

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

ES/SR Nos. 04-075, 076, 077, 078, and 079

Assessment of the Environmental Impacts
of the Proposal to Remove Well Jackets Nos. 1, 5, 7, 8, and 12 in
Ship Shoal Area, Blocks 166 and 167
Lease OCS-G 5549 and 0818
by Murphy Exploration & Production Company, USA

Date Submitted: June 2, 2004

Commencement Date: July 1, 2004

Prepared by:

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Environmental Scientist

SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT/FONSI/EIS DETERMINATION

Murphy Exploration & Production Company, USA's applications to use non-explosive methods to remove Well Jackets Nos. 1, 5, 7, 8, and 12 in Ship Shoal Area, Blocks 166 and 167, OCS-G 5549 and 0818, have been reviewed. Our SEA, ES/SR 04-075, 076, 077, 078, and 079, on the subject actions is complete and results in a Finding of No Significant Impact. Based on the conclusions of the SEA, 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. Mitigation is imposed to ensure environmental protection, consistent environmental policy and safety as required by the National Environmental Policy Act (NEPA), as amended; or measures needed for compliance with 40 CFR 1500.2(f) regarding the requirement for Federal agencies to avoid or minimize any possible adverse affects of their actions upon the quality of the human environment.

Our review of your application indicates that your proposed activities are in the vicinity of the unidentified magnetic anomalies listed in the Enclosure 1, features that may represent significant archaeological resources. In accordance with 30 CFR 250.194(b), ensure that all seafloor disturbing actions resulting from the activities proposed in your application avoid the subject features by a distance greater than that listed in the Enclosure 1. Include in your Post-removal Report as-built plats, at a scale of 1-in. = 1,000-ft. with DGPS accuracy, showing the position of barge anchors deployed during the structure removal relative to these features. If you conduct an underwater archaeological investigation, comply with the investigation methodology and reporting requirements found at:

<http://www.gomr.mms.gov/homepg/regulate/environ/archaeological/evaluation.html>.

The operator will comply with NTL No. 2003-G10 Vessel Strike Avoidance and Injured/Dead Protected Species Reporting. It can be accessed on the web at:

<http://www.gomr.mms.gov/homepg/regulate/regs/ntl1tl.html>

The operator will comply with NTL No. 2003-G11 Marine Trash and Debris Awareness and Elimination. It can be accessed on the web at:

<http://www.gomr.mms.gov/homepg/regulate/regs/ntl1tl.html>

Michael Tolbert
Acting Chief, Project Management Section
Leasing and Environment, GOM OCS Region

6/10/2004
Date

ENCLOSURE 1

FEATURES THAT MAY REPRESENT SIGNIFICANT ARCHAEOLOGICAL RESOURCES

TABLE OF MAGNETIC ANOMALIES AND/OR SIDE-SCAN SONAR TARGETS

AREA CODE	BLOCK NUMBER	LINE NUMBER	SHOT POINT	INTENSITY	DURATION	X COORDINATE	Y COORDINATE	MIN AVOID DISTANCE	PROJ	LATITUDE	LONGITUDE
SS	167	11	19	19	150	2128990.	-3340.	200	72	28.65686030	-90.93124487
SS	167	18	17	11	150	2128050.	-2180.	200	72	28.66005899	-90.93416242
SS	167	3	16	24	150	2127650.	-4600.	200	72	28.65340853	-90.93543553

INTRODUCTION AND BACKGROUND

The purpose of this Site-Specific Environmental Assessment (SEA) is to assess the specific impacts associated with proposed structure-removal activities. This SEA implements the tiering process outlined in 40 CFR 1502.20, which encourages agencies to tier environmental documents and eliminates repetitive discussions of the same issue. 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 [GOM] Outer Continental Shelf). This SEA conforms to the Minerals Management Service (MMS) and other appropriate guidelines for preparing environmental assessments by tiering to the PEA, to the most recent Final Environmental Impact Statements (FEIS) for the Central and Western Planning Areas, and by use of reference to related environmental documents. It presents site-specific data regarding the proposed structure removal activities 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 is necessary.

I. DESCRIPTION AND NEED FOR THE ACTION

Murphy Exploration & Production Company, USA proposes to non-explosively remove Well Jackets Nos. 1, 5, 7, 8, and 12 in Ship Shoal Area, Blocks 166 and 167, Lease OCS-G 5549 and 0818. The structures are located at water depths of 60, 80, 80, 50, and 48 feet consecutively, and lie approximately 27 miles south from the nearest Louisiana shoreline at Terrebonne Parish, and 43 miles south-southwest from the onshore support base in Cocodrie, Louisiana. The operator will mechanically sever and remove the caissons, conductors, and casing strings to a minimum depth of 15 feet below the mudline. The maximum anchor radius will be 3,000 feet. (Murphy Exploration & Production Company, USA, 2004).

A discussion of the legal and regulatory mandates to remove abandoned oil and gas structures from Federal Waters can be found in the PEA. According to the operator, the structure will be removed because the wells depleted the reservoirs.

Since explosives will not be utilized during the proposed removal activities, MMS has determined that sea turtles and marine mammals will not be affected. A Section 7 Consultation under the Endangered Species Act, as amended, will not be initiated.

II. ALTERNATIVES TO THE PROPOSED ACTION

MMS initially discussed various structure-removal techniques in the Final Environmental Impact Statement (FEIS) for Proposed Oil and Gas Lease Sales 118 and 122 (USDOJ, MMS, 1988) and in the PEA. Updated information is found in the FEIS for Gulf of Mexico OCS Oil and Gas Lease Sales: 2003-2007 (USDOJ, MMS, 2002). Refer to the FEIS (USDOJ, MMS, 1988 and 2002) and PEA for detailed information concerning alternative methods of structure removal. Alternatives to the proposed structure removal with mitigation originally submitted are:

A. NON-REMOVAL OF THE STRUCTURE

The alternative to the proposed structure removal as originally submitted is non-removal. Non-removal of the structure 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 is not an acceptable alternative.

B. REMOVAL OF THE STRUCTURE AS PROPOSED WITH ADDED MITIGATION

Measures that Murphy Exploration & Production Company, USA proposes to limit potential environmental effects are discussed in the structure removal application incorporated herein by reference (Murphy Exploration & Production Company, USA, 2004). Outer Continental Shelf Operating Regulations, Notices to Lessees and Operators, and other regulations and laws were identified throughout this assessment as existing mitigation for potential environmental effects associated with the proposed structure removal application. Additional information can be found in the PEA.

The operator will comply with NTL No. 2003-G11 Marine Trash and Debris Awareness and Elimination. It can be accessed on the web at:

<http://www.gomr.mms.gov/homepg/regulate/regs/ntl1tl.html>

The following mitigative measures will be included in MMS's approval of the proposed structure removal to ensure environmental protection, consistent environmental policy, and safety as required by the National Environmental Policy Act:

Our review of your application indicates that your proposed activities are in the vicinity of the unidentified magnetic anomalies listed in the Enclosure 1 on page 6, features that may represent significant archaeological resources. In accordance with 30 CFR 250.194(b), ensure that all seafloor disturbing actions resulting from the activities proposed in your application avoid the subject features by a distance greater than that listed in the Enclosure 1 on page 6. Include in your Post-removal Report as-built plats, at a scale of 1-in. = 1,000-ft. with DGPS accuracy, showing the position of barge anchors deployed during the structure removal relative to these features. If you conduct an underwater archaeological investigation, comply with the investigation methodology and reporting requirements found at:

<http://www.gomr.mms.gov/homepg/regulate/envIRON/archaeological/evaluation.html>.

The operator will comply with NTL No. 2003-G10 Vessel Strike Avoidance and Injured/Dead Protected Species Reporting. It can be accessed on the web at:

<http://www.gomr.mms.gov/homepg/regulate/regs/ntl1tl.html>

III. ENVIRONMENTAL EFFECTS, SOCIOECONOMIC CONCERNS, AND OTHER CONSIDERATIONS.

In accordance with *The National Environmental Policy Act (NEPA) of 1969, as amended (Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4[b], Sept. 13, 1982)* and the Council on Environmental Quality (CEQ) implementing regulations (40 CFR Sec. 1502.15) *Affected Environment*, the following potential environmental effects were identified from the proposed action. Mitigative measures are included to eliminate or reduce the potential effect from the proposed activities to a level of insignificance as described in 40 CFR Sec. 1508.27

A. PHYSICAL ENVIRONMENT

A discussion of environmental geology, geologic hazards, meteorological conditions, physical and chemical oceanography, water quality and air quality can be found in the PEA. The proposed structure-removal activities are not in an area of sediment instability (mud flows, slumps, or slides). Other potential impacts from the proposed activities to the physical environment have been considered, but were deemed insignificant (40 CFR 1508.27) and are not discussed in this SEA.

B. BIOLOGICAL ENVIRONMENT

A discussion of coastal habitats, protected, endangered and threatened species (birds, marine mammals, and sea turtles), and sensitive marine habitats are discussed in the PEA. The PEA delineates sensitive areas along the Texas coastline where whooping cranes and brown pelicans could be adversely impacted by structure-removal support activities. Since the operator will use a shore base in Cocodrie, Louisiana, no impacts to these sensitive areas are expected.

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. 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 by far the most likely marine mammals to be encountered in the GOM. Since the proposed structure removal will not utilize explosives, no significant impacts are expected on marine mammals.

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. 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 1995) indicate that sea turtles may 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 during explosive operations is scarce. Since the proposed structure removal will not utilize explosives, no significant impacts are expected on sea turtles.

Other potential impacts from the proposed activities to the biological environment have been considered, but were deemed insignificant (40 CFR 1508.27) and are not discussed in this SEA.

C. OTHER CONSIDERATIONS

A discussion of socioeconomic, commercial and recreational fisheries, archaeological resources, military warning areas, explosive dumping areas, navigation and shipping areas, pipelines, cables, other mineral uses, and health and human safety can be found in the PEA referenced in the Introduction.

Other environmental effects have been considered, but potential impacts from the proposed activities were deemed insignificant (40 CFR 1508.27) and are not discussed further in this SEA.

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

D. UNAVOIDABLE ADVERSE IMPACTS

A discussion of unavoidable adverse impacts can be found in the PEA. 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. Although the impacts to commercial and recreational fisheries are considered to be low, further studies information about this issue will 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. No public comments have been received regarding the proposed structure-removal operations.

V. CONSULTATION AND COORDINATION

In accordance with the provisions of Section 7 of the Endangered Species Act, as amended, the proposed structure-removal operations do not require coordination with NOAA Fisheries.

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.
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- Gitschlag, Gregg R., 2000. Personal Communication Concerning a Cumulative Trip Report Summery of Marine Mammal Observations during Explosive Structure Removal Operations; November 1995 to November 2000. Information Transfer Meeting, New Orleans Hilton. December 7, 2000.
- Murphy Exploration & Production Company, USA 2004. Proposed OCS Platform Removal Applications 04-075, 076, 077, 078, and 079: Lease OCS-G 5549 and 0818, Well Jackets Nos. 1, 5, 7, 8, and 12, Ship Shoal Blocks 166 and 167, Offshore, LA
- Teas, Wendy, G. 1995. 1994 Semi-annual Report of the Sea Turtle Stranding and Salvage Network. Atlantic and Gulf Coasts of the United States. January - June 1994. National Marine Fisheries Service. Southeast Fisheries Center, Miami Laboratory, 75 Virginia Beach Drive, Miami, FL.
- 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.
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- U.S. Department of the Interior. Minerals Management Service. 2002. Final Environmental Impact Statement. Gulf of Mexico Oil and Gas Lease Sales: 2003-2007: Central Planning Area Sales 185, 190, 194, 198, and 201; Western Planning Area Sales 187, 192, 196, and 200 Vol. I and II. OCS EIS/EA MMS 02-052. Gulf of Mexico OCS Region, New Orleans, LA.
- U.S. Department of the Interior. Minerals Management Service. 2004. Notice to Lessees and Operators NTL No. 2004-G06, Structure Removal Operations. Gulf of Mexico OCS Region, New Orleans, LA.

VII. PREPARER AND NEPA COORDINATOR

Warren J. Barton – Environmental Scientist

ENCLOSURE 1

FEATURES THAT MAY REPRESENT SIGNIFICANT ARCHAEOLOGICAL RESOURCES

TABLE OF MAGNETIC ANOMALIES AND/OR SIDE-SCAN SONAR TARGETS

AREA CODE	BLOCK NUMBER	LINE NUMBER	SHOT POINT	INTENSITY	DURATION	X COORDINATE	Y COORDINATE	MIN AVOID DISTANCE	PROJ	LATITUDE	LONGITUDE
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SS	167	18	17	11	150	2128050.	-2180.	200	72	28.67204773	-90.93411507
SS	167	3	16	24	150	2127650.	-4600.	200	72	28.67870587	-90.93533592