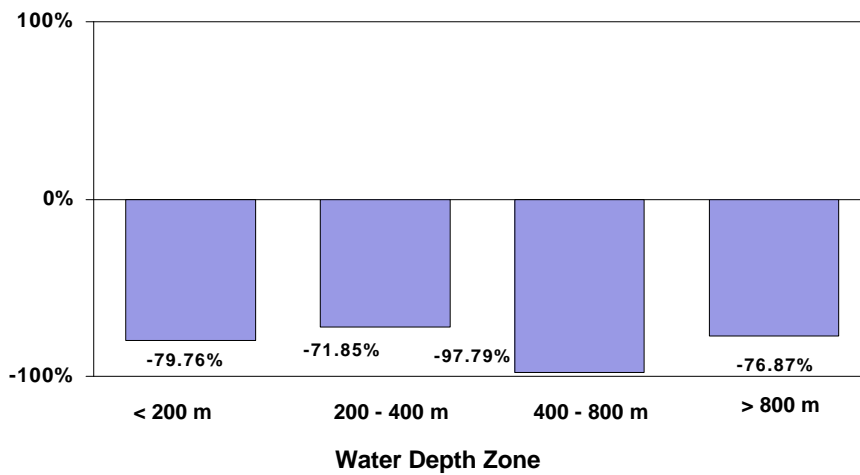
Sale 172 v. Sale 169 - Bonuses

Aggregate High Bids by Water Depth Zone

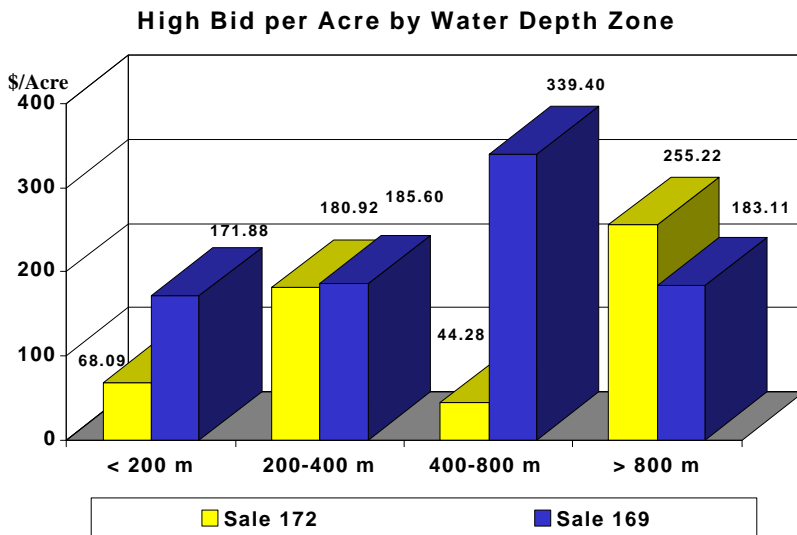


Sale 172 v. Sale 169 - Bonuses

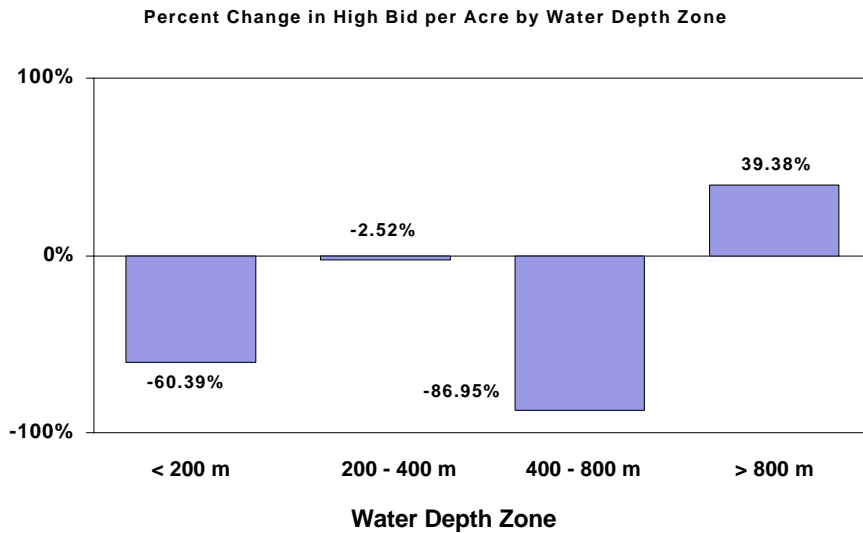
Percent Change in Aggregate High Bids by Water Depth Zone



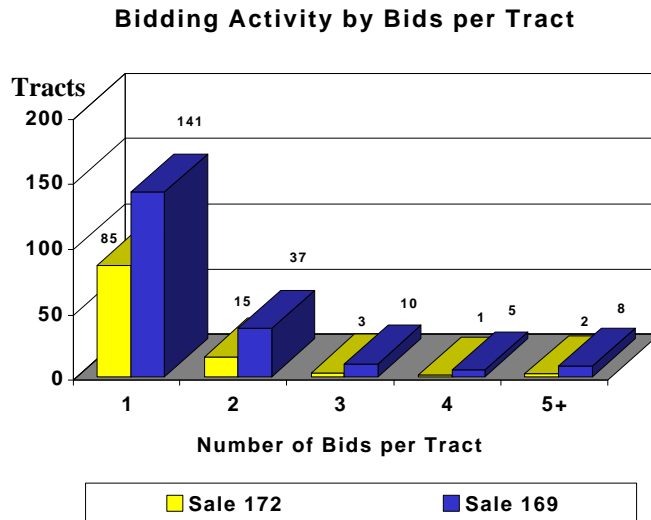
Sale 172 v. Sale 169 - High Bid per Acre



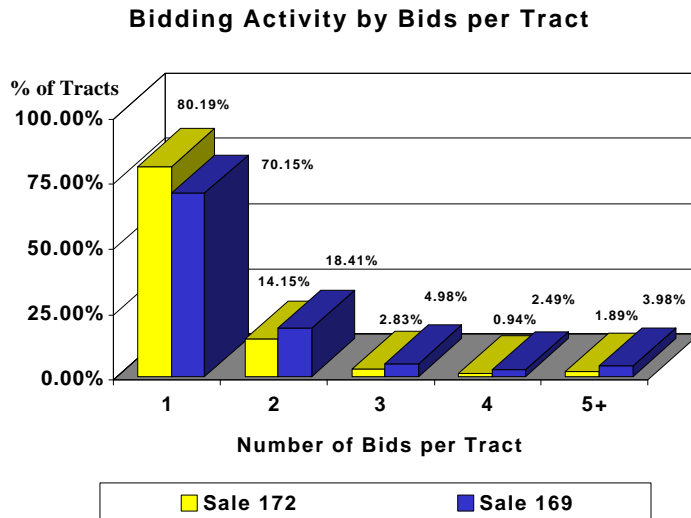
Sale 172 v. Sale 169 - High Bid per Acre



Sale 172 v. Sale 169 - Tracts in Less than 200 Meters Water Depth

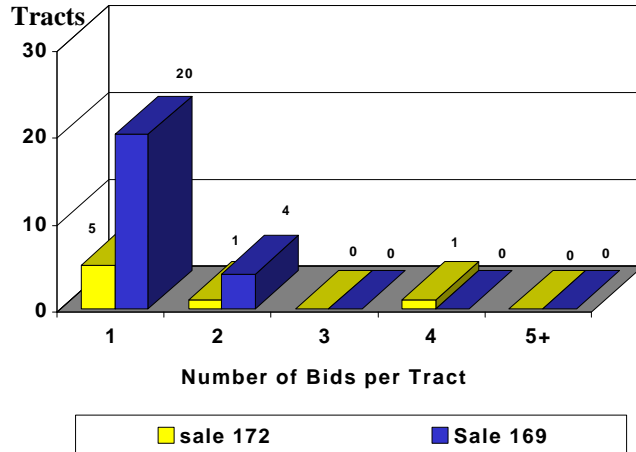


Sale 172 v. Sale 169 - Tracts in Less than 200 Meters Water Depth



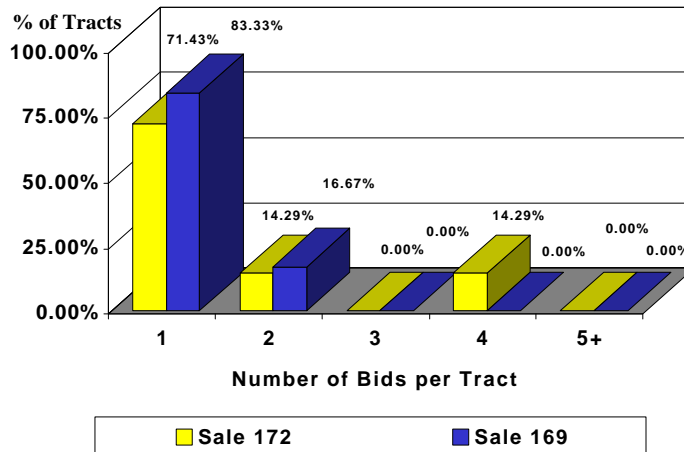
Sale 172 v. Sale 169 - Tracts in 200 to 400 Meters Water Depth

Bidding Activity by Bids per Tract

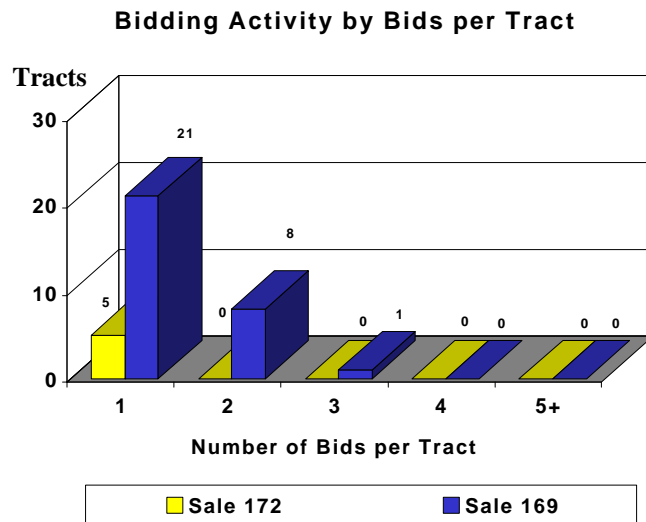


Sale 172 v. Sale 169 - Tracts in 200 to 400 Meters Water Depth

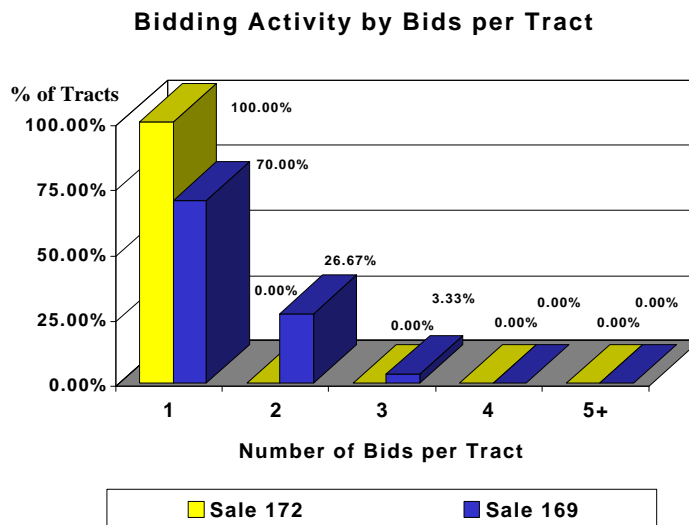
Bidding Activity by Bids per Tract



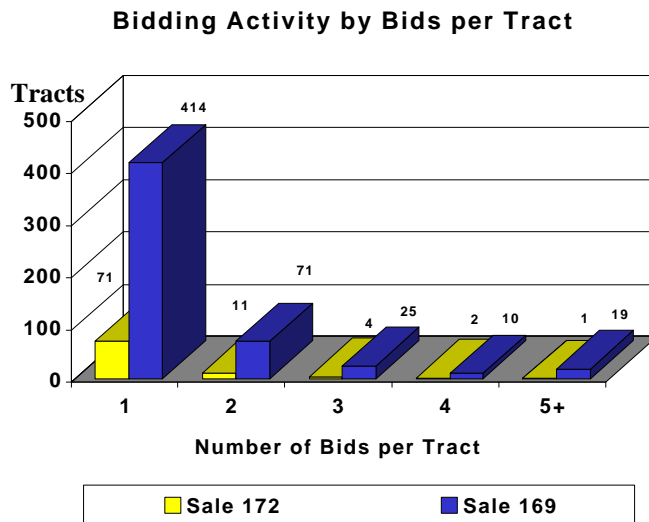
Sale 172 v. Sale 169 - Tracts in 400 to 800 Meters Water Depth



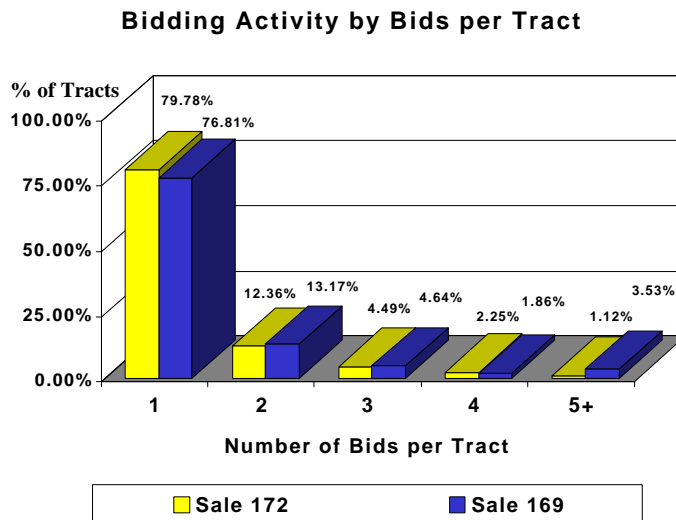
Sale 172 v. Sale 169 - Tracts in 400 to 800 Meters Water Depth



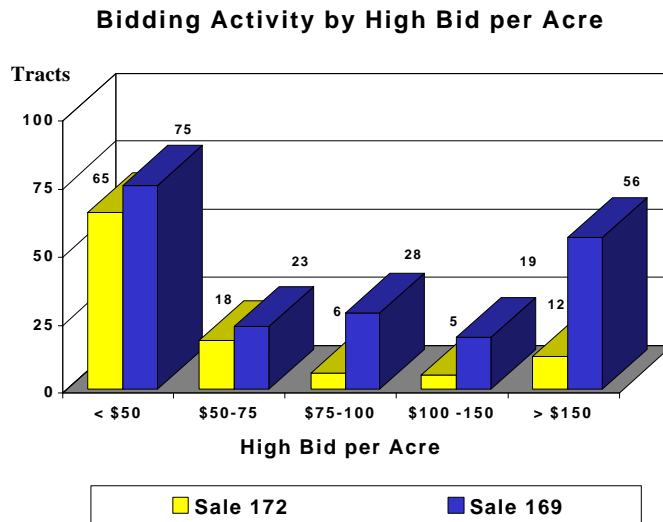
Sale 172 v. Sale 169 - Tracts in More than 800 Meters Water Depth



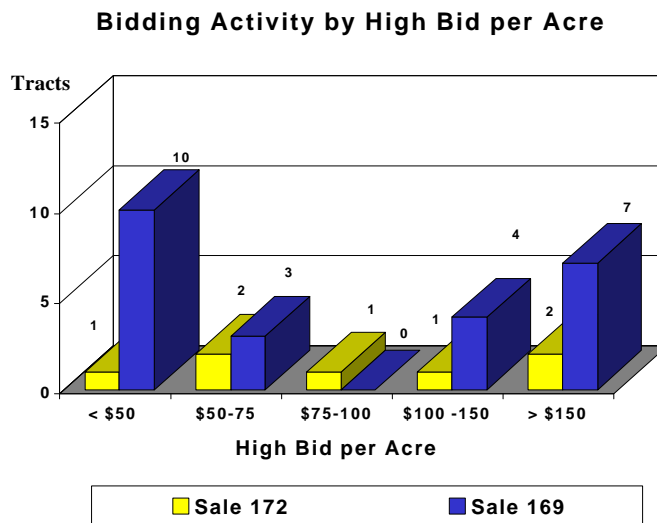
Sale 172 v. Sale 169 - Tracts in More than 800 Meters Water Depth



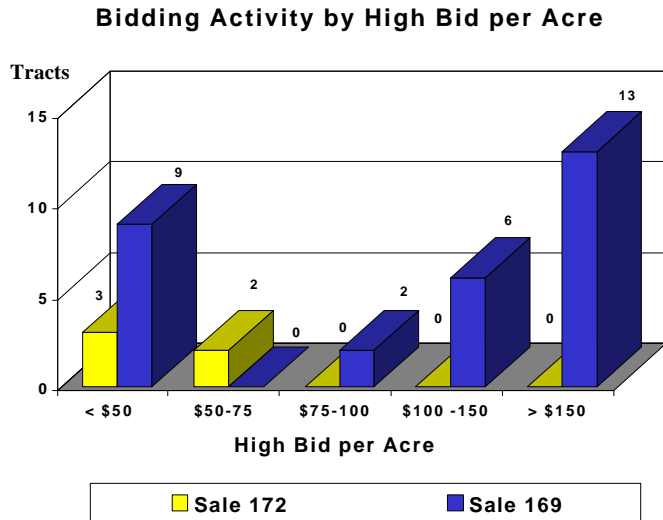
Sale 172 v. Sale 169 - Tracts in Less than 200 Meters Water Depth



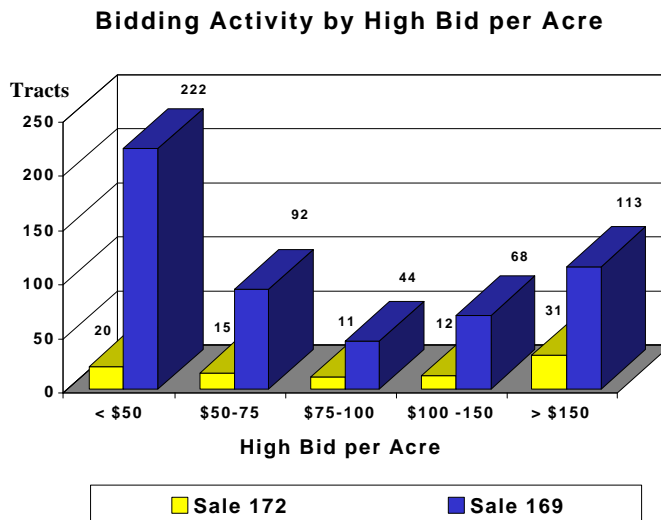
Sale 172 v. Sale 169 - Tracts in 200 to 400 Meters Water Depth



Sale 172 v. Sale 169 - Tracts in 400 to 800 Meters Water Depth



Sale 172 v. Sale 169 - Tracts in More than 800 Meters Water Depth



Appendix I

Sale 172

Revised
Bid Adequacy Procedures

[Federal Register: February 10, 1999 (Volume 64, Number 27)]
[Notices]
[Page 6677-6678]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr10fe99-117]

DEPARTMENT OF THE INTERIOR

Minerals Management Service

Modifications to the Bid Adequacy Procedures

AGENCY: Minerals Management Service (MMS), Interior.

ACTION: Notification of procedural changes.

SUMMARY: The Minerals Management Service (MMS) is modifying one element of its existing bid adequacy procedures for ensuring receipt of fair market value on Outer Continental Shelf (OCS) oil and gas leases. The modification establishes a new criterion for acceptance under the number of bids rule for selected tracts in Phase 1. Specifically, for viable confirmed and wildcat (C&W) tracts receiving three or more qualified bids, where the third largest bid is within 50 percent of the high bid, acceptance under the number of bids rule will apply only to those viable C&W tracts having high bids that are in the top 75 percent of high bids on a per acre basis for all three-or-more-bid C&W tracts within designated water depth categories. Unless stated otherwise, usually in the final notice of sale, the designated categories in the Gulf of Mexico are: water depths of less than 800 meters and water depths of 800 meters or more.

This change has been made following a review of bidding activity in recent OCS sales. The new criterion for the number of bids rule was developed in part because in these sales a disproportionately large number of the three-bid confirmed and wildcat tracts with relatively low high bids were accepted in Phase 1, while tracts of this type with much larger high bids tended to be passed to Phase 2 in the evaluation process. Yet, in sales held without a number of bids rule for Phase 1 acceptance, it was found that of the set of tracts receiving three or more bids, the ones that tended to get rejected were those receiving relatively small high bids. Thus, this new criterion will allow the MMS to better ensure receipt of fair market value through more efficient targeting of its tract evaluation resources.

Another reason for the change is that the previous three-bid rule provided an incentive to submit lower bids. By doing so, a bidder could raise the chance that if it was the high bidder, the third largest bid would fall within the required 50 percent of its high bid. Under the proposed change, bidders would be discouraged from adopting this strategy because attempts to implement it would likely cause the potential high bid to fall below the new requirement that an acceptable high bid in Phase 1 must be in the top 75 percent of all high bids in

the tract's class. Indeed, the 75 percent parameter was chosen, in part, because in recent sales, there were no cases in which a high bidder could have successfully implemented this strategy with the proposed change in the rule in place.

DATES: This modification is effective February 4, 1999.

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

SUPPLEMENTARY INFORMATION: The following set of bid adequacy procedures incorporates the most recent changes. During the bid review process, MMS conducts evaluations in a two-phased process for bid adequacy determination. We also review the bid for legal sufficiency¹ and anomalies² to establish the set of qualified bids³ to be evaluated.

Phase 1

The tracts receiving bids are partitioned into four general categories:

- Those tracts where competitive market forces can be relied upon to assure fair market value;
- Those tracts which the MMS identifies as being nonviable⁴ based on adequate data and maps;
- Those tracts where the Government has the most detailed and reliable data;
- Those tracts where opportunities are greatest for strategic underbidding, information asymmetry, collusion, and other noncompetitive practices.

Based on these categories, six Phase 1 rules are applied to all tracts receiving bids:

- Accept the highest qualified bid on viable confirmed and wildcat tracts receiving three or more qualified bids where the third largest such bid on the tract is at least 50 percent of the highest qualified bid and where the high bid per acre ranks in the top 75 percent of high bids for all three-or-more-bid confirmed and wildcat tracts that reside within a specified water depth category.⁵
- Accept the highest qualified bid on confirmed and wildcat tracts determined to be nonviable.

¹ Legal bids are those bids which comply with MMS regulations (30 CFR 256) and the Notice of Sale. Any illegal high bid will be returned to the bidder.

² Anomalous bids include all but the highest bid submitted for a tract by the same company, parent or subsidiary (bidding alone or jointly). Such bids are excluded when applying the number of bids rule or any bid adequacy measure.

³ Qualified bids are those bids which are legal and not anomalous.

⁴ Nonviable tracts or prospects are those geographic or geologic configurations of hydrocarbons whose risk weighted most probable resource size is below the minimum economic field size for the relevant cost regime and anticipated future prices. The risk used is below the lowest level anticipated for any tract or prospect in the same cost regime.

⁵ The water depth categories usually will be specified in the final notice of sale.

--Pass to Phase 2 all tracts that require additional information to make a determination on viability or tract type.
--Pass to Phase 2 all viable confirmed and wildcat tracts receiving one or two qualified bids.
--Pass to Phase 2 all viable confirmed and wildcat tracts receiving three or more qualified bids where either the third largest such bid is less than 50 percent of the highest qualified bid or where the high bid per acre ranks in the lowest 25 percent of high bids for all three-or-more-bid confirmed and wildcat tracts in the specified water depth category.
--Pass to Phase 2 all drainage and development tracts.

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 confirmed and wildcat tract's high bid to the total number of all viable and nonviable three-or-more-bid confirmed and wildcat tracts in the designated water depth. For example, suppose there are 21 total confirmed and wildcat tracts identified in Phase 1 as receiving three-or-more-bids in the designated water depth category of at least 800 meters. All viable tracts in this set having a high bid among the top 15 high bids would satisfy the 75% requirement; the 15th ranked high bid would represent the 71st percentile.

In ensuring the integrity of the bidding process, the Regional Director (RD) may identify an unusual bidding pattern⁶ at any time during the bid review process, but before a tract is accepted. If the finding is documented, the RD has discretionary authority, after consultation with the Solicitor, to pass those tracts so identified to Phase 2 for further analysis. The RD 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.

All of these procedures are generally completed within 3 weeks of the bid opening, and the results are announced simultaneously at the end of this period.

Phase 2

The Phase 2 bid adequacy determinations are normally completed sequentially over a period ranging between 21 and 90 days after the sale. The total evaluation period can be extended, if needed, at the RD's discretion (61 FR 34730, July 3, 1996).

Activities designed to resolve bid adequacy assessments are undertaken by analyzing, partitioning, and evaluating tracts in two steps:

--Further mapping and/or analysis is done to review, modify, and finalize viability determinations and tract classifications.

⁶ Within the context of our bid adequacy procedures, the term "unusual bidding patterns" typically refers to a situation in which there is an excessive amount of coincident bidding by different companies on a set of tracts in a sale. Other forms of unusual bidding patterns exist as well, and generally involve anti-competitive practices, e.g., when there is an uncommon absence of competition among companies active in a sale on a set of prospective tracts.

--Tracts identified as being viable must undergo an evaluation to determine if fair market value has been received.

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

--Accept newly classified confirmed and wildcat tracts having three or more qualified bids if the third largest such bid is at least 50 percent of the highest qualified bid.

--Accept the highest qualified bid on all tracts determined to be nonviable.

--Determine whether any categorical fair market evaluation technique(s) will be used. If so:

--Evaluate, define, and identify the appropriate threshold measure(s).

--Accept all tracts whose individual measures of bid adequacy satisfy the threshold categorical requirements.

--Conduct a full-scale evaluation, which could include the use of MONTCAR⁷, on all remaining tracts⁸ passed to Phase 2 and still awaiting an acceptance or rejection decision.

-Compare the highest qualified bid on each of these remaining tracts to two measures of bid adequacy: the Mean Range of Values (MROV)⁹ and the Adjusted Delayed Value (ADV)¹⁰.

-Accept the highest qualified bid for those tracts where such a bid equals or exceeds the tract's ADV.

-Reject the highest qualified bid on drainage and development tracts receiving three or more qualified bids where such a bid is less than one-sixth of the tract's MROV.

-Reject the highest qualified bid on drainage and development tracts receiving one or two qualified bids and on confirmed and wildcat tracts receiving only one qualified bid where the high bid is less than the tract's ADV.

At this stage of the process, the outstanding tracts consist of those having a highest qualified bid that is less than the MROV of the

⁷ MONTCAR is a probabilistic, cash flow computer simulation model designed to conduct a resource-economic evaluation that results in an estimate of the expected net present value of a tract(or prospect) along with other measures.

⁸ These include tracts not accepted by a categorical rule that are classified as drainage and development tracts and those classified as confirmed and wildcat tracts that are viable and received (a) one or two qualified bids, or (b) three or more qualified bids where either the third largest such bid is less than 50 percent of the highest qualified bid or the high bid is in the bottom quartile of all three-or-more-bid confirmed and wildcat tracts for a designated water depth category.

⁹ The MROV is a dollar measure of a tract's expected net present private value, given that the tract is leased in the current sale, allowing for exploration and economic risk, and including tax consequences including depletion of the cash bonus.

¹⁰ The ADV is the minimum of the MROV and the Delayed MROV (DMROV). The 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 where the MROV exceeds the high bid.

ADV, and are either (a) drainage or development tracts receiving three or more qualified bids with the highest such bid exceeding one-sixth of the tract's MROV, or (b) viable confirmed and wildcat tracts that receive two or more qualified bids.

From these outstanding tracts, MMS selects the following ones:

- Drainage and development tracts having three or more qualified bids with the third largest such bid being at least 25 percent of the highest qualified bid;
- Confirmed and wildcat tracts having two or more qualified bids with the second largest such bid being at least 25 percent of the highest qualified bid.

The MMS then compares the highest qualified bid on each of these selected, outstanding tracts to the tract's Revised Arithmetic Average Measure (RAM)¹¹. For all these tracts:

- Accept the highest qualified bid where such a bid equals or exceeds the tract's RAM.
- Reject the highest qualified bid where such a bid is less than the tract's RAM.

Finally, the MMS identifies those tracts that were in the "outstanding" set above but not selected for comparison to the RAM.

- Reject the high bid on all of these leftover tracts.

Dated: February 4, 1999.

Thomas A. Readinger,
Acting Associate Director for Offshore Minerals Management.
[FR Doc. 99-3228 Filed 2-9-99; 8:45 am]
BILLING CODE 4310-MR-M

¹¹ The RAM is the arithmetic average of the MROV and all qualified bids on the tract that are equal to at least 25 percent of the high bid.