

In Reply Refer To: RP-2-1

JAN 13 1986

Kerr-McGee Corporation
Attention: Mr. Cary V. Bradford
Post Office Box 54028
Lafayette, Louisiana 70505

Gentlemen:

Reference is made to your Initial Plan of Exploration and Environmental Report received January 7, 1986, amended January 13, 1986, for Lease OCS-G 7753, Block 180, Ship Shoal Area. This plan includes the activities proposed for Well No. 1.

In accordance with 30 CFR 250.34, revised December 13, 1979, and our letter dated January 29, 1979, this plan has been determined to be complete as of January 13, 1986, and is now being considered for approval.

Your plan control number is N-2377 and should be referenced in your communication and correspondence concerning this plan.

Sincerely yours,

Original Signed: Eric L. Primeaux

Acting Regional Supervisor
Rules and Production

bcc: Lease OCS-G 7753 (OPS-3-2) (FILE ROOM)
OPS-3-4 w/Public Info. Copy of the plan and ER (PUBL.REC.)
DO-6

MJTolbert:rbr:1/13/86 Disk 1a

Office of
Production

JAN 21 1986

Information Services
Section

COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION

EXPLORATION
.....
Type of Plan

SHIP SHOAL AREA BLOCK 180 (OCS-G-7753)
.....
Area and Block

The proposed activities described in detail in the attached Plan of Exploration 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 activity no later than January 7, 1986.

KERR-MCGEE CORPORATION
.....
Lessee or Operator

Clay V. McGee
.....
Certifying Official

January 7, 1986
Date

MINERAL RIGHTS OF STATE

JAN 10 1986

John E. Chance & Assoc., Inc.



KERR-MCGEE CORPORATION

P.O. BOX 54028 • LAFAYETTE, LOUISIANA 70505

OIL AND GAS DIVISION

PHONE
518 261-3000

January 2, 1986

U.S. Department of the Interior
Minerals Management Service
P.O. Box 7944
Metairie, Louisiana 70011

MINERALS MANAGEMENT SERVICE

JAN 02 1986

Attention: Mr. Mike Joseph

RE: Initial Plan of Exploration
OCS-G 7753 Well No. 1
Ship Shoal Block 180

This initial Plan of Exploration for Block 180 Ship Shoal, Lease OCS-G 7753 for the drilling of one well is submitted for your approval.

1. The drilling of Well No. 1 is expected to begin during January 1986. It is estimated that it will take approximately four weeks to drill and if no unexpected delays are encountered, should be completed during March, 1986.

Well No. 1 will be drilled as a directional hole from a surface location of 1500' FNL and 3500' FEL of Ship Shoal Block 180 to a bottom hole location of 5130' FNL and 3500' FEL of Ship Shoal Block 180. This well will be drilled to 12,000' TVD, 13,244' MD. This location is indicated on the location plat attached.

2. A submersible drilling unit, similar to Transworld Rig 68, will be utilized to drill the No. 1 well. A description of the rig and features pertaining to pollution prevention and control was submitted July 22, 1981.
3. The Archeological Survey for Ship Shoal Block 180 was approved October 30, 1985.
4. Onshore base operations will be conducted from our Morgan City base located in Morgan City, Louisiana. There will be no significant impact on the onshore support facilities as a direct result of the drilling of Well No. 1.
5. The oil spill contingency plan was approved by your office December 16, 1985.
6. Arrangements have been made with the States-Item in Baton Rouge, Louisiana to publish notice of the proposed activities no later than January 7, 1986.

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7. The proposed activity complies with Louisiana's approved Coastal Management Program and will be conducted in a manner consistent with the program.
8. Enclosed are copies of the following information:
 - a. Location Plats
 - b. Structure Map
 - c. Abnormal Pressure Map
 - d. Shallow Hazard Report
 - e. List of mud components and additives
 - f. Vicinity Map
 - g. Air Quality Emissions Schedule
 - h. Environmental Report

Kerr-McGee Corporation is a member of Clean Gulf Associates. The base facilities to be utilized in the event of a spill is located in Morgan City, Louisiana. Deployment time is approximately 12 hours.

Kerr-McGee Corporation plans to develop this lease with a minimum number of surface structures, which will be determined as exploratory drilling takes place. If the wells are plugged and abandoned, the work shall be done in accordance with OCS Order No. 3 "Plugging and Abandonment of Wells." Should the wells be temporarily abandoned with casing stubs, the stubs shall be marked in accordance with Coast Guard regulations. The wells will then be reported on the semiannual report of Subsea Casing Stubs to the District Supervisor.

It is understood that the wells shall not be produced until it can be demonstrated by additional drilling and/or geological and engineering data that it is needed for proper production of the lease, and until final approval of a production platform is obtained.

Kerr-McGee Corporation will drill Well No. 1 according to regulations as set forth in the OCS Order No. 2, effective January 1, 1980.

Kerr-McGee Corporation is of the opinion that all information supplied in this communication will be exempt from disclosure under the "Freedom of Information Act" (5 U.S.C. 522) and implementing regulations (43 CFR Part 2).

It is believed that the data in this communication and its attachments provide the information required by 30 CFR 250.34. Therefore, it is respectfully requested that this Plan of Exploration be considered as soon as possible since drilling operations are to commence during January, 1986.

PUBLIC INFORMATION

Minerals Management Service

Page 3

Should you have any questions, or if additional information is required, please contact Ray Pitre in our Lafayette District Office.

Very truly yours,



for Cary V. Bradford
Manager-Engineering Services

RJP/sp

Enclosures

cc: U.S. Department of the Interior
Minerals Management Services
P.O. Box 10145
Houma, Louisiana 70361

PUBLIC INFORMATION

171

S 02° 28' 55" E 213,562.68'
From IISC & GS Mon. "OYSTER"

No. 1 Prop. Surf. Loc'n

X = 2,074,500.00'
Y = -13,523.39'
Lat. 28° 37' 45.386"
Long. 91° 06' 04.195"

SOUTH
1500'

WEST 3500'

SOUTH
3630.00'

SOUTH 5130'

No. 1 Prop. B.M.L.

X = 2,074,500.00'
Y = -17,153.39'

B.M.L.

WEST 3500'

BLK. 180

KERR MCGEE CORPORATION

O.C.S.-6-7753

195

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I hereby certify that the above proposed surface
location is correct.

Robert J. Champagne

Registered Professional Land Surveyor No. 309
State of Louisiana
John E. Chance & Associates, Inc.



Robert J. Champagne

Reg. No. 309

REGISTERED
PROFESSIONAL

LAND SURVEYOR

KERR MCGEE CORPORATION

O.C.S.-6-7753 NO. 1

PERMIT PLAT

SHIP SHOAL AREA

SCALE: 1" = 2000'

12/31/85

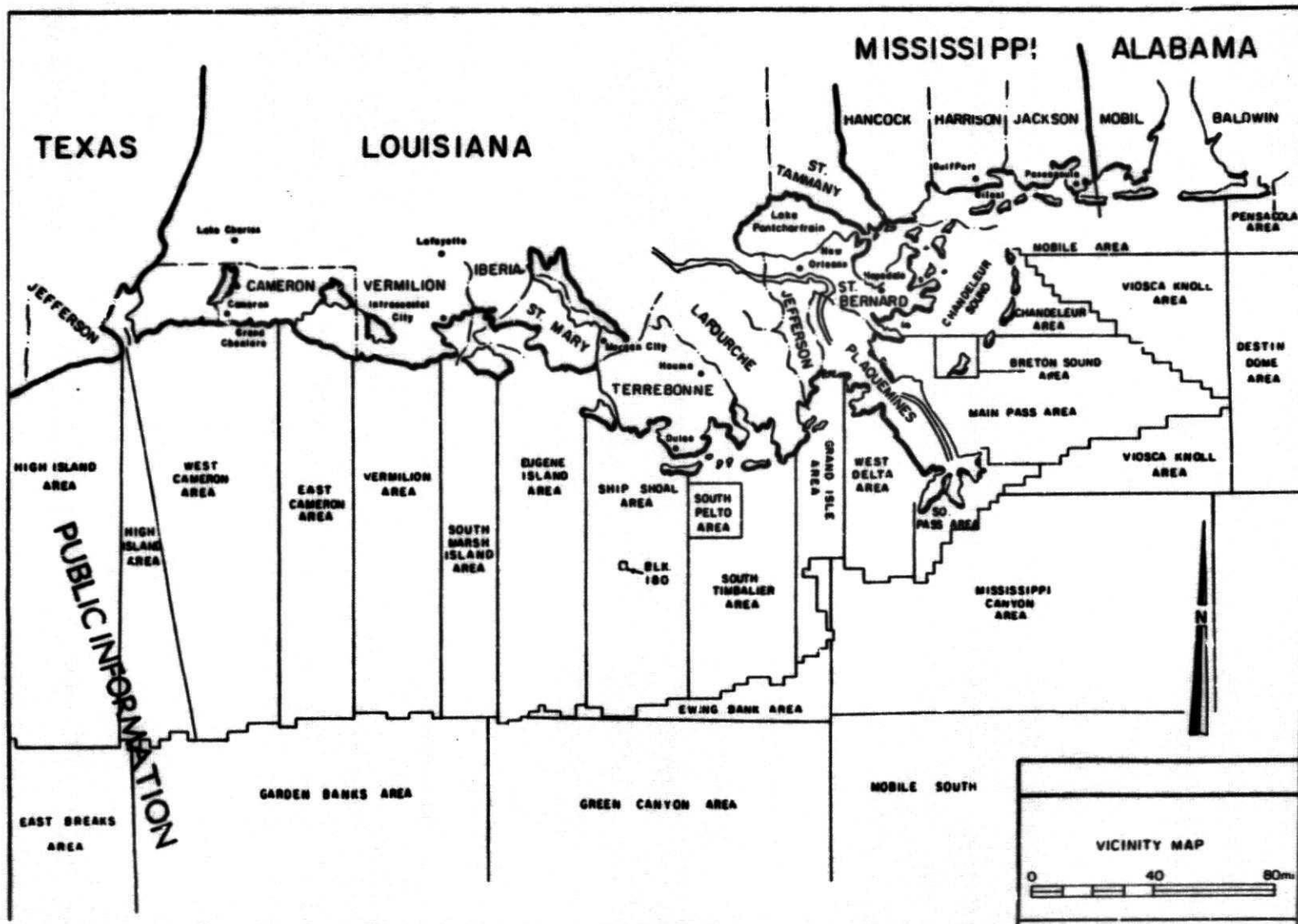
DETAILED LIST OF DRILLING MUD COMPONENTS AND MUD ADDITIVES

1. Bulk Barite/Sack Barite (Weight Material)
2. Gel (Bentonite)
3. Caustic (Sodium Hydroxide)
4. Sodium Bicarbonate
5. CLS (Lignosulfonate)
6. Lignite
7. Aluminum Stearate
8. Sodium Chromate
9. Soda Ash
10. Lime
11. Resinex/Tem-Flo C (High Temperature Fluid Loss Agent)
12. Soltex (Asphalt Based Fluid Loss Agent)
13. HEC (Polymer Viscosifier)
14. Drispac (Polymer Viscosifier, Fluid Loss Agent)
15. DD (Drilling Detergent)
16. Stickless/Torqueless (Glass Beads)
17. Morrex (Grain By-Product)
18. Starch
19. Mica (Lost Circulation Material - LCM)
20. Nut Plug (Ground Walnut Shells)

SPECIALTY MUD PRODUCTS FOR STUCK PIPE APPLICATIONS

1. Black Magic/SFT (Sacked Fishing Tools)
2. Pipe Lax/Oil Faze

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COMPANY: Kerr-McGee Corporation

RIG OR PLATFORM:

LOCATION: OCS-G 7753 Well No. 1
Ship Shoal Block 180

DATE: January 2, 1986

EMISSION DISCHARGE SUMMARY

PROCESS	PART	TONS EMITTED PER YEAR				UNITS
		SO _x	NO _x	HC	CO	
POWER SOURCES						
Rig Power Units (Total)	67.0	62.4	938.0	75.0	204.0	2000 Gals. Burned
Distillate Oil (Diesel)						
Reciprocating						
PROCESS EQUIPMENT						
TRANSPORT SOURCES						
Helicopter-Kerosene/						
Naptha (Jet Fuel) &						
Turbine	.14	.174	1.90	.156	.131	28 Gals. Burned
Reciprocating	2.68	2.49	37.5	3.00	8.16	80 Gals. Burned
TOTAL LBS/DAY	69.82	65.1	977.40	78.2	212.3	
TOTAL LBS/YEAR	25,484	23,762	356,751	28,543	77,489	
TOTAL TONS/YEAR	12.7	11.9	178.4	14.3	38.7	

PUBLIC INFORMATION

OCS-G 7753 Well No. 1

Ship Shoal Block 180

Exemption Formula

$$E = 33.3 D$$

$$E = 33.3 \times 40.4 \text{ Miles}$$

$$E = 1345 \text{ Tons/Years}$$

Projected Emissions

$$\text{Part} - 12.7 \text{ Tons}$$

$$\text{SO}_x - 178.7 \text{ Tons}$$

$$\text{NO}_x - 14.3 \text{ Tons}$$

$$\text{HC} - 11.9 \text{ Tons}$$

Exemption Formula

$$E = 34000^{2/3}$$

$$E = 3400 \times 40.4^{2/3}$$

$$E = 3400 \times 11.77$$

$$E = 40,031 \text{ Tons/Years}$$

Project Emissions

$$\text{CO} - 38.7 \text{ Tons/Years}$$

PUBLIC INFORMATION

**ENVIRONMENTAL REPORT
FOR COASTAL MANAGEMENT CONSISTENCY DETERMINATION
PLAN OF EXPLORATION
GULF OF MEXICO**

**FOR
SHIP CHANNEL AREA BLOCK 180 (OCS-8-7753)**

**SUBMITTED TO:
CARY BRADFORD
MANAGER OF ENGINEERING SERVICES
KERR-MCGEE CORPORATION
201 RUE IBERVILLE
LAFAYETTE, LOUISIANA 70508
(318/261-3000)**

DECEMBER 31, 1985

**PREPARED BY:
JOHN E. CHANCE & ASSOCIATES, INC.
REGULATORY & ENVIRONMENTAL DIVISION
PROJECT #85-8324**

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II. Description of the Proposed Action

This report addresses the activity proposed by Kerr-McGee Corporation for Ship Shoal Area Block 180 (NCS-G-7753). The approximate location of the activity is presented in Figure 1, a general vicinity map of the Outer Continental Shelf (OCS) lease areas off the coast of Louisiana.

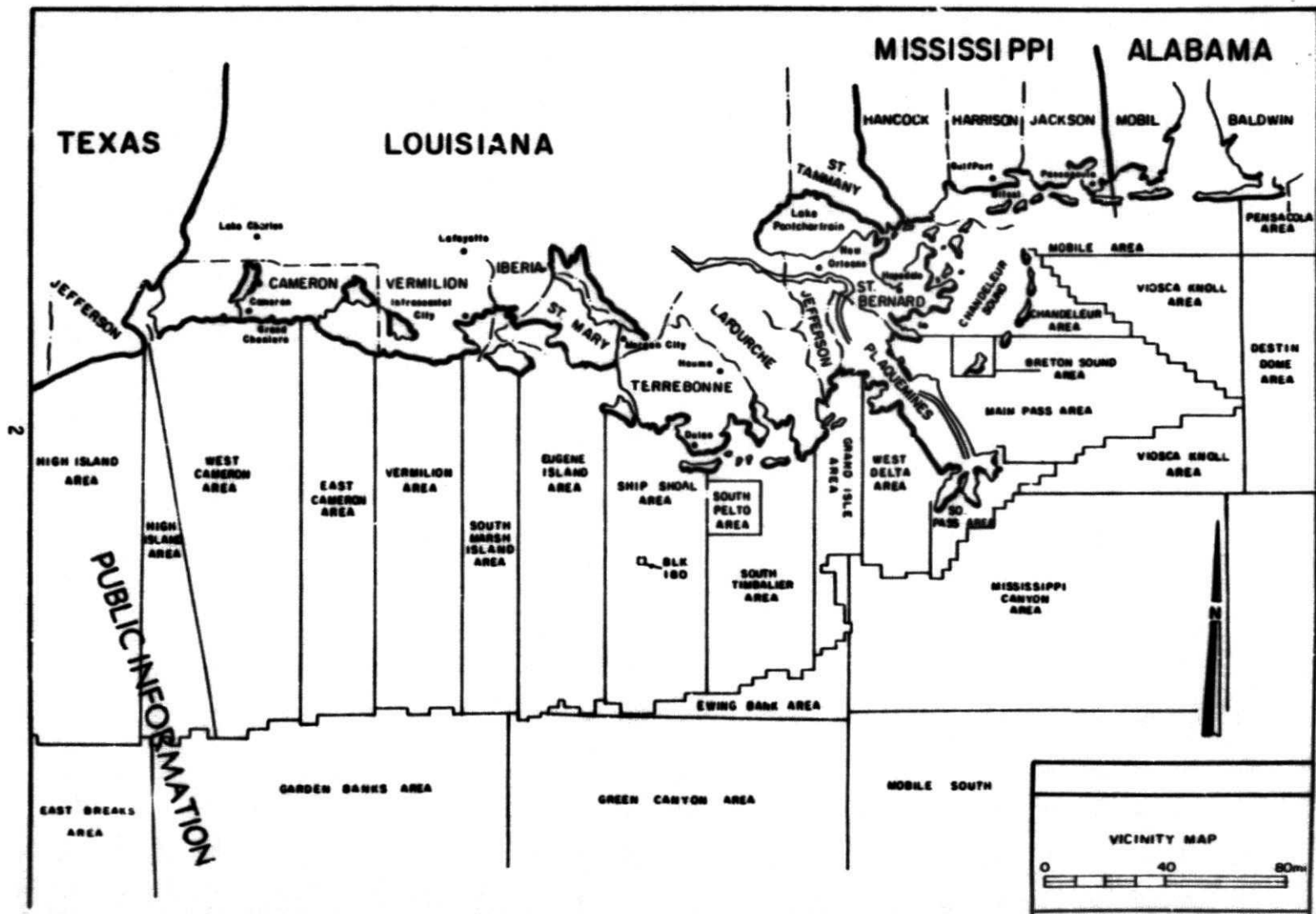
It is anticipated that a submersible or jack-up type rig will be moved on location and one (1) exploratory well will be drilled. The surface location of the well and additional information regarding specific activities proposed by Kerr-McGee Corporation for this block are included in the attached Plan of Exploration.

The proposed activities will be carried out by Kerr-McGee Corporation with a guarantee of the following:

1. 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, equipment and monitoring systems.
2. All operations will be covered by M.M.S. approved Oil Spill Contingency Plan.
3. All applicable Federal, State, and local requirements regarding air emissions, water quality, and discharge for the proposed

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activities, as well as any other permit conditions, will be complied with.

A. Travel Modes, Routes, and Frequencies

Kerr-McGee Corporation will operate out of their service base facilities established in Morgan City, Louisiana. Kerr-McGee Corporation anticipates using one (1) helicopter, one (1) supply boat, one (1) work boat, and one (1) crew boat to support their Ship Shoal Area Block 180 activity.

The helicopter will travel to the location a total of fourteen (14) times per week, the crew boat will travel to the location a total of three (3) times per week, and the supply boat and work boat will travel to the location a total of three (3) times per week.

It is anticipated that the transportation vessels will utilize the most direct route from the Morgan City, Louisiana service base. Because a vessel supporting the Ship Shoal Area Block 180 exploration activities, as outlined in the Plan of Exploration, may be scheduled for other stops in the area, the exact route for each vessel on each particular trip cannot be predetermined.

B. Support Base and New Personnel

Kerr-McGee Corporation will utilize support base facilities

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established in Morgan City, Louisiana. The Morgan City, Louisiana support base is located approximately seventy-five (75) miles northwest of the block.

Because helicopter and marine facilities are currently available at the service base and are presently and continuously manned, no additional onshore employment is expected to be generated as a result of these activities.

The initial OCS Socio-Economic Data Base Report for the service base facilities utilized by Kerr-McGee Corporation will be prepared for submission pursuant to the specific parameters to be established by the DOI/MMS and scheduled to be issued at a later date.

C. New Support Facilities

The proposed exploration activities for Ship Shoal Area Block 180 will not require the development of any new support facilities.

D. New or Unusual Technology

The exploration activities for Ship Shoal Area Block 180 will not warrant utilizing any new or unusual technology that may affect coastal waters.

E. Location of the Proposed Activities

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Ship Shoal Area Block 180 is located approximately seventy-five (75) miles southeast of Morgan City, Louisiana and approximately thirty-eight (38) miles south of the Louisiana coast of Terrebonne Parish. Figure 1 presents the location of the block in relation to the Louisiana coast, as well as the geographic relationship between Ship Shoal Area Block 180 and the other OCS lease areas.

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III. DESCRIPTION OF THE AFFECTED ENVIRONMENT AND IMPACTS

A. Physical and Environmental

1. Commercial Fishing -

Commercial fishing has traditionally provided an important economic base for a majority of the coastal communities along the Gulf of Mexico. In 1982, the Gulf coastal states landed 2.3 billion pounds of fish products representing a third of the nation's total, valued at over 600 million dollars. The five commercial fisheries of the greatest economic importance are the shrimp, menhaden, oyster, industrial bottom fish, and crab fisheries.

In 1982, Gulf fishermen landed over 209.9 million pounds of shrimp representing 75 percent of the nation's total and valued at over 425 million dollars. The northern Gulf shrimp fishery is comprised mainly of three species; the brown shrimp (Penaeus aztecus), the white shrimp (P. setiferus) and the pink shrimp (P. duorarum). The smaller brown shrimp represent approximately 60 percent of the shrimp taken, the pink shrimp 10 percent, and the white shrimp account for a majority of the remainder. Three other species, the rock shrimp, royal reds, and the seabobs, are also taken commercially in the northern Gulf but together comprise less than 4 percent of the total shrimp landings.

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Statistics compiled by the National Marine Fisheries Service indicate that 76,953,758 pounds of shrimp (heads on) valued at over 40 million dollars were landed at Louisiana ports in 1983. It should be noted that catch statistics are recorded by the area landed and do not necessarily indicate that the species were actually caught in waters adjacent to the ports where they were landed.

Most shrimp are taken by trawl and are estuarine dependent in that they require estuaries during some stage of their life cycles. Mature shrimp leave the estuary for the open Gulf where they spawn (release eggs). The eggs and subsequent larval stages circulate freely in the currents of the OCS and can be found in virtually all OCS waters. Young juveniles then enter the estuary to feed, mature, and repeat the cycle.

The Ship Shoal Area under consideration falls within the "high to moderate brown shrimp productivity area" (U.S.N.I., FREIS, Gulf of Mexico, 1983, Visual No. 4-I) wherein the possibility of shrimp fishing activity exists. Some documented impacts of petroleum exploration and production on the shrimp fishery include the removal of trawling space during the drilling and exploration phases and the possibility of fishing gear conflicts with existing well heads. These conflicts could result in loss of catch, loss of or damage to nets, vessel damage, and/or fishing downtime losses. Additional discussion of the impacts on the commercial fishing industry is contained in the Final Regional Environmental Impact Statement, Gulf of Mexico, Volume 1, pages 327 to 332 (U.S.N.I., 1983).

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The Gulf oyster fishery provided over 40 percent of the oysters landed nationally in 1982 totaling 24.2 million pounds of meat worth over 33 million dollars. Most Gulf oysters are taken by oyster dredging in estuarine and coastal waters within 5 miles of shore. According to National Marine Fisheries Service statistics over 13 million pounds of oysters valued at over 17 million dollars were landed at Louisiana ports in 1983. The proposed activities in Ship Shoal Area Block 180 are not expected to have any impact on the oyster fishery in Louisiana.

In 1981 the Gulf States also landed 37.4 million pounds of blue crabs (Callinectes sapidus) valued at over 8 million dollars. Most were captured in "pots" (baited traps) in shallow estuarine or near shore waters. Blue crabs are also caught using "trotlines" (shallow, multibaited lines) and bottom trawls. These crabs are estuarine dependent with planktonic eggs and larval stages. Blue crab landings at Alabama ports totaled 1,411,629 pounds valued at 514,299 dollars in 1983, according to National Marine Fisheries Service statistics. The fishery for blue crabs is unlikely to be significantly affected by exploration activities in this block as it is offshore of the coastal and estuarine waters in which this fishery operates.

Table 1 presents a list of commercially important shellfish found in this area of the Gulf.

The menhaden or "Pogy" fishery is the nation's second most valuable fishery accounting for 1.2 billion pounds valued at 47 million dollars.

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TABLE 1
COMMERCIALY IMPORTANT SHELLFISH
OF THE GULF OF MEXICO

COMMON NAME	SCIENTIFIC NAME	HARVEST METHOD
SHRIMP:		
Brown Shrimp	<u>Penaeus aztecus</u>	BT
White Shrimp	<u>P. setiferus</u>	BT
Pink Shrimp	<u>P. duorarum</u>	BT
Seabob	<u>Xiphopenaeus kroyeri</u>	BT
Royal Red Shrimp	<u>Hymenopenaeus robustus</u>	BT
Rock Shrimp	<u>Sicyonia brevirostris</u>	BT
Blue Crab	<u>Callinectes sapidus</u>	CT,BT,TL
Oysters	<u>Crassostrea</u> sp.	OD,OT

BT Bottom Trawl
CT Baited Crab Trap
OD Oyster Dredge
OT Oyster Tongs
TL "Trotline"

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roughly half of the total 1981 fish poundage landed in the U. S. Spurred by a 55 percent increase in menhaden landings from the Gulf coast states, the U. S. had a record setting menhaden catch in 1982. Gulf landings were 1.9 billion pounds worth over 72 million dollars. Four species are said to comprise the menhaden fishery but the Gulf menhaden (Brevoortia patronus) accounts for most of the catch. Menhaden are processed into fish meal, fish oil, and fish solubles for industrial use. Menhaden are estuarine dependent with planktonic eggs. The activities as proposed are unlikely to have any adverse effect on the menhaden fishing as Ship Shoal Area Block 180 lies outside the "Principal Menhaden Harvest Area" (U.S.D.I., FREIS, Gulf of Mexico, 1983, Visual No. 4-I).

Industrial bottomfishes make up a large fishery in the Gulf. Within this group are fishes taken on or very near the bottom by commercial trawlers. The following fishes generally account for 95 to 98 percent of the industrial bottomfish trawl fishery: croaker, spot, sand seatrout, silver seatrout, catfish, and longspine porgy (U.S.D.I., 1983).

Many of the species taken in the industrial bottomfish category spawn in offshore waters, and it is possible that the eggs might be adversely affected by contact with drill cuttings and/or drilling mud if they were present near the rig during such releases. These discharges may also cause temporary relocation of adults due to inundation of feeding ground at the drill site. Fishing activity will be temporarily interrupted by the placement of the drilling rig but no long-term effects are anticipated as a result of this proposal. Industrial bottomfish are usually sold as

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industrial fishmeal and fish solubles, but this group also produces some foodfish, pet food, and FPC (fish protein concentrate).

Other species for which significant commercial fisheries exist include striped mullet, groupers, snappers, and flounders. Mullet are taken near shore and in estuarine waters in seine nets, gill nets, and cast nets. Snappers and groupers are taken by hook and line throughout the OCS wherever naturally occurring or man-made benthic features provide sufficient habitat. Flounders are also caught commercially by hook and line and are taken seasonally in very shallow estuarine water by gig (barbless spear). Weakfishes, croakers, and drums are also taken commercially by hook and line as foodfishes. Table 2 presents a list of commercially important industrial bottomfishes and sport fishes found in the Gulf of Mexico.

Overall, commercial fishermen have benefited from the growth of the petroleum industry in the OCS water of the Gulf of Mexico. While technological improvements have enabled commercial fishermen to increase the volume of landings, development of the petroleum industry has also had a positive impact on fishing. Because OCS petroleum development is dependent on extensive marine vessel utilization, harbors and ports have been improved, port access waterways have been expanded and improved, and the availability and quality of marine vessel maintenance and repair facilities have increased significantly. These improvements have definitely had a positive effect on fishermen (Lassiter, 1980).

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TABLE 2

A CHECK LIST OF COMMERCIAL & SPORT FISHES
OF THE NORTHERN GULF OF MEXICO¹

COMMON NAME	SCIENTIFIC NAME ²
Gulf Menhaden	<u>Brevoortia patronus</u>
Hardhead Catfish	<u>Arius felis</u>
Gafftopsail Catfish	<u>Bagre marinus</u>
Marsaw Grouper	<u>Epinephelus nigritus</u>
Jewfish	<u>Epinephelus itajara</u>
Red Grouper	<u>Epinephelus morio</u>
Rock Hind	<u>Epinephelus adscensionis</u>
Florida Pompano	<u>Trachinotus carolinus</u>
Red Snapper	<u>Lutjanus campechanus</u>
Sheepshead	<u>Archosargus probatocephalus</u>
Northern Kingfish	<u>Menticirrhus saxatilis</u>
Black Drum	<u>Pogonias cromis</u>
Atlantic Croaker	<u>Micropogonias undulatus</u>
Spotted Seatrout	<u>Cynoscion nebulosus</u>
Sand Seatrout	<u>Cynoscion arenarius</u>
Red Drum	<u>Sciaenops ocellatus</u>
Spot	<u>Leiostomus xanthurus</u>
Striped Mullet	<u>Mugil cephalus</u>
King Mackerel	<u>Scomberomorus cavalla</u>

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TABLE 2 (cont'd)

A CHECK LIST OF COMMERCIAL & SPORT FISHES
OF THE NORTHERN GULF OF MEXICO

Spanish Mackerel

Scomberomorus maculatus

Unclassified Flounders

Paralichthys spp.

1. Based on landing statistics compiled by the National Marine Fisheries Service, New Orleans, Louisiana.
2. Scientific nomenclature from American Fisheries Society (1980).

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2. Shipping

A designated shipping fairway is located approximately fifty (50) miles northwest of the block. It is likely that the marine vessels supporting this block will utilize the shipping fairway located northwest of the block to gain access to the support base, however, it is unlikely that the marine vessels will have a significant effect on fairway traffic. The drilling rig and each of the marine vessels will be equipped with all U. S. Coast Guard required navigational safety aids.

3. Recreation

The open Gulf encompasses a broad expanse of saltwater which is utilized by numerous sports fishermen and a small but rapidly increasing number of SCUBA divers. Many fishermen charter boats to deep-sea fish and sport dive in the northern Gulf. The states of Alabama, Mississippi, and Louisiana support approximately 120 charter boats which conduct a majority of their fishing activities in the waters of the OCS (U.S.D.I., 1983). Petroleum platforms in the northern Gulf provide recreation for fishermen and scuba divers because they act as artificial reefs attracting and establishing aquatic communities including highly sought after food and sport fishes. The reef effect created by petroleum platforms is well known and is evidenced by the numerous private boat owners who regularly visit offshore facilities to harvest food and sport fishes.

Frequently, offshore rigs and platforms serve as navigation points for small commercial and recreational marine craft. Manned drilling rigs and

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platforms can also provide a haven for small craft operators forced to abandon their vessels during storms or following boat accidents. The installation and use of navigational aids, lifesaving equipment, and other safety requirements pursuant to Coast Guard regulations are standard procedure for drilling rigs and marine vessels utilized by Kerr-McGee Corporation.

4. Cultural Resources

Visual No. 11 from the Regional Environmental Impact Statement (U.S.D.I., 1983) indicates that Ship Shoal Area Block 180 falls within the zone designated as an area with a high probability of occurrence of historical cultural resources. John E. Chance and Associates conducted an archeological assessment for this block. A copy of that report is included as an attachment to the Plan of Exploration. This assessment indicates that the near-surface strata do not reflect any evidence of human site remains. The water is too deep in the area for any vessel to have run aground, and the side scan sonar records do not reflect any obstructions or debris on the seafloor.

5. Ecologically Sensitive Features

Ship Shoal Area Block 180 is located approximately thirty-five (35) miles north of Ewing Bank and approximately forty-three (43) miles northwest of Diaphus Bank. There are no other known ecologically sensitive areas near Ship Shoal Area Block 180.

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The Morgan City, Louisiana support base which will be utilized as operations base for the Ship Shoal Area Block 180 exploration activities is located approximately thirty-three (33) miles east-northeast of Marsh Island Wildlife Refuge (U.S.D.I. FREIS, Gulf of Mexico, 1983, Visual No. 3).

In general if all activities are executed as planned, encountering no unusual circumstances, the environmentally sensitive areas will not be affected.

6. Existing Pipelines and Cables

A shallow hazards survey was performed for Kerr-McGee Corporation by John E. Chance and Associates, Inc. and is included as an attachment to the Plan of Exploration. This report indicates that homogeneous and/or gas-saturated sediments occur at depths of 10-37 feet below the seafloor. These sediments are in a low pressure state, however the geotechnical properties of the gas-saturated sediments may vary from surrounding deposits and influence the stability of bottom supported structures. A number of faults, buried at depths of -10 feet to -15 feet below the seafloor were indicated on pin or profiler records. Kerr-McGee Corporation is aware of these potential hazards and has taken necessary precautionary measures.

There are no known pipelines or man-made structures in Ship Shoal Area Block 180.

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7. Other Mineral Uses

There are no other known mineral resources located in or near Ship Shoal Area Block 180.

8. Ocean Dumping

The major sources of ocean dumping related to OCS petroleum exploration activity are drilling fluids, or "muds," and drill cuttings. After the exploratory drilling in Ship Shoal Area Block 180 is completed, Kerr-McGee Corporation does anticipate dumping their excess water-based drilling fluids (approximately 1400 bbls). If any oil-based mud is used in the drilling operations, it will be transported to shore for proper disposal.

Drill cuttings are brought up by the drilling mud and range in size from grains of sand to pebbles. These cuttings are separated and sifted and then disposed overboard. Treated domestic wastes and drill waters will also be disposed at the proposed drilling site. There will be no intentional discharge of any oily or hazardous materials in violation of DOI or EPA regulations.

9. Endangered or Threatened Species

Endangered or threatened species which might occur in Ship Shoal Area Block 180 are blue whale (Balaenoptera musculus), finback whale

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(Balaenoptera physalus), humpback whale (Megaptera novaeangliae), sei whale (Balaenoptera borealis), sperm whale (Physeter catodon), Kemp's ridley turtle (Lepidochelys kempi), green turtle (Chelonia mydas), hawksbill turtle (Eretmochelys imbricata), leatherback turtle (Dermochelys coriacea) and loggerhead turtle (Caretta caretta) (U.S.D.I., Region IV Endangered Species Notebook).

Endangered and threatened species expected to occur in the vicinity of the onshore base are bald eagle (Haliaeetus leucocephalus), the brown pelican (Pelecanus occidentalis), and American alligator (Alligator mississippiensis) (U.S.D.I., Region IV Endangered Species Notebook). The brown pelican was common resident of Louisiana but this species became virtually extinct in the late 1950's (Fritts et al., 1983). By 1960, the estimated Louisiana population of brown pelicans was four birds (NFWL, 1980). Re-establishment of a breeding population in Louisiana has met with varying success (Fritts et al., 1983). The activities proposed by Kerr-McGee Corporation are expected to have no impacts on the brown pelican. The American alligator is classified as threatened biologically in Louisiana and a regulated harvest is permitted under State Law (U.S.D.I., Region IV Endangered Species Notebook). The presense of marine mammals in coastal Louisiana is considered sporadic and probably no resident populations exist. It is unlikely that onshore or exploration activities related to Ship Shoal Area Block 180 will have any effect on the previously named species.

B. Socio-Economic Impacts

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In accordance with DOI/MMS guidelines (OS-7-01), dated November 20, 1980, the initial OCS Data Base Report will be developed for submission on or before the prescribed due date. Subsequent Environmental Reports provided by Kerr-McGee Corporation will address this data and related activity impacts as required.

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IV. UNAVOIDABLE ADVERSE IMPACTS

The greatest threat to the natural environment is caused by inadequate operational safeguards that may cause or contribute to an oil spill or well blowout. These accidents can be greatly reduced in number by utilizing trained operational personnel and employing all available safety and pollution control systems. These measures are standard operating procedure for Kerr-McGee Corporation. Kerr-McGee Corporation has an approved Oil Spill Contingency Plan.

It should be noted that most large crude oil and refined products spills have occurred during transportation and not during drilling or production operations. Furthermore, the probability of an oil spill occurring during exploratory drilling operations is low (Danenberger, 1976). Transportation and river runoff contribute an estimated 34.9 percent and 26.2 percent, respectively, to the hydrocarbon contamination of the world's oceans while offshore production activities account for only 1.3 percent (National Academy of Sciences, 1975). Natural seeps of petroleum and natural gas, which occur throughout the northern Gulf of Mexico (Zobell, 1954; Geyer, 1979), contribute an estimated 9.9 percent to the contamination of the world's oceans (National Academy of Sciences, 1975). Additionally, it was noted in the executive summary of a recent study of petroleum production platforms in the central Gulf of Mexico (Redinger,), that natural disturbances (i.e. river flooding and storms) can more greatly affect normal biological communities than the current industrial development of the Louisiana OCS. The preceding discussion is not intended to minimize

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the significance of major oil spills resulting from petroleum exploration and production activities but is provided to establish a perspective relative to their probable occurrence.

Thirteen of the forty-six blow-outs on the OCS between 1971 and 1978 were associated with exploratory drilling activities, none of which released any oil to the marine environment (Dananberger, 1980). The IXTOC I spill of 1979, however, demonstrates that advanced drilling technology and available safety and pollution control systems are not infallible. Most spills are subjected to immediate containment and cleanup efforts. The ultimate fate of oil spilled in the marine environment is generally considered to be one or a combination of the following: evaporation and decomposition in the atmosphere, dispersal in the water column, incorporation into sediments, and oxidation by chemical or biological means (National Academy of Sciences, 1975).

The unavoidable adverse impacts that will occur as a result of the exploratory drilling and discharging of drilling fluids, and treated sewage will be few in number and temporary in nature. The primary adverse impacts include a localized degradation of water and air quality in the vicinity of the drilling site, the potential obstruction to commercial and recreational fishing vessels, and the disruption and/or killing of benthic and/or pelagic organisms during location of the drilling rig and during disposal of muds, cuttings, and domestic wastes and sewage.

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Discharging from the drill site is inevitable during OCS operations, particularly during exploration. Any materials that may contain oil or other hazardous materials, and therefore would have a much greater adverse impact on the environment, will not be discharged intentionally. Any discharging will be done pursuant to all DOI and EPA regulations. The discharges to be disposed overboard as a result of the exploration activity will include domestic waste and sewage that is treated on the rig before discharging, drill cuttings, and excess water-based mud.

The environmental fate and effects of drilling muds and cuttings has been extensively addressed in a recent symposium (See Ayers et al., 1980 for detailed discussions). The discharging of drill cuttings and water-based mud will result in an increase in water turbidity, burial of benthic organisms, and possible toxic effects on marine organisms in the immediate vicinity of the drilling rig. A reduction in photosynthetic activity and plankton populations can also be expected as a result of discharging. It is expected, however, that pelagic and benthic organisms will repopulate the area rapidly after discharging if the effects are minimal and intermittent as expected.

Offshore activities generate a small but significant amount of air pollutants due to the emissions of diesel engines; therefore, the deterioration of air quality is unavoidable in an OCS operation area. In most instances, these emissions affect only the immediate exploration activity site and are rapidly dissipated by the atmosphere depending upon climatic conditions. An Air Quality Review Report has been performed for

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Ship Shoal Area Block 180 and is included as an attachment to the Environmental Report.

Commercial and recreational fishing would be affected by OCS development, but primarily in terms of inconvenience and interference. Although the unavoidable adverse impacts could include some smothering of shellfish, snagging of trawl nets, reduction of area presently used for unrestricted fishing, and minimal finfish killing, commercial fishing activities would not be significantly effected, except in the unlikely event of an oil spill. An oil spill would result in serious economic losses due to the contamination of commercial fish species over a large area.

There is a remote possibility that offshore areas of historical, cultural, or biological significance could be damaged or destroyed by OCS exploration operations. Visual No. 11 from the Regional Environmental Impact Statement (U.S.D.I., 1983) indicates that no archeological, cultural, or historic areas are in the vicinity of Ship Shoal Area Block 180. Kerr-McGee Corporation will make every effort to avoid disturbing any historically, culturally, or biologically significant feature.

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APPENDIX 1
COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATE

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COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION

EXPLORATION
.....
Type of Plan

SHIP SHOAL AREA BLO. V. 180 (OCS-G-7753)
.....
Area and Block

The proposed activities described in detail in the attached Plan of Exploration 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 activity no later than _____.

KERR-MCGEE CORPORATION
.....
Lessee or Operator

.....
Certifying Official

.....
Date

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