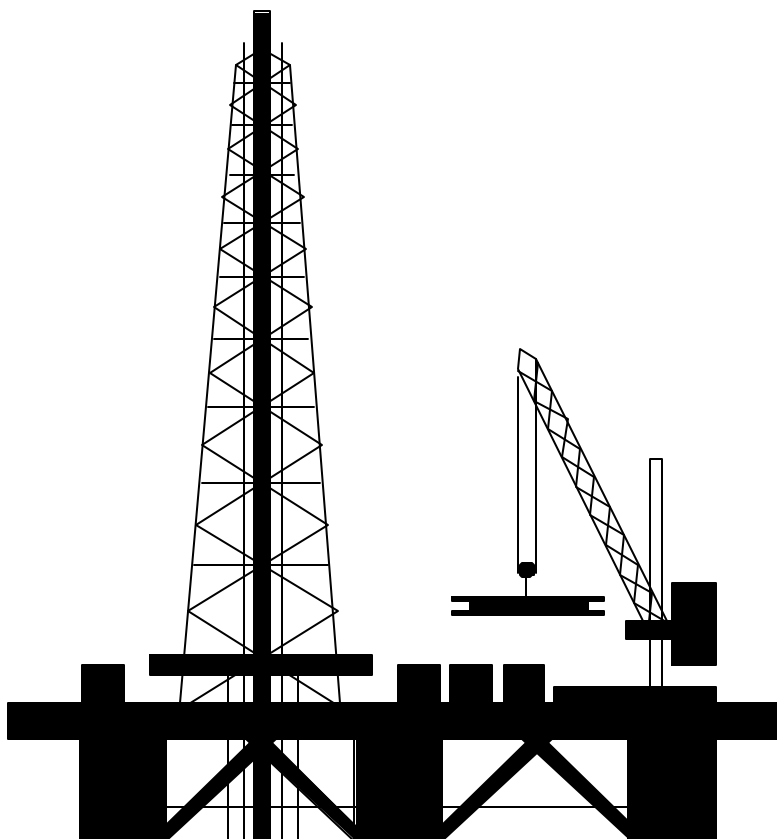


Central Gulf of Mexico Sale 182 March 20, 2002

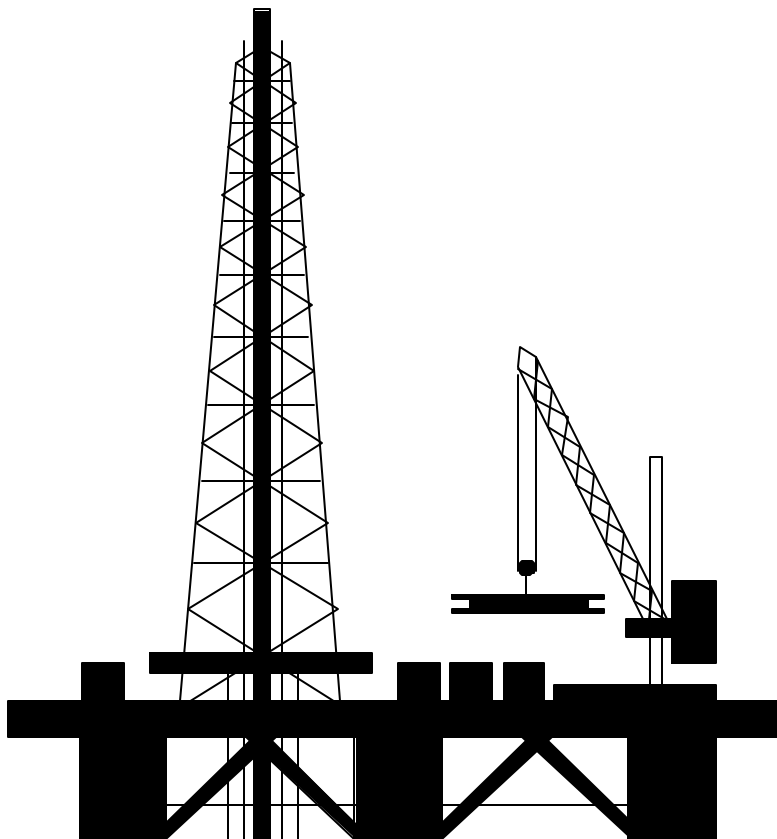
Sale Summary, Bidding Results and
Related Analyses



Central Gulf of Mexico Sale 182 March 20, 2002

Sale Summary, Bidding Results and
Related Analyses

By
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Central Gulf of Mexico

Sale 182 March 20, 2002 Sale Overview

Sale 182 in the Central Gulf of Mexico (CGOM) was the second sale in that planning area in which the sale's royalty suspension volumes and water depth categories were specified in the notice of lease sale. In this sale, 506 tracts received 697 bids (an average of 1.38 bids per tract). Tracts that were in water depths eligible for deepwater royalty relief totaled 199, while 288 were in water depths eligible for shallow water, deep gas royalty relief.

Bidding Results

Sale 182, in terms of the number of tracts receiving bids, was about 7 percent smaller than CGOM Sale 178-1, held in 2001. The decrease in aggregate high bids in Sale 182 compared to Sale 178-1 was about 28 percent. In Sale 182, 506 tracts received 697 bids with high bids totaling \$363,210,467.

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.	288	\$125.71	405	1.41
200 - 399 m.	19	\$11.54	28	1.47
400 - 799 m.	42	\$30.72	46	1.10
800 - 1,599 m.	81	\$100.94	109	1.35
1,600+ m.	76	\$94.30	109	1.43
Total	506	\$363.21	697	1.38

Bidding activity in Sale 182 resulted in a decrease in the number of tracts receiving bids and number of bids, as well as a relatively large decrease in aggregate high bids compared to the previous CGOM sale (Sale 178-1, March 28, 2001). In Sale 178-1, 547 tracts received 780 bids, whereas 506 tracts received 697 bids in Sale 182, resulting in decreases of 7 and 11 percent, respectively. In addition, the sum of high bids submitted on tracts receiving bids in Sale 182 decreased by about 28 percent compared to Sale 178-1 (\$363.21 million v. \$505.47 million). The decrease in tracts, number of bids, and aggregate high bids was due to lower levels of

bidding activity, especially in water depths of less than 200 meters. The amount of competition for tracts was similar to other recent CGOM lease sales. About 73 percent of tracts received single-bids. Two-bid tracts accounted for the next highest percent of tracts receiving bids (about 19 percent). A summary of bidding results by number of bidders is presented in Table 2 and bidding results by number of bids for the various water depth zones are presented in Appendix B.

Table 2.—*Bidding Results by Number of Bids Submitted*¹

Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	370	73.12%	\$180.53	49.70%
2	94	18.58%	\$108.16	29.78%
3	33	6.52%	\$49.52	13.63%
4	7	1.38%	\$23.04	6.34%
5 or more	2	0.40%	\$1.96	0.54%
Total	506	100.00%	\$363.21	100.00%

Sale 182 was typical of sales in the CGOM as more tracts received high bids greater than \$50 per acre than those receiving less than that amount. In Sale 182, tracts with high bids greater than \$150 per acre accounted for about 67 percent of aggregate high bids, an amount lower than that observed in Sale 178-1. 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	211	41.70%	\$37.27	10.26%
\$50 - 74.99	105	20.75%	\$32.51	8.95%
\$75 - 99.99	49	9.68%	\$22.30	6.14%
\$100 - 149.99	48	9.49%	\$28.94	7.97%
\$150+	93	18.38%	\$242.18	66.68%
Total	506	100.00%	\$363.21	100.00%

¹ 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 42 tracts in 400 - 799 meters that are eligible for royalty suspension volumes of 5 million barrels of oil equivalent (MMBOE) received bids, as did 81 tracts in 800 - 1,599 meters that are eligible for royalty suspension volumes of 9 MMBOE and 76 tracts in 1,600 meters or more that are eligible for royalty suspension volumes of 12 MMBOE. These tracts accounted for 39 percent of the tracts in the sale receiving bids and 62 percent of the sale's high bids. To put the magnitude of this bidding activity in perspective, the number of tracts receiving bids in water depths of 400 meters or more in Sale 182 was 3 percent higher, but their associated high bids were 30 percent lower than those received in Sale 178-1. These results are interesting because in 400 - 799 meters, no royalty relief was offered in Sale 178-1, yet fewer tracts received, on average, lower bids in that water depth zone in Sale 182 with a royalty suspension volume of 5 MMBOE per lease. In addition, in Sale 182, the average high bid in 1,600 meters or more was much lower than in Sale 178-1.

In the water depth categories between 200 - 399 meters, bidding activity in Sale 182 was similar to the level observed in Sale 178-1 for tracts receiving bids, but the Sale 182 aggregate high bids were lower. In Sales 182 and 178-1, tracts in 200 - 399 meters were not eligible for automatic royalty suspension volumes.

In comparing the average high bid per acre by water depth category between Sales 182 and 178-1 in water depth categories below 400 meters, the Sale 182 averages were below those observed in Sale 178-1. In water depths less than 200 meters, the Sale 182 average was \$94.65/acre and the Sale 178-1 average was \$106.64/acre. In 200 - 399 meters, Sale 182's average was \$121.99/acre and Sale 178-1's was \$160.58/acre. In 400 - 799 meters, Sale 182's average was \$135.22/acre and Sale 178-1's was \$235.88/acre. Finally, in 800 meters or more, Sale 182's average was \$216.53/acre and Sale 178-1's was \$303.19/acre. These results suggest that industry continues to perceive significant economic potential to exist in all water depths in the CGOM as the average high bids continue to be well above the minimum bid level.

Phase 1 Results

Following the post-sale bid evaluation procedures, which include a modified 3-bid rule, high bids on 184 tracts were accepted in Phase 1 of Sale 182. High bids were accepted on 129 tracts in water depths less than 200 meters, 1 tract in 200 - 399 meters, and 54 tracts in water depths of 400 meters or more, which are eligible for automatic royalty suspension volumes. The Phase 1-accepted high bids accounted for about 36 percent of the tracts, representing 14 percent of the high bids. In terms of number of Phase 1 bid acceptances, the two most successful companies were Magnum Hunter Production, with 16 of 41 high bids accepted, and Chevron USA, with 13 of 29 high bids accepted.

High bids accepted in Phase 1 were in two categories of tracts. There were 182 wildcat and confirmed tracts determined to be non-viable. In addition, two tracts were accepted in Phase 1 by the number of bids rule. The Sale 182, Phase 1 results by number of bids 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	164	89.13%	\$42.92	82.79%
2	18	9.78%	\$6.78	13.08%
3+	2	1.09%	\$2.14	4.13%
Total	184	100.00%	\$51.84	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	108	58.70%	\$18.68	36.03%
\$50 - 74.99	42	22.83%	\$12.80	24.69%
\$75 - 99.99	15	8.15%	\$6.37	12.29%
\$100 - 149.99	11	5.98%	\$6.75	13.02%
\$150+	8	4.34%	\$7.24	13.97%
Total	184	100.00%	\$51.84	100.00%

Revised Arithmetic Average Measure of Tract (RAM)

The RAM is a secondary bid acceptance criterion that was used in Phase 2 of the Sale 182 bid evaluation process on multi-bid tracts that have high bids that do not exceed the Government's Adjusted Delayed Value (ADV) of the tract. The ADV is explained in detail in Appendix J.

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

Use of the RAM allows the MMS to balance market factors and its own ADV evaluation in determining fair market value. Previously, using the Geometric Average Evaluation Of Tract (GAEOT), a few low losing bids on a tract were sufficient to require an MMS evaluation of the ADV well in excess of \$100 million for the high bid to be rejected. Using the RAM, the highest ADV required to reject a high bid on a multi-bid tract in Sale 182 was about \$37 million, and the

majority was less than \$3 million. These values are not unreasonable relative to high bids observed in this sale.

In Sale 182, 40 tracts classified as wildcat and confirmed receiving three or more bids were passed to Phase 2 for evaluation. These tracts, potentially, could have their bid acceptance or rejection decision based on the RAM. After adjusting the number of bids to include only those bids that are at least 25 percent of a tract's high bid, 33 tracts could be eligible for a decision based on the RAM. These 33 tracts would require ADV's of around \$0.29 million to \$37 million for rejection. For three tracts (G23867, G23923, and G24078) in Sale 182, the RAM was the decision rule that allowed the high bid to be accepted. 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 182 decreased to 77 from the 90 active in Sale 178-1, the previous CGOM sale. Fourteen companies submitted bids (either solo or jointly) on 20 or more tracts. Magnum Hunter Production was the most active company in terms of bids submitted with 64. The most apparent high bids, 42, were submitted by Spinnaker Exploration. Dominion Exploration & Production had the greatest aggregate high bids with a total of \$37.02 million.

With about 27 percent of the tracts receiving bids in the sale being multi-bid tracts, only one firm (Amerada Hess) that submitted 10 or more bids was the high bidder on every bid it submitted. For firms submitting 20 or more bids, the most successful bidder was Kerr-McGee Oil & Gas, with 36 high bids out of the 42 bids that it offered.

The 10 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 general, the companies that were most active in CGOM Sale 178-1 (March 28, 2001) continued to be among the most active in Sale 182. Although the magnitude of the high bids was lower in Sale 182 than in Sale 178-1, companies with high levels of interest in the CGOM in previous sales continued to participate in the current sale.

Appendix G presents a listing of bidding by the most active companies in Sales 182 and 178-1.

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
Dominion Exploration & Production	\$37,022,600	50 (4)	37 (4)
Spinnaker Exploration	\$28,770,381	56 (2)	42 (1)
BP Exploration & Production	\$27,244,990	56 (2)	39 (3)
Chevron USA	\$26,621,161	35 (8)	29 (7)
Phillips Petroleum	\$17,466,000	1 (64)	1 (53)
Kerr-McGee Oil & Gas	\$15,345,706	42 (5)	36 (5)
Shell Offshore	\$15,315,522	20 (14)	17 (12)
BHP Petroleum (Deepwater)	\$15,312,875	32 (10)	27 (8)
Nexen Petroleum Offshore USA	\$13,665,709	39 (6)	30 (6)
Mariner Energy	\$10,943,242	16 (21)	12 (17)

Sale 182 v. Sale 178-1

The results of Sale 182 were lower than the results of Sale 178-1 in every category of bidding activity. The average high bid per acre was \$182.31 in Sale 178-1 as compared with \$142.35 in Sale 182. In Sale 178-1, 547 tracts received 780 bids, thus exceeding the 506 tracts that received 697 bids in Sale 182. In addition, the number of bids per tract decreased slightly to 1.38 from 1.43 in the previous sale.

The amount of bidding activity in deep water in Sale 182 increased compared to Sale 178-1. Specifically, the number of tracts potentially eligible for deepwater royalty suspension volumes (water depth of 400 meters or more) receiving bids increased by about 3 percent, but the high bids on these tracts decreased 30 percent. Appendix H presents a graphical comparison of sale results.

In Sale 182, ten tracts with high bids that were rejected in Sale 178-1 received bids. In addition, there were three rejected tracts in Sale 178-1 with aggregate high bids of \$1,314,201 that did not receive bids in Sale 182.

The high bids on the ten tracts with bids increased from \$4,470,822 in Sale 178-1 to \$21,356,546 in Sale 182, an increase in high bids of 378 percent. The number of bids on these ten tracts increased from 17 to 21, a gain of 24 percent. Subsequently, the high bid on two of the tracts was rejected in Sale 182. For the eight tracts on which the high bids were accepted, the increase in high bids was 422 percent. The potential to realize substantial gains in high bids on tracts that were previously rejected highlights the importance of MMS's bid adequacy procedure.

Appendix A

Central Gulf of Mexico
Outer Continental Shelf
Oil and Gas Lease Sale 182

Bidding Summary

Central Gulf of Mexico

OCS Oil and Gas Lease Sale 182

Sale Day Statistics by Royalty Rate

	<u>16 2/3% Royalty</u>	<u>12 1/2% Royalty</u>	<u>Sale Total</u>
Tracts Receiving Bids	307	199	506
Acres Receiving Bids	1,422,717.79	1,128,857.68	2,551,575.47
Sum of High Bids	\$137,252,098	\$225,958,369	\$363,210,467
Sum of All Bids	\$177,463,230	\$264,977,806	\$442,441,036
Total Number of Bids	433	264	697
Average Bids	1.41	1.33	1.38
Companies Bidding	64	31	77
Highest Bid per Tract	\$7,355,500	\$17,466,000	\$17,466,000
- Tract Number	G23735	G24160	G24160
- Number of Bids	3	4	4
Highest Bid per Acre	\$2,007.09	\$3,032.29	\$3,032.29
- Tract Number	G24021	G24160	G24160
- Number of Bids	1	4	4
Most Bids	7	4	7
- Tract Number	G23867	G24078 G24160 G24207	G23867

Central Gulf of Mexico

OCS Oil and Gas Lease Sale 182

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

	<u>16 2/3% w/RS¹</u>	<u>16 2/3% w/ROY²</u>	<u>16 2/3% Total</u>
Tracts Receiving Bids	288	19	307
Acres Receiving Bids	1,328,126.55	94,591.24	1,422,717.79
Sum of High Bids	\$125,712,874	\$11,539,224	\$137,252,098
Sum of All Bids	\$163,626,912	\$13,836,318	\$177,463,230
Total Number of Bids	405	28	433
Average Bids	1.41	1.47	1.41
Companies Bidding	62	14	64
Highest Bid per Tract	\$7,355,500	\$3,231,690	\$7,355,500
- Tract Number	G23735	G24137	G23735
- Number of Bids	3	1	3
Highest Bid per Acre	\$2,007.09	\$561.06	\$2,007.09
- Tract Number	G24021	G24137	G24021
- Number of Bids	1	1	1
Most Bids	7	3	7
- Tract Number	G23867	G24020 G24026 G24093	G23867

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

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

Central Gulf of Mexico

OCS Oil and Gas Lease Sale 182

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

	<u>12 1/2% w/RS5¹</u>	<u>12 1/2% w/RS3²</u>	<u>12 1/2% w/RS4³</u>	<u>12 1/2% Royalty</u>
Tracts Receiving Bids	42	81	76	199
Acres Receiving Bids	227,152.97	463,944.71	437,760.00	1,128,857.68
Sum of High Bids	\$30,715,952	\$100,942,765	\$94,299,652	\$225,958,369
Sum of All Bids	\$31,565,140	\$125,332,768	\$108,079,898	\$264,977,806
Total Number of Bids	46	109	109	264
Average Bids	1.10	1.35	1.43	1.33
Companies Bidding	28	22	21	31
Highest Bid per Tract	\$5,777,990	\$17,466,000	\$14,857,000	\$17,466,000
- Tract Number	G24040	G24160	G24179	G24160
- Number of Bids	1	4	2	4
Highest Bid per Acre	\$1,003.12	\$3,032.29	\$2,579.34	\$3,032.29
- Tract Number	G24040	G24160	G24179	G24160
- Number of Bids	1	4	2	4
Most Bids	3	4	4	4
- Tract Number	G24153	G24160 G24207	G24078	G24078 G24160 G24207

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

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

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

Appendix B

Central Gulf of Mexico
Outer Continental Shelf
Oil and Gas Lease Sale 182

Bidding by Number of Bids

Sale 182

All Tracts

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	370	73.12%	\$180.53	49.70%
2	94	18.58%	\$108.16	29.78%
3	33	6.52%	\$49.52	13.63%
4	7	1.38%	\$23.04	6.34%
<u>5+</u>	<u>2</u>	<u>0.40%</u>	<u>\$1.96</u>	<u>0.54%</u>
Total	506	100.00%	\$363.21	100.00%

Tracts with 1/6 Royalty Rate

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	218	71.01%	\$66.08	48.14%
2	62	20.20%	\$35.05	25.53%
3	21	6.84%	\$30.84	22.47%
4	4	1.30%	\$3.33	2.43%
<u>5+</u>	<u>2</u>	<u>0.65%</u>	<u>\$1.96</u>	<u>1.42%</u>
Total	307	100.00%	\$137.25	100.00%

Tracts with 1/8 Royalty Rate

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	152	76.38%	\$114.45	50.65%
2	32	16.08%	\$73.11	32.36%
3	12	6.03%	\$18.68	8.27%
4	3	1.51%	\$19.71	8.72%
<u>5+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	199	100.00%	\$225.96	100.00%

Sale 182, by Water Depth Category

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

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	205	71.18%	\$58.99	46.93%
2	59	20.49%	\$33.54	26.68%
3	18	6.25%	\$27.90	22.19%
4	4	1.39%	\$3.33	2.65%
<u>5+</u>	<u>2</u>	<u>0.69%</u>	<u>\$1.96</u>	<u>1.56%</u>
Total	288	100.00%	\$125.71	100.00%

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

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	13	68.42%	\$7.09	61.41%
2	3	15.79%	\$1.51	13.07%
3	3	15.79%	\$2.94	25.51%
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	19	100.00%	\$11.54	100.00%

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

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	39	92.86%	\$25.83	84.10%
2	2	4.76%	\$3.38	11.00%
3	1	2.38%	\$1.51	4.90%
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	42	100.00%	\$30.72	100.00%

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

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	61	75.31%	\$61.03	60.46%
2	14	17.28%	\$15.61	15.47%
3	4	4.94%	\$5.56	5.51%
4	2	2.47%	\$18.73	18.56%
<u>5+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	81	100.00%	\$100.94	100.00%

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

No. Of Bids	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
1	52	68.42%	\$27.59	29.25%
2	16	21.05%	\$54.12	57.40%
3	7	9.21%	\$11.61	12.31%
4	1	1.32%	\$0.98	1.04%
<u>5+</u>	<u>0</u>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>
Total	76	100.00%	\$94.30	100.00%

Appendix C

Central Gulf of Mexico
Outer Continental Shelf
Oil and Gas Lease Sale 182

Bidding by High Bid per Acre

Sale 182

All Tracts

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	211	41.70%	\$37.27	10.26%
\$50 - 74.99	105	20.75%	\$32.51	8.95%
\$75 - 99.99	49	9.68%	\$22.30	6.14%
\$100 - 149.99	48	9.49%	\$28.94	7.97%
<u>\$150+</u>	<u>93</u>	<u>18.38%</u>	<u>\$242.18</u>	<u>66.68%</u>
Total	506	100.00%	\$363.21	100.00%

Tracts with 1/6 Royalty Rate

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	137	44.63%	\$21.03	15.32%
\$50 - 74.99	66	21.50%	\$18.90	13.77%
\$75 - 99.99	24	7.82%	\$9.58	6.98%
\$100 - 149.99	30	9.77%	\$16.67	12.14%
<u>\$150+</u>	<u>50</u>	<u>16.29%</u>	<u>\$71.07</u>	<u>51.78%</u>
Total	307	100.00%	\$137.25	100.00%

Tracts with 1/8 Royalty Rate

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	74	37.19%	\$16.24	7.19%
\$50 - 74.99	39	19.60%	\$13.61	6.03%
\$75 - 99.99	25	12.56%	\$12.72	5.63%
\$100 - 149.99	18	9.05%	\$12.27	5.43%
<u>\$150+</u>	<u>43</u>	<u>21.61%</u>	<u>\$171.11</u>	<u>75.73%</u>
Total	199	100.00%	\$225.96	100.00%

Sale 182, by Water Depth Category

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

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	126	43.75%	\$19.22	15.29%
\$50 - 74.99	64	22.22%	\$18.25	14.51%
\$75 - 99.99	24	8.33%	\$9.58	7.62%
\$100 - 149.99	30	10.42%	\$16.67	13.26%
<u>\$150+</u>	<u>44</u>	<u>15.28%</u>	<u>\$62.00</u>	<u>49.32%</u>
Total	288	100.00%	\$125.71	100.00%

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

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	11	57.89%	\$1.81	15.71%
\$50 - 74.99	2	10.53%	\$0.66	5.68%
\$75 - 99.99	0	0.00%	\$0.00	0.00%
\$100 - 149.99	0	0.00%	\$0.00	0.00%
<u>\$150+</u>	<u>6</u>	<u>31.58%</u>	<u>\$9.07</u>	<u>78.61%</u>
Total	19	100.00%	\$11.54	100.00%

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

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	26	61.90%	\$4.45	14.48%
\$50 - 74.99	3	7.14%	\$0.98	3.19%
\$75 - 99.99	4	9.52%	\$2.10	6.83%
\$100 - 149.99	1	2.38%	\$0.81	2.62%
<u>\$150+</u>	<u>8</u>	<u>19.05%</u>	<u>\$22.39</u>	<u>72.89%</u>
Total	42	100.00%	\$30.39	100.00%

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

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	23	28.40%	\$5.76	5.71%
\$50 - 74.99	15	18.52%	\$5.04	5.00%
\$75 - 99.99	15	18.82%	\$7.60	7.52%
\$100 - 149.99	11	13.58%	\$7.35	7.28%
<u>\$150+</u>	<u>17</u>	<u>20.99%</u>	<u>\$75.19</u>	<u>74.49%</u>
Total	81	100.00%	\$100.94	100.00%

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

High Bid/acre	Tracts	Percent of Tracts	High Bids (\$MM)	Percent of High Bids
< \$50	25	32.89%	\$6.03	6.40%
\$50 - 74.99	21	27.63%	\$7.59	8.05%
\$75 - 99.99	6	7.89%	\$3.03	3.21%
\$100 - 149.99	6	7.89%	\$4.12	4.37%
<u>\$150+</u>	<u>18</u>	<u>23.68%</u>	<u>\$73.53</u>	<u>77.97%</u>
Total	76	100.00%	\$94.30	100.00%

Appendix D

Central Gulf of Mexico
Outer Continental Shelf
Oil and Gas Lease Sale 182
Bidding Results – Graphs

Distribution of High Bids Sale 182, CGOM

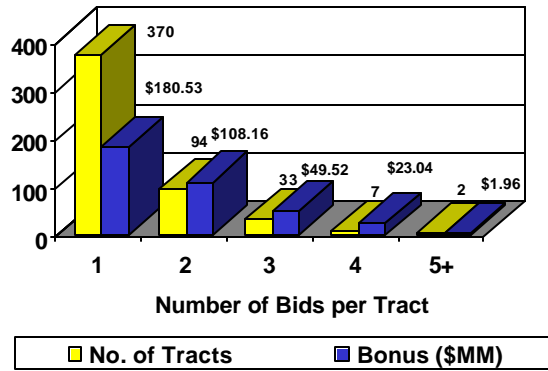
Prepared by:
Economics Division, MMS

Sale 182 (CGOM) Bidding Results

- 506 tracts received 697 bids (1.38 bids/tract)
- High bids were \$363.21 MM
- Average high bid per acre was \$142.35
- 77 companies submitted bids
- 307 tracts in < 400 meters received bids - 60.67% of tracts and 37.79% of high bids
- 199 tracts in 400+ meters received bids - 30.33% of tracts and 62.21% of high bids

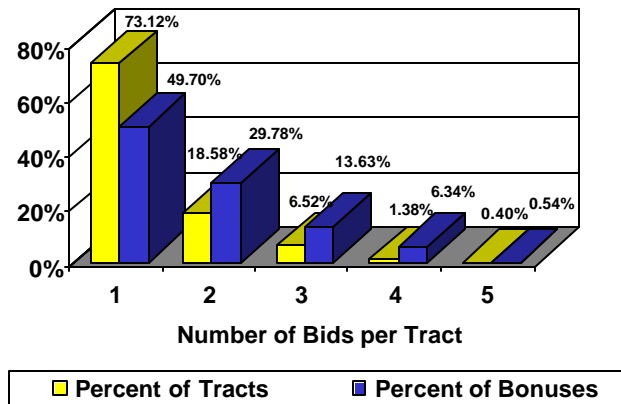
Sale 182, Aggregate

Bidding Activity by Bids per Tract



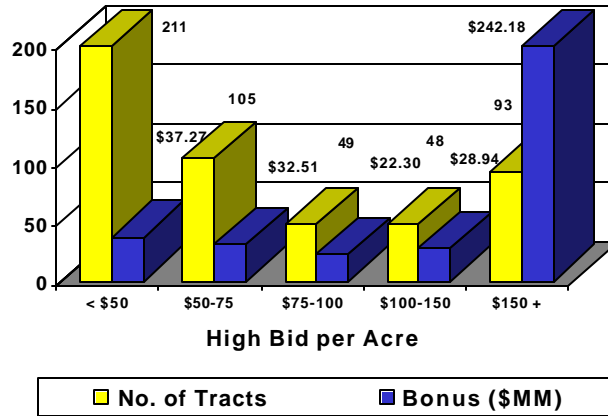
Sale 182, Aggregate

Bidding Activity by Bids per Tract



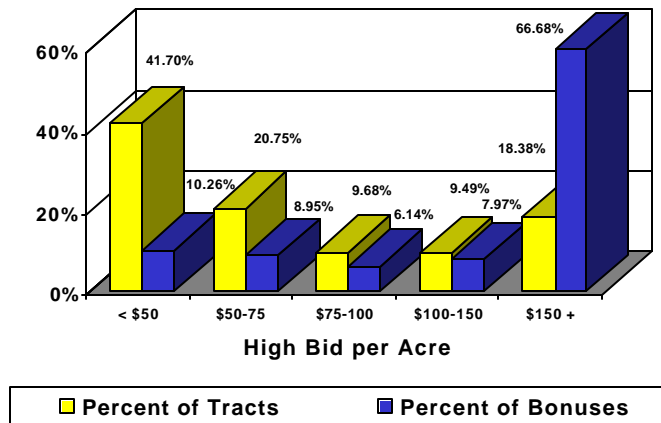
Sale 182, Aggregate

Bidding Activity by High Bid per Acre



Sale 182, Aggregate

Bidding Activity by High Bid per Acre



Sale 182

Bidding by Water Depth Category

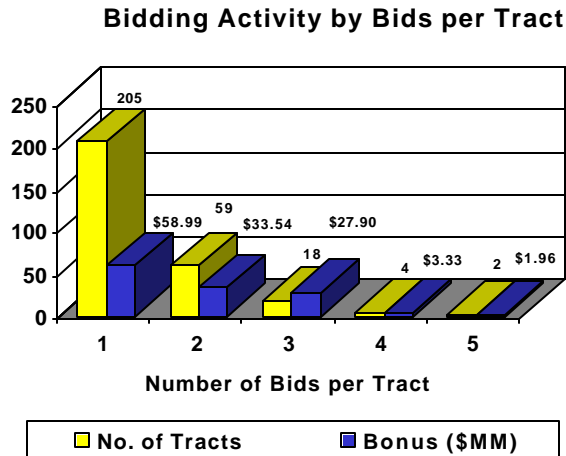
Prepared by:
Economics Division, MMS

Sale 182 (CGOM)

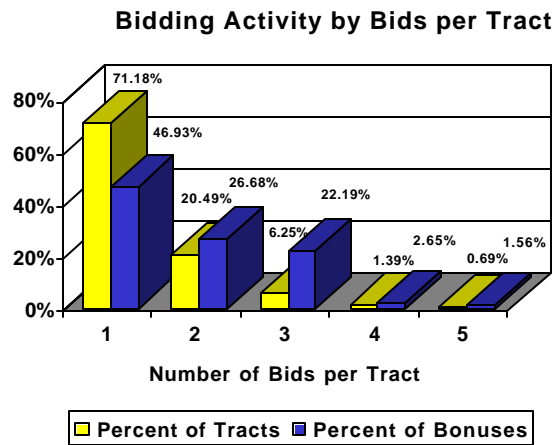
Bidding by Water Depth Category

- 288 tracts in < 200 meters received 405 bids and high bids of \$125.71 MM (\$94.65/acre)
- 19 tracts in 200-399 meters had 28 bids and high bids of \$11.54 MM (\$121.99/acre)
- 42 tracts in 400-799 meters had 46 bids and high bids of \$30.72 MM (\$135.22/acre)
- 81 tracts in 800-1,599 meters had 109 bids and high bids of \$100.94 MM (\$217.57/acre)
- 76 tracts in > 1,600 meters had 109 bids and high bids of \$94.30 MM (\$215.41/acre)

Sale 182, Tracts in < 200 Meters Water Depth

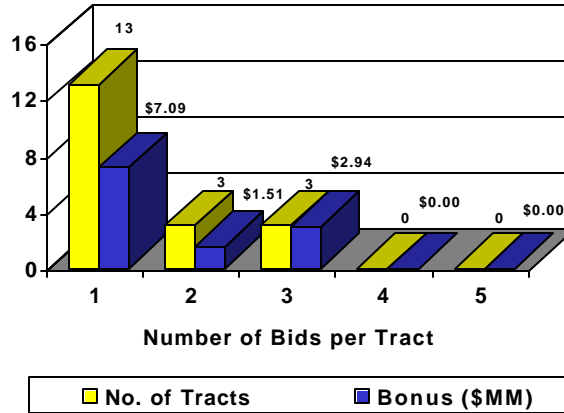


Sale 182, Tracts in < 200 Meters Water Depth



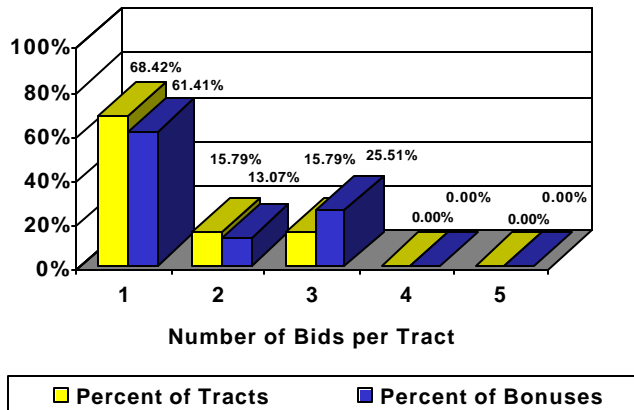
Sale 182, Tracts in 200-399 Meters Water Depth

Bidding Activity by Bids per Tract



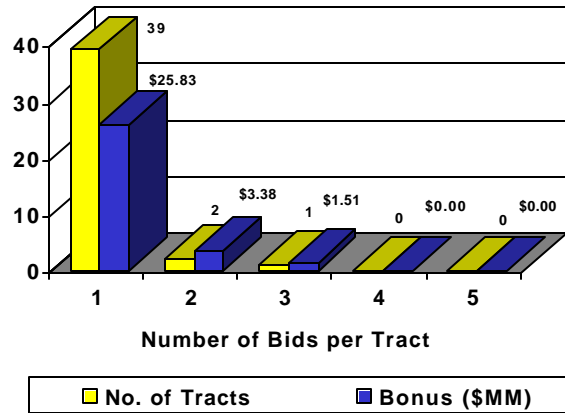
Sale 182, Tracts in 200-399 Meters Water Depth

Bidding Activity by Bids per Tract



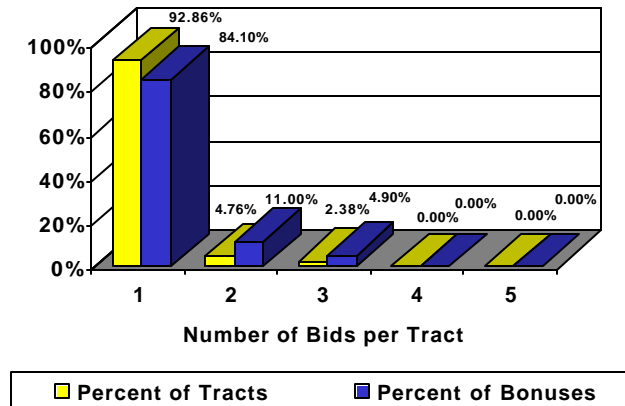
Sale 182, Tracts in 400-799 Meters Water Depth

Bidding Activity by Bids per Tract



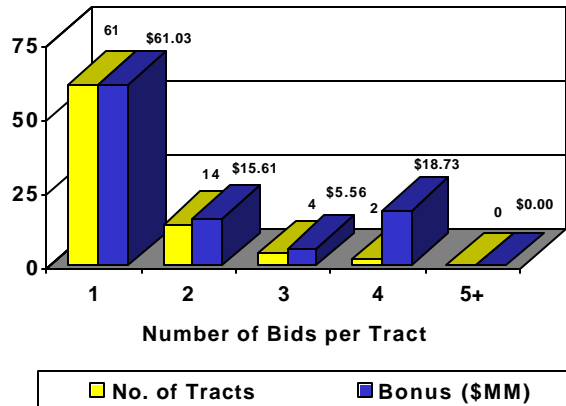
Sale 182, Tracts in 400-799 Meters Water Depth

Bidding Activity by Bids per Tract



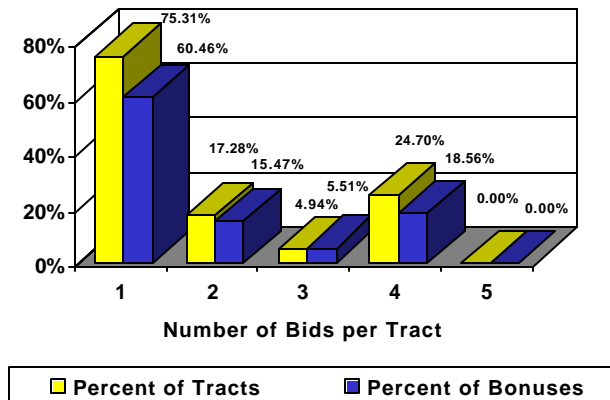
Sale 182, Tracts in 800-1,599 Meters Water Depth

Bidding Activity by Bids per Tract

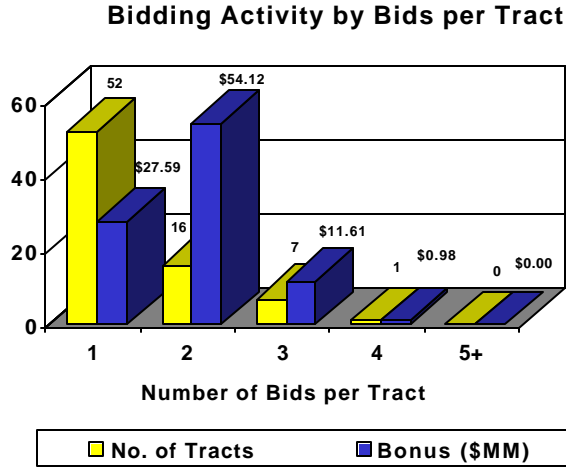


Sale 182, Tracts in 800-1,599 Meters Water Depth

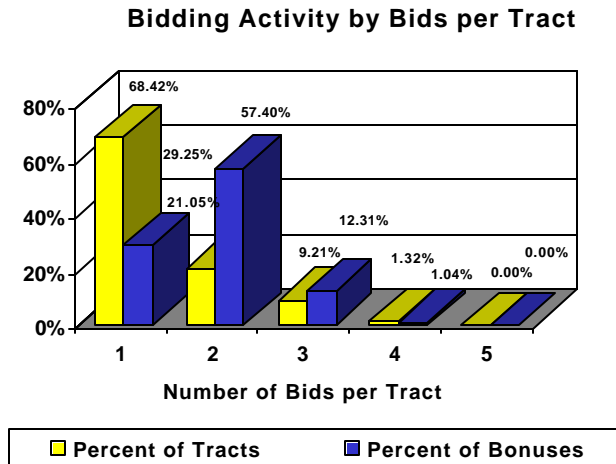
Bidding Activity by Bids per Tract



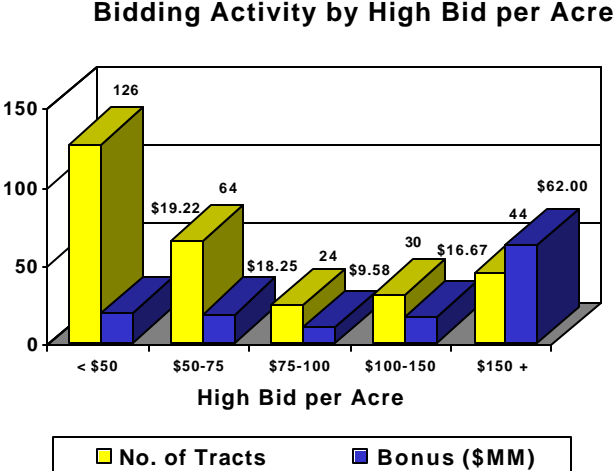
Sale 182, Tracts in 1,600 Meters Water Depth



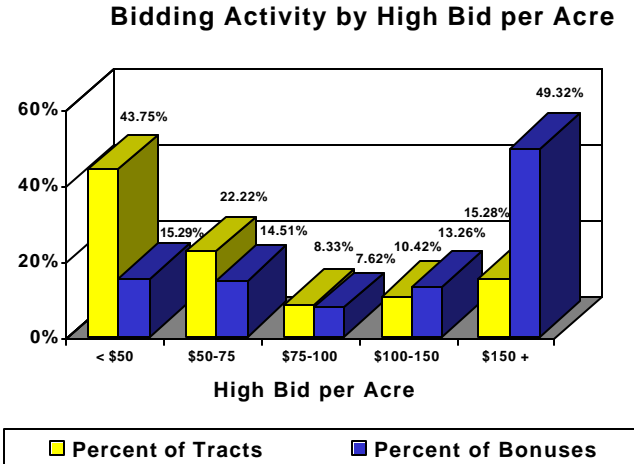
Sale 182, Tracts in 1,600 Meters Water Depth



Sale 182, Tracts in < 200 Meters Water Depth

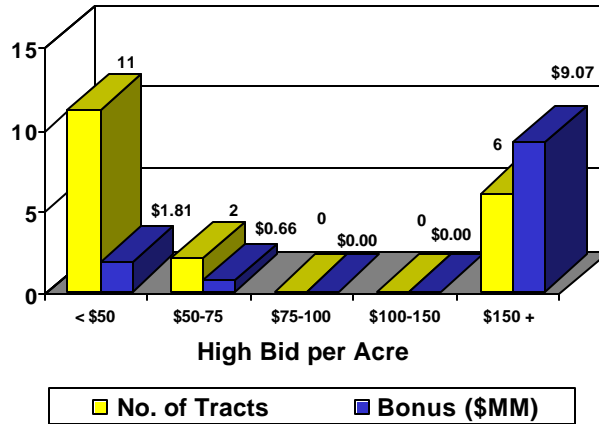


Sale 182, Tracts in < 200 Meters Water Depth



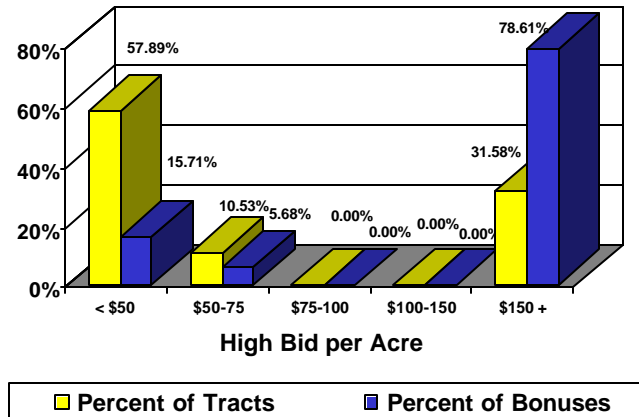
Sale 182, Tracts in 200-399 Meters Water Depth

Bidding Activity by High Bid per Acre



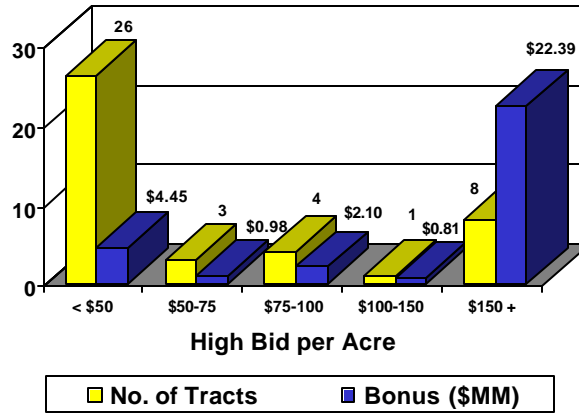
Sale 182, Tracts in 200-399 Meters Water Depth

Bidding Activity by High Bid per Acre



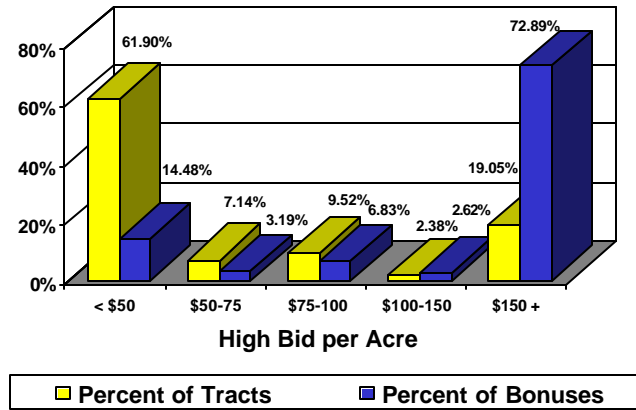
Sale 182, Tracts in 400-799 Meters Water Depth

Bidding Activity by High Bid per Acre



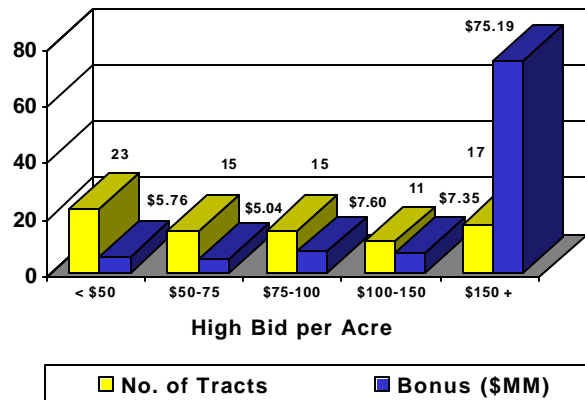
Sale 182, Tracts in 400-799 Meters Water Depth

Bidding Activity by High Bid per Acre



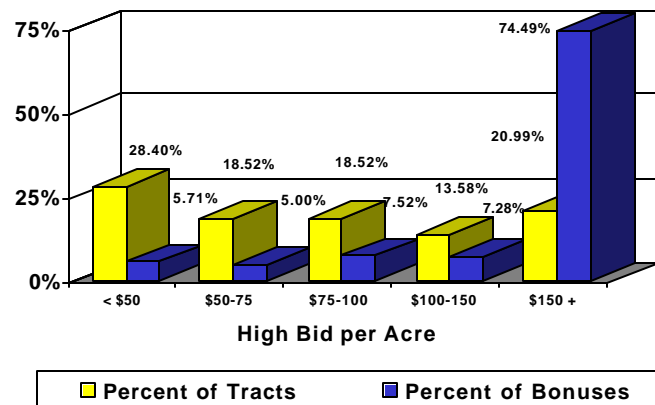
Sale 182, Tracts in 800-1,599 Meters Water Depth

Bidding Activity by High Bid per Acre



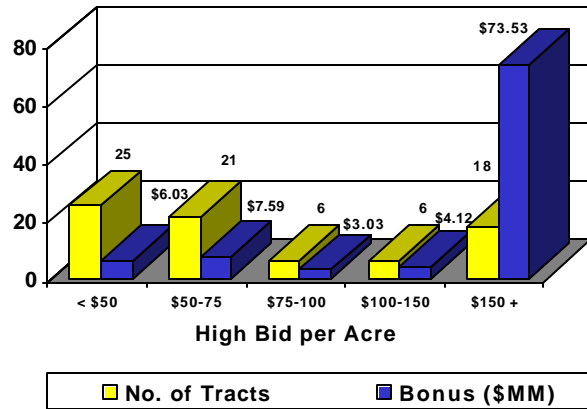
Sale 182, Tracts in 800-1,599 Meters Water Depth

Bidding Activity by High Bid per Acre



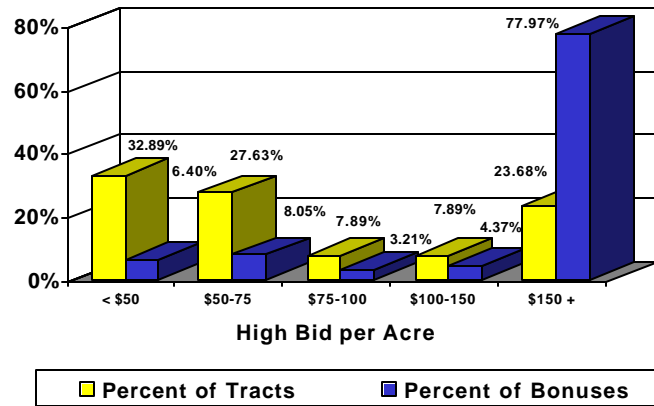
Sale 182, Tracts in 1,600+ Meters Water Depth

Bidding Activity by High Bid per Acre



Sale 182, Tracts in 1,600+ Meters Water Depth

Bidding Activity by High Bid per Acre



Appendix E

Revised Arithmetic Average Measure (RAM)

Sale 182, Tracts with Three or More Bids

In Sale 182, three or more bids were received on 42 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.

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

Category	< 25%	25 - 50%	50 - 75%	> 75%	Total
< 200 m.	10	9	5	0	24
200 - 399 m.	2	1	0	0	3
400 - 799 m.	1	0	0	0	1
800 – 1,599 m.	2	3	1	0	6
1,600 m. or more	3	4	1	0	8
Total	18	17	7	0	42

Sale 182 was the tenth sale in which the modified number of bids rule was used for Phase 1 acceptance of high bids on selected tracts receiving three or more bids. Under the rule, high bids on wildcat and confirmed tracts receiving three or more bids are accepted in Phase 1, if the third highest bid on the tract is at least 50 percent of the high bid and the high bid per acre ranks in the top 75 percent of high bids per acre for all three-or-more bid tracts within a specified water depth category. (The procedure is described in the *Federal Register*, vol. 64, no.132, pp. 37,560-37,562.) In Sale 182, two three-or-more bid tracts met the bid acceptance criteria described above.

Sale 182 was also the tenth sale using a modified Phase 2 averaging rule, the “Revised Arithmetic Average Measure” (RAM) of tract value. The RAM is a secondary bid acceptance rule that is used on multi-bid tracts if the Government’s value of the tract (ADV) exceeds the high bid. The RAM is an arithmetic average of a tract’s high bid, ADV, and all other bids that are at least 25 percent of the high bid. If a bid on a tract is not at least 25 percent of the high bid, that bid is considered an outlier and not included in the RAM calculation. Thus, the adjusted number of bids on a tract for the RAM calculation can be less than the total number of bids that a tract receives.

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

Forty tracts were passed to Phase 2 for further evaluation that potentially could use the RAM as the bid acceptance decision rule. Of those, 7 did not have second bids that were at least 25 percent of the high bids, so the use of the RAM as a Phase 2 decision criterion for those tracts was not a possibility. For the remaining 33 tracts, the ADV's that would be needed to reject a tract's high bid using the RAM were calculated. Using the RAM, 14 tracts need an ADV of less than \$1 million; 15 tracts need an ADV of between \$1 million to \$5 million; 2 need an ADV of between \$5 million to \$10 million; and 2 need an ADV of more than \$10 million for high bid rejection based on this criterion. The results are presented in Table E2.

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

Category	< \$1 MM	\$1-5 MM	\$5-10 MM	> \$10 MM	Total
< 200 m.	10	8	1	1	20
200 - 399 m.	1	1	0	0	2
400 - 799 m.	0	0	0	0	0
800 – 1,599 m.	1	3	0	1	5
1,600 m. or more	2	3	1	0	6
Total	14	15	2	2	33

Sale 182, Tracts with Three or More Bids Passed to Phase 2

Table E3.—Tracts in < 200 Meters; potential Royalty Suspension Volume of 20 billion cubic feet for natural gas from deep (more than 15,000 feet) wells

Tract	High Bid	No. of Bids	3 rd Bid as % of High Bid	Adjusted No. of Bids	ADV to Reject w/RAM
G23734	\$845,500	3	18.51%	2	\$1,014,788
G23735	\$7,355,500	3	5.30%	2	\$12,234,000
G23736	\$4,145,000	3	10.27%	1	Not Applicable
G23745	\$1,252,000	3	20.29%	2	\$2,178,500
G23752	\$576,210	4	37.31%	4	\$1,716,252
G23771	\$212,760	3	64.65%	3	\$294,028
G23807	\$617,650	4	24.82%	2	\$920,050
G23813	\$675,000	3	22.96%	2	\$1,064,550
G23816	\$703,001	5	44.49%	5	\$2,438,553
G23851	\$539,957	3	24.83%	2	\$681,495
G23867	\$1,252,167	7	27.45%	3	\$2,922,761

Tract	High Bid	No. of Bids	3rd Bid as % of High Bid	Adjusted No. of Bids	ADV to Reject w/RAM
G23881	\$315,000	3	48.14%	3	\$561,455
G23902	\$210,000	3	60.48%	3	\$350,974
G23915	\$1,295,896	3	16.48%	1	Not Applicable
G23923	\$1,535,335	3	49.54%	3	\$2,795,353
G23928	\$508,266	3	29.65%	3	\$957,694
G23939	\$2,277,500	3	23.07%	2	\$3,977,500
G23946	\$5,551,250	3	18.16%	2	\$7,213,612
G23964	\$206,400	3	64.58%	3	\$333,240
G23966	\$206,400	3	25.03%	3	\$396,210
G23967	\$407,200	3	49.48%	3	\$665,440
G23968	\$358,500	3	42.58%	3	\$606,540

Table E4.—*Tracts in 200 - 399 Meters; No Royalty Suspension Volume*

Tract	High Bid	No. of Bids	3rd Bid as % of High Bid	Adjusted No. of Bids	ADV to Reject w/RAM
G24020	\$1,308,266	3	12.67%	2	\$2,289,032
G24026	\$327,500	3	50.60%	3	\$508,530
G24093	\$1,308,266	3	9.44%	1	Not Applicable

Table E5.—*Tracts in 400 - 799 Meters; 5 MMBOE Royalty Suspension Volume*

Tract	High Bid	No. of Bids	3rd Bid as % of High Bid	Adjusted No. of Bids	ADV to Reject w/RAM
G24153	\$1,505,585	3	12.91%	1	Not Applicable

Table E6.—*Tracts in 800 – 1,599 Meters; 9 MMBOE Royalty Suspension Volume*

Tract	High Bid	No. of Bids	3 rd Bid as % of High Bid	Adjusted No. of Bids	ADV to Reject w/RAM
G24043	\$442,391	3	56.81%	3	\$773,136
G24160	\$17,466,000	4	35.19%	3	\$37,751,105
G24207	\$1,265,782	4	26.85%	3	\$2,691,961
G24214	\$3,055,585	3	8.61%	1	Not Applicable
G24229	\$1,501,015	3	23.65%	2	\$2,370,530
G24231	\$565,585	3	40.98%	3	\$1,146,220

Table E7.—*Tracts in 1,600 Meters or More; 12 MMBOE Royalty Suspension Volume*

Tract	High Bid	No. of Bids	3 rd Bid as % of High Bid	Adjusted No. of Bids	ADV to Reject w/RAM
G24069	\$511,000	3	43.74%	3	\$886,500
G24075	\$423,000	3	55.08%	3	\$700,500
G24078	\$981,654	4	28.04%	3	\$1,889,672
G24107	\$4,155,500	3	8.54%	2	\$6,309,296
G24133	\$815,585	3	43.12%	3	\$1,511,869
G24208	\$2,055,585	3	10.59%	1	Not Applicable
G24209	\$520,585	3	41.71%	3	\$1,011,933
G24210	\$3,127,050	3	7.75%	1	Not Applicable

The RAM was used in the acceptance of the high bid on three tracts. For tract G23867, the ADV on the tract was \$1.5 million, which exceeded the high bid of \$1,252,167, but the high bid was accepted because it was larger than the tract's RAM of \$896,477. For tract G23923, the ADV on the tract was \$2.6 million, which exceeded the high bid of \$1,535,335, but the high bid was accepted because it was larger than the tract's RAM of \$1,486,497. For tract G24078, the ADV on the tract was \$1.0 million, which exceeded the high bid of \$981,654, but the high bid was accepted because it was larger than the tract's RAM of \$759,236.

Appendix F

Summary of Company Bids

Sale 182 - Company Bids by Total Amount of High Bids

Rank	Company #	Company Name	Total	High	Losers	Total Exposed	Total High Bids	Total Unsuccessful
1	282	Dominion Exploration & Production	50	37	13	\$40,400,375	\$37,022,600	\$3,377,775
2	2169	Spinnaker Exploration	56	42	14	\$32,220,630	\$28,770,381	\$3,450,249
3	2481	BP Exploration & Production	56	39	17	\$32,468,881	\$27,244,990	\$5,223,891
4	78	Chevron USA	35	29	6	\$28,692,597	\$26,621,161	\$2,071,436
5	56	Phillips Petroleum	1	1	0	\$17,466,000	\$17,466,000	\$0
6	2219	Kerr-McGee Oil & Gas	42	36	6	\$17,299,226	\$15,345,706	\$1,953,520
7	689	Shell Offshore	20	17	3	\$17,240,320	\$15,315,522	\$1,924,798
8	2277	BHP Petroleum (Deepwater)	32	27	5	\$20,000,585	\$15,312,875	\$4,687,710
9	2079	Nexen Petroleum Offshore USA	39	30	9	\$18,829,510	\$13,665,709	\$5,163,800
10	818	Mariner Energy	16	12	4	\$13,368,776	\$10,943,242	\$2,425,534
11	185	Samedan Oil	19	17	2	\$10,225,771	\$9,780,058	\$445,713
12	2117	Enterprise Oil Gulf of Mexico	9	9	0	\$9,225,962	\$9,225,962	\$0
13	59	Amerada Hess	10	10	0	\$9,211,533	\$9,211,533	\$0
14	1777	Ocean Energy	19	17	2	\$9,774,331	\$9,124,012	\$650,319
15	2190	PanCanadian Gulf of Mexico	10	9	1	\$8,520,983	\$8,441,299	\$79,684
16	1	Conoco	33	24	9	\$11,679,200	\$8,296,045	\$3,383,155
17	2525	Westport Resources	17	14	3	\$9,369,732	\$7,515,032	\$1,854,700
18	64	Hunt Oil	16	11	5	\$8,682,584	\$7,370,541	\$1,312,043
19	236	El Paso Production	22	17	5	\$8,739,167	\$6,649,528	\$2,089,639
20	3	Union Oil Company of California	27	18	9	\$8,159,520	\$5,918,699	\$2,240,821
21	2349	Magnum Hunter Production	64	41	23	\$8,307,658	\$5,691,106	\$2,616,552
22	1689	Murphy Exploration & Production	11	9	2	\$6,169,238	\$5,630,925	\$538,313
23	1364	Newfield Exploration	14	7	7	\$7,845,344	\$5,267,500	\$2,577,844
24	2480	Davis Offshore	9	4	5	\$9,706,758	\$4,860,794	\$4,845,965
25	2579	Tana Exploration	10	8	2	\$4,499,535	\$4,276,193	\$223,342
26	2058	LLOG Exploration Offshore	23	10	13	\$10,128,208	\$4,052,384	\$6,075,825
27	1704	Remington Oil and Gas	39	25	14	\$5,020,668	\$3,723,106	\$1,297,563
28	276	Exxon Mobil	17	10	7	\$5,405,000	\$3,320,000	\$2,085,000
29	2397	Samson Offshore	19	12	7	\$4,129,563	\$3,047,647	\$1,081,916
30	981	Anadarko Petroleum	9	6	3	\$3,518,960	\$2,789,100	\$729,860

Rank	Company #	Company Name	Total	High	Losers	Total Exposed	Total High Bids	Total Unsuccessful
31	231	Pogo Producing	6	6	0	\$2,718,366	\$2,718,366	\$0
32	2222	PetroQuest Energy	2	2	0	\$2,559,554	\$2,559,554	\$0
33	730	Walter Oil & Gas	7	6	1	\$2,583,739	\$2,365,151	\$218,588
34	2421	Devon Energy Production	6	4	2	\$3,452,630	\$2,302,935	\$1,149,695
35	2479	Republic Exploration	3	3	0	\$2,095,445	\$2,095,445	\$0
36	724	Marathon Oil	11	7	4	\$2,581,640	\$1,846,755	\$734,885
37	1046	The Houston Exploration Company	6	3	3	\$6,371,956	\$1,700,763	\$4,671,193
38	2266	Energy Partners	4	4	0	\$1,326,600	\$1,326,600	\$0
39	2466	Gryphon Exploration	12	3	9	\$3,048,005	\$1,315,229	\$1,732,776
40	1217	AEDC (USA)	3	2	1	\$1,267,456	\$1,144,000	\$123,456
41	2493	Pure Resources	4	3	1	\$1,374,109	\$1,061,332	\$312,777
42	2470	The Wiser Oil Company	17	12	5	\$1,214,031	\$927,144	\$286,888
43	1978	The William G. Helis Company	6	5	1	\$1,009,285	\$891,923	\$117,362
44	2580	Elite Exploration	4	4	0	\$785,008	\$785,008	\$0
45	2268	Bois d'Arc Offshore	6	6	0	\$656,500	\$656,500	\$0
46	2427	Virgin Offshore USA	1	1	0	\$630,000	\$630,000	\$0
47	2577	Magnolia Offshore Exploration	5	3	2	\$975,660	\$530,260	\$445,400
48	2341	Winwell Resources	1	1	0	\$518,002	\$518,002	\$0
49	771	Texaco Exploration and Production	2	2	0	\$432,720	\$432,720	\$0
50	222	Aviara Energy	4	2	2	\$930,078	\$409,278	\$520,800
51	777	OXY USA	2	1	1	\$472,755	\$371,864	\$100,891
52	2211	EEX Corporation	9	6	3	\$525,834	\$370,056	\$155,778
53	2538	Manti Resources	2	2	0	\$349,500	\$349,500	\$0
54	2407	Woodside Energy (USA)	4	1	3	\$746,280	\$334,665	\$411,615
55	145	J. M. Huber Corporation	2	2	0	\$325,883	\$325,883	\$0
56	1711	Cairn Energy USA	1	1	0	\$315,000	\$315,000	\$0
57	560	Seneca Resources	3	1	2	\$605,656	\$294,552	\$311,104
58	1999	Houston Energy	6	4	2	\$330,115	\$280,661	\$49,454
59	2248	Agip Petroleum Exploration	2	1	1	\$395,500	\$244,300	\$151,200
60	2108	Transworld Exploration & Production	2	2	0	\$226,260	\$226,260	\$0

Rank	Company #	Company Name	Total	High	Losers	Total Exposed	Total High Bids	Total Unsuccessful
61	2522	Denbury Offshore	1	1	0	\$225,000	\$225,000	\$0
62	2583	Endeavor Exploration	2	1	1	\$973,360	\$212,760	\$760,600
63	2377	MCX Gulf of Mexico	1	1	0	\$212,003	\$212,003	\$0
64	1355	Cabot Oil & Gas	2	1	1	\$280,000	\$202,500	\$77,500
65	2436	Palace Exploration	2	1	1	\$280,000	\$202,500	\$77,500
66	2375	Duke Energy Hydrocarbons	1	1	0	\$196,217	\$196,217	\$0
67	774	Taylor Energy	1	1	0	\$175,000	\$175,000	\$0
68	537	Paragon Petroleum	1	1	0	\$150,800	\$150,800	\$0
69	1866	Range Energy Ventures	2	1	1	\$245,565	\$140,078	\$105,487
70	1586	Petsec Energy	1	1	0	\$128,875	\$128,875	\$0
71	2459	Strassner Management	1	1	0	\$65,000	\$65,000	\$0
72	48	Forest Oil	2	1	1	\$197,015	\$35,482	\$161,533
73	1207	Petrobras America	2	1	1	\$143,650	\$34,900	\$108,750
74	1958	Maxus (US) Exploration	5	0	5	\$1,500,000	\$0	\$1,500,000
75	1513	Callon Petroleum Operating	1	0	1	\$218,581	\$0	\$218,581
76	1819	ATP Oil & Gas	1	0	1	\$206,700	\$0	\$206,700
77	1630	Cheyenne International	1	0	1	\$113,094	\$0	\$113,094

Appendix G

Sales 182 and 178-1

Active Bidders

Companies Participating in 20 or More Bids in Sale 182

Company	Co. #	< 200 m.	200 - 399 m.	400 - 799 m.	800 - 1,599 m.	1,600 + m.	Total	Exposure	Exposure Rank	Exposure per Bid
Magnum Hunter Production	2349	63	1	0	0	0	64	\$8,307,658	22	\$129,807
Spinnaker Exploration	2169	15	3	18	18	2	56	\$32,220,630	3	\$575,368
BP Exploration & Production	2481	18	7	10	6	15	56	\$32,468,881	2	\$579,801
Dominion Exploration & Production	282	19	0	9	21	1	50	\$40,400,375	1	\$808,008
Kerr-McGee Oil & Gas	2219	21	1	6	7	7	42	\$17,299,226	8	\$411,886
Nexen Petroleum Offshore USA	2079	10	4	14	8	3	39	\$18,829,510	6	\$482,808
Remington Oil and Gas	1704	39	0	0	0	0	39	\$5,020,668	28	\$128,735
Chevron USA	78	21	0	8	5	1	35	\$28,692,597	4	\$819,788
Conoco	1	0	0	5	28	0	33	\$11,679,200	11	\$353,915
BHP Petroleum (Deepwater)	2277	0	4	13	11	4	32	\$20,000,585	5	\$625,018
Union Oil Company of California	3	24	0	2	0	1	27	\$8,159,520	23	\$302,204
LLOG Exploration Offshore	2058	14	2	3	3	1	23	\$10,128,208	13	\$440,357
El Paso Production	236	22	0	0	0	0	22	\$8,739,167	19	\$397,235
Shell Offshore	689	8	4	5	2	1	20	\$17,240,320	9	\$862,016

Companies Participating in 20 or More Bids in Sale 178-1

Company	Co. #	< 200 m.	200 - 399 m.	400 - 799 m.	800 - 1,599 m.	1,600 + m.	Total	Exposure	Exposure Rank	Exposure per Bid
Magnum Hunter Production	2349	62	0	0	0	0	62	\$7,340,895	18	\$118,402
Chevron USA	78	42	2	0	10	5	59	\$26,913,886	10	\$456,168
Spinnaker Exploration	2169	23	3	3	20	5	54	\$32,179,161	8	\$595,910
Remington Oil and Gas	1704	45	0	0	0	0	45	\$8,097,945	17	\$179,954
Dominion Exploration	282	19	1	0	18	6	44	\$32,282,526	7	\$733,694
Samedan Oil	185	18	0	3	12	9	42	\$40,529,829	3	\$964,996
Kerr-McGee Oil & Gas	2219	6	3	6	10	11	36	\$59,266,020	2	\$1,646,278
BP Exploration & Production	2481	14	2	3	12	3	34	\$36,322,288	5	\$1,068,303
Shell Offshore	689	19	0	6	9	0	34	\$28,354,770	9	\$833,964
The Wiser Oil Company	2470	31	0	0	0	0	31	\$3,007,060	39	\$97,002
Anadarko Petroleum	981	9	2	11	7	0	29	\$3,369,019	6	\$116,173
Amerada Hess	59	5	0	0	12	9	26	\$22,913,214	11	\$881,277
Devon Energy Production	2421	17	0	1	2	4	24	\$9,155,825	15	\$381,493
Gryphon Exploration	2466	24	0	0	0	0	24	\$5,843,901	25	\$243,496
Murphy Exploracion & Production	1689	1	0	0	19	3	23	\$39,204,120	4	\$1,704,527
Nexen Petroleum Offshore	2079	11	0	1	10	1	23	\$13,168,100	13	\$572,526
Samson Offshore	2397	23	0	0	0	0	23	\$5,653,626	26	\$245,810
Exxon Asset Management	2295	0	0	1	15	6	22	\$89,460,000	1	\$4,066,364
Houston Energy	1999	22	0	0	0	0	22	\$1,321,857	56	\$60,084
Chieftain International	1385	18	0	3	0	0	21	\$8,138,160	16	\$387,531
Union Oil Co. of California	3	12	0	0	2	7	21	\$6,486,859	21	\$308,898

Appendix H

Sales 182 and 178-1

Comparison of Sales - Graphs

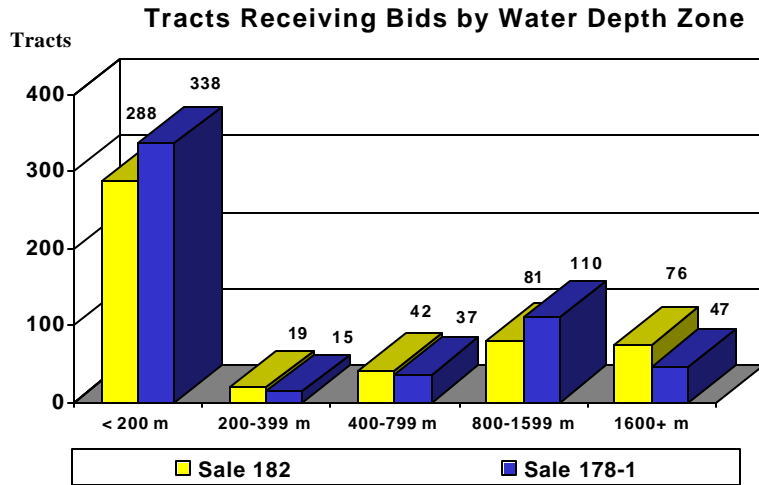
Sale 182 v. Sale 178-1

Prepared by:
Economics Division, MMS

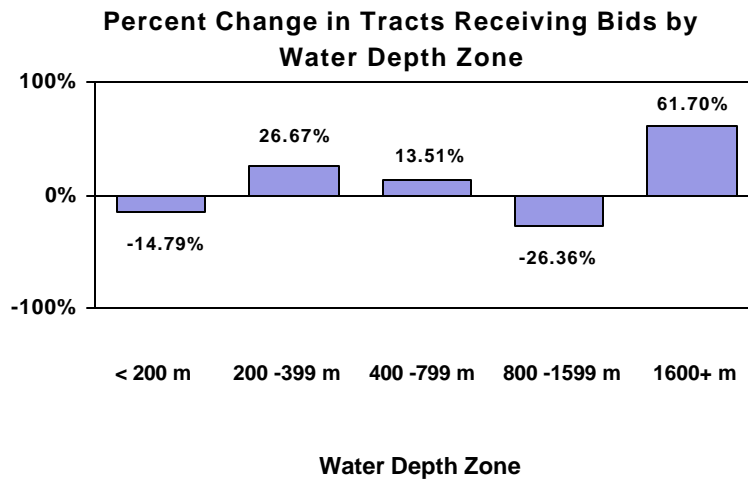
Sale 182 v. Sale 178-1 (CGOM) Comparison of Results

- In aggregate, 506 tracts received high bids of \$363.21 MM in Sale 182 and 547 tracts received high bids of \$505.47 MM in Sale 178-1
- Bids per tract decreased from 1.43 in Sale 178-1 to 1.38 in Sale 182
- Sale 182 had 288 tracts in < 200 m. receiving high bids of \$125.71 MM v. 338 tracts and high bids of \$167.55 MM in Sale 178-1
- Sale 182 had 218 tracts in > 200 m. receiving high bids of \$237.50 MM v. 209 tracts and high bids of \$337.92 MM in Sale 178-1

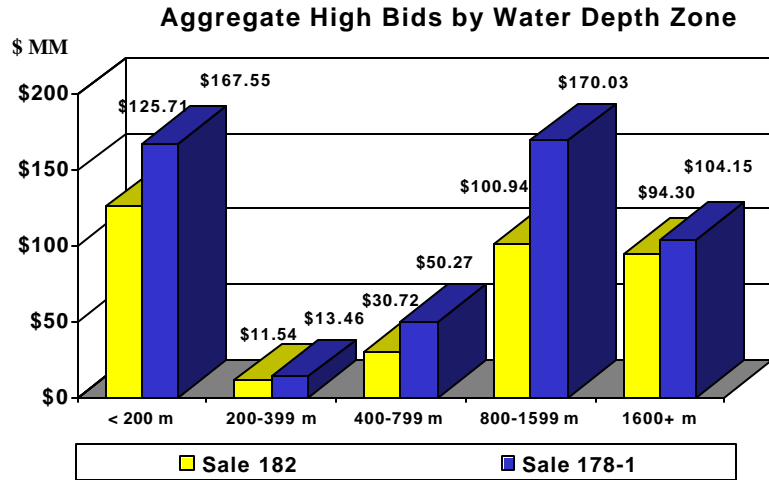
Sale 182 v. Sale 178-1 - Tracts



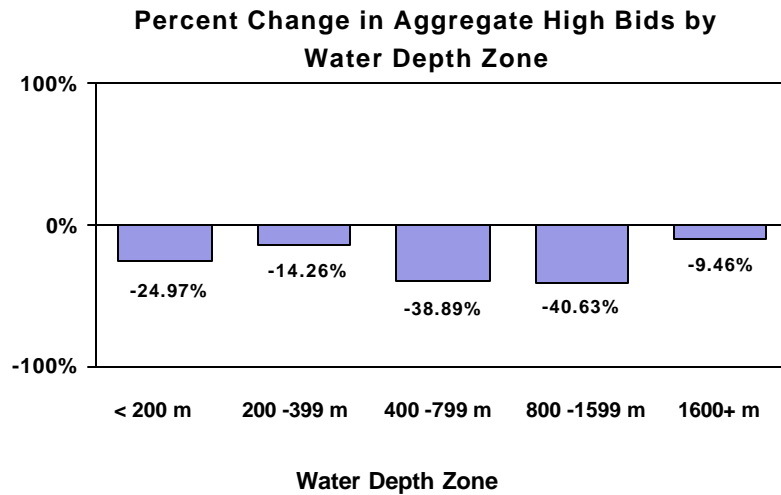
Sale 182 v. Sale 178-1 - Tracts



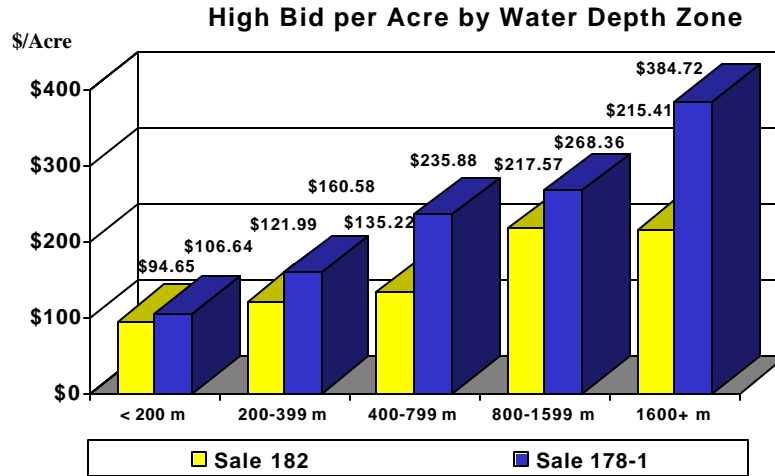
Sale 182 v. Sale 178-1 - Bonuses



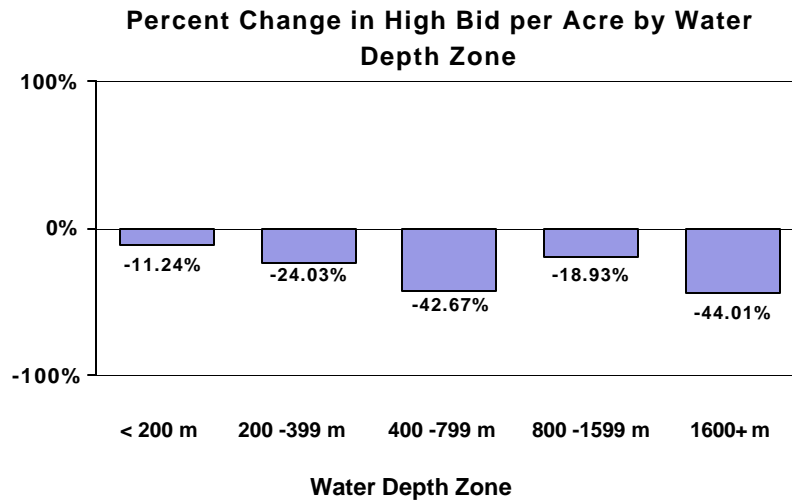
Sale 182 v. Sale 178-1 - Bonuses



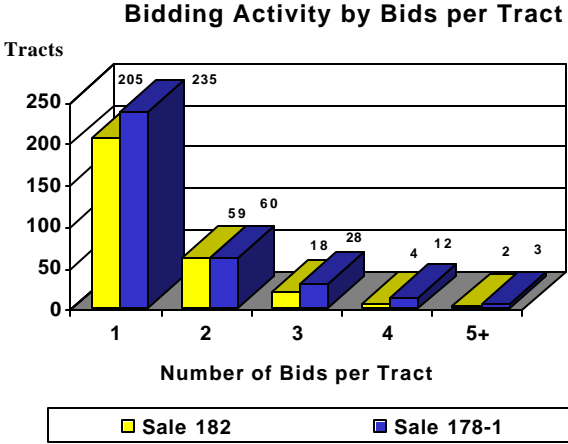
Sale 182 v. Sale 178-1 - High Bid per Acre



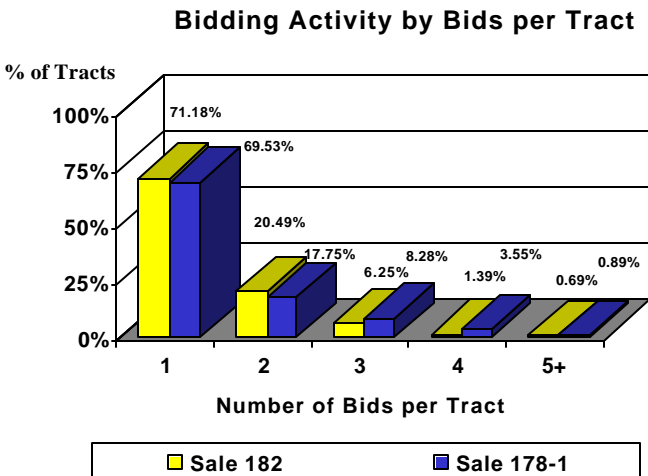
Sale 182 v. Sale 178-1 - High Bid per Acre



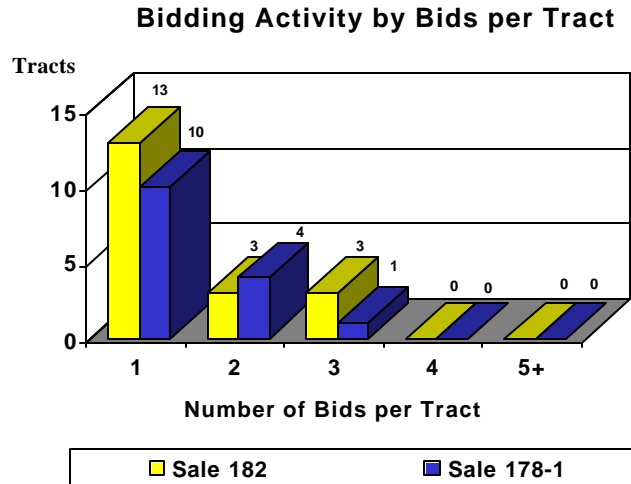
Sale 182 v. Sale 178-1 - Tracts < 200 Meters Water Depth



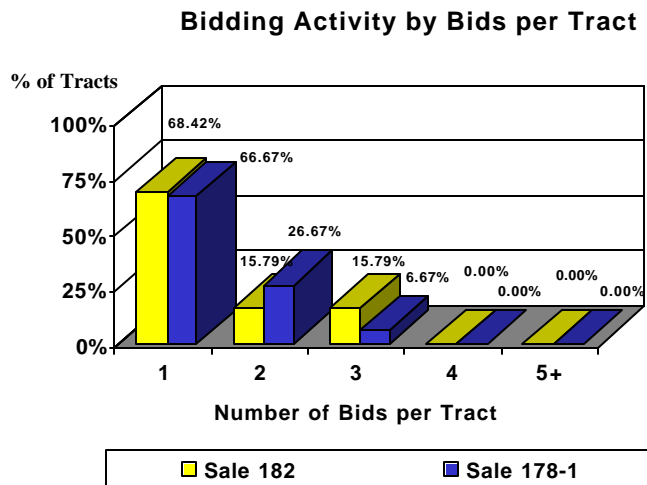
Sale 182 v. Sale 178-1 - Tracts < 200 Meters Water Depth



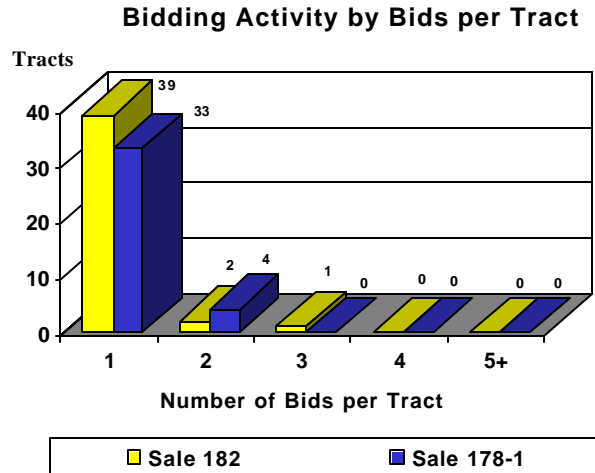
Sale 182 v. Sale 178-1 - Tracts in 200 to 399 Meters Water Depth



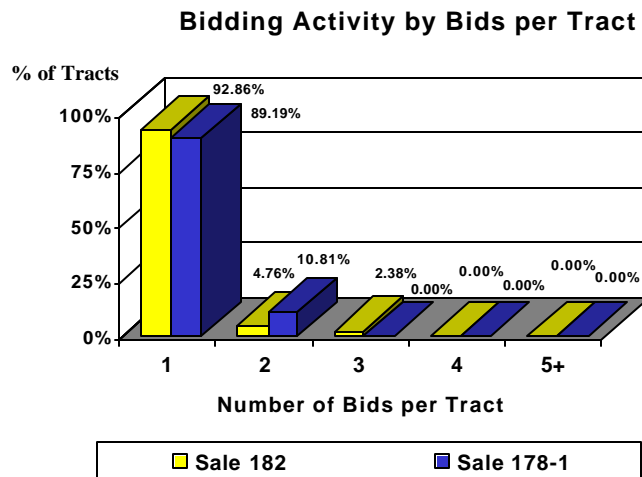
Sale 182 v. Sale 178-1 - Tracts in 200 to 399 Meters Water Depth



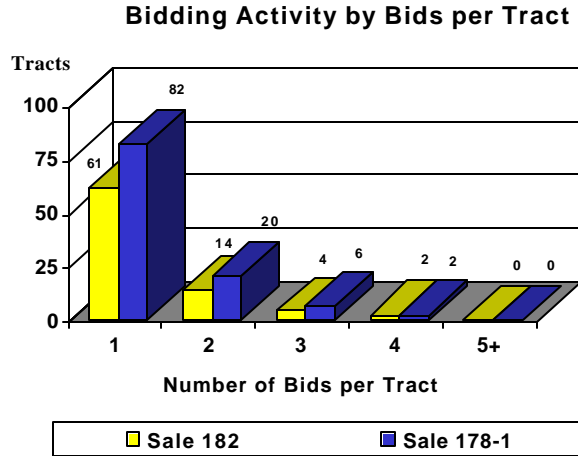
Sale 182 v. Sale 178-1 - Tracts in 400 to 799 Meters Water Depth



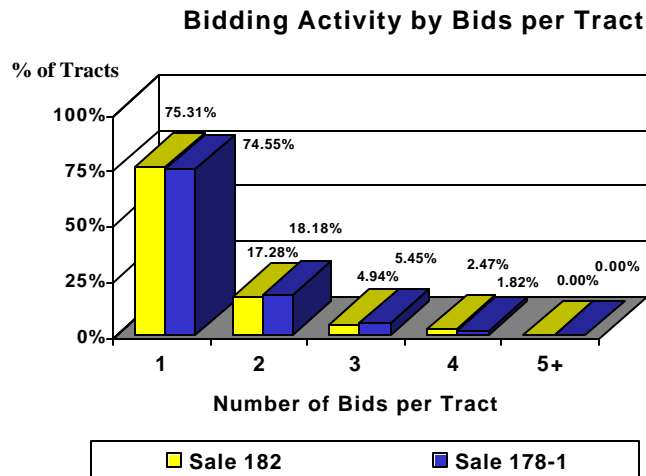
Sale 182 v. Sale 178-1 - Tracts in 400 to 799 Meters Water Depth



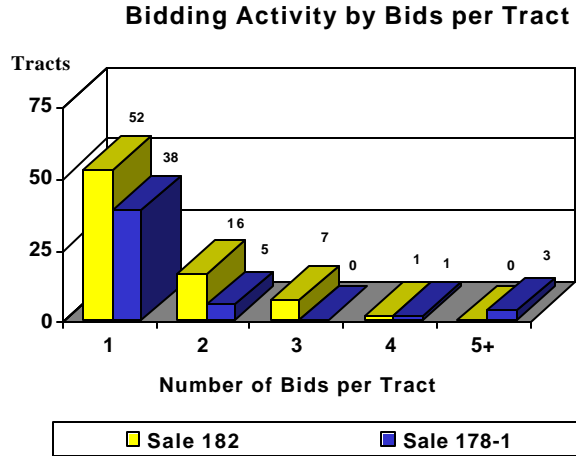
Sale 182 v. Sale 178-1 - Tracts in 800 to 1599 Meters Water Depth



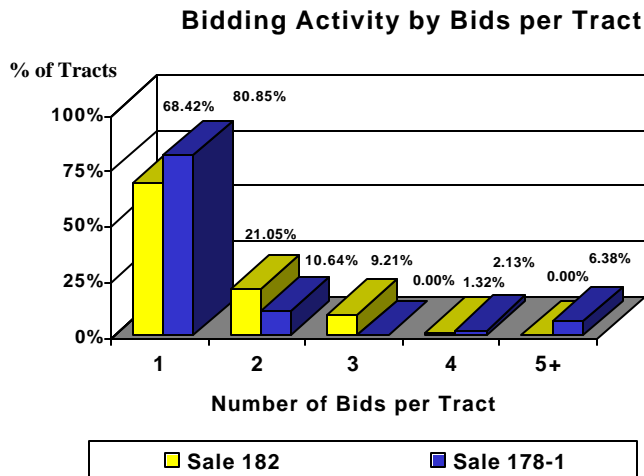
Sale 182 v. Sale 178-1 - Tracts in 800 to 1599 Meters Water Depth



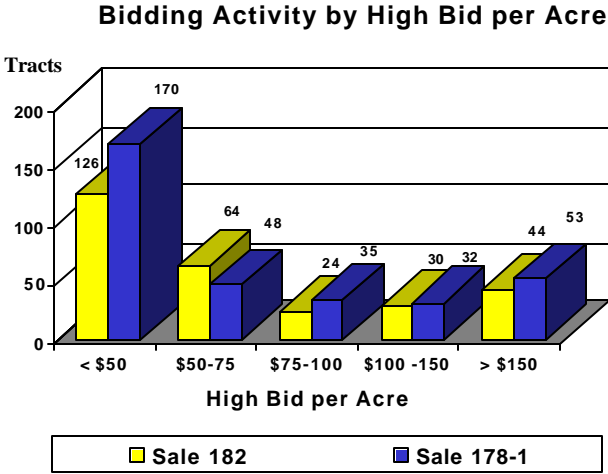
Sale 182 v. Sale 178-1 - Tracts in 1600+ Meters Water Depth



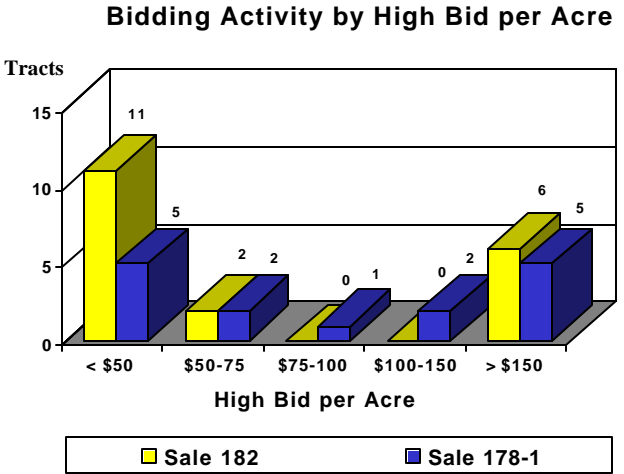
Sale 182 v. Sale 178-1 - Tracts in 1600+ Meters Water Depth



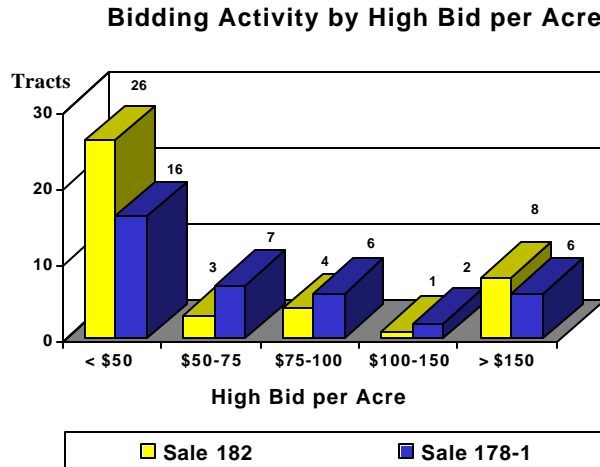
Sale 182 v. Sale 178-1 - Tracts < 200 Meters Water Depth



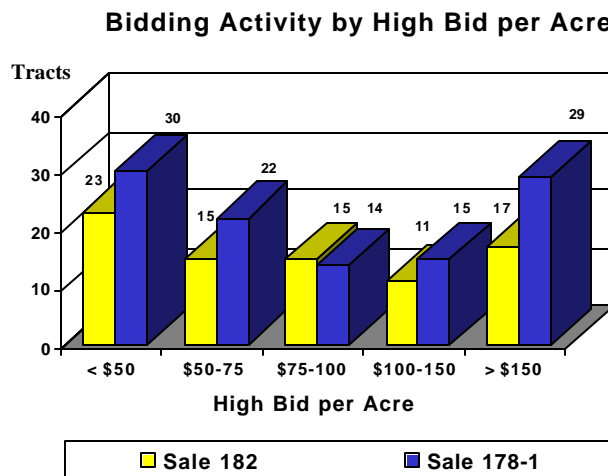
Sale 182 v. Sale 178-1 - Tracts in 200 to 399 Meters Water Depth



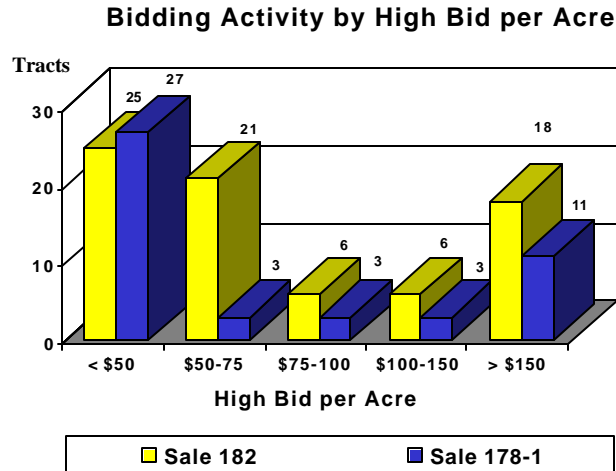
Sale 182 v. Sale 178-1 - Tracts in 400 to 799 Meters Water Depth



Sale 182 v. Sale 178-1 - Tracts in 800 to 1599 Meters Water Depth



Sale 182 v. Sale 178-1 - Tracts in 1600+ Meters Water Depth



Appendix I

High Bid Rejections

Sale 182 Rejections

High bids on 15 tracts were rejected in Sale 182. The rejected blocks received from one bid to three bids. By water depth category, the rejections were as follows: seven in less than 200 meters, four in 200 to 399 meters, three in 400 to 799 meters, and one in 800 to 1,599 meters.

Table I1.—*Sale 182, Rejections in Water Depths Less than 200 Meters; Royalty Rate = 1/6; Potential Royalty Suspension Volume for Natural Gas from Deep (15,000 feet or more) Wells*

Tract No.	Bids	High Bid	ADV	RAM
G23746	1	\$263,555	\$1,000,000	Not Applicable
G23789	2	\$215,983	\$1,500,000	\$641,161
G23790	2	\$688,250	\$2,400,000	\$1,155,407
G23795	1	\$276,350	\$800,000	Not Applicable
G23825	2	\$455,000	\$1,300,000	\$628,705
G23869	1	\$140,000	\$740,000	Not Applicable
G23821	2	\$251,650	\$780,000	\$393,883

Table I2.—*Sale 182, Rejections in Water Depths of 200-399 Meters; Royalty Rate = 1/6; No Royalty Suspension Volume*

Tract No.	Bids	High Bid	ADV	RAM
G24018	1	\$135,704	\$500,000	Not Applicable
G24019	1	\$157,704	\$510,000	Not Applicable
G24020	3	\$1,308,266	\$3,400,000	\$1,678,589
G24026	3	\$327,500	\$1,800,000	\$650,368

Table I3.—*Sale 182, Rejections in Water Depths of 400-799 Meters; Royalty Rate = 1/8; 5 MMBOE Royalty Suspension Volume*

Tract No.	Bids	High Bid	ADV	RAM
G24090	1	\$145,704	\$710,000	Not Applicable
G24091	1	\$145,704	\$600,000	Not Applicable
G24163	1	\$508,585	\$1,200,000	Not Applicable

Table I4.—*Sale 182, Rejection in Water Depths of 800-1,599 Meters; Royalty Rate = 1/8; 9 MMBOE Royalty Suspension Volume*

Tract No.	Bids	High Bid	ADV	RAM
G24048	1	\$458,266	\$1,000,000	Not Applicable

Appendix J

Bid Adequacy Procedures

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

DEPARTMENT OF THE INTERIOR

Minerals Management Service

Modifications to the Bid Adequacy Procedures

AGENCY: Minerals Management Service (MMS), Interior.

ACTION: Notification of procedural change.

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

DATES: This modification is effective July 1, 1999.

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

The revised bid adequacy procedures are described below.

What Definitions Apply to These Procedures?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

What Problem Is Addressed by the Change?

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

What Change Is Being Made?

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

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The Department of the Interior Mission

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



The Minerals Management Service Mission

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

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

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