

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
No. ES/SR 92-077

Structure Removal Activity
Vermilion Area, Block 54
Lease OCS-G 7678
September, 1992

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

**FINAL
SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT
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No. ES/SR 92-077**

**Assessment of the Environmental Impacts from the
Proposed Removal of the Well No. 1 Caisson
in Vermilion Area, Block 54 (Lease OCS-G 7678)
by Taylor Energy Company**

**Date Submitted: May 14, 1992
Commencement Date: September, 1992**

Prepared by Richard T. Bennett

FINDING OF NO SIGNIFICANT IMPACT

I have considered the proposal by Taylor Energy Company to remove the Well No. 1 caisson/casings in Vermilion Area, Block 54, (OCS-G 7678), SEA No. ES/SR 92-077. Based on the environmental analysis, there are no mitigative measures contained in the site-specific environmental assessment. There is no evidence to indicate that the proposed action will significantly (40 CFR 1508.27) affect the quality of the human environment. Preparation of an environmental impact statement is not required.



Regional Supervisor
Leasing and Environment
Gulf of Mexico OCS Region

9-10-92
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) (USDOJ, 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 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 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 and evaluates the removal's 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 is necessary.

I. DESCRIPTION OF THE PROPOSAL AND NEED FOR THE PROPOSAL

A. DESCRIPTION OF THE PROPOSED ACTION WITH MITIGATION

Taylor Energy Company proposes to remove the Well No. 1 caisson/casing in Vermilion Area, Block 54, (Lease OCS-G 7678). The operator plans to use a mechanical device to cut and remove the 30-inch caisson and casing string 20 feet below the mud line. The caisson is located in a water depth of 14 feet, approximately 14 miles south of Vermilion Parish, Louisiana.

Since no explosives will be utilized during the proposed removal activities, the MMS has determined that sea turtles and marine mammals will not be affected. A Section 7 Consultation under the Endangered Species Act will not be initiated.

Refer to the operator's proposal (Appendix A) for structure specifications and additional information on the removal activities.

In the course of this evaluation process, no additional protective measures (in addition to normal operating requirements) were identified to further mitigate the environmental impacts associated with the proposal.

B. NEED FOR THE PROPOSED ACTION

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. The operator plans to conduct removal activities because the well stopped economically producing hydrocarbons.

II. ALTERNATIVES TO THE PROPOSED ACTION

A. NON-REMOVAL OF THE STRUCTURE

An alternative to the proposed caisson removal, as originally submitted, is non-removal. Non-removal of the caisson 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 or easement. Therefore, non-removal does not appear to be a valid alternative.

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 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 they propose to use Freshwater City, Louisiana, as shore base to support the proposed caisson-removal activities. 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 Gulf of Mexico (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 water in the GOM. Results of these surveys indicate that the bottlenose dolphin is by far the most likely marine mammal to be encountered at the proposed structure removal. Since the proposed structure removal will not utilize explosives, no impacts are expected 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, 1992) indicate that sea turtles occur in the vicinity of the proposed activities. Definitive information on the probability of encountering sea turtles at the removal site during removal operations is scarce. Since the proposed structure removal will not utilize explosives, no impacts are expected on sea turtles.

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 caisson removal 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 they propose to use Freshwater City, Louisiana, as the shore base to support the proposed structure-removal activities. No impacts are expected as a result of the proposed activities.

D. OTHER CONSIDERATIONS

1. Commercial and Recreational Fisheries

a. Commercial Fisheries

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

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.

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

The proposed caisson-removal activities will not take place in a military use/warning area or in an explosive dumping area. A description of these areas, their locations and potential impacts of structure-removal activities on these areas can be found in the PEA referenced in the Introduction. No impact is expected.

4. Navigation and Shipping

The proposed caisson-removal activities in Vermilion Area, Block 54 are not located in a vessel fairway or anchorage area. Structures located nearshore may serve as "landmarks" to vessels or helicopters operating in the area on a regular basis. The overall impacts of the proposed work on navigation and shipping is expected to be very low. More information on the impacts of structure removal 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 removals on pipelines and cables. There are no existing pipelines within 150 meters (490 feet) of the proposed structure-removal activities. Therefore, the proposed work will not pose a hazard to pipelines or cables in the area.

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 non-explosive methods to remove the subject caisson and well casings. 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. One area of primary concern is the potential loss of habitat to the marine environment. This topic is discussed in the PEA referenced in the Introduction and a low level of impact is expected. Other unavoidable adverse impacts are considered to be a minor.

IV. PUBLIC OPINION

A discussion of public concerns regarding structure removals can be found in the PEA referenced in the Introduction. The proposed caisson removal has generated no comments from the public.

V. CONSULTATION AND COORDINATION

In accordance with the provisions of Section 7 of the Endangered Species Act, the proposed caisson removal does not require coordination with the National Marine Fisheries Service (NMFS).

VI. BIBLIOGRAPHY AND SPECIAL REFERENCES

- Fritts, T.H., A.B. Irvine, R.D. Jennings, L.A. Collum, W. Hoffman, and M.A. McGehee. 1983. Turtles, birds, and mammals in the northern Gulf of Mexico and nearby Atlantic waters. U.S. Fish and Wildlife Service, Division of Biological Services, Washington, D.C.
- Fuller, D.A. and A.M. Tappan. 1986. The occurrence of sea turtles in Louisiana coastal waters. Coastal Fisheries Institute. Center for Wetland Resources. Louisiana State University. Baton Rouge, LA.
- Teas, Wendy G. 1992. 1991 annual report of the sea turtle stranding and salvage network. Atlantic and Gulf Coasts of the United States. January - December 1991. National Marine Fisheries Service. Southeast Fisheries Center, Miami Laboratory, 75 Virginia Beach Drive, Miami, FL.
- U.S. Department of the Interior. Minerals Management Service. 1985. Accidents connected with Federal oil and gas operations on the Outer Continental Shelf. Gulf of Mexico OCS Region. Volume II January, 1980-December, 1984. Washington, D.C.
- U.S. Department of the Interior. Minerals Management Service. 1987. Programmatic Environmental Assessment. Structure-removal activities Central and Western Gulf of Mexico Planning Areas. OCS/EA 87-0002. Gulf of Mexico OCS Region, New Orleans, LA.
- U.S. Department of the Interior. Minerals Management Service. 1989. Final Environmental Impact Statement. Proposed OCS Oil and Gas Lease Sales 123 and 125: Central and Western Planning Areas. OCS EIS/EA MMS 89-0053. Washington, D.C. Available from NTIS, Springfield, VA: PB89-114185/AS.
- U.S. Department of the Interior. Minerals Management Service. 1990. Final Environmental Impact Statement. Proposed OCS Oil and Gas Lease Sales 131, 135, and 147 (Central, Western, and Eastern Gulf of Mexico). OCS EIS/EA MMS No. 90-0042. Washington, D.C. Available from the Gulf of Mexico Region or from NTIS, Springfield VA. Volume 1 PB90-273582 and Volume 2, PB90-273590.

VII. PREPARERS

Author:

Richard T. Bennett - Biologist

Typist:

Mike Wallace - Mineral Leasing Assistant

VIII. APPENDIX

A. TAYLOR ENERGY COMPANY CORRESPONDENCE

APPENDIX A
TAYLOR ENERGY COMPANY CORRESPONDENCE

Nonexplosive

*RB

7/5/92 34

UNITED STATES GOVERNMENT
MEMORANDUM

5/14/92

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: Taylor

Control No: ES/SR 92-077

RECEIVED

MAY 14 1992

MINERALS MANAGEMENT SERVICE
LEASING & ENVIRONMENT

<u>Platform</u>	<u>Area/Block</u>	<u>Lease</u>
<u>Caisson No. 1</u>	<u>VR 54</u>	<u>OCS - 67678</u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>

Shore Base: Freshwater City LA

The attached application is forwarded to your office so that the Finding of No Significant Impact can be prepared. Since explosives will not be used in this removal operation, an Endangered Species Act Section 7 Consultation Documentation is not required. There ~~are~~ are no existing pipeline(s) within 500 feet of the proposed removal location.

Arvind Shah

Arvind Shah (OSTS)
Extension 2894

Attachment

cc:

AShah: :LEXITYPE:Disk 5

FILE: 92-077

011

LE

42-011



TAYLOR
ENERGY COMPANY

PATRICK F. TAYLOR
Chairman and CEO

May 12, 1992

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

Attn: Mr. D. J. Bourgeois



RE: OCS Structure Removal
Vermilion Block 54
OCS-G 7678, Well #1

Gentlemen:

In accordance with 30 CFR 250.143 please find enclosed, in triplicate, our Proposed OCS Platform/Structure Removal form for the above referenced facility. If approved, we will plug and abandon the facility as outlined in our Sundry Notice submitted to the Lafayette District for approval.

If you have any questions or require further information, please contact me at (504) 593-8501.

Sincerely,

Tracy Albert
Regulatory Assistant

/ta

Enclosures

TWA0049A

012

PROPOSED OCS PLATFORM/STRUCTURE REMOVAL

RECEIVED

MAY 13 1992

Office of Structural
and Technical Support

I. Responsible Party

- A. Lease operator name Taylor Energy Company
- B. Address 234 Loyola Bldg., Suite 500
New Orleans, LA 70112
- C. Contact person and telephone number Tracy Albert
(504) 593-8501
- D. Shore base ~~LA~~ Freshwater City, LA

II. Identification of Structure to be Removed

- A. Platform name Vermilion Block 54, Well No. 1
- B. Location (lease, area, block, and block coordinates) Vermilion Blk. 54, OCS-G 7678, x = 1694447.09', y = 251155.71'
- C. Date installed (year) 1990
- D. Proposed date of removal (Month/Year) August 1992
- E. Water depth 25'

III. Description of Structure to be Removed

- A. Configuration (attach a photograph or a diagram)
- B. Size 30" casing, 1" wall with Nav-Aid light & horn
- C. Number of legs/casings/pilings 1 - 30" casing

D. Diameter and wall thickness of legs/casings/pilings _____
30 x 1" 310#/ft., 16" 65#/ft., 10-3/4" 40.5#/ft., 7" 29#/ft.

E. Are ^{casing} piles grouted? Yes Inside or outside? Cemented to surface

F. Brief description of soil composition and condition _____
Very soft to firm clay was encountered to 44' penetration and was
underlain by 17' stratum of stiff clay. Below 61' pene., stiff clay
was encountered to 122'.

IV. Purpose

Lease expiration date and reason for removing the structure _____
Lease expired September 1991, lost lease due to lack of production.

V. Removal Method

A. Brief description of the method to be used _____
Mechanically cut casing strings, @ 20' BML

B. If explosives are to be used, provide the following:

1. Kind of explosives N/A

2. Number and sizes of charges N/A

a. Single shot or multiple shots? N/A

b. If multiple shots, sequence and timing of detonations N/A

3. Bulk or shaped charge? N/A

a. Depth of detonation below mud line N/A

b. Inside or outside piling? N/A

C. Pre-removal monitoring techniques

1. Is the use of scare charges or acoustic devices proposed? No

If yes, provide the following:

a. Number and kind N/A

b. Size of charges N/A

c. Brief description of how, where, and when scare charges or acoustic devices will be used N/A

2. Will divers or acoustic devices be used to conduct a pre-removal survey to detect presence of turtles and marine mammals? No

If yes, briefly describe the proposed detection method N/A

D. Post-removal monitoring techniques

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

- 4
2. Will divers be used to survey the area after removal to determine and effects on marine life? No (side-scan sonar)

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 turtles or marine mammals at the structure site.

N/A

PLEASE SEND THREE COPIES OF THE APPLICATION TO:

**Regional Supervisor, Field Operations (OSTS)
Minerals Management Service
1201 Elmwood Park Blvd.
New Orleans, Louisiana 70123**



TAYLOR ENERGY COMPANY
** PRESENT CONDITION **

FIELD: VERMILION BLOCK 54
LEASE: DCS-G 7678
WELL NUMBER: 1

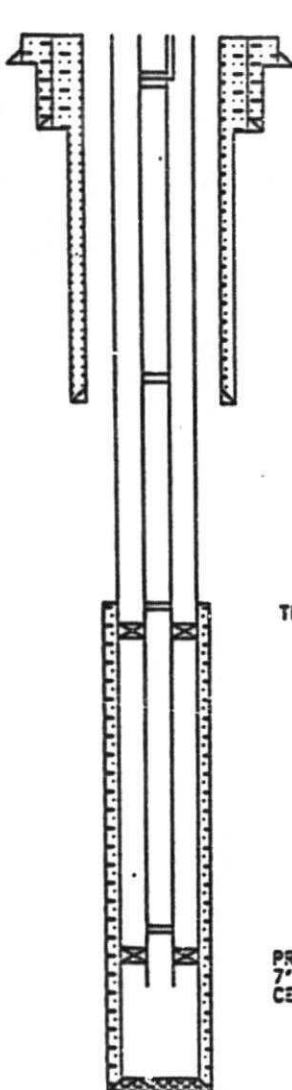
DEPTH REFERENCE: RKB TO WATER: 104'
WATER DEPTH: 25'

BAKER 'FVLE' SCSSV @ 500'

MODEL 'FW' PKR. @ 7650'

MODEL 'D' PKR. @ 10899'

CDH 5/5/92



DRIVE PIPE
30 X 1" @ 348' (219' PENETRATION)

CONDUCTOR CASING
16" 65# H-40 @ 1020'
CEMENTED V/ 2716 CU. FT.

SURFACE CASING
10 3/4" K-55 40.5# @ 3025'
CEMENTED V/ 2726 CU. FT.

TDC @ 7000'

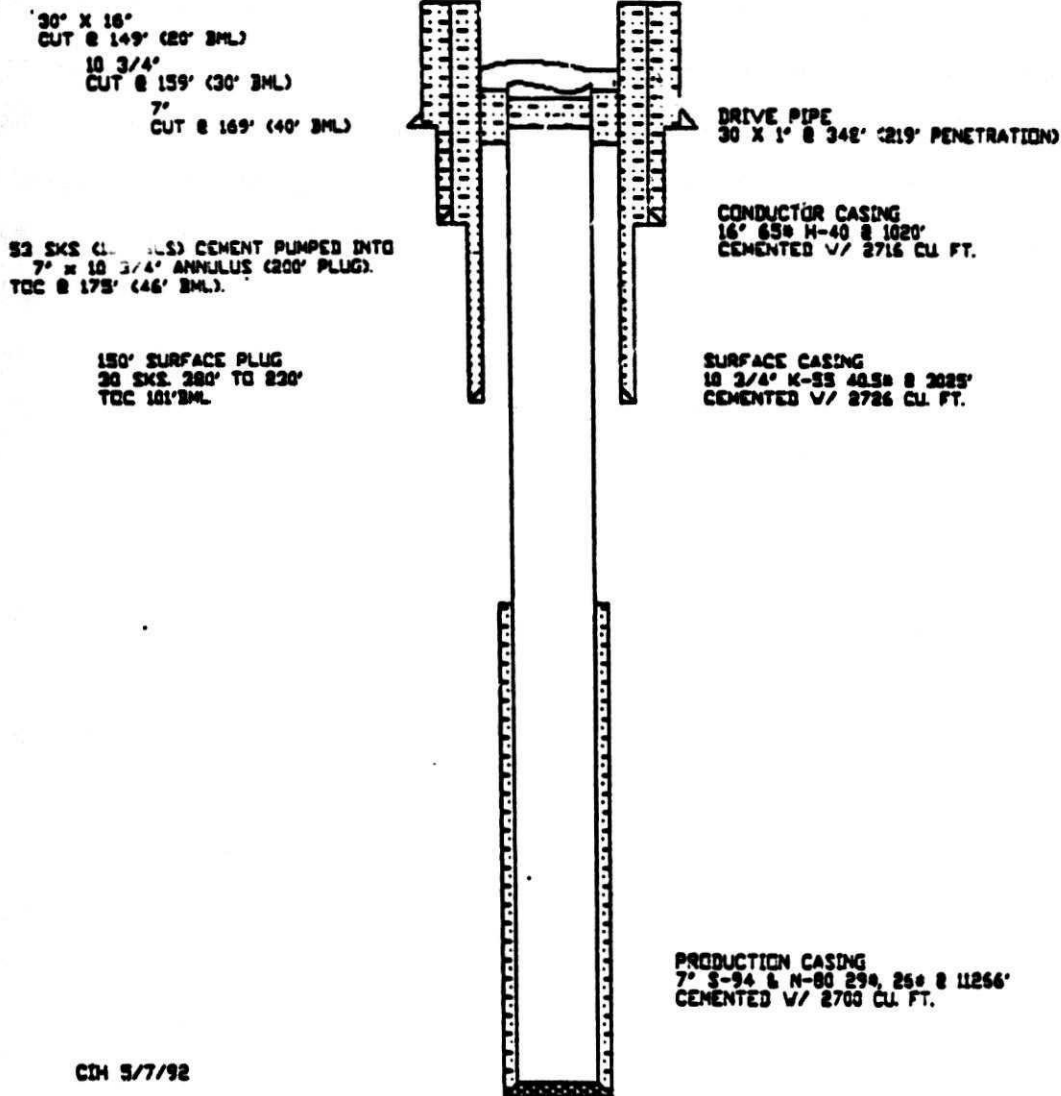
PRODUCTION CASING
7" S-94 & N-80 29#, 26# & U766'
CEMENTED V/ 2700 CU. FT.



TAYLOR ENERGY COMPANY
PROPOSED CONDITION

FIELD: VERMILION
LEASE: DCS-G
WELL NUMBER: 34

DEPTH REFERENCE RKS TO WATER: 104'
WATER DEPTH: 52'



CDH 5/7/92