OCS-G-6834 & 6835

N-3064

DATA INPUT
ON 7-12-88
By

In Reply Refer To: PO-2-1

July 1, 1988

Amoco Production Company
Attention: Mr. R. A. Fitch
Post Office Box 50879
New Orleans, Louisiana 70150

Gentlemen:

Reference is made to your Initial Plan of Exploration and accompanying information received June 22, 1988, for Leases OCS-G 6834 and 6835, Blocks 286 and 287, respectively, Main Pass Area. This plan includes the activities proposed for Wells A and C in Block 286 and Wells B and D in Block 287.

In accordance with 30 CFR 250.33, this plan is hereby deemed submitted and is now being considered for approval.

Your plan control number is N-3064 and should be referenced in your communication and correspondence concerning this plan.

Sincerely yours,

(Orig. Sgd.) A. Donald Giroir

For D. J. Bourgeois
Regional Supervisor
Field Operations

bcc: Lease OCS-G 6834 (OPS-3-2) (FILE ROOM)
Lease OCS-G 6835 (OPS-3-2) (FILE ROOM)
OPS-3-4 w/ Public Info. Copy of the plan and accomp. info. (PUBLIC RECORDS)

LTHerbst:cck:06/29/88:pcccc

Office of
Program Services

JUL 05 1988

Information Services
Section

PUBLIC INFORMATION
COPY

Amoco Production Company
New Orleans Region
Amoco Building
Post Office Box 50879
New Orleans, Louisiana 70150
Offshore

R. A. Fitch
Division Production
Manager

June 21, 1988

File: GAU-LF

Minerals Management Service
Office of Field Operations
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Regional Supervisor

Plan of Exploration
Main Pass Blocks 286 and 287
OCS-G-6834 and 6835
Offshore, Louisiana, Mississippi, and Alabama

In accordance with 30 CFR 250.33, Exploration Plan, attached please find seventeen copies of Amoco Production Company's Plan of Exploration and Environmental Report for Main Pass Blocks 286 and 287, Offshore Louisiana, Mississippi and Alabama.

Amoco respectfully requests your favorable attention to this matter. Should further information be desired, please contact Harty Van of this office at telephone 504/586-6567.

Yours sincerely,

R. A. Fitch

HCV

Attachments

PLAN OF EXPLORATION

MAIN PASS BLOCKS 286 AND 287

OCS-G-6834 and 6835

OFFSHORE, LOUISIANA, MISSISSIPPI & ALABAMA

AMOCO PRODUCTION COMPANY
HARTY C. VAN, JR.
PETROLEUM ENGINEERING ASSOCIATE
(504) 586-6567
NEW ORLEANS, LOUISIANA

JUNE, 1988

COASTAL ZONE MANAGEMENT

CONSISTENCY CERTIFICATION

Plan of Exploration
Type of Plan

Main Pass Blocks 286 and 287
Area and Block

OCS-G-6834 and 6835
Lease Number

The proposed activities described in detail in this Plan comply with Louisiana's approved Coastal Management Program and will be conducted in a manner consistent with such Program.

Arrangements have been made with the State-Times in Baton Rouge, Louisiana to publish a public notice of the proposed activities not later than July 5, 1988.

Amoco Production Company
Lessee or Operator

R. A. Fitch
Certifying Official

June 21, 1988
Date

COASTAL ZONE MANAGEMENT

CONSISTENCY CERTIFICATION

Plan of Exploration
Type of Plan

Main Pass Blocks 286 and 287
Area and Block

OCS-G-6834 and 6835
Lease Number

The proposed activities described in detail in this Plan comply with Mississippi's approved Coastal Management Program and will be conducted in a manner consistent with such Program.

Amoco Production Company
Lessee or Operator

R. A. Fitch
Certifying Official

June 21, 1988
Date

COASTAL ZONE MANAGEMENT

CONSISTENCY CERTIFICATION

Plan of Exploration
Type of Plan

Main Pass Blocks 286 and 287
Area and Block

OCS-G-6834 and 6835
Lease Number

The proposed activities described in detail in this Plan comply with Alabama's approved Coastal Management Program and will be conducted in a manner consistent with such Program.

Amoco Production Company
Lessee or Operator

R. A. Fitch

R. A. Fitch
Certifying Official

June 21, 1988
Date

A BRIEF DESCRIPTION OF THE PROPOSED TYPE AND SEQUENCE OF EXPLORATION ACTIVITIES TO BE UNDERTAKEN TOGETHER WITH A TENTATIVE TIMETABLE FOR THEIR PERFORMANCE INCLUDING PLAN COMMENCEMENT DATE, SEQUENCE EACH WELL IS TO BE DRILLED, TIME FRAME (DAYS) TO COMPLETE EACH WELL, AND TOTAL TIME TO COMPLETE THE PROPOSED PROJECT.

Amoco Production Company, 100% W.I., acquired Main Pass Blocks 286 (OCS-G-6834) and 287 (OCS-G-6835) in Lease Sale 81, June 1984, for $1.260 MM and $0.761 MM respectively.

Main Pass 286 and 287 are located in 400' of water, 38 miles offshore and east of Boothville, Plaquemines Parish, Louisiana, and 73 miles offshore and south of Mobile County, Alabama. See Attachment No. 1, Location Map.

Amoco's exploratory plan entails drilling four wells with a semi-submersible rig. The proposed locations of these wells are as follows:

A. Surface: 4,950' FSL & 1,800' FWL (Block 286)

B. Surface: 2,200' FSL & 1,750' FEL (Block 287)

C. Surface: 5,700' FNL & 6,000' FWL (Block 286)

D. Surface: 4,250' FSL & 4,800' FWL (Block 287)

Drilling of the first well will commence on January 1, 1989, with drilling of the remaining three wells to end on approximately December 21, 1990. Total time to complete the project will be approximately 720 days. See Attachment No. 2 for the Timing Schedule on the drilling of the four wells.

A DESCRIPTION OF THE DRILLING VESSEL(S), OR OTHER INSTALLATION(S) OR DEVICE(S) TO BE PERMANENTLY OR TEMPORARILY ATTACHED TO THE SEABED INDICATING THE IMPORTANT FEATURES THEREOF WITH SPECIAL ATTENTION TO SAFETY FEATURES AND POLLUTION PREVENTION AND CONTROL FEATURES INCLUDING OIL SPILL CONTAINMENT AND CLEANUP PLANS.

Amoco intends to utilize the Penrod 73 semi-submersible rig, or similar type equipment to drill these prospects. A descriptive brochure for this semi-submersible has been filed with the MMS. The rig is equipped with all pollution-prevention equipment required by Title 30 CFR Part 250, Subparts C - Pollution Prevention and D - Drilling Operations. Operations personnel will be in compliance with Title 30 CFR Part 250, Subpart O - Training. See Attachment No. 3 for a description of the rig. Please reference Attachment No. 4, "Air Quality" for specific data on air emissions. Note that all operations are covered by Amoco's Oil Spill Contingency Plan approved by the MMS on April 19, 1988.

GEOLOGICAL AND GEOPHYSICAL SURVEY RESULTS IDENTIFYING GEOLOGICAL HAZARDS AND/OR SUSPECTED ARCHAEOLOGICAL ANOMALIES RELATIVE TO PROPOSED WELL(S),

A MAP IDENTIFYING ANY SUSPECTED ARCHAEOLOGICAL ANOMALIES RELATIVE TO PROPOSED WELL(S) WHERE AN ARCHAEOLOGICAL SURVEY IS REQUIRED, AND A DESCRIPTION OF SURVEY EQUIPMENT UTILIZED.

The attached Shallow Hazard Report (Attachment No. 5) confirms that the proposed well locations are free of surface faults, seafloor anomalies, and shallow gas accumulations.

In accordance with the stipulation outlined in the lease agreement, an archeological survey was not required nor conducted. The Marine High-Resolution Geophysical Survey Report in two copies, is included as Attachment No. 6.

In accordance with Title 30 CFR Part 250.33(b)(1)(ii), full-scale and if appropriate, migrated Common Depth Point seismic lines intersecting at or near the primary well locations will be presented to the MMS Gulf of Mexico Regional Office.

A LOCATION MAP OF THE LEASE BLOCK(S) RELATIVE TO THE SHORELINE, INCLUDING A DESCRIPTION OF ONSHORE SUPPORT BASE FACILITIES, A LOCATION MAP SHOWING EACH PROPOSED WELL, INCLUDING SURFACE AND PROJECTED BOTTOM-HOLE LOCATION, WATER DEPTH (BATHYMETRY), PROPOSED TRUE VERTICAL AND MEASURED DEPTH OF EACH WELL.

Please reference Attachment No. 1, Location Map, which shows the relationship of Blocks 286 and 287 Main Pass area, to the shoreline as well as the proposed locations of the four wells. Water depth in the blocks are 400'. Bathymetry maps are included in Attachment No. 6.

Operations will be conducted out of M & I's dock facility in Venice, Louisiana. Helicopter support will be provided out of PHI's heliport base also located in Venice.

CURRENT STRUCTURE MAPS AND, AS APPROPRIATE, SCHEMATIC CROSS SECTIONS SHOWING EXPECTED DEPTH OR MARKER FORMATIONS.

NOTE: Amoco Production Company believes all geologic information submitted under this section to be exempt from disclosure under the Freedom of Information Act and its implementing regulations.

Attachment No. 7 is a structure map demonstrating structural relationships. Attachment No. 8 is a Schematic Cross-Section showing the geologic setting of the prospects and depicting structural relationships as determined by interpretation of proprietary data.

A BRIEF DESCRIPTION OF PROCEDURES, PERSONNEL, AND EQUIPMENT USED IN YOUR OIL SPILL CONTINGENCY PLAN THAT ARE TO BE USED FOR PREVENTING, REPORTING, AND CLEANING UP A POLLUTION SPILL, INCLUDING EQUIPMENT LOCATION AND TRAVEL AND DEPLOYMENT TIME.

In addition to those systems commonly utilized by industry to prevent pollution, Amoco is a member of Clean Gulf Associates which is a combine of companies formed to clean up oil spills if such occur. Existing oil spill cleanup equipment with beach protection and bird-cleaning stations

can be on hand within 11 hours in the event of a spill. This equipment is maintained on standby and in a ready state at locations such as Panama City, Florida; Theodore, Alabama; Venice, Louisiana; Grand Isle, Louisiana; Houma, Louisiana; Intracoastal City, Louisiana; Cameron, Louisiana; Galveston (Texas City), Texas; and Port Aransas (Fulton), Texas.

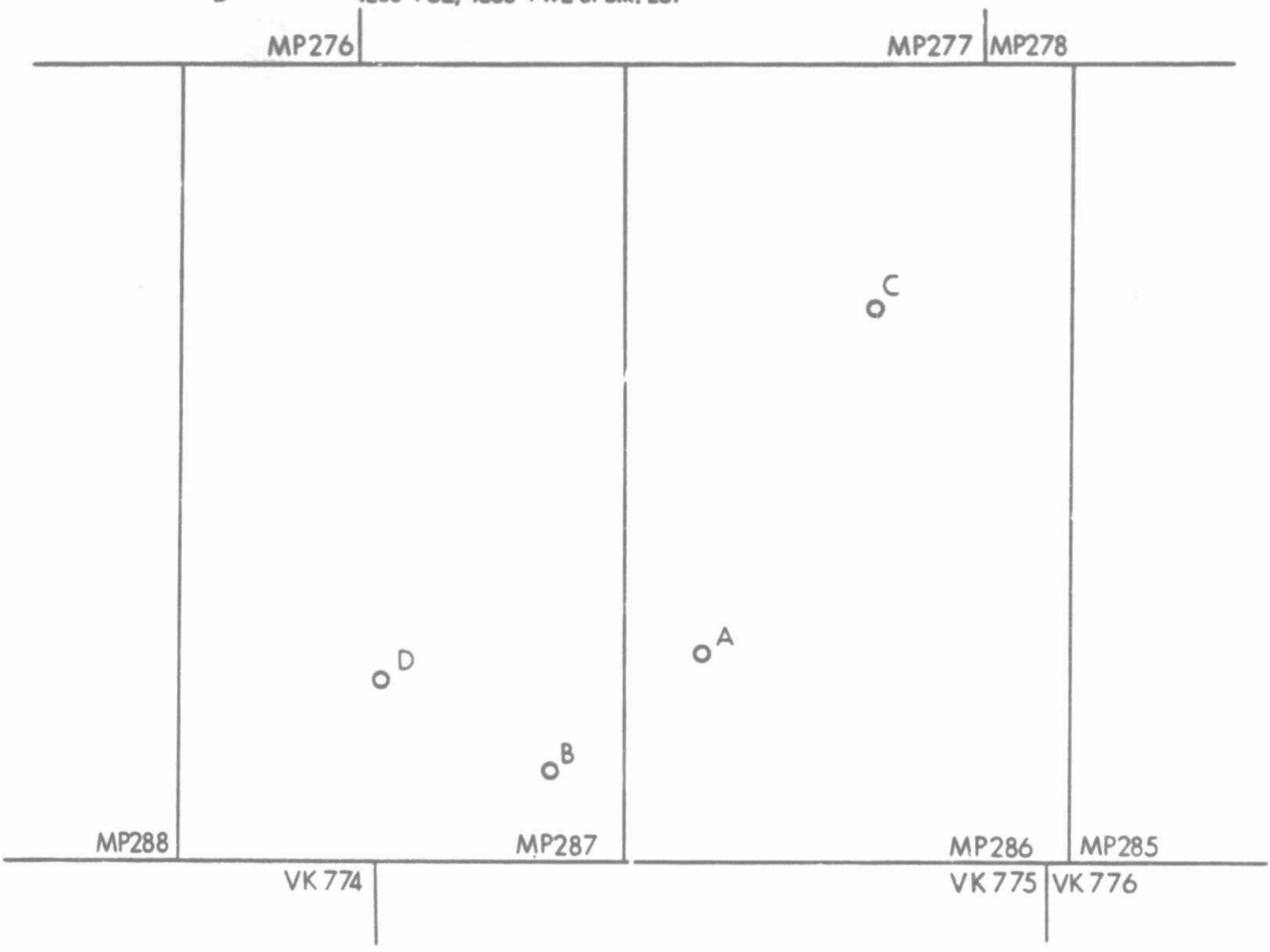
All applicable safety and pollution standards of the MMS, USCG, OSHA, and the EPA will be complied with. All personnel will be trained in the proper maintenance of existing equipment and will participate in drills and inspections designed to enhance their ability to utilize the equipment to its fullest extent and ensure as safe an operation as possible.

Attachment No. 9 is the Environmental Report as required by Section 307 of the Coastal Zone Management Act (CZMA).

A DETAILED LIST OF MUD COMPONENTS AND ADDITIVES, INCLUDING THE COMMON OR CHEMICAL TRADE NAME OF EACH.

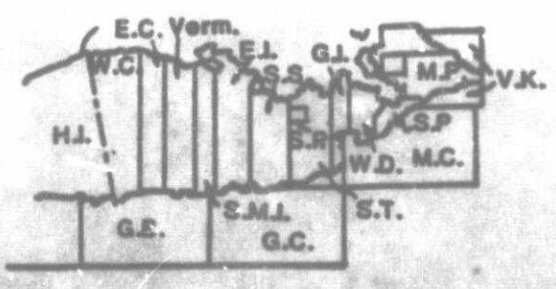
Components of the drilling mud may include any or all of the following: barite, gel, caustic, soda, chrome lignosulfonate, lignite, sapp, aluminum stearate, soda ash, phosphate, gilsonite, surfactant (methanol), Quick Seal, Spotty and CMC. No bactericides containing halogenated phenols will be used in the mud system. Any drilling mud, drill cuttings, sand, or other solids will not be disposed of into the Gulf unless all of the free oil has been removed.

WELL	SURFACE LOC.
A	4950' FSL, 1800' FWL of blk. 286
B	2200' FSL, 1750' FEL of blk. 287
C	5700' FNL, 6000' FWL of blk 286
D	4250' FSL, 4800' FWL of blk. 287



SCALE: 1"=4,000'

VICINITY



Offshore Louisiana

ATTACHMENT #1

Amoco Production Company
NEW ORLEANS REGION

BLOCK: MAIN PASS 286 & 287
OCS-6834 and 6835

LOCATION MAP

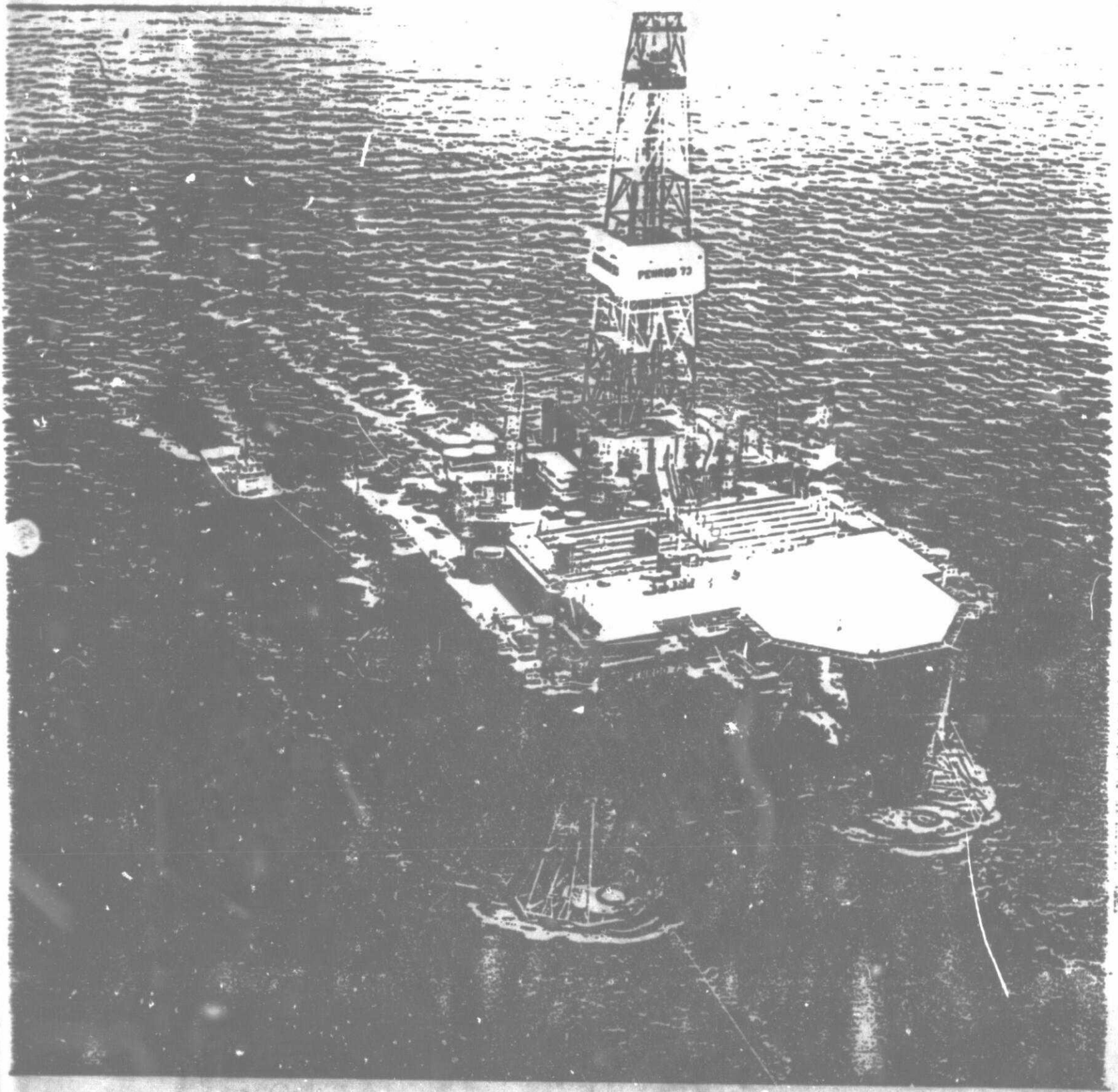
Start Date: January 1, 1989

A	B	C	D

180 Days Each

ATTACHMENT # 2

Amoco Production Company
NEW ORLEANS REGION
Timing Schedule
BLOCK: MAIN PASS 286 & 287
OCS-G- 6834 & 6835



ATTACHMENT NO. 3

Semisubmersible

PENROD 73

Nominal water depth rating 1600 ft.

Hull Dimensions	PENROD 73 Enhanced Pacesetter
Registered	ABS +A1, Column Stabilized United States Coast Guard MODU,
Overall Length	270 ft.
Overall Width	200 ft.
Depth	116 ft.
Operating Draft	65 ft.
Cranes	Two National OS435HD Hydraulic/Diesel with 150 ft. booms rated at 88 kips at 60 foot radius
Anchoring System	1) Skagit WMD-48 wildcat windlasses rated at 502 kips stall load. 2) 8 - 32 518 lb. moorfast anchors and 8 spares for piggy backing. 3) 8 anchor chains 5000' x 3" dia. API oil rig quality. 4) Assisted by four Schottel 360° thrusters.
Towing Speed in Calm Sea	Eight knots
Variable Load	286° st.
Storage	
Drilling Water	9205 bbls.
Potable Water	3245 bbls.
Fuel Oil	12,097 bbls.
Liquid Mud	1942 bbls.
Total Bulk Mud and Cement	4720 cu. ft.
Sack Storage	5000 sacks
Sewage Treating System	Two Red Fox Foxpac FP-1500
Desalinization Unit	8500 G.P.D. Maximum Capacity
Heliport	S-61 or equivalent
Quarters	Quarters for 86 persons, includes hospital and 2 galleys
Personnel Survival	Two 58 men Watercraft lifeboats. Three 20 men davit launched life rafts.

Drilling Equipment	Rated to 30,000'
Drawworks	National 1625-DE with sand-line drum, emergency rotary drive and a parmac V-295 hydromatic brake
Main Power Plant	Four EMD 16-645 E98 diesel engines, each rated at 3070 continuous H.P. each driving a 2100 KW 600 volt AC generator Eight I.P.S. Corp. Model 2200 m SCR units supply DC power to drilling and mooring functions
Pumps	Two Nat'l 12P160 Triplex 1600 hp mud pumps each powered by two EMD D-79 electric motors
Rotary	Nat'l C495 with 49 1/2" table opening
Riser Pipe Equipment	1600 ft. 20" O.D. x 1/2" wall x-52 pipe; slip joint with a 60' stroke; six 80,000 lb. Western Gear riser tensioners
BOP Equipment	Cameron 18 3/4" x 10,000 psi stack with two U double ram preventers and two 18 3/4" 5000 psi Rucker-Shaffer sphericals
Substructure Derrick	160' x 40' Dreco Inc., with static hook load capacity of 1,050,000 lbs.
Pipe Racking System	VMW Model RJT-33C drill string racking arm
Drill String Compensator System	NL rig equipment model 25/400 with 25' stroke and 400,000 lb. capacity
Mud Mixing Pumps	Two 6" x 5" centrifugals
Cementing Unit	Halliburton electric HT-400
Drill Collars	8" OD x 2 13/16" ID collars 6 1/2" OD x 2 1/4" ID spiral collars
Drill Pipe	5" OD, 19.50 lb. Grade E & G, Range 2

Plan of Exploration for Main Pass Blocks 286 and 287
OCS-G-6834 and 6835
Air Quality

This attachment includes the information required under 30 CFR Part 250.45, to make the necessary findings under that section.

Exemption Formula

The distance of the proposed facility from the closest onshore area of a state is 38 statute miles:

The proposed facility is at: latitude 29° 14' 9.07" north, and
longitude 88° 22' 5.38" west.

The closest onshore area of a state is in Plaquemines parish, Louisiana, at:

latitude 29° 10' 51.11" north, and
longitude 89° 0' 0.60" west.

This produces the exemption amount of 1,265 tons/year for particulates, sulfur dioxide, nitrogen oxides and volatile organic compounds, and the exemption amount of 38,429 tons/year for carbon monoxide.

Projected Emissions

Drilling

The wells proposed to be drilled on this plan are as follows:

Proposed Well	Rig Type
OCS-G-6834 A	Semi-Submersible
OCS-G-6835 B	Semi-Submersible
OCS-G-6834 C	Semi-Submersible
OCS-G-6835 D	Semi-Submersible
Total Feet Drilled	

ATTACHMENT NO. 4

Assuming that the rate of drilling will be constant, the total feet drilled during each year of the plan are as follows:

1989	38,528 feet
1990	37,472 feet

Assuming 60 horsepower hours required to drill one foot [1] on an offshore oil and gas drilling rig, this plan will require 2,311,680 horsepower hours to complete the 1989 portion. The duration of the operations is 365 days. Using the emission factors for diesel powered industrial equipment from Table 3.3.3-1 of EPA publication AP-42, Compilation of Air Pollutant Emission Factors, the following total emissions are expected from this plan:

	Carbon Monoxide	Nitrogen Oxide	Hydrocarbons	Sulfur Dioxide	Particulates
Drilling Rig	7.72	35.67	2.85	2.37	2.55

We estimate to have two helicopter landing-takeoff cycles each day at the drilling location for the 365 day period of drilling activity. The emission factors per landing-takeoff cycle for helicopters from Table 3.2.1-3 of EPA Publication AP-42 produce the following helicopter emissions in tons:

Helicopters	2.08	0.21	0.19	0.07	0.09

We plan one 2,000 horsepower workboat landing with six hours of idling three times each week at the drilling location. The fuel consumption while idling at the drilling location is seven gallons per hour. The emission factors (7 gallons/hour x 6 hours/landing x 3 landing/week x 52 weeks of drilling = 6,552 gallons) for CO, VOC and NOx from diesel vessel emission factors by operating mode, Table 3.2.3-3, and the factors for SO_2 and particulates from Table 3.3.3-1 produce the following workboat emissions, in tons, at the drilling location:

Workboats	0.96	0.81	0.31	0.10	0.11
Subtotal	10.76	36.69	3.35	2.54	2.75

These emissions are planned to occur in 1989.

---

1 Atmospheric emissions from offshore oil and gas development and production (EPA 450/3-77-026, p. 82-83, June 1977).

In 1990, we plan to drill 37,472 feet. The emissions from the 1990 drilling operations are as follows:

Emissions in tons/year

	Carbon Monoxide	Nitrogen Oxide	Hydrocarbons	Sulfur Dioxide	Particulates
Drilling	7.51	34.70	2.78	2.31	2.48
Helicopters	2.02	0.20	0.18	0.06	0.09
Workboats	0.94	0.79	0.31	0.10	0.11
Subtotal	10.47	35.69	3.27	2.47	2.68

These emissions are planned to occur in 1990.

The annual emission totals, in tons, are as follows:

1989					
Drilling	10.76	36.69	3.35	2.54	2.75
1990					
Drilling	10.47	35.69	3.27	2.47	2.68

Therefore, since none of these amounts approach 1,265 tons (38,429 tons for carbon monoxide), we request that you determine under Section 250.57(d) that this plan be exempt from further air quality review.

Amoco Production Company
New Orleans Region
Amoco Building
Post Office Box 50879
New Orleans, Louisiana 70150

May 17,1988

Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123
Attn: Regional Supervisor

Dear Sir:

Subject: Shallow Hazard Report
Plan of Exploration
Main Pass Blocks 286, 287, OCS-G-6834, 6835

A multi-sensor, high-resolution, geophysical survey was conducted over both blocks. The results indicate a smooth seafloor no surface faults, seafloor anomalies, or shallow gas accumulations at the following surface locations:

A.	4950' FSL, 1800' FWL	Blk. 286
B.	2200' FSL, 1750' FEL	Blk. 287
C.	5700' FNL, 6000' FWL	Blk. 286
D.	4250' FSL, 4800' FWL	Blk. 287

Conventional CDP and "bright-spot" seismic data, with associated velocity analyses, are free from anomalies at these locations.

Geological control is available from OCS-G-2335 No. 1, previously drilled in block 286, and a similar geologic sequence is expected at the proposed locations.

Sincerely,

for D. D. Harper
Donaldson Harper
Division Geophysical Manager

ATTACHMENT NO. 5

PLAN OF EXPLORATION

ENVIRONMENTAL REPORT

MAIN PASS AREA

MAIN PASS BLOCKS 286 & 287, OCS-G-6834, 6835

AMOCO PRODUCTION COMPANY
P. O. BOX 50879
NEW ORLEANS, LOUISIANA 70150
JUNE 21, 1988

HARTY C. VAN, JR.
PETROLEUM ENGINEERING ASSOCIATE
PHONE 504/586-6567

ATTACHMENT NO. 9

TABLE OF CONTENTS

I. DESCRIPTION OF PROPOSED ACTION

A. **DESCRIPTION OF PROPOSED TRAVEL MODES ROUTES AND FREQUENCY:** Boats and helicopters will be dispatched from Venice, Louisiana bases on a daily basis or as needed to the proposed drilling locations upon commencement of drilling operations. Boats will travel out Southwest Pass to the Gulf. Upon reaching the Gulf of Mexico, a more or less direct route will be taken.

The breakdown shown below reflects an approximate account of boat and aircraft departures and arrivals for the different phases of the activity, dependent upon variable weather conditions.

	Drilling:
Boat	- 1 trip every two days
Helicopter	- 2 trips daily

B. PERSONNEL REQUIRED TO CONDUCT ACTIVITIES: The number of persons expected to be needed to carry on and support the drilling and production operations is as follows:

Offshore	No. of Employees
Drilling Phase:	
Contract Rig Crew	55 (7/7 shift)
Service Support	10 (7/7 shift)
Catering	8 (7/7 shift)
Company Supervision	2 (7/7 shift)
Onshore	
Dockside Support	6 (7/7 shift)
Transportation	
Helicopter Pilots	2 (7/7 shift)
Marine Crews	12 (7/7 shift)
Total Persons	95

Since the rig and transportation vehicles to be used are currently working in the Gulf of Mexico, no additional families of drilling or transportation personnel are expected in the area. Any personnel needed for onshore support activities will be hired locally; therefore, no new families are anticipated in the coastal area.

C. ONSHORE SUPPORT SYSTEMS:
We expect to use the currently existing support facilities of Milpark's Dock and PHI's Heliport in Venice, Louisiana. An easily accessible state highway leads to the support base facilities. No extra land is expected to be needed under the proposed activities for facilities, storage, rights-of-way or easements. Current facilities already in use seem adequate to support all phases of the drilling plan.

D. NEW OR UNUSUAL TECHNOLOGY:
No new or unusual technology will be employed during this drilling operation.

E. VICINITY MAP:
See Attachment No. 1.

F. PROPOSED MEANS TO TRANSPORT OIL AND GAS TO SHORE, ROUTES, QUANTITIES:
The proposed action is exploratory. No oil or gas will be produced by this plan of exploration.

II. DESCRIPTION OF AFFECTED ENVIRONMENT

A. COMMERCIAL FISHING:
The Gulf fishery is dominated by the shell fisheries: shrimp, crabs, and oysters (with smaller amounts of clams and scallops). The shrimp fishery in the Gulf area includes brown, white, and pink shrimp. These are taken almost exclusively by trawl fishing in depths ranging from 2 to 73 meters.

Main Pass 286 and 287 are located on the outer limit of the major finfish, but outside the principal industrial bottomfish, pink, brown and white shrimp harvest areas and outside any high density shellfish area. Finfish volume for the Gulf states is dominated by menhaden. Menhaden are number one in volume and second in value for Louisiana. Gulf Region Landings in 1986 were 1.8 billion pounds, or 75% of the 2.4 billion pounds U.S. menhaden catch, most of which is landed at Louisiana ports. (Fisheries of the United States 1986, April 1987). Other finfishes which contribute significantly to Louisiana's landings include drum, mullet, sea trout, mackeral, and snapper. Alabama's dominant commercial catches are the shellfish (shrimp, crab, and oysters), while commercially important finfish include sea trout, spot, Atlantic croaker, striped mullet, and southern flounder. Mississippi produces large quantities of shellfish and finfish with shrimp representing the most important catch. Oysters and blue crabs also contribute significantly to Mississippi's shellfish landings.

(FEIS Sale 94, 98 and 102). See Appendix No. 1 for a complete listing of the Louisiana catch by major species.

Since the majority of shrimp and commercial bottom fish are caught by trawling, sites occupied by drilling rigs and attendant service boats must be avoided.

B. SHIPPING:

At least 8,000 km of navigable streams and 1,800 km of intercoastal waterways are located in the state. These waterways include the Mississippi River and the Gulf Intracoastal Waterway which are major waterways for the nation's waterborne commerce. Other notable waterways include the Atchafalaya River in St. Mary Parish. Louisiana has three major ports - New Orleans, Baton Rouge, and Lake Charles. Alabama's main port is located in Mobile. Aside from deep-draft ocean shipping, Louisiana and Alabama are key focal points for inland waterway traffic. Inland barge traffic not only links the deepwater ports to the interior of the nation, but also provides important support for the industrial structure of coastal Louisiana and Alabama. The existence of barge service tends to concentrate petrochemical facilities adjacent to the water sites in Louisiana.

Main Pass Blocks 286 and 287 are not located near any fairway or anchorage area. No problems are anticipated in association with fairways or anchorage areas. See Attachment No. 2. (FEIS Sale 94, 98 and 102 - Visual No. 11).

A heavily used shipping pattern has developed in the offshore waters of the Gulf. Ships crossing open Gulf waters often utilize a system of established safety fairways. These fairways connect the major Gulf ports, which include the deepwater oil terminal (LOOP) located offshore Louisiana. Regulations prohibit the placement of fixed structures in fairways, thus providing clear passages of 2 nautical miles in width through the developed areas of the Gulf. Vessels operating along the coast generally use the Gulf Intracoastal Waterways (GIWW)) which follows the coastline inshore and through bays and estuaries from Fort Meyers, Florida, to Brownsville, Texas. However, ships do not always use these fairways and waterways and this increases the possibility of a collision with drilling rigs, permanent platforms or vessels attending these platforms. In the fairways there is the risk of ship/ship collisions. Impacts which could result include loss of human life, spillage of oil, release of debris, including part of or the entire drilling rig and the ship. The contents of the ship's cargo could pose a serious threat to the environment if it includes toxic materials such as chemicals, crude oil, or refined products. It should be noted that while the number of offshore structures is increasing, the number of accidents involving the structures has not increased.

C. PLEASURE BOATING, SPORT FISHING AND RECREATION:
Sport fishing in Louisiana and Alabama is a very popular form of recreation. Louisiana's coastal marshland with few roads reaching the shoreline has limited fishing access and precludes full utilization of the saltwater fishery resources. Nevertheless, a high percentage of Louisiana residents own or have access to boats. Sport fishing around offshore oil and gas rigs is popular. Results of recreational fisheries surveys by Ditton and Graefe (1978) in the northwestern Gulf of Mexico's Houston-Galveston area indicated that only one-third of the boating population was saltwater fishermen and only 5% fished offshore. However, oil and gas structures attracted more fishing than any other structure, natural or artificial (87% of the boats and 50% of all offshore recreational fishing effort were directly at oil and gas platforms). Offshore fishermen were estimated to have contributed over five million dollars to the local economy. (The Ecology of Petroleum Platforms in the Northwestern Gulf of Mexico; A Community Profile).

Boating in Louisiana's and Alabama's coastal areas is most often related to recreational fishing. Water skiing and sailing are growing in popularity, especially in estuarine lakes near South Lousiana's major urban centers and Mississippi's and Alabama's coastal areas.

Hunting is a popular recreational activity in Louisiana, Mississippi and Alabama. A variety of water fowl are taken throughout the coastal marshes. There are two National Wildlife Refuges, one National Wilderness Area, five state parks and two additional state game management areas plus numerous state and federal biologically sensitive land areas onshore from the area of operation.

Numerous recreational beaches are located along the coast line of the States of Mississippi and Alabama. Most of the beaches are narrow, of good recreational quality and generally accessible to tourist traffic.

Several additional significant recreations resources are found along the Gulf Coast. Mississippi and Alabama have ornamental gardens, scenic roads, rivers, and trails. No adverse impacts are anticipated.

D. POTENTIAL OR KNOWN CULTURAL RESOURCES:
Main Pass Blocks 286 & 287 lie outside the Prehistoric, and Historic Cultural Resources High Probability Lines. Pursuant to the lease agreement for the tract, an archaeological survey was not required nor conducted.

E. ECOLOGICALLY SENSITIVE FEATURES:

There are no areas of particular concern within Main Pass Blocks 286 & 287. However, there are numerous areas of environmental concern that lie far onshore from the lease area. These include (1) Biloxi Wildlife Management Area, (2) Delta National Wildlife Refuge, (3) Pass A'Loutre Wildlife Management area, (4) Bohemia Wildlife Management Area, (5) Gulf Islands National Seashore, (6) Mississippi Sandhill Crane Sanctuary, (7) Dauphin Island Sanctuary, (8) Oyster Beds, (9) Bird Rookeries, (10) Sea Turtle Nesting Area, (11) Osprey Nests, (12) Submergent Grass Beds, and (13) Gulf Islands National Seashore and other recreational beaches.

Blocks 286 & 287 do not occupy a position within any known breeding habitat, nursery area, or specific migration route. While associated activities could occur in the blocks, they are not known to be concentrated there. No adverse impacts are anticipated.

F. PIPELINES AND CABLES:
There are no pipelines crossing Main Pass Blocks 286 & 287.

G. OTHER MINERAL USES:
There are no known other mineral deposits in the lease area which would be considered commercially important.

H. OCEAN DUMPING ACTIVITIES:
There are no EPA approved ocean dumping sites located within the Main Pass Area.

I. ENDANGERED OR THREATENED SPECIES AND CRITICAL HABITAT:
Five federally listed endangered whale species occur within the Central Gulf. These include fin, humpback, right, sei, and sperm whales. Generally, these large cetaceans inhabit the continental slope and deep oceanic waters, occasionally they are sighted nearshore (Schmidly, 1981). Sperm whales have been sighted near the Louisiana Delta and offshore Brownsville, (Fritts et al., 1983).

Red wolf hybrids occur along the Gulf coast in Cameron Parish Louisiana and Jefferson County Texas; for all practical purposes, pure-blood red wolves are extinct in the wild (McCarley and Carley, 1979).

Four federally listed endangered turtle species (Kemp's ridley, green, hawksbill and leatherback turtles) and one threatened species (loggerhead turtle) occur in the Gulf of Mexico. The green turtle is listed as endangered in Florida waters and threatened throughout the rest of the Gulf. The Kemp's ridley turtle inhabits shallow coastal and estuarine waters. Ridley turtles commonly occur in shallow water areas

from Marsh Island to the Mississippi Delta in Louisiana (Hildebrand, 1982). Kemp's ridley turtles infrequently nest on the beaches of southwestern Padre Island, Texas, where FWS, NMFS, and NPS have established a ridley turtle head start release program. The green turtle is found throughout the Gulf where its favored habitats are lagoons and shoals providing an abundance of marine grass and algae on which it feeds. No recent green turtle nesting has been reported on Gulf beaches. Juvenile green turtles occur in Texas estuaries (Hildebrand, 1982) and along the southwest Florida coast. The leatherback turtle is the most pelagic marine turtle and may be found near the Gulf coast in March and April; no recent nesting has been reported in the Gulf. The loggerhead turtle occurs throughout the Gulf and has been observed as far as 500 miles out in the open sea. They nest on various barrier islands and beaches from the Florida Keys, up the southwest Florida coast where the majority of nesting in the Gulf occurs, and west to the Chandeleur Islands off Louisiana where nesting occurs.

The American alligator occurs generally throughout the Central Gulf coastal areas in fresh to brackish water areas. The alligator is listed as endangered throughout its range except in the coastal areas of Florida and Texas where it is listed as threatened and in Louisiana where it is listed as "threatened by similarity of appearance." American crocodiles are restricted to southern Florida, chiefly along Florida Bay and on adjacent Key Largo. Current population is estimated to range from 200-400 animals.

The red-cockaded woodpecker occurs primarily in mature open pine forest throughout the Eastern and Central Gulf area and into eastern Texas.

Arctic peregrine falcons migrate along the eastern coast of Florida, the Florida Keys, and the Gulf coast of Texas. Some peregrine falcons overwinter along the Gulf coastal areas.

The endangered eskimo curlew's northward migration corridor crosses the Louisiana and Texas coastal areas.

A small population of nonmigratory Mississippi sandhill cranes inhabits an area in Jackson County, Mississippi.

A small population (about 70 - 80) of migratory whooping cranes overwinters at the Aransas National Wildlife Refuge and surrounding wetland areas from October through April.

The largest population of brown pelicans (about 9,000 - 10,000 birds) in the Gulf region occurs along the west coast of Florida. Four smaller brown pelican rookeries (about 900 - 1,000 birds) occur at North Island, northern St. Bernard Parish, and Queen Bess Island in Louisiana. Also, a small population of

brown pelicans occur near Corpus Christi, Texas, and a small number of brown pelicans from Mexico feed along the southwestern coast of Texas during the summer.

Bald eagles inhabit several Gulf coastal counties; the majority of this population occurs in Florida.

The Key tree cactus was listed as endangered on July 19, 1984. The distribution of the cactus is within the boundaries of the Key Deer National Wildlife Refuge, on a few of the larger lower Florida Keys. (FEIS Sale 94, 98 and 102).

III. UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

A. WATER QUALITY:

Drilling activities will temporarily reduce water quality adjacent to the drilling locations due to discharges of drilling fluids and cuttings. These discharges will increase turbidity in a plume down-current from the drill site. Released formation waters and a minor oil spill could also contribute to water quality degradation.

B. EFFECTS ON MARINE ORGANISMS:

Some organisms will be killed and some will be temporarily functionally impaired as a result of drilling operations. The most affected groups will be plankton and benthos immediately around the drilling rig. Damage will be both mechanical and toxicological. Discharge of formation waters, drill muds and cuttings will damage plankton within the plume. Disposal of cuttings and muds will bury some of the less mobile benthic infauna and epifauna. These impacts are considered to be localized, short term and reversible at the population level.

An oil spill could affect a broad spectrum of marine organisms. However, most effects would be localized and short term. Any effects on mammals and turtles would be significant.

C. WETLANDS AND BEACH:

In the unlikely event of a spill occurring and reaching shore, organisms in wetland and beach habitats could be killed or functionally impaired. Human community disruption could also occur. Although all such effects would be localized, any effects on endangered species and/or critical habitats would be significant.

D. AIR QUALITY:

The air quality at the lease site will be degraded temporarily during operations, but should return to normal once operations are measurably completed. Offshore activities probably will not affect onshore air quality. Air quality at the onshore base will be only insignificantly reduced by onshore activities. Any such effect will be temporary.

E. COMMERCIAL FISHING:

Of the various types of fishing gear in use in the OCS areas, trawls have the greatest chance for operational conflicts with oil and gas activities. Losses may, however, be compensated under the Fishermen's Contingency Fund or other legal routes. Trawl nets can be snagged on underwater stubs causing damage or loss of the nets. In addition, it is conceivable that snags could damage underwater production equipment or pipelines causing a spill of oil or gas. Because safety equipment is installed, which shuts in production when a loss of pressure occurs, the likelihood of a major spill resulting thereby is considered very small. Less frequently, large objects which were lost overboard from petroleum industry boats, pipeline lay barges, and platforms are caught by fishing gear resulting in damage to the gear and/or its catch of fish; however, occurrence of this type of incident is low. Also, commercial fishermen would probably not harvest fish in the area of an oil spill , as spilled oil could coat or contaminate commercial fish species rendering them unmarketable. Other unavoidable adverse impacts include loss of fish space caused by installation of unburied pipelines, rigs, platforms, or by other OCS-related structures. There may be some localized competition for shore facilities. These effects and any effect that the drilling and production operations will have on stocks of important species are considered minor.

F. SHIP NAVIGATION:

Very little interference can be expected between the drilling location and ships that use established fairways. However, at night and during rough weather, fog, and heavy seas, ships not using established fairways could collide with the rig.

G. CULTURAL RESOURCES:

There is only a small probability that an unknown cultural resource exists in the lease area. There is an even smaller probability that the activity in the area will adversely affect any unknown cultural resource.

H. RECREATION AND AESTHETIC VALUES:

The drilling locations may represent an obstacle to some sport fishermen, but such an effect is expected to be negligible and only temporary.

Even though existing regulations and orders prohibit indiscriminate littering of the marine environment with trash, offshore oil and gas operations involving men, machines, equipment, and supplies is bound to result in some littering of the ocean. Human nature and accidents associated with offshore operations will contribute some flotable debris to the ocean environment which will eventually come ashore on major recreational beaches.

The effects that normal operations or a minor oil spill would have on any fish stocks important to sport fishermen are also considered to be negligible.

A minor oil spill and/or non-petroleum floating debris could foul beaches inshore of the lease area. The fouling of the beaches would be an aesthetic detriment that could adversely affect recreation. Any effects on beach recreation could adversely affect tourism and, consequently, the local economy.

IV. THE PROPOSED ACTIVITY WILL BE CARRIED OUT AND COMPLETED WITH THE GUARANTEE OF THE FOLLOWING ITEMS:

A. The best available and safest technologies will be utilized throughout the project. This includes meeting all applicable requirements for equipment types, general project layout, safety systems, and equipment and monitoring systems.

B. All operations are covered by Amoco Production Company's Oil Spill Contingency Plan, approved by the M.M.S. on April 19, 1988.

C. All applicable Federal, State, and Local requirements regarding air emission and water quality and discharge for the proposed activities, as well as any other permit conditions, will be complied with.

D. The proposed activities described in detail in the Plan of Exploration comply with Louisiana's, Mississippi's and Alabama's Coastal Management Programs and will be conducted in a manner consistent with such Programs.

REFERENCES

1. Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales, 94, 98, and 102, Gulf of Mexico OCS Region, OCS EIS, MMS 84-0057.

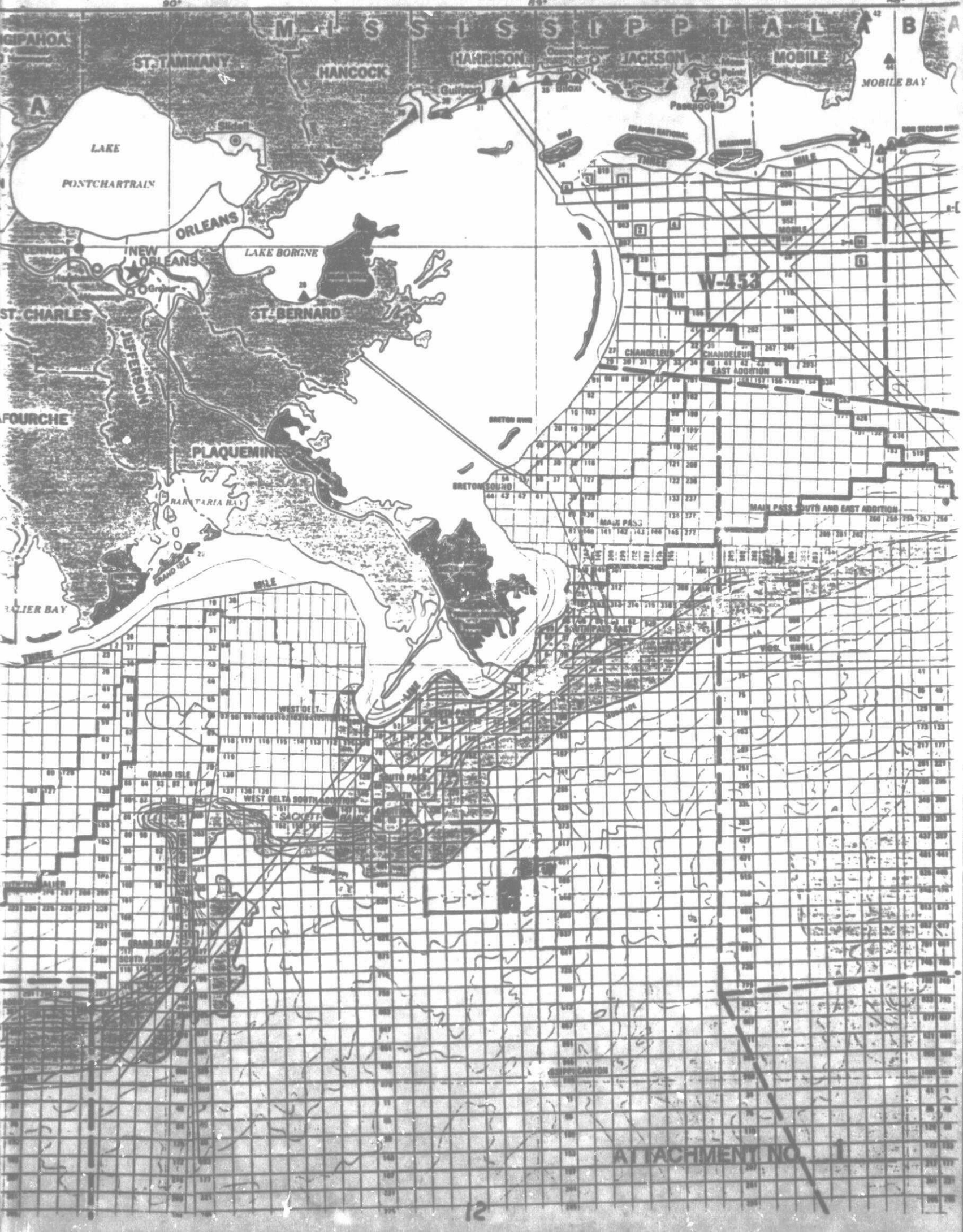
2. Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales, 94, 98, and 102, Gulf of Mexico OCS Region, OCS EIS, MMS 84-0057, visuals.

3. Fisheries of the United States, 1986, April, 1987.

4. The Ecology of Petroleum Platforms in the Northwestern Gulf of Mexico: A Community Profile, Bureau of Land Management Open File Report 82-C3, July 1982.

APPENDICES

1. Louisiana Landings for Specified Periods, 1986 and 1987.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HANCOCK
HARRISON
JACKSON
MOBILE
MOBILE BAY
LAKE
PONTCHARTRAIN
ORLEANS
NEW ORLEANS
LAKE BORGNE
ST. CHARLES
ST. BERNARD
JEFFERSON
PLAQUEMINES
BRETON SOUND
W-453
CHANDELEUR
CHANDELEUR EAST ADDITION
MAIN PASS SOUTH AND EAST ADDITION
MAIN PASS
GRAND ISLE
WEST DELTA
WEST DELTA SOUTH ADDITION
SOUTH PASS
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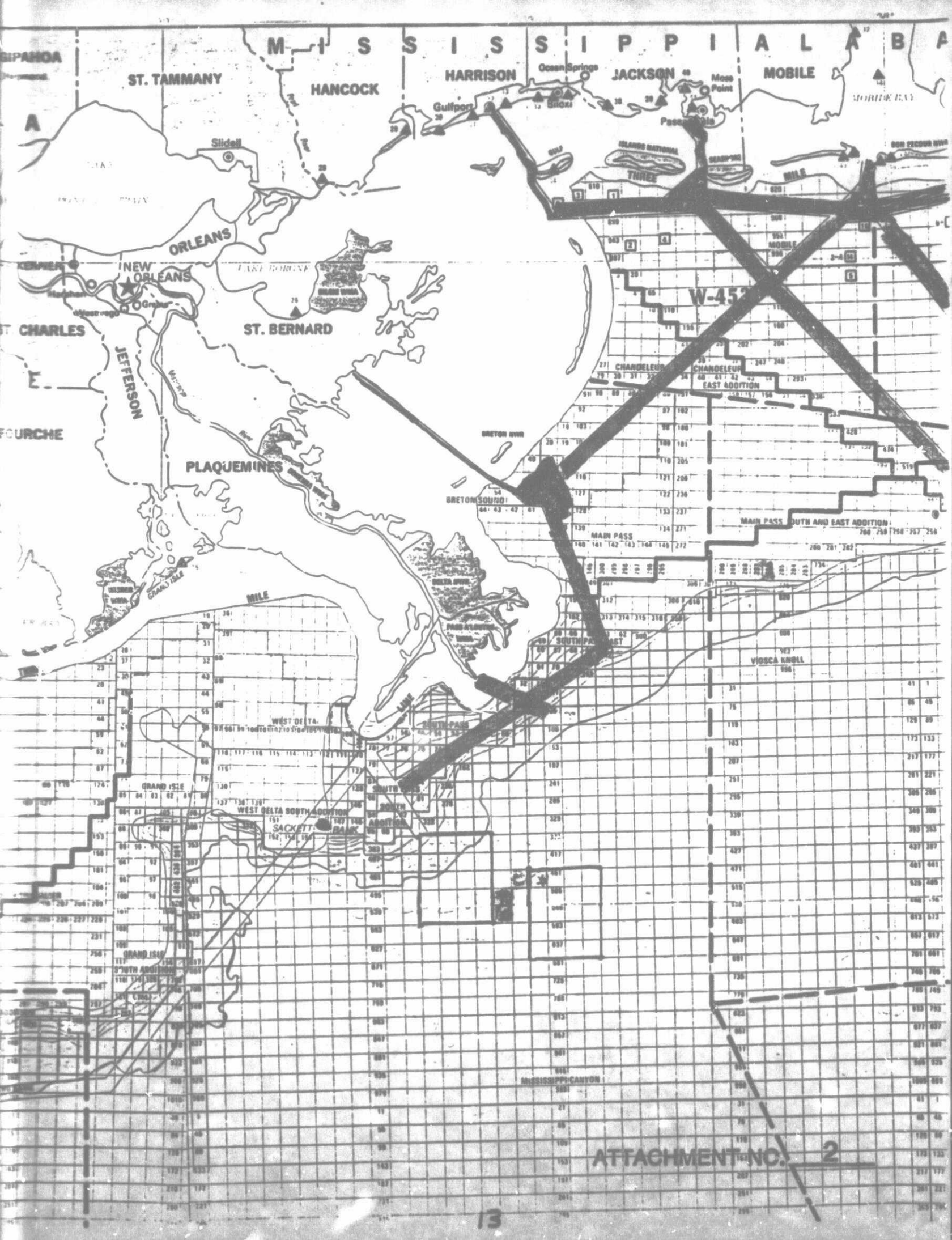
THREE MILE
ATTACHMENT NO. 1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Ocean Springs
Gulfport
Biloxi
Moss Point
Pascagoula
Slidell
ORLEANS
NEW ORLEANS
KENNER
ST. CHARLES
JEFFERSON
ST. BERNARD
PLAQUEMINES
LAFOURCHE
TERREBONNE
BRETON SOUND
MAIN PASS
MAIN PASS SOUTH AND EAST ADDITION
CHANDELEUR
CHANDELEUR EAST ADDITION
VIOSCA KNOLL
GRAND ISLE
WEST DELTA
WEST DELTA SOUTH ADDITION
SOUTH PASS
SOUTH ADDITION
SACKETT BANK
MISSISSIPPI CANYON
W-451
MILE
ATTACHMENT NO. 2

LOUISIANA LANDINGS FOR SPECIFIED PERIODS, 1986 AND 1987

SPECIES	12 MONTHS ENDING WITH DECEMBER 1986		1987	
FISH	POUNDS	DOLLARS	POUNDS	DOLLARS
AMBERJACK	314,057	134,153	380,847	196,510
BARRACUDA	0	0	176	42
BILLFISH	0	0	314	250
BLACKFISH, BLACK	227	57	13,015	10,592
BLACKFISH, SACRAMENTO	26	7	0	0
BLUEFISH	1,488	763	10,579	2,544
BLUE RUNNER	67	18	46,921	10,238
BONITO	0	0	6,996	921
BOWFIN	14,390	910	6,252	506
BUFFALOFISH	2,219,511	424,323	2,564,611	486,187
BUTTERFISH, LG	105	31	0	0
BUTTERFISH, UNC	112,156	70,459	649	194
CABIO	33,628	22,652	39,092	27,328
CARP	242,704	20,145	154,851	11,441
CATFISH & BULLHEADS	6,909,707	3,209,949	6,121,321	2,899,990
CREVALLE	54	4	495	42
CROAKER, ATLANTIC, UNC	52,598	35,940	63,452	37,221
DOLPHINFISH	33,867	27,933	56,377	47,099
DRUM, BLACK	5,225,656	1,636,930	8,020,901	2,670,319
DRUM, RED	7,817,694	5,707,526	4,571,177	5,161,532
EEL, COMMON	4,036	2,630	0	0
EEL, CONGER	38	15	24	10
BEARDED BROTULA	18,312	7,032	23,423	13,013
FILEFISH	11	2	0	0
FLOUNDERS	825,034	576,321	938,076	737,775
GARFISH (FRESHWATER)	1,233,793	393,907	848,981	309,760
GROUPER & SCAMP	168,039	205,758	131,467	224,548
HIND, SPECKLED	1,251	1,420	1,346	1,654
HIND, ROCK	256	329	404	517
HIND, RED	483	663	184	228
GROUPER, SNOWY	21,801	27,522	35,503	47,396
GROUPER, YELLOWEDGE	561,336	730,737	304,906	495,718
GROUPER, RED	1,052	1,240	826	1,232
GROUPER, MARBLED	2,801	3,325	830	1,020
GROUPER, BLACK	1,434	2,024	518	651
GROUPER, GAG	30,599	41,156	32,407	52,466
SCAMP	58,561	83,011	50,051	78,569
GROUPER, YELLOWMOUTH	96	139	0	0
GROUPER, YELLOWFIN	16,923	19,592	1,847	3,202
GRUNTS	0	0	340	99
JEWFISH	213	161	1,146	859
KING MACKEREL & CERO	334,405	248,807	527,960	404,154
KING WHITING (KING FSH	248,177	71,652	327,049	85,200
MARLIN, BLK	146	105	111	100
MARLIN, WHITE	22,652	14,356	28,567	22,089
MARLIN, BLUE	5,837	3,519	8,834	6,941
MARLIN, UNCL	24,618	13,878	34,920	29,919
MENHADEN	1,459,152,685	53,536,262	1,601,020,173	55,101,962
MINNOW	0	0	34,146	1,704
MOONFISH (OPAH)	172	13	0	0
MULLET, BLACK	2,277,713	1,192,404	1,434,425	716,644
PADDLEFISH	3,200	478	0	0
PERMIT	0	0	107	93
PIGFISH	1	0	0	0
POMPANO	27,675	98,661	26,746	95,787
RAY, UNCL	0	0	240	88
ROUDERFISH	0	0	1,242	737
SAILFISH	0	0	952	888
SAWFISH	0	0	45	45
SCULPIN (BULLHEAD, SCUL	0	0	2,038	2,107
SCUP OR PORGY, RD	4,331	3,160	0	0
SCUP OR PORGY, UNCL	16,402	10,822	46,389	42,572
PORGY, RED	0	0	184	153
SEA BASS, ATLN, UNCL	0	0	211	180
SEA CATFISH	103,263	12,076	139,148	15,521
SEA TROUT, SPOTTED	1,978,038	1,075,935	1,801,874	1,004,678
SEA TROUT, WHITE	234,422	140,432	227,721	116,092

APPENDIX NO. 1

SHAD,UNCL	53,435	5,539	375,591	64,129
SHARK,SAND TIGER	0	0	304	109
SHARK,BLACK TIP	0	0	8,649	3,254
SHARK,LONGFIN MAKO	0	0	6,557	6,523
SHARK,BONITO(SHTFN MA	2,039	1,130	18,923	16,564
SHARK,UNCL	157,565	44,059	210,369	79,211
SHARK,THRESHER	154	80	5,305	3,954
SHARK,BIGEYE THRESHER	0	0	451	177
SHARK,WHITE	0	0	246	102
SHARK,SANDBAR	0	0	9,953	2,601
SHARK,TIGER	0	0	569	187
SHEEPSHEAD,FRESHWATER	575,157	109,877	640,406	123,688
SHEEPSHEAD, ATLANTIC	962,698	128,687	1,917,953	277,741
SKATES	48	24	306	122
SNAPPER,BLACK	4,985	6,634	2,752	2,927
WENCHMAN	5	4	0	0
SNAPPER,BLACKFIN	5,840	6,139	0	0
SNAPPER,SILK	1,017	1,148	0	0
SNAPPER,LANE	4,466	5,850	1,092	2,490
SNAPPER,MANGROVE	3,401	3,636	6,296	8,236
SNAPPER,MUTTON	0	0	3	1
SNAPPER, RED	1,358,766	3,006,871	1,284,750	2,974,280
SNAPPER,VERMILION	442,597	619,043	609,733	1,013,983
SNAPPER,YELLOWTAIL	16	15	0	0
SNAPPER, UNCL	2,297	2,767	39,264	65,482
SNAPPER,QUEEN	17,561	25,377	39,190	51,113
SNAPPER,MAHOGONY	14	13	137	176
SPANISH MACKEREL	21,761	5,032	61,471	12,132
SPEARFISH	0	0	1,668	1,199
SPOT	2,696	382	2,257	316
SUNFISH	281	195	0	0
SWORDFISH	137,972	358,048	747,846	2,082,231
TILEFISH	94,077	83,139	233,682	263,971
TRIGGERFISH	14,493	6,043	21,941	11,758
TRIPLETAIL	1,314	582	573	207
TUNA,ALBACORE	334	234	3,100	1,811
TUNA,BLUEFIN	156,067	474,512	298,379	1,315,180
TUNA,YELLOWFIN	2,435,014	3,231,617	5,625,426	10,785,214
TUNA,UNCL	0	0	22,720	43,569
TUNA,BIGEYE	811	1,280	5,079	11,233
TUNA, BLACKFIN	26,161	43,119	27,509	11,930
WAHOO	7,412	6,551	50,238	42,300
WARSAW	83,685	67,214	102,596	110,935
FINFISH,UNCL	1,234	439	1,420	1,150
FINFISH,UNCL GEN	0	0	1,764	626
FINFISH,UNCL FOR BAIT	6,880	635	13,731	1,738
FISH,FRESHWATER,OTH	1,236	183	0	0
TOTAL FISH	1,496,991,232	78,858,442	1,642,511,737	91,242,114
SHELLFISH				
CRAB, BLUE, HARD	31,610,887	9,301,202	52,344,886	20,133,987
CRAB,BLUE,SOFT &PEELR	79,385	180,697	139,080	371,952
CRAB,STONE	997	2,217	9,760	21,025
CRAWFISH,FRESHWATER	16,679,824	7,070,150	24,814,212	10,316,614
SHRIMP,FRESHWATER	0	0	355	247
OYSTER,EAST,MKT,P,SP	1,750,481	2,670,803	1,166,353	2,802,705
OYSTER,EAST,MKT,P,FA	1,364,819	3,717,323	1,061,046	3,593,105
OYSTER,EAST,MKT,PR,SP	6,187,322	9,998,428	6,096,316	13,278,936
OYSTER,EAST,MKT,PR,FA	3,350,887	7,997,997	3,702,793	11,359,715
SQUID, UNCLASSIED	14,943	5,355	3,308	1,326
TURTLE,SNAPPER	31,168	29,225	586	468
FROGS	10,529	15,316	2,460	3,205
TOTAL SHELLFISH	61,081,242	40,988,713	89,341,155	61,883,345
SUB-TOTAL	1,558,072,474	119,847,155	1,731,852,892	153,125,459
Shrimp, saltwater,all	146,681,064	206,355,729	117,746,060	184,222,287
GRAND TOTAL	1,704,753,538	326,202,884	1,849,598,952	337,347,746