UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
Gulf of Mexico OCS Region
New Orleans, Louisiana

FINAL
SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT
ENDANGERED SPECIES/STRUCTURE REMOVAL(S)
Nos. ES/SR 94-23, 94-24, and 94-25

Assessment of the Environmental Impact of the Proposed Removal of Caisson No. 11, Platform B, and Platform No. 7 in the West Cameron Area, Blocks 72 and 71 (Leases OCS 0245 and 0244) by Mobil Exploration and Producing U.S. Inc.

Date Submitted: January 25, 1994
Commencement Date: June 1994

Prepared by Warren J. Barton
FINDING OF NO SIGNIFICANT IMPACT

I have considered the proposal by Mobil Exploration and Producing U.S. Inc. to remove Caisson No. 11 and Platform B in West Cameron Area, Block 72 (Lease OCS 0245), and Platform No. 7 in West Cameron Area, Block 71 (Lease OCS 0244), SEA Nos. ES/SR 94-23, 94-24, and 94-25. Based on the environmental analysis and mitigative measures contained in the site-specific environmental assessment, there is no evidence to indicate that the proposed action(s) will significantly (40 CFR 1508.27) affect the quality of the human environment if the permit/application is approved subject to the mitigative measures. Preparation of an environmental impact statement is not required.

Warren J. Barton  
Analyst  
3/1/94  
Date

Jerry Brasher  
Chief, Environmental Operations Section  
3/1/94  
Date

Jerry Brasher  
Acting Regional Supervisor  
Leasing and Environment  
Gulf of Mexico OCS Region  
3/1/94  
Date
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INTRODUCTION AND BACKGROUND

The purpose of this Site-Specific Environmental Assessment (SEA) is to assess the specific impacts associated with proposed structure-removal activities. The SEA is based on a Programmatic Environmental Assessment (PEA) (USDOI, MMS, 1987) which evaluates a broader spectrum of potential impacts resulting from the removal of structures; e.g., platforms/caissons across the central and western planning areas of the Gulf of Mexico (GOM) Outer Continental Shelf. The PEA/SEA process is designed to simplify and reduce the size of environmental assessment documents by eliminating repetitive discussions of the same issues. This SEA conforms to the Minerals Management Service (MMS) and other appropriate guidelines for preparing environmental assessments by utilizing data presented in the PEA to complete the assessment. It presents site-specific data regarding the proposed structure removal(s) and evaluates the potential impacts. Mitigation measures are contained in this document to lessen potential impacts. Preparation of this SEA has allowed the determination of whether a Finding of No Significant Impact (FONSI) is appropriate or whether further assessment of the proposal(s) is necessary.

I. DESCRIPTION OF THE PROPOSAL(S) AND NEED FOR THE PROPOSAL(S)

A. DESCRIPTION OF THE PROPOSED ACTION(S) WITH MITIGATION

Mobil Exploration and Producing U.S. Inc. (Mobil) proposes to remove Caisson No. 11 and Platform B in Block 72 (OCS 0245), and Platform No. 7 in Block 71 (OCS 0244). The structures are located in a water depth of 37 to 40 feet and lie approximately 17 miles southeast of Cameron, Louisiana. The operator plans to explosively sever and remove Caisson No. 11 including 1 well casing/casing string, Platform B, including 113 legs/piles, and 8 well casings/casing strings, and Platform No. 7 including 4 legs/piles, and 4 well casings/casing strings. See Table 1 for specific data regarding the explosive removal operations.

Refer to Appendix A for structure specifications for the removal(s), additional data on removal techniques, and sequence of events.

MITIGATION

Refer to the operator’s proposal(s) (Appendix A) for mitigative measure(s) proposed to reduce the likelihood of death or injury to sea turtles and marine mammals.

B. NEED FOR THE PROPOSED ACTION(S)

A discussion of the legal and regulatory mandates to remove abandoned oil and gas structures from Federal waters can be found
in the PEA referenced in the Introduction. Caisson No. 11, Well WC 72-11 was never completed and has no future utility to the field. Platform B is in poor shape, and it is a burden to maintain. Platform No. 7 wells have been depleted and Platform No. 7 is no longer useful to field operations.

II. ALTERNATIVES TO THE PROPOSED ACTION(S)

Alternatives to the proposed structure removal(s) with mitigation originally submitted are:

A. NON-REMOVAL OF THE STRUCTURE(S)

The operator would not proceed with the proposed removal(s). This alternative would eliminate the possibility that sea turtles, marine mammals, or other marine life would be harmed by removal of the structure(s) as proposed. However, non-removal of the structure(s) would represent a conflict with Federal legal and regulatory requirements, which mandate the timely removal of obsolete or abandoned structures within a period of one year after termination of the lease, or upon termination of a right-of-use and easement. Therefore, non-removal does not appear to be a valid alternative.

B. REMOVAL OF THE STRUCTURE(S) BY ALTERNATIVE NON-EXPLOSIVE METHODS

The MMS has discussed various structure-removal techniques in the Final Environmental Impact Statement (FEIS) for Proposed Oil and Gas Lease Sales 118 and 122 (USDOI, MMS, 1988) and the PEA referenced in the Introduction. Updated information is also found in the FEIS for Sales 139 and 141 (USDOI, MMS, 1991). It was concluded that the most effective methods of structure removal are the use of explosives, either bulk or shaped charges, and underwater arc cutting. Other methods appear promising but require additional development to solve the operational and logistical problems associated with these techniques. Primarily for this reason, these methods do not appear to be feasible alternatives for the removal of the subject structure(s).

Refer to the FEIS (USDOI, MMS, 1988 and 1991) and PEA referenced in the Introduction for detailed information concerning alternative methods of structure removal.

C. REMOVAL OF THE STRUCTURE(S) AS PROPOSED WITH ADDED MITIGATION

It has been determined that the proposed operations fall within the category of activities covered by the National Marine Fisheries Service (NMFS) Biological Opinion of July 25, 1988, which addresses "standard" explosive structure removals in the GOM.
Refer to the terms and conditions of the "generic" Incidental Take Statement (Appendix B), and any mitigation identified by this SEA necessary to reduce the likelihood of death or injury to sea turtles and marine mammals.

In the course of this evaluation, additional protective measure was identified to further mitigate the environmental impacts associated with the proposal. Appropriate regulations and procedures are believed sufficient to prevent significant adverse impacts.

Our analysis indicates that there are existing pipeline(s) located within 150 meters (490 feet) of the proposed activities. The existing pipeline(s) may pose a hazard to the proposed operations. Precautions in accordance with NTL 83-3, Section IV.B, will be taken prior to performing the proposed operations.

III. ENVIRONMENTAL EFFECTS, SOCIOECONOMIC CONCERNS, AND OTHER CONSIDERATIONS

A. PHYSICAL ENVIRONMENT

1. Environmental Geology and Geologic Hazards

A discussion of environmental geology and geologic hazards can be found in the PEA referenced in the Introduction. The proposed structure-removal activities are not in an area of sediment instability (mud flows, slumps, or slides). Therefore, geologic conditions are not expected to have an impact on the proposed structure-removal activities.

2. Meteorological Conditions

No impacts are expected as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

3. Physical and Chemical Oceanography

a. Physical Oceanography

No impacts are expected as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

b. Chemical Oceanography

Impacts are expected to be very low as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.
4. Water Quality

Impacts are expected to be low as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

5. Air Quality

Impacts are expected to be very low as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

B. BIOLOGICAL ENVIRONMENT

1. Coastal Habitats

No impacts are expected as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

2. Protected, Endangered, and/or Threatened Species
   a. Birds

The operator has indicated that helicopter flights and boat traffic would utilize a shore base in Cameron, Louisiana. The PEA referenced in the Introduction delineates sensitive areas along the Texas coastline where whooping cranes and brown pelicans could be adversely impacted by structure-removal support activities. The proposed work is not expected to impact threatened or endangered birds or their habitats.

   b. Marine Mammals

A discussion of marine mammals occurring across the GOM and an assessment of the potential impacts of structure-removal activities on marine mammals can be found in the PEA referenced in the Introduction. Fritts et al. (1983), conducted aerial surveys across a 9,514 square mile area of GOM waters. Results of these surveys indicate that the bottlenose dolphin is probably the most likely marine mammal to be encountered at the proposed structure removal(s). The MMS observers may be utilized to look for marine mammals prior to detonation of the primary charge(s) at the removal site(s). If marine mammals are detected at the structure-removal site(s), detonation of the primary charge(s) would be delayed until the animals are removed from the area(s). In spite of these precautions, a low probability exists that marine mammals could enter the blast area(s) undetected and could be injured or killed by the underwater, subsurface detonation(s). Such an occurrence is considered highly unlikely and with the indicated protective mitigation measure(s), the proposed
structure-removal activities are expected to have only a low impact on marine mammals.

c. Sea Turtles

A discussion of sea turtles occurring across the central and western GOM and an assessment of the potential impacts of structure-removal activities on sea turtles can be found in the PEA referenced in the Introduction. Studies by Fritts et al. (1983), and Fuller and Tappan (1986) as well as stranding data from the Sea Turtle Stranding and Salvage Network (Teas, 1993) indicate that sea turtles occur in the vicinity of the proposed activities and therefore could be impacted by the structure-removal operations. Definitive information on the probability of encountering sea turtles at the removal site(s) during explosive operations is scarce. The NMFS and/or MMS observers may be utilized to look for sea turtles prior to detonation of the primary charge(s). If sea turtles are detected at the structure-removal site(s), detonation of the primary charge(s) will be delayed until the animals are removed from the area(s). As in the case of marine mammals, the possibility exists that sea turtles could enter the blast area(s) undetected and could be injured or killed by the underwater, subsurface detonation(s). This occurrence is considered unlikely, and with the indicated protective mitigation measure(s), the proposed structure-removal activities are expected to have only a low impact on sea turtles. A cumulative incidental take has been authorized by the NMFS for this category actions, but with all the precautions to be taken as mitigating measure(s), it is unlikely that any sea turtles will be affected by these proposed operations.

3. Birds

Impacts are expected to be very low as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

4. Sensitive Marine Habitats

A discussion of sensitive marine habitats occurring in the central and western GOM and an assessment of the potential impacts of structure-removal activities on these areas can be found in the PEA referenced in the Introduction. The proposed activities are not near any sensitive marine habitats. Therefore, the subject structure-removal activities will not impact any sensitive marine habitats or their resident biota.
5. Offshore Habitats and Biota

Impacts are expected to be low as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

C. SOCIOECONOMIC CONCERNS

1. Employment

Impacts are expected to be very low as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

2. Economics

Impacts are expected to be very low as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

3. Onshore Support Facilities, Land Use, and Coastal Communities and Services

The operator has indicated that Cameron, Louisiana, would be the shore base for the proposed structure-removal activities. No impacts are expected as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

D. OTHER CONSIDERATIONS

1. Commercial and Recreational Fisheries

   a. Commercial Fisheries

   For analysis information, see the PEA referenced in the Introduction. Since the PEA was originally written, new concerns have emerged concerning the impacts of explosive structure removals on reef fish populations. On May 9, 1991, the GOM Fishery Management Council expressed concern over the declining stocks of reef fish, especially red snapper. They referred to the antidotal accounts of finfish kills associated with explosive removals of offshore structures in order to link these activities with their concerns about declining populations of reef fish. They further suggested that the MMS should hold all explosive structure-removals in abeyance until more information becomes available on the effects of these activities on fish stocks. See the PEA (Section on Offshore Habitats and Biota) for a discussion of fish kills in association with explosive structure-removals.

   The MMS has declined to hold all explosive structure-removals in abeyance citing the regulatory mandates for structure removals and problems with current non-explosive structure-
removal methods. The MMS has stated a commitment to carry out studies to assess the impacts of oil and gas structure removals on Gulf fisheries resources and the results of these studies will be used to determine future policies with respect to these activities.

The MMS continues to consider the overall impacts of structure removals on commercial fishing to be low. The MMS policy of encouraging an active rigs-to-reefs program will help to offset cumulative structure-removal impacts to fisheries resources.

b. Recreational Fisheries

Impacts are expected to be low as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction. See the preceding section for a discussion of fish kills in association with explosive structure removals.

2. Archaeological Resources

Impacts are expected to be low as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

3. Military Use/Warning Areas and Explosive Dumping Areas

A description of military use/warning areas and explosive dumping areas, their locations and potential impacts of structure-removal activities on these areas can be found in the PEA referenced in the Introduction. The proposed activities will not impact or be impacted by any military use/warning area or explosives dumping areas.

4. Navigation and Shipping

The proposed structure-removal activities in Blocks 71 and 72 are not located near a vessel fairway or anchorage. Structures located nearshore may serve as "landmarks" to vessels or helicopter operating in the area on a regular basis. The overall impacts of the proposed work on navigation and shipping are expected to be very low. More information on the impacts of structure removals on navigation and shipping can be found in the PEA referenced in the Introduction.

5. Pipelines and Cables

The PEA referenced in the Introduction contains a description of the impacts of structure-removal activities on pipelines and cables. There are existing pipelines within 150 meters (490 feet) of the proposed structure-removal activities. Since the operator must adhere to existing laws and
regulations for abandonment of structures (including procedures required by Notice to Lessees and Operators No. 83-3), the proposed work will not pose a hazard to pipeline(s) and cable(s) in the area(s).

6. Other Mineral Resources

No impacts are expected as a result of the proposed activities. For analysis information, see the PEA referenced in the Introduction.

7. Human Health and Safety

The PEA referenced in the Introduction describes the hazardous conditions for workers during structure-removal activities. The operator has proposed the use of explosives in conjunction with the structure-removal activities. Existing legal and regulatory safety requirements will keep the impacts of the proposed work on human health and safety at a very low level.

E. UNAVOIDABLE ADVERSE IMPACTS

A discussion of unavoidable adverse impacts can be found in the PEA referenced in the Introduction. Two areas of ongoing concern have been the potential impact to protected, threatened, and/or endangered species and potential loss of habitat to the marine environment. Both topics are discussed in the PEA and previously in this document. A more recent issue of concern has surfaced regarding the impacts of explosive structure-removals on reef fish stocks. This issue has been previously discussed in this document. Although the impacts to commercial and recreational fisheries is considered to be low, further studies information about this issue should be available in the future. Other unavoidable adverse impacts are considered to be minor.

IV. PUBLIC OPINION

A discussion of public concerns regarding structure removals can be found in the PEA referenced in the Introduction.

In May 1991, the GOM Fishery Management Council requested that the MMS place a moratorium over the explosive removal of offshore structures with three or more supports. Non-removal of these structures would conflict with current Federal legal and regulatory requirements which mandate the timely removal of abandoned or obsolete structures within a period of one year after termination of the lease, or upon termination of a right-of-use and easement.

The MMS believes that current data on the effects of explosive removals on fish mortality is insufficient to draw any conclusions, and a moratorium on all but single pile caissons at
this time is unjustified. In order to quantify explosive effects, the MMS initiated an interagency study with the NMFS to determine fish mortalities from platform-removal operations. In addition to the above study, the MMS supports an active rigs-to-reef program and encourages industry to search for method that will minimize effects on fish from platform-removal operations.

V. CONSULTATION AND COORDINATION

In accordance with the provisions of Section 7 of the Endangered Species Act, the proposed structure-removal operations are covered by the Biological Opinion issued by the NMFS on July 25, 1988, which established a category of "standard" explosive structure-removal operations. Their comments are included in Appendix B. The NMFS concluded that this category of structure-removal activities will not likely jeopardize the continued existence of any threatened or endangered species under their purview. Additionally, they concluded that this type of "standard" structure-removal activity may result in injury or mortality of loggerhead, Kemp's ridley, green, hawksbill, and leatherback turtles. Therefore, they established a cumulative level of incidental take and discussed various measures necessary to monitor and minimize this impact (see Appendix B). The NMFS noted that no incidental taking of marine mammals was authorized under Section 101(a)(5) of the Marine Mammal Protection Act of 1972 in connection with this category of structure-removal activities. Therefore, taking of marine mammals by the operator would be prohibited unless they successfully apply for and obtain a permit or waiver to do so from the NMFS.
VI. BIBLIOGRAPHY AND SPECIAL REFERENCE(S)


TABLE 1
EXPLOSIVES PROPOSED BY THE OPERATOR
FOR THE STRUCTURE REMOVALS IN
WEST CAMERON AREA
BLOCKS 72 (OCS 0245) AND 71 (OCS 0244)

Type of Explosives:
Composition B or HMX

Number and Size of Charges:

CAISSON NO. 11

One (1) bulk, 49-pound charge to cut the one (1) 30" diameter conductor and the inner casing strings, one (1) 13 3/8" diameter casing, one (1) 9 5/8" diameter casing, and (1) 7" diameter casing.

PLATFORM B
(113 LEGS/PILINGS AND WELLS B-1, B-7(S.T.), B-2, B-3, B-4, B-5, B-6, B-10, AND B-11)

PLATFORM B LEGS/PILINGS (113)

JACKETS A AND B (36 PILES)

Thirty-six (36) bulk, 35-pound charges to cut the thirty-six (36) 16" diameter piles and the thirty-six (36) 12 3/4" diameter insert piles.

JACKETS C, D, E, AND F (77 PILES)

Seventy-seven (77) bulk, 20-pound charges to cut the seventy-seven (77) 16" diameter piles.

WELLS B-1, B-7(S.T.), B-2, B-3, B-4, B-5, B-6, B-10, AND B-11

WELLS B-1 AND B-7(S.T.)

One (1) bulk, 49-pound charge to cut the one (1) 26" diameter conductor, and the inner casing strings, one (1) 18 5/8" diameter casing, and one (1) 13 3/8" diameter casing.
WELLS B-2, B-3, B-4, B-5, AND B-6

Five (5) bulk, 49-pound charges to cut the five (5) 20" diameter conductors, and the inner casing strings, five (5) 13 3/8" diameter casings, and five (5) 9 5/8" diameter casings.

WELL B-10

One (1) bulk, 49-pound charge to cut the one (1) 30" diameter conductor, and the inner casing strings, one (1) 10 3/4" diameter casing, and one (1) 7" diameter casing.

WELL B-11

One (1) bulk, 49-pound charge to cut the one (1) 30" diameter conductor, and the inner casing strings, one (1) 11 3/4" diameter casing, and one (1) 7" diameter casing.

PLATFORM NO. 7
(4 LEGS/PILES AND WELLS 72-7, 71-7, 71-10, AND 71-11)

PLATFORM NO. 7 LEGS/PILES (4)

Four (4) bulk, 40-pound charges to cut the four (4) 40" diameter platform legs/four (4) 36" diameter pilings.

WELL 72-7

One (1) bulk, 49-pound charge to cut the one (1) 30" diameter conductor, and the inner casing strings, one (1) 13 3/8" diameter casing, one (1) 9 5/8" diameter casing, and one (1) 7" diameter casing.

WELL 71-7

One (1) bulk, 49-pound charge to cut the one (1) 30" diameter conductor, and the inner casing strings, one (1) 20" casing, one (1) 13 3/8" casing, one (1) 9 5/8" casing, and one (1) 7" diameter casing.

WELL 71-10

One (1) bulk, 49-pound charge to cut the one (1) 30" diameter conductor, and the inner casing strings, one (1) 11 3/4" diameter casing, and one (1) 7" diameter casing.

WELL 71-11

One (1) bulk, 49-pound charge to cut the one (1) 30" diameter conductor, and the inner casing strings, one (1) 13 3/8" diameter casing, and one (1) 9 5/8" casing.
An extra shot may be required for the above structures in case of incomplete separation.

Employment of Charges:

All cuts will be 16 feet below the mud line. If the charges fail to sever the structures on the first attempt, new charges will be detonated 16 feet below the mud line. The structures will be removed and placed on cargo barges to be off-loaded onshore.

Note: A minimum of 16 feet below the mud line is required.

Sequencing of Detonation

CAISSON NO. 11

Single shot

PLATFORM B

Multiple Shots

These series will be made up of two separate detonation sets of eight shots each with one second delays between each shot. There will be a one-minute delay between the first set of eight shots and the second set of eight shots.

PLATFORM NO. 7

Multiple Shots

The platform piles and well casings will be shot in one series involving eight detonations. The shots will be detonated with a one-second delay between shots.
VII. PREPARERS

Author:
Warren J. Barton - Environmental Scientist

Typist:
Alice Sue Kriz - Office Automation Clerk
VIII. APPENDICES

A. MOBIL EXPLORATION AND PRODUCING U.S. INC. CORRESPONDENCE

B. NMFS CORRESPONDENCE

C. FISHERMEN'S CONTINGENCY HANG SITE(S) MAP
UNITED STATES GOVERNMENT
MEMORANDUM

To: Environmental Operations Section (LE-5)

From: Office of Structural and Technical Support, Field Operations, Gulf of Mexico OCS Region (OSTS)

Subject: Platform Removal

OPERATOR: Mobil

Control No: ES/SR 94-23, 24, 25

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<tr>
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Shore Base: Cameron, LA

The attached application is forwarded to your office so that the Finding of No Significant Impact can be prepared. We believe this proposed activity meets the requirements of the generic Endangered Species Act Section 7 Consultation Document. There are no existing pipeline(s) within 500 feet of the proposed removal location. Please advise us if these removals are located in environmentally sensitive areas. I called Arvind Shah on 2/11/94 at 8:47 am to inform him that the proposed structural removals are not located in environmentally sensitive areas.

Arvind Shah (OSTS)
Extension 2894

Enclosure

cc: No Bio., No MWA, No

ASah: LEXITYPE: DISK 5
Mobil Exploration & Producing U.S. Inc.

January 21, 1994

U.S. Department of Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Regional Supervisor-OSTS

CAISSON SALVAGE
WEST CAMERON 72 # 11
OCS-0245
WEST CAMERON 71 FIELD

Gentlemen:

Mobil Exploration and Producing U.S. Inc. (MEPUS), requests approval to salvage the subject caisson. We plan to perform this salvage with a multi-platform program beginning in June 1994.

Pertinent information related to the salvage operation is attached. Explosives will be employed. Conventional methods are proposed with consideration given to the NMFS’ efforts to eliminate the effects of explosives on endangered marine life.

A site clearance verification plan in accordance with MTL 92-02 will be submitted for this caisson at a later date when a trawling contractor and positioning contractor has been chosen.

Should you have any questions, please contact Jeff Passmore at (318) 491-6693 or Mike Marks at (504) 566-5266.

Very truly yours,

[Signature]

K. W. Vanacor
Environmental and Regulatory Specialist

1319.mhm

Attachments

cc J. L. Passmore- Lake Charles
K. M. Mosca- Lake Charles
A. M. Jackson- 1983
NMFS, 4700 Avenue U, Galveston, TX 77551
I. Responsible Party

A. Lease Operator Name: Mobil Exploration & Producing United States Inc. as agent for Mobil Oil Exploration and Producing Southeast, Inc. (MOEPSI).

B. Address: 751 Bayou Pines East
Lake Charles, La. 70601

C. Contact Person(s) and Telephone Number(s):
   Jeff L. Passmore (318) 491-6693
   Michael H. Marks (504) 566-5266

D. Base of Operations: Mobil's Cameron Base (Cameron, LA.)

II. Identification of Structure to be Removed:

A. Caisson Name: West Cameron 72-11

B. Location (Lease, Area, Block and Caisson Coordinates):
   West Cameron 72
   OCS-0245
   X = 1,414,354
   Y = 346,996

C. Date Installed (Year): 1990

D. Proposed Date of Removal (Month/Year): June-Aug 1994

E. Water Depth: 37'

III. Description of Structure to be Removed:

A. Configuration: Single free standing well caisson

B. Deck Size: Crows nest dimension 11' x 20'

C. Number of Legs/Casings/Pilings:
   Platform Legs: N/A
   Well Casing(s): One (1) Well Casing

D. Diameter and Wall Thickness of Legs/ Casings/Pilings:
   Platform Legs: N/A
   Pilings: N/A
Well: WC 72-11

30" x 1.5" W.T. drive pipe
13-3/8", 9-5/8" & 7" casing strings

E. Are Piles Grouted?: N/A   Inside or Outside?:

F. Brief Description of Soil Composition and Condition:

0-7' below the mudline a loose tan and gray silt.
8'-118' Very stiff to stiff gray and tan clay.

IV. Purpose

Brief Discussion of the Reason for Removing the Structure:

The WC 72 # 11 well was never completed. It has no future potential or utility to the field.

V. Removal Method

A. Brief Description of the Method to be Used:

Platform- N/A

Well Casing- After removal of the wellhead, a bulk charge will be placed inside the well's inner casing string. The charges will then be detonated, severing the well at a minimum depth of 16' below the mudline.

B. If Explosives Are to be Used, Provide the Following:

1. Kind of Explosives: Comp B or HMX explosives will be used.

2. Number and Sizes of Charges:
   Platform Piles: N/A
   
   Well Casing(s): One (1) bulk charges at 49 lbs.
   
   a. Single Shots or Multiple Shots?:

      Single

   b. If Multiple Shots, Sequence and Timing of Detonations:

      Well Casing: The well casing will be severed a minimum of 16' below the mudline with one (1) 49 # bulk charge.

3. Bulk or Shaped Charges?: Bulk.

   a. Depth of Detonation Below Mudline: The well casing will be severed at a minimum depth of 16' below the mudline.

   b. Inside or Outside Piling and/or Well Casing(s)?:

      The charge will be placed inside the well casing.
C. Pre-Removal Monitoring Techniques

1. Is the Use of Scare Charges or Acoustical Devices Proposed?:
   No.
   If Yes, Provide the Following:
   a. Number and Kind:
   b. Size of Scare Charges:
   c. Brief Description of How, Where, and When Scare Charges be used.

2. Will divers or Acoustic Devices be Used to Conduct a Pre-Removal Survey to Detect the Presence of Sea Turtles and Marine Mammals?:
   Divers will be available to perform a survey in and around the platform for a period of thirty minutes prior to detonation if required by NMFS personnel. This survey shall not interfere with the critical path work of the salvage equipment. In addition, the normal aerial survey 30 minutes prior to and after detonations will be conducted as required by NMFS personnel.
   If Yes, Briefly Describe the Proposed Detection Method:

   See above.

D. Post Removal Monitoring Techniques:

1. Will transducers be used to measure the presence and impulse of the detonations?: No.

2. Will divers be used to survey the area after removal to determine the effects on marine life?:
   Yes. Divers will be available to perform a survey following detonations. Any effects on marine life will be recorded during dives made in the course of salvage work.

VI. BIOLOGICAL INFORMATION

If available, provide the results of any recent biological surveys conducted in the vicinity of the structure. If available, describe any recent observations of sea turtles or marine mammals at the structure site.

There have been no reported sightings of endangered turtles at this site. The field personnel have been instructed to report any turtle sightings in the area.
WELL SCHEMATIC
WEST CAMERON 71 FIELD
OCS 0245 WC72 #11
PRESENT COMPLETION

WATER DEPTH: 37'

CEMENT PLUG FROM 236–436'

CASING DETAIL

DRIVE PIPE
30" (0–331')

CONDUCTOR PIPE
20" 94# X56 RL4C (0–922')

SURFACE CASING
13 3/8" 68# K55 BTC (0–4508')

INTERMEDIATE CASING
9 5/8" 53.5# C95 NK35B (0–12070')

DRILLING LINER
7 5/8" 29.7# L80 FL45 (11417–12395')

BEST AVAILABLE COPY

CEMENT PLUG FROM 11318–11518'

CEMENT RETAINER Ø 12240'

CEMENT PLUG FROM 12250–13100'

92 FB I-1 SAND
SAND TOP: 12587'
NET PAY: 3' Sw. 60%

94 FB I-1 SAND
SAND TOP: 12675' (12515')
NET PAY: 20' Sw. 30%
SHP: 11000 BHT: 320 72–11

TD: 13100', TVD: 12908'

MMC 12/18/90
Mobil Exploration & Producing U.S. Inc.

January 21, 1994

U.S. Department of Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Regional Supervisor-OSTS

PLATFORM SALVAGE
WEST CAMERON 72-B
OCS-0245 CPXID 20122
WEST CAMERON 71 FIELD

Gentlemen:

Mobil Exploration and Producing U.S. Inc. (MEPUS), requests approval to salvage the subject platform. We plan to perform this salvage with a multi-platform program beginning in June 1994.

Pertinent information related to the salvage operation is attached. Explosives will be employed. Conventional methods are proposed with consideration given to the NMFS' efforts to eliminate the effects of explosives on endangered marine life.

A site clearance verification plan in accordance with NTL 92-02 will be submitted for this platform at a later date when a trawling contractor and positioning contractor has been chosen.

Should you have any questions, please contact Jeff Passmore at (318) 491-6693 or Mike Marks at (304) 566-5266.

Very truly yours,

[Signature]

K. W. Vanacor
Environmental and Regulatory Specialist

1317.mdm

Attachments

cc J. L. Passmore- Lake Charles
K. M. Mosca- Lake Charles
A. M. Jackson- 1983
NMFS, 4700 Avenue U, Galveston, TX 77551
I. Responsible Party

A. Lease Operator Name: Mobil Exploration & Producing United States Inc. as agent for Mobil Oil Exploration and Producing Southeast, Inc. (MCEPSI).

B. Address: 751 Bayou Pines East
Lake Charles, La. 70601

C. Contact Person(s) and Telephone Number(s):
   Jeff L. Passmore (318) 491-6693
   Michael H. Marks (504) 566-5266

D. Base of Operations: Mobil's Cameron Base
Cameron, LA.

II. Identification of Structure to be Removed:

A. Platform Name: West Cameron 72-B
   CPXID-20122

B. Location (Lease, Area, Block and Platform Coordinates):
   West Cameron 72  OCS-0245
   X = 1,420,262  Y = 375,420

C. Date Installed (Year): 1949

D. Proposed Date of Removal (Month/Year): June-Aug 1994

E. Water Depth: 40'

III. Description of Structure to be Removed:

A. Configuration: 113 Pile Tender Rig Production Platform

B. Size: Main Deck Dimension 174' x 106'

C. Number of Legs/Casings/Pilings:
   Platform Legs: 113 Legs and Pilings
   Well Casing(s): Eight (8) Well Casings

D. Diameter and Wall Thickness of Legs/Casings/Pilings:
   Platform Legs: 18" O.D. x 0.375" Wall
Piling: See platform layout attachment for jacket designation

Jackets "A" & "B"

16" O.D. x 0.500" Wall
12 3/4" O.D. X .375" Wall Insert Pile

Jackets "C", "D", "E", & "F"

16" O.D. x .500" W.T.

Wells: Wells B-1 & B-7
20" x 1.00" W.T. drive pipe
18-5/8" & 13-3/8" casing strings

Wells B-2, B-3, B-4, & B-5
20" x 1.00" W.T. drive pipe
13-3/8", & 9-5/8" casing strings

Well B-6
20" x 1.00" W.T. drive pipe
13-3/8", & 9-5/8" casing strings

Well B-10
30" x 1.25" W.T. drive pipe
20-3/4", & 7" casing strings

Well B-11
30" x 1.25" W.T. drive pipe
11-3/4", & 7" casing strings

E. Are Piles Grouted?: No    Inside or Outside?:

F. Brief Description of Soil Composition and Condition:

The upper soil stratum in the area ranges from 0-87' of depth. This stratum appears to be a stiff tan and gray clay with silt and sand seams at various depths in the stratum.

IV. Purpose

Brief Discussion of the Reason for Removing the Structure:

The platform is in very poor shape and is a maintenance burden to the field.

V. Removal Method

A. Brief Description of the Method to be Used:

Platform- After removal of the platform deck, the jacket piles will be open. This will allow charges to be lowered to a minimum depth of 16' below the mudline to internally cut the
the piles with bulk charges.

Well Casing(s): After removal of the wellhead, a bulk charge will be placed inside the well’s inner casing string. The charges will then be detonated, severing the wells at a minimum depth of 16' below the mudline.

B. If Explosives Are to be Used, Provide the Following:

1. Kind of Explosives: Comp B or HMX explosives will be used.

2. Number and Sizes of Charges:

   Platform Piles:
   Jackets "A" & "B": 36 bulk charges @ 35 lbs. each
   Jackets "C", "D", "E" & "F": 77 bulk charges @ 20 lbs. each

   Well Casing(s): Eight (8) bulk charges at 49 lbs. each

   a. Single Shots or Multiple Shots?:

      Multiple.

   b. If Multiple Shots, Sequence and Timing of Detonations:

      Platform and Well Casings: All detonations will be performed in a maximum series of sixteen (16) shots. These series will be made up of two separate detonation sets of eight (8) shots each with one (1) second delays between each shot. There will be a one minute delay between the first set of eight shots the second set of eight shots.

3. Bulk or Shaped Charges?: Bulk.

   a. Depth of Detonation Below Mudline: The well casings and the platform piles will be severed at a minimum depth of 16' below the mudline.

   b. Inside or Outside Piling and/or Well Casing(s)?:

      All charges will be placed inside the pilings and well casings.

C. Pre-Removal Monitoring Techniques

1. Is the Use of Scare Charges or Acoustical Devices Proposed?:

   No.

   If Yes, Provide the Following:

   a. Number and Kind:
b. Size of Scare Charges:

c. Brief Description of How, Where, and When Scare Charges be used.

2. Will divers or Acoustic Devices be Used to Conduct a Pre-Removal Survey to Detect the Presence of Sea Turtles and Marine Mammals?:

Divers will be available to perform a survey in and around the platform for a period of thirty minutes prior to detonation if required by NMFS personnel. This survey shall not interfere with the critical path work of the salvage equipment. In addition, the normal aerial survey 30 minutes prior to and after detonations will be conducted as required by NMFS personnel.

If Yes, Briefly Describe the Proposed Detection Method:

See above.

D. Post Removal Monitoring Techniques:

1. Will transducers be used to measure the presence and impulse of the detonations?:

No.

2. Will divers be used to survey the area after removal to determine the effects on marine life?:

Yes. Divers will be available to perform a survey following detonations. Any effects on marine life will be recorded during dives made in the course of salvage work.

VI. BIOLOGICAL INFORMATION

If available, provide the results of any recent biological surveys conducted in the vicinity of the structure. If available, describe any recent observations of sea turtles or marine mammals at the structure site.

There have been no reported sightings of endangered turtles in this area. The field personnel have been instructed to report any turtle sightings in the area.
West Cameron 72-2
113-Field S/C Drilling Platform

Structure Number: 461
Lease Number: OCS-0245

Water Depth: 42
Year Installed: 1949
WELL SCHEMATICS
WEST CAMERON 71 FIELD
GCS 0245 WC72 B-1
PRESENT COMPLETION

26' DRIVE PIPE
18 5/8' @ 410'
13 3/8' 54.5 T&A @ 2010'
SIDE TRACTED AS B-2
CEMENT PLUG @ 1712' (400 SACKS)
WELL SIDETRACKED @ 2090'
9 5/8' Casing Backed-Out @ 2210'

BEST AVAILABLE COPY

54 FB D
PERFS: 12258-75' @ 6 SPF
B-1

92 FB L
SAND TOP: 13795' (10')
7' 32# P110 XL @ 12298-15000'
CEMENT PLUG @ 15241' (70 SACKS)
TD 17442'

Mobil

PERFS: 11486-91' @ 6 SPF
TESTED & SQUEEZED

50 SAND
PERFS: 11872-95' @ 6 SPF
TESTED & SQUEEZED

PERFS: 11730-38' @ 6 SPF
TESTED & SQUEEZED
9 5/8' 53.5/47.0/43.5 W80 XL @ 12299
WEST CAMERON 71 FIELD
OCS 0247 WC102 B-2
PRESENT COMPLETION

ELEVATION: 16'
COMPL FLX: 8.5' SW
GEL DISCOSE
DEVIATED HOLE
AVG ANG 23.5 DEG

20' DRIVE PIPE @ 400'

13 3/8' 54.5# JS5 TBC
CASING @ 1856'
(CMT W/ 1850 C.U.FT.)

TOP OF 6 5/8'
LINER @ 10015'

9 5/8' 53.5, 47, & 43.5#
NBD XL CASING @ 10204'
(CMT W/ 1000 C.U. FT.)

TOP OF 4 1/2'
LINER @ 12287'
6 5/8' 28# PT110
XL LINER @ 12496'
(CMT W/ 625 SXS )

45X/46/47 FB A-1 SAND
PERFS: 12540-44' GRM
( 6 SPF )
12553-61' GRM
( 4 SPF )
B-2

BLOCK SOZ @ 12561-63'

51 FB A-1 SAND
PERFS: 13011-18' GRM
( 4 SPF )
13032-50' GRM
( 6 SPF )
B-2-D

BLOCK SOZ @ 13089-108'
4 1/2' 16.5# FJ
LINER @ 13171'
(CMT W/ 175 SXS )

TOC @ 152' WLM (112' BML)

CSG PERFS: 400-02', 4 SPF
BRIDGE PLUG SET @ 450'
JET CUT: LS- 500', SS- 490'

2 3/8' OTIS S3 NIPPLE @ 9497' (SS)
( 1.875' ID )

2 3/8' OTIS S3 NIPPLE @ 9496' (LS)
( 1.875' ID )

TOC IN LS @ 9715' WLM

TCC IN SS @ 9826' WLM
TBG PERFS IN LS @ 9938-40', 4 SPF
RESTRICTION IN LS @ 9950'

2 3/8' OTIS S2 NIPPLE @ 9989' (SS)
( 1.875' ID )

2 3/8' OTIS S2 NIPPLE @ 9992' (LS)
( 1.875' ID )

BOT DS--9-2 PACKER @ 12253'

3 1/8' BLAST JOINT @ 12535-67'

2 3/8' OTIS S1 NIPPLE @ 12560'
( 1.875' ID )

BOT HS--16-1 PACKER @ 12983'
SHEAR OUT SUB
( 1 3/8' ID AFTER SHEAR OUT )

POTD @ 13050'
TD @ 13171'

WMC 03/28/90
WEST CAMERON 71 FIELD
OCS 0245 WC72 B-3
PRESENT COMPLETION

ELEVATION: 26'
CONF PLUG: 10.5# CDC2
DEVIA LED HOLE
MAX ANG 33 DEG

20' 71.5# 16C CASING @ 455'

13 3/8' 54.5# 355
BIRD 16C CASING @ 1545'

3 5/8' 53.10'
70# @ 8682'
BEST AVAILABLE COPY

TOP OF 5 5/8' LINER
@ 9756'
9 5/8' 43.5, 47, & 53.5#
N80 XL CASING @ 9928'

46 FB B SAND
PERFS: 11778-85 4 SPF

6 5/8' 25# N80 & P110
XL LINER @ 12145'

2 3/8' OSIS 51 NIPPLE @ 9998'
(1.825' ID)

TBC PERFS @ 3071'
DW PLUG @ 3081'

2 3/8' OSIS 51 NIPPLE @ 9497'
(1.875' ID)

GUBERSON L-30 PACKER @ 11701'
END OF TUBING @ 11741'

PBD @ 11826'
TD @ 13192'

CGB 12/02/92
WEST CAMERON 71 FIELD
OCS 0244 WC71 B-11
PRESENT COMPLETION

ELEVATION: (RKB-MYL) 74'
(RKB-THF) 47'
WATER DEPTH: 40'
COMP FLD: 8.5% SEA WATER
DEViated HOLE
KOP @ 3155'
MAX ANG 15 DEG

30" DRIVE PIPE @ 150'
11 3/4" 47#/K55 8RD, STAC, &
BUTTRESS CASING @ 3155'

47 FB D SAND
PERFS: 11465-72 ELM
B-11:E

51 FB D SAND
PERFS: 11887-95 ELM
B-11:D

53/53A FB D SAND
PERFS: 12286-294'
12348-352' ELM
B-11:B

55 FB D SAND
PERFS: 12605-607'
12626-636' ELM
B-11

7 5/8" 33.7 & 29.7#/AR95 &
US95 BUTTRESS & LT&G
CASING @ 13160'

2 3/8" 4.7#/1480 ARMCO NU-LOCK
TUBING (BOTH STRINGS)

TOP OF CEMENT @ 140" WLM
PERFS: 400-402', 8 SPF
SS TBG CUT @ 490'
LS TBG CUT @ 500'
2 3/8" OTIS "C" G/L VALVE ON "C"
PACK-OFF @ 3280' WLM (SS)
2 3/8" OTIS S4 NIPPLE @ 6000' (LS)
(1.675" ID) W/ OTIS GS PLUG
2 3/8" OTIS S4 NIPPLE @ 5500' (SS)
TBG PERFS @ 14400-96', 4 SPF
TOC INLS @ 10524'
BOT HYD PACKER @ 11350'
ADJUSTABLE UNION
SAFETY SHEAR JOINT (30F)
TBG PERFS @ 11400-65', 4 SPF
TOC IN SS @ 11210'
2 3/8" OTIS XA SLEEVE @ 11460' (SS)
OPEN)
1/2" THICK BLAST JOINT (LS)
3/4" THICK BLAST JOINT (SS)
SAND IN TUBING @ 11475' WLM (SS)
TOC IN LS @ 11547' WLM
2 3/8" OTIS S3 NIPPLE @ 11600' (LS)
2 3/8" OTIS S3 NIPPLE @ 11600' (SS)
BOT HYD PACKER @ 11600'
2 3/8" OTIS S2 NIPPLE @ 11615' (SS)
(1.675" ID) (PS PLUG INSTALLED)
RUBBER COATED BLAST JOINT
(1/2" COATING) (25' LONG)
2 3/8" OTIS S2 NIPPLE @ 11999' (LS)
(1.875" ID)
BOT BD PACKER @ 12000'
(3.25" BORE) (6' SEALS)
BOT BD PACKER @ 12540'
(3.25" BORE)
2 3/8" OTIS N NIPPLE @ 12544'
(1.791" ID) (PN PLUG INSTALLED)
WIRELINE RE-ENTRY GUIDE

PBTO @ 12700'
TD @ 13160'

MMCO 03/14/90
Mobil Exploration & Producing U.S. Inc.

January 21, 1994

U.S. Department of Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Regional Supervisor-OSTS

PLATFORM SALVAGE
WEST CAMERON 71-7
OCS-0244 CPXTD 21790
WEST CAMERON 71 FIELD

Gentlemen:

Mobil Exploration and Producing U.S. Inc. (MEPUS), requests approval to salvage the subject platform. We plan to perform this salvage with a multi-platform program beginning in June 1994.

Pertinent information related to the salvage operation is attached. Explosives will be employed. Conventional methods are proposed with consideration given to the NMFS' efforts to eliminate the effects of explosives on endangered marine life.

A site clearance verification plan in accordance with NTL 92-02 will be submitted for this platform at a later date when a trawling contractor and positioning contractor has been chosen.

Should you have any questions, please contact Jeff Passmore at (318) 491-6693 or Mike Marks at (504) 566-5266.

Very truly yours,

K. H. Vanacor
Environmental and Regulatory Specialist

1318.mhd

Attachments

cc J. L. Passmore - Lake Charles
K. M. Mosca - Lake Charles
A. M. Jackson - 1983
NMFS, 4700 Avenue U, Galveston, TX 77551
PROPOSED PLATFORM/STRUCTURE REMOVAL

I. Responsible Party
----------------------------------
A. Lease Operator Name: Mobil Exploration & Producing United States Inc. as agent for Mobil Oil Exploration and Producing Southeast, Inc. (MOEPSI).

B. Address: 751 Bayou Pines East
Lake Charles, La. 70601

C. Contact Person(s) and Telephone Number(s):
   Jeff L. Passmore (318) 491-6693
   Michael H. Marks (504) 566-5266

D. Base of Operations: Mobil's Cameron Base
   Cameron, LA.

II. Identification of Structure to be Removed:
---------------------------------------------
A. Platform Name: West Cameron 71-7
   CPHID: 21790

B. Location (Lease, Area, Block and Platform Coordinates):
   West Cameron 71
   OCS-0244
   \[ X = 1,422,057 \]
   \[ Y = 349,037 \]

C. Date Installed (Year): 1977

D. Proposed Date of Removal (Month/Year): June-Aug 1994

E. Water Depth: 40'

III. Description of Structure to be Removed:
---------------------------------------------
A. Configuration: 4 Pile Well Protector Platform

B. Size: Main Deck Dimension 50' x 70'

C. Number of Legs/Casings/Pilings:
   Platform Legs: Four (4) Legs and Piles
   Well Casing(s): Four (4) Well Casings

D. Diameter and Wall Thickness of Legs/ Casings/Pilings:
   Platform Legs: 40" O.D. x 0.750" - 2.00" (Varies) Wall
   Pilings: 36" O.D. x 1.500" Wall @ -16' below mudline
Well 72-7
30" x 1.25" W.T. drive pipe
13-3/8", 9-5/8" & 7" casing strings

Well 71-7
30" x 1.25" W.T. drive pipe
20", 13-3/8", 9-5/8" & 7" casing strings

Well 71-10
30" x 1.25" W.T. drive pipe
11-3/4" & 7" casing strings

Well 71-11
30" x 1.25" W.T. drive pipe
13-3/8" & 9-5/8" casing strings

E. Are Piles Grouted?: No    Inside or Outside?:

F. Brief Description of Soil Composition and Condition:

0-10' Loose gray and tan sandy silt
10'- 120' Stiff to very stiff gray and tan clay

IV. Purpose

Brief Discussion of the Reason for Removing the Structure:

The wells on the platform have been depleted, thus the platform is
no longer useful to field operations.

V. Removal Method

A. Brief Description of the Method to be Used:

Platform- After removal of the platform deck, the jacket piles
will be open. This will allow charges to be lowered to a
minimum depth of 16' below the mudline to internally cut the
the piles with bulk charges.

Well Casing(s)- After removal of the wellhead, a bulk charge
will be placed inside the well's inner casing string. The
charges will then be detonated, severing the wells at a
minimum depth of 16' below the mudline.

B. If Explosives Are to be Used, Provide the Following:

1. Kind of Explosives: Comp B or HMX explosives will be used.

2. Number and Sizes of Charges:
   Platform Piles: Four (4) bulk charges @ 40 lbs. each
   Well Casing(s): Four (4) bulk charges at 49 lbs. each
a. Single Shots or Multiple Shots?:

Multiple.

b. If Multiple Shots, Sequence and Timing of Detonations:

Platform and Well Casing: The platform piles and well casings will be shot in one series involving eight detonations. The shots will be detonated with a one second delay between shots.

3. Bulk or Shaped Charges?: Bulk.

a. Depth of Detonation Below Mudline: The well casings and the platform piles will be severed at a minimum depth of 16' below the mudline.

b. Inside or Outside Piling and/or Well Casing(s)?:

All charges will be placed inside the pilings and well casings.

C. Pre-Removal Monitoring Techniques

1. Is the Use of Scare Charges or Acoustical Devices Proposed?:

No.

If Yes, Provide the Following:

a. Number and Kind:

b. Size of Scare Charges:

c. Brief Description of How, Where, and When Scare Charges be used.

2. Will divers or Acoustic Devices be Used to Conduct a Pre-Removal Survey to Detect the Presence of Sea Turtles and Marine Mammals?:

Divers will be available to perform a survey in and around the platform for a period of thirty minutes prior to detonation if required by NMFS personnel. This survey shall not interfere with the critical path work of the salvage equipment. In addition, the normal aerial survey 30 minutes prior to and after detonations will be conducted as required by NMFS personnel.
D. Post Removal Monitoring Techniques:

1. Will transducers be used to measure the presence and impulse of the detonations?:

No.

2. Will divers be used to survey the area after removal to determine the effects on marine life?:

Yes. Divers will be available to perform a survey following detonations. Any effects on marine life will be recorded during dives made in the course of salvage work.

VI. BIOLOGICAL INFORMATION

If available, provide the results of any recent biological surveys conducted in the vicinity of the structure. If available, describe any recent observations of sea turtles or marine mammals at the structure site.

There have been no reported sightings of endangered turtles in this area. The field personnel have been instructed to report any turtle sightings in the area.
PLATFORM PHOTOGRAPH
WELL SCHEMATICS
WEST CAMERON 71 FIELD
OCS 0244 WC71 #11
PRESENT COMPLETION

COMP FLUID: 17.3 PPG MUD
WATER DEPTH: 36'

30°, 0.750° DRIVE PIPE @ 258'
160° PENETRATION

13 3/8" 61# 54.5# K55 ST&c @ 3000'

8 FB & SAND
SAND TOP: 4770'
NET PAY: 5'

9 FB & SAND
SAND TOP: 4870'
NET PAY: 3'

45X FB & SAND
SAND TOP: 10907'
NET PAY: 5'

46 FB & SAND
SAND TOP: 10926'
NET PAY: 21'

9 5/8" 47# 50095 AR95
BUTT LT&c @ 11980'

MA10 FB J-2 SAND
SAND TOP: 13796'
NET PAY: 120'

MA10B FB J-2 SAND
SAND TOP: 13940'
NET PAY: 40'

SURFACE CMT PLUG F/ 135-375'

BEST AVAILABLE COPY

CEMENT PLUG F/ 2840-3700'

HOLE IN B 5/8" @ 3317'
SQUEEZED W/ 2500 B / OF CMT

TOP OF CEMENT @ 4922'
TOP OF FISH @ 5466'

BMT OF FISH @ 5844'

HOLE SIZZ 6.5'

TO 14220'

UMC 03/06/91
WEST CAMERON 71 FIELD
OCS 0244 WC71 #7
PRESENT COMPLETION

Mobil

ELEVATION: 43'
COMP FLD: 17.65%
LIGNO SULFONATE MUD
WATER DEPTH: 38'
STRAIGHT HOLE

30" DRIVE PIPE @ 251'
20" 94.4' H40 CASING @ 703'

13 3/8" 61 & 54.5' K55
STAC CASING @ 3038'
7" 33' 50095 & C95 HTS
TEBACK @ 11766'
9 5/8" 47' AR95 & 50095
LTAC & HTS CASING @ 11883'

TOP OF 5" LINER @ 13257'
WINDOW CUT IN 7" LINER @
13460-85' & SIDETRACKED
7" 32' C95 XL LINER @ 13700'

MA-10 FB J-1 SAND

PERFS: 13950-56'
13961-82' 15F
( FORMERLY MA-40 &
MA-60 SANDS )
71-7.E

BLOCK 502 @ 13983-84'
BLOCK 502 @ 14471-74'

MA-25 FB J-1 SAND

PERFS: 14475-60
14486-92 14514-20' 15F
( FORMERLY MA-65 SAND )
71-7.A

MA-29 FB J-1 SAND

PERFS: 14645-55
14659-77' 15F
( FORMERLY MA-70 SAND )
71-7.A

5" 18' 5135 SFJ
LINER @ 14740'

2 7/8" B.7' C75 PH-6
TUBING 0 - 13902'
2 3/8" 4.6' PI05 HYDRL FJ
TUBING 13902 - 14560'

5" 23.2' C95 XL KILL STRING
ESTIMATED TOP OF SETTLED OUT
BARITE @ 9036'

2 7/8" OTIS R NIPPLE @ 12460'
( 2.19' ID )
2 7/8" OTIS SIDE DOOR CHOKe
BOT POLISHED BORE BUSHING
@ 12515'

2 7/8" OTIS R NIPPLE W/ 3' FLOW
CPLS ABOVE & BELOW @ 12586'
( DDR PLUG INSTALLED ) (1.875' ID)

WIRELINE TOOL STRING @ 13899'

NOTE: BGS04 SCALE BELOW
APPROX 13899'

QUIBERSON DRILLABLE PKR @ 13902'
( 6' SEAL ASSY ) ( 2.265' BORE )
TUBING PERFORATED @ 14078-79'

2 3/8" OTIS T-2 NIPPLE @ 14098'
( 1.79' ID )
( PT PLUG INSTALLED )
QUIBERSON DRILLABLE PKR @ 14450'
( 2.265' BORE ) ( 12' SEALS )
(SEALS SPACED OUT 5' ABOVE PKR)
TUBING PERFORATED TO COMMINGLE
MA-25/29 SDS @ 14490-92'
2 3/8" OTIS 0 NIPPLE @ 14543'
( NO-CO ) ( 1.79' ID )
QUIBERSON DRILLABLE PKR @ 14549'
( 2.265' BORE ) ( 12' SEALS )
(SEALS SPACED OUT 5' ABOVE PKR)
5' PRODUCTION TUBE

TOP OF CEMENT @ 14690'
TO @ 14740'

WUC 02/27/91
APPENDIX B

NMFS CORRESPONDENCE
Mr. William D. Bettenberg  
Director  
Minerals Management Service  
U.S. Department of the Interior  
Washington, D.C. 20240

Dear Mr. Bettenberg:

Enclosed is the Biological Opinion prepared by the National Marine Fisheries Service (NMFS) pursuant to Section 7 of the Endangered Species Act (ESA) concerning potential impacts on endangered and threatened species associated with removal of certain oil and gas platforms and related structures in the Gulf of Mexico (GOM) using explosives.

This "standard" consultation covers only those removal operations that meet specified criteria pertaining to the size of explosive charge used, detonation depth, and number of blasts per structural grouping. Consultation must be initiated on a case-by-case basis for all dismantling operations requiring the use of explosives that do not meet the established criteria.

NMFS concludes that structure removals in the GOM that fall within the established criteria are not likely to jeopardize the continued existence of listed species under the jurisdiction of NMFS. However, it is our opinion that the proposed activities may result in the injury or mortality of endangered and threatened sea turtles. Therefore, pursuant to Section 7(b)(4) of the ESA, we have established a low level of incidental take, which is cumulative for all removals covered by this consultation, and terms and conditions necessary to minimize and monitor any impacts, should they occur. The terms and conditions are contained in the enclosed incidental take statement. Also enclosed is a list of pending consultations that meet, with noted exceptions, the criteria established in the "standard" consultation. This biological opinion and the mitigating measures and terms and conditions contained in the related incidental take statement apply to these proposed removal operations. Therefore, formal consultation is concluded for these proposed actions.
Consultation must be reinititated if: (1) the amount or extent of taking specified in the incidental take statement is exceeded; (2) new information reveals impacts of the proposed activities that may affect listed species in a manner or to an extent not considered thus far in our opinions; (3) the identified activities are modified in a manner that causes an adverse effect to listed species not previously considered; or (4) a new species is listed or critical habitat is designated that may be affected by the project.

I look forward to your continued cooperation in future consultations.

Sincerely,

[Signature]

James W. Brennan
Assistant Administrator for Fisheries
Biological Opinion


Activity: Consultation for Removal of Certain Outer Continental Shelf Oil and Gas Structures in the Gulf of Mexico

Consultation Conducted By: National Marine Fisheries Service (NMFS)

Date Issued: 

Background Information:

In a letter dated November 19, 1986, the Minerals Management Service (MMS) made an initial request for formal consultation pursuant to Section 7 of the Endangered Species Act (ESA) for the removal of an offshore oil and gas platform located in the federal waters of the Gulf of Mexico (GOM). MMS and NMFS determined that removal of oil and gas platforms and related structures in the GOM may affect endangered and threatened marine species. This "may affect" determination was based on a possible relationship between endangered and threatened sea turtle mortalities and the dismantling of platforms using explosives. On November 25, 1986, NMFS issued the first of a series of biological opinions addressing, in detail, the potential impacts to listed marine species that may occur as a result of OCS abandonment activities.

MMS and NMFS established procedures for expediting Section 7 consultations on platform abandonment activities in the GOM referred to as "expedited consultations." Following those procedures, approximately 44 consultations have been completed for removal operations in the GOM region. All of the consultations have concluded that the proposed abandonment activities were not likely to jeopardize the continued existence of any listed species, but that the proposed activities may result in the incidental taking of endangered and threatened sea turtles.
The dismantling of platforms and related structures using explosives has evolved to a point where a "standard" protocol can be established for removal operations meeting certain criteria. Based upon removal techniques developed and reviewed in conjunction with the previously conducted "expedited consultations," MMS has requested, by letter of May 24, 1988, a "generic consultation" that would be applicable to all future removal operations that fall within a distinct category, defined by specific parameters. A category has been designed to include those structure types and removal techniques most commonly encountered during the expedited consultations and dismantling operations already completed. Since approximately 1000 structures that may be scheduled for future removal fall within the parameters of the established category, NMFS agrees that a "generic" consultation is appropriate at this time. The objective of the consultation is to reduce the administrative burden on both MMS and NMFS for conducting repetitive consultations on activities that may result in similar impacts to listed species and that require identical mitigating measures to maintain adequate protection for such species. This biological opinion responds to MMS' May 24, 1988, consultation request. The opinion is based on the best scientific and commercial data presently available and incorporates information from: 1) previous MMS Summary Evaluations, 2) previous NMFS biological opinions on platform removal, 3) the scientific literature, and 4) other pertinent and available information. Consultation must be reinitiated if new information becomes available concerning impacts to listed species that would alter the conclusions reached in this opinion or require modification of the measures identified in the attached incidental take statement. Consultation will continue on a case-by-case basis for those structure removals that do not meet the criteria established for "standard" removals.

Description of Proposed Action:

The proposed action involves the removal, by explosive means, of offshore oil and gas structures located in Federal waters in the Gulf of Mexico. Removal of the structures will be accomplished by severing the support pilings, caissons, well conductors, etc., using varying amounts of explosives to permit salvage of the structures. This involves the placement of explosives inside or outside of supporting structures and detonating charges primarily using electronically controlled signals.

This "generic" consultation considers only those removal operations that meet certain criteria pertaining to the size of the explosive charge used, detonation depths, and number of blasts per structural grouping. The specific criteria established to cover such removals are as follows:
1) Use of high velocity explosives (detonation rate greater than 7,600 meters/second).

2) A maximum of eight individual blasts per group of detonations with charges staggered at an interval of 0.9 seconds (900 milliseconds).

3) Charges must be set at a minimum depth of 15 feet below the sediment surface. Severing of structures above the sediment surface "open water" must be accomplished by mechanical (non-explosive) methods.

4) The maximum amount of explosives per detonation is not to exceed 50 pounds.

Species Occurring in the Project Area:

Listed species under the jurisdiction of NMFS that may occur in the project area:

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<th>COMMON NAME</th>
<th>SCIENTIFIC NAME</th>
<th>STATUS</th>
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<td>right whale</td>
<td>Eubalaena glacialis</td>
<td>E</td>
<td>6/2/70</td>
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<td>sperm whale</td>
<td>Physeter catodon</td>
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</tr>
<tr>
<td>green turtle</td>
<td>Chelonia mydas</td>
<td>Th E+</td>
<td>7/28/78</td>
</tr>
<tr>
<td>Kemp's ridley turtle</td>
<td>Lepidochelys kempi</td>
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<td>12/2/70</td>
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<td>leatherback turtle</td>
<td>Dermochelys coriacea</td>
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<td>loggerhead turtle</td>
<td>Careta caretta</td>
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<td>7/28/78</td>
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<tr>
<td>hawksbill turtle</td>
<td>Eretmochelys imbricata</td>
<td>E</td>
<td>6/2/70</td>
</tr>
</tbody>
</table>

*All of the U.S. green turtle populations are listed as threatened except the Florida breeding population, which is listed as endangered.
No critical habitat has been designated in the project area for the above species.

Assessment of Impacts:

Based upon their known distribution and abundance in the GOM, endangered whales are believed unlikely to occur in the vicinity of the proposed structure removal activities, and, therefore, unlikely to be adversely affected by the proposed action.

Previous NMFS biological opinions (November 25, 1986 and February 26, 1987) have addressed, in detail, removal of structures in the GOM. Accounts of endangered and threatened species which occur in the project area, and the "Assessment of Impacts" contained in these prior opinions also apply to this consultation and are incorporated by reference.

In summary, the opinions referenced above acknowledge the existence of a possible relationship between the use of underwater explosives in removing platforms and related structures and the occurrence of stranded sea turtles, marine mammals (Tursiops truncatus) and fish. Limited experiments conducted by NMFS, Galveston Laboratory confirm that sea turtles (and other marine vertebrates) found in proximity to petroleum platforms can be injured or killed by removal operations employing underwater explosives (Klima, 1986).

Technology most commonly used in the dismantling of platforms includes: bulk explosives, shaped explosive charges, mechanical and abrasive cutters and underwater arc cutters. The use of bulk explosives has become the industry's standard procedure for severing pilings, well conductors and related supporting structures (approx. 90% use). When using bulk charges, the inside of the structure can be jetted out to at least 15 feet below the sediment floor to allow placement of explosives inside of the structure, resulting in a decrease in the impulse and pressure forces released into the water column upon detonation. The use of high velocity shaped charges is reported to have some advantages over bulk explosives and has been used in combination with smaller bulk charges. The cutting action obtained by a shaped charge is accomplished by focusing the explosive energy with a conical metallic liner. A major advantage associated with use of high velocity shaped charges is that a smaller amount of explosive charge is required to sever the structure, which also results in reductions in the impulse and pressure forces released into the water column. Use of mechanical cutters and underwater arc cutters is successful in some circumstances and do not produce the impulse and pressure forces associated with detonation of explosives, however, these methods are, in most instances, more time consuming, costly and more hazardous to divers. As a result, these methods are not used on a routine basis (MMS Report on Platform Removal Techniques).
Based upon data obtained during previously conducted "expedited" consultations on platform removals, the following is a comparison of the types of explosives most likely to be used in the proposed removal operations:

<table>
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<th>Detonating Velocity</th>
<th>Brisance*</th>
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<td>ROX</td>
<td>approx. 8,199 m/sec.</td>
<td>1.35</td>
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<tr>
<td>C-4</td>
<td>approx. 8,001 m/sec.</td>
<td>1.15</td>
</tr>
<tr>
<td>Comp.-B</td>
<td>approx. 7,803 m/sec.</td>
<td>1.32</td>
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</table>

* Brisance is the measure of shattering power as compared to TNT which has brisance of 1.00. (NMFS Report on Platform Removal Techniques, 1986.)

The proposed removal operations will be accomplished using high velocity explosives. Use of this type of explosive charge should minimize the duration of the impulse and pressure forces produced by detonation of the charges, while providing the amount of force required to sever the structures. According to NMFS, restricting the grouping of detonations to eight individual blasts per group and staggering blasts by 0.9 seconds (900 milliseconds) will minimize the area affected by the blasts and suppress phasing of shock waves, thereby decreasing the cumulative effects of the blasts. In addition, since all detonations will occur at least 15 feet below the sediment surface and no more than 50 pounds of explosives per blast will be permitted, the amount of residual energy released into the marine environment should be reduced significantly. As a result, NMFS believes that minimal shock and impulse forces will be released in the vicinity of removal operations at any given time.

To date, of approximately 14 previously conducted consultations covering abandonment activities, about 13 structure removals have been completed. Each removal operation was monitored by NMFS observers and was conducted using appropriate mitigating measures. At the present time, eight turtles have been sighted in areas near structures being dismantled, at least two of which were green turtles. Of the eight documented sightings, one turtle was reported to be floating on its back near a platform after detonation of charges, apparently stunned or injured. No other incidents of sea turtle injury or mortality have been reported. Therefore, NMFS believes that the proposed actions are not likely to result in significant adverse impacts to endangered and threatened sea turtle populations.
Conclusions:

Based on the above, it is our opinion that removal of platforms and related structures in the GOM is not likely to jeopardize the continued existence of threatened and endangered species under the jurisdiction of NMFS. However, NMFS concludes that the proposed activities may result in the injury or mortality of loggerhead, Kemp’s ridley, green, hawksbill and leatherback turtles. Therefore, pursuant to Section 7(b)(4) of the ESA, we have established a low level of incidental take and terms and conditions necessary to minimize and monitor this impact. Compliance with these terms and conditions is the responsibility of NMFS and the permit applicant.

Reinitiation of Consultation:

Consultation must be reinitiated if: 1) the amount or extent of taking specified in the incidental take statement is met or exceeded; 2) new information reveals impacts of the project that may affect listed species in a manner or to an extent not considered in this opinion; 3) the identified activities are modified in a manner that causes an adverse effect on listed species not previously considered; or 4) a new species is listed or critical habitat is designated that may be affected by the proposed activities.
INCIDENTAL TAKE STATEMENT

Section 7(b)(4) of the Endangered Species Act requires that when a proposed agency action is found to be consistent with Section 7(a)(2) of the Act and the proposed actions may incidentally take individuals of listed species, NMFS will issue a statement that specifies the impact (amount or extent) of such incidental taking. Incidental taking by the Federal agency or applicant that complies with the specified terms and conditions of this statement is authorized and exempt from the taking prohibitions of the ESA.

Based on stranding records, incidental captures aboard commercial shrimp vessels and historical data, five species of sea turtles are known to occur in northern Gulf of Mexico waters. Current available information on the relationship between sea turtle mortality and the use of high-velocity explosives to remove oil platforms indicates that injury and/or death of sea turtles may result from the proposed actions. Therefore, pursuant to Section 7(b)(4) of the ESA, an incidental take (by injury or mortality) level of one documented Kemp's ridley, green, hawksbill or leatherback turtle or ten loggerhead turtles is set for all removal operations conducted under the terms and conditions of this incidental take statement. The level of taking specified here is cumulative for all removals covered by this consultation. If the incidental take meets or exceeds this specified level, MMS must initiate consultation. The Southeast Region, NMFS, will cooperate with MMS in the review of the incident to determine the need for developing further mitigation measures.

The reasonable and prudent measures that NMFS believes are necessary to minimize the impact of incidental takings have been discussed with MMS and will be incorporated in the removal design for "standard" structure removals. The following terms and conditions are established for these removals to implement the identified mitigation measures and to document the incidental take should such take occur:

1) Qualified observer(s), as approved by NMFS, must be used to monitor the area around the site prior to, during and after detonation of charges. Observer coverage will begin 48 hours prior to detonation of charges. If sea turtles are observed in the vicinity of the platform and thought to be resident at the site, pre- and post-detonation diver surveys must be conducted.
2) On days that blasting operations occur, a 30-minute aerial survey must be conducted within one hour before and one hour after each blasting episode. The NMFS-approved observer and/or NMFS on-site personnel (NMFS employee only) must be used to check for the presence of turtles and, if possible, to identify species. If weather conditions (fog, excessive winds, etc.) make it impossible to conduct aerial surveys, blasting activities may be allowed to proceed if approved by the NMFS and/or MMS personnel on-site.

3) If sea turtles are observed in the vicinity of the platform (within 1000 yards of the site) prior to detonating charges, blasting will be delayed until attempts are successful in removing them at least 1000 yards from the blast site. The aerial survey must be repeated prior to resuming detonation of charges.

4) Detonation of explosives will occur no sooner than 1 hour following sunrise and no later than 1 hour prior to sunset. However, if it is determined by NMFS and/or MMS on-site personnel that special circumstances justify a modification of these time restrictions and that such modification is not likely to adversely impact listed species, blasting may be allowed to proceed outside of this time frame.

5) During all diving operations (working dives as required in the course of the removals), divers will be instructed to scan the subsurface areas surrounding the platform (blasting) sites for turtles and marine mammals. Any sightings must be reported to the NMFS or MMS on-site personnel. Upon completion of blasting, divers must report and attempt to recover any sighted injured or dead sea turtles or marine mammals.

6) Charges must be staggered 0.9 seconds (900 milliseconds) for each group of structures, to minimize the cumulative effects of the blasts. If a removal operation involves multiple groupings of structures, the interval between detonation of charges for each group should be minimized to avoid the "chumming" effect. Whenever such intervals exceed 90 minutes, the aerial survey must be repeated.

7) The use of scare charges should be avoided to minimize the "chumming effect." Use of scare charges may be allowed only if approved by the NMFS and/or MMS on-site personnel.

8) A report summarizing the results of the removal and mitigation measures must be submitted to the MMS Gulf of Mexico Region within 15 working days of the removal. A copy of the report must be forwarded to NMFS, Southeast Region.
This incidental take statement applies only to endangered and threatened sea turtles. In order to allow an incidental take of a marine mammal species, the taking must be authorized under Section 101(a)(5) of the Marine Mammal Protection Act of 1972. Although interest has been expressed in obtaining an exception authorizing a limited take of dolphins incidental to abandonment activities, no marine mammal take is authorized until appropriate small take regulations are in place and related "Letters of Authorization" are issued.
REFERENCES


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* Consultations whose numbers include an asterisk (*) did not totally fall under the parameters of this "standard" consultation, therefore, only those removals meeting the parameters are approved and further consultation will be necessary for the exceptions.
APPENDIX C

FISHERMEN’S CONTINGENCY FUND HANG SITE(S) MAP