

# Federal Offshore Statistics: 1993

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Leasing, Exploration, Production, and Revenue as of  
December 31, 1993

By  
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**MASTER**

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## Abbreviations & Acronyms

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<b>A</b>		<b>M</b>	
API	American Petroleum Institute	MAFLA	Offshore Mississippi, Alabama, Florida, and Louisiana
ATL	Atlantic OCS Region	MATL	Mid-Atlantic Planning Area
atm	atmosphere	Mcf	thousand cubic feet
<b>B</b>		MMbbl	million barrels
bbl	barrels	MMPA	Marine Mammal Protection Act
Bbbl	billion barrels	<b>N</b>	
BF	Beaufort Sea Planning Area	NATL	North Atlantic Planning Area
BBOE	billion barrels of oil equivalent	NAV	Navarin Basin Planning Area
BOE	barrels of oil equivalent	NALEU	North Aleutian Basin Planning Area
bpd	barrels per day	NCA	Northern California Planning Area
<b>C</b>		NEPA	National Environmental Protection Act
CAA	Clean Air Act	NORT	Norton Basin Planning Area
CCA	Central California Planning Area	<b>O</b>	
CFR	Code of Federal Regulations	OCS	Outer Continental Shelf
CGOM	Central Gulf of Mexico Planning Area	OCSLA	Outer Continental Shelf Lands Act
CHK	Chukchi Sea Planning Area	OPA	Oil Pollution Act
CKI	Cook Inlet Planning Area	<b>P</b>	
CWA	Clean Water Act	PAC	Pacific OCS Region
CZMA	Coastal Zone Management Act	PRESTO	Probabilistic Resource Estimates Offshore
<b>E</b>		<b>S</b>	
EGOM	Eastern Gulf of Mexico Planning Area	SA	salt
ESA	Endangered Species Act	SATL	South Atlantic Planning Area
<b>F</b>		SCA	Southern California Planning Area
FOGRAMA	Federal Oil and Gas Royalty Management Act	SPE	Society of Petroleum Engineers
FOS	Federal Offshore Statistics	STGEO	St. George Basin Planning Area
<b>H</b>		<b>T</b>	
ha	hectare (2.471 acres)	Tcf	trillion cubic feet
<b>I</b>		TQ	Transition Quarter
INTERMAR	International Activities and Marine Minerals Information Section	<b>W</b>	
IS	Information Section	WA/OR	Washington-Oregon Planning Area
<b>K</b>		WGOM	Western Gulf of Mexico Planning Area
KOD	Kodiak Planning Area		
<b>L</b>			
LCI	Lower Cook Inlet		



## *Inch-Pound—Metric Conversion*

Measurements in this document are reported in the unit system that reflects the most common usage. The following table provides factors for converting measurements from one system of units to another.

<i>Inch-Pound Unit</i>	<i>(multiply to obtain)</i>	<i>Metric Unit</i>
foot . . . . .	0.3048 . . . . .	meters
mile, statute <sup>1</sup> . . . . .	1.609 . . . . .	kilometers
mile, nautical (geographic) <sup>1</sup> . . . . .	1.852 . . . . .	kilometers
acre . . . . .	0.4047 . . . . .	hectares <sup>2</sup>
barrel (petroleum, 1 bbl = 42 gal) . . . . .	0.1589 . . . . .	cubic meters
gallon . . . . .	3.785 . . . . .	liters
cubic foot . . . . .	0.0283 . . . . .	cubic meters
ton, long (deadweight; 2,240 lb) . . . . .	1.016 . . . . .	metric tons
<i>Metric Unit</i>	<i>(multiply to obtain)</i>	<i>Inch-Pound Unit</i>
meter . . . . .	3.281 . . . . .	feet
kilometer . . . . .	0.6215 . . . . .	miles, (statute)
kilometer . . . . . Unit	0.5399 . . . . .	miles, nautical (geographic)
hectare . . . . .	2.471 . . . . .	acres
cubic meter . . . . .	35.33 . . . . .	cubic feet
cubic meter . . . . .	6.293 . . . . .	barrels (petroleum, 1 bbl= 42 gal)
liter . . . . .	0.2642 . . . . .	gallons
metric ton . . . . .	0.9843 . . . . .	tons, long (deadweight; 2,240 lb)
<sup>1</sup> Distances on the Federal Outer Continental Shelf and on land are measured in statute miles. Distances on offshore State lands are measured in nautical (geographic) miles.		
<sup>2</sup> Hectare is an alternative name for square hectometer (hm <sup>2</sup> ) used restrictively for land and water area measurements.		



# **Preface**

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## **Mandate**

The Outer Continental Shelf Lands Act (OCSLA [43 U.S.C. 1331, et seq.]), enacted in 1953 and amended by the OSCLA Amendments of 1978 and 1985 and the OCS Paperwork and Reporting Act of 1986 (amending 43 U.S.C. 1343, 1861, and 1865), charges the Secretary of the Interior with the responsibility for administering and managing mineral exploration and development of the Outer Continental Shelf (OCS), as well as for conserving its natural resources.

The OCSLA as amended defines a national policy for the comprehensive management of natural gas and oil production in the offshore marine environment. The goals of this national policy are the following:

- to ensure orderly and timely exploration and development of mineral resources to meet the energy needs of the Nation;
- to provide for optimal protection of the environment concurrent with efficient and economic mineral-resource development; and
- to ensure that fair market value is received for the lands leased and the rights conveyed by the Federal Government.

To fulfill this mandate, the Department of the Interior (DOI) in 1953 established an oil and gas leasing program to make OCS lands available to private industry for mineral development. Over the last 39 years, DOI has leased more than 69 million acres of Federal land in 113 lease sales.

## **Operations and Safety Management**

The Minerals Management Service (MMS), through the Associate Director for Offshore Minerals Management (OMM), manages the day-to-day postlease mineral exploration and development activities on the OCS. The OMM, through its Regional and District offices, monitors the day-to-day operations on the OCS to ensure operator compliance with Federal regulations. Additionally, OMM, through its headquarters office of Operations and Safety Management, develops and maintains a comprehensive system of prescriptive and performance-based regulations for the production facilities and their associated pipelines that were on Federal OCS lands at the end of 1993. These regulations include

- rules for obtaining geological and geophysical data;
- minimum safety requirements for drilling and production operations;
- periodic inspection and testing requirements;
- management requirements for hydrogen sulfide and other toxic substances; and

- standards for plugging and abandoning wells, removing platforms, and clearing a work site after production is terminated.

These regulations must allow MMS to respond to such long-term trends in exploration and development as the increasing age of offshore facilities and the increasing number of small, independent operators. These same regulations need to allow MMS to respond to short-term events such as Hurricane Andrew, which cut a wide swath through the Gulf of Mexico in September 1992.

Additional challenges come from Executive Order 12777 (issued in 1993) which authorizes MMS under the Oil Pollution Act of 1990 (OPA 90) to regulate offshore production facilities and associated pipelines in State and Federal waters.

To deal with these challenges, MMS has sought to enhance its Civil and Criminal Penalties Program, study the implementation of a Safety and Environmental Management Program, and develop new bonding requirements for offshore operators; MMS has already implemented OPA 90 requirements for oil-spill financial liability and responsibility. Additionally, MMS conducts a vigorous technology and research assessment program directed at facility safety, pollution prevention, and oil-spill response technology. This program includes management of the National Oil Spill Response Test Center (Ohmsett) which is now in its fourth year of operation.

As Federal OCS production reaches the end of its fourth decade in 1994 and begins its fifth, MMS will continue to create a regulatory process that ensures improved facility design, promotes worker safety, and encourages industry to operate in the safest and most environmentally sound manner possible.

## **Executive Summary**

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### **Leasing**

In 1993, MMS held two lease offerings, one each in the Central and Western Gulf of Mexico Planning Areas. The lease areas contained a total of 10,125 tracts. Companies submitted 458 bids on 2.2 percent of these tracts, exposing a total of about \$126.5 million. Ultimately, MMS issued 336 leases that cover about 1.7 million acres and collected \$126.5 million in bonus bids. These two lease offerings brought the total of OCS acreage put up for lease since 1954 to about 1 billion acres. Out of this total acreage about 6.9 percent was leased, but only 2.9 percent remained under lease at the end of 1993.

### **Operations**

At the end of 1993, offshore oil and gas companies could conduct exploration, development, and production operations on about 28.9 million acres of OCS lands. Producing leases numbered 1,735, accounting for 30.6 percent of the active leases, and covering 8.1 million acres. Most drilling activity was on the Gulf of Mexico OCS, which contains 90.9 percent of active leases and 97.3 percent of producing leases. In 1993, operators completed drilling on 339 wells. This brought the total number of wells drilled on the OCS to 31,645. About 53 percent of these wells are plugged and abandoned. Oil and natural gas production exists in the Gulf of Mexico and offshore southern California. There is also sulphur production in the Gulf of Mexico.

Operators installed 110 production facilities on the OCS in 1993. This brought the total number of offshore production facilities to 3,755, a decrease from 1992's total. This happened because for the second straight year removals (179) exceeded installations. This decline continues a trend since 1986 in which the number of production facility removals has more than quadrupled. Most of this activity is in the Gulf of Mexico. The number of production facilities offshore California at the end of 1993 remains at 24 with no installations since 1989, and activity being confined to the installation of two topsides to the jackets installed in 1989. There were 153 bbl of oil spilled during OCS operations in 1993 and there were four drilling blowouts. One blowout spilled 60 bbl of oil while the others each spilled less than 1 bbl.

### **Production**

Federal offshore leases have produced 9.7 billion barrels of oil and 106.5 trillion cubic feet of natural gas over the history of the program. In 1993, OCS production was 14.1 percent of total U.S. oil production. When compared to oil production by State, the Federal OCS ranks fifth behind Texas, Alaska, Louisiana, and California. In 1993, OCS natural gas production was 23.5 percent of total U.S. production. When compared to natural gas production by State, the Federal OCS ranks third behind Texas and Louisiana. Federal leases offshore Louisiana produced about 79.2 percent and 74 percent of OCS crude oil and

natural gas respectively.

In 1993, there were 123 producers of crude oil on the OCS. The top 10 producers, about 8.1 percent, produced about 69.6 percent of OCS crude oil. In contrast, the top 10 natural gas producers out of 126 accounted for about 50 percent of OCS natural gas production.

## Revenue

Revenue from Federal OCS production comes from bonuses paid at lease sales, annual rent on leases, and royalties on the resources brought to market by producers. In 1993, total revenue generated from extraction of Federal OCS resources totaled about \$2.9 billion. About 57 percent of this money went directly to the U.S. Treasury. The Land and Water Conservation Fund and the National Historic Preservation Fund, both administered by the National Park Service, received about 40 percent of 1993 OCS revenue. These funds provide grants to other Federal agencies and States for conservation and historic preservation projects. Seven coastal States received the remainder, about 3 percent, of OCS revenue.

## About This Document

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All information in this report refers to what was in effect on December 31, 1993, unless otherwise noted. Because of a continuing audit of the data, this edition includes corrections to data from previous editions. Therefore, the numbers in tables and figures within this report supersede earlier editions of *Federal Offshore Statistics* (FOS).

All words appearing in boldface within the text are defined in the glossary (p. 160). All abbreviations and acronyms are defined in the Abbreviations and Acronyms list (p. ix). A number in parentheses denotes credits for prior-year adjustments; these numbers are subtracted when total or cumulative numbers are generated. Conversion of volumetric data (e.g., production and reserves) for natural gas figures to a standard 14.73 psi pressure base is made where necessary.

Unless otherwise noted, MMS is the source for all information contained in this report. More detailed information is available on request from the Information and Training Branch, MMS's regional offices, or MMS's Royalty Management Program at the following addresses:

Pacific OCS Region  
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770 Paseo Camarillo, MS 7000  
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# **I. Federal Offshore Lands**

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The Submerged Lands Act (SLA) of 1953 grants the States rights to the natural resources of the submerged lands from the coastline to no more than 3 nautical miles (5.6 km) into the Atlantic, Pacific, and Arctic Oceans, and the Gulf of Mexico except the coastal waters of Texas and western Florida, where State jurisdiction extends from the coastline to no more than 3 marine leagues (14.5 km) into the Gulf of Mexico. The SLA also reaffirmed the Federal claim to the **Outer Continental Shelf (OCS)**, which consists of those submerged lands seaward of State jurisdiction.

The SLA led to the passage of the Outer Continental Shelf Lands Act in 1954 (OCSLA). The OCSLA and subsequent amendments in 1978 and 1985 provide for Federal jurisdiction over the submerged lands of the OCS. Additionally, it authorizes the Secretary of the Interior to lease those lands for mineral development. Note that the legal OCS includes submerged lands that are not part of the geological OCS.

On March 10, 1983, U.S. President Ronald Reagan signed Proclamation 5030 (3 CFR 22) which set up the U.S. **Exclusive Economic Zone (EEZ)**. The EEZ consists of those areas adjoining the territorial sea of the United States, the Commonwealth of Puerto Rico, the Commonwealth of Northern Mariana Islands, and U.S. overseas territories and possessions. The EEZ extends up to 370 km (200 nmi) from the coastline. About 15 percent of this area lies on the geologic continental shelf and is shallower than 200 m (656 ft). Another 10 to 15 percent lies on the continental slope and rise, between 200 and 2,000 m (656 and 6,562 ft) water depth. The remaining 70–75 percent is abyssal plain where water depths reach 3,000–5,000 m (9,843–16,404 ft).

Leasing of Federal lands and their subsequent development have made the OCS a major source of the Nation's supply of crude oil and natural gas. Offshore operators also produce salt and sulphur from OCS leases, and investigations continue into the possibility of the OCS becoming a source of other nonfuel minerals (i.e., sand and gravel, phosphorite, manganese, gold, tin, titanium, and platinum).

The Oil Pollution Act of 1990 (OPA 90) gave the Secretary of the Interior authority over offshore facilities and associated pipelines, with the exception of deep-water ports, for State and Federal offshore waters. The Secretary in turn delegated this OPA 90 authority to MMS. The resulting tasks for MMS include the following:

- enforcing spill prevention measures
- reviewing spill response plans
- inspecting spill containment and cleanup equipment
- reviewing spill financial liability limits, and
- certifying spill financial responsibility

While the OCSLA and OPA 90 define MMS jurisdiction and regulatory responsibility on

Federal offshore lands, other Federal laws play a significant role in the management of offshore operations. Some of those laws are the

- National Environmental Policy Act of 1970 (NEPA) - The NEPA requires a detailed environmental review before any major or controversial Federal action.
- Clean Air Act of 1970 (CAA, reauthorized in 1990) - The CAA regulates the emission of air pollutants from industrial activities.
- Coastal Zone Management Act of 1972 (CZMA, reauthorized in 1990) - The CZMA requires State review of Federal action that affects the land and water use of the coastal zone.
- Clean Water Act of 1977 (CWA) - The CWA, through the issuance of National Pollutant Discharge and Elimination System permits, regulates the discharge of toxic and nontoxic pollutants into the surface waters of the U.S.
- Federal Oil and Gas Royalty Management Act of 1982 (FOGRAMA) - The FOGRAMA requires that oil and gas facilities be built in a way that protects the environment and conserves Federal resources.
- Marine Mammals Protection Act of 1972 (MMPA) - The MMPA provides for the protection and conservation of all marine mammals and their habitats.
- Endangered Species Act of 1973 (ESA) - The ESA requires a permit for the taking of any protected species. It also requires that all Federal actions not significantly impair or jeopardize protected species or their habitats.

Table 1 shows the areal extent of both the State offshore waters and the Federal OCS. The MMS divides the Federal waters of the OCS into four regions: the Atlantic OCS, the Gulf of Mexico OCS, the Pacific OCS, and the Alaska OCS. These regions are in turn divided into planning areas, as shown in figure 1. Table 2 gives the areal extent of the EEZ.

**Table 1. Areal Extent of State and Federal Submerged Lands in U.S. Offshore Areas**

<i>U.S. Offshore/Planning Area</i>	<i>State Offshore (Acres)</i>	<i>Federal OCS (Acres)</i>	<i>Totals (Acres)</i>
<b>Alaska</b>	<b>14,656,000</b>	<b>945,569,883</b>	<b>960,225,883</b>
Aleutian Arc . . . . .	N/A	161,300,000	N/A
Aleutian Basin . . . . .	N/A	47,400,000	N/A
Beaufort Sea . . . . .	N/A	62,345,883	N/A
Bowers Basin . . . . .	N/A	90,300,000	N/A
Chukchi Sea . . . . .	N/A	41,468,477	N/A
Cook Inlet/Shelikof Strait . . . . .	N/A	5,356,431	N/A
Gulf of Alaska . . . . .	N/A	134,078,219	N/A
Hope Basin . . . . .	N/A	12,811,077	N/A
Kodiak . . . . .	N/A	88,985,055	N/A
Navarin Basin . . . . .	N/A	37,107,431	N/A
North Aleutian Basin . . . . .	N/A	32,452,522	N/A
Norton Basin . . . . .	N/A	25,005,234	N/A
Shumagin . . . . .	N/A	83,162,115	N/A
St. George Basin . . . . .	N/A	70,238,345	N/A
St. Matthew-Hall . . . . .	N/A	53,559,094	N/A
<b>Atlantic Coast States</b>	<b>4,544,000</b>	<b>255,356,910</b>	<b>259,900,910</b>
North Atlantic . . . . .	N/A	48,770,485	N/A
Mid-Atlantic . . . . .	N/A	82,180,484	N/A
South Atlantic . . . . .	N/A	114,223,681	N/A
Straits of Florida . . . . .	N/A	10,182,260	N/A
<b>Gulf Coast States</b>	<b>8,640,000</b>	<b>159,276,572</b>	<b>167,916,572</b>
Eastern Gulf of Mexico . . . . .	N/A	75,594,026	N/A
Central Gulf of Mexico . . . . .	N/A	47,777,241	N/A
Western Gulf of Mexico . . . . .	N/A	35,905,305	N/A
<b>Pacific Coast States</b>	<b>2,880,000</b>	<b>121,939,940</b>	<b>124,819,940</b>
Northern California . . . . .	N/A	28,525,517	N/A
Central California . . . . .	N/A	15,000,443	N/A
Southern California . . . . .	N/A	30,502,502	N/A
Washington-Oregon . . . . .	N/A	47,911,478	N/A
<b>Total</b>	<b>30,720,000</b>	<b>1,482,143,305</b>	<b>1,513,863,305</b>

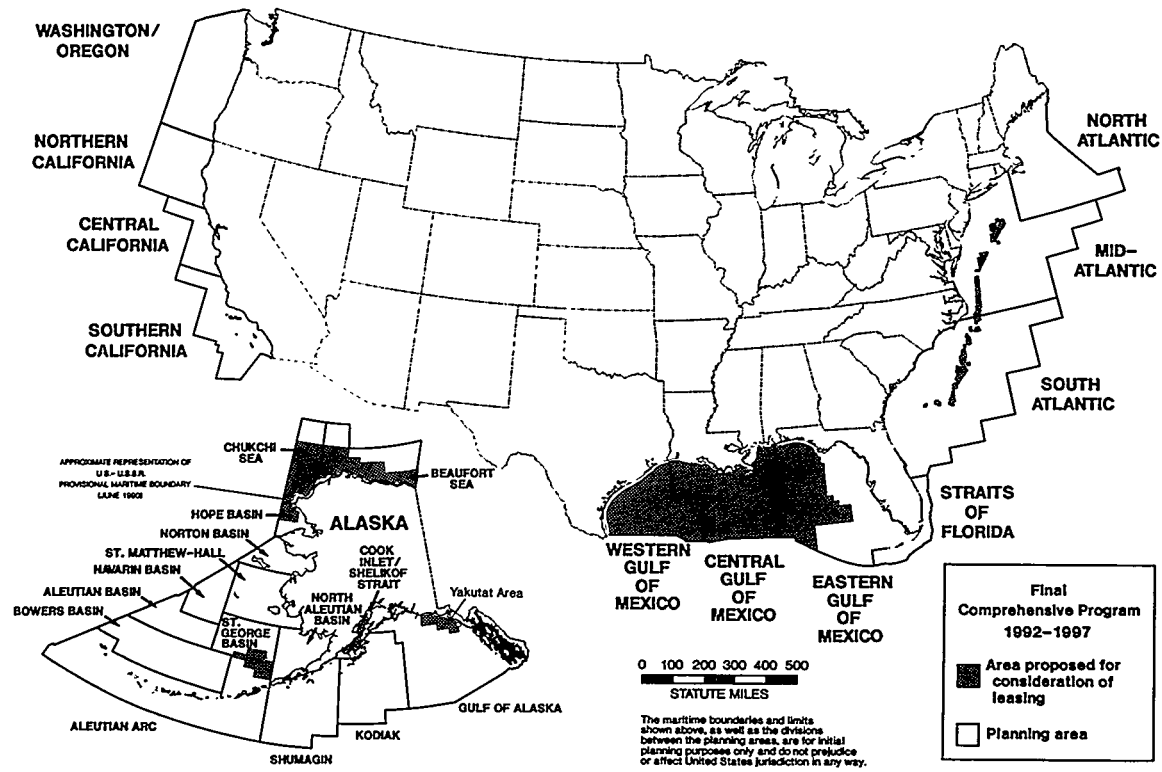
NOTE: Acreages for the Aleutian Arc, Aleutian Basin, and Bowers Basin Planning Areas are estimates.

**Table 2. Areal Extent of the U.S. Exclusive Economic Zone (EEZ)**

<i>Offshore Areas</i>	<i>EEZ (Acres)</i>	<i>EEZ (nmi<sup>2</sup>)</i>
Atlantic Coast .....	215,401,075	253,800
Gulf of Mexico .....	158,028,685	186,200
Pacific Coast .....	200,973,107	236,800
Alaska .....	806,268,800	950,000
Hawaii .....	589,849,280	695,000
<i>Subtotal (50 States)</i>	<u>1,970,520,947</u>	<u>2,321,800</u>
Commonwealth of Puerto Rico and the U.S. Virgin Islands .....	49,564,314	58,400
Guam .....	51,261,722	60,400
American Samoa .....	105,918,259	124,800
Other U.S. Territories and Possessions .....	486,646,874	573,400
<i>Subtotal (Territories and Possessions)</i>	<u>693,391,168</u>	<u>817,000</u>
<b>U.S. Total .....</b>	<b>2,663,912,115</b>	<b>3,138,800</b>
Commonwealth of the Northern Mariana Islands .....	189,939,955	223,800
<b>Total EEZ .....</b>	<b>2,853,852,070</b>	<b>3,362,600</b>

NOTE: Areal numbers in square nautical miles are rounded off to the nearest 100, and then converted to acres. Therefore, the numbers used herein should be treated as estimates of EEZ acreage.

SOURCE: US Geological Survey/National Oceanic and Atmospheric Administration Joint Office of Mapping and Research



**Activity by OCS Region and Planning Area 1992-1997**

Region: Planning Area	Consider Leasing*	Region: Planning Area	Consider Leasing*
<b>Atlantic Region</b>		<b>Alaska Region</b>	
North Atlantic	—	Gulf of Alaska	
Mid-/South Atlantic	1996	Yakutat	1995
Straits of Florida	—	Middleton Island	—
<b>Gulf of Mexico Region</b>		Kodiak	—
Eastern Gulf		Cook Inlet/Shelikof Strait	1994
North of 26°	1995	Shumagin	—
South of 26°	—	North Aleutian Basin	—
Central Gulf	Annually	Aleutian Arc	—
Western Gulf	Annually	St. George Basin	1996
<b>Pacific Region</b>		Bowers Basin	—
Southern California	—	Aleutian Basin	—
Central California	—	Navarin Basin	—
Northern California	—	St. Matthew-Hall	—
Washington-Oregon	—	Norton Basin	—
		Hope Basin	1997
		Chukchi Sea	1996
		Beaufort Sea	1995

\*Actual dates depend upon the outcome of the Area Evaluation and Decision Process

**Figure 1. Map of Federal Offshore Regions in the OCS Natural Gas and Oil Resource Management Comprehensive Program: 1992-97.**



## **II. Offshore Leasing Activity and Status**

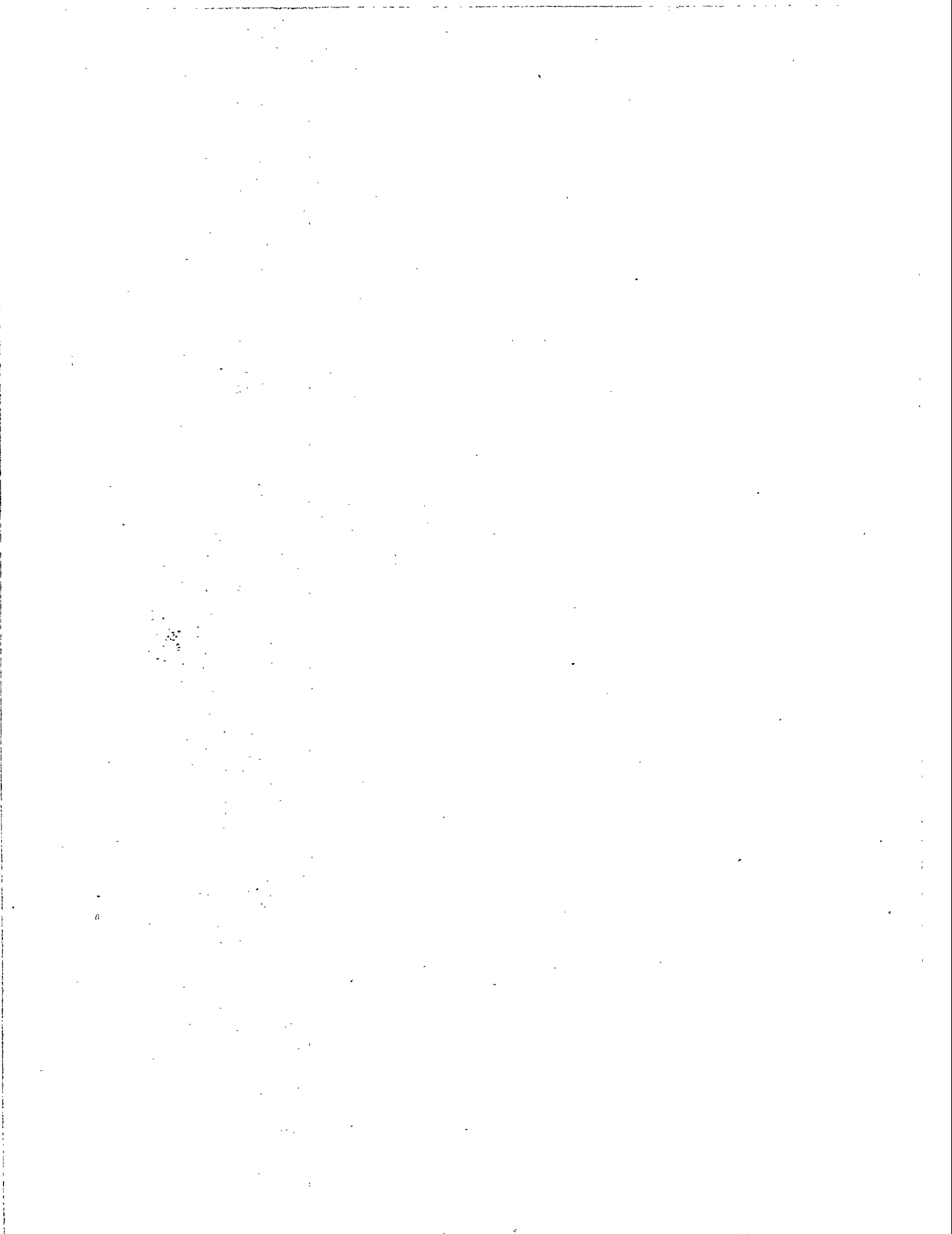
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The OCSLA as amended authorizes the Secretary of the Interior to lease OCS lands for mineral development. Leasing activity in 1993 included two sales in the Gulf of Mexico (GOM) Region. Sales were not held in other OCS regions. Leasing activity will continue with 14 lease sales in portions of 11 planning areas between 1994 and 1997 under MMS's Comprehensive Program as approved in July 1992. The lease sale schedule is shown in figure 1. For the remainder of the program, annual lease sales are scheduled for the Central and Western GOM planning areas. One sale has been scheduled for each of these planning areas: Gulf of Alaska, Cook Inlet/Shelikof Strait, St. George Basin, Hope Basin, Chukchi Sea, Beaufort Sea, Eastern Gulf, and Mid/South Atlantic.

Through 1993 the U.S. Department of the Interior has offered more than 1.01 billion OCS acres (409 million ha) for lease in 113 lease sales. In those 113 lease sales, the oil and gas industry paid about \$56.4 billion in bonuses to lease 69.9 million acres (28.3 million ha). Table 3 shows the OCS leasing history by year.

In 1993, sales 142 and 143 in the Central and Western GOM, respectively, attracted 458 bids, which resulted in 336 leases covering 1.7 million acres. This acreage leased represents 3.1 percent of the acreage offered for lease in Sales 142 and 143 (see figure 2). Total bonuses accepted for these two sales amounted to \$126.5 million. The average bonus per acre leased was \$70.48 for Sale 142 and \$77.45 for Sale 143. Expected first year rentals from these two sales total \$6.8 million.

Tables 4 through 8 present leasing statistics for individual sales, and table 9 provides a regional breakdown of leasing acreage and status. The GOM is the most successful of the OCS areas. Through 1993, GOM lease sales produced about 81 percent of total leases (see figure 3) and 77 percent of the bonus monies. At the end of 1993, there were 28.9 million acres (11.7 million ha) in active lease status.



**Table 3. Summary by Year of Federal Lease Offerings and Acreage Leased, 1954-93**

Year	No. of Lease Offerings	Tracts Offered	Tracts Leased	Acres Offered	Acres Leased	High Bid Bonuses Accepted (\$)	Acreage leased as a Percentage of Acreage Offered
1954	3	345	114	1,384,238	486,870	140,969,005	35.2
1955	1	210	121	674,095	402,567	108,528,726	59.7
1959	2	118	42	539,813	171,300	89,746,992	31.7
1960	2	395	148	1,632,339	707,026	282,717,065	43.3
1961	1	16	6	80,640	30,240	122,000	37.5
1962	3	830	420	3,718,115	1,929,177	489,481,061	51.9
1963	1	129	57	669,777	312,945	12,807,337	46.7
1964	2	224	124	1,124,102	613,524	95,874,327	54.6
1965	1	658	50	947,520	72,000	33,740,309	7.6
1966	3	71	42	265,886	141,768	209,199,893	53.3
1967	2	214	159	988,484	746,951	510,109,742	75.6
1968	3	305	197	1,315,984	934,164	1,346,487,097	71.0
1969	3	185	40	355,758	114,282	111,660,685	32.1
1970	2	161	138	666,845	598,540	945,064,773	89.8
1971	1	18	11	55,872	37,222	96,304,523	66.6
1972	2	210	178	970,711	826,195	2,251,347,556	85.1
1973	2	276	187	1,514,940	1,032,570	3,082,462,611	68.2
1974	4	1,006	356	5,006,881	1,762,158	5,022,860,815	35.2
1975	4	1,374	321	7,247,327	1,679,877	1,088,133,152	23.2
1976	4	536	246	2,827,342	1,277,937	2,242,898,467	45.2
1977	2	358	211	1,843,116	1,100,734	1,568,564,745	59.7
1978	4	586	249	3,140,696	1,297,274	1,767,042,064	41.3
1979	6	666	351	3,412,252	1,767,443	5,078,861,692	51.8
1980	3	483	218	2,563,452	1,134,227	4,204,640,257	44.3
1981	7	1,398	430	7,680,398	2,265,537	6,652,980,897	29.5
<sup>1</sup> 1982	5	1,410	357	7,637,122	1,886,360	3,987,490,009	24.7
1983	7	21,689	1,251	119,811,784	6,587,823	5,749,016,369	5.5
1984	6	27,928	1,387	154,383,680	7,397,939	3,928,876,308	4.8
1985	3	15,754	681	87,028,709	3,573,554	1,557,650,714	4.1
1986	2	10,724	142	58,670,104	734,418	187,094,747	1.3
1987	2	10,926	640	59,762,078	3,447,809	497,247,006	5.8
1988	7	28,382	1,621	158,016,215	8,838,943	1,259,548,738	5.6
1989	2	11,013	1,049	60,097,672	5,580,867	645,617,410	9.3
1990	2	10,459	825	56,788,766	4,263,446	584,301,918	7.5
1991	4	16,600	676	90,287,925	3,413,560	338,856,549	3.8
1992	2	9,618	204	52,380,047	1,020,919	84,784,975	2.0
1993	<u>2</u>	<u>101,164</u>	<u>336</u>	<u>55,070,269</u>	<u>1,714,458</u>	<u>126,467,246</u>	<u>3.1</u>
<b>Total<sup>2</sup></b>	<b>113</b>	<b>185,439</b>	<b>13,585</b>	<b>1,010,560,954</b>	<b>69,902,624</b>	<b>56,379,435,780</b>	<b>6.9</b>

<sup>1</sup> The 1982 data for 5 oil and gas lease sales account for the first part of Sale 69 as 69-1 and the 1983 data account for the second part as 69-2. Thus, there were 8 bid openings but only 7 offshore oil and gas lease sales recorded for 1983.

<sup>2</sup> This total does not include lease issuance data here for the Pacific phosphate sale held December 15, 1961, because 6 awarded leases (30,240 acres) were subsequently "terminated at the convenience of the Federal Government." The action followed discovery of unexploded naval missiles on the ocean floor of the 6 tracts on the southern California OCS. All bonuses (\$122,000) were returned to the lessees and are not totaled as revenues.

NOTE: This table and tables 4 through 7 summarize, by calendar year, 113 Federal offshore lease offerings that were held from October 1954 through August, 1993. They include 93 oil and gas, 3 sulphur (1954, 1965, and 1969), 2 salt (1960 and 1967), phosphate (1961), and 1 sulphur and salt (1988) lease offerings.

**Table 4. Statistical Summary of Federal Offshore Lease Offerings held by DOI from October 1954 through December 1993**

Sale	Bid Opening		Sale Offering		Bids Made			Total Exposed (\$)
	Date	Area	Tracts	Acres	Number	Tracts	Acres	
1	10/13/54	LA	199	748,819	336	90	394,721	302,924,834
1S	10/13/54	LA	108	523,630	5	5	25,000	1,233,500
2	11/09/54	TX	38	111,789	90	19	67,149	73,801,896
3	07/12/55	TX, LA	210	674,095	384	121	402,567	323,240,052
5	05/26/59	FL	80	458,000	23	23	132,480	1,711,872
6	08/11/59	LA	38	81,813	56	28	62,967	174,411,628
7	02/24/60	TX, LA	385	1,610,254	444	173	813,663	575,175,650
8SA	05/19/60	LA	10	22,085	1	1	2,500	75,250
PH <sup>1</sup>	12/15/61	SCA	(16)	(80,640)	(6)	(6)	(30,240)	(122,000)
9	03/13/62	LA	401	1,808,276	538	212	981,407	314,218,540
10	03/16/62	TX, LA	410	1,875,984	666	210	977,092	605,357,718
11	10/09/62	LA	19	33,855	26	14	24,858	66,265,290
P-1	05/14/63	C & NCA	129	669,777	70	58	312,975	13,989,953
12	04/28/64	LA	28	34,028	69	23	32,671	93,850,051
P-2	10/01/64	OR, WA	196	1,090,074	222	101	580,853	53,579,753
13S	12/14/65	TX	658	947,520	113	50	72,000	56,324,364
14	03/29/66	LA	18	35,993	64	18	35,993	275,384,739
15	10/18/66	LA	52	227,898	79	32	134,717	185,214,816
P-3	12/15/66	SCA	1	1,995	7	1	1,995	89,937,020
16	06/13/67	LA	206	971,489	743	172	812,202	1,627,749,269
17SA	09/05/67	LA	8	16,995	1	1	2,495	30,564
P-4	02/06/68	SCA	110	540,609	164	75	383,341	1,293,601,113
18	05/21/68	TX	169	728,551	556	141	666,631	1,620,393,212
19	11/19/68	LA	26	46,824	38	21	40,262	398,430,736
19A	01/14/69	LA	38	96,389	40	26	61,628	71,036,938
20S	05/13/69	LA	120	165,605	43	38	50,880	4,070,549
19B	12/16/69	LA	27	93,764	58	16	60,153	230,460,743
21	07/21/70	LA	34	73,360	59	21	50,889	163,451,158
22	12/15/70	LA	127	593,485	1,043	127	593,485	2,877,429,559
23	11/04/71	LA	18	55,872	33	13	42,222	172,735,981
24	09/12/72	LA	78	366,682	324	74	346,693	1,599,155,464
25	12/19/72	LA	132	604,029	690	119	548,374	6,191,018,227
26	06/19/73	TX, LA	129	697,643	551	104	566,573	6,248,160,989
32	12/20/73	MAFLA	147	817,297	373	89	496,917	3,404,892,968
33	03/28/74	LA	206	930,918	402	114	522,397	6,474,003,574
34	05/29/74	TX	245	1,355,678	352	123	680,335	3,354,292,556
S1	07/30/74	TX, LA	258	1,298,739	57	49	249,704	88,799,354
<sup>2</sup> 36	10/16/74	LA	297	1,421,546	387	157	733,927	2,521,756,919
Subtotal (1954-74)			<u>5,371</u>	<u>21,912,000</u>	<u>9,113</u>	<u>2,665</u>	<u>11,994,956</u>	<u>41,548,288,799</u>

Footnotes at end of table.

**Table 4. Statistical Summary of Federal Offshore Lease Offerings held by DOI from October 1954 through December 1993 — continued**

Sale	Leases Issued		High-Bid Bonuses		High Bids Rejected		Average	First Year
	Tracts	Acres	Submitted (\$)	Accepted (\$)	No.	Amount (\$)	Bid per Acre (\$)	Rentals (\$)
1	90	394,721	116,378,476	116,378,476	0	0	294.84	1,184,175
1S	5	25,000	1,233,500	1,233,500	0	0	49.34	50,000
2	19	67,149	23,357,029	23,357,029	0	0	347.84	201,450
3	121	402,567	108,528,726	108,528,726	0	0	269.59	1,207,722
5	23	132,480	1,711,872	1,711,872	0	0	12.92	397,440
6	19	38,820	90,286,693	88,035,120	9	2,251,573	2,267.28	388,200
7	147	704,526	285,180,648	282,641,815	26	2,538,833	350.46	2,113,599
8SA	1	2,500	75,250	75,250	0	0	30.10	7,500
PH	(6)	(30,240)	(122,000)	(122,000)	0	0	N/A	N/A
9	206	956,407	177,745,105	177,260,305	6	484,800	185.34	2,855,433
10	205	956,592	268,724,090	268,333,397	5	390,693	280.51	2,869,638
11	9	16,178	44,399,399	43,887,359	5	512,040	2,712.79	161,780
P-1	57	312,945	12,807,587	12,807,337	1	250	40.93	938,838
12	23	32,671	60,340,626	60,340,626	0	0	1,846.90	326,780
P-2	101	580,853	35,533,701	35,533,701	0	0	61.18	1,742,562
13S	50	72,000	33,740,309	33,740,309	0	0	468.62	216,000
14	17	35,056	89,054,406	88,845,963	1	208,443	2,534.44	350,570
15	24	104,717	101,730,216	99,164,930	8	2,565,286	946.98	523,600
P-3	1	1,995	21,189,000	21,189,000	0	0	10,618.50	9,980
16	158	744,456	511,957,288	510,079,178	14	1,878,110	685.17	2,233,458
17SA	1	2,495	30,564	30,564	0	0	12.25	7,485
P-4	71	363,181	603,204,284	602,719,262	4	485,022	1,659.56	1,089,543
18	110	541,304	602,475,717	593,899,046	31	8,576,671	1,097.16	1,623,915
19	16	29,679	150,482,797	149,868,789	5	614,008	5,049.59	296,820
19A	20	48,504	45,588,052	44,037,339	6	1,550,713	907.90	485,050
20S	4	5,625	3,678,045	715,150	34	2,962,895	127.14	16,875
19B	16	60,153	66,908,196	66,908,196	0	0	1,112.30	601,550
21	19	44,642	98,101,013	97,769,013	2	332,000	2,190.07	446,420
22	119	553,898	851,388,599	847,295,760	8	4,092,839	1,529.70	1,661,694
23	11	37,222	96,491,023	96,304,523	2	186,500	2,587.29	372,230
24	62	290,321	586,297,925	585,827,925	12	470,000	2,017.87	870,996
25	116	535,874	1,673,054,912	1,665,519,631	3	7,535,281	3,108.04	1,607,661
26	100	547,173	1,598,590,620	1,591,397,380	4	7,193,240	2,908.40	1,641,519
32	87	485,397	1,491,617,119	1,491,065,231	2	551,888	3,071.85	1,456,197
33	91	421,218	2,175,095,514	2,092,510,854	23	82,584,660	4,967.76	1,263,675
34	102	565,112	1,502,429,426	1,471,851,831	21	30,577,595	2,604.53	1,695,348
S1	19	100,241	76,617,645	30,236,800	30	46,380,845	301.64	300,729
36	144	675,587	1,445,175,340	1,428,261,330	13	16,914,010	N/A	2,026,812
	<u>2,384</u>	<u>10,889,259</u>	<u>15,051,200,712</u>	<u>14,829,362,517</u>	<u>275</u>	<u>221,838,195</u>	<u>N/A</u>	<u>35,243,244</u>

Footnotes at end of table.

**Table 4. Statistical Summary of Federal Offshore Lease Offerings held by DOI from October 1954 through December 1993 — *continued***

Sale	Bid Opening		Sale Offering		Bids Made			Total Exposed (\$)
	Date	Area	Tracts	Acres	Number	Tracts	Acres	
37	02/04/75	TX	515	2,870,344	281	143	796,367	484,721,874
38	05/28/75	TX, LA	283	1,346,432	191	102	486,327	402,752,355
38A	07/29/75	TX, LA	345	1,772,958	179	80	408,009	317,001,333
35	12/11/75	SCA	231	1,257,593	166	70	384,540	901,960,364
41	02/18/76	GOM	132	687,604	81	41	191,718	428,003,629
39	04/13/76	GOA	189	1,008,500	244	81	437,524	1,732,170,868
40	08/17/76	MATL	154	876,750	410	101	575,012	3,513,411,802
44	11/16/76	TX, LA	61	254,488	117	48	201,825	833,015,950
47	06/23/77	GOM	223	1,074,536	424	152	739,326	2,928,091,214
CI	10/27/77	LCI	135	768,580	240	91	518,080	677,075,681
43	03/28/78	SATL	224	1,275,273	99	57	324,511	150,927,700
45	04/25/78	TX, LA	145	709,727	283	101	490,752	1,559,345,260
65	10/31/78	GOM	89	511,709	62	35	201,295	87,592,568
51	12/19/78	TX, LA	128	643,987	288	88	449,691	2,355,263,307
49	02/28/79	MATL	109	620,557	74	44	250,500	66,005,881
48	06/29/79	SCA	148	792,845	112	55	294,018	994,683,701
58	07/31/79	GOM	123	577,517	316	88	424,030	3,333,990,620
58A	11/27/79	GOM	124	588,601	322	96	450,914	4,683,195,907
BF	12/11/79	BF	46	172,323	62	25	88,037	945,445,102
42	12/18/79	NATL	116	660,409	189	73	415,602	1,270,789,890
A62	09/30/80	GOM	192	909,575	506	147	706,042	7,119,464,692
55	10/21/80	GOA	210	1,195,569	64	37	210,648	197,417,469
62	11/18/80	GOM	81	458,308	268	74	420,058	3,500,570,271
<sup>3</sup> 53	05/28/81	SCA	111	603,613	301	81	432,817	4,885,810,689
RS-1	06/30/81	AK	175	996,327	7	5	28,466	5,582,362
A66	07/21/81	GOM	212	1,077,913	419	162	829,900	5,227,548,535
56	08/04/81	SATL	285	1,622,557	120	54	307,432	561,050,365
60	09/29/81	LCI	153	858,247	15	13	73,158	4,697,309
66	10/20/81	GOM	209	1,081,364	233	107	532,064	2,402,400,552
59	12/08/81	MATL	253	1,440,376	240	98	557,932	578,952,000
67	02/09/82	GOM	234	1,219,826	290	137	695,749	2,683,699,843
68	06/11/82	SCA	140	716,866	66	35	176,253	210,486,278
RS-2	08/05/82	ATL, CA, AK	554	3,142,068	48	40	227,727	14,439,195
71	10/13/82	BF (Diapir)	338	1,825,770	252	125	683,026	4,589,972,518
<sup>4</sup> 69-1	11/17/82	GOM	144	732,570	151	67	339,999	1,185,091,610
Subtotal (1975-82)			<u>6,811</u>	<u>36,351,705</u>	<u>7,120</u>	<u>2,753</u>	<u>14,349,363</u>	<u>60,832,628,694</u>

Footnotes at end of table.

**Table 4. Statistical Summary of Federal Offshore Lease Offerings held by DOI from October 1954 through December 1993 — continued**

Sale	Leases Issued		High-Bid Bonuses		High Bids Rejected		Average Bid per Acre (\$)	First-Year Rentals (\$)
	Tracts	Acres	Submitted (\$)	Accepted (\$)	No.	Amount (\$)		
37	113	626,585	300,632,667	274,690,955	30	25,941,712	438.39	1,879,761
38	86	406,942	250,681,156	232,916,050	16	17,765,106	572.36	1,220,856
38A	66	336,301	171,511,620	163,214,006	14	8,297,614	485.32	1,008,906
35	56	310,049	438,190,780	417,312,141	14	20,878,639	1,345.96	930,147
41	34	161,286	183,498,244	175,976,493	7	7,521,751	1,091.09	483,867
39	76	409,058	571,871,587	559,836,587	5	12,035,000	1,368.60	1,226,718
40	93	529,466	1,135,802,179	1,127,936,425	8	7,865,754	2,130.33	1,714,176
44	43	178,127	381,911,757	379,148,962	5	2,762,795	2,128.53	534,396
47	124	605,427	1,214,002,429	1,170,093,432	28	43,908,997	1,932.68	1,816,302
CI	87	495,307	400,319,543	398,471,313	4	1,848,230	804.49	1,603,584
43	43	244,807	109,695,692	100,743,443	14	8,952,249	411.52	792,576
45	90	438,756	767,407,369	733,656,893	11	33,750,476	1,672.13	1,316,283
65	35	201,295	61,176,730	61,176,730	0	0	303.92	603,885
51	81	412,416	884,589,799	871,464,998	7	13,124,801	2,113.07	1,237,263
49	39	222,034	41,720,618	40,001,631	5	1,718,987	180.16	718,848
48	54	288,260	573,956,402	572,825,418	1	1,130,984	1,987.18	867,489
58	81	391,183	1,261,358,089	1,247,489,022	7	13,869,067	3,189.02	1,173,570
58A	90	421,519	1,932,891,290	1,913,337,938	6	19,556,352	4,539.15	1,264,590
BF	24	85,776	491,728,138	488,691,137	1	3,037,000	5,697.27	277,808
42	63	358,671	827,832,854	816,516,546	10	11,316,308	2,276.51	1,161,216
A62	116	551,643	2,805,524,393	2,676,927,673	31	128,596,720	4,852.65	1,654,962
55	35	199,261	117,550,113	109,751,073	2	7,799,040	550.79	645,120
62	67	383,323	1,436,448,959	1,417,961,511	7	18,487,448	3,699.12	1,149,969
53	60	320,567	2,277,856,761	2,088,881,824	21	24,648,000	6,516.21	1,037,904
RS-1	1	5,694	3,091,738	170,496	4	2,921,242	29.95	18,432
A66	156	799,899	2,666,828,352	2,649,628,752	6	17,199,600	3,312.45	2,399,736
56	47	267,580	363,829,954	342,766,174	7	21,063,780	1,280.99	866,304
60	13	73,158	4,405,899	4,405,899	0	0	60.23	236,856
66	102	508,287	1,280,983,917	1,243,468,752	5	37,515,165	2,446.39	1,524,903
59	51	290,352	424,927,000	323,659,000	47	101,268,000	1,114.71	940,032
67	115	590,265	1,251,793,459	1,193,654,719	22	58,138,740	2,022.29	1,770,795
68	29	147,066	132,252,632	117,875,281	6	14,377,351	801.51	443,913
RS-2	36	204,955	12,310,706	11,149,450	4	1,161,256	54.40	663,552
71	121	662,861	2,067,604,786	2,055,632,336	4	11,972,450	3,101.15	2,146,112
69-1	56	281,213	634,919,980	609,178,223	11	25,741,757	2,166.25	843,657
	<u>2,383</u>	<u>12,409,389</u>	<u>27,481,110,592</u>	<u>26,590,611,283</u>	<u>370</u>	<u>726,172,371</u>	<u>N/A</u>	<u>38,174,488</u>

Footnotes at end of table.

**Table 4. Statistical Summary of Federal Offshore Lease Offerings held by DOI from October 1954 through December 1993 — continued**

Sale	Bid Opening		Sale Offering		Bids Made			Total Exposed (\$)
	Date	Area	Tracts	Acres	Number	Tracts	Acres	
69-2	03/08/83	GOM	125	665,478	20	13	68,106	48,755,129
57	03/15/83	NORT	418	2,379,751	98	64	364,364	371,803,984
70	04/12/83	STGEO	479	2,688,787	150	97	546,621	547,731,283
76	04/26/83	MATL	4,050	22,664,991	53	40	227,727	86,822,680
72	05/25/83	CGOM	7,050	37,867,762	1,015	656	3,249,199	4,582,847,288
78	07/26/83	SATL	3,582	20,156,426	12	11	62,625	14,562,040
<sup>5</sup> 74	08/24/83	WGOM	5,848	32,620,248	773	436	2,410,809	2,350,359,669
<sup>6</sup> 73	11/30/83	SCA	137	768,341	14	8	43,801	24,045,646
79	01/05/84	EGOM	8,868	50,631,513	226	156	897,786	500,261,361
<sup>7</sup> 83	04/17/84	NAV	5,036	28,048,995	425	186	1,058,932	1,148,701,653
81	04/24/84	CGOM	6,502	34,743,780	793	529	2,650,070	2,126,776,904
84	07/18/84	WGOM	5,446	30,038,593	593	402	2,173,704	1,263,576,675
<sup>8</sup> 87	08/22/84	BF (Diapir)	1,419	7,773,447	432	232	1,233,573	1,365,968,674
80	10/17/84	CA	657	3,147,352	30	25	125,100	73,163,686
98	04/22/85	CGOM	4,531	24,006,157	644	444	2,241,597	1,566,926,725
102	08/14/85	WGOM	4,879	27,199,074	265	210	1,156,842	519,116,036
<sup>9</sup> 94	12/18/85	EGOM	6,344	35,823,478	114	82	450,259	155,241,798
104	04/30/86	CGOM	5,837	31,382,152	129	114	569,418	164,135,937
105	08/27/86	WGOM	4,887	27,287,952	52	41	229,613	69,498,490
110	04/22/87	CGOM	5,881	31,818,472	385	313	1,636,330	341,540,856
112	08/12/87	WGOM	5,045	27,943,606	519	367	2,021,096	310,835,932
<sup>10</sup> S/S	02/24/88	CGOM	51	593,971	20	14	142,685	20,792,841
<sup>11</sup> 97	03/16/88	BF	3,344	18,277,806	276	218	1,198,099	139,194,672
113	03/30/88	CGOM	6,229	33,580,661	931	684	3,523,160	592,797,316
109	05/25/88	CHK	4,694	25,631,122	653	351	1,982,565	666,232,384
115	08/31/88	WGOM	5,053	27,911,790	370	270	1,499,164	188,974,839
<sup>12</sup> 92	10/11/88	NALEU	990	5,603,586	31	23	121,754	114,067,500
116-1	11/16/88	EGOM	8,149	46,417,392	135	115	657,348	47,559,746
118	03/15/89	CGOM	5,970	32,123,675	821	591	2,972,567	477,045,923
122	08/23/89	WGOM	5,043	27,973,997	676	488	2,759,424	382,977,307
123	03/21/90	CGOM	5,667	30,493,461	840	538	2,671,597	589,547,008
125	08/22/90	WGOM	4,792	26,295,305	465	307	1,699,507	240,912,740
131	03/27/91	CGOM	5,420	29,127,324	637	464	2,265,799	320,537,387
124	06/26/91	BF	3,417	18,556,976	60	57	277,004	17,301,819
135	08/21/91	WGOM	4,287	23,616,034	182	142	792,546	76,743,875
126	08/28/91	CHK	3,476	18,987,976	30	28	159,213	7,405,804
139	05/13/92	CGOM	5,213	28,152,199	196	151	727,186	56,195,552
<sup>13</sup> 141	08/19/92	WGOM	4,405	24,227,848	81	61	333,600	30,619,313
142	03/24/93	CGOM	5,443	29,325,669	261	201	976,083	63,897,083
143	09/15/93	WGOM	<u>4,682</u>	<u>25,744,600</u>	<u>197</u>	<u>157</u>	<u>848,686</u>	<u>62,570,163</u>
<b>Subtotal (1983-93)</b>			<b><u>173,346</u></b>	<b><u>952,297,747</u></b>	<b><u>13,604</u></b>	<b><u>9,286</u></b>	<b><u>49,025,559</u></b>	<b><u>21,727,845,718</u></b>
<b>Total (1954-93)</b>			<b>185,528</b>	<b>1,010,561,452</b>	<b>29,837</b>	<b>14,704</b>	<b>75,369,878</b>	<b>124,108,763,211</b>

Footnotes at end of table.

**Table 4. Statistical Summary of Federal Offshore Lease Offerings held by DOI from October 1954 through December 1993 — continued**

Leases Issued			High-Bid Bonuses		High Bids Rejected		Average Bid per Acre (\$)	First-Year Rentals (\$)
Sale	Tracts	Acres	Submitted (\$)	Accepted (\$)	No.	Amount (\$)		
69-2	11	58,117	39,741,340	37,570,900	2	2,170,440	646.44	174,360
57	59	335,898	325,267,372	317,873,372	5	7,394,000	946.34	1,087,488
70	96	540,917	427,343,830	426,458,830	1	885,000	788.40	1,751,248
76	37	210,648	71,141,240	68,410,240	3	2,731,000	324.77	681,984
72	623	3,089,812	3,469,214,969	3,367,606,134	33	101,608,835	1,089.89	9,269,616
78	11	62,625	13,362,040	13,362,040	0	0	213.37	202,752
74	406	2,246,005	1,549,262,300	1,501,712,517	30	47,549,783	668.62	6,738,015
73	8	43,801	16,022,336	16,022,336	0	0	365.80	141,808
79	156	897,786	310,586,261	310,586,261	0	0	345.95	2,693,358
83	163	927,989	631,228,331	516,317,331	23	114,911,000	556.38	2,784,366
81	453	2,278,129	1,446,584,927	1,323,036,649	76	123,548,278	580.76	6,834,537
84	361	1,949,186	945,717,312	844,850,488	41	100,866,824	433.44	5,847,639
87	231	1,230,486	877,131,327	871,964,327	1	5,167,000	708.63	3,910,184
80	23	114,363	66,231,426	62,121,252	2	4,110,174	543.20	347,157
98	409	2,076,907	1,147,434,447	1,079,377,760	35	68,056,687	519.70	6,230,829
102	195	1,075,188	391,137,536	359,175,656	15	31,961,880	334.06	3,225,597
94	77	421,459	124,022,098	119,097,298	0	0	282.58	1,264,392
104	101	504,806	146,367,757	130,276,757	13	16,091,000	258.07	1,514,442
105	41	229,612	56,817,990	56,817,990	0	0	247.45	688,839
110	293	1,539,626	290,554,484	262,971,486	20	27,582,998	170.80	4,618,941
112	347	1,908,183	242,796,331	234,275,520	20	8,520,811	122.77	5,724,597
S/S	14	142,685	15,149,327	15,149,327	0	0	106.17	428,058
97	202	1,110,764	118,574,936	115,261,636	0	0	103.76	3,596,192
113	662	3,416,716	404,612,164	388,730,457	22	15,881,707	113.77	10,250,277
109	350	1,976,912	478,177,948	478,032,631	1	145,317	241.81	6,400,280
115	255	1,412,764	130,285,464	125,352,889	13	4,932,574	88.73	4,238,340
92	23	121,754	95,439,500	95,439,500	0	0	783.87	394,208
116-1	115	657,348	41,582,298	41,582,298	0	0	63.26	1,972,047
118	574	2,892,487	397,513,998	388,393,077	17	9,120,921	134.28	8,677,605
122	475	2,688,380	263,753,883	257,224,333	13	6,529,550	95.68	8,065,182
123	525	2,604,259	427,413,211	424,334,314	13	3,078,897	162.94	7,812,927
125	300	1,659,187	162,442,246	159,967,604	6	2,333,442	96.41	4,977,606
131	456	2,224,284	259,859,788	256,286,186	8	3,573,602	115.22	6,673,026
124	57	277,004	16,807,025	16,807,025	0	0	60.67	896,896
135	135	753,059	62,646,526	58,646,034	7	4,000,492	77.88	2,259,195
126	28	159,213	7,117,304	7,117,304	0	0	44.70	515,464
139	144	693,079	65,300,864	54,373,022	7	1,822,530	78.45	2,079,279
141	60	327,840	36,718,223	30,411,953	1	207,360	94.49	983,529
142	187	906,587	69,061,024	63,897,083	12	4,027,391	70.48	2,719,824
143	149	807,871	64,338,759	62,570,163	8	1,768,596	77.45	4,039,410
	<u>8,812</u>	<u>46,573,736</u>	<u>15,704,750,142</u>	<u>14,959,461,980</u>	<u>448</u>	<u>720,578,089</u>	<u>N/A</u>	<u>142,711,494</u>
	<b>13,579</b>	<b>69,872,384</b>	<b>58,237,061,446</b>	<b>56,379,435,780</b>	<b>1,093</b>	<b>1,668,588,655</b>	<b>N/A</b>	<b>216,129,226</b>

Footnotes at end of table.

**Table 4. Statistical summary of Federal Offshore Lease Offerings held by DOI from October 1954 through December 1993 — *continued***

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- <sup>1</sup> Only the offering and bidding data for this phosphate lease sale are totaled here since the awarded leases were subsequently terminated and all monies were returned to the bidder/lessees.
- <sup>2</sup> Sale 36 had a two-part bidding system: 10 tracts (51,515 acres) were offered in a royalty bidding system, 287 tracts (1,370,031 acres) were offered in a high bid-bonus system. Of these, 8 tracts (40,755 acres) were bid and let on the royalty system for an average \$25 per acre (\$1,018,875 in bonuses); another 149 tracts (693,172 acres) were bid on the high-bid system with 136 let (634,832 acres) for an average \$2,248.22 per acre (\$1,427,242,455 in bonuses).
- <sup>3</sup> In Sale 53 (May 1981), Chevron USA and Phillips Petroleum jointly paid the highest per acre bid so far, of \$65,014.16 on Lease No. OCS-P 0450 in the Santa Maria Basin. Altogether the tract's 5,131 acres brought in \$333,596,200 of the total accepted bonus payments of \$2,088,881,824. In the same sale, high bidders afterwards relinquished leasing rights to 12 other tracts, thus forfeiting one-fifth or \$41,081,734 of their \$205,408,672 in bids. Bids for 9 other tracts were rejected as insufficient. The average bid per acre was \$6,516.21 on 320,567 acres. As adjusted, totals for this sale also reflect leases for 5 tracts issued in 1984, previously delayed by litigation.
- <sup>4</sup> The 1982 data for 5 oil and gas lease sales account for the first part of Sale 69 as 69-1 and the 1983 data account for the second part as 69-2. Thus, there were 8 bid openings but only 7 offshore oil and gas lease sales recorded for 1983.
- <sup>5</sup> In Sale 74 (August 1983), two of the high bidders failed to execute leases on time and had to forfeit their one-fifth bonus deposits.
- <sup>6</sup> In Sale 73 (November 1983), litigation delayed the scheduled bid opening until December of that year.
- <sup>7</sup> In Sale 83, bids were received on 17 tracts that were in an international dispute with the Soviet Union. On December 4, 1988, the Federal Government decided that it was not in the United States' best interest to accept the bids and rejected all bids in this disputed area. The 17 tracts on 96,784 acres for \$108,174,000 are included under *Bids Made*.
- <sup>8</sup> In Sale 87, bids were received on 4 tracts that are involved in an international boundary dispute with Canada. Data are included under bids made (acres bid on, total exposed, high-bids submitted) for these 4 tracts covering 22,773 acres for \$5,104,000. These bids were not accepted or rejected, and the one-fifth bonus bid amounts were deposited in an interest-bearing account pending a decision. On June 12, 1992, the one-fifth bonus bid amounts plus interest were returned to the bidders upon their request, as provided for in the Notice of Sale.
- <sup>9</sup> In Sale 94 (December 1985), one high bidder did not execute 5 awarded leases of 43 on time and, therefore, forfeited the one-fifth bonus deposit of \$1,231,200.
- <sup>10</sup> Sale S/S is the sulphur and salt sale.
- <sup>11</sup> In Sale 97, bids were received on 16 tracts that are involved in an international boundary dispute with Canada. Data are included on bids made (acres bid on, total exposed, high-bids submitted) for these 16 tracts covering 87,359 acres for \$3,313,300. These bids were not accepted or rejected, and the one-fifth bonus bid amounts were deposited in an interest-bearing account pending a decision. Five years from the day of bid opening, the bidders may elect to withdraw the bonus deposits together with accrued interest, as provided for in the Notice of Sale.
- <sup>12</sup> Sale 92, originally scheduled for January 1986, was held October 11, 1988, after a preliminary injunction prohibiting the opening of bids was lifted.
- <sup>13</sup> In Sale 141 (8/19/92) one high bidder failed to execute the lease and forfeited the one-fifth bonus deposit.

NOTE: Sulphur lease sales have S after the sale numbers and salt lease sales have SA. PH indicates a phosphate lease sale; P indicates a Pacific (area) sale; RS indicates a reoffering sale. Two-part sales either have A and B or 1 and 2 after the sale numbers and were accounted for as separate sales, with the exception of Sale 69.

**Table 5. Statistical Summary of Federal Offshore Lease Offerings on the Alaska OCS Held by DOI from October 1954 through December 1993**

Bld Opening			Sale Offering		Bids Made			Total Monies Exposed (\$)
Sale	Date	Area	Tracts	Acres	Number	Tracts	Acres	
39	04/13/76	GOA	189	1,008,500	244	81	437,524	1,732,170,868
CI	10/27/77	LCI	135	768,580	240	91	518,080	677,075,681
BF	12/11/79	BF	46	172,323	62	25	88,037	945,445,102
RS-1	06/30/81	AK	175	996,327	7	5	28,466	5,582,362
60	09/29/81	LCI	153	858,247	15	13	73,158	4,697,309
RS-2	08/05/82	LCI	140	785,091	0	0	0	0
71	10/13/82	BF(Diapiir)	338	1,825,770	252	125	683,026	4,589,972,518
57	03/15/83	NORT	418	2,379,751	98	64	364,364	371,803,984
70	04/12/83	STGEO	479	2,688,787	150	97	546,621	547,731,283
<sup>1</sup> 83	04/17/84	NAV	5,036	28,048,995	425	186	1,058,932	1,148,701,653
<sup>2</sup> 87	08/22/84	BF(Diapiir)	1,419	7,773,447	432	232	1,233,573	1,365,968,674
<sup>3</sup> 97	03/16/88	BF	3,344	18,277,806	276	218	1,198,099	139,194,672
109	05/25/88	CHK	4,694	25,631,122	653	351	1,982,565	666,232,384
<sup>4</sup> 92	10/11/88	NALEU	990	5,603,586	31	23	121,754	114,067,500
124	06/26/91	BF	3,417	18,556,976	60	57	277,004	17,301,819
126	08/28/91	CHK	3,476	18,987,591	30	28	159,213	7,405,804
<b>Total</b>	<b>N/A</b>	<b>N/A</b>	<b>24,274</b>	<b>133,366,957</b>	<b>2,968</b>	<b>1,591</b>	<b>8,741,950</b>	<b>12,327,769,251</b>

Leases Issued			High Bid Bonuses		High Bids Rejected		Average Bid	First-Year
Sale	Tracts	Acres	Submitted (\$)	Accepted (\$)	Number	Amount (\$)	per Acre (\$)	Rentals (\$)
39	76	409,058	571,871,587	559,836,587	5	12,035,000	1,368.60	1,226,718
CI	87	495,307	400,319,543	398,471,313	4	1,848,230	804.49	1,603,584
BF	24	85,776	491,728,138	488,691,137	1	3,037,000	5,697.27	277,808
RS-1	1	5,694	3,091,738	170,496	4	2,921,242	29.95	18,432
60	13	73,158	4,405,899	4,405,899	0	0	60.23	236,856
RS-2	0	0	0	0	0	0	0	0
71	121	662,861	2,067,604,786	2,055,632,336	4	11,972,450	3,101.15	2,146,112
57	59	335,898	325,267,372	317,873,372	5	7,394,000	946.34	1,087,488
70	96	540,917	427,343,830	426,458,830	1	885,000	788.40	1,751,248
<sup>1</sup> 83	163	927,989	631,228,331	516,317,331	23	114,911,000	556.38	2,784,366
<sup>2</sup> 87	231	1,230,486	877,131,327	871,964,327	1	5,167,000	708.63	3,910,184
<sup>3</sup> 97	202	1,110,764	118,574,936	115,261,636	0	0	103.76	3,596,192
109	350	1,976,912	478,177,948	478,032,631	1	145,317	241.81	6,400,280
<sup>4</sup> 92	23	121,754	95,439,500	95,439,500	0	0	783.87	394,208
124	57	277,004	16,807,025	16,807,025	0	0	60.67	896,896
126	28	159,213	7,117,304	7,117,304	0	0	44.70	515,464
<b>Total</b>	<b>1,530</b>	<b>8,407,097</b>	<b>6,513,017,526</b>	<b>6,352,309,228</b>	<b>45</b>	<b>157,394,997</b>	<b>N/A</b>	<b>26,827,404</b>

<sup>1</sup> In Sale 83, bids were received on 17 tracts that were in an international dispute with the Soviet Union. On December 4, 1988, the Federal Government decided that it was not in the United States' best interest to accept the bids and rejected all bids in this disputed area. The 17 tracts on 96,784 acres for \$108,174,000 are included under *Bids Made*.

<sup>2</sup> In Sale 87, bids were received on 4 tracts that are involved in an international boundary dispute with Canada. Data are included under bids made (acres bid on, total exposed, high-bids submitted) for these 4 tracts covering 22,773 acres for \$5,104,000. These bids were not accepted or rejected, and the one-fifth bonus bid amounts were deposited in an interest-bearing account pending a decision. On June 12, 1992, the one-fifth bonus bid amounts plus interest were returned to the bidders upon their request, as provided for in the Notice of Sale.

<sup>3</sup> In Sale 97, bids were received on 16 tracts that are involved in an international boundary dispute with Canada. Data are included on bids made (acres bid on, total exposed, high-bids submitted) for these 16 tracts covering 87,359 acres for \$3,313,300. These bids were not accepted or rejected, and the one-fifth bonus bid amounts were deposited in an interest-bearing account pending a decision. Five years from the day of bid opening, the bidders may elect to withdraw the bonus deposits together with accrued interest, as provided for in the Notice of Sale.

<sup>4</sup> Sale 92, originally scheduled for January 1986, was held October 11, 1988, after a preliminary injunction prohibiting the opening of bids was lifted.

**Table 6. Statistical Summary of Federal Offshore Lease Offerings on the Atlantic OCS Held by DOI from October 1954 through December 1993**

<i>Bid Opening</i>			<i>Sale Offering</i>		<i>Bids Made</i>			
<i>Sale</i>	<i>Date</i>	<i>Area</i>	<i>Tracts</i>	<i>Acres</i>	<i>Number</i>	<i>Tracts</i>	<i>Acres</i>	<i>Total Monies Exposed (\$)</i>
40	08/17/76	MATL	154	876,750	410	101	575,012	3,513,411,802
43	03/28/78	SATL	224	1,275,273	99	57	324,511	150,927,700
49	02/28/79	MATL	109	620,557	74	44	250,500	66,005,881
42	12/18/79	NATL	116	660,409	189	73	415,602	1,270,789,890
56	08/04/81	SATL	285	1,622,558	120	54	307,432	561,050,365
59	12/08/81	MATL	253	1,440,376	240	98	557,932	578,952,000
RS-2	08/05/82	MATL	155	882,444	19	19	108,170	4,464,828
RS-2	08/05/82	SATL	232	1,320,819	9	9	51,239	3,009,300
76	04/26/83	MATL	4,050	22,664,991	53	40	227,727	86,822,680
78	07/26/83	SATL	3,582	20,156,426	12	11	62,625	14,562,040
<b>Total</b>	<b>N/A</b>	<b>N/A</b>	<b>9,160</b>	<b>51,520,603</b>	<b>1,225</b>	<b>506</b>	<b>2,880,750</b>	<b>6,249,996,486</b>
<i>Leases Issued</i>			<i>High Bid Bonuses</i>		<i>High Bids Rejected</i>		<i>Average Bid per Acre (\$)</i>	<i>First-Year Rentals (\$)</i>
<i>Sale</i>	<i>Tracts</i>	<i>Acres</i>	<i>Submitted (\$)</i>	<i>Accepted (\$)</i>	<i>Number</i>	<i>Amount (\$)</i>		
40	93	529,466	1,135,802,179	1,127,936,425	8	7,865,754	2,130.33	1,714,176
43	43	244,807	109,695,692	100,743,443	14	8,952,249	411.52	792,576
49	39	222,034	41,720,618	40,001,631	5	1,718,987	180.16	718,848
42	63	358,671	827,832,854	816,516,546	10	11,316,308	2,276.51	1,161,216
56	47	267,580	363,829,954	342,766,174	7	21,063,780	1,280.99	866,304
59	51	290,352	424,927,000	323,659,000	47	101,268,000	1,114.71	940,032
RS-2	18	102,477	4,197,828	3,920,828	1	277,000	38.20	331,776
RS-2	8	45,545	3,009,300	2,859,150	1	150,150	58.73	147,456
76	37	210,648	71,141,240	68,410,240	3	2,731,000	324.77	681,984
78	11	62,625	13,362,040	13,362,040	0	0	213.37	202,752
<b>Total</b>	<b>410</b>	<b>2,334,205</b>	<b>2,995,518,705</b>	<b>2,840,175,477</b>	<b>96</b>	<b>155,343,228</b>	<b>N/A</b>	<b>7,077,888</b>

**Table 7. Statistical Summary of Federal Offshore Lease Offerings Held on the Pacific OCS by DOI from October 1954 through December 1993**

Bid Opening			Sale Offering		Bids Made			Total Monies Exposed (\$)
Sale	Date	Area	Tracts	Acres	Number	Tracts	Acres	
PH <sup>1</sup>	12/51/61	SCA	16	80,640	6	6	30,240	122,000
P-1	05/14/63	C & NCA	129	669,777	70	58	312,975	13,989,953
P-2	10/01/64	OR, WA	196	1,090,074	222	101	580,853	53,579,753
P-3	12/15/66	SCA	1	1,995	7	1	1,995	89,937,020
P-4	02/06/68	SCA	110	540,609	164	75	383,341	1,293,601,113
35	12/11/75	SCA	231	1,257,593	166	70	384,540	901,960,364
48	06/29/79	SCA	148	792,845	112	55	294,018	994,683,701
<sup>2</sup> 53	05/28/81	SCA	111	603,613	301	81	432,815	4,885,810,689
68	06/11/82	SCA	140	716,866	66	35	176,253	210,486,278
RS-2	08/05/82	SCA	27	153,716	19	12	68,318	6,965,067
<sup>3</sup> 73	11/30/83	SCA	137	768,341	14	8	43,801	24,045,646
80	10/17/84	SCA	657	3,147,352	30	25	125,100	73,163,686
Total			1,903	9,823,421	1,177	527	2,834,249	8,541,380,203

Leases Issued			High Bid Bonuses		High Bids Rejected		Average Bid	First-Year
Sale	Tracts	Acres	Submitted (\$)	Accepted (\$)	Number	Amount (\$)	per Acre (\$)	Rentals (\$)
PH <sup>1</sup>	6	30,240	122,000	122,000	0	0	N/A	N/A
P-1	57	312,945	12,807,587	12,807,337	1	250	40.93	938,838
P-2	101	580,853	35,533,701	35,533,701	0	0	61.18	1,742,562
P-3	1	1,995	21,189,000	21,189,000	0	0	10,621.05	9,980
P-4	71	363,181	603,204,284	602,719,262	4	485,022	1,659.56	1,089,543
35	56	310,049	438,190,780	417,312,141	14	20,878,639	1,345.96	930,147
48	54	288,260	573,956,402	572,825,418	1	1,130,984	1,987.18	867,489
<sup>2</sup> 53	60	320,567	2,277,856,761	2,088,881,824	21	24,648,000	6,516.21	1,037,904
68	29	147,066	132,252,632	117,875,281	6	14,377,351	801.51	443,913
RS-2	10	56,932	5,103,578	4,369,472	2	724,106	76.75	184,320
<sup>3</sup> 73	8	43,801	16,022,336	16,022,336	0	0	365.80	141,808
80	23	114,363	66,231,426	62,121,252	2	4,110,174	543.20	347,157
Total			4,182,348,487	3,951,657,024	51	66,354,526	N/A	7,549,341

<sup>1</sup> Only the offering and bidding data for this phosphate lease sale are totaled here since the awarded leases were subsequently terminated and all monies were returned to the bidder/lessees.

<sup>2</sup> In Sale 53 (May 1981), Chevron USA and Phillips Petroleum jointly paid the highest per-acre bid so far, of \$65,014.16 on Lease No. OCS-P 0450 in the Santa Maria Basin. Altogether, the tract's 5,131 acres brought in \$333,596,200 of the total accepted bonus payments of \$2,088,881,824. In the same sale, high bidders afterwards relinquished leasing rights to 12 other tracts, thus forfeiting one-fifth or \$41,081. Bids for 9 other tracts were rejected as insufficient. The average bid per acre was \$6,516.21 on 320,567 acres. As adjusted, totals for this sale also reflect leases for 5 tracts issued in 1984, previously delayed by litigation.

<sup>3</sup> In Sale 73 (November 1983), litigation delayed the scheduled bid opening until December of that year.

NOTE: PH indicates a phosphate lease sale, P indicates a Pacific area sale, and RS indicates a reoffering sale.

**Table 8. Statistical Summary of Federal Offshore Lease Offerings in the Gulf of Mexico OCS Held by DOI from October 1954 through December 1993**

Sale	Bid Opening		Sale Offering		Bids Made			Total Monies Exposed (\$)
	Date	Area	Tracts	Acres	Number	Tracts	Acres	
1	10/13/54	LA	199	748,819	336	90	394,721	302,924,834
1S	10/13/54	LA	108	523,630	5	5	25,000	1,233,500
2	11/09/54	TX	38	111,789	90	19	67,149	73,801,896
3	07/12/55	TX, LA	210	674,095	384	121	402,567	323,240,052
5	05/26/59	FL	80	458,000	23	23	132,480	1,711,872
6	08/11/59	LA	38	81,813	56	28	62,967	174,411,628
7	02/24/60	TX, LA	385	1,610,254	444	173	813,663	575,175,650
8SA	05/19/60	LA	10	22,085	1	1	2,500	75,250
9	03/13/62	LA	401	1,808,276	538	212	981,407	314,218,540
10	03/13/62	TX, LA	410	1,875,984	666	210	977,092	605,357,718
11	10/09/62	LA	19	33,855	26	14	24,858	66,265,290
12	04/28/64	LA	28	34,028	69	23	32,671	93,850,051
13S	12/14/65	TX	658	947,520	113	50	72,000	56,324,364
14	03/29/66	LA	18	35,993	64	18	35,993	275,384,739
15	10/18/66	LA	52	227,898	79	32	134,717	185,214,816
16	06/13/67	LA	206	971,489	743	172	812,202	1,627,749,269
17SA	09/05/67	LA	8	16,995	1	1	2,495	30,564
18	05/21/68	TX	169	728,551	556	141	666,631	1,620,393,212
19	11/19/68	LA	26	46,824	38	21	40,262	398,430,736
19A	01/14/69	LA	38	96,389	40	26	61,628	71,036,938
20S	05/13/69	LA	120	165,605	43	38	50,880	4,070,549
19B	12/16/69	LA	27	93,764	58	16	60,153	230,460,743
21	07/21/70	LA	34	73,360	59	21	50,889	163,451,158
22	12/15/70	LA	127	593,485	1,043	127	593,485	2,877,429,559
23	11/04/71	LA	18	55,872	33	13	42,222	172,735,981
24	09/12/72	LA	78	366,682	324	74	346,693	1,599,155,464
25	12/19/72	LA	132	604,029	690	119	548,374	6,191,018,227
26	06/19/73	TX, LA	129	697,643	551	104	566,573	6,248,160,989
32	12/20/73	MAFLA	147	817,297	373	89	496,917	3,404,892,968
33	03/28/74	LA	206	930,918	402	114	522,397	6,474,003,574
34	05/29/74	TX	245	1,355,678	352	123	680,335	3,354,292,556
S1	07/30/74	TX, LA	258	1,298,739	57	49	249,704	88,799,354
'36	10/16/74	LA	297	1,421,546	387	157	733,927	2,521,756,919
37	02/04/75	TX	515	2,870,344	281	143	796,367	484,721,874
38	05/28/75	TX, LA	283	1,346,432	191	102	486,327	402,752,355
38A	07/29/75	TX, LA	345	1,772,958	179	80	408,009	317,001,333
41	02/18/76	GOM	132	687,604	81	41	191,718	428,003,629
44	11/16/76	TX, LA	61	254,488	117	48	201,825	833,015,950
47	06/23/77	GOM	223	1,074,536	424	152	739,326	2,928,091,214

Footnotes at end of table

**Table 8. Statistical Summary of Federal Offshore Lease Offerings in the Gulf of Mexico OCS Held by DOI from October 1954 through December 1993 - continued**

Leases Issued			High Bid Bonuses		High Bids Rejected		Average Bid per Acre (\$)	First-Year Rentals (\$)
Sale	Tracts	Acres	Submitted (\$)	Accepted (\$)	Number	Amount (\$)		
1	90	394,721	116,378,476	116,378,476	0	0	294.84	1,184,175
1S	5	25,000	1,233,500	1,233,500	0	0	49.34	50,000
2	19	67,149	23,357,029	23,357,029	0	0	347.84	201,450
3	121	402,567	108,528,726	108,528,726	0	0	269.59	1,207,722
5	23	132,480	1,711,872	1,711,872	0	0	12.92	397,440
6	19	38,820	90,286,693	88,035,120	9	2,251,573	2,267.28	388,200
7	147	704,526	285,180,648	282,641,815	26	2,538,833	350.46	2,113,599
8SA	1	2,500	75,250	75,250	0	0	30.10	7,500
9	206	956,407	177,745,105	177,260,305	6	484,800	185.34	2,855,433
10	205	956,592	268,724,090	268,333,397	5	390,693	280.51	2,869,638
11	9	16,178	44,399,399	43,887,359	5	512,040	2,712.79	161,780
12	23	32,671	60,340,626	60,340,626	0	0	1,846.90	326,780
13S	50	72,000	33,740,309	33,740,309	0	0	468.62	216,000
14	17	35,056	89,054,406	88,845,963	1	208,443	2,534.44	350,570
15	24	104,717	101,730,216	99,164,930	8	2,565,286	946.98	523,600
16	158	744,456	511,957,288	510,079,178	14	1,878,110	685.17	2,233,458
17SA	1	2,495	30,564	30,564	0	0	12.25	7,485
18	110	541,304	602,475,717	593,899,046	31	8,576,671	1,097.16	1,623,915
19	16	29,679	150,482,797	149,868,789	5	614,008	5,049.59	296,820
19A	20	48,504	45,588,052	44,037,339	6	1,550,713	907.90	485,050
20S	4	5,625	3,678,045	751,150	34	2,962,895	127.14	16,875
19B	16	60,153	66,908,196	66,908,196	0	0	1,112.30	601,550
21	19	44,642	98,101,013	97,769,013	2	332,000	2,190.07	446,420
22	119	553,898	851,388,599	847,295,760	8	4,092,839	1,529.70	1,661,694
23	11	37,222	96,491,023	96,304,523	2	186,500	2,587.29	372,230
24	62	290,321	582,697,925	585,827,925	12	470,000	2,017.87	870,996
25	116	535,874	1,673,054,912	1,665,519,631	3	7,535,281	3,108.04	1,607,661
26	100	547,173	1,598,590,620	1,591,397,380	4	7,193,240	2,908.40	1,641,519
32	87	485,397	1,491,617,119	1,491,065,231	2	551,888	3,071.85	1,456,197
33	91	421,218	2,175,095,514	2,092,510,854	23	82,584,660	4,967.76	1,263,675
34	102	565,112	1,502,429,426	1,471,851,831	21	30,577,595	2,604.53	1,695,348
S1	19	100,241	76,617,645	30,236,800	30	46,380,845	301.64	300,729
36	144	675,587	1,445,175,340	142,826,1330	13	16,914,010	N/A	2,026,812
37	113	626,585	300,632,667	274,690,955	30	25,941,712	438.39	1,879,761
38	86	406,942	250,681,156	232,916,050	16	17,765,106	572.36	1,220,856
38A	66	336,301	171,511,620	163,214,006	14	8,297,614	485.32	1,008,906
41	34	161,286	183,498,244	175,976,493	7	7,521,751	1,091.09	483,867
44	43	178,127	381,911,757	379,148,962	5	2,762,795	2,128.53	534,396
47	124	605,427	1,214,002,429	1,170,093,432	28	43,908,997	1,932.68	1,816,302

Footnotes at end of table

**Table 8. Statistical Summary of Federal Offshore Lease Offerings in the Gulf of Mexico  
OCS Held by DOI from October 1954 through December 1993 — continued**

Sale	Bid Opening		Sale Offering		Bids Made			Total Monies Exposed (\$)
	Date	Area	Tracts	Acres	Number	Tracts	Acres	
45	04/25/78	TX, LA	145	709,727	283	101	490,752	1,559,345,260
65	10/13/78	GOM	89	511,709	62	35	201,295	87,592,568
51	12/19/78	TX, LA	128	643,987	288	88	449,691	2,355,263,307
58	07/31/79	GOM	123	577,517	316	88	424,030	3,333,990,620
58A	11/27/79	GOM	124	588,601	322	96	450,914	4,683,195,907
A62	09/30/80	GOM	192	909,575	506	147	706,042	7,119,464,692
62	11/18/80	GOM	81	458,308	268	74	420,058	3,500,570,271
A66	07/21/81	GOM	212	1,077,913	419	162	829,900	5,227,548,535
60	09/29/81	LCI	153	858,247	15	13	73,158	4,697,309
66	10/20/81	GOM	209	1,081,364	233	107	532,064	2,402,400,552
67	02/09/82	GOM	234	1,219,847	290	137	695,765	2,683,699,843
<sup>2</sup> 69-1	11/17/82	GOM	144	732,570	151	67	339,999	1,185,091,610
69-2	03/08/83	GOM	125	665,478	20	13	68,106	48,755,129
72	05/25/83	CGOM	7,050	37,867,762	1,015	656	3,249,199	4,582,847,288
<sup>3</sup> 74	08/24/83	WGOM	5,848	32,620,248	773	436	2,410,809	2,350,359,669
79	01/05/84	EGOM	8,868	50,631,513	226	156	897,786	500,261,361
81	04/24/84	CGOM	6,502	34,743,780	793	529	2,650,070	2,126,776,904
84	07/18/84	WGOM	5,446	30,038,593	593	402	2,173,704	1,263,576,675
98	04/22/85	CGOM	4,531	24,006,157	644	444	2,241,597	1,566,926,725
102	08/14/85	WGOM	4,879	27,199,074	265	210	1,156,842	519,116,036
<sup>4</sup> 94	12/18/85	EGOM	6,344	35,823,478	114	82	450,259	155,241,798
104	04/30/86	CGOM	5,837	31,382,152	129	114	569,418	164,135,937
105	08/27/86	WGOM	4,887	27,287,952	52	41	229,613	69,498,490
110	04/22/87	CGOM	5,881	31,818,472	385	313	1,636,330	341,540,856
112	08/12/87	WGOM	5,045	27,943,606	519	367	2,021,096	310,835,932
S/S <sup>5</sup>	02/24/88	CGOM	51	593,971	20	14	142,685	20,792,841
113	03/30/88	CGOM	6,229	33,580,661	931	684	3,523,160	592,797,316
115	08/31/88	WGOM	5,053	27,911,790	370	270	1,499,164	188,974,839
116-1	11/16/88	EGOM	8,149	46,417,392	135	115	657,348	47,559,746
118	03/15/89	CGOM	5,970	32,123,675	821	591	2,972,567	477,045,923
122	08/23/89	WGOM	5,043	27,973,997	676	488	2,759,424	382,777,307
123	03/21/90	CGOM	5,667	30,493,461	840	538	2,671,597	589,547,008
125	08/22/90	WGOM	4,792	26,295,305	465	307	1,699,507	240,912,740
131	03/27/91	CGOM	5,420	29,127,324	637	464	2,265,799	320,537,387
135	08/21/91	WGOM	4,287	23,616,034	182	142	792,546	76,743,875
139	05/13/92	CGOM	5,213	28,152,199	196	151	727,186	56,195,552
<sup>6</sup> 141	08/19/92	WGOM	4,405	24,227,848	81	61	333,600	30,619,313
142	03/24/93	CGOM	5,443	29,325,669	261	201	976,083	63,897,083
143	09/15/93	WGOM	<u>4,682</u>	<u>25,744,600</u>	<u>197</u>	<u>157</u>	<u>848,686</u>	<u>62,570,163</u>
<b>Total</b>			<b>149,959</b>	<b>814,516,823</b>	<b>24,410</b>	<b>12,051</b>	<b>60,746,973</b>	<b>96,784,349,682</b>

Footnotes at end of table

**Table 8. Statistical Summary of Federal Offshore Lease Offerings in the Gulf of Mexico OCS Held by DOI from October 1954 through December 1993 —continued**

Sale	Leases Issued		High Bid Bonuses		High Bids Rejected		Average Bid per Acre (\$)	First-Year Rentals (\$)
	Tracts	Acres	Submitted (\$)	Accepted (\$)	Number	Amount (\$)		
45	90	438,756	767,407,369	733,656,893	11	33,750,476	1,672.13	1,316,283
65	35	201,295	61,176,730	61,176,730	0	0	303.92	603,885
51	81	412,416	884,589,799	871,464,998	7	13,124,801	2,113.07	1,237,263
58	81	391,183	1,261,358,089	1,247,489,022	7	13,869,067	3,189.02	1,173,570
58A	90	421,519	1,932,894,290	1,913,337,938	6	19,556,352	4,539.15	1,264,590
A62	116	551,643	2,805,524,393	2,676,927,673	31	128,596,720	4,852.65	1,654,962
62	67	383,323	1,436,448,959	1,417,961,511	7	18,487,448	3,699.12	1,149,969
A66	156	799,899	2,666,828,352	2,649,628,752	6	17,199,600	3,312.45	2,399,736
60	13	73,158	4,405,899	4,405,899	0	0	60.23	236,856
66	102	508,287	1,280,983,917	1,243,468,752	5	37,515,165	2,446.39	1,524,903
67	115	590,265	1,251,793,459	1,193,654,719	22	58,138,740	2,022.29	1,770,795
69-1	56	281,213	634,919,980	609,178,223	11	25,741,757	2,166.25	843,657
69-2	11	58,117	39,741,340	37,570,900	2	2,170,440	646.44	174,360
72	623	3,089,812	3,469,214,969	3,367,606,134	33	101,608,835	1,089.89	9,269,616
74	406	2,246,005	1,549,262,300	1,501,712,517	30	47,549,783	668.26	6,738,015
79	156	897,786	310,586,261	310,586,261	0	0	345.95	2,693,358
81	453	2,278,129	1,446,584,927	1,323,036,649	76	123,548,278	580.76	6,834,537
84	361	1,949,186	945,717,312	844,850,488	41	100,866,824	433.44	5,847,639
98	409	2,076,907	1,147,434,447	1,079,377,760	35	68,056,687	519.70	6,230,829
102	195	1,075,188	391,137,536	359,175,656	15	31,961,880	334.06	3,225,597
94	77	421,459	124,022,098	119,097,298	0	0	282.58	1,264,392
104	101	504,806	146,367,757	130,276,757	13	16,091,000	258.07	1,514,442
105	41	229,612	56,817,990	56,817,990	0	0	247.45	688,839
110	293	1,539,626	290,554,484	262,971,486	20	27,582,998	170.80	4,618,941
112	347	1,908,183	242,796,331	234,275,520	20	8,520,811	122.77	5,724,597
S/S	14	142,685	15,149,327	15,149,327	0	0	106.17	428,058
113	662	3,416,716	404,612,164	388,730,457	22	15,881,707	113.77	10,250,277
115	255	1,412,764	130,285,464	125,352,889	13	4,932,574	88.73	4,238,340
116-1	115	657,348	41,582,298	41,582,298	0	0	63.26	1,972,047
118	574	2,892,487	397,513,998	388,393,077	17	9,120,921	134.28	8,677,605
122	475	2,688,380	263,753,883	257,224,333	13	6,529,550	95.68	8,065,182
123	525	2,604,259	427,413,211	424,334,314	13	3,078,897	162.94	7,812,927
125	300	1,659,187	162,442,246	159,967,604	6	2,333,442	96.41	4,977,606
131	456	2,224,284	259,859,788	256,286,186	8	3,573,602	115.22	6,673,026
135	135	753,059	62,646,526	58,646,034	7	4,000,492	77.88	2,259,195
139	144	693,079	65,300,864	54,373,022	7	1,822,530	78.45	2,079,279
141	60	327,840	36,708,223	30,411,953	1	207,360	94.49	983,529
142	187	906,587	69,061,024	63,897,083	12	4,027,391	88.15	2,719,824
143	149	807,871	64,338,759	62,570,163	8	1,768,596	94.42	4,039,410
	<b>11,146</b>	<b>56,459,272</b>	<b>44,429,940,776</b>	<b>43,129,778,381</b>	<b>895</b>	<b>1,278,765,622</b>	<b>N/A</b>	<b>173,584,645</b>

**Table 8. Statistical Summary of Federal Offshore Lease Offerings in the Gulf of Mexico OCS Held by DOI from October 1954 through December 1993 - continued**

- <sup>1</sup> Sale 36 had a two-part bidding system: 10 tracts (51,515 acres) were offered in a royalty bidding system, 287 tracts (1,370,031 acres) were offered in a high bid-bonus system. Of these, 8 tracts (40,755 acres) were bid and let on the royalty system for an average \$25 per acre (\$1,018,875 in bonuses); another 149 tracts (693,172 acres) were bid on the high-bid system with 136 let (634,832 acres) for an average \$2,248.22 per acre (\$1,427,242,455 in bonuses).
- <sup>2</sup> The 1982 data for 5 oil and gas lease sales account for the first part of Sale 69 as 69-1 and the 1983 data account for the second part as 69-2. Thus, there were 8 bid openings but only 7 offshore oil and gas lease sales recorded for 1983.
- <sup>3</sup> In Sale 74 (August 1983), two of the high bidders failed to execute leases on time and had to forfeit their one-fifth bonus deposits.
- <sup>4</sup> In Sale 94 (December 1985), one high bidder did not execute 5 awarded leases of 43 on time and, therefore, forfeited the one-fifth bonus deposit of \$1,231,200.
- <sup>5</sup> Sale S/S is the sulphur and salt sale.
- <sup>6</sup> In Sale 141 one high bidder failed to execute the lease and forfeited the one-fifth bonus deposit.

NOTE: Sulphur lease sales have S after the sale numbers and salt lease sales have SA. PH indicates a phosphate lease sale; P indicates a Pacific (area) sale; RS indicates a reoffering sale. Two-part sales either have A and B or 1 and 2 after the sale numbers and were accounted for as separate sales, with the exception of Sale 69.

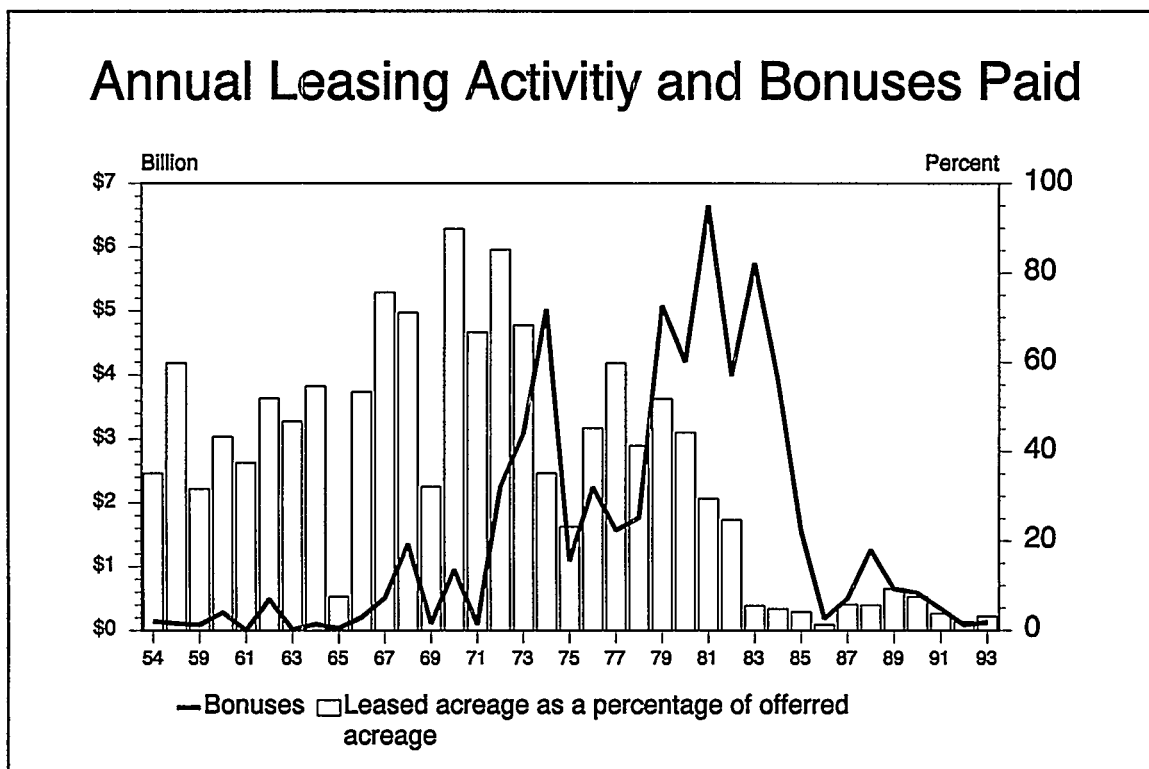


Figure 2.

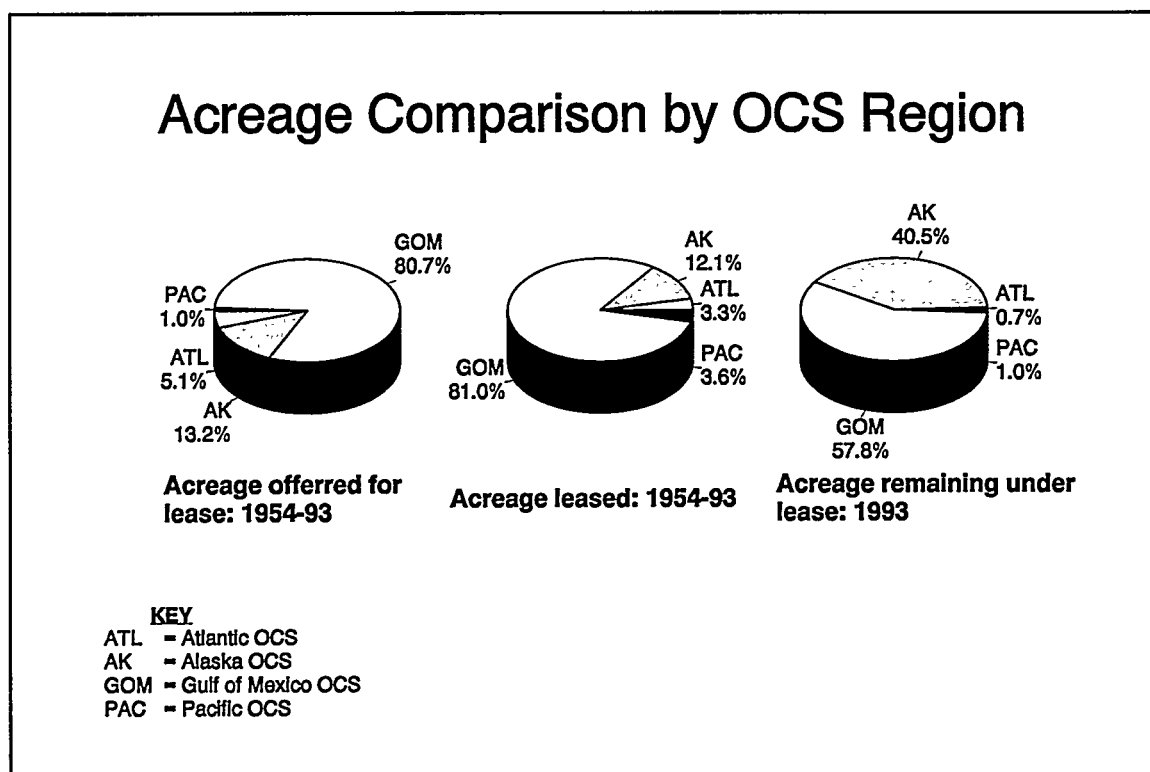
**Table 9. Summary by OCS Region of Federal Lease Offerings and Lease Status, 1954-93**

OCS Region	No. of Lease Offerings	Offerings		Leases Issued		Under Supervision <sup>1</sup>	
		Tracts	Acres	Tracts	Acres	Tracts	Acres
Alaska	15	24,344	133,776,553	1,561	8,519,935	346	1,849,455
Atlantic	8	8,773	49,316,683	384	2,186,183	51	290,353
Gulf of Mexico	77	149,959	814,516,823	11,146	56,459,272	5,174	26,349,931
Pacific	<u>11</u>	<u>1,876</u>	<u>9,669,705</u>	<u>466</u>	<u>2,513,336</u>	<u>92</u>	<u>465,126</u>
<b>Subtotal</b>	<b><u>111</u></b>	<b><u>184,952</u></b>	<b><u>1,007,279,764</u></b>	<b><u>13,557</u></b>	<b><u>69,678,726</u></b>	<b><u>5,663</u></b>	<b><u>28,954,865</u></b>

OCS Area		Reofferings <sup>2</sup>		Leases Issued		Under Supervision	
		Tracts	Acres	Tracts	Acres	Tracts	Acres
Alaska	RS 1&2	315	1,781,399	1	5,694	0	0
Atlantic	RS-2	387	2,203,263	26	148,022	2	11,386
Pacific	RS-2	<u>27</u>	<u>153,716</u>	<u>10</u>	<u>56,932</u>	<u>0</u>	<u>0</u>
<b>Subtotal</b>	<b><u>2</u></b>	<b><u>729</u></b>	<b><u>4,138,378</u></b>	<b><u>37</u></b>	<b><u>210,648</u></b>	<b><u>2</u></b>	<b><u>11,386</u></b>
<b>Total</b>		<b>113</b>	<b>185,681</b>	<b>13,594</b>	<b>69,889,374</b>	<b>5,665</b>	<b>28,966,251</b>

<sup>1</sup> Under Supervision indicates all producing and nonproducing offshore mineral leases for which the DOI had responsibility as of December 31, 1993.

<sup>2</sup> The DOI has held 2 reoffering sales in offshore oil and gas lease areas: RS-1 reoffered 175 tracts (996,308 acres), Alaska; RS-2 reoffered 140 tracts (785,091 acres), Alaska; 155 tracts (882,444 acres), Mid-Atlantic; 232 tracts (1,320,819 acres), South Atlantic; and 27 tracts (153,716 acres), Northern and Central California. See table 3 for bidding and bonus details.



**Figure 3.**



### **III. Offshore Development Activity**

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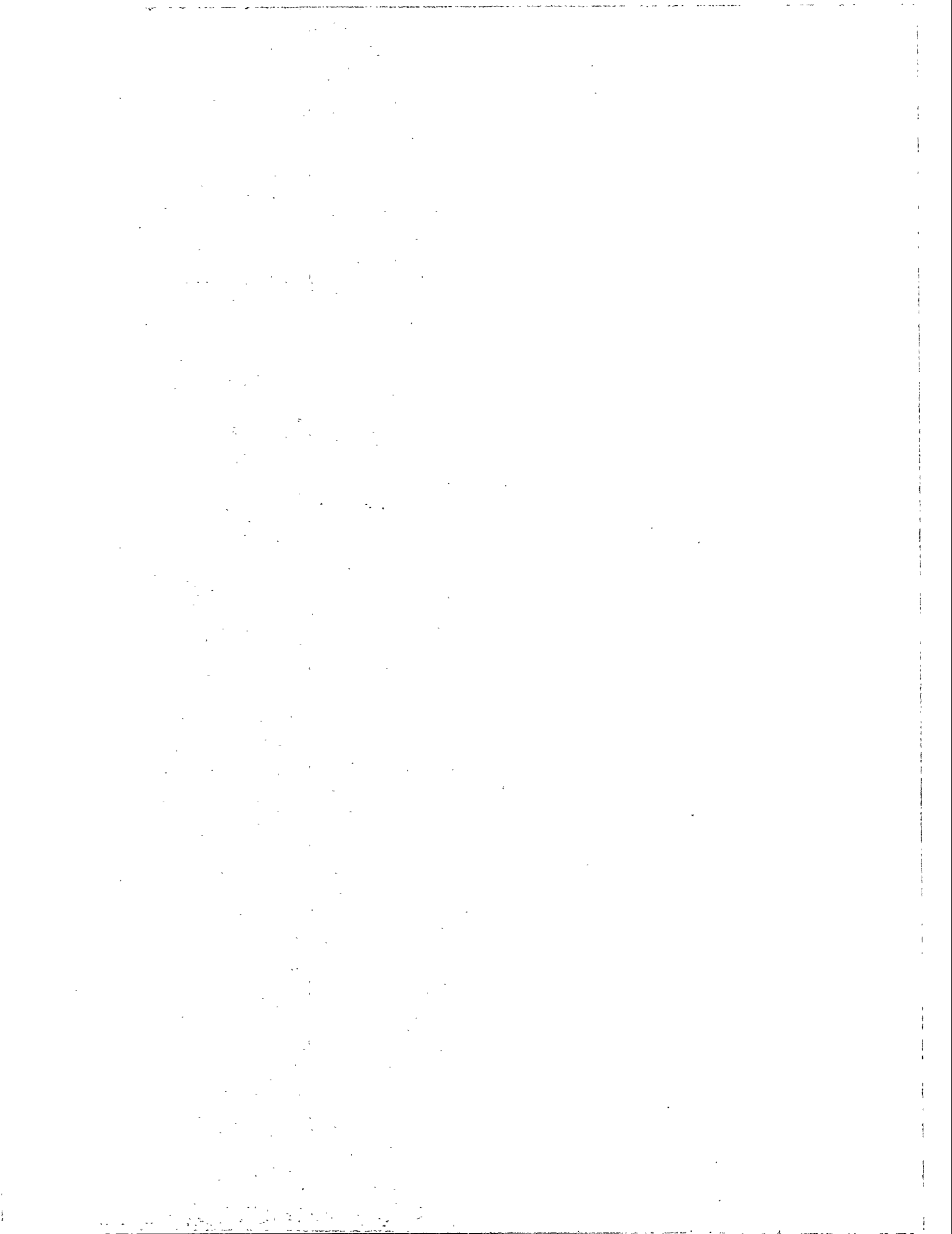
The Gulf of Mexico (GOM) OCS Region has the highest level of permitting and drilling activity. The number of permits issued for collecting geologic and geophysical (G&G) data is shown in table 10. Tables 11, 13, and 15 show the yearly record of OCS drilling activity, zone completions, and producing acreage, respectively. Additionally, tables 12, 14, and 16 breakdown OCS drilling activity, zone completions, and producing acreage by regional area, respectively.

The number of G&G permits issued on the OCS in the latter half of the 1980's was less than 75 percent of the total issued in the first half of the decade. This trend continues in the 1990's with a total of 143 in 1993. Drilling activity in 1993 increased by 31 percent with 798 wells drilled compared to 610 in 1992 (see fig. 4).

Production of oil and gas occurs on about 8 percent of the acreage originally offered for lease. This producing acreage accounts for about 18 percent of active lease acreage (see fig. 5).

Although drilling activity increased in the GOM OCS Region, there was a net decrease of 69 production facilities 1993, for a year end total of 3,755 (see table 17 and figs. 6 and 7). This is the second year in a row that removals of production facilities exceeded installations. The Pacific OCS Region, the only other producing OCS area, has not added or removed any production facilities since 1989 and still has 24 (see table 18). More than 50 percent of OCS production facilities are between 0 and 32.2 km (0 and 20 mi) of shore (see table 19). Over 80 percent of these facilities are found in less than 50 m (164 ft) of water (see table 20).

Tables 21 and 22 show pipeline mileage in the western and central GOM and offshore California. Collectively, pipelines transport almost 95 percent of OCS oil and 100 percent of OCS natural gas. The growth in pipeline mileage in the GOM has been steady throughout the last decade, reaching a total of more than 19,000 mi of pipeline.



**Table 10. Permits Issued for Geologic and/or Geophysical Exploration on Federal Offshore Lands, 1960-93**

*(These calendar year data count only G&G permits issued; permit extensions are not reported in this tabulation.. Numbers in parenthesis indicate permits issued for 3-D seismic exploration as part of total permits issued.)*

Year	Alaska OCS	Atlantic OCS	Pacific OCS	Gulf of Mexico OCS			Yearly Total
				Louisiana	Texas	MAFLA <sup>1</sup>	
1960-69	106	52	175	1,417	673	188	2,611
1970	40	4	3	108	47	11	213
1971	27	4	0	126	38	15	210
1972	17	4	1	130	42	26	220
1973	33	4	30	133	55	84	339
1974	47	2	24	174	103	7	357
1975	82	29	46	251	92	10	510
1976	69	35	24	195	89	8	420
1977	33	20	31	269	88	11	452
1978	9	17	38	165	97	16	342
1979	32	9	24	126	73	12	276
1980	41	15	31	142	65	24	318
1981	54	17	40	177	69	37	394
1982	(1) 85	11	(3) 62	226	100	18	(4) 502
1983	103	10	(1) 45	(15) 267	(1) 108	41	(17) 574
1984	70	6	(8) 56	(13) 260	(5) 114	37	(26) 543
1985	63	2	(1) 33	(29) 193	(9) 76	31	(39) 398
1986	18	3	(5) 20	(25) 107	(6) 46	(1) 17	(37) 211
1987	18	2	(3) 20	(33) 186	(7) 52	(2) 20	(45) 298
1988	(1) 13	4	(2) 33	(32) 172	(10) 64	(3) 27	(48) 313
1989	(1) 17	0	0	(36) 177	(9) 49	(2) 6	(48) 249
1990	19	1	4	(42) 157	(13) 64	(2) 6	(57) 251
1991	7	0	0	(32) 109	(12) 51	(1) 3	(45) 170
1992	7	0	0	(46) 103	(5) 27	(2) 4	(53) 141
1993	(2) 8	0	0	(56) 102	(11) 29	(1) 4	(70) 143
<b>Total</b>	<b>(5) 1,018</b>	<b>251</b>	<b>(23) 740</b>	<b>(359) 5,472</b>	<b>(88) 2,313</b>	<b>(14) 663</b>	<b>(489) 10,455</b>

<sup>1</sup> Mississippi, Alabama, and Florida.

**Table 11. Oil and Gas Well Drilling on Federal Offshore Leases, 1955–93**

*[Well and borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations.]*

Year	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
1955	41	0	N/A	239	175	455
1956	76	0	N/A	357	261	694
1957	61	17	N/A	588	402	1,068
1958	35	21	N/A	795	485	1,336
1959	40	31	N/A	1,461	569	2,101
1960	58	53	N/A	1,923	686	2,720
1961	54	99	N/A	2,467	814	3,434
1962	56	107	N/A	3,091	1,002	4,256
1963	62	130	N/A	3,631	1,226	5,049
1964	73	193	102	4,313	1,372	6,053
1965	89	261	0	4,733	1,685	6,768
1966	82	0	444	3,305	1,871	5,702
1967	95	0	496	3,762	2,233	6,586
1968	133	0	592	4,258	2,592	7,575
1969	103	129	590	4,752	2,919	8,493
1970	106	115	534	5,359	3,278	9,392
1971	89	152	551	5,718	3,724	10,234
1972	79	263	537	6,032	4,168	11,079
1973	84	249	546	6,421	4,599	11,899
1974	91	292	1,006	6,218	5,108	12,715
1975	97	292	977	6,104	5,617	13,087
1976	97	362	1,117	6,461	6,088	14,125
1977	169	496	N/A	7,914	6,610	15,189
1978	117	486	N/A	8,433	7,133	16,169
1979	175	603	N/A	8,964	7,576	17,318
1980	191	739	N/A	9,638	8,057	18,625
1981	173	724	N/A	10,308	8,704	19,909
1982	166	701	N/A	11,164	8,913	20,944
1983	134	597	N/A	11,990	9,374	22,095
1984	253	313	1,151	11,861	9,903	23,481
1985	195	348	1,166	12,285	10,487	24,481
1986	95	279	1,200	12,536	11,909	26,019
1987	142	265	1,275	12,736	12,373	26,791
1988	116	289	1,402	12,827	13,164	27,798
1989	123	361	1,441	12,938	13,846	28,709
1990	120	266	1,466	13,167	14,677	29,696
1991	64	249	1,436	13,184	15,430	30,363
1992	104	180	1,465	13,209	16,348	31,306
1993	129	193	1,433	13,181	16,709	31,645

<sup>1</sup> Other kinds of wells not yet plugged and abandoned (P&A), but standing awaiting work, are not separately reported from 1955–83 and from 1977–83. Before 1964 and from 1977–83, wells or boreholes not yet P&A were listed as either completed or suspended.

NOTE: See table 12 for well information by adjacent State or planning area. See table 13 for information about zone completions.

**Table 12. Oil and Gas Well Drilling Status by OCS Area, 1954-93**

*[Well and Borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations]*

OCS Area by Adjacent State	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
<b>1954</b>						
Louisiana	26	0	N/A	130	103	259
Texas	1	0	N/A	0	1	2
<b>Total</b>	<b>27</b>	<b>0</b>	<b>N/A</b>	<b>130</b>	<b>104</b>	<b>261</b>
<b>1955</b>						
Louisiana	38	0	N/A	235	170	443
Texas	3	0	N/A	4	5	12
<b>Total</b>	<b>41</b>	<b>0</b>	<b>N/A</b>	<b>239</b>	<b>175</b>	<b>455</b>
<b>1956</b>						
Louisiana	75	0	N/A	353	242	670
Texas	1	0	N/A	4	19	24
<b>Total</b>	<b>76</b>	<b>0</b>	<b>N/A</b>	<b>357</b>	<b>261</b>	<b>694</b>
<b>1957</b>						
Louisiana	61	17	N/A	585	381	1,044
Texas	0	0	N/A	3	21	24
<b>Total</b>	<b>61</b>	<b>17</b>	<b>N/A</b>	<b>588</b>	<b>402</b>	<b>1,068</b>
<b>1958</b>						
Louisiana	34	21	N/A	791	464	1,310
Texas	1	0	N/A	4	21	26
<b>Total</b>	<b>35</b>	<b>21</b>	<b>N/A</b>	<b>795</b>	<b>485</b>	<b>1,336</b>
<b>1959</b>						
Louisiana	40	31	N/A	1,455	545	2,071
Texas	0	0	N/A	6	24	30
<b>Total</b>	<b>40</b>	<b>31</b>	<b>N/A</b>	<b>1,461</b>	<b>569</b>	<b>2,101</b>
<b>1960</b>						
Florida	1	0	N/A	0	1	2
Louisiana	55	53	N/A	1,916	657	2,681
Texas	2	0	N/A	7	28	37
<b>Total</b>	<b>58</b>	<b>53</b>	<b>N/A</b>	<b>1,923</b>	<b>686</b>	<b>2,720</b>
<b>1961</b>						
Florida	0	0	N/A	0	3	3
Louisiana	54	99	N/A	2,456	771	3,380
Texas	0	0	N/A	11	40	51
<b>Total</b>	<b>54</b>	<b>99</b>	<b>N/A</b>	<b>2,467</b>	<b>814</b>	<b>3,434</b>

Footnotes at end of table.

**Table 12. Oil and Gas Well Drilling Status by OCS Area, 1954-93 — continued**

*[Well and Borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations]*

OCS Area by Adjacent State	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
<b>1962</b>						
Florida	0	0	N/A	0	3	3
Louisiana	56	107	N/A	3,079	955	4,197
Texas	0	0	N/A	12	44	56
<b>Total</b>	<b>56</b>	<b>107</b>	<b>N/A</b>	<b>3,091</b>	<b>1,002</b>	<b>4,256</b>
<b>1963</b>						
California	1	0	N/A	0	1	2
Florida	0	0	N/A	0	3	3
Louisiana	60	130	N/A	3,617	1,175	4,982
Texas	1	0	N/A	14	47	62
<b>Total</b>	<b>62</b>	<b>130</b>	<b>N/A</b>	<b>3,631</b>	<b>1,226</b>	<b>5,049</b>
<b>1964</b>						
California	2	0	0	0	8	10
Florida	0	0	0	0	3	3
Louisiana	70	193	2	4,281	1,302	5,948
Texas	1	0	0	32	59	92
<b>Total</b>	<b>73</b>	<b>193</b>	<b>2</b>	<b>4,313</b>	<b>1,372</b>	<b>6,053</b>
<b>1965</b>						
California	0	0	0	0	15	15
Florida	0	0	0	0	3	3
Louisiana	87	241	0	4,694	1,597	6,619
Oregon	1	1	0	0	3	5
Texas	1	19	0	39	67	126
<b>Total</b>	<b>89</b>	<b>261</b>	<b>0</b>	<b>4,733</b>	<b>1,685</b>	<b>6,768</b>
<b>1966</b>						
California	1	0	0	0	16	17
Florida	0	0	0	0	3	3
Louisiana	80	0	427	3,254	1,773	5,534
Oregon	0	0	0	0	7	7
Texas	1	0	17	51	70	139
Washington	0	0	0	0	2	2
<b>Total</b>	<b>82</b>	<b>0</b>	<b>444</b>	<b>3,305</b>	<b>1,871</b>	<b>5,702</b>

Footnotes at end of table.

**Table 12. Oil and Gas Well Drilling Status by OCS Area, 1954-93 — continued**

*[Well and Borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations]*

OCS Area by Adjacent State	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
<b>1967</b>						
California	0	0	0	0	26	26
Florida	0	0	0	0	3	3
Louisiana	93	0	493	3,681	2,111	6,378
Oregon	0	0	0	0	8	8
Texas	2	0	3	81	81	167
Washington	0	0	0	0	4	4
<b>Total</b>	<b>95</b>	<b>0</b>	<b>496</b>	<b>3,762</b>	<b>2,233</b>	<b>6,586</b>
<b>1968</b>						
California	9	0	4	26	51	90
Florida	0	0	0	0	3	3
Louisiana	117	0	576	4,147	2,425	7,265
Oregon	0	0	0	0	8	8
Texas	7	0	12	85	101	205
Washington	0	0	0	0	4	4
<b>Total</b>	<b>133</b>	<b>0</b>	<b>592</b>	<b>4,258</b>	<b>2,592</b>	<b>7,575</b>
<b>1969</b>						
California	6	7	4	94	71	182
Florida	0	0	0	0	3	3
Louisiana	92	120	570	4,567	2,680	8,029
Oregon	0	0	0	0	8	8
Texas	5	2	16	91	153	267
Washington	0	0	0	0	4	4
<b>Total</b>	<b>103</b>	<b>129</b>	<b>590</b>	<b>4,752</b>	<b>2,919</b>	<b>8,493</b>
<b>1970</b>						
California	5	9	5	162	77	258
Florida	0	0	0	0	3	3
Louisiana	100	102	510	5,099	3,006	8,817
Oregon	0	0	0	0	8	8
Texas	1	4	19	98	180	302
Washington	0	0	0	0	4	4
<b>Total</b>	<b>106</b>	<b>115</b>	<b>534</b>	<b>5,359</b>	<b>3,278</b>	<b>9,392</b>

Footnotes at end of table.

**Table 12. Oil and Gas Well Drilling Status by OCS Area, 1954-93 — continued**

[Well and Borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations]

OCS Area by Adjacent State	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
<b>1971</b>						
California	1	13	5	188	88	295
Florida	0	0	0	0	3	3
Louisiana	81	131	526	5,429	3,429	9,596
Oregon	0	0	0	0	8	8
Texas	7	8	20	101	192	328
Washington	0	0	0	0	4	4
<b>Total</b>	<b>89</b>	<b>152</b>	<b>551</b>	<b>5,718</b>	<b>3,724</b>	<b>10,234</b>
<b>1972</b>						
California	1	12	6	191	92	302
Florida	0	0	0	0	3	3
Louisiana	77	251	517	5,727	3,851	10,423
Oregon	0	0	0	0	8	8
Texas	1	0	14	114	210	339
Washington	0	0	0	0	4	4
<b>Total</b>	<b>79</b>	<b>263</b>	<b>537</b>	<b>6,032</b>	<b>4,168</b>	<b>11,079</b>
<b>1973</b>						
California	1	13	6	194	92	306
Florida	0	0	0	0	3	3
Louisiana	73	236	522	6,104	4,252	11,187
Oregon	0	0	0	0	8	8
Texas	10	0	18	123	240	391
Washington	0	0	0	0	4	4
<b>Total</b>	<b>84</b>	<b>249</b>	<b>546</b>	<b>6,421</b>	<b>4,599</b>	<b>11,899</b>
<b>1974</b>						
California	2	0	24	191	97	314
Florida	10	0	0	0	14	24
Louisiana	63	292	948	5,912	4,624	11,839
Oregon	0	0	0	0	8	8
Texas	16	0	34	115	361	526
Washington	0	0	0	0	4	4
<b>Total</b>	<b>91</b>	<b>292</b>	<b>1,006</b>	<b>6,218</b>	<b>5,108</b>	<b>12,715</b>
<b>1975</b>						
California	2	0	15	207	92	316
Florida	6	0	3	0	36	45
Louisiana	70	292	906	5,776	5,024	12,068
Oregon	0	0	0	0	8	8
Texas	19	0	53	121	453	646
Washington	0	0	0	0	4	4
<b>Total</b>	<b>97</b>	<b>292</b>	<b>977</b>	<b>6,104</b>	<b>5,617</b>	<b>13,087</b>

Footnotes at end of table.

**Table 12. Oil and Gas Well Drilling Status by OCS Area, 1954-93 — continued**

*[Well and Borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations]*

OCS Area by Adjacent State	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
<b>1976</b>						
Alaska	2	0	0	0	0	2
California	6	0	14	210	102	332
Florida	2	2	0	1	67	72
Louisiana	55	359	961	6,102	5,321	12,798
Oregon	0	0	0	0	8	8
Texas	32	1	142	148	586	909
Washington	0	0	0	0	4	4
<b>Total</b>	<b>97</b>	<b>362</b>	<b>1,117</b>	<b>6,461</b>	<b>6,088</b>	<b>14,125</b>
<b>1977</b>						
Alaska	2	0	N/A	0	7	9
California	4	15	N/A	230	141	390
Louisiana	131	319	N/A	7,422	5,704	13,576
MAFLA	0	1	N/A	26	81	108
Oregon	0	0	N/A	0	8	8
Texas	32	161	N/A	236	665	1,094
Washington	0	0	N/A	0	4	4
<b>Total</b>	<b>169</b>	<b>496</b>	<b>N/A</b>	<b>7,914</b>	<b>6,610</b>	<b>15,189</b>
<b>1978</b>						
Alaska	1	0	N/A	0	13	14
Atlantic	7	0	N/A	0	8	15
California	4	20	N/A	224	176	424
Louisiana	85	339	N/A	7,758	6,034	14,216
MAFLA	1	5	N/A	34	94	134
Oregon	0	0	N/A	0	8	8
Texas	19	122	N/A	417	796	1,354
Washington	0	0	N/A	0	4	4
<b>Total</b>	<b>117</b>	<b>486</b>	<b>N/A</b>	<b>8,433</b>	<b>7,133</b>	<b>16,169</b>
<b>1979</b>						
Alaska	2	0	N/A	0	17	19
Atlantic	4	0	N/A	0	25	29
California	4	24	N/A	223	203	454
Louisiana	114	382	N/A	8,169	6,305	14,970
MAFLA	5	10	N/A	50	118	183
Oregon	0	0	N/A	0	8	8
Texas	46	187	N/A	522	896	1,651
Washington	0	0	N/A	0	4	4
<b>Total</b>	<b>175</b>	<b>603</b>	<b>N/A</b>	<b>8,964</b>	<b>7,576</b>	<b>17,318</b>

Footnotes at end of table.

**Table 12. Oil and Gas Well Drilling Status by OCS Area, 1954-93 — continued**

*[Well and Borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations]*

OCS Area by Adjacent State	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
<b>1980</b>						
Alaska	0	0	N/A	0	21	21
Atlantic	2	0	N/A	0	30	32
California	10	37	N/A	246	238	531
Louisiana	130	479	N/A	8,618	6,641	15,868
MAFLA	2	36	N/A	70	126	234
Oregon	0	0	N/A	0	8	8
Texas	47	187	N/A	704	989	1,927
Washington	0	0	N/A	0	4	4
<b>Total</b>	<b>191</b>	<b>739</b>	<b>N/A</b>	<b>9,638</b>	<b>8,057</b>	<b>18,625</b>
<b>1981</b>						
Alaska	2	0	N/A	0	21	23
Atlantic	3	0	N/A	0	35	38
California	10	33	N/A	286	265	594
Louisiana	107	443	N/A	9,094	7,090	16,734
MAFLA	6	51	N/A	90	139	286
Oregon	0	0	N/A	0	8	8
Texas	45	197	N/A	838	1,142	2,222
Washington	0	0	N/A	0	4	4
<b>Total</b>	<b>173</b>	<b>724</b>	<b>N/A</b>	<b>10,308</b>	<b>8,704</b>	<b>19,909</b>
<b>1982</b>						
Alaska	1	3	N/A	0	21	25
Atlantic	0	0	N/A	0	42	42
California	13	48	N/A	325	294	680
Louisiana	103	406	N/A	9,707	7,390	17,606
MAFLA	8	24	N/A	132	25	189
Oregon	0	0	N/A	0	8	8
Texas	41	220	N/A	1,000	1,129	2,390
Washington	0	0	N/A	0	4	4
<b>Total</b>	<b>166</b>	<b>701</b>	<b>N/A</b>	<b>11,164</b>	<b>8,913</b>	<b>20,944</b>
<b>1983</b>						
Alaska	1	2	N/A	0	24	27
Atlantic	1	0	N/A	0	43	44
California	14	36	N/A	378	334	762
Louisiana	81	361	N/A	10,333	7,719	18,494
MAFLA	10	15	N/A	169	25	219
Oregon	0	0	N/A	0	8	8
Texas	27	183	N/A	1,110	1,217	2,537
Washington	0	0	N/A	0	4	4
<b>Total</b>	<b>134</b>	<b>597</b>	<b>N/A</b>	<b>11,990</b>	<b>9,374</b>	<b>22,095</b>

Footnotes at end of table.

**Table 12. Oil and Gas Well Drilling Status by OCS Area, 1954-93 — continued**

[Well and Borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations]

OCS Area by Adjacent State	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
<b>1984</b>						
Alaska	5	0	5	0	33	43
Atlantic	0	0	0	0	46	46
California	10	11	6	440	348	815
Louisiana	167	211	1,140	10,279	8,103	19,900
MAFLA	0	0	0	0	25	25
Oregon	0	0	0	0	8	8
Texas	71	91	0	1,142	1,336	2,640
Washington	0	0	0	0	4	4
<b>Total</b>	<b>253</b>	<b>313</b>	<b>1,151</b>	<b>11,861</b>	<b>9,903</b>	<b>23,481</b>
<b>1985</b>						
Alaska	1	0	4	0	56	61
Atlantic	0	0	0	0	46	46
California	4	0	14	471	304	793
Louisiana	140	214	966	10,626	8,574	20,520
MAFLA	0	0	0	0	27	27
Oregon	0	0	0	0	8	8
Texas	50	134	182	1,188	1,468	3,022
Washington	0	0	0	0	4	4
<b>Total</b>	<b>195</b>	<b>348</b>	<b>1,166</b>	<b>12,285</b>	<b>10,487</b>	<b>24,481</b>
<b>1986</b>						
Alaska	0	0	9	0	57	66
Atlantic	0	0	0	0	46	46
Gulf of Mexico						
Central	64	166	1,003	10,753	9,751	21,737
Eastern	0	0	1	0	33	34
Western	24	113	168	1,279	1,628	3,212
Pacific	7	0	19	504	394	924
<b>Total</b>	<b>95</b>	<b>279</b>	<b>1,200</b>	<b>12,536</b>	<b>11,909</b>	<b>26,019</b>
<b>1987</b>						
Alaska	1	0	7	0	60	68
Atlantic	0	0	0	0	46	46
Gulf of Mexico						
Central	104	163	1,073	10,878	10,113	22,331
Eastern	2	0	1	0	35	38
Western	26	97	178	1,321	1,717	3,339
Pacific	9	5	16	537	402	969
<b>Total</b>	<b>142</b>	<b>265</b>	<b>1,275</b>	<b>12,736</b>	<b>12,373</b>	<b>26,791</b>

Footnotes at end of table.

**Table 12. Oil and Gas Well Drilling Status by OCS Area, 1954-93 — continued**

[Well and Borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations]

OCS Area by Adjacent State	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
<b>1988</b>						
Alaska	0	0	6	0	63	69
Atlantic	0	0	0	0	46	46
Gulf of Mexico						
Central	87	167	1,170	10,888	10,775	23,087
Eastern	0	0	3	0	36	39
Western	24	120	197	1,384	1,833	3,558
Pacific	5	2	26	555	411	999
<b>Total</b>	<b>116</b>	<b>265</b>	<b>1,402</b>	<b>12,827</b>	<b>13,164</b>	<b>27,798</b>
<b>1989</b>						
Alaska	0	0	7	0	66	73
Atlantic	0	0	0	0	46	46
Gulf of Mexico						
Central	88	224	1,224	10,898	11,306	23,740
Eastern	1	0	6	0	37	44
Western	27	135	177	1,476	1,962	3,777
Pacific	7	2	27	564	429	1,029
<b>Total</b>	<b>123</b>	<b>361</b>	<b>1,441</b>	<b>12,938</b>	<b>13,846</b>	<b>28,709</b>
<b>1990</b>						
Alaska	0	0	3	0	72	75
Atlantic	0	0	0	0	46	46
Gulf of Mexico						
Central	93	164	1,263	11,014	11,953	24,487
Eastern	1	0	5	0	38	44
Western	24	101	167	1,582	2,134	4,008
Pacific	2	1	28	571	434	1,036
<b>Total</b>	<b>120</b>	<b>266</b>	<b>1,466</b>	<b>13,167</b>	<b>14,677</b>	<b>29,696</b>
<b>1991</b>						
Alaska	1	0	2	0	75	78
Atlantic	0	0	0	0	46	46
Gulf of Mexico						
Central	55	149	1,256	10,999	12,570	25,029
Eastern	0	0	6	0	38	44
Western	8	99	144	1,598	2,272	4,121
Pacific	0	1	28	587	429	1,045
<b>Total</b>	<b>64</b>	<b>249</b>	<b>1,436</b>	<b>13,184</b>	<b>15,430</b>	<b>30,363</b>

Footnotes at end of table.

**Table 12. Oil and Gas Well Drilling Status by OCS Area, 1954-93 — continued**

*[Well and Borehole are used interchangeably in these data, and no distinction is made between exploration and production well drilling in the tabulations]*

OCS Area by Adjacent State	Well Drilling Status			Completed (Wells and Boreholes)	Plugged and Abandoned (Wells and Boreholes)	Cumulative Total
	Active	Suspended	Other <sup>1</sup>			
<b>1992</b>						
Alaska	0	0	2	0	77	79
Atlantic	0	0	0	0	46	46
Gulf of Mexico						
Central	88	97	1,301	11,015	13,317	25,818
Eastern	0	0	6	0	38	44
Western	14	82	130	1,604	2,439	4,269
Pacific	2	1	26	590	431	1,050
<b>Total</b>	<b>104</b>	<b>180</b>	<b>1,465</b>	<b>13,209</b>	<b>16,348</b>	<b>31,306</b>
<b>1993</b>						
Alaska	0	0	2	0	80	82
Atlantic	0	0	0	0	46	46
Gulf of Mexico						
Central	99	80	1,274	10,945	13,662	26,060
Eastern	0	0	6	0	39	45
Western	24	110	128	1,627	2,449	4,338
Pacific	6	3	23	609	433	1,074
<b>Total</b>	<b>129</b>	<b>193</b>	<b>1,433</b>	<b>13,181</b>	<b>16,709</b>	<b>31,645</b>

<sup>1</sup> Other kinds of wells not yet plugged and abandoned (P&A), but standing awaiting work, are not separately reported from 1955-63 and from 1977-83. Before 1964 and from 1977-83, wells or boreholes not yet P&A were listed as either completed or suspended.

<sup>2</sup> The 1982 figures for MAFLA have been adjusted after audit.

<sup>3</sup> GOM statistics for 1984 and 1985 are not available separately for the OCS areas adjacent to the State waters of Louisiana, Texas and MAFLA. However, the totals are actual.

**Table 13. Zone Completion Status of Oil and Gas Wells on the Federal OCS, 1950-93**

Year	Producible Zone Completion					Year-end Total	Other Than Producible Zone Completions <sup>2</sup>		
	Active		Shut-in <sup>1</sup>				Service, <sup>3</sup> etc.	Not Restorable <sup>4</sup>	Yearend Total
	Oil	Gas	Oil	Gas	U. H.				
1950	371	N/A	13	26	N/A	410	N/A	N/A	N/A
1951	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1952	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1953	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1954	50	20	15	45	N/A	130	N/A	N/A	N/A
1955	117	29	31	62	N/A	239	N/A	N/A	N/A
1956	195	32	41	89	N/A	357	N/A	N/A	N/A
1957	330	31	83	144	N/A	588	N/A	N/A	N/A
1958	487	74	80	154	N/A	795	N/A	N/A	N/A
1959	864	173	245	179	N/A	1,461	N/A	N/A	N/A
1960	1,138	210	326	249	N/A	1,923	N/A	N/A	N/A
1961	1,463	240	429	335	N/A	2,467	N/A	N/A	N/A
1962	1,863	333	513	382	N/A	3,091	N/A	N/A	N/A
1963	2,237	397	584	413	N/A	3,631	N/A	N/A	N/A
1964	2,708	417	622	486	N/A	4,233	80	0	80
1965	3,068	516	687	462	N/A	4,733	0	0	0
1966	3,588	660	747	504	N/A	5,499	35	0	35
1967	4,080	870	759	507	N/A	6,216	60	0	60
1968	4,483	1,040	908	578	N/A	7,009	91	0	91
1969	4,985	1,280	880	578	N/A	7,723	117	0	117
1970	5,565	1,574	882	645	N/A	8,666	164	0	164
1971	5,704	1,872	953	602	N/A	9,131	217	0	217
1972	3,744	1,808	2,996	872	N/A	9,420	296	0	296
1973	3,814	2,108	3,054	879	N/A	9,855	332	0	332
1974	3,686	1,942	732	461	266	7,087	416	873	1,289
1975	3,477	2,126	1,013	694	512	10,677	325	587	912
1976	3,555	2,256	3,206	1,419	193	10,629	333	2,304	2,637
1977	3,747	2,542	3,122	1,476	111	10,098	404	2,210	2,614
1978	3,648	2,869	3,257	2,638	0	12,412	382	3,323	3,705
1979	2,781	3,266	3,262	1,759	170	11,238	389	3,638	4,027
1980	5,375	3,631	3,161	1,813	44	14,024	370	3,406	3,776
1981	4,522	3,923	2,847	1,907	53	13,252	362	3,830	4,192
1982	4,734	4,238	2,799	2,052	110	13,933	363	4,201	4,564
1983	4,142	3,332	3,690	3,270	8	14,442	496	4,510	5,006
1984	4,138	3,536	3,888	3,372	0	14,934	514	4,314	4,828
1985	4,321	3,332	3,794	3,701	0	15,148	576	4,146	4,722
1986	4,406	3,404	3,799	3,743	0	15,352	511	4,339	4,850
1987	4,543	3,468	3,684	3,780	0	15,475	503	4,302	4,805
1988	4,627	3,290	3,618	4,037	0	15,572	585	4,495	5,080
1989	4,507	3,422	3,496	4,073	0	15,498	484	4,288	4,772
1990	4,515	3,580	3,412	4,140	0	15,647	560	4,130	4,690
1991	4,549	3,543	3,309	4,139	0	15,540	542	3,926	4,468
1992	4,612	3,332	3,143	4,288	0	15,375	535	4,053	4,588
1993	4,774	3,557	2,949	4,116	0	15,396	529	3,954	4,483

Footnotes at end of table.

**Table 13. Zone Completion Status of Oil and Gas Wells on the Federal OCS, 1950-93 —  
continued**

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- <sup>1</sup> *Shut-In Oil, Gas, or Undetermined Hydrocarbon (U.H.)* completions are those temporarily taken out of production pending either repairs or major or minor workovers. Until 1974, calendar year reports did not distinguish such restorable but producible zone completions that are shut-in and left "standing due to drilling on platforms, planning for secondary or other injection projects, delay in facilities (installation), well plugging by sand or (those) other mechanical problems, pressure depletion, or having an excessive oil/gas ratio."
- <sup>2</sup> *Other Than Producing Zone Completions* includes those service completions drilled for injection/withdrawal, salt disposal, or similar purpose. These have been reported separately since 1964.
- <sup>3</sup> All injection, service wells, etc.
- <sup>4</sup> *Not Restorable* (oil or gas) completions are judged not capable of production and are to be plugged and abandoned (P&A) and permanently sealed.

Table 14. Zone Completion Status of Oil and Gas Wells by OCS Area, 1954-93

OCS Area by Adjacent State	Producible Zone Completions					Yearend Total	Other Than Producible Zone Completions <sup>2</sup>		
	Active		Shut-In <sup>1</sup>				Service, <sup>3</sup> etc.	Not Restorable <sup>4</sup>	Yearend Total
	Oil	Gas	Oil	Gas	U. H.				
<b>1954</b>									
Louisiana	50	20	15	45	0	130	0	0	0
Texas	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>50</b>	<b>20</b>	<b>15</b>	<b>45</b>	<b>0</b>	<b>130</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1955</b>									
Louisiana	117	29	30	59	0	235	0	0	0
Texas	0	0	1	3	0	4	0	0	0
<b>Total</b>	<b>117</b>	<b>29</b>	<b>31</b>	<b>62</b>	<b>0</b>	<b>239</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1956</b>									
Louisiana	194	32	41	86	0	353	0	0	0
Texas	0	0	0	3	0	4	0	0	0
<b>Total</b>	<b>194</b>	<b>32</b>	<b>41</b>	<b>89</b>	<b>0</b>	<b>357</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1957</b>									
Louisiana	330	31	83	141	0	585	0	0	0
Texas	0	0	0	3	0	3	0	0	0
<b>Total</b>	<b>330</b>	<b>31</b>	<b>83</b>	<b>144</b>	<b>0</b>	<b>588</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1958</b>									
Louisiana	487	74	80	150	0	791	0	0	0
Texas	0	0	0	4	0	4	0	0	0
<b>Total</b>	<b>487</b>	<b>74</b>	<b>80</b>	<b>154</b>	<b>0</b>	<b>795</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1959</b>									
Louisiana	864	173	244	174	0	1,455	0	0	0
Texas	0	0	1	5	0	6	0	0	0
<b>Total</b>	<b>864</b>	<b>173</b>	<b>245</b>	<b>179</b>	<b>0</b>	<b>1,461</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1960</b>									
Florida	0	0	0	0	0	0	0	0	0
Louisiana	1,138	210	324	244	0	1,916	0	0	0
Texas	0	0	2	5	0	7	0	0	0
<b>Total</b>	<b>1,138</b>	<b>210</b>	<b>326</b>	<b>249</b>	<b>0</b>	<b>1,923</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1961</b>									
Florida	0	0	0	0	0	0	0	0	0
Louisiana	1,463	240	427	326	0	2,456	0	0	0
Texas	0	0	2	9	0	11	0	0	0
<b>Total</b>	<b>1,463</b>	<b>240</b>	<b>429</b>	<b>335</b>	<b>0</b>	<b>2,467</b>	<b>0</b>	<b>0</b>	<b>0</b>

Footnotes at end of table.

Table 14. Zone Completion Status of Oil and Gas Wells by OCS Area, 1954-93 — continued

OCS Area by Adjacent State	Producible Zone Completions					Yearend Total	Other Than Producible Zone Completions <sup>2</sup>		
	Active		Shut-In <sup>1</sup>				Service, <sup>3</sup> etc.	Not Restorable <sup>4</sup>	Yearend Total
	Oil	Gas	Oil	Gas	U. H.				
<b>1962</b>									
Florida	0	0	0	0	0	0	0	0	0
Louisiana	1,863	333	511	372	0	3,079	0	0	0
Texas	0	0	2	10	0	12	0	0	0
<b>Total</b>	<b>1,863</b>	<b>333</b>	<b>513</b>	<b>382</b>	<b>0</b>	<b>3,091</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1963</b>									
California	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0
Louisiana	2,235	397	583	402	0	3,617	0	0	0
Texas	2	0	1	11	0	14	0	0	0
<b>Total</b>	<b>2,237</b>	<b>397</b>	<b>584</b>	<b>413</b>	<b>0</b>	<b>3,631</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1964</b>									
California	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0
Louisiana	2,708	417	615	461	0	4,201	80	0	80
Texas	0	0	7	25	0	32	0	0	0
<b>Total</b>	<b>2,708</b>	<b>417</b>	<b>622</b>	<b>486</b>	<b>0</b>	<b>4,233</b>	<b>80</b>	<b>0</b>	<b>80</b>
<b>1965</b>									
California	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0
Louisiana	3,067	516	681	430	0	4,694	0	0	0
Oregon	0	0	0	0	0	0	0	0	0
Texas	1	0	6	32	0	39	0	0	0
<b>Total</b>	<b>3,068</b>	<b>516</b>	<b>687</b>	<b>462</b>	<b>0</b>	<b>4,733</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1966</b>									
California	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0
Louisiana	3,580	630	744	474	0	5,428	35	0	0
Oregon	0	0	0	0	0	0	0	0	0
Texas	8	30	3	30	0	71	0	0	0
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,588</b>	<b>660</b>	<b>747</b>	<b>504</b>	<b>0</b>	<b>5,499</b>	<b>35</b>	<b>0</b>	<b>0</b>
<b>1967</b>									
California	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0
Louisiana	4,053	789	756	499	0	6,097	60	0	60
Oregon	0	0	0	0	0	0	0	0	0
Texas	27	81	3	8	0	117	0	0	0
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,080</b>	<b>870</b>	<b>759</b>	<b>507</b>	<b>0</b>	<b>6,214</b>	<b>60</b>	<b>0</b>	<b>60</b>

Footnotes at end of table.

Table 14. Zone Completion Status of Oil and Gas Wells by OCS Area, 1954-93 — continued

OCS Area by Adjacent State	Producible Zone Completions					Yearend Total	Other Than Producible Zone Completions <sup>2</sup>		
	Active		Shut-In <sup>1</sup>				Service, <sup>3</sup> etc.	Not Restorable <sup>4</sup>	Yearend Total
	Oil	Gas	Oil	Gas	U. H.				
<b>1968</b>									
California	24	0	2	0	0	26	0	0	0
Florida	0	0	0	0	0	0	0	0	0
Louisiana	4,428	956	903	569	0	6,856	91	0	0
Oregon	0	0	0	0	0	0	0	0	0
Texas	31	84	3	9	0	127	0	0	0
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,483</b>	<b>1,040</b>	<b>908</b>	<b>578</b>	<b>0</b>	<b>7,009</b>	<b>91</b>	<b>0</b>	<b>0</b>
<b>1969</b>									
California	77	0	17	0	0	94	0	0	0
Florida	0	0	0	0	0	0	0	0	0
Louisiana	4,875	1,189	860	569	0	7,493	117	0	117
Oregon	0	0	0	0	0	0	0	0	0
Texas	33	91	3	9	0	136	0	0	0
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,985</b>	<b>1,280</b>	<b>880</b>	<b>578</b>	<b>0</b>	<b>7,723</b>	<b>117</b>	<b>0</b>	<b>117</b>
<b>1970</b>									
California	149	0	14	0	0	163	0	0	0
Florida	0	0	0	0	0	0	0	0	0
Louisiana	5,384	1,483	861	629	0	8,357	164	0	164
Oregon	0	0	0	0	0	0	0	0	0
Texas	32	91	7	16	0	146	0	0	0
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5,565</b>	<b>1,574</b>	<b>882</b>	<b>645</b>	<b>0</b>	<b>8,666</b>	<b>164</b>	<b>0</b>	<b>164</b>
<b>1971</b>									
California	182	0	11	0	0	193	1	0	1
Florida	0	0	0	0	0	0	0	0	0
Louisiana	5,495	1,771	935	588	0	8,789	216	0	216
Oregon	0	0	0	0	0	0	0	0	0
Texas	27	101	7	14	0	149	0	0	0
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5,704</b>	<b>1,872</b>	<b>953</b>	<b>602</b>	<b>0</b>	<b>9,131</b>	<b>217</b>	<b>0</b>	<b>217</b>
<b>1972</b>									
California	172	0	18	0	0	190	1	0	1
Florida	0	0	0	0	0	0	0	0	0
Louisiana	3,556	1,714	2,959	838	0	9,067	294	0	294
Oregon	0	0	0	0	0	0	0	0	0
Texas	16	94	19	34	0	163	1	0	1
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,744</b>	<b>1,808</b>	<b>2,996</b>	<b>872</b>	<b>0</b>	<b>9,420</b>	<b>296</b>	<b>0</b>	<b>296</b>

Footnotes at end of table.

**Table 14. Zone Completion Status of Oil and Gas Wells by OCS Area, 1954-93 — continued**

OCS Area by Adjacent State	Producible Zone Completions					Yearend Total	Other Than Producible Zone Completions <sup>2</sup>		
	Active		Shut-In <sup>1</sup>				Service, <sup>3</sup> etc.	Not Restorable <sup>4</sup>	Yearend Total
	Oil	Gas	Oil	Gas	U. H.				
<b>1973</b>									
California	172	0	18	0	0	190	4	0	4
Florida	0	0	0	0	0	0	0	0	0
Louisiana	3,623	2,016	3,014	832	0	9,485	327	0	327
Oregon	0	0	0	0	0	0	0	0	0
Texas	19	92	22	47	0	180	1	0	1
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,814</b>	<b>2,108</b>	<b>3,054</b>	<b>879</b>	<b>0</b>	<b>9,855</b>	<b>332</b>	<b>0</b>	<b>332</b>
<b>1974</b>									
California	172	0	5	0	0	177	21	0	21
Florida	0	0	0	0	0	0	0	0	0
Louisiana	3,500	1,837	717	444	260	6,758	394	859	1,253
Oregon	0	0	0	0	0	0	0	0	0
Texas	14	105	10	17	6	152	1	14	15
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,686</b>	<b>1,942</b>	<b>732</b>	<b>461</b>	<b>266</b>	<b>7,087</b>	<b>416</b>	<b>873</b>	<b>1,289</b>
<b>1975</b>									
California	172	0	20	0	0	192	24	0	24
Florida	0	0	0	0	0	0	0	0	0
Louisiana	3,297	2,048	3,228	1,219	503	10,295	299	581	880
Oregon	0	0	0	0	0	0	0	0	0
Texas	8	78	30	65	9	190	2	6	8
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,477</b>	<b>2,126</b>	<b>3,278</b>	<b>1,284</b>	<b>512</b>	<b>10,677</b>	<b>325</b>	<b>587</b>	<b>912</b>
<b>1976</b>									
California	176	0	21	0	0	197	24	0	24
Florida	0	0	3	0	0	3	0	2	2
Louisiana	3,363	2,184	3,158	1,341	189	10,235	305	2,226	2,531
Oregon	0	0	0	0	0	0	0	0	0
Texas	16	72	24	78	4	218	4	76	80
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,555</b>	<b>2,256</b>	<b>3,206</b>	<b>1,419</b>	<b>193</b>	<b>10,653</b>	<b>333</b>	<b>2,304</b>	<b>2,637</b>
<b>1977</b>									
Alaska	0	0	0	0	0	0	0	0	0
California	198	0	20	0	0	218	23	0	23
Louisiana	3,512	2,465	3,064	1,347	101	10,489	378	2,168	2,546
MAFLA	21	0	6	0	0	27	0	0	0
Oregon	0	0	0	0	0	0	0	0	0
Texas	16	77	32	129	10	264	3	42	45
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,747</b>	<b>2,542</b>	<b>3,122</b>	<b>1,475</b>	<b>111</b>	<b>10,998</b>	<b>404</b>	<b>2,210</b>	<b>2,614</b>

Footnotes at end of table.

**Table 14. Zone Completion Status of Oil and Gas Wells by OCS Area, 1954-93 — continued**

OCS Area by Adjacent State	Producible Zone Completions					Yearend Total	Other Than Producible Zone Completions <sup>2</sup>		
	Active		Shut-In <sup>1</sup>				Service, <sup>3</sup> etc.	Not Restorable <sup>4</sup>	Yearend Total
	Oil	Gas	Oil	Gas	U. H.				
<b>1978</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
California	202	0	22	0	0	224	22	0	22
Louisiana	3,393	2,707	3,183	2,439	0	11,722	357	3,247	3,604
MAFLA	34	1	0	0	0	35	0	0	0
Oregon	0	0	0	0	0	0	0	0	0
Texas	19	161	52	199	0	431	3	76	79
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,648</b>	<b>2,869</b>	<b>3,257</b>	<b>2,638</b>	<b>0</b>	<b>12,412</b>	<b>382</b>	<b>3,323</b>	<b>3,705</b>
<b>1979</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
California	205	0	6	0	0	211	30	0	30
Louisiana	2,499	2,991	3,171	1,569	120	10,350	354	3,554	3,908
MAFLA	55	2	1	0	0	58	1	0	1
Oregon	0	0	0	0	0	0	0	0	0
Texas	22	273	84	190	50	619	4	84	88
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2,781</b>	<b>3,266</b>	<b>3,262</b>	<b>1,759</b>	<b>170</b>	<b>11,238</b>	<b>389</b>	<b>3,638</b>	<b>4,027</b>
<b>1980</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
California	213	0	14	0	0	227	33	0	33
Louisiana	5,032	3,250	3,072	1,590	29	12,973	331	3,303	3,634
MAFLA	64	2	0	0	0	66	2	2	4
Oregon	0	0	0	0	0	0	0	0	0
Texas	66	379	75	223	15	758	4	101	105
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5,375</b>	<b>3,631</b>	<b>3,161</b>	<b>1,813</b>	<b>44</b>	<b>14,024</b>	<b>370</b>	<b>3,406</b>	<b>3,776</b>
<b>1981</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
California	248	0	19	0	0	267	37	0	37
Louisiana	4,127	3,463	2,738	1,588	41	11,957	320	3,718	4,038
MAFLA	74	1	0	0	1	76	2	3	5
Oregon	0	0	0	0	0	0	0	0	0
Texas	73	459	90	319	11	952	3	109	112
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,522</b>	<b>3,923</b>	<b>2,847</b>	<b>1,907</b>	<b>53</b>	<b>13,252</b>	<b>362</b>	<b>3,830</b>	<b>4,192</b>

Footnotes at end of table.

**Table 14. Zone Completion Status of Oil and Gas Wells by OCS Area, 1954-93 — continued**

OCS Area by Adjacent State	Producible Zone Completions					Yearend Total	Other Than Producible Zone Completions <sup>2</sup>		
	Active		Shut-In <sup>1</sup>				Service, etc.	Not Restorable <sup>3</sup>	Yearend Total
	Oil	Gas	Oil	Gas	U. H.				
<b>*1982</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
California	266	1	34	0	0	301	43	0	43
Louisiana	4,353	3,661	2,703	1,711	90	12,518	312	4,038	4,350
MAFLA	0	0	0	0	0	0	6	4	10
Oregon	0	0	0	0	0	0	0	0	0
Texas	115	576	62	341	18	1,112	2	159	161
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,734</b>	<b>4,238</b>	<b>2,799</b>	<b>2,052</b>	<b>108</b>	<b>13,931</b>	<b>363</b>	<b>4,201</b>	<b>4,564</b>
<b>*1983</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
California	289	5	34	0	0	328	46	0	46
Louisiana	3,730	2,681	3,574	2,906	7	12,898	435	4,327	4,762
MAFLA	0	0	0	0	0	0	12	4	16
Oregon	0	0	0	0	0	0	0	0	0
Texas	123	646	82	364	1	1,216	3	179	182
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,142</b>	<b>3,332</b>	<b>3,690</b>	<b>3,270</b>	<b>8</b>	<b>14,442</b>	<b>496</b>	<b>4,510</b>	<b>5,006</b>
<b>*1984</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
California	310	7	47	21	0	385	56	0	56
Louisiana/MAFLA	3,705	2,861	3,750	2,917	0	13,233	453	4,141	4,594
Oregon	0	0	0	0	0	0	0	0	0
Texas	123	668	91	434	0	1,316	5	173	178
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,138</b>	<b>3,536</b>	<b>3,888</b>	<b>3,372</b>	<b>0</b>	<b>14,934</b>	<b>514</b>	<b>4,314</b>	<b>4,828</b>
<b>*1985</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
California	340	20	57	5	0	422	88	0	88
Louisiana/MAFLA	3,836	2,600	3,660	1,540	0	13,349	485	3,877	4,362
Oregon	0	0	0	0	0	0	0	0	0
Texas	145	712	77	433	0	1,367	3	269	272
Washington	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,321</b>	<b>3,332</b>	<b>3,794</b>	<b>3,701</b>	<b>0</b>	<b>15,148</b>	<b>576</b>	<b>4,146</b>	<b>4,722</b>

Footnotes at end of table.

**Table 14. Zone Completion Status of Oil and Gas Wells by OCS Area, 1954-93 — continued**

OCS Area by Adjacent State	Producible Zone Completions					Yearend Total	Other Than Producible Zone Completions <sup>2</sup>		
	Active		Shut-In <sup>1</sup>				Service, etc.	Not Restorable <sup>2</sup>	Yearend Total
	Oil	Gas	Oil	Gas	U. H.				
	<b>1986</b>								
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
Gulf of Mexico									
Central	3,912	2,606	3,646	3,261	0	13,425	416	4,057	4,473
Eastern	0	0	0	0	0	0	0	0	0
Western	150	777	82	472	0	1,481	3	282	285
Pacific	344	21	71	10	0	446	92	0	92
Total	4,406	3,404	3,799	3,743	0	15,352	511	4,339	4,850
	<b>1987</b>								
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
Gulf of Mexico									
Central	4,010	2,631	3,526	3,320	0	13,487	400	3,992	4,392
Eastern	0	0	0	0	0	0	0	0	0
Western	167	817	82	450	0	1,516	6	310	316
Pacific	366	20	76	10	0	472	97	0	97
Total	4,543	3,468	3,684	3,780	0	15,475	503	4,302	4,805
	<b>1988</b>								
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
Gulf of Mexico									
Central	3,998	2,500	3,448	3,450	0	13,396	480	4,090	4,570
Eastern	0	0	0	0	0	0	0	0	0
Western	172	760	90	577	0	1,599	3	395	398
Pacific	457	30	80	10	0	577	102	10	112
Total	4,627	3,290	3,618	4,037	0	15,572	585	4,495	5,080
	<b>1989</b>								
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
Gulf of Mexico									
Central	3,947	2,558	3,333	3,463	0	13,301	385	3,889	4,274
Eastern	0	0	0	0	0	0	0	0	0
Western	176	849	83	599	0	1,707	3	385	388
Pacific	384	15	80	11	0	490	96	14	110
Total	4,507	3,422	3,496	4,073	0	15,498	484	4,288	4,772

Footnotes at end of table.

**Table 14. Zone Completion Status of Oil and Gas Wells by OCS Area, 1954-93 — continued**

OCS Area by Adjacent State	Producible Zone Completions					Yearend Total	Other Than Producible Zone Completions <sup>2</sup>		
	Active		Shut-In <sup>1</sup>				Service, etc.	Not Restorable <sup>4</sup>	Yearend Total
	Oil	Gas	Oil	Gas	U. H.				
<b>1990</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
Gulf of Mexico									
Central	3,940	2,643	3,252	3,460	0	13,295	461	3,628	4,089
Eastern	0	0	0	0	0	0	0	0	0
Western	179	920	81	666	0	1,846	1	490	491
Pacific	396	17	79	14	0	506	98	12	110
<b>Total</b>	<b>4,515</b>	<b>3,580</b>	<b>3,412</b>	<b>4,140</b>	<b>0</b>	<b>15,647</b>	<b>560</b>	<b>4,130</b>	<b>4,690</b>
<b>1991</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
Gulf of Mexico									
Central	4,001	2,597	3,120	3,456	0	13,174	444	3,446	3,890
Eastern	0	0	0	0	0	0	0	0	0
Western	165	927	91	671	0	1,854	1	466	467
Pacific	383	19	98	12	0	512	97	14	111
<b>Total</b>	<b>4,549</b>	<b>3,543</b>	<b>3,309</b>	<b>4,139</b>	<b>0</b>	<b>15,540</b>	<b>542</b>	<b>3,926</b>	<b>4,468</b>
<b>1992</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
Gulf of Mexico									
Central	4,040	2,411	2,983	3,574	0	13,008	431	3,716	4,147
Eastern	0	0	0	0	0	0	0	0	0
Western	171	900	82	704	0	1,857	4	327	331
Pacific	401	21	78	10	0	510	100	10	110
<b>Total</b>	<b>4,612</b>	<b>3,332</b>	<b>3,143</b>	<b>4,288</b>	<b>0</b>	<b>15,375</b>	<b>535</b>	<b>4,053</b>	<b>4,588</b>
<b>1993</b>									
Alaska	0	0	0	0	0	0	0	0	0
Atlantic	0	0	0	0	0	0	0	0	0
Gulf of Mexico									
Central	4,186	2,367	2,787	3,361	0	12,971	425	3,636	4,061
Eastern	0	0	0	0	0	0	0	0	0
Western	169	902	81	741	0	1,893	4	308	312
Pacific	419	18	81	14	0	532	100	10	110
<b>Total</b>	<b>4,774</b>	<b>3,557</b>	<b>2,949</b>	<b>4,116</b>	<b>0</b>	<b>15,396</b>	<b>529</b>	<b>3,954</b>	<b>4,483</b>

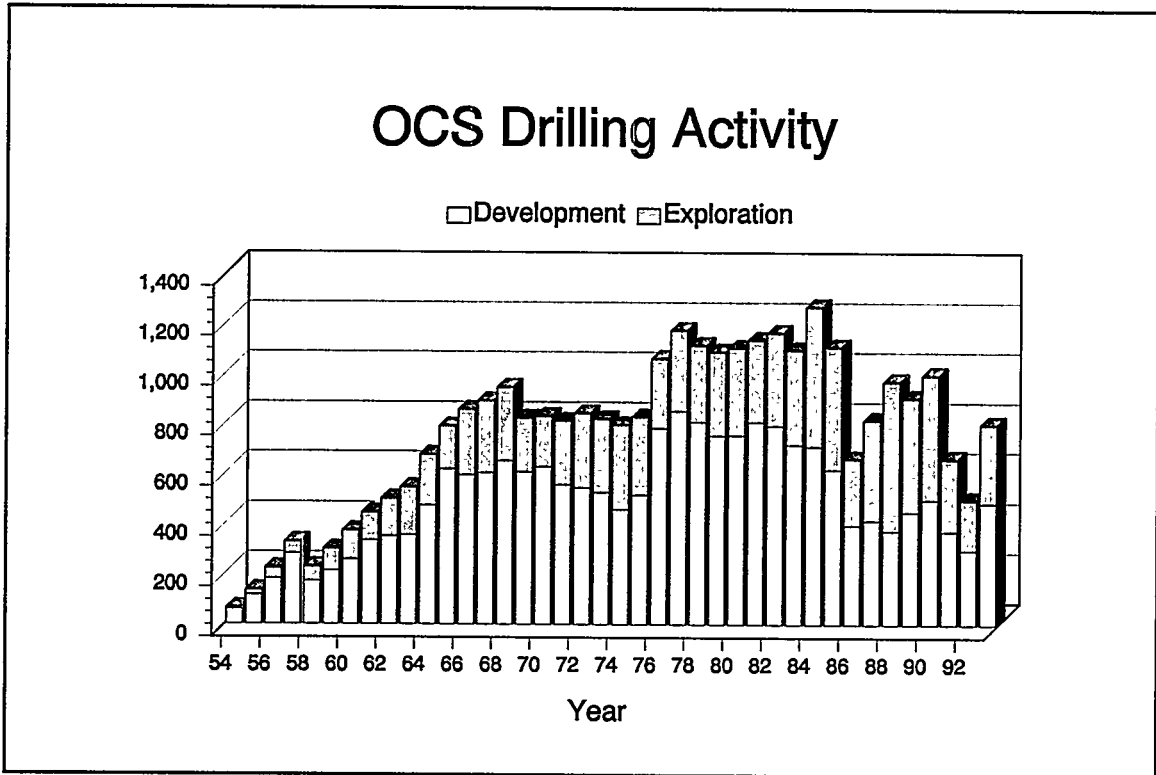
Footnotes at end of table.

**Table 14. Zone Completion Status of Oil and Gas Wells by OCS Area, 1954–93 — *continued***

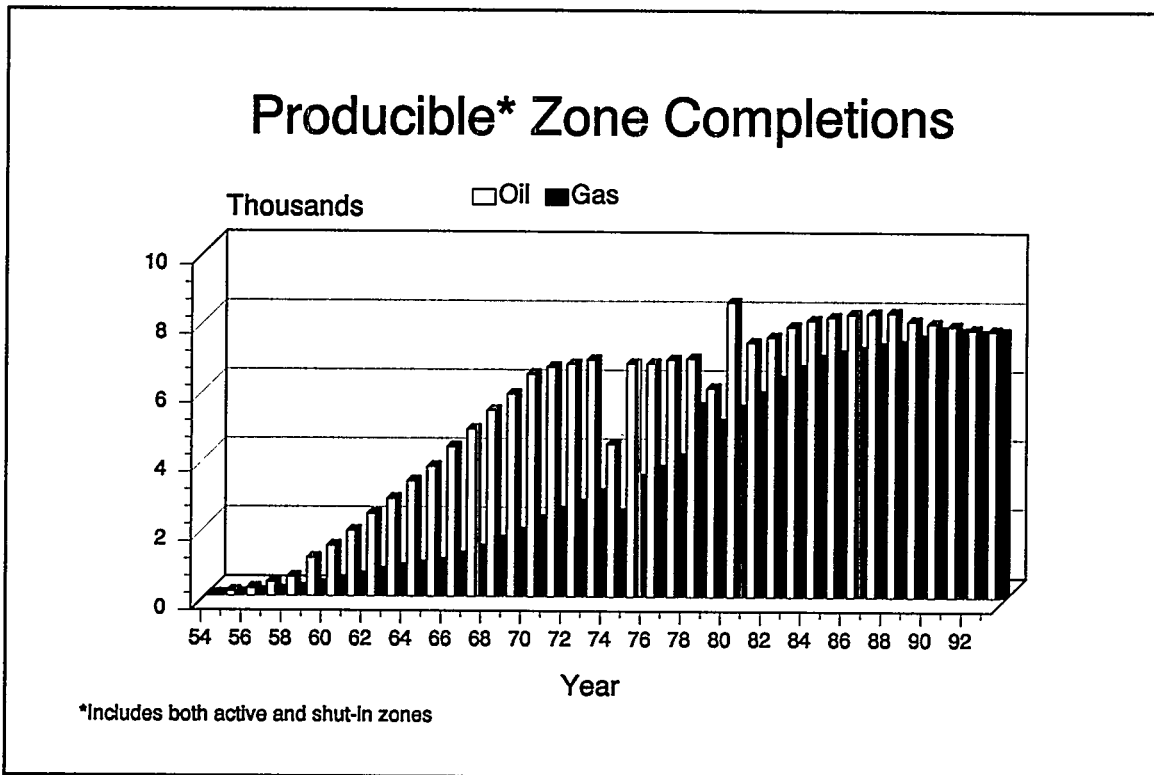
- 
- <sup>1</sup> *Shut-In Oil, Gas, or Undetermined Hydrocarbon* (U.H.) completions are those temporarily taken out of production pending either repairs or major or minor workovers. Until 1974, calendar year reports did not distinguish such restorable but producible zone completions that are shut-in and left "standing due to drilling on platforms, planning for secondary or other injection projects, delay in facilities (installation), well plugging by sand or (those) other mechanical problems, pressure depletion, or having an excessive oil/gas ratio."
- <sup>2</sup> *Other Than Producing Zone Completions* include those service completions drilled for injection/withdrawal, salt disposal, or similar purpose. These have been reported separately since 1964.
- <sup>3</sup> All injection, service, wells, etc.
- <sup>4</sup> *Not Restorable* (oil or gas) completions are judged not capable of production and are to be plugged and abandoned (P&A), and permanently sealed.
- <sup>5</sup> The 1982 figures for MAFLA have been adjusted after audit.
- <sup>6</sup> GOM statistics for 1984 and 1985 are not available separately for the OCS areas adjacent to the State waters of Louisiana, Texas, and MAFLA. However, the totals are actual.

**Table 15. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur under Federal Supervision, 1954-93**

Year	Producing		Nonproducing		Total	
	Number	Acres	Number	Acres	Number	Acres
1954	58	240,028	420	1,288,665	478	1,528,693
1955	106	438,076	505	1,938,656	611	2,376,732
1956	171	674,176	391	1,181,162	562	1,855,338
1957	213	775,566	208	709,941	421	1,485,507
1958	230	969,575	162	551,377	392	1,520,952
1959	272	1,102,660	117	384,446	389	1,487,106
1960	299	1,167,499	170	823,321	469	1,990,820
1961	315	1,228,839	148	705,367	463	1,934,206
1962	332	1,300,955	526	2,424,225	858	3,725,180
1963	363	1,431,827	524	2,458,188	887	3,890,015
1964	375	1,504,462	606	2,870,912	981	4,375,374
1965	425	1,679,617	512	2,450,253	937	4,129,870
1966	488	1,964,529	486	2,128,147	974	4,092,676
1967	525	2,086,074	358	1,519,663	883	3,605,737
1968	538	2,156,185	485	2,199,604	1,023	4,355,789
1969	568	2,308,538	453	2,004,712	1,021	4,313,250
1970	608	2,529,909	409	1,750,765	1,017	4,280,674
1971	649	2,709,997	434	1,892,294	1,083	4,602,291
1972	698	2,914,964	325	1,423,103	1,023	4,338,067
1973	726	3,039,418	540	2,574,565	1,266	5,613,983
1974	733	3,065,699	857	4,181,169	1,590	7,246,868
1975	790	3,252,735	1,002	5,068,056	1,792	8,320,791
1976	833	3,476,595	1,163	5,955,508	1,996	9,432,103
1977	896	3,893,285	1,252	6,341,595	2,148	10,234,880
1978	931	4,104,086	1,147	5,783,940	2,078	9,888,026
1979	1,022	4,532,733	1,141	5,818,751	2,163	10,351,484
1980	1,145	5,126,991	1,144	5,795,646	2,289	10,922,637
1981	1,218	5,447,556	1,235	6,119,276	2,453	11,566,832
1982	1,307	5,891,925	1,378	6,962,709	2,685	12,854,634
1983	1,393	6,317,423	2,379	12,229,930	3,772	18,547,353
1984	1,476	6,718,673	3,548	18,403,549	5,024	25,122,222
1985	1,514	6,965,316	3,690	19,047,583	5,204	26,012,899
1986	1,543	7,142,989	3,532	18,295,258	5,075	25,438,247
1987	1,596	7,415,149	3,596	18,676,131	5,192	26,091,280
1988	1,647	7,691,964	4,171	21,891,787	5,818	29,583,751
1989	1,688	7,896,055	4,827	25,525,778	6,515	33,421,833
1990	1,717	8,044,618	5,272	27,837,820	6,989	35,882,438
1991	1,712	7,952,904	5,422	28,989,968	7,134	36,942,872
1992	1,711	7,972,403	4,734	25,070,563	6,445	33,042,966
1993	1,735	8,108,944	3,930	20,857,307	5,665	28,966,251



**Figure 4.**



**Figure 5.**

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93**

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing <sup>1</sup>		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1954</b>						
Louisiana	58	240,028	295	1,066,739	353	1,306,767
sulphur	0	0	5	25,000	5	25,000
Texas	0	0	120	196,926	120	196,926
<b>Total</b>	<b>58</b>	<b>240,028</b>	<b>420</b>	<b>1,288,665</b>	<b>478</b>	<b>1,528,693</b>
<b>1955</b>						
Louisiana	102	432,316	356	1,567,147	458	1,999,463
sulphur	0	0	5	25,000	5	25,000
Texas	4	5,760	144	346,509	148	352,269
<b>Total</b>	<b>106</b>	<b>438,076</b>	<b>505</b>	<b>1,938,656</b>	<b>611</b>	<b>2,376,732</b>
<b>1956</b>						
Louisiana	167	668,416	265	842,143	432	1,510,559
sulphur	0	0	5	25,000	5	25,000
Texas	4	5,760	121	314,019	125	319,779
<b>Total</b>	<b>171</b>	<b>674,176</b>	<b>391</b>	<b>1,181,162</b>	<b>562</b>	<b>1,855,338</b>
<b>1957</b>						
Louisiana	210	771,246	176	587,552	386	1,358,798
sulphur	0	0	5	25,000	5	25,000
Texas	3	4,320	27	97,389	30	101,709
<b>Total</b>	<b>213</b>	<b>775,566</b>	<b>208</b>	<b>709,941</b>	<b>421</b>	<b>1,485,507</b>
<b>1958</b>						
Louisiana	226	959,495	136	453,593	362	1,413,088
sulphur	0	0	5	21,995	5	21,995
Texas	4	10,080	21	75,789	25	85,869
<b>Total</b>	<b>230</b>	<b>969,575</b>	<b>162</b>	<b>551,377</b>	<b>392</b>	<b>1,520,952</b>
<b>1959</b>						
Florida	0	0	23	132,480	23	132,480
Louisiana	259	1,079,620	85	209,983	344	1,289,603
sulphur	0	0	5	22,000	5	22,000
Texas	13	23,040	4	19,983	17	43,023
<b>Total</b>	<b>272</b>	<b>1,102,660</b>	<b>117</b>	<b>384,446</b>	<b>389</b>	<b>1,487,106</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — *continued***

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1960</b>						
Florida	0	0	23	132,480	23	132,480
Louisiana	285	1,141,959	94	428,361	379	1,570,320
salt	1	2,500	0	0	1	2,500
sulphur	0	0	5	22,000	5	22,000
Texas	13	23,040	48	240,480	61	263,520
<b>Total</b>	<b>299</b>	<b>1,167,499</b>	<b>170</b>	<b>823,321</b>	<b>469</b>	<b>1,990,820</b>
<b>1961</b>						
Florida	0	0	23	132,480	23	132,480
Louisiana	294	1,189,146	85	366,967	379	1,556,113
salt	1	2,500	0	0	1	2,500
sulphur	5	6,953	0	0	5	6,953
Texas	15	30,240	40	205,920	55	236,160
<b>Total</b>	<b>315</b>	<b>1,228,839</b>	<b>148</b>	<b>705,367</b>	<b>463</b>	<b>1,934,206</b>
<b>1962</b>						
California						
phosphate	0	0	6	30,240	6	30,240
Florida	0	0	11	63,360	11	63,360
Louisiana	311	1,261,262	475	2,177,985	786	3,439,247
salt	1	2,500	0	0	1	2,500
sulphur	5	6,953	0	0	5	6,953
Texas	15	30,240	34	152,640	49	182,880
<b>Total</b>	<b>332</b>	<b>1,300,955</b>	<b>526</b>	<b>2,424,225</b>	<b>858</b>	<b>3,725,180</b>
<b>1963</b>						
California	0	0	57	312,945	57	312,945
Louisiana	342	1,381,874	441	2,030,043	783	3,411,917
salt	1	2,500	0	0	1	2,500
sulphur	5	6,953	0	0	5	6,953
Texas	15	40,500	26	115,200	41	155,700
<b>Total</b>	<b>363</b>	<b>1,431,827</b>	<b>524</b>	<b>2,458,188</b>	<b>887</b>	<b>3,890,015</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — continued**

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1964</b>						
California	0	0	54	295,665	54	295,665
Louisiana	357	1,463,149	422	1,870,554	779	3,333,703
salt	1	2,500	0	0	1	2,500
sulphur	5	6,953	0	0	5	6,953
Oregon	0	0	74	425,433	74	425,433
Texas	12	31,860	29	123,840	41	155,700
Washington	0	0	27	155,420	27	155,420
<b>Total</b>	<b>375</b>	<b>1,504,462</b>	<b>606</b>	<b>2,870,912</b>	<b>981</b>	<b>4,375,374</b>
<b>1965</b>						
California	0	0	50	272,625	50	272,625
Louisiana	406	1,632,544	335	1,487,335	741	3,119,879
salt	1	2,500	0	0	1	2,500
sulphur	5	6,953	0	0	5	6,953
Oregon	0	0	74	425,433	74	425,433
Texas	13	37,620	26	109,440	39	147,060
Washington	0	0	27	155,420	27	155,420
<b>Total</b>	<b>425</b>	<b>1,679,617</b>	<b>512</b>	<b>2,450,253</b>	<b>937</b>	<b>4,129,870</b>
<b>1966</b>						
California	0	0	35	186,225	35	186,225
Louisiana	469	1,917,276	303	1,307,869	772	3,225,145
salt	1	2,500	0	0	1	2,500
sulphur	5	6,953	0	0	5	6,953
Oregon	0	0	60	344,793	60	344,793
Texas	13	37,800	26	109,260	39	147,060
sulphur	0	0	41	59,040	41	59,040
Washington	0	0	21	120,960	21	120,960
<b>Total</b>	<b>488</b>	<b>1,964,529</b>	<b>486</b>	<b>2,128,147</b>	<b>974</b>	<b>4,092,676</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — continued**

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1967</b>						
California	0	0	3	13,515	3	13,515
Louisiana	506	2,038,821	293	1,303,928	799	3,342,749
salt	1	2,500	1	2,495	2	4,995
sulphur	5	6,953	0	0	5	6,953
Oregon	0	0	8	45,825	8	45,825
Texas	13	37,800	16	87,660	29	125,460
sulphur	0	0	34	48,960	34	48,960
Washington	0	0	3	17,280	3	17,280
<b>Total</b>	<b>525</b>	<b>2,086,074</b>	<b>358</b>	<b>1,519,663</b>	<b>883</b>	<b>3,605,737</b>
<b>1968</b>						
California	3	13,156	69	352,021	72	365,177
Louisiana	518	2,119,651	276	1,182,081	794	3,301,732
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	0	0	5	6,953
Oregon	0	0	2	11,520	2	11,520
Texas	10	11,430	125	622,304	135	633,734
sulphur	0	0	10	14,400	10	14,400
Washington	0	0	3	17,278	3	17,278
<b>Total</b>	<b>538</b>	<b>2,156,185</b>	<b>485</b>	<b>2,199,604</b>	<b>1,023</b>	<b>4,355,789</b>
<b>1969</b>						
California	7	30,300	65	334,876	72	365,176
Louisiana	531	2,182,860	265	1,106,437	796	3,289,297
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	4	5,625	9	12,578
Texas	23	83,430	113	549,134	136	632,564
sulphur	0	0	6	8,640	6	8,640
<b>Total</b>	<b>568</b>	<b>2,308,538</b>	<b>453</b>	<b>2,004,712</b>	<b>1,021</b>	<b>4,313,250</b>
<b>1970</b>						
California	10	42,256	60	312,983	70	355,239
Louisiana	557	2,329,365	254	999,393	811	3,328,758
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	4	5,625	9	12,578
Texas	34	146,340	90	431,324	124	577,664
sulphur	0	0	1	1,440	21	1,440
<b>Total</b>	<b>608</b>	<b>2,529,909</b>	<b>409</b>	<b>1,750,765</b>	<b>1,017</b>	<b>4,280,674</b>

Footnotes at end of table

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — continued**

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing <sup>1</sup>		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1971</b>						
California	12	53,776	58	301,463	70	355,239
Louisiana	596	2,497,933	303	1,248,742	899	3,746,675
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	4	5,625	9	12,578
Texas	34	146,340	69	336,464	103	482,804
<b>Total</b>	<b>649</b>	<b>2,709,997</b>	<b>434</b>	<b>1,892,294</b>	<b>1,083</b>	<b>4,602,291</b>
<b>1972</b>						
California	16	78,816	53	275,061	69	351,877
Louisiana	636	2,659,880	234	952,183	870	3,612,063
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	2	3,125	7	10,078
Texas	39	0	36	192,734	75	359,054
<b>Total</b>	<b>698</b>	<b>2,914,964</b>	<b>325</b>	<b>1,423,103</b>	<b>1,023</b>	<b>4,338,067</b>
<b>1973</b>						
Alabama	0	0	13	74,106	13	74,106
California	17	82,576	52	269,301	69	351,877
Florida	0	0	62	357,120	62	357,120
Louisiana	660	2,769,934	309	1,306,336	969	4,076,270
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	1	1,875	6	8,828
Mississippi	0	0	6	34,560	6	34,560
Texas	42	174,960	97	531,267	139	706,227
<b>Total</b>	<b>726</b>	<b>3,039,418</b>	<b>540</b>	<b>2,574,565</b>	<b>1,266</b>	<b>5,613,983</b>
<b>1974</b>						
Alabama	0	0	13	74,106	13	74,106
California	14	63,617	54	283,191	68	346,808
Florida	0	0	62	357,120	62	357,120
Louisiana	668	2,987,540	519	2,619,609	1,187	5,123,263
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	1	1,875	6	8,828
Mississippi	0	0	6	34,560	6	34,560
Texas	44	186,480	202	1,110,708	246	1,297,188
<b>Total</b>	<b>733</b>	<b>3,065,699</b>	<b>857</b>	<b>4,181,169</b>	<b>1,590</b>	<b>7,246,868</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — *continued***

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing <sup>1</sup>		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1975</b>						
Alabama	0	0	13	74,106	13	74,106
California	14	63,617	60	317,751	74	381,368
Florida	0	0	61	351,360	61	351,360
Louisiana	725	2,987,540	521	2,413,141	1,246	5,400,681
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	1	1,875	6	8,828
Mississippi	0	0	6	34,560	6	34,560
Texas	44	189,630	340	1,875,263	384	2,064,893
<b>Total</b>	<b>790</b>	<b>3,252,735</b>	<b>1,002</b>	<b>5,068,056</b>	<b>1,792</b>	<b>8,320,791</b>
<b>1976</b>						
Alabama	0	0	11	62,586	11	62,586
Alaska	0	0	76	409,057	76	409,057
California	14	63,617	110	593,240	124	656,857
Florida	0	0	50	288,000	50	288,000
Louisiana	749	3,082,564	489	2,245,316	1,238	5,327,880
salt	0	0	2	4,995	2	4,995
sulphur	0	0	1	1,875	1	1,875
Mississippi	0	0	6	34,560	6	34,560
Mid-Atlantic	0	0	93	529,466	93	529,466
Texas	70	330,414	325	1,786,413	395	2,116,827
<b>Total</b>	<b>833</b>	<b>3,476,595</b>	<b>1,163</b>	<b>5,955,508</b>	<b>1,996</b>	<b>9,432,103</b>
<b>1977</b>						
Alabama	0	0	11	62,586	11	62,586
Alaska	0	0	163	904,364	163	904,364
California	24	121,672	97	518,355	121	640,027
Florida	0	0	46	264,960	46	264,960
Louisiana	780	3,317,335	509	2,238,462	1,289	5,555,797
salt	0	0	1	2,495	1	2,495
sulphur	0	0	1	1,875	1	1,875
Mississippi	0	0	6	34,560	6	34,560
Mid-Atlantic	0	0	93	529,466	93	529,466
Texas	92	454,278	325	1,784,472	417	2,238,750
<b>Total</b>	<b>896</b>	<b>3,893,285</b>	<b>1,252</b>	<b>6,341,595</b>	<b>2,148</b>	<b>10,234,880</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — continued**

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing <sup>1</sup>		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1978</b>						
Alabama	0	0	8	45,306	8	45,306
Alaska	0	0	144	796,194	144	796,194
California	24	121,672	77	413,367	101	535,039
Florida	0	0	35	201,600	35	201,600
Louisiana	786	3,366,831	475	2,067,884	1,261	5,434,715
salt	0	0	1	2,495	1	2,495
Mississippi	0	0	4	23,040	4	23,040
Texas	121	615,583	267	1,459,775	388	2,075,358
Mid-Atlantic	0	0	93	529,466	93	529,466
South Atlantic	0	0	43	244,813	43	244,813
<b>Total</b>	<b>931</b>	<b>4,104,086</b>	<b>1,147</b>	<b>5,783,940</b>	<b>2,078</b>	<b>9,888,026</b>
<b>1979</b>						
Alabama	0	0	5	28,495	5	28,495
Alaska	0	0	116	655,260	116	655,260
California	24	121,672	121	648,555	145	770,227
Florida	0	0	35	201,600	35	201,600
Louisiana	849	3,640,793	457	2,032,785	1,306	5,673,578
salt	0	0	1	2,495	1	2,495
Texas	149	770,268	237	1,287,423	386	2,057,691
Mid-Atlantic	0	0	126	717,325	126	717,325
South Atlantic	0	0	43	244,813	43	244,813
<b>Total</b>	<b>1,022</b>	<b>4,532,733</b>	<b>1,141</b>	<b>5,818,751</b>	<b>2,163</b>	<b>10,351,484</b>
<b>1980</b>						
Alabama	0	0	5	28,495	5	28,495
Alaska	0	0	129	683,560	129	683,560
California	24	121,672	118	639,013	142	760,685
Florida	0	0	35	201,600	35	201,600
Louisiana	933	4,029,519	478	2,127,361	1,411	6,156,880
salt	2	4,995	0	0	2	4,995
Texas	186	970,805	147	794,841	333	1,765,646
Mid-Atlantic	0	0	126	737,304	126	737,304
South Atlantic	0	0	43	224,813	43	224,813
North Atlantic	0	0	63	358,659	63	358,659
<b>Total</b>	<b>1,145</b>	<b>5,126,991</b>	<b>1,144</b>	<b>5,795,646</b>	<b>2,289</b>	<b>10,922,637</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — continued**

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing <sup>1</sup>		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
	<b>1981</b>					
Alabama	0	0	5	28,495	5	28,495
Alaska			110	574,534	110	574,534
California	24	121,672	126	672,922	150	794,594
Florida	0	0	35	201,600	35	201,600
Louisiana	993	4,299,826	564	2,582,865	1,557	6,882,691
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	0	0	5	6,953
Texas	194	1,014,110	239	1,170,752	433	2,184,862
Mid-Atlantic	0	0	65	370,045	65	370,045
South Atlantic	0	0	28	159,404	28	159,404
North Atlantic	0	0	63	358,659	63	358,659
<b>Total</b>	<b>1,218</b>	<b>5,447,556</b>	<b>1,235</b>	<b>6,119,276</b>	<b>2,453</b>	<b>11,566,832</b>
	<b>1982</b>					
Alabama	0	0	5	28,495	5	28,495
Alaska	0	0	194	1,026,747	194	1,026,747
California	31	156,616	153	809,913	184	966,529
Florida	0	0	35	201,600	35	201,600
Louisiana	1,055	4,600,686	526	2,450,818	1,581	7,051,504
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	0	0	5	6,953
Texas	214	1,122,675	238	1,152,825	452	2,275,500
Mid-Atlantic	0	0	99	563,607	99	563,607
South Atlantic	0	0	68	387,124	68	387,124
North Atlantic	0	0	60	341,580	60	341,580
<b>Total</b>	<b>1,307</b>	<b>5,891,925</b>	<b>1,378</b>	<b>6,962,709</b>	<b>2,685</b>	<b>12,854,634</b>
	<b>1983</b>					
Alabama	0	0	5	28,495	5	28,495
Alaska	<sup>2</sup> 3	<sup>2</sup> 12,294	228	1,362,645	231	1,374,939
California	38	194,776	141	746,342	179	941,118
Florida	0	0	35	201,600	35	201,600
Louisiana	1,110	4,861,499	1,106	5,386,883	2,216	10,248,382
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	0	0	5	6,953
Texas	235	1,236,906	606	3,035,171	841	4,272,077
Mid-Atlantic	0	0	132	751,476	132	751,476
South Atlantic	0	0	66	375,738	66	375,738
North Atlantic	0	0	60	341,580	60	341,580
<b>Total</b>	<b>1,393</b>	<b>6,317,423</b>	<b>2,379</b>	<b>12,229,930</b>	<b>3,772</b>	<b>18,547,353</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — *continued***

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing <sup>1</sup>		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1984</b>						
Alabama	0	0	5	28,495	5	28,495
Alaska	<sup>2</sup> 4	<sup>2</sup> 17,426	710	3,885,200	714	3,902,626
California	38	194,056	144	751,800	182	945,856
Florida	0	0	35	201,600	35	201,600
Louisiana	1,163	5,098,106	1,540	7,703,853	2,703	12,801,959
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	0	0	5	6,953
Texas	264	1,397,137	896	4,591,527	1,160	5,988,664
Mid-Atlantic	0	0	140	797,020	140	797,020
South Atlantic	0	0	32	182,176	32	182,176
North Atlantic	0	0	46	261,878	46	261,878
<b>Total</b>	<b>1,476</b>	<b>6,718,673</b>	<b>3,548</b>	<b>18,403,549</b>	<b>5,024</b>	<b>25,122,222</b>
<b>1985</b>						
Alabama	0	0	5	28,495	5	28,495
Alaska	<sup>2</sup> 4	<sup>2</sup> 17,426	690	3,765,647	694	3,783,073
California	38	194,056	134	704,852	172	898,908
Florida	0	0	35	201,600	35	201,600
Louisiana	1,180	5,223,218	1,836	9,220,332	3,016	14,443,550
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	0	0	5	6,953
Texas	285	1,518,668	861	4,392,236	1,146	5,910,904
Mid-Atlantic	0	0	109	620,557	109	620,557
South Atlantic	0	0	20	113,864	20	113,864
<b>Total</b>	<b>1,514</b>	<b>6,965,316</b>	<b>3,690</b>	<b>19,047,583</b>	<b>5,204</b>	<b>26,012,899</b>
<b>1986</b>						
Alaska	<sup>2</sup> 5	<sup>2</sup> 23,119	623	3,392,103	628	3,415,222
California	38	194,056	124	650,430	162	844,486
Gulf of Mexico						
Central	1,209	5,402,369	1,524	7,541,767	2,733	12,944,136
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	0	0	5	6,953
Eastern	0	0	209	1,257,123	209	1,257,123
Western	284	1,511,497	947	4,856,051	1,231	6,367,548
Mid-Atlantic	0	0	85	483,920	85	483,920
South Atlantic	0	0	20	113,864	20	113,864
<b>Total</b>	<b>1,543</b>	<b>7,142,989</b>	<b>3,532</b>	<b>18,295,258</b>	<b>5,075</b>	<b>25,438,247</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — continued**

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing <sup>1</sup>		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1987</b>						
Alaska	<sup>2</sup> 8	<sup>2</sup> 34,913	462	2,497,906	470	2,532,819
California	45	231,843	91	474,067	136	705,910
Gulf of Mexico						
Central	1,241	5,566,371	1,623	8,124,999	2,864	13,691,370
salt	2	4,995	0	0	2	4,995
sulphur	5	6,953	0	0	5	6,953
Eastern	0	0	177	1,072,803	177	1,072,803
Western	295	1,570,074	1,154	5,999,663	1,449	7,569,737
Mid-Atlantic	0	0	69	392,830	69	392,830
South Atlantic	0	0	20	113,863	20	113,863
<b>Total</b>	<b>1,596</b>	<b>7,415,149</b>	<b>3,596</b>	<b>18,676,131</b>	<b>5,192</b>	<b>26,091,280</b>
<b>1988</b>						
Alaska	<sup>2</sup> 8	<sup>2</sup> 34,913	992	5,460,146	1,000	5,495,059
California	47	242,670	88	457,530	135	700,200
Gulf of Mexico						
Central	1,297	5,861,582	1,920	9,722,475	3,217	15,584,057
salt	2	4,995	0	0	2	4,995
sulphur	1	1,094	14	142,685	15	143,779
Eastern	0	0	175	1,061,283	175	1,061,283
Western	292	1,546,710	908	4,626,372	1,200	6,173,082
Mid-Atlantic	0	0	54	307,432	54	307,432
South Atlantic	0	0	20	113,864	20	113,864
<b>Total</b>	<b>1,647</b>	<b>7,691,964</b>	<b>4,171</b>	<b>21,891,787</b>	<b>5,818</b>	<b>29,583,751</b>
<b>1989</b>						
Alaska	<sup>2</sup> 8	<sup>2</sup> 34,913	926	5,110,793	934	5,145,706
California	48	243,126	75	394,631	123	637,757
Gulf of Mexico						
Central	1,319	5,969,992	2,216	11,258,903	3,535	17,228,895
salt	2	4,995			2	4,995
sulphur	1	1,094	14	142,685	15	143,779
Eastern	3	17,280	280	1,661,031	283	1,678,311
Western	307	1,624,655	1,253	6,599,064	1,560	8,223,719
Mid-Atlantic	0	0	44	250,500	44	250,500
South Atlantic	0	0	19	108,171	19	108,171
<b>Total</b>	<b>1,688</b>	<b>7,896,055</b>	<b>4,827</b>	<b>25,525,778</b>	<b>6,515</b>	<b>33,421,833</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — continued**

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing <sup>1</sup>		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
<b>1990</b>						
Alaska	<sup>2</sup> 8	<sup>2</sup> 34,913	886	4,920,961	894	4,955,874
California	46	236,910	64	326,425	110	563,335
<b>Gulf of Mexico</b>						
Central	1,333	6,039,865	2,503	12,688,203	3,836	18,728,068
salt	2	4,995	0	0	2	4,995
sulphur	1	1,094	14	142,685	15	143,779
Eastern	3	17,280	299	1,752,073	302	1,769,353
Western	324	1,709,561	1,445	7,660,189	1,769	9,369,750
Mid-Atlantic	0	0	42	239,114	42	239,114
South Atlantic	0	0	19	108,170	19	108,170
<b>Total</b>	<b>1,717</b>	<b>8,044,618</b>	<b>5,272</b>	<b>27,837,820</b>	<b>6,989</b>	<b>35,882,438</b>
<b>1991</b>						
Alaska	<sup>2</sup> 4	<sup>2</sup> 20,866	861	4,720,374	865	4,741,240
California	45	222,553	59	298,281	104	520,834
<b>Gulf of Mexico</b>						
Central	1,302	5,806,207	2,696	13,787,989	3,998	19,594,196
salt	1	2,495	0	0	2	2,495
sulphur	1	1,094	11	90,370	12	91,464
Eastern	0	0	279	1,595,421	279	1,595,421
Western	359	1,899,689	1,460	8,150,249	1,819	10,049,938
Mid-Atlantic	0	0	37	239,114	37	239,114
South Atlantic	0	0	19	108,170	19	108,170
<b>Total</b>	<b>1,712</b>	<b>7,952,904</b>	<b>5,422</b>	<b>28,989,968</b>	<b>7,134</b>	<b>36,942,872</b>
<b>1992</b>						
Alaska	<sup>2</sup> 4	20,866	530	2,866,523	534	2,887,389
California	45	228,492	49	253,397	94	481,889
<b>Gulf of Mexico</b>						
Central	1,286	5,734,885	2,678	13,614,463	3,964	19,349,348
salt	1	2,495	0	0	1	2,495
sulphur	1	1,094	8	74,063	9	75,157
Eastern	0	0	262	1,497,502	262	1,497,502
Western	374	1,984,571	1,154	6,462,876	1,528	8,447,447
Mid-Atlantic	0	0	34	193,568	34	193,568
South Atlantic	0	0	19	108,171	19	108,171
<b>Total</b>	<b>1,711</b>	<b>7,972,403</b>	<b>4,734</b>	<b>25,070,563</b>	<b>6,445</b>	<b>33,042,966</b>

Footnotes at end of table.

**Table 16. Producing and Nonproducing OCS Oil and Gas and Salt and Sulphur Leases under Federal Supervision by OCS Area, 1954-93 — *continued***

(Data from phosphate, salt and sulphur leases are reported separately from oil and gas leases.)

OCS Area by Adjacent State	Producing <sup>1</sup>		Nonproducing		Total Leases	
	No.	Acres	No.	Acres	No.	Acres
						1993
Alaska	0	0	346	1,849,455	346	1,849,455
California	43	217,667	49	247,459	92	465,126
Gulf of Mexico						
Central	1,310	5,867,853	2,186	11,175,868	3,496	17,043,721
salt	1	2,495	0	0	1	2,495
sulphur	3	7,470	8	74,063	11	81,533
Eastern	0	0	260	1,486,714	260	1,486,714
Western	378	2,013,459	1,028	5,722,009	1,406	7,735,468
Mid-Atlantic	0	0	34	193,568	34	193,568
South Atlantic	0	0	19	108,171	19	108,171
<b>Total</b>	<b>1,735</b>	<b>8,108,944</b>	<b>3,930</b>	<b>20,857,307</b>	<b>5,665</b>	<b>28,966,251</b>

<sup>1</sup> The designation *Producing* actually includes all the leases in each producing unit.

<sup>2</sup> Producing leases and acreage (see glossary).

**Table 17. Installations, Removals, and Cumulative Totals of Offshore Production Facilities in Federal Waters, 1953-93**

*(There have not been any production facilities installed on the Atlantic or Alaska OCS.)*

Year	Gulf of Mexico OCS			Pacific OCS			Cumulative Total
	Installations	Removals	Net Change	Installations	Removals	Net Change	
1953	41	0	41	0	0	0	41
1954	24	0	24	0	0	0	65
1955	30	1	29	0	0	0	94
1956	45	1	44	0	0	0	138
1957	55	4	51	0	0	0	189
1958	85	0	85	0	0	0	274
1959	80	1	79	0	0	0	353
1960	114	0	114	0	0	0	467
1961	111	0	111	0	0	0	578
1962	123	0	123	0	0	0	701
1963	86	2	84	0	0	0	785
1964	130	0	130	0	0	0	915
1965	126	5	121	0	0	0	1,036
1966	116	2	114	0	0	0	1,150
1967	134	0	134	1	0	1	1,285
1968	107	1	106	3	0	3	1,394
1969	105	1	104	1	0	1	1,499
1970	124	1	123	0	0	0	1,622
1971	101	4	97	0	0	0	1,719
1972	121	6	115	0	0	0	1,834
1973	98	1	97	0	0	0	1,931
1974	52	18	34	0	0	0	1,965
1975	100	32	68	0	0	0	2,033
1976	111	31	80	1	0	1	2,114
1977	116	15	101	1	0	1	2,216
1978	164	25	139	0	0	0	2,355
1979	159	43	116	2	0	2	2,473
1980	169	32	137	3	0	3	2,613
1981	171	24	147	3	0	3	2,763
1982	193	21	172	0	0	0	2,935
1983	177	<sup>1</sup> 36	141	1	0	1	3,077
1984	229	47	182	1	0	1	3,260
1985	<sup>2</sup> 214	68	146	3	0	3	3,409
1986	109	33	76	1	0	1	3,486
1987	119	24	95	1	0	1	3,582
1988	178	102	76	0	0	0	3,658
1989	195	100	95	2	0	2	3,755
1990	174	107	67	0	0	0	3,822
1991	153	117	36	0	0	0	3,858
1992	88	122	(34)	0	0	0	3,824
1993	110	179	(69)	0	0	0	3,755
<b>Total</b>	<b>4,937</b>	<b>1,206</b>	<b>3,731</b>	<b>24</b>	<b>0</b>	<b>24</b>	<b>3,755</b>

<sup>1</sup> The 1983 removal figures reflect earlier transfers of 5 Federal facilities from Federal to State jurisdiction and conversion of 3 from production to service use.

<sup>2</sup> The 1985 installation total includes 47 facilities counted during audits completed in 1985.

## Growth in Production Facilities on the OCS

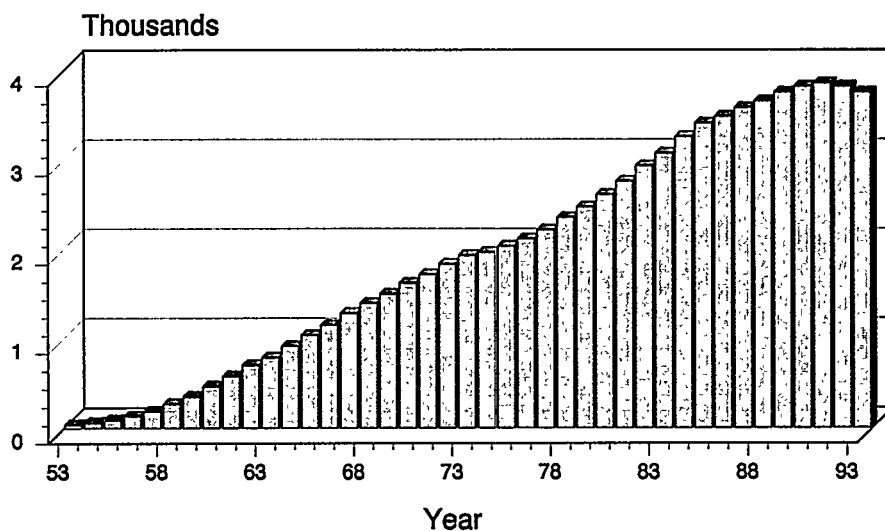


Figure 6.

## Net change in Number of OCS Production Facilities

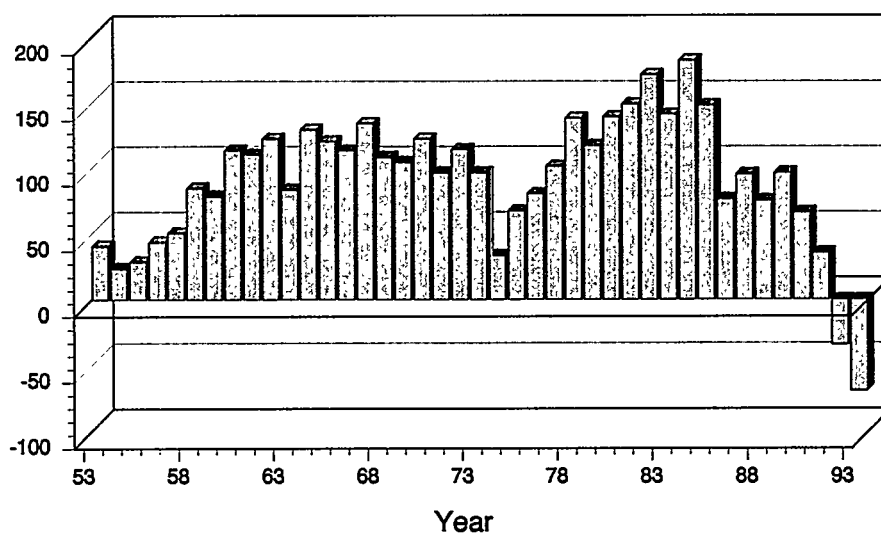


Figure 7.

**Table 18. Oil and Gas Production Facilities on the OCS by Operational District, 1993**

<i>OCS Region</i>	<i>Number of Facilities</i>
Alaska .....	0
Atlantic .....	0
Pacific .....	24
Camarillo District .....	20
Santa Maria District .....	4
Gulf of Mexico .....	3,731
Corpus Christi Subdistrict .....	128
Lake Charles Subdistrict .....	381
Lake Jackson District .....	344
Lafayette District .....	792
Houma District .....	1,055
New Orleans District .....	1,031
<b>Total</b>	<b>3,755</b>

<sup>1</sup> Pacific OCS Region platforms include Platform Ely (see table 17), but not offshore storage and treatment (OS&T) facility/vessel.

NOTE: See table 17 for information on annual installations and removals.

**Table 19. Type of Production Facilities on the OCS and their Distance from Shore, 1993**

<i>Distance from Shore (miles)</i>	<i>Facility Class (Number of Well Slots)</i>							<i>Total</i>
	<i>Processing (0)</i>	<i>Single (1)</i>	<i>Jacket (2-6)</i>	<i>Medium (7-18)</i>	<i>Large (19-27)</i>	<i>Major (28-59)</i>	<i>Super (≥60)</i>	
0 to 20	247	953	434	192	59	20	15	1,920
21 to 40	123	302	294	220	32	9	0	980
41 to 60	38	58	102	117	21	2	0	338
61 to 80	31	19	56	102	26	1	0	235
81 to 100	11	7	38	82	25	9	1	173
>100	10	3	17	55	23	1	0	109
<b>Total</b>	<b>460</b>	<b>1,342</b>	<b>941</b>	<b>768</b>	<b>186</b>	<b>42</b>	<b>16</b>	<b>3,755</b>

**Table 20. Distribution of Production Facilities by Water Depth, 1993**

<i>Water Depth (meters)</i>	<i>Facility Class (Number of Well Slots)</i>							<i>Total</i>
	<i>Processing (0)</i>	<i>Single (1)</i>	<i>Jacket (2 - 6)</i>	<i>Medium (7 - 18)</i>	<i>Large (19 - 27)</i>	<i>Major (28 - 59)</i>	<i>Super (≥60)</i>	
0 to 50	408	1,325	826	478	76	8	5	3,126
51 to 100	48	17	111	261	86	19	6	548
101 to 200	4	0	4	27	19	7	0	61
201 to 400	0	0	0	2	4	8	4	18
401 to 900	0	0	0	0	1	0	1	2
>900	0	0	0	0	0	0	0	0
<b>Total</b>	<b>460</b>	<b>1,342</b>	<b>941</b>	<b>768</b>	<b>186</b>	<b>42</b>	<b>16</b>	<b>3,755</b>

**Table 21. Pipeline Installations on the Gulf of Mexico OCS, 1951-93**

*(Both Federal- and State-permitted pipelines reported here originate in Federal waters; all landfalls are State-permitted and made on State lands. Construction setups for pipelines are listed as undated if the installation year is not reported.)*

Year	Central Gulf Permits				Western Gulf Permits				Cumulative
	Federal		State		Federal		State		
	Sections	Miles	Sections	Miles	Sections	Miles	Sections	Miles	
1951	0	0	1	0.9	0	0	0	0	0.9
1952	1	10.4	0	0	0	0	0	0	11.3
1953	0	0	0	0	0	0	0	0	11.3
1954	1	0.9	3	6.9	0	0	0	0	19.1
1955	5	8.6	0	0	0	0	0	0	27.7
1956	13	55.1	3	14.8	0	0	0	0	97.6
1957	8	8.5	2	6.9	0	0	0	0	113.0
1958	15	20.8	2	4.9	0	0	0	0	138.7
1959	8	28.4	3	4.6	0	0	0	0	171.7
1960	19	29.6	6	21.9	0	0	0	0	223.2
1961	20	58.8	7	28.5	0	0	0	0	310.5
1962	27	98.8	1	4.2	0	0	0	0	413.5
1963	39	126.7	11	42.8	0	0	0	0	583.0
1964	18	65.1	2	74.3	0	0	0	0	722.4
1965	24	63.6	3	14.9	2	22.6	1	15	838.5
1966	31	271.7	5	21.2	0	0	0	0	1,131.4
1967	36	200.4	7	34.7	1	22.1	1	15.1	1,403.7
1968	39	227.9	9	46.6	0	0	0	0	1,678.2
1969	82	415.7	9	49.6	1	4	0	0	2,147.5
1970	125	413.2	9	43.2	1	16.5	0	0	2,620.4
1971	208	393.2	3	17.7	0	0	0	0	3,031.3
1972	318	1,286.3	15	158.7	10	26	1	7.4	4,509.7
1973	103	376.5	3	10.6	4	50.1	1	10.5	4,957.4
1974	115	522.8	4	31.5	2	11.6	0	0	5,523.3
1975	129	387.1	1	4.1	2	0.3	0	0	5,914.8
1976	200	578.9	5	24.5	3	2.8	0	0	6,521.0
1977	133	356	3	22.5	2	19.6	1	1.7	6,920.8
1978	202	585.4	9	40.4	24	148.8	1	22	7,717.4
1979	204	586.3	2	17.3	21	209.4	0	0	8,530.4
1980	178	649.7	3	4.9	38	224.6	0	0	9,409.6
1981	197	546	N/A	N/A	33	158.9	N/A	N/A	10,114.5
1982	147	261.6	N/A	N/A	13	29.9	N/A	N/A	10,406.0
1983	201	465.2	N/A	N/A	26	91.1	N/A	N/A	10,962.3
1984	176	265.5	N/A	N/A	5	23.2	N/A	N/A	11,251.0
1985	161	356.4	N/A	N/A	31	163.7	N/A	N/A	11,771.1
1986	162	423.9	N/A	N/A	34	113.2	N/A	N/A	12,308.2
1987	177	349.9	N/A	N/A	29	185	N/A	N/A	12,843.1
1988	174	535.9	N/A	N/A	41	174.7	N/A	N/A	13,553.7
1989	233	480	N/A	N/A	77	294	N/A	N/A	14,327.7
1990	235	601.7	N/A	N/A	78	200.6	N/A	N/A	15,130.0
1991	236	674.9	N/A	N/A	42	168.7	N/A	N/A	15,973.6
1992	168	515.9	N/A	N/A	30	91.1	N/A	N/A	16,580.6
1993	156	411.9	N/A	N/A	28	72.7	N/A	N/A	17,065.2
<b>Subtotal</b>	<b>4,724</b>	<b>13,715</b>	<b>131</b>	<b>753</b>	<b>578</b>	<b>2,525</b>	<b>6</b>	<b>72</b>	<b>17,065.2</b>
<b>Undated</b>	<b>2,819</b>	<b>3,097.4</b>	<b>50</b>	<b>251</b>	<b>117</b>	<b>416.8</b>	<b>4</b>	<b>48.3</b>	<b>3,813.5</b>
<b>Total</b>	<b>7,543</b>	<b>16,812.6</b>	<b>181</b>	<b>1004.1</b>	<b>695</b>	<b>2,942.0</b>	<b>10</b>	<b>120.0</b>	<b>20,878.7</b>

**Table 22. Pipeline Installations on the Pacific OCS, 1967-93**

Year	Pipeline Route	Length of Pipeline (meters)			
		Oil	Gas	Oil/Gas	Water
1967	Platform Hogan to shore facility .....	1,271.62	1,271.62	0.00	1,271.62
	Platform Hogan to shore facility .....	0.00	<sup>1</sup> 1,271.62	0.00	0.00
1968	Platform "A" to shore facility .....	10,845.39	10,845.39	0.00	10,845.39
	Platform "B" to Platform "A" .....	1,211.27	1,211.27	0.00	1,211.27
	Platform Houchin to Platform Hogan .....	1,022.60	1,022.60	0.00	1,022.60
	Platform Houchin to Platform Hogan .....	0.00	<sup>1</sup> 1,022.60	0.00	0.00
	Platform "C" to Platform "B" .....	865.32	865.32		
1969	Platform Hillhouse to Platform "A" .....	856.79	856.79	0.00	856.79
1979	Platform Grace to (Platform Hope) .....	18,745.20	18,745.20	0.00	0.00
	Platform Henry to Platform Hillhouse .....	4,008.12	4,008.12	0.00	4,008.12
1980	Platform Ellen to Platform Elly .....	0.00	0.00	60.96	0.00
	Platform Elly to shore facility .....	10,282.73	0.00	0.00	0.00
1981	Platform Gilda to shore facility .....	10,036.45	10,036.45	0.00	10,036.45
	Platform Gina to shore facility .....	0.00	0.00	483.71	483.71
	Platform Hondo "A" to OS & T <sup>2</sup> .....	2,481.07	<sup>3</sup> 2,529.84	0.00	2,481.07
1983	Platform Edith to Platform Elly .....	1,873.30	0.00	0.00	0.00
	Platform Edith to (Platform Eva) .....	0.00	8,183.57	0.00	0.00
	Platform Habitat to shore facility .....	0.00	7,588.91	0.00	0.00
	Platform Hondo "A" to shore facility .....	0.00	3,346.70	0.00	0.00
1984	Platform Eureka to Platform Elly .....	2,566.41	2,596.89	0.00	2,551.77
1986	Platform Irene to shore facility .....	3,688.08	3,688.08	0.00	3,688.08
	Platform Harvest to Platform Hermosa .....	4,815.84	4,815.84	0.00	0.00
	Platform Hermosa to shore facility .....	9,662.16	9,662.16	0.00	0.00
1987	Platform Gail to Platform Grace .....	9,656.06	9,656.06	0.00	9,656.06
	Platform Hidalgo to Platform Hermosa .....	8,686.80	8,686.80	0.00	0.00
1992	Platform Harmony to shore .....	7,435.92	0.00	0.00	0.00
	(20" oil emulsion)				
	Shore to Platform Harmony .....	0.00	0.00	0.00	7,521.87
	(12" treated water)				
	Platform Hondo to Platform Harmony .....	4,607.98	0.00	0.00	0.00
	(14" oil emulsion)				
Platform Harmony to Platform Hondo .....	0.00	4,623.22	0.00	0.00	
(12" sales gas)					
Platform Heritage to Platform Harmony .....	10,900.58	0.00	0.00	0.00	
(20" oil emulsion)					
<b>Total .....</b>		<b>125,519.69</b>	<b>116,535.05</b>	<b>544.67</b>	<b>56,500.12</b>

Footnotes at end of table.

**Table 22. Pipeline Installations on the Pacific OCS, 1967-93 — continued**

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<sup>1</sup> Gas lift pipeline.

<sup>2</sup> Production from Platform Hondo, launched in 1976, is piped to a single anchor-leg mooring (SALM) to which a converted tanker, the *Santa Ynez*, is attached. An offshore storage and treatment vessel (OS&T) provides primary separation, treatment, and storage for about 40,000 barrels of oil per day. Approximately every 9 days the accumulated crude is offloaded to tankers for shipment to Exxon's Texas refinery.

<sup>3</sup> Fuel gas pipeline.

NOTE: All offshore facilities (with the launch dates) reported here are located in Federal waters with the exception of Platform Hope (1979) and Platform Eva (1983), shown above in parentheses, which are in State waters. Altogether, Federal leases offshore California are serviced by 299 kilometers (185.89 statute miles) of pipeline.



## **IV. Offshore Production of Crude Oil and Natural Gas**

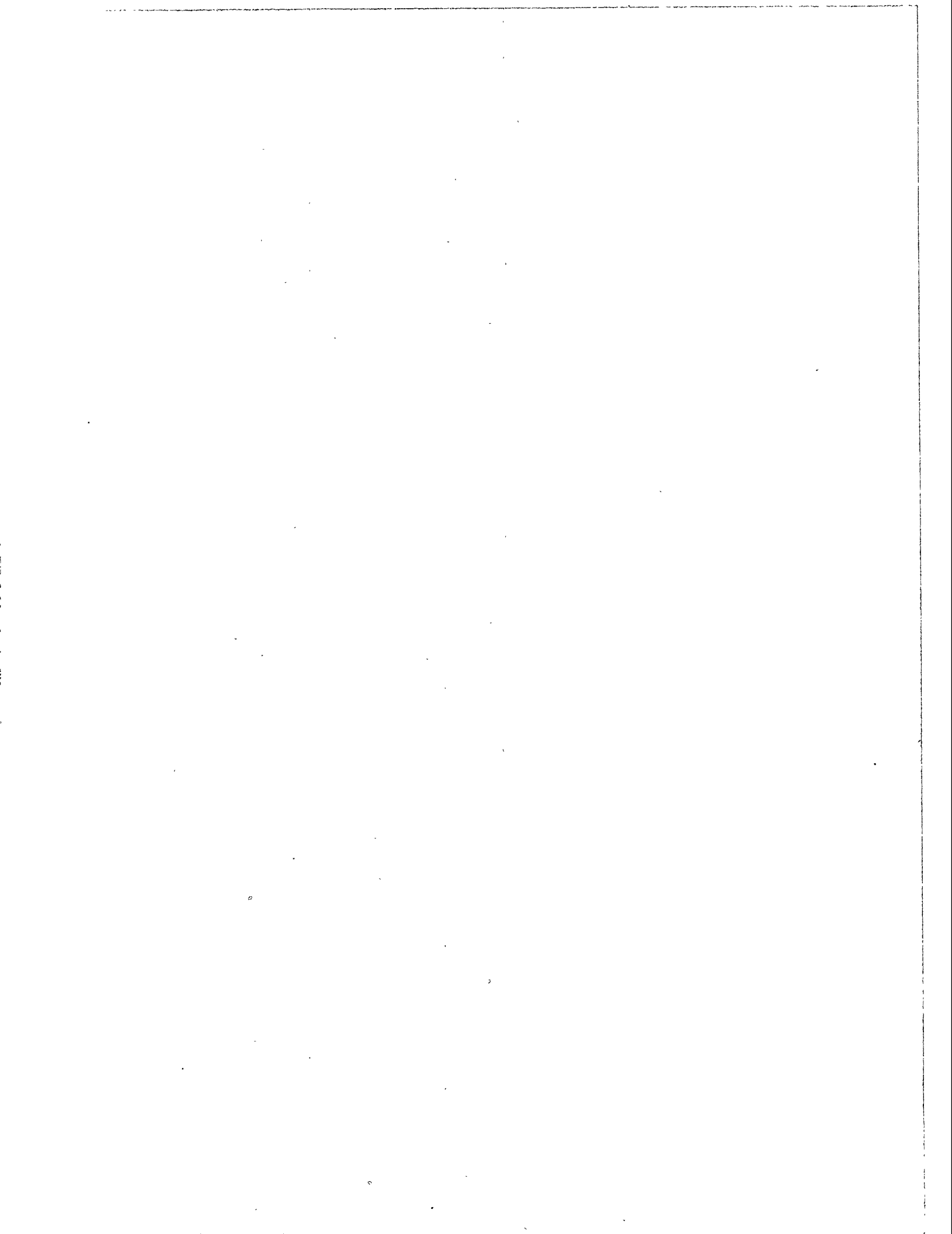
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Table 23 and figure 8 show Federal OCS oil and natural gas production as a percentage of total U.S. production. The role of Federal OCS oil and natural gas production as part of total U.S. production has increased steadily since 1954. By 1971, Federal OCS crude oil and natural gas production stood at 11.8 and 12.4 percent, respectively, of the Nation's total. Since 1971, OCS crude oil as a percentage of total U.S. production has remained stable — ranging between 8.8 and 12.9 percent before reaching an all-time high of 14.1 percent in 1993. Production of OCS natural gas as a percentage of total U.S. production has continued to rise since 1971, reaching an all-time high in 1990 of 27.4 percent before dropping to 23.5 percent in 1993.

Tables 24 through 35 compare Federal OCS production to offshore production in State waters. The States producing hydrocarbons in adjacent offshore waters are Alaska, Alabama, California, Louisiana, and Texas. There is no oil or natural gas production on the Federal OCS offshore Alaska.

The Federal OCS accounts for about 77 percent of offshore crude oil and 89 percent of natural gas production (see figs. 9 and 10). In 1993, Federal production of crude oil and condensate was 70, 71, 93, and 94 percent of total offshore production for Alabama, California, Louisiana, and Texas, respectively. For Alabama, California, Louisiana, and Texas, Federal offshore production is more than 40, 89, 93, and 94 percent, respectively, of total offshore natural gas production.

Tables 36 and 37 present a ranking of operators by field size in Federal offshore waters. There are 123 operators producing crude oil or condensate from Federal OCS leases and 126 producers of natural gas. Of these, the top ten operators produce about 70 percent of OCS oil but only 50 percent of OCS natural gas (see figs. 11 and 12). The number of producing operators has continually increased since 1983 (see fig. 13). Most of these operators produce from leases in the Gulf of Mexico. On the Pacific OCS, there are 6 crude oil and natural gas producers.



**Table 23. Federal Offshore Oil and Gas Production as a Percentage of Total U.S. Production, 1954-93**

Year	Crude Oil & Condensate (bb)			Natural Gas (Mcf)		
	Federal OCS	Total U.S.	Federal OCS as a Percent of Total U.S.	Federal OCS <sup>1</sup>	Total U.S. <sup>2</sup>	Federal OCS as a Percent of Total U.S.
1954	2,416,684	2,314,988,000	0.10	56,325,083	8,742,546,000	0.64
1955	3,841,332	2,484,428,000	0.15	81,279,042	9,045,351,000	0.90
1956	7,043,710	2,617,283,000	0.27	82,892,538	10,081,923,000	0.82
1957	11,824,727	2,616,901,000	0.45	82,573,604	10,680,258,000	0.77
1958	19,693,626	2,448,987,000	0.80	127,692,848	11,030,248,000	1.16
1959	29,628,136	2,574,590,000	1.15	207,156,296	12,046,115,000	1.72
1960	40,608,419	2,574,933,000	1.58	273,034,451	12,771,038,000	2.14
1961	55,640,370	2,621,758,000	2.12	318,280,095	13,254,028,000	2.40
1962	76,765,311	2,676,189,000	2.87	451,952,659	13,876,622,000	3.26
1963	96,391,296	2,752,723,000	3.50	564,352,606	14,746,663,000	3.83
1964	111,264,706	2,786,822,000	3.99	621,731,438	15,546,592,000	4.00
1965	165,969,656	2,848,514,000	5.83	645,589,469	16,039,753,000	4.02
1966	175,470,024	3,027,763,000	5.80	1,007,447,235	17,206,628,000	5.85
1967	209,538,664	3,215,742,000	6.52	1,187,215,750	18,171,325,000	6.53
1968	255,930,903	3,329,042,000	7.69	1,524,178,078	19,322,400,000	7.89
1969	302,187,991	3,371,751,000	8.96	1,954,486,975	20,698,240,000	9.44
1970	354,175,830	3,517,450,000	10.07	2,418,676,591	21,920,642,000	11.03
1971	406,912,590	3,453,914,000	11.78	2,777,043,418	22,493,012,000	12.35
1972	395,985,737	3,455,965,000	11.46	3,038,554,773	22,531,698,000	13.49
1973	384,796,753	3,360,920,000	11.45	3,211,588,422	22,647,549,000	14.18
1974	354,925,731	3,202,510,000	11.08	3,514,723,907	21,600,522,000	16.27
1975	325,277,114	3,056,875,000	10.64	3,458,693,454	20,108,681,000	17.20
1976	314,523,742	2,968,180,000	10.60	3,595,923,526	19,952,438,000	18.02
1977	295,948,312	3,009,425,000	9.83	3,737,746,922	20,025,463,000	18.66
1978	287,956,861	3,178,055,000	9.06	4,385,060,878	19,974,033,000	21.95
1979	274,237,127	3,121,480,000	8.79	4,672,979,139	20,471,260,000	22.83
1980	274,732,179	3,137,905,000	8.76	4,641,456,983	20,179,724,000	23.00
1981	282,923,076	3,128,780,000	9.04	4,849,536,728	19,955,823,000	24.30
1982	314,523,227	3,156,885,000	9.96	4,679,511,272	18,582,005,000	25.18
1983	350,794,257	3,171,120,000	11.06	4,040,733,857	16,884,093,000	23.93
1984	385,131,443	3,240,835,000	11.88	4,537,841,051	18,304,339,000	24.79
1985	380,022,004	3,274,415,000	11.61	4,000,975,226	17,270,227,000	23.17
1986	384,322,180	3,168,200,000	12.13	3,948,891,837	16,858,675,000	23.42
1987	358,832,754	3,047,385,000	11.78	4,425,581,690	17,432,901,000	25.39
1988	332,702,192	2,971,100,000	11.20	4,309,874,827	17,918,465,000	24.05
1989	313,739,473	2,778,745,000	11.29	4,200,263,926	18,095,147,000	23.21
1990	304,481,947	2,684,575,000	11.34	5,092,931,169	18,593,792,000	27.39
1991	326,385,853	2,707,205,000	12.06	4,515,531,673	18,532,439,000	24.37
1992	337,915,799	2,617,415,000	12.91	4,685,644,725	18,711,808,000	25.04
1993	<u>352,734,772</u>	<u>2,495,870,000</u>	<u>14.13</u>	<u>4,533,389,731</u>	<u>19,331,000,000</u>	<u>23.45</u>
<b>Total</b>	<b>9,658,196,508</b>	<b>118,167,623,000</b>	<b>8.17</b>	<b>106,459,343,892</b>	<b>691,635,466,000</b>	<b>15.39</b>

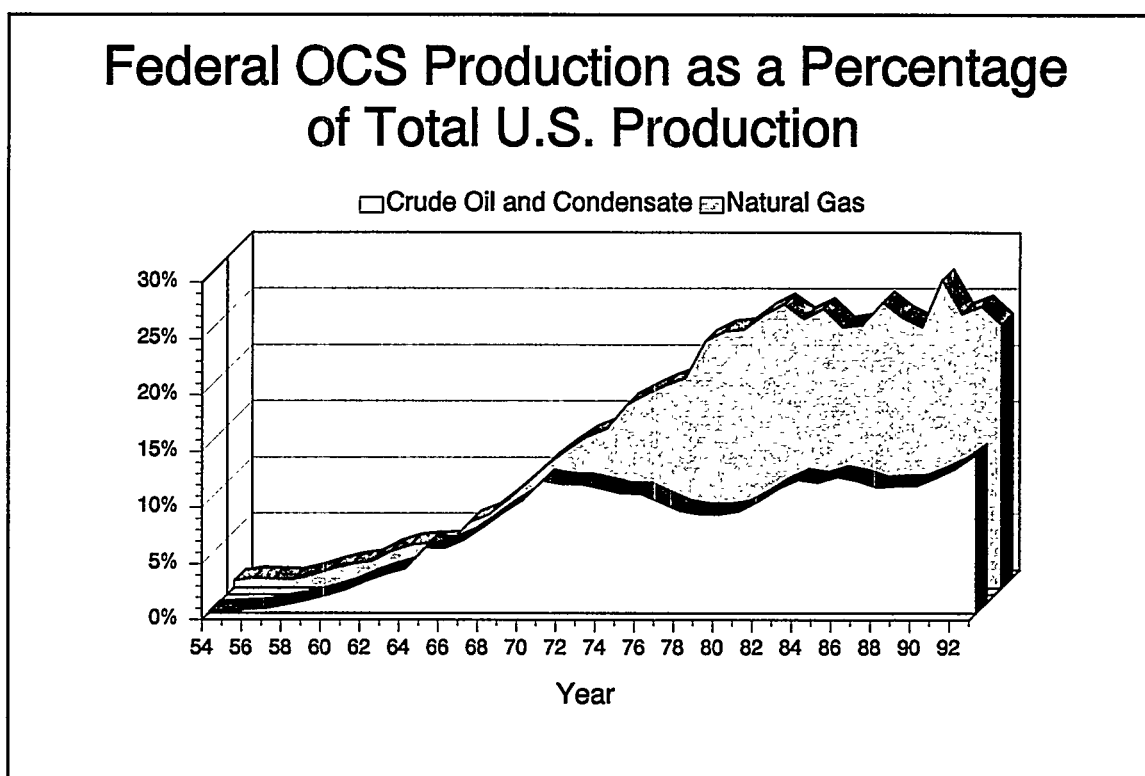
<sup>1</sup> Sales volume, which is the quantity of natural gas that is reported to MMS as being sold. This excludes gas lost (vented or flared) and liquid gas products that are refined from the natural gas stream.

<sup>2</sup> Marketed production, which is defined as gross production minus natural gas that is vented and flared, used for repressuring, and nonhydrocarbon gases removed.

SOURCE: Total U. S. production from the Department of Energy, Energy Information Administration, Monthly Energy Review [DOE/EIA-0035 (94/03)].

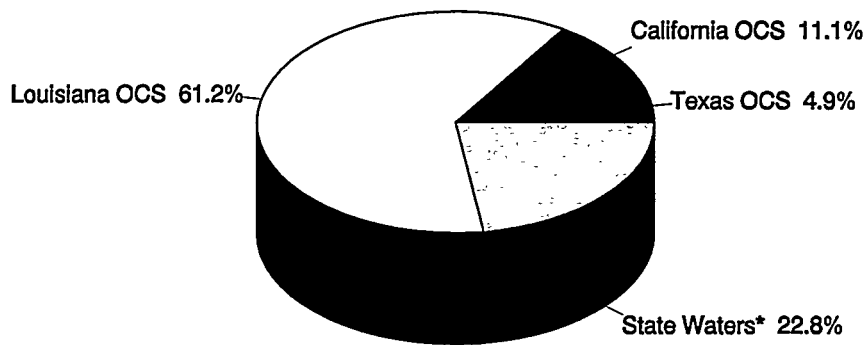
**Table 24. Alabama Offshore: Federal and State Crude Oil and Condensate Production, 1992-93**

Year	State			Federal & State Comparison		
	Crude Oil (bbl)	Condensate (bbl)	Total (bbl)	Federal OCS (bb)	Federal OCS & State (bbl)	Federal OCS Production as Percent of Total
pre-1992	0	0	0	0	0	0
1992	0	337	337	4,492	4,829	93
1993	0	2,065	2,065	4,866	6,931	70
Total	0	2,402	2,402	9,358	11,760	80



**Figure 8.**

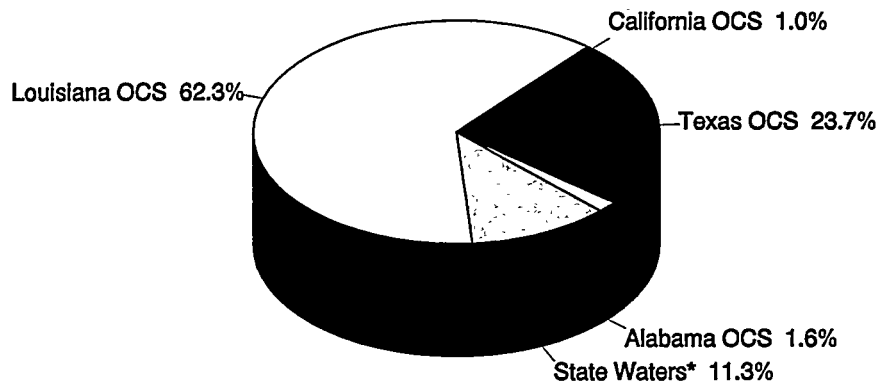
## Offshore Crude Oil and Condensate Production: 1993



\*State Waters include the territorial waters of Alabama, Alaska, California, Louisiana, and Texas

**Figure 9.**

## Offshore Natural Gas Production: 1993



\*State Waters include the territorial waters of Alabama, Alaska, California, Louisiana, and Texas

**Figure 10.**

**Table 25. Alaska Offshore: Federal and State Crude Oil and Condensate Production, 1965-93**

Year	State			Federal & State Comparison	
	Crude Oil (bbl)	Condensate (bbl)	Total (bbl)	Federal OCS (bbl)	Federal OCS as Percent of Total
1965	31,867	0	31,867	0	0
1966	2,652,688	0	2,652,688	0	0
1967	15,933,006	0	15,933,006	0	0
1968	52,524,619	0	52,524,619	0	0
1969	60,886,964	0	60,886,964	0	0
1970	70,006,786	465,167	70,471,953	0	0
1971	66,161,697	631,601	66,793,298	0	0
1972	63,742,157	594,426	64,336,583	0	0
1973	61,714,937	712,370	62,427,307	0	0
1974	59,933,837	696,352	60,630,189	0	0
1975	60,034,539	674,685	60,709,224	0	0
1976	54,511,252	679,616	55,190,868	0	0
1977	49,839,033	777,030	50,616,063	0	0
1978	45,039,005	748,812	45,787,817	0	0
1979	38,368,066	554,634	38,922,700	0	0
1980	32,308,682	417,814	32,726,496	0	0
1981	27,957,666	489,488	28,447,154	0	0
1982	24,229,745	451,160	24,680,905	0	0
1983	21,576,014	335,886	21,911,900	0	0
1984	19,307,065	321,704	19,628,769	0	0
1985	14,632,586	197,513	14,830,099	0	0
1986	15,367,307	230,691	15,597,998	0	0
<sup>1</sup> 1987	22,742,244	199,985	22,942,229	0	0
1988	50,889,832	654,520	51,544,352	0	0
1989	49,358,957	843,239	50,202,196	0	0
1990	46,780,360	872,971	47,653,331	0	0
1991	54,501,534	1,217,176	55,718,710	0	0
1992	54,834,271	1,479,134	56,313,405	0	0
1993	<u>58,832,390</u>	<u>1,633,756</u>	<u>60,466,146</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>1,194,699,106</b>	<b>15,879,730</b>	<b>1,210,578,836</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Increase in oil and condensate production caused by *Endicott Field* production (two offshore manmade islands, North Slope).

SOURCE: *State Production* — Alaska Oil and Gas Conservation Commission.

**Table 26. California Offshore: Federal and State Crude Oil and Condensate Production, pre-1933-93**

Year	State			Federal & State Comparison		
	Crude Oil (bbl)	Condensate <sup>1</sup> (bbl)	Total (bbl)	Federal OCS Total (bbl)	Federal OCS & State Total (bbl)	Federal OCS as Percent of Total
pre-1933	N/A	N/A	28,061,000	0	28,061,000	0
1933-53	N/A	N/A	394,324,000	0	394,324,000	0
1954	N/A	N/A	32,665,000	0	32,665,000	0
1955	N/A	N/A	33,252,000	0	33,252,000	0
1956	N/A	N/A	32,348,000	0	32,348,000	0
1957	N/A	N/A	30,561,000	0	30,561,000	0
1958	N/A	N/A	28,363,000	0	28,363,000	0
1959	N/A	N/A	26,787,000	0	26,787,000	0
1960	N/A	N/A	28,074,000	0	28,074,000	0
1961	N/A	N/A	29,887,000	0	29,887,000	0
1962	N/A	N/A	34,613,000	0	34,613,000	0
1963	N/A	N/A	38,346,000	0	38,346,000	0
1964	N/A	N/A	40,526,000	0	40,526,000	0
1965	N/A	N/A	42,772,000	0	42,772,000	0
1966	N/A	N/A	53,294,000	0	53,294,000	0
1967	N/A	N/A	64,807,000	0	64,807,000	0
1968	N/A	N/A	83,279,000	2,076,160	85,355,160	2.4
1969	88,635,955	425,045	89,061,000	9,942,733	99,003,733	10.0
1970	79,227,885	276,341	79,504,226	25,035,171	104,539,397	23.9
1971	70,623,439	195,575	70,819,014	31,103,681	101,922,695	30.5
1972	73,028,202	140,309	73,168,511	22,562,566	95,731,077	23.6
1973	70,480,460	102,122	70,582,582	18,818,026	89,400,608	21.0
1974	67,139,497	67,333	67,206,830	16,784,100	83,990,930	20.0
1975	64,236,367	37,594	64,273,961	15,434,507	79,708,468	19.4
1976	56,615,279	30,773	56,646,052	13,977,436	70,623,488	19.8
1977	48,196,061	27,864	48,223,925	12,258,013	60,481,938	20.3
1978	43,504,171	20,444	43,524,615	11,979,674	55,504,289	21.6
1979	42,184,333	18,241	42,202,574	10,971,013	53,173,587	20.6
1980	39,966,673	12,179	39,978,852	10,118,614	50,097,466	20.2
1981	39,154,316	10,367	39,164,683	19,619,670	58,784,353	33.4
1982	39,801,922	8,665	39,810,587	28,471,665	68,282,252	41.7
1983	37,695,467	7,120	37,702,587	30,558,866	68,261,453	44.8
1984	39,503,415	4,885	39,508,300	30,500,506	70,008,806	43.6
1985	39,503,348	85,492	39,588,840	29,673,649	69,262,489	42.8
1986	34,633,031	64,438	34,697,469	28,779,936	63,477,405	45.3
1987	30,335,628	24,766	30,360,394	31,279,566	61,639,960	50.7
1988	28,193,032	9,820	28,202,852	31,529,776	59,732,628	52.8
1989	25,390,894	6,090	25,396,984	33,079,829	58,471,514	56.6
1990	23,553,257	5,890	23,559,147	29,847,869	53,407,016	55.9
1991	23,243,332	0	23,243,332	31,668,504	54,911,836	57.7
1992	21,943,748	0	21,943,748	42,713,294	64,657,042	66.1
1993	<u>20,843,516</u>	<u>0</u>	<u>20,843,516</u>	<u>50,649,892</u>	<u>71,493,408</u>	<u>70.8</u>
<b>Total</b>	<b>1,147,633,228</b>	<b>1,581,353</b>	<b>2,171,173,581</b>	<b>619,434,716</b>	<b>2,790,608,297</b>	<b>22.2</b>

<sup>1</sup> State offshore figures are not available (N/A) except as two lump sums through 1953 and only as combined yearly totals through 1968. State totals are rounded to the nearest thousand through 1969.

SOURCE: State Production data through 1968—Conservation Committee of California; 1969-92—the State of California Division of Oil and Gas.

**Table 27. Louisiana Offshore: Federal and State Crude Oil and Condensate Production, 1941-93**

Year	State			Federal & State Comparison		
	Crude Oil (bb)	Condensate (bb)	Total (bb)	Federal OCS Total (bb)	Federal OCS & State Total (bb)	Federal OCS as Percent of Total
1941-53	22,405,822	0	22,405,822	1,266,284	23,672,106	5.3
1954	12,807,659	0	12,807,659	2,416,684	15,224,343	15.9
1955	20,428,368	3,096	20,431,464	3,838,860	24,270,324	15.8
1956	31,627,143	14,675	31,641,818	7,030,682	38,672,500	18.2
1957	37,997,383	441,629	38,439,012	11,819,086	50,258,098	23.5
1958	33,377,129	960,981	34,338,110	19,693,626	54,031,736	36.4
1959	38,633,234	1,086,855	39,720,089	29,627,876	69,347,965	42.7
1960	42,621,220	1,345,871	43,967,091	40,608,419	84,575,510	48.0
1961	42,499,174	1,477,544	43,976,718	55,640,370	99,617,088	55.9
1962	45,838,924	1,221,157	47,060,081	76,760,007	123,820,088	62.0
1963	48,166,750	1,056,747	49,223,497	96,338,161	145,561,658	66.2
1964	51,682,587	2,104,023	53,786,610	111,259,777	165,046,387	67.4
1965	48,753,046	4,499,953	53,252,999	165,963,347	219,216,346	75.7
1966	50,630,341	6,067,097	56,697,438	174,262,585	230,960,023	75.5
1967	57,262,205	7,778,015	65,040,220	206,895,491	271,935,711	76.1
1968	57,741,273	8,907,618	66,648,891	250,750,797	317,399,688	79.0
1969	58,434,872	8,815,786	67,250,658	289,461,139	356,711,797	81.1
1970	64,645,894	7,417,311	72,063,205	326,929,906	398,993,111	81.9
1971	63,047,255	6,014,111	69,061,366	374,093,809	443,155,175	84.4
1972	65,197,043	5,987,517	71,184,560	371,664,657	442,849,217	83.9
1973	49,794,738	5,162,941	54,957,679	364,391,357	419,349,036	86.9
1974	42,399,558	4,289,003	46,688,561	336,763,253	383,451,814	87.8
1975	37,017,112	3,945,210	40,962,322	308,821,939	349,784,261	88.3
1976	34,695,350	3,662,830	38,358,180	229,172,903	337,531,083	88.6
1977	30,477,122	3,327,557	33,804,679	282,795,323	316,600,002	89.3
1978	28,840,730	3,524,770	32,365,500	273,932,263	306,297,763	89.4
1979	25,990,275	3,369,666	29,359,941	259,887,654	289,247,595	89.8
1980	24,834,002	2,757,941	27,591,943	255,335,863	282,927,806	90.2
1981	23,884,965	2,334,686	26,219,651	250,329,678	276,549,329	90.5
1982	22,710,467	2,115,177	24,825,644	269,091,969	293,917,613	91.6
1983	22,340,535	1,973,935	24,314,470	300,460,274	324,774,744	92.5
1984	24,981,437	1,871,249	26,852,686	333,068,442	359,921,128	92.5
1985	22,204,428	1,543,377	23,747,805	330,507,292	354,255,097	93.3
1986	23,719,223	2,000,725	25,719,948	335,358,029	361,077,977	92.9
1987	23,174,339	1,727,436	24,901,775	303,086,548	327,988,323	92.4
1988	22,434,692	1,649,256	24,083,948	273,655,098	297,739,046	91.9
1989	20,743,514	1,819,599	22,563,113	252,987,039	275,550,152	91.8
1990	21,128,443	1,701,098	22,829,541	249,650,229	272,479,770	91.6
1991	21,476,805	1,791,408	23,268,213	270,329,209	293,597,422	92.1
1992	20,644,191	1,549,045	22,193,236	271,621,791	293,815,027	92.4
1993	<u>19,338,585</u>	<u>1,489,307</u>	<u>20,827,892</u>	<u>279,714,061</u>	<u>300,541,953</u>	<u>93.1</u>
<b>Total</b>	<b>1,456,627,833</b>	<b>118,806,202</b>	<b>1,575,434,035</b>	<b>8,717,281,777</b>	<b>10,292,715,812</b>	<b>84.7</b>

SOURCE: State Production — State of Louisiana Department of Natural Resources, Office of Conservation.

**Table 28. Texas Offshore: Federal and State Crude Oil and Condensate Production, 1954-93**

Year	State		Total (bbl)	Federal & State Comparison		
	Crude Oil <sup>1</sup> (bbl)	Condensate <sup>1</sup> (bbl)		Federal OCS Total (bbl)	Federal OCS & State Total (bbl)	Federal OCS as Percent of Total
1954	N/A	N/A	10,000	0	10,000	0.0
1955	N/A	N/A	154,000	2,472	156,472	1.6
1956	N/A	N/A	127,000	13,028	140,028	9.3
1957	N/A	N/A	250,000	5,641	255,641	2.2
1958	N/A	N/A	470,000	0	470,000	0.0
1959	N/A	N/A	499,000	260	499,260	0.1
1960	N/A	N/A	567,000	0	567,000	0.0
1961	N/A	N/A	292,000	0	292,000	0.0
1962	N/A	N/A	800,000	5,304	805,304	0.7
1963	N/A	N/A	616,000	53,135	669,135	7.9
1964	N/A	N/A	573,000	4,929	577,929	0.9
1965	N/A	N/A	553,000	6,309	559,309	1.1
1966	111,782	255,812	367,594	1,207,439	1,575,033	76.7
1967	109,733	170,348	280,081	2,643,173	2,923,254	90.4
1968	34,090	501,929	536,019	3,103,946	3,639,965	85.3
1969	194,460	29,268	223,728	2,784,119	3,007,847	92.6
1970	344,872	434,638	779,510	2,210,753	2,990,263	73.9
1971	301,092	172,925	474,017	1,715,100	2,189,117	78.3
1972	262,179	477,603	739,782	1,758,514	2,498,296	70.4
1973	311,731	355,824	667,555	1,587,370	2,254,925	70.4
1974	285,249	292,861	578,110	1,378,378	1,956,488	70.5
1975	149,579	204,226	353,805	1,020,668	1,374,473	74.3
1976	344,401	364,145	708,546	1,373,403	2,081,949	66.0
1977	1,014,854	1,605,401	2,620,255	894,976	3,515,231	25.5
1978	863,308	1,594,297	2,457,605	2,044,924	4,502,529	45.4
1979	760,504	1,783,595	2,544,099	3,378,460	5,922,559	57.0
1980	574,995	1,387,576	1,962,571	9,277,702	11,240,273	82.5
1981	1,039,463	784,301	1,823,764	12,973,728	14,797,492	87.7
1982	922,763	831,514	1,754,277	16,959,593	18,713,870	90.6
1983	1,824,242	462,307	2,286,549	19,775,117	22,061,666	89.6
1984	1,753,154	347,597	2,100,751	21,562,495	23,663,246	91.1
1985	1,779,269	396,361	2,175,630	19,841,063	22,016,693	90.1
1986	1,816,738	274,718	2,091,456	20,184,215	22,275,671	90.6
1987	1,564,683	224,119	1,788,802	24,466,640	26,255,442	93.2
1988	1,272,823	226,774	1,499,597	27,517,318	29,016,915	94.8
1989	1,334,570	283,706	1,618,276	27,677,904	29,296,180	94.5
1990	1,298,719	470,061	1,768,780	24,983,849	26,752,629	93.4
1991	2,049,597	402,910	2,452,507	24,415,091	26,867,598	90.0
1992	1,876,320	262,178	2,138,498	23,594,391	25,732,889	91.7
1993	<u>1,670,536</u>	<u>264,722</u>	<u>1,935,258</u>	<u>22,365,953</u>	<u>24,301,211</u>	<u>92.0</u>
<b>Total</b>	<b>25,865,706</b>	<b>14,861,716</b>	<b>40,727,422</b>	<b>322,696,282</b>	<b>363,423,704</b>	<b>88.8</b>

<sup>1</sup> Separate crude oil and condensate figures are not available (NA) from the State before 1966, and the combined totals are rounded to the nearest thousand through 1965.

SOURCE: State Production—Railroad Commission of Texas, Oil and Gas Division

**Table 29. State Offshore and Federal OCS: Total Crude Oil and Condensate Production, pre-1954-93**

<i>Year</i>	<i>State (bbl)</i>	<i>Federal OCS (bbl)</i>	<i>Total (bbl)</i>	<i>Federal OCS as Percent of Total</i>
pre-1954	444,790,822	<sup>1</sup> 1,266,284	446,057,106	0.3
1954	45,482,659	2,416,684	47,899,343	5.0
1955	53,837,464	3,841,332	57,678,796	6.7
1956	64,116,818	7,043,710	71,160,528	9.9
1957	69,250,012	11,824,727	81,074,739	14.6
1958	63,171,110	19,693,626	82,864,736	23.8
1959	67,006,089	29,628,136	96,634,225	30.7
1960	72,608,091	40,608,419	113,216,510	35.9
1961	74,155,718	55,640,370	129,796,088	42.9
1962	82,473,081	76,765,311	159,238,392	48.2
1963	88,185,497	96,391,296	184,576,793	52.2
1964	94,885,610	111,264,706	206,150,316	54.0
1965	96,609,866	165,969,656	262,579,522	63.2
1966	113,011,720	175,470,024	288,481,744	60.8
1967	146,060,307	209,538,664	355,598,971	58.9
1968	202,988,529	255,930,903	458,919,432	55.8
1969	217,422,350	302,187,991	519,610,341	58.2
1970	222,818,894	354,175,830	576,994,724	61.4
1971	207,147,695	406,912,590	614,060,285	66.3
1972	209,429,436	395,985,737	605,415,173	65.4
1973	188,635,123	384,796,753	573,431,876	67.1
1974	175,103,690	354,925,731	530,029,421	67.0
1975	166,299,312	325,277,114	491,576,426	66.2
1976	150,903,646	314,523,742	465,427,388	67.6
1977	135,264,922	295,948,312	431,213,234	68.6
1978	124,135,537	287,956,861	412,092,398	69.9
1979	113,029,314	274,237,127	387,266,441	70.8
1980	102,259,862	274,732,179	376,992,041	72.9
1981	95,655,252	282,923,076	378,578,328	74.7
1982	91,071,413	314,523,227	405,594,640	77.5
1983	86,215,506	350,794,257	437,009,763	80.3
1984	88,090,506	385,131,443	473,221,949	81.4
1985	80,342,374	380,022,004	460,364,378	82.5
1986	78,106,871	384,322,180	462,429,051	83.1
1987	79,993,200	358,832,754	438,825,954	81.8
1988	105,330,749	332,702,192	438,032,941	76.0
1989	99,780,569	313,744,772	413,525,341	75.9
1990	95,810,799	304,481,947	400,292,746	76.1
1991	104,682,762	326,412,804	431,045,566	75.7
1992	102,588,887	337,933,968	440,522,855	76.7
1993	<u>104,074,877</u>	<u>352,734,771</u>	<u>456,809,648</u>	<u>77.2</u>
<b>Total</b>	<b>5,002,826,939</b>	<b>9,659,513,210</b>	<b>14,662,340,149</b>	<b>65.9</b>

<sup>1</sup> Production from Federal leases on the OCS began after 1953; however, reporting of both production and royalties was transferred from certain pre-1954 wells located in Federal waters.

NOTE: Louisiana and California had offshore leases in production before 1954.

**Table 30. Alabama Offshore: Federal and State Casinghead and Dry Gas Production, 1987-93**

(State production is reported at 14.65 psia and Federal production is reported at 15.025 psia.. All production figures are converted to a 14.73 pressure base.)

Year	State	Federal & State Comparison		
	Dry Gas (Mcf)	Federal OCS (Mcf)	Federal OCS & State Total (Mcf)	Federal OCS as Percent of Total
1987	41,986	0	41,986	0
1988	9,439,888	0	9,439,888	0
1989	12,876,571	0	12,876,571	0
1990	19,861,302	0	19,861,302	0
1991	32,602,862	0	32,602,682	0
1992	111,644,951	79,307,238	190,952,189	41.5
1993	<u>131,508,215</u>	<u>88,569,280</u>	<u>220,077,496</u>	<u>40.2</u>
<b>Total</b>	<b>317,975,775</b>	<b>167,876,519</b>	<b>485,852,294</b>	<b>34.6</b>

SOURCE: State Production—State Oil and Gas Board of Alabama.

**Table 31. Alaska Offshore: Federal and State Casinghead and Dry Gas Production, 1965–93**

(State production is reported at 14.65 psia. Production is converted to a 14.73 pressure base.)

Year	State		Federal & State Comparison		
	Casinghead Gas (Mcf)	Dry Gas (Mcf)	Total (Mcf)	Federal OCS Total (Mcf)	Federal OCS as Percent of Total
1965	10,861	0	10,861	0	0
1966	1,193,588	0	1,193,588	0	0
1967	8,997,159	0	8,997,159	0	0
1968	25,635,279	31,346	25,666,625	0	0
1969	30,565,788	12,442,833	43,008,620	0	0
1970	37,289,784	45,398,212	82,687,996	0	0
1971	37,524,667	48,332,760	85,857,426	0	0
1972	30,825,064	45,576,373	76,401,437	0	0
1973	26,914,300	47,335,335	74,249,635	0	0
1974	23,447,569	50,821,371	74,268,940	0	0
1975	22,552,799	53,327,355	75,880,154	0	0
1976	22,105,909	51,634,187	73,740,096	0	0
1977	22,479,313	54,639,108	77,118,421	0	0
1978	20,387,894	54,124,023	74,511,916	0	0
1979	16,502,925	56,893,474	73,396,398	0	0
1980	15,268,701	48,924,007	64,192,708	0	0
1981	14,812,542	56,923,248	71,735,790	0	0
1982	13,724,272	54,298,247	68,022,519	0	0
1983	12,172,936	56,501,727	68,674,662	0	0
1984	11,258,011	57,051,959	68,309,970	0	0
1985	9,412,310	53,042,278	62,454,588	0	0
1986	9,150,629	53,487,964	62,638,593	0	0
<sup>1</sup> 1987	16,239,041	53,236,778	69,475,818	0	0
1988	43,601,909	57,878,041	101,479,950	0	0
1989	50,264,533	72,430,167	122,694,700	0	0
1990	49,424,293	94,642,047	144,066,340	0	0
1991	70,931,371	100,733,152	171,664,523	0	0
1992	106,310,788	110,066,434	216,377,221	0	0
1993	<u>133,000,977</u>	<u>105,372,125</u>	<u>238,373,102</u>		<u>0</u>
<b>Total</b>	<b>882,005,206</b>	<b>1,495,144,551</b>	<b>2,377,149,751</b>	<b>0</b>	<b>0</b>

<sup>1</sup>Increase in gas and casinghead gas production caused by *Endicott Field* production (two offshore manmade islands, North Slope).

SOURCE: State Production—Alaska Oil and Gas Conservation Commission.

**Table 32. California Offshore: Federal and State Casinghead and Dry Gas Production, 1960-93**

(Federal and State production are reported at 14.73 psia.)

Year	State			Federal & State Comparison		
	Casinghead <sup>1</sup> Gas (Mcf)	Dry Gas <sup>1</sup> (Mcf)	Total (Mcf)	Federal OCS Total (Mcf)	Federal OCS & State Total (Mcf)	Federal OCS as Percent of Total
1960	N/A	N/A	1,113,000	0	1,113,000	0.0
1961	N/A	N/A	5,903,000	0	5,903,000	0.0
1962	N/A	N/A	10,671,000	0	10,671,000	0.0
1963	N/A	N/A	25,769,000	0	25,769,000	0.0
1964	N/A	N/A	35,323,000	0	35,323,000	0.0
1965	N/A	N/A	40,770,000	0	40,770,000	0.0
1966	N/A	N/A	46,839,000	0	46,839,000	0.0
1967	N/A	N/A	46,732,000	0	46,792,000	0.0
1968	N/A	N/A	85,765,000	1,237,180	87,002,180	1.4
1969	44,701,265	34,356,739	79,058,004	6,016,485	85,074,489	7.1
1970	33,098,387	25,793,815	58,892,202	13,757,148	72,649,350	18.9
1971	27,539,950	18,236,683	45,776,633	17,853,055	63,629,688	28.1
1972	22,394,587	12,352,539	34,747,126	12,546,915	47,294,041	26.5
1973	20,921,819	9,674,530	30,596,349	9,157,714	39,754,063	23.0
1974	18,788,339	10,142,744	28,931,083	7,234,937	36,166,020	20.0
1975	16,580,811	6,739,235	23,320,046	5,978,959	29,299,005	20.4
1976	13,703,065	5,280,849	18,983,914	5,533,258	24,517,172	22.6
1977	11,152,000	3,085,185	14,237,185	5,366,181	19,603,366	27.4
1978	10,659,570	3,536,577	14,196,147	5,193,985	19,390,132	26.8
1979	11,415,873	2,134,394	13,550,267	5,430,689	18,980,956	28.6
1980	10,628,256	2,446,480	13,074,736	5,771,792	18,846,528	30.6
1981	11,300,192	2,170,475	13,470,667	12,769,110	26,239,777	48.7
1982	12,075,887	1,931,298	14,007,185	17,814,958	31,822,143	56.0
1983	12,054,614	1,798,652	13,853,266	23,923,258	37,776,524	63.3
1984	12,517,184	1,319,403	13,836,587	45,912,435	59,749,022	76.8
1985	13,356,754	6,126,304	19,483,058	63,523,094	83,006,152	76.5
1986	12,911,086	5,341,798	18,252,884	57,989,035	76,241,919	76.1
1987	10,936,678	2,067,900	13,004,578	54,872,217	67,876,795	80.0
1988	9,659,808	1,055,404	10,715,212	49,132,759	59,847,971	82.1
1989	8,173,175	855,205	9,028,380	50,872,775	59,901,155	84.9
1990	7,664,748	340,226	8,004,974	49,948,905	57,953,879	86.2
1991	7,577,376	0	7,577,376	52,491,511	60,074,887	87.4
1992	7,210,620	0	7,210,620	55,323,296	62,533,916	88.5
1993	6,467,188	0	6,467,188	51,828,533	58,295,721	88.9
<b>Total</b>	<b>373,489,323</b>	<b>156,786,435</b>	<b>829,160,667</b>	<b>687,486,184</b>	<b>1,516,646,851</b>	<b>45.0</b>

<sup>1</sup> Separate casinghead and dry gas figures are not available (N/A) from the State before 1968, and the combined totals are rounded to the nearest thousand through 1968.

SOURCE: State Production data through 1968—Conservation Committee of California; 1969-92—State of California, Division of Oil and Gas.

**Table 33. Louisiana Offshore: Federal and State Casinghead and Dry Gas Production, 1941-93**

*(Federal and State production is reported using 15.025 psia. All production figures are converted to a 14.73 pressures base.)*

Year	State			Federal & State Comparison		
	Casinghead Gas (Mcf)	Dry Gas (Mcf)	Total (Mcf)	Federal OCS Total (Mcf)	Federal OCS & State Total (Mcf)	Federal OCS as Percent of Total
1941-53	14,332,724	2,705,913	17,038,636	25,382,974	42,421,611	59.08
1954	9,379,658	1,784,267	11,163,925	61,104,514	72,268,439	84.6
1955	17,467,816	4,160,199	21,628,015	89,174,039	110,802,054	80.5
1956	28,770,662	7,233,098	36,003,759	92,658,051	128,661,810	72.0
1957	37,283,975	21,089,443	58,373,419	95,201,718	153,575,137	62.0
1958	30,672,719	45,118,435	75,791,154	146,476,573	222,267,727	65.9
1959	38,817,599	48,354,540	87,172,139	228,816,444	315,988,583	72.4
1960	46,874,757	61,691,807	108,566,564	287,184,398	395,750,962	72.6
1961	48,409,419	70,895,907	119,305,327	341,457,127	460,762,454	74.1
1962	53,240,138	79,819,450	133,059,588	460,395,415	593,455,003	77.6
1963	55,726,366	91,011,320	146,737,686	571,700,603	718,438,289	79.6
1964	56,786,776	103,877,134	160,663,910	657,509,495	818,173,405	80.4
1965	49,433,348	182,222,010	231,655,358	757,581,636	989,236,994	76.6
1966	50,968,519	251,566,341	302,534,860	972,207,948	1,274,742,808	76.3
1967	54,317,020	369,554,113	423,871,133	1,203,364,312	1,627,235,446	74.0
1968	56,253,978	472,990,977	529,244,955	1,518,507,284	2,047,752,239	74.2
1969	53,833,593	545,405,312	599,238,904	1,861,111,518	2,460,350,422	75.6
1970	67,542,844	571,546,073	639,088,917	2,315,355,871	2,954,444,788	78.4
1971	78,567,075	536,263,122	614,830,197	2,655,012,406	3,269,842,603	81.2
1972	84,243,335	562,850,168	647,093,504	2,911,641,756	3,558,735,260	81.8
1973	66,356,517	531,680,844	598,037,361	3,224,027,930	3,822,065,291	84.4
1974	59,070,604	497,624,430	556,695,034	3,344,660,590	3,901,355,624	85.7
1975	48,622,260	497,757,280	546,379,540	3,388,408,510	3,934,788,050	86.1
1976	43,806,173	507,688,189	551,494,362	3,532,017,404	4,083,511,766	86.5
1977	36,145,673	486,808,112	522,953,785	3,755,522,498	4,278,476,283	87.8
1978	30,300,913	496,920,395	527,221,308	4,083,241,273	4,610,462,581	88.6
1979	26,289,968	487,380,218	513,670,186	4,223,175,877	4,736,846,064	89.2
1980	22,979,195	417,236,745	440,215,940	4,190,788,707	4,631,004,647	90.5
1981	22,157,056	381,008,582	403,165,638	4,246,663,721	4,649,829,358	91.3
1982	23,657,754	363,118,935	386,776,689	3,873,552,714	4,260,329,403	90.9
1983	26,514,509	313,542,702	340,057,211	3,296,250,261	3,636,307,472	90.6
1984	30,104,263	306,618,200	336,722,463	3,746,674,125	4,083,396,588	91.8
1985	29,142,993	217,557,800	246,700,792	3,300,855,500	3,547,556,292	93.0
1986	32,539,589	211,970,831	244,510,421	3,069,670,092	3,314,180,513	92.6
1987	28,703,498	208,515,913	237,219,411	3,384,342,974	3,621,562,386	93.4
1988	23,953,736	201,944,180	225,897,916	3,390,418,253	3,616,316,169	93.8
1989	22,677,548	192,029,009	214,706,556	3,380,040,292	3,594,746,848	94.9
1990	20,952,494	170,806,515	191,759,009	3,553,534,364	3,745,293,372	94.9
1991	21,227,336	137,743,228	158,970,564	3,407,500,570	3,566,471,134	95.5
1992	21,633,887	123,340,074	144,973,961	3,303,614,473	3,448,588,435	95.8
1993	<u>20,580,508</u>	<u>132,738,886</u>	<u>153,319,393</u>	<u>3,350,158,319</u>	<u>3,503,477,712</u>	<u>95.6</u>
<b>Total</b>	<b>1,590,338,796</b>	<b>10,914,170,697</b>	<b>12,504,509,493</b>	<b>92,296,962,528</b>	<b>104,801,472,021</b>	<b>88.0</b>

NOTE: Only lump sums are available from the State for the 13 years before 1954.

SOURCE: State Production—State of Louisiana Department of Natural Resources, Office of Conservation

**Table 34. Texas Offshore: Federal and State Casinghead and Dry Gas Production, 1954-93**

(State agencies report production at 14.65 psia and MMS officials report production at 15.025 psia. All production figures are converted to a 14.73 pressure base.)

Year	State			Federal & State Comparison		
	Casinghead Gas (Mcf)	Gas-Well Gas <sup>2</sup> (Mcf)	Total (Mcf)	Federal OCS Total (Mcf)	Federal OCS & State Total (Mcf)	Federal OCS as Percent of Total
1954	N/A	N/A	3,421,317	0	3,421,317	>0.1
1955	N/A	N/A	6,842,634	4,721	6,847,356	0.1
1956	N/A	N/A	6,842,634	19,869	6,862,503	0.3
1957	N/A	N/A	13,685,470	11,199	13,696,669	0.1
1958	N/A	N/A	23,949,219	0	23,949,219	>0.1
1959	N/A	N/A	23,949,219	875	23,950,094	>0.1
1960	N/A	N/A	30,791,853	0	30,791,853	>0.1
1961	N/A	N/A	13,685,268	0	13,685,268	>0.1
1962	N/A	N/A	41,055,804	6,278	41,062,082	>0.1
1963	N/A	N/A	30,791,853	180,615	30,972,468	0.6
1964	N/A	N/A	30,791,853	23,295	30,815,148	0.1
1965	N/A	N/A	27,370,536	41,426	27,411,962	0.2
1966	N/A	N/A	21,505,526	40,150,762	61,656,288	65.1
1967	N/A	N/A	60,514,123	107,543,591	168,057,714	64.0
1968	N/A	N/A	189,742,133	113,557,526	303,299,659	37.4
1969	N/A	N/A	110,356,829	129,081,554	239,438,383	53.9
1970	1,742,382	128,904,947	130,647,330	134,791,079	265,438,409	50.8
1971	2,037,525	105,616,692	107,654,216	129,438,526	237,092,743	54.6
1972	1,942,907	127,476,403	129,419,310	153,397,624	282,816,935	54.2
1973	1,205,732	100,602,652	101,808,384	155,355,870	257,164,254	60.4
1974	1,120,077	107,882,031	109,002,108	143,243,176	252,245,284	56.8
1975	731,334	96,693,840	97,425,175	108,195,579	205,620,754	52.6
1976	974,728	111,820,323	112,795,052	96,993,975	209,789,026	46.2
1977	2,219,152	178,102,830	180,321,981	87,303,092	267,625,073	32.6
1978	2,236,064	166,982,506	169,218,570	41,962,843	211,181,413	19.9
1979	1,772,569	204,717,169	206,489,739	542,956,105	749,445,844	72.4
1980	1,873,587	251,122,036	252,995,623	671,305,577	924,301,200	72.6
1981	3,278,425	232,143,174	235,421,600	742,027,954	977,449,554	75.9
1982	2,769,594	242,855,956	245,625,550	886,977,924	1,132,603,474	78.3
1983	3,381,651	143,948,103	147,329,754	861,441,382	1,008,771,136	85.4
1984	3,391,242	108,090,617	111,481,860	909,615,709	1,021,097,569	89.1
1985	3,491,506	104,051,921	107,543,426	838,808,151	946,351,577	88.6
1986	2,346,529	112,154,478	114,501,007	1,055,356,244	1,169,857,250	90.2
1987	2,997,255	95,053,454	98,050,709	1,231,878,168	1,329,928,877	92.6
1988	1,601,270	95,943,562	97,544,832	1,279,608,530	1,377,153,362	92.9
1989	2,502,648	108,398,202	110,900,849	1,349,695,952	1,460,596,801	92.4
1990	994,541	107,408,998	108,403,540	1,454,239,629	1,562,643,169	93.1
1991	1,607,991	96,884,485	98,492,476	1,396,382,102	1,494,874,579	93.4
1992	1,625,253	76,638,024	78,263,277	1,332,886,775	1,411,150,053	94.5
1993	<u>1,350,387</u>	<u>77,883,413</u>	<u>79,233,799</u>	<u>1,275,933,338</u>	<u>1,355,167,137</u>	<u>94.2</u>
<b>Total</b>	<b>49,194,349</b>	<b>3,181,375,819</b>	<b>3,230,570,167</b>	<b>16,879,795,305</b>	<b>20,110,365,472</b>	<b>83.9</b>

<sup>1</sup> State offshore figures are not available (N/A) except as combined totals from 1954-69. Totals were rounded to the nearest thousand through 1985.

<sup>2</sup> Texas reports natural gas production as wet gas by State statute.

SOURCE: State Production—Railroad Commission of Texas, Oil and Gas Division

**Table 35. State Offshore and Federal OCS: Total Casinghead and Dry Gas Production, pre-1954-93**

Year	State (Mcf)	Federal OCS (Mcf)	Total (Mcf)	Federal OCS as Percent of Total
pre-1954	17,038,636	25,382,974	42,421,611	59.8
1954	14,585,242	61,104,514	75,689,756	80.7
1955	28,470,650	89,178,760	117,649,410	75.8
1956	42,846,393	92,677,920	135,524,314	68.4
1957	72,058,889	95,212,917	167,271,805	56.9
1958	99,740,373	146,476,573	246,216,946	59.5
1959	111,121,359	228,817,319	339,938,678	67.3
1960	140,471,417	287,184,398	427,655,815	67.2
1961	138,893,595	341,457,127	480,350,722	71.1
1962	184,786,392	460,401,693	645,188,085	71.4
1963	203,298,539	571,881,217	775,179,757	73.8
1964	226,778,763	657,532,791	884,311,554	74.4
1965	299,806,755	757,623,062	1,057,429,817	71.7
1966	372,072,973	1,012,358,710	1,384,431,683	73.1
1967	540,114,415	1,310,907,903	1,851,022,318	70.8
1968	830,418,713	1,633,301,990	2,463,720,703	66.3
1969	831,662,358	1,996,209,557	2,827,871,915	70.6
1970	911,316,444	2,463,904,098	3,375,220,542	72.9
1971	854,118,473	2,802,303,987	3,656,422,460	76.6
1972	887,661,378	3,077,586,295	3,965,247,672	77.6
1973	804,691,729	3,388,541,513	4,193,233,242	80.8
1974	768,897,165	3,495,138,703	4,264,035,868	81.9
1975	743,004,914	3,502,583,049	4,245,587,963	82.5
1976	757,013,424	3,634,544,637	4,391,558,061	82.8
1977	794,631,373	3,848,191,771	4,642,823,143	82.9
1978	785,147,942	4,130,398,100	4,915,546,042	84.0
1979	807,106,590	4,771,562,671	5,578,669,261	85.5
1980	770,479,007	4,867,866,076	5,638,345,083	86.3
1981	723,793,695	5,001,460,785	5,725,254,480	87.4
1982	714,431,944	4,778,345,596	5,492,777,540	86.9
1983	569,914,893	4,181,614,901	4,751,529,794	88.1
1984	530,350,879	4,702,202,270	5,232,553,149	89.9
1985	436,181,864	4,203,186,745	4,639,368,609	90.6
1986	439,902,904	4,183,015,371	4,622,918,275	90.5
1987	417,792,502	4,671,135,345	5,088,927,847	91.8
1988	445,077,798	4,728,599,430	5,173,677,228	91.4
1989	470,207,057	4,793,483,582	5,263,690,639	91.1
1990	472,203,623	5,077,692,659	5,549,896,282	91.5
1991	469,307,801	4,842,382,241	5,311,690,042	91.2
1992	558,470,031	4,770,924,663	5,329,394,694	89.5
1993	<u>608,901,697</u>	<u>4,766,489,470</u>	<u>5,375,391,167</u>	<u>88.7</u>
<b>Total</b>	<b>19,894,770,589</b>	<b>110,450,863,384</b>	<b>130,345,633,973</b>	<b>84.7</b>

NOTE: Production from Federal leases on the OCS began after 1953, with passage of the Submerged Lands Act, when certain pre-OCS leases already in production on were transferred to the Federal Government.

## OCS Crude Oil Production: 1993

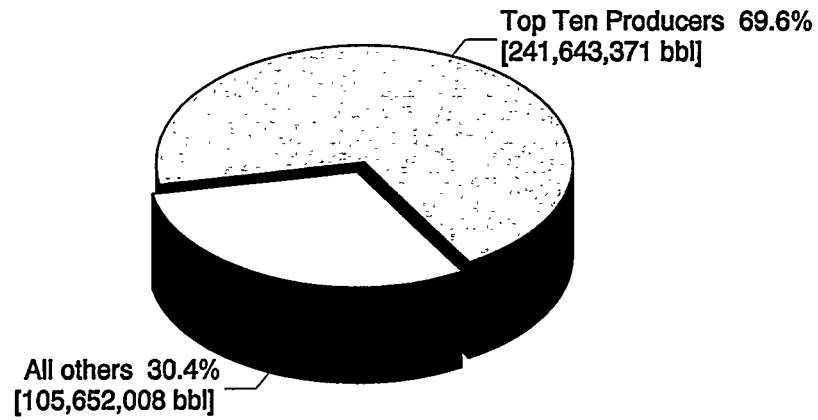


Figure 11.

## OCS Natural Gas Production: 1993

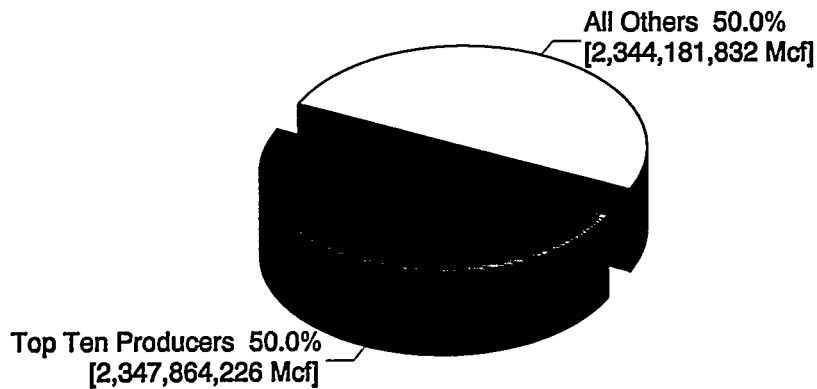


Figure 12.

**Table 36. Crude Oil and Condensate: Producing OCS Operators in 1993**

*(The volumes here are those metered in the field at the wellhead not, the adjusted final production figures that the operators report and on which lessees pay royalties to the Federal Government.)*

Rank	Operator	Gulf of Mexico OCS		Pacific OCS	Total (bbl)
		Crude Oil (bbl)	Condensate (bbl)	Crude Oil & Condensate (bbl)	
1	Chevron USA, Incorporated	45,530,468	5,391,777	17,250,404	68,172,649
2	Shell Offshore, Incorporated	47,238,383	3,182,336	0	50,420,719
3	Union Oil Company of California	9,127,962	2,025,890	10,491,745	21,645,597
4	Conoco, Incorporated	17,933,309	2,381,840	0	20,315,149
5	Exxon Corporation	16,441,297	1,415,191	1,392,850	19,249,338
6	Texaco Exploration & Production	13,710,135	1,137,873	2,308,881	17,156,889
7	Mobil Oil Exploration & Production	11,380,104	2,588,771	0	13,968,875
8	Marathon Oil Company	10,751,145	323,396	0	11,074,541
9	BP Exploration & Oil, Incorporated	10,031,381	425,988	0	10,457,369
10	Texaco Incorporated	0	40,139	9,142,106	9,182,245
	<b>Subtotal</b>	<b><u>182,144,184</u></b>	<b><u>18,913,201</u></b>	<b><u>40,585,986</u></b>	<b><u>241,643,371</u></b>
11	Pennzoil Exploration & Production	7,845,093	771,598	0	8,616,691
12	Freeport-McMoran, Incorporated	7,008,567	420,756	0	7,429,323
13	Murphy Exploration & Production	5,655,034	925,226	0	6,580,260
14	Mobil Producing Texas & New Mexico Incorporated	3,812,014	2,354,456	0	6,166,470
15	Kerr-McGee Corporation	4,689,804	1,473,810	0	6,163,614
16	Shell Frontier Oil & Gas, Incorporated	4,814,098	438,669	0	5,252,767
17	Amoco Production Company	1,999,249	2,063,108	0	4,062,357
18	AGIP Petroleum Company, Incorporated	3,794,079	137,809	0	3,931,888
19	Shell Western Exploration & Production, Incorporated	0	0	3,487,218	3,487,218
20	Torch Operating Company	2,563,604	532,562	0	3,096,166
	<b>Subtotal</b>	<b><u>224,325,726</u></b>	<b><u>28,031,195</u></b>	<b><u>44,073,204</u></b>	<b><u>296,430,125</u></b>
21	CNG Producing Company	814,066	2,228,677	0	3,042,743
22	Atlantic Richfield Company	2,040,029	564,014	0	2,604,043
23	Forest Oil Corporation	2,012,061	456,478	0	2,468,539
24	Newfield Exploration Company	1,975,127	493,273	0	2,468,400
25	Amerada Hess Corporation	1,473,226	963,395	0	2,436,621
26	Canadianoxy Offshore Production	1,856,880	482,488	0	2,339,368
27	Delmar Operating, Incorporated	1,129,244	1,102,613	0	2,231,857
28	LLECO Holdings Incorporated	974,517	1,174,976	0	2,149,493
29	Walter Oil & Gas Corporation	168,983	1,966,767	0	2,135,750
30	Hall-Houston Oil Company	1,615,211	483,491	0	2,098,702
	<b>Subtotal</b>	<b><u>238,385,070</u></b>	<b><u>37,947,367</u></b>	<b><u>44,073,204</u></b>	<b><u>320,405,641</u></b>
31	Samedan Oil Corporation	1,420,716	442,117	0	1,862,833
32	Pennzoil Petroleum Company	1,246,430	476,767	0	1,723,197
33	Phillips Petroleum Company	538,089	1,121,603	0	1,659,692
34	Elf Exploration, Incorporated	1,568,282	37,744	0	1,606,026
35	Apache Corporation	883,260	323,059	0	1,206,319
36	Sonat Exploration Company	463,810	629,207	0	1,093,017
37	Oryx Energy Company	772,535	185,745	0	958,280

**Table 36. Crude Oil and Condensate: Producing OCS Operators in 1993—continued**

(The volumes here are those metered in the field at the wellhead not, the adjusted final production figures that the operators report and on which lessees pay royalties to the Federal Government.)

Rank	Operator	Gulf of Mexico OCS		Pacific OCS	Total (bbl)
		Crude Oil (bbl)	Condensate (bbl)	Crude Oil & Condensate (bbl)	
38	Louis Dreyfus Reserves Corporation	888,182	49,593	0	937,775
39	Taylor Energy Company	696,325	208,308	0	904,633
40	Forcenergy Gas Exploration Incorporated	760,401	41,053	0	801,454
	<b>Subtotal</b>	<b><u>247,623,100</u></b>	<b><u>41,462,563</u></b>	<b><u>44,073,204</u></b>	<b><u>333,158,867</u></b>
41	Howell Petroleum Corporation	666,689	998	0	667,687
42	Norcen Explorer Incorporated	302,973	326,117	0	629,090
43	Flores & Rucks Incorporated	571,113	20,162	0	591,275
44	Energy Development Corporation	396,077	168,908	0	564,985
45	B T Operating Company	434,953	127,436	0	562,389
46	Mesa Operating Limited Partnership	235,656	317,871	0	553,527
47	Pacific Offshore Operators	0	0	509,115	509,115
48	Total Minatome Corporation	376,004	127,133	0	503,137
49	Aquila Energy Resources Corp	401,801	91,787	0	493,588
50	Anadarko Petroleum Corporation	395,505	83,775	0	479,280
	<b>Subtotal</b>	<b><u>251,403,871</u></b>	<b><u>42,726,750</u></b>	<b><u>44,582,319</u></b>	<b><u>338,712,940</u></b>
51	Zilkha Energy Company	0	415,902	0	415,902
52	Columbia Gas Development Corporation	230,392	165,758	0	396,150
53	Mobil Exploration and Producing	178,012	211,811	0	389,823
54	GulfStream Resources, Incorporated	249,219	107,634	0	356,853
55	Union Pacific Resources Company	20,901	331,793	0	352,694
56	Mobil Oil Corporation	66,364	269,844	0	336,208
57	Century Offshore Management	302,863	18,836	0	321,699
58	Global Marine Oil & Gas Company	0	316,386	0	316,386
59	WHK, Incorporated	290,583	23,624	0	314,207
60	Stone Petroleum Corporation	189,149	120,323	0	309,472
	<b>Subtotal</b>	<b><u>252,931,354</u></b>	<b><u>44,708,661</u></b>	<b><u>44,582,319</u></b>	<b><u>342,222,334</u></b>
61	Santa Fe Energy Resources Incorporated	297,407	3,934	0	301,341
62	PG&E Resources Offshore Company	92,702	193,796	0	286,498
63	AEDC USA Incorporated	0	278,605	0	278,605
64	Great Western Offshore Incorporated	96,862	166,530	0	263,392
65	Tatham Offshore Incorporated	0	224,921	0	224,921
66	Diamond Shamrock Offshore Partners	125,093	88,360	0	213,453
67	Louisiana Land and Exploration	38,481	156,345	0	194,826
68	Coastal Oil & Gas Corporation	182,207	0	0	182,207
69	Hunt Oil Company	33,939	147,247	0	181,186
70	Roberts & Bunch Offshore Incorporated	0	168,981	0	168,981
	<b>Subtotal</b>	<b><u>253,798,045</u></b>	<b><u>46,137,380</u></b>	<b><u>44,582,319</u></b>	<b><u>344,517,744</u></b>
71	W & T Offshore Incorporated	158,321	3,905	0	162,226
72	Santa Fe Minerals Incorporated	0	151,232	0	151,232

**Table 36. Crude Oil and Condensate: Producing OCS Operators in 1993—continued**

(The volumes here are those metered in the field at the wellhead not, the adjusted final production figures that the operators report and on which lessees pay royalties to the Federal Government.)

Rank	Operator	Gulf of Mexico OCS		Pacific OCS	Total (bb)
		Crude Oil (bb)	Condensate (bb)	Crude Oil & Condensate (bb)	
73	Aran Energy Corporation	139,784	5,717	0	145,501
74	Seagull Energy E&P, Incorporated	0	137,925	0	137,925
75	Brooklyn Union Exploration Company	0	133,226	0	133,226
76	OXY USA Incorporated	0	124,803	0	124,803
77	UMC Petroleum Corporation	120,711	0	0	120,711
78	Greenhill Petroleum Corporation	82,349	37,686	0	120,035
79	EP Operating Limited Partner	0	114,639	0	114,639
80	Sandefur Offshore Operating	0	111,492	0	111,492
	<b>Subtotal</b>	<b><u>254,299,210</u></b>	<b><u>46,958,005</u></b>	<b><u>44,582,319</u></b>	<b><u>345,839,534</u></b>
81	Sante Fe International Corporation	0	107,040	0	107,040
82	Forcenergy Gas Exploration Incorporated	85,346	7,427	0	92,773
83	Wacker Oil Incorporated	0	92,532	0	92,532
84	Scana Petroleum Resources Incorporated	0	79,001	0	79,001
85	Santa Fe Energy Operation Partnership	75,466	711	0	76,177
86	Cockrell Oil Corporation.	0	74,316	0	74,316
87	Aviva America Incorporated	70,841	711	0	71,552
88	Sekco Energy Incorporated	71,124	0	0	71,124
89	Enron Oil & Gas Company	0	71,022	0	71,022
90	Koch Exploration Company	0	68,745	0	68,745
	<b>Subtotal</b>	<b><u>254,601,987</u></b>	<b><u>47,459,510</u></b>	<b><u>44,582,319</u></b>	<b><u>346,643,816</u></b>
91	Mitchell Energy Corporation	64,052	2,561	0	66,613
92	Seneca Resources Corporation	0	59,481	0	59,481
93	Gas Transportation Corporation	30,552	26,101	0	56,653
94	Pogo Producing Company	7,740	46,874	0	54,614
95	Pan Petroleum Master Limited	0	51,268	0	51,268
96	Pel-Tex Company	0	47,541	0	47,541
97	Midcon Offshore Incorporated	29,246	16,135	0	45,381
98	Partners Oil Company	0	41,620	0	41,620
99	Aquila Energy Corporation	0	35,951	0	35,951
100	American Exploration Company	22,669	11,637	0	34,306
	<b>Subtotal</b>	<b><u>254,756,246</u></b>	<b><u>47,798,679</u></b>	<b><u>44,582,319</u></b>	<b><u>347,137,244</u></b>
101	BHP Petroleum Americas Incorporated	0	24,286	0	24,286
102	Levinson Partners Corporation	0	18,030	0	18,030
103	Quintana Petroleum Corporation	0	15,122	0	15,122
104	Energy Resource Technology Incorporated	0	13,041	0	13,041
105	Hardy Oil & Gas USA, Incorporated	0	12,842	0	12,842
106	Ashlawn Energy Incorporated	10,461	0	0	10,461
107	Zapata Exploration Company	0	10,190	0	10,190

**Table 36. Crude Oil and Condensate: Producing OCS Operators in 1993—continued**

(The volumes here are those metered in the field at the wellhead not, the adjusted final production figures that the operators report and on which lessees pay royalties to the Federal Government.)

Rank	Operator	Gulf of Mexico OCS		Pacific OCS	Total (bb)
		Crude Oil (bb)	Condensate (bb)	Crude Oil & Condensate (bb)	
108	Four Star Oil & Gas Company	0	9,423	0	9,423
109	Mesa Petroleum Company	9,295	31	0	9,326
110	Houston Oil & Minerals Corporation	0	6,002	0	6,002
	<b>Subtotal</b>	<b><u>254,776,002</u></b>	<b><u>47,907,646</u></b>	<b><u>44,582,319</u></b>	<b><u>347,265,967</u></b>
111	Ivory Production Company	0	4,518	0	4,518
112	Ashland Exploration Incorporated	0	4,409	0	4,409
113	Van Petroleum Incorporated	0	4,087	0	4,087
114	Conn Energy Incorporated	0	3,809	0	3,809
115	General Atlantic Resources Incorporated	0	3,660	0	3,660
116	Trade & Development Corporation	0	2,179	0	2,179
117	ANR Production Company	0	1,960	0	1,960
118	Matrix Oil & Gas Incorporated	0	1,923	0	1,923
119	Hughes Eastern Petroleum Incorporated	0	1,267	0	1,267
120	British-Borneo Exploration Incorporated	0	1,086	0	1,086
	<b>Subtotal</b>	<b><u>254,776,002</u></b>	<b><u>47,936,544</u></b>	<b><u>44,582,319</u></b>	<b><u>347,294,865</u></b>
121	Offshore Energy Development	0	458	0	458
122	Entre Energy Corporation	0	42	0	42
123	UMC Petroleum Corporation	0	14	0	14
	<b>Total</b>	<b>254,776,002</b>	<b>47,937,058</b>	<b>44,582,319</b>	<b>347,295,379</b>

**Table 37. Natural Gas: Producing OCS Operators in 1993**

(The volumes here are those metered in the field at the wellhead, not the adjusted final production figures that the operators report and on which lessees pay royalties to the Federal Government.)

Rank	Operator	Gulf of Mexico		Pacific OCS	Total (Mcf)
		Natural Gas (Mcf)	Casinghead Gas (Mcf)	Gas well & Oil well Gas (Mcf)	
1	Chevron USA Incorporated	484,712,839	77,174,209	14,496,178	576,383,226
2	Shell Offshore Incorporated	213,550,466	89,563,992	0	303,114,458
3	Union Oil Company of California	209,180,506	19,097,607	5,872,319	234,150,432
4	Exxon Corporation	156,594,799	50,307,786	14,948,830	221,851,415
5	Texaco E&P	168,684,993	47,657,805	2,547,672	218,890,470
6	Amoco Production Company	205,157,939	2,564,700	0	207,722,639
7	Mobil Oil Exploration & Production	182,169,418	25,152,316	0	207,321,734
8	Conoco Incorporated	99,845,505	39,972,188	0	139,817,693
9	Amerada Hess Corporation	124,474,780	3,343,713	0	127,818,493
10	Atlantic Richfield Company	108,494,580	2,299,086	0	110,793,666
	<b>Subtotal</b>	<b><u>1,952,865,825</u></b>	<b><u>357,133,402</u></b>	<b><u>37,864,999</u></b>	<b><u>2,347,864,226</u></b>
11	Pennzoil E & P	94,621,387	10,626,260	0	105,247,647
12	Murphy Exploration & Production	95,915,806	8,465,070	0	104,380,876
13	OXY USA Incorporated	87,081,524	0	0	87,081,524
14	Forest Oil Corporation	83,694,111	2,841,274	0	86,535,385
15	Marathon Oil Company	53,684,099	30,792,762	0	84,476,861
16	Kerr-McGee Corporation	76,397,876	5,496,039	0	81,893,915
17	CNG Producing Company	80,263,474	1,558,876	0	81,822,350
18	Walter Oil & Gas Corporation	76,717,459	50,212	0	76,767,671
19	Mobil Producing Texas & New Mexico Incorporated	66,261,648	9,223,956	0	75,485,604
20	Samedan Oil Corporation	69,256,699	1,335,636	0	70,592,335
	<b>Subtotal</b>	<b><u>2,736,759,908</u></b>	<b><u>427,523,487</u></b>	<b><u>37,864,999</u></b>	<b><u>3,202,148,394</u></b>
21	Oryx Energy Company	68,339,026	1,840,563	0	70,179,589
22	Hall-Houston Oil Company	66,606,049	1,928,795	0	68,534,844
23	Pennzoil Petroleum Company	59,167,225	2,803,279	0	61,970,504
24	Freeport-McMoran Incorporated	59,473,010	611,199	0	60,084,209
25	Brooklyn Union Exploration Company	57,672,754	0	0	57,672,754
26	Torch Operating Company	49,605,203	5,567,368	0	55,172,571
27	Phillips Petroleum Company	52,946,893	2,200,900	0	55,147,793
28	Lleco Holdings Incorporated	53,556,629	1,005,832	0	54,562,461
29	Newfield Exploration Company	49,109,067	3,586,510	0	52,695,577
30	Seagull Energy E&P Incorporated	46,556,555	0	0	46,556,555
	<b>Subtotal</b>	<b><u>3,299,792,319</u></b>	<b><u>447,067,933</u></b>	<b><u>37,864,999</u></b>	<b><u>3,784,725,251</u></b>
31	Apache Corporation	40,647,827	612,177	0	41,260,004
32	Enron Oil & Gas Company	38,631,614		0	38,631,614
33	Energy Development Corporation	37,877,381	637,049	0	38,514,430
34	Union Pacific Resources Company	37,108,677	301,695	0	37,410,372
35	Delmar Operating, Incorporated	33,057,129	3,623,144	0	36,680,273
36	PG&E Resources Offshore Company	36,032,730	103,165	0	36,135,895
37	Sonat Exploration Company	33,156,934	734,315	0	33,891,249
38	BP Exploration & Oil, Incorporated	21,940,224	11,246,771	0	33,186,995

**Table 37. Natural Gas: Producing OCS Operators in 1993—continued**

(The volumes here are those metered in the field at the wellhead, not the adjusted final production figures that the operators report and on which lessees pay royalties to the Federal Government.)

Rank	Operator	Gulf of Mexico		Pacific OCS	Total (Mcf)
		Natural Gas (Mcf)	Casinghead Gas (Mcf)	Gas well & Oil well Gas (Mcf)	
39	Diamond Shamrock Offshore Partners	30,277,896	426,365	0	30,704,261
40	Shell Frontier Oil and Gas, Incorporated	17,654,137	6,313,859	0	23,967,996
	<b>Subtotal</b>	<b><u>3,626,176,868</u></b>	<b><u>471,066,473</u></b>	<b><u>37,864,999</u></b>	<b><u>4,135,108,340</u></b>
41	Zilkha Energy Company	22,547,357	0	0	22,547,357
42	Wacker Oil Incorporated	20,661,821	0	0	20,661,821
43	AEDC USA Incorporated	19,212,446	0	0	19,212,446
44	Texaco Incorporated	5,928,246	0	12,613,009	18,541,255
45	Anadarko Petroleum Corporation	17,530,797	918,761	0	18,449,558
46	Mobil Exploration and Producing	17,612,585	274,005	0	17,886,590
47	AGIP Petroleum Company Incorporated	10,707,364	7,007,921	0	17,715,285
48	Hunt Oil Company	16,339,237	493,108	0	16,832,345
49	Mesa Operating Limited Partners	15,363,856	1,328,440	0	16,692,296
50	Mobil Oil Corporation	16,418,533	62,947	0	16,481,480
	<b>Subtotal</b>	<b><u>3,788,499,110</u></b>	<b><u>481,151,655</u></b>	<b><u>50,478,008</u></b>	<b><u>4,320,128,773</u></b>
51	EP Operating Limited Partnership	15,834,917	0	0	15,834,917
52	Koch Exploration Company	15,272,149	0	0	15,272,149
53	Canadianoxy Offshore Production	13,029,039	2,043,597	0	15,072,636
54	Columbia Gas Development Corporation	14,340,266	520,366	0	14,860,632
55	Santa Fe International Corporation	14,637,921	0	0	14,637,921
56	Scana Petroleum Resource	14,237,794	0	0	14,237,794
57	Great Western Offshore Incorporated	12,843,306	435,619	0	13,278,925
58	Aquila Energy Resources Corporation	12,704,663	386,912	0	13,091,575
59	Santa Fe Minerals Incorporated	11,989,165	0	0	11,989,165
60	General Atlantic Resources Incorporated	11,843,047	0	0	11,843,047
	<b>Subtotal</b>	<b><u>3,925,231,377</u></b>	<b><u>484,538,149</u></b>	<b><u>50,478,008</u></b>	<b><u>4,460,247,534</u></b>
61	Louisiana Land and Exploration	11,445,721	245,856	0	11,691,577
62	BHP Petroleum Americas Incorporated	10,986,493	0	0	10,986,493
63	Elf Exploration Incorporated	6,834,150	4,026,273	0	10,860,423
64	Norcen Explorer Incorporated	9,653,417	1,144,170	0	10,797,587
65	Seneca Resources Corporation	10,715,523	0	0	10,715,523
66	Total Minatome Corporation	9,630,044	882,278	0	10,512,322
67	Roberts & Bunch Offshore Incorporated	9,103,563	0	0	9,103,563
68	Taylor Energy Company	8,084,082	1,015,157	0	9,099,239
69	B T Operating Company	7,398,035	1,152,208	0	8,550,243
70	Matrix Oil & Gas, Incorporated	8,497,081	0	0	8,497,081
	<b>Subtotal</b>	<b><u>4,017,579,486</u></b>	<b><u>493,004,091</u></b>	<b><u>50,478,008</u></b>	<b><u>4,561,061,585</u></b>

**Table 37. Natural Gas: Producing OCS Operators in 1993—continued**

(The volumes here are those metered in the field at the wellhead, not the adjusted final production figures that the operators report and on which lessees pay royalties to the Federal Government.)

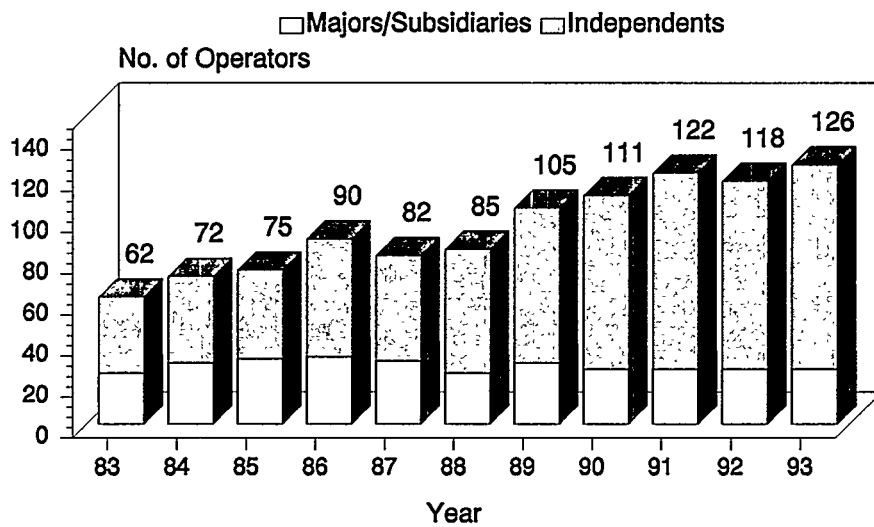
Rank	Operator	Gulf of Mexico		Pacific OCS	Total (Mcf)
		Natural Gas (Mcf)	Casinghead Gas (Mcf)	Gas well & Oil well Gas (Mcf)	
71	Century Offshore Management	7,382,807	646,904	0	8,029,711
72	Zapata Exploration Company	7,697,623	0	0	7,697,623
73	Sandefur Offshore Operating	7,465,211	0	0	7,465,211
74	Santa Fe Energy Resources, Incorporated	7,160,492	185,372	0	7,345,864
75	Forcenergy Gas Exploration Incorporated	6,023,635	1,106,348	0	7,129,983
76	Cockrell Oil Corporation	6,383,133	0	0	6,383,133
77	Stone Petroleum Corporation	5,946,469	217,024	0	6,163,493
78	Aran Energy Corporation	5,832,170	247,126	0	6,079,296
79	Pel-Tex Company	5,082,962	0	0	5,082,962
80	Aquila Energy Corporation	5,078,452	0	0	5,078,452
	<b>Subtotal</b>	<b><u>4,081,632,440</u></b>	<b><u>495,406,865</u></b>	<b><u>50,478,008</u></b>	<b><u>4,627,517,313</u></b>
81	POGO Producing Company	4,597,559	2,239	0	4,599,798
82	Santa Fe Energy Operating Partners	4,189,661	50,263	0	4,239,924
83	Gulfstream Resources, Incorporated	3,330,693	715,072	0	4,045,765
84	Midcon Offshore, Incorporated	3,756,395	78,396	0	3,834,791
85	Partners Oil Company	3,431,755	0	0	3,431,755
86	WHK, Incorporated	2,680,779	514,157	0	3,194,936
87	Global Marine Oil & Gas Company	2,994,777	0	0	2,994,770
88	Hardy Oil & Gas USA, Incorporated	2,764,716	0	0	2,764,716
89	Ashland Exploration Incorporated	2,565,811	0	0	2,565,811
90	OEDC Exploration & Production	2,520,404	0	0	2,520,404
	<b>Subtotal</b>	<b><u>4,114,464,983</u></b>	<b><u>496,766,992</u></b>	<b><u>50,478,008</u></b>	<b><u>4,661,709,983</u></b>
91	Aviva America Incorporated	2,184,902	192,645	0	2,377,547
92	W & T Offshore Incorporated	1,697,811	245,485	0	1,943,296
93	Louis Dreyfus Reserves Corporation	958,480	953,987	0	1,912,467
94	Houston Oil & Minerals Corporation	1,912,179	0	0	1,912,179
95	Tatham Offshore Incorporated	1,807,938	0	0	1,807,938
96	Levinson Partners Corporation	1,711,486	0	0	1,711,486
97	ANR Production Company	1,519,507	0	0	1,519,507
98	Mesa Petroleum, Incorporated	1,352,398	70,049	0	1,422,447
99	Flores & Rucks Incorporated	756,036	598,166	0	1,354,202
100	GreenHill Petroleum Corporation	1,231,018	85,333	0	1,316,351
	<b>Subtotal</b>	<b><u>4,129,596,738</u></b>	<b><u>498,912,657</u></b>	<b><u>50,478,008</u></b>	<b><u>4,678,987,403</u></b>
101	Entre Energy Corporation	1,284,764	0	0	1,284,764
102	Forcenergy Gas Exploration Inc	1,059,323	162,306	0	1,221,629
103	Howell Petroleum Corporation	316,453	789,227	0	1,105,680
104	Energy Resource Technology Incorporated	771,640	0	0	771,640
105	Offshore Energy Development	758,732	0	0	758,732
106	Ivory Production Company	715,296	0	0	715,296

**Table 37. Natural Gas: Producing OCS Operators in 1993—continued**

(The volumes here are those metered in the field at the wellhead, not the adjusted final production figures that the operators report and on which lessees pay royalties to the Federal Government.)

Rank	Operator	Gulf of Mexico		Pacific OCS	Total (Mcf)
		Natural Gas (Mcf)	Casinghead Gas (Mcf)	Gas well & Oil well Gas (Mcf)	
107	Pan Petroleum Master Limited	715,296	0	0	715,296
108	Shell Western E&P Incorporated	0	0	692,125	692,125
109	Pacific Offshore Operators	0	0	646,685	646,685
110	Coastal Oil & Gas Corporation	0	571,229	0	571,229
	<b>Subtotal</b>	<b><u>4,135,218,242</u></b>	<b><u>500,435,419</u></b>	<b><u>51,816,818</u></b>	<b><u>4,687,470,479</u></b>
111	Trade & Development Corporation	499,352	0	0	499,352
112	Gas Transportation Corporation	465,458	16,688	0	482,146
113	American Exploration Company	426,315	46,702	0	473,017
114	Van Petroleum Incorporated	455,226	0	0	455,226
115	Conn Energy Incorporated	450,184	0	0	450,184
116	Mitchell Energy Corporation	194,469	232,756	0	427,225
117	Four Star Oil & Gas Company	426,111	0	0	426,111
118	Hughes Eastern Petroleum Incorporated	366,965	0	0	366,965
119	Ashlawn Energy Incorporated	218,140	26,660	0	244,800
120	UMC Petroleum Corporation	105,829	93,659	0	199,488
	<b>Subtotal</b>	<b><u>4,138,826,291</u></b>	<b><u>500,851,884</u></b>	<b><u>51,816,818</u></b>	<b><u>4,691,494,993</u></b>
121	UMC Petroleum Corporation	174,528	0	0	174,528
122	British-Borneo Exploration Incorporated	171,752	0	0	171,752
123	Sekco Energy Incorporated	55,201	30,497	0	85,698
124	Petrobras America Incorporated	58,774	0	0	58,774
125	Quintana Petroleum Corporation	53,177	0	0	53,177
126	Flash Gas & Oil Southwest	7,136	0	0	7,136
				0	
	<b>Total</b>	<b>4,139,346,859</b>	<b>500,882,381</b>	<b>51,816,818</b>	<b>4,692,046,058</b>

## Growth of Producing OCS Operators



**Figure 13**

## **V. Federal Offshore Oil and Natural Gas Sales Volume and Royalties**

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Annual crude oil and condensate sales volume is shown in tables 38 and 39. These two tables also give data on the sales value and royalties received from the sale of these commodities. Table 40 gives totals for crude oil and condensate. Natural gas sales volume is shown in table 41 with sales value and royalties received.

Crude oil and condensate sales peaked in 1971 at 418 million barrels (MMbbl) and steadily decreased to 277 MMbbl in 1980. In 1981, sales began rising again and reached a 2-year peak of 389 MMbbl in 1985 and 1986. Sales decreased through the latter half of the 1980's, before rebounding in 1992 and 1993, reaching 363 MMbbl. Natural gas sales on the OCS hit an all-time high in 1990 of 5.1 Tcf. In 1993, OCS natural gas sales totalled 4.5 Tcf.

The amount of royalty collected is a function of both sales volume and current crude oil and natural gas prices. Therefore, the peak years for sales volume and royalty collections do not coincide. Royalties from the sale of crude oil peaked in 1984 at \$1.8 billion; this was 86 percent more revenue than in 1971, the peak year of production. Additionally, natural gas royalties hit a high of \$2.1 billion in 1984. This was 26 percent more revenue than in the peak production year of 1990.

Between 1954 and 1976, royalties from crude oil and condensate provided more than 50 percent of OCS production royalties. In 1976, natural gas royalties exceeded crude oil and condensate royalties for the first time (see fig. 14). In 1993 natural gas royalties totalled \$1.6 billion, accounting for 64 percent of OCS production royalties. Since 1954, natural gas production generated \$26 billion in royalties, which amounts to about 54 percent of the total (see fig. 15).

Tables 43 through 61 show offshore oil and natural gas sales volume and royalty statistics for Federal leases adjacent to Alabama, California, Louisiana, and Texas. Submerged lands offshore Louisiana produce the most oil and natural gas of any Federal OCS area. Therefore, production highs and lows for offshore Louisiana closely follow total Federal OCS production. In 1993, Louisiana, Alabama, and California were the only OCS producers of sulphur. The only directly mined deposits of sulphur are offshore Louisiana. Alabama and California sulphur production is a byproduct of crude oil and natural gas production.

Royalty rates for OCS resources generally range between 12.5 and 16.7 percent of sales value, with the majority of leases employing a 16.7 percent royalty rate. One exception involves net profit share leases (NPSL) introduced in the early 1980's. Under NPSL lease terms, payers must report the sales volume and sales value from a lease but do not owe a profit share payment until aggregate lease revenues exceed costs.

In 1993, payers reported approximately 1.8 percent of oil and 1.3 percent of natural gas sales volume from NPSL's on which profit share payments were not due. Payers must submit a percentage share once a profit is realized. Although the percentage share ranges up to 50 percent for existing leases, no NPSL's reached a profitable status until 1988, and only a few profitable leases existed in 1993. Therefore, most OCS resources remain subject to customary royalty rates.

In 1993, royalties as a percentage of sales value were 16.1 percent for natural gas. Since 1954, the average for natural gas royalties as a percentage of sales value is 16.4 percent. Corresponding 1993 values for crude oil and condensate are 15.1 percent and, since 1954, 16.2 percent.

**Table 38. Crude Oil Sales Volume, Sales Value, and Royalties Received from Federal Offshore Leases, pre-1954-93**

<i>Year</i>	<i>Sales Volume (bbl)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1954	940,634	2,770,866	584,088
1954	2,723,173	8,028,326	1,681,702
1955	5,871,853	17,318,314	3,539,946
1956	10,136,355	29,764,624	6,019,747
1957	15,373,071	51,166,849	9,793,597
1958	23,709,108	77,266,710	14,482,598
1959	34,177,529	108,197,518	20,331,723
1960	47,359,144	139,113,972	27,843,125
1961	61,265,770	192,144,960	35,462,210
1962	84,931,909	264,052,899	48,707,457
1963	98,331,298	313,797,445	55,618,246
1964	114,977,253	352,677,995	64,360,892
1965	136,236,062	417,141,510	75,419,562
1966	175,187,390	537,917,792	96,028,102
1967	205,860,535	633,989,826	112,770,550
1968	252,016,345	780,113,838	138,248,305
1969	295,429,477	958,388,119	167,701,123
1970	337,122,885	1,112,183,855	193,102,272
1971	390,180,091	1,378,656,056	235,780,785
1972	378,497,189	1,331,063,800	227,096,426
1973	360,888,784	1,480,012,269	248,255,928
1974	332,354,155	2,196,822,331	361,566,306
1975	303,159,121	2,207,663,216	363,462,463
1976	294,483,025	2,335,775,088	380,224,980
1977	276,983,936	2,434,108,445	400,363,388
1978	270,421,174	2,627,929,612	429,615,710
1979	262,275,483	2,873,567,427	468,727,986
1980	258,809,111	4,783,536,710	778,757,011
1981	263,117,614	8,844,132,476	1,440,447,962
1982	283,845,607	8,928,559,167	1,536,145,116
1983	311,897,837	9,161,386,009	1,468,642,532
1984	330,081,395	9,623,439,863	1,630,494,906
1985	351,291,399	9,585,170,180	1,541,512,557
1986	350,611,608	5,765,016,676	910,801,628
1987	325,323,990	5,629,094,453	888,099,155
1988	279,168,943	4,162,079,652	648,388,269
1989	260,180,825	4,448,633,477	693,991,544
1990	273,744,957	5,850,392,530	909,534,651
1991	263,272,578	5,225,977,492	822,585,098
1992	301,811,829	5,328,198,399	810,471,642
1993	<u>307,243,768</u>	<u>4,924,463,471</u>	<u>738,220,285</u>
<b>Total</b>	<b>8,931,294,210</b>	<b>117,121,714,217</b>	<b>19,004,881,573</b>

**Table 39. Condensate Sales Volume, Sales Value, and Royalties Received from Federal Offshore Leases, pre-1954-93**

<i>Year</i>	<i>Sales Volume (bb)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1954	210,063	719,664	135,453
1954	619,057	1,947,804	361,496
1955	833,631	2,624,334	483,418
1956	878,177	2,738,187	505,938
1957	697,116	2,397,306	432,270
1958	1,059,929	3,470,484	627,780
1959	1,519,992	4,871,845	889,736
1960	2,306,845	7,320,399	1,328,526
1961	3,064,308	9,527,903	1,788,043
1962	4,804,673	14,874,907	2,799,353
1963	6,247,942	19,168,310	3,618,838
1964	7,522,873	22,941,499	4,286,902
1965	8,732,553	26,664,321	4,988,612
1966	13,526,680	41,750,232	7,679,495
1967	16,001,079	48,190,009	8,627,708
1968	16,979,545	55,166,230	9,789,356
1969	17,430,510	60,742,729	10,590,402
1970	23,523,283	81,407,670	13,974,190
1971	28,368,855	103,024,860	17,448,239
1972	33,388,704	122,901,971	20,593,075
1973	33,841,215	140,719,956	23,234,913
1974	28,239,910	201,954,417	32,798,697
1975	27,078,331	221,185,285	36,064,743
1976	22,437,084	197,634,617	32,077,708
1977	26,964,304	249,472,545	40,783,625
1978	21,843,868	226,416,780	37,012,093
1979	23,290,055	254,025,614	40,592,290
1980	18,579,864	359,575,076	58,480,375
1981	26,647,791	843,634,441	134,868,547
1982	37,365,850	1,224,612,621	204,142,922
1983	36,433,406	1,106,012,804	170,878,978
1984	40,157,619	1,205,552,892	192,952,938
1985	38,032,886	1,036,510,708	165,672,342
1986	38,604,396	664,049,929	104,236,075
1987	40,817,719	715,958,985	111,174,336
1988	41,498,481	652,825,286	99,066,090
1989	44,986,830	806,924,323	124,599,951
1990	50,678,224	1,130,145,158	181,418,661
1991	52,420,673	1,092,395,207	173,980,987
1992	51,914,551	991,468,676	157,581,060
1993	<u>55,431,998</u>	<u>949,947,262</u>	<u>146,785,388</u>
<b>Total</b>	<b>944,980,870</b>	<b>14,903,473,246</b>	<b>2,379,301,549</b>

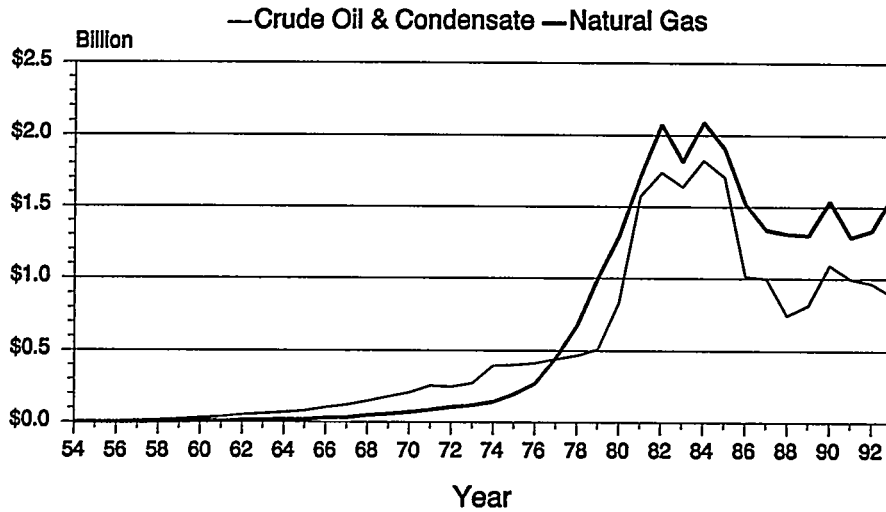
**Table 40. Crude Oil and Condensate Sales Volume, Sales Value, and Royalties Received from Federal Offshore Leases, pre-1954-93**

<i>Year</i>	<i>Sales Volume (bbl)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1954	1,150,697	3,490,530	719,541
1954	3,342,230	9,976,130	2,043,198
1955	6,705,484	19,942,648	4,023,364
1956	11,014,532	32,502,811	6,525,685
1957	16,070,187	53,564,155	10,225,867
1958	24,769,037	80,737,194	15,110,378
1959	35,697,521	113,069,363	21,221,459
1960	49,665,989	146,434,371	29,171,651
1961	64,330,078	201,672,863	37,250,253
1962	89,736,582	278,927,806	51,506,810
1963	104,579,240	332,965,755	59,237,084
1964	122,500,126	375,619,494	68,647,794
1965	144,968,615	443,805,831	80,408,174
1966	188,714,070	579,668,024	103,707,597
1967	221,861,614	682,179,835	121,398,258
1968	268,995,890	835,280,068	148,037,661
1969	312,859,987	1,019,130,848	178,291,525
1970	360,646,168	1,193,591,525	207,076,462
1971	418,548,946	1,481,680,916	253,229,024
1972	411,885,893	1,453,965,771	247,689,501
1973	394,729,999	1,620,732,225	271,490,841
1974	360,594,065	2,398,776,748	394,365,003
1975	330,237,452	2,428,848,501	399,527,206
1976	316,920,109	2,533,409,705	412,302,688
1977	303,948,240	2,683,580,990	441,147,013
1978	292,265,042	2,854,346,392	466,627,803
1979	285,565,538	3,127,593,041	509,320,276
1980	277,388,975	5,143,111,786	837,237,386
1981	289,765,405	9,687,766,917	1,575,316,509
1982	321,211,457	10,153,171,788	1,740,288,038
1983	348,331,243	10,267,398,813	1,639,521,510
1984	370,239,014	10,828,992,755	1,823,447,844
1985	389,324,285	10,621,680,888	1,707,184,899
1986	389,216,004	6,429,066,605	1,015,037,703
1987	366,141,709	6,345,053,438	999,273,491
1988	320,667,424	4,814,904,938	747,454,359
1989	305,167,655	5,255,557,800	818,591,495
1990	324,423,181	6,980,537,688	1,090,953,312
1991	315,693,251	6,318,372,699	996,566,085
1992	353,726,380	6,319,667,075	968,052,702
1993	<u>362,675,766</u>	<u>5,874,410,733</u>	<u>885,005,673</u>
<b>Total</b>	<b>9,876,275,080</b>	<b>132,025,187,463</b>	<b>21,384,233,122</b>

**Table 41. Natural Gas Sales Volume, Sales Value, and Royalties Received from Federal Offshore Leases, pre-1954-93**

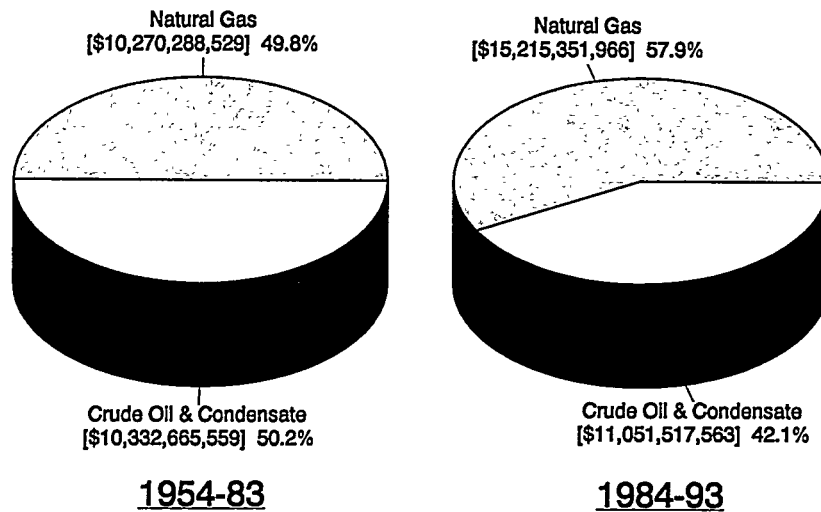
<i>Year</i>	<i>Sales Volume (Mcf)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1954	19,881,055	1,546,331	248,361
1954	56,325,083	4,393,968	705,779
1955	81,279,042	7,118,031	1,116,642
1956	82,892,538	6,995,060	1,103,698
1957	82,573,604	7,508,433	1,165,378
1958	127,692,848	15,733,942	2,313,500
1959	207,156,296	37,403,164	5,318,518
1960	273,034,451	52,761,614	7,636,074
1961	318,280,095	64,615,520	9,483,489
1962	451,952,659	92,209,196	13,748,400
1963	564,352,606	106,783,758	16,136,781
1964	621,731,438	118,377,080	17,887,512
1965	645,589,469	126,977,562	19,248,110
1966	1,007,447,235	189,381,492	29,142,325
1967	1,187,215,750	227,694,353	32,034,125
1968	1,524,178,078	291,257,157	48,453,724
1969	1,954,486,975	365,770,489	57,390,300
1970	2,418,676,591	438,136,408	69,445,227
1971	2,777,043,418	549,648,012	87,405,869
1972	3,038,554,773	663,647,779	105,892,430
1973	3,211,588,422	736,877,724	118,244,998
1974	3,514,723,907	877,700,506	141,653,952
1975	3,458,693,454	1,205,677,587	195,198,256
1976	3,595,923,526	1,652,842,563	268,090,028
1977	3,737,746,922	2,766,397,049	449,322,812
1978	4,385,060,878	4,135,198,537	672,570,441
1979	4,672,979,139	6,125,502,323	1,002,697,388
1980	4,641,456,983	7,885,212,996	1,295,291,353
1981	4,849,536,728	10,502,988,536	1,711,962,893
1982	4,679,511,272	12,419,927,350	2,074,583,597
1983	4,040,733,857	11,273,488,686	1,814,796,569
1984	4,537,841,051	12,839,297,031	2,091,276,753
1985	4,000,975,226	11,369,247,971	1,905,597,880
1986	3,948,891,837	9,117,507,291	1,518,338,984
1987	4,425,581,690	8,134,688,593	1,337,761,434
1988	4,309,874,827	7,946,040,609	1,310,301,872
1989	4,200,263,926	7,838,429,288	1,300,193,995
1990	5,092,931,169	9,458,313,225	1,539,364,756
1991	4,515,531,673	7,890,057,471	1,286,891,566
1992	4,685,644,725	8,164,857,461	1,333,786,723
1993	<u>4,533,389,731</u>	<u>9,893,435,203</u>	<u>1,591,838,003</u>
<b>Total</b>	<b>106,479,224,947</b>	<b>155,601,647,349</b>	<b>25,485,640,495</b>

## Crude Oil and Condensate and Natural Gas Royalties from OCS Production



**Figure 14.**

## Comparison of Crude Oil and Condensate to Natural Gas Royalties



**Figure 15.**

**Table 42. Sulphur Sales Volume, Sales Value, and Royalties Received from Federal Leases, 1960-93**

*(Statistics in parentheses indicate reporting adjustments for prior periods.)*

<b>Year</b>	<b>Sales Volume (Short Tons)</b>	<b>Sales Value (\$)</b>	<b>Royalties Received (\$)</b>
1960	98,025	1,762,866	285,784
1961	40,1521	7,252,931	1,170,733
1962	285,975	5,507,050	835,816
1963	552,573	11,069,637	1,617,471
1964	634,875	12,748,602	1,858,535
1965	1,090,950	23,387,005	3,197,532
1966	1,400,848	32,621,551	4,128,691
1967	1,409,276	37,291,107	4,167,804
1968	1,553,621	53,277,667	4,628,512
1969	1,232,939	49,129,573	3,684,432
1970	1,099,584	24,636,736	3,235,874
1971	1,178,400	23,718,311	3,452,117
1972	1,176,833	22,286,906	3,438,515
1973	1,235,358	23,748,632	3,610,757
1974	1,303,750	34,820,443	3,852,700
1975	1,248,134	69,737,571	3,737,784
1976	(554,271)	(36,777,151)	(1,651,794)
1977	0	0	0
1978	(5,090)	(27,891)	(4,648)
1979-87	0	0	0
1988	890	104,972	17,524
1989	162,152	17,506,189	2,922,072
1990	734,449	91,967,724	4,598,386
1991	856,247	95,706,063	4,785,304
1992	1,047,117	67,513,203	3,819,516
1993	<u>1,727,317</u>	<u>96,405,524</u>	<u>6,735,578</u>
<b>Total</b>	<b>19,871,473</b>	<b>765,395,221</b>	<b>68,124,995</b>

**Table 43. Condensate Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Alabama, 1992-93**

<i>Year</i>	<i>Sales Volume (bb)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1992	0	0	0
1992	3,209	58,687	9,742
1993	<u>2,630</u>	<u>44,002</u>	<u>3,837</u>
<b>Total</b>	<b>5,839</b>	<b>102,689</b>	<b>13,579</b>

**Table 44. Crude Oil and Condensate Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Alabama, 1992-93**

<i>Year</i>	<i>Sales Volume (bb)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1992	0	0	0
1992	3,209	58,687	9,742
1993	<u>2,630</u>	<u>44,002</u>	<u>3,837</u>
<b>Total</b>	<b>5,839</b>	<b>102,689</b>	<b>13,579</b>

**Table 45. Natural Gas Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Alabama, 1992-93**

<i>Year</i>	<i>Sales Volume (Mcf)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1992	0	0	0
1992	67,280,071	121,995,233	18,743,011
1993	<u>76,561,233</u>	<u>167,413,886</u>	<u>27,791,761</u>
<b>Total</b>	<b>143,841,304</b>	<b>289,409,119</b>	<b>46,534,772</b>

**Table 46. Sulphur Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Alabama, 1992-93**

Year	Sales Volume (Short tons)	Sales Value (\$)	Royalties Received (\$)
pre-1992	0	0	0
1992	218	9,464	1,116
1993	<u>240</u>	<u>9,407</u>	<u>533</u>
<b>Total</b>	<b>458</b>	<b>18,871</b>	<b>1,649</b>

NOTE: Alabama sulphur production is a byproduct of gas processing.

**Table 47. Crude Oil Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore California, 1968-93**

Year	Sales Volume (bbl)	Sales Value (\$)	Royalties Received (\$)
1968	2,059,889	5,222,660	870,444
1969	9,940,844	28,042,929	4,673,822
1970	24,987,628	72,294,311	12,049,052
1971	31,103,548	98,407,829	16,401,306
1972	22,562,213	70,131,629	11,688,605
1973	18,915,314	63,475,178	10,579,199
1974	16,776,744	78,014,292	13,002,385
1975	15,304,757	63,789,230	10,631,541
1976	13,978,553	65,245,691	10,874,283
1977	12,267,598	58,205,617	9,707,115
1978	12,085,908	69,709,403	11,704,453
1979	10,961,076	78,086,108	13,014,352
1980	10,198,886	111,407,469	18,567,912
1981	19,605,027	477,803,916	86,004,705
1982	28,434,202	679,293,086	160,992,461
1983	30,527,487	717,395,945	165,001,057
1984	30,254,306	645,004,111	122,270,587
1985	29,781,465	628,442,977	123,056,974
1986	29,227,846	358,544,517	63,973,110
1987	33,556,686	423,213,631	75,690,692
1988	32,615,118	322,221,171	53,723,584
1989	33,072,161	401,679,836	69,618,869
1990	33,312,719	540,919,648	94,552,896
1991	29,142,348	359,875,572	64,130,301
1992	41,220,209	474,967,802	71,946,494
1993	<u>50,073,501</u>	<u>500,662,325</u>	<u>70,522,621</u>
<b>Total</b>	<b>621,966,033</b>	<b>7,392,056,883</b>	<b>1,365,248,830</b>

**Table 48. Condensate Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore California, 1968–93**

<i>Year</i>	<i>Sales Volume (bbl)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
1968–89	0	0	0
1990	3,742	66,651	11,488
1991	3,125	55,684	9,281
1992	2,592	36,958	6,095
1993	<u>4,643</u>	<u>60,856</u>	<u>9,815</u>
<b>Total</b>	<b>14,102</b>	<b>220,149</b>	<b>36,679</b>

**Table 49. Crude Oil and Condensate Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore California, 1968–93**

<i>Year</i>	<i>Sales Volume (bbl)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
1968	2,059,889	5,222,660	870,444
1969	9,940,844	28,042,929	4,673,822
1970	24,987,628	72,294,311	12,049,052
1971	31,103,548	98,407,829	16,401,306
1972	22,562,213	70,131,629	11,688,605
1973	18,915,314	63,475,178	10,579,199
1974	16,776,744	78,014,292	13,002,385
1975	15,304,757	63,789,230	10,631,541
1976	13,978,553	65,245,691	10,874,283
1977	12,267,598	58,205,617	9,707,115
1978	12,085,908	69,709,403	11,704,453
1979	10,961,076	78,086,108	13,014,352
1980	10,198,886	111,407,469	18,567,912
1981	19,605,027	477,803,916	86,004,705
1982	28,434,202	679,293,086	160,992,461
1983	30,527,487	717,395,945	165,001,067
1984	30,254,306	645,994,111	122,270,587
1985	29,781,465	628,442,977	123,056,974
1986	29,227,846	358,544,517	63,973,110
1987	33,556,686	423,213,631	75,690,692
1988	32,615,118	322,221,171	53,723,584
1989	33,072,161	401,679,836	69,618,869
1990	33,312,719	540,919,648	94,552,896
1991	29,146,090	359,942,223	64,141,789
1992	41,222,801	475,004,760	71,952,589
1993	<u>50,078,144</u>	<u>500,723,181</u>	<u>70,532,436</u>
<b>Total</b>	<b>621,977,010</b>	<b>7,392,221,348</b>	<b>1,365,276,228</b>

**Table 50. Natural Gas Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore California, 1968-93**

<i>Year</i>	<i>Sales Volume (Mcf)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
1968	799,685	215,915	35,986
1969	4,845,851	1,308,380	218,063
1970	12,229,147	3,301,870	550,312
1971	15,671,479	4,231,299	705,217
1972	10,033,581	2,709,067	451,511
1973	7,286,549	1,968,775	328,129
1974	5,573,642	1,485,338	247,556
1975	3,951,633	1,083,486	180,581
1976	3,475,201	1,013,835	168,973
1977	3,289,963	1,699,845	283,381
1978	3,472,292	1,934,826	314,421
1979	2,866,822	1,878,349	313,058
1980	3,107,023	2,435,833	405,972
1981	12,766,307	13,919,105	2,158,289
1982	17,750,924	40,521,810	10,936,614
1983	16,024,292	45,508,989	11,832,337
1984	27,806,899	99,218,481	16,932,454
1985	49,164,213	151,241,817	25,676,251
1986	42,689,021	129,220,799	21,888,369
1987	40,986,158	111,589,318	18,085,583
1988	34,570,638	92,648,015	15,086,166
1989	28,574,912	77,322,251	12,920,381
1990	38,531,764	107,345,547	17,822,908
1991	40,626,577	116,722,285	19,536,916
1992	40,873,660	111,075,007	18,325,587
1993	<u>42,082,090</u>	<u>116,076,588</u>	<u>16,859,977</u>
<b>Total</b>	<b>509,050,323</b>	<b>1,237,676,830</b>	<b>212,264,992</b>

**Table 51. Sulphur Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore California, 1988-93**

<i>Year</i>	<i>Sale Volume (Short Tons)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
1988	3	179	30
1989	140	8,933	1,483
1990	0	0	0
1991	2,121	1,286	65
1992	(49)	(224)	(34)
1993	<u>3,295</u>	<u>11,035</u>	<u>124</u>
<b>Total</b>	<b>5,510</b>	<b>21,209</b>	<b>1,668</b>

NOTE: California sulphur production is a byproduct of gas processing.

**Table 52. Crude Oil Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Louisiana, pre-1954-93**

<i>Year</i>	<i>Sales Volume (bb)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1954	940,634	2,770,866	584,088
1954	2,723,173	8,028,326	1,681,702
1955	5,869,897	17,312,409	3,538,967
1956	10,123,071	29,724,365	6,013,072
1957	15,367,279	51,146,960	9,790,301
1958	23,709,108	77,266,710	14,482,598
1959	34,177,272	108,196,671	20,331,582
1960	47,359,046	139,113,688	27,843,078
1961	61,265,770	192,144,960	35,462,210
1962	84,928,426	264,041,875	48,705,620
1963	98,278,494	313,637,681	55,591,619
1964	114,972,300	352,663,296	64,358,443
1965	136,232,315	417,131,468	75,417,896
1966	174,304,792	535,253,645	95,584,085
1967	204,698,134	630,364,403	112,166,314
1968	248,223,799	769,355,722	136,455,284
1969	283,974,318	925,153,657	162,162,256
1970	311,035,150	1,036,032,944	180,410,505
1971	358,366,080	1,277,637,359	218,947,766
1972	355,029,953	1,257,524,468	214,844,499
1973	341,277,611	1,413,819,684	237,227,064
1974	315,124,798	2,116,320,829	348,152,189
1975	287,515,795	2,142,058,833	352,531,404
1976	279,738,781	2,263,338,628	368,173,908
1977	264,522,771	2,374,005,873	390,343,437
1978	257,395,201	2,548,509,418	416,325,361
1979	249,183,243	2,768,895,263	451,278,478
1980	239,908,850	4,506,131,180	732,523,049
1981	234,774,684	8,038,329,770	1,299,779,462
1982	244,965,408	7,912,382,678	1,318,994,192
1983	270,291,238	8,113,911,006	1,252,703,480
1984	286,179,678	8,585,390,310	1,444,944,002
1985	308,963,685	8,610,369,286	1,363,608,919
1986	310,229,856	5,222,317,657	819,079,411
1987	278,095,030	4,963,852,356	774,729,750
1988	233,931,885	3,642,541,107	565,189,667
1989	213,826,751	3,808,158,426	587,668,216
1990	227,122,655	5,013,258,505	769,435,910
1991	224,442,426	4,656,857,085	726,484,625
1992	248,857,594	4,631,840,641	703,313,779
1993	<u>249,001,891</u>	<u>4,279,258,587</u>	<u>645,332,505</u>
<b>Total</b>	<b>8,136,928,842</b>	<b>106,016,048,595</b>	<b>17,052,260,693</b>

**Table 53. Condensate Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Louisiana, pre-1954-93**

<i>Year</i>	<i>Sales Volume (bbl)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1954	210,063	719,664	135,453
1954	619,057	1,947,804	361,496
1955	833,631	2,624,334	483,418
1956	878,177	2,738,187	505,938
1957	697,116	2,397,306	432,270
1958	1,059,929	3,470,484	627,780
1959	1,519,992	4,871,845	889,736
1960	2,306,845	7,320,399	1,328,526
1961	3,064,308	9,527,903	1,788,043
1962	4,804,673	14,874,907	2,799,353
1963	6,247,942	19,168,310	3,618,838
1964	7,522,873	22,941,499	4,286,902
1965	8,732,553	26,664,321	4,988,612
1966	13,526,680	41,750,232	7,679,495
1967	14,297,694	42,884,947	7,743,531
1968	15,601,560	50,711,986	9,046,984
1969	16,184,974	56,381,108	9,863,476
1970	22,376,342	77,309,209	13,291,113
1971	27,394,271	99,350,253	16,835,804
1972	32,560,709	119,704,749	20,060,994
1973	32,919,245	136,308,235	22,505,037
1974	27,310,698	194,647,283	31,596,951
1975	26,076,764	213,350,928	34,774,428
1976	22,148,221	194,022,687	31,475,662
1977	26,248,834	242,253,426	39,581,711
1978	20,676,334	212,781,919	34,739,603
1979	21,825,673	237,417,026	37,824,355
1980	16,779,232	326,710,741	53,003,093
1981	21,101,033	733,062,032	116,447,980
1982	30,548,081	1,001,671,575	166,978,650
1983	27,802,321	843,800,442	130,367,168
1984	31,844,944	954,011,338	152,454,740
1985	29,938,178	813,081,497	130,292,473
1986	29,922,420	517,989,208	80,809,948
1987	29,855,851	525,364,523	80,463,024
1988	28,004,645	444,135,383	67,498,626
1989	32,380,902	581,792,391	90,138,817
1990	37,547,880	840,299,780	135,992,050
1991	38,205,307	801,165,282	127,385,280
1992	40,060,614	773,524,961	122,331,496
1993	<u>44,441,990</u>	<u>759,887,530</u>	<u>116,590,797</u>
<b>Total</b>	<b>796,078,556</b>	<b>11,954,637,634</b>	<b>1,910,019,651</b>

**Table 54. Crude Oil and Condensate Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Louisiana, pre-1954-93**

<i>Year</i>	<i>Sales Volume (bb).</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1954	1,150,697	3,490,530	719,541
1954	3,342,230	9,976,130	2,043,198
1955	6,703,528	19,936,743	4,022,385
1956	11,001,248	32,462,552	6,519,010
1957	16,064,395	53,544,266	10,222,571
1958	24,769,037	80,737,194	15,110,378
1959	35,697,264	113,068,516	21,221,318
1960	49,665,891	146,434,087	29,171,604
1961	64,330,078	201,672,863	37,250,253
1962	89,733,099	278,916,782	51,504,973
1963	104,526,436	332,805,991	59,210,457
1964	122,495,173	375,604,795	68,645,345
1965	144,964,868	443,795,789	80,406,508
1966	187,831,472	577,003,877	103,263,580
1967	218,995,828	673,249,350	119,909,845
1968	263,825,359	820,067,708	145,502,268
1969	300,159,292	981,534,765	172,025,732
1970	333,411,492	1,113,342,153	193,701,618
1971	385,760,351	1,376,987,612	235,783,570
1972	387,590,662	1,377,229,217	234,905,493
1973	374,196,856	1,550,127,919	259,732,101
1974	342,435,496	2,310,968,112	379,749,140
1975	313,592,559	2,355,409,761	387,305,832
1976	301,887,002	2,457,361,315	399,649,570
1977	290,771,605	2,616,259,299	429,925,148
1978	278,071,535	2,761,291,337	451,064,964
1979	271,008,916	3,006,312,289	489,102,833
1980	256,688,082	4,832,841,921	785,526,142
1981	255,875,717	8,771,391,802	1,416,227,442
1982	275,513,489	8,914,054,253	1,485,972,842
1983	298,093,559	8,957,711,448	1,383,070,648
1984	318,024,622	9,539,401,648	1,597,398,742
1985	338,901,863	9,423,450,783	1,493,901,392
1986	340,152,276	5,740,306,865	899,889,359
1987	307,950,881	5,489,216,879	855,192,774
1988	261,936,530	4,086,676,490	632,688,293
1989	246,207,653	4,389,950,817	677,807,033
1990	264,670,535	5,853,558,285	905,427,960
1991	262,647,733	5,458,022,367	853,869,905
1992	288,918,208	5,405,365,602	825,715,275
1993	<u>293,443,881</u>	<u>5,039,146,117</u>	<u>761,923,302</u>
<b>Total</b>	<b>8,933,007,398</b>	<b>117,970,686,229</b>	<b>18,962,280,344</b>

**Table 55. Natural Gas Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Louisiana, pre- 1954-93**

<i>Year</i>	<i>Sales Volume (Mcf)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
pre-1954	19,881,055	1,546,331	248,351
1954	56,325,083	4,393,968	705,779
1955	81,279,042	7,118,031	1,116,642
1956	82,892,538	6,995,060	1,103,698
1957	82,568,807	7,507,953	1,165,294
1958	127,692,848	15,733,942	2,313,500
1959	207,156,296	37,403,164	5,318,518
1960	273,034,451	52,761,614	7,636,074
1961	318,280,095	64,615,520	9,483,489
1962	451,952,659	92,209,196	13,748,400
1963	564,352,606	106,783,758	16,136,781
1964	621,731,438	118,377,080	17,887,512
1965	645,589,469	126,977,562	19,248,110
1966	965,387,849	182,465,908	27,989,727
1967	1,087,262,804	210,606,727	29,186,187
1968	1,413,467,606	272,969,079	45,405,714
1969	1,822,544,142	344,015,027	53,764,395
1970	2,273,147,040	414,018,458	65,425,568
1971	2,634,014,031	525,451,277	83,373,079
1972	2,881,364,733	636,164,978	101,311,962
1973	3,055,628,236	707,142,624	113,289,175
1974	3,349,170,864	844,519,248	136,123,741
1975	3,332,169,057	1,169,897,666	189,234,935
1976	3,499,865,900	1,622,680,649	263,063,050
1977	3,647,513,674	2,712,635,503	440,362,490
1978	4,149,731,136	3,847,319,737	624,603,700
1979	4,158,521,710	5,225,483,453	852,694,229
1980	4,013,707,434	6,578,100,474	1,077,439,212
1981	4,106,494,590	8,677,535,461	1,407,880,914
1982	3,803,740,050	10,079,911,140	1,680,321,200
1983	3,173,892,354	8,632,987,203	1,381,277,952
1984	3,578,740,570	9,656,366,956	1,551,459,784
1985	3,116,884,490	8,468,902,650	1,420,442,835
1986	2,927,832,264	6,605,111,673	1,081,739,674
1987	3,180,107,195	5,775,180,843	935,053,158
1988	3,096,881,628	5,705,494,358	919,994,644
1989	3,006,576,061	5,590,014,727	912,525,885
1990	3,706,324,044	6,914,198,999	1,116,561,923
1991	3,289,968,602	5,811,082,617	938,334,655
1992	3,338,101,447	5,903,755,520	952,478,988
1993	<u>3,386,808,653</u>	<u>7,391,111,524</u>	<u>1,176,770,756</u>
<b>Total</b>	<b>89,528,584,551</b>	<b>121,147,547,658</b>	<b>19,674,221,680</b>

**Table 56. Salt Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Louisiana, 1960-93**

*(Salt production on the OCS occurs only offshore Louisiana. Therefore, salt production here accounts for total OCS production. Statistics in parentheses indicate reporting adjustments for prior years.)*

Year	Sales Volume (Short Tons)	Sales Value (\$)	Royalties Received (\$)
1960	59,794	10,764	1,792
1961	528,581	95,142	15,857
1962	176,924	31,848	5,308
1963	262,951	47,334	7,889
1964	212,978	38,334	6,389
1965	290,804	52,334	8,724
1966	297,475	53,544	8,924
1967	274,422	49,396	7,422
1968	540,651	97,317	17,030
1969	343,060	61,751	10,292
1970	269,691	48,544	8,091
1971	370,406	66,673	11,112
1972	358,782	64,581	10,764
1973	381,247	68,624	11,437
1974	346,411	62,354	10,392
1975	151,032	(54,212)	(8,469)
1976	(113,590)	(20,446)	(3,408)
1977-87	0	0	0
1988	44	2,619	437
1989	1,059	63,556	10,614
1990	302,246	54,404	9,086
1991	197,543	35,701	5,926
1992	265,528	140,730	7,966
1993	<u>357,081</u>	<u>303,519</u>	<u>10,712</u>
<b>Total</b>	<b>5,875,120</b>	<b>1,374,411</b>	<b>174,287</b>

**Table 57. Sulphur Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Louisiana, 1960-93**

*(Statistics in parenthesis indicate reporting adjustments for prior years.)*

<b>Year</b>	<b>Sales Volume (Short Tons)</b>	<b>Sales Value (\$)</b>	<b>Royalties Received (\$)</b>
1960	98,025	1,762,866	285,784
1961	401,521	7,252,931	1,170,733
1962	285,975	5,507,050	835,816
1963	552,573	11,069,637	1,617,471
1964	634,875	12,748,602	1,858,535
1965	1,090,950	23,387,005	3,197,532
1966	1,400,848	32,621,551	4,128,691
1967	1,409,276	37,291,107	4,167,804
1968	1,553,621	53,277,667	4,628,512
1969	1,232,939	49,129,573	3,684,432
1970	1,099,584	24,636,736	3,235,874
1971	1,178,400	23,718,311	3,452,117
1972	1,176,833	22,286,906	3,438,515
1973	1,235,358	23,748,632	3,610,757
1974	1,303,750	34,820,443	3,852,700
1975	1,248,134	69,737,571	3,737,784
1976	(554,271)	(36,777,151)	(1,651,794)
1977	0	0	0
1978	(5,090)	(27,891)	(4,648)
1979-87	0	0	0
1988	887	104,753	17,494
1989	162,012	17,497,256	2,922,042
1990	734,449	91,967,724	4,598,386
1991	854,126	95,704,777	4,785,239
1992	1,046,948	67,503,963	3,818,434
1993	<u>1,723,782</u>	<u>96,385,082</u>	<u>6,734,921</u>
<b>Total</b>	<b>19,865,505</b>	<b>765,355,101</b>	<b>68,123,131</b>

**Table 58. Crude Oil Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Texas, 1955-93**

<i>Year</i>	<i>Sales Volume (bbl)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
1955	1,956	5,905	979
1956	13,284	40,259	6,675
1957	5,792	19,889	3,296
1958	0	0	0
1959	257	847	141
1960	98	284	47
1961	0	0	0
1962	3,483	11,024	1,837
1963	52,804	159,764	26,627
1964	4,953	14,699	2,449
1965	3,747	10,042	1,666
1966	882,598	2,664,147	444,017
1967	1,162,401	3,625,423	604,236
1968	1,732,657	5,535,456	922,577
1969	1,514,315	5,191,533	865,045
1970	1,100,107	3,856,600	642,715
1971	710,463	2,610,868	431,713
1972	905,023	3,407,703	563,322
1973	695,859	2,717,407	449,665
1974	452,613	2,487,210	411,732
1975	338,569	1,815,153	299,518
1976	765,691	7,190,769	1,176,789
1977	193,567	1,896,955	312,836
1978	940,065	9,710,791	1,585,896
1979	2,131,164	26,586,056	4,435,156
1980	8,701,375	165,998,061	27,666,050
1981	8,737,903	327,998,790	54,663,795
1982	10,445,997	336,883,403	56,158,463
1983	11,079,112	330,079,058	50,937,985
1984	13,647,411	393,045,442	63,280,317
1985	12,546,249	346,357,917	54,846,664
1986	11,153,906	184,154,502	27,749,107
1987	13,672,274	242,028,466	37,678,713
1988	12,621,940	197,317,374	29,475,018
1989	13,281,913	238,795,215	36,704,459
1990	13,312,708	296,270,061	45,555,126
1991	9,687,804	209,244,835	31,970,172
1992	11,734,026	221,389,956	35,141,369
1993	<u>8,168,376</u>	<u>144,542,559</u>	<u>22,365,159</u>
<b>Total</b>	<b>172,402,460</b>	<b>3,713,664,423</b>	<b>587,381,331</b>

**Table 59. Condensate Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Texas, 1967-93**

<i>Year</i>	<i>Sales Volume (bbl)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
1967	1,703,385	5,305,062	884,177
1968	1,377,985	4,454,244	742,372
1969	1,245,536	4,361,621	726,926
1970	1,146,941	4,098,461	683,077
1971	974,584	3,674,607	612,435
1972	827,995	3,197,222	532,081
1973	921,970	4,411,721	729,876
1974	929,212	7,307,134	1,201,746
1975	1,001,567	7,834,357	1,290,315
1976	288,863	3,611,930	602,046
1977	715,470	7,219,119	1,201,914
1978	1,167,534	13,634,861	2,272,490
1979	1,464,382	16,608,588	2,767,935
1980	1,800,632	32,864,335	5,477,282
1981	5,546,758	110,572,409	18,420,567
1982	6,817,769	222,941,046	37,164,272
1983	8,631,085	262,212,362	40,511,810
1984	8,312,675	251,541,554	40,498,198
1985	8,094,708	223,429,211	35,379,869
1986	8,681,976	146,060,721	23,426,127
1987	10,961,868	190,594,462	30,711,312
1988	13,493,836	208,689,903	31,567,464
1989	12,605,928	225,131,932	34,461,134
1990	13,127,219	289,789,694	45,417,330
1991	14,211,624	291,163,274	46,584,219
1992	11,848,136	217,848,070	35,233,727
1993	<u>10,982,735</u>	<u>189,954,874</u>	<u>30,180,939</u>
<b>Total</b>	<b>148,882,373</b>	<b>2,948,512,774</b>	<b>469,281,640</b>

**Table 60. Crude Oil and Condensate Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Texas, 1955-93**

<i>Year</i>	<i>Sales Volume (bbl)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
1955	1,956	5,905	979
1956	13,284	40,259	6,675
1957	5,792	19,889	3,296
1958	0	0	0
1959	257	847	141
1960	98	284	47
1961	0	0	0
1962	3,483	11,024	1,837
1963	52,804	159,764	26,627
1964	4,953	14,699	2,449
1965	3,747	10,042	1,666
1966	882,598	2,664,147	444,017
1967	2,865,786	8,930,485	1,488,413
1968	3,110,642	9,989,700	1,664,949
1969	2,759,851	9,553,154	1,591,971
1970	2,247,048	7,955,061	1,325,792
1971	1,685,047	6,285,475	1,044,148
1972	1,733,018	6,604,925	1,095,403
1973	1,617,829	7,129,128	1,179,541
1974	1,381,825	9,794,344	1,613,478
1975	1,340,136	9,649,510	1,589,833
1976	1,054,554	10,802,699	1,778,835
1977	909,037	9,116,074	1,514,750
1978	2,107,599	23,345,652	3,858,386
1979	3,595,546	43,194,644	7,203,091
1980	10,502,007	198,862,396	33,143,332
1981	14,284,661	438,571,199	73,084,362
1982	17,263,766	559,824,449	93,322,735
1983	19,710,197	592,291,420	91,449,795
1984	21,960,086	644,586,996	103,778,515
1985	20,640,957	569,787,128	90,226,533
1986	19,835,882	330,215,223	51,175,234
1987	24,634,142	432,622,928	68,390,025
1988	26,115,776	406,007,277	61,042,482
1989	25,887,841	463,927,147	71,165,593
1990	26,439,927	586,059,755	90,972,456
1991	23,899,428	500,408,109	78,554,391
1992	23,582,162	439,238,026	70,375,096
1993	<u>19,151,111</u>	<u>334,497,433</u>	<u>52,546,098</u>
<b>Total</b>	<b>321,284,833</b>	<b>6,662,177,197</b>	<b>1,056,662,971</b>

**Table 61. Natural Gas Sales Volume, Sales Value, and Royalties Received from Federal Leases Offshore Texas, 1957-93**

<i>Year</i>	<i>Sales Volume (Mcf)</i>	<i>Sales Value (\$)</i>	<i>Royalties Received (\$)</i>
1957	4,797	480	84
1958	0	0	0
1959	0	0	0
1960	0	0	0
1961	0	0	0
1962	0	0	0
1963	0	0	0
1964	0	0	0
1965	0	0	0
1966	42,059,386	6,915,584	1,152,598
1967	99,952,946	17,087,626	2,847,938
1968	109,910,787	18,072,163	3,012,028
1969	127,096,982	20,447,082	3,407,848
1970	133,300,404	20,816,080	3,469,347
1971	127,357,908	19,965,436	3,327,573
1972	147,156,459	24,773,734	4,128,957
1973	148,673,637	27,766,325	4,627,694
1974	159,979,401	31,695,920	5,282,655
1975	122,572,764	34,696,435	5,782,740
1976	92,582,425	29,148,079	4,858,005
1977	86,943,285	52,061,701	8,676,941
1978	231,857,450	285,943,974	47,652,320
1979	511,590,607	898,140,521	149,690,101
1980	624,642,526	1,304,676,689	217,446,169
1981	730,275,831	1,811,533,970	301,923,690
1982	858,020,298	2,299,494,400	383,325,783
1983	850,817,211	2,594,992,494	421,686,280
1984	931,293,582	3,083,711,594	522,884,515
1985	834,926,523	2,749,103,504	459,478,794
1986	978,370,552	2,383,174,819	414,710,941
1987	1,204,488,337	2,247,918,432	384,622,693
1988	1,178,422,561	2,147,898,236	375,221,062
1989	1,165,112,953	2,171,092,310	374,747,729
1990	1,348,075,361	2,436,768,679	404,979,925
1991	1,184,936,494	1,962,252,569	329,019,995
1992	1,239,389,547	2,028,031,701	344,239,137
1993	<u>1,027,937,755</u>	<u>2,218,833,205</u>	<u>370,415,509</u>
<b>Total</b>	<b>16,297,748,769</b>	<b>32,927,013,742</b>	<b>5,552,619,051</b>

## **VI. Revenue from Federal Offshore Leases**

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Revenue contributions from Federal leases of adjacent States are shown in table 62. Annual and cumulative mineral revenue from the OCS mineral leasing program are shown in table 63. Revenue by commodity is shown in tables 64 through 66. The OCS mineral leasing program generates revenue from the following sources:

- **Bonus bids** paid on tracts at lease offerings;
- **Annual rental payments** on leases not in production;
- **Minimum royalties** assessed on producible leases that are not actively producing;
- **Shut-in gas payments** on producible gas wells closed temporarily because of mechanical, safety, or other problems; and
- **Royalties** paid on sales of crude oil, condensate, natural gas, oil lost, gas lost, gas plant products, sulphur, and salt.

The major sources of OCS revenue are bonuses, and oil and natural gas royalties, which accounted for 91 percent of total OCS mineral revenue in 1993. The number one contributor to OCS revenue in 1993 was the royalties paid for crude oil, condensate, and natural gas. Crude oil, condensate, and natural gas royalties made up 87 percent of total OCS mineral revenue in 1993, with natural gas royalties being responsible for 56 percent of total mineral royalties (see fig. 16).

In 1993, lease sale bonuses totaled about \$127 million, which was about 4 percent of OCS revenue. This was smaller than the combined contribution of rental payments and minimum royalties, which was about 6 percent. Over the life of the program, bonuses have played a much larger role, generating 53 percent of OCS mineral revenue since 1954, compared to 45 percent from crude oil, condensate, and natural gas royalties.

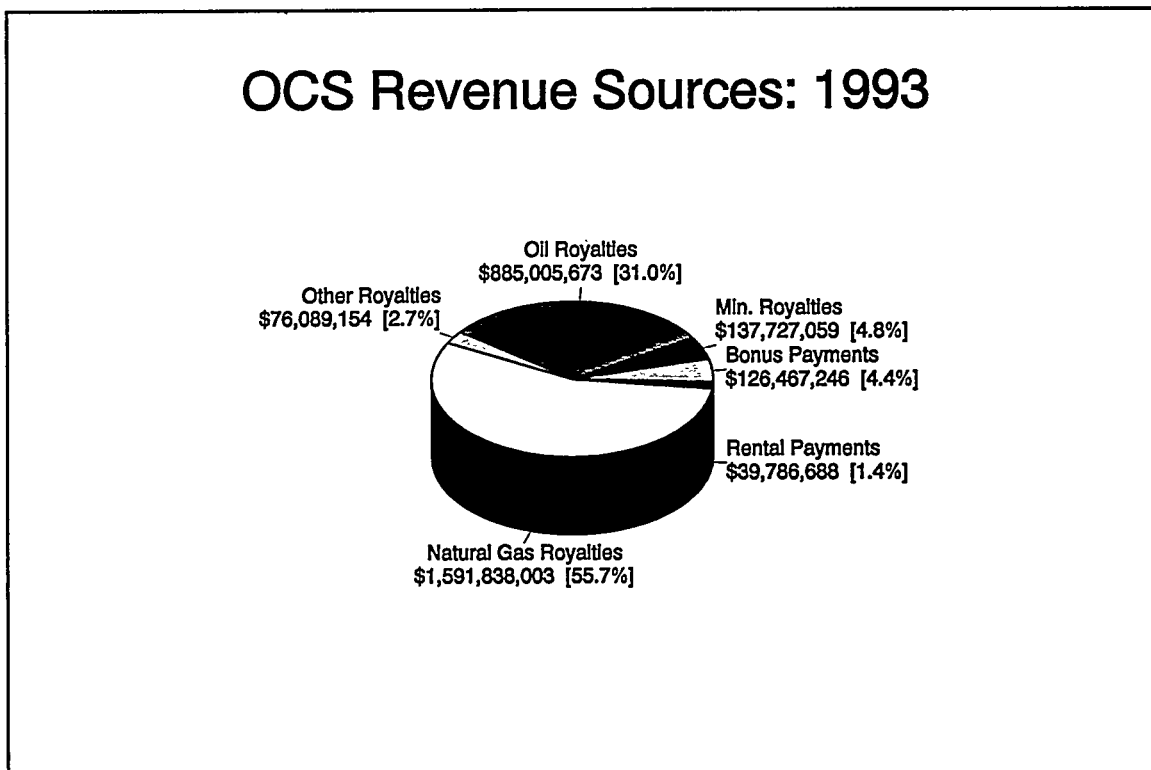
Tables 67 through 79 show annual OCS revenue generated by adjacent State or planning area. Leases offshore Louisiana have generated more revenue than any other State both in 1993 and over the life of the program. In 1993, OCS leases offshore Louisiana generated 87 percent of total OCS revenue (see fig. 17). Since 1954, OCS leases offshore Louisiana have been the source of 66 percent of total OCS revenue.



**Table 62. Total Revenue from Mineral Leases on the Federal OCS by Adjacent State or OCS Planning Area, 1954-93**

<i>State/ Planning Area</i>	<i>Bonus Payments (\$)</i>	<i>Rental Payments (\$)</i>	<i>Minimum Royalties (\$)</i>	<i>Shut-in Gas Production (\$)</i>	<i>Production Royalties<sup>1</sup> (\$)</i>	<i>Total Revenue by State or OCS Planning Area (\$)</i>
Alabama	715,073,236	4,162,932	2,766,362	0	46,550,000	768,552,530
Alaska	6,462,230,797	128,538,133	812,578	0	0	6,591,581,508
California	3,916,123,323	37,384,100	8,887,973	0	1,578,328,137	5,540,723,533
Florida	1,629,007,590	12,625,410	0	0	0	1,641,633,000
Louisiana	29,110,354,797	598,581,378	279,979,567	1,423,258	39,230,864,567	69,221,203,567
Mississippi	271,723,950	1,476,635	530,266	0	0	273,730,851
Oregon	27,768,773	3,759,021	0	0	0	31,527,794
Texas	11,399,243,379	132,248,566	57,356,573	0	6,638,750,874	18,227,599,392
Washington	7,764,928	1,399,080	0	0	0	9,164,008
Mid-Atlantic	1,563,897,654	26,236,234	73,728	0	0	1,590,207,616
North Atlantic	816,516,546	5,185,782	0	0	0	821,702,328
South Atlantic	<u>459,730,807</u>	<u>7,596,698</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>467,327,505</u>
<b>Total</b>	<b>56,379,435,780</b>	<b>959,193,969</b>	<b>350,407,047</b>	<b>1,423,258</b>	<b>47,494,493,578</b>	<b>105,184,953,632</b>

<sup>1</sup> These royalties include \$542,208,495 for gasoline and LPG; \$13,974,637 for gas lost; and \$136,094 for oil lost; \$68,126,448 for sulphur; and \$174,267 for salt.



**Figure 16.**

**Table 63. All Coastal States: Annual and Cumulative Mineral Revenue and Sales Value from Federal Offshore Leases, pre-1954-93**

Year	Bonus Payments (\$)	Rental Payments (\$)	Minimum Royalties (\$)	Shut-In Payments (\$)	Oil & Gas Royalties <sup>1</sup> (\$)
pre-1954	0	1,366,978	0	30,650	967,902
1954	140,969,005	3,855,333	0	86,950	2,748,977
1955	108,528,726	3,406,351	0	122,000	5,140,006
1956	0	4,006,193	0	79,950	7,629,383
1957	0	3,270,122	68,581	110,268	11,391,245
1958	0	2,420,584	184,396	121,218	17,423,878
1959	89,746,992	2,285,725	171,036	84,984	26,539,977
1960	282,717,065	3,603,140	316,975	49,350	36,807,725
1961	0	3,073,861	314,121	37,100	46,733,742
1962	489,481,061	8,412,207	517,722	62,200	65,255,210
1963	12,807,337	8,435,184	668,339	52,950	75,373,865
1964	95,874,327	9,798,573	820,343	45,800	86,535,306
1965	33,740,309	8,731,378	1,072,699	38,450	99,656,284
1966	209,199,893	6,869,277	1,367,250	41,700	132,849,922
1967	510,109,742	6,208,936	1,891,515	41,400	153,432,383
1968	1,346,487,097	8,230,787	2,145,178	52,300	196,491,385
1969	111,660,685	8,312,607	1,923,632	41,650	235,681,825
1970	945,064,773	8,607,855	1,745,864	47,700	276,521,689
1971	96,304,523	7,741,997	1,891,000	32,300	340,634,893
1972	2,251,347,556	7,984,897	2,019,533	49,550	353,581,931
1973	3,082,462,611	8,948,816	2,391,249	52,650	389,735,839
1974	5,022,860,815	13,532,754	2,048,439	32,550	536,018,955
1975	1,088,133,152	17,522,037	2,085,885	39,500	594,725,462
1976	2,242,898,467	23,370,502	2,128,336	38,400	680,392,716
1977	1,568,564,745	19,830,026	1,678,957	21,106	890,469,825
1978	1,767,042,064	21,512,669	2,207,183	3,950	1,139,198,244
1979	5,078,861,692	20,287,300	2,088,478	6,632	1,512,017,664
1980	4,204,640,257	19,055,150	2,291,433	0	2,132,528,739
1981	<sup>6</sup> 6,652,980,897	21,731,035	2,250,300	0	3,287,279,402
1982	3,987,490,009	20,055,201	2,393,759	0	3,814,871,635
1983	5,749,016,369	32,463,097	4,463,658	0	3,454,318,079
1984	3,928,876,308	35,607,835	3,458,139	0	3,914,724,597
1985	1,557,650,714	61,999,144	4,067,321	0	3,612,782,779
1986	187,094,747	52,958,237	5,176,608	0	2,533,376,687
1987	497,247,006	74,642,712	21,399,332	0	2,337,034,925
1988	1,259,548,738	62,867,785	16,822,821	0	2,057,756,231
1989	645,617,410	79,247,653	38,890,914	0	2,118,785,490
1990	584,301,918	79,339,130	19,298,248	0	2,630,318,068
1991	338,856,549	78,115,402	20,677,698	0	2,283,457,651
1992	84,784,975	59,698,811	39,743,046	0	2,301,839,425
1993	<u>126,467,246</u>	<u>39,786,688</u>	<u>137,727,059</u>	<u>0</u>	<u>2,476,843,676</u>
<b>Total</b>	<b>56,379,435,780</b>	<b>959,193,969</b>	<b>350,407,047</b>	<b>1,423,258</b>	<b>46,869,873,617</b>

Footnotes at end of table.

**Table 63. All Coastal States: Annual and Cumulative Mineral Revenue and Sales Value from Federal Offshore Leases, pre-1954-93 — continued**

Year	Other Mineral Revenue* (\$)	Total Mineral Revenue* (\$)	Cumulative Mineral Revenue* (\$)	Total Sales Value (\$)	Cumulative Sales Value (\$)	Federal Percent Share*
pre-1954	0	2,365,530	2,365,530	5,036,861	5,036,861	47
1954	0	147,660,265	150,025,795	14,370,098	19,406,959	773
1955	0	117,197,083	267,222,878	27,060,679	46,467,638	575
1956	0	11,715,526	278,938,404	39,497,871	85,965,509	324
1957	0	14,840,216	293,778,620	61,072,588	147,038,097	200
1958	0	20,150,076	313,928,696	96,471,136	243,509,233	129
1959	0	118,828,714	432,757,410	150,472,527	393,981,760	110
1960	287,576	323,781,831	756,539,241	200,969,615	594,951,375	127
1961	1,186,590	51,345,414	807,884,655	273,636,456	868,587,831	93
1962	841,124	564,569,524	1,372,454,179	376,675,900	1,245,263,731	110
1963	1,625,360	98,963,035	1,471,417,214	450,866,484	1,696,130,215	87
1964	1,864,924	194,939,273	1,666,356,487	506,783,510	2,202,913,725	76
1965	3,206,256	146,445,376	1,812,801,863	594,222,732	2,797,136,457	65
1966	4,137,615	354,465,657	2,167,267,520	801,724,611	3,598,861,068	60
1967	4,175,226	675,859,202	2,843,126,722	947,214,691	4,546,075,759	63
1968	4,645,542	1,558,052,289	4,401,179,011	1,179,912,209	5,725,987,968	77
1969	4,408,835	362,029,234	4,763,208,245	1,443,870,472	7,169,858,440	66
1970	6,972,879	1,238,960,760	6,002,169,005	1,707,593,450	8,877,451,890	68
1971	9,407,595	456,012,308	6,458,181,313	2,135,677,078	11,013,128,968	59
1972	9,974,408	2,624,957,875	9,083,139,188	2,229,179,121	13,242,308,089	69
1973	11,390,275	3,494,981,440	12,578,120,628	2,486,864,855	15,729,172,944	80
1974	24,264,934	5,598,758,447	18,176,879,075	3,570,053,959	19,299,226,903	94
1975	20,819,108	1,723,325,144	19,900,204,219	3,924,914,930	23,224,141,833	86
1976	19,032,074	2,967,860,495	22,868,064,714	4,402,439,996	27,626,581,829	83
1977	29,177,641	2,509,742,300	25,377,807,014	5,774,056,434	33,400,638,263	76
1978	11,147,838	2,941,111,948	28,318,918,962	7,096,500,055	40,497,138,318	70
1979	3,330,286	6,616,592,052	34,945,511,014	9,273,278,309	49,770,416,627	70
1980	4,134,686	6,362,650,265	41,298,161,279	13,055,515,832	62,825,932,459	66
1981	1,270,822	9,965,512,456	51,263,673,735	20,199,823,201	83,025,755,660	62
1982	0	7,824,810,604	59,088,484,339	22,573,099,138	105,598,854,798	56
1983	0	9,240,261,203	68,328,745,542	21,540,887,499	127,139,742,297	54
1984	49,456,076	7,932,122,955	76,260,868,497	24,001,446,123	151,141,188,420	50
1985	26,030,597	5,262,530,555	81,523,399,052	22,153,497,042	173,294,685,462	47
1986	26,283,936	2,804,890,215	84,328,289,267	15,711,161,561	189,005,847,023	45
1987	14,129,101	2,944,453,076	87,272,742,343	14,575,635,158	203,581,482,181	43
1988	20,845,382	3,417,840,957	90,690,583,300	12,929,511,935	216,510,994,116	42
1989	32,604,073	2,915,145,540	93,605,728,840	13,352,682,705	229,863,676,821	41
1990	54,481,455	3,367,738,819	96,973,467,659	16,916,343,010	246,780,019,831	39
1991	72,059,198	2,793,166,498	99,766,634,157	14,846,275,327	261,626,295,158	38
1992	75,339,395	2,561,405,652	102,328,039,809	15,144,392,460	276,770,687,618	37
1993	76,089,154	2,856,913,823	105,184,953,632	16,392,245,025	293,162,932,643	36
<b>Total</b>	<b>624,619,961</b>	<b>105,184,953,632</b>	<b>N/A</b>	<b>293,162,932,643</b>	<b>N/A</b>	<b>46</b>

Footnotes at end of table.

**Table 63. All Coastal States: Annual and Cumulative Mineral Revenue and Sales Value from Federal Offshore Leases, pre-1954-93 — continued**

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- <sup>1</sup> Royalties for condensate are included in the oil and gas royalties. Data for condensate are reported separately in Section V. (Federal Offshore Oil and Natural Gas Sales Volume and Royalties).
- <sup>2</sup> Other Mineral Revenue includes the 1960-91 royalties for gas lost (\$13,974,637), oil lost (\$136,094), sulphur (\$68,126,448), gasoline and LPG (\$542,208,495), and salt (\$174,287).
- <sup>3</sup> No monies from Sale PH (12/15/61) are reported as Federal revenue in this table (See table 3).
- <sup>4</sup> Escrow funds distributed to the State of Louisiana and lessees, pursuant to decrees of the U.S. Supreme Court, are not deducted from the Cumulative Mineral Revenues reported in this table.
- <sup>5</sup> Federal Percent Share is the Federal Government's share of the mineral revenues from the competitive leasing and private development of Federal oil and gas and other leases on the OCS. The percentage figure represents Cumulative Mineral Revenue divided by Cumulative Sales Value. Sales value for royalty purposes means the mineral's monetary worth at the time of its production, not its current sale price.
- <sup>6</sup> As adjusted, this 1981 figure now includes \$10,846,000 paid in 1984 for leases on five tracts. Timely issuance of those leases was held up, pending resolution of litigation.

**Table 64. Sales Value for Sulphur, Salt, Gasoline and LPG, Gas Lost, and Oil Lost from Federal Offshore Leases, 1960-93**

Year	Sulphur (\$)	Salt (\$)	Gasoline & LPG (\$)	Gas Lost (\$)	Oil Lost (\$)	Yearly Total (\$)
1960	1,762,866	10,764	0	0	0	1,773,630
1961	7,252,931	95,142	0	0	0	7,348,073
1962	5,507,050	31,848	0	0	0	5,538,898
1963	11,069,637	47,334	0	0	0	11,116,971
1964	12,748,602	38,334	0	0	0	12,786,936
1965	23,387,005	52,334	0	0	0	23,439,339
1966	32,621,551	53,544	0	0	0	32,675,095
1967	37,291,107	49,396	0	0	0	37,340,503
1968	53,277,667	97,317	0	0	0	53,374,984
1969	49,129,573	61,751	9,777,811	0	0	58,969,135
1970	24,636,736	48,544	51,180,237	0	0	75,865,517
1971	23,718,311	66,673	80,563,166	0	0	104,348,150
1972	22,286,906	64,581	89,214,084	0	0	111,565,571
1973	23,748,632	68,624	105,437,650	0	0	129,254,906
1974	34,820,443	62,354	254,743,978	3,933,524	16,406	293,576,704
1975	69,737,571	(54,212)	216,042,645	4,636,434	26,404	290,388,842
1976	(36,777,151)	(20,446)	246,449,316	6,522,116	13,893	216,187,728
1977	0	0	314,642,294	9,159,109	276,992	324,078,395
1978	(27,891)	0	85,728,017	20,950,991	304,009	106,955,126
1979	0	0	(616,832)	20,732,506	67,272	20,182,946
1980	0	0	3,271,711	23,811,929	107,410	27,191,050
1981	0	0	2,640,193	6,417,800	9,755	9,067,748
1982	0	0	0	0	0	0
1983	0	0	0	0	0	0
1984	0	0	333,156,337	0	0	333,156,337
1985	0	0	166,784,148	(4,215,965)	0	162,568,183
1986	0	0	164,258,808	328,042	815	164,587,665
1987	0	0	95,336,708	556,373	46	95,893,127
1988	104,932	2,619	168,314,496	144,201	140	168,566,388
1989	17,506,189	63,556	247,308,996	(6,182,701)	(423)	258,695,617
1990	91,967,724	54,404	385,050,216	419,753	0	477,492,097
1991	95,706,063	35,701	541,736,415	366,872	106	637,845,157
1992	67,513,203	140,730	590,793,743	1,420,248	0	659,867,924
1993	<u>96,405,524</u>	<u>303,519</u>	<u>527,155,935</u>	<u>534,111</u>	<u>0</u>	<u>624,399,089</u>
<b>Total</b>	<b>765,395,181</b>	<b>1,374,411</b>	<b>4,678,970,072</b>	<b>89,535,343</b>	<b>822,824</b>	<b>5,536,097,831</b>

**Table 65. Royalties for Sulphur, Salt, Gasoline and Liquefied Petroleum Gas, Gas Lost, and Oil Lost from Federal Offshore Leases, 1960-93**

Year	Sulphur (\$)	Salt (\$)	Gasoline & LPG (\$)	Gas Lost (\$)	Oil Lost (\$)	Total Royalties (\$)
1960	285,784	1,792	0	0	0	287,576
1961	1,170,733	15,857	0	0	0	1,186,590
1962	835,816	5,308	0	0	0	841,124
1963	1,617,471	7,889	0	0	0	1,625,360
1964	1,858,535	6,389	0	0	0	1,864,924
1965	3,197,532	8,724	0	0	0	3,206,256
1966	4,128,691	8,924	0	0	0	4,137,615
1967	4,167,804	7,422	0	0	0	4,175,226
1968	4,628,512	17,030	0	0	0	4,645,542
1969	3,684,432	10,292	714,111	0	0	4,408,835
1970	3,235,874	8,091	3,728,914	0	0	6,972,879
1971	3,452,117	11,112	5,944,366	0	0	9,407,595
1972	3,438,515	10,764	6,525,129	0	0	9,974,408
1973	3,610,757	11,437	7,768,081	0	0	11,390,275
1974	3,852,700	10,392	19,796,332	602,715	2,795	24,264,934
1975	3,737,784	(8,469)	16,375,770	709,658	4,365	20,819,108
1976	(1,651,794)	(3,408)	19,655,521	1,029,451	2,304	19,032,074
1977	0	0	27,687,770	1,443,719	46,152	29,177,641
1978	(4,648)	0	7,744,713	3,357,374	50,399	11,147,838
1979	0	0	12,157	3,307,259	10,870	3,330,286
1980	0	0	309,011	3,808,206	17,469	4,134,686
1981	0	0	427,803	841,393	1,626	1,270,822
1982	0	0	0	0	0	0
1983	0	0	0	0	0	0
1984	0	0	49,456,076	0	0	49,456,076
1985	0	0	26,732,896	(702,299)	0	26,030,597
1986	0	0	26,229,226	54,574	136	26,283,936
1987	0	0	14,048,961	80,132	8	14,129,101
1988	17,524	437	20,808,745	18,653	23	20,845,382
1989	2,923,525	10,614	30,640,383	(970,378)	(71)	32,604,073
1990	4,598,386	9,086	49,806,815	67,168	0	54,481,455
1991	4,785,304	5,926	67,187,838	80,112	18	72,059,198
1992	3,819,516	7,966	71,332,053	179,860	0	75,339,395
1993	<u>6,735,578</u>	<u>10,712</u>	<u>69,275,824</u>	<u>67,040</u>	<u>0</u>	<u>76,089,154</u>
<b>Total</b>	<b>68,126,448</b>	<b>174,287</b>	<b>542,208,495</b>	<b>13,974,637</b>	<b>136,094</b>	<b>624,619,961</b>

**Table 66. Oil and Gas and Sulphur and Salt Revenue from Federal Offshore Leases, 1953-93**

<i>Minerals</i>	<i>Bonus Payments (\$)</i>	<i>Rental Payments (\$)</i>	<i>Minimum Royalties (\$)</i>	<i>Shut-in Gas Payments (\$)</i>	<i>Production Royalties (\$)</i>	<i>Total Revenue (\$)</i>
Oil & Gas	56,328,491,680	957,472,654	350,290,735	1,423,258	47,426,192,843	105,063,871,170
Sulphur & Salt	<u>50,944,100</u>	<u>1,721,315</u>	<u>116,312</u>	<u>0</u>	<u>68,300,735</u>	<u>121,082,462</u>
<b>Total</b>	<b>56,379,435,780</b>	<b>959,193,969</b>	<b>350,407,047</b>	<b>1,423,258</b>	<b>47,494,493,578</b>	<b>105,184,953,632</b>

**Table 67. Total Revenues from Sulphur and Salt Leases on the Federal OCS by Adjacent State or OCS Planning Area, 1954-93**

<i>OCS Leases by Adjacent State</i>	<i>Bonus Payments (\$)</i>	<i>Rental Payments (\$)</i>	<i>Minimum Royalties (\$)</i>	<i>Production Royalties (\$)</i>	<i>Total Revenue (\$)</i>
<b>Alabama</b>					
Sulphur	0	0	0	1,649	1,649
<b>California</b>					
Sulphur	0	0	0	1,668	1,668
<b>Louisiana</b>					
Sulphur	1,948,650	628,007	17,392	68,123,131	70,717,180
Salt	105,814	29,940	59,500	174,287	369,541
Salt & Sulphur	15,149,327	428,058	0	0	15,577,385
<b>Texas</b>					
Sulphur	<u>33,740,309</u>	<u>635,310</u>	<u>39,420</u>	<u>0</u>	<u>34,415,039</u>
<b>Total</b>	<b>50,944,100</b>	<b>1,721,315</b>	<b>116,312</b>	<b>68,300,735</b>	<b>121,082,462</b>

**Table 68. Alabama OCS: Revenue from Federal Oil and Gas Leases, 1973–93**

Year	Bonus Payments (\$)	Rental Payments (\$)	Minimum Royalties (\$)	Shut-in Gas Payments (\$)	Production Royalties <sup>1</sup> (\$)	Annual Revenue (\$)
1973	135,834,100	222,318	0	0	0	136,056,418
1974	0	187,758	0	0	0	187,758
1975	0	187,758	0	0	0	187,758
1976	0	187,758	0	0	0	187,758
1977	0	120,960	0	0	0	120,960
1978	17,353,000	154,605	0	0	0	17,507,605
1979	0	51,840	0	0	0	51,840
1980	0	207,360	0	0	0	207,360
1981	0	154,602	0	0	0	154,602
1982	218,707,403	85,485	0	0	0	218,792,888
1983	41,667,460	85,485	0	0	0	41,752,945
1984	168,541,640	122,820	0	0	0	168,664,460
1985	93,314,800	340,409	34,038	0	0	93,689,247
1986	16,545,148	450,034	51,318	0	0	17,046,500
1987	15,627,000	548,601	101,859	0	0	16,277,460
1988	0	130,884	209,011	0	0	339,895
1989	1,711,900	160,020	191,949	0	0	2,063,869
1990	2,812,682	155,469	252,089	0	0	3,220,240
1991	381,906	141,522	248,742	0	0	772,170
1992	133,975	147,523	1,691,097	0	18,753,869	20,726,464
1993	<u>2,442,222</u>	<u>319,721</u>	<u>(13,741)</u>	<u>0</u>	<u>27,796,131</u>	<u>30,544,333</u>
<b>Total</b>	<b>715,073,236</b>	<b>4,162,932</b>	<b>2,766,362</b>	<b>0</b>	<b>46,550,000</b>	<b>768,552,530</b>

<sup>1</sup> These royalties include \$1,116 for sulphur.

**Table 69. Alaska OCS: Revenue from Federal Oil and Gas Leases, 1976–93**

<i>Year</i>	<i>Bonus Payments (\$)</i>	<i>Rental Payments (\$)</i>	<i>Minimum Royalties (\$)</i>	<i>Shut-in Gas Payments (\$)</i>	<i>Production Royalties (\$)</i>	<i>Annual Revenue (\$)</i>
1976	559,836,587	1,226,718	0	0	0	561,063,305
1977	398,471,313	2,796,157	0	0	0	401,267,470
1978	0	2,813,129	0	0	0	2,813,129
1979	488,691,137	2,395,763	0	0	0	491,086,900
1980	109,751,073	2,036,436	0	0	0	111,787,509
1981	4,576,395	1,722,966	0	0	0	6,299,361
1982	2,055,632,336	1,965,516	0	0	0	2,057,597,852
1983	744,332,202	4,248,241	12,516	0	0	748,592,959
1984	1,388,281,658	4,601,574	39,934	0	0	1,392,923,166
1985	0	11,603,554	112,088	0	0	11,715,642
1986	0	7,561,960	56,792	0	0	7,618,752
1987	0	7,677,314	71,320	0	0	7,748,634
1988	688,733,767	16,915,379	130,696	0	0	705,779,842
1989	0	18,708,334	102,480	0	0	18,810,814
1990	0	15,255,133	84,048	0	0	15,339,181
1991	23,924,329	15,243,423	67,568	0	0	39,235,320
1992	0	7,374,262	67,568	0	0	7,441,830
1993	<u>0</u>	<u>4,329,274</u>	<u>67,568</u>	<u>0</u>	<u>0</u>	<u>4,396,842</u>
<b>Total</b>	<b>6,462,230,797</b>	<b>128,538,133</b>	<b>812,578</b>	<b>0</b>	<b>0</b>	<b>6,591,518,508</b>

**Table 70. California OCS: Revenue from Federal Oil and Gas Leases, 1963-93**

Year	Bonus Payments (\$)	Rental Payments (\$)	Minimum Royalties (\$)	Shut-in Gas Payments (\$)	Production Royalties <sup>1</sup> (\$)	Annual Revenue (\$)
1963	12,807,337	938,838	0	0	0	13,746,175
1964	0	938,838	0	0	0	938,838
1965	0	817,878	0	0	0	817,878
1966	21,189,000	568,658	0	0	0	21,757,658
1967	0	34,560	0	0	0	34,560
1968	602,719,262	1,089,543	0	0	906,430	604,715,235
1969	0	1,056,063	0	0	4,891,885	5,947,948
1970	0	974,817	17,280	0	12,599,910	13,592,007
1971	0	953,913	51,435	0	17,115,304	18,120,652
1972	0	965,940	55,388	0	12,140,515	13,161,843
1973	0	544,516	77,592	0	10,907,328	11,529,436
1974	0	404,631	0	0	13,249,941	13,654,572
1975	417,312,141	1,662,867	25,752	0	10,812,254	429,813,014
1976	0	892,145	(43,368)	0	11,043,334	11,892,111
1977	0	1,328,966	0	0	9,990,581	11,319,547
1978	0	1,665,835	0	0	12,020,055	13,685,890
1979	572,825,418	2,305,301	77,592	0	13,327,448	588,535,759
1980	0	2,213,979	77,592	0	18,973,897	21,265,468
<sup>2</sup> 1981	2,088,881,824	2,275,512	154,227	0	88,192,738	2,179,504,301
1982	122,244,753	2,051,874	171,507	0	171,929,075	296,397,209
1983	16,022,336	1,821,505	481,932	0	176,833,404	195,159,177
1984	62,121,252	1,937,130	178,119	0	139,302,841	203,539,342
1985	0	1,995,694	451,785	0	148,751,441	151,198,920
1986	0	1,862,983	445,015	0	85,861,479	88,169,477
1987	0	1,848,659	434,917	0	93,776,275	96,059,851
1988	0	1,130,759	646,162	0	68,819,19	70,596,011
1989	0	1,104,568	526,300	0	82,587,466	84,218,334
1990	0	901,733	551,205	0	112,479,294	113,932,232
1991	0	640,071	441,400	0	83,866,615	84,948,086
1992	0	402,180	997,354	0	90,354,536	91,754,070
1993	0	54,144	3,068,787	0	87,594,894	90,717,825
<b>Total</b>	<b>3,916,123,323</b>	<b>37,384,100</b>	<b>8,887,973</b>	<b>0</b>	<b>1,578,328,137</b>	<b>5,540,723,533</b>

<sup>1</sup> These royalties include \$718,124 paid for gasoline and LPG, \$67,125 paid for gas lost, and \$1,668 for sulphur.

<sup>2</sup> The 1981 bonuses reported here include payments of \$10,846,000 from Sale 53 for five leases that could not be issued until 1984 because of litigation. In the same sale, certain bidders relinquished their rights to lease 12 other tracts and forfeited \$41,081,734 or one-fifth of the \$205,408,672 they had bid for those tracts.

**Table 71. Florida OCS: Revenue from Federal Oil and Gas Leases, 1959-93**

<i>Year</i>	<i>Bonus Payments</i> ( <i>\$</i> )	<i>Rental Payments</i> ( <i>\$</i> )	<i>Minimum Royalties</i> ( <i>\$</i> )	<i>Shut-in Gas Payments</i> ( <i>\$</i> )	<i>Production Royalties</i> ( <i>\$</i> )	<i>Annual Revenue</i> ( <i>\$</i> )
1959	1,711,872	397,440	0	0	0	2,109,312
1960	0	397,440	0	0	0	397,440
1961	0	397,440	0	0	0	397,440
1962	0	190,080	0	0	0	190,080
<sup>1</sup> 1963-72	0	0	0	0	0	0
1973	1,100,399,131	1,071,360	0	0	0	1,101,470,491
1974	0	881,280	0	0	0	881,280
1975	0	881,280	0	0	0	881,280
1976	4,040,000	829,440	0	0	0	4,869,440
1977	0	604,800	0	0	0	604,800
1978	43,823,730	604,800	0	0	0	44,428,530
1979	0	276,480	0	0	0	276,480
1980	0	379,245	0	0	0	379,245
1981	3,515,000	449,260	0	0	0	3,964,260
1982	2,457,000	604,800	0	0	0	3,061,800
1983	1,795,000	604,800	0	0	0	2,399,800
1984	310,586,261	138,240	0	0	0	310,724,501
1985	119,097,298	1,402,632	0	0	0	120,499,930
1986	0	138,240	0	0	0	138,240
1987	0	0	0	0	0	0
1988	41,582,298	1,972,047	0	0	0	43,554,345
1989	0	(14,825)	0	0	0	(14,825)
1990	0	88,527	0	0	0	88,527
1991	0	110,191	0	0	0	110,191
1992	0	105,807	0	0	0	105,807
1993	<u>0</u>	<u>114,606</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>114,606</u>
<b>Total</b>	<b>1,629,007,590</b>	<b>12,625,410</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,641,633,000</b>

<sup>1</sup> No oil and gas leases in force on Federal offshore lands in this area from 1963-72.

**Table 72. Louisiana OCS: Revenue from Federal Oil and Gas Leases, 1953-93**

<i>Year</i>	<i>Bonus Payments (\$)</i>	<i>Rental Payments (\$)</i>	<i>Minimum Royalties (\$)</i>	<i>Shut-in Gas Payments (\$)</i>	<i>Production Royalties<sup>1</sup> (\$)</i>	<i>Annual Revenues (\$)</i>
1953	0	1,271,790	0	30,650	967,892	2,270,332
1954	116,378,476	3,516,043	0	86,950	2,748,977	122,730,446
1955	100,091,264	2,819,231	0	122,000	5,139,027	108,171,522
1956	0	3,259,704	0	79,950	7,622,708	10,962,362
1957	0	2,930,301	67,201	110,268	11,387,865	14,495,635
1958	0	2,140,584	184,396	121,218	17,423,878	19,870,076
1959	88,035,120	1,780,026	171,036	84,984	26,539,836	116,611,002
1960	246,909,784	2,422,790	299,695	49,350	36,807,678	286,489,297
1961	0	1,984,441	291,790	37,100	46,733,742	49,047,073
1962	488,923,341	7,707,267	497,202	62,200	65,253,373	562,443,383
1963	0	7,059,246	632,376	52,950	75,347,238	83,091,810
1964	60,340,626	7,040,422	823,439	45,800	112,999,967	181,250,254
1965	0	5,909,553	1,021,505	38,450	126,121,728	133,091,236
1966	238,958,065	4,736,294	1,327,830	41,700	131,253,307	376,317,196
1967	510,079,178	5,500,516	1,888,758	41,400	149,096,032	666,605,884
1968	149,868,789	5,275,979	2,140,858	52,300	190,907,982	348,245,908
1969	110,945,535	5,584,162	1,922,340	41,650	226,504,238	344,997,925
1970	945,064,773	6,243,362	1,692,274	47,700	262,709,833	1,215,757,942
1971	96,304,523	5,687,848	1,564,845	32,300	324,815,819	428,405,335
1972	2,251,347,556	6,396,291	1,725,573	49,550	342,476,302	2,601,995,272
1973	193,031,709	5,272,797	2,005,785	52,650	380,509,177	580,872,118
1974	3,528,744,084	8,350,760	1,739,159	32,550	535,836,029	4,074,702,582
1975	325,424,688	8,947,571	1,837,253	39,500	593,359,397	929,608,409
1976	482,592,035	12,974,770	1,879,704	38,400	682,922,971	1,180,407,880
1977	813,991,004	7,740,185	1,248,616	21,106	899,016,863	1,722,017,774
1978	1,015,873,944	8,616,027	1,502,963	3,950	1,086,517,424	2,112,514,308
1979	2,521,190,635	7,328,999	1,105,865	6,632	1,344,995,442	3,874,627,573
1980	2,676,927,673	7,361,904	1,277,987	0	1,866,737,837	4,552,305,401
1981	3,308,009,881	8,205,515	1,211,959	0	2,825,271,285	6,142,698,640
1982	1,110,172,751	7,288,316	1,349,850	0	3,166,294,042	4,285,104,959
1983	3,796,644,766	13,620,158	2,540,294	0	2,764,348,600	6,577,153,818
1984	1,154,495,009	16,323,567	2,010,462	0	3,195,995,282	4,368,824,320
1985	830,710,260	33,756,447	2,139,530	0	2,940,519,737	3,807,125,974
1986	113,731,609	34,110,029	3,199,547	0	2,006,205,199	2,157,246,384
1987	247,344,486	52,115,828	19,239,027	0	1,803,208,740	2,121,908,081
1988	388,730,457	35,752,757	8,727,373	0	1,571,981,500	2,005,210,018
1989	386,710,637	48,498,402	26,261,190	0	1,618,163,065	2,082,565,532
1990	421,375,632	55,568,777	16,028,740	0	2,068,487,831	2,566,068,452
1991	276,234,849	59,126,732	15,444,167	0	1,859,392,914	2,210,198,662
1992	53,716,797	49,087,621	33,533,897	0	1,848,599,157	1,984,937,472
1993	<u>61,454,861</u>	<u>292,268,366</u>	<u>119,445,091</u>	<u>0</u>	<u>2,009,644,653</u>	<u>2,219,812,961</u>
<b>Total</b>	<b>29,110,354,797</b>	<b>861,581,378</b>	<b>279,979,577</b>	<b>1,423,258</b>	<b>39,230,864,567</b>	<b>69,221,203,567</b>

<sup>1</sup> These royalties include \$512,690,988 paid for gasoline and LPG; \$13,248,739 paid for gas lost; \$125,398 for oil lost, \$68,123,131 for sulphur, and \$174,287 for salt.

**Table 73. Mississippi OCS: Revenue from Federal Oil and Gas Leases, 1973-93**

Year	Bonus Payments (\$)	Rental Payments (\$)	Minimum Royalties (\$)	Shut-In Gas Payments (\$)	Production Royalties (\$)	Annual Revenue (\$)
1973	115,702,000	103,680	0	0	0	115,805,680
1974	0	120,960	0	0	0	120,960
1975	0	103,680	0	0	0	103,680
1976	0	103,680	0	0	0	103,680
1977	0	69,120	0	0	0	69,120
1978	0	0	0	0	0	0
1979	0	0	0	0	0	0
1980	0	0	0	0	0	0
1981	0	0	0	0	0	0
1982	0	0	0	0	0	0
1983	0	0	0	0	0	0
1984	0	49,731	0	0	0	49,731
1985	155,352,700	334,681	0	0	0	155,687,381
1986	0	103,257	0	0	0	103,257
1987	0	138,240	15,594	0	0	153,834
1988	0	17,280	32,874	0	0	50,154
1989	0	51,840	15,594	0	0	67,434
1990	146,000	69,120	49,731	0	0	264,851
1991	0	51,840	49,731	0	0	101,571
1992	523,250	107,686	67,011	0	0	697,947
1993	0	51,840	299,731	0	0	351,571
<b>Total</b>	<b>271,723,950</b>	<b>1,476,635</b>	<b>530,266</b>	<b>0</b>	<b>0</b>	<b>273,730,851</b>

**Table 74. Oregon OCS: Revenue from Federal Oil and Gas Leases, 1964-93**

Year	Bonus Payments (\$)	Rental Payments (\$)	Minimum Royalties (\$)	Shut-In Gas Payments (\$)	Production Royalties (\$)	Annual Revenue (\$)
1964	27,768,773	1,276,302	0	0	0	29,045,075
1965	0	1,276,302	0	0	0	1,276,302
1966	0	1,034,382	0	0	0	1,034,382
1967	0	137,475	0	0	0	137,475
1968	0	34,560	0	0	0	34,560
1969-93	0	0	0	0	0	0
<b>Total</b>	<b>27,768,773</b>	<b>3,759,021</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,527,794</b>

**Table 75. Texas OCS: Revenue from Federal Oil and Gas Leases, 1953–93**

<i>Year</i>	<i>Bonus Payments (\$)</i>	<i>Rental Payments (\$)</i>	<i>Minimum Royalties (\$)</i>	<i>Shut-in Gas Payments (\$)</i>	<i>Production Royalties<sup>1</sup> (\$)</i>	<i>Annual Revenue (\$)</i>
1953	0	87,840	0	0	0	87,840
1954	23,357,029	289,290	0	0	0	23,646,319
1955	8,437,462	537,120	0	0	979	8,975,561
1956	0	696,489	0	0	6,675	703,164
1957	0	289,821	1,380	0	3,380	294,581
1958	0	236,010	0	0	0	236,010
1959	0	64,269	0	0	141	64,410
1960	35,732,031	762,750	17,280	0	47	36,512,108
1961	0	679,320	19,123	0	0	698,443
1962	557,720	502,200	20,520	0	1,837	1,082,277
1963	0	424,440	35,963	0	26,627	487,030
1964	0	686,475	55,060	0	2,449	743,984
1965	0	655,109	109,350	0	1,666	766,125
1966	0	2,933	0	0	1,596,615	1,599,548
1967	0	244,080	2,757	0	4,336,351	4,583,188
1968	593,899,046	1,727,325	4,320	0	4,676,977	600,307,668
1969	0	1,642,275	0	0	4,999,819	6,642,094
1970	0	1,357,695	29,430	0	4,940,860	6,327,985
1971	0	1,072,575	267,840	0	4,648,136	5,988,551
1972	0	602,505	231,692	0	5,490,243	6,324,440
1973	1,537,495,671	1,723,674	302,400	0	6,087,415	1,545,609,160
1974	1,494,116,731	3,570,954	302,400	0	7,334,827	1,505,324,912
1975	345,396,323	5,722,470	216,000	0	7,643,604	358,978,397
1976	68,493,420	5,428,842	285,120	0	7,113,687	81,321,069
1977	356,102,428	5,442,689	423,461	0	10,640,022	372,608,600
1978	589,247,947	5,144,173	697,340	0	51,813,251	646,902,711
1979	639,636,325	4,010,097	900,021	0	157,025,060	801,571,503
1980	1,417,961,511	3,796,514	928,974	0	250,951,691	1,673,638,690
1981	581,572,623	4,448,482	884,114	0	375,086,201	961,991,420
1982	471,495,788	3,891,934	872,402	0	476,648,518	952,908,642
1983	1,066,782,325	7,676,526	1,428,916	0	513,136,075	1,589,023,842
1984	844,850,488	8,545,621	1,155,896	0	628,882,550	1,483,434,555
1985	359,175,656	10,206,431	1,329,880	0	549,542,198	920,254,165
1986	56,817,990	6,738,005	1,423,936	0	467,593,945	532,573,876
1987	234,275,520	10,556,888	1,536,615	0	454,179,011	700,548,034
1988	125,352,889	5,640,007	7,076,705	0	437,782,985	575,852,586
1989	257,224,333	9,578,098	11,793,401	0	447,706,376	726,302,208
1990	159,967,604	6,120,723	2,332,435	0	499,224,926	667,645,688
1991	38,312,393	3,478,608	4,426,090	0	412,257,320	458,474,411
1992	30,411,963	2,381,572	3,386,119	0	419,471,258	455,650,912
1993	<u>62,570,163</u>	<u>5,585,737</u>	<u>14,859,633</u>	<u>0</u>	<u>427,897,152</u>	<u>510,912,685</u>
<b>Total</b>	<b>11,399,243,379</b>	<b>132,248,566</b>	<b>57,356,573</b>	<b>0</b>	<b>6,638,750,874</b>	<b>18,227,599,392</b>

<sup>1</sup> These royalties include \$28,799,383 paid for gasoline and LPG; \$658,773 paid for gas lost; and \$10,696 paid for oil lost.

**Table 76. Washington OCS: Revenue from Federal Oil and Gas Leases, 1964–93**

<i>Year</i>	<i>Bonus Payments (\$)</i>	<i>Rental Payments (\$)</i>	<i>Minimum Royalties (\$)</i>	<i>Shut-In Gas Payments (\$)</i>	<i>Production Royalties (\$)</i>	<i>Annual Revenue (\$)</i>
1964	7,764,928	466,260	0	0	0	8,231,188
1965	0	466,260	0	0	0	466,260
1966	0	362,880	0	0	0	362,880
1967	0	51,840	0	0	0	51,840
1968	0	51,840	0	0	0	51,840
1969–93	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>7,764,928</b>	<b>1,399,080</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,164,008</b>

**Table 77. North Atlantic OCS: Revenue from Federal Oil and Gas Leases, 1979–93**

<i>Year</i>	<i>Bonus Payments (\$)</i>	<i>Rental Payments (\$)</i>	<i>Minimum Royalties (\$)</i>	<i>Shut-In Gas Payments (\$)</i>	<i>Production Royalties (\$)</i>	<i>Annual Revenue (\$)</i>
1979	816,516,546	1,161,216	0	0	0	817,677,762
1980	0	0	0	0	0	0
1981	0	1,075,977	0	0	0	1,075,977
1982	0	1,075,977	0	0	0	1,075,977
1983	0	1,024,740	0	0	0	1,024,740
1984	0	847,872	0	0	0	847,872
1985–93	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>816,516,546</b>	<b>5,185,782</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>821,702,328</b>

**Table 78. Mid-Atlantic OCS: Revenue from Federal Oil and Gas Leases, 1976-93**

Year	Bonus Payments (\$)	Rental Payments (\$)	Minimum Royalties (\$)	Shut-In Gas Payments (\$)	Production Royalties (\$)	Annual Revenue (\$)
1976	1,127,936,425	1,714,176	0	0	0	1,129,650,601
1977	0	1,714,176	0	0	0	1,714,176
1978	0	1,714,176	0	0	0	1,714,176
1979	40,001,631	1,957,680	0	0	0	41,959,311
1980	0	2,359,296	0	0	0	2,359,296
1981	323,628,530	1,929,927	0	0	0	325,588,927
1982	3,920,828	2,254,428	0	0	0	6,175,256
1983	68,410,240	2,835,114	0	0	0	71,245,354
1984	0	2,451,456	73,728	0	0	2,525,184
1985	0	1,990,656	0	0	0	1,990,656
1986	0	1,652,137	0	0	0	1,652,137
1987	0	1,415,590	0	0	0	1,415,590
1988	0	967,080	0	0	0	967,080
1989	0	940,032	0	0	0	940,032
1990	0	958,464	0	0	0	958,464
<sup>1</sup> 1991	0	(673,450)	0	0	0	(673,450)
1992	0	55,296	0	0	0	55,296
<sup>2</sup> 1993	0	0	0	0	0	0
<b>Total</b>	<b>1,563,897,654</b>	<b>26,236,234</b>	<b>73,728</b>	<b>0</b>	<b>0</b>	<b>1,590,207,616</b>

<sup>1</sup> Recoupments were claimed in 1991 by several firms for payments made in prior years.

<sup>2</sup> All remaining leases on the Atlantic OCS are under a Suspension of Operations which includes a waiver of rental payments.

**Table 79. South Atlantic OCS: Revenue from Federal Oil and Gas Leases, 1978-93**

Year	Bonus Payments (\$)	Rental Payments (\$)	Minimum Royalties (\$)	Shut-In Gas Payments (\$)	Production Royalties (\$)	Annual Revenues (\$)
1978	100,743,443	792,576	0	0	0	101,536,019
1979	0	792,576	0	0	0	792,576
1980	0	700,416	0	0	0	700,416
1981	342,766,174	1,468,794	0	0	0	344,234,968
1982	2,859,150	836,871	0	0	0	3,696,021
1983	13,362,040	546,528	0	0	0	13,908,568
1984	0	589,824	0	0	0	589,824
1985	0	368,640	0	0	0	368,640
1986	0	341,592	0	0	0	341,592
1987	0	341,592	0	0	0	341,592
1988	0	341,592	0	0	0	341,592
1989	0	221,184	0	0	0	221,184
1990	0	221,184	0	0	0	221,184
<sup>1</sup> 1991	0	(3,535)	0	0	0	(3,535)
1992	0	36,864	0	0	0	36,864
<sup>2</sup> 1993	0	0	0	0	0	0
<b>Total</b>	<b>459,730,807</b>	<b>7,596,698</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>467,327,505</b>

<sup>1</sup> Recoupments were claimed in 1991 by several firms for payments made in prior years.

<sup>2</sup> All remaining leases on the Atlantic OCS are under a Suspension of Operations which includes a waiver of rental payments.

## Revenue Generated from OCS Leases, 1993

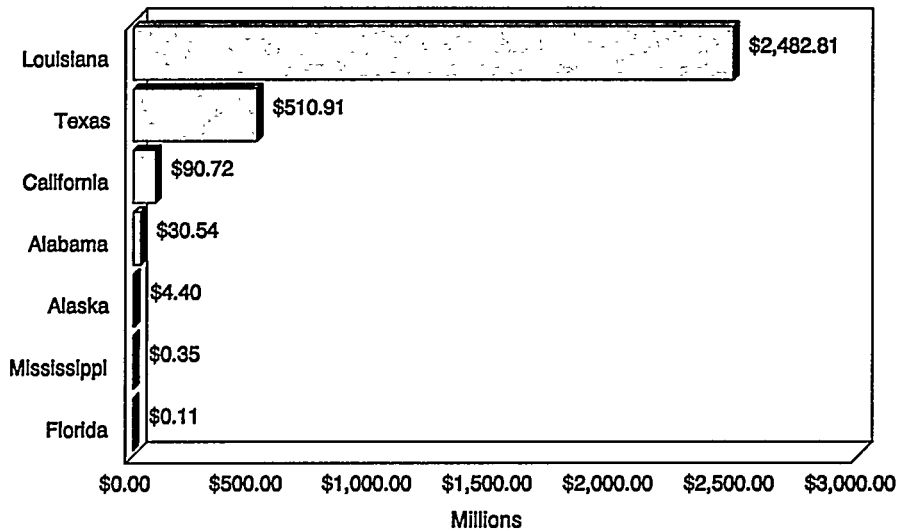


Figure 17.



## VII. Disbursement of Federal Offshore Revenue

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Total disbursements of OCS revenue since 1955 amount to \$102 billion (see table 80). About 81 percent of total disbursements of OCS revenue has gone to the U.S. Treasury General Fund. However, in 1993 only about 57 percent of OCS revenue, about \$1.7 billion, went directly into the U.S. Treasury General Fund. In addition to this fund, MMS distributes OCS revenue to the Land and Water Conservation Fund (LWCF), the National Historic Preservation Fund (NHPF), and coastal States. In 1993 about 35 percent of OCS revenue went into the LWCF (see fig. 18)

In accordance with Section 8(g) of the OCSLA Amendments of 1978, coastal States must receive some of the revenue from the leasing and development of offshore areas which contain oil and gas fields that straddle Federal and State jurisdictional boundaries.

Because the States and the Federal Government could not reach an agreement on a formula for dividing these revenues, the subject monies went into a Section 8(g) escrow fund beginning in August 1979. Revenues from the Beaufort Sea in Alaska went into a second escrow fund under Section 7 beginning in December 1979.

Congress resolved the dispute in the OCSLA Amendments of 1985, Public Law 99-72. The law provides to the States the following distribution of Section 8(g) funds (see table 71):

- Escrow funds to be disbursed in FY 1986 and 1987;
- A series of annual payments disbursed to the States between FY 1987 and 2001; and
- Recurring annual disbursements of 27 percent of royalty, rent, and bonus revenues from Section 8(g) leases.

Congress passed a second law, Public Law 100-102, to distribute the Section 7 Beaufort Sea escrow funds to the State of Alaska in FY 1988 (see table 80). In 1993, MMS disbursements to the States amounted to \$77.5 million.

As amended, the LWCF Act of 1965 requires the National Park Service, since 1978, to keep at least \$900 million in the LWCF each fiscal year (FY). Before FY 1978, the amount was \$300 million. Money for the LWCF comes from surplus property sales held by the General Services Administration, motorboat fuel taxes collected by the U.S. Treasury, and recreation use fees collected by the U.S. Department of the Interior and the U.S. Department of Agriculture. Any difference between these combined receipts and the \$900 million total is made up from OCS revenue.

Since 1971, OCS revenue has provided more than 70 percent of LWCF monies, and in

some of those years more than 90 percent (see table 80). In 1993, the LWCF received \$900 million. The States and Federal Agencies use LWCF grants to buy parks and recreation areas, and to aid in planning, acquiring, and developing land and water areas for recreation use. Since 1965, the LWCF has distributed about \$3.2 billion to States and \$5 billion to Federal Agencies (see table 72).

Revenue from Federal offshore mineral leases sustains the NHPF. The National Historic Preservation Act of 1986, as amended, limits OCS revenue payments into the NHPF to \$150 million. The Act specifies how annual appropriations of the NHPF support matching grants to the States and Territories and to the National Trust for Historic Preservation. Each State or Territory in turn must award 10 percent of its annual NHPF allocation to certified local governments as subgrants. Projects funded by the NHPF include among others, the following:

- Identifying and nominating properties to the National Register of Historic Places (NRHP);
- Protecting NRHP-listed properties and districts affected by federally funded or licensed construction projects;
- Reviewing and recommending to the NPS historic preservation certifications under the Economic Recovery Tax Act of 1981; and
- Setting up rehabilitation standards for public or private properties.

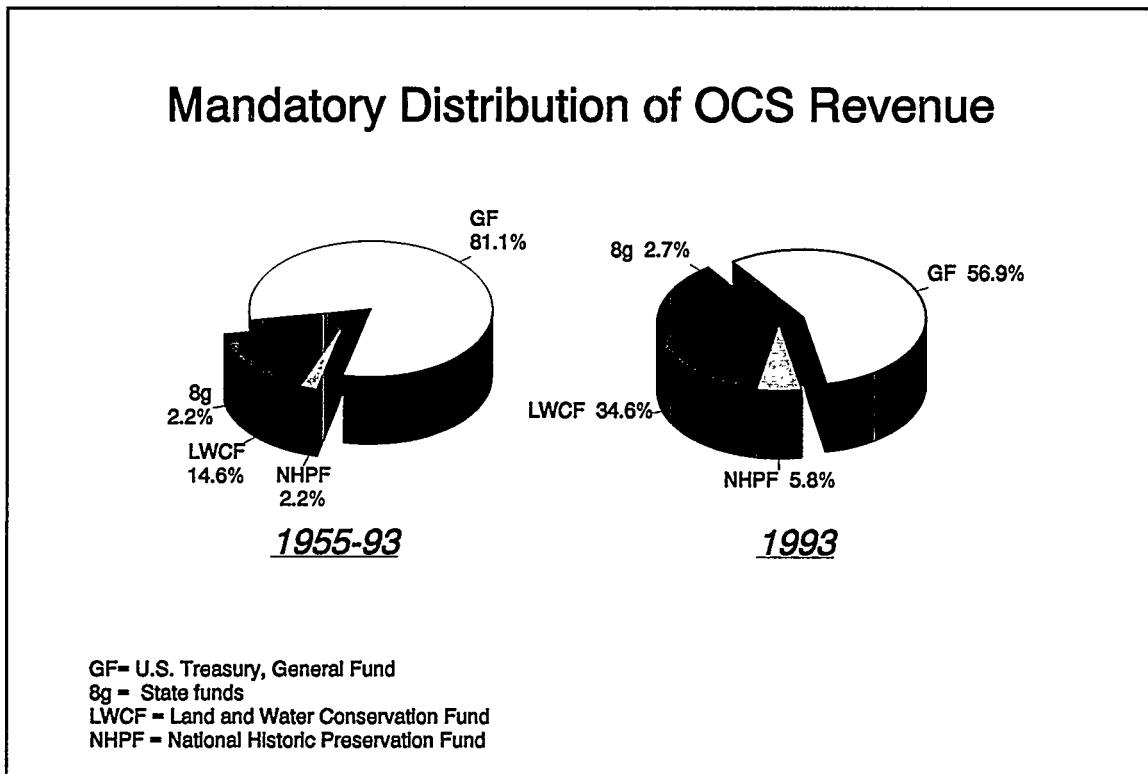
Table 82 shows the amount of monies distributed by the LWCF and NHPF to the States, and U.S. Territories and Possessions in FY 93. Figures 19 and 20 show how regional areas of the U.S. fared when it comes to receiving monies from these two funds.

**Table 80. Mandated Disbursement by Fiscal Year of Mineral Revenue from Federal OCS Leases, 1955-93**

Fiscal Year	U.S. Treasury General Fund		Land & Water Conservation Fund (\$)	National Historic Preservation Fund (\$)	States (\$)	Total Disbursement <sup>1</sup> (\$)
	Bonus & Rental Payments (\$)	Royalty Payments (\$)				
1955	142,404,630	0	0	0	0	142,404,630
1956	111,171,041	52,814	0	0	0	111,223,855
1957	(55,457,867)	9,352,889	0	0	0	(46,104,978)
1958	2,630,090	10,686,064	0	0	0	13,316,154
1959	1,145,720	2,266,484	0	0	0	3,412,204
1960	226,616,838	2,839,980	0	0	0	229,456,818
1961	1,716,161	5,588,525	0	0	0	7,304,686
1962	6,006,936	5,605,230	0	0	0	11,612,166
1963	359,370,510	7,443,921	0	0	0	366,814,431
1964	5,870,970	10,620,439	0	0	0	16,491,409
1965	42,223,700	11,246,201	0	0	0	53,469,901
1966	161,893,155	86,424,061	0	0	0	248,317,216
1967	596,202,951	41,107,770	0	0	0	637,310,721
1968	903,330,950	57,935,108	0	0	0	961,266,058
1969	223,821,610	78,083,889	126,873,300	0	0	428,778,799
1970	73,280,497	14,933,349	107,882,204	0	0	196,096,050
1971	680,542,388	159,914,892	210,092,091	0	0	1,050,549,371
1972	28,029,742	27,645,946	223,677,068	0	0	279,352,756
1973	2,704,908,793	1,026,685,098	223,983,126	0	0	3,955,577,017
1974	6,096,405,041	408,101,161	243,887,918	0	0	6,748,394,120
1975	1,688,826,143	491,813,968	247,325,029	0	0	2,427,965,140
1976	1,385,179,272	1,000,627,187	276,641,316	0	0	2,662,447,775
TQ <sup>2</sup>	1,090,478,816	178,741,689	41,898,324	0	0	1,311,118,829
1977	1,302,356,698	804,649,966	232,339,865	24,400,000	0	2,363,746,529
1978	320,153,229	1,005,726,401	833,428,546	100,000,000	0	2,259,308,176
1979	1,088,416,655	1,337,744,641	741,214,437	100,000,000	0	3,267,375,733
1980	1,360,713,229	1,839,574,175	900,583,342	0	0	4,100,870,746
1981	6,684,689,957	2,286,169,198	867,123,128	300,000,000	0	10,137,982,283
1982	1,744,453,723	3,529,206,734	825,959,504	150,000,000	0	6,249,619,961
1983	6,579,073,584	2,947,728,610	814,693,040	150,000,000	0	10,491,495,234
1984	2,604,347,777	3,149,777,867	789,421,288	150,000,000	0	6,693,546,932
1985	1,018,662,056	3,588,937,243	784,279,198	150,000,000	0	5,541,878,497
1986	1,188,838,879	2,621,904,068	755,223,819	150,000,000	897,486,953	5,613,453,719
1987	629,745,831	2,418,156,141	823,575,610	150,000,000	681,782,529	4,703,260,111
1988	270,108,066	2,267,821,971	825,949,540	150,000,000	<sup>3</sup> 367,020,193	3,880,899,770
1989	(145,215,350)	2,061,666,495	862,760,617	150,000,000	46,849,754	2,976,061,516
1990	259,659	2,010,060,802	843,765,173	150,000,000	49,023,327	3,053,108,961
1991	208,049	2,115,242,775	884,999,910	150,000,000	43,683,226	3,194,133,960
1992	60	1,460,328,533	887,925,509	150,000,000	<sup>4</sup> 68,391,572	2,566,645,674
1993	<u>25,560,022</u>	<u>1,709,001,994</u>	<u>900,000,000</u>	<u>150,000,000</u>	<u>77,473,362</u>	<u>2,862,035,378</u>
<b>Total</b>	<b>41,148,970,211</b>	<b>40,791,414,279</b>	<b>15,275,502,902</b>	<b>2,234,400,000</b>	<b>2,231,710,916</b>	<b>101,771,998,308</b>

**Table 80. Mandated Disbursement by Fiscal Year of Mineral Revenue from Federal OCS Leases, 1955-93**

- <sup>1</sup> Total disbursement does not include the Federal share of escrow interest because interest is not a direct mineral leasing receipt. However, the figures for State payments include their share of escrow interest. Interest is accrued for the time bid deposits are held in escrow pending fair market determination and other bid acceptance criteria.
- <sup>2</sup> Transition Quarter, which resulted from a change in the end of the Federal Government's FY from June 30 to September 30.
- <sup>3</sup> From 1988 forward, Alaska's payment includes 27% from part of a disputed Federal/State boundary area in the Beaufort Sea. Part of the disputed area was determined to be in the 8(g) zone. Alaska received \$320 million from monies held in escrow for this area in 1988.
- <sup>4</sup> The increase here is a result of a 1986 Budget Reconciliation Act increase in the settlement payment from \$19.5 million to \$45.5 million.



**Figure 18.**

**Table 81. Appropriations for the Land and Water Conservation Fund, Fiscal Years 1965-94 and National Historic Preservation Fund, Fiscal Years 1967-94**

Fiscal Year	Land and Water Conservation Fund			National Historic Preservation Fund
	Grants to States (\$) (1)	Grants to Federal Agencies (\$) (2)	Total Appropriation (\$) (3)	Appropriations <sup>1</sup> (\$) (4)
1965	10,375,000	5,625,000	16,000,000	0
1966	82,408,718	39,706,282	122,115,000	0
1967	56,531,090	38,475,910	95,007,000	0
1968	61,520,000	42,420,000	103,940,000	300,000
1969	44,938,000	66,562,000	111,500,000	100,000
1970	61,832,000	69,268,000	131,100,000	969,000
1971	185,239,000	172,161,000	357,400,000	5,980,000
1972	255,000,000	106,500,000	361,500,000	5,980,000
1973	181,800,000	118,200,000	300,000,000	7,505,000
1974	65,767,000	10,456,000	76,223,000	11,505,000
1975	179,880,000	127,612,000	307,492,000	20,000,000
1976	175,739,000	141,247,000	316,986,000	24,750,000
TQ <sup>3</sup>	43,925,000	32,063,000	75,988,000	N/A
1977	175,315,000	362,484,000	537,799,000	17,500,000
1978	305,694,000	499,306,000	805,000,000	45,000,000
1979	369,602,000	367,423,000	737,025,000	60,000,000
1980	299,703,000	209,491,000	509,194,000	<sup>4</sup> 55,000,000
1981	173,745,000	114,848,000	288,593,000	<sup>5</sup> 26,000,000
1982	0	179,927,000	179,927,000	25,440,000
1983	110,619,000	224,474,000	335,093,000	<sup>6</sup> 51,000,000
1984	72,919,000	228,971,000	301,890,000	27,500,000
1985	71,853,000	214,759,000	286,612,000	25,480,000
1986	45,992,900	122,216,100	168,209,000	23,729,330
1987	32,700,000	177,926,000	210,626,000	24,250,000
1988	16,567,000	153,897,000	170,464,000	<sup>7</sup> 27,250,000
1989	16,700,000	189,533,000	206,233,000	<sup>8</sup> 30,500,000
1990	16,501,000	214,980,000	231,481,000	<sup>9</sup> 32,887,504
1991	29,843,000	311,828,000	341,671,000	<sup>10</sup> 34,484,000
1992	19,748,000	297,644,000	317,392,000	<sup>11</sup> 35,478,000
1993	24,787,000	258,865,000	283,652,000	<sup>12</sup> 36,617,000
1994	24,750,000	228,200,000	252,950,000	<sup>13</sup> 40,000,000
<b>Total</b>	<b>3,211,993,708</b>	<b>5,327,068,292</b>	<b>8,539,062,000</b>	<b>695,204,834</b>

<sup>1</sup> Before FY 77 the Grant Program operated under a no-year appropriation from General Revenue (the Preservation of Historic Properties Account). Then the Historic Preservation Fund was created, funded by OCS revenue, with 2-year appropriations.

<sup>2</sup> Includes additional funds for Federal administration costs for Federal Land Acquisition and State Grants.

<sup>3</sup> Transition Quarter, July 1, 1976, to September 30, 1976, because of adoption of new FY calendar

<sup>4</sup> Includes \$10 million deferred from FY 1980 to FY 1981.

<sup>5</sup> Beginning with the FY 1981 appropriation, National Historic Preservation Fund program administration costs (\$1.54 million in 1981) were separated from the grants-in-aid appropriation.

<sup>6</sup> Includes \$25 million appropriated by the Emergency Jobs Act (P.L. 98-8)

<sup>7</sup> The FY 1988 included \$1 million for the Bicentennial Lighthouse Program, and \$750,000 for a Micronesian Study

<sup>8</sup> The FY 1989 also included \$1 million for the Bicentennial Lighthouse Program.

<sup>9</sup> The FY 1990 included \$1 million for the Bicentennial Lighthouse Program as well as \$473,000 for grants to Native American Tribes, and \$600,000 for Disaster Relief.

<sup>10</sup> The FY 1991 included \$721,000 for grants to Native American Tribes.

<sup>11</sup> The FY 1992 includes \$938,000 for grants to Native American Tribes.

<sup>12</sup> The FY 1993 includes \$1,487,000 for grants to Native American Tribes.

<sup>13</sup> The FY 1994 includes \$2 million for grants to Native American Tribes.

NOTE: The total awarded to date for the National Trust is \$93,463,713.

SOURCE: National Park Service, Recreation Grants Division and Preservation Assistance Division.

**Table 82. Apportionments to States and U.S. Territories and Possessions from the Land and Water Conservation Fund (LWCF) and the National Historic Preservation Fund (NHPF), Fiscal Year 1994**

State, Territory, or Possession	Apportionment		Total (\$)
	Land and Water Conservation Fund (\$)	National Historic Preservation Fund (\$)	
<b>Pacific Northwest</b> .....	<b>1,293,454</b>	<b>1,950,941</b>	<b>3,244,395</b>
Alaska .....	218,952	428,873	647,825
Idaho .....	235,103	493,178	728,281
Oregon .....	351,672	524,145	875,817
Washington .....	487,727	504,745	992,472
<b>West</b> .....	<b>3,124,784</b>	<b>2,765,631</b>	<b>5,890,415</b>
American Samoa .....	25,000	198,121	223,121
Arizona .....	416,812	538,605	955,417
California .....	2,131,707	894,149	3,025,856
Federated States of Micronesia .....	0	272,287	272,287
Guam .....	25,000	218,034	243,034
Hawaii .....	257,713	321,754	579,467
Nevada .....	268,552	322,681	591,233
Northern Marianas .....	25,000	193,610	218,610
<b>Rocky Mountain</b> .....	<b>1,566,588</b>	<b>2,967,463</b>	<b>4,534,051</b>
Colorado .....	390,608	591,436	982,044
Montana .....	224,562	489,881	714,443
North Dakota .....	221,976	336,512	558,488
South Dakota .....	222,598	476,021	698,619
Utah .....	294,456	582,863	877,319
Wyoming .....	212,388	490,750	703,138
<b>Southwest</b> .....	<b>2,576,041</b>	<b>3,107,218</b>	<b>5,683,259</b>
Arkansas .....	301,062	483,182	784,244
Louisiana .....	433,344	708,171	1,141,515
New Mexico .....	269,890	586,435	856,325
Oklahoma .....	354,794	556,104	910,898
Texas .....	1,216,951	773,326	1,990,277
<b>Midwest</b> .....	<b>5,234,341</b>	<b>5,851,481</b>	<b>11,085,822</b>
Illinois .....	880,110	617,781	1,497,891
Indiana .....	502,183	578,452	1,080,635
Iowa .....	319,196	524,572	843,768
Kansas .....	315,376	330,850	646,226
Michigan .....	748,202	693,191	1,441,393
Minnesota .....	433,110	603,416	1,036,526
Missouri .....	471,774	731,089	1,202,863
Nebraska .....	269,201	391,775	660,976
Ohio .....	835,161	792,507	1,627,668
Wisconsin .....	460,028	587,848	1,047,876

**Table 82. Apportionments to States and U.S. Territories and Possessions from the Land and Water Conservation Fund (LWCF) and the National Historic Preservation Fund (NHPF), Fiscal Year 1994 - *continued***

State, Territory, or Possession	Apportionment		Total (\$)
	Land and Water Conservation Fund (\$)	National Historic Preservation Fund (\$)	
<b>Southeast</b> .....	<b>4,038,072</b>	<b>5,151,460</b>	<b>9,189,532</b>
Alabama .....	412,114	583,421	995,535
Florida .....	1,020,265	672,140	1,692,405
Georgia .....	545,836	749,194	1,295,030
Kentucky .....	367,092	765,280	1,132,372
Mississippi .....	297,745	470,430	768,175
North Carolina .....	550,034	701,146	1,251,180
South Carolina .....	386,239	582,742	968,981
Tennessee .....	458,747	627,107	1,085,854
<b>Mid-Atlantic</b> .....	<b>6,891,720</b>	<b>8,696,590</b>	<b>15,588,310</b>
Connecticut .....	405,035	593,127	998,162
District of Columbia .....	65,723	330,640	396,363
Delaware .....	234,124	427,824	661,948
Maine .....	246,178	452,843	699,021
Maryland .....	497,912	750,781	1,248,693
Massachusetts .....	580,347	749,985	1,330,332
New Hampshire .....	250,332	378,583	628,915
New York .....	1,323,714	917,087	2,240,801
New Jersey .....	702,763	590,480	1,293,243
Pennsylvania .....	910,913	870,205	1,781,118
Puerto Rico .....	350,580	322,204	672,784
Rhode Island .....	257,650	532,808	790,458
Vermont .....	216,119	418,688	634,807
Virginia .....	551,534	651,113	1,202,647
Virgin Islands .....	25,000	285,211	310,211
West Virginia .....	273,796	425,011	698,807
<b>Subtotal</b>	<b><u>24,725,000</u></b>	<b><u>30,490,784</u></b>	<b><u>55,215,784</u></b>
<b>Federal Agency</b> .....	<b>228,200,000</b>	<b>N/A</b>	<b>228,200,000</b>
Bureau of Land Management ...	12,100,000	N/A	12,100,000
U.S. Fish and Wildlife Service	82,700,000	N/A	82,700,000
U.S. Forest Service .....	64,300,000	N/A	64,300,000
National Park Service .....	<u>69,100,000</u>	<u>N/A</u>	<u>69,100,000</u>
<b>Total</b>	<b>252,925,000</b>	<b>30,490,784</b>	<b>283,415,784</b>

Source: National Park Service, Recreation Grants Division and Preservation Assistance Division

## State Apportionments from the Land and Water Conservation Fund (FY 1994)

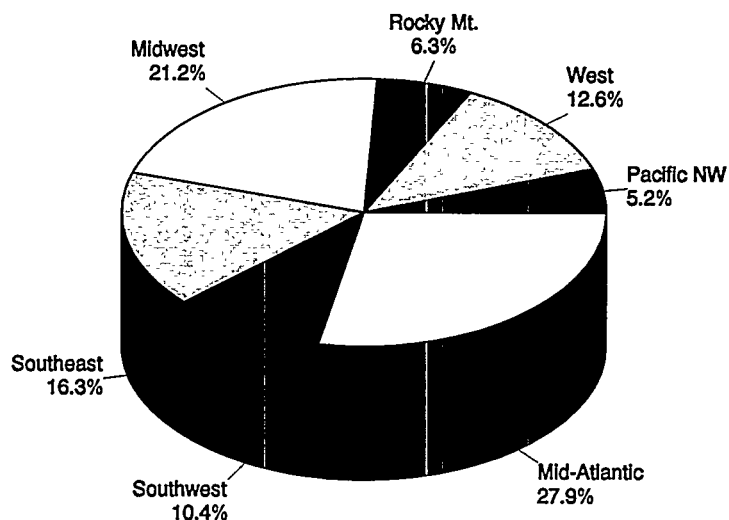


Figure 19.

## State Apportionments from the National Historic Preservation Fund (FY 1994)

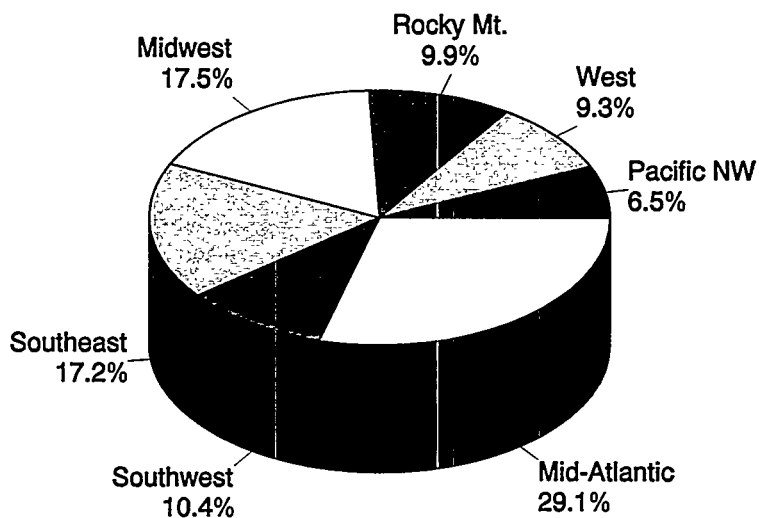


Figure 20.

## VIII. Reserves and Resource Estimates of Offshore Oil and Natural Gas

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In 1987, the U.S. Geological Survey and the MMS completed an assessment of the undiscovered conventional resources of crude oil and natural gas in the United States. National Resource Assessment (NRA) results for all 26 Federal offshore planning areas are shown in table 83. The MMS updated portions of that assessment in January 1990. Rankings are according to risked mean BOE resource estimates of the undiscovered, economically recoverable hydrocarbon resources. The estimates include both leased and unleased submerged lands of the OCS. The table also includes each planning area's conditional mean estimates for oil and gas.

The NRA made an inventory of those conventional resources considered recoverable under current technology, and those for which development and production are economical under specified price and cost relationships, excluding exploration costs. The NRA did not include resources from the following:

- Tar deposits;
- Intractable heavy oil deposits;
- Oil shales;
- Gas in low-permeability (<0.1 millidarcy in situ) tight reservoirs;
- Coal bed methane;
- Gas in geopressed shales and brines; and
- Natural gas hydrates (clathrates).
- Any other unconventional resource

Using an exploration simulation model called PRESTO, the MMS calculated resource estimates for the OCS. The mean estimate is the average estimate of a distribution of possible values. The conditional mean estimate refers to the average estimate of oil or gas given the condition that economically recoverable hydrocarbons are present in the assessment area. Each planning area has a **marginal probability of hydrocarbons** ( $MP_{HC}$ ) associated with its corresponding range of estimates.

Table 83 shows how MMS uses risked mean estimates for ranking the planning area whose  $MP_{HC}$ 's are different. An area's risked mean BOE estimate comes from dividing the area's conditional mean gas estimate by 5,620 and adding the result to the area's conditional mean oil estimate. The conditional mean BOE is then multiplied by the  $MP_{HC}$  for the area. Therefore, risked mean resource estimates include the possibility that an area is devoid of commercially recoverable hydrocarbons.

Complete explanations of the modeling methodology and the data used are in the MMS reports *Estimates of Undiscovered Oil and Gas Resources for the Outer Continental Shelf as of January 1987* (MMS 89-0090) and *Estimates of Undiscovered, Economically Recoverable Oil and Gas Resources for the Outer Continental Shelf Revised as of January*

1990 (MMS 91-0051). Another NRA is underway, with a completion date at the end of 1994. Results are expected to be published in 1995.

Offshore oil and natural gas reserves are shown in tables 84, 85, and 86. The tables show annual MMS estimates of oil and natural gas reserves that remained in producing or active fields between 1975 and 1993. Oil includes crude oil and condensate; gas includes associated and nonassociated natural gas.

The definition for reserve estimation changed in 1988 from American Petroleum Institute (API) **demonstrated reserves** to Society of Petroleum Engineers (SPE) **proved reserves**. Consequently, annual reserve estimates from 1975 to 1987 are API demonstrated reserves. Annual reserve estimates from 1988 through 1993 are SPE proved reserves.

Oil reserves are given in Bbbl at 60°F and 1 atm and natural gas reserves are given in Tcf at 60°F. Table 85 reports natural gas reserves for the GOM using a pressure base of 15.025 psi while table 86 reports PAC reserves using a pressure base of 14.73 psi. The MMS has adopted these pressures on the basis of standard industry practices for the respective regions. The total gas reserves in table 84 include an adjustment of GOM natural gas reserves to 14.73 psi (standard atmospheric pressure). The adjustment was done by multiplying the reported GOM natural gas reserves by 1.02, which is the ratio of the GOM to PAC pressure base.

To arrive at a combined oil and natural gas reserve figure, natural gas numbers were converted to **barrels of oil equivalent (BOE)**. Given a figure for BOE of natural gas, adding this number to the estimated reserves of oil in barrels results in total BOE for each OCS region.

For detailed information on reserve estimates and methodology, refer to the following reports:

- *Estimated Proved Oil and Gas Reserves, Gulf of Mexico Outer Continental Shelf, December 31, 1992 (MMS 93-0050)*
- *Estimated Oil and Gas Reserves, Pacific Outer Continental Shelf, as of December 31, 1992 (MMS 94-0008)*

**Table 83. Conditional and Risked Mean Estimates of Undiscovered, Economically Recoverable Resources for Federal Offshore Planning Areas, January 1, 1990**

*(Oil and oil equivalents are expressed in billions of barrels; gas in trillion cubic feet)*

Rank	OCS Planning Area	Marginal Probability of Hydrocarbons (MP <sub>HC</sub> )	Conditional Mean		Risked Mean Estimates
			Oil	Gas <sup>1</sup>	BOE
1	Central Gulf of Mexico	1.00	3.82	37.66	10.52
2	Western Gulf of Mexico	1.00	1.58	25.40	6.10
3	Southern California	1.00	1.31	3.01	1.84
4	Chukchi Sea	0.23	5.96	0.00	1.36
5	Eastern Gulf of Mexico	1.00	0.95	1.68	1.25
6	Northern California	0.78	0.89	2.45	1.03
7	Central California	0.90	0.50	0.82	0.58
8	Mid-Atlantic	0.44	0.22	5.35	0.52
9	Beaufort Sea	0.23	1.66	0.00	0.38
10	South Atlantic	0.23	0.21	4.60	0.24
11	North Atlantic	0.39	0.11	2.54	0.22
12	Washington-Oregon	0.25	0.19	1.97	0.14
13	Straits of Florida	0.19	0.34	0.57	0.08
14	Navarin Basin	0.03	1.14	0.00	0.03
15	Gulf of Alaska	0.04	0.98	0.00	0.04
16	St. George Basin	0.02	0.39	0.00	0.01
17	N. Aleutian Basin	0.02	0.61	0.00	0.01
18	Kodiak	0.03	0.43	0.00	0.01
19	Norton Basin	< 0.01	0.58	0.00	< 0.01
20	Cook Inlet	< 0.01	0.17	0.00	< 0.01
21	Hope Basin	< 0.01	0.50	0.00	< 0.01
22	Shumagin	0.01	0.28	0.00	< 0.01
23	Aleutian Arc	<0.01	<0.01	0.00	< 0.01
24	Aleutian Basin	<0.01	<0.01	0.00	< 0.01
25	Bowers Basin	<0.01	<0.01	0.00	< 0.01
26	St. Matthew-Hall	<0.01	<0.01	0.00	< 0.01

<sup>1</sup> Natural gas in Alaska was noneconomic.

**Table 84. Proved Oil and Gas Reserves and Cumulative Production for the United States Federal OCS, 1975-93**

(Oil and oil equivalents are expressed in billions of barrels; gas in trillion cubic feet.)

Year	No. of OCS Fields in Reserve Estimation	Original Recoverable Reserves		Cumulative Production		Remaining Recoverable Reserves		
		Oil	Gas	Oil	Gas	Oil	Gas	BOE
1975	255	6.61	61.1	3.82	27.7	2.79	33.4	8.73
1976	308	7.11	66.9	4.28	31.5	2.84	35.4	9.14
1977	338	7.74	71.5	4.64	35.8	3.10	35.7	9.46
1978	389	8.12	78.6	4.94	39.9	3.18	38.8	10.08
1979	421	8.31	84.8	5.02	45.2	3.29	39.6	10.33
1980	441	8.80	91.6	5.19	49.8	3.60	41.9	11.05
1981	468	9.01	96.4	5.49	54.8	3.52	41.6	10.92
1982	491	9.38	101.2	5.83	59.6	3.55	41.6	10.95
1983	528	10.12	109.5	6.18	63.9	3.94	45.6	12.06
1984	558	10.74	115.1	6.55	68.6	4.19	46.4	12.45
1985	586	11.80	120.7	6.92	72.8	4.92	48.0	13.44
1986	657	12.14	125.4	7.30	77.0	4.84	48.4	13.45
1987	717	12.09	126.6	7.66	81.7	4.52	44.1	12.51
<sup>2</sup> 1988	691	12.37	131.2	7.99	86.4	4.38	44.8	12.35
1989	752	12.29	133.7	8.30	91.2	3.98	42.5	11.55
1990	795	12.06	134.5	8.60	96.2	3.45	39.3	10.27
1991	823	12.16	135.2	8.94	101.1	3.22	33.5	9.18
1992	848	12.50	134.8	9.28	103.8	3.22	30.9	8.73
1993	862	12.64	141.9	9.63	110.7	3.02	31.40	8.5

<sup>1</sup> No reserve estimates were available for the Pacific OCS.

<sup>2</sup> Basis of reserves changed from API demonstrated to SPE proved.

**Table 85. Proved Oil and Gas Reserves and Cumulative Production for the Gulf of Mexico Federal Outer Continental Shelf and Slope, 1975-93**

*(Oil and oil equivalents are expressed in billions of barrels; gas in trillion cubic feet.)*

Year	No. of OCS Fields in Reserve Estimation	Original Recoverable Reserves		Cumulative Production		Remaining Recoverable Reserves		
		Oil	Gas	Oil	Gas	Oil	Gas	BOE
1975	255	6.61	59.9	3.82	27.2	2.79	32.7	8.61
1976	306	6.86	65.5	4.12	30.8	2.74	34.7	8.91
1977	334	7.18	69.2	4.47	35.0	2.71	34.2	8.80
1978	385	7.52	76.2	4.76	39.0	2.76	37.2	9.38
1979	417	7.71	82.2	4.83	44.2	2.88	38	9.64
1980	435	8.04	88.9	4.99	48.7	3.05	40.2	10.20
1981	461	8.17	93.4	5.27	53.6	2.90	39.8	9.98
1982	484	8.56	98.1	5.58	58.3	2.98	39.8	10.06
1983	521	9.31	106.2	5.90	62.5	3.41	43.7	11.19
1984	551	9.91	111.6	6.24	67.1	3.67	44.5	11.59
1985	575	10.63	116.7	6.58	71.1	4.05	45.6	12.16
1986	645	10.81	121.0	6.93	75.2	3.88	45.8	12.03
1987	704	10.76	122.1	7.26	79.7	3.50	42.4	11.04
<sup>1</sup> 1988	678	10.95	126.7	7.56	84.3	3.39	42.4	10.93
1989	739	10.87	129.1	7.84	88.9	3.03	40.2	10.18
1990	782	10.64	129.9	8.11	93.8	2.53	36.1	8.95
1991	819	10.74	130.5	8.41	98.5	2.33	32.0	8.02
1992	835	11.08	132.7	8.71	103.2	2.37	29.5	7.62
1993	849	11.15	139.5	9.01	110.0	2.15	29.7	7.33

<sup>1</sup> Basis of reserves changed from API demonstrated to SPE proved.

**Table 86. Proved Oil and Gas Reserves and Cumulative Production for the Pacific Federal Outer Continental Shelf and Slope, 1975-93**

*(Oil and oil equivalents are expressed in billions of barrels; gas in trillion cubic feet.)*

Year	No. of OCS Fields Included in Reserve Estimation	Original Recoverable Reserves		Cumulative Production		Remaining Recoverable Reserves		
		Oil	Gas	Oil	Gas	Oil	Gas	BOE
<sup>1</sup> 1975	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1976	2	0.25	0.11	0.16	0.08	0.10	0.03	0.10
1977	4	0.57	0.94	0.17	0.08	0.40	0.86	0.55
1978	4	0.60	0.92	0.18	0.09	0.42	0.83	0.57
1979	4	0.60	0.92	0.19	0.10	0.41	0.82	0.55
1980	6	0.76	0.96	0.20	0.10	0.55	0.86	0.71
1981	7	0.84	1.13	0.22	0.11	0.62	1.02	0.80
1982	7	0.82	1.15	0.25	0.13	0.57	1.02	0.75
1983	7	0.81	1.20	0.28	0.16	0.53	1.05	0.72
1984	7	0.83	1.22	0.31	0.20	0.52	1.02	0.70
1985	11	1.17	1.70	0.34	0.27	0.87	1.43	1.12
1986	12	1.33	2.00	0.37	0.32	0.96	1.68	1.26
1987	13	1.42	2.03	0.40	0.38	1.02	1.65	1.31
<sup>2</sup> 1988	13	1.42	2.00	0.43	0.43	0.99	1.57	1.27
1989	13	1.42	1.99	0.46	0.48	0.95	1.51	1.22
1990	13	1.42	2.01	0.49	0.53	0.92	1.48	1.19
1991	13	1.42	2.08	0.53	0.58	0.89	1.50	1.16
1992	13	1.49	2.39	0.57	0.64	0.92	1.75	1.23
1993	13	1.49	2.39	0.62	0.69	0.87	1.70	1.17

<sup>1</sup> No reserve estimates were available.

<sup>2</sup> The basis of reserve estimation changed from API demonstrated to SPE proved.

## **IX. Oil Pollution in U.S. and International Waters**

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Table 87 lists pollution spills on the OCS that are greater than 1 bbl. In 1993, there were 25 spills on the OCS from facilities or operational activity on Federal leases. These incidents resulted in the release of 159 bbl of pollutant (i.e., crude oil, condensate, refined product, mineral oil, diesel, or natural gas) into offshore waters. None of those 25 spills released more than 50 bbl (see table 87). In 1993, there were no spills of 1,000 bbl or greater from OCS facilities or operations (see table 88).

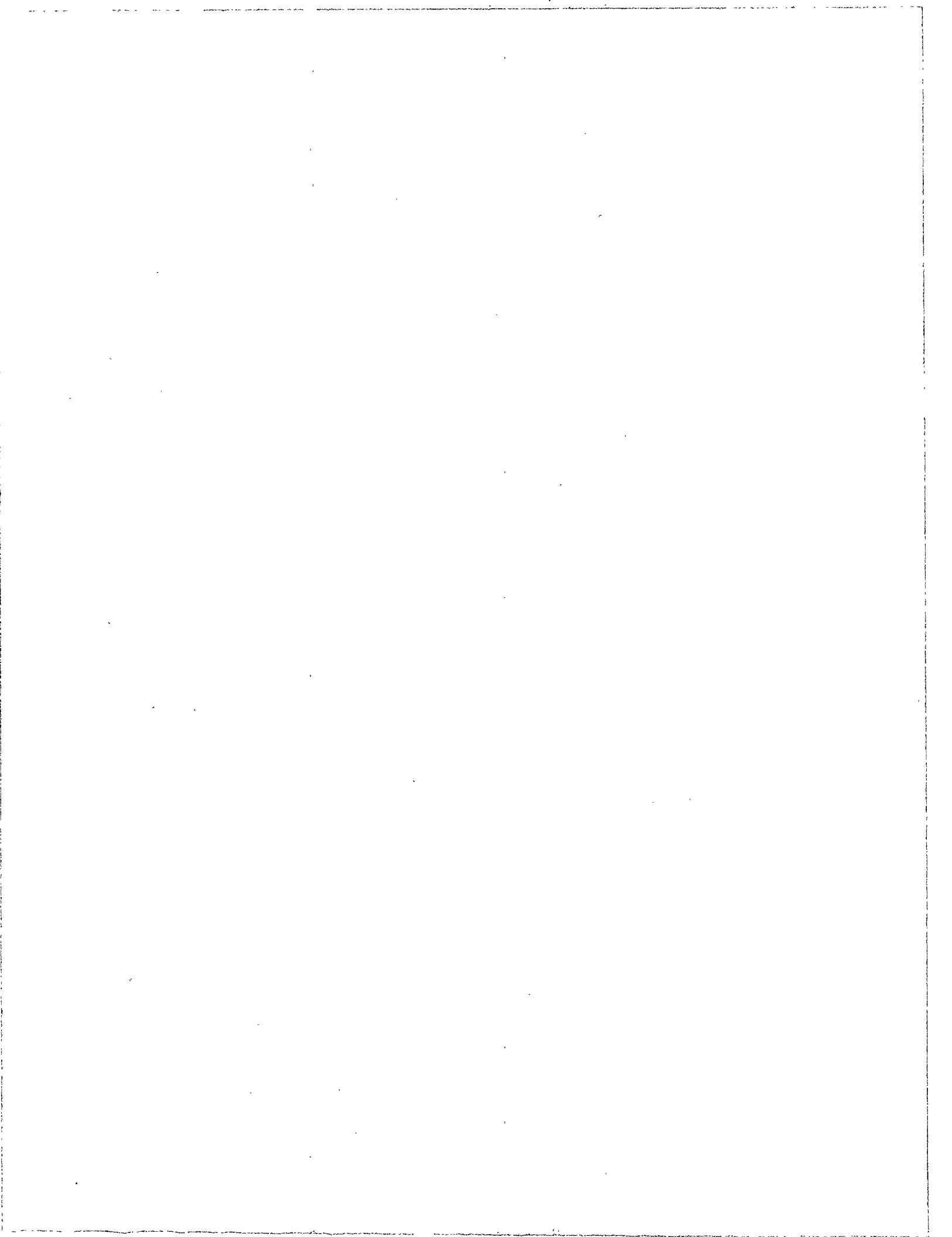
Table 89 lists the number of blowouts from offshore wells. In 1993, there were three blowouts during development drilling in the GOM and none during production operations. Over the last 21 years, out of the 22,594 wells spudded on the OCS, there have been 150 blowouts, less than 0.7 percent of the total. Between 1971 and 1993 the total spillage from OCS operations amounted to 116,519 bbl of pollutants. This spillage is less than 0.002 percent of the oil produced from OCS facilities.

Table 90 reports on the number of crude oil and refined petroleum product spills of 1,000 bbl or more from tankers in coastal and offshore waters worldwide since 1974. In 1993, there were 14 such tanker spills, which released 933,274 bbl of oil. None of these spills occurred in U.S. coastal and offshore waters (see table 91).

The information on spill incidents from OCS facilities comes from a database file, maintained by MMS headquarters and each regional office. Information on tanker spills comes from MMS's Technical Analysis Group (TAG) in the Environmental Policy and Programs Division. All the spills in the TAG database must be from a vessel — usually a tanker or barge — that carried a petroleum product as cargo. The spill may be cargo or fuel from the carrier and must be at least 1,000 bbl in size.

An MMS contract established the worldwide tanker spill database in 1983. Since 1983, TAG has maintained and verified the database in-house. The TAG adds U.S. Coast Guard data annually. Additional information comes from the Institut Français du Pétrole tanker database for the years 1974–87 and the *Oil Spill Bulletin* for events during 1986 and 1987. Current information usually comes from the *Oil Spill Intelligence Report* (OSIR), *Golob's Oil Pollution Bulletin*, newspaper accounts, and various reports concerning oil-spill events.

The most recent updates to the database include OSIR's *1992 International Spill Statistic Summary* (March 1992); Tanker Advisory Center Report *1993 Guide to the Selection of Tankers*; and *Oil Spill Case Histories: 1967–1991* prepared for the NOAA/Hazardous Materials Response and Assessment Division.



**Table 87. Number and Volume of Spills of More than 1 Barrel of All Pollutants from Facilities and Operations on Federal OCS Leases, 1970-93**

Year	Gulf of Mexico OCS			Pacific OCS			Total OCS Spillage (bbl)
	No. of Spills		Total Spillage (bbl)	No. of Spills		Total Spillage (bbl)	
	>1 and ≤50 (bbl)	> 50 (bbl)		>1 and ≤50 (bbl)	> 50 (bbl)		
1970	8	5	83,894	0	0	0	83,894
1971	267	7	2,441	0	0	0	2,441
1972	204	1	999	0	0	0	999
1973	178	5	23,125	0	0	0	23,125
1974	80	7	24,453	0	0	0	24,453
1975	109	2	761	0	0	0	761
1976	66	3	5,021	1	0	2	5,023
1977	70	3	1,080	1	0	4	1,084
1978	77	3	1,525	0	0	0	1,525
1979	106	4	2,627	1	0	2	2,629
1980	49	8	2,826	2	0	7	2,833
1981	51	5	5,794	10	0	75	5,869
1982	71	3	1,137	1	0	3	<sup>1</sup> 1,159
1983	91	9	2,552	3	0	5	<sup>2</sup> 2,583
1984	58	1	378	3	0	36	<sup>3</sup> 416
1985	72	6	1,716	3	0	9	<sup>4</sup> 1,727
1986	45	3	572	3	0	12	584
1987	35	1	231	2	0	11	242
1988	30	3	15,971	1	0	2	<sup>5</sup> 15,797
1989	24	1	476	3	0	8	484
1990	35	3	19,308	0	1	100	19,408
1991	33	1	646	3	0	61	707
1992	29	2	2,336	0	0	0	2,336
1993	<u>25</u>	<u>0</u>	<u>159</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>153</u>
<b>Total</b>	<b>1,806</b>	<b>81</b>	<b>116,136</b>	<b>37</b>	<b>1</b>	<b>337</b>	<b>116,519</b>

<sup>1</sup> This total includes 1 spill of 9 barrels on the Alaska OCS.

<sup>2</sup> This total includes 2 spills totaling 24 barrels on the Atlantic OCS.

<sup>3</sup> This total includes 1 spill of 2 barrels on the Alaska OCS.

<sup>4</sup> This total includes 1 spill of 2 barrels on the Alaska OCS.

<sup>5</sup> This total includes 1 spill of 19 barrels on the Alaska OCS.

**Table 88. Spills of 1,000 Barrels or More from Facilities and Operations on Federal OCS Leases, 1964-93**

*(The 25 spills reported here are from oil and gas activities on the Gulf of Mexico OCS, except for the 1969 blowout in the Santa Barbara Channel on the Pacific OCS.)*

<b>Year</b>	<b>Location</b>	<b>Cause of Accident</b>	<b>Spillage (bbl)</b>
1964	Eugene Island	Freighter struck platform	2,559
	Eugene Island	Platform in hurricane	5,180
	Ship Shoal	Platform in hurricane	5,100
	Ship Shoal	Platform in hurricane	1,589
1965	Ship Shoal	Well blowout	1,688
1967	West Delta	Anchor damage to pipeline	160,638
1968	South Timbalier	Anchor damage to pipeline	6,000
1969	Santa Barbara Channel	Well blowout	80,000
	Main Pass	Anchor damage to pipeline	7,532
	Ship Shoal	Ship struck platform during storm	2,500
1970	Main Pass	Well blowout	30,000
	South Timbalier	Well blowout	53,000
1973	West Delta	Structural failure, tank rupture	9,935
	South Pelto	Storage barge sank	7,000
	West Delta	Pipeline corrosion	5,000
1974	Eugene Island	Anchor damage to pipeline	19,833
	Main Pass	Hurricane damage to pipeline	3,500
1976	Eugene Island	Shrimp trawl damage to pipeline	4,000
1979	Main Pass	Vessel collided with semisubmersible	1,500
1980	High Island	Pump failure, tank spill	1,456
1981	South Pass	Anchor damage to pipeline	5,100
1988	Galveston	Anchor damage to pipeline	15,576
1990	Ship Shoal	Anchor damage to pipeline	14,423
	Eugene Island	Trawl damage to pipeline valve	4,569
1992	South Pelto	Hurricane damage to pipeline	<u>2,000</u>
	<b>Total</b>		<b>449,678</b>

**Table 89. Blowouts and Spillage from Federal Offshore Wells Compared to Crude Oil and Condensate Production on Federal OCS Leases, 1971-93**

(Only crude oil and condensate blowout spillage is given here in barrels for the 150 blowouts that occurred during the past 22 years.)

Year	Well Starts	Drilling Blowouts				Nondrilling Blowouts						Total Blowouts		OCS Production MMbbl
		Exploration		Development		Production		Workover		Completion		No.	bbl	
		No.	bbl	No.	bbl	No.	bbl	No.	bbl	No.	bbl			
1971	851	4	0	1	0	2	450	1	0	0	0	5	450	406.9
1972	845	2	0	2	0	1	0	0	0	0	0	5	0	396.0
1973	820	2	0	1	0	0	0	0	0	0	0	3	0	384.8
1974	802	1	0	1	0	4	275	0	0	0	0	6	275	354.9
1975	842	4	0	1	0	0	0	1	0	1	0	7	0	325.3
1976	1,078	1	0	4	0	1	0	0	0	0	0	6	0	314.5
1977	1,240	3	0	1	0	1	0	3	0	1	0	9	0	296.0
1978	1,164	3	0	4	0	0	0	3	0	1	0	11	0	288.0
1979	1,140	4	0	1	0	0	0	0	0	0	0	5	0	274.2
1980	1,158	3	0	1	0	2	1	1	0	1	0	8	1	274.7
1981	1,208	1	0	2	0	1	0	3	64	3	0	10	64	282.9
1982	1,255	1	0	4	0	0	0	4	0	0	0	9	0	314.5
1983	1,180	5	0	5	0	0	0	2	0	0	0	12	0	350.8
1984	1,352	3	0	1	0	0	0	1	0	0	0	5	0	385.1
1985	1,169	3	0	1	0	0	0	2	40	0	0	6	40	380.0
1986	694	0	0	1	0	0	0	1	0	0	0	2	0	384.3
1987	845	2	0	0	0	3	0	1	0	2	60	8	60	358.8
1988	950	1	0	1	0	0	0	1	0	0	0	3	0	332.7
1989	947	2	0	5	0	3	0	1	0	0	0	11	0	313.7
1990	1,018	1	0	1	0	0	0	3	9	1	0	6	9	304.5
1991	726	3	0	3	0	0	0	0	0	0	0	6	0	326.4
1992	431	3	100	0	0	0	0	0	0	0	0	3	100	337.9
1993	879	0	0	3	0	0	0	0	0	0	0	4	60	352.7
<b>Total</b>	<b>22,594</b>	<b>49</b>	<b>100</b>	<b>44</b>	<b>0</b>	<b>18</b>	<b>726</b>	<b>28</b>	<b>113</b>	<b>10</b>	<b>60</b>	<b>150</b>	<b>1,059</b>	<b>7,739.7</b>

<sup>1</sup> Two of the drilling blowouts occurred during drilling for sulphur.

<sup>2</sup> One blowout occurred during abandonment operations.

<sup>3</sup> Two of the drilling blowouts occurred during drilling for sulphur.

**Table 90. Spills of 1,000 Barrels or More from Tankers in Coastal and Offshore Waters Worldwide, 1974-93**

Year	Crude Oil		Refined Product		All Products	
	No. of Spills	Spillage (bbt)	No. of Spills	Spillage (bbt)	No. of Spills	Spillage (bbt)
1974	19	809,911	26	717,356	45	1,527,267
1975	19	1,775,276	22	521,202	41	2,296,478
1976	18	1,980,715	23	981,759	41	2,962,474
1977	15	1,884,014	24	815,332	39	2,699,346
1978	17	3,095,689	23	469,029	40	3,564,718
1979	21	3,833,214	39	928,598	60	4,761,812
1980	11	1,256,861	24	341,247	35	1,598,108
1981	7	43,350	20	412,280	27	455,630
1982	6	230,556	14	89,743	20	320,299
1983	13	2,587,918	16	335,165	29	2,923,083
1984	6	189,585	21	135,915	27	325,500
1985	5	538,678	22	173,974	27	712,652
1986	6	63,085	9	121,844	15	184,929
1987	11	109,698	9	129,593	20	239,291
1988	7	1,088,059	4	241,143	11	1,329,202
1989	12	1,219,945	20	126,962	32	1,346,907
1990	8	217,386	9	165,488	17	382,874
1991	6	641,036	4	10,882	10	651,918
1992	6	625,996	8	399,824	14	1,025,820
1993	<u>5</u>	<u>805,984</u>	<u>9</u>	<u>127,290</u>	<u>14</u>	<u>933,274</u>
Total	218	22,996,956	346	7,244,626	564	30,241,582

**Table 91. Spills of 1,000 Barrels or More from Tankers in U.S. Coastal and Offshore Waters, 1974-93**

*(Spills reported here exclude those that occurred off U.S. Territories and Possessions.)*

Year	Crude Oil		Refined Product		All Products	
	No. of Spills	Spillage (bbl)	No. of Spills	Spillage (bbl)	No. of Spills	Spillage (bbl)
1974	2	57,328	3	10,358	5	67,686
1975	4	304,800	4	149,701	8	454,501
1976	2	8,600	6	380,740	8	389,340
1977	2	16,686	2	15,715	4	32,401
1978	0	0	4	14,447	4	14,447
1979	4	273,437	4	10,045	8	283,482
1980	2	34,000	4	29,952	6	63,952
1981	2	28,571	2	3,476	4	32,047
1982	0	0	2	2,466	2	2,466
1983	1	1,200	2	2,786	3	3,986
1984	1	66,452	9	71,621	10	138,073
1985	2	16,047	3	8,320	5	24,367
1986	3	9,990	2	14,422	5	24,412
1987	3	31,310	0	0	3	31,310
1988	1	15,350	2	24,000	3	39,350
1989	2	242,200	3	19,834	5	262,034
1990	2	102,315	2	7,333	4	109,648
1991	0	0	0	0	0	0
1992	1	2,310	1	3,450	2	5,760
1993	0	0	0	0	0	0
<b>Total</b>	<b>34</b>	<b>1,210,596</b>	<b>55</b>	<b>768,666</b>	<b>89</b>	<b>1,979,262</b>



## **X. International Activities and Marine Minerals**

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The Office of International Activities and Marine Minerals (INTERMAR) encourages the judicious exploration, development, and extraction of Federal OCS mineral resources, while ensuring environmental protection and full public and coastal State participation. Table 89 shows the Nation's net import reliance for selected nonfuel minerals. INTERMAR's cooperative projects in 1993 focused on the following areas:

**New England States (sand and gravel)** — In 1992, the report *Construction Aggregate Demand in the New England States* marked the completion of Phase I work. Work on Phase II, a companion study on onshore aggregate supplies, was completed in late 1993. The final phase, scheduled for completion in 1994, will use both studies to draw conclusions on the regional construction aggregate outlook and forecast whether offshore supply sources will be needed to meet demand.

- **New Jersey (sand)** — A cooperative agreement established in 1992 sought to identify and evaluate Federal sand resources suitable for coastal restoration needs. During 1993, a map of the New Jersey shoreline was prepared showing the severity of erosion, the classification of "reaches" or sand movement cells, and the State's ranking for priority attention. Volumes of sand needed to restore the highest priority beaches were also calculated.
- **Delaware/Maryland (sand)** — In 1992, the States of Delaware and Maryland joined with the MMS in a tripartite agreement to investigate sand resources in Federal waters for beach restoration needs. Data collected offshore both States in 1993 identified four shoal areas as potential targets. Other surveys completed over the shoal include detailed archaeological and bathymetric surveys.
- **Virginia (sand)** — A cooperative agreement, established in 1992 with the Commonwealth of Virginia, targets Sandbridge Shoal as a beach restoration supply source for the Virginia Beach and Sandbridge areas. A report released in late 1993 summarizes studies of the potential of Sandbridge Shoal to serve as a sand supply resource. The studies include compilation and analysis of geological and geophysical data over the shoal, a survey of available upland sources of beach quality sand, and a study of wave patterns and water circulation in the study area.
- **North Carolina (sand)** — The North Carolina Sand Task Force continued its phased study of Federal sand resources for coastal erosion needs along the Outer Banks barrier islands. In 1993, the North Carolina Geological Survey published *North Carolina Outer Banks Beach Nourishment and Sand Resource Study, First Interim Report: Shallow High-Resolution Seismic Survey, Offshore Nags Head Area*. This report covers the work and findings of Year 1.
- **South Carolina (sand)** — Since its inception in 1992, the South Carolina Task Force on

Offshore Resources has been compiling and evaluating existing data relevant to beach restoration needs. The work of this task force has led to the identification of three general data classifications: geological resources, critical habitat for biological resources, and historical trends for erosion and accretion. Using the findings to date, a phased mapping effort to fill data gaps in the nearshore zone (0-10 miles) will be the next focus.

- **Georgia (heavy mineral placers and phosphorites)** — A contract for a compilation of all previous environmental research relevant to extraction of heavy minerals and phosphorites offshore Georgia was awarded in 1992. The contractors are Battelle Ocean Sciences and Skidaway Oceanographic Institute. The project, scheduled for completion in mid-1994, will identify gaps in environmental data and make recommendations for studies to assess impacts associated with any development ventures.
- **Florida (sand)** — The MMS received a request from the Florida Department of Environmental Protection to establish a cooperative agreement and form an informal Federal/State technical working group to identify and evaluate Federal sand resources for coastal restoration needs.
- **Alabama (sand)** — Work identifying and evaluating Federal sand resources for coastal restoration now indicates that the highest priority for restoration is Dauphin Island. Five offshore sites are suitable sources. During 1993, an economic analysis identified a shoal called Target Area 4 for more detailed assessment.
- **Mississippi (shell)** — Because of the cessation of most onshore shell dredging, there is industry interest in evaluating potential shell deposits offshore Mississippi and Louisiana. Plans for a reconnaissance survey have been formulated with field work scheduled for 1994 by the Continental Shelf Division of the Marine Minerals Technology Center.
- **Louisiana (sand and shell)** — Objectives identified during 1993 are (1) promoting strong State/local support for use of Ship Shoal sand for barrier island restoration and wetlands protection, (2) developing a viable demonstration project for the Isles Dernieres, and (3) completing reconnaissance and characterization work on potential shell resources.
- **Texas (sand)** -- Work continued on studying the potential of Sabine and Heald Banks for beach and barrier island restoration. Galveston Island, Padre Island, and parts of the Texas coast adjacent to historic Highway 87 are the areas experiencing the greatest erosion problems. A report on work conducted during 1991-1992 was released in January 1994.
- **Hawaii (cobalt-rich manganese crusts)** — In November 1993, a research cruise completed a study of biological and physical characteristics of cobalt-rich manganese crusts in the Exclusive Economic Zone adjacent to Johnston Atoll. The 17-day project used the *Kaimikai-o-Kanaloa*, a Hawaii Undersea Research Laboratory research vessel, to collect over 2,500 pounds of samples at 25 oceanographic stations. The new data provide much needed biological and resource characterization information.

**Table 92. Estimated 1993 Net Import Reliance<sup>1</sup> of Selected Nonfuel Mineral Materials as a Percent of Apparent Consumption<sup>2</sup> — *continued***

<i>Mineral</i>	<i>Percent of Consumption</i>	<i>Major Sources, 1987-92</i>
Arsenic	100	France, Chile, Mexico
Bauxite and Alumina	100	Australia, Guinea, Jamaica, Brazil
Cesium (pollucite)	100	Canada
Columbium (niobium)	100	Brazil, Canada, Germany
Graphite	100	Mexico, China, Brazil, Madagascar
Manganese	100	South Africa, Gabon, France
Mica (sheet)	100	India, Belgium, Brazil, Japan
Rubidium	100	Canada
Strontium (celestite)	100	Mexico, Germany, Spain
Thallium	100	Belgium, Japan, United Kingdom, Germany
Gem Stones (natural & synthetic)	98	Belgium, Israel, India, United Kingdom
Asbestos	95	Canada, South Africa
Diamond (Industrial stones)	92	Ireland, United Kingdom, South Africa, Zaire
Tantalum	87	Germany, Thailand, Australia
Fluorspar	87	Mexico, South Africa, China, Canada
Tungsten	85	China, Bolivia, Germany, Peru
Cobalt	76	Zaire, Zambia, Canada, Norway
Chromium	74	South Africa, Turkey, Zimbabwe, Yugoslavia
Tin	73	Brazil, Bolivia, China, Indonesia, Malaysia
Potash	67	Canada, Israel, CIS, Germany
Nickel	64	Canada, Norway, Australia, Dominican Republic
Iodine	52	Japan, Chile
Peat	50	Canada, Norway, Austria, Ireland
Cadmium	49	Canada, Mexico, Australia, Germany
Selenium	47	Canada, United Kingdom, Japan, Belgium/Luxembourg
Barite	44	China, India, Mexico, Morocco
Silicon	36	Brazil, Canada, Venezuela, Norway
Gypsum	35	Canada, Mexico, Spain
Zinc	34	Canada, Mexico, Peru, Spain
Pumice & Pumicite	32	Greece, Mexico, Ecuador
Magnesium Compounds	23	China, Canada, Greece, Mexico
Cement	17	Mexico, Canada, Japan, Spain
Nitrogen	15	Canada, CIS, Trinidad & Tobago, Mexico
Vermiculite	14	South Africa, China, Brazil

Footnotes at end of table

**Table 92. Estimated 1993 Net Import Reliance<sup>1</sup> of Selected Nonfuel Mineral Materials as a Percent of Apparent Consumption<sup>2</sup> — *continued***

<i>Mineral</i>	<i>Percent of Consumption</i>	<i>Major Sources, 1987-92</i>
Mica (scrap & flake) . . . . .	14	Canada, India
Salt . . . . .	13	Canada, Mexico, Bahamas, Chile
Iron Ore . . . . .	12	Canada, Brazil, Venezuela, Mauritania
Iron & Steel . . . . .	12	European Economic Community, Japan, Canada, South Korea
Sulphur . . . . .	8	Mexico, Canada
Lead . . . . .	8	Canada, Mexico, Peru, Belgium/Luxembourg
Quartz Crystal (industrial) . . . . .	5	Brazil, Namibia
Perlite . . . . .	3	Greece
Sodium Sulfate . . . . .	1	Canada, Mexico

<sup>1</sup> Net Import Reliance = (imports - exports) + adjustments for Government and industry stock exchanges.

<sup>2</sup> Apparent Consumption = U.S. primary + secondary production + net import reliance.

NOTE: For a number of minerals, net import reliance data are withheld or incomplete. However, commodities for which sufficient data are available to indicate a significant degree of import dependency include bismuth (Belgium, Mexico, Peru, United Kingdom); ilmenite (South Africa, Australia, Canada); mercury (China, Spain, Japan, Algeria); pyrophyllite [wonder stone] (South Africa); rhenium (Chile, Germany, Sweden, United Kingdom); rutile (Australia, South Africa, Sierra Leone); tellurium (United Kingdom, Canada, Japan, Philippines); and vanadium (South Africa, European Economic Community, South America, Mexico).

SOURCE: U.S. Bureau of Mines, Mineral Commodity Summaries 1992.

# Glossary

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**Active well** — A well in mechanical condition for production or service use (i.e., in active production or service use).

**Associated gas** — Gas combined with oil. Known also as gas cap gas and solution gas, it provides the drive mechanism needed to force oil to the surface of a well. Associated gas is normally present in an oil reservoir in the early stages of production.

**Barrel of Oil Equivalent (BOE)** — The amount of energy resource (in this document, natural gas) that is equal to one barrel of oil on an energy basis. The conversion is based on the assumption that one barrel of oil produces the same amount of energy when burned as 5,620 m<sup>3</sup> of natural gas.

**Bid** — An offer for an OCS lease submitted by a potential lessee in the form of a cash bonus dollar amount or other commitments as specified in the final notice of sale.

**Block** — A numbered area on an OCS leasing map or official protraction diagram (OPD). Blocks are portions of OCS leasing maps and OPD's that are themselves portions of planning areas. Blocks vary in size, but typical ones are 5,000 to 5,760 acres (about 9 mi<sup>2</sup>). Each block has a specific identifying number, area, and latitude and longitude coordinates that can be pinpointed on a leasing map of OPD.

**Blowout** — An uncontrolled flow of gas, oil, or other fluids from a well to the atmosphere. A well may blow out when formation pressure exceeds the pressure overburden of a column of drilling fluid.

**Bonus** — The cash consideration paid to the United States by the successful bidder for a mineral lease. The payment is made in addition to the rent and royalty obligations specified in the lease.

**Borehole** — The hole in the earth made by the drill; the uncased drill hole from the surface to the bottom of the well.

**Casinghead** — The top of the casing set in a well; the part of the casing that protrudes above the surface and to which the control valves and flow pipes are attached.

**Casinghead gas** — Gas produced from an oil well as distinguished from gas from a gas well. The casinghead gas is taken off at the top of the well or at the separator.

**Completed well** — A well that has been mechanically completed for production or service use. There may be more than one completed zone in the well. (*See Active well.*)

**Condensate** — A natural gas liquid with a low vapor pressure, compared with natural

gasoline and liquified petroleum gas. It is produced from a deep well where the temperature and pressure are high. Gas condenses as it rises up the wellbore and reaches the surface as condensate. Similarly, condensate separates out naturally in pipelines or in a separation plant by the normal process of condensation.

**Demonstrated reserves (American Petroleum Institute)** — A collective term for the sum of proved and indicated reserves. Proved reserves are estimated with reasonable certainty to be recovered under current economic conditions. Indicated reserves are economic reserves in known productive reservoirs in existing fields expected to respond to improved recovery techniques where (1) an improved technique has been installed but its effect cannot yet be fully evaluated, or (2) an improved technique has not been installed but knowledge of reservoir characteristics and the results of a known technique installed in a similar situation are available for use in the estimating procedure.

**Development** — Activities following exploration including the installation of facilities and the drilling and completion of wells for production purposes.

**Dry gas** — Natural gas from the well that is free of liquid hydrocarbons; gas that has been treated to remove all liquids; pipeline gas.

**Economically Recoverable Resource Estimate** — An assessment of hydrocarbon potential that takes into account (1) physical and technological constraints on production and (2) the influence of exploration and development costs and market price on industry investment in OCS exploration and production.

**Exclusive Economic Zone (EEZ)** — An area contiguous to the territorial sea of the United States, the Commonwealth of Puerto Rico, the Commonwealth of Northern Mariana Islands, and the U.S. overseas territories and possessions and extending 200 nautical miles from the coastline.

**Exploration** — The process of searching for minerals preliminary to development. Exploration activities include (1) geophysical surveys, (2) drilling to locate an oil or gas reservoir, and (3) the drilling of additional wells after a discovery to delineate a reservoir. It enables the lessee to determine whether to proceed with development and production.

**Field** — A geographical area in which one or more oil or gas wells produce. A field may refer to surface area only or to underground productive formation. A single field may include several reservoirs separated either horizontally or vertically.

**Gas lost** — Avoidably lost natural gas which is flared or vented (i.e., natural gas not retained in the production system for sale or use).

**Lease** — A legal document executed between a landowner, as lessor, and a company or individual (as lessee) that conveys the right to exploit the premises for minerals or other products for a specified period of time over a given area.

**Lease Sale (also called lease offering)** — An MMS proceeding by which leases of certain OCS tracts are offered for lease by competitive sealed bidding and during which bids are received, announced, and recorded.

**MAFLA** — The OCS area in the Gulf of Mexico adjacent to and seaward of the submerged lands and seabeds of Mississippi, Alabama, and Florida.

**Marginal probability of hydrocarbons ( $MP_{HC}$ )** — The probability that oil and gas occur in commercial quantities, using existing recovery technology under current economic conditions.

**Minimum royalty** — The lowest payment a lessee can pay on an OCS lease after production begins. It is equivalent to the yearly rental, typically \$3 per acre or \$8 per hectare. Rentals are paid annually before a discovery; royalties are paid on production after a discovery. If the total royalty payments amount to less than the yearly rental, the minimum royalty payments make up the difference. (*See Rent and Royalty.*)

**Net Profit Share lease** — An OCS lease that provides for payment to the U.S. of a percentage share of the net profits for production of oil and gas from the tract. The percentage share may be fixed in the notice of the lease sale or may be a variable of the bid, depending on the bidding system used for the lease sale.

**Nonassociated gas** — Dry gas that is not associated with oil in a productive reservoir, as opposed to associated gas or solution gas.

**Oil lost** — Oil that is spilled or burned (i.e., oil not retained in the production system for sale).

**Operator** — The individual, partnership, firm, or corporation having control or management of operations on a leased area or a portion thereof. The operator may be a lessee, designated agent of the lessee, or holder of rights under an approved operation agreement.

**Outer Continental Shelf (OCS)** — All submerged lands seaward and outside the area of lands beneath navigable waters. Lands beneath navigable waters are interpreted as extending from the coastline no more than 3 nautical miles into the Atlantic Ocean, the Pacific Ocean, the Arctic Ocean, and the Gulf of Mexico excluding the coastal waters off Texas and western Florida. Lands beneath navigable waters are interpreted as extending from the coastline no more than 3 marine leagues into the Gulf of Mexico off Texas and western Florida.

**Planning area** — A subdivision of an offshore area used as the initial basis for considering blocks to be offered for lease.

**Plugged and abandoned** — Wells in which casings have been removed, and the well bore sealed with mechanical or cement plugs.

**Producing lease** — A lease that is producing oil, gas, or sulphur in quantities sufficient to generate royalties.

**Producible lease** — A lease where one well or several wells have discovered hydrocarbons in paying quantities, but for which there is no production during the reporting period.

**Producible zone completion** — The interval in a wellbore that has been mechanically prepared to produce oil, gas, or sulphur. There can be more than one zone completed for production in a wellbore.

**Production** — The phase of oil and gas operations involved with well fluids extraction, separation, treatment, storage, measurement, and (sometimes) transportation.

**Proven reserves (Society of Petroleum Engineers)** — Reserves that can be estimated with reasonable certainty to be recovered under current economic conditions. Current economic conditions include processing costs prevailing at the time of the estimate. Proved reserves must either have facilities that are operational at the time of the estimate to process and transport those reserves to market, or a commitment of reasonable expectation to install such facilities in the future. Proved reserves can be subdivided into undeveloped and developed.

**Rent** — Periodic payments made by the holder of a lease for the right to use the land or resources for purposes established in the lease.

**Royalty** — Payment, in money or kind, of a stated share of production from mineral deposits by the lessees or the lessor. Royalty rate may be an established minimum, a sliding-scale, or a step-scale. A step-scale royalty rate increases by steps as the average production on the lease increases. A sliding-scale royalty rate is based on average production and applies to all production from the lease.

**Sales value** — A mineral's monetary worth at the time of its production.

**Service zone completion** — The interval in a well bore that has been mechanically prepared for service use, usually water or gas injection to stimulate production from other wells or for water or other waste disposal.

**Shut-in payments** — Payments made for any producible well on the Federal OCS that is temporarily closed down. (*See Shut-in zone completion.*)

**Shut-in zone completion** — A restorable and producible zone that is temporarily taken out of production because of (1) drilling on platforms, (2) planning for secondary or other injection projects, (3) delay in installation of facilities, (4) well plugging by sand or other mechanical problems, (5) pressure depletion, or (6) having an excessive oil/gas ratio.

**Sulphur** — A nonmetallic element that occurs in association with salt diapirs throughout much of the onshore and offshore Gulf of Mexico region. All offshore sulphur is mined by

the Frasch process, which uses hot brine to melt sulphur out of the enclosing rock so the molten sulphur can be recovered.

**Suspended well** — A well on which operations have been discontinued. The usual context is an uncompleted well in which operations ceased during drilling but which has not been plugged and abandoned permanently.

**Well** — A hole drilled or bored into the earth, usually cased with metal pipe, for the production of gas or oil. A hole for the injection under pressure of water or gas into a subsurface rock formation.

**Workover** — Operation on a shut-in or producing well to restore or increase its production.