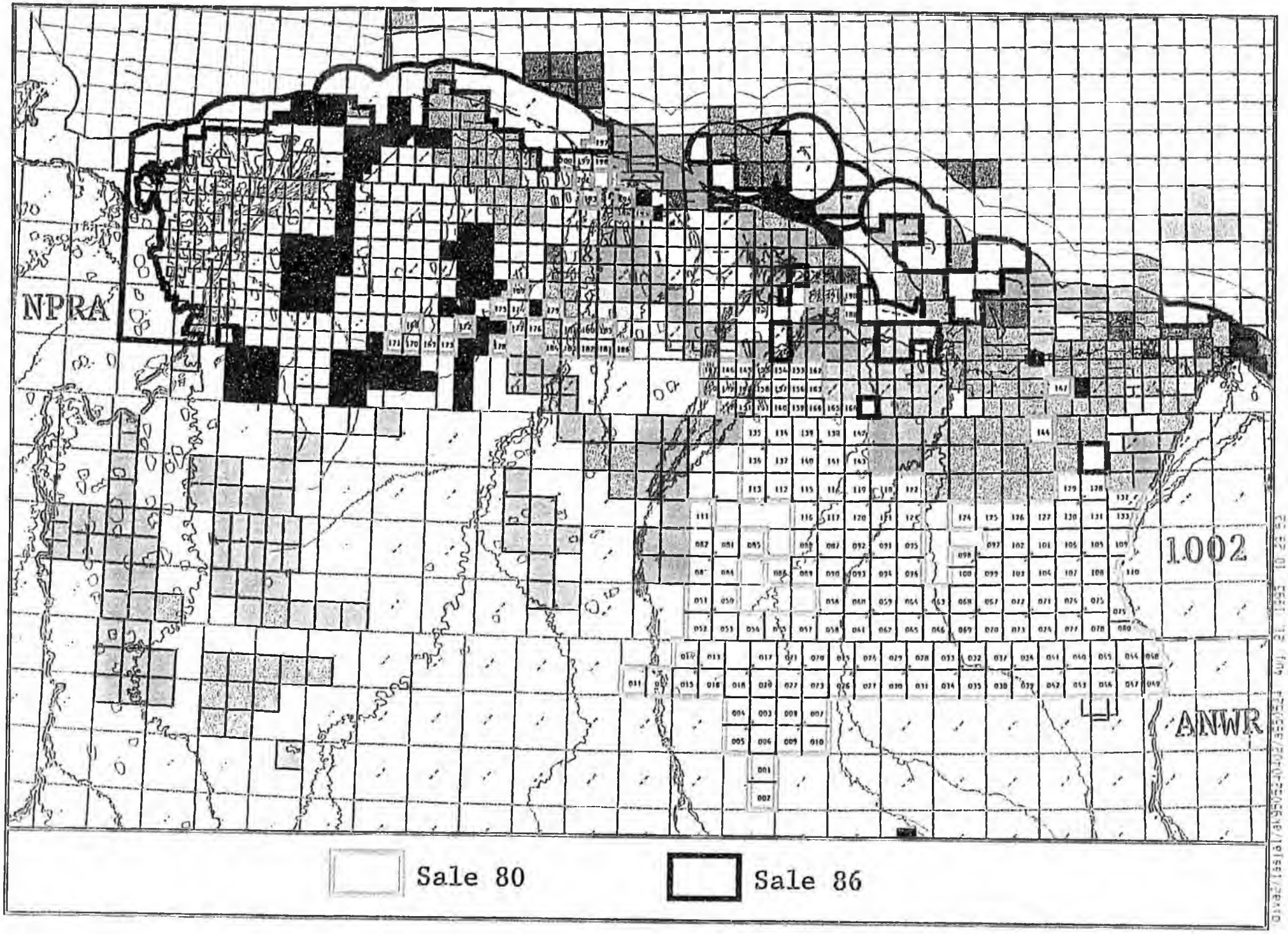
ALASKA LEGISLATURE COMMITTEE FILES 1995-1996 8672 228
8737 HOUSE RESOURCES

Area-Wide Leasing / Gulf of Mexico Sale Data

Sale Date	Sale Nos.	Total Bonus High Bid $	No. of Bids Received	No. of Companies Participating
2/4/75	37	300,632,667	281	
5/28/75	38	250,681,156	191	
7/29/95	38A	171,511,620	179	
2/18/76	41	183,498,244	81	
11/16/76	44	381,911,757	117	
6/23/77	47	1,214,002,429	424	
4/25/78	45	767,407,369	283	
10/31/78	65	61,176,730	62	
12/19/78	51	884,589,799	288	
7/31/79	58	1,261,358,089	316	
11/27/79	58A	1,932,894,290	322	
9/30/80	A62	2,805,524,393	506	
11/18/80	62	1,436,448,959	268	
7/21/81	A66	2,666,828,352	419	
10/20/81	66	1,280,983,917	233	N/A
2/9/82	67	1,251,793,459	290	N/A
11/17/82	69 (1)	634,919,980	151	103
3/8/83	69 (2)	39,741,340	20	N/A
*Area-Wide Leasing				
1983	72, 74	5,018,477,269	1,788	124
1984	79, 81, 84	2,702,888,500	1,612	95
1985	98, 102, 94	1,662,594,081	1,023	87
1986	104, 105	203,185,747	181	54
1987	110, 112	533,350,815	904	71
1988	113, 115, 116 (1)	576,479,926	1,436	105
1989	118, 122	661,267,881	1,497	107
1990	123, 125	589,855,457	1,305	106
1991	131, 135	322,506,314	819	101
1992	139, 141	86,814,865	277	71
1993	142, 143	133,399,783	458	71
1994	147, 150	337,416,583	864	82
1995	152	307,328,550	880	N/A

*Lease sales conducted prior to 1983 covered the entire GOM. Under the area-wide leasing program, the GOM was divided into three parts, Eastern, Central and Western. Area-wide sales for all three areas were combined for statistical comparison.


NPRA
1002
ANWR
Sale 80
Sale 86

Alaska Region
Domestic Production

Marathon Oil Company

P.O. Box 196168
Anchorage, AK 99519-6168
Telephone 907/561-5311

March 11, 1996

Representative Norman Rokeberg
Alaska State Legislature
State Capital (MS3100)
Juneau, Alaska 99801-1182

Dear Representative Rokeberg:

CSHB 388 AREAWIDE BEST INTEREST FINDINGS

As part of a concerted industry effort we have been working on a mechanism to provide endorsement of the areawide sale concept and provide that the scope and usefulness of a best interest finding be expanded. The changes streamline the existing process and reduce the number of best interest findings the Division of Oil and Gas must prepare, yet does not limit public comments on the best interest findings. Therefor, Marathon Oil Company endorses CSHB 388 version G. This version, provides for a legislative finding that areawide lease sales are in the best interest of the state, clarifies public notice provisions, increases the usefulness of a best interest finding to 10 years, and streamlines the DNR's existing process for all areas to be leased in the state.

Thank you and your staff for the work on this bill during the session.

Sincerely,

Bradley G. Penn, CPL
Alaska Region Landman

cc: N.L.Calvert
J.V. Miesse

AREAWIDE LEASING

Objective: **To facilitate a process that results in annual lease sales covering those core areas that have had multiple sales over the past 25 years.**

Base Assumptions:

- DNR has authority to conduct areawide leasing (AOGA agrees);
- It is helpful to have legislative endorsement of the areawide sale concept;
- Published maps for scheduled sales 85, 86 and 87 cover the areas of interest for areawide BIF's and subsequent annual sales.
- Current sales on 5-yr schedule proceed on schedule.

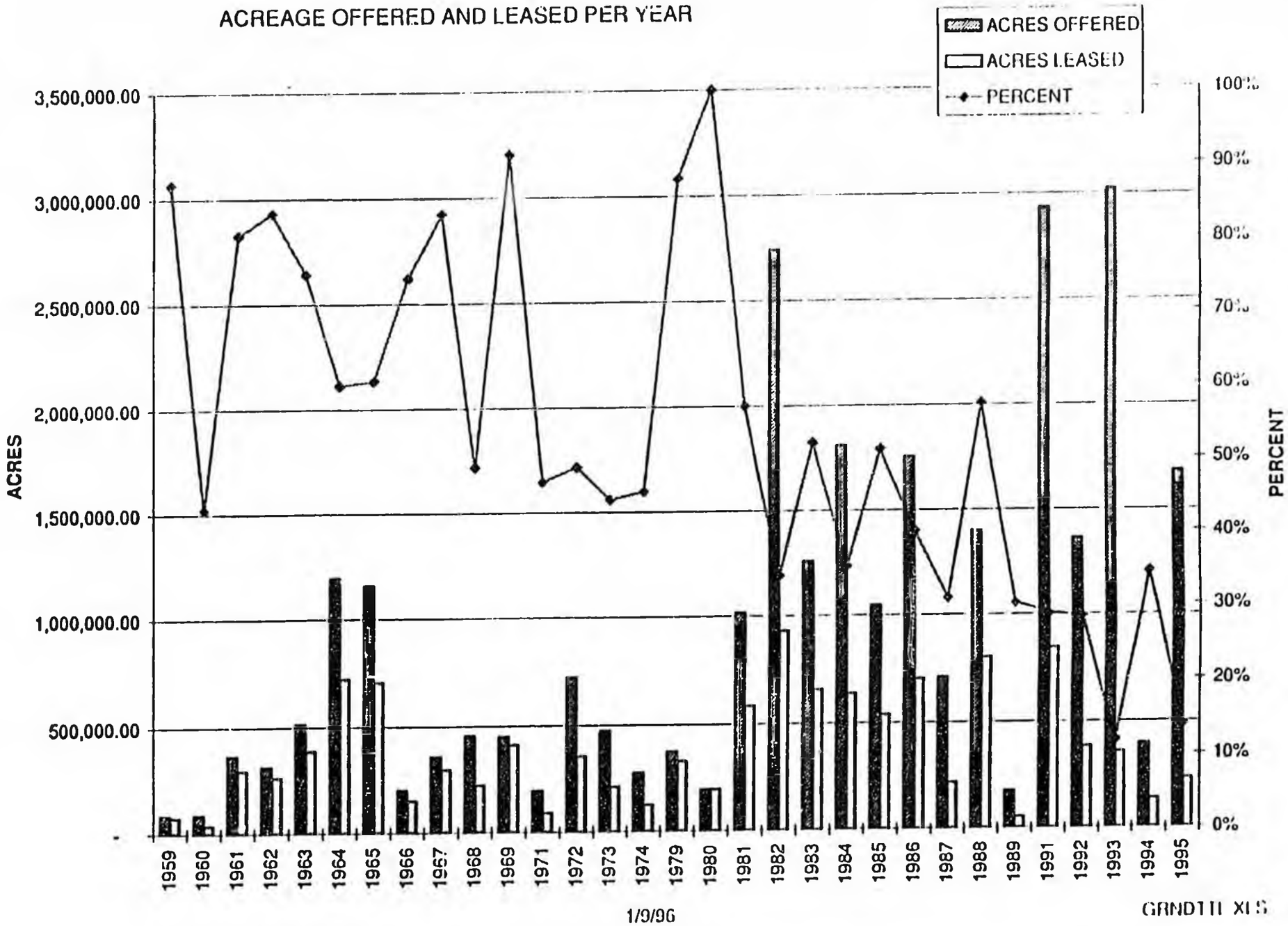
Current Concept - New AOGA Proposal/Chenoweth Redraft of CSHB 388 - Advantages:

- Legislative finding of state's best interest to conduct annual areawide sales;
- BIF that lasts for 10yrs;
- Annual areawide sales of acreage subject to an effective BIF;
- Clear, streamlined process for abbreviated process to "supplement" an existing areawide BIF;
- Not area specific - all acreage covered by BIF can be offered annually for 10 yrs;
- AOGA unanimity - AOGA member companies unanimously endorsed the current concept;
- Achieves industry and the state's objectives without creating a new program, therefore no regulations - no delay of current sales nor of initiating areawide BIF's - no large fiscal note;
- Nothing in the current concept is expected to draw strong opposition from the Div. of Oil & Gas.

ACREAGE OFFERED AND LEASED PER YEAR

1 5/96

YEAR	ACRES OFFERED	ACRES LEASED	PERCENT
1959	88,055.00	77,191.00	88%
1960	90,615.21	39,372.27	43%
1961	367,241.44	296,755.44	81%
1962	316,730.63	265,498.63	84%
1963	514,365.46	388,579.51	76%
1964	1,194,373.00	721,224.00	60%
1965	1,157,075.06	704,751.28	61%
1966	203,639.75	152,576.99	75%
1967	358,978.89	300,104.31	84%
1968	457,822.48	225,233.15	49%
1969	450,858.47	412,548.47	92%
1971	196,635.07	92,617.97	47%
1972	725,322.38	356,217.27	49%
1973	475,048.85	211,695.40	45%
1974	278,269.43	127,119.65	46%
1979	375,818.22	330,985.69	88%
1980	196,268.00	196,268.00	100%
1981	1,017,836.74	582,406.38	57%
1982	2,744,028.59	930,730.70	34%
1983	1,256,733.10	655,342.96	52%
1984	1,812,083.46	636,801.96	35%
1985	1,047,538.45	537,486.35	51%
1986	1,757,253.61	703,669.74	40%
1987	710,289.31	218,779.31	31%
1988	1,399,070.95	803,809.06	57%
1989	176,658.63	53,140.49	30%
1991	2,933,001.11	845,768.48	29%
1992	1,361,737.00	385,382.00	28%
1993	3,020,993.69	359,438.07	12%
1994	396,760.00	136,307.00	34%
1995	1,682,840.00	233,085.00	14%
Grand Total:	28,763,941.98	11,980,886.53	42%


ACREAGE OFFERED AND LEASED PER YEAR
ACRES OFFERED
ACRES LEASED
PERCENT
ACRES
PERCENT
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1993
1994
1995
1/9/96
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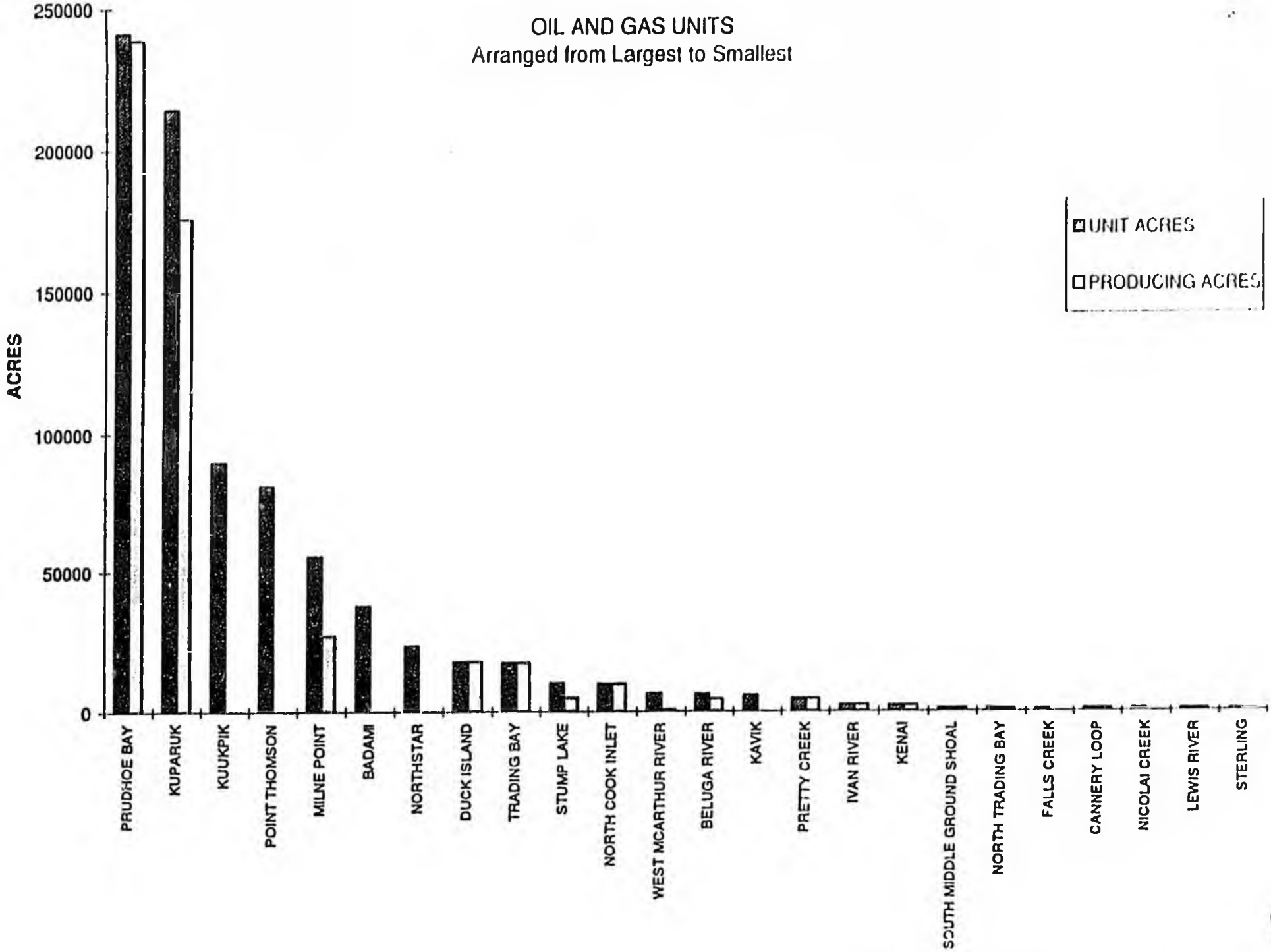
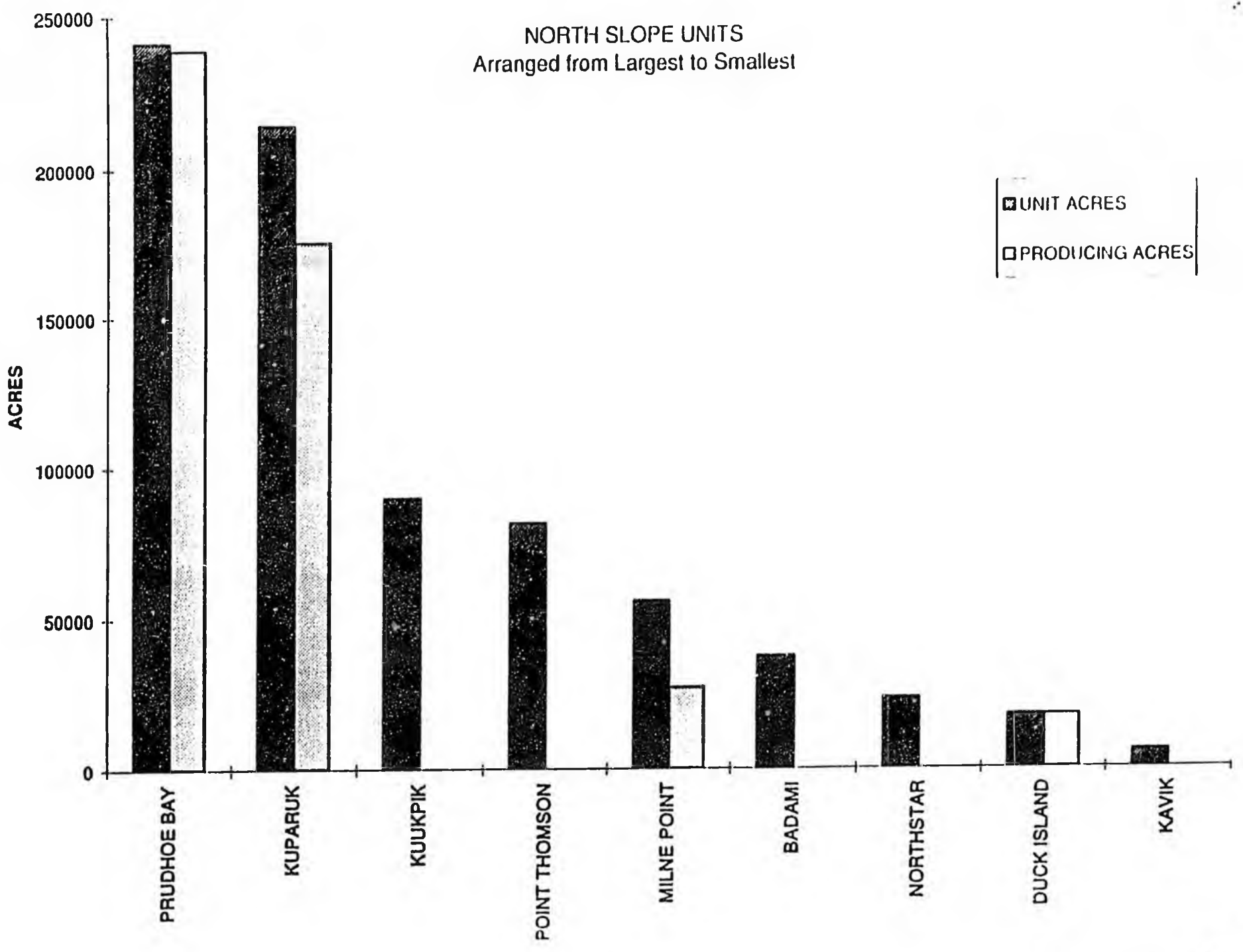
UNIT ACREAGE

08-Jan-96

AREA	UNIT NAME	UNIT ACRES	PRODUCING ACRES
COOK INLET			
	BELUGA RIVER	6,099.15	4,464.60
	CANNERY LOOP	916.00	916.00
	FALLS CREEK	964.45	0.00
	IVAN RIVER	2,290.79	2,290.79
	KENAI	2,191.08	2,191.08
	LEWIS RIVER	720.00	720.00
	NICOLAI CREEK	879.78	0.00
	NORTH COOK INLET	9,781.50	9,781.50
	NORTH TRADING BAY	1,120.00	1,120.00
	PRETTY CREEK	4,579.33	4,579.33
	SOUTH MIDDLE GROUND SHOAL	1,160.00	1,160.00
	STERLING	496.37	133.28
	STUMP LAKE	10,062.50	4,880.00
	TRADING BAY	17,299.50	17,299.50
	WEST MCARTHUR RIVER	6,330.00	640.00
	COOK INLET	64,890.45	50,176.08
NORTH SLOPE			
	BADAMI	37,401.92	0.00
	DUCK ISLAND	17,547.62	17,547.62
	KAVIK	5,652.59	0.00
	KUPARUK	214,331.15	175,502.15
	KUUKPIK	89,799.11	0.00
	MILNE POINT	55,498.00	26,965.00
	NORTHSTAR	23,343.49	0.00
	POINT THOMSON	81,281.03	0.00
	PRUDHOE BAY	241,555.10	238,995.10
	NORTH SLOPE	766,410.01	459,009.87
	GRAND TOTAL:	831,300.46	509,185.95


OIL AND GAS UNITS
Arranged from Largest to Smallest
ACRES
250000
200000
150000
100000
50000
0
UNIT ACRES
PRODUCING ACRES
PRUDHOE BAY
KUPARUK
KUUKPIK
POINT THOMSON
MILNE POINT
BADAMI
NORTHSTAR
DUCK ISLAND
TRADING BAY
STUMP LAKE
NORTH COOK INLET
WEST MCARTHUR RIVER
BELUGA RIVER
KAVIK
PRETTY CREEK
IVAN RIVER
KENAI
SOUTH MIDDLE GROUND SHOAL
NORTH TRADING BAY
FALLS CREEK
CANNERY LOOP
NICOLAI CREEK
LEWIS RIVER
STERLING


NORTH SLOPE UNITS
Arranged from Largest to Smallest
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200000
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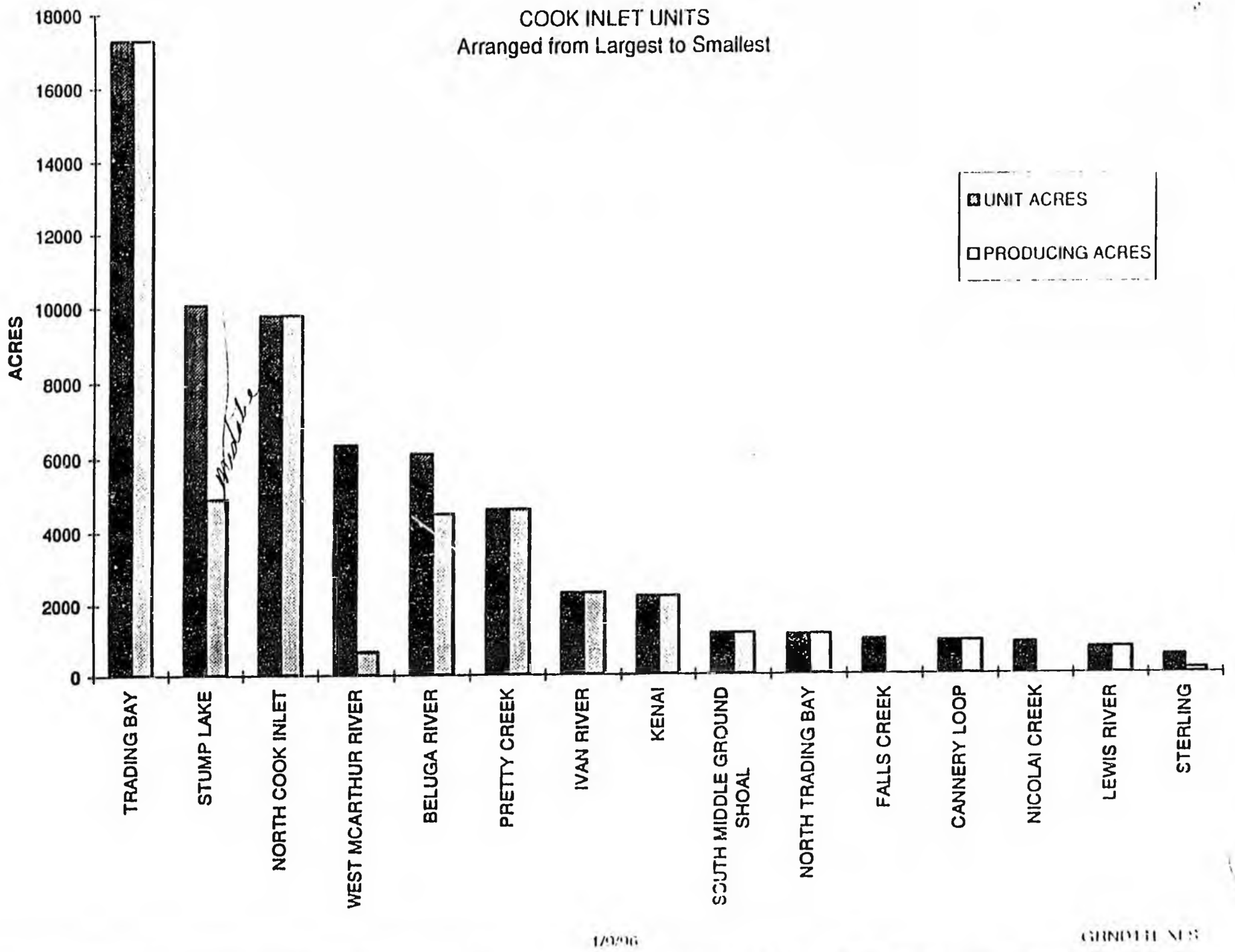
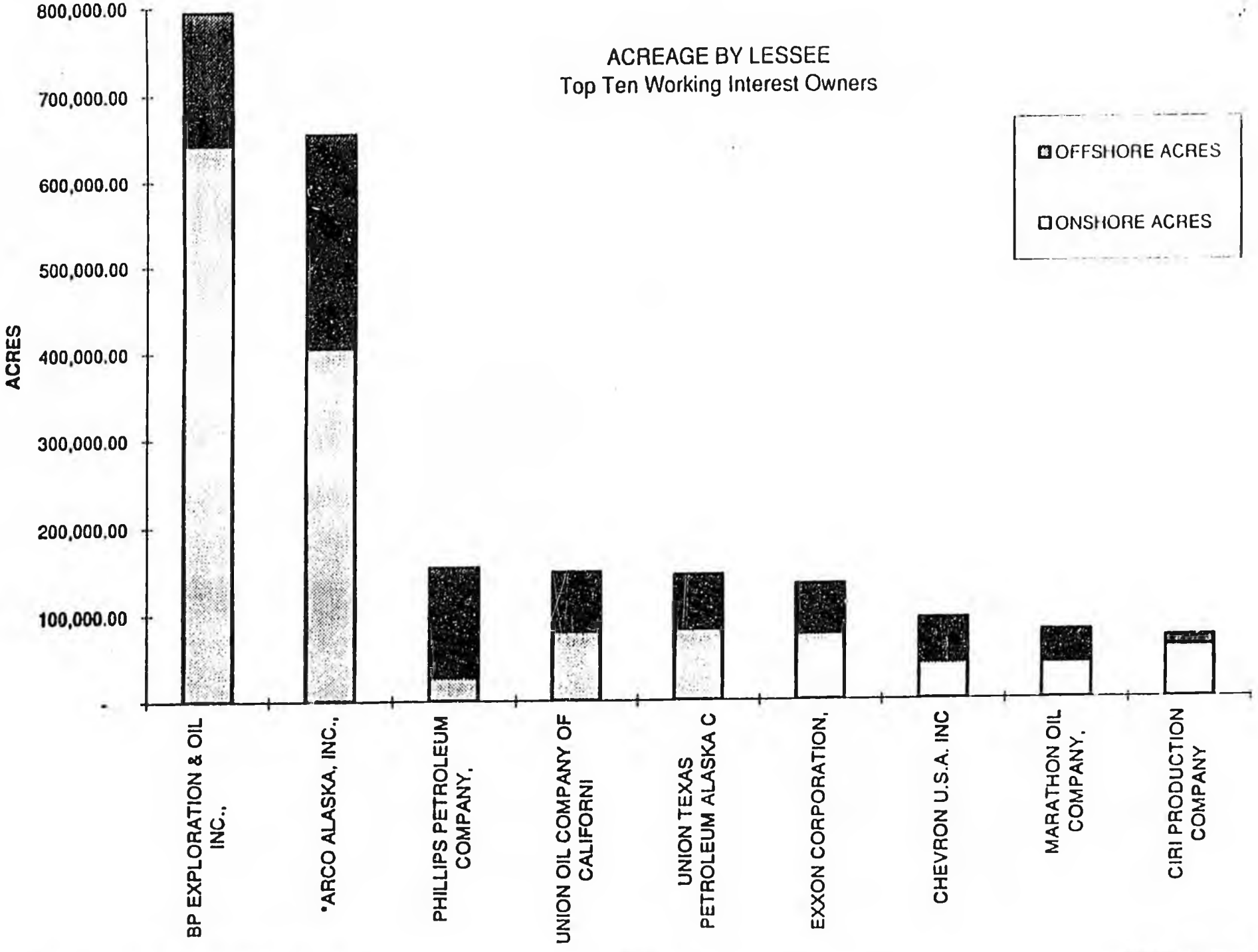
PRODUCING ACRES
PRUDHOE BAY
KUPARUK
KUUKPIK
POINT THOMSON
MILNE POINT
BADAMI
NORTHSTAR
DUCK ISLAND
KAVIK


COOK INLET UNITS
Arranged from Largest to Smallest
ACRES
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
UNIT ACRES
PRODUCING ACRES
TRADING BAY
STUMP LAKE
NORTH COOK INLET
WEST MCARTHUR RIVER
BELUGA RIVER
PRETTY CREEK
IVAN RIVER
KENAI
SOUTH MIDDLE GROUND SHOAL
NORTH TRADING BAY
FALLS CREEK
CANNERY LOOP
NICOLAI CREEK
LEWIS RIVER
STERLING

Top Ten Working Interest Owners

NAME	ONSHORE ACRES	OFFSHORE ACRES
BP EXPLORATION & OIL INC.,	642,481.63	152,483.17
*ARCO ALASKA, INC.,	484,772.30	249,911.48
PHILLIPS PETROLEUM COMPANY,	27,003.32	126,717.40
UNION OIL COMPANY OF CALIFORNI	79,552.93	68,566.13
UNION TEXAS PETROLEUM ALASKA C	81,274.35	62,793.05
EXXON CORPORATION,	75,674.05	56,680.87
CHEVRON U.S.A. INC	41,370.84	51,454.11
MARATHON OIL COMPANY,	40,314.40	38,009.15
CIRI PRODUCTION COMPANY	58,471.89	12,092.10
DANCO EXPLORATION, INC.	32,424.28	26,569.57
	1,670,634.79	971,405.54

* Arco and Atlantic Richfield Combined



* Arco and Atlantic Richfield Combined

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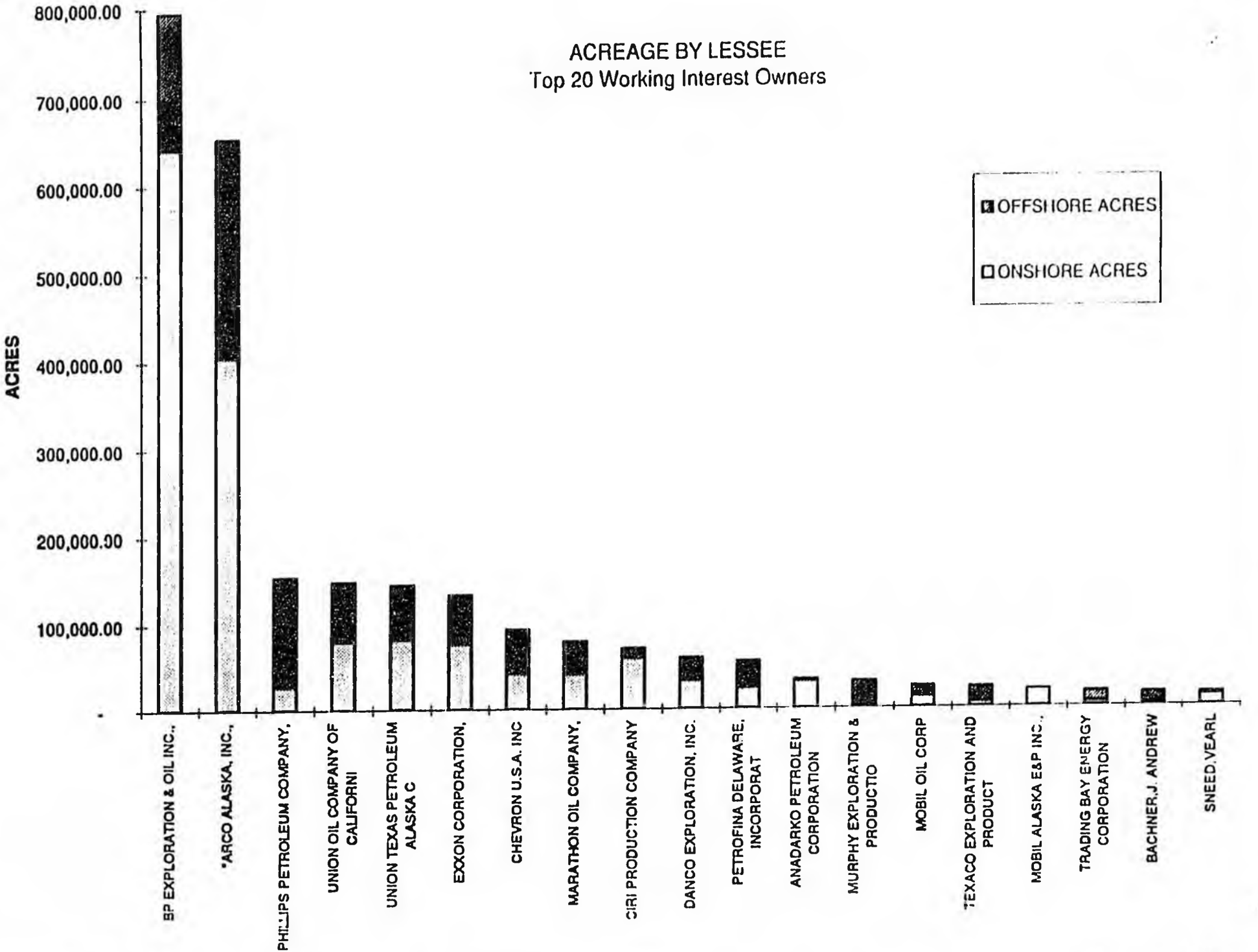

* Arco and Atlantic Richfield Combined

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Oil and Gas Lessees
Listed in Order of Total Acreage Held

NAME	TOTAL ACRES	ONSHORE ACRES	OFFSHORE ACRES
BP EXPLORATION & OIL INC.,	794,964.81	642,481.63	152,483.17
*ARCO ALASKA, INC.,	654,589.81	404,678.32	249,911.48
PHILLIPS PETROLEUM COMPANY.	153,720.72	27,003.32	126,717.40
UNION OIL COMPANY OF CALIFORNI	148,119.06	79,552.93	68,566.13
UNION TEXAS PETROLEUM ALASKA C	144,067.40	81,274.35	62,793.05
EXXON CORPORATION.	132,354.93	75,674.05	56,680.87
CHEVRON U.S.A. INC	92,824.96	41,370.84	51,454.11
MARATHON OIL COMPANY.	78,323.55	40,314.40	38,009.15
CIRI PRODUCTION COMPANY	70,563.99	58,471.89	12,092.10
DANCO EXPLORATION, INC.	58,993.85	32,424.28	26,569.57
PETROFINA DELAWARE, INCORPORAT	54,631.14	23,373.73	31,257.41
ANADARKO PETROLEUM CORPORATION	33,024.48	30,407.29	2,617.18
MURPHY EXPLORATION & PRODUCTIO	30,497.95	275.54	30,222.41
MOBIL OIL CORP	24,736.02	12,232.09	12,503.93
TEXACO EXPLORATION AND PRODUCT	23,323.57	5,161.65	18,161.92
MOBIL ALASKA E&P INC.,	19,719.83	19,719.83	-
TRADING BAY ENERGY CORPORATION	17,354.22	4,384.08	12,970.14
BACHNER,J. ANDREW	15,254.12	26.40	15,227.72
SNEED,VEARL	14,881.99	11,714.19	3,167.80
PLACID OIL CO	12,768.19	1,615.17	11,153.01
STEWART PETROLEUM COMPANY.	10,252.23	279.50	9,972.72
SHELL WESTERN E & P INC	10,250.27	2,700.49	7,549.77
BURGLIN,CLIFFORD	10,062.22	8,576.00	1,486.22
MIDGARD ENERGY COMPANY.	9,889.81	3,574.31	6,315.50
SHELL ONSHORE VENTURES INC.,	8,524.27	929.90	7,594.37
BOREALIS RESOURCES INC.,	8,306.50	5,813.50	2,493.00
MOBIL ROCKY MOUNTAIN INC.	7,656.75	-	7,656.75
OXY USA INC.,	7,395.02	4,517.49	2,877.53
SHELL FRONTIER OIL AND GAS INC	5,725.00	5,725.00	-
LAPP RESOURCES INC	5,674.97	5,674.97	-
BLOCKER JOHN R	5,365.38	279.50	5,085.88
AMOCO PRODUCTION COMPANY	5,323.75	3,329.00	1,994.75
BACHNER,KARL A.	4,677.88	4,677.88	-
DANCO INC	4,462.00	-	4,462.00
TEXACO INC.	4,282.31	2,777.31	1,505.00
BACHNER DANA K	3,958.98	3,958.98	-
ROSEWOOD RESOURCES INC.	3,706.78	939.22	2,767.56
HUNT PETROLEUM CORPORATION,	3,542.82	1,082.76	2,460.05
LEWIS RIVER UNIT PARTNERSHIP,	3,200.00	3,200.00	-
SHELL OFFSHORE INC.,	2,955.33	-	2,955.33
MOBIL EXPLORATION AND PRODUCIN	2,723.23	1,733.39	989.84
ESCOPETA OIL & GAS CORPORATION	2,486.46	139.75	2,346.71
ESCOPETA PRODUCTION - ALASKA	2,486.46	139.75	21,346.71
ARCTIC SLOPE REGIONAL CORPORAT	2,278.50	2,278.50	-
PENNZOIL EXPLORATION AND PRODU	2,158.39	371.50	1,786.89
FORSGREN,KEITH C	2,080.11	3.60	2,076.51
SHELL LAND & ENERGY COMPANY.	1,376.80	1,376.80	-
LOUISIANA LAND AND EXPLORATION	1,329.04	339.20	989.84
JAMES,ALFRED III	1,280.00	5.00	1,275.00
NOVOSEL,FRANK J	1,244.00	1,244.00	-
HUNT, WILLIAM HERBERT TRUST ES	1,119.94	1,119.94	-

* Arco and Atlantic Richfield Combined

Oil and Gas Lessees
Listed in Order of Total Acreage Held

NAME	TOTAL ACRES	ONSHORE ACRES	OFFSHORE ACRES
HUNT, LAMAR TRUST ESTATE	1,077.41	1,077.41	-
HUNT, NELSON BUNKER TRUST ESTATE	1,077.41	1,077.41	-
GAFFI ZELLA	1,024.00	1,024.00	-
LUNDGREN (ESTATE OF),JAMES	1,013.33	-	1,013.33
WHITE,JAMES W.	718.17	87.34	630.83
COASTAL OIL & GAS CORPORATION	588.80	427.23	161.58
SUN OPERATING LIMITED PARTNERS	554.52	554.52	-
EVERETTE,KELLEY	512.00	512.00	-
COOK INLET REGION INC.	485.67	339.49	146.19
PARKER NANCY BLACK	317.50	317.50	-
FOREST OIL CORPORATION	268.66	194.94	73.73
MARATHON PETROLEUM COMPANY,	253.34	253.34	-
GUSTAFSON,MARY	202.67	-	202.67
BLOCKER, JOHN R. TRUSTEE	189.90	-	189.90
KLEINER,WALTER H	179.54	21.83	157.71
SEXTON,MICHAEL R	168.89	-	168.89
TIPPERARY OIL & GAS CORPORATIO	129.25	70.68	58.57
GIINTHER DOROTHY	128.00	128.00	-
BURGLIN,BRIAN	101.33	-	101.33
BURGLIN,BRUCE	101.33	-	101.33
BURGLIN,DAVID	101.33	-	101.33
BURGLIN,JOSEPH	101.33	-	101.33
RIMA,BARBARA C	101.33	-	101.33
GREMILLION,ANNE L	79.38	79.38	-
LOVICK,,ROBERT G. JR.	79.38	79.38	-
READ,NANCY L	79.38	79.38	-
SPINKS,MARGARET L.	79.38	79.38	-
TRANSWORLD OIL & GAS LTD	68.04	49.37	18.67
TWO FOUR SIX EXPLORATION INC,	68.04	49.37	18.67
LEEDE,EDWARD H	64.62	35.34	29.28
NANA REGIONAL CORPORATION INC	64.50	-	64.50
BATTLEY KENNETH W.	49.45	-	49.45
RYLANDER,MARIAN IRIS	35.00	35.00	-
PACIFIC LIGHTING GAS DEV CO,	32.00	17.50	14.50
DONNELLY,RICHARD	29.08	15.90	13.18
GRACE PETROLEUM CORPORATION,	27.22	19.75	7.47
SUNLITE INTERNATIONAL INC,	27.22	19.75	7.47
ARTUS,WILLIAM D.	23.54	-	23.54
HUGHES,KINGDON R	23.04	12.60	10.44
DOYON LIMITED	21.50	-	21.50
CHAPARRAL ROYALTY COMPANY	14.54	7.95	6.59
LEEDE AND PINE,	12.92	7.07	5.86
CHRISTIANSON,CABOT	9.42	-	9.42
PERRY (ESTATE OF),JOHN W	7.27	3.98	3.29
SEARLS,ROBERT JR	7.27	3.98	3.29
POPE,JOHN C	3.06	-	3.06
ROBERTS,CATHRYN	3.06	-	3.06
WOODBINE PETROLEUM. INC..	0.53	0.53	-
	2,810,888.29	1,745,718.48	1,084,169.76

* Arco and Atlantic Richfield Combined

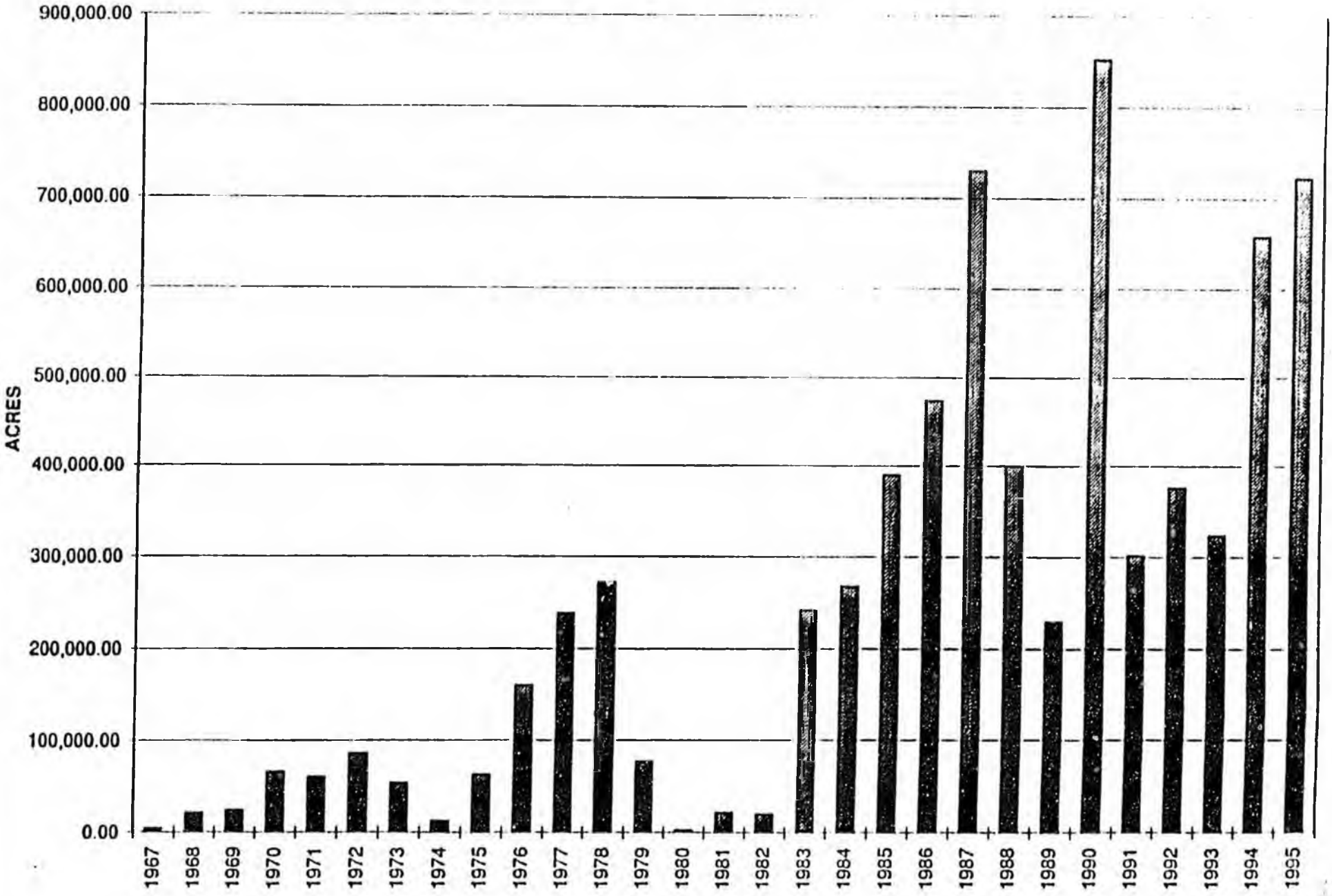
(1)

CLOSED LEASES

04-Jan-96

STATUS DATE	TOTAL ACRES
1967	4,329.99
1968	20,903.47
1969	23,897.48
1970	65,808.82
1971	60,223.79
1972	85,860.95
1973	53,372.48
1974	12,216.39
1975	62,976.88
1976	159,986.82
1977	238,493.74
1978	271,487.49
1979	76,702.83
1980	2,295.47
1981	21,614.33
1982	20,004.64
1983	241,923.74
1984	267,982.62
1985	390,081.28
1986	473,464.94
1987	730,063.63
1988	399,823.23
1989	229,143.08
1990	852,197.39
1991	301,659.43
1992	375,849.50
1993	323,774.58
1994	658,375.98
1995	722,643.15
Grand Total:	**7,147,158.12**

CLOSED ACREAGE PER YEAR



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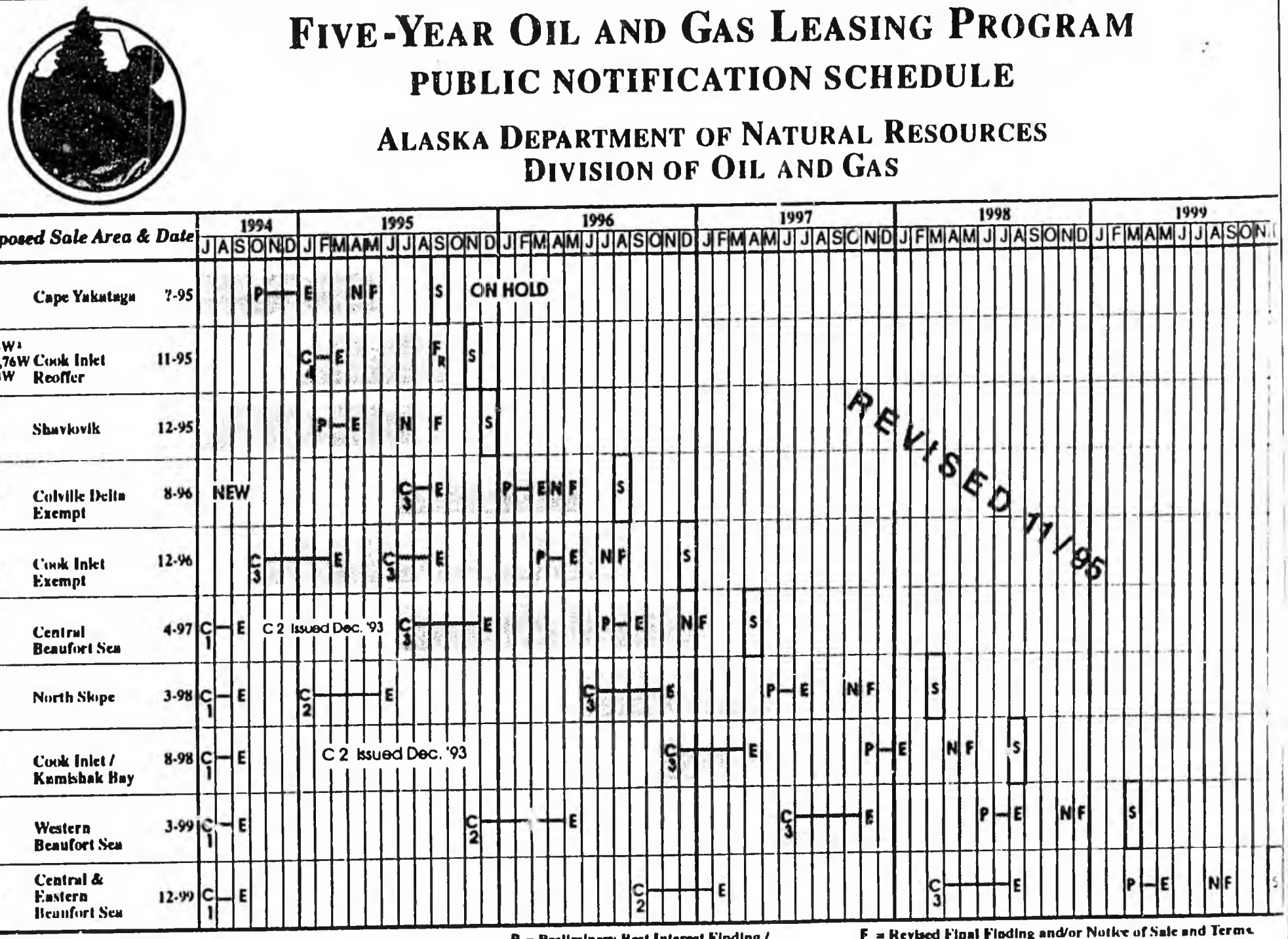
FIVE-YEAR OIL AND GAS LEASING PROGRAM

PUBLIC NOTIFICATION SCHEDULE

ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS



C = Call for Comments:
- 1 = New Sales and 5-Year Program Revisions.
- 2 = Request for General Information.
- 3 = Request for Socioeconomic and Environmental Information.
- 4 = Request for New Information Made Available Since Last Finding.

E = End of Comment Period

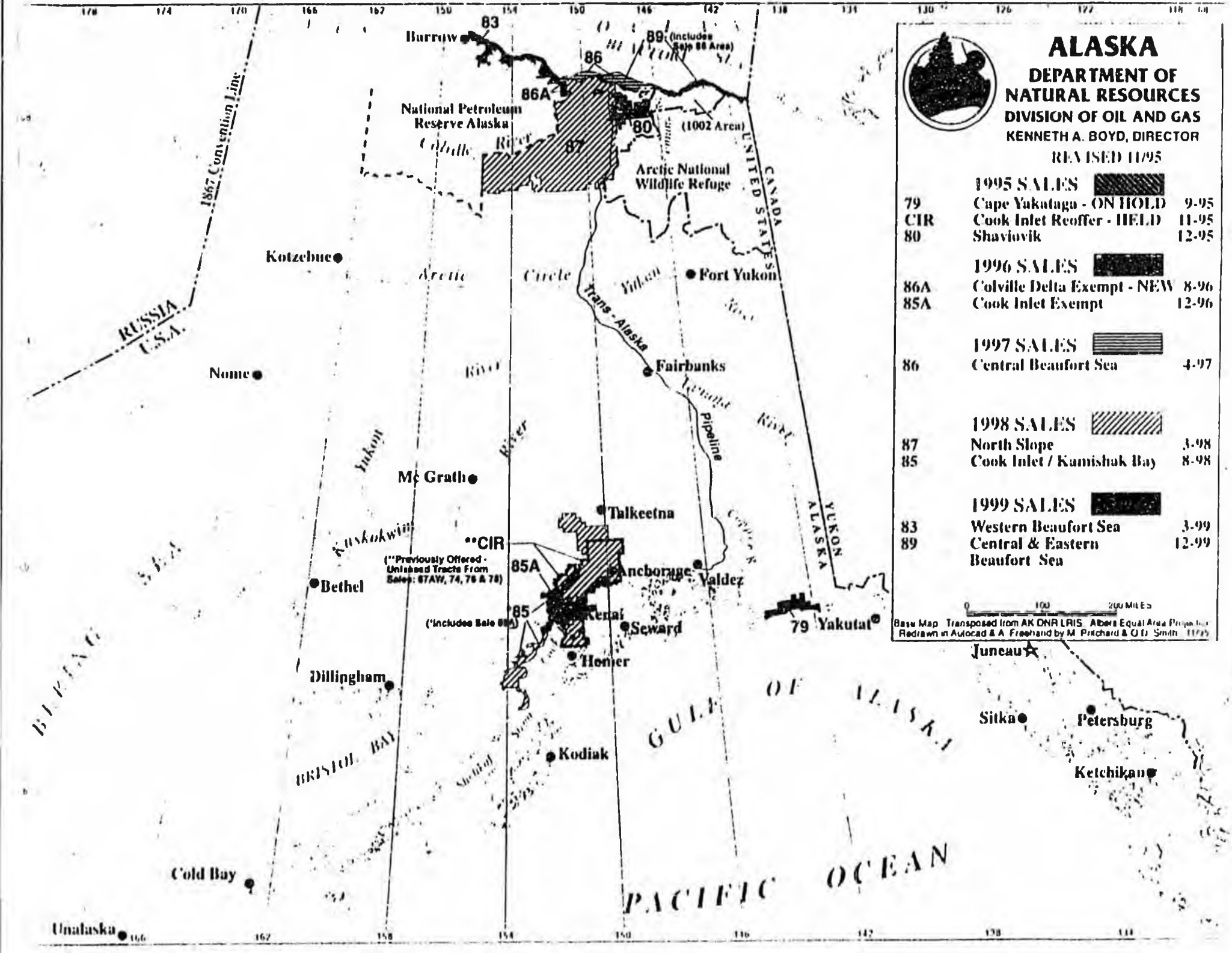
P = Preliminary Best Interest Finding / ACMP Consistency Analysis. (If required.)
N = Notice of Intent to Issue Final Finding.
F = Final Finding and Notice of Sale and Terms.
S = Sale.

F_R = Revised Final Finding and/or Notice of Sale and Terms.

Best Interest Finding Process

Public Meetings may be held at any time.

ALASKA OIL AND GAS LEASING PROGRAM



ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

KENNETH A. BOYD, DIRECTOR

REVISED 11/95

1995 SALES

79	Cape Yakataga - ON HOLD	9-95
CIR	Cook Inlet Reoffer - HELD	11-95
80	Shaviovik	12-95

1996 SALES

86A	Colville Delta Exempt - NEW	8-96
85A	Cook Inlet Exempt	12-96

1997 SALES

86	Central Beaufort Sea	4-97

1998 SALES

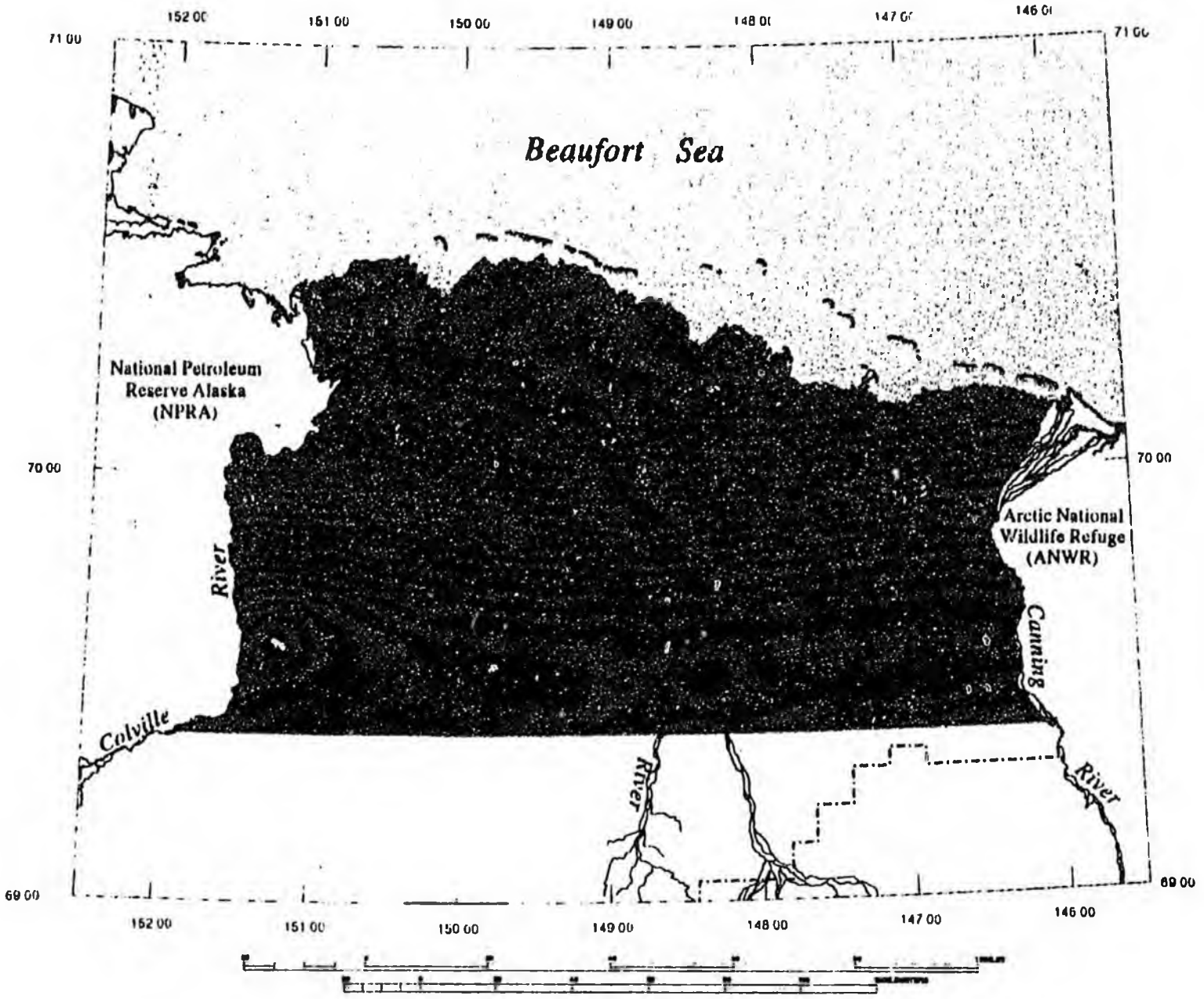
87	North Slope	3-98
85	Cook Inlet / Kamishak Bay	8-98

1999 SALES

83	Western Beaufort Sea	3-99
89	Central & Eastern Beaufort Sea	12-99

0 100 200 MILES

Base Map Transposed from AK DNR LRIS Albers Equal Area Projection
Redrawn in Autocad & A Freehand by M Pritchard & O.D. Smith 11/95



AREAWIDE LEASING

Report of Investigations 95-11

ANALYSIS OF HISTORICAL OIL AND GAS LEASE SALE AND EXPLORATION DATA FOR ALASKA

by

Richard W. Kornbrath

Published by

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS
IN COOPERATION WITH THE DIVISION OF OIL & GAS

1995

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

Tony Knowles, *Governor*

John T. Shively, *Commissioner*

Milton A. Wiltse, *Acting Director and State Geologist*

1995

This DGGS Report of Investigations is a final report of scientific research. It has received technical review and may be cited as an agency publication.

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In cooperation with the Division of Oil and Gas

CONTENTS

FIGURES

TABLES

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CONTENTS

FIGURES

TABLES

ANALYSIS OF HISTORICAL OIL AND GAS LEASE SALE AND EXPLORATION DATA FOR ALASKA

by
Richard W. Kornbrath[1]

INTRODUCTION

This report examines the relationship between competitive oil and gas lease-sale offerings and the success rate of subsequent exploration. In some past state lease sales, all the tracts offered were leased. However, in most state lease sales and in all the federal lease sales in Alaska, substantially fewer tracts have been leased than were offered. Of the tracts leased by the oil industry, virtually all are "explored," but to very different degrees; some tracts have been commercially developed, some have been drilled without success, and many have reverted back to the state without drilling.

To understand the potential impacts from exploration and development, specific activities and techniques that are generally used (or that may be contemplated) to locate and extract subsurface hydrocarbons must be considered. These possible activities should be viewed in the proper perspective by examining their frequency of occurrence and the likelihood that a given lease offering or an individual lease will undergo exploration drilling with a subsequent commercial discovery over the lifetime of the lease.

Northern Alaska and Cook Inlet are the dominant oil regions of the state (figs. 1 and 2) and account for most lease sale offerings. Historical lease sale data from state and federal sales in Alaska have been compiled by sale number, date, and region (tables 1-3). A complete database of all producing fields, known but undeveloped accumulations, and discoveries has been assembled and categorized by region, hydrocarbon type (oil or gas), date of discovery, and status (tables 4-9). A commercial well-log database containing all the exploration and development wells in the state has also been used to compile lists of the numbers and types of wells drilled in each region of the state. The data are summarized in tables 10-12 and figures 3 and 4.

THE EXPLORATION PROCESS

Exploration for oil and gas is often misinterpreted solely as the drilling of exploration wells. In fact, most exploration activities are conducted without ever drilling a new exploration well. The actual drilling of a well, when it does occur, is the culmination of a comprehensive evaluation process that may take many years to complete and is reserved for those prospects with sufficient revenue-generating potential to offset the high costs of lease acquisition, drilling, and development. This analysis shows that few leases offered in competitive sales are ever drilled, and fewer yet are found to hold commercial quantities of hydrocarbons. Understanding this is critical to rationally weigh the benefits versus the financial risk of oil and gas exploration and to make rational land-use decisions. In actual process, "exploration" primarily entails highly technical subsurface mapping efforts conducted in oil-company offices; moreover, potentially "intrusive" activities such as drilling, field development, facilities construction, and product transportation are unlikely to occur on the vast majority of tracts being offered for lease.

The term "exploration," as it pertains to the search for commercial quantities of oil and gas, encompasses a broad range of techniques and activities developed by geoscientists to help detect and find hydrocarbons trapped in rocks beneath the earth's surface. These techniques and activities attempt to take advantage of different aspects of the generally accepted model used to explain the formation of hydrocarbon deposits in the subsurface.

Briefly, this geologic model recognizes source rock, reservoir rock, a seal, a trap, timing, and migration as the most important elements responsible for most hydrocarbon deposits. Source rocks (normally shales) are organic-rich, generally fine-grained rocks that have the capacity to generate hydrocarbons under certain subsurface burial temperatures and pressures. Reservoir rock (normally porous sandstone or limestone) refers to a rock type that has interconnected pore space capable of storing and then yielding liquid or gaseous hydrocarbons. Seal refers to the generally fine-grained rock type that forms an impervious barrier over a trap, preventing the further migration or escape of hydrocarbons. Trap or trapping mechanism describes the combination of elements (structural and/or stratigraphic) that result in particular geometries in subsurface reservoir rocks conducive to collecting and storing hydrocarbons. Finally, timing and migration describe the processes related to the subsurface movement (generally up-structure or updip), over time, of hydrocarbons after the time of formation of a subsurface trap.

The State of Alaska's Five-Year Oil and Gas Leasing Program establishes biennial lists of proposed lease-sale areas projected five years into the future. This lead time,

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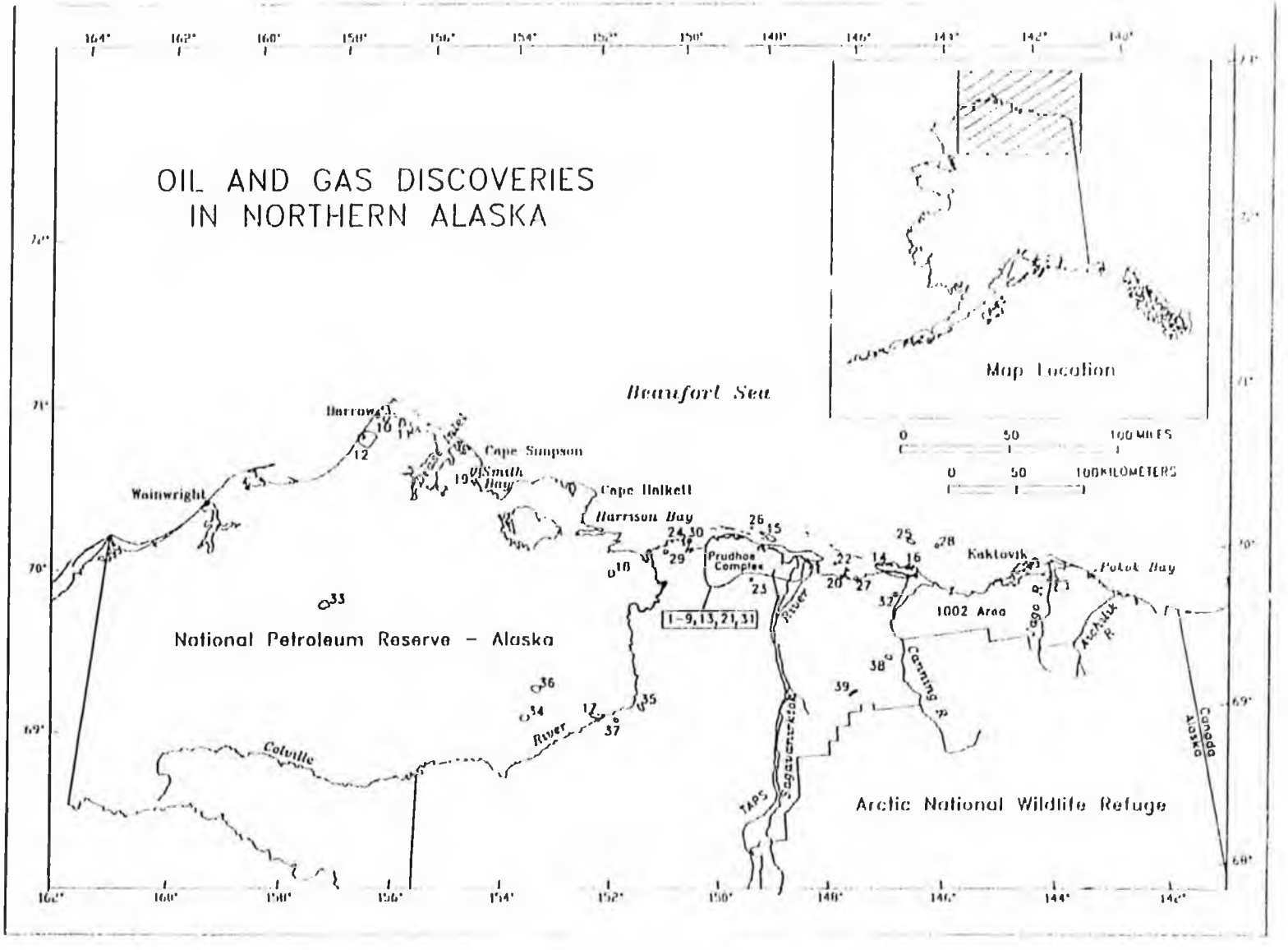

Figure 1. *Oil and gas discoveries in northern Alaska. (The numbers by the discoveries are keyed to table 9.)*

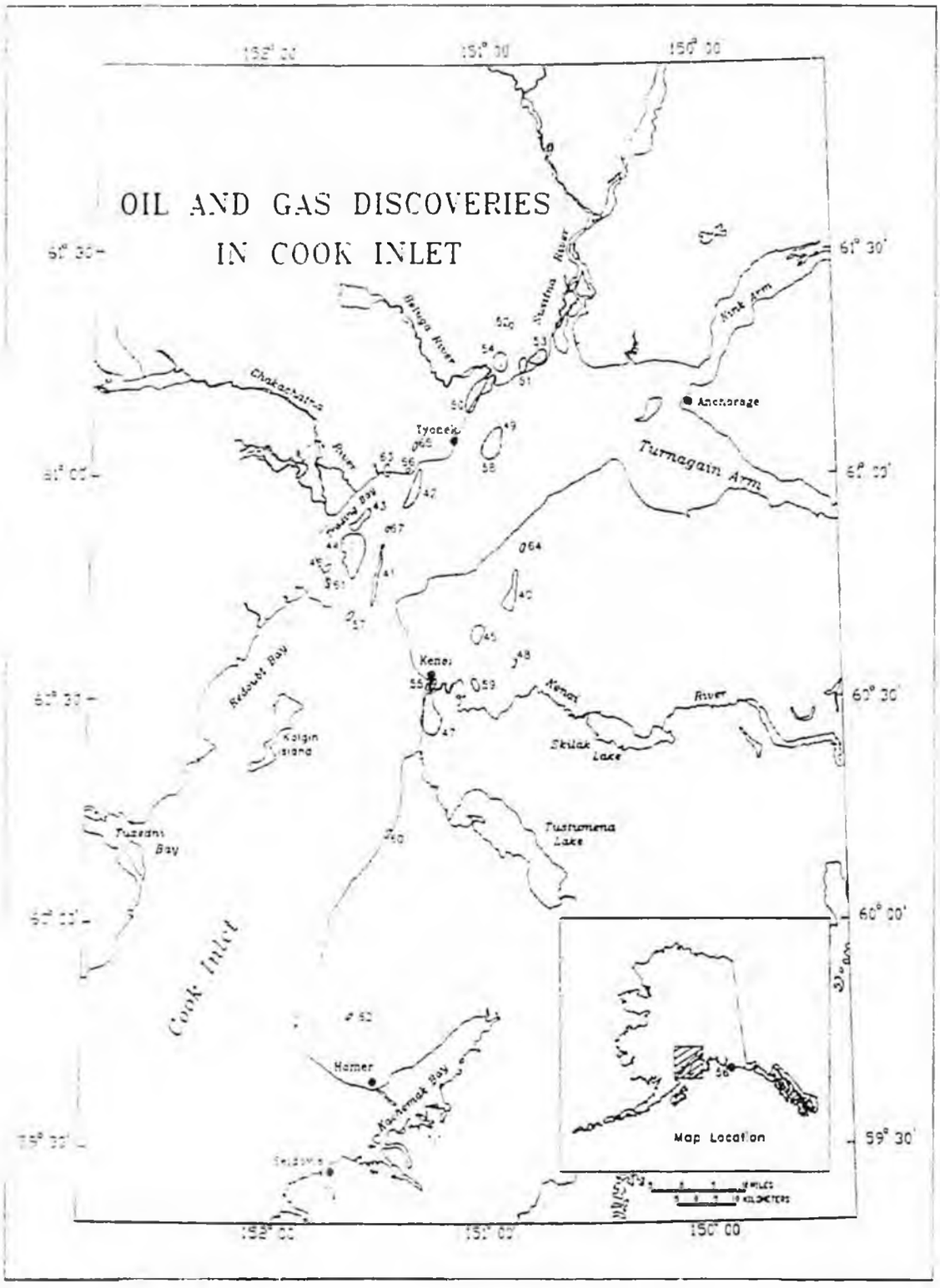

Figure 2. *Oil and gas discoveries in Cook Inlet. (The numbers by the discoveries are keyed to table 9.)*

in addition to providing a stable and predictable schedule as a basis for comprehensive reviews of potential benefits and impacts, enables the oil industry to target specific areas for exploration *before* the actual lease sale. Exploration for oil and gas prior to a lease sale follows a very logical and predictable path that begins with the gathering and compilation of existing technical information in the oil-company offices, the construction of geologic and geophysical maps and other displays to illuminate prospective areas, and the acquisition of additional information that may be desirable.

The first stage of "exploration" can be considered to be those activities and techniques that examine different aspects of the geologic model for hydrocarbon formation *before* leasing. For example, one group of geoscientists will review existing seismic data and previously drilled wells in a particular area to create subsurface maps that will be the basis for evaluating the area for potential subsurface traps. Another group may be in the field conducting studies of rock outcroppings, which may reveal information on source-rock potential, type of hydrocarbons, or the likelihood for reservoir rock in the subsurface. Engineers and economists may be looking at flow rates, potential productivity, or the drilling costs associated with known accumulations that have similarities to the area under investigation. When these studies reveal gaps in the data or interesting leads, additional seismic data may be acquired by individual companies, groups, or consortiums of companies, or by seismic-acquisition companies to sell later on speculation. Prospect maps generated at this stage are used to make probabilistic estimates of the amount of trapped petroleum. The same maps are used to guide the companies' competitive bids at the time of the lease sale. The most potentially "intrusive" activity during this first phase of exploration is the acquisition of new seismic data if the companies deem it necessary.

The second stage of exploration occurs after lease acquisition, following a lease sale. At this point a company knows which lands it has rights to and can begin a thorough evaluation of that land. Again, the predominant activity in this phase is unobtrusive studies conducted primarily in the office. For example, if a block of leases has been acquired and there is a greater expectation of an eventual return on investment, expenditures toward the evaluation effort can be increased. At this point, advanced computer mapping techniques are used to analyze and refine geologic interpretations and produce upgraded, more detailed subsurface prospect maps. Much time and effort is put into these types of complex analyses. At the same time, company officers may contact other companies that also acquired a lease interest in the area and may be interested in joint exploration to trim costs, increase efficiency, and spread risk. If the mapped prospects look good both geologically and economically when stacked up against dozens, or perhaps hundreds, of other prospects or investment opportunities, and if the companies' financial situations are favorable given the current timing and management philosophy, further exploration expenditures may be considered.

At times, the second stage of exploration will lead to another round of seismic-data acquisition and subsequent interpretation. Today, with advanced computer modeling and three-dimensional seismic surveys, it is often more cost effective to acquire new and better seismic data, reinterpret the prospect by integrating the new data, and conduct another round of even more rigorous prospect delineation than it is to go out at this point and drill an exploration well. Despite all the expensive technology, however, no amount of studies provide any certainty that hydrocarbons are present, and there are no methods to directly detect commercial hydrocarbons beneath the surface. Only drilling can determine the actual presence of producible hydrocarbons.

The third stage of exploration entails the actual drilling of an exploration well. At this point, the prospect beneath a lease has survived an exhaustive geologic and economic "culling" and review process, and all the other needed elements such as timing, rig availability and suitability, intercompany coordination, allocation of exploration budgets, and management commitment have finally come together. The results of the first exploration well, which may take months to fully analyze, will determine the next course of action. In most cases—as the statistics in this report show—an exploration well fails to find a hydrocarbon deposit. However, if the results are positive and hydrocarbon-bearing rocks are encountered, additional delineation drilling and seismic data acquisition may be needed. Further lease acquisition or intercompany agreements may also be desirable. The decision to pursue further delineation drilling is based primarily on the perceived (or potential) commerciality of the deposit. The estimated size and the complexity of a newly discovered deposit will generally govern the number of delineation wells needed (and the timing of the drilling of these tests) in this latter stage of exploration.

All the data from the exploration and delineation wells and from the geological and geophysical mapping efforts are used to rigorously refine the assessment of in-place and recoverable hydrocarbons trapped in the prospect. This complex interpretation of the quantity and producibility of the deposit is considered in light of engineering and economic models that assess the feasibility, costs, and timing of development. Within a time period of 5 to 10 years from lease acquisition through discovery and delineation, a go or no-go decision on development is finally made. At this stage—when a new discovery has been sufficiently delineated and the

companies make a commitment to commercial development by applying to form development units, participating areas, or pool rule areas—the exploration phase can be considered complete.

DATABASE AND SOURCES OF INFORMATION

The data used in this analysis and the various compilations and calculations are displayed in tables 1-12 and figures 3 and 4. Locations of the oil and gas discoveries are depicted on the maps of northern Alaska and Cook Inlet in figures 1 and 2. The historical information on competitive lease sales was compiled from data supplied by the Alaska Department of Natural Resources, Division of Oil and Gas. Much of the lease-sale data can be found in the division's 1993 Five-Year Oil and Gas Leasing Program document. Updates through the current year and further details of mixed sale areas were provided by division staff.

Federal lease sales data were obtained from the 1994 Alaska OCS Statistical Summary by the Alaska Regional Office of the Minerals Management Service and compiled from their master list of leases. The Bureau of Land Management provided data for the onshore competitive sales held in National Petroleum Reserve-Alaska (NPRA).

Information on known oil and gas fields, discoveries, and undeveloped accumulations was compiled from the 1994 Division of Oil and Gas Historical and Projected Oil and Gas Consumption report. Updated material and more recent information on estimated volumes were provided by division staff.

Finally, the Petroleum Information Corporation well database on CD-ROM (PetroROM Well Data), subscribed to by the Division of Oil and Gas and current through April 1994, provided a means to conduct searches by well type to assess the numbers of exploration wells drilled by region of the state.

RESULTS OF ANALYSIS

LEASING DATA

From December 10, 1959, to the present, 89 state and federal sales have been conducted in Alaska. Twelve other sales (six state and six federal) have been canceled for various reasons. The areas offered for lease encompass onshore and offshore lands that overlie parts of sedimentary basins throughout the state, along the coastline, and into the federal Outer Continental Shelf (OCS). The two dominant areas of leasing, exploration, and development are Cook Inlet and northern Alaska (tables 1-3, figs. 1 and 2).

Table 10 provides details of the compiled lease sales data. The 89 state and federal lease sales, combined, have offered 34,096 tracts for competitive leasing, or a combined total of 171,069,120 acres. The state alone, in 68 sales, has offered 9,018 tracts (26,686,902 acres), and leased 4,654 tracts (11,611,495 acres). The federal government, in 21 sales, has offered 25,078 tracts (144,382,218 acres), and leased 1,618 tracts (9,894,273 acres). Of the state tracts leased, only 1,148 remain active (validly held and rentals being paid) as of May 1994. The federal government reports 334 active OCS leases and about 155 active onshore leases (an accurate account of the onshore leases was not available from the Bureau of Land Management) as of February 1994, and the number of leases being "relinquished" (returned) is increasing.

In this compilation, some of the tracts *offered* include some reoffered tracts or acreage that represent either multiple offerings of the same lands that were not leased initially or lands leased once and then reoffered. In addition, the tracts and acreage *leased* also include some lands that may have been leased more than once. With the current database it is difficult to separate first-time, original tract offerings from multiple offerings. However, inasmuch as each lease sale is a distinct event in time, at which tracts may (or may not) receive bids, distinguishing between these categories is not thought to be significant.

For comparison, a 1994 Land Status (Ownership) Map (oral commun., Mark Myers, Department of Natural Resources) with sedimentary basin outlines was used to estimate that the total state acreage available for leasing in Cook Inlet is about 8 million acres and in northern Alaska, about 14 million acres. This combined estimate (about 22 million acres) compares favorably to the total state Cook Inlet (10,412,283 acres) and northern Alaska (13,416,981 acres) acreage already offered for lease (23,829,264 acres). Because the state has offered virtually all its Cook Inlet and northern Alaska lands for lease, the inference is that perhaps as much as 2 million acres—mostly in Cook Inlet—would fall in one of the categories of reoffered lands.

The statistics in table 10 show that the total number of state tracts leased in all 68 state sales represents an average of about 51.6 percent of the tracts offered. This number is somewhat smaller (43.5 percent) when calculated based upon acreages offered and leased. The average number of federal tracts leased in the 21 federal offerings is only about 6.4 percent, or when calculated based on acreage, about 6.8 percent. The discrepancy in these percentages is undoubtedly a result of the large OCS areas the Minerals Management Service has historically offered for leasing. Federal lease sales in areas such as the Navarin Basin, Chukchi Sea, Beaufort Shelf, and even in NPRA, encompass millions of acres in a single offering, compared to state sales which historically offer only hundreds

of thousands of acres. In addition, it is likely that the high costs associated with exploration programs in the arctic and western Alaska OCS have had a dampening effect on leasing in those areas. For these reasons, the combined average of all (federal and state) tracts leased of about 18.4 percent is viewed as probably not being a very meaningful historical estimate. Rather, more importance should be placed on the individual state and federal averages.

Another calculation was performed on just the state sales in the two dominant oil and gas regions of the state, Cook Inlet and northern Alaska. In 34 Cook Inlet offerings (comprised of 27 sales and the Cook Inlet portion of seven other sales), about 56.4 percent of the tracts were leased (48.1 percent based upon acreage). In 31 northern Alaska sales (comprised of 29 sales and portions of two other sales), about 49.7 percent of the tracts were leased (43.5 percent based upon acreage).

KNOWN DEPOSITS AND DRILLED WELLS

All known hydrocarbon deposits in the state are listed on tables 4–9, 11. There are currently 28 developed fields (12 in northern Alaska, 16 in Cook Inlet) producing oil or gas or both; as of May 1994, the total number of state leases contributing to this production is 282. No federal OCS leases currently produce, but 35 onshore leases in Cook Inlet do have production.

Table 11, provides a summary of Alaska hydrocarbon deposits. The total number of undeveloped accumulations or discoveries in northern Alaska is 27, which includes Point Thomson and Flaxman Island as two separate discoveries. In Cook Inlet, there are 11 additional known, but currently nonproducing, accumulations. These include three fields that have previously produced but are now shut in (Sterling, Nicolai Creek, and Moquawkie). Table 11 also includes the abandoned Katalla field onshore in the Gulf of Alaska. The total number of known, but nonproducing, accumulations for the state is 39.

The grand total of all Alaska discoveries—the combined number of producing fields and nonproducing accumulations—is 67.

The well database used to assess numbers of exploration wells is organized into onshore and offshore parts on CD-ROM for Alaska. These categories are not strictly adhered to in all cases, as the "onshore" listing contains many wells drilled offshore in state waters along the northern Alaska Beaufort Sea coast and in Cook Inlet. These and other minor problems with the data format do not materially impact the validity of the data sorts performed in this analysis. This database employs 11 categories to describe initial well status, ranging from new field wildcat to development wells, injection wells, stratigraphic tests and others. For this analysis, exploration wells are considered to be those wells that fall into the following three status categories: new field wildcat, new pool wildcat, and outpost-extension.

The total number of wells (all types) drilled in Alaska through April 1994 is 4,057 according to the database (table 11). A convenient dividing line for separating the North Slope Basin (north of the Brooks Range) from the rest of the state is lat 68° N. The database reveals that north of this latitude, 2,911 wells have been drilled; south of this line, 1,146 wells have been drilled. A total of 751 exploration wells have been drilled in the state through April 1994. In northern Alaska, which includes all onshore areas north of lat 68° N., the Beaufort Sea, and the Chukchi Sea, 350 exploration wells have been drilled. In Cook Inlet, the area between lat 58.5°–62° and long 149°–153.5°, 266 exploration wells have been drilled.

CONCLUSIONS

Historical leasing data show that, on average, about half of the tracts offered in state sales are ultimately leased (51.6 percent of the tracts are leased or 43.5 percent of the acreage offered is leased). Average for state Cook Inlet leased tracts is slightly higher (56.4 percent) and the federal averages are considerably lower. The significance of this lease information is that although virtually all the offered tracts will have undergone an initial stage of exploration prior to the lease sale, only about half of the offered tracts have undergone the more rigorous second stage of exploration, which may involve a second phase of seismic-data acquisition.

In the third exploration stage (exploratory wells), the number of tracts initially offered for lease that might be drilled has already been reduced by about half. Information from the well database shows that 751 exploratory wells have been drilled in Alaska from 1900 through April 1994. This number includes 79 early wells (many in Katalla and NPRA) that were drilled prior to 1960. The state competitive leasing program began with the Cook Inlet Lease Sale 1 on December 10, 1959, and the federal program in Alaska began with Sale 39 in 1976. Thus, the total number of drilled exploratory wells resulting from competitive leasing is 672. It is reasonable to assume that most of these wells were located on separate tracts, that is, there were not two or more exploratory wells on a given lease. This information leads to the conclusion that of the total number of leased tracts in all state and federal competitive sales (6,272), only 672 were actually drilled (10.7 percent) (table 12). If this percentage is calculated just for state leases and exploratory wells (which is difficult because of the data format), the estimate is slightly higher.

Examining the data further reveals the success ratio (percent of discoveries versus the number of drilled exploration wells) of exploratory drilling in Alaska. For example, the total number of discoveries (producing fields plus all other known accumulations) for Alaska is 67. Eleven of these deposits (mostly in NPRA) were identified before competitive leasing began in December 1959 (table 9). The historical success ratio of exploratory drilling since 1960 is the 56 discoveries divided by the 672 exploratory wells, or about 8.3 percent (table 12). This calculation assumes that only one exploratory well was drilled on each discovery, an assumption that is not totally valid inasmuch as one or two delineation wells drilled after the initial discovery well may be counted in the "exploration well count." However, even if the well count is arbitrarily reduced to 600 exploratory wells, the success ratio only rises to about 9.3 percent, indicating that the originally calculated 8.3 percent success ratio is still within a reasonable and logical range.

Finally, it is important to examine the success ratios for *commercially successful* discoveries. In Alaska, there are currently 28 producing oil or gas accumulations, and three other fields (Sterling, Nicolai Creek, and Moquawkie) that have produced in the past. Three currently producing fields were found prior to 1960 (South Barrow, Swanson River, and Kenai gas fields). Therefore, 28 fields meet the criteria of current or past production since Sale 1. The 28 fields divided by the 672 exploratory wells reveal that about 4.2 percent of the exploratory wells drilled since 1960 have found commercially viable fields in Alaska (table 12). Again, this calculations assumes that only one exploratory well was drilled on each commercial field, an assumption that is not totally valid inasmuch as one or two delineation wells drilled after the initial discovery well may be counted in the "exploration well count." However, an arbitrary reduction in the exploratory well count does not significantly affect the range of the 4.2 percent estimated commercial success ratio.

As of May 1994, 282 state and 35 federal leases were producing hydrocarbons. Twelve additional leases (oral commun., Bill Van Dyke, Department of Natural Resources) have produced hydrocarbons at some point in the past (from fields or parts of fields that are now shut in), bringing the total number of state and federal leases that have produced or are currently producing to about 329. Therefore, of the total state and federal tracts leased (6,272) only about 5.2 percent (329/6,272 x 100) are being (or have been) commercially produced (table 12). This number is slightly higher (about 6.3 percent) when calculated with just the 4,654 state tracts leased and state producing leases (294). When calculated with the 9,018 total state tracts *offered* for lease (table 1), just 3.3 percent (294/9,018 x 100) of the total state tracts offered for lease were or are being produced.

The state has realized enormous financial benefits from leasing its subsurface oil and gas rights. Revenues from bonuses, rentals, royalties, and taxes on petroleum exploration and development have contributed tremendously to the state's economy, infrastructure, standard of living, and fiscal health. Potential or perceived conflicts between the state's leasing program and other activities have historically been evaluated in the best-interest findings, which were compiled by the department prior to leasing.

Data compiled and analyzed in this study can help increase public understanding of the process and results of state and federal land leasing for oil exploration. The study points out that when land is made available for lease, only half will be leased; of the land leased, only a small percentage will be explored; and the exploration of a still smaller percentage of the leases will lead to discovery of oil and subsequent development.

KEY HISTORICAL PERCENTAGES

- About half of the state tracts offered for leasing have actually been leased.
- About 10.7 percent of the state and federal tracts leased have actually been drilled.
- Discoveries have been made by about 8.3 percent of all the state and federal exploratory wells drilled since competitive leasing began.
- Commercial deposits have been found by about 4.2 percent of all the state and federal exploratory wells drilled since competitive leasing began.
- About 5.2 percent of the total state and federal tracts leased have been commercially developed (were or are being produced). About 3.3 percent of the total state tracts offered for lease have been commercially developed (were or are being produced).

ACKNOWLEDGMENTS

I thank Gil Mull of the Alaska Division of Geological & Geophysical Surveys for his encouragement and thoughtful review of this paper.

Table 1. *Summary of past state competitive lease sales as of May 1994*

Sale	Sale date	Acres offered	Percent leased	Acres leased	Average $/acre	Tracts offered	Tracts leased	Bonus received	Dominant area	Area
1	12/10/59	88,055.00	87.66%	77,191.00	52.08	37	31	$ 4,020,342.43	Cook Inlet	Wide Bay, Kenai to Nimlchik, Kachemak Bay
2	7/13/60	17,567.51	93.96%	16,505.57	24.70	27	26	407,654.54	Cook Inlet	Kenai Pen., W. Forelands, Nushagak Bay
3 (1)*	12/7/60	73,047.70	31.30%	22,866.70	1.54	26	9	35,325.31	Mixed	Katalla, Kalifonsky Beach, Herendeen Bay
4	1/25/61	400	100.00%	400	679.04	3	3	271,614.40	Cook Inlet	Nimilchik uplands
5 (2)	5/23/61	97,876.00	98.06%	95,980.00	74.71	102	99	7,170,464.88	Mixed	Tyonek, Controller Bay, Pavlov Bay
6	8/4/61	13,257.00	100.00%	13,257.00	8.35	6	6	110,671.55	Gulf Ak.	Controller Bay
7 (3)	12/19/61	255,708.44	73.18%	187,118.44	79.43	68	53	14,863,049.33	Mixed	Icy, Yakutat, Kachemak bays, S. Kenai, N. CI
8	4/24/62	1,061.70	100.00%	1,061.70	4.80	8	8	5,097.00	Cook Inlet	Big Lake, uplands
9 (4)	7/11/62	315,668.93	83.77%	264,436.93	59.42	89	76	15,714,112.60	Mixed	Tyonek, Knik, Kalgin Is., S. Kenai, Wide Bay
10	5/8/63	167,583.06	84.43%	141,490.51	29.23	200	158	4,136,224.92	Cook Inlet	Tyonek, Kenai, offshore/uplands
11	8/2/63		CANCELED							Yakutat Bay
12	12/11/63	346,782.40	71.25%	247,089.00	12.31	308	207	3,042,680.74	Cook Inlet	Forelands, Knik/Turnagain, U. CI, Kenai Pen.
13 (5)	12/9/64	1,194,373.00	60.39%	721,224.00	7.68	610	341	5,537,099.85	Mixed	Fire Is., W. Forelands, Prudhoe West
14	7/14/65	754,033.00	53.45%	403,000.00	15.25	297	159	6,145,472.59	North Slope	Prudhoe west to Canning R., offshore/uplands
15	9/28/65	403,042.06	74.87%	301,751.28	15.49	293	216	4,674,343.74	Cook Inlet	N. CI, Kalgin, Redoubt Bay, Knik, S. Kenai
16 (6)	7/19/66	184,410.05	72.66%	133,987.29	52.55	205	153	7,040,880.17	Mixed	Kenai Pen., N. CI, Middleton Is., Redoubt Bay
17	11/22/66	19,229.70	96.67%	18,589.70	7.33	36	35	136,279.67	Cook Inlet	Big Lake, Kenai, offshore/uplands
18 (7)	1/24/67	47,729.00	91.47%	43,657.00	33.90	23	20	1,479,906.19	Mixed	Katalla, Prudhoe, offshore/uplands
19	3/28/67	2,560.00	REJECTED 12/9/74							Lower Cook Inlet; offshore/uplands
20	7/25/67	311,249.89	82.39%	256,447.31	73.14	295	220	18,757,340.88	Cook Inlet	Big Lake, Knik, N. CI, Kalgin Is., Nimilchik
21	3/26/68	346,623.00	47.59%	164,961.00	18.24	308	147	3,009,224.00	Ak. Pen.	Port Heiden and Port Moller, offshore
22	10/29/68	111,199.48	54.20%	60,272.15	17.29	230	125	1,042,219.90	Cook Inlet	Big Lake, W. Forelands, Kachemak. to Kenai
23	9/10/69	450,858.47	91.50%	412,548.47	2,181.66	179	164	900,041,605.34	North Slope	Colville to Canning R., offshore/uplands
24	5/12/71	196,635.07	47.10%	92,617.97	4.92	244	106	455,640.57	Cook Inlet	Big Lake, Knik, Kenai, West Forelands
25	9/26/72	325,401.42	54.78%	178,244.71	7.43	259	152	1,324,673.40	Cook Inlet	Big Lake, Knik, Belukha, N.CI
26	12/11/72	399,920.96	44.50%	177,972.56	8.75	218	105	1,557,848.84	Cook Inlet	North Cook Inlet
27	5/9/73	308,400.81	36.93%	113,891.71	9.92	210	96	1,130,324.51	Cook Inlet	Tuxedni, Nimilchik, Kenai, Kalgin
28	12/13/73	166,648.04	58.69%	97,803.69	253.77	98	62	24,819,189.91	Cook Inlet	Nimilchik, Kachemak Bay, Belukha
29	10/23/74	278,269.43	45.68%	127,119.65	8.19	164	82	1,040,909.98	Cook Inlet	Kalgin, Nimilchik, N. CI, Turnagain, Big Lake
29A	10/17/78		CANCELED							Point Thomson
29B	7/24/79	34,678.04	100.00%	34,678.04	4.56	20	20	158,041.78	Copper R.	Copper River Basin
30	12/12/79	341,140.18	86.86%	296,307.65	1,914.87	71	62	567,391,497.48	North Slope	Beaufort Sea (Joint Federal & State)
31	9/16/80	196,268.00	100.00%	196,268.00	63.12	78	78	12,387,469.60	North Slope	Prudhoe uplands, Kuparuk R. to Mik. Bay
33	5/13/81	815,000.00	52.76%	429,978.16	10.00	202	103	4,299,781.60	Cook Inlet	Upper CI, Kenai Pen., Susitna
32	8/25/81	202,836.74	75.15%	152,428.22	10.00	78	59	1,524,282.20	Cook Inlet	Lower Cook Inlet, Kenai Pen. and offshore
35	2/2/82	601,171.50	21.82%	131,190.69	10.00	149	31	1,311,906.90	Cook Inlet	Lower CI, Kenai Pen., Redoubt north to Drift R.
36	5/26/82	56,862.41	100.00%	56,862.41	573.02	13	13	32,583,451.87	North Slope	Beaufort Sea, Pt. Thomson area
37	8/24/82	852,603.08	19.80%	168,849.00	3.33	217	33	562,943.90	Copper R.	Middle Tanana and Copper River basins
37A	8/24/82	1,874.60	100.00%	1,874.60	52.00	1	1	97,479.20	Cook Inlet	Chakok River Exempt (Kenai Pen.)
34	9/28/82	1,231,517.00	46.44%	571,954.00	46.70	261	119	26,713,018.17	North Slope	Prudhoe uplands, Sag R. to Canning R.

Table 1. *Summary of past state competitive lease sales as of May 1994 (cont.)*

Sale	Sale date	Acres offered	Percent leased	Acres leased	Average $/acre	Tracts offered	Tracts leased	Bonus received	Dominant area	Area
38	1/19/83		CANCELED							Norton Basin
39	5/17/83	211,988.08	100.00%	211,988.08	99.05	42	42	$20,998,100.98	North Slope	Beaufort Sea, Gwydyr Bay to Harrison Bay
40	9/28/83	1,044,743.02	42.44%	443,354.88	7.17	284	140	3,177,178.26	Cook Inlet	Upper Cl, Anchorage south to Homer
42	1/24/84		CANCELED							Minchumina Basin
43&43A	5/22/84	374,152.89	95.65%	357,863.02	94.53	84	81	33,827,377.15	North Slope	Beaufort, Pitt Pt. to Harrison Bay, Colville/PB
41	9/18/84	1,437,900.46	19.40%	278,938.96	3.03	308	63	843,964.92	Bristol Bay	Bristol Bay Uplands: Kvichak R. to Port Heiden
46A	2/26/85	248,581.64	76.45%	190,041.54	13.28	65	50	2,523,333.71	Cook Inlet	Cl Exempt, Kenai Pen., Susitna, N. Cl
45A	9/24/85	606,385.00	27.19%	164,885.00	28.25	113	32	4,657,478.08	North Slope	NS Exempt, Canning R. to Colville R.
47	9/24/85	192,568.81	94.80%	182,559.81	63.79	50	48	11,645,003.26	North Slope	Kuparuk Uplands, south of Prudhoe Bay
48	2/25/86	526,101.00	50.70%	266,736.00	9.16	104	54	2,444,341.85	North Slope	Kuparuk Uplands: south of Kuparuk oil field
48A	2/25/86	42,053.00	100.00%	42,053.00	12.13	11	11	510,255.16	North Slope	Mikkelsen Bay, Foggy Is. Bay
49	6/24/86	1,189,000.61	33.21%	394,880.74	2.40	260	98	947,171.27	Cook Inlet	Kalgin Is., Yentna/Skwentna, Alexander Cr.
51	1/27/87	592,142.00	16.99%	100,632.00	2.88	119	26	289,624.90	North Slope	Prod. Bay Uplands, Canning R. to Sag R.
50	6/30/87	118,147.31	100.00%	118,147.31	56.05	35	35	6,621,722.81	North Slope	Camden Bay, Flaxman Is. to Hulahula R.
54	1/26/88	421,809.16	80.29%	338,687.16	13.83	89	72	4,683,388.24	North Slope	Kuparuk Uplands, Colville R. delta
66A	6/28/88		CANCELED							North Slope Exempt
55	9/28/88	201,706.79	47.91%	96,641.90	152.13	56	25	14,700,602.00	North Slope	Demarcation Pt., Canning R. to Canada
69A	9/28/88	775,555.00	47.51%	368,490.00	16.61	155	75	6,119,135.00	North Slope	Kuparuk Uplands, Canning R. to Colville R.
52	1/24/89	175,981.48	29.81%	52,463.34	33.12	43	15	1,737,512.66	North Slope	Beaufort Sea, Pitt Point to Tangent Point
72A	1/24/89	677.15	100.00%	677.15	671.90	1	1	454,977.40	North Slope	Oliktok Point uplands
67A	1/29/91	549,364.06	34.87%	191,588.06	28.77	140	55	5,511,338.27	Cook Inlet	Cl Exempt, Anch., Upper Cl, Kenai Pen.
70A	1/29/91	532,152.82	79.03%	420,567.82	65.88	135	109	27,707,540.94	North Slope	Kuparuk Uplands, Canning R. to Colville R.
64	6/4/91	754,542.40	4.52%	34,143.00	7.10	141	6	242,389.00	North Slope	Kavik, Canning R. to Sagavanirktok R.
65	6/4/91	491,090.94	35.20%	172,864.61	40.46	108	36	6,993,949.12	North Slope	Beaufort Sea, Pitt Point to Canning R.
74	9/24/91	605,850.89	4.39%	26,604.99	12.06	134	5	320,852.72	Cook Inlet	Nikishka to Nimilchik, Drift R., N. Cl
61	1/22/92	991,087.00	26.29%	260,550.00	9.32	181	46	2,429,551.00	North Slope	White Hills, Colville R. to White Hills
68	6/2/92	153,445.00	0.00%	0	0.00	36	0	0	North Slope	Beaufort Sea, Nulavik to Tangent Point
75	12/8/92	217,205.00	57.47%	124,832.00	78.11	90	55	9,750,111.21	North Slope	Kuparuk Uplands, Colville to Sag R.
76	1/26/93	393,024.70	36.00%	141,503.66	461.25	86	36	65,269,166.65	Cook Inlet	Upper Cook Inlet
67 A-W	1/26/93	282,577.26	45.94%	129,809.69	18.75	69	33	2,433,863.85	Cook Inlet	West Cook Inlet
77	5/25/93	1,260,146.00	3.63%	45,727.00	25.47	228	8	1,164,555.34	North Slope	Nanushuk onshore, Chandler to IvishAk. R.
70 A-W	5/25/93	37,655.00	74.51%	28,055.00	48.41	11	8	1,358,027.12	North Slope	Kuparuk Uplands, Canning to Kavik R.
57	9/21/93	1,033,248.01	0.00%	0	0.00	196	0	0	North Slope	North Slope Foothills
75A	9/21/93	14,342.72	100.00%	14,342.72	31.36	11	11	449,846.80	North Slope	Colville River Exempt
TOTALS:		26,686,901.87	43.51%	11,611,494.55	164.91	9,018	4,654	$1,914,812,429.61		

*1-7 refers to mixed areas described in table 2.

Table 2. *Details of mixed state lease-sale areas*

Mixed areas	Sale number	Sale date	Acres offered	Percent leased	Acres leased	Average $/acre	Tracts offered	Tracts leased	Bonus received	Dominant area	Area
(1)	3 CI	12/7/60	1,851.70	100.00	1,851.70	5.41	1	1	$ 10,026.25	Cook Inlet	Kalifonsky Beach area
	3 GOA	12/7/60	12,275.00	42.83	5,257.00	1.10	6	3	5,777.81	Gulf Ak.	Katalla area
	3 Kod.	12/7/60	12,270.00	0.00	0.00	0.00	4	0	0.00	Kodiak	Offshore Kodiak
	3 Ak. Pen.	12/7/60	46,651.00	33.78	15,758.00	1.24	15	5	19,521.25	Ak. Pen.	Herendeen Bay
		Totals:	**73,047.70**	**31.30**	**22,866.70**	**1.54**	**26**	**9**	**35,325.31**		
(2)	5 CI	5/23/61	58,275.00	96.75	56,379.00	124.84	93	90	7,038,533.38	Cook Inlet	Tyonek area
	5 GOA	5/23/61	23,508.00	100.00	23,508.00	2.82	6	6	66,203.88	Gulf Ak.	Controller Bay
	5 Ak. Pen.	5/23/61	16,093.00	100.00	16,093.00	4.08	3	3	65,727.62	Ak. Pen.	Pavlov Bay
		Totals:	**97,876.00**	**98.06**	**95,980.00**	**74.71**	**102**	**99**	**7,170,464.88**		
(3)	7 CI	12/19/61	205,251.44	72.06	147,911.44	98.66	56	44	14,593,659.13	Cook Inlet	S. Kenai, N. CI
	7 GOA	12/19/61	50,457.00	77.70	39,207.00	6.87	12	9	269,390.20	Gulf Ak.	Icy Bay, Yakutat
		Totals:	**255,708.44**	**73.18**	**187,118.44**	**79.43**	**68**	**53**	**14,863,049.33**		
(4)	9 CI	7/11/62	310,310.46	85.00	263,758.46	59.24	84	74	15,620,116.56	Cook Inlet	Tyonek, Knik., S. Kenai
	9 Ak. Pen.	7/11/62	5,358.47	12.66	678.47	129.70	5	2	87,996.04	Ak. Pen.	Wide Bay
		Totals:	**315,668.93**	**83.77**	**264,436.93**	**59.42**	**89**	**76**	**15,714,112.60**		
(5)	13 CI	12/9/64	569,916.00	44.97	256,299.00	4.53	361	157	1,160,576.56	Cook Inlet	Fire Is., W. Forelands areas
	13 N. Ak.	12/9/64	624,457.00	74.45	464,925.00	9.41	249	184	4,376,523.29	N. Alaska	Prudhoe West area
		Totals:	**1,194,373.00**	**60.39**	**721,224.00**	**7.68**	**610**	**341**	**5,537,099.85**		
(6)	16 CI	7/19/66	153,441.05	69.63	106,835.29	24.18	181	132	2,583,748.87	Cook Inlet	Kenai Pen., N. CI
	16 GOA	7/19/66	30,969.00	87.67	27,152.00	164.15	24	21	4,457,131.30	Gulf Ak.	Middleton Island
		Totals:	**184,410.05**	**72.66**	**133,987.29**	**52.55**	**205**	**153**	**7,040,880.17**		
(7)	18 N. Ak.	1/24/67	37,662.00	100.00	37,662.00	39.02	15	15	1,469,645.39	N. Alaska	Prudhoe area
	18 GOA	1/24/67	10,067.00	59.55	5,995.00	1.71	8	5	10,260.80	Gulf Ak.	Katalla
		Totals:	**47,729.00**	**91.47**	**43,657.00**	**33.90**	**23**	**20**	**1,479,906.19**		

Table 3. *Summary of past federal lease sales (updated February 1994)*

Sale	Sale date	Acres offered	Percent leased	Acres leased	Average $/acre	Blocks offered	Blocks leased	High bid total[a]	Bonus received	Area
39	4/13/76	1,008,499.00	40.56	409,058	1,368.60	189	76	$571,871,587	$559,836,587	Gulf of Alaska
CI	10/27/77	768,580.00	64.44	495,307	804.49	135	87	400,319,543	398,471,313	Cook Inlet
BF	12/11/79	173,423.00	49.46	85,776	5,697.29	46	24	491,728,138	488,691,138	Beaufort Sea
55	10/21/80	1,195,569.00	16.67	199,261	550.79	210	35	117,550,113	109,751,073	Gulf of Alaska
RS-1	6/30/81	996,300.00	0.57	5,693	29.95	175	1	3,091,738	170,496	Gulf of Alaska
60	9/29/81	858,247.00	8.52	73,157	60.23	153	13	4,405,899	4,405,899	Cook Inlet
821	1/27/82	1,516,257.00	44.57	675,816	86.34	59	26	na	58,351,262	NPRA
822	5/26/82	3,519,515.00	7.85	276,396	35.24	212	12	na	9,741,022	NPRA
RS-2	8/5/82	785,089.60	0.00	0	0.00	140	0	0	0	Cook Inlet
71	10/13/82	1,825,770.40	36.31	662,860	3,101.16	338	121	2,067,604,786	2,055,632,336	Beaufort Sea - Diapir Field
57	3/15/83	2,379,751.00	14.11	335,898	946.34	418	59	325,267,372	317,873,372	Norton Basin
70	4/12/83	2,688,787.00	20.12	540,917	788.40	479	96	427,343,830	426,458,830	St. George Basin
831	7/20/83	2,195,845.00	18.96	416,433	40.02	84	18	na	16,666,659	NPRA
85	3/9/84	CANCELED								Barrow Arch/Chukchi
83	4/17/84	28,048,995.00	3.31	927,989	556.38	5,036	163	631,228,331[b]	516,317,331	Navarin Basin
841	7/18/84	1,590,677.00	0.00	0	0.00	64	0	na	0	NPRA
87	8/22/84	7,773,446.82	15.54	1,207,714	722.00	1,419	227	877,131,327[b]	871,964,327	Beaufort Sea - Diapir Field
99	2/20/85	CANCELED								Shumagin
86	2/26/86	CANCELED								Shumagin
100	4/11/86	CANCELED								Norton Basin
89	5/2/86	CANCELED								St. George Basin
88	5/2/86	CANCELED	1							Gulf of Alaska
97	3/16/88	18,277,806.00	6.08	1,110,742	103.77	3,344	202	115,261,636[b]	115,261,636	Beaufort Sea
109	5/25/88	25,631,122.00	7.47	1,914,285	249.72	4,694	350	478,177,948	478,032,631	Chukchi Sea
92	10/11/88	5,603,586.00	2.17	121,754	783.87	990	23	95,439,500	95,439,500	N. Aleutian Basin
124	6/26/91	18,556,976.24	1.49	276,004	60.89	3,417	57	16,807,025	16,807,025	Beaufort Sea
126	8/28/91	18,987,975.69	0.84	159,213	44.70	3,476	28	7,117,304	7,117,304	Chukchi Sea
TOTALS:		**144,382,217.75**	**6.85**	**9,894,273**	**661.69**	**25,078**	**1,618**	**6,630,346,077**	**6,546,989,741**	

[a] Includes only accepted and rejected high bid amounts.

[b] Does not include 17 blocks (39,168 hectares) in Sale 83 affected by a Soviet claim of jurisdiction. Bids on these blocks were rejected on December 14, 1988. Does not include 4 blocks (9,216 hectares) in Sale 87 and 16 blocks (35,353 hectares) in Sale 97 affected by a Canadian claim of jurisdiction. Bids on these blocks have been determined to be adequate but will not be accepted or rejected until the U.S. determines that it is in its best interest to do so. The 1/5-bonus amounts received for these bids have been placed in an interest-bearing account.

Table 4. *Producing fields of northern Alaska as of January 1994*

Status	Years in production	No.	Field name	Year of discovery	Projected avg. 1994 daily prod. (x1000 bbls/day)	Estimated original recov. reserves	Cumulative production thru 1993	Remaining reserves as of 1/94	Est. ultimate recovery as of 1/94	Est. percent depleted as of 1/94
Oil production (Millions of barrels)										
P	1969-present	1	Prudhoe Bay	1967	1,078	9,590	8,307	3,618	11,925	69.7%
P	1981-present	2	Lisburne	1967	24	400	98	83	181	54.2%
P	1981-present	3	Kuparuk River	1969	315	1,200	1,070	1,142	2,212	48.4%
P	1985-present[a]	4	Milne Point[b]	1969	20	60	34	81	115	29.5%
P	1993-present	5	Prudhoe Bay other[c]	1970, 1976	6	25	1	25	26	3.2%
P	1986-present	6	Endicott[d]	1978	100	375	243	262	505	48.1%
P 4/94	1994	7	Niakuk[e]	1985	10	55	0	55	55	0.0%
P	1993-present	8	Point McIntyre	1988	90	300	2	356	358	0.5%
					TOTALS:	**12,005**	**9,755**	**5,622**	**15,377**	
Gas production (Billions of cubic feet)										
P	1958-present	1	South Barrow	1949	not available	25	21	4	25	84.0%
P	1969-present	2	Prudhoe Bay	1967	not available	28,500	1,631	21,551	23,182	7.0%
P	1981-present	3	Lisburne	1967	not available	635	70	277	347	20.2%
P	1981-present	4	Kuparuk River	1969	not available	640	261	709	970	26.9%
P	1985-present[a]	5	Milne Point[b,f]	1969	not available	n/a	9	n/a	n/a	n/a
P	1981-present	6	East Barrow	1974	not available	12	7	6	13	53.8%
P	1993-present	7	Prudhoe Bay other[c]	1976	not available	n/a	1	n/a	n/a	n/a
P	1986-present	8	Endicott[d]	1978	not available	731	71	908	979	7.3%
P	1992-present	9	Walakpa	1980	not available	n/a	1	n/a	n/a	n/a
					TOTALS:	**30,543**	**2,072**	**23,455**	**25,516**	

P = producing

[a]Milne Point was shut in for 1988 and part of 1987

[b]Milne Point includes Schrader Bluff; Schrader Bluff production commenced in 1991

[c]Includes West Beach and N. Prudhoe Bay State (discovered in 1970) together

[d]Includes Sag Delta North; Sag Delta production commenced in 1989

[e]Includes Alapah (Lisburne)

[f]Milne Pt. is assigned no gas reserves because most of its gas will be used for production fuel

Sources: "Historical and Projected Oil and Gas Consumption," DNR, Feb. 1994; "Estimates of Oil Reserves in Alaska" and "Estimates of Gas Reserves in Alaska," AOGCC, Jan. 1994

Table 5. *Significant undeveloped northern Alaska hydrocarbon accumulations as of January 1994*

Status	Years in production	No	Field name	Year of discovery	Projected avg. 1994 daily prod. (x1000 bbls/day)	Estimated original recov. reserves	Cumulative production thru 1993	Remaining reserves as of 1/94	Est. ultimate recovery as of 1/94	Est. percent depleted as of 1/94
Oil accumulations (Millions of barrels)										
UD	1983-1986[a]	1	West Sak	1969	0	147	0.755	149	150	0.5%
UD	none	2	Point Thomson/Flaxman	1977[b]	0	200	0	200	200	0.0%
UD	none	3	Northstar/Seal Island	1984	0	180	0	180	180	0.0%
Gas accumulations (Billions of cubic feet)										
UD	none	1	Point Thomson/Flaxman	1977	0	3,500	0	3,000	3,000	0.0%

UD = undeveloped
[a]West Sak Pilot Project
[b]Flaxman Island accumulation discovered in 1975

Sources: "Historical and Projected Oil and Gas Consumption," DNR, Feb. 1994; "Estimates of Oil Reserves in Alaska" and "Estimates of Gas Reserves in Alaska," AOGCC, Jan. 1994

Table 6. *Other undeveloped northern Alaska hydrocarbon discoveries as of January 1994*

No.	Field name	Year of discovery	Estimated original recov. reserves
Oil discoveries (Millions of barrels)			
1	Umiat	1946	50
2	Fish Creek	1949	n/a
3	Simpson	1950	12
4	Mikkelson	1978	n/a
5	Gwydyr Bay	1981	n/a
6	Tern Island	1983	n/a
7	Hemi Springs	1984	n/a
8	Colville Delta	1985	n/a
9	Hammerhead	1986	n/a
10	Sandpiper Island	1986	n/a
11	Badami	1990	n/a
12	Kuvlum	1992	n/a
13	Fiord (Colville Delta)	1992	n/a
14	Kalubik (Colville Delta)	1992	n/a
15	Cascade	1993	n/a
16	Sourdough	1994	n/a

No.	Field name	Year of discovery	Estimated original recov. reserves
Gas discoveries (Billions of cubic feet)			
1	Meade	1950	20
2	Wolf Creek	1951	n/a
3	Gubik	1951	600
4	Square Lake	1952	58
5	East Umiat	1963	n/a
6	Kavik	1969	n/a
7	Kemik	1972	n/a

Table 7. *Producing fields of Cook Inlet as of January 1994*

Status	Years in production	No	Field name	Year of discovery	Projected avg. 1994 daily prod. (x1000 bbls/day)	Estimated original recov. reserves	Cumulative production thru 1993	Remaining reserves as of 1/94	Est. ultimate recovery as of 1/94	Est. percent depleted as of 1/94
Oil production (Millions of barrels)										
P	1958-present	1	Swanson River (federal)	1957	n/a	217	219	11	230	95.2%
P	1968-present	2	Middle Ground Shoal	1962	6.1	162	169	16	185	91.3%
P	1967-present	3	Granite Point	1965	6.2	126	120	14	134	89.6%
P	1967-present	4	Trading Bay	1965	2.2	90	95	6	101	94.0%
P	1965-present	5	McArthur River	1965	17.9	574	561	42	603	93.0%
P	1972-present	6	Beaver Creek (federal)	1965	n/a	4	5	1	6	82.2%
P	1993-present	7	West McArthur River	1991	2	n/a	0	5	5	2.0%
					TOTALS:	**1,173**	**1,168**	**95**	**1,263**	
Gas production (Billions of cubic feet)										
P	1958-present	1	Swanson River (federal)	1957	not available	259.000	0.000	165.000	165.000	0.0%
P	1960-present	2	Kenai	1959	not available	2,496.000	2,081.189	204.000	2,285.189	91.1%
P	1978-present[a]	3	West Fork	1960	not available	n/a	4.049	4.000	8.049	50.3%
P	1965-present	4	Middle Ground Shoal	1962	not available	86.000	91.983	11.000	102.983	89.3%
P	1969-present	5	North Cook Inlet	1962	not available	1,594.000	1,089.657	410.000	1,499.657	72.7%
P	1963-present[b]	6	Beluga River	1962	not available	1,003.000	455.358	375.000	830.358	54.8%
P	1967-present	7	Granite Point	1965	not available	105.000	104.804	33.000	137.804	76.1%
P	1965-present	8	Trading Bay	1965	not available	63.000	69.564	29.000	98.564	70.6%
P	1967-present	9	McArthur River	1965	not available	965.000	617.615	349.000	966.615	63.9%
P	1973-present	10	Beaver Creek (federal)	1965	not available	241.500	127.176	115.000	242.176	52.5%
P	1990-present	11	Ivan River	1966	not available	n/a	11.112	n/a	n/a	n/a
P	1984-present	12	Lewis River	1975	not available	n/a	8.157	n/a	n/a	n/a
P	1990-present	13	Stump Lake	1978	not available	n/a	4.464	185[c]	194.302[c]	2.1%
P	1986-present	14	Pretty Creek	1979	not available	n/a	4.838	[c]	[c]	[c]
P	1988-present	15	Cannery Loop	1979	not available	300.000	65.726	226.000	291.726	22.5%
P	1993-present	16	West McArthur River	1991	not available	n/a	0.031	n/a	n/a	n/a
					TOTALS:	**7,112.500**	**4,735.723**	**1,921.000**	**6,628.121**	

P = producing

[a]West Fork was shut in from 1986 through 1990

[b]Beluga did not produce in 1965 and 1966

[c]Pretty Creek and Stump Lake remaining reserves and ultimate recovery are combined

Sources: "Historical and Projected Oil and Gas Consumption," DNR, Feb. 1994; "Estimates of Oil Reserves in Alaska" and "Estimates of Gas Reserves in Alaska," AOGCC, Jan. 1994

Table 8. *Other known Cook Inlet[a] hydrocarbon accumulations as of January 1994*

Status	Years in production	No.	Field name	Year of Discovery	Projected avg. 1994 daily prod. (x1000 bbls/day)	Estimated original recov. reserves	Cumulative production thru 1993	Remaining reserves as of 1/94	Est. ultimate recovery as of 1/94	Est. percent depleted as of 1/94
Oil accumulations (Millions of barrels)										
ABND	1904-1933	1	Katalla (Gulf of Alaska)	1902	0	n/a	0.154	n/a	n/a	n/a
UD	none	2	Redoubt Shoal	1968	0	n/a	0.000	n/a	n/a	0.0%
UD	none	3	Sunfish	1991	0	n/a	0.000	77.000	77.000	0.0%
Gas accumulations (Billions of cubic feet)										
SI	1962-1986	1	Sterling[b]	1961	not available	25.100	2.088	23.000	25.088	8.3%
UD	none	2	Falls Creek	1961	not available	n/a	0.019	13.000	13.019	0.1%
UD	none	3	West Foreland	1962	not available	n/a	0.000	20.000	20.000	0.0%
UD	none	4	N. Middle Ground Shoal	1964	not available	n/a	n/a	n/a	n/a	n/a
SI	1967-1970	5	Moquawkie	1965	not available	n/a	0.985	n/a	n/a	n/a
UD	none	6	North Fork	1965	not available	n/a	0.105	12.000	12.105	0.9%
SI	1968-1977	7	Nicolai Creek	1966	not available	n/a	1.062	2.000	3.062	34.7%
UD	none	8	Birch Hill	1967	not available	11.000	0.065	11.000	11.065	0.6%
UD	none	9	Albert Kaloa	1968	not available	n/a	0.119	n/a	n/a	n/a

[a]Includes Katalla, onshore in the Gulf of Alaska
[b]Sterling field has been shut in since 1987
ABND = abandoned
UD = undeveloped
SI = shut-in

Sources: "Historical and Projected Oil and Gas Consumption," DNR, Feb. 1994; "Estimates of Oil Reserves in Alaska" and Estimates of Gas Reserves in Alaska," AOGCC, Jan. 1994

Table 9. *Complete listing of all Alaska discoveries*

No.	Field/accumulation	Discovery date	Fluid type(s)	Status
	Northern Alaska			
1	Prudhoe Bay	1967	Oil, Gas	P
2	Lisburne	1967	Oil, Gas	P
3	Kuparuk River	1969	Oil, Gas	P
4	Milne Point	1969	Oil, Gas	P
5	Prud. Bay - West Beach	1976	Oil, Gas	P
6	Prud. Bay - N. PB St.	1970	Oil, Gas	P
7	Endicott	1978	Oil, Gas	P
8	Niakuk	1985	Oil	P
9	Point McIntyre	1988	Oil, Gas	P
10	South Barrow	1949	Gas	P
11	East Barrow	1974	Gas	P
12	Walakpa	1980	Gas	P
13	West Sak	1969	Oil	UD
14	Point Thomson	1977	Oil, Gas	UD
15	Northstar/Seal Island	1984	Oil	UD
16	Flaxman Island	1975	Oil	UD
17	Umiat	1946	Oil	UD
18	Fish Creek	1949	Oil	UD
19	Simpson	1950	Oil	UD
20	Mikkelson	1978	Oil	UD
21	Gwydyr Bay	1981	Oil	UD
22	Tern Island	1983	Oil	UD
23	Hemi Springs	1984	Oil	UD
24	Colville Delta	1985	Oil	UD
25	Hammerhead	1986	Oil	UD
26	Sandpiper Island	1986	Oil	UD
27	Badami	1990	Oil	UD
28	Kuvlum	1992	Oil	UD
29	Fiord (Colville Delta)	1992	Oil	UD
30	Kalubik (Colville Delta)	1992	Oil	UD
31	Cascade	1993	Oil	UD
32	Sourdough	1994	n/a	UD
33	Meade	1950	Gas	UD
34	Wolf Creek	1951	Gas	UD
35	Gubik	1951	Gas	UD
36	Square Lake	1952	Gas	UD
37	East Umiat	1963	Gas	UD
38	Kavik	1969	Gas	UD
39	Kemik	1972	Gas	UD

No.	Field/accumulation	Discovery date	Fluid type(s)	Status
	Cook Inlet			
40	Swanson River	1957	Oil, Gas	P
41	Middle Ground Shoal	1962	Oil, Gas	P
42	Granite Point	1965	Oil, Gas	P
43	Trading Bay	1965	Oil, Gas	P
44	McArthur River	1965	Oil, Gas	P
45	Beaver Creek	1965	Oil, Gas	P
46	West McArthur River	1991	Oil, Gas	P
47	Kenai	1959	Gas	P
48	West Fork	1960	Gas	P
49	North Cook Inlet	1962	Gas	P
50	Beluga River	1962	Gas	P
51	Ivan River	1966	Gas	P
52	Lewis River	1975	Gas	P
53	Stump Lake	1978	Gas	P
54	Pretty Creek	1979	Gas	P
55	Cannery Loop	1979	Gas	P
56	Katalla (Gulf of Alaska)	1902	Oil	ABND
57	Redoubt Shoal	1968	Oil	UD
58	Sunfish	1991	Oil	UD
59	Sterling	1961	Gas	SI
60	Falls Creek	1961	Gas	UD
61	West Foreland	1962	Gas	UD
62	North Fork	1965	Gas	UD
63	Nicolai Creek	1966	Gas	SI
64	Birch Hill	1967	Gas	UD
65	Moquawkie	1965	Gas	SI
66	Albert Kaloa	1968	Gas	UD
67	N. Middle Ground Shoal	1964	Gas	UD

Abbreviations

P = producing
UD = undeveloped
ABND = abandoned
SI = shut in
☐ = discovered prior to competitive leasing, 12/59

Table 10. *Compiled lease sale data through May 1994*

	Tracts offered[1]	Tracts leased[2]	Acres offered[1]	Acres leased[2]
STATE SALES ONLY				
Cook Inlet				
34 Sales[3]	4,889	2,756	10,412,283.20	5,012,400.63
North Alaska[4]				
31 Sales[5]	3,202	1,590	13,416,980.62	5,842,423.45
FEDERAL SALES ONLY				
Cook Inlet				
3 Sales[6]	428	100	2,411,916.60	568,464.00
North Alaska[4]				
11 Sales	17,153	1,065	100,048,814.15	6,785,239.00
STATE AND FEDERAL SALES				
68 State Sales	9,018	4,654	26,686,901.87	11,611,494.55
21 Fed. Sales	25,078	1,618	144,382,217.75	9,894,273.00
Total:	34,096	6,272	171,069,119.62	21,505,767.55

PERCENTAGES OF *TRACTS* LEASED TO *TRACTS* OFFERED

	Cook Inlet only	North Alaska only	All areas
State	**56.37%**	**49.66%**	**51.61%**
Federal	**23.36%**	**6.21%**	**6.45%**
State & Federal	**53.71%**	**13.04%**	**18.40%**

PERCENTAGES OF *ACRES* LEASED TO *ACRES* OFFERED

	Cook Inlet only	North Alaska only	All areas
State	**48.14%**	**43.54%**	**43.51%**
Federal	**23.57%**	**6.78%**	**6.85%**
State & Federal	**43.52%**	**11.13%**	**12.57%**

[1] Includes all tracts or acreage: new and reoffered

[2] Includes some released tracts or acreage

[3] 27 CI sales plus the CI portions of 7 other sales

[4] North Alaska: entire North Slope onshore (including NPRA), Beaufort Sea, and Chukchi Sea

[5] 29 North Alaska sales plus the North Alaska portions of 2 other sales

[6] Includes one reoffering sale, RS-2

Note: Number of active state leases (as of 5/94): 1,148
Number of producing state leases (as of 5/94): 282 (about 12 more have produced in past)
Number of active OCS federal leases (as of 2/94): 334 (no OCS leases produce)
Number of active onshore federal leases (as of 5/94): 155
Number of producing onshore federal leases (as of 5/94): 35

Table 11. *Hydrcarbon deposit summaries and well counts through April 1994*

CURRENTLY PRODUCING FIELDS			
Area	Oil	Gas only	Total
N. Alaska	9	3	12
Cook Inlet	7	9	16
Other	0	0	0
	Total producing fields:		28

NONPRODUCING DEPOSITS				ALL DEPOSITS GRAND TOTALS
Area	Shut in	Undvlpd	Total	
N. Alaska	0	27	27	39
Cook Inlet	3*	8	11	27
Other	1**	0	1	1
	Total of other deposits:		39	67

*Sterling, Nicolai Creek, and Moquawkie

**Katalla Field (Gulf of Alaska) produced briefly and is now considered abandoned

CURRENTLY AND PAST PRODUCING FIELDS DISCOVERED POST-1959*		ALL DEPOSITS DISCOVERED POST-1959*	
N. Alaska	11	N. Alaska	31
Cook Inlet	17	Cook Inlet	25

*Commercial fields that were discovered after 1959, and have produced or are producing

*All deposits (commercial and noncommercial) that were made after 1959

Note: Competitive leasing began with State Sale No. 1 in December 1959. All discoveries found after that date, including commercially produced fields and noncommercial accumulations, are a result of the competitive leasing programs.

NUMBERS OF DRILLED WELLS* IN ALASKA

Areas	All types of wells	Exploration wells	Exploration wells post-1959
N. of 68° latitude[3]	2,911	350	335
S. of 68° latitude[4]	1,146	401	337
Entire State Total:	**4,057**	**751**	**672**
Cook Inlet Only[5]	973	266	248
Northern Alaska[6]	2,911	350	335
N. Alaska & C.I. Total:	**3,884**	**616**	**583**

*State and Federal, onshore and offshore

[1]Includes new field wildcats, new pool wildcats, and outpost-extension wells

[2]Entire North Slope onshore (including NPRA), Beaufort Sea, and Chukchi Sea

[3]Rest of state other than (4)

[4]Just Cook Inlet, defined by lat 58.5°-62° and long 149°-153.5°

[5]Same as (3)

Table 12. *Historical percentages and success ratios through April 1994*

PERCENTAGES OF TRACTS LEASED THAT WERE ACTUALLY DRILLED BY EXPLORATORY WELLS

	Exploratory wells drilled[a]	Total tracts leased[b]	Calculated percentage
Northern Alaska	335	2,655	12.6%
Cook Inlet	248	2,856	8.7%
Entire State	672	6,272	10.7%

[a]Wells drilled after December 1959, the beginning of competitive leasing
[b]State and federal tracts leased

PERCENTAGES OF TRACTS LEASED THAT ARE BEING COMMERCIALLY PRODUCED

	Producing leases[c]	Total tracts leased	Calculated percentage
State	294	4,654	6.3%
Federal	35	1,618	2.2%
State and federal	329	6,272	5.2%

[c]Currently producing or have produced in the past

PERCENTAGES OF TRACTS OFFERED THAT ARE BEING COMMERCIALLY PRODUCED

	Producing leases[c]	Total tracts offered	Calculated percentage
State	294	9,018	3.3%

REGIONAL EXPLORATION WELL SUCCESS RATIOS

Area	ALL DEPOSITS POST-1959 Success ratio	ALL COMMERCIAL FIELDS, POST-1959 Success ratio
Northern Alaska	31/335 x 100 = 9.2%	11/335 x 100 = 3.3%
Cook Inlet	25/248 x 100 = 10.1%	17/248 x 100 = 6.9%
Entire State	56/672 x 100 = 8.3%	28/672 x 100 = 4.2%

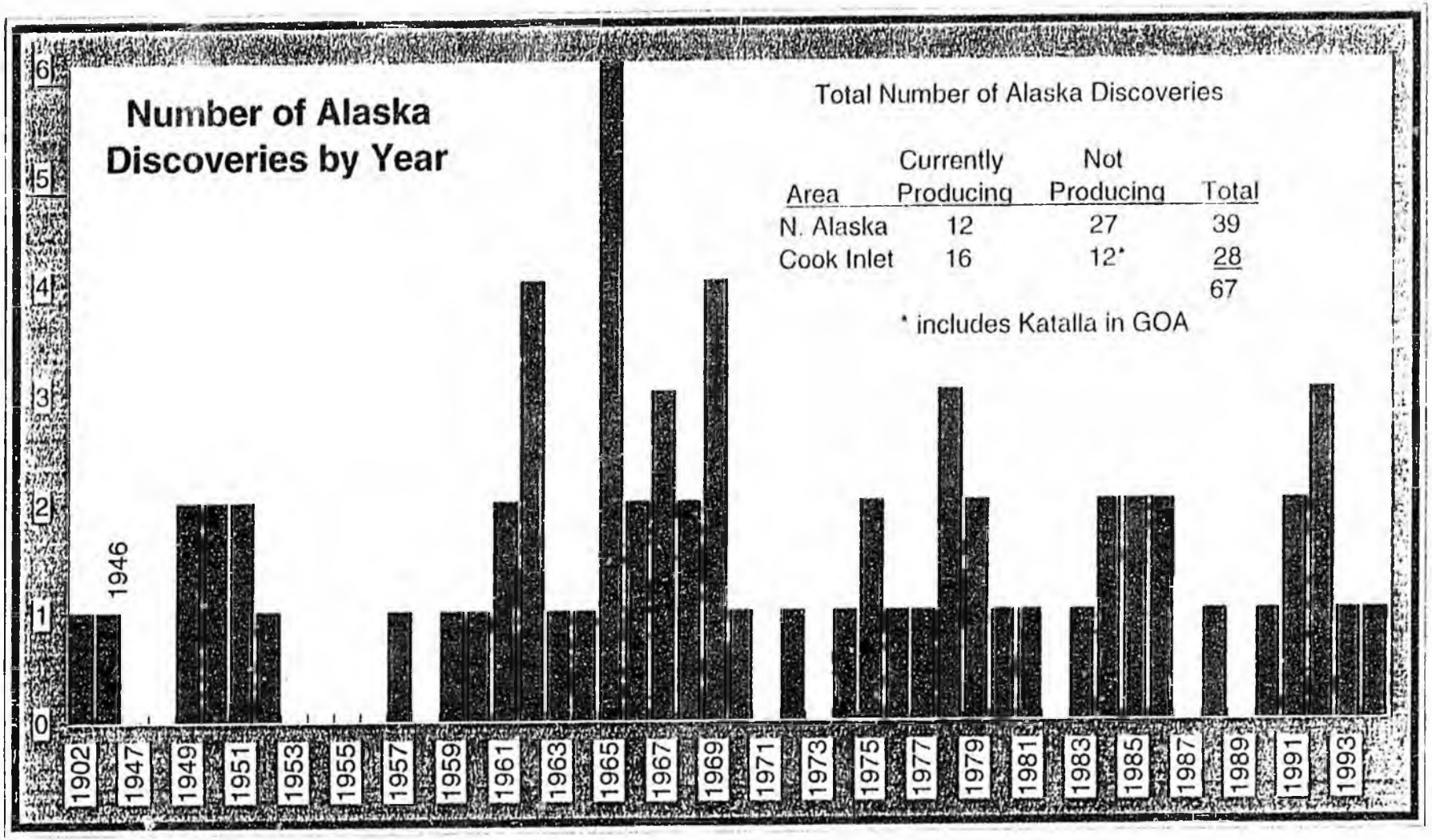

Figure 3. *Number of Alaska discoveries by year through April 1994.*

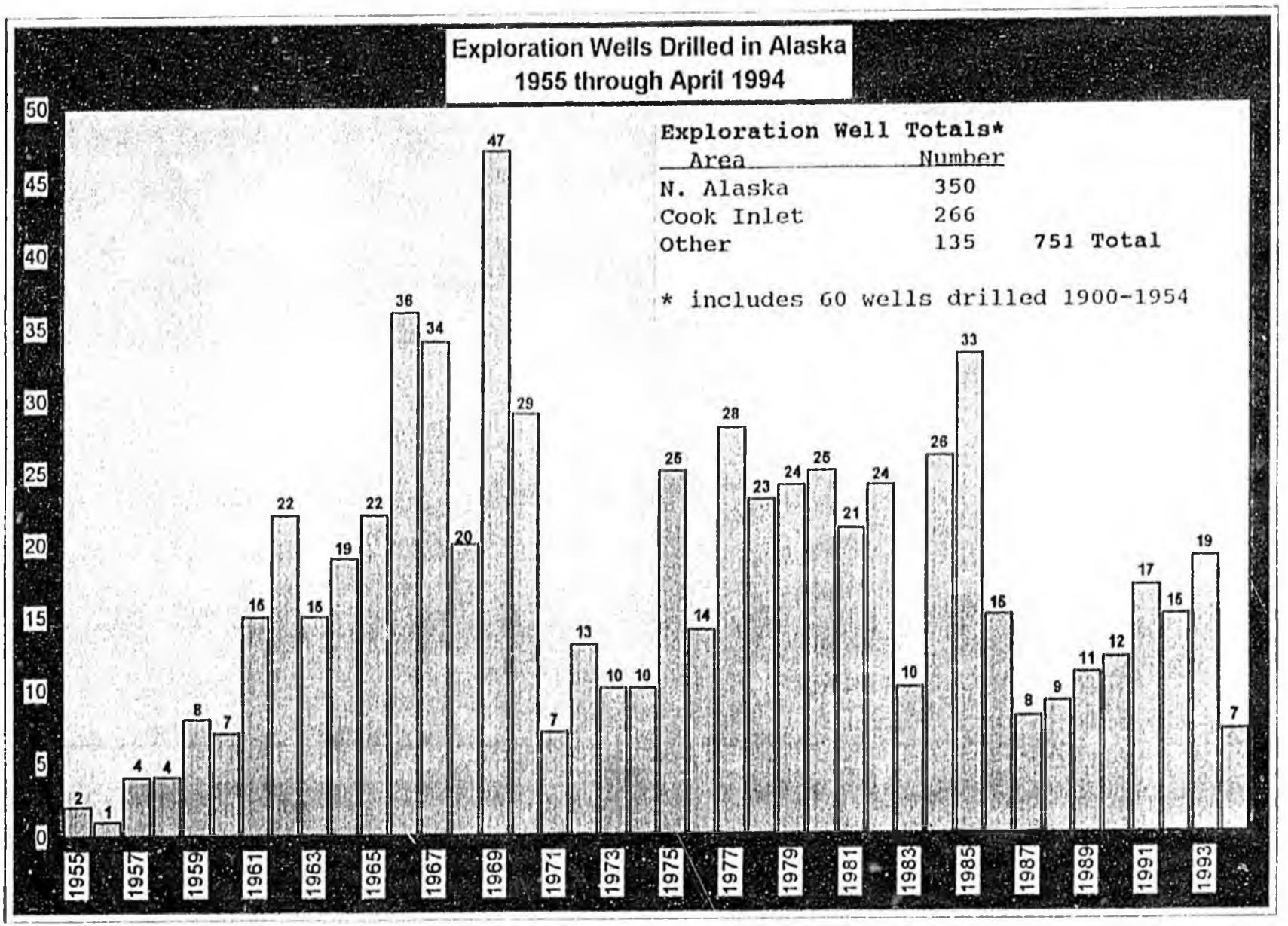

Figure 4. *Exploration wells drilled in Alaska through April 1994.*

Sec. 38.05.180. Oil and gas leasing. (a) The legislature finds that

(1) the people of Alaska have an interest in the development of the state's oil and gas resources to

(A) maximize the economic and physical recovery of the resources;

(B) maximize competition among parties seeking to explore and develop the resources;

(C) maximize use of Alaska's human resources in the development of the resources;

(2) it is in the best interests of the state to encourage an assessment of its oil and gas resources and to allow the maximum flexibility in the methods of issuing leases to

(A) recognize the many varied geographical regions of the state and the different costs of exploring for oil and gas in these regions;

(B) minimize the adverse impact of exploration, development, production, and transportation activity.

(b) The commissioner shall biennially prepare and, between the first and the 15th day of the first regular session of each legislature, notify the legislature of the availability of, a five-year proposed oil and gas leasing program consisting of a schedule of proposed lease sales and specifying as precisely as practicable the location of tracts proposed to be offered for oil and gas leasing during the calendar year in which the proposed program is made available to the legislature and the following four calendar years.

(c) Except as provided in (d) and (w) of this section, an oil and gas lease sale may not be held unless it was included in the proposed leasing programs submitted to the legislature during the two calendar years preceding the year in which the sale is held. A lease sale may not be held before the date it is scheduled in the proposed oil and gas leasing program.

(d) The commissioner may issue oil and gas leases in an area that has not been included in a leasing program submitted, in accordance with (b) of this section, to the legislature if the land to be leased

(1) was previously subject to a valid state or federal oil and gas lease;

(2) is contiguous to land already under state, federal or private lease and the commissioner makes a written finding, after hearing, that leasing of the land would result in a substantial probability of early evaluation and development of the land to be leased;

(3) is adjacent to land owned or controlled by another party on which a discovery of commercial quantities of oil or gas has been made, and the commissioner finds, after hearing, that there is a reasonable probability that the land to be leased contains oil or gas in communication with the oil or gas discovered on the land of the other party;

(4) is adjacent to land included in the federal five-year Outer Continental Shelf leasing program under 43 U.S.C. 1344, and the commissioner makes a written finding, after hearing, that coordinated or simultaneous leasing with the federal government is in the public interest; or

(5) is the subject of an oil and gas exploration license issued under AS 38.05.131 — 38.05.134.

(e) Simultaneously with submission of the leasing program required under (b) of this section, the commissioner shall prepare and notify the legislature of the availability of a report containing the following:

(1) the schedule of all lease sales held during the preceding calendar year, the bidding method or methods utilized, and an analysis of the results of the bidding;

(2) if determined, a description of the bidding methods to be used for all lease sales to be held during the current and next two succeeding calendar years;

(3) the reasons a particular bidding method has been selected

(f) Except as provided by AS 38.05.131 — 38.05.134, the commissioner may issue oil and gas leases on state land to the highest responsible qualified bidder determined by competitive bidding under regulations adopted by the commissioner. Bidding may be by sealed bid or according to any other bidding procedure the commissioner determines is in the best interests of the state. Whenever, under any of the leasing methods listed in this subsection, a royalty share is reserved to the state, it shall be delivered in pipeline quality and free of all lease or unit expenses, including but not limited to separation, cleaning, dehydration, gathering, salt water disposal, and preparation for transportation off the lease or unit area. Following a pre-sale analysis, the commissioner may choose at least one of the following leasing methods:

(1) a cash bonus bid with a fixed royalty share reserved to the state of not less than 12.5 percent in amount or value of the production removed or sold from the lease;

(2) a cash bonus bid with a fixed royalty share reserved to the state of not less than 12.5 percent in amount or value of the production removed or sold from the lease and a fixed share of the net profit derived from the lease of not less than 30 percent reserved to the state;

(3) a fixed cash bonus with a royalty share reserved to the state as the bid variable but no less than 12.5 percent in amount or value of the production removed or sold from the lease;

(4) a fixed cash bonus with the share of the net profit derived from the lease reserved to the state as the bid variable;

(5) a fixed cash bonus with a fixed royalty share reserved to the state of not less than 12.5 percent in amount or value of the production removed or sold from the lease with the share of the net profit derived from the lease reserved to the state as the bid variable;

(6) a cash bonus bid with a fixed royalty share reserved to the state based on a sliding scale according to the volume of production or other factor but in no event less than 12.5 percent in amount or value of the production removed or sold from the lease;

(7) a fixed cash bonus with a royalty share reserved to the state based on a sliding scale according to the volume of production or other factor as the bid variable but not less than 12.5 percent in amount or value of the production removed or sold from the lease.

(g) The share of the net profit derived from a lease reserved to the state under (f) of this section is royalty sale proceeds for the purposes of the Alaska permanent fund under AS 37.13.010.

(h) The commissioner may include terms in any oil and gas lease imposing a minimum work commitment on the lessee. These terms shall be made public before the sale, and may include appropriate penalty provisions to take effect in the event the lessee does not fulfill the minimum work commitment. If it is demonstrated that a lease has been proven unproductive by actions of adjacent lease holders, the commissioner may set aside a work commitment. The commissioner may waive for a period not to exceed one two-year period any term of a minimum work commitment if the commissioner makes a written finding either that conditions preventing drilling or exploration were beyond the lessee's reasonable ability to foresee or control or that the lessee has demonstrated through good faith efforts an intent and ability to drill or develop the lease during the term of the waiver.

(i) The commissioner may provide for the establishment of an exploration incentive credit system under which a lessee of state land drilling an exploratory well on that land may earn credits based upon the footage drilled and the region in which the well is situated. The commissioner may also provide for credits to be earned by persons performing geophysical work on state land, if that work is performed during the two seasons immediately preceding an announced lease sale and on land included within the sale area and the geophysical information is made public following the sale. Credits may not exceed 40 percent of the cost of the drilling or geophysical work. Credits may be used during a limited period established by the commissioner and may be assigned during that period. Credits may be applied against (1) oil and gas royalty and rental payments payable to the state or (2) taxes payable under AS 43.55. A credit may not exceed 50 percent of the payment toward which it is being applied. Amounts due the Alaska permanent fund (AS 37.13.010) shall be calculated before the application of credits under this subsection.

(j) The commissioner

(1) may provide for an increase or decrease or otherwise modify royalty, to allow for production that would not otherwise be economically feasible, on individual leases, leases unitized as described in (p) this section, leases subject to an agreement described in (a) or (t) of

this section, or interests unitized under AS 31.05; the commissioner may act under this subsection to modify the royalty

(A) after June 20, 1995 and not later than July 1, 2015, so long as the authority to modify royalty under this subparagraph has been authorized or reauthorized by law within the ten years preceding the commissioner's action to modify the royalty, to allow for production from an oil or gas field or pool if

(i) the oil or gas field or pool has been delineated sufficiently to allow the commissioner to conduct the analyses and make the findings required by this subsection; and

(ii) the field or pool has not previously produced oil or gas for sale;

(B) to prolong the economic life of an oil or gas field or pool as costs per barrel or barrel equivalent increase; or

(C) to reestablish production of shut-in oil or gas;

(2) may not grant a royalty modification unless the lessee or lessees requesting the modification make a clear and convincing showing that a modification of royalty meets the requirements of this subsection and is in the best interests of the state;

(3) shall

(A) condition any royalty modification granted under this subsection in any way necessary to protect the state's best interests;

(B) describe, in the findings and determinations required by this subsection, the relevant factors, including price, projected production rate or volume, predicted ultimate recovery, and development, operating, and transportation costs, upon which the modification is based;

(C) for a modification under (1)(A) of this subsection, set out the terms and conditions, which

(i) must include a mechanism for adjusting royalty percentage based on price; using forecasts of the range of future prices and their probabilities, the mechanism must provide that the value of the potential revenue increases resulting from royalty percentage increases must exceed the value of the potential revenue losses resulting from royalty percentage decreases; and

(ii) may include, in addition to the royalty percentage adjustment based on price, which must meet the conditions specified in (i) of this subparagraph, a further adjustment based on production rate or volume from the field or pool; and

(D) for a modification under (1)(B) or (1)(C) of this subsection, set out the terms and conditions, which may include substitution of a sliding scale royalty or other mechanism to modify the royalty if there is a change in the relevant factors, such as price, projected production rate or volume, predicted ultimate recovery, and development, operating, and transportation costs, upon which the modification is based;

(4) may not grant a royalty modification for a field or pool

(A) under (1)(A) of this subsection if the royalty modification for the field or pool would establish a royalty rate of less than five percent in

amount or value of the production removed or sold from a lease or leases covering the field or pool;

(B) under (1)(B) or (1)(C) of this subsection if the royalty modification for the field or pool would establish a royalty rate of less than three percent in amount or value of the production removed or sold from a lease or leases covering the field or pool;

(5) may not grant a royalty modification under this subsection without including an explicit condition that the royalty modification is not assignable without the prior written approval of the commissioner; the commissioner shall, in the preliminary and final findings and determinations, set out the conditions under which the royalty modification may be assigned;

(6) shall require the lessee or lessees to submit, with the application for the royalty modification, financial and technical data that demonstrate that the requirements of this subsection are met; the commissioner shall

(A) require disclosure of the financial and technical data related to development, production, and transportation of oil and gas from the field or pool that are necessary to make a determination as to whether or not to grant the request for royalty modification; and

(B) keep the data described in (A) of this paragraph confidential under AS 38.05.035(a)(9) at the request of the lessee or lessees making application for the royalty modification; the confidential data may be disclosed by the commissioner to legislators and to the legislative auditor and as directed by the chair or vice-chair of the LB&A Committee to the director of the division of legislative finance, the permanent employees of their respective divisions who are responsible for evaluating a royalty modification, and to agents or contractors of the legislative auditor or the legislative finance director who are engaged under contract to evaluate the royalty modification, provided they sign an appropriate confidentiality agreement;

(7) may require the lessee or lessees making application for the royalty modification to pay for the services of an independent contractor, qualified to evaluate hydrocarbon development, production, transportation, and economics, who is selected by the commissioner to assist the commissioner in evaluating the application and financial and technical data; selection of an independent contractor under this paragraph is not subject to AS 36.30;

(8) shall

(A) make and publish a preliminary findings and determination on the royalty modification application; if the preliminary findings and determination concerns a royalty modification under (1)(A) of this subsection, the preliminary findings and determination shall also be presented to the governor for the governor's approval or disapproval; the governor may not delegate a determination to approve or disapprove a preliminary findings and determination under this subparagraph;

(B) for a royalty modification under (1)(A) of this subsection, if the governor approves the preliminary findings and determination under (A) of this paragraph,

(i) give reasonable public notice of the preliminary findings and determination;

(ii) concurrently with the issuance of the public notice, unless directed by the Legislative Budget and Audit Committee to do otherwise, make available copies of the commissioner's preliminary findings and determination on the royalty modification application and the supporting financial and technical data, including the work papers, analyses, and recommendations of any contractors retained under (7) of this subsection, to persons authorized under (6)(B) of this subsection to review the data; and

(iii) invite public comment on the preliminary findings and determination during a 30-day period for receipt of public comment;

(C) for a royalty modification under (1)(B) or (C) of this subsection, if the preliminary findings and determination approves a royalty modification,

(i) give reasonable public notice of the preliminary findings and determination; and

(ii) invite public comment on the preliminary findings and determination during a 30-day period for receipt of public comment;

(9) shall address in any findings and determinations required under this subsection the reasonably foreseeable effects of the proposed royalty modification on the state's revenue;

(10) shall offer to appear before the Legislative Budget and Audit Committee to provide the committee a review of the commissioner's preliminary findings and determination on the royalty modification application and the supporting financial and technical data; if the Legislative Budget and Audit Committee accepts the commissioner's offer, the committee shall give notice of the committee's meeting to all members of the legislature; if, under (6)(B) of this subsection, the financial and technical data must be kept confidential at the request of a lessee or lessees making application for the royalty modification, the commissioner may appear before the committee in executive session;

(11) shall make copies of the preliminary findings and determination available to

(A) the presiding officer of each house of the legislature;

(B) the chairs of the legislature's standing committees on resources; and

(C) the chairs of the legislature's special committees on oil and gas, if any;

(12) shall, within 30 days after the close of the public comment period under (8) of this subsection,

(A) prepare a summary of the public response to the commissioner's preliminary findings and determination;

(B) make a final findings and determination and present it to the governor for the governor's approval or disapproval; the governor may not delegate a decision to approve or disapprove a final findings and determination presented under this subparagraph; the commissioner's final findings and determination regarding a royalty modification, if approved by the governor, is final and not appealable to the court;

(C) transmit a copy of the final findings and determination prepared under (B) of this paragraph to the lessee or lessees making application for the royalty modification;

(D) with the consent of the lessee or lessees applying for the royalty modification, amend the lease or unitization agreement of the lessee or lessees applying for the royalty modification consistent with the commissioner's approved final findings and determination; and

(E) make copies of the final findings and determination available to each person who submitted comment under (8) of this subsection and who has filed a request for the copies;

(13) is not limited by the provisions of AS 38.05.134(3) or (f) of this section in the commissioner's determination under this subsection.

(k) The commissioner shall define all terms and adopt all regulations necessary for a reasonable understanding and evaluation of a particular bidding method before the public announcement of the terms of proposed sale employing that method.

(*l*) Subject to the provisions of AS 31.05, the commissioner has discretion to enter into an agreement whereby, with the consent of the lessee, the state's royalty share of oil and gas production may be stored or retained in storage by the lessee, or the commissioner may enter into an agreement with one or more of the affected field lease holders to trade current royalty production from a field for a like amount, kind, and quality of future production, on the condition that the state receives back its stored or traded royalty share during the first half of the estimated field life or no later than 15 years after start of production, whichever is sooner.

(m) An oil and gas lease must cover a reasonably compact area not exceeding 5,760 acres, and may be for a maximum period of 10 years, except that the commissioner may issue a lease for a period not less than five years upon a finding that it is in the best interests of the state. An oil and gas lease shall be automatically extended if and for so long thereafter as oil or gas is produced in paying quantities from the lease or if the lease is committed to a unit approved by the commissioner. A lease issued under this section covering land on which there is a well capable of producing oil or gas in paying quantities does not expire because the lessee fails to produce oil or gas unless the

lessee is allowed reasonable time to place the well on a producing status. Upon extension, the commissioner may increase lease rentals so long as the increased rental rate does not exceed 150 percent of the rate for the preceding year. If drilling has commenced on the expiration date of the primary term of the lease and is continued with reasonable diligence, including such operations as redrilling, sidetracking, or other means necessary to reach the originally proposed bottom hole location, the lease continues in effect until 90 days after drilling has ceased and for so long thereafter as oil or gas is produced in paying quantities. An oil and gas lease issued under this section which is subject to termination by reason of cessation of production does not terminate if, within 60 days after production ceases, reworking or drilling operations are commenced on the land under lease and are thereafter conducted with reasonable diligence during the period of nonproduction.

(n) The commissioner may establish by regulation that after a well has been plugged and abandoned, the rental rate which was in effect during the year of abandonment is maintained for the remainder of the term. Rental is payable in advance and continues until income to the state from royalty or net profit share exceeds rental income to the state for that year. Oil and gas leases shall provide for payment to the state of rental on the following basis:

(1) for the first year, $1.00 per acre;

(2) for the second year, $1.50 per acre;

(3) for the third year, $2.00 per acre;

(4) for the fourth year, $2.50 per acre;

(5) for the fifth and following years, $3.00 per acre.

(o) Upon timely application as provided by regulation, the state may issue to the holder of a federal or private lease, a state shoreland lease covering land within the exterior boundaries of the federal or private lease which has been excluded on the basis of navigability or which is later administratively or judicially determined to be shoreland. The term of such a state shoreland lease shall be the same as the term of the federal or private lease.

(p) To conserve the natural resources of all or a part of an oil or gas pool, field, or like area, the lessees and their representatives may unite with each other, or jointly or separately with others, in collectively adopting or operating under a cooperative or a unit plan of development or operation of the pool, field, or like area, or a part of it, when determined and certified by the commissioner to be necessary or advisable in the public interest. The commissioner may, with the consent of the holders of leases involved, establish, change, or revoke drilling, producing, and royalty requirements of the leases and adopt regulations with reference to the leases, with like consent on the part of the lessees, in connection with the institution and operation of a cooperative or unit plan as the commissioner determines necessary or

proper to secure the proper protection of the public interest. The commissioner may not decrease royalty on leases in connection with a cooperative or unit plan except as provided in (j) of this section. The commissioner may require oil and gas leases issued under this section to contain a provision requiring the lessee to operate under a reasonable cooperative or unit plan, and may prescribe a plan under which the lessee must operate. The plan must adequately protect all parties in interest, including the state.

(q) A plan authorized by (p) of this section, which includes land owned by the state, may contain a provision vesting the commissioner, or a person, committee, or state agency, with authority to modify from time to time the rate of prospecting and development and the quantity and rate of production under the plan. All leases operated under a plan approved or prescribed by the commissioner are excepted in determining holdings or control under AS 38.05.140. The provisions of this section concerning cooperative or unit plans are in addition to and do not affect AS 31.05.

(r) Producing acreage on a known geologic structure of a producing oil or gas field is excluded from chargeability as against the acreage limitation provisions of AS 38.05.140.

(s) When separate tracts cannot be individually developed and operated in conformity with an established well-spacing or development program, a lease, or a portion of a lease, may be pooled with other land, whether or not owned by the state, under a communication or drilling agreement providing for an apportionment of production or royalties among the separate tracts of land comprising the drilling or spacing unit when determined by the commissioner to be in the public interest. Operations or production under the agreement are considered as operations or production as to each lease committed to the agreement. The commissioner may not decrease royalty on leases in connection with a communitization or drilling agreement except as provided in (j) of this section.

(t) The commissioner may prescribe conditions and approve, on conditions, drilling, or development contracts made by one or more lessees of oil or gas leases, with one or more persons, when, in the discretion of the commissioner, the conservation of natural resources or the public convenience or necessity requires it or the interests of the state are best served. All leases operated under approved drilling or development contracts and interests under them, are excepted in determining holding or control under AS 38.05.140. The commissioner may not decrease royalty on a lease or leases that are subject to a drilling or development contract except as provided in (j) of this section.

(u) To avoid waste or to promote conservation of natural resources, the commissioner may authorize the subsurface storage of oil or gas whether or not produced from state land, in land leased or subject to lease under this section. This authorization may provide for the payment of a storage fee or rental on the stored oil or gas, or, instead of the fee or rental, for a royalty other than that prescribed in the lease when the stored oil or gas is produced in conjunction with oil or gas not previously produced. A lease on which storage is so authorized shall be extended at least for the period of storage and so long thereafter as oil or gas not previously produced is produced in paying quantities.

(v) *[Repealed, § 36 ch 94 SLA 1980.]*

(w) Notwithstanding any other provisions of this section, land which has been offered for lease within the previous five years and which received no bids at competitive sale or for which no bid was accepted may be, at the discretion of the commissioner, immediately offered for lease, under regulations adopted by the commissioner, upon terms appearing most advantageous to the state; however, noncompetitive leasing is prohibited. The commissioner shall establish a royalty determined to be in the public interest but not less than 12 ½ percent. A lease must provide for payment to the state or rental but need not adhere to the rental schedule in (n) of this section nor to the 5,760-acres-per-lease limitation in (m) of this section. The lease term may not exceed 10 years, except as provided in (o) of this section.

(x) A lessee conducting or permitting any exploration for, or development or production of, oil or gas on state land shall provide the commissioner access to all noninterpretive data obtained from that lease and shall provide copies of that data, as the commissioner may request. The confidentiality provisions of AS 38.05.035 apply to the information obtained under this subsection.

(y) A noncompetitive lease existing at October 10, 1978 shall be extended for a period of two years and so long thereafter as oil and gas is produced in paying quantities. A noncompetitive lease extended under this subsection is subject to the regulations in force at the expiration of the initial five-year term of the lease. No extension may be granted, however, unless within a period of 90 days before the expiration date an application for extension is filed by the record title holder or an assignee whose assignment has been filed for approval, or an operator whose operating agreement has been filed for approval.

(z) No leases may be issued under this section without the inclusion of the following language: "The landowners' royalty share of the unit production allocated to each separately owned tract shall be regarded as royalty to be distributed to and among, or the proceeds of it paid to, the landowners, free and clear of all unit expense and free of any lien for it." Leases issued in violation of this subsection shall, for all purposes, be construed as containing the language required by this subsection.

(aa) Within 90 days after the written request of a lessee of a lease issued under this section or of a lessee of federal land from which the state is entitled under applicable federal law to receive a share of the

royalty on gas production, the commissioner shall enter into an agreement with the lessee to use or accept the price for the gas established in the contract between the lessee and a gas or electric utility as the value of the state's royalty share of gas production sold by the lessee under the contract

(1) but only if the primary function of the utility with which the lessee has entered into the contract is to provide, either directly or by selling at wholesale to another utility, gas or electricity to the general public, including residential consumers, within the utilities' service areas, and the utility with which the lessee has entered into the contract is not an affiliated interest, as that term is defined in AS 42.05.990, with the lessee or with a subsequent purchaser of more than 10 percent of the utility's gas or electricity; and

(2) unless the commissioner makes a written finding, based on clear and convincing evidence, that

(A) the contract price is unreasonably low;

(B) the prospective reduction in royalty receipts would not be balanced by increased benefits to in-state gas and electric consumers;

(C) the lessee and the utility are related in management, ownership, or other aspect; and

(D) the contract price is not in the best interest of the state.

(bb) In (aa) of this section,

(1) "gas or electric utility" includes an electric cooperative organized under AS 10.25, a municipal utility, and a gas or electric utility regulated under AS 42.05; provided that if the contract gas is transmitted to consumers through a pipeline and the gas utility either owns the pipeline or is related in ownership to the owner of the pipeline, then the gas utility qualifies as a "gas or electric utility" within the meaning of this paragraph only if it is bound or agrees to be bound by the covenants set out in AS 38.35.120;

(2) "price for the gas established in the contract" includes tax reimbursement amounts, deliverability and other charges, and other forms of consideration paid by the gas or electric utility under the contract;

(3) "state's royalty share of gas production"

(A) includes payments on federal leases made to the state under 30 U.S.C. 191;

(B) does not include the state's royalty share of gas production from land patented to the state under

(i) P.L. 84-830, 70 Stat. 709 (Alaska Mental Health Enabling Act);

(ii) 38 Stat. 1214 (Act of March 4, 1915); or

(iii) 43 U.S.C. 1635 in settlement of the claims of the state under 38 Stat. 1214.

(cc) The provisions of (aa) of this section do not prohibit the commissioner from accepting any payment on a federal lease tendered by the federal agency responsible for determination and transmittal of the payment to the state under 30 U.S.C. 191 or otherwise due the state as

the state's royalty share of gas production irrespective of the state's acceptance of the use of the contract price for purposes of determining royalty share on gas production under that subsection. (§ 3(7) art VIII ch 169 SLA 1959; am § 18 ch 61 SLA 1960; am § 1 ch 124 SLA 1962; am §§ 4 — 7 ch 30 SLA 1964; am § 20 ch 70 SLA 1964; am § 2 ch 91 SLA 1967; am § 1 ch 65 SLA 1969; am § 1 ch 86 SLA 1970; am § 1 ch 155 SLA 1978; am § 16 ch 160 SLA 1978; am §§ 3, 4 ch 65 SLA 1979; am § 6 ch 18 SLA 1980; am § 36 ch 94 SLA 1980; am §§ 1 — 5 ch 111 SLA 1980; am §§ 11, 12 ch 161 SLA 1984; am § 1 ch 89 SLA 1985; am § 2 ch 55 SLA 1986; am §§ 3, 4 ch 124 SLA 1990; am § 5 ch 134 SLA 1990; am §§ 1 — 3 ch 53 SLA 1993; am §§ 5, 6 ch 35 SLA 1994; am § 1 ch 36 SLA 1994; am §§ 67, 68 ch 21 SLA 1995; am §§ 2 — 5 ch 85 SLA 1995)

Revisor's notes. — In 1990, a reference to (m) of this section was deleted from the last sentence of (w) of this section to correct a manifest error in § 4, ch. 124, SLA 1990.

In 1995, in subsection (s), "communitization" was substituted for "communitzation" to correct a manifest error in § 4, ch. 85, SLA 1995.

Cross references. — For legislative findings in connection with the 1986 amendment to this section, see § 1, ch. 55, SLA 1986, in the Temporary and Special Acts.

For provisions superseding (aa) and (bb) of this section that are applicable to the state's share of royalty production of gas produced after January 2, 1959 and before June 12, 1993 from certain federal leases, see § 4, ch. 53, SLA 1993 in the Temporary and Special Acts.

Effect of amendments. — The first 1990 amendment rewrote subsection (j) and substituted "10 years" for "five years" in the last sentence of subsection (w).

The second 1990 amendment substituted "biennially" for "annually" and "15th day of the first regular session of each legislature" for "fifteenth day of each regular legislative session" in subsection (b).

The 1993 amendment, effective June 12, 1993, in subsection (aa), inserted "or of a lessee of federal land from which the state is entitled under applicable federal law to receive a share of the royalty on gas production" and "or accept," added paragraph (1), added the paragraph (2) designation, and redesignated former paragraphs (1)-(4) as present subparagraphs (2)(A)-(2)(D) respectively; in subsection (bb), rewrote paragraph (3), and added subsection (cc).

The first 1994 amendment, effective August 7, 1994, in subsection (d), made minor stylistic changes and added paragraph (5); and, in subsection (f), substituted "Except as provided by AS 38.05.131 — 38.05.134, the" for "The" at the beginning and made minor stylistic changes.

The second 1994 amendment, effective May 10, 1994, in subsection (c), deleted the former second and third sentences, relating to lease sale delays and reschedulings, respectively.

The first 1995 amendment, effective August 8, 1995, in subsection (b), deleted "submit to the legislature" following "prepare and," inserted "notify the legislature of the availability of," and substituted "made available" for "submitted"; and, in the introductory language of subsection (e), substituted "prepare and notify" for "submit to" and inserted "of the availability of."

The second 1995 amendment, effective June 20, 1995, rewrote subsection (j), added the present third sentence in subsection (p), and added the last sentence in subsections (s) and (t).

HB

394

TCN: 60498 DATE & TIME: 03/11/96 08:00 TO 10:00 STATUS:7 STATS. IN

**** ORDER SUMMARY ****
SPONSOR: HRES HOUSE RESOURCES CHAIRS: GREEN
PURPOSE: PUB PUBLIC HEARING LEGISLATIVE WILLIAMS
CONTACT: JEFF OR GARY TEL#: (907)465-6547
CHAIRING SITE: JUNEAU CAPITOL CAP124
TOLL FREE: DIAL-UP: LIO:(800)478-9908

SPONSOR REMARKS(PUB): TESTIMONY:Y ALLOWED 3 MINUTE LIMIT
TESTIMONY WILL BE TAKEN WITH A 3 MINUTE LIMIT.
SEE COMMITTEE SCHEDULE IN BASIS

SPONSOR REMARKS(LIO): BACKUP MATERIAL:N MEETING IN PROGRESS:N MAX. SITES:10
OTHER SITES MAY ADD THRU THE JNU LIO.
BACK-UP = DJT
TCN REQUESTED ON 03/11/96 AND HAS 5 UPDATES

**** AGENDA ****
1 HB 511 DEPOSITS INTO FISH AND GAME FUND
2 HB 447 CAN'T CLOSE LAND TO TRADITIONAL REC. USES
3 BILLS PREVIOUSLY HEARD

**** PARTICIPATING LIOS ****

	ANC ANCHORAGE	716 W 4TH, #200		LOCATION	STAFF
	DJT DELTA JCT.	JARVIS CTR. #210		LOCATION	STAFF
	FBX FAIRBANKS	119 N CUSHMAN ST		LOCATION	STAFF
*	JNU JUNEAU	CAPITOL	CAP124	LOCATION	STAFF
	MAT MATSU	600 E RAILROAD		LOCATION	STAFF

**** VOLUNTEER & OFFNET SITES ****
ZZZ OF1 OFFNET 1 LONDON DAVID LAPPI (999)999-9999

PARTICIPANTS IN:ANCHORAGE ANC

1	RICHARD	GRAHAM	FISH & WILDLIFE	UNABL HB 511		
			ANCHORAGE	AK	(907)269-5589	
2	JAMES	HANSON	DNR HB 394	TSFY. ALL ITEMS		
	3601 C ST, STE 1380		ANCHORAGE	AK 99503	(907)269-8804	
3	LANCE	NELSON	D.O.L.	UNABL HB 511		
	1031 W 4TH, STE 200		ANCHORAGE	AK 99501	(907)264-5240	
4	GEORGE	PIASKOWSKI	AK BOATING ASSOC	UNABL HB 447		
	1836 SEENIC WAY #2		ANCHORAGE	AK 99501	(907)229-6069	
5	TUCKERMAN	BABCOCK	HB 394	TSFY. ALL ITEMS		
	3001 PORCUPINE		ANCHORAGE	AK 99501	(907)279-1433	
6	BOB	CRANDALL	HB 394	TSFY. ALL ITEMS		
	3001 PORCUPINE		ANCHORAGE	AK 99501	(907)279-1433	
7	CLIFF	EAMES		OBSV. ALL ITEMS		
				AK	(907)000-0000	

PARTICIPANTS IN:DELTA JCT. DJT

1 MR.	ROY	BOWDRE		OBSV. HB 447	
	PO BOX 2		DELTA JUNCTION	AK 99737	(907)895-4448

PARTICIPANTS IN:FAIRBANKS FBX

1 MR.	MICK	MANNS		UNABL HB 447	
	PARADISE VALLEY		BETTLES	AK 99726	(907)479-5704

Rocky LAPP RCS Inc 248-7188
1900 Sportsman

TCN: 60498 DATE & TIME: 03/11/96 08:00 TO 10:00 STATUS:7 STATS. IN

PARTICIPANTS IN:JUNEAU JNU

1	TO	OBSERVE	OBSV. ALL ITEMS
2	TO	OBSERVE	OBSV. ALL ITEMS
3	TO	OBSERVE	OBSV. ALL ITEMS
4	TO	OBSERVE	OBSV. ALL ITEMS
5	TO	OBSERVE	OBSV. ALL ITEMS
6	TO	OBSERVE	OBSV. ALL ITEMS
7	TO	OBSERVE	OBSV. ALL ITEMS
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12	TO	OBSERVE	OBSV. ALL ITEMS
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16	TO	OBSERVE	OBSV. ALL ITEMS
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18	TO	OBSERVE	OBSV. ALL ITEMS
19	TO	OBSERVE	OBSV. ALL ITEMS
20	TO	OBSERVE	OBSV. ALL ITEMS
21	TO	TESTIFY	TSFY. ALL ITEMS
22	TO	TESTIFY	TSFY. ALL ITEMS
23	TO	TESTIFY	TSFY. ALL ITEMS
24	TO	TESTIFY	TSFY. ALL ITEMS
25	TO	TESTIFY	TSFY. ALL ITEMS
26	TO	TESTIFY	TSFY. ALL ITEMS
27	TO	TESTIFY	TSFY. ALL ITEMS
28	TO	TESTIFY	TSFY. ALL ITEMS
29	TO	TESTIFY	TSFY. ALL ITEMS
30	TO	TESTIFY	TSFY. ALL ITEMS
31	TO	TESTIFY	TSFY. ALL ITEMS
32	TO	TESTIFY	TSFY. ALL ITEMS

PARTICIPANTS IN:MATSU MAT

1 MR LEONARD HAIRE UNABL HB 447
BOX 877030 WASILLA AK 99687 (907)376-6183

PARTICIPANTS IN:OFFNET 1 ZZZ OF1

1 DAVID LAPPI TSFY. BILLS PREVIOU
LONDON NN (999)999-9999

**** UPDATES ****

01	03/08/96	08:01:54	ANNOUNCING TELECONFERENCE
02	03/08/96	11:44:45	FAIRBANKS ADDED ON
03	03/08/96	15:11:13	DELTA JCT. ADDED ON
04	03/11/96	07:56:03	OFFNET 1 ADDED ON
05	03/11/96	08:13:26	MATSU ADDED ON

LEGISLATIVE REFERENCE LIBRARY

LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA

(907) 465-3808
FAX (907) 465-2029
Mail Stop 3101

130 Seward Street, Suite 400
Juneau, Alaska 99801-2105

Copies of minutes listed below were originally included in this file. The minutes are available on the legislative computer database. In order to save space copies of minutes have not been left in the files.

Mary Pagenkopf

House Resources
3-13-96 8:10am
HB394

Official Business

COMMITTEE: RESOURCES

DATE: HB 447

SIGN-IN

Subject of meeting: HB 447, CAN"T CLOSE LAND TO TRADITIONAL REC USES

PLEASE PRINT!

NAME	ADDRESS (MAILING) & (ZIP)	PHONE	REPRESENTING	DO YOU WANT TO TESTIFY?
Sara Hanna	PO Box 22151 JUN AK	463-3366	AEL	YES

Official Business

COMMITTEE: RESOURCES

DATE: MARCH 11, 1996

Subject of meeting: HB 511, DEPOSITS INTO FISH & GAME FUND

SIGN-IN

PLEASE PRINT!

NAME	ADDRESS (MAILING) & (ZIP)	PHONE	REPRESENTING	DO YOU WANT TO TESTIFY?
Dean Paddock	PO Box 20712 Juno 99802	463-4872	Bristol Bay Drift Gillnetters Assn	Yes

AU DKLOW9

3/11/96
Version M

AMENDMENT

OFFERED IN HOUSE RESOURCES BY REPRESENTATIVE JOHN DAVIES

TO: CSHB 394 (O&G)

Page 10, line 15-18:

Delete all material

#655

AMENDMENT # 3

OFFERED IN HOUSE RESOURCES COMMITTEE BY REP ROKEBERG

TO: CSHB 394(RES) version\K dated 4/18/96

Page 2, Line 9, after "criteria":

INSERT: "or regulations"

Page 2, Line 7, after (b):

DELETE: "(4)"

INSERT: "(3)"

Page 3, Line 23, after (b):

DELETE: "(4)"

INSERT: "(3)"

Page 3, Line 24, after (b):

DELETE: "(4)"

INSERT: "(3)"

ADKLNOWG

Adopted

ADKLNOWG

AMENDMENT # 2

OFFERED IN HOUSE RESOURCES COMMITTEE BY DEC & AOGA

TO: CSHB 394(RES) version\K dated 4/18/96

PAGE 2, Line 2, after "regulations.":

DELETE: "Promptly, but no later than 12 months, after the effective date of"

INSERT: "Within 90 days, or by another date mutually agreed upon by the applicant and the department, of receipt of a request to amend the state's water quality standards to incorporate"

Page 2, Line 7, after (b):

DELETE: "(4)"

INSERT: "(3)"

adopted

Page 3, Lines 1-2:

DELETE ALL MATERIAL

Page 3, Line 3:

INSERT: "(1)"

Renumber subsection paragraphs accordingly

ABOKLNOWG

3/12/96
Version M

NEW **AMENDMENT 1**

Offered in House Resources By: Rep. Scott Ogan

TO: CSHB 394

Page 2, line 24: Delete "at the drill site"

Page 3, line 27: Delete "at the drill site"

Page 5, line 26: Delete "at the drilling site"

3/12/96
Version M

NEW

AMENDMENT 2

Offered in House Resources By: Rep. Scott Ogan

TO: CSHB 394

Page 9, line 5&6: Delete "of the facility"
line 5: Insert "owner or" following "the"

Page 9, line 11: Delete "of the facility"
line 11: Insert "ow. er or" following "the"

Page 10, line 7: Delete "of the facility"
line 7: Insert "owner or" following "the"

3/12/96
Version M

NEW **AMENDMENT 3**

Offered in House Resources By Rep. Scott Ogan

TO: CSHB 394

Page 3, line 19: Substitute "more" for "less"

A D K L

3/12/96
Version M

NEW **AMENDMENT 4**

Offered in House Resources BY: Rep. Scott Ogan

TO: CSHB 394

Page 5, Lines 26-29:

Delete: "If the lessee's operation under the lease results in the production of oil or of gas in violation of this subsection, the director shall immediately suspend the lessee's operation under the lease and may terminate the lease."

Insert: following "surface" ". If an onshore well drilling for natural gas under a lease authorized by AS38.05.177 penetrates a formation capable of producing gas below 3,000 feet of the surface, the owner or operator

(1) shall notify the department and the Alaska Oil and Gas Conservation Commission; and

(2) may not conduct further operations in the drilled well until the facility complies with all applicable laws and regulations relating to oil and gas production; however, this paragraph does not prevent the owner or operator from conducting activities that may be required by the Alaska Oil and Gas Conservation Commission to plug or abandon a well."

A D K L O W 9

9-LS1463\M.1
Chenoweth
3/12/96

NEW **AMENDMENT** 5

OFFERED IN THE HOUSE

TO: CSHB 394( ) "M" version

Page 4, line 20, after "lease;":

Insert "if the commissioner determines that the lessee has not diligently developed or continued to operate under the lease, the commissioner, after giving notice and opportunity for hearing to the lessee, may terminate the lease;"

CHANGES IN NEW CS DRAFT (MARCH 7, 1996)

Refer to CS dated 2/26/96 to see where changes occur.

1. The word "Bed" is deleted throughout.

2. p.2, line 4: Change to read "the methane derived from these coals or other sources and which is found in reservoirs at depths less than 3,000 feet could be tapped to serve..."

3. p.2, line 7: Change to read "the methane derived from these coals and other shallow gas reservoirs could be developed..."

4. p.2, line 12: Delete "commercial quality" and add to the end of line 13 ",especially when this natural gas can be delivered to consumers at less cost than alternative energy sources."

5. p.2, line 21: Delete "without" and replace with "with minimal"

6. p.2, line 23: Delete all of (2)

7. p.3, line 14: Add "reservoirs" after "natural Gas"

8. p.3, line 15: Substitute "for which the state owns the subsurface rights" in place of "of the state"

9. p.3, line 17: Remove provision for minimum size. There will be no minimum size requirements. The maximum size of a lease will fall in line with current statutes for Oil and Gas Leases, 5,760 acres. 23,040 will remain as the maximum number of acres a lessee can have throughout the state under the shallow gas legislation.

10. p.3, line 19: Substitute "shall" for "may"

11. p.3, line 24: Substitute "may" for "shall"

12. p.4, line 21: put in 60 day public comment period. Once the comment period has ended the division will have up to 90 days in which to issue the lease.

13. p.3, line 25: Delete "initial"

14. p.3, line 28: Length of the lease is reverted to five years as it exists under AS38.05.180(m).

15. p.4, subsection (e): This section is deleted

16. p.4, line 32: All rent, from the time the lease is entered into, is 50 cents

17. p.5, line 23: (i) now reads "The applicant for a shallow gas lease shall be responsible for conducting the title search"

18. p.5, line 32: Subsection (1) is deleted

19. p.8, line 9: Delete all of section 5

20. p.11, line 13: Delete section 14

3/8/96

AMENDMENT

Offered in House Resources By Rep. Scott Ogan

To: CSHB 394 (3/7/96 version)

Page 3, line 19: Substitute "not more than" for "not less than"

3/11/96
Version M

AMENDMENT 1

Offered in House Resources BY: Rep. Scott Ogan

TO: CSHB 394

Page 5, Line 26:

Delete: "If the lessee's operation under the lease results in the production of oil or of gas in violation of this subsection, the director shall immediately suspend the lessee's operation under the lease and may terminate the lease."

Insert: following "surface." "If an onshore well drilling for natural gas under a lease authorized by AS38.05.177 penetrates a formation capable of producing gas below 3,000 feet of the surface, the owner or operator

(1) shall notify the department and the Alaska Oil and Gas Conservation Commission; and

(2) may not conduct further operations in the drilled well until the facility complies with all applicable laws and regulations relating to oil and gas production; however, this paragraph does not prevent the owner or operator from conducting activities that may be required by the Alaska Oil and Gas Conservation Commission to plug or abandon a well."

3/11/96
Version M

AMENDMENT 2

Offered in House Resources BY: Rep. Scott Ogan

TO: CSHB 394

Page 9, Line 11:

Delete: "of the facility"

Following "the"
Insert: "owner or"

3/11/96
Version M

Amendment 3

Offered in House Resources By: Rep. Scott Ogan

TO: CSHB 394

Page 9, line 5 & 6: Delete "of the facility"

Following "the"
Insert: "owner or"

3/11/96
Version M

AMENDMENT 4

Offered In House Resources By: Rep. Scott Ogan

TO: CSHB 394

Page 5, line 26: Delete "at the drilling site"

3/11/96
Version M

AMENDMENT 5

Offered in House Resources BY: Rep. Scott Ogan

TO: CSHB 394

Page 3, Line 27: Delete "at the drill site"

3/11/96
Version M

AMENDMENT 6

Offered in House Resources By: Rep. Scott Ogan

To: CSHB 394

Page 2, Line 24: Delete "at the drill site"

3/11/96
Version M

AMENDMENT 7

Offered in House Resources By: Rep. Scott Ogan

Page 10, Line 7:

Delete: "of the facility"

following "the"
Insert: "owner or"

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Chenoweth
3/7/96

CS FOR HOUSE BILL NO. 394( )

IN THE LEGISLATURE OF THE STATE OF ALASKA

NINETEENTH LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): REPRESENTATIVES OGAN AND ROKEBERG, James, Kohring

A BILL

FOR AN ACT ENTITLED

"An Act authorizing shallow natural gas leasing from sources within 3,000 feet of the surface; relating to regulation of natural gas exploration facilities for purposes of preparation of discharge prevention and contingency plans and compliance with financial responsibility requirements; exempting response and prevention activities associated with shallow natural gas leasing as a use for which money in the oil and hazardous substance release prevention and response fund is authorized; and adding, in the exemption from obtaining a waste disposal permit for disposal of waste produced from drilling, a reference to shallow natural gas."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. LEGISLATIVE FINDINGS, PURPOSE, AND EXPRESSION OF INTENT. (a) The legislature finds that

(1) there exist throughout the state sizeable reserves of coal and small but commercially significant amounts of natural gas located close to the earth's surface that are usually, though not always, associated with and emitted from coal reserves;

(2) the methane derived from this coal and other sources and that is found in reservoirs at depths of less than 3,000 feet could be tapped to serve as a principal or a chief supplemental energy source of benefit to residents of areas in which they are found;

(3) the methane derived from this coal and other shallow gas reservoirs could be developed without interfering with the development and transportation of the state's vast gas reserves available for interstate and foreign markets; and

(4) it is in the best interests of the state and its people that this natural gas should be identified and developed, especially to serve as a source of natural gas for use in rural communities and remote locations within the state, especially when the natural gas can be delivered to consumers at less cost than alternative energy sources.

(b) In authorizing a program of leasing shallow natural gas from state land, it is the legislature's purpose to provide both a means and an incentive by which that gas may be identified and developed at low cost for the direct benefit of residents of remote or sparsely populated areas for which connection to the in-place gas pipeline transmission and distribution system serving population centers in Southcentral Alaska is not economically feasible.

* Sec. 2. AS 38.05 is amended by adding a new section to read:

Sec. 38.05.177. SHALLOW NATURAL GAS LEASES. (a) The provisions of this section

(1) apply to gas, whether methane associated with and derived from coal reserves or otherwise, developed from a source that is within 3,000 feet of the surface at the drill site; and

(2) do not apply to authorize lease of

(A) land described in AS 38.05.131(b) in which oil and gas exploration licenses and leases may not be issued;

(B) the land

(i) that is or becomes subject to an oil and gas exploration license or lease issued under AS 38.05.131 - 38.05.134;

(ii) that is leased under AS 38.05.180; or

(iii) that is described in and is part of the proposed oil