

OIL LEASING ON THE OUTER CONTINENTAL SHELF ADJACENT TO OREGON and WASHINGTON

By V. C. Newton, Jr.* and C. J. Newhouse**

A total of \$35.5 million in cash bonus offers was received October 1, 1964, when officials representing the U.S. Bureau of Land Management opened the sealed envelopes which contained oil company bids for tracts of federal shelf land. The lease-sale was held at the Statler Hotel in Los Angeles and approximately 120 persons from industry attended. Representatives from the State of Oregon Land Board and Department of Geology and Mineral Industries were present to observe the procedure.

The sale proved to be highly successful. A total of \$27,770,000 was bid for outer continental shelf lands bordering Oregon and \$7,770,000 for shelf lands adjacent to Washington. Leases covered 425,430 acres off shore from Oregon and 155,420 acres off the Washington shore (see maps). Yearly rentals for the first lease year made the sum of receipts from the lease-sale \$37 million.

Eleven major firms participated in the bidding. Several of the companies bid both jointly and separately on leases, indicating differing opinions of the geology. Pan-American Petroleum and Atlantic Refining Co., even though not engaged in extensive offshore studies until 1964, were among the most active competitors.

<u>Leading Successful Bidders</u>	
Shell Oil Co.	\$ 8,651,230
Pan American Petrol.	7,342,490
Union Oil Co.	6,905,340
Standard of Cal.	4,784,520
Atlantic Refining Co.	3,576,270
Superior	2,342,890

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** Cartographer-Geographer, Oregon Dept. Geology and Mineral Ind.

The areas of main interest are more than 10 miles from shore. The western margin of the lease block off Florence is 35 miles from land. Water depth at this distance is 500 feet. The small lease block opposite Tillamook Bay is 30 miles from shore and the water depth at this location is 1,500 feet. Shell was the only bidder on the Tillamook block.

Bidding formulas

A study of the bidding statistics reveals that companies or groups of companies used formulas for bidding. Shell Oil Co. was the most consistent in bidding a calculated value for tracts it wanted. In Washington, Shell was not a strong competitor. The company lost all the tracts for which it submitted a blanket bid of \$47,400. Pan American-Atlantic Refining played a game of blanket bidding, employing the formula \$30,000; \$58,000; and \$87,000, with high bids on desirable leases. Standard-Union countered with their philosophy of blanket bidding with a formula of \$43,000; \$58,000; and \$86,000. They paid heavily for tracts valued highly by their scientific staffs. All these systems proved effective in obtaining leases.

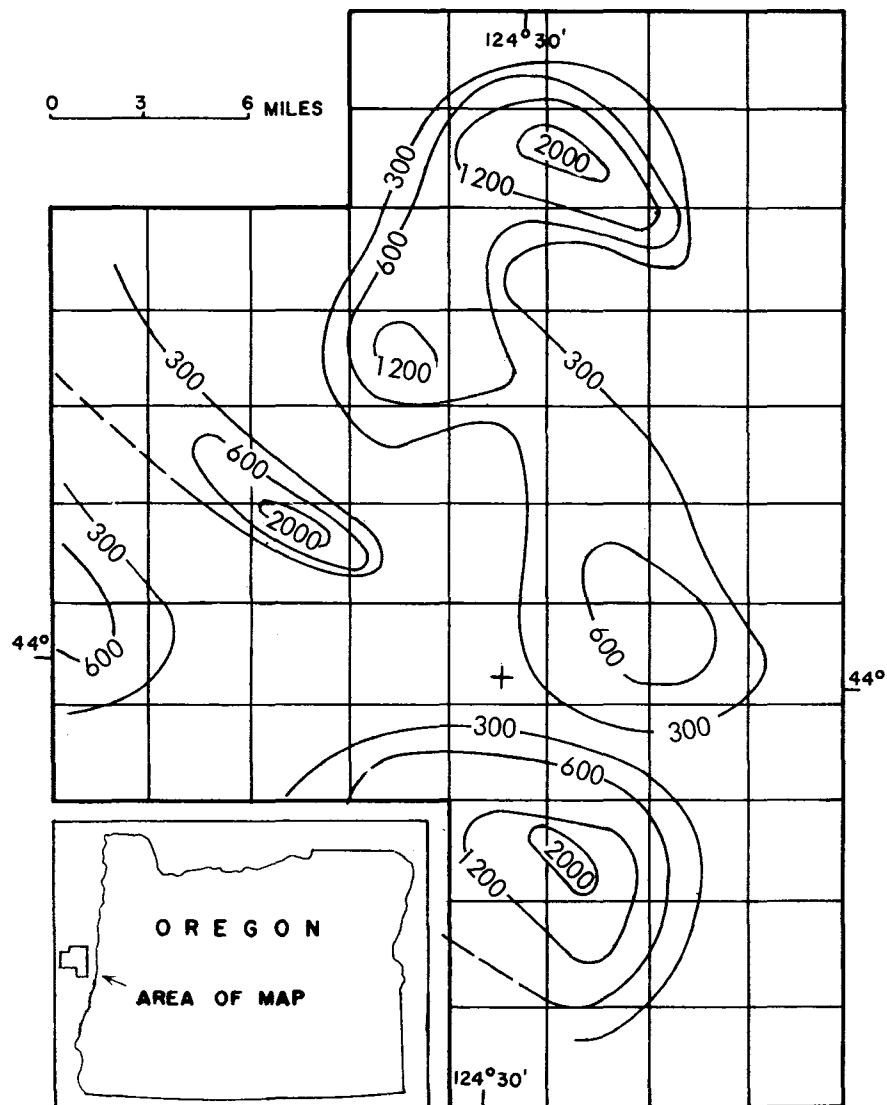
The system used by Texaco-Richfield-Mobil was generally unsuccessful. This group used a \$41,300; \$101,000; and \$201,000 pattern. Bids on valued tracts were seldom high enough. Success of bidding by these companies averaged 15 per cent.

It is hard to visualize that bidding for tracts was done on geologic structure, because low bids won tracts next to high bids and, in some cases, tracts went unleased next to high bids. However, if a general outline is drawn around the most sought-after leases, a semblance of geologic features is suggested. Bids were apparently made on structures delineated by seismic studies (see Figure 1).

Deep test drilling planned

Deep drilling on the outer continental shelf along the Oregon coast appears to be assured in the summer of 1965. Companies must evaluate their holdings by 1969 under the 5-year term of the federal leases or relinquish them. A minimum of five or six deep test holes will be needed to determine whether or not the shelf lands are productive. Besides the time-squeeze placed on the operators by the 5-year lease term, there is pressure to avoid paying yearly rental on non-productive acreage.

Figure 1. "Isobuck" map of the Florence-Yachats lease area.



Contours based on total cash bonuses offered per parcel
(in thousands of dollars)

Two types of equipment will be used to drill in the deep-water areas leased October 1, 1964. A massive floating platform has been constructed by the Blue Water Drilling Corp. for deep-water drilling on the West Coast. It is presently being used by Shell Oil Co. to drill off shore in northern California. Large drilling ships of varied design will also be used for off-shore drilling in the Northwest.

Global Marine Exploration may have one of its "Glomar" vessels available for work in Oregon and Washington. This is the same type of vessel which was used for preliminary "Mohole" drilling. Western Offshore Co. completed construction on a large drilling ship at Seattle in the spring of 1964. The ship has been contracted by Standard Oil Co. for deep-water drilling on the West Coast.

Union Oil Co. is considering moving equipment from Alaska to conduct work on its newly acquired property in Oregon and Washington. Pan American Petroleum Corp. has a new twin-hulled vessel on the drawing board. The catamaran is designed to float submerged with the main deck 40 feet above the water surface. A contract has been given Western Offshore Drilling & Exploration Co. by Mobil for construction of a new floating barge for West Coast operations.

The arrangements already being made indicate the industry plans to begin drilling tracts as soon as possible. Results of the lease-sale appear to have encouraged an active role in exploration by most of the competitors.

References

Oil and Gas Journal, 1964, Oregon-Washington sale sets stage for lots of wildcatting: Oil and Gas Jour., vol. 62, no. 41, p. 108.

Oregon Dept. Geology and Mineral Industries, 1964, Deep-water oil drilling assured in the Northwest: The Ore Bin, vol. 26, no. 2, February 1964, p. 34.

_____, 1964, Offshore area selected for leasing: The Ore Bin, vol. 26, no. 5, May 1964, p. 92.

_____, 1964, Oil companies bid on Oregon's offshore: The Ore Bin, vol. 26, no. 10, October 1964, p. 184.

Note: The U.S. Bureau of Land Management's list of bids and its official lease maps showing location of federal offshore tracts are published on pages 195 to 208 of this issue.



W. E. Grant, manager of U.S. Bureau of Land Management's West Coast OCS office, conducts recent Northwest lease-sale at the Statler Hotel in Los Angeles.

Bidding Summary

Company or Group	Number of tracts bid	Number of tracts won	Average bid per acre	Expenditures for leases	Bids offered but unsuccessful	Per Cent Success of Bidding
Standard/Union	67	29	\$38.60	\$9,479,156	\$4,872,816	45
Shell	41	23	51.80	8,905,073	3,596,390	59
Pan Am/Atl	54	27	23.00	5,189,460	1,883,140	50
Sup/Atl/Pan Am.	11	6	76.80	3,726,180	2,081,670	50
Sup/Pan Am.	2	2	245.00	2,822,688	--	100
Tex/Rich/Mob.	19	3	25.60	403,940	2,404,440	16
Union	1	1	376.00	2,165,760	--	100
Texaco/Mobil	2	1	161.00	1,101,484	751,334	50
Pan Amer.	4	4	64.00	1,473,925	--	100
Humble	4	0	31.00	--	719,077	--
Richfield	14	2	8.30	117,560	760,546	14
Gulf	4	2	17.00	197,000	196,550	50
Standard	6	1	8.80	45,366	260,968	17

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OREGON LEASE-SALE DELAYED UNTIL DECEMBER 1964

The Land Board moved back the opening of bids for state-owned tide and submerged lands from October 22, 1964, to December 3, 1964, in response to a request by the oil industry. A difference of opinion existed among the legal advisors of the oil companies as to the necessity of specifying the rate of royalty on sulphur. The postponement will not alter the competitive position of bidding. By eliminating any objectionable condition in the bidding procedure, the Land Board felt it could enhance the competition for leases. The conditions stipulated by the Land Board for bidding include: oil and gas royalty: $12\frac{1}{2}$ per cent of gross production; annual rental: \$1 per acre per year; and sulphur royalty: \$1 per long ton. Sulphur is often a by-product in producing oil and gas.

The tracts comprise 136,300 acres of submerged land lying along the coastline between Cape Blanco and Winchester Bay. The parcels are approximately 7,000 acres in size. Four federal tracts off shore from Bandon (see map No. 3) received bids amounting to \$550,000. The tracts are just half a mile from the state 3-mile line.

OFFER TO LEASE STATE-OWNED OFFSHORE LANDS

Pursuant to Oregon Revised Statutes 274.765 and other applicable statutes and regulations, the Oregon State Land Board will receive bids for the lease of certain tracts of tide and submerged lands adjacent to Coos and Douglas Counties for the purpose of extracting oil, gas and sulphur. To be considered, bids shall be delivered by mail or in person to, and shall be received at, the Land Board office, 106 State Capitol, Salem, Oregon 97310, before 10 a.m., PST, December 3, 1964. Bids will be opened publicly at 11 a.m., PST, December 3, 1964, in the Board of Control room of the State Capitol in Salem.

Tracts offered for bid are tracts numbered 24, 25, 26, 27, 28, 29, 30, 31, 32E, 33E, 34, 35, 36, 37, 38, 39, 39E, and 40 as delineated and described on the official lease map adopted by the State Land Board on January 3, 1964, as revised April 16, 1964, May 12, 1964, and September 15, 1964. This map may be inspected and copies purchased at the Land Board office. Tracts 32E and 39E are subject to drilling restrictions in that drilling in bays or estuaries is prohibited.

The annual rental for all tracts leased shall be \$1.00 per acre; the royalty rate for oil and gas shall be $12\frac{1}{2}$ per cent; and the royalty for sulphur shall be \$1.00 per long ton. The lease on each tract will be awarded to the bidder who, in addition to complying with all the conditions of bidding and applicable statutes and regulations, offers the highest cash bonus.

Each tract must be applied for separately; each such bid must be sealed in a separate envelope; each such bid must be on the form provided by the Board and accompanied by duplicate lease forms executed by the bidder; and each bid must be accompanied by a certified financial statement establishing to the satisfaction of the Board the bidder's financial ability to undertake and fulfill all obligations under the prospective lease. Included with each bid shall be a certified or cashier's check made payable to the State of Oregon in an amount sufficient to cover the first year's rental, one-fifth of the cash bonus offered, and \$100 fee to cover the cost of advertisement. The State Land Board reserves the right to reject any or all bids for cause.

The form of the lease, conditions for bidding, and bid forms may be obtained from the State Land Board upon request.

/s/ Dale Mallicoat, Clerk
OREGON STATE LAND BOARD
106 State Capitol
Salem, Oregon 97310

October 23, 1964
October 30, 1964

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OREGON and WASHINGTON OFFSHORE LEASE SALE
October 1, 1964

OCS-P								
No.	Tract No.	Bidder	Block No.	Acreage	Total Bid	Per Acre		
<u>TILLAMOOK AREA</u>								
065	Ore 1	Shell Oil Co.	42N 66W All	5760	\$ 35,424.00	\$ 6.15		
066	Ore 2	Shell Oil Co.	42N 67W All	5760	55,123.20	9.57		
067	Ore 4	Shell Oil Co.	43N 67W All	5760	34,424.00	6.15		
068	Ore 13	Std. Cal/Union	56N 63W All	5760	43,268.00	7.51+		
069	Ore 14	Std. Cal/Union	56N 64W All	5760	86,468.00	15.01+		
		Shell Oil Co.			61,344.00	10.65		
070	Ore 16	Std. Cal/Union	57N 63W All	5760	58,676.00	10.18+		
		Shell Oil Co.			41,817.60	7.26		
071	Ore 17	Shell Oil Co.	57N 64W All	5760	87,897.60	15.26		
072	Ore 18	Shell Oil Co.	57N 65W All	5760	1,598,400.00	277.50		
		Std. Cal/Union			981,244.00	170.35		
		Texaco/Rich/Mobil			201,139.20	34.92		
073	Ore 19	Shell Oil Co.	58N 63W All	5760	41,817.60	7.26		
074	Ore 21	Std. Cal/Union	58N 65W All	5760	491,684.00	85.36		
		Shell Oil Co.			151,257.60	26.26		
075	Ore 22	Shell Oil Co.	59N 63W All	5760	504,000.00	87.50		
076	Ore 23	Std. Cal/Union	59N 64W All	5760	316,892.00	55.01+		
		Shell Oil Co.			61,344.00	10.65		
077	Ore 24	Std. Cal/Union	59N 65W All	5760	317,222.00	55.07+		
		Shell Oil Co.			61,344.00	10.65		
<u>NEWPORT AREA</u>								
078	Ore 28	Texaco/Rich/Mob	13N 67W All	5504.74	201,308.34	36.57		
		Panam/Atlantic			192,776.00	35.02		
		Shell Oil Co.			143,955.75	26.15		
		Std. Cal/Union			41,326.00	7.50+		
079	Ore 29	Shell Oil Co.	13N 68W All	5494.56	728,087.50	132.50		
		Panam/Atlantic			467,696.95	85.12		
		Texaco/Rich/Mobil			75,165.60	13.68		
080	Ore 31	Std. Cal/Union	13N 70W All	5473.75	137,136.00	25.05+		
081	Ore 34	Shell Oil Co.	14N 65W All	5760	309,657.60	53.76		
082	Ore 35	Shell Oil Co.	14N 66W All	5760	87,955.20	15.27		

OREGON and WASHINGTON OFFSHORE LEASE SALE, Continued

OCS-P						
No.	Tract No.	Bidder	Block No.	Acreage	Total Bid	Per Acre
<u>NEWPORT AREA, continued</u>						
083	Ore 36	Panam/Atlantic Shell Oil Co. Std. Cal/Union	14N 67W All	5760	\$ 173,779.20 58,176.00 43,336.00	\$ 30.17 10.10 7.52+
084	Ore 37	Shell Oil Co. Panam/Atlantic	14N 68W All	5760	206,553.60 144,115.20	35.86 25.02
085	Ore 39	Std. Cal/Union	14N 70W All	5760	58,676.00	10.18+
086	Ore 40	Std. Cal/Union Richfield	14N 71W All	5760	233,440.00 91,180.00	40.52 15.83
087	Ore 43	Shell Oil Co. Std. Cal/Union Panam/Atlantic Texaco/Rich/Mobil	15N 66W All	5760	1,516,147.20 587,522.00 145,843.20 101,318.40	263.22 102.00+ 25.32 17.59
088	Ore 44	Shell Oil Co. Supr/Panam/Atl. Std. Cal/Union Texaco/Rich/Mobil	15N 67W All	5760	905,472.00 576,864.00 432,432.00 351,302.40	157.20 100.15 75.07+ 60.99
089	Ore 51	Std. Cal/Union Texaco/Rich/Mobil Panam/Atlantic	19N 65W All	5760	462,462.00 101,318.40 30,470.40	80.28+ 17.59 5.29
090	Ore 54	Panam/Atlantic	20N 65W All	5760	87,148.80	15.13
091	Ore 55	Std. Cal/Union Panam/Atlantic	20N 66W All	5760	1,042,042.00 59,155.20	180.91+ 10.27
092	Ore 56	Std. Cal/Union	20N 67W All	5760	777,776.00	135.03+
093	Ore 57	Panam/Atlantic Std. Cal/Union Gulf Oil Corp.	21N 65W All	5760	346,579.20 291,824.00 98,726.40	60.17 50.66+ 17.14
094	Ore 58	Panam/Atlantic	21N 66W All	5760	58,176.00	10.10
095	Ore 60	Panam/Atlantic Std. Cal/Union Gulf Oil Corp. Shell Oil Co.	22N 65W All	5760	318,067.20 116,326.00 98,726.40 30,355.20	55.22 20.19+ 17.14 5.27
096	Ore 61	Panam/Atlantic Std. Cal/Union	22N 66W All	5760	87,782.40 86,428.00	15.24 15.00+
097	Ore 62	Std. Cal/Union Panam/Atlantic	22N 67W All	5760	173,888.00 30,009.60	30.18 5.21
098	Ore 63	Gulf Oil Corp. Panam/Atlantic	23N 65W All	5760	98,726.40 58,003.20	17.14 10.07

OREGON and WASHINGTON OFFSHORE LEASE SALE, Continued

OCS-P

No.	Tract No.	Bidder	Block No.	Acreage	Total Bid	Per Acre
<u>NEWPORT AREA, continued</u>						
099	Ore 64	Panam/Atlantic Std. Cal/Union	23N 66W All	5760	\$ 58,924.80 57,776.00	\$ 10.23 10.03+
0100	Ore 65	Std. Cal/Union Panam/Atlantic	23N 67W All	5760	57,776.00 46,598.40	10.03+ 8.09
0101	Ore 66	Gulf Oil Corp. Panam/Atlantic	24N 65W All	5760	98,726.40 59,385.60	17.14 10.31
0102	Ore 67	Shell Oil Co. Std. Cal/Union Panam/Atlantic	24N 66W All	5760	116,755.20 43,250.00 30,873.60	20.27 7.50+ 5.36
0103	Ore 74	Std. Cal/Union Shell Oil Co. Humble Oil Co. Texaco/Rich/Mobil Panam/Atlantic	29N 62W All	5760	1,446,336.00 1,228,147.20 332,812.80 201,420.80 58,003.20	251.10 213.22 57.78 34.97 10.07
0104	Ore 75	Shell Oil Co. Std. Cal/Union Humble Oil Co. Panam/Atlantic	29N 63W All	5760	135,936.00 102,222.00 60,768.00 58,233.60	23.60 17.74+ 10.55 10.11
0105	Ore 78	Shell Oil Co. Std. Cal/Union Humble Oil Co. Richfield Panam/Atlantic	30N 62W All	5760	652,032.00 291,842.00 244,512.00 126,316.80 58,464.00	113.20 50.66+ 42.45 21.93 10.15
0106	Ore 79	Std. Cal/Union Shell Oil Co. Humble Oil Co. Panam/Atlantic	30N 63W All	5760	1,012,124.00 910,080.00 80,985.60 58,694.40	175.71+ 158.00 14.06 10.19
0107	Ore 82	Panam/Atlantic	31N 62W All	5760	57,945.60	10.06
0108	Ore 87	Std. Cal/Union	32N 63W All	5760	43,250.00	7.50+
<u>COOS BAY AREA</u>						
0109	Ore 93	Std. Cal/Union	36N 69W All	5760	43,246.00	7.50+
0110	Ore 99	Supr/Atl/Panam Std. Cal/Union	38N 69W All	5760	116,640.00 43,224.00	20.25 7.50
0111	Ore 101	Texaco/Rich/Mob	39N 68W All	5760	101,318.40	17.59
0112	Ore 102	Supr/Atl/Panam Std. Cal/Union	39N 69W All	5760	289,152.00 230,434.00	50.20 40.00

OREGON and WASHINGTON OFFSHORE LEASE SALE, Continued

OCS-P

No.	Tract No.	Bidder	Block No.	Acreage	Total Bid	Per Acre
<u>COOS BAY AREA, continued</u>						
0113	Ore 105	Texaco/Rich/Mob Panam/Atlantic Std. Cal/Union	52N 66W All	5760	\$ 101,318.40 58,233.60 43,276.00	\$17.59 10.11 7.51+
0114	Ore 109	Panam/Atlantic Texaco/Rich/Mobil Std. Cal/Union	53N 66W All	5760	1,154,016.00 371,462.40 43,264.00	200.35 64.49 7.51+
0115	Ore 110	Panam/Atlantic Texaco/Rich/Mobil Std. Cal/Union	53N 67W All	5760	432,806.40 101,318.40 43,222.00	75.14 17.59 7.50+
0116	Ore 113	Texaco/Mobil Supr/Atl/Panam Std. Cal/Union	54N 66W All	5760	1,101,484.80 1,038,528.00 201,666.00	191.23 180.30 35.01
0117	Ore 114	Supr/Atl/Panam Std. Cal/Union Richfield	54N 67W All	5760	1,785,888.00 86,444.00 76,262.40	310.05 15.00+ 13.24
0118	Ore 117	Panam/Atlantic Richfield	55N 66W All	5760	\$ 231,148.80 41,299.20	\$ 40.13 7.17
0119	Ore 119	Shell Oil Co. Panam/Atlantic	55N 68W All	5760	756,000.00 29,030.40	131.25 5.04
0120	Ore 124	Std. Cal/Union	56N 65W All	5760	748,888.00	130.01+
0121	Ore 125	Shell Oil Co. Panam/Atlantic Std. Cal/Union	56N 66W All	5760	620,064.00 88,473.60 43,216.00	107.65 15.36 7.50+
0122	Ore 126	Richfield Oil	56N 67W All	5760	41,299.20	7.17
0123	Ore 127	Panam/Atlantic	56N 68W All	5760	30,067.20	5.22
0124	Ore 129	Shell Oil Co. Std. Cal/Union Texaco/Rich/Mobil Panam/Atlantic	56N 70W All	5760	150,681.60 57,750.00 41,299.20 30,412.80	26.16 10.02+ 7.17 5.28
0125	Ore 130	Std. Cal/Union Shell Oil Co. Richfield Panam/Atlantic	56N 71W All	5760	433,666.00 150,681.60 41,299.20 29,836.80	75.28 26.16 7.17 5.18
0126	Ore 132	Std. Cal/Union Texaco/Rich/Mobil	57N 65W All	5760	230,476.00 126,316.80	40.01 21.93
0127	Ore 133	Panam/Atlantic Texaco/Rich/Mobil Std. Cal/Union	57N 66W All	5760	347,961.60 126,316.80 86,434.00	60.41 21.93 15.00+

OREGON and WASHINGTON OFFSHORE LEASE SALE, Continued

OCS-P

No.	Tract No.	Bidder	Block No.	Acreage	Total Bid	Per Acre
<u>COOS BAY AREA, continued</u>						
0128	Ore 134	Panam/Atlantic Std. Cal/Union Richfield	57N 67W All	5760	\$ 145,555.20 86,534.00 41,299.20	\$25.27 15.02+ 7.17
0129	Ore 135	Std. Cal/Union	57N 68W All	5760	97,922.00	17.00+
0130	Ore 136	Union Oil Co. Texaco/Mobil Shell Oil Co. Supr/Atl/Panam	57N 69W All	5760	2,165,760.00 751,334.40 360,460.80 144,868.00	376.00 130.44 62.58 25.15
0131	Ore 137	Std. Cal/Union	57N 70W All	5760	43,278.00	7.51+
0132	Ore 138	Std. Cal/Union Texaco/Rich/Mobil Panam/Atlantic	57N 71W All	5760	86,424.00 61,113.60 30,009.60	15.00 10.61 5.21
0133	Ore 140	Std. Cal/Union Richfield	58N 65W All	5760	57,774.00 41,299.20	10.03 7.17
0134	Ore 141	Supr/Atl/Panam Richfield	58N 66W All	5760	549,504.00 41,299.20	95.40 7.17
0135	Ore 142	Panam/Atlantic	58N 67W All	5760	87,897.60	15.26
0136	Ore 143	Panam/Atlantic Std. Cal/Union	58N 68W All	5760	88,185.60 58,784.00	15.31 10.20+
0137	Ore 144	Richfield Oil Std. Cal/Union Panam/Atlantic	58N 69W All	5760	76,262.40 57,762.00 29,721.60	13.24 10.02+ 5.16
0138	Ore 145	Std. Cal/Union Texaco/Rich/Mobil Panam/Atlantic	58N 70W All	5760	291,124.00 251,308.80 31,046.40	50.54+ 43.63 5.39

WASHINGTON

CAPE FLATTERY AREA

0139	Wash 3	Std. Oil Cal.	11N 58W All	5760	45,366.00	7.87+
0140	Wash 4	Panam/Atlantic Std. Cal/Union	17N 61W All	5760	86,745.60 86,468.00	15.06 15.01+
0141	Wash 5	Panam/Atlantic Shell Oil Co.	17N 62W All	5760	144,864.00 47,462.40	25.15 8.24

OREGON and WASHINGTON OFFSHORE LEASE SALE, Continued

OCS-P No.	Tract No.	Bidder	Block No.	Acreage	Total Bid	Per Acre
<u>CAPE FLATTERY AREA, continued</u>						
0142	Wash 6	Panam/Atlantic	18N 61W All	5760	34,848.00	6.05
0143	Wash 7	Shell Oil Co.	18N 62W All	5760	47,462.40	8.24
0144	Wash 10	Std. Cal/Union Supr/Atl/Panam	20N 61W All	5760	\$ 291,776.00 88,128.00	\$50.65+ 15.30
0145	Wash 11	Std. Cal/Union Panam/Atlantic	20N 62W All	5760	58,776.00 58,060.80	10.20 10.80
0146	Wash 12	Std. Cal/Union Supr/Atl/Panam Texaco/Rich/Mobil	21N 61W All	5760	291,324.00 233,280.00 76,262.40	50.57+ 40.50 13.24
0147	Wash 13	Panam/Atlantic Std. Cal/Union Richfield	21N 62W All	5760	87,321.60 58,222.00 51,379.20	15.16 10.10+ 8.92
<u>COPALIS BEACH AREA</u>						
0148	*Wash 14	Supr/Atl/Panam	34N 58W * 34N 59W	5660	40,752.00	7.20
0149	Wash 16	Superior/Panam Richfield Std. Oil of Cal.	34N 61W All	5760	1,036,800.00 126,316.80 62,336.00	180.00 21.93 10.82+
0150	Wash 17	Shell Oil Co. Panam/Atlantic	34N 62W All	5760	206,553.60 144,633.60	35.86 25.11
0151	Wash 20	Superior/Panam Std. Oil of Cal. Texaco/Rich/Mobil Shell Oil Co.	35N 61W All	5760	1,785,888.00 306,124.00 176,083.20 47,462.40	310.05 53.14+ 30.57 8.24
0152	Wash 21	Panam/Atlantic Shell Oil Co. Texaco/Rich/Mobil	35N 62W All	5760	58,579.20 47,462.40 41,299.20	10.17 8.24 7.17
0153	Wash 24	Panam/Atlantic Std. Oil of Cal.	36N 61W All	5760	347,040.00 46,776.00	60.25 8.12+
0154	Wash 27	Shell Oil Co. Richfield Panam/Atlantic	37N 61W All	5760	58,176.00 41,299.20 35,078.40	10.10 7.17 6.09

* All that portion lying seaward of a line 3 geographical miles distant from the coast line of Wash.

OREGON and WASHINGTON OFFSHORE LEASE SALE, Continued

OCS-P

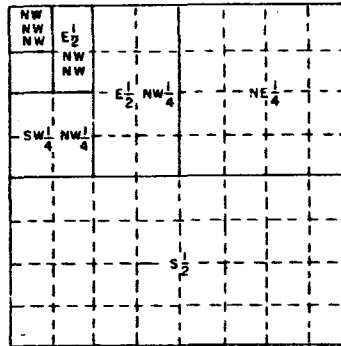
No.	Tract No.	Bidder	Block No.	Acreage	Total Bid	Per Acre
<u>COPALIS BEACH AREA, continued</u>						
0155	Wash 28	Shell Oil Co. Panam/Atlantic	37N 62W All	5760	50,457.60 34,963.20	8.76 6.07
0156	Wash 30	Panam/Atlantic Std. Oil of Cal.	39N 61W All	5760	145,209.60 45,366.00	25.21 7.87
0157	Wash 31	Supr/Atl/Panam Shell Oil Co.	39N 62W All	5760	894,240.00 51,091.20	155.25 8.87
0158	Wash 33	Panam/Atlantic	40N 60W All	5760	\$ 57,772.80	\$ 10.03
0159	Wash 34	Panam/Atlantic Std. Oil of Cal.	40N 61W All	5760	433,555.20 61,124.00	75.27 10.61+
0160	Wash 37	Panam/Atlantic	41N 60W All	5760	29,260.80	5.08
0161	Wash 38	Panam/Atlantic Std. Oil of Cal.	41N 61W All	5760	58,233.60 45,366.00	10.11 7.87+
0162	Wash 43	Pan Amer. Petr. Std. Cal/Union Shell Oil Co. Richfield	45N 64W All	5760	865,497.60 261,200.00 93,888.00 41,299.20	150.26 45.34+ 16.30 7.17
0163	Wash 44	Pan Amer. Petr. Std. Cal/Union	45N 65W All	5760	145,267.20 126,720.00	25.22 22.00
0164	Wash 46	Pan Amer. Petr. Std. Cal/Union Shell Oil Co.	46N 64W All	5760	289,497.60 71,224.00 47,462.40	50.26 12.36+ 8.24
0165	Wash 47	Pan Amer. Petr. Std. Cal/Union	46N 65W All	5760	173,664.00 111,444.00	30.15 19.34+

Summary of Recent Federal Lease Sales off the West Coast

Date	State	No. Acres Offered	No. Acres Leased	Total Bonus	Average Per Acre	Total Rentals	Total Amount of All Bids Received
5/14/63	Cal.	669,777	312,976	\$12,807,586	\$40.93	\$ 938,838	\$13,989,702
10/1/64	Ore.	836,134	425,433	27,768,772	65.27	1,276,302	43,049,543
10/1/64	Wash.	253,940	155,420	7,764,928	49.96	466,260	10,530,210

Explanation for Outer Continental Lease Maps

Subdivision of blocks on
Outer Continental Shelf



Typical method of subdivision of a block,
each subdivision being an aliquot part of the
total based on mid-point subdivision throughout.

All blocks on the following maps are based on the Oregon (Lambert) Plane Coordinate System.

The identification of the blocks is based on the numerical sequence N(North) starting at Y origin and the numerical sequence W(West) starting at the central meridian.

Example: 36N - 74W

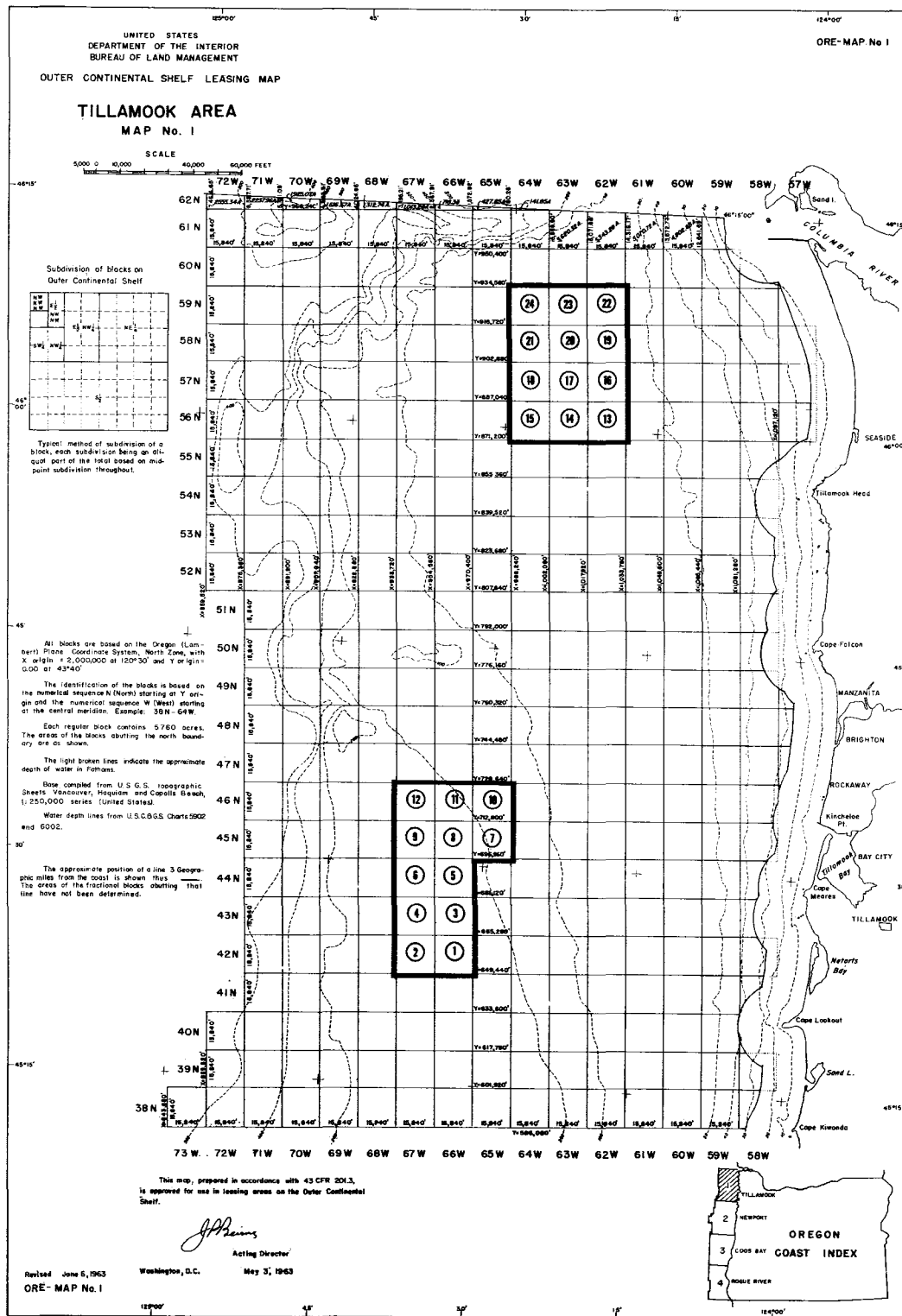
Each regular block contains 5,760 acres.

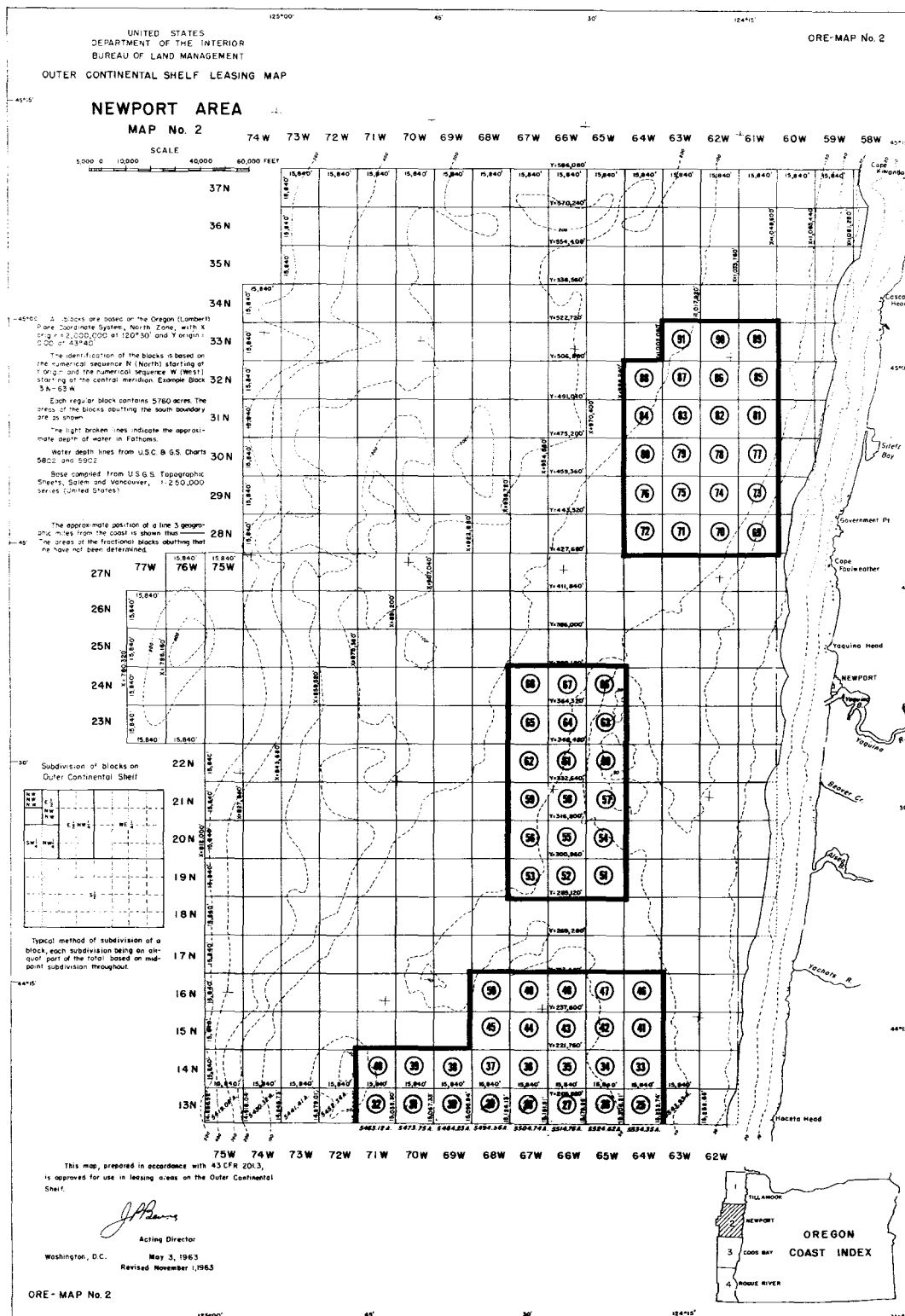
Base compiled from U.S. Geological Survey topographic sheets.

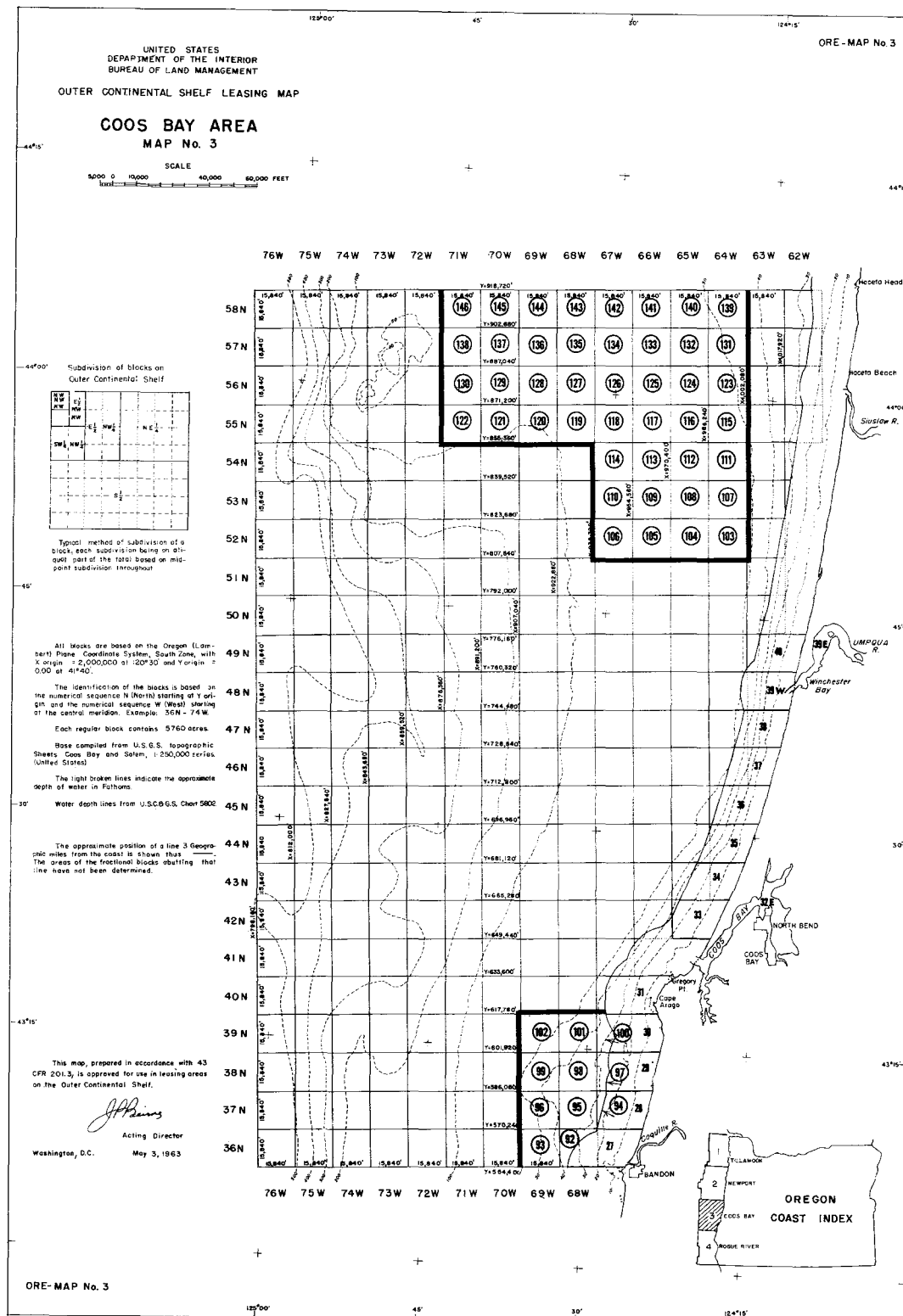
The light broken lines indicate the approximate depth of water in fathoms.

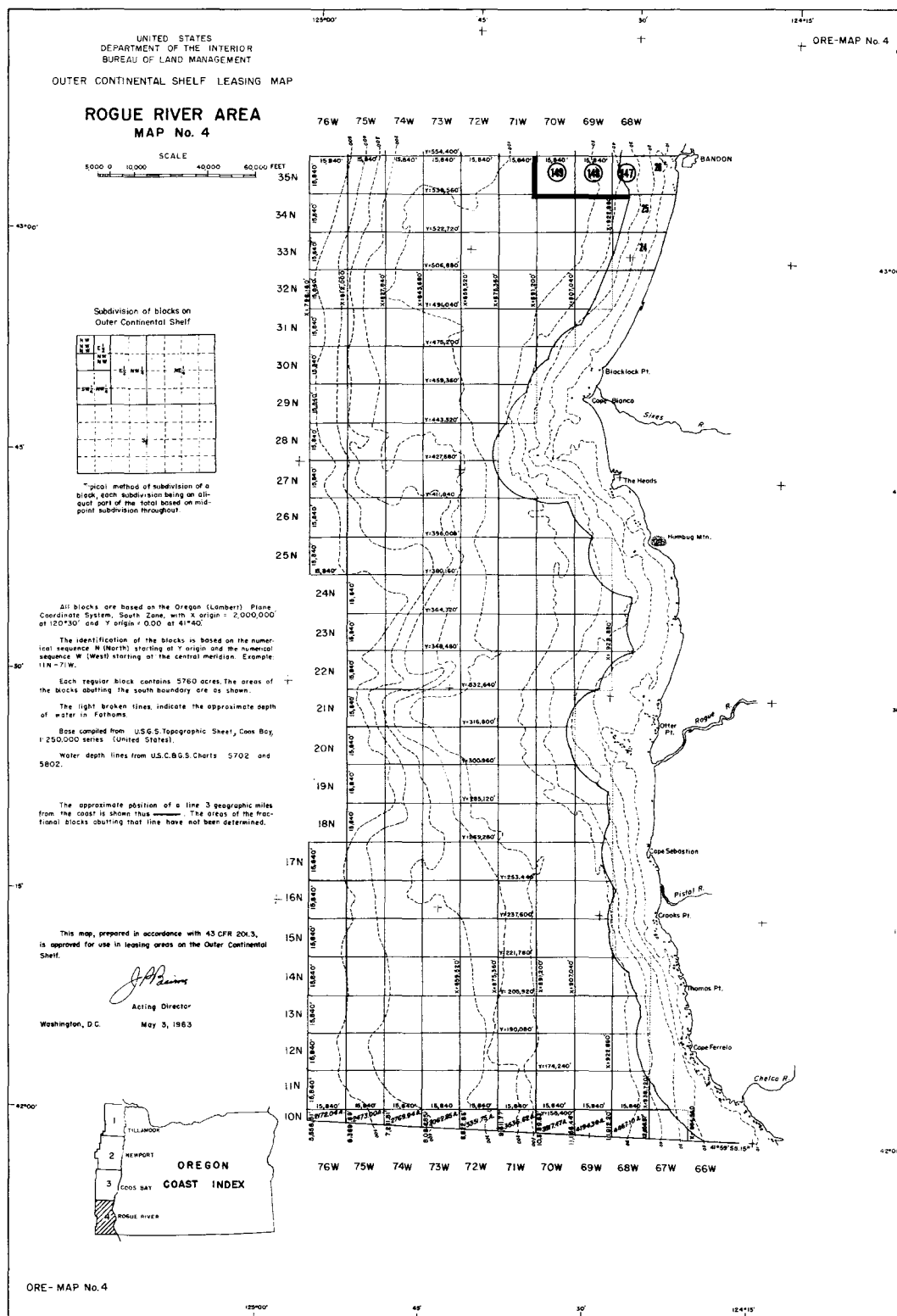
Water depth lines from U.S. Coast & Geodetic Survey Charts.

The approximate position of a line 3 geographical miles from the coast is shown thus: ———. The areas of the fractional blocks abutting that line have not been determined.









CAPE FLATTERY AREA
MAP No. 1

A horizontal scale bar with the word "SCALE" centered above it. The bar has tick marks at 0, 10,000, 40,000, and 60,000 FEET. The segment between 0 and 10,000 is subdivided into four equal parts, each representing 2,500 feet.



