

# Western Gulf of Mexico Sale 174 August 25, 1999

## Sale Summary, Bidding Results and Related Analyses

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## Table of Contents

Sale Overview

Appendices:

- A. Bidding Summary
- B. Bidding by Number of Bids
- C. Bidding by High Bid per Acre
- D. Bidding Results Graphs
- E. RAM
- F. Summary of Company Bids
- G. Sales 174, 171, 168, and 161: Active Bidders
- H. Sales 174 and 171: Comparison of Sales Graphs
- I. High Bid Rejections
- J. Sale 174: Revised Bid Adequacy Procedure

#### Sale 174, Western Gulf of Mexico August 25, 1999 Sale Overview

Sale 174 in the Western Gulf of Mexico (WGOM) was the fourth sale in that planning area in which the "new lease" provisions of the Deep Water Royalty Relief Act of 1995 (DWRRA) were applied. In this sale, 153 tracts received 177 bids (an average of 1.16 bids per tract) and 86 of those tracts were in water depths eligible for royalty relief.

#### **Bidding Results**

Sale 174, in terms of the number of tracts receiving bids, was about 40 percent the size of the WGOM Sale 171 held in 1998. The decrease in aggregate high bids in Sale 174 compared to Sale 171 was relatively large, as they declined 83 percent. In Sale 174, 153 tracts received 177 bids with high bids totaling \$94,649,044.

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

Water Depth	Tracts with Bids	High Bids (\$ MM)	Number of Bids	Average Bids/Tract
< 200 m.	67	\$ 26.30	81	1.21
200 - 400 m.	9	\$ 2.27	9	1.00
400 - 800 m.	13	\$ 4.47	14	1.08
800+ m.	64	\$ 61.61	73	1.14
Total	153	\$ 94.65	177	1.16

Table 1. Bidding Activity by Water Depth Zone

Bidding activity in Sale 174 resulted in a large decrease in the number of tracts receiving bids, number of bids, and aggregate high bids compared to the previous WGOM sale (Sale 171, August 26, 1998). In Sale 171, 402 tracts received 486 bids, whereas 153 tracts received 177 bids in Sale 174, resulting in decreases of 62 and 64 percent, respectively. In addition, the sum of high bids submitted on tracts receiving bids in Sale 174 decreased by about 83 percent compared to Sale 171 (\$94.65 million v. \$553.44 million). The decrease in tracts, number of bids, and aggregate high bids was due to the lower level of bidding activity in all water depth categories, especially those of more than 400 meters. The amount of competition for tracts was less than other post-DWRRA, WGOM lease sales. More than 88 percent of tracts received single-bids. Two-bid tracts accounted for the next highest percent of tracts receiving bids (about 10 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.

Bids	Tracts	Percent of Tracts	High Bids (\$ MM)	Percent of High Bids
1	135	88.24%	\$78.38	82.81%
2	15	9.80%	\$12.98	13.71%
3	1	0.65%	\$1.32	1.40%
4	1	0.65%	\$0.73	0.77%
5	1	0.65%	\$1.24	1.31%
Total	153	100.00 %	\$94.65	100.00 %

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

In contrast to many sales in the WGOM, in Sale 174 there was an approximately even split between tracts receiving high bids of \$50 or more per acre and those receiving less. In Sale 174, tracts with high bids greater than \$150 per acre accounted for more than 57 percent of aggregate high bids, a decrease of about 24 percent compared to Sale 171. 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	77	50.33%	\$16.14	17.04%
\$50 - \$74.99	38	24.84%	\$12.46	13.17%
\$75 - 99.99	10	6.54%	\$4.69	4.95%
\$100 - 149.99	10	6.54%	\$7.14	7.55%
\$150 +	18	11.76%	\$54.22	57.29%
Total	153	100.00 %	\$94.65	100.00 %

<sup>&</sup>lt;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

A total of 64 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 42 percent of the tracts in the sale receiving bids and 65 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 800 meters or more in Sale 174 was 77 percent lower and their associated high bids were 88 percent lower than those received in Sale 171. In the water depth categories with smaller royalty suspension volumes, bidding activity in Sale 174 lagged the level observed in Sale 171 for both tracts receiving bids and high bids.

In comparing the average high bid per acre by royalty suspension volume water depth category between Sales 171 and 168, in every category the Sale 174 averages were below those observed in Sale 171. Only in the 800-meters or more category did the Sale 171 average exceed Sale 168's (\$313.01/acre v. \$135.39), but it was about 131 percent higher. In 200-400 meters, Sale 171's average was \$61.06/acre and Sale 174's was \$48.28/acre. In 400-800 meters, Sale 171's average was \$99.42/acre and Sale 174's was \$59.76/acre. Finally, in 800 meters or more, Sale 171's average was \$313.01/acre and Sale 174's was \$167.13/acre. These results suggest that, even with lower average high bids, industry perceives greater resource potential and value to exist in the deepest water depth category.

#### Phase 1 Results

Following the revised post-sale evaluation procedures, which include a modified 3-bid rule, in Phase 1 of Sale 174, high bids were accepted on 25 tracts in water depths less than 200 meters and 12 tracts in water depths eligible for royalty relief. The Phase 1-accepted high bids accounted for about 24 percent of the tracts, representing 10 percent of the high bids. In terms of Phase 1 bid acceptances, Coastal Oil & Gas USA was the most successful company, as 7 of its 18 high bids were accepted.

Phase 1-accepted high bids were in only one category of tract. All 37 were wildcat and confirmed tracts determined to be non-viable. No tracts were accepted in Phase 1 by the revised number of bid rule. The Sale 174 Phase 1 results by number of bidders and high bid per acre are presented in Tables 4 and 5, respectively

Bids	Tracts	Percent of Tracts	High Bids (\$ MM)	Percent of High Bids
1	35	94.59%	\$8.90	93.78%
2	2	5.41%	\$0.59	6.22%
3+	0	0.00%	\$0.00	0.00%
Total	37	100.00 %	\$9.49	100.00 %

Table 4. Phase 1 Results by Number of Bids

 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	26	70.27%	\$5.19	54.69%
\$50 - 74.99	9	24.32%	\$2.99	31.51%
\$75 - 99.99	1	2.70%	\$0.53	5.58%
\$100 - 149.99	1	2.70%	\$0.78	8.22%
\$150 +	0	0.00%	\$0.00	0.00%
Total	37	100.00%	\$9.49	100.00 %

#### Revised Arithmetic Average Measure of Tract

The RAM is a secondary bid acceptance criterion that is used in Phase 2 of the Sale 174 bid evaluation process on multi-bid tracts that have high bids that do not exceed the Government's value of the tract (MROV).

For evaluating the high bids on multi-bid tracts that do not exceed the MROV, 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 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 continue to consider market factors in the evaluation of high bids without the distorting effects of the geometric average evaluation of tract (GAEOT), which often required MROV's well in excess of \$100 million for a high bid to be rejected. Using the RAM, the highest MROV required to reject a high bid on a multi-bid tract in Sale 174 is about

\$2.2 million. This value for a lease is not unreasonable relative to high bids observed in this sale.

In Sale 174, three 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 that are at least 25 percent of a tract's high bid, two tracts could be eligible for a decision based on the RAM. These two tracts would require MROV's of around \$1.5 million and \$2.2 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 174 decreased to 41 from the 63 active in Sale 171, the previous WGOM sale. One company submitted bids (either solo or jointly) on 35 or more tracts. Kerr-McGee Oil & Gas Corporation was the most active company in terms of bids submitted with 38. The most apparent high bids, 36, and highest total amount of high bids, \$33.21 million, were submitted by Kerr-McGee as well.

With about 12 percent of the tracts receiving bids in the sale being multi-bid tracts, no firms that submitted ten or more bids were the high bidders on every bid they submitted. The most efficient bidders, in terms of apparent high bids, were Coastal Oil and Gas USA, which submitted 19 bids and was the high bidder on 18 and Kerr-McGee, which submitted 38 bids and was the high bidder on 36.

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.

In ranking companies by the high bids submitted, although some companies that were most active in WGOM Sale 171 (August 26, 1998) continued to be among the most active in Sale 174, a number of changes were apparent. For example, two companies (Texaco and Burlington Resources) that were in the Sale 171 top ten were not ranked among the top 20 participants in Sale 174 and four Sale 171 top ten firms (Seagull Energy, Chevron, Amoco, and British-Borneo Petroleum) did not participate in Sale 174.

Appendix G presents a listing of bidding by the most active companies in Sales 174 and 171 (as well as Sales 168 and 161).

Company	Total High Bids	Number of Bids	High Bids
Kerr-McGee	\$33,211,289	38 (1)	36 (1)
Union Oil - CA	\$8,802,180	17 (3)	15 (3)
CNG Producing	\$5,653,289	9 (5)	5 (12)
Spinnaker Exploration	\$5,511,442	15 (4)	11 (4)
Murphy E & P	\$4,793,950	7 (8)	7 (5)
Coastal Oil & Gas USA	\$4,473,580	19 (2)	18 (2)
Phillips Petroleum	\$4,100,000	4 (19)	4 (16)
Vastar Resources	\$4,010,945	8 (6)	5 (12)
Shell Offshore	\$3,563,713	4 (19)	4 (16)
Houston Exploration Co.	\$2,104,460	8 (6)	7 (5)

## Table 6. Most Active Bidders by Total Amount of High Bids (For number of bids and high bids, rank is in parentheses.)

#### Sale 174 v. Sale 171

The results of Sale 174 did not meet the results of Sale 171 in any category of bidding activity. The average high bid per acre was \$110.49 in Sale 174 as compared with \$241.44 in Sale 171. In Sale 171, 402 tracts received 486 bids, thus exceeding the 153 tracts that received 177 bids in Sale 174. In addition, the number of bids per tract declined slightly from 1.2 to 1.16 in Sale 174.

The amount of bidding activity in deep water in Sale 174 decreased greatly compared to Sale 171. Specifically, the number of tracts potentially eligible for DWRRA royalty suspension volumes (water depth of 200 meters or more) receiving bids decreased by about 73 percent, and the high bids on these tracts decreased 87 percent. Appendix H presents a graphical comparison of sale results.

In Sale 174, seven tracts that were rejected in Sale 171 received bids and 18 Sale 171-rejected tracts (with high bids of \$15,455,343) did not. The high bids on the seven tracts increased from \$7,095,456 in Sale 171 to \$10,454,450 in Sale 174, an increase in high bids of 47 percent. The number of bids on these seven tracts decreased from 10 to seven, a decline of 30 percent. The potential to realize gains in high bids on tracts that were previously rejected highlights the importance of MMS's bid adequacy procedures. Sale 174 also illustrated the possibility that tracts that were rejected in a previous sale will not receive bids in the area's next sale.

#### Sale 174 Rejections

High bids on 11 tracts were rejected in Sale 174. Eight of the rejected blocks received one bid and three were two-bid tracts. By water depth category, the rejections were as follows: six in less than 200 meters; none in 200 to 400 meters; one in 400 to 800 meters; and four in 800 meters or more. Details about the high bids on rejected tracts are presented in Appendix I.

Sale 174 was the first sale to use the revised bid adequacy procedures in which the number of bids rule was modified to ensure consistency in the treatment of tracts that might have been reclassified in Phase 2 of the procedures. The modified procedures were published in the *Federal Register* on July 12, 1999 (64 FR 37560-37562) and are presented in Appendix J.

#### Bid Comparison - Sale 171 Rejections v. Sale 174 High Bids

In Sale 171, high bids of \$22,550,799 on 25 tracts were rejected. In Sale 174, seven of those tracts received bids. The remaining 18 tracts, with Sale 171 high bids of \$15,455,343, did not receive bids in Sale 174.

After Sale 174 bid evaluations were completed, the high bids on only three of the seven tracts were accepted. The high bids on these three tracts were \$9,125,486 in Sale 174. In Sale 171, the same three tracts received high bids of \$4,061,805. Thus, the high bids that were accepted on previously rejected tracts increased by about 125 percent.

The high bids on the four tracts that were rejected in Sale 174 that previously had been rejected in Sale 171 were \$1,328,964. In Sale 171, these four tracts received high bids of \$3,033,651. The high bids for these four tracts in Sale 174 decreased by about 56 percent compared to their high bids in Sale 171.

## Appendix A

# Sale 171

# **Bidding Summary**

#### Western Gulf of Mexico OCS Oil and Gas Lease Sale 174

#### Sale Day Statistics by Royalty Rate

	16 2/3% Royalty	12 1/2% Royalty	Sale Total
Tracts Receiving Bids	76	77	153
Acres Receiving Bids	413,101.05	443,520.00	856,621.05
Sum of High Bids	\$28,563,533	\$66,085,511	\$94,649,044
Sum of All Bids	\$34,730,741	\$69,480,967	\$104,211,708
Total Number of Bids	90	87	177
Average Bids	1.18	1.13	1.16
Companies Bidding	29	21	41
Highest Bid per Tract	\$3,230,300	\$11,283,000	\$11,283,000
Tract Number	21345	21408	21408
Number of Bids	2	1	1
Highest Bid per Acre	\$560.82	\$1,958.85	\$1,958.85
Tract Number	21345	21408	21408
Number of Bids	2	1	1
Most Bids	5	2	5
Tract Number	21343	10 tracts	21343

#### Western Gulf of Mexico OCS Oil and Gas Lease Sale 174

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

	<u>16 2/3% w/ROY<sup>2</sup></u>	<u>16 2/3% w/RS<sup>3</sup></u>	<u>16 2/3% Total</u>
Tracts Receiving Bids	67	9	76
Acres Receiving Bids	366,151.25	46,949.80	413,101.05
Sum of High Bids	\$26,296,894	\$2,266,639	\$28,563,533
Sum of All Bids	\$32,464,102	\$2,266,639	\$34,730,741
Total Number of Bids	81	9	90
Average Bids	1.21	1.00	1.18
Companies Bidding	27	4	29
Highest Bid per Tract	\$3,230,300	\$454,000	\$3,230,300
Tract Number	21345	21385	21345
Number of Bids	2	1	2
Highest Bid per Acre	\$560.82	\$78.82	\$560.82
Tract Number	21345	21385	21345
Number of Bids	2	1	2
Most Bids	5	1	5
Tract Number	21343	9 tracts	21343

 $<sup>^{2}</sup>$  "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.

 $<sup>^3</sup>$  "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.

#### Western Gulf of Mexico OCS Oil and Gas Lease Sale 174

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

	<u>12 1/2% w/RS1<sup>4</sup></u>	<u>12 1/2% w/RS2<sup>5</sup></u>	<u>12 1/2% Total</u>
Tracts Receiving Bids	13	64	77
Acres Receiving Bids	74,880.00	368,640.00	443,520.00
Sum of High Bids	\$4,474,560	\$61,610,951	\$66,085,511
Sum of All Bids	\$4,626,310	\$64,854,657	\$69,480,967
Total Number of Bids	14	73	87
Average Bids	1.08	1.14	1.13
Companies Bidding	10	18	21
Highest Bid per Tract	\$1,077,000	\$11,283,000	\$11,283,000
Tract Number	21379	21408	21406
Number of Bids	1	1	1
Highest Bid per Acre	\$186.98	\$1,958.85	\$1,958.85
Tract Number	21379	21408	21408
Number of Bids	1	1	1
Most Bids	2	2	2
Tract Number	21368	9 tracts	10 tracts

<sup>&</sup>lt;sup>4</sup> "12 1/2% 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.

<sup>&</sup>lt;sup>5</sup> "12 1/2% 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 174

# Bidding by Number of Bids

## Sale 174

### All Tracts

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of <u>High Bids</u>
1	135	88.24%	\$78.38	82.81%
2	15	9.80%	\$12.98	13.71%
3	1	0.65%	\$1.32	1.40%
4	1	0.65%	\$0.73	0.77%
<u>5</u>	<u>1</u>	0.65%	<u>\$1.24</u>	<u>1.31%</u>
Total	153	100.00%	\$94.65	100.00%

## Tracts with 1/6 Royalty Rate

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of <u>High Bids</u>
1	68	89.47%	\$19.94	69.80%
2	5	6.58%	\$5.34	18.68%
3	1	1.32%	\$1.32	4.63%
4	1	1.32%	\$0.73	2.55%
<u>5</u>	<u>1</u>	<u>1.32%</u>	<u>\$1.24</u>	<u>4.34%</u>
Total	76	100.00%	\$28.57	100.00%

### Tracts with 1/8 Royalty Rate

<u>No. Of Bids</u>	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of <u>High Bids</u>
1	67	87.01%	\$58.44	88.43%
2	10	12.99%	\$7.64	11.57%
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	77	100.00%	\$66.08	100.00%

#### Sale 174 by Water Depth Category

No. Of Bids	<u>Tracts</u>	Percent of Tracts	High Bids <u>(\$MM)</u>	Percent of <u>High Bids</u>
1	59	88.06%	\$17.67	67.19%
2	5	7.46%	\$5.34	20.29%
3	1	1.49%	\$1.32	5.03%
4	1	1.49%	\$0.73	2.77%
<u>5</u>	<u>1</u>	<u>1.49%</u>	<u>\$1.24</u>	4.72%
Total	67	100.00%	\$26.30	100.00%

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

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

No. Of Bids	Tracts	Percent of Tracts	High Bids <u>(\$MM)</u>	Percent of <u>High Bids</u>
1	9	100.00%	\$2.27	100.00%
2	0	0.00%	\$0.00	0.00%
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	9	100.00%	\$2.27	100.00%

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

<u>No. Of Bids</u>	<u>Tracts</u>	Percent of Tracts	High Bids <u>(\$MM)</u>	Percent of <u>High Bids</u>
1	12	92.31%	\$4.04	90.21%
2	1	7.69%	\$0.44	9.79%
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	13	100.00%	\$4.48	100.00%

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

No. Of Bids	Tracts	Percent of Tracts	High Bids <u>(\$MM)</u>	Percent of <u>High Bids</u>
1	55	85.94%	\$54.40	88.30%
2	9	14.06%	\$7.21	11.70%
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	64	100.00%	\$61.61	100.00%

# Appendix C

## Sale 174

# Bidding by High Bid per Acre

## Sale 174

### All Tracts

<u>High Bid/acre</u>	Tracts	Percent of Tracts	High Bids ( <u>\$MM)</u>	Percent of <u>High Bids</u>
< \$50	77	50.33%	\$16.13	17.04%
\$50 - 74.99	38	24.84%	\$12.46	13.17%
\$75 - 99.99	10	6.54%	\$4.69	4.95%
\$100 - 149.99	10	6.54%	\$7.14	7.55%
<u>\$150 +</u>	<u>18</u>	<u>11.76%</u>	\$54.22	<u>57.29%</u>
Total	153	100.00%	\$94.65	100.00%

### Tracts with 1/6 Royalty Rate

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of <u>High Bids</u>
< \$50	42	55.26%	\$7.90	27.64%
\$50 - 74.99	17	22.37%	\$5.41	18.94%
\$75 - 99.99	6	7.89%	\$2.77	9.71%
\$100 - 149.99	5	6.58%	\$3.57	12.50%
<u>\$150 +</u>	<u>6</u>	7.89%	<u>\$8.91</u>	<u>31.20%</u>
Total	76	100.00%	\$28.56	100.00%

## Tracts with 1/8 Royalty Rate

High Bid/acre	<u>Tracts</u>	Percent of Tracts	High Bids (\$MM)	Percent of <u>High Bids</u>
< \$50	35	45.45%	\$8.24	12.46%
\$50 - 74.99	21	27.27%	\$7.05	10.67%
\$75 - 99.99	4	5.19%	\$1.91	2.90%
\$100 - 149.99	5	6.49%	\$3.57	5.41%
<u>\$150 +</u>	<u>12</u>	<u>15.58%</u>	<u>\$45.31</u>	<u>68.56%</u>
Total	77	100.00%	\$66.08	100.00%

#### Sale 174 by Water Depth Category

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

High Bid/acre	<u>Tracts</u>	Percent of Tracts	High Bids <u>(\$MM)</u>	Percent of <u>High Bids</u>
< \$50	37	55.22%	\$6.84	26.01%
\$50 - 74.99	14	20.90%	\$4.65	17.70%
\$75 - 99.99	5	7.46%	\$2.32	8.82%
\$100 - 149.99	5	7.46%	\$3.57	13.58%
<u> \$150 +</u>	<u>6</u>	<u>8.96%</u>	<u>\$8.91</u>	<u>33.89%</u>
Total	67	100.00%	\$26.29	100.00%

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

High Bid/acre	Tracts	Percent of Tracts	High Bids <u>(\$MM)</u>	Percent of <u>High Bids</u>
< \$50	5	55.56%	\$1.06	46.58%
\$50 - 74.99	3	33.33%	\$0.76	33.39%
\$75 - 99.99	1	11.11%	\$0.45	20.03%
\$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	9	100.00%	\$2.27	100.00%

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

High Bid/acre	<u>Tracts</u>	Percent of Tracts	High Bids <u>(\$MM)</u>	Percent of <u>High Bids</u>
< \$50	7	53.85%	\$1.46	32.58%
\$50 - 74.99	3	23.08%	\$1.05	23.42%
\$75 - 99.99	2	15.38%	\$0.89	19.93%
\$100 - 149.99	0	0.00%	\$0.00	0.00%
<u>\$150 +</u>	<u>1</u>	<u>7.69%</u>	<u>\$1.08</u>	24.07%
Total	13	100.00%	\$4.48	100.00%

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

High Bid/acre	Tracts	Percent of Tracts	High Bids ( <u>\$MM)</u>	Percent of <u>High Bids</u>
< \$50	28	43.75%	\$6.78	11.00%
\$50 - 74.99	18	27.13%	\$6.00	9.74%
\$75 - 99.99	2	3.13%	\$1.02	1.66%
\$100 - 149.99	5	7.81%	\$3.57	5.80%
<u>\$150 +</u>	<u>11</u>	<u>17.19%</u>	<u>\$44.23</u>	<u>71.79%</u>
Total	64	100.00%	\$61.60	100.00%

## Appendix D

# Sale 171

# Bidding Results – Graphs

## Distribution of High Bids Sale 174 - WGOM

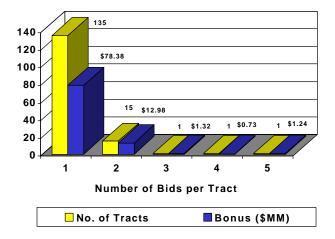
Prepared by: Economics Division, MMS

## Sale 174 (WGOM) - Bidding Results

- 153 tracts received 177 bids (1.16 bids/tract)
- High bids were \$94.65 MM
- Average high bid per acre was \$110.49
- 41 companies submitted bids
- 76 tracts in < 400 meters received bids -49.67 % of tracts and 30.17 % of high bids
- 77 tracts in 400+ meters received bids -50.33 % of tracts and 69.83 % of high bids

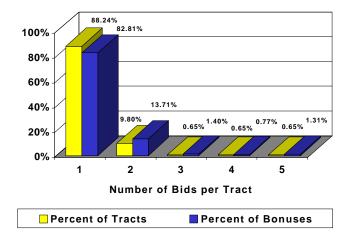
## Sale 174 - Aggregate

**Bidding Activity by Bids per Tract** 

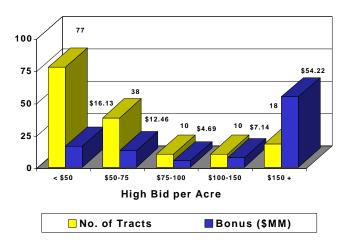


## Sale 174 - Aggregate

Bidding Activity by Bids per Tract



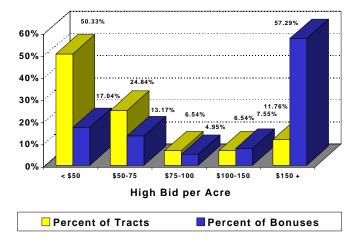
## Sale 174 - Aggregate



Bidding Activity by High Bid per Acre

## Sale 174 - Aggregate

Bidding Activity by High Bid per Acre



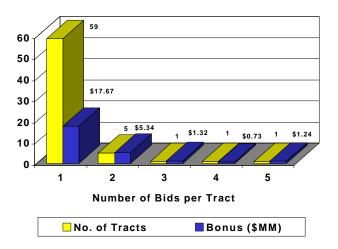
## Sale 174 Bidding by Water Depth Category

Prepared by: Economics Division, MMS

## Sale 174 (WGOM) Bidding by Water Depth Category

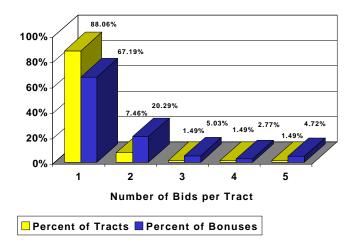
- 67 tracts in < 200 meters received 81 bids and high bids of \$26.30 MM (\$71.82/acre)
- 9 tracts in 200-400 meters had 9 bids and high bids of \$2.27 MM (\$48.28/acre)
- 13 tracts in 400-800 meters had 14 bids and high bids of \$4.47 MM (\$59.76/acre)
- 64 tracts in > 800 meters had 73 bids and high bids of \$61.61 MM (\$167.13/acre)

Sale 174 - Tracts in < 200 Meters Water Depth



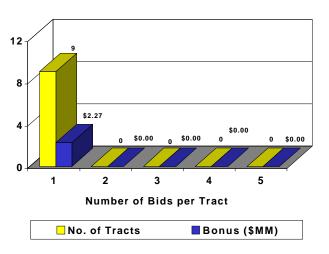
Bidding Activity by Bids per Tract

## Sale 174 - Tracts in < 200 Meters Water Depth



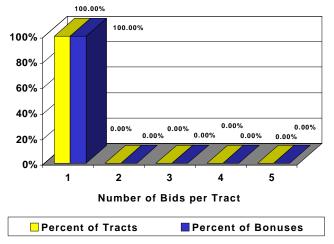
Bidding Activity by Bids per Tract

Sale 174 - Tracts in 200-400 Meters Water Depth

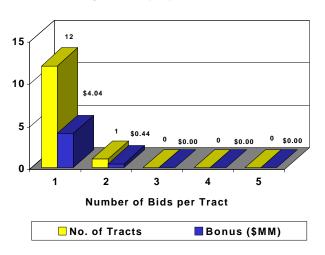


Bidding Activity by Bids per Tract

### Sale 174 - Tracts in 200-400 Meters Water Depth Bidding Activity by Bids per Tract



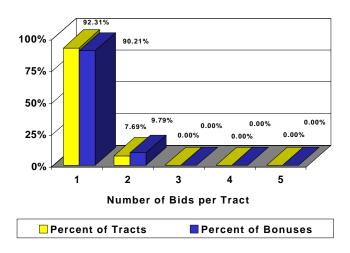
Sale 174 - Tracts in 400-800 Meters Water Depth



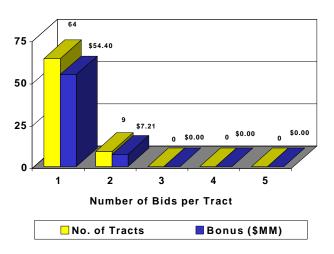
Bidding Activity by Bids per Tract

### Sale 174 - Tracts in 400-800 Meters Water Depth

Bidding Activity by Bids per Tract

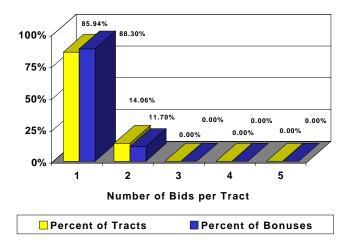


Sale 174 - Tracts in 800+ Meters Water Depth

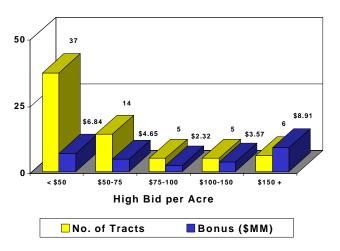


Bidding Activity by Bids per Tract

### Sale 174 - Tracts in 800+ Meters Water Depth Bidding Activity by Bids per Tract

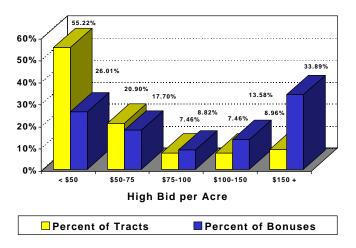


Sale 174 - Tracts in < 200 Meters Water Depth



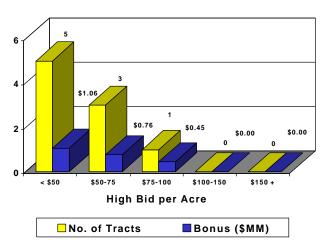
Bidding Activity by High Bid per Acre

## Sale 174 - Tracts in < 200 Meters Water Depth



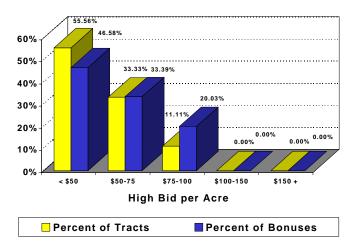
Bidding Activity by High Bid per Acre

### Sale 174 - Tracts in 200-400 Meters Water Depth

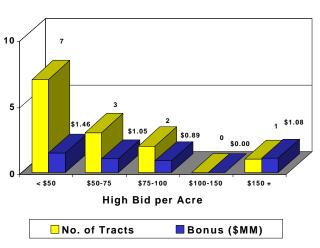


Bidding Activity by High Bid per Acre

### Sale 174 - Tracts in 200-400 Meters Water Depth



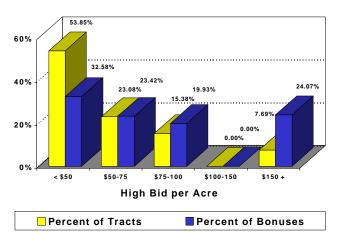
Bidding Activity by High Bid per Acre



Sale 174 - Tracts in 400-800 Meters Water Depth

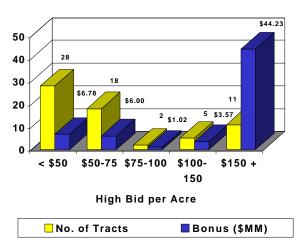
Bidding Activity by High Bid per Acre

#### Sale 174 - Tracts in 400-800 Meters Water Depth



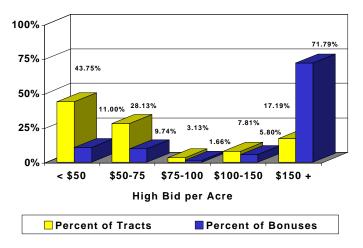
Bidding Activity by High Bid per Acre

Sale 174 - Tracts in 800+ Meters Water Depth



Bidding Activity by High Bid per Acre

### Sale 174 - Tracts in 800+ Meters Water Depth Bidding Activity by High Bid per Acre



# Appendix E

# Sale 174

# RAM

#### Sale 174 - Tracts with Three-or-More Bids

In Sale 174, three or more bids were received on 3 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.

Category	< 25 %	25 - 50 %	50 - 75 %	> 75 %	Total
< 200 m.	0	0	2	1	3
200 - 400 m.	0	0	0	0	0
400 - 800 m.	0	0	0	0	0
> 800 m.	0	0	0	0	0
Total	0	0	2	1	3

Table E1. Percent Difference between a Tract's High Bid and Third Bidby Water Depth Category

Sale 174 was the fifth 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 <u>and</u> 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. (The procedure is described in the <u>Federal Register</u>, vol. 64, no.132, pp. 37560-37562.) In Sale 174, no tracts had third highest bids within 50 percent of the high bid, so there were no Phase 1 acceptances based on this rule.

Sale 174 was also the fifth 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 (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.

For the three 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, two tracts need a MROV less than \$2.2 million and one tract would not be eligible for the RAM because all of its losing bids were less than 25 percent of the high bid. These results are presented in Table E2.

Category	< \$1 MM	\$1-5 MM	\$5-10 MM	>\$ 10 MM	Total
< 200 m.	0	2	0	0	2
200 - 400 m.	0	0	0	0	0
400 - 800 m.	0	0	0	0	0
> 800 m.	0	0	0	0	0
Total	0	0	0	0	0

Table E2. MROV Needed to Reject a High Bid Using the RAMby Water Depth Category

#### Sale 174 - Tracts with Three or More Bids Passed to Phase 2

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

Tract	<u>High Bid</u>	No. Of <u>Bids</u>	3 <sup>rd</sup> Bid as % <u>of High Bid</u>	Adjusted <u>No. Of Bids</u>	MROV to <u>Reject w/RAM</u>
21312	\$1,321,920	3	10.89%	1	Not Applicable
21314	\$728,338	4	29.75%	3	\$1,520,316
21343	\$1,241,000	5	27.24%	3	\$2,166,772

## Appendix F

## Sale 174

# Summary of Company Bids

#### Sale 174 - Company Bids by Total Amount of High Bids

						Total	Total	Total
<u>Rank</u>	Company #	Company Name	<u>Total</u>	<u>High</u>	Losers	Exposed	<u>High Bids</u>	<u>Unsuccessful</u>
1	2219 Ke	err-McGee Oil & Gas	38	36	2	\$33,981,288.96	\$33,211,288.96	\$770,000.00
2	3 Ur	nion Oil Co. of California	17	15	2	\$9,162,984.00	\$8,802,180.00	\$360,804.00
3	282 CI	NG Producing	9	5	4	\$6,306,538.50	\$5,563,288.50	\$653,250.00
4	2169 Sp	binnaker Exploration	15	11	4	\$7,053,692.10	\$5,511,442.10	\$1,542,250.00
5	1689 M	urphy Exploration & Production	7	7	0	\$4,793,950.00	\$4,793,950.00	\$0.00
6	2025 Co	oastal Oil & Gas USA	19	18	1	\$4,648,800.00	\$4,473,580.00	\$175,220.00
7	56 Pł	nillips Petroleum	4	4	0	\$4,100,000.00	\$4,100,000.00	\$0.00
8	1855 Va	astar Resources	8	5	3	\$4,789,608.00	\$4,010,945.00	\$778,663.00
9	689 Sh	nell Offshore	4	4	0	\$3,563,713.00	\$3,563,713.00	\$0.00
10	1046 Th	e Houston Exploration Co.	8	7	1	\$3,137,460.00	\$2,104,460.00	\$1,033,000.00
11	276 Ex	xxon	7	7	0	\$1,749,000.00	\$1,749,000.00	\$0.00
12	1385 Cł	nieftain International (U.S.)	6	3	3	\$3,320,368.00	\$1,571,920.00	\$1,748,448.00
13	185 Sa	amedan Oil	6	6	0	\$1,512,337.40	\$1,512,337.00	\$0.00
14	1777 Oc	cean Energy	7	7	0	\$1,304,928.00	\$1,304,928.00	\$0.00
15		nadarko Petroleum	5	5	0	\$1,239,320.00	\$1,239,320.00	\$0.00
16	2190 Pa	anCanadian Gulf of Mexico	1	1	0	\$1,223,467.00	\$1,223,467.00	\$0.00
17		asin Exploration	2	2	0	\$1,109,216.00	\$1,109,216.00	\$0.00
18		ppon Oil Exploration U.S.A.	6	5	1	\$1,494,708.99	\$950,708.99	\$544,000.00
19	560 Se	eneca Resources	3	2	1	\$980,681.00	\$817,454.00	\$163,227.00
20	59 Ar	nerada Hess	6	6	0	\$794,880.10	\$794,880.10	\$0.00
21	1935 Pi	oneer Natural Resources USA	1	1	0	\$728,338.00	\$728,339.00	\$0.00
22	771 Te	exaco Exploration and Production	5	4	1	\$778,696.00	\$668,968.00	\$0.00
23	1513 Ca	allon Petroleum Operating Co.	6	6	0	\$646,050.00	\$646,050.00	\$0.00
24	1904 Bu	Irlington Resources Offshore	5	5	0	\$566,019.96	\$566,019.96	\$0.00
25	1958 Ma	axus (U.S.) Exploration	2	2	0	\$480,500.00	\$480,500.00	\$0.00
26	2332 Pe	ennzEnergy Exploration & Prod.	1	1	0	\$415,987.00	\$415,987.00	\$0.00
27	1364 Ne	ewfield Exploration	4	2	2	\$1,000,000.00	\$377,000.00	\$623,000.00
28	1 Co	DNOCO	3	3	0	\$374,365.00	\$374,365.00	\$0.00
29		neyenne International	1	1	0	\$356,250.00	\$356,250.00	\$0.00
30	48 Fc	orest Oil	2	1	1	\$370,275.00	\$256,462.50	\$113,812.50

						Total	Total	Total
<u>Rank</u>	Company #	<u>Company Name</u>	<u>Total</u>	<u>High</u>	Losers	Exposed	<u>High Bids</u>	<u>Unsuccessful</u>
31	2172 W B (	Dil & Gas	1	1	0	\$227,000.00	\$227,000.00	\$0.00
32	1732 Cock	rell Oil and Gas	1	1	0	\$214,430.00	\$214,430.00	\$0.00
33	730 Walte	er Oil & Gas	2	1	1	\$355,968.00	\$205,344.00	\$150,624.00
34	1001 IP Pe	troleum Co.	1	1	0	\$201,449.00	\$201,449.00	\$0.00
35	1586 Petse	ec Energy	1	1	0	\$142,874.00	\$142,874.00	\$0.00
36	2248 Agip	Petroleum Exploration Co.	1	1	0	\$119,519.99	\$119,519.99	\$0.00
37	2222 Petro	Quest Energy One	2	1	1	\$123,425.00	\$85,487.50	\$37,937.50
38	231 Pogo	Producting	1	1	0	\$84,920.00	\$84,920.00	\$0.00
39	846 Hall-H	louston Oil	1	0	1	\$325,000.00	\$0.00	\$325,000.00
40	2148 West	port Oil and Gas	1	0	1	\$217,000.00	\$0.00	\$217,000.00
41	2312 McMo	oRan Oil & Gas LLC	1	0	1	\$216,700.00	\$0.00	\$216,700.00

## Appendix G

### Sales 174, 171, 168, and 161

Active Bidders

#### Companies Participating in 7 or More Bids in Sale 174

							Exposure	Exposure	Exposure
<u>Company</u>	<u>Co. Code</u>	<u>&lt; 200 m.</u>	<u>200-400 m.</u>	<u>400-800 m.</u>	<u>800 + m.</u>	<u>Total</u>	<u>(\$MM)</u>	Rank	per Bid
Kerr-McGee Oil & Gas	2219	0	2	5	31	38	\$33.98	1	\$894,244
Coastal Oil & Gas USA	2025	16	3	0	0	19	\$4.65	7	\$244,674
Union Oil Co. – California	3	5	3	0	9	17	\$9.16	2	\$538,999
Spinnaker Exploration	2169	4	0	2	9	15	\$7.05	3	\$470,246
CNG Producing	282	3	0	1	5	9	\$6.31	4	\$700,727
Vastar Resources	1855	5	0	0	3	8	\$4.79	6	\$598,701
The Houston Exploration Co.	1046	8	0	0	0	8	\$3.14	11	\$392,183
Murphy Exploration & Production	1689	1	0	2	4	7	\$4.79	5	\$684,850
Exxon Corporation	276	0	0	0	7	7	\$1.75	12	\$249,857
Ocean Energy	1777	7	0	0	0	7	\$1.30	15	\$186,418

#### Companies Participating in 15 or More Bids in Sale 171

	o Blao III Gal	• • • •				-		<b>F</b>	<b>F</b>
								Exposure	Exposure
<u>Company</u>	<u>Co. Code</u>	<u>&lt; 200 m.</u>	<u>200-400 m.</u>	<u>400-800 m.</u>	<u>800 + m.</u>	<u>Total</u>	<u>(\$MM)</u>	<u>Rank</u>	<u>per Bid</u>
Union Oil - California	3	11	4	0	69	84	\$193.06	1	\$2,298,333
Texaco Exploration and Production	771	2	0	1	69	72	\$57.60	2	\$800,000
Sonat Exploration GOM	1138	5	0	6	26	37	\$10.38		\$280,541
Burlington Resources Offshore	1904	0	0	0	35	35	\$36.91	5	\$1,054,571
Vastar Resources	1855	8	0	6	18	32	\$39.98	3	\$1,249,375
Amerada Hess	59	0	0	0	19	19	\$16.68		\$877,895
Kerr-McGee	2219	0	0	0	18	18	\$16.43		\$912,778
Seagull Energy E&P	1956	1	0	2	15	18	\$23.35	7	\$1,297,222
Shell Deepwater Development	2139	0	0	1	17	18	\$21.97	8	\$1,220,556
Pennzoil Exploration and Production	1750	1	2	2	11	16	\$7.80		\$487,500
Exxon Asset Management Corp.	2295	0	0	1	15	16	\$9.50		\$593,750
British-Borneo Petroleum	1431	0	0	0	15	15	\$19.62	10	\$1,308,000
Other Bidders of Note:									
Marathon Oil	724	0	0	0	6	6	\$36.93	4	\$6,155,000
Chevron U.S.A.	78	0	0	0	4	4	\$30.00	6	\$7,500,000
Sun Operating	1022	0	0	0	11	11	\$20.08	9	\$1,825,455

#### Companies Participating in 25 or More Bids in Sale 168

Companies Farticipating in 25 of W	iore blus in Sai	e 100							
							Exposure	Exposure	Exposure
<u>Company</u>	<u>Co. Code</u>	<u>&lt; 200 m.</u>	<u>200-400 m.</u>	<u>400-800 m.</u>	<u>800 + m.</u>	<u>Total</u>	<u>(\$MM)</u>	<u>Rank</u>	<u>per Bid</u>
Shell Deepwater Development	2139	0	0	19	199	218	\$102.23	1	\$468,945
BP Exploration	1680	0	0	2	128	130	\$75.47	2	\$580,538
Chevron	78	0	0	3	98	101	\$57.11	4	\$565,446
Union Oil of California	3	12	4	5	71	92	\$47.47	5	\$515,978
Texaco	771	5	1	6	76	88	\$38.61	6	\$438,750
Amoco	114	0	0	0	88	88	\$21.16		\$240,455
Exxon	276	0	0	0	84	84	\$72.50	3	\$863,095
Sun Operating	1022	13	1	2	38	54	\$29.36	9	\$543,704
Vastar Resources	1855	7	0	1	42	50	\$28.70	10	\$574,000
Amerada Hess	59	2	1	8	32	43	\$22.16		\$515,349
Statoil Exploration (US)	1247	0	0	0	41	41	\$26.70		\$651,220
Burlington Resources	1904	2	0	4	35	41	\$22.07		\$538,293
Murphy Exploration	1689	0	0	5	33	38	\$19.23		\$506,053
Elf Exploration	1500	0	0	3	33	36	\$25.83		\$717,500
Louisiana Land	83	1	0	0	33	34	\$15.09		\$443,824
Conoco	1	0	0	2	24	26	\$31.64	8	\$1,216,923
Other Bidder(s) of Note:									
Marathon	724	0	0	3	16	19	\$36.63	7	\$1,927,895

#### Companies Participating in 25 or More Bids in Sale 161

Companies randopading in 25 of							_	_	_
							Exposure	Exposure	Exposure
<u>Company</u>	<u>Co. Code</u>	<u>&lt; 200 m.</u>	<u>200-400 m.</u>	<u>400-800 m.</u>	<u>800 + m.</u>	<u>Total</u>	<u>(\$MM)</u>	<u>Rank</u>	<u>per Bid</u>
Shell	689	39	11	30	94	174	\$82.95	1	\$476,724
Chevron	78	1	2	3	66	72	\$12.57	9	\$174,583
Texaco	771	5	3	3	52	63	\$12.14	10	\$192,698
Vastar	1855	11	0	7	24	42	\$18.08	4	\$430,476
Conoco	1	0	1	4	37	42	\$15.69	7	\$373,571
Mobil	565	0	0	1	38	39	\$16.22	5	\$415,897
Zilkha	1138	26	4	6	2	38	\$12.06		\$317,368
Enron	1103	24	5	7	1	37	\$16.06	6	\$434,054
Phillips	56	0	0	1	35	36	\$5.58		\$155,000
Amoco	114	5	0	0	30	35	\$11.52		\$329,143
Amerada Hess	59	4	3	16	11	34	\$18.37	3	\$540,294
Chieftain International	1385	30	1	0	0	31	\$9.50		\$306,452
Exxon	276	0	0	2	28	30	\$8.04		\$268,000
Union Oil of California	3	4	4	5	16	29	\$10.07		\$347,241
British-Borneo Petroleum	1431	0	7	4	16	27	\$10.44		\$386,667
Sun Operating	1022	5	4	10	7	26	\$15.20	8	\$584,615
Other Bidder(s) of Note:									
Barrett Resources	2050	22	0	0	0	22	\$37.95	2	\$1,725,000

## Appendix H

### Sales 174 and 171

## Comparison of Sales - Graphs

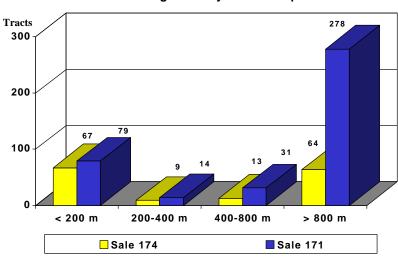
### Sale 174 v. Sale 171

Prepared by: Economics Division, MMS

### Sale 174 - Sale 171 (WGOM) Comparison of Results

- In aggregate, 153 tracts received high bids of
- \$94.65 MM in Sale 174 and 402 tracts received high bids of \$553.44 MM in Sale 171
- Bids per tract declined from 1.21 to 1.16 in Sale 174
- Sale 174 had 67 tracts in < 200 m. receiving high bids of \$26.30 MM v. 79 tracts and high bids of \$31.38 MM in Sale 171
- Sale 174 had 86 tracts in > 200 m. receiving high bids of \$68.35 MM v. 323 tracts and high bids of \$522.06 MM in Sale 171

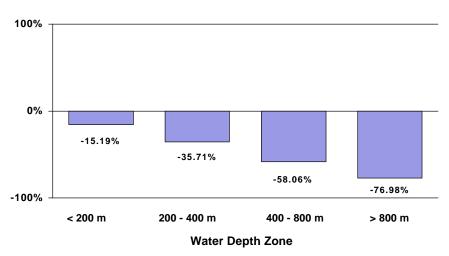
### Sale 174 v. Sale 171 - Tracts



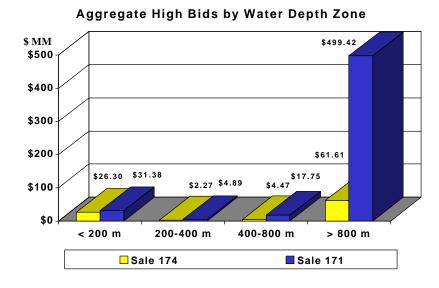
Tracts Receiving Bids by Water Depth Zone

### Sale 174 v. Sale 171 - Tracts

Percent Change in Tracts Receiving Bids by Water Depth Zone

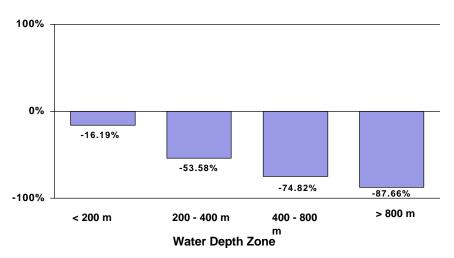


### Sale 174 v. Sale 171 - Bonuses

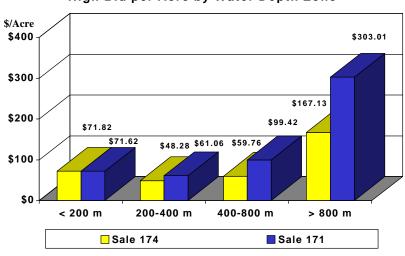


Sale 174 v. Sale 171 - Bonuses

Percent Change in Aggregate High Bids by Water Depth Zone



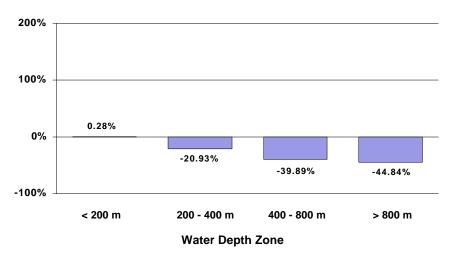
### Sale 174 v. Sale 171 - High Bid per Acre



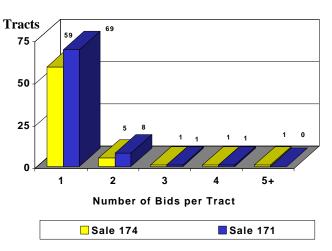
High Bid per Acre by Water Depth Zone

### Sale 174 v. Sale 171 - High Bid per Acre

Percent Change in High Bid per Acre by Water Depth Zone

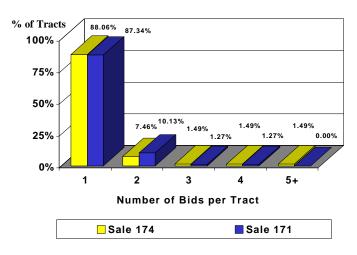


Sale 174 v. Sale 171 - Tracts in Less than 200 Meters Water Depth



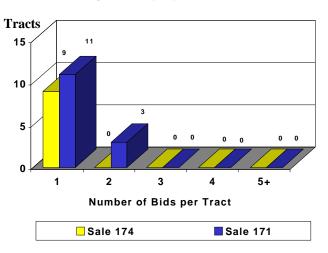
**Bidding Activity by Bids per Tract** 

Sale 174 v. Sale 171 - Tracts in Less than 200 Meters Water Depth



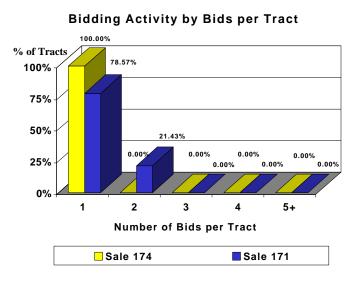
**Bidding Activity by Bids per Tract** 

Sale 174 v. Sale 171 - Tracts in 200 to 400 Meters Water Depth

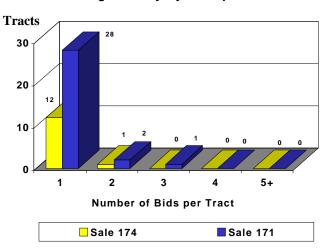


Bidding Activity by Bids per Tract

Sale 174 v. Sale 171 - Tracts in 200 to 400 Meters Water Depth

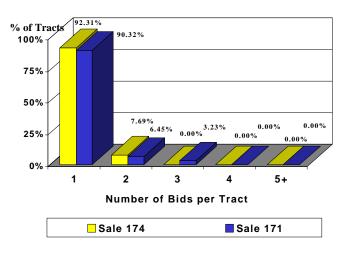


Sale 174 v. Sale 171 - Tracts in 400 to 800 Meters Water Depth



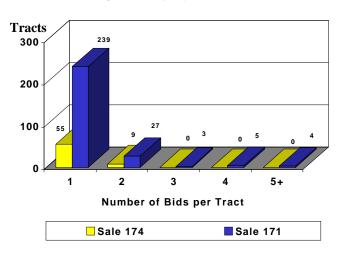
Bidding Activity by Bids per Tract

Sale 174 v. Sale 171 - Tracts in 400 to 800 Meters Water Depth



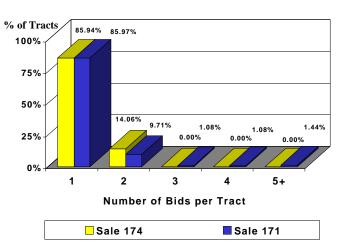
**Bidding Activity by Bids per Tract** 

Sale 174 v. Sale 171 - Tracts in More than 800 Meters Water Depth



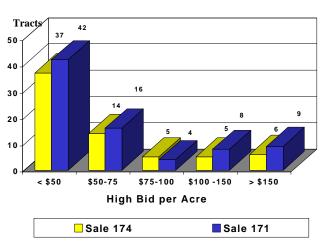
**Bidding Activity by Bids per Tract** 

Sale 174 v. Sale 171 - Tracts in More than 800 Meters Water Depth



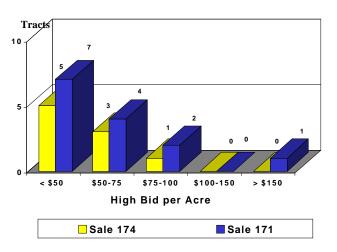
Bidding Activity by Bids per Tract

Sale 174 v. Sale 171 - Tracts in Less than 200 Meters Water Depth



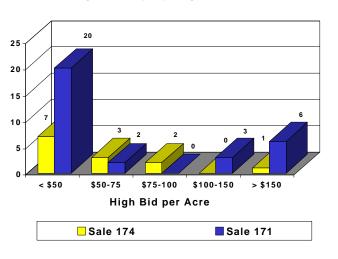
Bidding Activity by High Bid per Acre

Sale 174 v. Sale 171 - Tracts in 200 to 400 Meters Water Depth



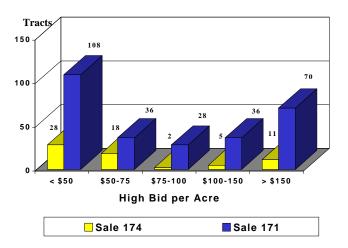
Bidding Activity by High Bid per Acre

Sale 174 v. Sale 171 - Tracts in 400 to 800 Meters Water Depth



Bidding Activity by High Bid per Acre

Sale 174 v. Sale 171 - Tracts in More than 800 Meters Water Depth



Bidding Activity by High Bid per Acre

## Appendix I

## Sale 174

# High Bid Rejections

#### Sale 174 Rejections

High bids on 11 tracts were rejected in Sale 174. Eight of the rejected blocks received one bid and three were two-bid tracts. By water depth category, the rejections were as follows: six in less than 200 meters; none in 200 to 400 meters; one in 400 - 800 meters; and four in 800 meters or more.

Tract No.	Bids	High Bid	MROV	RAM	GAEOT
21311	1	\$157,000	\$940,000	NA	NA
21321	1	\$110,700	\$940,000	NA	NA
21339	1	\$275,123	\$920,000	NA	NA
21341	1	\$341,950	\$800,000	NA	NA
21360	1	\$225,820	\$640,000	NA	NA
21377	1	\$325,891	\$1,600,000	NA	NA

Table I1. Sale 174 Rejections in Water Depths Less than 200 Meters Royalty Rate = 1/6; No Royalty Suspension Volume

Table I2. Sale 174 Rejections in Water Depths of 400 to 800 Meters Royalty Rate = 1/8; 52.5 MMBOE Royalty Suspension Volume

Tract No.	Bids	High Bid	MROV	RAM	GAEOT
21383	1	\$386,000	\$3,200,000	NA	NA

Tract No.	Bids	High Bid	MROV	RAM	GAEOT
21397	1	\$246,000	\$1,400,000	NA	NA
21404	2	\$1,223,467	\$2,300,000	NA	\$859,956
21422	2	\$697,800	\$4,000,000	\$1,672,933	\$964,048
21440	2	\$511,488	\$2,700,000	\$1,211,329	\$835,620

Table I3. Sale 174 Rejections in Water Depths 800 Meters or More Royalty Rate = 1/8; 87.5 MMBOE Royalty Suspension Volume

Sale 174 was the fifth sale to use the revised bid adequacy procedures in which the Revised Arithmetic-average Measure (RAM) replaced the Geometric Average Evaluation of Tract (GAEOT) as the secondary bid acceptance criterion. If the GAEOT were still in use for this sale, the high bid on one additional tract (21404) would have been accepted. The modified procedures were published in the *Federal Register* on July 12, 1999 (64 FR 37560-37562).

### Appendix J

### Sale 174

## Revised 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.

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**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.

[[Page 37561]]

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 been 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

[[Page 37562]]

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. [FR Doc. 99-17662 Filed 7-9-99; 8:45 am] BILLING CODE 4310-MR-P